

CONTRACT FOR CONSTRUCTION

THIS CONTRACT FOR CONSTRUCTION (“Contract”) is made and entered into as of the date stated on the City’s signature page below (the **“Effective Date”**) by and between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado acting on behalf of its Department of Aviation (the **“City”**), and **FLATIRON CONSTRUCTORS, INC.**, a Delaware corporation and authorized to do business in the State of Colorado (**“Contractor”**) (collectively the **“Parties”**).

WITNESSETH

WHEREAS, the City, for at least three (3) consecutive days, advertised that proposals would be received for furnishing all labor, tools, supplies, equipment, materials and everything necessary and required for the construction and installation of the work under Invitation for Bid No. 202158849, Taxiway EE Construction at Denver International Airport (**“DEN”**); and

WHEREAS, a bid in response to said advertisement have been received by the Chief Executive Officer of DEN (the **“CEO”**), who has recommended that a contract for the work be made and entered into with Contractor, which was the lowest, responsive, qualified bidder; and

WHEREAS, Contractor is qualified, willing, and able to perform the work in accordance with its proposal and the Contract Documents defined below;

NOW, THEREFORE, for and in consideration of the compensation to be paid by the City to Contractor and the other terms and conditions of this Contract, the Parties agree as follows:

ARTICLE I. CONTRACT DOCUMENTS

It is agreed by the Parties that the instruments, drawings, and documents described below and whether attached to and bound with this Contract or not (the **“Contract Documents”**), are incorporated into the Contract by this reference, and are as fully a part of this Contract as if they were set out here verbatim and in full:

- Contract
- Request for Proposals
- Notice to Proceed
- Form of Final Receipt
- Building Information Modeling (**“BIM”**) if applicable
- Change Directives
- Change Orders
- Exhibit A Federal Appendices
- Exhibit B Equal Employment Opportunity Provisions
- Exhibit C Insurance Requirements
- Exhibit D Prevailing Wage Schedules
- Exhibit E Special Conditions

- Exhibit F Standard Specifications for Construction General Contract Conditions (2011 Edition) (the “Yellow Book”) (“General Conditions”) (Table of Contents attached as Exhibit F)
- Exhibit G Performance Bond
- Exhibit H Payment Bond
- Exhibit I Technical Specifications
- Exhibit J Contract Drawings
- Exhibit K Invitation for Bids and Contractor’s Response to Invitation for Bids

In the event of an irreconcilable conflict between a provision of Article I through XXXI of this Contract document and any other provisions of the Contract Documents such that it is impossible to give effect to both, the order of precedence to determine which document shall control to resolve such conflict is as follows, in descending order:

1. Exhibit A Federal Appendices
2. Contract
3. Change Directives
4. Change Orders
5. Exhibit B Equal Employment Opportunity Provisions
6. Exhibit E Special Conditions
7. Exhibit F Standard Specifications for Construction General Contract Conditions (2011 Edition) (the “Yellow Book”) (“General Conditions”) (Table of Contents attached as Exhibit F)
8. Exhibit C Insurance Requirements
9. Exhibit D Prevailing Wage Schedules
10. Exhibit I Technical Specifications
11. Exhibit J Contract Drawings
12. Exhibit K Invitation for Bids and Contractor’s Response to Invitation for Bids
13. Exhibit G Performance Bond
14. Exhibit H Payment Bond
15. Notice to Proceed
16. Form of Final Receipt
17. Building Information Modeling (“BIM”) if applicable

The remaining order of precedence is established in General Conditions Title 4.

ARTICLE II. SCOPE OF WORK

Contractor shall furnish all labor and tools, supplies, equipment, superintendence, materials, and everything necessary for and required to do, perform, and complete all of the work described, drawn, set forth, shown, and included in the Contract Documents (the “Work”).

ARTICLE III. TERM OF CONTRACT

The Senior Vice President of Aviation – Airport Infrastructure Management (the “SVP-AIM”) will issue a written notice to proceed to Contractor (the “Notice to Proceed”), and Contractor shall begin performing the Work required under this Contract within ten (10) days of

such Notice to Proceed (the “**Commencement Date**”). Contractor shall fully complete the Work in its entirety within 607 consecutive calendar days from the date of the Notice to Proceed (“**Contract Time**”). Contractor is not authorized to commence work prior to its receipt of the Notice to Proceed.

ARTICLE IV. TERMS OF PAYMENT

The City agrees to pay Contractor for the performance and completion of all of the Work as required by the Scope of Work and the Contract Documents, and Contractor agrees to accept as its full and only compensation therefor, a total amount of **Forty-Two Million, Four Hundred and Five Thousand, Six Hundred and Forty-Three Dollars and Ninety Cents (\$42,405,643.90)** (the “**Maximum Contract Amount**”). In no event will the City’s liability exceed the Maximum Contract Amount, as adjusted by duly authorized Change Orders in accordance with this Contract. The Parties specifically agree that any performance by Contractor hereunder shall not subject the City to any cost, charge, or fee not specified above.

ARTICLE V. VERIFIED STATEMENT OF CLAIMS

Colorado Revised Statutes § 38-26-107 (“**C.R.S.**”) requires that, in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to Contractor sufficient funds to insure the payment of any such claims. Should the City be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, Contractor agrees to pay to the City its costs and a reasonable attorney’s fee incurred in any such lawsuit. Because the City Attorney Staff does not bill the City for legal services on an hourly basis, Contractor agrees a reasonable fee shall be computed at the rate of two hundred dollars and no cents (\$200.00) per hour of City Attorney time.

ARTICLE VI. DISPUTES

All disputes arising under or related to this Contract shall be resolved by administrative hearing under the procedures described in *Exhibit F*, as modified by *Exhibit E*, if any, and the Denver Revised Municipal Code Section 5-17 (“**D.R.M.C.**”) and all related rules and procedures. The determination resulting from said administrative hearing shall be final, subject only to Contractor's right to appeal the determination under Colorado Rule of Civil Procedure, Rule 106.

ARTICLE VII. DEFENSE AND INDEMNIFICATION

A. To the fullest extent permitted by law, Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or related to the work performed under this Contract that are due to the negligence or fault of the Contractor or the Contractor’s agents, representatives, subcontractors, or suppliers (“**Claims**”). This indemnity shall be interpreted in the broadest possible manner consistent with the applicable law to indemnify the City.

B. Contractor’s duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether suit has been filed and even if Contractor is

not named as a Defendant.

C. Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation, including but not limited to time expended by the City Attorney Staff, whose costs shall be computed at the rate specified in Article V. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

D. Insurance coverage requirements specified in this Contract shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.

E. This defense and indemnification obligation shall survive the expiration or termination of this Contract.

ARTICLE VIII. WAIVER OF C.R.S. § 13-20-801, *et seq.*

Notwithstanding any other provision of this Contract, Contractor specifically waives all of the provisions of C.R.S. §§ 13-20-801 *et seq.* as they may relate to Contractor's performance under this Contract.

ARTICLE IX. LIQUIDATED DAMAGES

If Contractor fails to achieve Substantial Completion of the Work within the Contract Time or fails to substantially complete the Work described in the Scope of Work within the time set forth in the Special Conditions, the City will suffer substantial damages, which damages would be difficult to accurately determine. The Parties hereto have considered the possible elements of damages and have agreed that the amount of liquidated damages for Contractor's failure to substantially complete the work within the Contract Time or to substantially complete the work described in any Milestone Areas shall be as provided in the Special Conditions. If Contractor shall fail to pay such liquidated damages promptly upon demand therefor, the Surety on its Performance Bond and Payment Bond shall pay such damages. Also, the City may withhold all, or any part of, such liquidated damages from any payment due to Contractor. Additional provisions relating to liquidated damages are set forth in the Construction Contract General Conditions and Special Conditions.

ARTICLE X. INSURANCE REQUIREMENTS

A. Contractor shall obtain and keep in force all of the minimum insurance coverage forms and amounts set forth in *Exhibit C* ("**Insurance Requirements**") during the entire term of this Contract, including any extensions of the Contract or other extended period stipulations stated in *Exhibit C*. All certificates of insurance and any required endorsements must be received and approved by DEN Risk Management before any airport access or work commences.

B. Unless specifically excepted in writing by DEN Risk Management, if Contractor shall be

using subcontractors to provide any part of the services under this Contract, Contractor shall do one of the following:

1. Include all subcontractors performing services hereunder as insureds under its required insurance and specifically list on all submitted certificates of insurance required under *Exhibit C*; or
2. Ensure that each subcontractor provides its own insurance coverage in accordance with the requirements set forth in this Contract.

C. The City in no way warrants or represents the minimum limits contained herein are sufficient to protect Contractor from liabilities arising out of the performance of the terms and conditions of this Contract by Contractor, its agents, representatives, employees, or subcontractors. Contractor shall assess its own risks and maintain higher limits and/or broader coverage as it deems appropriate and/or prudent. Contractor is not relieved of any liability or other obligations assumed or undertaken pursuant to this Contract by reason of its failure to obtain or maintain insurance in sufficient amounts, duration, or types.

D. In no event shall the City be liable for any of the following: (i) business interruption or other consequential damages sustained by Contractor; (ii) damage, theft, or destruction of Contractor's inventory, or property of any kind; or (iii) damage, theft, or destruction of an automobile, whether or not insured.

E. The Parties understand and agree that the City, its elected and appointed officials, employees, agents and volunteers are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations and any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101, *et seq.*, or otherwise available to the City, its elected and appointed officials, employees, agents and volunteers.

ARTICLE XI. CONTRACT BINDING

It is agreed that this Contract shall be binding on and inure to the benefit of the Parties hereto, their heirs, executors, administrators, assigns, and successors.

ARTICLE XII. SEVERABILITY

If any part, portion, or provision of this Contract shall be found or declared null, void, or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having authority thereover, only such part, portion, or provision shall be affected thereby and all other parts, portions, and provisions of this Contract shall remain in full force and effect.

ARTICLE XIII. ASSIGNMENT

Contractor shall not assign, pledge or transfer its duties, obligations, and rights under this Contract, in whole or in part, without first obtaining the written consent of the CEO or their authorized representative. Any attempt by Contractor to assign or transfer its rights hereunder

without such prior written consent shall, at the option of the CEO or their authorized representative, automatically terminate this Contract and all rights of Contractor hereunder.

ARTICLE XIV. APPROPRIATIONS

Payment will be in accordance with the provisions of the Contract Documents, including Title 9 of the General Conditions, and will be made solely and exclusively from funds appropriated or otherwise lawfully made available for the purposes of this Contract from the City and County of Denver Airport System Funds. The City has no obligation to make payments from any other fund or source or to make additional appropriations or allocations to such fund to satisfy such costs or other obligations.

ARTICLE XV. APPROVALS

In the event this Contract calls for the payment by the City of Five Million Dollars and no cents (\$5,000,000.00) or more, approval by the Denver City Council, acting by Resolution in accordance with Section 3.2.6 of the Charter of the City and County of Denver, is and shall be an express condition precedent to the lawful and binding execution and performance of this Contract.

ARTICLE XVI. JOINT VENTURE

If Contractor is a Joint Venture, the partners to the Joint Venture shall be jointly and severally liable to the City for the performance of all duties and obligations of Contractor which are set forth in the Contract.

ARTICLE XVII. NO DISCRIMINATION IN EMPLOYMENT

In connection with the performance of work under this Contract, Contractor agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender variance, marital status, or physical or mental disability; and Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

ARTICLE XVIII. COORDINATION OF SERVICES

Contractor agrees to perform its work under this Contract in accordance with the operational requirements of DEN, and all work and movement of personnel or equipment on areas included within the DEN site shall be subject to the regulations and restrictions established by the City or its authorized agents.

ARTICLE XIX. COMPLIANCE WITH ALL LAWS AND REGULATIONS

A. Contractor and its subcontractor(s) shall perform all work under this Contract in compliance with all existing and future applicable laws, rules, regulations, and codes of the United States and the State of Colorado and with the City Charter, ordinances, Executive Orders, and rules and regulations of the City.

B. Contractor shall perform all work in compliance with Executive Order 123 regarding

Sustainability as may be directed by the City, including the requirement that all new City buildings and major renovations will be certified to the applicable LEED Gold Certification, with the goal of achieving LEED Platinum where economically feasible. Contractor also shall comply with all applicable DEN design and construction standards, including the DEN Design Standards Manuals, which are incorporated herein by reference. Current versions can be found at:

<https://business.flydenver.com/bizops/bizRequirements.asp>.

ARTICLE XX. PREVAILING WAGE REQUIREMENTS

A. In addition to the Davis-Bacon Requirements contained in Exhibit A, Contractor shall comply with, and agrees to be bound by, all requirements, conditions and determinations of the City regarding the Payment of Prevailing Wages Ordinance, D.R.M.C. §§20-76 through 20-79, including, but not limited to, the requirement that every covered worker working on a City-owned or leased building or on City-owned land shall be paid no less than the prevailing wages and fringe benefits in effect on the date the bid or request for proposal was advertised. In the event a request for bids, or a request for proposal, was not advertised, Contractor shall pay every covered worker no less than the prevailing wages and fringe benefits in effect on the date funds for the Contract were encumbered.

Date bid or proposal issuance was advertised: July 1, 2021

B. Prevailing wage and fringe rates will adjust on the yearly anniversary of the actual date of bid or proposal issuance, if applicable, or the date of the written encumbrance if no bid/proposal issuance date is applicable. Unless expressly provided for in this Contract, Contractor will receive no additional compensation for increases in prevailing wages or fringe rates.

C. Contractor shall provide the Auditor of the City and County of Denver with a list of all subcontractors providing any services under the Contract.

D. Contractor shall provide the Auditor with electronically-certified payroll records for all covered workers employed under the Contract in a manner specified by the Auditor.

E. Contractor shall prominently post at the work site the current prevailing wage and fringe rates. The posting must inform workers that any complaints regarding the payment of prevailing wages or fringe benefits may be submitted to the Denver Auditor by calling 720-913-5000 or emailing auditor@denvergov.org.

F. If Contractor fails to pay workers as required by the Prevailing Wage Ordinance, Contractor will not be paid until documentation of payment satisfactory to the Auditor has been provided. The Auditor may enforce the Prevailing Wage Ordinance in a manner provided by law, including the Prevailing Wage Ordinance. The City also may, by written notice, suspend or terminate work if Contractor fails to pay required wages and fringe rates.

ARTICLE XXI. CITY PROMPT PAYMENT

A. Unless otherwise provided in this Contract, the City will make monthly progress payments to the Contractor for all services performed under this Contract based upon the Contractor's

monthly invoices and in compliance with the General Conditions, as they may be modified in this Contract. The City's Prompt Payment Ordinance, D.R.M.C. §§ 20-107 to 20-118, applies to invoicing and payment under this Contract.

B. Final Payment to the Contractor shall not be made until after the Project is accepted, and all certificates of completion, record drawings and reproducible copies are delivered to the City, and the Contract is otherwise fully performed by the Contractor. In addition to retention, the City may, at the discretion of the Director, withhold reasonable amounts from billing and the entirety of the final payment until all such requirements are performed to the satisfaction of the Director.

C. Prompt Pay of MWBE Subcontractors. For contracts of one million dollars (\$1,000,000.00) and over to which D.R.M.C. § 28-72 applies, the Contractor is required to comply with the Prompt Payment provisions under D.R.M.C. § 28-72, with regard to payments by the Contractor to MWBE subcontractors. The Contractor shall make payment by no later than thirty-five (35) days from receipt by the Contractor of the subcontractor's invoice.

ARTICLE XXII. OWNERSHIP AND DELIVERABLES

Upon payment to Contractor, all records, data, deliverables, and any other work product prepared by Contractor or any custom development work performed by Contractor for the purpose of performing this Contract on or before the day of payment for such work shall become the sole property of the City. Upon request by the City, or based on any schedule agreed to by Contractor and the City, Contractor shall provide the City with copies of the data/files that have been uploaded to any database maintained by or on behalf of Contractor or otherwise saved or maintained by Contractor as part of the services provided to the City under this Contract. All such data/files shall be provided to the City electronically in a format agreed to by the Parties. Contractor also agrees to allow the City to review any of the procedures Contractor uses in performing any work or other obligations under this Contract, and to make available for inspection any and all notes, documents, materials, and devices used in the preparation for or performance of any of the scope of work, for up to six (6) years after termination of this Contract. Upon written request from the City, Contractor shall deliver any information requested pursuant to this Article within ten (10) business days in the event a schedule or otherwise agreed-upon timeframe does not exist.

ARTICLE XXIII. COLORADO OPEN RECORDS ACT

A. Contractor acknowledges that the City is subject to the provisions of the Colorado Open Records Act ("CORA"), C.R.S. §§ 24-72-201 *et seq.*, and Contractor agrees that it will fully cooperate with the City in the event of a request or lawsuit arising under such act for the disclosure of any materials or information which Contractor asserts is confidential or otherwise exempt from disclosure. Any other provision of this Contract notwithstanding, all materials, records, and information provided by Contractor to the City shall be considered confidential by the City only to the extent provided in CORA, and Contractor agrees that any disclosure of information by the City consistent with the provisions of CORA shall result in no liability of the City.

B. In the event of a request to the City for disclosure of such information, time and circumstances permitting, the City will make a good faith effort to advise Contractor of such request in order to give Contractor the opportunity to object to the disclosure of any material

Contractor may consider confidential, proprietary, or otherwise exempt from disclosure. In the event Contractor objects to disclosure, the City, in its sole and absolute discretion, may file an application to the Denver District Court for a determination of whether disclosure is required or exempted. In the event a lawsuit to compel disclosure is filed, the City may tender all such material to the court for judicial determination of the issue of disclosure. In both situations, Contractor agrees it will either waive any claim of privilege or confidentiality or intervene in such legal process to protect materials Contractor does not wish disclosed. Contractor agrees to defend, indemnify, and hold harmless the City, its officers, agents, and employees from any claim, damages, expense, loss, or costs arising out of Contractor's objection to disclosure, including prompt reimbursement to the City of all reasonable attorney's fees, costs, and damages the City may incur directly or may be ordered to pay by such court, including but not limited to time expended by the City Attorney Staff, whose costs shall be computed at the rate specified in Article V.

ARTICLE XXIV. EXAMINATION OF RECORDS AND AUDITS

A. Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access, and the right to examine, copy and retain copies, at City's election in paper or electronic form, any pertinent books, documents, papers and records related to Contractor's performance pursuant to this Contract, provision of any goods or services to the City, and any other transactions related to this Contract. Contractor shall cooperate with City representatives and City representatives shall be granted access to the foregoing documents and information during reasonable business hours and until the latter of six (6) years after the final payment under the Contract or expiration of the applicable statute of limitations. When conducting an audit of this Contract, the City Auditor shall be subject to government auditing standards issued by the United States Government Accountability Office by the Comptroller General of the United States, including with respect to disclosure of information acquired during the course of an audit. No examination of records and audits pursuant to this paragraph shall require Contractor to make disclosures in violation of state or federal privacy laws. Contractor shall at all times comply with D.R.M.C. 20-276.

B. Additionally, Contractor agrees until the expiration of six (6) years after the final payment under this Contract, any duly authorized representative of the City, including the CEO or their representative, shall have the right to examine any pertinent books, documents, papers and records of Contractor related to Contractor's performance of this Contract, including communications or correspondence related to Contractor's performance, without regard to whether the work was paid for in whole or in part with federal funds or was otherwise related to a federal grant program.

C. In the event the City receives federal funds to be used toward the services performed under this Contract, the Federal Aviation Administration ("FAA"), the Comptroller General of the United States and any other duly authorized representatives shall have access to any books, documents, papers and records of Contractor which are directly pertinent to a specific grant program for the purpose of making audit, examination, excerpts and transcriptions. Contractor further agrees that such records will contain information concerning the hours and specific services performed along with the applicable federal project number.

ARTICLE XXV. MINIMUM WAGE REQUIREMENTS

To the extent required by law, Contractor shall comply with and agrees to be bound by all requirements, conditions, and City determinations regarding the City's Minimum Wage Ordinance, D.R.M.C. §§ 20-82 through 20-84, including, but not limited to, the requirement that every covered worker shall be paid no less than the City Minimum Wage in accordance with the City's Minimum Wage Ordinance. By executing this Contract, Contractor expressly acknowledges that Contractor is aware of the requirements of the City's Minimum Wage Ordinance and that any failure by Contractor, or any other individual or entity acting subject to this Contract, to strictly comply with the foregoing D.R.M.C. Sections shall result in the penalties and other remedies authorized therein.

ARTICLE XXVI. COMPLIANCE WITH DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

This Department of Transportation (DOT) 49 C.F.R. Part 26 ("Part 26") applies to this Project and will be incorporated into any contract entered into by the City and contained in the City and County of Denver Bid Documents. It is the policy of DOT and the City to ensure non-discrimination in the award and administration of DOT-assisted contracts financed in whole or in part with Federal funds. Consequently, the Bidders must fully comply with the DBE requirements of Part 26 in bidding and performing hereunder.

Part 26 provides for the adoption of a good faith goals program, to be administered by the Division of Small Business Opportunity (DSBO). As such, each bidder must comply with the terms and conditions of the Part 26 in making its bid and, if awarded the Contract, in performing all Work thereunder. A bidder's failure to comply with Part 26, any Rules or Regulations promulgated pursuant thereto, or any additional requirements contained herein may render a bid non-responsive and may constitute cause for rejection.

In accordance with the requirements of the Part 26, the Contractor is committed to, at a minimum, meet the participation goal of sixteen (16%) established for this Project utilizing properly certified DBE subcontractors and suppliers.

ARTICLE XXVII. SENSITIVE SECURITY INFORMATION

Contractor acknowledges that, in the course of performing its work under this Contract, Contractor may be given access to Sensitive Security Information ("SSI"), as material is described in the Code of Federal Regulations, 49 C.F.R. Part 1520. Contractor specifically agrees to comply with all requirements of the applicable federal regulations, including but not limited to, 49 C.F.R. Parts 15 and 1520. Contractor understands any questions it may have regarding its obligations with respect to SSI must be referred to the DEN's Security Office.

ARTICLE XXVIII. DEN SECURITY

A. Contractor, its officers, authorized officials, employees, agents, subcontractors, and those under its control, shall comply with safety, operational, or security measures required of Contractor or the City by the FAA or TSA. If Contractor, its officers, authorized officials, employees, agents, subcontractors or those under its control, fail or refuse to comply with said measures and such non-

compliance results in a monetary penalty being assessed against the City, then, in addition to any other remedies available to the City, Contractor shall fully reimburse the City any fines or penalties levied against the City, and any attorney fees or related costs paid by the City as a result of any such violation. Contractor must pay this amount within fifteen (15) days from the date of the invoice or written notice. Any fines and fees assessed by the FAA or TSA against the City due to the actions of Contractor and/or its agents will be deducted directly from the invoice for that billing period.

B. Contractor is responsible for compliance with Airport Security regulations and 49 C.F.R. Parts 1542 (Airport Security) and 14 C.F.R. Parts 139 (Airport Certification and Operations). Any and all violations pertaining to Parts 1542 and 139 resulting in a fine will be passed on to and borne by Contractor. The fee/fine will be deducted from the invoice at time of billing.

ARTICLE XXIX. FEDERAL RIGHTS

A. This Contract is subject and subordinate to the terms, reservations, restrictions and conditions of any existing or future contracts between the City and the United States, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the City for airport purposes, and the expenditure of federal funds for the extension, expansion or development of the Denver Municipal Airport System.

1. General Civil Rights: Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal Assistance. This provision binds Contractor and sub-tier contractors from the bid solicitation period through the completion of the Contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.
2. Federal Fair Labor Standards Act: This Contract incorporates by reference the provisions of 29 C.F.R. Part 201, the Federal Fair Labor Standards Act (“FLSA”), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers. Contractor agrees to incorporate by reference the provisions of FLSA in all contracts and subcontracts resulting from this Contract. Contractor has full responsibility to monitor compliance to the referenced regulation. Contractor must address any claims or disputes arising from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.
3. Occupational Safety and Health Act: This Contract incorporates by reference the requirements of 29 C.F.R. Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. Contractor retains full responsibility to monitor its compliance and any subcontractor’s compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 C.F.R. Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and

Health Administration.

4. Contractor covenants it will include the provisions of this section in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Federal Acts, Regulations and directives issued pursuant thereto. Contractor covenants it will take action with respect to any subcontract or procurement as the City or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, Contractor may request the City to enter into any litigation to protect the interests of the City. In addition, Contractor may request the United States to enter into the litigation to protect the interests of the United States.

ARTICLE XXX. CITY EXECUTION OF CONTRACT

This Contract is expressly subject to, and shall become effective upon, the execution of all signatories of the City and, if required, the approval of Denver City Council. This Contract may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same.

ARTICLE XXXI. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS

The Contract, and any other documents requiring a signature hereunder, may be signed electronically by the City and/or Contractor in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Contract solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Contract in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

[SIGNATURE PAGES FOLLOW]

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5. Exhibit B Equal Employment Opportunity Provisions
6. Exhibit E Special Conditions
7. Exhibit F Standard Specifications for Construction General Contract Conditions (2011 Edition) (the “Yellow Book”) (“General Conditions”) (Table of Contents attached as Exhibit F)
8. Exhibit C Insurance Requirements
9. Exhibit D Prevailing Wage Schedules
10. Exhibit I Technical Specifications
11. Exhibit J Contract Drawings
12. Exhibit K Invitation for Bids and Contractor’s Response to Invitation for Bids
13. Exhibit G Performance Bond
14. Exhibit H Payment Bond
15. Notice to Proceed
16. Form of Final Receipt
17. Building Information Modeling (“BIM”) if applicable

The remaining order of precedence is established in General Conditions Title 4.

ARTICLE II. SCOPE OF WORK

Contractor shall furnish all labor and tools, supplies, equipment, superintendence, materials, and everything necessary for and required to do, perform, and complete all of the work described, drawn, set forth, shown, and included in the Contract Documents (the “Work”).

ARTICLE III. TERM OF CONTRACT

The Senior Vice President of Aviation – Airport Infrastructure Management (the “SVP-AIM”) will issue a written notice to proceed to Contractor (the “Notice to Proceed”), and Contractor shall begin performing the Work required under this Contract within ten (10) days of

such Notice to Proceed (the “**Commencement Date**”). Contractor shall fully complete the Work in its entirety within 720 consecutive calendar days from the date of the Notice to Proceed (“**Contract Time**”). Contractor is not authorized to commence work prior to its receipt of the Notice to Proceed.

ARTICLE IV. TERMS OF PAYMENT

The City agrees to pay Contractor for the performance and completion of all of the Work as required by the Scope of Work and the Contract Documents, and Contractor agrees to accept as its full and only compensation therefor, a total amount of **Forty-Two Million, Four Hundred and Five Thousand, Six Hundred and Forty-Three Dollars and Ninety Cents (\$42,405,643.90)** (the “**Maximum Contract Amount**”). In no event will the City’s liability exceed the Maximum Contract Amount, as adjusted by duly authorized Change Orders in accordance with this Contract. The Parties specifically agree that any performance by Contractor hereunder shall not subject the City to any cost, charge, or fee not specified above.

ARTICLE V. VERIFIED STATEMENT OF CLAIMS

Colorado Revised Statutes § 38-26-107 (“**C.R.S.**”) requires that, in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to Contractor sufficient funds to insure the payment of any such claims. Should the City be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, Contractor agrees to pay to the City its costs and a reasonable attorney’s fee incurred in any such lawsuit. Because the City Attorney Staff does not bill the City for legal services on an hourly basis, Contractor agrees a reasonable fee shall be computed at the rate of two hundred dollars and no cents (\$200.00) per hour of City Attorney time.

ARTICLE VI. DISPUTES

All disputes arising under or related to this Contract shall be resolved by administrative hearing under the procedures described in *Exhibit F*, as modified by *Exhibit E*, if any, and the Denver Revised Municipal Code Section 5-17 (“**D.R.M.C.**”) and all related rules and procedures. The determination resulting from said administrative hearing shall be final, subject only to Contractor's right to appeal the determination under Colorado Rule of Civil Procedure, Rule 106.

ARTICLE VII. DEFENSE AND INDEMNIFICATION

A. To the fullest extent permitted by law, Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or related to the work performed under this Contract that are due to the negligence or fault of the Contractor or the Contractor’s agents, representatives, subcontractors, or suppliers (“**Claims**”). This indemnity shall be interpreted in the broadest possible manner consistent with the applicable law to indemnify the City.

B. Contractor’s duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether suit has been filed and even if Contractor is

not named as a Defendant.

C. Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation, including but not limited to time expended by the City Attorney Staff, whose costs shall be computed at the rate specified in Article V. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

D. Insurance coverage requirements specified in this Contract shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.

E. This defense and indemnification obligation shall survive the expiration or termination of this Contract.

ARTICLE VIII. WAIVER OF C.R.S. § 13-20-801, *et seq.*

Notwithstanding any other provision of this Contract, Contractor specifically waives all of the provisions of C.R.S. §§ 13-20-801 *et seq.* as they may relate to Contractor's performance under this Contract.

ARTICLE IX. LIQUIDATED DAMAGES

If Contractor fails to achieve Substantial Completion of the Work within the Contract Time or fails to substantially complete the Work described in the Scope of Work within the time set forth in the Special Conditions, the City will suffer substantial damages, which damages would be difficult to accurately determine. The Parties hereto have considered the possible elements of damages and have agreed that the amount of liquidated damages for Contractor's failure to substantially complete the work within the Contract Time or to substantially complete the work described in any Milestone Areas shall be as provided in the Special Conditions. If Contractor shall fail to pay such liquidated damages promptly upon demand therefor, the Surety on its Performance Bond and Payment Bond shall pay such damages. Also, the City may withhold all, or any part of, such liquidated damages from any payment due to Contractor. Additional provisions relating to liquidated damages are set forth in the Construction Contract General Conditions and Special Conditions.

ARTICLE X. INSURANCE REQUIREMENTS

A. Contractor shall obtain and keep in force all of the minimum insurance coverage forms and amounts set forth in *Exhibit C* ("**Insurance Requirements**") during the entire term of this Contract, including any extensions of the Contract or other extended period stipulations stated in *Exhibit C*. All certificates of insurance and any required endorsements must be received and approved by DEN Risk Management before any airport access or work commences.

B. Unless specifically excepted in writing by DEN Risk Management, if Contractor shall be

using subcontractors to provide any part of the services under this Contract, Contractor shall do one of the following:

1. Include all subcontractors performing services hereunder as insureds under its required insurance and specifically list on all submitted certificates of insurance required under *Exhibit C*; or
2. Ensure that each subcontractor provides its own insurance coverage in accordance with the requirements set forth in this Contract.

C. The City in no way warrants or represents the minimum limits contained herein are sufficient to protect Contractor from liabilities arising out of the performance of the terms and conditions of this Contract by Contractor, its agents, representatives, employees, or subcontractors. Contractor shall assess its own risks and maintain higher limits and/or broader coverage as it deems appropriate and/or prudent. Contractor is not relieved of any liability or other obligations assumed or undertaken pursuant to this Contract by reason of its failure to obtain or maintain insurance in sufficient amounts, duration, or types.

D. In no event shall the City be liable for any of the following: (i) business interruption or other consequential damages sustained by Contractor; (ii) damage, theft, or destruction of Contractor's inventory, or property of any kind; or (iii) damage, theft, or destruction of an automobile, whether or not insured.

E. The Parties understand and agree that the City, its elected and appointed officials, employees, agents and volunteers are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations and any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101, *et seq.*, or otherwise available to the City, its elected and appointed officials, employees, agents and volunteers.

ARTICLE XI. CONTRACT BINDING

It is agreed that this Contract shall be binding on and inure to the benefit of the Parties hereto, their heirs, executors, administrators, assigns, and successors.

ARTICLE XII. SEVERABILITY

If any part, portion, or provision of this Contract shall be found or declared null, void, or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having authority thereover, only such part, portion, or provision shall be affected thereby and all other parts, portions, and provisions of this Contract shall remain in full force and effect.

ARTICLE XIII. ASSIGNMENT

Contractor shall not assign, pledge or transfer its duties, obligations, and rights under this Contract, in whole or in part, without first obtaining the written consent of the CEO or their authorized representative. Any attempt by Contractor to assign or transfer its rights hereunder

without such prior written consent shall, at the option of the CEO or their authorized representative, automatically terminate this Contract and all rights of Contractor hereunder.

ARTICLE XIV. APPROPRIATIONS

Payment will be in accordance with the provisions of the Contract Documents, including Title 9 of the General Conditions, and will be made solely and exclusively from funds appropriated or otherwise lawfully made available for the purposes of this Contract from the City and County of Denver Airport System Funds. The City has no obligation to make payments from any other fund or source or to make additional appropriations or allocations to such fund to satisfy such costs or other obligations.

ARTICLE XV. APPROVALS

In the event this Contract calls for the payment by the City of Five Million Dollars and no cents (\$5,000,000.00) or more, approval by the Denver City Council, acting by Resolution in accordance with Section 3.2.6 of the Charter of the City and County of Denver, is and shall be an express condition precedent to the lawful and binding execution and performance of this Contract.

ARTICLE XVI. JOINT VENTURE

If Contractor is a Joint Venture, the partners to the Joint Venture shall be jointly and severally liable to the City for the performance of all duties and obligations of Contractor which are set forth in the Contract.

ARTICLE XVII. NO DISCRIMINATION IN EMPLOYMENT

In connection with the performance of work under this Contract, Contractor agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender variance, marital status, or physical or mental disability; and Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

ARTICLE XVIII. COORDINATION OF SERVICES

Contractor agrees to perform its work under this Contract in accordance with the operational requirements of DEN, and all work and movement of personnel or equipment on areas included within the DEN site shall be subject to the regulations and restrictions established by the City or its authorized agents.

ARTICLE XIX. COMPLIANCE WITH ALL LAWS AND REGULATIONS

A. Contractor and its subcontractor(s) shall perform all work under this Contract in compliance with all existing and future applicable laws, rules, regulations, and codes of the United States and the State of Colorado and with the City Charter, ordinances, Executive Orders, and rules and regulations of the City.

B. Contractor shall perform all work in compliance with Executive Order 123 regarding

Sustainability as may be directed by the City, including the requirement that all new City buildings and major renovations will be certified to the applicable LEED Gold Certification, with the goal of achieving LEED Platinum where economically feasible. Contractor also shall comply with all applicable DEN design and construction standards, including the DEN Design Standards Manuals, which are incorporated herein by reference. Current versions can be found at:

<https://business.flydenver.com/bizops/bizRequirements.asp>.

ARTICLE XX. PREVAILING WAGE REQUIREMENTS

A. In addition to the Davis-Bacon Requirements contained in Exhibit A, Contractor shall comply with, and agrees to be bound by, all requirements, conditions and determinations of the City regarding the Payment of Prevailing Wages Ordinance, D.R.M.C. §§20-76 through 20-79, including, but not limited to, the requirement that every covered worker working on a City-owned or leased building or on City-owned land shall be paid no less than the prevailing wages and fringe benefits in effect on the date the bid or request for proposal was advertised. In the event a request for bids, or a request for proposal, was not advertised, Contractor shall pay every covered worker no less than the prevailing wages and fringe benefits in effect on the date funds for the Contract were encumbered.

Date bid or proposal issuance was advertised: July 1, 2021

B. Prevailing wage and fringe rates will adjust on the yearly anniversary of the actual date of bid or proposal issuance, if applicable, or the date of the written encumbrance if no bid/proposal issuance date is applicable. Unless expressly provided for in this Contract, Contractor will receive no additional compensation for increases in prevailing wages or fringe rates.

C. Contractor shall provide the Auditor of the City and County of Denver with a list of all subcontractors providing any services under the Contract.

D. Contractor shall provide the Auditor with electronically-certified payroll records for all covered workers employed under the Contract in a manner specified by the Auditor.

E. Contractor shall prominently post at the work site the current prevailing wage and fringe rates. The posting must inform workers that any complaints regarding the payment of prevailing wages or fringe benefits may be submitted to the Denver Auditor by calling 720-913-5000 or emailing auditor@denvergov.org.

F. If Contractor fails to pay workers as required by the Prevailing Wage Ordinance, Contractor will not be paid until documentation of payment satisfactory to the Auditor has been provided. The Auditor may enforce the Prevailing Wage Ordinance in a manner provided by law, including the Prevailing Wage Ordinance. The City also may, by written notice, suspend or terminate work if Contractor fails to pay required wages and fringe rates.

ARTICLE XXI. CITY PROMPT PAYMENT

A. Unless otherwise provided in this Contract, the City will make monthly progress payments to the Contractor for all services performed under this Contract based upon the Contractor's

monthly invoices and in compliance with the General Conditions, as they may be modified in this Contract. The City's Prompt Payment Ordinance, D.R.M.C. §§ 20-107 to 20-118, applies to invoicing and payment under this Contract.

B. Final Payment to the Contractor shall not be made until after the Project is accepted, and all certificates of completion, record drawings and reproducible copies are delivered to the City, and the Contract is otherwise fully performed by the Contractor. In addition to retention, the City may, at the discretion of the Director, withhold reasonable amounts from billing and the entirety of the final payment until all such requirements are performed to the satisfaction of the Director.

C. Prompt Pay of MWBE Subcontractors. For contracts of one million dollars (\$1,000,000.00) and over to which D.R.M.C. § 28-72 applies, the Contractor is required to comply with the Prompt Payment provisions under D.R.M.C. § 28-72, with regard to payments by the Contractor to MWBE subcontractors. The Contractor shall make payment by no later than thirty-five (35) days from receipt by the Contractor of the subcontractor's invoice.

ARTICLE XXII. OWNERSHIP AND DELIVERABLES

Upon payment to Contractor, all records, data, deliverables, and any other work product prepared by Contractor or any custom development work performed by Contractor for the purpose of performing this Contract on or before the day of payment for such work shall become the sole property of the City. Upon request by the City, or based on any schedule agreed to by Contractor and the City, Contractor shall provide the City with copies of the data/files that have been uploaded to any database maintained by or on behalf of Contractor or otherwise saved or maintained by Contractor as part of the services provided to the City under this Contract. All such data/files shall be provided to the City electronically in a format agreed to by the Parties. Contractor also agrees to allow the City to review any of the procedures Contractor uses in performing any work or other obligations under this Contract, and to make available for inspection any and all notes, documents, materials, and devices used in the preparation for or performance of any of the scope of work, for up to six (6) years after termination of this Contract. Upon written request from the City, Contractor shall deliver any information requested pursuant to this Article within ten (10) business days in the event a schedule or otherwise agreed-upon timeframe does not exist.

ARTICLE XXIII. COLORADO OPEN RECORDS ACT

A. Contractor acknowledges that the City is subject to the provisions of the Colorado Open Records Act ("**CORA**"), C.R.S. §§ 24-72-201 *et seq.*, and Contractor agrees that it will fully cooperate with the City in the event of a request or lawsuit arising under such act for the disclosure of any materials or information which Contractor asserts is confidential or otherwise exempt from disclosure. Any other provision of this Contract notwithstanding, all materials, records, and information provided by Contractor to the City shall be considered confidential by the City only to the extent provided in CORA, and Contractor agrees that any disclosure of information by the City consistent with the provisions of CORA shall result in no liability of the City.

B. In the event of a request to the City for disclosure of such information, time and circumstances permitting, the City will make a good faith effort to advise Contractor of such request in order to give Contractor the opportunity to object to the disclosure of any material

Contractor may consider confidential, proprietary, or otherwise exempt from disclosure. In the event Contractor objects to disclosure, the City, in its sole and absolute discretion, may file an application to the Denver District Court for a determination of whether disclosure is required or exempted. In the event a lawsuit to compel disclosure is filed, the City may tender all such material to the court for judicial determination of the issue of disclosure. In both situations, Contractor agrees it will either waive any claim of privilege or confidentiality or intervene in such legal process to protect materials Contractor does not wish disclosed. Contractor agrees to defend, indemnify, and hold harmless the City, its officers, agents, and employees from any claim, damages, expense, loss, or costs arising out of Contractor's objection to disclosure, including prompt reimbursement to the City of all reasonable attorney's fees, costs, and damages the City may incur directly or may be ordered to pay by such court, including but not limited to time expended by the City Attorney Staff, whose costs shall be computed at the rate specified in Article V.

ARTICLE XXIV. EXAMINATION OF RECORDS AND AUDITS

A. Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access, and the right to examine, copy and retain copies, at City's election in paper or electronic form, any pertinent books, documents, papers and records related to Contractor's performance pursuant to this Contract, provision of any goods or services to the City, and any other transactions related to this Contract. Contractor shall cooperate with City representatives and City representatives shall be granted access to the foregoing documents and information during reasonable business hours and until the latter of six (6) years after the final payment under the Contract or expiration of the applicable statute of limitations. When conducting an audit of this Contract, the City Auditor shall be subject to government auditing standards issued by the United States Government Accountability Office by the Comptroller General of the United States, including with respect to disclosure of information acquired during the course of an audit. No examination of records and audits pursuant to this paragraph shall require Contractor to make disclosures in violation of state or federal privacy laws. Contractor shall at all times comply with D.R.M.C. 20-276.

B. Additionally, Contractor agrees until the expiration of six (6) years after the final payment under this Contract, any duly authorized representative of the City, including the CEO or their representative, shall have the right to examine any pertinent books, documents, papers and records of Contractor related to Contractor's performance of this Contract, including communications or correspondence related to Contractor's performance, without regard to whether the work was paid for in whole or in part with federal funds or was otherwise related to a federal grant program.

C. In the event the City receives federal funds to be used toward the services performed under this Contract, the Federal Aviation Administration ("FAA"), the Comptroller General of the United States and any other duly authorized representatives shall have access to any books, documents, papers and records of Contractor which are directly pertinent to a specific grant program for the purpose of making audit, examination, excerpts and transcriptions. Contractor further agrees that such records will contain information concerning the hours and specific services performed along with the applicable federal project number.

ARTICLE XXV. MINIMUM WAGE REQUIREMENTS

To the extent required by law, Contractor shall comply with and agrees to be bound by all requirements, conditions, and City determinations regarding the City's Minimum Wage Ordinance, D.R.M.C. §§ 20-82 through 20-84, including, but not limited to, the requirement that every covered worker shall be paid no less than the City Minimum Wage in accordance with the City's Minimum Wage Ordinance. By executing this Contract, Contractor expressly acknowledges that Contractor is aware of the requirements of the City's Minimum Wage Ordinance and that any failure by Contractor, or any other individual or entity acting subject to this Contract, to strictly comply with the foregoing D.R.M.C. Sections shall result in the penalties and other remedies authorized therein.

ARTICLE XXVI. COMPLIANCE WITH DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

This Department of Transportation (DOT) 49 C.F.R. Part 26 ("Part 26") applies to this Project and will be incorporated into any contract entered into by the City and contained in the City and County of Denver Bid Documents. It is the policy of DOT and the City to ensure non-discrimination in the award and administration of DOT-assisted contracts financed in whole or in part with Federal funds. Consequently, the Bidders must fully comply with the DBE requirements of Part 26 in bidding and performing hereunder.

Part 26 provides for the adoption of a good faith goals program, to be administered by the Division of Small Business Opportunity (DSBO). As such, each bidder must comply with the terms and conditions of the Part 26 in making its bid and, if awarded the Contract, in performing all Work thereunder. A bidder's failure to comply with Part 26, any Rules or Regulations promulgated pursuant thereto, or any additional requirements contained herein may render a bid non-responsive and may constitute cause for rejection.

In accordance with the requirements of the Part 26, the Contractor is committed to, at a minimum, meet the participation goal of sixteen (16%) established for this Project utilizing properly certified DBE subcontractors and suppliers.

ARTICLE XXVII. SENSITIVE SECURITY INFORMATION

Contractor acknowledges that, in the course of performing its work under this Contract, Contractor may be given access to Sensitive Security Information ("SSI"), as material is described in the Code of Federal Regulations, 49 C.F.R. Part 1520. Contractor specifically agrees to comply with all requirements of the applicable federal regulations, including but not limited to, 49 C.F.R. Parts 15 and 1520. Contractor understands any questions it may have regarding its obligations with respect to SSI must be referred to the DEN's Security Office.

ARTICLE XXVIII. DEN SECURITY

A. Contractor, its officers, authorized officials, employees, agents, subcontractors, and those under its control, shall comply with safety, operational, or security measures required of Contractor or the City by the FAA or TSA. If Contractor, its officers, authorized officials, employees, agents, subcontractors or those under its control, fail or refuse to comply with said measures and such non-

compliance results in a monetary penalty being assessed against the City, then, in addition to any other remedies available to the City, Contractor shall fully reimburse the City any fines or penalties levied against the City, and any attorney fees or related costs paid by the City as a result of any such violation. Contractor must pay this amount within fifteen (15) days from the date of the invoice or written notice. Any fines and fees assessed by the FAA or TSA against the City due to the actions of Contractor and/or its agents will be deducted directly from the invoice for that billing period.

B. Contractor is responsible for compliance with Airport Security regulations and 49 C.F.R. Parts 1542 (Airport Security) and 14 C.F.R. Parts 139 (Airport Certification and Operations). Any and all violations pertaining to Parts 1542 and 139 resulting in a fine will be passed on to and borne by Contractor. The fee/fine will be deducted from the invoice at time of billing.

ARTICLE XXIX. FEDERAL RIGHTS

A. This Contract is subject and subordinate to the terms, reservations, restrictions and conditions of any existing or future contracts between the City and the United States, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the City for airport purposes, and the expenditure of federal funds for the extension, expansion or development of the Denver Municipal Airport System.

1. General Civil Rights: Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal Assistance. This provision binds Contractor and sub-tier contractors from the bid solicitation period through the completion of the Contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.
2. Federal Fair Labor Standards Act: This Contract incorporates by reference the provisions of 29 C.F.R. Part 201, the Federal Fair Labor Standards Act (“FLSA”), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers. Contractor agrees to incorporate by reference the provisions of FLSA in all contracts and subcontracts resulting from this Contract. Contractor has full responsibility to monitor compliance to the referenced regulation. Contractor must address any claims or disputes arising from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.
3. Occupational Safety and Health Act: This Contract incorporates by reference the requirements of 29 C.F.R. Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. Contractor retains full responsibility to monitor its compliance and any subcontractor’s compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 C.F.R. Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and

Health Administration.

4. Contractor covenants it will include the provisions of this section in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Federal Acts, Regulations and directives issued pursuant thereto. Contractor covenants it will take action with respect to any subcontract or procurement as the City or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, Contractor may request the City to enter into any litigation to protect the interests of the City. In addition, Contractor may request the United States to enter into the litigation to protect the interests of the United States.

ARTICLE XXX. CITY EXECUTION OF CONTRACT

This Contract is expressly subject to, and shall become effective upon, the execution of all signatories of the City and, if required, the approval of Denver City Council. This Contract may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same.

ARTICLE XXXI. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS

The Contract, and any other documents requiring a signature hereunder, may be signed electronically by the City and/or Contractor in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Contract solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Contract in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

[SIGNATURE PAGES FOLLOW]

Contract Control Number: PLANE-202158849-00
Contractor Name: FLATIRON CONSTRUCTORS, INC.

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of:

SEAL

CITY AND COUNTY OF DENVER:

ATTEST:

By:

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

Attorney for the City and County of Denver

By:

By:

By:

Contract Control Number:
Contractor Name:

PLANE-202158849-00
FLATIRON CONSTRUCTORS, INC.

By: DocuSigned by:
Grant Johns
DE0C339A96D14DC...

Name: Grant Johns
(please print)

Title: District Operations Manager
(please print)

ATTEST: [if required]

By: DocuSigned by:
Kevin McCormick
CBB144F6B7CB480...

Name: Kevin McCormick
(please print)

Title: Central Division Finance Manager
(please print)

EXHIBIT A

FEDERAL CONSTRUCTION CONTRACT PROVISIONS

A1 ACCESS TO RECORDS AND REPORTS

A1.3 ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

A2 AFFIRMATIVE ACTION REQUIREMENT

A2.3 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: [*sponsor must insert established goal*]

Goals for female participation in each trade: 6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good

faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is City and County of Denver, Colorado.

A3 BREACH OF CONTRACT TERMS

A3.3 BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the [*Contractor* | *Consultant*] or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

A4 BUY AMERICAN PREFERENCE

A4.3.1 BUY AMERICAN PREFERENCE

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal

Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

A4.3.2 Certificate of Buy American Compliance – Total Facility

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark () or the letter "X".

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States; or
 - b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

- a) To submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
- b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
- c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility”. The required documentation for a Type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

A4.3.3 Certificate of Buy American Compliance – Manufactured Product

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (☐) or the letter “X”.

☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States;
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing U.S. domestic product.
3. To furnish U.S. domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

A5 CIVIL RIGHTS – GENERAL

A5.3.1 GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.3.1 Title VI Solicitation Notice

The **(Name of Sponsor)**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, [select disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A6.4.1 Title VI Clauses for Compliance with Nondiscrimination Requirements

Compliance with Nondiscrimination Requirements:

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor’s obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Contractor’s noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

A6.4.5 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing

entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;

- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.3 CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.3 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives

compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

A9 COPELAND “ANTI-KICKBACK” ACT

A9.3 COPELAND “ANTI-KICKBACK” ACT

Contractor must comply with the requirements of the Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

A10 DAVIS-BACON REQUIREMENTS

A10.3 DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: *Provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or

advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

- (i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.* the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at www.dol.gov/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a

violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;
 - (2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
 - (4) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.
 - (D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
 - (ii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
4. Apprentices and Trainees.
- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program,

who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any

employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5,

6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

- (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

A11 DEBARMENT AND SUSPENSION

A11.3.1 CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

A11.3.2 CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.
2. Collecting a certification statement similar to the Certification of Offerer /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.3.1 SOLICITATION LANGUAGE (SOLICITATIONS THAT INCLUDE A PROJECT GOAL)

Information Submitted as a matter of bidder responsiveness: The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

Information submitted as a matter of bidder responsibility:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in its commitment within five days after bid opening.

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

A12.3.2 SOLICITATION LANGUAGE (RACE/GENDER NEUTRAL MEANS)

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the [Insert Name of Owner] to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

A12.3.3 PRIME CONTRACTS (PROJECTS COVERED BY A DBE PROGRAM)

DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§ 26.13) –

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Owner deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment (§26.29) –

The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than [specify number] days from the receipt of each payment the prime contractor receives from [Name of recipient]. The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the [Name of Recipient]. This clause applies to both DBE and non-DBE subcontractors.

A13 DISTRACTED DRIVING WHEN DRIVING

A13.3 TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant. In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

A14 ENERGY CONSERVATION REQUIREMENTS

A14.3 ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201 *et seq.*).

A16 EQUAL EMPLOYEMENT OPPORTUNITY (EEO)

A16.3.1 EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

A16.3.2 STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:
 - a. “Covered area” means the geographical area described in the solicitation from which this contract resulted;
 - b. “Director” means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
 - c. “Employer identification number” means the Federal social security number used on the Employer’s Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
 - d. “Minority” includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to

achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a

union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.

- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246. 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

A17 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The [*Contractor* | *Consultant*] has full responsibility to monitor compliance to the referenced statute or regulation. The [*Contractor* | *Consultant*] must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

A18 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

A18.3 CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

A19 PROHIBITION of SEGREGATED FACILITIES

A19.3 PROHIBITION OF SEGREGATED FACILITIES

- (a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.
- (b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

A20 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A20.3 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

A21 PROCUREMENT OF RECOVERED MATERIALS

A21.3 PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or
- 2) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

A22 RIGHT TO INVENTIONS

A22.3 RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

A23 SEISMIC SAFETY

A23.3 PROFESSIONAL SERVICE AGREEMENTS FOR DESIGN

SEISMIC SAFETY

In the performance of design services, the Consultant agrees to furnish a building design and associated construction specification that conform to a building code standard that provides a level of seismic safety substantially equivalent to standards as established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their building code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety. At the conclusion of the design services, the Consultant agrees to furnish the Owner a “certification of compliance” that attests conformance of the building design and the construction specifications with the seismic standards of NEHRP or an equivalent building code.

A23.3.2 CONSTRUCTION CONTRACTS

SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A24 TAX DELINQUENCY AND FELONY CONVICTIONS

A24.3 CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (☐) in the space following the applicable response. The applicant agrees that, if

awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government’s interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency’s SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions-

Felony conviction: Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

A25 TERMINATION OF CONTRACT

A25.3.1 TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.

2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

1. completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
2. documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
3. reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
4. reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

TERMINATION FOR CONVENIENCE (PROFESSIONAL SERVICES)

The Owner may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of Consultant. Upon receipt of the notice of termination, except as explicitly directed by the Owner, the Contractor must immediately discontinue all services affected.

Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

A25.3.2 TERMINATION FOR DEFAULT

TERMINATION FOR DEFAULT (CONSTRUCTION)

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights, and remedies associated with Owner termination of this contract due to default of the Contractor.

TERMINATION FOR DEFAULT (EQUIPMENT)

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract if the Contractor:

1. Fails to commence the Work under the Contract within the time specified in the Notice-to-Proceed;
2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms;
3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
4. Fails to comply with material provisions of the Contract;
5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements; or
6. Becomes insolvent or declares bankruptcy.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within [10] days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

TERMINATION FOR DEFAULT (PROFESSIONAL SERVICES)

Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.

The terminating party must provide the breaching party [7] days advance written notice of its intent to terminate the Agreement. The notice must specify the nature and extent of the breach, the conditions necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

a) **Termination by Owner:** The Owner may terminate this Agreement in whole or in part, for the failure of the Consultant to:

1. Perform the services within the time specified in this contract or by Owner approved extension;
2. Make adequate progress so as to endanger satisfactory performance of the Project; or
3. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

If, after finalization of the termination action, the Owner determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the Owner issued the termination for the convenience of the Owner.

b) **Termination by Consultant:** The Consultant may terminate this Agreement in whole or in part, if the Owner:

1. Defaults on its obligations under this Agreement;
2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
3. Suspends the Project for more than [180] days due to reasons beyond the control of the Consultant.

Upon receipt of a notice of termination from the Consultant, Owner agrees to cooperate with Consultant for the purpose of terminating the agreement or portion thereof, by mutual consent. If Owner and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the Owner's breach of the contract.

In the event of termination due to Owner breach, the Engineer is entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. Owner agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

A26 TRADE RESTRICTION CERTIFICATION

A26.3 TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

A27 VETERAN'S PREFERENCE

A27.3 VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

EXHIBIT B

**CITY AND COUNTY OF DENVER
RULES AND REGULATIONS AND BID
CONDITIONS OF THE
MANAGER OF PUBLIC WORKS**

**PERTAINING TO EQUAL EMPLOYMENT OPPORTUNITY
IN THE CITY AND COUNTY OF DENVER**

APPROVED FOR LEGALITY:

APPROVED AND ADOPTED:

/s/ _____
Attorney for the City and
County of Denver

/s/ _____
Manager of Public Works

Adopted and Published Pursuant to Article 111, Division 2 of Chapter 28
the Revised Municipal Code
of the City and County of Denver

These Rules and Regulations cancel and supersede any and all previous issued Rules and
Regulations on the subject

RULES AND REGULATIONS
REGARDING
EQUAL EMPLOYMENT OPPORTUNITY

Promulgated and adopted by the Manager of Public Works pursuant to and by authority of Article III, Division 2, Chapter 28 of the Revised Municipal Code of the City and County of Denver, and for the purpose of insuring that contractors, subcontractors and suppliers soliciting and receiving compensation for contract work from or through the City and County of Denver provide equal opportunity in employment without regard to race, color, creed, sex, national origin, age, religion, marital status, political opinion or affiliation or mental or physical handicap and meet certain requirements for the hiring, training, promotion and treatment during employment of members of ethnic groups subjected to differential treatment, including persons of African descent (Black), Spanish-surnamed (Hispanic), Asian-American and American Indian groups.

RULE I
DEFINITIONS

- A. "City" means the City and County of Denver.
- B. "Manager" shall mean the Manager of Public Works for the City and County of Denver.
- C. "Contract" means a contract entered into with the City and County of Denver, financed in whole or in part by local resources or funds of the City and County of Denver, for the construction of any public building or prosecution or completion of any public work.
- D. "Contractor" means the original party to a contract with the City and County of Denver, also referred to as the "general" or "prime" contractor.
- E. "Director" means the Director of the Mayor's Office of Contract Compliance.
- F. "Subcontractor" means any person, company, association, partnership, corporation, or other entity which assumes by subordinate agreement some or all of the obligations of the general or prime contractor.
- G. The Phrase "Bidding Specifications" as used in Article 111, Division 2 of Chapter 28 of the Revised Municipal Code shall include BID CONDITION, INVITATION TO BID AND NOTICE OF PROPOSAL.
- H. "Affirmative Action Program" means a set of specific and result-oriented procedures or steps to which a contractor commits himself to apply every good faith effort to employ members of ethnic minority groups, to include persons of African descent (Black), Spanish surnamed (Hispanic), Asian-American, American Indians, and persons with mental or physical handicap.
- I. "Mayor's Office of Contract Compliance" means the City agency established pursuant to Article III, Division 1 of Chapter 28 of the Denver Revised Municipal Code.

RULE II
NOTICE OF HEARING

When results of conciliation efforts are unsatisfactory to the Manager and he is informed in accordance with Article III, Division 2 of Chapter 28 of the Revised Municipal Code that a contractor or subcontractor has apparently failed to meet affirmative action and equal employment opportunity requirements after a reasonable period of notice to correct deficiencies, the Manager will, prior to imposition of any sanctions, afford the general contractor a hearing in order to determine whether the contractor or his subcontractors have failed to comply with the affirmative action and equal employment opportunity requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code or of the contract. Written notice of such hearing shall be delivered personally or sent by certified mail return receipt requested, to the contractor and to any subcontractor involved at least ten days prior to the date scheduled for the hearing.

RULE III
HEARING

- A. Contractors will appear at hearings and may be represented by counsel, and may present testimony orally and other evidence.
- B. Hearings shall be conducted by one or more hearing examiners designated as such by the Manager.
- C. The Director of the Mayor's Office of Contract Compliance may participate in hearings as a witness.
- D. Hearings shall be held at the place specified in the notice of hearing.
- E. All oral testimony shall be given under oath or affirmation and a record of such proceedings shall be made.
- F. All hearings shall be open to the public.
- G. The hearing officer shall make recommendations to the Manager who shall make a final decision.

REGULATIONS

REGULATION NO. 1. **ORDINANCE:** The Rules and Regulations of the Manager shall be inserted in the bidding specifications for every contract for which bidding is required.

REGULATION NO. 2. **EXEMPTIONS:** Each contract and subcontract, regardless of dollar amount, shall be subject to affirmative action requirements unless specifically exempted in writing individually by the Manager. Exemptions apply only to "affirmative action" in equal employment opportunity, and are not to be construed as condonation in any manner of "discrimination" or "discriminatory practices" in employment because of race, color, creed sex age national origin, religion, marital status, political opinion or mental or physical handicap.

REGULATION NO. 3. DIRECTOR OF CONTRACT COMPLIANCE: The Director of the Mayor's Office of Contract Compliance shall perform the duties assigned to such official by Article III, Division 2 of Chapter 28 of the Revised Municipal Code and by the Manager. (1) The Director of the Mayor's Office of Contract Compliance or designated representatives shall inform bidders and contractors of affirmative action procedures, programs, and goals in accordance with the ordinance at pre-bid and pre-construction conference; (2) make regular on-site inspections; (3) supply contractors and subcontractors with report forms to be completed by them when requested, and furnished to the Director of the Mayor's Office of Contract Compliance; and (4) review payroll records, employment records and practices of general contractors and their subcontractors and suppliers during the performance of any contract. The Director of the Mayor's Office of Contract Compliance shall promptly report apparent affirmative action deficiencies to the Manager.

REGULATION NO. 4. GOALS AND TIMETABLES: In general, goals and timetables should take into account anticipated vacancies and the availability of skills in the market place from which employees should be drawn. In addition, where discrimination in employment by a general contractor or any of his subcontractors is indicated, a corrective action program will take into account the need by the general contractor and his subcontractors to correct past discriminatory practices and reach goals of minority manpower utilization on a timely basis through such recruiting and advertising efforts as are necessary and appropriate.

REGULATION NO.5. AWARD OF CONTRACTS: It shall be the responsibility of the Director of the Mayor's Office of Contract Compliance to determine the affirmative action capability of bidders, contractors and subcontractors and to recommend to the Manager the award of contracts to those bidders, contractors and subcontractors and suppliers who demonstrate the ability and willingness to comply with the terms of their contract.

REGULATION NO. 6. PUBLICATION AND DUPLICATION: Copies of these Rules and Regulations as amended by the Manager from time to time, shall as soon as practicable and after Notice being published will be made a part of all City Contracts.

REGULATION NO. 7. NOTICE TO PROCEED: Prior to issuance of Notice to Proceed a sign-off will be required of the Director of the Mayor's Office of Contract Compliance or his designee.

REGULATION NO. 8. CONTRACTS WITH SUBCONTRACTORS: To the greatest extent possible the contractor shall make a good faith effort to contract with minority contractors, subcontractors and suppliers for services and supplies by taking affirmative actions which include but are not limited to the following:

1. Advertise invitations for subcontractor bids in minority community news media.
2. Contact minority contractor organizations for referral of prospective subcontractors.
3. Purchase materials and supplies from minority material suppliers.

REGULATION NO. 9. AGENCY REFERRALS: it shall be no excuse that the union with which the contractor or subcontractor has an agreement providing for referral, exclusive or otherwise, failed to refer minority employees.

REGULATION NO. 10. CLAUSES: The Manager shall include the appropriate clauses in every contract and the contractor shall cause to be inserted in every subcontract the appropriate clauses:

1. **APPENDIX A:** City and County of Denver Equal Opportunity Clause-ALL CONTRACTS funded only with City & County of Denver monies.
2. **APPENDIX B:** Equal Opportunity Clause (11246)-ALL FEDERAL ASSISTED
3. **APPENDIX C:** Section 3-Assurance of Compliance-HUD ASSISTED PROJECTS.
4. **APPENDIX D:** Section 3-Clause-HUD ASSISTED PROJECTS.

All amendments to the appendices shall be included by reference.

REGULATION NO. 11. SHOW CAUSE NOTICES: When the Manager has reasonable cause to believe that a contractor has violated Article III, Division 2 of Chapter 28 of the Revised Municipal Code, he may issue a notice requiring the contractor to show cause, within fifteen days why enforcement procedures, or other appropriate action to insure compliance, should not be instituted.

REGULATION NO. 12. BID CONDITIONS-AFFIRMATIVE ACTION REQUIREMENTS-EQUAL EMPLOYMENT OPPORTUNITY:

1. APPENDIX E:

The Bid Conditions- Affirmative Action Requirements-Equal Employment Opportunity as amended and published by the U.S. Department of Labor, Employment Standards Administration, Office of Federal Contract Compliance, shall be inserted verbatim for bidding specification for every non-exempt contract involving the use of Federal funds.

2. APPENDIX F:

The Bid Conditions- Affirmative Action Requirements-Equal Employment Opportunity as published by the Department of Public Works, City and County of Denver shall be inserted verbatim as bidding specifications for every non-exempt contract using City funds.

APPENDIX A

CITY AND COUNTY OF DENVER EQUAL OPPORTUNITY CLAUSE-ALL CONTRACTS

1. The contractor will not discriminate against any employee or applicant for employment because of race creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap.
3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. Each contractor will comply with all provisions of Article III, Division 2, Chapter 28 of the Revised Municipal Code, and the rules, regulations, and relevant orders of the Manager and Director.
5. The contractor will furnish all information and reports required by Article III, Division 2, Chapter 28 of the Revised Municipal Code, and by rules, regulations and orders of the Manager and Director or pursuant thereto, and will permit access to his books, records, and accounts by the Manager, Director or their designee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further City contracts in accordance with procedures authorized in Article III, Division 2, Chapter 28 of the Revised Municipal Code, or by rules, regulations, or order of the Manager.
7. The contractor will include Regulation 12 Paragraph 2 and the provisions of paragraphs (1) through (6) in every subcontract or purchase order unless, exempted by rules, regulations, or orders of the Manager issued pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, so that such provisions will be binding upon each subcontractor or suppliers. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

The applicant further agrees to be bound by the above equal opportunity clauses with respect to its own employment practices when it participates in City contracts. The contractor agrees to assist and cooperate actively with the Manager and the Director in obtaining compliance of subcontractors and suppliers with the equal opportunity clause and the rules, regulations and relevant orders of the Manager, and will furnish the Manager and the Director such information as they may require for the supervision of compliance, and will otherwise assist the Manager and Director in the discharge of the City's primary responsibility for securing compliance. The contractor further agrees to refrain from entering into any contract or contract modification subject to Article III, Division 2, Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who has not demonstrated eligibility for, City contracts.

The contractor will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the Manager and Director. In addition, the contractor agrees that failure or refusal to comply with these undertakings the Manager may take any or all of the following actions:

- A. Cancellation, termination, or suspension in whole or in part of this contract.
- B. Refrain from extending any further assistance to the applicant under the program with respect to which the failure occurred until satisfactory assurance of future compliance has been received from such applicant.
- C. Refer the case to the City Attorney for appropriate legal proceedings.

SUBCONTRACTS: Each prime contractor or subcontractor shall include the equal opportunity clause in each of its subcontracts.

**APPENDIX F
BID CONDITIONS
AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY**

For all Non-Exempt Construction Contracts to be Awarded by
the City and County of Denver, Department of Public Works

NOTICE

EACH BIDDER, CONTRACTOR OR SUBCONTRACTOR (HEREINAFTER THE CONTRACTOR) MUST FULLY COMPLY WITH THE REQUIREMENTS OF THESE BID CONDITIONS AS TO EACH CONSTRUCTION TRADE IT INTENDS TO USE ON THIS CONSTRUCTION CONTRACT, AND ALL OTHER CONSTRUCTION WORK (BOTH CITY AND NON-CITY) IN THE DENVER AREA DURING THE PERFORMANCE OF THIS CONTRACT OR SUBCONTRACT. THE CONTRACTOR COMMITS ITSELF TO THE GOALS FOR MINORITY MANPOWER UTILIZATION, AS APPLICABLE, AND ALL OTHER REQUIREMENTS, TERMS AND CONDITION OF THESE BID CONDITIONS BY SUBMITTING A PROPERLY SIGNED BID.

THE CONTRACTOR SHALL APPOINT A COMPANY EXECUTIVE TO ASSUME THE RESPONSIBILITY FOR THE IMPLEMENTATION OF THE REQUIREMENTS, TERMS AND CONDITIONS OF THESE BID CONDITIONS.

EULOIS CLECKLEY
Manager of Public Works
City and County of Denver

A. REQUIREMENTS --AN AFFIRM ATIVE ACTION PLAN:

Contractors shall be subject to the provisions and requirements of these bid conditions including the goals and timetables for minority' and female utilization, and specific affirmative action steps set forth by the Office of Contract Compliance. The contractor's commitment to the goals for minority, and female utilization as required constitutes a commitment that it will make every good faith effort to meet such goals.

1. GOALS AND TIMETABLES:

The goals and timetables for minority¹ and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade are as follows:

**GOALS FOR MINORITY PARTICIPATION
FOR EACH TRADE**

From January 1, 1982
to 21.7% - 23.5%
Until Further Notice

**GOALS FOR FEMALE PARTICIPATION
FOR EACH TRADE**

From January 1, 1982
to 6.9%
Until Further Notice

The goals for minority and female utilization above are expressed in terms of hours of training and employment as a proportion of the total number of hours to be worked by the contractor's aggregate workforce, which includes all supervisory personnel, in each trade, on all projects for the City and County of Denver during the performance of its contract (i.e., The period beginning with the first day of work on the City and County of Denver funded construction contract and ending with the last day of work).

The hours of minority and female employment and training must be substantially uniform throughout the length of the contract in each trade and minorities and females must be employed evenly on each of a contractor's projects. Therefore, the transfer of minority or female employees from contractor to contractor or from project to project for the purpose of meeting the contractor's goals shall be a violation of these Bid Conditions.

If the contractor counts the nonworking hours of apprentices they must be employed by the contractor during the training period; the contractor must have made a commitment to employ apprentices at the completion of their training subject to the availability of employment opportunities; and the apprentices must be trained pursuant to training programs approved by the Bureau of Apprenticeship and Training.

¹ "Minority" is defined as including, Blacks, Spanish Surname Americans, Asian-Americans, and American Indians, and includes both men and Minority women.

2. **SPECIFIC AFFIRMATIVE ACTION STEPS:**

No contractor shall be found to be in noncompliance solely on account of its failure to meet its goals, but will be given an opportunity to demonstrate that the contractor has instituted all the specific affirmative action steps specified and has made every good faith effort to make these steps work toward the attainment of its goals within the timetables, all to the purpose of expanding minority and female utilization in its aggregate workforce. A contractor, who fails to comply with its obligation under the Equal Opportunity Clause of its contract and fails to achieve its commitments to the goals for minority and female utilization has the burden of proving that it has engaged in an Affirmative Action Program directed at increasing minority and female utilization and that such efforts were at least as extensive and as specific as the following:

- a. The contractor should have notified minority and female organizations when employment opportunities were available and should have maintained records of the organization's response.
- b. The contractor should have maintained a file of the names and addresses of each minority and female referred to it by any individual or organization and what action was taken with respect to each such referred individual, and if the individual was not employed by the contractor, the reasons. If such individual was sent to the union hiring hall for referral and not referred back by the union or if referred, not employed by the contractor, the file should have documented this and their reasons.
- c. The contractor should have promptly notified the Department of Public Works, and Mayor's Office of Contract Compliance when the union or unions with which the contractor has collective bargaining agreements did not refer to the contractor a minority or female sent by the contractor, or when the contractor has other information that the union referral process has impeded efforts to meet its goals.
- d. The contractor should have disseminated its EEO policy within its organization by including it in any employee handbook or policy manual; by publicizing it in company newspapers and annual reports and by advertising such policy at reasonable intervals in union publications. The EEO policy should be further disseminated by conducting staff meetings to explain and discuss the policy; by posting of the policy; and by review of the policy with minority and female employees.
- e. The contractor should have disseminated its EEO policy externally by informing and discussing it with all recruitment sources; by advertising in news media, specifically including minority and female news media; and by notifying and discussing it with all subcontractors.
- f. The contractor should have made both specific and reasonably recurrent written and oral recruitment efforts. Such efforts should have been directed at minority and female organizations, schools with substantial minority and female enrollment, and minority and female recruitment and training organizations within the contractor's recruitment area.

- g. The contractor should have evidence available for inspection that all tests and other selection techniques used to select from among candidates for hire, transfer, promotion, training, or retention are being used in a manner that does not violate the OFCCP Testing Guidelines in 41 CFR Part 60-3.
- h. The contractor should have made sure that seniority practices and job classifications do not have a discriminatory effect.
- i. The contractor should have made certain that all facilities are not segregated by race.
- j. The contractor should have continually monitored all personnel activities to ensure that its EEO policy was being carried out including the evaluation of minority and female employees for promotional opportunities on a quarterly basis and the encouragement of such employees to seek those opportunities.
- k. The contractor should have solicited bids for subcontracts from available minority and female subcontractors engaged in the trades covered by these Bid conditions, including circulation of minority and female contractor associations.

NOTE: The Director and the Mayor's Office of Contract Compliance will provide technical assistance on questions pertaining to minority and female recruitment sources, minority and female community organizations, and minority and female news media upon receipt of a request for assistance from a contractor.

3. NON-DISCRIMINATION:

In no event may a contractor utilize the goals and affirmative action steps required in such a manner as to cause or result in discrimination against any person on account of race, color, religion, sex, marital status, national origin, age, mental or physical handicap, political opinion or affiliation.

4. COMPLIANCE AND ENFORCEMENT:

In all cases, the compliance of a contractor will be determined in accordance with its obligations under the terms of these Bid Conditions. All contractors performing or to perform work on projects subject to these Bid Conditions hereby agree to inform their subcontractors in writing of their respective obligations under the terms and requirements of these Bid Conditions, including the provisions relating to goals of minority and female employment and training.

A. Contractors Subject to these Bid Conditions:

In regard to these Bid Conditions, if the contractor meets the goals set forth therein or can demonstrate that it has made every good faith effort to meet these goals, the contractor shall be presumed to be in compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, the implementing regulations and its obligations under these Bid Conditions. In the event, no formal sanctions or proceedings leading toward sanctions shall be instituted unless the contracting or administering agency otherwise determines that the contractor is violating the Equal Opportunity Clause.

- 1. Where the Office of Contract Compliance finds that a contractor failed to comply with the requirements of Article 111, Division 2, Chapter 28 of the Revised Municipal

Code or the implementing regulations and the obligations under these Bid Conditions, and so informs the Manager, the Manager shall take such action and impose such sanctions, which include suspension, termination, cancellation, and debarment, as may be appropriate under the Ordinance and its regulations. When the Manager proceeds with such formal action it has the burden of proving that the contractor has not met the goals contained in these Bid Conditions. The contractor's failure to meet its goals shall shift to it the requirement to come forward with evidence to show that it has met the good faith requirements of these Bid Conditions.

2. The pendency of such proceedings shall be taken into consideration by the Department of Public Works in determining whether such contractor can comply with the requirements of Article 111, Division 2, Chapter 28 of the Revised Municipal Code, and is therefore a "responsible prospective contractor".
3. The Mayor's Office of Contract Compliance shall review the contractor's employment practices during the performance of the contract. If the Mayor's Office of Contract Compliance determines that the contractor's Affirmative Action Plan is no longer an acceptable program, the Director shall notify the Manager.

B. Obligations Applicable to Contractors:

It shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority or female employees. Discrimination in referral for employment, even if pursuant to provisions of a collective bargaining agreement, is prohibited by the National Labor Relations Act, as amended, Title VI of the Civil Rights Act of 1964, as amended, and Article III, Division 2, Chapter 28 of the Revised Municipal Code. It is the policy of the Department of Public Works that contractors have a responsibility to provide equal employment opportunity, if they wish to participate in City and County of Denver contracts. To the extent they have delegated the responsibility for some of their employment practices to a labor organization and, as a result, are prevented from meeting their obligations pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, such Contractors cannot be considered to be in compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, or its implementing rules and regulations.

C. General Requirements

Contractors are responsible for informing their subcontractors in writing regardless of tier, as to their respective obligations. Whenever a contractor subcontracts a portion of work in any trade covered by these Bid Conditions, it shall include these Bid Conditions in such subcontracts and each subcontractor shall be bound by these Bid Conditions to the full extent as if it were the prime contractor. The contractor shall not, however, be held accountable for the failure of its subcontractors to fulfill their obligations under these Bid Conditions. However, the prime contractor shall give notice to the Director of any refusal or failure of any subcontractor to fulfill the obligations under these Bid Conditions. A subcontractor's failure to comply will be treated in the same manner as such failure by a prime contractor.

1. Contractors hereby agree to refrain from entering into any contract or contract modification subject to Article 111, Division 2, Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who is determined not to be a "responsive" bidder for the City and County of Denver contracts pursuant to the Ordinance.
2. The contractor shall carry out such sanctions and penalties for violation of these Bid Conditions and the Equal Opportunity Clause including suspension, termination and cancellation of existing subcontracts and debarment from future contracts as may be ordered by the Manager pursuant to Article 111, Division 2, Chapter 28 of the Revised Municipal Code and its implementing regulations.
3. Nothing herein is intended to relieve any contractor during the term of its contract from compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, and the Equal Opportunity Clause of its contract with respect to matters not covered in these Bid Conditions.
4. Contractors must keep such records and file such reports relating to the provisions of these Bid Conditions as shall be required by the Office of Contract Compliance.
5. Requests for exemptions from these Bid Conditions must be made in writing, with justification, to the Manager of Public Works, City and County Building, Room 379, Denver, Colorado 80202, and shall be forwarded through and with the endorsement of the Director.

EXHIBIT C

**CITY AND COUNTY OF DENVER
INSURANCE REQUIREMENTS FOR DEPARTMENT OF AVIATION
OWNER CONTROLLED INSURANCE PROGRAM (OCIP/ROCIP) PROJECT**

NOTICE OF CHANGE TO ROCIP: DEN reserves the right to terminate or modify the DEN ROCIP or any portion thereof. Further, dependent on factors including, but not limited to, the official timing and duration of the ROCIP project for which services are provided under this Agreement, DEN may need to transition from one ROCIP program to another and introduce corresponding requirements for contractors. DEN will provide Contractor notice in accordance with the terms and conditions of this Agreement.

1. General Information

City and County of Denver and Denver International Airport (hereinafter referred to collectively as “DEN”) has arranged for certain construction activities at DEN to be insured under an Owner Controlled Insurance Program (OCIP) or a Rolling Owner Controlled Insurance Program (ROCIP) (hereinafter collectively referred to as “ROCIP”). A ROCIP is a single insurance program that insures DEN, the Contractor and subcontractors of any tier, and other designated parties (Enrolled Parties), for work performed at the Project Site. Certain trade contractors and subcontractors are ineligible for this program; see Excluded Parties under the definitions Section 7 for a general list of excluded parties. Insurance requirements are determined based on the scope of work.

1.2 ROCIP Manuals

Below are links to access the current reference manuals related to DEN ROCIP III. These manuals are part of the Contract Documents.

[DEN ROCIP III Insurance Manual](#)

[DEN ROCIP III Safety Manual](#)

[DEN ROCIP III Claims Guide](#)

2. Insurance Requirements for Non-ROCIP Contractors and Subcontractors (Excluded Parties)

Contractor and subcontractors of any tier shall require all Excluded Parties, as defined in Section 7 or confirmed as excluded by DEN, to provide and maintain insurance of the type and in limits as set forth in the Contractor Subcontract Agreement and such insurance shall include the minimum defined coverages and be evidenced to DEN as required in this Section 2.

2.1 Certificate Holder

Certificate(s) shall be issued to:	CITY AND COUNTY OF DENVER Denver International Airport 8500 Peña Boulevard, Suite 8810 Denver CO 80249 Attn: Risk Management
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2.2 Acceptable Certificate of Insurance Form and Submission Instructions

Please read these requirements carefully to ensure proper documentation and receipt of your certificate(s) of insurance.

- ACORD FORM (or equivalent) certificate is required.
- SUBMIT via emailed in pdf format to: contractadmininvoices@flydenver.com
- ELECTRONIC CERTIFICATES are required, hard copy documents will not be accepted.

- THIRD PARTY SOFTWARE may be implemented during the term of this Agreement to manage insurance compliance and documents with required use by Vendor of such system.
- REFERENCE on the certificate must include the DEN assigned Contract Number.

2.3 Coverage and Limits

2.3.1 Commercial General Liability

Contractor shall maintain insurance coverage including bodily injury, property damage, personal injury, advertising injury, and products and completed operations in minimum limits of \$1,000,000 each occurrence, \$2,000,000 products and completed operations aggregate and \$2,000,000 annual aggregate.

2.3.1.1 Coverage shall include Contractual Liability covering liability assumed under this Agreement (including defense costs assumed under contract) within the scope of coverages provided.

2.3.1.2 Coverage shall include Mobile Equipment Liability.

2.3.2 Business Automobile Liability

Contractor shall maintain a minimum limit of \$1,000,000 combined single limit each occurrence for bodily injury and property damage for all owned, leased, hired and/or non-owned vehicles used in performing services under this Agreement.

2.3.2.1 If operating vehicles unescorted airside at DEN, a \$10,000,000 combined single limit each occurrence for bodily injury and property damage is required.

2.3.2.2 If Contractor does not have blanket coverage on all owned and operated vehicles, then a schedule of insured vehicles (including year, make, model and VIN number) must be submitted by the insurer with the Certificate of Insurance.

2.3.2.3 The policy must not contain an exclusion related to operations on airport premises.

2.3.2.4 If transporting waste, hazardous material, or regulated substances, Contractor shall carry a Broadened Pollution Endorsement and an MCS 90 endorsement on its policy.

2.3.2.5 If Contractor is an individual or represents that Contractor does not own any motor vehicles and Contractor's owners, officers, directors, and employees use their personal vehicles for business purposes, Personal Automobile Liability insurance coverage will be accepted provided it includes a business use endorsement.

2.3.2.6 If Contractor will be completing all services to DEN under this Agreement remotely this requirement will be waived.

2.3.3 Workers' Compensation and Employer's Liability Insurance

Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits no less than \$1,000,000 per occurrence for each bodily injury claim, \$1,000,000 per occurrence for each bodily injury caused by disease claim, and \$1,000,000 aggregate for all bodily injuries caused by disease claims.

2.3.3.1 If Contractor is a sole proprietor, Workers' Compensation and Employer's Liability is exempt under the Colorado Workers' Compensation Act.

2.3.4 Professional Liability (Errors and Omissions) Insurance

Contractor shall maintain a minimum limit of \$1,000,000 each claim and policy aggregate, providing coverage for applicable services outlined in this Agreement. If there are no applicable professional services, this coverage will not be required.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

2.3.5 Contractor's Pollution Legal Liability

If required by DEN Risk Management for any specific Excluded Party based on their scope of work, Contractor shall maintain coverage for its work site operations that are conducted on DEN's premises including project management and site supervision duties with a limit no less than \$1,000,000 each occurrence and aggregate resulting from claims arising out of a pollution condition or site environmental condition resulting out of work site operations on DEN's premises.

2.3.5.1 Coverage shall include claims/losses for bodily injury, property damage including loss of use of damaged property, defense costs including costs and expenses incurred in the investigation, defense or settlement of claims, and cleanup cost for pollution conditions resulting from illicit abandonment, the discharge, dispersal, release, escape, migration or seepage of any solid, liquid, gaseous or thermal irritant, contaminant, or pollutant, including soil, silt, sedimentation, smoke, soot, vapors, fumes, acids, alkalis, chemicals, electromagnetic fields, hazardous substances, hazardous materials, waste materials, low level radioactive waste, mixed wastes, on, in, into, or upon land and structures thereupon, the atmosphere, surface water or groundwater on the DEN premises.

2.3.5.2 Work site means a location where covered operations are being performed, including real property rented or leased from DEN for the purpose of conducting Contractor's covered operations.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

2.3.6 Technology Errors and Omissions, Network Security, and Privacy Liability (Cyber):

If required by DEN Risk Management for any specific Excluded Party based on their scope of work, Contractor shall maintain a limit no less than \$1,000,000 each claim and aggregate; \$1,000,000 each claim and aggregate for cyber extortion; and no less than \$250,000 each claim for invoice manipulation and email spoofing.

2.3.6.1 Coverage shall include professional misconduct or lack of ordinary skill.

2.3.6.2 Coverage shall include, but not be limited to, liability arising from theft, dissemination and/or use of personal, private, confidential, information subject to a non-disclosure agreement, including information stored or transmitted, privacy or cyber laws, damage to or destruction of information, intentional and/or unintentional release of private information, alteration of information, extortion and network security, introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon, advertising injury, personal injury (including invasion of privacy) and intellectual property offenses related to internet.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

2.3.7 Unmanned Aerial Vehicle (UAV) Liability

If Contractor desires to use drones in any aspect of its work on DEN premises, the following requirements must be met prior to commencing any drone operations:

- 2.3.7.1 Express written permission must be granted by DEN.
- 2.3.7.2 Express written permission must be granted by the Federal Aviation Administration (FAA).
- 2.3.7.3 Drone equipment must be properly registered with the FAA.
- 2.3.7.4 Drone operator(s) must be properly licensed by the FAA.
- 2.3.7.5 Contractor must maintain UAV Liability including flight coverage, personal and advertising injury liability, and hired/non-owned UAV liability for its commercial drone operations with a limit no less than \$1,000,000 combined single limit each occurrence for bodily injury and property damage.

2.3.8 Excess/Umbrella Liability

Combination of primary and excess coverage may be used to achieve minimum required coverage limits. Excess/Umbrella policy(ies) must follow form of the primary policies with which they are related to provide the minimum limits and be verified as such on any submitted Certificate of Insurance.

2.4 Reference to Project and/or Contract

The DEN Project and/or Contract Number and project description shall be noted on the Certificate of Insurance.

2.5 Additional Insured

For all coverages required under this Agreement (excluding Workers' Compensation and Professional Liability), Contractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers as Additional Insureds by policy endorsement.

2.6 Waiver of Subrogation

For all coverages required under this Agreement, Contractor's insurer(s) shall waive subrogation rights against the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers by policy endorsement.

2.7 Notice of Material Change, Cancellation or Nonrenewal

Each certificate and related policy shall contain a valid provision requiring notification to the Certificate Holder in the event any of the required policies be canceled or non-renewed or reduction in coverage before the expiration date thereof.

- 2.7.1 Such notice shall reference the DEN assigned contract number related to this Agreement.
- 2.7.2 Said notice shall be sent thirty (30) days prior to such cancellation, non-renewal or reduction in coverage unless due to non-payment of premiums for which notice shall be sent ten (10) days prior.
- 2.7.3 If such written notice is unavailable from the insurer or afforded as outlined above, Contractor and/or its insurance broker/agent shall provide written notice of cancellation, non-renewal and

any reduction in coverage to the Certificate Holder within seven (7) business days of receiving such notice by its insurer(s) and include documentation of the formal notice received from its insurer(s) as verification. Contractor shall replace cancelled or nonrenewed policies with no lapse in coverage and provide an updated Certificate of Insurance to DEN.

2.8 Additional Provisions

- 2.8.1 Deductibles, SIRS, or any other type of retention are the sole responsibility of the Contractor.
- 2.8.2 Defense costs shall be in addition to the limits of liability. If this provision is unavailable that limitation must be evidenced on the Certificate of Insurance.
- 2.8.3 A severability of interests or separation of insureds provision (no insured vs. insured exclusion) is included under any policy requiring Additional Insured status.
- 2.8.4 A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by DEN, excluding Professional Liability and Workers' Compensation policies, if required.
- 2.8.5 The insurance requirements under this Agreement shall be the greater of (i) the minimum limits and coverage specified hereunder or (ii) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the Contractor. It is agreed that the insurance requirements set forth herein shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums set forth in this Agreement.
- 2.8.6 All policies shall be written on an occurrence form when available and industry norm. If an occurrence form is unavailable and/or the industry norm, claims-made coverage may be accepted by DEN provided the retroactive date is on or before the Agreement Effective Date or the first date when any goods or services were provided to DEN, whichever is earlier, and continuous coverage will be maintained or an extended discovery period of three years beginning at the time work under this Agreement is completed or the Agreement is terminated, whichever is later.
- 2.8.7 Contractor shall advise DEN in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.
- 2.8.8 Certificates of Insurance must specify the issuing companies, policy numbers and policy periods for each required form of coverage. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf and must be submitted to DEN at the time Contractor signed this Agreement.
- 2.8.9 The insurance shall be underwritten by an insurer licensed or authorized to do business in the State of Colorado and rated by A.M. Best Company as A- VIII or better.
- 2.8.10 Certificate of Insurance and Related Endorsements: DEN's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of DEN's rights or remedies under this Agreement. DEN's acceptance of any submitted insurance certificate is subject to the approval of DEN Risk Management. All coverage requirements specified in the certificate shall be enforced unless waived or otherwise modified in writing by DEN Risk Management. Contractor is solely responsible for ensuring all formal policy endorsements are issued by their insurers to support the requirements herein.
- 2.8.11 DEN shall have the right to verify or confirm, at any time, all coverage, information or representations, and the insured and its undersigned agent shall promptly and fully cooperate in any such audit DEN may elect to undertake including provision of certified copies of insurance policies upon request.
- 2.8.12 No material changes that negatively impact DEN or reductions in the coverage required herein shall be allowed without the review and written approval of DEN Risk Management.

3. Insurance Requirements for ROCIP Enrolled Contractors and Subcontractors

3.1 Insurance Provided by the DEN ROCIP

DEN retains the right to have this Project insured under a ROCIP. ROCIP coverage shall provide: (i) Commercial General Liability, (ii) Workers' Compensation & Employer's Liability, (iii) Excess Liability, (iv) Contractor's Pollution Liability, and (v) Builder's Risk as outlined herein and as defined by the respective policies for each coverage, for the period from the start of Work through completion and final acceptance by DEN except as otherwise provided herein.

3.2 Enrollment Required

Parties performing labor or services at the Project Site are eligible to enroll in the DEN ROCIP, unless they are Excluded Parties (as defined in Section 7). Participation is mandatory but not automatic. Parties eligible for enrollment shall follow the procedures and follow the instructions as provided in the DEN ROCIP Insurance Manual to enroll in the program. When the Contractor and subcontractors of any tier are properly enrolled, the DEN ROCIP Administrator will issue a Certificate of Insurance evidencing the coverages afforded to each Enrolled Party under the DEN ROCIP, prior to their commencing Work on the Project Site.

3.3 Exclusion of Contractor/Subcontractor Insurance Costs from Proposal and Bid Prices

Contractor shall exclude from Contractor's cost of work and ensure that each subcontractor of any tier exclude from their cost of work, normal costs for insurance for those coverages provided under the DEN ROCIP. As part of the enrollment process, Contractor and subcontractors shall provide policy declaration rate pages and deductible endorsements on the General Liability, Workers' Compensation, and Excess Liability policies as required in the DEN ROCIP Insurance Manual. The calculation of these costs will be determined by the ROCIP Program Administrator. The costs of DEN ROCIP coverage includes reductions in insurance premiums, all relevant taxes and assessments, markup on insurance premiums, and losses retained through large deductibles, self-insured retentions, or self-funded programs. Change orders shall also exclude the cost of ROCIP coverage.

Pre-employment substance abuse testing costs will be covered by DEN and should be removed from bid prices. Drug testing will be more thoroughly discussed in the ROCIP Safety Manual.

3.4 Insurance Premiums

DEN will pay the insurance premiums for the DEN ROCIP insurance policies. DEN is responsible for all adjustments to the premiums and will be the sole beneficiary of all dividends, retroactive adjustments, return premiums, and any other monies due through audits or otherwise. The Contractor assigns to DEN the right to receive all such adjustments and will require that each subcontractor of any tier assign to DEN all such adjustments. The Contractor and the subcontractors who are Enrolled Parties shall execute such further documentation as may be required by DEN to accomplish this assignment.

3.5 Off Site Operations Coverage Under ROCIP

The DEN ROCIP will provide certain insurance coverage for DEN, Contractor and Enrolled Parties, along with their Eligible Employees performing Work at the Project Site. Off-site operations shall be covered only if designated in writing by DEN and when all operations at such site are identified and solely dedicated to the Project. Contractors and subcontractors are responsible to notify the DEN ROCIP Administrator in writing, to request coverage for specified off-site operations. Coverage is not provided at the off-site location unless confirmed in writing by the DEN ROCIP Administrator.

3.6 DEN ROCIP Insurance Manual

As soon as practicable, the DEN ROCIP Insurance Manual will be sent to each Enrolled Party and will become a part of the Contract and Contractor's Subcontract with its subcontractor and its subcontractors' agreements with any lower-tier subcontractor. The DEN ROCIP Insurance Manual will contain the

administrative and claim reporting procedures. Contractor agrees to and will require that its subcontractors of any tier to cooperate with the DEN ROCIP Administrator in providing all required information.

3.7 Conflicts

Descriptions of the DEN ROCIP coverages set forth in Section 3.8 are not intended to be complete or meant to alter or amend any provision of the DEN ROCIP insurance policies. The DEN ROCIP coverages, terms, conditions, and exclusions are set forth in full in their respective policy forms. In the event of a conflict or omission between the coverages provided in the DEN ROCIP insurance policies and the coverages summarized or described in the DEN ROCIP Insurance Manual, this Exhibit or elsewhere in the Contract Documents, the DEN ROCIP insurance policies shall govern. In the event of a conflict between the provisions of this Exhibit and the DEN ROCIP Insurance Manual, that does not involve any conflict with the provisions of the DEN ROCIP insurance policies, the provisions of this Exhibit shall govern.

3.8 ROCIP Insurance Coverage Provided to Enrolled Parties

3.8.1 Insurance Provided by DEN

Unless otherwise provided herein, prior to commencement of the Work, DEN, at its sole option and expense, shall secure and maintain at all times during the performance of this Contract the insurance specified below, insuring DEN, Enrolled Parties and such other persons or interests as DEN may designate with limits not less than those specified below for each coverage.

3.8.1.1 Workers' Compensation & Employer's Liability – On Site Only

DEN shall maintain the coverage as required by statute for the Project Site and shall maintain Employer's Liability insurance with limits no less than \$1,000,000 per occurrence for each bodily injury claim, \$1,000,000 per occurrence for each bodily injury caused by disease claim, and \$1,000,000 aggregate for all bodily injuries caused by disease claims.

3.8.1.2 Commercial General Liability – On Site Only

DEN shall maintain insurance coverage including bodily injury, property damage, personal injury, advertising injury, and products and completed operations in minimum limits as listed below:

Coverage	Limit
Annual General Aggregate (Per Project and Reinstates Annually)	\$4,000,000
Products/Completed Operations Aggregate (Per Project and Statute of Repose)	\$4,000,000
Total Products/Completed Operations Aggregate (Statute of Repose)	\$8,000,000
Personal / Advertising Injury Limit	\$2,000,000
Each Occurrence Limit	\$2,000,000
Fire Damage Legal Liability (any one fire)	\$ 300,000
Medical Payments (any one person)	\$ 10,000

3.8.1.3 Excess Liability Insurance

DEN shall maintain coverage following form with underlying policies of

Commercial General Liability and Employer's Liability in minimum limits as listed below:

Coverage	Limit
Annual General Aggregate (Per Project and Reinstates Annually)	\$200,000,000
Products/Completed Operations Aggregate (Per Project)	\$200,000,000
Total Products/Completed Operations Aggregate (Policy Cap)	\$400,000,000
Each Occurrence Limit	\$200,000,000

DEN, in its sole discretion, may elect to provide higher limits, based on Project size. Excess Liability limits are shared by all Insured parties.

3.8.1.4 Contractor's Pollution Liability

DEN shall maintain coverage for bodily injury, property damage, or environmental damage caused by a pollution event resulting from covered operations, including completed operations, at the Project Site with a limit no less than \$10,000,000 each occurrence and aggregate. Coverage includes microbial matter and legionella pneumophila in any structure on land and the atmosphere contained with the structure. Products/Completed Operations coverage may extend for the statute of limitations/repose after final completion of the Project.

3.8.1.5 Builder's Risk Insurance

DEN shall maintain, Builder's Risk (and/or Installation Floater) in the amount of \$500,000,000 per occurrence subject to various sublimits (as defined in the Builders' Risk Policy). Such insurance shall end when the first of the following occurs: 1) DEN's interest in the Work ceases; 2) the policy expires or is cancelled; or 3) the Work is accepted by DEN.

Builder's Risk Insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss of damage including , theft, vandalism, malicious mischief, terrorism, rigging and hoisting for materials and equipment that are part of the Project, collapse, earthquake, flood, windstorm, falsework, testing and startup (as provided by the policy), temporary buildings and debris removal including demolition occasioned by enforcement of any applicable ordinance laws, and shall cover reasonable compensation for services and expenses required as a result of such insured loss.

This Builder's Risk Insurance shall cover portions of the Work stored off site, and also portions of the Work in transit.

DEN and Contractor shall waive all rights against (1) each other and any of their subcontractors of any tier, and all respective agents and employees, and (2) the architect, architect's consultants, separate contractors, if any, and any of their subcontractors of any tier, and all respective agents and employees, for damages caused by fire or other causes of loss to the extent covered by Builder's Risk Insurance obtained pursuant to this Section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by DEN as fiduciary. DEN or Contractor, as appropriate, shall require of the architect,

architect's consultants, separate contractors, and their subcontractors of any tier, and all respective agents and employees, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

3.8.2 Claim Chargeback

A claim charge-back will be assessed, regardless of fault, for the amount of any loss payable under this program with the exception of Workers' Compensation and Excess Liability, up to a maximum of \$25,000 each loss. Lead Contractor may elect to pass no more than \$5,000 of this charge, each loss, through to any responsible subcontractor.

3.9 Other Insurance Provided By Enrolled Parties

At their own expense, the Enrolled Parties of all tiers must carry the following minimum coverage and limits and such insurance shall be evidenced to DEN and the DEN ROCIP Administrator as required in this Section 3.9.

3.9.1 Certificate Holder

Certificate(s) shall be issued to: CITY AND COUNTY OF DENVER
Denver International Airport
8500 Peña Boulevard, Suite 8810
Denver CO 80249
Attn: Risk Management

and

CITY AND COUNTY OF DENVER
Department of Aviation
c/o Arthur J. Gallagher RMS, Inc.
12444 Powerscourt Drive
St. Louis, MO 63131
Attn: Gallagher OCIP Group

3.9.2 Acceptable Certificate of Insurance Form and Submission Instructions

Please read these requirements carefully to ensure proper documentation and receipt of your certificate(s) of insurance.

- ACORD FORM (or equivalent) must be emailed in pdf format to:
contractadmininvoices@flydenver.com
and heather_lawson@ajg.com
- HARD COPIES of certificates and/or copies of insurance policies will not be accepted.
- ACORD FORM (or equivalent) must reference the DEN assigned Contract Number.

3.9.3 Commercial General Liability – Off Site Only

Contractor shall maintain insurance coverage including bodily injury, property damage, personal injury, advertising injury, and products and completed operations for Contract operations not physically occurring within the Project Site in minimum limits of \$1,000,000 each occurrence,

\$2,000,000 products and completed operations aggregate and \$2,000,000 policy and annual aggregate.

- 3.9.3.1 Coverage shall include Contractual Liability covering liability assumed under this Agreement (including defense costs assumed under contract) within the scope of coverages provided.

3.9.4 Business Automobile Liability

Contractor shall maintain a minimum limit of \$1,000,000 combined single limit each occurrence for bodily injury and property damage for all owned, leased, hired and/or non-owned vehicles used in performing services under this Agreement.

- 3.9.4.1 If operating vehicles unescorted airside at DEN, a \$10,000,000 combined single limit each occurrence for bodily injury and property damage is required.
- 3.9.4.2 If Contractor does not have blanket coverage on all owned and operated vehicles, then a schedule of insured vehicles (including year, make, model and VIN number) must be submitted by the insurer with the Certificate of Insurance.
- 3.9.4.3 The policy must not contain an exclusion related to operations on airport premises.
- 3.9.4.4 If transporting waste, hazardous material, or regulated substances, Contractor shall carry a pollution coverage endorsement and an MCS 90 endorsement on its policy.
- 3.9.4.5 If Contractor is an individual or represents that Contractor does not own any motor vehicles and Contractor's owners, officers, directors, and employees use their personal vehicles for business purposes, Personal Automobile Liability insurance coverage will be accepted provided it includes a business use endorsement.
- 3.9.4.6 If Contractor will be completing all services to DEN under this Agreement remotely this requirement will be waived.

3.9.5 Workers' Compensation and Employer's Liability Insurance – Off Site Only

Coverage to protect Contractor/Subcontractor from and against all claims arising from performance of Work outside the Project Site under the Contract.

Contractor shall maintain the coverage as required by statute for performance of Work outside the Project Site under the Contract and shall maintain Employer's Liability insurance with limits no less than \$1,000,000 per occurrence for each bodily injury claim, \$1,000,000 per occurrence for each bodily injury caused by disease claim, and \$1,000,000 aggregate for all bodily injuries caused by disease claims.

- 3.9.5.1 If Contractor is a sole proprietor, Workers' Compensation and Employer's Liability is exempt under the Colorado Workers' Compensation Act.

3.9.6 Professional Liability (Errors and Omissions) Insurance

Contractor shall maintain a minimum limit of \$1,000,000 each claim and policy aggregate, providing coverage for applicable services outlined in this Agreement.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

3.9.7 Technology Errors and Omissions, Network Security, and Privacy Liability (Cyber):

Contractor shall maintain a limit no less than \$1,000,000 each claim and aggregate; \$1,000,000 each claim and aggregate for cyber extortion; and no less than \$250,000 each claim for invoice manipulation and email spoofing for applicable services outlined in this Agreement.

- 3.9.7.1 Coverage shall include professional misconduct or lack of ordinary skill.
- 3.9.7.2 Coverage shall include, but not be limited to, liability arising from theft, dissemination and/or use of personal, private, confidential, information subject to a non-disclosure agreement, including information stored or transmitted, privacy or cyber laws, damage to or destruction of information, intentional and/or unintentional release of private information, alteration of information, extortion and network security, introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon, advertising injury, personal injury (including invasion of privacy) and intellectual property offenses related to internet.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

3.9.8 Excess/Umbrella Liability:

Combination of primary and excess coverage may be used to achieve minimum required coverage limits. Excess/Umbrella policy(ies) must follow form of the primary policies with which they are related to provide the minimum limits and be verified as such on any submitted Certificate of Insurance.

3.9.9 Reference to Project and/or Contract

The DEN Project and/or Contract Number and project description shall be noted on the Certificate of Insurance.

3.9.10 Additional Insured

For all coverages required under this Agreement (excluding Workers' Compensation and Professional Liability), Contractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers as Additional Insureds by policy endorsement.

3.9.11 Waiver of Subrogation

For all coverages required under this Agreement, Contractor's insurer(s) shall waive subrogation rights against the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers by policy endorsement.

3.9.12 Notice of Material Change, Cancellation or Nonrenewal

Each certificate and related policy shall contain a valid provision requiring notification to the Certificate Holder in the event any of the required policies be canceled or non-renewed or reduction in coverage from the requirements herein before the expiration date thereof.

- 3.9.12.1 Such notice shall reference the DEN assigned contract number related to this Agreement.
- 3.9.12.2 Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal or reduction in coverage unless due to non-payment of premiums for which notice shall be sent ten (10) days prior.
- 3.9.12.3 If such written notice is unavailable from the insurer, and in any event, Contractor and/or its insurance broker/agent shall provide written notice of cancellation, non-

renewal and any reduction in coverage to the Certificate Holder within seven (7) business days of receiving such notice by its insurer(s) and include documentation of the formal notice received from its insurer(s) as verification. Contractor shall replace cancelled or nonrenewed policies with no lapse in coverage and provide an updated Certificate of Insurance to DEN.

3.9.13 Additional Provisions

- 3.9.13.1 Deductibles, SIRS, or any other type of retention are the sole responsibility of the policyholder.
- 3.9.13.2 Defense costs shall be in addition to the limits of liability. If this provision is unavailable that limitation must be evidenced on the Certificate of Insurance.
- 3.9.13.3 A severability of interests or separation of insureds provision (no insured vs. insured exclusion) is included under any policy requiring Additional Insured status.
- 3.9.13.4 A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by DEN, excluding Professional Liability and Workers' Compensation policies, if required.
- 3.9.13.5 The insurance requirements under this Agreement shall be the greater of (i) the minimum limits and coverage specified hereunder or (ii) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the Contractor. It is agreed that the insurance requirements set forth herein shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums set forth in this Agreement.
- 3.9.13.6 All policies shall be written on an occurrence form when available and industry norm. If an occurrence form is unavailable and/or the industry norm, claims-made coverage may be accepted by DEN provided the retroactive date is on or before the Agreement Effective Date or the first date when any goods or services were provided to DEN, whichever is earlier, and continuous coverage will be maintained or an extended discovery period of three years beginning at the time work under this Agreement is completed or the Agreement is terminated, whichever is later.
- 3.9.13.7 Contractor shall advise DEN in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.
- 3.9.13.8 Certificates of Insurance must specify the issuing companies, policy numbers and policy periods for each required form of coverage. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf and must be submitted to DEN at the time Contractor signed this Agreement.
- 3.9.13.9 The insurance shall be underwritten by an insurer licensed or authorized to do business in the State of Colorado and rated by A.M. Best Company as A- VIII or better.
- 3.9.13.10 Certificate of Insurance and Related Endorsements: DEN's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of DEN's rights or remedies under this Agreement. DEN's acceptance of any submitted insurance certificate is subject to the approval of DEN Risk Management. All coverage requirements specified in the certificate shall be enforced unless waived or otherwise modified in writing by DEN Risk Management. Contractor is solely responsible for ensuring all formal policy endorsements are issued by their insurers to support the requirements herein.
- 3.9.13.11 DEN shall have the right to verify or confirm, at any time, all coverage, information or representations, and the insured and its undersigned agent shall promptly and

fully cooperate in any such audit DEN may elect to undertake including provision of certified copies of insurance policies upon request.

- 3.9.13.12 No material changes that negatively impact DEN or reductions in the coverage required herein shall be allowed without the review and written approval of DEN Risk Management.

4. Contractor Warranties and Agreements

4.1 Accuracy of Contractor-provided Information

Contractor warrants that all information submitted to DEN or the DEN ROCIP Administrator is accurate and complete to the best of its knowledge. Contractor will notify DEN or the DEN ROCIP Administrator immediately in writing of any errors discovered during the performance of the Work.

4.2 Contractor Responsible to Review Coverage

Contractor acknowledges that all references to DEN ROCIP policy terms, conditions, and limits of liability in this document, as well as the DEN ROCIP Insurance Manual, are for reference only. Contractor and its subcontractors of any tier are responsible for conducting their own independent review and analysis of the DEN ROCIP insurance policies in formulating any opinion or belief as to the applicability of such coverage in the event of any loss or potential claim. Any type of insurance or increase of limits not described above, which the Contractor requires for its own protection or on account of statute, shall be its own responsibility and at its own expense.

4.3 Audit

Contractor agrees to make its records available for review and to cooperate with DEN, its insurers and insurance brokers, the City Auditor, and representatives of the aforesaid parties in the event of an audit. In the event that a DEN audit of Contractor's records, as permitted in the Contract or other DEN ROCIP documents, reveals a discrepancy in the insurance, payroll, safety, or any other information required to be provided to DEN or the DEN ROCIP Administrator, or reveals inclusion of costs for DEN ROCIP coverage or other coverage beyond what is described above in any payment for the Work, DEN will have the right to deduct from payments due Contractor all such insurance costs as well as all audit costs.

4.4 Insurance Costs Removed

Contractor warrants that the costs for insurance as provided under the DEN ROCIP were not included in Contractor's bid or proposal for the Work, the Contract Price/Contract Sum, and will not be included in any change order or any request for payment for the Work or extra work.

5. Contractor Obligations

5.1 ROCIP Documents Shall be Provided to Subcontractor

Contractor shall furnish each bidding subcontractor, vendor, supplier, material dealer or other party a copy of this Exhibit, the DEN ROCIP Insurance Manual and the DEN ROCIP Safety Manual and shall incorporate the terms of this Exhibit in all contracts and agreements entered into for performance of any portion of the Work.

5.2 Timely Enrollment Required

Contractor shall enroll in the DEN ROCIP within five (5) business days following a request by DEN or the DEN ROCIP Administrator. Contractor shall notify each subcontractor of the process for enrolling in DEN ROCIP and confirm that enrollment is mandatory, but not automatic. Contractor shall assure that subcontractors of any tier shall not commence Work until verification of enrollment is confirmed by the

DEN ROCIP Administrator by the issuance of a Certificate of Insurance to each individual Enrolled Party.

5.3 Compliance with Conditions

Contractor shall not violate any condition of the policies of insurance provided by DEN under the terms of this Exhibit, the DEN ROCIP Insurance Manual or the DEN ROCIP Safety Manual. All requirements imposed by the subject policies and to be performed by Contractor shall likewise be imposed on, assumed, and performed by each subcontractor of any tier.

5.4 Claims Cooperation

Contractor shall participate in claim reporting procedures. Contractor agrees to assist and cooperate in every manner possible in connection with the adjustment of all claims arising out of operations within the scope of the Work required by the Contract, and to cooperate with DEN's insurer(s) in all claims and demands which DEN's insurer(s) is called upon to adjust or to defend against. Contractor shall take all necessary action to assure that its subcontractors of any tier comply with any request for assistance and cooperation. This obligation includes, without limitation, providing light or modified duty for injured workers, appearing in mediation, arbitration or court proceedings and/or participating in settlement meetings, as may be required.

5.5 Monthly Payroll Submission

All Enrolled Parties shall submit monthly payrolls and worker-hour reports to DEN and/or the DEN ROCIP Administrator via the DEN ROCIP Administrator's online reporting system as outlined in the DEN ROCIP Insurance Manual. The online reporting instructions will be provided to all Contractors at time of enrollment. Failure to submit these reports may result in funds being held or delayed from monthly progress payments. Payroll must be submitted online for each month, including zero (0) payroll, if applicable, until completion of the Work under each Contract and Subcontract. For subcontractors of any tier performing Work under multiple Subcontracts, a separate payroll report is required for each Subcontract under which Work is being performed.

5.6 Response to Information Requests

All insurance underwriting, payroll, rating or loss history information requested by DEN or the DEN ROCIP Administrator shall be provided by the Contractor within three (3) business days of request. Contractor agrees (and will require each subcontractor to agree) that DEN, DEN's insurers or its representative may audit the Contractor's records or records of subcontractors of any tier to confirm the accuracy of all insurance information provided including, without limitation, any such information that may have any effect on insurance resulting from changes in the Work. At all times during performance of the Contract and Subcontracts, the Contractor and subcontractors of any tier shall cooperate with DEN, the DEN ROCIP Administrator and DEN's insurers.

5.7 Responsibility for Safety

Notwithstanding the DEN ROCIP, the Contractor shall initiate, maintain and supervise all safety precautions and programs in connection with the Work. Contractor is solely responsible, at no adjustment to the contract sum payable or contract time, for initiating, maintaining, and supervising all safety precautions and programs relating to the conduct of Work including, without limitation, any safety programs or procedures that are required by any applicable state or federal laws, rules or regulations, or under the terms of the DEN ROCIP Safety Manual.

5.8 Duty of Care

Nothing herein shall relieve the Enrolled Parties of their respective obligations to exercise due care in the

performance of their duties in connection with the Work or to complete the Work in strict compliance with this Contract and subsequent subcontracts.

6. Notices and Costs

6.1 Limitations on DEN Provided Coverage and DEN Right to Purchase Other Coverage

DEN assumes no obligations to provide insurance other than that evidenced by the policies referred to in Section 3.8. DEN, however, reserves the right to furnish insurance coverage of various types and limits provided that such coverage shall not be less than that specified in Section 3.8 and the costs of such insurance shall be paid by DEN. Apart from the DEN ROCIP, DEN may at its option purchase additional insurance coverages that insure the Project that may not necessarily insure the Contractor or the subcontractors. Without limitation, examples of such coverage may include pollution liability, excess professional liability, and excess automobile liability insurance.

6.2 Contractors Responsible for Own Equipment

Contractor and subcontractors are solely responsible for loss or damage of all construction tools and other equipment whether owned, leased, rented, borrowed or used on Work at the Project Site. If an individual Enrolled Party purchases insurance on their tools and equipment, such insurance shall contain a waiver of subrogation in favor of the City and County of Denver, its elected and appointed officials, agents, employees and volunteers and all other Enrolled Parties. If an individual Enrolled Party does not purchase such insurance, that Enrolled Party will hold harmless the City and County of Denver, its elected and appointed officials, agents, employees and volunteers and other Enrolled Parties for loss or damage to its tools and equipment.

6.3 No Release; No Waiver of Immunity

The provision of the DEN ROCIP shall in no way be interpreted as relieving Contractor or subcontractors of any tier of any responsibility or liability under the Contract Documents, the DEN ROCIP insurance policies or applicable laws including, without limitation, Contractor's and subcontractor's responsibilities relative to indemnification and their obligation to exercise due care in the performance of the Work and to complete the Work in strict compliance with the Contract Documents. The parties hereto understand and agree that the City and County of Denver, its elected and appointed officials, agents, employees and volunteers are relying on, and do not waive or intend to waive by any provisions of this agreement, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §§ 24-10-101 to 120, C.R.S., or otherwise available to DEN, its officers, officials and employees.

6.4 DEN Right to Withhold Payments

In addition to any other rights of withholding that DEN may have under the Contract Documents, DEN has the right to withhold any payments otherwise due to Contractor in the event of a failure by Contractor or any subcontractor to comply with the requirements of this Exhibit, the DEN ROCIP Insurance Manual or the DEN ROCIP Safety Manual. DEN may withhold from any payment owing to Contractor the costs of DEN ROCIP coverages if included in a request for payment. Such withholding by DEN shall not be deemed to be a default under the Contract. DEN shall withhold from Contractor the costs of DEN ROCIP coverages attributable to an increase in an Enrolled Party's total payroll for the Work over the amount reported to DEN and/or the DEN ROCIP Administrator at time of enrollment.

6.5 DEN Remedies

Without limitation upon any of DEN's other rights or remedies, any failure of an Enrolled Party to comply with any provision of this Exhibit, the DEN ROCIP Insurance Manual, or the DEN ROCIP Safety Manual shall be deemed a material breach of the Contract, thereby entitling DEN, at its option, upon

notice to Contractor, to (1) suspend performance by Contractor and/or the offending subcontractor, without any adjustment to Contract Sum Payable or Contract Time, until there is full compliance, or (2) terminate this Contract for cause.

6.6 Off Site Storage

Unless otherwise provided in the Contract Documents, the property insurance provided by DEN shall not cover portions of the Work stored off the Site without written approval of DEN. Contractor shall be responsible for reporting such property or work if ownership has been transferred to DEN. If ownership rests with the Contractor, Contractor shall be responsible for obtaining insurance to protect its interests.

6.7 Partial Occupancy

Partial occupancy or use shall not commence until DEN insurer(s) providing Builders Risk and/or Property Insurance have consented to such partial occupancy or use by endorsement or otherwise. DEN and the Contractor shall take reasonable steps to obtain consent of the insurer(s) and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

6.8 DEN Right to Exclude Parties from the DEN ROCIP

DEN reserves the right to exclude any subcontractor from the DEN ROCIP, before or after enrollment by the subcontractor. If DEN elects to exclude a subcontractor from the DEN ROCIP, the Contractor will be responsible for ensuring the insurance coverages outlined in the Contractor's Subcontract Agreement are provided to DEN or the DEN ROCIP Administrator before the subcontractor can begin or resume Work on the Project.

6.9 DEN's Right to Modify or Discontinue DEN ROCIP Coverages

If DEN determines that modification or discontinuation of the DEN ROCIP is in the best interest of DEN, the Contractor and subcontractor will receive sixty (60) days advance written notice to secure and maintain such insurance as is required to provide replacement coverage comparable to that provided under the DEN ROCIP. Provided that the foregoing is not the result of any failure by the Contractor or any subcontractor to comply with the requirements of the Contract Documents, the DEN ROCIP Insurance Manual or DEN ROCIP Safety Manual, the costs of such replacement insurance shall be deemed a cost of Work for which the Contractor shall be entitled to a Contract Adjustment, without any sum added thereto for Allowable Markup. The form, content, limits of liability, cost and the rating of the insurer(s) issuing such replacement coverage shall be subject to DEN's prior written approval.

7. Definitions

Certificate of Insurance:	A document providing evidence of coverage for a particular insurance policy or policies. This will include certificates issued to Enrolled Parties evidencing the coverage afforded under the DEN ROCIP and certificates issued to DEN evidencing additional coverage "Provided by Enrolled Parties"
DEN:	City and County of Denver and Denver International Airport
Contract:	The written agreement between DEN and Contractor describing the Work, contract terms and conditions, or a portion thereof; also includes a written agreement between a Contractor and any subcontractor as well as between subcontractors and their subcontractors of any tier.

- Contractor Insurance Cost: The costs of ROCIP coverage are defined as the amount of Contractor’s and eligible Subcontractors’ of every tier reduction in insurance costs due to participation in the DEN ROCIP.
- Rolling Owner Controlled Insurance Program (ROCIP): A coordinated insurance program providing certain coverage, as defined herein, for DEN, Contractor and Enrolled Subcontractors, along with their Eligible Employees, performing Work at the Project Site.
- Eligible Employees: Employees of the Contractor and Enrolled Subcontractors who are not excluded from the ROCIP under the “Excluded Parties” definition.
- Enrolled Parties: The Contractor and those subcontractors that have submitted all necessary enrollment information and been accepted into the ROCIP as evidenced by the issuance of a Certificate of Insurance.
- Excluded Parties: Parties not covered by the ROCIP because of ineligibility or DEN explicit exclusion. No insurance coverage provided by DEN under the ROCIP shall extend to the activities or products of the following:
- Any person or organization that fabricates or manufactures products, materials or supplies away from a Project Site with no direct onsite installation responsibility
- Exception: The ROCIP Insurer may agree to extend General Liability coverage only if the Lead Contractor has a written contract with the off-site fabricator or manufacturer to provide the pre-fabricated product. To consider extending coverage, the Insurer requires 30 days advance written notice to the ROCIP Administrator with details of the work/product and a copy of the contract between the Lead Contractor and the off-site fabricator or manufacturer. Approval must be obtained from the Insurer before enrolling in the ROCIP for General Liability coverage only.
- Hazardous materials remediation, removal, or transportation companies and their consultants
 - Architects, engineers, surveyors and their consultants
 - Truckers, haulers, material dealers, vendors, suppliers, and others who merely transport, pick up, deliver or carry materials, personnel, parts or equipment or any other items or persons to or from a Project Site
 - Contractors, subcontractors and subconsultants who do not work at a Project Site
 - Employees of an Enrolled Party who either (i) do not work on-site or (ii) occasionally visit a Project Site to make deliveries, pick-up supplies or personnel, to perform supervisory or progress inspections, or for any other reason
 - Day labor employees (individuals working directly for the Contractor and not procured through a third party

Exception: The ROCIP Insurer typically will accept including employees working for a contractor, or employed by temporary staffing agencies or professional employer organizations, as long as those employer-entities are enrolled as subcontractors to supply supplemental workforce.

- Insured:
(liability policies) DEN, Contractor and Enrolled Parties and their Eligible Employees and any other party named in the insurance policies.
- Insurers: Those insurance companies providing the DEN ROCIP coverage. The insurers will be identified on the issued Certificate of Insurance and in the DEN ROCIP Insurance Manual.
- Net Bid: Contractor bids with insurance costs removed because of the obligation of any Enrolled Party to delete insurance costs for coverage provided by the ROCIP from its bid and all change orders. Net bids are subject to verification by the Administrator through the providing of contractors' rate and declaration pages from their Insurance policies.
- ROCIP Administrator: The DEN ROCIP Administrator will be identified in the DEN ROCIP Insurance Manual.
- ROCIP Insurance Manual: A reference document provided to Contractor and subcontractors of all tiers, which summarizes the terms and provisions of the DEN ROCIP and provides information about requirements and compliance.
- ROCIP Safety Manual: A reference document provided to Contractor and subcontractors of all tiers which contains workplace safety requirements of all Enrolled Parties.
- Off Site Work: Work performed away from the Project Site.
- Payroll: For purposes of the ROCIP only, refers to Unburdened Straight Time Payroll per Workers Compensation Class Code.
- Policy Owner: City and County of Denver and Denver International Airport
- Project: The Project as defined in the contract documents and as described in the Declarations of the DEN ROCIP insurance policies.
- Project Site: Means those areas designated in writing by DEN in a Contract document for performance of the Work and such additional areas as may be designated in writing by DEN for Contractors' use in performance of the Work. Subject to the ROCIP Insurer(s) written approval, the term "Project Site" shall also include: (1) field office sites, (2) property used for bonded storage of material for the Project approved by DEN, staging areas dedicated to the Project, and (4) areas where activities incidental to the Project are being performed by Contractor or subcontractors covered by the DEN ROCIP Worker's Compensation policy (if included), but excluding any permanent locations of any Enrolled Party.

Items 1 through 4 above must be approved by the ROCIP Insurer and

listed on the DEN ROCIP insurance policies.

- Subcontract:** The written agreement between Contractor and subcontractor, or between subcontractor and a lower tier subcontractor, describing the Work, subcontract terms and conditions, or a portion thereof.
- Subcontractor:** Includes those persons, firms, joint venture entities, corporations, or other parties that enter into a Subcontract with Contractor to perform Work at the Project Site and any of these subcontractor's lower-tier subcontractors.
- Work:** Operations, as fully described in the Contract and Subcontract, performed at the Project Site.

EXHIBIT D



TO: All Users of the City and County of Denver Prevailing Wage Schedules
FROM: Ryland Feno, Classification & Compensation Technician II
DATE: January 04, 2021
SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised prevailing wage rates for some building, heavy, highway, and residential construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor in accordance with the Davis-Bacon Act.

The effective date for this publication will be **Friday, January 01, 2021** and applies to the City and County of Denver for **HIGHWAY CONSTRUCTION PROJECTS** in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO20210009
Superseded General Decision No. CO20200009
Modification No. 0
Publication Date: 01/01/2021
(6 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor (DOL). The employer and the individual apprentice must be registered in a program which has received prior approval by the DOL. Any employer who employs an apprentice and is found to be in violation of this provision shall be required to pay said apprentice the full journeyman scale.

Attachments as listed above.

***Career Service Board approved to adjust all Davis Bacon classifications under \$13.00 to comply with the city's minimum wage. The effective date is August 15, 2019. See page 7 for reference.**

Office of Human Resources

201 W. Colfax Ave. Dept. 412 | Denver, CO 80202
p: 720.913.5751 | f: 720.913.5720
www.denvergov.org/humanresources

Flatiron Constructors, Inc.
Contract No. 202158849-00

"General Decision Number: CO20210009 01/01/2021

Superseded General Decision Number: CO20200009

State: Colorado

Construction Type: Highway

Counties: Denver and Douglas Counties in Colorado.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021

* CARP9901-008 11/01/2019

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 26.50	10.32

ELEC0068-016 03/01/2011		

	Rates	Fringes
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1.....	\$ 26.42	4.75%+8.68
Zone 2.....	\$ 29.42	4.75%+8.68

TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

- Colorado Springs - Nevada & Bijou
- Denver - Ellsworth Avenue & Broadway
- Ft. Collins - Prospect & College
- Grand Junction - 12th & North Avenue
- Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

 ENGI0009-008 05/01/2018

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
(3)-Hydraulic Backhoe (Wheel Mounted, under 3/4 yds), Hydraulic Backhoe (Backhoe/Loader combination), Drill Rig Caisson (smaller than Watson 2500 and similar), Loader (up to and including 6 cu. yd.).....	\$ 28.25	10.70
(3)-Loader (under 6 cu. yd.) Denver County.....	\$ 28.25	10.70
(3)-Motor Grader (blade- rough) Douglas County.....	\$ 28.25	10.70
(4)-Crane (50 tons and under), Scraper (single bowl, under 40 cu. yd).....	\$ 28.40	10.70
(4)-Loader (over 6 cu. yd) Denver County.....	\$ 28.40	10.70
(5)-Drill Rig Caisson (Watson 2500 similar or larger), Crane (51-90 tons), Scraper (40 cu.yd and over),.....	\$ 28.57	10.70
(5)-Motor Grader (blade- finish)		

Douglas County.....	\$ 28.57	10.70
(6)-Crane (91-140 tons).....	\$ 29.55	10.70

SUCO2011-004 09/15/2011

	Rates	Fringes
CARPENTER (Excludes Form Work)...	\$ 19.27	5.08
CEMENT MASON/CONCRETE FINISHER		
Denver.....	\$ 20.18	5.75
Douglas.....	\$ 18.75	3.00
ELECTRICIAN (Excludes Traffic Signal Installation).....	\$ 35.13	6.83
FENCE ERECTOR (Excludes Link/Cyclone Fence Erection).....	\$ 13.02	3.20
GUARDRAIL INSTALLER.....	\$ 12.89	3.20
HIGHWAY/PARKING LOT STRIPING:Painter		
Denver.....	\$ 12.62	3.21
Douglas.....	\$ 13.89	3.21
IRONWORKER, REINFORCING (Excludes Guardrail Installation).....	\$ 16.69	5.45
IRONWORKER, STRUCTURAL (Includes Link/Cyclone Fence Erection, Excludes Guardrail Installation).....	\$ 18.22	6.01
LABORER		
Asphalt Raker.....	\$ 16.29	4.25
Asphalt Shoveler.....	\$ 21.21	4.25
Asphalt Spreader.....	\$ 18.58	4.65
Common or General		
Denver.....	\$ 16.76	6.77
Douglas.....	\$ 16.29	4.25
Concrete Saw (Hand Held)....	\$ 16.29	6.14
Landscape and Irrigation....	\$ 12.26	3.16
Mason Tender- Cement/Concrete		
Denver.....	\$ 16.96	4.04
Douglas.....	\$ 16.29	4.25
Pipelayer		
Denver.....	\$ 13.55	2.41
Douglas.....	\$ 16.30	2.18
Traffic Control (Flagger)...	\$ 9.55	3.05

Traffic Control (Sets Up/Moves Barrels, Cones, Install Signs, Arrow Boards and Place Stationary Flags) (Excludes Flaggers).....	\$ 12.43	3.22
PAINTER (Spray Only).....	\$ 16.99	2.87
POWER EQUIPMENT OPERATOR:		
Asphalt Laydown		
Denver.....	\$ 22.67	8.72
Douglas.....	\$ 23.67	8.47
Asphalt Paver		
Denver.....	\$ 24.97	6.13
Douglas.....	\$ 25.44	3.50
Asphalt Roller		
Denver.....	\$ 23.13	7.55
Douglas.....	\$ 23.63	6.43
Asphalt Spreader.....	\$ 22.67	8.72
Backhoe/Trackhoe		
Douglas.....	\$ 23.82	6.00
Bobcat/Skid Loader.....	\$ 15.37	4.28
Boom.....	\$ 22.67	8.72
Broom/Sweeper		
Denver.....	\$ 22.47	8.72
Douglas.....	\$ 22.96	8.22
Bulldozer.....	\$ 26.90	5.59
Concrete Pump.....	\$ 21.60	5.21
Drill		
Denver.....	\$ 20.48	4.71
Douglas.....	\$ 20.71	2.66
Forklift.....	\$ 15.91	4.68
Grader/Blade		
Denver.....	\$ 22.67	8.72
Guardrail/Post Driver.....	\$ 16.07	4.41
Loader (Front End)		
Douglas.....	\$ 21.67	8.22
Mechanic		
Denver.....	\$ 22.89	8.72
Douglas.....	\$ 23.88	8.22
Oiler		
Denver.....	\$ 23.73	8.41
Douglas.....	\$ 24.90	7.67
Roller/Compactor (Dirt and Grade Compaction)		
Denver.....	\$ 20.30	5.51
Douglas.....	\$ 22.78	4.86
Rotomill.....	\$ 16.22	4.41
Screed		
Denver.....	\$ 22.67	8.38
Douglas.....	\$ 29.99	1.40

Tractor.....	\$ 13.13	2.95
TRAFFIC SIGNALIZATION:		
Groundsman		
Denver.....	\$ 17.90	3.41
Douglas.....	\$ 18.67	7.17
TRUCK DRIVER		
Distributor		
Denver.....	\$ 17.81	5.82
Douglas.....	\$ 16.98	5.27
Dump Truck		
Denver.....	\$ 15.27	5.27
Douglas.....	\$ 16.39	5.27
Lowboy Truck.....	\$ 17.25	5.27
Mechanic.....	\$ 26.48	3.50
Multi-Purpose Specialty & Hoisting Truck		
Denver.....	\$ 17.49	3.17
Douglas.....	\$ 20.05	2.88
Pickup and Pilot Car		
Denver.....	\$ 14.24	3.77
Douglas.....	\$ 16.43	3.68
Semi/Trailer Truck.....	\$ 18.39	4.13
Truck Mounted Attenuator.....	\$ 12.43	3.22
Water Truck		
Denver.....	\$ 26.27	5.27
Douglas.....	\$ 19.46	2.58

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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**Office of Human Resources
Supplemental Rates
(Specific to the Denver Projects)
Revised 08/21/2019)**

Classification		Base	Fringe
Guard Rail Installer		\$13.00	\$3.20
Highway Parking Lot Striping: Painter		\$13.00	\$3.21
Ironworker (Ornamental)		\$26.05	\$12.00
Laborer	Removal of Asbestos	\$21.03	\$8.55
Laborer (Landscape & Irrigation)		\$13.00	\$3.16
Laborer: Traffic Control (Flagger)		\$13.00	\$3.05
Laborer: Stationary Flags(excludes Flaggers)		\$13.00	\$3.22
Line Construction	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck Crew	\$25.74	\$8.09
Millwright		\$28.00	\$10.00
Pipefitter		\$30.45	\$12.85
Plumber		\$30.19	\$13.55
Power Equipment Operator (Tunnels Above and Below Ground, shafts and raises):	Group 1	\$25.12	\$10.81
	Group 2	\$25.47	\$10.85
	Group 3	\$25.57	\$10.86
	Group 4	\$25.82	\$10.88
	Group 5	\$25.97	\$10.90
	Group 6	\$26.12	\$10.91
	Group 7	\$26.37	\$10.94
Power Equipment Operator	Group 1	\$22.97	\$10.60
	Group 2	\$23.32	\$10.63
	Group 3	\$23.67	\$10.67
	Group 4	\$23.82	\$10.68
	Group 5	\$23.97	\$10.70
	Group 6	\$24.12	\$10.71
	Group 7	\$24.88	\$10.79
Truck Driver	Group 1	\$18.42	\$10.00
	Group 2	\$19.14	\$10.07
	Group 3	\$19.48	\$10.11
	Group 4	\$20.01	\$10.16
	Group 5	\$20.66	\$10.23
	Group 6	\$21.46	\$10.31
Truck Driver: Truck Mounted Attenuator		\$13.00	\$3.22

Go to <http://www.denvergov.org/Auditor> to view the Prevailing Wage Clarification Document for a list of complete classifications used.

EXHIBIT E

V. SPECIAL CONDITIONS

SC-1 CONSTRUCTION CONTRACT GENERAL CONDITIONS

The Construction Contract General Conditions which constitute a part of the Contract Documents are set forth in a separately published document, entitled "City and County of Denver, Department of Aviation and Department of Public Works, Standard Specifications for Construction, General Contract Conditions," 2011 Edition, the Table of Contents to which is bound herein (which may be informally referred to as the Yellow Book). The General Conditions book is available for purchase for \$12.00 per copy at the following locations during the business hours stated, Monday through Friday, excluding holidays:

Office of the Cashier
Wellington E. Webb Municipal Office Building, 2nd Floor
201 West Colfax Avenue
Denver, Colorado, USA 80202
7:30 a.m. to 4:30 p.m.

The General Conditions are also available on the City and County of Denver website at:

<https://www.denvergov.org/content/denvergov/en/contract-administration/contractor-resources/general-contract-conditions.html>

SC-2 DRAWINGS AND SPECIFICATIONS TO BE FURNISHED BY THE CITY

The City will provide the following Contract Documents to the Contractor in electronic format at no expense to the Contractor:

Taxiway EE IFB Drawings
Taxiway EE IFB Division 1 & Division 2 Specs
TW EE Construction Safety and Phasing Plan

Additional copies of the foregoing documents will be furnished to the Contractor at the Contractor's expense. The Contractor will be responsible for supplying all subcontractors with copies of the Contract Documents at its expense.

If Sensitive Security Information ("SSI") is provided to the Contractor, the Contractor shall be required to comply with Department of Aviation, Standard Policies and Procedures No. 6003, "Contractor Protection of Sensitive Security Information," or its successor, and 49 C.F.R. § 1520, or its successor.

The City will not supply any copies of the General Contract Conditions to the Contractor at City expense.

SC-3 REVISIONS TO G.C. 201

The second sentence of General Condition 201 is amended to read: "The unit responsible for this management and control is the Airport Infrastructure Management Office under the supervision of the Senior Vice President for Maintenance and Airport Infrastructure Management."

SC-4 CITY LINE OF AUTHORITY AND CONTACTS

In accordance with General Condition 214, the City's line of authority for administration of this Contract is:

Flatiron Constructors, Inc.
Contract No. 202158849-00

Chief Executive Officer (CEO). Executive Office, 9th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249. Any reference to the Manager of Aviation shall also mean Chief Executive Officer, Department of Aviation (CEO).

Executive Vice President – Chief Operating Officer (EVP-COO) who reports to the CEO. Airport Infrastructure Management office, 9th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249.

Senior Vice President - Airport Infrastructure Management (SVP-AIM) who reports to the COO. Airport Infrastructure Management office, 10th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249.

Director of Infrastructure and Quality Assurance, reports to the SVP-AIM. The Project Manager reports to the Director of Infrastructure and Quality Assurance. Airport Infrastructure Management Division, 7th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249.

Project Manager, the City representative who has day to day administrative responsibility of this Contract, and who reports to the SVP-AIM. All notices, requests, pay applications (pursuant to G.C. 902), and other correspondence from the Contractor shall be sent to the assigned Project Manager unless otherwise provided in this Contract. The Project Manager for this Contract is: Brent Nichols, Airport Infrastructure Management Office, 7th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249, phone 303-342-2200.

The CEO may from time to time substitute a different City official as the designated “SVP-AIM” hereunder, and any such change will be effective upon the issuance of written notice to the Contractor which identifies the successor SVP-AIM. The SVP-AIM may from time to time change the assigned Project Manager, and any such change will be effective upon the issuance of written notice to the Contractor which identifies the successor Project Manager.

SC-5 CONTRACTOR PERFORMANCE; SUBCONTRACTING

With respect to General Condition 501, no more than ninety-five percent (95%) of the work may be subcontracted. If it is determined to be in the City’s best interest, this percentage may be modified throughout the course of the project by the SVP-AIM.

SC-6 COOPERATION WITH OTHERS

The Technical Specifications describe the constraints on the physical work site areas. These descriptions are not exhaustive, and the Contractor is required to coordinate its activities and work as may be required to meet FAA or City requirements while performing work on DEN.

Without limiting the foregoing, the following contracts administered by the City involve or may involve work overlapping or adjoining the Work under this Contract and may be prosecuted concurrently with the Work performed under this Contract. There may also be other adjoining or overlapping contracts which are not listed.

<u>Contract Number</u>	<u>Description</u>
201732479	Runway 8-26 Pavement Rehabilitation
201846271	Runway 17R-35L Pavement Rehabilitation
201952248	Runway 17R-35L Pavement Rehabilitation, Package 2

SC-7 PROSECUTION AND COMPLETION OF THE WORK:

The Work to be performed under the Contract is described in the Technical Specifications and Contract Drawings. The Contractor shall complete the Work within 607 consecutive calendar days from Notice to Proceed.

The Work to be performed under the Contract may be divided into the Milestone Areas which are described in the Technical Specifications or Contract Drawings. The Contractor shall complete the work included within these areas within the number of days set forth by the Project Manager.

	<u>Milestone</u>	<u>Date of Completion (or, days from NTP)</u>
1.	Taxiway M Connection	242 calendar days from NTP
2.	Taxiway L Connection	242 calendar days from NTP
3.	Taxiway ED Connection	607 calendar days from NTP
4.	Substantial completion	607 calendar days from NTP

SC-8 LIQUIDATED DAMAGES

If the Contractor fails to achieve Substantial Completion of the Work within the Contract Time, the Contractor shall be liable to the City for liquidated damages at the rate of Five Thousand Dollars (\$5,000.00) per day until substantial completion is achieved.

	<u>Milestone</u>	<u>Liquidated Damages, per day</u>
1.	Taxiway M Connection	\$5000.00
2.	Taxiway L Connection	\$5000.00
3.	Taxiway ED Connection	\$5000.00
4.	Substantial completion	\$5000.00

Article IV of the Contract and General Condition 602 cover payment and withholding of liquidated damages.

SC-9 FACILITY SECURITY AND PERSONNEL ACCESS

The Contractor shall conduct all its activities at the Airport in compliance with the Airport security system rules and regulations, which are administered by the Airport Operations Division. The Contractor shall obtain the proper access authorizations for its employees, subcontractors and suppliers (i.e., Badges and Permits), and shall be responsible for such persons' compliance with all the Airport rules and regulations. A copy of the Contractors' section of the Airport Security rules and regulations are available for Contractor review at the Airport Access Services Office, Concourse A East Subcore, 4th Level. Persons regularly entering the construction areas must obtain personnel access badges from the Airport Access Services Office and must display badges, at all times, upon entering the construction, restricted and sterile areas of the airport. Any employee, subcontractor or supplier who violates such rules may be subject to revocation of his access authorization, including authorization for access to the construction site and all other restricted and sterile areas.

The security status of the Airport is subject to change without notice. These contract Special Conditions are applicable to the current security status of the Airport. Should the security status of the Airport change at any time during the term of this Contract, a written notice shall be issued to the Contractor detailing all applicable security modifications from the airport's current security status. The Contractor shall take **immediate steps** to comply with those security modifications as directed in the written notice.

If these security modifications involve any additional project cost, the Contractor shall submit a Contractor Change Request in accordance with the General Conditions for the additional cost. The Contractor Change Request shall outline in specific detail the effects of the security modifications on the Contractor's performance of the Contract, and shall provide a detailed cost breakdown for each item for which the Contractor is requesting reimbursement.

The Contractor shall return to the City, at contract completion or termination, or upon demand by the City, all access keys issued to it by the City to all areas of the Airport. If the Contractor fails to return any such key or keys at contract completion or termination or upon demand by the City, the Contractor shall be liable to the City for all the City's costs, including the City's labor costs for employees, incurred in re-coring doors and any other work which is required to prevent compromise of the Airport security system. In order to collect such costs hereunder, the City may withhold funds in such amount from any amounts due and payable to the Contractor under this Contract.

The construction of all the Project / Task Items that involve the breaching of any airport perimeter security boundary or continued access to restricted access rooms or areas will require the posting of authorized contract security personnel to maintain required security controls. The Contractor's Total Contract Bid Amount shall include the cost of providing security services to maintain control and supervision of any and all airport perimeter security boundary breaches and for the duration of work activities where access to restricted areas is required and until the airport perimeter security boundaries are reestablished.

When security boundaries are opened for any reason, the Contractor must maintain one hundred percent (100%) control and supervision for the entire time that the openings are present to prevent unauthorized access to the secure / restricted access areas.

THE IMPORTANCE OF THIS SPECIAL CONDITION CANNOT BE OVER-EMPHASIZED. SEVERE FINANCIAL PENALTIES AS WELL AS CONTRACT TERMINATION COULD RESULT IF AIRPORT PERIMETER SECURITY REQUIREMENTS ARE NOT STRICTLY FOLLOWED. THE REQUIREMENT TO PROVIDE ONE HUNDRED PERCENT (100%) CONTROL AND SUPERVISION OF BREACHES IN THE AIRPORT'S PERIMETER SECURITY BOUNDARY IS ABSOLUTE. AT NO TIME, DURING WORK AND NON-WORK HOURS SHALL ANY BREACHES IN THE AIRPORT'S SECURITY PERIMETER BE UNSUPERVISED AND / OR UNSECURED.

For off-hours of construction, the Contractor may choose to erect a temporary wall to close all perimeter openings. The wall construction shall be of sufficient materials and strength to prevent access to the airport's Sterile/Restricted Areas. The Contractor shall submit for review and approval, the details and materials for the temporary closure of security perimeter breaches for review and approval.

The Contractor will provide contract security guard services to maintain supervision of these openings. The security services must provide coverage to allow for lunch breaks, comfort breaks and etc. The security services **must** be obtained from the following contract security guard company:

HSS
900 S. Broadway, Suite 100
Denver, Colorado 80209

DEN Contact: Glenn Spies
(303) 342-4323

All security guards provided for this project must have a Denver Airport SIDA Badge.

The DEN Security Guard Contractor may change between the bidding or Bid phase of this contract from Notice to Proceed to closure of all security perimeter breaches. The Contractor shall maintain a contractual relationship with the Security Guard Contractor holding the most current contract with Denver International Airport.

The Contractor shall continue to provide security of these areas until such time that the breaches in the airport's security perimeter have been permanently secured.

The Contractor shall submit a written security plan for approval to the Director of Airport Security prior to the start of construction on any work where a breach of the perimeter security boundaries is required.

SC-10 CONSTRUCTION ACCESS

The work site is located east of Taxiway M and north of Taxiway ED. The Contractor shall have access to the work site via Gate 4. The Contractor is responsible for ensuring all of the Contractor's and Subcontractor's personnel have the ability to access and locate the areas of work where the scope is to be performed without additional escorting or supervision from DEN.

The City will not provide parking spaces for the Contractor's employees or subcontractor employees at the Airport. Arrangements for transportation and parking for all of its and its subcontractors' employees will be the responsibility of the Contractor. The Total Contract Bid Amount or Contract Amount shall include any and all costs associated with the Contractor's and subcontractors' employee parking. Information about parking facilities and charges is available from the Airport Parking Office. Refundable deposits are required for all parking passes.

Unless specifically required by the Contract Documents, the Contractor shall install no fences or other physical obstructions on or around any project work area without the approval of the City.

SC-11 VEHICLE PERMITTING

Vehicle access on the Airport Operation Area ("AOA") is controlled by and requires permission from the Airport Access Services Office. It is not anticipated that the Contractor will need to operate vehicles on the AOA to perform the Work. Only direct construction support vehicles and/or equipment will be allowed in the contractor's work areas or sites.

SC-12 VENDORS AND SUPPLIERS

The Contractor shall provide the Project Manager's office with a list of its equipment/material vendors and suppliers. Vendors or suppliers shall access the construction work areas via the Contractor's access route, described in SC-10 above. All delivery vehicles are subject to search.

SC-13 COMMUNICATION DEVICES

Any site communications devices, mobile communication devices or internet data devices used at DEN must be approved by DEN Technologies.

SC-14 USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS

The Contractor and its officers, agents, and employees shall cooperate and comply with the provisions of Executive Order No. 94 and Attachment A thereto concerning the use, possession, or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City's barring the Contractor from City facilities or participating in City operations.

SC-15 ATTORNEYS' FEES

Colorado Revised Statute 38-26-107 requires that in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to the Contractor sufficient funds to insure the payment of any such claims. Should the City and County of Denver be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, Contractor agrees to pay to the City its costs and a reasonable attorney's fee. Because the City Attorney Staff does not bill the City for legal services on an hourly basis, Contractor agrees a reasonable fee shall be computed at the rate of two hundred dollars per hour of City Attorney time.

SC-16 INSURANCE REQUIREMENTS

In accordance with the provisions of Title 16 of the General Conditions, the minimum insurance requirements for this contract are set forth in Section II-14 of the Instructions to Bidders. The Contractor specifically agrees to comply with each condition, requirement or specification set forth in the attachment for each required coverage during all periods when the required coverages are in effect.

Contractor and sub-contractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, required insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or sub-contractors.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.

The City and County of Denver in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees or sub-contractors. The Contractor shall assess its own risks as it deems appropriate and/or prudent, maintain higher limits and/or broader coverages. The Contractor is not relieved of any liability or other obligations assumed or pursuant to the Contract by reason of its failure to obtain or maintain insurance in sufficient amounts, duration or types.

Contractor shall furnish the City and County of Denver with certificates of insurance (ACORD form or equivalent approved by CCD) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure

to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of the Contract. All insurance coverages for sub-contractors shall be subject to the minimum requirements identified in the Exhibit. All sub-contractors' certificates and endorsements shall be received and approved by the Contractor before work commences. The City reserves the right to request copies of these certificates at any time.

All certificates required by this Contract shall be sent directly to ContractAdminInvoices@flydenver.com. The City project/contract number and project description shall be noted on the certificate of insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time.

The parties hereto understand and agree that the City and County of Denver, its officers, officials and employees, are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §§ 24-10-101 - 120, C.R.S., or otherwise available to the City and County of Denver, its officers, officials and employees.

SC-17 SUBCONTRACTOR RELEASES

The release form referred to in General Condition 907 is attached to this Contract. It is entitled "Denver International Airport Partial Release."

SC-18 ADDITIONAL AFFIRMATIVE ACTION REQUIREMENTS, FEDERAL PROVISIONS

This contract is subject and subordinate to the terms, reservations, restrictions, and conditions of any existing or future agreements between the City and the United States, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the City for airport purposes, and the expenditure of federal funds for airport purposes. The "Federal Requirements" section attached hereto is made a part of this Contract.

SC-19 ESTIMATED QUANTITIES OF UNIT PRICED ITEMS

The "total estimated quantity" of each unit price item as stated on the bid schedules shall be the estimated quantity which is used to determine the percentage of change in such item for purposes of G.C. 1104.7.

SC-20 REVISIONS TO G.C. 1102

G.C. 1102.2 is amended by replacing the phrase "Change Request" in all its occurrences in such G.C. with the phrase "Change Notice."

G.C. 1102.3 is amended by replacing the phrase "Field Order/Change Order Directive" in all its occurrences in such G.C. with the phrase "Change Order Directive."

SC-21 LISTING OF ACCEPTABLE MANUFACTURERS

The Technical Specifications list "Acceptable Manufacturers" for certain products. Such listing identifies manufacturers of certain products which have been determined by a preliminary review to be able to meet the basic product and/or system technical requirements. The listing is not intended to provide a blanket endorsement or acceptance of the manufacturer's specified products or product line. All products from listed manufacturers must meet the detailed requirements of the Technical Specifications. Products that do not meet all detailed Technical Specifications are not acceptable and will be rejected, regardless of whether the manufacturer was listed as "acceptable." The Contractor is responsible for determining the acceptability of all products under the Technical Specifications prior to submission of products for

approval.

SC-22 ACCESSIBLE PARKING SPACES, ACCESS AISLES AND ROUTES OF TRAVEL

If any Work is performed in or adjacent to parking facilities at the Airport, the Contractor is responsible for compliance with this SC-30. "Accessible" parking spaces and access aisles as used in this SC-30 mean parking spaces and access aisles which are accessible for, and reserved for use by, persons with disabilities. These parking spaces and access aisles are designed and built to standards established by federal regulations implementing the Americans with Disabilities Act of 1990 ("ADA"), and are marked by signage. "Accessible routes of travel" as used herein means routes through parking facilities which comply with ADA accessibility standards, including degree of slope and absence of obstructions.

Accessible routes of travel and accessible parking spaces and access aisles must be kept free of obstructions and construction debris at all times. No accessible parking spaces or access aisles or accessible routes of travel shall be relocated, blocked or rendered unusable unless the contractor has obtained specific advance approval in writing for such actions from the airport's ADA Compliance Officer.

When prosecution of the Work requires that accessible spaces be temporarily blocked, those accessible spaces and their access aisles shall be temporarily relocated to another location as close as possible to an accessible building entrance. Temporary signage that identifies these parking spaces and access aisles as reserved for the handicapped shall be installed, and the accessible route shall be clearly marked as required.

Before blocking or relocating accessible parking spaces or accessible routes of travel, the contractor must obtain written approval from the DEN ADA Compliance Officer, by submitting a completed request form, which will be provided to the Contractor by the Project Manager at the preconstruction meeting if it is not included as a standard form in Section 019990 of the Technical Specifications. The request shall include the location of alternative spaces and/or routes, and specifications of the temporary signage to be used. Work shall not proceed without this approval.

If a vehicle is parked in any accessible space which is either temporary or approved to be relocated, the contractor will not remove signage or take any other action which would allow the access aisle for such parking space to be blocked. Such actions must be postponed until the parking space is no longer occupied.

SC-23 SUBCONTRACTOR PAYMENTS AND SUBCONTRACTOR RELEASES – REQUIRED USE OF THE B2G CONTRACT MANAGEMENT SYSTEM

The Contractor is required to use the City B2G Contract Management System to report all subcontractor payments and shall adhere to the City's Procedure for Reporting Subcontractor Payments. It is the Contractor's obligation to ensure that complete subcontractor information is entered into the B2G System prior to submission of the first application for payment in order to avoid any delays in payment. The Contractor shall, prior to the submission of each subsequent invoice, ensure payments to subcontractors have been entered into the B2G System, including subcontractor confirmation of amount of payment received, for services performed during the prior billing period.

SC-24 PAYMENTS TO CONTRACTORS

The Contractor recognizes and agrees that applications for payment shall be submitted using the Textura® Payment Management System (PPM System), which will also be the payment mechanism to

disburse payments to sub-contractors used on this Project. For more information, please refer to Division I, Technical Specifications.

The Contractor further agrees that, to the fullest possible within the TPM System, the City shall be entitled to all non-Confidential records, reports, data and other information related to the project that are available to Contractor through the TPM System, including, but not limited to, information related to Contractor and subcontractor billings. To that end, Contractor agrees that it will activate any available settings within the TPM System that are necessary to grant the City access to such non-Confidential information related to the contract and the project. Applications for payment shall be based on the Contract Unit Prices or the approved Schedule of Values described in GC 903.1

In accordance with General Contract Condition 902, PAYMENT PROCEDURE, the party(ies) responsible for review of all Pay Applications shall be:

Agency/Firm

DEN Division CA

DEN Division PM

DEN Division Director

DEN Contract Services CA

CCD Denver Prevailing Wage

In accordance with General Contract Condition 906, APPLICATIONS FOR PAYMENT, each Application submitted shall include the following:

1. The estimate of Work completed shall be based on the approved schedule of values or unit prices, as applicable, and the percent of the Work complete.
2. Each Application for Payment shall include each and every independent subcontractor's payroll information including pay dates and pay amounts.
3. The Contractor shall also submit to the Auditor and other appropriate officials of the City in a timely fashion, information required by General Contract Condition 1004, REPORTING WAGES PAID.

In accordance with General Contract condition 907, RELEASES AND CONTRACTORS CERTIFICATION OF PAYMENT, Applications for Payment must be accompanied by a completed Partial or Final Claim Release Form, as appropriate, from EACH subcontractor and supplier, **AND** the Contractor's Certification of Payment Form.

EXHIBIT F

City and County of Denver



D E N V E R
THE MILE HIGH CITY

**DEPARTMENT OF AVIATION
DEPARTMENT OF PUBLIC WORKS**

**STANDARD SPECIFICATIONS FOR
CONSTRUCTION
GENERAL CONTRACT CONDITIONS**

2011 Edition

Statement

The City and County of Denver does not warrant or represent the accuracy or timeliness of the information contained in this page or any of its constituent pages and the information presented is for instructional purposes and illustration only and is not intended to be specific advice, legal or otherwise. The City has made every effort to provide accurate up-to-date information, however this database is dynamic and errors can occur. The City and County of Denver shall not be held responsible for errors or omissions nor be liable for any special consequential or exemplary damages resulting, in whole or in part, from any viewer(s)' uses of, or in reliance upon, this material.

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EXHIBIT G

Liberty Bond # 015214610
Travelers Bond # 107433031
F&D/Zurich Bond # 9374494
Federal Bond # K40399689
Continental Bond # 30138062
Berkshire Bond # 47-SUR-300033-01-0556

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned Flatiron Constructors, Inc., a corporation organized under the laws of the State of Delaware, hereinafter referred to as the "Contractor" and SEE ATTACHMENT A, a corporation organized under the laws of the State of SEE ATTACHMENT A, and authorized to transact business in the State of Colorado, hereinafter referred to as Surety, are held and firmly bound unto the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereinafter referred to as the "CITY", in the penal sum of FORTY-TWO MILLION, FOUR HUNDRED FIVE THOUSAND, SIX HUNDRED FORTY-THREE AND 90/100 Dollars (\$42,405,643.90) lawful money of the United States of America, for the payment of which sum the Contractor and Surety bind themselves and their heirs, executors, administrators, successors and assigns, jointly and severally by these presents.

WHEREAS, the above Contractor has, as of the date of execution listed on the contract signature page, entered into a written contract with the City for furnishing all labor, materials, equipment, tools, superintendence, and other facilities and accessories for the construction of 202158849, Taxiway EE Construction, Denver International Airport, in accordance with the Technical Specifications, Contract Drawings and all other Contract Documents therefor which are incorporated herein by reference and made a part hereof, and are herein referred to as the Contract.

NOW, THEREFORE, the condition of this performance bond is such that if the Contractor:

1. Promptly and faithfully observes, abides by and performs each and every covenant, condition and part of said Contract, including, but not limited to, its warranty provisions, in the time and manner prescribed in the Contract, and
2. Pays the City all losses, damages (liquidated or actual, including, but not limited to, damages caused by delays in the performance of the Contract), expenses, costs and attorneys' fees, that the City sustains resulting from any breach or default by the Contractor under the Contract, then this bond is void; otherwise, it shall remain in full force and effect.

IN ADDITION, if said Contractor fails to duly pay for any labor, materials, team hire, sustenance, provisions, provender, or any other supplies used or consumed by said Contractor or its subcontractors in its performance of the work contracted to be done or fails to pay any person who supplies rental machinery, tools, or equipment, all amounts due as the result of the use of such machinery, tools, or equipment in the prosecution of the work, the Surety shall pay the same in an amount not exceeding the amount of this obligation, together with interest as provided by law.

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that any and all changes in the Contract or compliance or noncompliance with the formalities in the Contract for making such changes shall not affect the Surety's obligations under this bond and the Surety hereby waives notice of any such changes.

(End of Page)

IN WITNESS WHEREOF, said Contractor and said Surety have executed these presents as of this ____ day of _____, 20_____

Flatiron Constructors, Inc

CONTRACTOR

Attest: [Signature]
Kevin McCormick, Division Finance Manager

By: [Signature]
~~President~~
Grant Johns, District Operations Manager

See Attachment A

SURETY

By: See attachment A
Attorney-in-Fact



(Accompany this bond with Attorney-in-Fact's authority from the Surety to execute bond, certified to include the date of the bond.)

CITY AND COUNTY OF DENVER

By: _____
MAYOR

By: _____
Chief Executive Officer
Denver International Airport

**Signatures by CEO,
CAO and the Mayor
will be provided later
and shall be fully
incorporated herein**

APPROVED AS TO FORM:

KRISTIN M. BRONSON, Attorney for the
City and County of Denver

By: _____
Assistant City Attorney

ATTACHMENT A

BOND NUMBERS:	Liberty Bond No.:	015214610
	Travelers Bond No.:	107433031
	F&D/Zurich Bond No.:	9374494
	Federal Bond No.:	K40399689
	Continental Bond No.:	30138062
	Berkshire Bond No.:	47-SUR-300033-01-0556

Liberty Mutual Insurance Company, a Massachusetts Corporation
Travelers Casualty and Surety Company of America, a Connecticut corporation
Fidelity and Deposit Company of Maryland, a Illinois corporation
Zurich American Insurance Company, a New York corporation
Federal Insurance Company, an Indiana corporation
The Continental Insurance Company, a Pennsylvania Corporation
Berkshire Hathaway Specialty Insurance Company, a Nebraska Corporation

Liberty Mutual Insurance Company – A.M. Best Rating A XV

175 Berkeley Street, Boston, MA 02116

Mailing Address for Notices:

Gretchen Eck, Senior Surety Claims Counsel

2815 Forbs Avenue, Suite 102

Hoffman Estates, IL 60192

Bond No. 015214610

Travelers Casualty and Surety Company of America – A.M. Best Rating A++ XV

Construction Services, One Tower Square, Hartford, CT 06183

Bond No. 107433031

Fidelity and Deposit Company of Maryland

Zurich American Insurance Company - A.M. Best Rating A+ XV

1299 Zurich Way, 5th Floor, Schaumburg, IL 60196

Bond No. 9374494

Federal Insurance Company – A.M. Best Rating A++ XV

202B Hall's Mill Road, Whitehouse Station, NJ 08889

Bond No. K40399689

The Continental Insurance Company – A.M. Best Rating A XV

151 N Franklin Street, Chicago, IL 60606

Bond No. 30138062

Berkshire Hathaway Specialty Insurance Company – A.M. Best Rating A++ XV

1314 Douglas Street, Suite 1400, Omaha, NE 68102

Bond No. 47-SUR-300033-01-0556

By:



Elliott w Wolffe, Attorney-In-Fact

Witness:



John F. Surano



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8206136-974450

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Charo J. Rosemond, Elliott W. Wolffe, James Baldassare, Jr., John F. Surano, Krista A. Burke, Lisa M. Scavetta, Maria L. Spadaccini, Nicholas F. Walsh, Sherryanne M. DePirro

all of the city of Saddle Brook state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 12th day of August, 2021.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey

David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY

On this 12th day of August, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 14th day of September 2021



By: Renee C. Llewellyn

Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.



LIBERTY MUTUAL INSURANCE COMPANY
FINANCIAL STATEMENT — DECEMBER 31, 2020

Assets	Liabilities
Cash and Bank Deposits.....	\$2,058,007,542
*Bonds — U.S Government.....	2,209,760,437
*Other Bonds.....	15,902,755,586
*Stocks.....	18,517,107,230
Real Estate.....	193,169,809
Agents' Balances or Uncollected Premiums.....	6,970,170,469
Accrued Interest and Rents.....	118,399,147
Other Admitted Assets.....	12,079,597,645
Total Admitted Assets	<u>\$58,048,967,865</u>
	Unearned Premiums.....
	\$8,448,706,991
	Reserve for Claims and Claims Expense
	23,879,216,613
	Funds Held Under Reinsurance Treaties.....
	343,068,613
	Reserve for Dividends to Policyholders.....
	1,192,716
	Additional Statutory Reserve
	77,397,000
	Reserve for Commissions, Taxes and
	Other Liabilities
	6,279,510,804
	Total
	<u>\$39,029,092,737</u>
	Special Surplus Funds.....
	\$178,155,102
	Capital Stock.....
	10,000,075
	Paid in Surplus
	10,945,045,214
	Unassigned Surplus.....
	7,886,674,737
	Surplus to Policyholders
	19,019,875,128
	Total Liabilities and Surplus.....
	<u>\$58,048,967,865</u>



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2020, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 25th day of March, 2021.

T. Mikolajewski

Assistant Secretary



Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Elliott W. Wolfe of SADDLE BROOK, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

City of Hartford ss.

By: [Signature] Robert L. Raney, Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026



[Signature] Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 14th day of September 2021



[Signature] Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880. Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA
 HARTFORD, CONNECTICUT 06183
 FINANCIAL STATEMENT AS OF DECEMBER 31, 2020
 CAPITAL STOCK \$ 6,480,000

ASSETS		LIABILITIES & SURPLUS	
CASH AND INVESTED CASH	\$ 239,403,348	UNEARNED PREMIUMS	\$ 1,121,070,380
BONDS	3,831,156,861	LOSSES	1,003,200,666
STOCKS	109,074,035	LOSS ADJUSTMENT EXPENSES	163,346,678
INVESTMENT INCOME DUE AND ACCRUED	36,856,709	COMMISSIONS	40,805,693
OTHER INVESTED ASSETS	4,970,512	TAXES, LICENSES AND FEES	13,561,421
PREMIUM BALANCES	277,653,788	OTHER EXPENSES	42,506,558
NET DEFERRED TAX ASSET	55,188,715	CURRENT FEDERAL AND FOREIGN INCOME TAXES	4,865,484
REINSURANCE RECOVERABLE	32,553,518	REMITTANCES AND ITEMS NOT ALLOCATED	8,646,391
RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES	34,876,347	AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	42,228,250
OTHER ASSETS	4,155,794	POLICYHOLDER DIVIDENDS	12,353,304
		PROVISION FOR REINSURANCE	7,930,280
		ADVANCE PREMIUM	1,867,512
		CEDED REINSURANCE NET PREMIUMS PAYABLE	63,102,972
		RETROACTIVE REINSURANCE RESERVE ASSUMED	800,763
		OTHER ACCRUED EXPENSES AND LIABILITIES	568,668
		TOTAL LIABILITIES	\$2,534,855,020
		CAPITAL STOCK	\$6,480,000
		PAID IN SURPLUS	433,803,760
		OTHER SURPLUS	1,650,750,847
		TOTAL SURPLUS TO POLICYHOLDERS	\$2,091,034,607
TOTAL ASSETS	\$ 4,625,889,627	TOTAL LIABILITIES & SURPLUS	\$4,625,889,627

STATE OF CONNECTICUT)
 COUNTY OF HARTFORD) SS.
 CITY OF HARTFORD)

MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS VICE PRESIDENT - FINANCE, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2020.

Michael J. Doody

 VICE PRESIDENT - FINANCE

SUBSCRIBED AND SWORN TO BEFORE ME THIS
 26TH DAY OF MARCH, 2021

Susan M. Weissleder

 NOTARY PUBLIC

SUSAN M. WEISSLEDER
 Notary Public
 My Commission Expires November 30, 2022



**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by **Robert D. Murray**, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint, **Krista A. BURKE, Charo J. ROSEMOND, Maria L. SPADACCINI, Sherryanne M. DEPIRRO, Nicholas F. WALSH, Lisa M. SCAVETTA, Elliott W. WOLFFE, James BALDASSARE, JR. And John F. SURANO**, of Saddle Brook, New Jersey, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons. The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 28th day of July A.D. 2020.



ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By: *Robert D. Murray*
Vice President

By: *Dawn E. Brown*
Secretary

**State of Maryland
County of Baltimore**

On this 28th day of July, 2020, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2023

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 14th day of September, 2021.



Brian M. Hodges, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

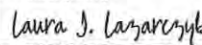
Zurich Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056
www.reportsfclaims@zurichna.com
800-626-4577

ZURICH AMERICAN INSURANCE COMPANY
COMPARATIVE BALANCE SHEET
4 WORLD TRADE CENTER, 150 GREENWICH STREET, NEW YORK, NY 10007
As of December 31, 2020 and December 31, 2019

<u>Assets</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Bonds	\$ 15,696,060,158	\$ 16,780,375,969
Preferred Stock	-	-
Common Stock	2,964,630,407	3,121,559,258
Real Estate	1,294,160,876	1,273,640,596
Other Invested Assets	1,435,120,966	1,185,313,467
Derivatives	178,175	21,358
Short-term Investments	285,002	14,532,665
Receivable for securities	809,339	114,199,089
Cash and cash equivalents	526,475,686	42,548,382
Securities lending reinvested collateral assets	105,614,095	55,769,285
Employee Trust for Deferred Compensation Plan	122,225,149	129,612,266
Total Cash and Invested Assets	<u>\$ 22,145,559,853</u>	<u>\$ 22,717,572,333</u>
Premiums Receivable	\$ 5,318,928,254	\$ 4,775,851,073
Funds Held with Reinsurers	99,875	97,862
Reinsurance Recoverable	1,248,855,148	1,497,744,413
Accrued Investment Income	118,531,136	127,170,427
Federal Income Tax Recoverable	507,200,404	565,755,651
Due from Affiliates	92,277,523	204,233,875
Other Assets	559,476,243	527,556,278
Total Assets	<u>\$ 29,990,928,434</u>	<u>\$ 30,415,981,911</u>
<u>Liabilities and Policyholders' Surplus</u>		
<u>Liabilities:</u>		
Loss and LAE Reserves	\$ 12,295,705,961	\$ 12,626,869,059
Unearned Premium Reserve	3,952,940,831	3,845,794,904
Funds Held with Reinsurers	554,226,440	385,953,985
Loss In Course of Payment	1,351,312,377	1,442,194,686
Commission Reserve	119,930,116	124,215,143
Federal Income Tax Payable	34,772,832	-
Remittances and Items Unallocated	432,727,110	147,106,142
Payable to parent, subs and affiliates	273,601,687	294,896,500
Provision for Reinsurance	175,327,995	110,765,261
Ceded Reinsurance Premiums Payable	1,591,358,027	1,821,418,177
Securities Lending Collateral Liability	105,614,095	55,769,285
Other Liabilities	1,922,304,215	1,887,566,082
Total Liabilities	<u>\$ 22,809,821,689</u>	<u>\$ 22,742,549,225</u>
<u>Policyholders' Surplus:</u>		
Common Capital Stock	\$ 5,000,000	\$ 5,000,000
Paid-In and Contributed Surplus	4,394,131,321	4,394,131,321
Surplus Notes	-	-
Special Surplus Funds	9,672,000	2,910,000
Cumulative Unrealized Gain	192,450,057	118,847,749
Unassigned Surplus	2,579,853,368	3,152,543,616
Total Policyholders' Surplus	<u>\$ 7,181,106,746</u>	<u>\$ 7,673,432,686</u>
Total Liabilities and Policyholders' Surplus	<u>\$ 29,990,928,434</u>	<u>\$ 30,415,981,911</u>

I, LAURA J. LAZARCZYK, Corporate Secretary of ZURICH AMERICAN INSURANCE COMPANY do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company, on the 31st day of December, 2020, according to the best of my information, knowledge and belief.

DocuSigned by:



Corporate Secretary

State of Illinois
 County of Cook

} SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2021.




Notary public

THE FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

1299 Zurich Way Schaumburg, IL 60196

Statement of Financial Condition
As Of December 31, 2020

ASSETS

Bonds.....	\$ 262,624,334
Stocks	19,715,392
Cash and Short-Term Investments	3,219,781
Reinsurance Recoverable	17,293,466
Federal Income Tax Recoverable.....	114,253
Other Accounts Receivable.....	29,083,530
TOTAL ADMITTED ASSETS.....	\$ 332,050,756

LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses	\$ 539,588
Ceded Reinsurance Premiums Payable	43,847,005
Remittances and Items Unallocated	0
Payable to parents, subs and affiliates	0
Securities Lending Collateral Liability.....	0
TOTAL LIABILITIES	\$ 44,413,593
Capital Stock, Paid Up	\$ 5,000,000
Surplus.....	282,637,163
Surplus as regards Policyholders.....	287,637,163
TOTAL	\$ 332,050,756

Securities carried at \$165,065,329 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2020 would be \$346,439,970 and surplus as regards policyholders \$302,026,377.

I, LAURA J. LAZARCZYK, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2020.

DocuSigned by:

 42DF6DB47437489...
 Corporate Secretary

State of Illinois }
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2021.




 Notary Public



Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that **FEDERAL INSURANCE COMPANY**, an Indiana corporation, **VIGILANT INSURANCE COMPANY**, a New York corporation, **PACIFIC INDEMNITY COMPANY**, a Wisconsin corporation, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint James Baldassare Jr., Krista A. Burke, Sherryanne M. DePirro, Charo J. Rosemond, Lisa M. Scavetta, Maria L. Spadaccini, John F. Surano, Nicholas F. Walsh and Elliott W. Wolffe of Saddle Brook, New Jersey -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than ball bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, **PACIFIC INDEMNITY COMPANY**, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** have each executed and attested these presents and affixed their corporate seals on this 29th day of July, 2020.

Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney

Stephen M. Haney, Vice President



STATE OF NEW JERSEY
County of Hunterdon SS.

On this 29th day of July, 2020 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 18, 2024

Katherine J. Adelaar

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

*RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this 14th day of September 2021



Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:
Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

FEDERAL INSURANCE COMPANY
STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

December 31, 2020

(in thousands)

<i>ASSETS</i>		<i>LIABILITIES AND SURPLUS TO POLICYHOLDERS</i>	
Cash and Short Term Investments	\$ (247,647)	Outstanding Losses and Loss Expenses	\$ 7,823,012
United States Government, State and Municipal Bonds	4,277,332	Reinsurance Payable on Losses and Expenses	1,421,176
Other Bonds	5,455,272	Unearned Premiums	2,145,775
Stocks	567,832	Ceded Reinsurance Premiums Payable	261,276
Other Invested Assets	<u>1,207,053</u>	Other Liabilities	<u>551,641</u>
TOTAL INVESTMENTS	<u>11,259,842</u>	TOTAL LIABILITIES	<u>12,202,880</u>
Investments in Affiliates:		Capital Stock	20,980
Great Northern Ins. Co.	404,889	Paid-In Surplus	2,711,474
Vigilant Ins. Co.	349,615	Unassigned Funds	<u>1,591,718</u>
Chubb Indemnity Ins. Co.	182,191	SURPLUS TO POLICYHOLDERS	<u>4,324,172</u>
Chubb National Ins. Co.	186,189		
Other Affiliates	98,826		
Premiums Receivable	1,634,609		
Other Assets	<u>2,410,891</u>		
TOTAL ADMITTED ASSETS	<u>\$ 16,527,052</u>	TOTAL LIABILITIES AND SURPLUS	<u>\$ 16,527,052</u>

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners, At December 31, 2020, investments with a carrying value of 507,794,700 were deposited with government authorities as required by law.

"Electronic signatures only and no notary due to COVID-19 related stay at home restrictions"

STATE OF PENNSYLVANIA

COUNTY OF PHILADELPHIA

John Taylor, being duly sworn, says that he is Senior Vice President of Federal Insurance Company and that to the best of his knowledge and belief the foregoing is a true and correct statement of the said Company's financial condition as of the 31 st day of December, 2020.

DocuSigned by: e this _____

John P Taylor

3FB94DA7737548E... Vice President

Notary Public

My commission expires

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That The Continental Insurance Company, a Pennsylvania insurance company, is a duly organized and existing insurance company having its principal office in the City of Chicago, and State of Illinois, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Elliott Wolffe, Maria L Spadaccini, James Baldassare Jr, Krista A Burke, Sherryanne M DePirro, Lisa M Scavetta, Nicholas F Walsh, Charo J Rosemond, John F Surano, Individually

of Saddle Brook, NJ, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the insurance company and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Board of Directors of the insurance company.

In Witness Whereof, The Continental Insurance Company has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 27th day of June, 2021.



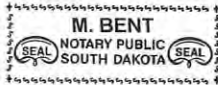
The Continental Insurance Company

Paul T. Bruflat

Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 27th day of June, 2021, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of The Continental Insurance Company, a Pennsylvania insurance company, described in and which executed the above instrument; that he knows the seal of said insurance company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said insurance company and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance company.



My Commission Expires March 2, 2026

M. Bent

M. Bent Notary Public

CERTIFICATE

I, D. Johnson, Assistant Secretary of The Continental Insurance Company, a Pennsylvania insurance company, do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance company printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance company this 14th day of September . 2021



The Continental Insurance Company

D. Johnson

D. Johnson Assistant Secretary

Form F6850-4/2012

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF THE CONTINENTAL INSURANCE COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company at a meeting held on May 10, 1995.

“RESOLVED: That any Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Group Vice President to the Secretary of the Company prior to such execution becoming effective.

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execution power of attorneys on behalf of The Continental Insurance Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012.

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”), Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company.”

THE CONTINENTAL INSURANCE COMPANY
Radnor, Pennsylvania
Statement of Net Admitted Assets and Liabilities
December 31, 2020

ASSETS

Bonds	\$	1,486,639,077
Stocks		162,236,319
Cash and short-term investments		98,903,921
Receivables for securities		180,000
Investment income due and accrued		15,233,564
Amounts recoverable from reinsurers		53,225,848
Funds held by or deposited with reinsured companies		1,599,351
Current federal and foreign income tax recoverable and interest thereon		-
Net deferred tax asset		52,540,270
Premiums and considerations		42,752,978
Other assets		6,646,732
Total Assets	\$	<u>1,919,958,060</u>

LIABILITIES AND SURPLUS

Losses	\$	531,250,741
Loss adjustment expense		35,327,198
Unearned premiums		-
Other expenses		-
Federal and foreign income taxes payable		2
Ceded reinsurance premiums payable (net of ceding commissions)		40,875,605
Funds held by company under reinsurance treaties		2,701,045
Provision for reinsurance		30,000,000
Other liabilities		(487,038,433)
Total Liabilities	\$	<u>153,116,158</u>

Surplus Account:

Capital paid up	\$	53,566,360
Gross paid in and contributed surplus		1,423,436,994
Special Surplus		265,943,410
Unassigned funds		23,895,138
Surplus as regards policyholders		<u>1,766,841,902</u>
Total Liabilities and Capital	\$	<u>1,919,958,060</u>

I, Julie Lee, Assistant Vice President of Continental Insurance Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2020, as filed with the various Insurance Departments and is a true and correct statement of the condition of Continental Insurance Company as of that date.



THE CONTINENTAL INSURANCE COMPANY

By Julie Lee
Assistant Vice President, External Reporting

Subscribed and sworn to me this 9 day of April 2021
My commission expires:



By Yolanda Jimenez
Notary Public



Power Of Attorney

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY
NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY

Know all men by these presents, that BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, NATIONAL INDEMNITY COMPANY, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: Krista A. Burke, Sherryanne M. DePirro, Charo J. Rosemond, Andrew Waterbury, James Baldassare, Jr., Maria L. Spadaccini, Nicholas F. Walsh, John F. Surano, Elliott W. Wolfe, Lisa M. Scavetta, 250 Pehle Avenue, Suite 311 of the city of Saddle Brook, State of New Jersey, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of December 20, 2018. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively. The following signature by an authorized officer of the Company may be a facsimile, which shall be deemed the equivalent of and constitute the written signature of such officer of the Company for all purposes regarding this Power of Attorney, including satisfaction of any signature requirements on any and all undertakings, bonds, or other such writings obligatory in the nature thereof, to which this Power of Attorney applies.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY,

[Handwritten signature of David Fields]

By: David Fields, Executive Vice President



NATIONAL INDEMNITY COMPANY, NATIONAL LIABILITY & FIRE INSURANCE COMPANY,

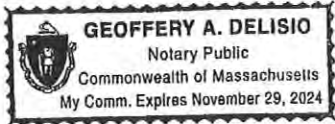
[Handwritten signature of David Fields]

By: David Fields, Vice President



NOTARY
State of Massachusetts, County of Suffolk, ss:
On this 20th day of December, 2018, before me appeared David Fields, Executive Vice President of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY and Vice President of NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



[Handwritten signature of Geoffrey A. Delisio]

Notary Public

I, Ralph Tortorella, the undersigned, Officer of BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. IN TESTIMONY WHEREOF, see hereunto affixed the seals of said Companies this September 14, 2021



[Handwritten signature of Ralph Tortorella]

Officer

To verify the authenticity of this Power of Attorney please contact us at: BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, One Lincoln Street, 23rd Floor Boston, MA 02111 | (770) 625-2516 or by email at jscamiller-porter@bhspecialty.com THIS POWER OF ATTORNEY IS VOID IF ALTERED To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claim@bhspecialty.com, via fax to (617) 507-8259, or via mail.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102-1944

ADMITTED ASSETS *

	12/31/2020	12/31/2019	12/31/2018
Total invested assets	\$ 5,475,240,588	\$ 5,172,183,338	\$ 4,313,185,189
Premium & agent balances (n)	603,615,506	368,086,012	301,849,144
All other assets	157,897,676	127,524,677	140,930,406
Admitted Assets	\$ 6,236,753,770	\$ 5,667,794,027	\$ 4,755,964,739

LIABILITIES & SURPLUS *

	12/31/2020	12/31/2019	12/31/2018
Loss & loss exp. unpaid	\$ 921,923,948	\$ 634,745,558	\$ 463,103,223
Unearned premiums	372,836,160	314,117,549	241,835,588
All other liabilities	1,054,922,210	744,738,458	570,628,148
Total Liabilities	2,349,682,318	1,693,601,565	1,275,566,959
Total Policyholders' Surplus	3,887,071,452	3,974,192,463	3,480,397,780
Total Liabilities & Surplus	\$ 6,236,753,770	\$ 5,667,794,028	\$ 4,755,964,739

* Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.

AUTHORIZATION TO INSERT DATE OF CONTRACT ON BONDS

DATE: September 14, 2021

TO: City and County of Denver

RE: Flatiron Constructors, Inc ("as Contractor")
Taxiway EE Construction Denver International Airport
Contract # 202158849

Flatiron BOND NOS. Liberty Mutual Bond # 015214610
Travelers Bond # 107433031
F&D/Zurich Bond # 9374494
Federal Bond # K40399689
Continental Bond # 30138062
Berkshire Bond # 47-SUR-300033-01-0556

Dear Sir or Madam:

The Performance and Payment Bond covering the referenced project were executed by this agency, an authorized representative for the sureties for Flatiron Constructors, Inc on September 14, 2021.

We hereby authorize the City and County of Denver to date the bonds to coincide with the date of the contract.

Liberty Mutual Insurance Company
Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Zurich American Insurance Company
Federal Insurance Company
The Continental Insurance Company
Berkshire Hathaway Specialty Insurance Company

By: _____

Elliott W Wolfe, Attorney-in-Fact

Turner Surety and Insurance Brokerage, Inc.

250 Pehle Avenue, Suite 311, Saddle Brook, NJ 07663

Direct: 201.267.7510 | Cell 201.527.5282 | jurano@tsibinc.com | CA License # 0E81386

CORPORATE ACKNOWLEDGMENT

Form 152

STATE OF NEW JERSEY
COUNTY OF BERGEN

On this 14th day of September, 2021 before me personally came Elliott W. Wolffe to me known, who, being by me duly sworn, did depose and say that she/he resides in Livingston, New Jersey that she/he is the ATTORNEY IN FACT of the LIBERTY MUTUAL INSURANCE COMPANY, TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA , ZURICH AMERICAN INSURANCE COMPANY, FEDERAL INSURANCE COMPANY, THE CONTINENTAL INSURANCE COMPANY, BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, the corporation described in and which executed the above instrument that she/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)



BIANCA L. MELI

NOTARY PUBLIC, STATE OF NEW JERSEY

MY COMMISSION EXPIRES

SEPTEMBER 30, 2024

**ACTION BY UNANIMOUS WRITTEN CONSENT
OF THE BOARD OF DIRECTORS**

FLATIRON CONSTRUCTORS, INC.

The undersigned, being the sole member of the board of directors (the "**Board**") of Flatiron Constructors, Inc., a Delaware corporation (the "**Corporation**") pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, does hereby waive all notice of the time, place and purposes of a meeting and does hereby consent to and adopt the resolutions set forth below to have the same force and effect as a unanimous vote of the directors of the Corporation at a duly-convened meeting of the Board called and held for the purpose of acting upon proposals to adopt such resolutions.

WHEREAS, the Board has determined that it is in the best interest of the Corporation to appoint certain management employees as authorized signatories with power of attorney to act on behalf of the Corporation (an "Authorized Signatory"); and

WHEREAS, such Authorized Signatories must have the authority to execute certain contracts and other instruments necessary to bind the Corporation in furtherance of the Corporation's projects and in the administration of its operations.

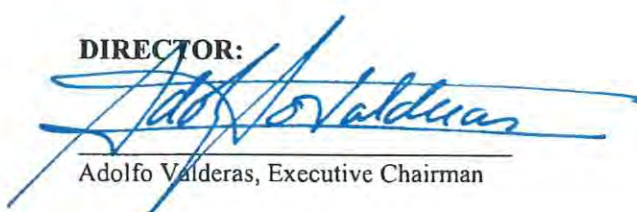
NOW, THEREFORE, BE IT

RESOLVED, that the Board hereby appoints **Grant Johns** as an Authorized Signatory of the Corporation, effective **October 26, 2020** to act in this capacity until his authority is rescinded; and

FURTHER RESOLVED, that an Authorized Signatory of the Corporation shall have the authority to execute contracts and other instruments on behalf of the Corporation in accordance with internal policies and procedures, and shall perform such other duties and exercise such other powers as assigned to him by the Board, the Chief Executive Officer, Chief Financial Officer the Chief Operating Officer, or other Officers of the Corporation.

IN WITNESS WHEREOF, the undersigned has executed this Written Consent the 29th day of October 2020.

DIRECTOR:


Adolfo Valderas, Executive Chairman

**ACTION BY UNANIMOUS WRITTEN CONSENT
OF THE BOARD OF DIRECTORS**

FLATIRON CONSTRUCTORS, INC.

The undersigned, being the sole member of the board of directors (the "**Board**") of Flatiron Constructors, Inc., a Delaware corporation (the "**Corporation**") pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, does hereby waive all notice of the time, place and purposes of a meeting and does hereby consent to and adopt the resolutions set forth below to have the same force and effect as a unanimous vote of the directors of the Corporation at a duly-convened meeting of the Board called and held for the purpose of acting upon proposals to adopt such resolutions.

WHEREAS, the Board has determined that it is in the best interest of the Corporation to appoint certain management employees as authorized signatories with power of attorney to act on behalf of the Corporation (an "Authorized Signatory"); and

WHEREAS, such Authorized Signatories must have the authority to execute certain contracts and other instruments necessary to bind the Corporation in furtherance of the Corporation's projects and in the administration of its operations.

NOW, THEREFORE, BE IT

RESOLVED, that the Board hereby appoints **Kevin McCormick** as an Authorized Signatory of the Corporation, effective **October 26, 2020** to act in this capacity until his authority is rescinded; and

FURTHER RESOLVED, that an Authorized Signatory of the Corporation shall have the authority to execute contracts and other instruments on behalf of the Corporation in accordance with internal policies and procedures, and shall perform such other duties and exercise such other powers as assigned to him by the Board, the Chief Executive Officer, Chief Financial Officer the Chief Operating Officer, or other Officers of the Corporation.

IN WITNESS WHEREOF, the undersigned has executed this Written Consent the 29th day of OCTOBER 2020.

DIRECTOR:



Adolfo Valderas, Executive Chairman

AUTHORIZATION TO INSERT DATE OF CONTRACT ON BONDS

DATE: September 14, 2021

TO: City and County of Denver

RE: Flatiron Constructors, Inc ("as Contractor")
Taxiway EE Construction Denver International Airport
Contract # 202158849

Flatiron BOND NOS. Liberty Mutual Bond # 015214610
Travelers Bond # 107433031
F&D/Zurich Bond # 9374494
Federal Bond # K40399689
Continental Bond # 30138062
Berkshire Bond # 47-SUR-300033-01-0556

Dear Sir or Madam:

The Performance and Payment Bond covering the referenced project were executed by this agency, an authorized representative for the sureties for Flatiron Constructors, Inc on September 14, 2021.

We hereby authorize the City and County of Denver to date the bonds to coincide with the date of the contract.

Liberty Mutual Insurance Company
Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Zurich American Insurance Company
Federal Insurance Company
The Continental Insurance Company
Berkshire Hathaway Specialty Insurance Company

By: _____

Elliott W Wolfe, Attorney-In-Fact

Turner Surety and Insurance Brokerage, Inc.
250 Pehle Avenue, Suite 311, Saddle Brook, NJ 07663

Direct: 201.267.7510 | Cell 201.527.5282 | jsurano@tsibinc.com | CA License # 0E81386

EXHIBIT H

Liberty Bond # 015214610
Travelers Bond # 107433031
F&D/Zurich Bond # 9374494
Federal Bond # K40399689
Continental Bond # 30138062
Berkshire Bond # 47-SUR-300033-01-0556

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned Flatiron Constructors, Inc., a corporation organized under the laws of the State of Delaware, hereinafter referred to as the "Contractor" and SEE ATTACHMENT A, a corporation organized under the laws of the State of SEE ATTACHMENT A, and authorized to transact business in the State of Colorado, hereinafter referred to as Surety, are held and firmly bound unto the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereinafter referred to as the "CITY", in the penal sum of FORTY-TWO MILLION, FOUR HUNDRED FIVE THOUSAND, SIX HUNDRED FORTY-THREE AND 90/100 Dollars (\$42,405,643.90) lawful money of the United States of America, for the payment of which sum the Contractor and Surety bind themselves and their heirs, executors, administrators, successors and assigns, jointly and severally by these presents.

WHEREAS, the above Contractor has entered into a written contract with the City for furnishing all labor, materials, tools, superintendence, and other facilities and accessories for the construction of Contract No. 202158849 Denver International Airport, in accordance with the Technical Specifications, Contract Drawings and all other Contract Documents therefor which are incorporated herein by reference and made a part hereof, and are herein referred to as the Contract.

NOW, THEREFORE, the condition of this payment bond obligation is such that if the Contractor shall at all times promptly make payments of all amounts lawfully due to all persons supplying or furnishing it or its subcontractors with labor and materials, rental machinery, tools, or equipment, used or performed in the prosecution of work provided for in the above Contract and shall indemnify and save harmless the City to the extent of any and all payments in connection with the carrying out of such Contract which the City may be required to make under the law, then this obligation shall be null and void, otherwise, it shall remain in full force and effect;

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that any and all changes in the Contract, or compliance or noncompliance with the formalities in the Contract for making such changes shall not affect the Surety's obligations under this bond and the Surety hereby waives notice of any such changes.

[END OF PAGE]

IN WITNESS WHEREOF, said Contractor and said Surety have executed these presents as of this ____ day of _____, 20_____

Flatiron Constructors, Inc

CONTRACTOR

Attest: 

Kevin McCormick, Division Finance Manager

By: 

~~President~~
Grant Johns, District Operations Manager

See Attachment A

SURETY



By: See Attachment A

Attorney-in-Fact

(Accompany this bond with Attorney-in-Fact's authority from the Surety to execute bond, certified to include the date of the bond.)

CITY AND COUNTY OF DENVER

By: _____
MAYOR

**Signatures by CEO,
CAO and the Mayor
will be provided later
and shall be fully
incorporated herein**

By: _____
Chief Executive Officer
Denver International Airport

APPROVED AS TO FORM:

KRISTIN M. BRONSON, Attorney for the
City and County of Denver

By: _____
Assistant City Attorney

ATTACHMENT A

BOND NUMBERS:	Liberty Bond No.:	015214610
	Travelers Bond No.:	107433031
	F&D/Zurich Bond No.:	9374494
	Federal Bond No.:	K40399689
	Continental Bond No.:	30138062
	Berkshire Bond No.:	47-SUR-300033-01-0556

Liberty Mutual Insurance Company, a Massachusetts Corporation
Travelers Casualty and Surety Company of America, a Connecticut corporation
Fidelity and Deposit Company of Maryland, a Illinois corporation
Zurich American Insurance Company, a New York corporation
Federal Insurance Company, an Indiana corporation
The Continental Insurance Company, a Pennsylvania Corporation
Berkshire Hathaway Specialty Insurance Company, a Nebraska Corporation

Liberty Mutual Insurance Company – A.M. Best Rating A XV

175 Berkeley Street, Boston, MA 02116

Mailing Address for Notices:

Gretchen Eck, Senior Surety Claims Counsel

2815 Forbs Avenue, Suite 102

Hoffman Estates, IL 60192

Bond No. 015214610

Travelers Casualty and Surety Company of America – A.M. Best Rating A++ XV

Construction Services, One Tower Square, Hartford, CT 06183

Bond No. 107433031

Fidelity and Deposit Company of Maryland

Zurich American Insurance Company - A.M. Best Rating A+ XV

1299 Zurich Way, 5th Floor, Schaumburg, IL 60196

Bond No. 9374494

Federal Insurance Company – A.M. Best Rating A++ XV

202B Hall's Mill Road, Whitehouse Station, NJ 08889

Bond No. K40399689

The Continental Insurance Company – A.M. Best Rating A XV

151 N Franklin Street, Chicago, IL 60606

Bond No. 30138062

Berkshire Hathaway Specialty Insurance Company – A.M. Best Rating A++ XV

1314 Douglas Street, Suite 1400, Omaha, NE 68102

Bond No. 47-SUR-300033-01-0556

By:



Elliott w Wolffe, Attorney-In-Fact

Witness:



John F. Surano



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8206136-974450

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Charo J. Rosemond, Elliott W. Wolffe, James Baldassare, Jr., John F. Surano, Krista A. Burke, Lisa M. Scavetta, Maria L. Spadaccini, Nicholas F. Walsh, Sherryanne M. DePirro

all of the city of Saddle Brook state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 12th day of August, 2021.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey

David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY

On this 12th day of August, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 14th day of September 2021



By: Renee C. Llewellyn

Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.



LIBERTY MUTUAL INSURANCE COMPANY
FINANCIAL STATEMENT — DECEMBER 31, 2020

Assets		Liabilities	
Cash and Bank Deposits	\$2,058,007,542	Unearned Premiums	\$8,448,706,991
*Bonds — U.S Government	2,209,760,437	Reserve for Claims and Claims Expense	23,879,216,613
*Other Bonds	15,902,755,586	Funds Held Under Reinsurance Treaties	343,068,613
*Stocks	18,517,107,230	Reserve for Dividends to Policyholders	1,192,716
Real Estate	193,169,809	Additional Statutory Reserve	77,397,000
Agents' Balances or Uncollected Premiums	6,970,170,469	Reserve for Commissions, Taxes and	
Accrued Interest and Rents	118,399,147	Other Liabilities	6,279,510,804
Other Admitted Assets	12,079,597,645	Total	\$39,029,092,737
		Special Surplus Funds	\$178,155,102
		Capital Stock	10,000,075
		Paid in Surplus	10,945,045,214
		Unassigned Surplus	7,886,674,737
		Surplus to Policyholders	19,019,875,128
Total Admitted Assets	<u>\$58,048,967,865</u>	Total Liabilities and Surplus	<u>\$58,048,967,865</u>



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2020, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 25th day of March, 2021.

T. Mikolajewski

Assistant Secretary



Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Elliott W. Wolfe of SADDLE BROOK, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.



State of Connecticut

City of Hartford ss.

By: [Signature] Robert L. Raney, Senior Vice President

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026



[Signature] Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 14th day of September 2021



[Signature] Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880. Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2020

CAPITAL STOCK \$ 6,480,000

ASSETS		LIABILITIES & SURPLUS	
CASH AND INVESTED CASH	\$ 239,403,348	UNEARNED PREMIUMS	\$ 1,121,070,380
BONDS	3,831,156,861	LOSSES	1,003,200,666
STOCKS	109,074,035	LOSS ADJUSTMENT EXPENSES	183,346,678
INVESTMENT INCOME DUE AND ACCRUED	36,856,709	COMMISSIONS	40,805,693
OTHER INVESTED ASSETS	4,970,512	TAXES, LICENSES AND FEES	13,561,421
PREMIUM BALANCES	277,653,788	OTHER EXPENSES	42,506,558
NET DEFERRED TAX ASSET	55,188,715	CURRENT FEDERAL AND FOREIGN INCOME TAXES	4,865,484
REINSURANCE RECOVERABLE	32,553,518	REMITTANCES AND ITEMS NOT ALLOCATED	8,646,391
RECEIVABLES FROM PARENT, SUBSIDIARIES AND AFFILIATES	34,876,347	AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	42,228,250
OTHER ASSETS	4,155,794	POLICYHOLDER DIVIDENDS	12,353,304
		PROVISION FOR REINSURANCE	7,930,280
		ADVANCE PREMIUM	1,867,512
		CEDED REINSURANCE NET PREMIUMS PAYABLE	63,102,972
		RETROACTIVE REINSURANCE RESERVE ASSUMED	800,763
		OTHER ACCRUED EXPENSES AND LIABILITIES	568,668
		TOTAL LIABILITIES	\$2,534,855,020
		CAPITAL STOCK	\$6,480,000
		PAID IN SURPLUS	433,803,760
		OTHER SURPLUS	1,650,750,847
		TOTAL SURPLUS TO POLICYHOLDERS	\$2,091,034,607
TOTAL ASSETS	\$ 4,625,889,627	TOTAL LIABILITIES & SURPLUS	\$4,625,889,627

STATE OF CONNECTICUT)
COUNTY OF HARTFORD) SS.
CITY OF HARTFORD)

MICHAEL J. DOODY, BEING DULY SWORN, SAYS THAT HE IS VICE PRESIDENT - FINANCE, OF TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, AND THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT STATEMENT OF THE FINANCIAL CONDITION OF SAID COMPANY AS OF THE 31ST DAY OF DECEMBER, 2020.

Michael J. Doody
VICE PRESIDENT - FINANCE

SUBSCRIBED AND SWORN TO BEFORE ME THIS
26TH DAY OF MARCH, 2021

Susan M. Weissleder
NOTARY PUBLIC

SUSAN M. WEISSLEDER
Notary Public
My Commission Expires November 30, 2022



**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by **Robert D. Murray**, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint, **Krista A. BURKE, Charo J. ROSEMOND, Maria L. SPADACCINI, Sherryanne M. DEPIRRO, Nicholas F. WALSH, Lisa M. SCAVETTA, Elliott W. WOLFFE, James BALDASSARE, JR. And John F. SURANO**, of Saddle Brook, New Jersey, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons. The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 28th day of July A.D. 2020.



ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By: *Robert D. Murray*
Vice President

By: *Dawn E. Brown*
Secretary

**State of Maryland
County of Baltimore**

On this 28th day of July, 2020, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Robert D. Murray, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2023

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 14th day of September, 2021.



Brian M. Hodges, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

Zurich Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056
www.reportsfclaims@zurichna.com
800-626-4577

ZURICH AMERICAN INSURANCE COMPANY
COMPARATIVE BALANCE SHEET
4 WORLD TRADE CENTER, 150 GREENWICH STREET, NEW YORK, NY 10007
As of December 31, 2020 and December 31, 2019

	12/31/2020	12/31/2019
<u>Assets</u>		
Bonds	\$ 15,696,060,158	\$ 16,780,375,969
Preferred Stock	-	-
Common Stock	2,964,630,407	3,121,559,258
Real Estate	1,294,160,876	1,273,640,596
Other Invested Assets	1,435,120,966	1,185,313,467
Derivatives	178,175	21,358
Short-term Investments	285,002	14,532,665
Receivable for securities	809,339	114,199,089
Cash and cash equivalents	526,475,686	42,548,382
Securities lending reinvested collateral assets	105,614,095	55,769,285
Employee Trust for Deferred Compensation Plan	122,225,149	129,612,266
Total Cash and Invested Assets	\$ 22,145,559,853	\$ 22,717,572,333
Premiums Receivable	\$ 5,318,928,254	\$ 4,775,851,073
Funds Held with Reinsurers	99,875	97,862
Reinsurance Recoverable	1,248,855,148	1,497,744,413
Accrued Investment Income	118,531,136	127,170,427
Federal Income Tax Recoverable	507,200,404	565,755,651
Due from Affiliates	92,277,523	204,233,875
Other Assets	559,476,243	527,556,278
Total Assets	\$ 29,990,928,434	\$ 30,415,981,911
<u>Liabilities and Policyholders' Surplus</u>		
<u>Liabilities:</u>		
Loss and LAE Reserves	\$ 12,295,705,961	\$ 12,626,869,059
Unearned Premium Reserve	3,952,940,831	3,845,794,904
Funds Held with Reinsurers	554,226,440	385,953,985
Loss In Course of Payment	1,351,312,377	1,442,194,686
Commission Reserve	119,930,116	124,215,143
Federal Income Tax Payable	34,772,832	-
Remittances and Items Unallocated	432,727,110	147,106,142
Payable to parent, subs and affiliates	273,601,687	294,896,500
Provision for Reinsurance	175,327,995	110,765,261
Ceded Reinsurance Premiums Payable	1,591,358,027	1,821,418,177
Securities Lending Collateral Liability	105,614,095	55,769,285
Other Liabilities	1,922,304,215	1,887,566,082
Total Liabilities	\$ 22,809,821,689	\$ 22,742,549,225
<u>Policyholders' Surplus:</u>		
Common Capital Stock	\$ 5,000,000	\$ 5,000,000
Paid-In and Contributed Surplus	4,394,131,321	4,394,131,321
Surplus Notes	-	-
Special Surplus Funds	9,672,000	2,910,000
Cumulative Unrealized Gain	192,450,057	118,847,749
Unassigned Surplus	2,579,853,368	3,152,543,616
Total Policyholders' Surplus	\$ 7,181,106,746	\$ 7,673,432,686
Total Liabilities and Policyholders' Surplus	\$ 29,990,928,434	\$ 30,415,981,911

I, LAURA J. LAZARCZYK, Corporate Secretary of ZURICH AMERICAN INSURANCE COMPANY do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company, on the 31st day of December, 2020, according to the best of my information, knowledge and belief.

DocuSigned by:

Laura J. Lazarczyk

42DF00697137RBU...

Corporate Secretary

State of Illinois
County of Cook

} SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2021.



Ryan Horgan
Notary public

THE FIDELITY AND DEPOSIT COMPANY

OF MARYLAND
1299 Zurich Way Schaumburg, IL 60196

Statement of Financial Condition
As Of December 31, 2020

ASSETS

Bonds.....	\$ 262,624,334
Stocks	19,715,392
Cash and Short-Term Investments	3,219,781
Reinsurance Recoverable	17,293,466
Federal Income Tax Recoverable.....	114,253
Other Accounts Receivable.....	29,083,530
TOTAL ADMITTED ASSETS.....	\$ 332,050,756

LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses	\$ 539,588
Ceded Reinsurance Premiums Payable	43,847,005
Remittances and Items Unallocated	0
Payable to parents, subs and affiliates	0
Securities Lending Collateral Liability.....	0
TOTAL LIABILITIES	\$ 44,413,593
Capital Stock, Paid Up	\$ 5,000,000
Surplus.....	282,637,163
Surplus as regards Policyholders.....	287,637,163
TOTAL	\$ 332,050,756

Securities carried at \$165,065,329 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2020 would be \$346,439,970 and surplus as regards policyholders \$302,026,377.

I, LAURA J. LAZARCZYK, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2020.

DocuSigned by:

 42DF6DB47437489...
 Corporate Secretary

State of Illinois }
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2021.




 Notary Public



Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that **FEDERAL INSURANCE COMPANY**, an Indiana corporation, **VIGILANT INSURANCE COMPANY**, a New York corporation, **PACIFIC INDEMNITY COMPANY**, a Wisconsin corporation, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint James Baldassare Jr., Krista A. Burke, Sherryanne M. DePirro, Charo J. Rosemond, Lisa M. Scavetta, Maria L. Spadaccini, John F. Surano, Nicholas F. Walsh and Elliott W. Wolfe of Saddle Brook, New Jersey -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than ball bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, **PACIFIC INDEMNITY COMPANY**, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** have each executed and attested these presents and affixed their corporate seals on this 29th day of July, 2020.

Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney

Stephen M. Haney, Vice President



STATE OF NEW JERSEY
County of Hunterdon

SS.

On this 29th day of July, 2020 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 18, 2024

Katherine J. Adelaar

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

*RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this 14th day of September 2021



Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:
Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

FEDERAL INSURANCE COMPANY
STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

December 31, 2020

(in thousands)

ASSETS		LIABILITIES AND SURPLUS TO POLICYHOLDERS	
Cash and Short Term Investments	\$ (247,647)	Outstanding Losses and Loss Expenses	\$ 7,823,012
United States Government, State and Municipal Bonds	4,277,332	Reinsurance Payable on Losses and Expenses	1,421,176
Other Bonds	5,455,272	Unearned Premiums	2,145,775
Stocks	567,832	Ceded Reinsurance Premiums Payable	261,276
Other Invested Assets	<u>1,207,053</u>	Other Liabilities	<u>551,641</u>
TOTAL INVESTMENTS	<u>11,259,842</u>	TOTAL LIABILITIES	<u>12,202,880</u>
Investments in Affiliates:		Capital Stock	20,980
Great Northern Ins. Co.	404,889	Paid-In Surplus	2,711,474
Vigilant Ins. Co.	349,615	Unassigned Funds	<u>1,591,718</u>
Chubb Indemnity Ins. Co.	182,191	SURPLUS TO POLICYHOLDERS	<u>4,324,172</u>
Chubb National Ins. Co.	186,189		
Other Affiliates	98,826		
Premiums Receivable	1,634,609		
Other Assets	<u>2,410,891</u>		
TOTAL ADMITTED ASSETS	<u>\$ 16,527,052</u>	TOTAL LIABILITIES AND SURPLUS	<u>\$ 16,527,052</u>

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners, At December 31, 2020, investments with a carrying value of 507,794,700 were deposited with government authorities as required by law.

"Electronic signatures only and no notary due to COVID-19 related stay at home restrictions"

STATE OF PENNSYLVANIA

COUNTY OF PHILADELPHIA

John Taylor, being duly sworn, says that he is Senior Vice President of Federal Insurance Company and that to the best of his knowledge and belief the foregoing is a true and correct statement of the said Company's financial condition as of the 31 st day of December, 2020.

DocuSigned by: e this _____

John P Taylor

3FB94DA7737548E... Vice President

Notary Public

My commission expires

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That The Continental Insurance Company, a Pennsylvania insurance company, is a duly organized and existing insurance company having its principal office in the City of Chicago, and State of Illinois, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Elliott Wolffe, Maria L Spadaccini, James Baldassare Jr, Krista A Burke, Sherryanne M DePirro, Lisa M Scavetta, Nicholas F Walsh, Charo J Rosemond, John F Surano, Individually

of Saddle Brook, NJ, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the insurance company and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Board of Directors of the insurance company.

In Witness Whereof, The Continental Insurance Company has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 27th day of June, 2021.



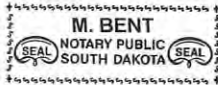
The Continental Insurance Company

Paul T. Bruflat

Paul T. Bruflat Vice President

State of South Dakota, County of Minnehaha, ss:

On this 27th day of June, 2021, before me personally came Paul T. Bruflat to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of The Continental Insurance Company, a Pennsylvania insurance company, described in and which executed the above instrument; that he knows the seal of said insurance company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said insurance company and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance company.



My Commission Expires March 2, 2026

M. Bent

M. Bent Notary Public

CERTIFICATE

I, D. Johnson, Assistant Secretary of The Continental Insurance Company, a Pennsylvania insurance company, do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance company printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance company this 14th day of September . 2021



The Continental Insurance Company

D. Johnson

D. Johnson Assistant Secretary

Form F6850-4/2012

Authorizing By-Laws and Resolutions

ADOPTED BY THE BOARD OF DIRECTORS OF THE CONTINENTAL INSURANCE COMPANY:

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the Board of Directors of the Company at a meeting held on May 10, 1995.

“RESOLVED: That any Group Vice President may authorize an officer to sign specific documents, agreements and instruments on behalf of the Company provided that the name of such authorized officer and a description of the documents, agreements or instruments that such officer may sign will be provided in writing by the Group Vice President to the Secretary of the Company prior to such execution becoming effective.

This Power of Attorney is signed by Paul T. Bruflat, Vice President, who has been authorized pursuant to the above resolution to execution power of attorneys on behalf of The Continental Insurance Company.

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 25th day of April, 2012.

“Whereas, the bylaws of the Company or specific resolution of the Board of Directors has authorized various officers (the “Authorized Officers”) to execute various policies, bonds, undertakings and other obligatory instruments of like nature; and

Whereas, from time to time, the signature of the Authorized Officers, in addition to being provided in original, hard copy format, may be provided via facsimile or otherwise in an electronic format (collectively, “Electronic Signatures”), Now therefore be it resolved: that the Electronic Signature of any Authorized Officer shall be valid and binding on the Company.”

THE CONTINENTAL INSURANCE COMPANY
Radnor, Pennsylvania
Statement of Net Admitted Assets and Liabilities
December 31, 2020

ASSETS

Bonds	\$	1,486,639,077
Stocks		162,236,319
Cash and short-term investments		98,903,921
Receivables for securities		180,000
Investment income due and accrued		15,233,564
Amounts recoverable from reinsurers		53,225,848
Funds held by or deposited with reinsured companies		1,599,351
Current federal and foreign income tax recoverable and interest thereon		-
Net deferred tax asset		52,540,270
Premiums and considerations		42,752,978
Other assets		6,646,732
Total Assets	\$	<u>1,919,958,060</u>

LIABILITIES AND SURPLUS

Losses	\$	531,250,741
Loss adjustment expense		35,327,198
Unearned premiums		-
Other expenses		-
Federal and foreign income taxes payable		2
Ceded reinsurance premiums payable (net of ceding commissions)		40,875,605
Funds held by company under reinsurance treaties		2,701,045
Provision for reinsurance		30,000,000
Other liabilities		(487,038,433)
Total Liabilities	\$	<u>153,116,158</u>

Surplus Account:

Capital paid up	\$	53,566,360
Gross paid in and contributed surplus		1,423,436,994
Special Surplus		265,943,410
Unassigned funds		23,895,138
Surplus as regards policyholders		<u>1,766,841,902</u>
Total Liabilities and Capital	\$	<u>1,919,958,060</u>

I, Julie Lee, Assistant Vice President of Continental Insurance Company hereby certify that the above is an accurate representation of the financial statement of the Company dated December 31, 2020, as filed with the various Insurance Departments and is a true and correct statement of the condition of Continental Insurance Company as of that date.



THE CONTINENTAL INSURANCE COMPANY

By Julie Lee
Assistant Vice President, External Reporting

Subscribed and sworn to me this 9 day of April 2021
My commission expires:



By Yolanda Jimenez
Notary Public



Power Of Attorney

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY NATIONAL INDEMNITY COMPANY / NATIONAL LIABILITY & FIRE INSURANCE COMPANY

Know all men by these presents, that **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at One Lincoln Street, 23rd Floor, Boston, Massachusetts 02111, **NATIONAL INDEMNITY COMPANY**, a corporation existing under and by virtue of the laws of the State of Nebraska and having an office at 3024 Harney Street, Omaha, Nebraska 68131 and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, a corporation existing under and by virtue of the laws of the State of Connecticut and having an office at 100 First Stamford Place, Stamford, Connecticut 06902 (hereinafter collectively the "Companies"), pursuant to and by the authority granted as set forth herein, do hereby name, constitute and appoint: **Krista A. Burke, Sherryanne M. DePirro, Charo J. Rosemond, Andrew Waterbury, James Baldassare, Jr., Maria L. Spadaccini, Nicholas F. Walsh, John F. Surano, Elliott W. Wolfe, Lisa M. Scavetta, 250 Pehle Avenue, Suite 311 of the city of Saddle Brook, State of New Jersey**, their true and lawful attorney(s)-in-fact to make, execute, seal, acknowledge, and deliver, for and on their behalf as surety and as their act and deed, any and all undertakings, bonds, or other such writings obligatory in the nature thereof, in pursuance of these presents, the execution of which shall be as binding upon the Companies as if it has been duly signed and executed by their regularly elected officers in their own proper persons. **This authority for the Attorney-in-Fact shall be limited to the execution of the attached bond(s) or other such writings obligatory in the nature thereof.**

In witness whereof, this Power of Attorney has been subscribed by an authorized officer of the Companies, and the corporate seals of the Companies have been affixed hereto this date of December 20, 2018. This Power of Attorney is made and executed pursuant to and by authority of the Bylaws, Resolutions of the Board of Directors, and other Authorizations of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, which are in full force and effect, each reading as appears on the back page of this Power of Attorney, respectively. **The following signature by an authorized officer of the Company may be a facsimile, which shall be deemed the equivalent of and constitute the written signature of such officer of the Company for all purposes regarding this Power of Attorney, including satisfaction of any signature requirements on any and all undertakings, bonds, or other such writings obligatory in the nature thereof, to which this Power of Attorney applies.**

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY,

By: _____
David Fields, Executive Vice President



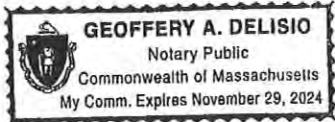
**NATIONAL INDEMNITY COMPANY,
NATIONAL LIABILITY & FIRE INSURANCE COMPANY,**

By: _____
David Fields, Vice President



NOTARY
State of Massachusetts, County of Suffolk, ss:
On this 20th day of December, 2018, before me appeared David Fields, Executive Vice President of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY** and Vice President of **NATIONAL INDEMNITY COMPANY** and **NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, who being duly sworn, says that his capacity is as designated above for such Companies; that he knows the corporate seals of the Companies; that the seals affixed to the foregoing instrument are such corporate seals; that they were affixed by order of the board of directors or other governing body of said Companies pursuant to its Bylaws, Resolutions and other Authorizations, and that he signed said instrument in that capacity of said Companies.

[Notary Seal]



Notary Public

I, Ralph Tortorella, the undersigned, Officer of **BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, NATIONAL INDEMNITY COMPANY and NATIONAL LIABILITY & FIRE INSURANCE COMPANY**, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies which is in full force and effect and has not been revoked. **IN TESTIMONY WHEREOF**, see hereunto affixed the seals of said Companies this September 14, 2021



Officer

To verify the authenticity of this Power of Attorney please contact us at: BHSI Surety Department, Berkshire Hathaway Specialty Insurance Company, One Lincoln Street, 23rd Floor Boston, MA 02111 | (770) 625-2516 or by email at Jerramier.Porter@bhspecialty.com THIS POWER OF ATTORNEY IS VOID IF ALTERED To notify us of a claim please contact us on our 24-hour toll free number at (855) 453-9675, via email at claim@bhspecialty.com, via fax to (617) 507-8259, or via mail.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY (BYLAWS)

ARTICLE V.

CORPORATE ACTIONS

....

EXECUTION OF DOCUMENTS:

....

Section 6.(b) The President, any Vice President or the Secretary, shall have the power and authority:

- (1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company bonds and other undertakings, and
- (2) To remove at any time any such Attorney-in-fact and revoke the authority given him.

NATIONAL INDEMNITY COMPANY (BY-LAWS)

Section 4. Officers, Agents, and Employees:

A. The officers shall be a President, one or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, and one or more Assistant Treasurers none of whom shall be required to be shareholders or Directors and each of whom shall be elected annually by the Board of Directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the Board of Directors, and shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the Board of Directors; and the Board of Directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the corporation.

NATIONAL INDEMNITY COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BY-LAWS)

ARTICLE IV

Officers

Section 1. Officers, Agents and Employees:

A. The officers shall be a president, one or more vice presidents, one or more assistant vice presidents, a secretary, one or more assistant secretaries, a treasurer, and one or more assistant treasurers, none of whom shall be required to be shareholders or directors, and each of whom shall be elected annually by the board of directors at each annual meeting to serve a term of office of one year or until a successor has been elected and qualified, may serve successive terms of office, may be removed from office at any time for or without cause by a vote of a majority of the board of directors. The president and secretary shall be different individuals. Election or appointment of an officer or agent shall not create contract rights. The officers of the Corporation shall have such powers and rights and be charged with such duties and obligations as usually are vested in and pertain to such office or as may be directed from time to time by the board of directors; and the board of directors or the officers may from time to time appoint, discharge, engage, or remove such agents and employees as may be appropriate, convenient, or necessary to the affairs and business of the Corporation.

NATIONAL LIABILITY & FIRE INSURANCE COMPANY (BOARD RESOLUTION ADOPTED AUGUST 6, 2014)

RESOLVED, That the President, any Vice President or the Secretary, shall have the power and authority to (1) appoint Attorneys-in-fact, and to authorize them to execute on behalf of this Company bonds and other undertakings and (2) remove at any time any such Attorney-in-fact and revoke the authority given.

BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY

1314 Douglas Street, Suite 1400, Omaha, Nebraska 68102-1944

ADMITTED ASSETS *

	12/31/2020	12/31/2019	12/31/2018
Total invested assets	\$ 5,475,240,588	\$ 5,172,183,338	\$ 4,313,185,189
Premium & agent balances (n)	603,615,506	368,086,012	301,849,144
All other assets	157,897,676	127,524,677	140,930,406
Admitted Assets	\$ 6,236,753,770	\$ 5,667,794,027	\$ 4,755,964,739

LIABILITIES & SURPLUS *

	12/31/2020	12/31/2019	12/31/2018
Loss & loss exp. unpaid	\$ 921,923,948	\$ 634,745,558	\$ 463,103,223
Unearned premiums	372,836,160	314,117,549	241,835,588
All other liabilities	1,054,922,210	744,738,458	570,628,148
Total Liabilities	2,349,682,318	1,693,601,565	1,275,566,959
Total Policyholders' Surplus	3,887,071,452	3,974,192,463	3,480,397,780
Total Liabilities & Surplus	\$ 6,236,753,770	\$ 5,667,794,028	\$ 4,755,964,739

* Assets, liabilities and surplus are presented on a Statutory Accounting Basis as promulgated by the NAIC and/or the laws of the company's domiciliary state.

AUTHORIZATION TO INSERT DATE OF CONTRACT ON BONDS

DATE: September 14, 2021

TO: City and County of Denver

RE: Flatiron Constructors, Inc ("as Contractor")
Taxiway EE Construction Denver International Airport
Contract # 202158849

Flatiron BOND NOS. Liberty Mutual Bond # 015214610
Travelers Bond # 107433031
F&D/Zurich Bond # 9374494
Federal Bond # K40399689
Continental Bond # 30138062
Berkshire Bond # 47-SUR-300033-01-0556

Dear Sir or Madam:

The Performance and Payment Bond covering the referenced project were executed by this agency, an authorized representative for the sureties for Flatiron Constructors, Inc on September 14, 2021.

We hereby authorize the City and County of Denver to date the bonds to coincide with the date of the contract.

Liberty Mutual Insurance Company
Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Zurich American Insurance Company
Federal Insurance Company
The Continental Insurance Company
Berkshire Hathaway Specialty Insurance Company

By: _____

Elliott W Wolfe, Attorney-in-Fact

Turner Surety and Insurance Brokerage, Inc.

250 Pehle Avenue, Suite 311, Saddle Brook, NJ 07663

Direct: 201.267.7510 | Cell 201.527.5282 | jurano@tsibinc.com | CA License # 0E81386

CORPORATE ACKNOWLEDGMENT

Form 152

STATE OF NEW JERSEY
COUNTY OF BERGEN

On this 14th day of September, 2021 before me personally came Elliott W. Wolffe to me known, who, being by me duly sworn, did depose and say that she/he resides in Livingston, New Jersey that she/he is the ATTORNEY IN FACT of the LIBERTY MUTUAL INSURANCE COMPANY, TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, ZURICH AMERICAN INSURANCE COMPANY, FEDERAL INSURANCE COMPANY, THE CONTINENTAL INSURANCE COMPANY, BERKSHIRE HATHAWAY SPECIALTY INSURANCE COMPANY, the corporation described in and which executed the above instrument that she/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)



BIANCA L. MELI

NOTARY PUBLIC, STATE OF NEW JERSEY

MY COMMISSION EXPIRES

SEPTEMBER 30, 2024

**ACTION BY UNANIMOUS WRITTEN CONSENT
OF THE BOARD OF DIRECTORS**

FLATIRON CONSTRUCTORS, INC.

The undersigned, being the sole member of the board of directors (the "**Board**") of Flatiron Constructors, Inc., a Delaware corporation (the "**Corporation**") pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, does hereby waive all notice of the time, place and purposes of a meeting and does hereby consent to and adopt the resolutions set forth below to have the same force and effect as a unanimous vote of the directors of the Corporation at a duly-convened meeting of the Board called and held for the purpose of acting upon proposals to adopt such resolutions.

WHEREAS, the Board has determined that it is in the best interest of the Corporation to appoint certain management employees as authorized signatories with power of attorney to act on behalf of the Corporation (an "Authorized Signatory"); and

WHEREAS, such Authorized Signatories must have the authority to execute certain contracts and other instruments necessary to bind the Corporation in furtherance of the Corporation's projects and in the administration of its operations.

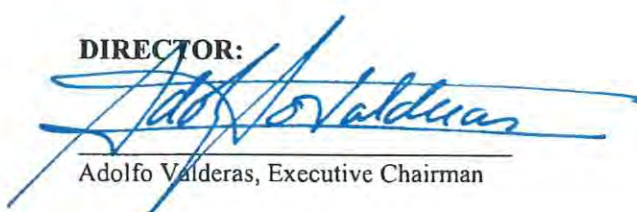
NOW, THEREFORE, BE IT

RESOLVED, that the Board hereby appoints **Grant Johns** as an Authorized Signatory of the Corporation, effective **October 26, 2020** to act in this capacity until his authority is rescinded; and

FURTHER RESOLVED, that an Authorized Signatory of the Corporation shall have the authority to execute contracts and other instruments on behalf of the Corporation in accordance with internal policies and procedures, and shall perform such other duties and exercise such other powers as assigned to him by the Board, the Chief Executive Officer, Chief Financial Officer the Chief Operating Officer, or other Officers of the Corporation.

IN WITNESS WHEREOF, the undersigned has executed this Written Consent the 29th day of October 2020.

DIRECTOR:



Adolfo Valderas, Executive Chairman

**ACTION BY UNANIMOUS WRITTEN CONSENT
OF THE BOARD OF DIRECTORS**

FLATIRON CONSTRUCTORS, INC.

The undersigned, being the sole member of the board of directors (the "**Board**") of Flatiron Constructors, Inc., a Delaware corporation (the "**Corporation**") pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, does hereby waive all notice of the time, place and purposes of a meeting and does hereby consent to and adopt the resolutions set forth below to have the same force and effect as a unanimous vote of the directors of the Corporation at a duly-convened meeting of the Board called and held for the purpose of acting upon proposals to adopt such resolutions.

WHEREAS, the Board has determined that it is in the best interest of the Corporation to appoint certain management employees as authorized signatories with power of attorney to act on behalf of the Corporation (an "Authorized Signatory"); and

WHEREAS, such Authorized Signatories must have the authority to execute certain contracts and other instruments necessary to bind the Corporation in furtherance of the Corporation's projects and in the administration of its operations.

NOW, THEREFORE, BE IT

RESOLVED, that the Board hereby appoints **Kevin McCormick** as an Authorized Signatory of the Corporation, effective **October 26, 2020** to act in this capacity until his authority is rescinded; and

FURTHER RESOLVED, that an Authorized Signatory of the Corporation shall have the authority to execute contracts and other instruments on behalf of the Corporation in accordance with internal policies and procedures, and shall perform such other duties and exercise such other powers as assigned to him by the Board, the Chief Executive Officer, Chief Financial Officer the Chief Operating Officer, or other Officers of the Corporation.

IN WITNESS WHEREOF, the undersigned has executed this Written Consent the 29th day of OCTOBER 2020.

DIRECTOR:



Adolfo Valderas, Executive Chairman

AUTHORIZATION TO INSERT DATE OF CONTRACT ON BONDS

DATE: September 14, 2021

TO: City and County of Denver

RE: Flatiron Constructors, Inc ("as Contractor")
Taxiway EE Construction Denver International Airport
Contract # 202158849

Flatiron BOND NOS. Liberty Mutual Bond # 015214610
Travelers Bond # 107433031
F&D/Zurich Bond # 9374494
Federal Bond # K40399689
Continental Bond # 30138062
Berkshire Bond # 47-SUR-300033-01-0556

Dear Sir or Madam:

The Performance and Payment Bond covering the referenced project were executed by this agency, an authorized representative for the sureties for Flatiron Constructors, Inc on September 14, 2021.

We hereby authorize the City and County of Denver to date the bonds to coincide with the date of the contract.

Liberty Mutual Insurance Company
Travelers Casualty and Surety Company of America
Fidelity and Deposit Company of Maryland
Zurich American Insurance Company
Federal Insurance Company
The Continental Insurance Company
Berkshire Hathaway Specialty Insurance Company

By: _____

Elliott W Wolfe, Attorney-In-Fact

Turner Surety and Insurance Brokerage, Inc.
250 Pehle Avenue, Suite 311, Saddle Brook, NJ 07663

Direct: 201.267.7510 | Cell 201.527.5282 | jsurano@tsibinc.com | CA License # 0E81386

EXHIBIT I

Contract Technical Specifications

**Incorporated by Reference
As Found in File 20210083 at the Denver
Office of the Clerk and Recorder**

EXHIBIT J

Contract Drawings

**Incorporated by Reference
As Found in File 20210083 at the Denver
Office of the Clerk and Recorder**



EXHIBIT K

INVITATION FOR BID

TAXIWAY EE CONSTRUCTION CONTRACT NO. 202158849

July 1, 2021

Flatiron Constructors, Inc.
Contract No. 202158849-00

DENVER INTERNATIONAL AIRPORT

INVITATION FOR BID (IFB)

Airport Office Building (AOB)
Denver International Airport (DEN)
8500 Pena Boulevard, Room 8810
Denver, Colorado 80249-6340

Contract Administrator (CA): Tony Deconinck
E-Mail: contract.procurement@flydenver.com

Invitation for Bid #: 202158849

BIDS MUST BE RECEIVED BY: July 30, 2021, by 2:00 PM Denver Local Time

Schedule of Activities

This projected schedule is an estimated timeline and is subject to change at the sole discretion of the City. All times listed in this document are understood to be Denver local time.

Event	Date
IFB Advertisement	July 1, 2021
Pre-Bid Conference	July 8, 2021 at 10:00 AM Denver Local Time
Last Date to Submit Written Questions	July 15, 2021 by 2:00 PM Denver Local Time
Bid Opening	July 30, 2021 by 2:00 PM Denver Local Time

Pre-Bid Conference – OPTIONAL

An optional Pre-Bid Conference will be held virtually via a Microsoft Teams Meeting at the time listed above in the Schedule of Activities. Please click on the following link to access the meeting:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZjRjNzFkZiQtMTg4Ny00ZTFkLTgwMjYtMTliNjk3ZGM4NzE5%40thread.v2/0?context=%7b%22Tid%22%3a%2279c62162-b85e-4b0e-a863-ebe7817ad70d%22%2c%22Oid%22%3a%224d2087cc-678d-42eb-a96a-3f2d7341b873%22%2c%22IsBroadcastMeeting%22%3a%22true%22%7d&btype=a&role=a

At this conference, DEN representatives will explain the opportunity and answer questions regarding this IFB, including any written questions submitted to DEN prior to the conference.

IFB Questions

DEN will not answer any telephone inquiries about this IFB. Written questions are due by the time listed above in the Schedule of Activities and shall be submitted electronically via the Rocky Mountain E-Purchasing System (BidNet) website. **DEN requires all questions to be submitted individually on this site.** Note: BidNet limits the characters available to input for DEN to respond to each question. For this reason, multiple questions may not be submitted as a single question, as DEN is unable to respond to multiple questions in the space provided. Because of this limitation, DEN reserves the right to reject groups of questions submitted in a single question box or to select and respond to only one question posed. A multi-part question containing an initial question and a follow-up is the exception to this rule. All questions and answers will be posted on the BidNet website as an addendum to the bid at the link below following the deadline for submittal of questions:

<https://www.bidnetdirect.com/colorado/cityandcountyofdenverdepartmentofaviation>

Bid Submittal

The bid shall be prepared in accordance with the Preparation of Bid as described in Section IV of this RFB. Proposers shall submit their bid and all required forms via the BidNet website at the link below. Bids are due by the date and time listed in the Schedule of Activities above.

<https://www.bidnetdirect.com/colorado/cityandcountyofdenverdepartmentofaviation>

Allow ample time for the electronic submission of your bid. Following are links to a BidNet Electronic Bid Submission (EBS) guide and EBS FAQ site. DEN strongly encourages bidders to review this information prior to starting your submission in addition to starting the submission process at least one business day prior to the bid due date. DEN will not extend the submission deadline due to any technical issues or outages you may experience.

Vendor EBS Guide: http://business.flydenver.com/bizops/documents/den_Vendor_EBS_Guide.pdf

EBS FAQs: <http://faq.bidnetdirect.com/electronic-bid-submission/>

Disadvantaged Business Enterprise Participation

The Director of the Division of Small Business Opportunity has the authority to establish a project goal for federally funded expenditures contracted by the City and County of Denver. The specific goal for this project is:

16% Disadvantaged Business Enterprise (DBE) Participation Goal

Project goals must be met with certified participants as set forth in 49 CFR Part 26 or through the demonstration of a sufficient good faith effort.

General Statement of Work

This project will provide the construction of a new taxiway (TW) EE and associated infrastructure. This taxiway will be located north and parallel to existing Taxiway ED, leading from Taxiway L, across Taxiway M, eastbound to the departure threshold of Runway 17L via extended Taxiway P7. The scope of work will include grading, drainage, utility relocation, airfield paving, airfield pavement marking, airfield electrical, and signage.

Prequalification

Each bidder must be prequalified in category **3C – Concrete Airfield Paving** at or above the **\$50 million** monetary level in accordance with the City's Rules and Regulations Governing Prequalification of Contractors. Each bidder must have submitted a prequalification application a minimum of ten (10) calendar days prior to the response due date. Applications must be submitted via email to pw.prequal@denvergov.org. To view the Rules and Regulations and to obtain a prequalification application, please visit our website at www.denvergov.org/prequalification.

BID SUBMITTAL REQUIREMENTS

The following is a checklist for reference when compiling the Bid submission. The documents listed below are required:

- Bid Forms - all complete and signed
 - Bid Letter – filled out completely and acknowledge all addenda
 - Bid Data Forms – all forms completed and submitted
 - Disclosure of Legal & Administrative Proceedings & Financial Conditions
 - Form W-9
 - Certificate of Good Standing
 - Bid Bond (scan of executed bid bond in submittal)

- DSBO Forms
 - Commitment to DBE Participation
 - Form 1A – List of Proposed Subcontractors, Subconsultants, and/or Suppliers
 - Letter(s) of Intent

- Diversity Survey
 - Diversity and Inclusiveness in City Solicitations (online survey – include the completed survey with your Bid submission)

- Financial Forms
 - Schedule of Prices/Values and Quantities

- XXI. Appendix A – Contract Provisions:
 - Section A4.3.2 Certificate of Buy American Compliance for Total Facility
 - Section A4.3.3 Certificate of Buy American Compliance for Manufactured Products

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I. CITY, AIRPORT AND PROJECT OVERVIEW

The values of equity, diversity, inclusivity, accessibility and sustainability are inherent to Denver's strategy to develop and maintain prosperous communities. Consequently, these values are imbedded into all of Denver's procurement processes to ensure competitive procurement that offers equitable opportunities for all potential proposers, including greater contracted and significant participation for minority, women-owned, and small businesses to ensure Denver's long-term economic, social, and environmental health. It is the City's expectation that all successful proposers demonstrate their commitment to City values through their procurement responses and post contract and/or lease activities.

Each procurement opportunity is to be approached with ethical and honest behavior. The City will solicit, evaluate, and award contracts based upon the Proposer's approach, proven experience, ability to perform work, costs, and pricing. DEN is looking for Proposers that demonstrate a history of integrity, stewardship, innovation and humanity. We are looking for firms that share these values with us and will approach this contract with them at the forefront.

The City's values may be demonstrated through but are not limited to: (a) workforce expansion; (b) utilization of minority, women-owned, and small business community separate from required certified goals; and (c) environmental sustainability.

In accordance with procedures described herein, you are hereby invited to submit a Bid for the subject project, which is described in the Technical Specifications and Drawings incorporated herein. The work under this Contract is anticipated to start on or about January 2022 and has a scheduled duration of approximately two years. The Bid must be prepared and submitted in accordance with the requirements and procedures contained in this IFB document and the City's, including DEN's, ordinances, rules, policies, and procedures. Compliance with these requirements by the Bidder is mandatory and is a condition of responsiveness. Any failure to satisfy these requirements will be a sufficient basis for the City and County of Denver's Department of Aviation, also known as Denver International Airport, (DEN or City) to disqualify the Bidder. The City shall not be liable for any of the Bidder's expenses associated with its preparation of the Bid or DEN's consideration of it. The Bidder, if selected, shall not include any such expenses as part of its fee for performing the Scope of Work.

II. ADMINISTRATIVE INFORMATION**II-1 Issuing Office**

The City and County of Denver's Department of Aviation (City or DEN), by the Contract Services Department (DEN Contract Services). This IFB is governed by the City's ordinances and Procurement Rules in effect at the time of its issuance. DEN Contract Services is the sole point of contact concerning this IFB. All communication must be done through the Contract Services Department.

II-2 Introduction and Acceptance of IFB Terms

The Bidder, by submitting its Bid, acknowledges that it understands and will agree to the Sample Contract and corresponding Exhibits and the Scope of Work, and that the Bidder shall be able to perform as required. Acknowledgement of this condition shall be indicated by the signature of the Bidder on the Bid Letter, which is attached hereto and incorporated here in as Attachment 1, or an officer of the Bidder legally authorized to execute contractual obligations. A submission in response to this IFB acknowledges acceptance by the Bidder of all terms and conditions as set forth herein. The Bidder shall identify clearly and thoroughly any variations between its Bid and this IFB. Failure to do so shall be deemed a waiver of any rights to subsequently modify the terms of performance, except as outlined or specified in this IFB.

II-3 Means of Communication

During the solicitation process for this IFB, all communication between the Contract Services Department and Bidders will be via postings on DEN's Rocky Mountain E-Purchasing System's (BidNet's) website: <https://www.bidnetdirect.com/colorado/cityandcountyofdenverdepartmentofaviation>

The Contract Services Department will post notices, which include, but are not limited to, any modifications to administrative or performance requirements, answers to inquiries received, clarifications to requirements, addenda, and the announcement of the apparent successful bidder. It is the responsibility of each potential Bidder to monitor the BidNet website regularly in order to be aware of changes, communications and/or addenda to bids.

DEN will not be held responsible for misinformation received from private plan holders. Please use the BidNet website to obtain solicitation information for the airport.

II-4 Interpretation of Bid Documents

The Bidder may request, in writing, a clarification or interpretation of any aspect of the IFB documents. Such requests must be made via the Rocky Mountain E-Purchasing System (BidNet) website by the due date and time specified in the Schedule of Activities listed on Page 2. DEN shall post all questions and answers on the BidNet Website following the deadline for submittal of questions as an addendum to the bid. DEN will not accept or respond to oral inquiries except for those made at the Pre-Bid Conference. The only 'official' responses are those that are posted to the BidNet Website for this IFB.

Note: BidNet limits the number of characters DEN may use to respond to each question. For this reason, do not submit multiple questions within a single question box, as DEN is unable to respond to multiple questions in the space provided. Because of this limitation, DEN reserves the right to reject groups of questions submitted in a single question box or to select and respond to only one question posed.

II-5 Addenda

DEN reserves the right to revise the IFB documents at any time up to the time set for submission of the Bids. Any such revision(s) shall be described in an addendum to the IFB and shall be posted on the BidNet Website at the following link:

<https://www.bidnetdirect.com/colorado/cityandcountyofdenverdepartmentofaviation>

If DEN determines that the addendum may require significant changes to the Scope of Work, the deadline for submitting the Bids may be postponed by the number of days that DEN determines will allow Bidders sufficient time to revise their Bids. Any new submittal deadline date for delivering Bids to DEN shall be included in the addendum.

Bidders must acknowledge in the Bid submission that they received all addenda to the Bid documents (see Attachment 2, Part 1). Failure to acknowledge receipt of addenda may disqualify the Bid.

II-6 **DEN Website**

It shall be conclusively presumed that the Proposer did, before submitting a proposal and prior to the final proposal deadline, read all addenda, posted decisions and other information items relevant to the RFP which appeared on the DEN BidNet Website. Proposer may also contact the DEN Contract Administrator, Tony Deconinck by email at contract.procurement@flydenver.com to confirm all posted information.

Please visit the BidNet Website at the following link which contains such services and information as:
<https://www.bidnetdirect.com/colorado/cityandcountyofdenverdepartmentofaviation>

- A. Advertisements for RFQs, RFPs and IFBs
- B. Status of RFQs, RFPs and IFBs
- C. Project addenda
- D. Incidental project information is available for viewing and printing, which includes:
 - a. Plan holder's list
 - b. Pre-Bid Conference attendance list
 - c. Questions and Answers

Incidental project information listed in item D., above, will only be available online at the BidNet Website and will not be mailed.

II-7 **Withdrawal of Bid**

A Bidder may withdraw its Bid by submitting to DEN a written request signed by the Bidder's authorized representative. The withdrawal of a Bid does not prejudice the right of the Bidder to submit future Bids.

II-8 **Rights of DEN**

DEN reserves the rights to cancel or modify this RFP at any time and to reject any or all proposals for any reason or for no reason. This RFP is an open and equitable invitation for proposals, and each proposal constitutes an offer to contract that DEN may consider in its sole and absolute discretion. Any errors or omissions in a proposal may result in the rejection and disqualification of the entire proposal. Errors, omissions, and other acts that may result in proposal rejection and disqualification include, but are not limited to, failure to strictly comply with the RFP requirements or any applicable ordinances, rules, or policies; the submission of any inaccurate or false information; any improper communications or collusion involving Proposers; default or termination for cause of any public or private contracts within the past five years; delinquent arrearages owed to DEN; and failure to submit proof of licensing or franchise authority and any related exclusivity requirements.

Notwithstanding the broad rights reserved to DEN to reject and disqualify any or all proposals, DEN may waive any immaterial deficiencies in proposals and may allow Proposers to cure any such deficiencies if an opportunity to cure is determined by DEN to be in DEN's best interests. If given an opportunity to

cure, Proposers will be notified of the allotted time to correct the identified deficiency; failure to correct the deficiency in the time allotted may result in proposals being deemed non-responsive and disqualified. DEN's waiver of an immaterial deficiency will in no way modify the RFP or excuse Proposers from full compliance with all RFP specifications. DEN may exercise the foregoing rights at any time without notice and without any liability whatsoever to any Proposer or other party. By responding to this RFP, each Proposer is deemed to accept and agree to all of these terms and conditions and to waive any rights to challenge DEN's determinations regarding proposal deficiencies in accordance with this section.

II-9 **Disadvantaged Business Enterprise (DBE)**

The City is committed to advancing its vision of small business equity and sustainability through growing the capacity of our small, disadvantaged businesses, which shall include certified small, disadvantaged businesses. The City will provide significant opportunities among these businesses and ensure they benefit from the contract. Aligning with the Division of Small Business Opportunity ("DSBO") mission to strengthen the City's small, disadvantaged, minority, and women-owned business community, this contract's disadvantaged business engagement initiatives are intended as a part of the City's commitment to ensure, small, disadvantaged businesses are actively and impactfully participating throughout the life of the Project.

Title 49, Code of Federal Regulations, Part 26, DBE Program Plan, Article III, Divisions 1 and 3 of Chapter 28(Ordinance), Denver Revised Municipal Code (D.R.M.C.), and any DOT Rules or Regulations promulgated pursuant thereto apply to this Project and will be incorporated into any agreement entered as part of this selection process. Under the Disadvantaged Business Enterprise (DBE) Regulations, the Director of DSBO ("Director") has the authority to establish participation goals for federally funded expenditure on construction, reconstruction, remodeling, professional and design work performed for the City and County of Denver. The participation goal is stated in the Notice of Invitation for bids bound herein. In order to comply with the bid requirements set forth in 49 CFR Part 26, DBE Program Plan, Ordinance, or any additional requirements, a bidder shall either meet the established participation goal or, in the alternative, demonstrate that the bidder has demonstrated sufficient good faith efforts to meet the goal in accordance with the Ordinance. A bidder's failure to comply with 49 CFR Part 26, DBE Program Plan, Ordinance, any Rules or Regulations promulgated pursuant thereto, or any additional requirement contained herein shall render the bid non-responsive and shall constitute cause for rejection. Failure by the Contractor/Consultant awarded the contract to comply with 49 CFR Part 26, DBE Program Plan, Ordinance requirements and its accompanying Rules and Regulations during the performance of the contract is a material breach of the contract, which may result in the imposition of sanctions on the Contractor/Consultant, as deemed appropriate by DSBO. Copies of the Ordinance and its accompanying Rules and Regulations are available for the use and review of bidders from DSBO, which can be found here: <https://www.denvergov.org/dsbo>.

Meeting Established Goal

1. All DBEs listed for participation toward meeting the goal must be properly certified by the City and County of Denver (CCD) or Colorado Department of Transportation (CDOT) on or before the date bids are opened. The DBE(s) must be certified in the NAICS code(s) that coincide with the scope of work the identified firm will be performing to count towards the participation goal. The DBE Directory ("Directory"), is a current list of DBEs certified by CCD and CDOT. A copy of the Directory is located at the following web site <http://coucp.dbesystem.com/>. Bidders are encouraged to use the Directory to

assist in identifying DBEs for the work and supplies required for the Project. Bidders are reminded that changes may be made to the Directory at any time. Procedures established to administer this program and a current copy of the Directory must always be used in preparing a bid. DBE certification or listing in the Directory is not a representation or warranty by the City regarding the qualifications of any listed DBE.

2. If a bidder is participating in a joint venture with a certified DBE firm, bidders must submit the Joint Venture Agreement to the DSBO **at least ten (10) business days prior to the bid opening**. The Joint Venture must be approved prior to the bid opening by the DSBO. Approval by the DSBO includes determining the amount the Joint Venture will count towards the participation goal.
3. Each bidder shall submit Bid Form pages entitled Commitment to DBE Participation, 1A- List of Proposed Subcontractors, Subconsultants, and/or Suppliers, and Letter(s) of Intent for all tiers with the bid at the time of bid opening. DSBO will evaluate each bid to determine responsiveness of the bid with regard to 49 CFR Part 26 and Ordinance requirements. **A DBE Prime Bidder must submit a Letter of Intent for itself for self-performed work.** The DBE Letter of Intent evidences the Bidder's understanding that the Bidder has or will enter into a contractual relationship with the DBE or that the Bidder's subcontractor(s), subconsultant(s), and/or supplier(s) will do so. Bidders are urged to carefully review these Letters of Intent before submission to the City to ensure the documents are properly completed and executed by the appropriate parties. **Only the DBEs identified, and the precise levels of participation listed for each, at the time of bid opening, will be considered in determining whether the bidder has met the designated participation goal. Additional, participation submitted after bid opening will not be considered in determining responsiveness.**
 - a. In determining whether a bidder's committed level of participation meets the stated DBE goal, DSBO shall base its calculation of applicable dollar amounts and percentages on the total base bid amount. If a bid contains alternates, participation contained in any alternate will not count towards satisfaction of the Participation goal at time of bid opening. However, should any designated alternate be selected by the City for inclusion in the contract ultimately awarded, the DBE goal percentage level submitted at time of bid opening, on the base bid, will also apply to the selected alternates and must be maintained through the remaining term of the contract on the total contract amount, including any alternate work. Therefore, bidders are urged to consider participation in preparing bids for designated alternates.
 - b. In utilizing the DBE participation of a Supplier, the following will count towards satisfaction of the goal:
 - i. If the materials or supplies are obtained from a DBE manufacturer, count one hundred percent (100%) of the cost of the materials or supplies toward the participation goal.
 - ii. Only sixty percent (60%) of the value of the commercially useful function performed by DBE Regular Dealers shall count toward satisfaction of the participation goal.
 - iii. Only the bona fide commissions earned by such Manufacturer Representatives or Brokers for its performance of a commercially useful function will count toward meeting the participation goals. The bidder must separate the bona fide brokerage commissions from the actual cost of the supplies or materials provided to determine the actual dollar amount of participation that can be counted towards meeting the goal.

- c. Any agreement between a bidder and an DBE in which the bidder requires that the DBE not provide subcontracting quotations to other bidders is prohibited and shall render a bidder's bid nonresponsive. D.R.M.C. 28-68(f)

Good Faith Effort

If the bidder has not fully met the participation goal as provided in D.R.M.C. Section 28-62, then it shall demonstrate that it has made good faith efforts to meet such goal. The bidder shall furnish to the Director, with the bid at time of bid opening by the City a detailed statement of its good faith efforts to meet the participation goal established by the Director. The statement of good faith efforts shall include a specific response to address each of the categories, as outlined in the Ordinance, D.R.M.C. Section 28-60, and any additional criteria that the Director may establish by rule or regulation consistent with the purposes of the Ordinance. A bidder may include any additional information it believes may be relevant. Good faith efforts must be demonstrated to be substantive and not merely for formalistic compliance with the Ordinance. The scope and adequacy of the efforts will be considered in determining whether the bidder has achieved a good faith effort. Failure of a bidder to show good faith efforts shall render its overall good faith effort showing insufficient and its bid nonresponsive.

Bidders are encouraged to contact DSBO by phone at (303) 342-2180 or by email at dsbo@flydenver.com with specific questions related to compliance with 49 CFR Part 26, the DBE Program Plan, or the Ordinance.

II-10 Certification of Independent Price and Work Determination

By submission of this Bid, each Bidder, and in the case of a joint Bid, each party thereto, certified, that, in connection with this procurement:

- a. Prices and specific work processes in this Bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor, or with any party contracted by DEN to design and/or manage all or part of the program or work of which this IFB is a part;
- b. Unless otherwise required by law, the prices quoted and specific work processes described in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly to any other bidder or to any competitor or to any party contracted by DEN to design and/or manage all or part of the program or work of which this IFB is a part; and
- c. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition.

Further, each person signing Attachment 1, Part 1 Bid Letter, for this Bid certified that:

- d. He/She is the person in the Bidder's organization responsible for the decision as to the prices being offered herein and that he/she has not participated, and will not participate, in any action contrary to subsection (a) through (c) above; or
- e. He / She is not the person in the Bidder's organization responsible for the decision as to the prices being offered herein but that he/she has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to subsections (a) through (c), above, and as their agent does

hereby so certify; and he/she has not participated, and will not participate, in any action contrary to subsections (a) through (c), above.

A Bid will not be considered for award where subsections (a), (c), (d) or (e), above, have been deleted or modified. Where (b) above has been deleted or modified, the Bid will not be considered for award unless the Bidder furnishes with the Bid a signed statement which sets forth in detail the circumstances of the disclosure and the Chief Executive Officer (CEO), or its designee, determines that such disclosure was not made for the purpose of restricting competition.

II-11 Designation of Subcontractors

The Bidder shall describe the qualifications of each subcontractor which it intends to use and the percentage and scope of the work which will be assigned to each of them. Resumes for the subcontractor's key personnel must be included.

Bidders who submit a Bid in response to this IFB are precluded from participation as a subcontractor with any other Bidders who submit a Bid for this IFB. However, subcontractors may be named on more than one (1) Bid.

II-12 Payment

Appropriate clarifications and additions to the Scope of Work may be made during negotiations with the successful Bidder. It is the intent of DEN to enter into a Contract in which the Bidder will be paid pursuant to the terms of the Contract.

II-13 Disclosure of Legal and Administrative Proceedings and Financial Condition

A. The Bidder shall submit (at time of submittal) a statement which shall disclose all legal or administrative proceedings that involve a civil claim in excess of Fifty Thousand Dollars (\$50,000) in which the Bidder, its principals or key personnel were a party in the last five years. The Bidder shall include in the statement:

1. The caption of the action naming all parties;
2. The case number, jurisdiction and the date the action was filed;
3. A brief description of the action, the amount of the claim and whether the action involved performance under any public or private construction contract; and
4. The outcome or disposition of the action.

B. The Bidder shall submit (at time of submittal) a statement which shall disclose whether Bidder has filed for protection under the laws of the U. S. Bankruptcy Code within the last ten (10) years.

C. The Bidder shall submit (at time of submittal) a statement as to whether the Bidder, its principals or key employees presently, or in the past, are or have been involved in any debarment or suspension proceedings. Please include a description of any proceedings which prohibited or limited the Bidder from bidding or entering into any contract with any federal, state or local government entity. Include a brief description of the reason(s) for such action having been taken, the effective dates thereof and the governmental agency.

If the Bidder is a partnership or joint venture, please include a statement disclosing the information listed in subparagraph A and B, above, for each partner or joint venturer. If the Bidder is fifty percent

(50%) or greater owned by another entity or individual, please include a statement disclosing the above information for such entity or individual.

- D. The Bidder shall submit (at time of submittal) a statement as to whether the Bidder, its principals or key employees have been convicted of any crime related embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, fraud, unfair trade practices, violation of state or federal antitrust statutes, or other law indicating a lack of business integrity or business honesty or have been convicted of any other felony in any jurisdiction within the last five (5) years. Include the current status of any such principal or key employees.
- E. The Bidder shall submit (at time of submittal) its Dun & Bradstreet identification number if applicable. If the Bidder is a partnership or joint venture, it must submit the Dun & Bradstreet identification number for each partner of a joint venture.
- F. If the Bidder is a publicly held company, it shall submit (at the time of submittal) a list of any holders of ten percent (10%) or more of its stock.
- G. During contract negotiations, the Bidder may be asked to submit the following:
1. An audited statement of overhead rates, payroll taxes and operating (profit) margin used to calculate hourly billing rates for DEN and approval. If the Bidder does not have audited overhead rates, an Exhibit E, Submittal 2 may be requested for each entity without audited overhead rates. This statement shall cover the Bidder's most recently completed fiscal year and shall be signed by a certified public accountant as a Certified Audited Statement in which the accountant expresses his or her opinion as to the fairness with which the statement represents the Bidder's financial position, results of operations and changes in financial position.
 2. If the Bidder is a partnership or joint venture, a Certified Audited Statement is required for each partner or joint venture. If the Bidder does not have audited overhead rates, an Exhibit E, Submittal 2 may be requested for each entity without audit overhead rates. If any individual owns thirty-two percent (32%) or more of the Bidder, a Certified Audited Statement is required for each such individual or if a Certified Audited Statement is not available, then the individual must supply copies of his or her federal tax returns for the prior two (2) years.
 3. If a Bidder is a small business as defined by the United States Small Business Administration, the Bidder may elect to submit copies of its Federal tax return for the prior two (2) years and prepare an Exhibit E, Submittal 2 in lieu of a Certified Audited Statement.
 4. A signed statement certifying that no material or significant changes have occurred since the date of completion of the Certified Audited Statement, or the filing of the Federal tax return and the date of the Bid.

II-14 Insurance Requirements

Bidder shall adhere to all insurance requirements stated in Attachment 4, which are attached hereto and incorporated herein by reference. ACORD FORM (or equivalent) must be emailed in pdf format to: contractadmininvoices@flydenver.com.

II-15 Governmental Immunity

Bidders and subcontractors understand and agree that the City, its officers, officials and employees are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §§ 24-10-101 - 120, C.R.S., or otherwise available to the City, its officers, officials and employees.

II-16 Security

After receiving an executed contract, the Bidder shall be deemed a Contractor of DEN. The Contractor (or subcontractor) requiring access to the Controlled Area, Sterile Area or Secured Area shall become a "Participant" in the Airport Security Program and remain in good standing in order to retain Airport Security privileges.

Participant guidelines are outlined in Rules and Regulations Governing the Denver Municipal Airport System Rules and Regulations Part 20. A Contractor must be sponsored by an Air Carrier, Tenant or by the City. Once a Contractor company has been sponsored, they must designate an Authorized Signatory.

The sponsorship establishes that a Contractor (or subcontractor) has legitimate business at the Airport. All construction Contractors must submit a Participant Sponsorship form signed by their sponsor. A company sponsoring a Participant shall immediately notify Airport Security when any sponsorship is terminated.

A subcontractor company working under its own entity must be sponsored by a Contractor company. The subcontracting company must designate its own Authorized Signatory(ies).

Each Participant shall designate an Authorized Signatory to ensure the Participant's compliance with the Airport Security Program and act as the point of contact between the Participant and Airport Security. The Authorized Signatory shall be designated in writing to Airport Security by the Participant.

The Authorized Signatory is responsible for signing and verifying all information on the Denver International Airport Fingerprinting and Badging applications. All submitted applications must be an original. It is the Authorized Signatory's responsibility to ensure that Airport Security maintains valid contact information. The Authorized Signatory must maintain a current and valid Airport Identification Badge (ID Badge).

The security status of the Airport is subject to change without notice. Should the security status of the Airport change at any time during the term of the Contract, a written notice shall be issued to the Contractor, detailing all applicable security modifications. The Contractor must take immediate steps to comply with those security modifications.

The Contractor shall return to DEN, upon Contract completion or termination, or upon demand by DEN, all access keys and Airport ID Badges issued to it by DEN to Controlled Areas, Sterile Areas or Secured Areas of the Airport. If the Contractor fails to return any such Airport ID Badge(s) or Airport Security Key(s) at Contract completion or termination or upon demand by the DEN, the Contractor shall be liable to the DEN for all DEN's costs, including the DEN's labor costs for re-coring doors and any other work which is required to prevent compromise of any Airport Security system. In order to collect such costs hereunder, the DEN may withhold funds in such amount from any amounts due and payable to the Contractor under the Contract.

Airport Security must be immediately notified if an Airport ID badge or security key is lost or stolen and must be notified immediately upon the termination of an individual's employment. Pursuant to 49 CFR Part 1520.04-10(d) a fee shall be assessed against any employer who fails to return an Airport ID badge or security keys upon the termination of an individual's employment, transfer, or completion of a project or contract. An additional fee may be requested to cover the administrative cost of processing a lost badge or security key.

II-17 **Airport Identification (ID) Badge Requirements**

All individuals employed at the Airport with Secured Area access, or working in the Terminal, Concourses or Parking and Ground Transportation facilities, must obtain an Airport ID Badge. Airport ID Badges will be issued by Airport Security. All Airport ID Badges shall be and remain the property of the Airport. The Airport ID Badge must be surrendered on demand to Airport Operations and/or a Contract Security Guard. An individual employed by more than one (1) company, or changing employers, must obtain an Airport ID Badge for each company. Badge color indicates general areas and levels of authorization in relationship with direct support of an individual's job function. Badge color does not determine access. The respective classes of Airport ID Badges, indicated by badge color and associated driving endorsement icon, describe driving privileges in direct correlation with job function.

The individual must complete an application, on a form prepared and currently approved by Airport Security. Two (2) valid forms of identification must be presented with the application, one of which must be a government-issued photo identification. The second form of identification must verify proof of citizenship (i.e., birth certificate or legal residency with work authorization). All information regarding the individual's name, age, gender and other vital statistics on both forms of identification must be consistent and verifiable.

A Denver International Airport Fingerprinting and Badge Application, Security Threat Assessment (STA) and Criminal History Record Check (CHRC) must be completed for everyone requesting an Airport ID Badge. Denver International Airport Fingerprinting and Badge Applications are available from the Airport Security Office. Allow adequate time for processing of the Security Threat Assessments (STA) and Criminal History Record Check (CHRC).

The individual must view a training film on Denver Municipal Airport System Rules and Regulations as they pertain to overall security and pass a corresponding test to assure understanding of the Rules and Regulations.

If the individual requests driver authorization, a valid driver's license must be presented, and the individual must view a training film on Denver Municipal Airport System Rules and Regulations as they pertain to overall Movement of Vehicles in the Secured Area and pass a corresponding test to assure understanding of the Rules and Regulations.

A construction orientation specific to the project must be conducted. A designated time for this session must be coordinated with Planning and Development and Airport Operations.

A lost or stolen Airport ID Badge must be immediately reported to Airport Security. For a replacement Airport ID Badge, a new Denver International Airport Fingerprinting and Badge Application must be completed and signed by the Company(s) Authorized Signatory. A non-refundable fee must be paid for a replacement Airport ID Badge.

If for any reason the Airport ID Badge becomes inoperable or damaged, the Airport ID Badge holder shall return that badge to Airport Security, and a replacement badge will be issued. A replacement fee may be assessed should the damage be attributable to the negligence of the employee who was issued the badge.

When an employee is terminated, the Contractor company shall immediately notify Airport Security. This notification must be followed by the return of the Airport ID Badge and written confirmation of this information. The Contractor company must recover Airport ID Badges from individuals whose employment at the Airport has been terminated. The Contractor company shall notify Airport Security in writing when a subcontractor is no longer under the Contractor company's sponsorship. All Airport ID Badges must be returned to Airport Security.

An employee possessing a valid Airport ID Badge may escort other individuals into the Secured Area(s) under the conditions listed in the Rules and Regulations Part 20. If the project is extended, DEN's Project Manager must submit a new Sponsorship Form with a new expiration date. This can be accomplished thirty (30) calendar days prior to expiration of the Airport ID Badge. An application revision must be completed for each employee still required on the project, if the badges have expired.

II-18 **Background Checks**

Every individual requesting an Airport ID Badge must complete a Criminal History Record Check (CHRC) and a Security Threat Assessment (STA) for unescorted access to the Sterile and Secured Area(s).

If an applicant has been convicted of a crime or found guilty by reason of insanity or has been arrested for any of the disqualifying crimes or is awaiting judicial proceedings, he/she may be ineligible to obtain an Airport ID Badge. A list of the disqualifying crimes may be found in 49 C.F.R. 1542.209.

II-19 **Vehicles in the Secured Area**

All Contractor employees who are required to drive in the Sterile and Secured Area(s) unescorted to perform their jobs are required to complete a training film on Denver Municipal Airport System Rules and Regulations as they pertain to overall movement of vehicles in the Sterile and Secured Area(s) and pass a corresponding test to assure understanding of the Rules and Regulations.

All unescorted vehicles must display a current Airport Contractor Vehicle Permit (Permit). Permits are available from Airport Security. An application form must be completed, signed by an Authorized Signatory, and all applicable permit fees must be paid for each Permit requested, and it must be signed by the Authorized Signatory. A Permit is required for each state licensed vehicle, and the vehicle Permit is not transferable.

The Contractor shall purchase and maintain in force a minimum of Ten Million Dollars (\$10,000,000.00) in combined, single-limit automobile insurance for bodily injury and property damage liability per accident or occurrence.

II-20 **Violations**

Any Contractor employer not regulated under 49 C.F.R. Part 1544, Aircraft Operator, will be responsible for payment or reimbursement to DEN of any Civil Penalties imposed by the Transportation Security Administration (TSA) for individual security violations by their employees and/or subcontractor employees for violations under 49 C.F.R. Part 1542.

A Contractor employee may be personally subject to Civil Penalties imposed by the TSA for individual security violations committed by Contractor employees and/or subcontractor employees under 49 C.F.R Part 1542.

Everyone who is issued an Airport ID Badge shall comply with all Security Advisories, Rules and Regulations Governing the Denver Municipal Airport System Rules and Regulations, the CEO Directives and the Denver International Airport Standard Policies and Procedures regarding Airport Safety, Security and Operations. The failure of any individual to comply with such Security Advisories, rules and directives, etc. will result in the issuance of a Violation Notice and may result in the assessment of a Federal Civil Penalty and/or the denial, suspension or revocation of their Airport ID Badges.

The security status of DEN is subject to change without prior notice. Should the security status of DEN change at any time during the term of the Contract, a written notice shall be issued to the Contractor, detailing all applicable security modifications. The Contractor must take immediate steps to comply with those security modifications.

II-21 **Diversity and Inclusivity in City Solicitations**

Each Bidder shall, as a condition of responsiveness to this solicitation, complete and return the “Diversity and Inclusiveness in City Solicitations Information Request Form” with their Bid.

Using the “Diversity and Inclusiveness in City Solicitations Information Request Form,” please state whether your firm has a diversity and inclusiveness program for employment and retention, procurement and supply chain activities, or customer service, and provide the additional information requested on the form. The information provided on the “Diversity and Inclusiveness in City Solicitations Information Request Form” will provide an opportunity for DEN contractors to describe their own diversity and inclusiveness practices. Bidders are not expected to conduct intrusive examinations of its employees, managers, subcontractors or business partners in order to describe diversity and inclusiveness measures. Rather, DEN simply seeks a description of the Bidder’s current practices, if any.

Diversity and Inclusiveness information provided by Bidders in response to DEN solicitations for services or goods will be collated, analyzed and made available in reports consistent with the Mayor’s Executive Order No. 101. However, no personally identifiable information provided by or obtained from Bidders will be in such reports.

For DEN to consider a Bid, Bidders must complete the electronic version of the Diversity and Inclusiveness in City Solicitations Form – then **print the completed form and include the hard copy as part of its Bid. A Bid or response to a solicitation by a Bidder that does not include this completed form shall be deemed non-responsive.** The form is found at: <https://fs7.formsite.com/CCDenver/form161/index.html>

The Diversity and Inclusiveness Form is separate from the requirements established by the Division of Small Business Opportunity (DSBO) and must always be completed – regardless of whether there are any DSBO goals assigned to this project.

II-22 **Wage Ordinances**

The services being requested in this IFB may involve services that are covered pursuant to Article IV of Chapter 20 of the Denver Revised Municipal Code (“D.R.M.C.”), which is designed to address the issue of wage equity and cost of living affordability in the City & County of Denver. Bidder agrees that any contract with DEN shall include a requirement that Bidder will comply with the provisions of D.R.M.C. relating to

living, minimum and prevailing wages, including, but not limited to, paying all covered workers no less than the City Minimum Wage for all covered services rendered in connection with the resulting contract. Additionally, Bidder agrees that the contract shall require compliance with all current and future federal and state laws and City ordinances.

II-23 **Taxes**

1. **General**: Bidders shall refer to the General Conditions, G.C. 323 regarding taxes to which Bidder may be subject in performing the Work under this Contract, including but not limited to, sales and use taxes and the Denver Occupational Privilege Tax. The following instructions are to be considered along with the General Conditions – and not in lieu of them.
2. **Sales and Use Tax**: Construction and building materials sold to contractors and subcontractors for use on structures, roads, streets, highways and other public works owned by the City at DEN are exempt from state, RTD and Cultural Facilities District sales and use taxes. However, such materials will be subject to sales and use taxes imposed by the City.
3. **Exemption Certificates – Sales and Use Tax**: Contractor and Contractor's subcontractors are responsible for applying to apply to the Colorado Department of Revenue (CDOR) for a certificate or certificates of exemption, indicating that their purchase of construction or building materials is for a public project, and to deliver to the City copies of such applications as soon as possible after approval by the CDOR. Bidders shall not include in their Bid amounts the State, RTD and Cultural Facilities District Sales and Use Taxes.
4. **Denver Occupational Privilege Tax**: Any employee working for a Contractor or a subcontractor who earns over Five Hundred Dollars (\$500.00) working in Denver during a calendar month is subject to the payment of the Employee Occupational Privilege Tax. The Contractor and any subcontractor must pay the Business Occupational Privilege Tax for each of its employees who are subject to such tax.

II-24 **Conformed Technical Specifications and Contract Documents**

If applicable, and when Technical Specifications are included and/or referenced herein, Bidder understands that the Technical Specifications and Contract Drawings included in this IFB have been conformed by the City. The conformed Technical Specifications and Contract Drawings were prepared by posting or otherwise incorporating the changes noted in any addendum(s) into the Technical Specifications and Contract Drawings to form a single set of construction documents.

II-25 **Site Inspection and Investigations**

Prior to submitting its Bid, the Bidder shall inspect the work site and its surroundings. A site visit may be scheduled following the Pre-Bid Conference as indicated herein. Requests for additional site visits must be made at least ten (10) calendar days prior to the Bid due date, and any visit(s) must be requested via email to contract.procurement@flydenver.com. For purposes of a Contract, it shall be conclusively presumed that the Bidder has made a thorough inspection of the site and has waived the right to later claim extra payment or time extension(s) for conditions which would have been evident during an inspection or investigation.

Drawings and Specifications which define the Work to be done were prepared on the basis of interpretation by design professionals of information derived from investigations of the work site and site condition data provided by the City. Such information and data are subject to sampling errors, and the interpretation of the information and data depends to a degree on the judgement of the design

professional. In view of this, the Bidder is invited to make additional investigations as the Bidder's judgement dictates the need for such investigations.

Because the Bid information cannot be guaranteed, the Contractor shall have assumed the risks attendant to successful performance of the Work, except for the risk of encountering differing site conditions which are defined in the General Conditions and shall never make claim for additional payments or time extensions on the grounds that the nature or amount of Work to be done was not understood by the Bidder at the time of Bid submission.

II-26 **Materials and Substitutions**

It is often convenient and practical to specify materials and equipment to be incorporated into the Work by a proprietary name or by the name of its manufacturer. When so specified and further qualified by the phrases "or equal" or "or equivalent," it shall be understood that such specification is not intended to limit the material and equipment selection process. Rather, the specification is intended to indicate a standard of quality and capability which will be accepted. However, all Bidders desiring to use materials other than the specified materials must obtain the written approval of the Project Manager.

Bidders requesting substitutions will submit a Request for 'or Equal' Approval Form contained herein. All requests for approval of equal or equivalent material shall contain adequate technical data to clearly demonstrate equivalency. Requests containing inadequate or incomplete information will not be reviewed.

Any such Request for 'or Equal' Approval Form must be submitted via email to contract.procurement@flydenver.com, must include in the email Subject line: "Request for Substitution" and the IFB name, and the email must be received no later than ten (10) calendar days before the posted deadline for IFB submittals. All approvals of equal or equivalent materials will be posted to the Contract Procurement website as addendum(s) to ensure full and complete disclosure to all potential Bidders. All requests for approval of equal or equivalent material shall contain adequate technical data in order to clearly demonstrate equivalency. Incomplete submittals will not be reviewed.

If the Bidder is awarded the Contract and elects to use an 'or equal' that has been added by addendum(s), the Bidder shall be deemed to have warranted that:

- (1) The use of the 'or equal' fulfills the specification requirements contained in this IFB.
- (2) The installation of the 'or equal' will not impact the spatial requirements for the Work or the scheduling of work performed by the City or other contractors.

Additionally, the Bidder agrees that it shall modify any building system(s) (i.e., HVAC, structural, electrical) impacted by the use of an 'or equal' at no cost to the City or any other contractors under contract with the City and shall make no claims for delay or disruption arising out of such 'or equal' modification.

II-27 **Permit Fees**

For the construction of this project, the awarded Contractor agrees to pay the permit fees described in General Condition 317 and in the Special Conditions and Technical Specifications.

II-28 **Construction Scheduling**

The Bidder shall refer to the General Conditions, Special Conditions and Division 013210 of the Technical Specifications for scheduling requirements for this Contract.

II-29 Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion

The Bidder certifies, by submission of its Bid or acceptance of this Contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible or involuntarily excluded from participation in any government contract by any Federal, State or local government department or agency. It further agrees by submitting its Bid that it will include this clause without modification in all lower-tier transactions, solicitations, Bids, contracts and subcontracts. Where the Bidder or any lower-tier participant is unable to certify to this statement, it shall attach an explanation to its Bid.

II-30 Bid Guarantee, Bond

As a guarantee of good faith on the part of the Bidder, each IFB must be accompanied by a Bid guarantee consisting of either a certified or cashier's check made payable without condition to the order of the City and County of Denver or a Bid bond written by an approved corporation surety in favor of the City and County of Denver. If the Bidder's IFB submission is responsive and Bidder is awarded a Contract but fails to either (1) execute a Contract in the form prescribed, (2) furnish the Payment & Performance Bonds described in Title 15 of the General Conditions, (3) furnish the required evidence of insurance described in Title 16 of the General Conditions or in the Special Conditions, or (4) satisfy any other condition precedent to Contract execution within its power within five (5) working days after such notice is made by the City, said Bid guarantee shall be forfeited to the City as liquidated damages and not as a penalty. The Bid guarantee shall be in the amount of five percent (5%) of the Maximum Contract Liability Amount.

A Bid Guarantee form for execution by the Bidder is supplied with each set of contract documents. IF A BID GUARANTEE IS USED, IT MUST BE THE FORM OF BID GUARANTEE SUPPLIED WITH THE CONTRACT DOCUMENTS.

Once the awarded Bidder executes a Contract and delivers to the City satisfactory Performance & Payment Bonds and the required insurance documentation and, if applicable, City Council approval of the Contract, the Bid guarantees of non-awarded Bidders will be returned.

II-31 Payment & Performance Bonds

The awarded Contractor will be required to submit Payment & Performance Bonds which guarantees it will fulfill its contractual obligations under this project and guarantees it will pay its subcontractors, material suppliers and/or laborers for any work and materials provided. The amount of the Bonds will be 100% of the Maximum Contract Liability Amount (the full amount of the bid). Should the awarded Contractor default on its obligations and fails to complete the project, a claims process may be initiated. If Contractor is found to be in breach of the Contract, it must compensate the City up to the full amount of the Bonds.

II-32 Project Controls Requirements

Bidder will be required to use the designated Project Management Information System (PMIS) as set forth in the Technical Specifications. The PMIS is Airport Infrastructure Management's (AIM's) tool for project and information management, data analysis and document control. DEN will be responsible for providing the licensing and training for PMIS.

II-33 Equal Employment Opportunity

1. Article III, Division 2 of Chapter 28 applies to this contract. It is the policy of the City to provide equal opportunity in employment without regard to race, color, creed, sex, national origin, religion, marital status, or political opinion or affiliation. It is hereby deemed and declared to be

for the public welfare and in the best interest of the City to require bidders, contractors and subcontractors soliciting and receiving, directly or indirectly, compensation from or through the City, for the performance of such contracts, to meet certain affirmative action and equal employment opportunity requirements. Additionally, contractors and subcontractors that hold any contracts which are federally-assisted shall be required to adhere to the Department of Labor's Contract Compliance program under Executive Order 11246 as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60-4.

2. After the Notice to Apparent Low Bidder has been issued, the Apparent Low Bidder shall submit the following to the Division of Small Business Opportunity:
 - (a) A statement that the bidder shall implement the affirmative action steps set forth in the Rules and Regulations and Bid Conditions of the Manager of Public Works pertaining to Equal Employment Opportunity, attached hereto, or the bidder's affirmative action plan which meets these requirements, and
 - (b) A projection of its anticipated workforce for this contract on the attached "EEO Questionnaire." Both of these submittals are required before the Division of Small Business Opportunity will approve the Notice to Proceed.
3. The bidder which is awarded this contract shall comply with the provisions and requirements, including the goals of minority and female participation and specific affirmative action steps, set forth in the Rules and Regulations and Bid Conditions of the Manager of Public Works pertaining to Equal Employment Opportunity, as said rules and regulations may be amended or readopted from time to time by the Manager of Public Works or the Director of the Division of Small Business Opportunity.

II-34 **Conflicts of Interest**

An organizational conflict of interest occurs when, because of the relationship between two organizations or one organization (including its subsidiaries or related organizations) performing or proposing for multiple scopes of work, there is or could be in the future a lack of impartiality, impaired objectivity, an unfair advantage over one or more firms competing for the work, or a financial or other interest in other scopes of work.

If the Submitter currently has existing contracts with the City for work at DEN, including any contracts held by Proposer's parent, affiliates or subsidiary corporations, this could pose a conflict of interest and could place your Proposal in jeopardy of being rejected for conflict of interest. If the Proposer believes a conflict of interest may exist but can be mitigated, please describe the steps it proposes that it will take to mitigate the conflict.

If the City identifies a conflict of interest that is not identified by the Proposer in its response, the City may find the Proposer to be non-responsive. If the City identifies a conflict during the course of the contract and the Proposer failed to disclose such conflict, the City may terminate the contract for cause or convenience at the discretion of the City.

III. PREPARATION OF BID**III-1 Preparation of Bid**

The Bid shall be submitted in accordance with and meet all requirements set forth in the Bid Forms, which are attached hereto. The Bidder shall fill in all blank spaces in the applicable Bid Forms and initial all interlineations, alterations or erasures in its Bid. The Bidder shall not delete, modify or supplement the printed matter on the forms which are included in "Attachment 1, Bid Forms" or make substitutions thereon. The Bidder's completed Bid Forms shall constitute its Bid. It shall be conclusively presumed that the Bidder did, before submitting a Bid, read all addenda, posted decisions and other information items relevant to the IFB that appeared on the BidNet Website.

An authorized representative of the Bidder shall execute Attachment 1 of its Bid Forms – the "Bid Letter."

1. If the Bidder is a corporation, it shall upon execution of the Contract provide a certificate from the Secretary of State, showing that it is qualified to do business in the State of Colorado. Please call the Secretary of State for Colorado at (303) 894-2200 for information on obtaining such certification.
2. If the Bidder is a partnership, the Bidder must include with its Bid evidence satisfactory to DEN that the partner signing the Bid has the authority to do so.
3. If the Bidder is a joint venture, the Bidder shall submit with its Bid a notarized copy of the joint venture agreement. That agreement must describe the scope and amount of work each participant will perform and contain a provision that each participant will be jointly and severally liable to DEN for completing all the work and to third parties for all duties, obligations and liabilities which arise out of the joint venture's performance of the work.

III-2 Completing and Signing Bid Forms

Each bidder shall submit the following, completed and executed in accordance with the Contract Documents:

- (1) the Bid Forms, including any additional forms required by any addendum;
- (2) the Bidder's Bid Bond or Bid Guarantee in conformance with II-30; and
- (3) the Diversity and Inclusivity in City Solicitations

The bidder must complete the Bid Forms by legibly writing or printing in ink, words or figures, or both if required all the bidder's offered prices for performing the work. All blank spaces which require a response of the bidder must be properly filled in. In filling out the Bid Forms, the bidder shall avoid making changes to the extent possible, but, if changes are necessary, any interlineation, white outs, or erasures shall be initialed.

For any contracts containing unit prices, the bidder shall specify in the Bid Forms a unit price for each item for which a quantity is given and shall write in figures the products of the respective unit prices and quantities in the "Amount" column provided for that purpose.

Each bidder must sign the Bid Forms and give the bidder's current business address and contact information as noted. If an individual, the signature must be of the individual offering the bid; if a partnership, the signature must be that of a general partner; and if a joint venture, by each joint venture participant in their individual capacity as a corporation, partnership, or individual; if a corporation, both

the president or a vice president and the secretary must sign and the seal of the corporation must be affixed. Signatures of other persons may be acceptable if the Bid contains evidence satisfactory to the CEO to prove that the other persons are authorized to bind the bidder.

Bidder shall submit its Bid Data Information in accordance with the format shown on each of the Bid Data Forms. Bidder shall prepare and use as many sheets as are necessary to provide the information required. Bidder shall ensure that each page of its Bid Data is completed and properly identified with the Bid Data form name, Bidder's name, and page number.

IV. EVALUATION OF BIDS**IV-1 BASIS FOR SELECTING THE APPARENT LOW BIDDER**

The selection of the Apparent Low Bidder will be made on the basis of the lowest responsive bid by a qualified bidder whose bid complies with all of the requirements prescribed herein. The lowest bidder shall be determined by the Total Base Bid Amount. This selection shall be subject to the approval of such resulting contract in accordance with the Charter and ordinances of the City and County of Denver.

If add alternates are listed in the Bid Documents, the Apparent Low Bidder will be chosen based solely on the lowest responsive Total Base Bid Amount.

IV-2 SUBMITTAL OF BIDS

There will be no live bid opening for this project. Bids shall be submitted electronically via the Rocky Mountain E-Purchasing System (BidNet) website at:

<https://www.bidnetdirect.com/colorado/cityandcountyofdenverdepartmentofaviation>

Following electronic submittal of bid (including a scan of the bid bond), the original bid bond must be received by mail within seven (7) calendar days of bid opening date to be considered part of a responsive bid. Bid bonds shall be mailed to Denver International Airport, 8500 Peña Blvd., Denver, CO 80249-6340, Attention: Tony Deconinck. At this time, bid bonds cannot be hand-delivered in person.

IV-3 UNACCEPTABLE BIDS

The City will not accept Bids from bidders in arrears to the City upon debt or contract, or which are defaulters (as surety or otherwise) upon any obligation to the City, or that are deemed irresponsible or unreliable by the CEO. A history or pattern of litigation against the City and County of Denver by any bidder, proposed subcontractor, interested party, or any person, firm, or corporation affiliated with any bidder, among other items, will be considered by the CEO in determining the responsibility and reliability of bidders. Bidders may be required to submit satisfactory evidence that they have a practical knowledge of the particular work bid upon and that they have the necessary financial resources to complete the proposed work.

IV-4 ONLY ONE BID ACCEPTED

The City will accept only one Bid for the same work from any one bidder. This includes Bids that may be submitted under different names by one firm or corporation. Evidence of collusion among bidders shall be grounds for exclusion of any bidder who is a participant in any such collusion.

IV-5 CONSIDERATION OF BIDS

After the Bids are opened and read and any discrepancies have been reviewed, bids will be compared based on the Total Contract Bid Amount written on the Bid Letter.

If a discrepancy exists between a price or amount written in words and the price or amount written in figures, the price or amount written in words shall govern, except that in the case where a price or amount shown in figures has been crossed out and replaced with a new, legible, initialed figure, the initialed figure shall govern.

Any bid discrepancies which the City corrects in accordance with the general rules described above shall be corrected with the understanding that the Apparent Low Bidder waives any claims against the City because of the bidder's mistakes in its bid.

The City reserves the right to waive informalities, to reject any and all bids, and to advertise for new bids where it is in the best interest of the City. The City also reserves the right to negotiate terms of the contract.

IV-6 INFORMAL AND UNBALANCED BIDS

Bids shall be considered informal and may be rejected for the following reasons:

- (a) If the bid is on a form other than the Bid Forms furnished by the City, or if the form is altered or any part thereof is detached.
- (b) If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the bid incomplete, indefinite, or ambiguous.
- (c) If the bidder fails to acknowledge in the bid receipt of any or all addenda current on the date of opening of bids.
- (d) If the bid does not contain a unit price or lump sum amount for each item listed except in the case of authorized alternative items.
- (e) If there is an interlineation, white out, or erasure in the Bid Forms.
- (f) If the bid is unbalanced so that (1) each pay item does not reasonably carry its own proportion of cost, or (2) any pay item contains an inadequate or unreasonable price.

IV-7 NOTICE TO APPARENT LOW BIDDER – EXECUTION OF CONTRACT

The Apparent Low Bidder will be given written notice of such status on the form included in the Bid Documents within ninety (90) days from the date of opening of bids.

The Apparent Low Bidder shall execute the contract and return it to the City along with the required bonds and insurance forms within ten (10) business days from and including the date of the Notice to Apparent Low Bidder. When the executed contract and the required bonds and insurance certificates are received, approval for the City to contract with the Apparent Low Bidder shall be sought in accordance with the Charter of the City and County of Denver. Such notice shall not create any rights in the Apparent Low Bidder to any contract with the City.

END OF INSTRUCTIONS TO BIDDERS

V. SPECIAL CONDITIONS**SC-1 CONSTRUCTION CONTRACT GENERAL CONDITIONS**

The Construction Contract General Conditions which constitute a part of the Contract Documents are set forth in a separately published document, entitled "City and County of Denver, Department of Aviation and Department of Public Works, Standard Specifications for Construction, General Contract Conditions," 2011 Edition, the Table of Contents to which is bound herein (which may be informally referred to as the Yellow Book). The General Conditions book is available for purchase for \$12.00 per copy at the following locations during the business hours stated, Monday through Friday, excluding holidays:

Office of the Cashier
Wellington E. Webb Municipal Office Building, 2nd Floor
201 West Colfax Avenue
Denver, Colorado, USA 80202
7:30 a.m. to 4:30 p.m.

The General Conditions are also available on the City and County of Denver website at:

<https://www.denvergov.org/content/denvergov/en/contract-administration/contractor-resources/general-contract-conditions.html>

SC-2 DRAWINGS AND SPECIFICATIONS TO BE FURNISHED BY THE CITY

The City will provide the following Contract Documents to the Contractor in electronic format at no expense to the Contractor:

Taxiway EE IFB Drawings
Taxiway EE IFB Division 1 & Division 2 Specs
TW EE Construction Safety and Phasing Plan

Additional copies of the foregoing documents will be furnished to the Contractor at the Contractor's expense. The Contractor will be responsible for supplying all subcontractors with copies of the Contract Documents at its expense.

If Sensitive Security Information ("SSI") is provided to the Contractor, the Contractor shall be required to comply with Department of Aviation, Standard Policies and Procedures No. 6003, "Contractor Protection of Sensitive Security Information," or its successor, and 49 C.F.R. § 1520, or its successor.

The City will not supply any copies of the General Contract Conditions to the Contractor at City expense.

SC-3 REVISIONS TO G.C. 201

The second sentence of General Condition 201 is amended to read: "The unit responsible for this management and control is the Airport Infrastructure Management Office under the supervision of the Senior Vice President for Maintenance and Airport Infrastructure Management."

SC-4 CITY LINE OF AUTHORITY AND CONTACTS

In accordance with General Condition 214, the City's line of authority for administration of this Contract is:

Chief Executive Officer (CEO). Executive Office, 9th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249. Any reference to the Manager of Aviation shall also mean Chief Executive Officer, Department of Aviation (CEO).

Executive Vice President – Chief Operating Officer (EVP-COO) who reports to the CEO. Airport Infrastructure Management office, 9th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249.

Senior Vice President - Airport Infrastructure Management (SVP-AIM) who reports to the COO. Airport Infrastructure Management office, 10th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249.

Director of Infrastructure and Quality Assurance, reports to the SVP-AIM. The Project Manager reports to the Director of Infrastructure and Quality Assurance. Airport Infrastructure Management Division, 7th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249.

Project Manager, the City representative who has day to day administrative responsibility of this Contract, and who reports to the SVP-AIM. All notices, requests, pay applications (pursuant to G.C. 902), and other correspondence from the Contractor shall be sent to the assigned Project Manager unless otherwise provided in this Contract. The Project Manager for this Contract is: Brent Nichols, Airport Infrastructure Management Office, 7th Floor, Airport Office Building, 8500 Peña Boulevard, Denver, CO 80249, phone 303-342-2200.

The CEO may from time to time substitute a different City official as the designated “SVP-AIM” hereunder, and any such change will be effective upon the issuance of written notice to the Contractor which identifies the successor SVP-AIM. The SVP-AIM may from time to time change the assigned Project Manager, and any such change will be effective upon the issuance of written notice to the Contractor which identifies the successor Project Manager.

SC-5 CONTRACTOR PERFORMANCE; SUBCONTRACTING

With respect to General Condition 501, no more than ninety-five percent (95%) of the work may be subcontracted. If it is determined to be in the City’s best interest, this percentage may be modified throughout the course of the project by the SVP-AIM.

SC-6 COOPERATION WITH OTHERS

The Technical Specifications describe the constraints on the physical work site areas. These descriptions are not exhaustive, and the Contractor is required to coordinate its activities and work as may be required to meet FAA or City requirements while performing work on DEN.

Without limiting the foregoing, the following contracts administered by the City involve or may involve work overlapping or adjoining the Work under this Contract and may be prosecuted concurrently with the Work performed under this Contract. There may also be other adjoining or overlapping contracts which are not listed.

<u>Contract Number</u>	<u>Description</u>
201732479	Runway 8-26 Pavement Rehabilitation
201846271	Runway 17R-35L Pavement Rehabilitation
201952248	Runway 17R-35L Pavement Rehabilitation, Package 2

SC-7 PROSECUTION AND COMPLETION OF THE WORK:

The Work to be performed under the Contract is described in the Technical Specifications and Contract Drawings. The Contractor shall complete the Work within 607 consecutive calendar days from Notice to Proceed.

The Work to be performed under the Contract may be divided into the Milestone Areas which are described in the Technical Specifications or Contract Drawings. The Contractor shall complete the work included within these areas within the number of days set forth by the Project Manager.

	<u>Milestone</u>	<u>Date of Completion (or, days from NTP)</u>
1.	Taxiway M Connection	242 calendar days from NTP
2.	Taxiway L Connection	242 calendar days from NTP
3.	Taxiway ED Connection	607 calendar days from NTP
4.	Substantial completion	607 calendar days from NTP

SC-8 LIQUIDATED DAMAGES

If the Contractor fails to achieve Substantial Completion of the Work within the Contract Time, the Contractor shall be liable to the City for liquidated damages at the rate of Five Thousand Dollars (\$5,000.00) per day until substantial completion is achieved.

	<u>Milestone</u>	<u>Liquidated Damages, per day</u>
1.	Taxiway M Connection	\$5000.00
2.	Taxiway L Connection	\$5000.00
3.	Taxiway ED Connection	\$5000.00
4.	Substantial completion	\$5000.00

Article IV of the Contract and General Condition 602 cover payment and withholding of liquidated damages.

SC-9 FACILITY SECURITY AND PERSONNEL ACCESS

The Contractor shall conduct all its activities at the Airport in compliance with the Airport security system rules and regulations, which are administered by the Airport Operations Division. The Contractor shall obtain the proper access authorizations for its employees, subcontractors and suppliers (i.e., Badges and Permits), and shall be responsible for such persons' compliance with all the Airport rules and regulations. A copy of the Contractors' section of the Airport Security rules and regulations are available for Contractor review at the Airport Access Services Office, Concourse A East Subcore, 4th Level. Persons regularly entering the construction areas must obtain personnel access badges from the Airport Access Services Office and must display badges, at all times, upon entering the construction, restricted and sterile areas of the airport. Any employee, subcontractor or supplier who violates such rules may be subject to revocation of his access authorization, including authorization for access to the construction site and all other restricted and sterile areas.

The security status of the Airport is subject to change without notice. These contract Special Conditions are applicable to the current security status of the Airport. Should the security status of the Airport change at any time during the term of this Contract, a written notice shall be issued to the Contractor detailing all applicable security modifications from the airport's current security status. The Contractor shall take **immediate steps** to comply with those security modifications as directed in the written notice.

If these security modifications involve any additional project cost, the Contractor shall submit a Contractor Change Request in accordance with the General Conditions for the additional cost. The Contractor Change Request shall outline in specific detail the effects of the security modifications on the Contractor's performance of the Contract, and shall provide a detailed cost breakdown for each item for which the Contractor is requesting reimbursement.

The Contractor shall return to the City, at contract completion or termination, or upon demand by the City, all access keys issued to it by the City to all areas of the Airport. If the Contractor fails to return any such key or keys at contract completion or termination or upon demand by the City, the Contractor shall be liable to the City for all the City's costs, including the City's labor costs for employees, incurred in re-coring doors and any other work which is required to prevent compromise of the Airport security system. In order to collect such costs hereunder, the City may withhold funds in such amount from any amounts due and payable to the Contractor under this Contract.

The construction of all the Project / Task Items that involve the breaching of any airport perimeter security boundary or continued access to restricted access rooms or areas will require the posting of authorized contract security personnel to maintain required security controls. The Contractor's Total Contract Bid Amount shall include the cost of providing security services to maintain control and supervision of any and all airport perimeter security boundary breaches and for the duration of work activities where access to restricted areas is required and until the airport perimeter security boundaries are reestablished.

When security boundaries are opened for any reason, the Contractor must maintain one hundred percent (100%) control and supervision for the entire time that the openings are present to prevent unauthorized access to the secure / restricted access areas.

THE IMPORTANCE OF THIS SPECIAL CONDITION CANNOT BE OVER-EMPHASIZED. SEVERE FINANCIAL PENALTIES AS WELL AS CONTRACT TERMINATION COULD RESULT IF AIRPORT PERIMETER SECURITY REQUIREMENTS ARE NOT STRICTLY FOLLOWED. THE REQUIREMENT TO PROVIDE ONE HUNDRED PERCENT (100%) CONTROL AND SUPERVISION OF BREACHES IN THE AIRPORT'S PERIMETER SECURITY BOUNDARY IS ABSOLUTE. AT NO TIME, DURING WORK AND NON-WORK HOURS SHALL ANY BREACHES IN THE AIRPORT'S SECURITY PERIMETER BE UNSUPERVISED AND / OR UNSECURED.

For off-hours of construction, the Contractor may choose to erect a temporary wall to close all perimeter openings. The wall construction shall be of sufficient materials and strength to prevent access to the airport's Sterile/Restricted Areas. The Contractor shall submit for review and approval, the details and materials for the temporary closure of security perimeter breaches for review and approval.

The Contractor will provide contract security guard services to maintain supervision of these openings. The security services must provide coverage to allow for lunch breaks, comfort breaks and etc. The security services **must** be obtained from the following contract security guard company:

HSS
900 S. Broadway, Suite 100
Denver, Colorado 80209

DEN Contact: Glenn Spies
(303) 342-4323

All security guards provided for this project must have a Denver Airport SIDA Badge.

The DEN Security Guard Contractor may change between the bidding or Bid phase of this contract from Notice to Proceed to closure of all security perimeter breaches. The Contractor shall maintain a contractual relationship with the Security Guard Contractor holding the most current contract with Denver International Airport.

The Contractor shall continue to provide security of these areas until such time that the breaches in the airport's security perimeter have been permanently secured.

The Contractor shall submit a written security plan for approval to the Director of Airport Security prior to the start of construction on any work where a breach of the perimeter security boundaries is required.

SC-10 CONSTRUCTION ACCESS

The work site is located east of Taxiway M and north of Taxiway ED. The Contractor shall have access to the work site via Gate 4. The Contractor is responsible for ensuring all of the Contractor's and Subcontractor's personnel have the ability to access and locate the areas of work where the scope is to be performed without additional escorting or supervision from DEN.

The City will not provide parking spaces for the Contractor's employees or subcontractor employees at the Airport. Arrangements for transportation and parking for all of its and its subcontractors' employees will be the responsibility of the Contractor. The Total Contract Bid Amount or Contract Amount shall include any and all costs associated with the Contractor's and subcontractors' employee parking. Information about parking facilities and charges is available from the Airport Parking Office. Refundable deposits are required for all parking passes.

Unless specifically required by the Contract Documents, the Contractor shall install no fences or other physical obstructions on or around any project work area without the approval of the City.

SC-11 VEHICLE PERMITTING

Vehicle access on the Airport Operation Area ("AOA") is controlled by and requires permission from the Airport Access Services Office. It is not anticipated that the Contractor will need to operate vehicles on the AOA to perform the Work. Only direct construction support vehicles and/or equipment will be allowed in the contractor's work areas or sites.

SC-12 VENDORS AND SUPPLIERS

The Contractor shall provide the Project Manager's office with a list of its equipment/material vendors and suppliers. Vendors or suppliers shall access the construction work areas via the Contractor's access route, described in SC-10 above. All delivery vehicles are subject to search.

SC-13 COMMUNICATION DEVICES

Any site communications devices, mobile communication devices or internet data devices used at DEN must be approved by DEN Technologies.

SC-14 USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS

The Contractor and its officers, agents, and employees shall cooperate and comply with the provisions of Executive Order No. 94 and Attachment A thereto concerning the use, possession, or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City's barring the Contractor from City facilities or participating in City operations.

SC-15 ATTORNEYS' FEES

Colorado Revised Statute 38-26-107 requires that in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to the Contractor sufficient funds to insure the payment of any such claims. Should the City and County of Denver be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, Contractor agrees to pay to the City its costs and a reasonable attorney's fee. Because the City Attorney Staff does not bill the City for legal services on an hourly basis, Contractor agrees a reasonable fee shall be computed at the rate of two hundred dollars per hour of City Attorney time.

SC-16 INSURANCE REQUIREMENTS

In accordance with the provisions of Title 16 of the General Conditions, the minimum insurance requirements for this contract are set forth in Section II-14 of the Instructions to Bidders. The Contractor specifically agrees to comply with each condition, requirement or specification set forth in the attachment for each required coverage during all periods when the required coverages are in effect.

Contractor and sub-contractors shall procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, required insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or sub-contractors.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.

The City and County of Denver in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees or sub-contractors. The Contractor shall assess its own risks as it deems appropriate and/or prudent, maintain higher limits and/or broader coverages. The Contractor is not relieved of any liability or other obligations assumed or pursuant to the Contract by reason of its failure to obtain or maintain insurance in sufficient amounts, duration or types.

Contractor shall furnish the City and County of Denver with certificates of insurance (ACORD form or equivalent approved by CCD) as required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf.

All certificates and any required endorsements are to be received and approved by the City before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure

to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of the Contract. All insurance coverages for sub-contractors shall be subject to the minimum requirements identified in the Exhibit. All sub-contractors' certificates and endorsements shall be received and approved by the Contractor before work commences. The City reserves the right to request copies of these certificates at any time.

All certificates required by this Contract shall be sent directly to ContractAdminInvoices@flydenver.com. The City project/contract number and project description shall be noted on the certificate of insurance. The City reserves the right to require complete, certified copies of all insurance policies required by this Contract at any time.

The parties hereto understand and agree that the City and County of Denver, its officers, officials and employees, are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §§ 24-10-101 - 120, C.R.S., or otherwise available to the City and County of Denver, its officers, officials and employees.

SC-17 SUBCONTRACTOR RELEASES

The release form referred to in General Condition 907 is attached to this Contract. It is entitled "Denver International Airport Partial Release."

SC-18 ADDITIONAL AFFIRMATIVE ACTION REQUIREMENTS, FEDERAL PROVISIONS

This contract is subject and subordinate to the terms, reservations, restrictions, and conditions of any existing or future agreements between the City and the United States, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the City for airport purposes, and the expenditure of federal funds for airport purposes. The "Federal Requirements" section attached hereto is made a part of this Contract.

SC-19 ESTIMATED QUANTITIES OF UNIT PRICED ITEMS

The "total estimated quantity" of each unit price item as stated on the bid schedules shall be the estimated quantity which is used to determine the percentage of change in such item for purposes of G.C. 1104.7.

SC-20 REVISIONS TO G.C. 1102

G.C. 1102.2 is amended by replacing the phrase "Change Request" in all its occurrences in such G.C. with the phrase "Change Notice."

G.C. 1102.3 is amended by replacing the phrase "Field Order/Change Order Directive" in all its occurrences in such G.C. with the phrase "Change Order Directive."

SC-21 LISTING OF ACCEPTABLE MANUFACTURERS

The Technical Specifications list "Acceptable Manufacturers" for certain products. Such listing identifies manufacturers of certain products which have been determined by a preliminary review to be able to meet the basic product and/or system technical requirements. The listing is not intended to provide a blanket endorsement or acceptance of the manufacturer's specified products or product line. All products from listed manufacturers must meet the detailed requirements of the Technical Specifications. Products that do not meet all detailed Technical Specifications are not acceptable and will be rejected, regardless of whether the manufacturer was listed as "acceptable." The Contractor is responsible for determining the acceptability of all products under the Technical Specifications prior to submission of products for

approval.

SC-22 ACCESSIBLE PARKING SPACES, ACCESS AISLES AND ROUTES OF TRAVEL

If any Work is performed in or adjacent to parking facilities at the Airport, the Contractor is responsible for compliance with this SC-30. "Accessible" parking spaces and access aisles as used in this SC-30 mean parking spaces and access aisles which are accessible for, and reserved for use by, persons with disabilities. These parking spaces and access aisles are designed and built to standards established by federal regulations implementing the Americans with Disabilities Act of 1990 ("ADA"), and are marked by signage. "Accessible routes of travel" as used herein means routes through parking facilities which comply with ADA accessibility standards, including degree of slope and absence of obstructions.

Accessible routes of travel and accessible parking spaces and access aisles must be kept free of obstructions and construction debris at all times. No accessible parking spaces or access aisles or accessible routes of travel shall be relocated, blocked or rendered unusable unless the contractor has obtained specific advance approval in writing for such actions from the airport's ADA Compliance Officer.

When prosecution of the Work requires that accessible spaces be temporarily blocked, those accessible spaces and their access aisles shall be temporarily relocated to another location as close as possible to an accessible building entrance. Temporary signage that identifies these parking spaces and access aisles as reserved for the handicapped shall be installed, and the accessible route shall be clearly marked as required.

Before blocking or relocating accessible parking spaces or accessible routes of travel, the contractor must obtain written approval from the DEN ADA Compliance Officer, by submitting a completed request form, which will be provided to the Contractor by the Project Manager at the preconstruction meeting if it is not included as a standard form in Section 019990 of the Technical Specifications. The request shall include the location of alternative spaces and/or routes, and specifications of the temporary signage to be used. Work shall not proceed without this approval.

If a vehicle is parked in any accessible space which is either temporary or approved to be relocated, the contractor will not remove signage or take any other action which would allow the access aisle for such parking space to be blocked. Such actions must be postponed until the parking space is no longer occupied.

SC-23 SUBCONTRACTOR PAYMENTS AND SUBCONTRACTOR RELEASES – REQUIRED USE OF THE B2G CONTRACT MANAGEMENT SYSTEM

The Contractor is required to use the City B2G Contract Management System to report all subcontractor payments and shall adhere to the City's Procedure for Reporting Subcontractor Payments. It is the Contractor's obligation to ensure that complete subcontractor information is entered into the B2G System prior to submission of the first application for payment in order to avoid any delays in payment. The Contractor shall, prior to the submission of each subsequent invoice, ensure payments to subcontractors have been entered into the B2G System, including subcontractor confirmation of amount of payment received, for services performed during the prior billing period.

SC-24 PAYMENTS TO CONTRACTORS

The Contractor recognizes and agrees that applications for payment shall be submitted using the Textura® Payment Management System (PPM System), which will also be the payment mechanism to

disburse payments to sub-contractors used on this Project. For more information, please refer to Division I, Technical Specifications.

The Contractor further agrees that, to the fullest possible within the TPM System, the City shall be entitled to all non-Confidential records, reports, data and other information related to the project that are available to Contractor through the TPM System, including, but not limited to, information related to Contractor and subcontractor billings. To that end, Contractor agrees that it will activate any available settings within the TPM System that are necessary to grant the City access to such non-Confidential information related to the contract and the project. Applications for payment shall be based on the Contract Unit Prices or the approved Schedule of Values described in GC 903.1

In accordance with General Contract Condition 902, PAYMENT PROCEDURE, the party(ies) responsible for review of all Pay Applications shall be:

Agency/Firm

DEN Division CA

DEN Division PM

DEN Division Director

DEN Contract Services CA

CCD Denver Prevailing Wage

In accordance with General Contract Condition 906, APPLICATIONS FOR PAYMENT, each Application submitted shall include the following:

1. The estimate of Work completed shall be based on the approved schedule of values or unit prices, as applicable, and the percent of the Work complete.
2. Each Application for Payment shall include each and every independent subcontractor's payroll information including pay dates and pay amounts.
3. The Contractor shall also submit to the Auditor and other appropriate officials of the City in a timely fashion, information required by General Contract Condition 1004, REPORTING WAGES PAID.

In accordance with General Contract condition 907, RELEASES AND CONTRACTORS CERTIFICATION OF PAYMENT, Applications for Payment must be accompanied by a completed Partial or Final Claim Release Form, as appropriate, from EACH subcontractor and supplier, **AND** the Contractor's Certification of Payment Form.

VI. ATTACHMENT 1, BID FORMS

Attachment 1, Part 1 Bid Acknowledgement Letter

CONTRACT NAME: Taxiway EE Construction
Contract No.: 202158849
Bid Letter

BIDDER _____

Chief Executive Officer
City and County of Denver
Business Management Services (Procurement) Office
Airport Office Building, Room 8810
Denver International Airport
8500 Peña Boulevard
Denver, Colorado 80249

This letter is in response to the Notice of Invitation for Bids first published on July 1, 2021, for Contract No. 202158849, Denver International Airport, Taxiway EE Construction.

This contract is for: construction of a new taxiway (TW) EE and associated infrastructure. This taxiway will be located north and parallel to existing Taxiway ED, leading from Taxiway L, across Taxiway M, eastbound to the departure threshold of Runway 17L via extended Taxiway P7. The scope of work will include grading, drainage, utility relocation, airfield paving, airfield pavement marking, airfield electrical, and signage.

The undersigned Bidder declares that it has carefully examined the location of the proposed work and has carefully read and examined all of the Contract Documents which include, but are not limited to, the Contract Drawings, Technical Specifications, Construction Contract General Conditions, Special Conditions, Instruction to Bidders, and EEO provisions, and hereby proposes to furnish all labor, materials, equipment, tools, transportation and services, and to discharge all duties and obligations necessary and required to perform and complete the Work as required in the Contract Documents which are provided herewith and by this reference made a part hereof for the prices shown in the bid forms and totaled below:

TOTAL BASE BID Amount: _____

_____ Dollars and _____ Cents
(\$ _____).

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents:

Addenda Nos.: _____

The undersigned agrees that this bid is a firm offer to the City to perform and complete the Contract described above which cannot be withdrawn for one hundred twenty (120) calendar days after the bids are opened or until after a contract for the work described in these bid documents is fully executed by the City, whichever date is earlier.

The undersigned Bidder hereby agrees to appear at Denver International Airport, Business Management Services Office, Room 8810, Airport Office Building, at any time within ten (10) business days from the date of a written notice from the CEO to do so, mailed, emailed, or faxed to the business address of Bidder and at that time the Bidder shall: (1) deliver an executed Contract which conforms with this bid; (2) furnish the required performance and payment bonds in the sum of the Total Contract Bid Amount shown above, executed by a surety company acceptable to the CEO; and (3) furnish the required insurance documents.

Enclosed herewith is a bid guarantee, as defined in the Instructions to Bidders, in the amount of which bid guarantee the undersigned Bidder agrees is to be paid to and become the property of the City as liquidated damages should the bid be considered to be the best by the City and the undersigned Bidder notified that it is the apparent low bidder and it fails to enter into contract in the form prescribed and to furnish the required performance and payment bonds and evidences of insurance within ten (10) business days as stipulated above.

Attached and incorporated herein are the proposed Schedule of Prices and Quantities and Bid Data Forms. All of the forms must be completed. Bidder acknowledges that the City may incorporate, at its option, any or all of the data submitted by the Bidder into a contract arising out of this Bid.

The undersigned Bidder acknowledges the right of the City to waive informalities in the bids, to reject any or all bids submitted, and to re-advertise for bids.

The undersigned certifies that it has examined and is fully familiar with all of the provisions of the Contract Documents and is satisfied that they are accurate; that it has carefully checked all words and figures and all statements made in these Bid forms; and that it has satisfied itself with respect to the actual site conditions and the nature and location of the Work, the general and local conditions which may be encountered in the performance of the Work, and other matters which in any way affect the Work or the cost thereof.

[CERTIFICATION AND SIGNATURE ON FOLLOWING PAGES]

This bid is submitted upon the declaration that neither, I (we), nor, to the best of my (our) knowledge, none of the members of my (our) firm or company have either directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this bid.

Dated this _____ day of _____, _____.

BUSINESS ADDRESS OF BIDDER: _____

City, State, Zip Code: _____

Telephone Number of Bidder: (____) _____

Fax Number of Bidder: (____) _____

Social Security or Employer Id. No. of Bidder: _____

Email Address: _____

SIGNATURE OF BIDDER:

PRINT NAME OF BIDDER:

Attest:

(Corporate Seal)

By: _____

Secretary

President

Attachment 1, Part 2 Disclosure of Legal and Administrative Proceedings and Financial Condition

**City and County of Denver
Denver International Airport
(Please use this form)**

If no disclosure required in accordance with II-13, please sign affirmation statement.

The undersign affirms that _____(Bidder) has not been involved in any legal or administrative proceedings which involve a claim in excess of Fifty Thousand Dollars (\$50,000.00); has not filed bankruptcy within the last ten (10) years; has not been debarred or suspended from bidding/proposing on any Federal, State or local government procurements; and neither the Bidder nor its key employees have been convicted of a bid/Bid-related crime, violation or felony in the last five (5) years.

Signature _____ Title _____

Print Name _____

Date _____

If disclosure is required in accordance with II-13, please use the following space to provide information. If additional space is needed, please attach additional pages.

Attachment 1, Part 3 Contract Information

1. Name of Bidder/Contractor: _____

2. Type of business entity: _____

NOTE: If bidder is a partnership or joint venture, give full names of all partners or joint venturers. Bid must be signed by all joint venturers. If bidder is a limited liability company, bid must be signed by authorized manager (may be signed by member-manager if LLC is organized to allow management by members).

3. Prequalified by City and County of Denver as Construction Contractor : Categories:_____

Monetary Limit:_____

4. Address of Contractor: _____

Telephone:_____ Fax: _____

Email Address:_____

5. Established where and when: _____

6. Contractor's Banks: _____

7. Principal Officers of Contractor (managers and members if LLC):

Name: _____

Name: _____

Title: _____

Title: _____

Name: _____

Name: _____

Title: _____

Title: _____

8. Bidder's/Contractor's City and County of Denver Contractor License if it has obtained one: _____ License No.: _____
 Class: _____

A contractor license is required prior to start of construction but not prior to bid submittal.

9. Bidder's/Contractor's state of incorporation (state of organization if an LLC or partnership): _____

10. Bidder's Surety: _____

11. Surety's State of Incorporation: _____

12. Address of Contractor in other areas (if different from No. 4): _____

13. Name and address of person to receive payments: _____

14. If the Bidder/Contractor is a joint venture, it shall attach a certified copy of the joint venture agreement. The joint venture agreement will not be included as a Contract Document.

15. The Bidder/Contractor shall identify all applicable labor agreements (if any) to be used in the performance of the Work:

Attachment 1, Part 4 List of Proposed Non-DBE Subcontractors

Bidder Company Name: _____
 IFB Name: Taxiway EE Construction
 IFB No.: 202158849

Bidder shall list below the name, business address, work assignment and dollar value of each subcontractor that is **not** a DBE subcontractor that will perform work or labor or provide services to the Bidder relating to this Contract in an amount greater than one and one-half percent (1.5%) of the Bidder’s total bid. Only one (1) subcontractor for each portion of the work shall be listed. Any proposed subcontractors to be utilized by the Bidder that are certified as a Small Business Enterprise (SBE) shall also be listed on the “List of Proposed Subcontractors” attached to this IFB.

If the Bidder does not identify a subcontractor to perform portions of the work which could be subcontracted on this form or the List of Proposed DBE Subcontractors, the Bidder, if it is awarded the Contract, agrees not to subcontract such portions that exceed one and one-half percent (1.5%) of the total bid amount until the Contractor has advised the SVP of AIM in writing of the reasons why the subcontractor was not listed in the Bid submission and complied with the requirements of General Condition 502.

If the Bidder is awarded the Contract and does not enter into a subcontract with a subcontractor listed below or on the List of Proposed DBE Subcontractors, the Bidder agrees not to subcontract any of the work assignment identified for that subcontractor until the Bidder has advised the SVP of AIM in writing of the reasons why a different subcontractor is being used and has obtained approval.

Subcontractor Information	Work Assignment	Subcontract Dollar Value
Name: _____ Address: _____ Phone: _____		
Name: _____ Address: _____ Phone: _____		

Attachment 1, Part 4 List of Proposed Non-DBE Subcontractors

Name: _____ Address: _____ Phone: _____		
Name: _____ Address: _____ Phone: _____		
Name: _____ Address: _____ Phone: _____		
Name: _____ Address: _____ Phone: _____		

This page can be duplicated if additional sheets are required

Attachment 1, Part 5 Certification of Non-Segregated Facilities

The Bidder must certify that it does not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder certifies further that it will not maintain or provide for its employees segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion or national origin because of habit, local custom or any other reason. The Bidder agrees that (except where it has obtained identical certification from proposed subcontractors for specific time period) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding Ten Thousand Dollars (\$10,000) which are not exempt from the provisions of the equal opportunity clause and that it will retain such certification in its files.

Dated: _____

Bidder Company Name: _____

By: _____

Title: _____

Attachment 1, Part 6 Equal Opportunity Report Statement

The Bidder shall review, complete, sign and submit with its Bid this Equal Opportunity Report Statement (Statement). A Bid may be considered unresponsive and may be rejected, in the City’s sole discretion, if the Bidder fails to provide the fully executed Statement or fails to furnish required data. The Bidder shall also, prior to award, furnish such other pertinent information regarding its own employment policies and practices as well as those of its proposed subcontractors as the FAA, the Owner or the Executive Vice Chairman of the President’s Committee may require.

The Bidder shall furnish similar Statements executed by each of its first tier and second-tier subcontractors and shall obtain similar compliance by such subcontractors before awarding subcontracts. No subcontract shall be awarded to any non-complying subcontractor.

Equal Opportunity Report Statement as Required in 41 CFR 60-1.7(b)

The Bidder shall complete the following statements by checking the appropriate blanks. Failure to complete these blanks may be grounds for rejection of Bid:

1. The Bidder has ___ has not ___ developed and has on file at each establishment affirmative action programs pursuant to 41 CFR 60-1.40 and 41 CFR 60-2.
2. The Bidder has ___ has not ___ participated in any previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended.
3. The Bidder has ___ has not ___ filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
4. The Bidder does ___ does not ___ employ fifty (50) or more employees.

Dated: _____

Bidder Company: _____

By: _____

Title: _____

Attachment 1, Part 7 Bid Bond

Bidder _____

DENVER INTERNATIONAL AIRPORT
Taxiway EE Construction
Contract No. 202158849

Bid Bond

KNOW ALL MEN BY THESE PRESENTS

THAT _____, as Principal, and _____, a corporation organized and existing under and by virtue of the laws of the State of _____, and authorized to do business within the State of Colorado as Surety, are held and firmly bound unto the City and County of Denver, Colorado, as Obligee, in the full and just sum of _____ Dollars and _____ Cents (\$ _____) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents:

WHEREAS, the said Principal is herewith submitting its Bid, dated on _____, _____, for the construction of Contract No. 202158849, Taxiway EE Construction, Denver International Airport, as set forth in detail in the contract documents for the City and County of Denver, Colorado, and said Obligee has required as a condition for receiving said Bid that the Principal deposit specified bid security in the amount of not less than five percent (5%) of the amount of said Bid, as it relates to work to be performed for the City, conditioned that in event of failure of the Principal to execute the Contract for such construction and furnish required Performance and Payment Bond if the Contract is offered him, that said sum be paid immediately to the Obligee as liquidated damages, and not as a Penalty, for the Principal's failure to perform.

The condition of this obligation is such that if the aforesaid Principal shall, within the period specified therefor, on the prescribed form presented to him for signature, enter into a written Contract with the Obligee in accordance with his bid as accepted, and give Performance and Payment Bond with good and sufficient surety or sureties, upon the form prescribed by the Obligee, for the faithful performance and the proper fulfillment of said Contract, or in the event of withdrawal of said bid within the time specified, or upon the payment to the Obligee of the sum determined upon herein, as liquidated damages and not as a Penalty, in the event the Principal fails to enter into said Contract and give such Performance and Payment Bond within the time specified, then this Obligation shall be null and void, otherwise to remain in full force and effect.

[END OF PAGE]

Signed, sealed and delivered this _____ day of _____, ____.

Attest:

PRINCIPAL

Secretary

[SEAL if bidder a corporation]

By: _____
President

SURETY

By: _____
Attorney-in-Fact

(ATTACH POWER OF ATTORNEY)

Power of Attorney shall be certified as to the date
of bid.

Attachment 1, Part 8 Schedule of Prices and Quantities

SCHEDULE OF PRICES AND QUANTITIES

The Schedule of Prices and Quantities forms which apply to this contract are contained in the pages immediately following this page.

These pages are not included in the page numbering of this contract document.

BID PROPOSAL SUMMARY

Bidder Name: _____

SCHEDULE I TOTAL

\$ _____

SCHEDULE II TOTAL

\$ _____

TOTAL ALL SCHEDULES

\$ _____

Bidder has examined the proposed site and is familiar with all site conditions.

Signature _____

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SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-100a	Contractor Quality Control Program (CQCP)	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
C-105a	Mobilization	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
013223a	Construction As-built Survey	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015050a	Textura Software Fee	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015525a	Flagger	HR	22,080	at the unit price of: _____ dollars and _____ cents.	\$
015525b	Gate Guard	HR	17,360	at the unit price of: _____ dollars and _____ cents.	\$
015525c	Gate Guard Shack	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015525d	Traffic Control	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015719a	Temporary Erosion Control	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
P-101a	Remove Portland Cement Concrete Pavement (Non-Reinforced, 17")	SY	2,484	at the unit price of: _____ dollars and _____ cents.	\$
P-101b	Remove Portland Cement Concrete Pavement (Reinforced, 17")	SY	425	at the unit price of: _____ dollars and _____ cents.	\$
P-101c	Remove Portland Cement Concrete Pavement (Non-Reinforced, 21")	SY	143	at the unit price of: _____ dollars and _____ cents.	\$
P-101d	Full Depth Asphalt Pavement Removal	SY	16,551	at the unit price of: _____ dollars and _____ cents.	\$
P-101e	Partial Depth Asphalt Pavement Removal	SY	158	at the unit price of: _____ dollars and _____ cents.	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-101f	Remove Permeable Base Course at the unit price of: _____ dollars and _____ cents.	SY	17,862	\$	\$
P-101g	Remove Cement Treated Base Course at the unit price of: _____ dollars and _____ cents.	SY	1,877	\$	\$
P-101h	Remove Cement Treated Subgrade at the unit price of: _____ dollars and _____ cents.	SY	2,356	\$	\$
P-101i	Remove Asphalt Road - Complete at the unit price of: _____ dollars and _____ cents.	SY	4,661	\$	\$
P-101j	Grind Cement Treated Base Course (0" to 1") at the unit price of: _____ dollars and _____ cents.	SY	300	\$	\$
P-101k	Pavement Marking Removal at the unit price of: _____ dollars and _____ cents.	SF	10,000	\$	\$
P-101l	Remove Gravel Road at the unit price of: _____ dollars and _____ cents.	SY	1,610	\$	\$
P-152a	Unclassified Excavation at the unit price of: _____ dollars and _____ cents.	CY	820,000	\$	\$
P-152b	Excavation for Undercut at the unit price of: _____ dollars and _____ cents.	CY	19,927	\$	\$
P-152c	Embankment (Common Fill) at the unit price of: _____ dollars and _____ cents.	CY	250,000	\$	\$
P-152d	Embankment (Stockpile Excess Material) at the unit price of: _____ dollars and _____ cents.	CY	472,000	\$	\$
P-152e	Upper Select Subgrade at the unit price of: _____ dollars and _____ cents.	CY	10,900	\$	\$
P-152f	Lower Select Subgrade at the unit price of: _____ dollars and _____ cents.	CY	98,000	\$	\$
P-152g	Subgrade Preparation (12") at the unit price of: _____ dollars and _____ cents.	SY	65,374	\$	\$
P-152h	Rock Excavation at the unit price of: _____ dollars and _____ cents.	CY	10,000	\$	\$
P-159a	Concrete Crushing at the unit price of: _____ dollars and _____ cents.	TON	2,950	\$	\$
P-220a	Cement Treated Soil Base Course at the unit price of: _____ dollars and _____ cents.	SY	65,374	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-304a	Cement Treated Base Course at the unit price of: _____ dollars and _____ cents.	SY	63,897	\$	\$
P-304Ca	CDOT Class 6 Roadway Base at the unit price of: _____ dollars and _____ cents.	CY	1,975	\$	\$
P-307a	Cement Treated Permeable Base Course (CTPB) 7" at the unit price of: _____ dollars and _____ cents.	SY	46,297	\$	\$
P-403a	Bituminous Surface Course at the unit price of: _____ dollars and _____ cents.	TON	9,068	\$	\$
P-403b	Bituminous Base Course at the unit price of: _____ dollars and _____ cents.	TON	17,670	\$	\$
P-501a	Cement Concrete Pavement (Non-Reinforced, 17") at the unit price of: _____ dollars and _____ cents.	SY	44,613	\$	\$
P-501b	Cement Concrete Pavement (Reinforced, 17") at the unit price of: _____ dollars and _____ cents.	SY	9,207	\$	\$
P-501c	Cement Concrete Pavement (Non Reinforced, 21") at the unit price of: _____ dollars and _____ cents.	SY	6,523	\$	\$
P-501d	Cement Concrete Pavement (Reinforced, 21") at the unit price of: _____ dollars and _____ cents.	SY	1,965	\$	\$
P-501e	Bond Breaker Fabric at the unit price of: _____ dollars and _____ cents.	SY	62,308	\$	\$
P-610a	Cement Treated Base Repair at the unit price of: _____ dollars and _____ cents.	SY	150	\$	\$
P-620a	Pavement Markings, Waterborne at the unit price of: _____ dollars and _____ cents.	SF	44,754	\$	\$
P-620b	Pavement Markings, Metacrylate at the unit price of: _____ dollars and _____ cents.	SF	3,075	\$	\$
P-620c	Reflective Media at the unit price of: _____ dollars and _____ cents.	LB	1,796	\$	\$
P-620d	Stop Sign at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
D-701a	Install 24" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	3,269	\$	\$
D-701b	Install 30" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	413	\$	\$
D-701c	Install 36" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	267	\$	\$
D-701d	Install 48" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	2,801	\$	\$
D-701e	Install 24" FES at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
D-701f	Install 48" FES at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
D-705a	Install 6" Underdrain (Perforated PVC) at the unit price of: _____ dollars and _____ cents.	LF	10,485	\$	\$
D-705b	Install 6" Underdrain (Non-Perforated PVC) at the unit price of: _____ dollars and _____ cents.	LF	2,510	\$	\$
D-705c	Repair Damaged Underdrain Pipe at the unit price of: _____ dollars and _____ cents.	LF	200	\$	\$
D-705d	Install Underdrain Cleanouts at the unit price of: _____ dollars and _____ cents.	E/A	80	\$	\$
D-705e	Remove Undredrain Pipe at the unit price of: _____ dollars and _____ cents.	LF	4,092	\$	\$
D-705f	Remove Underdrain Cleanouts at the unit price of: _____ dollars and _____ cents.	E/A	7	\$	\$
D-710a	Grouted Type "M" Riprap at the unit price of: _____ dollars and _____ cents.	CY	5	\$	\$
D-710b	Grouted Type "H" Riprap at the unit price of: _____ dollars and _____ cents.	CY	30	\$	\$
D-751a	Install New Triple Type II Inlet Structure at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
D-751b	Install New Double Type II Inlet Structure at the unit price of: _____ dollars and _____ cents.	E/A	7	\$	\$
D-751c	Install New 36"x48" Inlet at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
D-751d	Install Airfield Manhole at the unit price of: _____ dollars and _____ cents.	E.A	2	\$	\$
D-751e	Install Type B Manhole at the unit price of: _____ dollars and _____ cents.	E.A	3	\$	\$
D-751f	Install Type P Manhole at the unit price of: _____ dollars and _____ cents.	E.A	2	\$	\$
D-751g	Convert Existing Inlet to Manhole at the unit price of: _____ dollars and _____ cents.	E.A	1	\$	\$
D-751h	Install Underdrain Manholes at the unit price of: _____ dollars and _____ cents.	E.A	16	\$	\$
D-751i	Tie To Existing Structure at the unit price of: _____ dollars and _____ cents.	E.A	2	\$	\$
T-901a	Seeding (Seed Mix Design 2) at the unit price of: _____ dollars and _____ cents.	AC	235	\$	\$
T-905a	Topsoling at the unit price of: _____ dollars and _____ cents.	CY	49,248	\$	\$
T-908a	Hydraulic Mulching at the unit price of: _____ dollars and _____ cents.	AC	235	\$	\$
T-908b	Erosion Control Blankets at the unit price of: _____ dollars and _____ cents.	SY	86,527	\$	\$
L-108a	#8 AWG L-824C, 5000V Conductor at the unit price of: _____ dollars and _____ cents.	LF	194,000	\$	\$
L-110a	1W-2" Sch. 40 PVC Conduit in Earth at the unit price of: _____ dollars and _____ cents.	LF	550	\$	\$
L-110b	1W-2" Sch. 40 PVC Conduit in New Concrete Pavement at the unit price of: _____ dollars and _____ cents.	LF	7,580	\$	\$
L-110c	1W-2" Sch. 40 PVC Conduit in New Asphalt Pavement at the unit price of: _____ dollars and _____ cents.	LF	13,425	\$	\$
L-110d	8W-4" Sch. 40 PVC Concrete Encased Duct Bank at the unit price of: _____ dollars and _____ cents.	LF	1,800	\$	\$
L-110e	Broken Conduit Repair at the unit price of: _____ dollars and _____ cents.	E.A	2	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-110f	Remove Concrete Encased Duct Bank at the unit price of: _____ dollars and _____ cents.	LF	9,550	\$	\$
L-115a	Install New Electrical Manhole at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-115b	Adjust Existing Electrical Manhole at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-115c	Remove Existing Electrical Manhole at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-120c	Install L-847-2 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-120d	Install L-847-3 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-125a	L-852C LED Taxiway Unidirectional Centerline Light at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-125b	L-852C LED Taxiway Bidirectional Centerline Light (Single Circuit) at the unit price of: _____ dollars and _____ cents.	E/A	101	\$	\$
L-125c	L-852K LED Taxiway Bidirectional Centerline Light (Single Circuit) at the unit price of: _____ dollars and _____ cents.	E/A	80	\$	\$
L-125d	L-861T Quartz Taxiway Edge Light Mounted on L-867 Base Can at the unit price of: _____ dollars and _____ cents.	E/A	62	\$	\$
L-125e	L-861T LED Taxiway Edge Light Mounted on L-867 Base Can at the unit price of: _____ dollars and _____ cents.	E/A	66	\$	\$
L-125f	L-861T LED Taxiway Edge Light Mounted on L-868 Base Can at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-125g	L-868B 3/4" Thick Cover Plate at the unit price of: _____ dollars and _____ cents.	E/A	6	\$	\$
L-125h	L-867B 3/8" Thick Cover Plate at the unit price of: _____ dollars and _____ cents.	E/A	4	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125i	New 22" Deep L-868B Base Can in New Concrete Pavement at the unit price of: _____ dollars and _____ cents.	E/A	172	\$	\$
L-125j	New 26" Deep L-868B Base Can in New Concrete Pavement at the unit price of: _____ dollars and _____ cents.	E/A	10	\$	\$
L-125k	New L-867B Base Can in New Asphalt Pavement at the unit price of: _____ dollars and _____ cents.	E/A	121	\$	\$
L-125l	New L-867B Base Can in Existing Asphalt Pavement at the unit price of: _____ dollars and _____ cents.	E/A	7	\$	\$
L-125m	L-858 LED Guidance Sign - 2 Mod at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-125n	L-858 LED Guidance Sign - 3 Mod at the unit price of: _____ dollars and _____ cents.	E/A	10	\$	\$
L-125o	L-858 LED Guidance Sign - 4 Mod at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-125p	New Guidance Sign Foundation - 3 Mod at the unit price of: _____ dollars and _____ cents.	E/A	8	\$	\$
L-125q	New Guidance Sign Foundation - 4 Mod at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-125r	New Guidance Sign Foundation - 5 Mod at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-125s	Remove Existing Sign and Base at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-125t	Remove Fixture and Base Can at the unit price of: _____ dollars and _____ cents.	E/A	102	\$	\$
L-125u	Reconnect 2" Conduit at Location of Removed Base Can at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-125v	Remove and Replace Fixture or Sign ID Marker at the unit price of: _____ dollars and _____ cents.	E/A	215	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125w	Remove and Replace Circuit ID Tag	E.A	92	\$	\$
L-125x	Cover Taxiway Edge Light	E.A	24	\$	\$
L-125y	Mask Off Taxiway Centerline Light	E.A	42	\$	\$
L-125aa	Edge Light Drain	E.A	9	\$	\$
L-132-5.1	Installation of New LLWAS Including All Equipment and Foundations, As Shown on Contract Documents	LS	1	\$	\$
L-132-5.2	Removal of Existing LLWAS Including All Equipment and Foundations	LS	1	\$	\$
L-132-5.3	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 4 Way 4 Inch	LF	6,000	\$	\$
L-132-5.4	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 2 Way 2 Inch	LF	1,400	\$	\$
L-132-5.5	#1/0 AWG, Bare Copper FAA Guard Wire Installed Above Duct Bank or Conduit, Including Ground Rods, Connections, and Terminations	LF	7,500	\$	\$
L-132-5.6	FAA Communications Manhole, 6 Feet by 6 Feet	E.A	7	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-132-5.7	FAA Power Manhole, 6 Feet by 6 Feet at the unit price of: _____ dollars and _____ cents.	E/A	4	\$	\$
L-132-5.8	2-#2 AWG and 1-#4 AWG Ground Cable Installed in Duct Bank or Conduit, Including All Connections and Terminations at the unit price of: _____ dollars and _____ cents.	LF	1,550	\$	\$
L-140a	Post-Construction Photometric Testing at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$
L-150-1	Fiber Optic Cable Installed in Innerduct in Duct or Conduit, Including Testing and Connections at the unit price of: _____ dollars and _____ cents.	LF	36,000	\$	\$
L-150-2	25 pair #22 AWG Type USE Cable, Installed in Duct Bank or Conduit at the unit price of: _____ dollars and _____ cents.	LF	800	\$	\$

SCHEDULE I TOTAL \$ _____

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SCHEDULE II

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-105a	Mobilization at the unit price of: _____ dollars and _____ cents.	LS	1		\$
P-501f	Pavement Spall Repair at the unit price of: _____ dollars and _____ cents.	SY	100	\$	\$
L-120a	Furnish L-847-2 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-120b	Furnish L-847-3 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
13410Aa	ALCMS Modifications at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$

SCHEDULE II TOTAL \$ _____

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VII. ATTACHMENT 2, DBE FORMS

DSBO FORMS

The DSBO forms which apply to this contract are contained in the pages immediately following this page.

These pages are not included in the page numbering of this contract document.



DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO) COMMITMENT TO DBE PARTICIPATION

This page must be completed by all Bidders/Proposers to indicate their commitment towards satisfying the DBE participation goal. The commitment will be incorporated into the contract and thereby the selected Bidder/Proposer's will be held to that commitment. (Please check the appropriate box):

COMPLETE IF YOU ARE A NON-DBE PRIME:

The City and County of Denver has specified a _____% DBE Participation goal on this project. The Bidder/Proposer is committed to meeting _____% DBE Participation on the contract.

COMPLETE IF YOU ARE A DBE PRIME:

The City and County of Denver has specified a _____% DBE Participation goal on this project. The Bidder/Proposer is a certified DBE with the City and County of Denver and is committed to meeting _____% DBE Participation on the contract.

COMPLETE IF YOU ARE UNABLE TO MEET PROJECT GOAL:

The City and County of Denver has specified a _____% DBE Participation goal on this project. The Bidder/Proposer is unable to meet this project goal but is committed to a _____% DBE Participation on the contract. The Bidder/Proposer must make adequate good faith efforts to meet this goal in order to be deemed responsive. The Bidder/Proposer must submit a detailed statement and documentation of their good faith efforts. Award of the contract will be conditioned on meeting the requirements of this section, in accordance with C.F.R. 49 part 26.

The undersigned Bidder/Proposer hereby agrees and understands that they must comply with their DBE commitments in this project in conformity with the Requirements, Terms, and Conditions of this DBE Procurement/Contract Language.

Bidder/Proposer (Name of Firm): _____

Firm's Representative: _____

Title: _____

Signature (Firm's Representative): _____

Date: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone: _____

Email: _____



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
1A - LIST OF PROPOSED SUBCONTRACTORS,
SUBCONSULTANTS, AND/OR SUPPLIERS**

City & County of Denver Contract No.: _____

The undersigned proposes to utilize all listed firms. Any certified firm listed must be certified by the City and County of Denver and a **Letter of Intent (LOI)** submitted for each. If additional pages are required, please copy and attach the second page. This form must be updated and submitted to DSBO when subcontractors, subconsultants, and/or suppliers are added throughout the contract duration.

Contractor/Consultant		
Name of Firm:	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:		
Signature:	Date:	
Address:		
City:	State:	Zip:
Phone:	Email:	
Total Contract Value \$:	Self-Performing Contract Value \$:	

Subcontractors, Subconsultants, and/or Suppliers	
Name of Firm:	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)
Firm's Representative:	
Phone:	Email:
Type of Service:	Contract Value \$:
Anticipated Start Date:	Anticipated Completion Date:

Name of Firm:	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)
Firm's Representative:	
Phone:	Email:
Type of Service:	Contract Value \$:
Anticipated Start Date:	Anticipated Completion Date:

Name of Firm:	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)
Firm's Representative:	
Phone:	Email:
Type of Service:	Contract Value \$:
Anticipated Start Date:	Anticipated Completion Date:



Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	



DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO) LETTER OF INTENT (LOI)

Contract No.:

Project Name:

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm):

Self-Performing:

 Yes No

Firm's Representative:

Title:

Signature (Firm's Representative):

Date:

Address:

City:

State:

Zip:

Phone:

Email:

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm:

 MWBE(v) SBE(v) EBE(v) DBE(v)

Firm's Representative:

Title:

Signature:

Date:

Address:

City:

State:

Zip:

Phone:

Email:

Scope of Work:

NAICS Code(s):

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$

%

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:

Firm's Representative:

Title:

Signature:

Date:

*If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.*

VIII. ATTACHMENT 3, FORM W-9

FORM W-9

Please complete the Request for Taxpayer Identification Number
and Certification (FORM W-9) and submit with your Bid.

These pages are not included in the page numbering of this contract document.

Request for Taxpayer Identification Number and Certification

**Give Form to the
requester. Do not
send to the IRS.**

Print or type See Specific Instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only one of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	
	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>	
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number									
				-			-		
or									
Employer identification number									
				-					

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here	Signature of U.S. person ▶	Date ▶
------------------	----------------------------	--------

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

*If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See **What is backup withholding?** on page 2.*

By signing the filled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See **What is FATCA reporting?** on page 2 for further information.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following persons must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note. ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

Limited Liability Company (LLC). If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note. You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

- 1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.
- 2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
- 3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.
- 4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
- 5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee ¹ The actual owner ¹
5. Sole proprietorship or disregarded entity owned by an individual	The owner ³
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity ⁴
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: spam@uce.gov or contact them at www.ftc.gov/idtheft or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

IX. **ATTACHMENT 4, INSURANCE REQUIREMENTS**

INSURANCE REQUIREMENTS

The insurance requirements relative to this contract are contained in the pages immediately following this page.

These pages are not included in the page numbering of this contract document.

EXHIBIT C

**CITY AND COUNTY OF DENVER
INSURANCE REQUIREMENTS FOR DEPARTMENT OF AVIATION
OWNER CONTROLLED INSURANCE PROGRAM (OCIP/ROCIP) PROJECT**

NOTICE OF CHANGE TO ROCIP: DEN reserves the right to terminate or modify the DEN ROCIP or any portion thereof. Further, dependent on factors including, but not limited to, the official timing and duration of the ROCIP project for which services are provided under this Agreement, DEN may need to transition from one ROCIP program to another and introduce corresponding requirements for contractors. DEN will provide Contractor notice in accordance with the terms and conditions of this Agreement.

1. General Information

City and County of Denver and Denver International Airport (hereinafter referred to collectively as “DEN”) has arranged for certain construction activities at DEN to be insured under an Owner Controlled Insurance Program (OCIP) or a Rolling Owner Controlled Insurance Program (ROCIP) (hereinafter collectively referred to as “ROCIP”). A ROCIP is a single insurance program that insures DEN, the Contractor and subcontractors of any tier, and other designated parties (Enrolled Parties), for work performed at the Project Site. Certain trade contractors and subcontractors are ineligible for this program; see Excluded Parties under the definitions Section 7 for a general list of excluded parties. Insurance requirements are determined based on the scope of work.

1.2 ROCIP Manuals

Below are links to access the current reference manuals related to DEN ROCIP III. These manuals are part of the Contract Documents.

[DEN ROCIP III Insurance Manual](#)

[DEN ROCIP III Safety Manual](#)

[DEN ROCIP III Claims Guide](#)

2. Insurance Requirements for Non-ROCIP Contractors and Subcontractors (Excluded Parties)

Contractor and subcontractors of any tier shall require all Excluded Parties, as defined in Section 7 or confirmed as excluded by DEN, to provide and maintain insurance of the type and in limits as set forth in the Contractor Subcontract Agreement and such insurance shall include the minimum defined coverages and be evidenced to DEN as required in this Section 2.

2.1 Certificate Holder

Certificate(s) shall be issued to:	CITY AND COUNTY OF DENVER Denver International Airport 8500 Peña Boulevard, Suite 8810 Denver CO 80249 Attn: Risk Management
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2.2 Acceptable Certificate of Insurance Form and Submission Instructions

Please read these requirements carefully to ensure proper documentation and receipt of your certificate(s) of insurance.

- ACORD FORM (or equivalent) certificate is required.
- SUBMIT via emailed in pdf format to: contractadmininvoices@flydenver.com
- ELECTRONIC CERTIFICATES are required, hard copy documents will not be accepted.

- THIRD PARTY SOFTWARE may be implemented during the term of this Agreement to manage insurance compliance and documents with required use by Vendor of such system.
- REFERENCE on the certificate must include the DEN assigned Contract Number.

2.3 Coverage and Limits

2.3.1 Commercial General Liability

Contractor shall maintain insurance coverage including bodily injury, property damage, personal injury, advertising injury, and products and completed operations in minimum limits of \$1,000,000 each occurrence, \$2,000,000 products and completed operations aggregate and \$2,000,000 annual aggregate.

2.3.1.1 Coverage shall include Contractual Liability covering liability assumed under this Agreement (including defense costs assumed under contract) within the scope of coverages provided.

2.3.1.2 Coverage shall include Mobile Equipment Liability.

2.3.2 Business Automobile Liability

Contractor shall maintain a minimum limit of \$1,000,000 combined single limit each occurrence for bodily injury and property damage for all owned, leased, hired and/or non-owned vehicles used in performing services under this Agreement.

2.3.2.1 If operating vehicles unescorted airside at DEN, a \$10,000,000 combined single limit each occurrence for bodily injury and property damage is required.

2.3.2.2 If Contractor does not have blanket coverage on all owned and operated vehicles, then a schedule of insured vehicles (including year, make, model and VIN number) must be submitted by the insurer with the Certificate of Insurance.

2.3.2.3 The policy must not contain an exclusion related to operations on airport premises.

2.3.2.4 If transporting waste, hazardous material, or regulated substances, Contractor shall carry a Broadened Pollution Endorsement and an MCS 90 endorsement on its policy.

2.3.2.5 If Contractor is an individual or represents that Contractor does not own any motor vehicles and Contractor's owners, officers, directors, and employees use their personal vehicles for business purposes, Personal Automobile Liability insurance coverage will be accepted provided it includes a business use endorsement.

2.3.2.6 If Contractor will be completing all services to DEN under this Agreement remotely this requirement will be waived.

2.3.3 Workers' Compensation and Employer's Liability Insurance

Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits no less than \$1,000,000 per occurrence for each bodily injury claim, \$1,000,000 per occurrence for each bodily injury caused by disease claim, and \$1,000,000 aggregate for all bodily injuries caused by disease claims.

2.3.3.1 If Contractor is a sole proprietor, Workers' Compensation and Employer's Liability is exempt under the Colorado Workers' Compensation Act.

2.3.4 Professional Liability (Errors and Omissions) Insurance

Contractor shall maintain a minimum limit of \$1,000,000 each claim and policy aggregate, providing coverage for applicable services outlined in this Agreement. If there are no applicable professional services, this coverage will not be required.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

2.3.5 Contractor's Pollution Legal Liability

If required by DEN Risk Management for any specific Excluded Party based on their scope of work, Contractor shall maintain coverage for its work site operations that are conducted on DEN's premises including project management and site supervision duties with a limit no less than \$1,000,000 each occurrence and aggregate resulting from claims arising out of a pollution condition or site environmental condition resulting out of work site operations on DEN's premises.

2.3.5.1 Coverage shall include claims/losses for bodily injury, property damage including loss of use of damaged property, defense costs including costs and expenses incurred in the investigation, defense or settlement of claims, and cleanup cost for pollution conditions resulting from illicit abandonment, the discharge, dispersal, release, escape, migration or seepage of any solid, liquid, gaseous or thermal irritant, contaminant, or pollutant, including soil, silt, sedimentation, smoke, soot, vapors, fumes, acids, alkalis, chemicals, electromagnetic fields, hazardous substances, hazardous materials, waste materials, low level radioactive waste, mixed wastes, on, in, into, or upon land and structures thereupon, the atmosphere, surface water or groundwater on the DEN premises.

2.3.5.2 Work site means a location where covered operations are being performed, including real property rented or leased from DEN for the purpose of conducting Contractor's covered operations.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

2.3.6 Technology Errors and Omissions, Network Security, and Privacy Liability (Cyber):

If required by DEN Risk Management for any specific Excluded Party based on their scope of work, Contractor shall maintain a limit no less than \$1,000,000 each claim and aggregate; \$1,000,000 each claim and aggregate for cyber extortion; and no less than \$250,000 each claim for invoice manipulation and email spoofing.

2.3.6.1 Coverage shall include professional misconduct or lack of ordinary skill.

2.3.6.2 Coverage shall include, but not be limited to, liability arising from theft, dissemination and/or use of personal, private, confidential, information subject to a non-disclosure agreement, including information stored or transmitted, privacy or cyber laws, damage to or destruction of information, intentional and/or unintentional release of private information, alteration of information, extortion and network security, introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon, advertising injury, personal injury (including invasion of privacy) and intellectual property offenses related to internet.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

2.3.7 Unmanned Aerial Vehicle (UAV) Liability

If Contractor desires to use drones in any aspect of its work on DEN premises, the following requirements must be met prior to commencing any drone operations:

- 2.3.7.1 Express written permission must be granted by DEN.
- 2.3.7.2 Express written permission must be granted by the Federal Aviation Administration (FAA).
- 2.3.7.3 Drone equipment must be properly registered with the FAA.
- 2.3.7.4 Drone operator(s) must be properly licensed by the FAA.
- 2.3.7.5 Contractor must maintain UAV Liability including flight coverage, personal and advertising injury liability, and hired/non-owned UAV liability for its commercial drone operations with a limit no less than \$1,000,000 combined single limit each occurrence for bodily injury and property damage.

2.3.8 Excess/Umbrella Liability

Combination of primary and excess coverage may be used to achieve minimum required coverage limits. Excess/Umbrella policy(ies) must follow form of the primary policies with which they are related to provide the minimum limits and be verified as such on any submitted Certificate of Insurance.

2.4 Reference to Project and/or Contract

The DEN Project and/or Contract Number and project description shall be noted on the Certificate of Insurance.

2.5 Additional Insured

For all coverages required under this Agreement (excluding Workers' Compensation and Professional Liability), Contractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers as Additional Insureds by policy endorsement.

2.6 Waiver of Subrogation

For all coverages required under this Agreement, Contractor's insurer(s) shall waive subrogation rights against the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers by policy endorsement.

2.7 Notice of Material Change, Cancellation or Nonrenewal

Each certificate and related policy shall contain a valid provision requiring notification to the Certificate Holder in the event any of the required policies be canceled or non-renewed or reduction in coverage before the expiration date thereof.

- 2.7.1 Such notice shall reference the DEN assigned contract number related to this Agreement.
- 2.7.2 Said notice shall be sent thirty (30) days prior to such cancellation, non-renewal or reduction in coverage unless due to non-payment of premiums for which notice shall be sent ten (10) days prior.
- 2.7.3 If such written notice is unavailable from the insurer or afforded as outlined above, Contractor and/or its insurance broker/agent shall provide written notice of cancellation, non-renewal and

any reduction in coverage to the Certificate Holder within seven (7) business days of receiving such notice by its insurer(s) and include documentation of the formal notice received from its insurer(s) as verification. Contractor shall replace cancelled or nonrenewed policies with no lapse in coverage and provide an updated Certificate of Insurance to DEN.

2.8 Additional Provisions

- 2.8.1 Deductibles, SIRS, or any other type of retention are the sole responsibility of the Contractor.
- 2.8.2 Defense costs shall be in addition to the limits of liability. If this provision is unavailable that limitation must be evidenced on the Certificate of Insurance.
- 2.8.3 A severability of interests or separation of insureds provision (no insured vs. insured exclusion) is included under any policy requiring Additional Insured status.
- 2.8.4 A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by DEN, excluding Professional Liability and Workers' Compensation policies, if required.
- 2.8.5 The insurance requirements under this Agreement shall be the greater of (i) the minimum limits and coverage specified hereunder or (ii) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the Contractor. It is agreed that the insurance requirements set forth herein shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums set forth in this Agreement.
- 2.8.6 All policies shall be written on an occurrence form when available and industry norm. If an occurrence form is unavailable and/or the industry norm, claims-made coverage may be accepted by DEN provided the retroactive date is on or before the Agreement Effective Date or the first date when any goods or services were provided to DEN, whichever is earlier, and continuous coverage will be maintained or an extended discovery period of three years beginning at the time work under this Agreement is completed or the Agreement is terminated, whichever is later.
- 2.8.7 Contractor shall advise DEN in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.
- 2.8.8 Certificates of Insurance must specify the issuing companies, policy numbers and policy periods for each required form of coverage. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf and must be submitted to DEN at the time Contractor signed this Agreement.
- 2.8.9 The insurance shall be underwritten by an insurer licensed or authorized to do business in the State of Colorado and rated by A.M. Best Company as A- VIII or better.
- 2.8.10 Certificate of Insurance and Related Endorsements: DEN's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of DEN's rights or remedies under this Agreement. DEN's acceptance of any submitted insurance certificate is subject to the approval of DEN Risk Management. All coverage requirements specified in the certificate shall be enforced unless waived or otherwise modified in writing by DEN Risk Management. Contractor is solely responsible for ensuring all formal policy endorsements are issued by their insurers to support the requirements herein.
- 2.8.11 DEN shall have the right to verify or confirm, at any time, all coverage, information or representations, and the insured and its undersigned agent shall promptly and fully cooperate in any such audit DEN may elect to undertake including provision of certified copies of insurance policies upon request.
- 2.8.12 No material changes that negatively impact DEN or reductions in the coverage required herein shall be allowed without the review and written approval of DEN Risk Management.

3. Insurance Requirements for ROCIP Enrolled Contractors and Subcontractors

3.1 Insurance Provided by the DEN ROCIP

DEN retains the right to have this Project insured under a ROCIP. ROCIP coverage shall provide: (i) Commercial General Liability, (ii) Workers' Compensation & Employer's Liability, (iii) Excess Liability, (iv) Contractor's Pollution Liability, and (v) Builder's Risk as outlined herein and as defined by the respective policies for each coverage, for the period from the start of Work through completion and final acceptance by DEN except as otherwise provided herein.

3.2 Enrollment Required

Parties performing labor or services at the Project Site are eligible to enroll in the DEN ROCIP, unless they are Excluded Parties (as defined in Section 7). Participation is mandatory but not automatic. Parties eligible for enrollment shall follow the procedures and follow the instructions as provided in the DEN ROCIP Insurance Manual to enroll in the program. When the Contractor and subcontractors of any tier are properly enrolled, the DEN ROCIP Administrator will issue a Certificate of Insurance evidencing the coverages afforded to each Enrolled Party under the DEN ROCIP, prior to their commencing Work on the Project Site.

3.3 Exclusion of Contractor/Subcontractor Insurance Costs from Proposal and Bid Prices

Contractor shall exclude from Contractor's cost of work and ensure that each subcontractor of any tier exclude from their cost of work, normal costs for insurance for those coverages provided under the DEN ROCIP. As part of the enrollment process, Contractor and subcontractors shall provide policy declaration rate pages and deductible endorsements on the General Liability, Workers' Compensation, and Excess Liability policies as required in the DEN ROCIP Insurance Manual. The calculation of these costs will be determined by the ROCIP Program Administrator. The costs of DEN ROCIP coverage includes reductions in insurance premiums, all relevant taxes and assessments, markup on insurance premiums, and losses retained through large deductibles, self-insured retentions, or self-funded programs. Change orders shall also exclude the cost of ROCIP coverage.

Pre-employment substance abuse testing costs will be covered by DEN and should be removed from bid prices. Drug testing will be more thoroughly discussed in the ROCIP Safety Manual.

3.4 Insurance Premiums

DEN will pay the insurance premiums for the DEN ROCIP insurance policies. DEN is responsible for all adjustments to the premiums and will be the sole beneficiary of all dividends, retroactive adjustments, return premiums, and any other monies due through audits or otherwise. The Contractor assigns to DEN the right to receive all such adjustments and will require that each subcontractor of any tier assign to DEN all such adjustments. The Contractor and the subcontractors who are Enrolled Parties shall execute such further documentation as may be required by DEN to accomplish this assignment.

3.5 Off Site Operations Coverage Under ROCIP

The DEN ROCIP will provide certain insurance coverage for DEN, Contractor and Enrolled Parties, along with their Eligible Employees performing Work at the Project Site. Off-site operations shall be covered only if designated in writing by DEN and when all operations at such site are identified and solely dedicated to the Project. Contractors and subcontractors are responsible to notify the DEN ROCIP Administrator in writing, to request coverage for specified off-site operations. Coverage is not provided at the off-site location unless confirmed in writing by the DEN ROCIP Administrator.

3.6 DEN ROCIP Insurance Manual

As soon as practicable, the DEN ROCIP Insurance Manual will be sent to each Enrolled Party and will become a part of the Contract and Contractor's Subcontract with its subcontractor and its subcontractors' agreements with any lower-tier subcontractor. The DEN ROCIP Insurance Manual will contain the

administrative and claim reporting procedures. Contractor agrees to and will require that its subcontractors of any tier to cooperate with the DEN ROCIP Administrator in providing all required information.

3.7 Conflicts

Descriptions of the DEN ROCIP coverages set forth in Section 3.8 are not intended to be complete or meant to alter or amend any provision of the DEN ROCIP insurance policies. The DEN ROCIP coverages, terms, conditions, and exclusions are set forth in full in their respective policy forms. In the event of a conflict or omission between the coverages provided in the DEN ROCIP insurance policies and the coverages summarized or described in the DEN ROCIP Insurance Manual, this Exhibit or elsewhere in the Contract Documents, the DEN ROCIP insurance policies shall govern. In the event of a conflict between the provisions of this Exhibit and the DEN ROCIP Insurance Manual, that does not involve any conflict with the provisions of the DEN ROCIP insurance policies, the provisions of this Exhibit shall govern.

3.8 ROCIP Insurance Coverage Provided to Enrolled Parties

3.8.1 Insurance Provided by DEN

Unless otherwise provided herein, prior to commencement of the Work, DEN, at its sole option and expense, shall secure and maintain at all times during the performance of this Contract the insurance specified below, insuring DEN, Enrolled Parties and such other persons or interests as DEN may designate with limits not less than those specified below for each coverage.

3.8.1.1 Workers' Compensation & Employer's Liability – On Site Only

DEN shall maintain the coverage as required by statute for the Project Site and shall maintain Employer's Liability insurance with limits no less than \$1,000,000 per occurrence for each bodily injury claim, \$1,000,000 per occurrence for each bodily injury caused by disease claim, and \$1,000,000 aggregate for all bodily injuries caused by disease claims.

3.8.1.2 Commercial General Liability – On Site Only

DEN shall maintain insurance coverage including bodily injury, property damage, personal injury, advertising injury, and products and completed operations in minimum limits as listed below:

Coverage	Limit
Annual General Aggregate (Per Project and Reinstates Annually)	\$4,000,000
Products/Completed Operations Aggregate (Per Project and Statute of Repose)	\$4,000,000
Total Products/Completed Operations Aggregate (Statute of Repose)	\$8,000,000
Personal / Advertising Injury Limit	\$2,000,000
Each Occurrence Limit	\$2,000,000
Fire Damage Legal Liability (any one fire)	\$ 300,000
Medical Payments (any one person)	\$ 10,000

3.8.1.3 Excess Liability Insurance

DEN shall maintain coverage following form with underlying policies of

Commercial General Liability and Employer's Liability in minimum limits as listed below:

Coverage	Limit
Annual General Aggregate (Per Project and Reinstates Annually)	\$200,000,000
Products/Completed Operations Aggregate (Per Project)	\$200,000,000
Total Products/Completed Operations Aggregate (Policy Cap)	\$400,000,000
Each Occurrence Limit	\$200,000,000

DEN, in its sole discretion, may elect to provide higher limits, based on Project size. Excess Liability limits are shared by all Insured parties.

3.8.1.4 Contractor's Pollution Liability

DEN shall maintain coverage for bodily injury, property damage, or environmental damage caused by a pollution event resulting from covered operations, including completed operations, at the Project Site with a limit no less than \$10,000,000 each occurrence and aggregate. Coverage includes microbial matter and legionella pneumophila in any structure on land and the atmosphere contained within the structure. Products/Completed Operations coverage may extend for the statute of limitations/repose after final completion of the Project.

3.8.1.5 Builder's Risk Insurance

DEN shall maintain, Builder's Risk (and/or Installation Floater) in the amount of \$500,000,000 per occurrence subject to various sublimits (as defined in the Builders' Risk Policy). Such insurance shall end when the first of the following occurs: 1) DEN's interest in the Work ceases; 2) the policy expires or is cancelled; or 3) the Work is accepted by DEN.

Builder's Risk Insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss of damage including, theft, vandalism, malicious mischief, terrorism, rigging and hoisting for materials and equipment that are part of the Project, collapse, earthquake, flood, windstorm, falsework, testing and startup (as provided by the policy), temporary buildings and debris removal including demolition occasioned by enforcement of any applicable ordinance laws, and shall cover reasonable compensation for services and expenses required as a result of such insured loss.

This Builder's Risk Insurance shall cover portions of the Work stored off site, and also portions of the Work in transit.

DEN and Contractor shall waive all rights against (1) each other and any of their subcontractors of any tier, and all respective agents and employees, and (2) the architect, architect's consultants, separate contractors, if any, and any of their subcontractors of any tier, and all respective agents and employees, for damages caused by fire or other causes of loss to the extent covered by Builder's Risk Insurance obtained pursuant to this Section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by DEN as fiduciary. DEN or Contractor, as appropriate, shall require of the architect,

architect's consultants, separate contractors, and their subcontractors of any tier, and all respective agents and employees, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

3.8.2 Claim Chargeback

A claim charge-back will be assessed, regardless of fault, for the amount of any loss payable under this program with the exception of Workers' Compensation and Excess Liability, up to a maximum of \$25,000 each loss. Lead Contractor may elect to pass no more than \$5,000 of this charge, each loss, through to any responsible subcontractor.

3.9 Other Insurance Provided By Enrolled Parties

At their own expense, the Enrolled Parties of all tiers must carry the following minimum coverage and limits and such insurance shall be evidenced to DEN and the DEN ROCIP Administrator as required in this Section 3.9.

3.9.1 Certificate Holder

Certificate(s) shall be issued to: CITY AND COUNTY OF DENVER
Denver International Airport
8500 Peña Boulevard, Suite 8810
Denver CO 80249
Attn: Risk Management

and

CITY AND COUNTY OF DENVER
Department of Aviation
c/o Arthur J. Gallagher RMS, Inc.
12444 Powerscourt Drive
St. Louis, MO 63131
Attn: Gallagher OCIP Group

3.9.2 Acceptable Certificate of Insurance Form and Submission Instructions

Please read these requirements carefully to ensure proper documentation and receipt of your certificate(s) of insurance.

- ACORD FORM (or equivalent) must be emailed in pdf format to:
contractadmininvoices@flydenver.com
and heather_lawson@ajg.com
- HARD COPIES of certificates and/or copies of insurance policies will not be accepted.
- ACORD FORM (or equivalent) must reference the DEN assigned Contract Number.

3.9.3 Commercial General Liability – Off Site Only

Contractor shall maintain insurance coverage including bodily injury, property damage, personal injury, advertising injury, and products and completed operations for Contract operations not physically occurring within the Project Site in minimum limits of \$1,000,000 each occurrence,

\$2,000,000 products and completed operations aggregate and \$2,000,000 policy and annual aggregate.

3.9.3.1 Coverage shall include Contractual Liability covering liability assumed under this Agreement (including defense costs assumed under contract) within the scope of coverages provided.

3.9.4 Business Automobile Liability

Contractor shall maintain a minimum limit of \$1,000,000 combined single limit each occurrence for bodily injury and property damage for all owned, leased, hired and/or non-owned vehicles used in performing services under this Agreement.

3.9.4.1 If operating vehicles unescorted airside at DEN, a \$10,000,000 combined single limit each occurrence for bodily injury and property damage is required.

3.9.4.2 If Contractor does not have blanket coverage on all owned and operated vehicles, then a schedule of insured vehicles (including year, make, model and VIN number) must be submitted by the insurer with the Certificate of Insurance.

3.9.4.3 The policy must not contain an exclusion related to operations on airport premises.

3.9.4.4 If transporting waste, hazardous material, or regulated substances, Contractor shall carry a pollution coverage endorsement and an MCS 90 endorsement on its policy.

3.9.4.5 If Contractor is an individual or represents that Contractor does not own any motor vehicles and Contractor's owners, officers, directors, and employees use their personal vehicles for business purposes, Personal Automobile Liability insurance coverage will be accepted provided it includes a business use endorsement.

3.9.4.6 If Contractor will be completing all services to DEN under this Agreement remotely this requirement will be waived.

3.9.5 Workers' Compensation and Employer's Liability Insurance – Off Site Only

Coverage to protect Contractor/Subcontractor from and against all claims arising from performance of Work outside the Project Site under the Contract.

Contractor shall maintain the coverage as required by statute for performance of Work outside the Project Site under the Contract and shall maintain Employer's Liability insurance with limits no less than \$1,000,000 per occurrence for each bodily injury claim, \$1,000,000 per occurrence for each bodily injury caused by disease claim, and \$1,000,000 aggregate for all bodily injuries caused by disease claims.

3.9.5.1 If Contractor is a sole proprietor, Workers' Compensation and Employer's Liability is exempt under the Colorado Workers' Compensation Act.

3.9.6 Professional Liability (Errors and Omissions) Insurance

Contractor shall maintain a minimum limit of \$1,000,000 each claim and policy aggregate, providing coverage for applicable services outlined in this Agreement.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

3.9.7 Technology Errors and Omissions, Network Security, and Privacy Liability (Cyber):

Contractor shall maintain a limit no less than \$1,000,000 each claim and aggregate; \$1,000,000 each claim and aggregate for cyber extortion; and no less than \$250,000 each claim for invoice manipulation and email spoofing for applicable services outlined in this Agreement.

- 3.9.7.1 Coverage shall include professional misconduct or lack of ordinary skill.
- 3.9.7.2 Coverage shall include, but not be limited to, liability arising from theft, dissemination and/or use of personal, private, confidential, information subject to a non-disclosure agreement, including information stored or transmitted, privacy or cyber laws, damage to or destruction of information, intentional and/or unintentional release of private information, alteration of information, extortion and network security, introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon, advertising injury, personal injury (including invasion of privacy) and intellectual property offenses related to internet.

The Contractor shall be responsible for conferring with DEN Risk Management on any subcontractors providing work to the Project to obtain a formal determination if this coverage will be required.

3.9.8 Excess/Umbrella Liability:

Combination of primary and excess coverage may be used to achieve minimum required coverage limits. Excess/Umbrella policy(ies) must follow form of the primary policies with which they are related to provide the minimum limits and be verified as such on any submitted Certificate of Insurance.

3.9.9 Reference to Project and/or Contract

The DEN Project and/or Contract Number and project description shall be noted on the Certificate of Insurance.

3.9.10 Additional Insured

For all coverages required under this Agreement (excluding Workers' Compensation and Professional Liability), Contractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers as Additional Insureds by policy endorsement.

3.9.11 Waiver of Subrogation

For all coverages required under this Agreement, Contractor's insurer(s) shall waive subrogation rights against the City and County of Denver, its elected and appointed officials, successors, agents, employees and volunteers by policy endorsement.

3.9.12 Notice of Material Change, Cancellation or Nonrenewal

Each certificate and related policy shall contain a valid provision requiring notification to the Certificate Holder in the event any of the required policies be canceled or non-renewed or reduction in coverage from the requirements herein before the expiration date thereof.

- 3.9.12.1 Such notice shall reference the DEN assigned contract number related to this Agreement.
- 3.9.12.2 Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal or reduction in coverage unless due to non-payment of premiums for which notice shall be sent ten (10) days prior.
- 3.9.12.3 If such written notice is unavailable from the insurer, and in any event, Contractor and/or its insurance broker/agent shall provide written notice of cancellation, non-

renewal and any reduction in coverage to the Certificate Holder within seven (7) business days of receiving such notice by its insurer(s) and include documentation of the formal notice received from its insurer(s) as verification. Contractor shall replace cancelled or nonrenewed policies with no lapse in coverage and provide an updated Certificate of Insurance to DEN.

3.9.13 Additional Provisions

- 3.9.13.1 Deductibles, SIRS, or any other type of retention are the sole responsibility of the policyholder.
- 3.9.13.2 Defense costs shall be in addition to the limits of liability. If this provision is unavailable that limitation must be evidenced on the Certificate of Insurance.
- 3.9.13.3 A severability of interests or separation of insureds provision (no insured vs. insured exclusion) is included under any policy requiring Additional Insured status.
- 3.9.13.4 A provision that coverage is primary and non-contributory with other coverage or self-insurance maintained by DEN, excluding Professional Liability and Workers' Compensation policies, if required.
- 3.9.13.5 The insurance requirements under this Agreement shall be the greater of (i) the minimum limits and coverage specified hereunder or (ii) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the Contractor. It is agreed that the insurance requirements set forth herein shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums set forth in this Agreement.
- 3.9.13.6 All policies shall be written on an occurrence form when available and industry norm. If an occurrence form is unavailable and/or the industry norm, claims-made coverage may be accepted by DEN provided the retroactive date is on or before the Agreement Effective Date or the first date when any goods or services were provided to DEN, whichever is earlier, and continuous coverage will be maintained or an extended discovery period of three years beginning at the time work under this Agreement is completed or the Agreement is terminated, whichever is later.
- 3.9.13.7 Contractor shall advise DEN in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.
- 3.9.13.8 Certificates of Insurance must specify the issuing companies, policy numbers and policy periods for each required form of coverage. The certificates for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf and must be submitted to DEN at the time Contractor signed this Agreement.
- 3.9.13.9 The insurance shall be underwritten by an insurer licensed or authorized to do business in the State of Colorado and rated by A.M. Best Company as A- VIII or better.
- 3.9.13.10 Certificate of Insurance and Related Endorsements: DEN's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of DEN's rights or remedies under this Agreement. DEN's acceptance of any submitted insurance certificate is subject to the approval of DEN Risk Management. All coverage requirements specified in the certificate shall be enforced unless waived or otherwise modified in writing by DEN Risk Management. Contractor is solely responsible for ensuring all formal policy endorsements are issued by their insurers to support the requirements herein.
- 3.9.13.11 DEN shall have the right to verify or confirm, at any time, all coverage, information or representations, and the insured and its undersigned agent shall promptly and

fully cooperate in any such audit DEN may elect to undertake including provision of certified copies of insurance policies upon request.

- 3.9.13.12 No material changes that negatively impact DEN or reductions in the coverage required herein shall be allowed without the review and written approval of DEN Risk Management.

4. Contractor Warranties and Agreements

4.1 Accuracy of Contractor-provided Information

Contractor warrants that all information submitted to DEN or the DEN ROCIP Administrator is accurate and complete to the best of its knowledge. Contractor will notify DEN or the DEN ROCIP Administrator immediately in writing of any errors discovered during the performance of the Work.

4.2 Contractor Responsible to Review Coverage

Contractor acknowledges that all references to DEN ROCIP policy terms, conditions, and limits of liability in this document, as well as the DEN ROCIP Insurance Manual, are for reference only. Contractor and its subcontractors of any tier are responsible for conducting their own independent review and analysis of the DEN ROCIP insurance policies in formulating any opinion or belief as to the applicability of such coverage in the event of any loss or potential claim. Any type of insurance or increase of limits not described above, which the Contractor requires for its own protection or on account of statute, shall be its own responsibility and at its own expense.

4.3 Audit

Contractor agrees to make its records available for review and to cooperate with DEN, its insurers and insurance brokers, the City Auditor, and representatives of the aforesaid parties in the event of an audit. In the event that a DEN audit of Contractor's records, as permitted in the Contract or other DEN ROCIP documents, reveals a discrepancy in the insurance, payroll, safety, or any other information required to be provided to DEN or the DEN ROCIP Administrator, or reveals inclusion of costs for DEN ROCIP coverage or other coverage beyond what is described above in any payment for the Work, DEN will have the right to deduct from payments due Contractor all such insurance costs as well as all audit costs.

4.4 Insurance Costs Removed

Contractor warrants that the costs for insurance as provided under the DEN ROCIP were not included in Contractor's bid or proposal for the Work, the Contract Price/Contract Sum, and will not be included in any change order or any request for payment for the Work or extra work.

5. Contractor Obligations

5.1 ROCIP Documents Shall be Provided to Subcontractor

Contractor shall furnish each bidding subcontractor, vendor, supplier, material dealer or other party a copy of this Exhibit, the DEN ROCIP Insurance Manual and the DEN ROCIP Safety Manual and shall incorporate the terms of this Exhibit in all contracts and agreements entered into for performance of any portion of the Work.

5.2 Timely Enrollment Required

Contractor shall enroll in the DEN ROCIP within five (5) business days following a request by DEN or the DEN ROCIP Administrator. Contractor shall notify each subcontractor of the process for enrolling in DEN ROCIP and confirm that enrollment is mandatory, but not automatic. Contractor shall assure that subcontractors of any tier shall not commence Work until verification of enrollment is confirmed by the

DEN ROCIP Administrator by the issuance of a Certificate of Insurance to each individual Enrolled Party.

5.3 Compliance with Conditions

Contractor shall not violate any condition of the policies of insurance provided by DEN under the terms of this Exhibit, the DEN ROCIP Insurance Manual or the DEN ROCIP Safety Manual. All requirements imposed by the subject policies and to be performed by Contractor shall likewise be imposed on, assumed, and performed by each subcontractor of any tier.

5.4 Claims Cooperation

Contractor shall participate in claim reporting procedures. Contractor agrees to assist and cooperate in every manner possible in connection with the adjustment of all claims arising out of operations within the scope of the Work required by the Contract, and to cooperate with DEN's insurer(s) in all claims and demands which DEN's insurer(s) is called upon to adjust or to defend against. Contractor shall take all necessary action to assure that its subcontractors of any tier comply with any request for assistance and cooperation. This obligation includes, without limitation, providing light or modified duty for injured workers, appearing in mediation, arbitration or court proceedings and/or participating in settlement meetings, as may be required.

5.5 Monthly Payroll Submission

All Enrolled Parties shall submit monthly payrolls and worker-hour reports to DEN and/or the DEN ROCIP Administrator via the DEN ROCIP Administrator's online reporting system as outlined in the DEN ROCIP Insurance Manual. The online reporting instructions will be provided to all Contractors at time of enrollment. Failure to submit these reports may result in funds being held or delayed from monthly progress payments. Payroll must be submitted online for each month, including zero (0) payroll, if applicable, until completion of the Work under each Contract and Subcontract. For subcontractors of any tier performing Work under multiple Subcontracts, a separate payroll report is required for each Subcontract under which Work is being performed.

5.6 Response to Information Requests

All insurance underwriting, payroll, rating or loss history information requested by DEN or the DEN ROCIP Administrator shall be provided by the Contractor within three (3) business days of request. Contractor agrees (and will require each subcontractor to agree) that DEN, DEN's insurers or its representative may audit the Contractor's records or records of subcontractors of any tier to confirm the accuracy of all insurance information provided including, without limitation, any such information that may have any effect on insurance resulting from changes in the Work. At all times during performance of the Contract and Subcontracts, the Contractor and subcontractors of any tier shall cooperate with DEN, the DEN ROCIP Administrator and DEN's insurers.

5.7 Responsibility for Safety

Notwithstanding the DEN ROCIP, the Contractor shall initiate, maintain and supervise all safety precautions and programs in connection with the Work. Contractor is solely responsible, at no adjustment to the contract sum payable or contract time, for initiating, maintaining, and supervising all safety precautions and programs relating to the conduct of Work including, without limitation, any safety programs or procedures that are required by any applicable state or federal laws, rules or regulations, or under the terms of the DEN ROCIP Safety Manual.

5.8 Duty of Care

Nothing herein shall relieve the Enrolled Parties of their respective obligations to exercise due care in the

performance of their duties in connection with the Work or to complete the Work in strict compliance with this Contract and subsequent subcontracts.

6. Notices and Costs

6.1 Limitations on DEN Provided Coverage and DEN Right to Purchase Other Coverage

DEN assumes no obligations to provide insurance other than that evidenced by the policies referred to in Section 3.8. DEN, however, reserves the right to furnish insurance coverage of various types and limits provided that such coverage shall not be less than that specified in Section 3.8 and the costs of such insurance shall be paid by DEN. Apart from the DEN ROCIP, DEN may at its option purchase additional insurance coverages that insure the Project that may not necessarily insure the Contractor or the subcontractors. Without limitation, examples of such coverage may include pollution liability, excess professional liability, and excess automobile liability insurance.

6.2 Contractors Responsible for Own Equipment

Contractor and subcontractors are solely responsible for loss or damage of all construction tools and other equipment whether owned, leased, rented, borrowed or used on Work at the Project Site. If an individual Enrolled Party purchases insurance on their tools and equipment, such insurance shall contain a waiver of subrogation in favor of the City and County of Denver, its elected and appointed officials, agents, employees and volunteers and all other Enrolled Parties. If an individual Enrolled Party does not purchase such insurance, that Enrolled Party will hold harmless the City and County of Denver, its elected and appointed officials, agents, employees and volunteers and other Enrolled Parties for loss or damage to its tools and equipment.

6.3 No Release; No Waiver of Immunity

The provision of the DEN ROCIP shall in no way be interpreted as relieving Contractor or subcontractors of any tier of any responsibility or liability under the Contract Documents, the DEN ROCIP insurance policies or applicable laws including, without limitation, Contractor's and subcontractor's responsibilities relative to indemnification and their obligation to exercise due care in the performance of the Work and to complete the Work in strict compliance with the Contract Documents. The parties hereto understand and agree that the City and County of Denver, its elected and appointed officials, agents, employees and volunteers are relying on, and do not waive or intend to waive by any provisions of this agreement, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §§ 24-10-101 to 120, C.R.S., or otherwise available to DEN, its officers, officials and employees.

6.4 DEN Right to Withhold Payments

In addition to any other rights of withholding that DEN may have under the Contract Documents, DEN has the right to withhold any payments otherwise due to Contractor in the event of a failure by Contractor or any subcontractor to comply with the requirements of this Exhibit, the DEN ROCIP Insurance Manual or the DEN ROCIP Safety Manual. DEN may withhold from any payment owing to Contractor the costs of DEN ROCIP coverages if included in a request for payment. Such withholding by DEN shall not be deemed to be a default under the Contract. DEN shall withhold from Contractor the costs of DEN ROCIP coverages attributable to an increase in an Enrolled Party's total payroll for the Work over the amount reported to DEN and/or the DEN ROCIP Administrator at time of enrollment.

6.5 DEN Remedies

Without limitation upon any of DEN's other rights or remedies, any failure of an Enrolled Party to comply with any provision of this Exhibit, the DEN ROCIP Insurance Manual, or the DEN ROCIP Safety Manual shall be deemed a material breach of the Contract, thereby entitling DEN, at its option, upon

notice to Contractor, to (1) suspend performance by Contractor and/or the offending subcontractor, without any adjustment to Contract Sum Payable or Contract Time, until there is full compliance, or (2) terminate this Contract for cause.

6.6 Off Site Storage

Unless otherwise provided in the Contract Documents, the property insurance provided by DEN shall not cover portions of the Work stored off the Site without written approval of DEN. Contractor shall be responsible for reporting such property or work if ownership has been transferred to DEN. If ownership rests with the Contractor, Contractor shall be responsible for obtaining insurance to protect its interests.

6.7 Partial Occupancy

Partial occupancy or use shall not commence until DEN insurer(s) providing Builders Risk and/or Property Insurance have consented to such partial occupancy or use by endorsement or otherwise. DEN and the Contractor shall take reasonable steps to obtain consent of the insurer(s) and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

6.8 DEN Right to Exclude Parties from the DEN ROCIP

DEN reserves the right to exclude any subcontractor from the DEN ROCIP, before or after enrollment by the subcontractor. If DEN elects to exclude a subcontractor from the DEN ROCIP, the Contractor will be responsible for ensuring the insurance coverages outlined in the Contractor's Subcontract Agreement are provided to DEN or the DEN ROCIP Administrator before the subcontractor can begin or resume Work on the Project.

6.9 DEN's Right to Modify or Discontinue DEN ROCIP Coverages

If DEN determines that modification or discontinuation of the DEN ROCIP is in the best interest of DEN, the Contractor and subcontractor will receive sixty (60) days advance written notice to secure and maintain such insurance as is required to provide replacement coverage comparable to that provided under the DEN ROCIP. Provided that the foregoing is not the result of any failure by the Contractor or any subcontractor to comply with the requirements of the Contract Documents, the DEN ROCIP Insurance Manual or DEN ROCIP Safety Manual, the costs of such replacement insurance shall be deemed a cost of Work for which the Contractor shall be entitled to a Contract Adjustment, without any sum added thereto for Allowable Markup. The form, content, limits of liability, cost and the rating of the insurer(s) issuing such replacement coverage shall be subject to DEN's prior written approval.

7. Definitions

Certificate of Insurance:	A document providing evidence of coverage for a particular insurance policy or policies. This will include certificates issued to Enrolled Parties evidencing the coverage afforded under the DEN ROCIP and certificates issued to DEN evidencing additional coverage "Provided by Enrolled Parties"
DEN:	City and County of Denver and Denver International Airport
Contract:	The written agreement between DEN and Contractor describing the Work, contract terms and conditions, or a portion thereof; also includes a written agreement between a Contractor and any subcontractor as well as between subcontractors and their subcontractors of any tier.

- Contractor Insurance Cost: The costs of ROCIP coverage are defined as the amount of Contractor's and eligible Subcontractors' of every tier reduction in insurance costs due to participation in the DEN ROCIP.
- Rolling Owner Controlled Insurance Program (ROCIP): A coordinated insurance program providing certain coverage, as defined herein, for DEN, Contractor and Enrolled Subcontractors, along with their Eligible Employees, performing Work at the Project Site.
- Eligible Employees: Employees of the Contractor and Enrolled Subcontractors who are not excluded from the ROCIP under the "Excluded Parties" definition.
- Enrolled Parties: The Contractor and those subcontractors that have submitted all necessary enrollment information and been accepted into the ROCIP as evidenced by the issuance of a Certificate of Insurance.
- Excluded Parties: Parties not covered by the ROCIP because of ineligibility or DEN explicit exclusion. No insurance coverage provided by DEN under the ROCIP shall extend to the activities or products of the following:
- Any person or organization that fabricates or manufactures products, materials or supplies away from a Project Site with no direct onsite installation responsibility
- Exception: The ROCIP Insurer may agree to extend General Liability coverage only if the Lead Contractor has a written contract with the off-site fabricator or manufacturer to provide the pre-fabricated product. To consider extending coverage, the Insurer requires 30 days advance written notice to the ROCIP Administrator with details of the work/product and a copy of the contract between the Lead Contractor and the off-site fabricator or manufacturer. Approval must be obtained from the Insurer before enrolling in the ROCIP for General Liability coverage only.
- Hazardous materials remediation, removal, or transportation companies and their consultants
 - Architects, engineers, surveyors and their consultants
 - Truckers, haulers, material dealers, vendors, suppliers, and others who merely transport, pick up, deliver or carry materials, personnel, parts or equipment or any other items or persons to or from a Project Site
 - Contractors, subcontractors and subconsultants who do not work at a Project Site
 - Employees of an Enrolled Party who either (i) do not work on-site or (ii) occasionally visit a Project Site to make deliveries, pick-up supplies or personnel, to perform supervisory or progress inspections, or for any other reason
 - Day labor employees (individuals working directly for the Contractor and not procured through a third party

Exception: The ROCIP Insurer typically will accept including employees working for a contractor, or employed by temporary staffing agencies or professional employer organizations, as long as those employer-entities are enrolled as subcontractors to supply supplemental workforce.

Insured: (liability policies)	DEN, Contractor and Enrolled Parties and their Eligible Employees and any other party named in the insurance policies.
Insurers:	Those insurance companies providing the DEN ROCIP coverage. The insurers will be identified on the issued Certificate of Insurance and in the DEN ROCIP Insurance Manual.
Net Bid:	Contractor bids with insurance costs removed because of the obligation of any Enrolled Party to delete insurance costs for coverage provided by the ROCIP from its bid and all change orders. Net bids are subject to verification by the Administrator through the providing of contractors' rate and declaration pages from their Insurance policies.
ROCIP Administrator:	The DEN ROCIP Administrator will be identified in the DEN ROCIP Insurance Manual.
ROCIP Insurance Manual:	A reference document provided to Contractor and subcontractors of all tiers, which summarizes the terms and provisions of the DEN ROCIP and provides information about requirements and compliance.
ROCIP Safety Manual:	A reference document provided to Contractor and subcontractors of all tiers which contains workplace safety requirements of all Enrolled Parties.
Off Site Work:	Work performed away from the Project Site.
Payroll:	For purposes of the ROCIP only, refers to Unburdened Straight Time Payroll per Workers Compensation Class Code.
Policy Owner:	City and County of Denver and Denver International Airport
Project:	The Project as defined in the contract documents and as described in the Declarations of the DEN ROCIP insurance policies.
Project Site:	Means those areas designated in writing by DEN in a Contract document for performance of the Work and such additional areas as may be designated in writing by DEN for Contractors' use in performance of the Work. Subject to the ROCIP Insurer(s) written approval, the term "Project Site" shall also include: (1) field office sites, (2) property used for bonded storage of material for the Project approved by DEN, staging areas dedicated to the Project, and (4) areas where activities incidental to the Project are being performed by Contractor or subcontractors covered by the DEN ROCIP Worker's Compensation policy (if included), but excluding any permanent locations of any Enrolled Party.

Items 1 through 4 above must be approved by the ROCIP Insurer and

listed on the DEN ROCIP insurance policies.

- Subcontract:** The written agreement between Contractor and subcontractor, or between subcontractor and a lower tier subcontractor, describing the Work, subcontract terms and conditions, or a portion thereof.
- Subcontractor:** Includes those persons, firms, joint venture entities, corporations, or other parties that enter into a Subcontract with Contractor to perform Work at the Project Site and any of these subcontractor's lower-tier subcontractors.
- Work:** Operations, as fully described in the Contract and Subcontract, performed at the Project Site.

X. ATTACHMENT 5, DIVERSITY AND INCLUSIVENESS IN CITY SOLICITATIONS

For the City or the City Agency to consider a bid/Bid, Bidders must complete the on-line Diversity and Inclusiveness in City Solicitations Form – then **print the completed form and include the hard copy as part of Bidder's bid/Bid documents. A Bid or response to a solicitation by a Bidder that does not include this completed form shall be deemed non-responsive.**

Click on the following link to access the on-line form:

<https://fs7.formsite.com/CCDenver/form161/index.html>

Using the form found in link above, please state whether you have a Diversity and Inclusiveness program for employment and retention, procurement and supply chain activities or customer service, and provide the additional information requested on the form. The information provided on the Diversity and Inclusiveness in City Solicitations Form will provide an opportunity for City Bidders to describe their own diversity and inclusiveness practices. Bidders are not expected to conduct intrusive examinations of their employees, managers or business partners in order to describe diversity and inclusiveness measures. Rather, the City simply seeks a description of the Bidder's current practices, if any. Diversity and Inclusiveness information provided by City Bidders in response to City solicitations for services or goods will be collated, analyzed and made available in reports consistent with City Executive Order No. 101. However, no personally identifiable information provided by or obtained from Bidders will be in such reports.

**Insert the completed hard copy of the Diversity and Inclusiveness
in City Solicitations Form immediately following this page.**

XI. ATTACHMENT 6, SAMPLE CONTRACT

SAMPLE CONTRACT

The Sample Contract is contained in the pages immediately following this page. These pages are not included in the page numbering of this contract document.

SAMPLE AGREEMENT

Notice to Bidders:

City Required Contract Provisions

The following contract provisions are required in every contract issued by the Department of Aviation. The language of each clause is drafted in accordance with city, state and federal obligations placed on the airport and is not subject to modification. Accordingly, bidders should carefully review this Sample Agreement provided with the Invitation for Bid, including these required provisions, in preparation of their Bids.

- 1. Indemnification**
- 2. Basic insurance requirements**
- 3. Limitation of liability (available in narrowly applicable circumstances)**
- 4. Federal requirements**
 - a. Standard Federal Aviation Administration grant assurances (Appendix 1 to the Sample Agreement)**
 - b. Federal Aviation Administration document retention and review requirements**
- 5. Airport security requirements**
- 6. City code and charter; state statutes**
 - a. Prompt pay**
 - b. Prevailing wage**
 - c. Immigration provisions (Not applicable for contracts for Information Technology services or IT products and services – See, C.R.S. 8-17.5-101(6)(b)(V))**
 - d. Colorado open records act**
 - e. DSBO (if applicable to subject matter of contract)**
 - f. City nondiscrimination language**
 - g. Dispute resolution**
- 7. Denver Executive Orders (“XOs”)**
 - a. Environmental**
 - b. Drugs alcohol tobacco**
 - c. Nondiscrimination in contracts**
- 8. Airport System General Bond Ordinance (1984, as amended).**
- 9. Choice of law (Colorado)**
- 10. Jurisdiction and venue (Colorado)**

CONTRACT FOR CONSTRUCTION

THIS CONTRACT FOR CONSTRUCTION (“Contract”) is made and entered into as of the date stated on the City’s signature page below (the **“Effective Date”**) by and between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado acting on behalf of its Department of Aviation (the **“City”**), and **VENDOR NAME**, a Jurisdiction from the SOS website corporation and authorized to do business in the State of Colorado (**“Contractor”**) (collectively the **“Parties”**).

WITNESSETH

WHEREAS, the City, for at least three (3) consecutive days, advertised that proposals would be received for furnishing all labor, tools, supplies, equipment, materials and everything necessary and required for the construction and installation of the work under Invitation for Bid No. 202158849, Taxiway EE Construction at Denver International Airport (**“DEN”**); and

WHEREAS, a bid in response to said advertisement have been received by the Chief Executive Officer of DEN (the **“CEO”**), who has recommended that a contract for the work be made and entered into with Contractor, which was the lowest, responsive, qualified bidder; and

WHEREAS, Contractor is qualified, willing, and able to perform the work in accordance with its proposal and the Contract Documents defined below;

NOW, THEREFORE, for and in consideration of the compensation to be paid by the City to Contractor and the other terms and conditions of this Contract, the Parties agree as follows:

ARTICLE I. CONTRACT DOCUMENTS

It is agreed by the Parties that the instruments, drawings, and documents described below and whether attached to and bound with this Contract or not (the **“Contract Documents”**), are incorporated into the Contract by this reference, and are as fully a part of this Contract as if they were set out here verbatim and in full:

- Contract
- Request for Proposals
- Notice to Proceed
- Form of Final Receipt
- Building Information Modeling (**“BIM”**) if applicable
- Change Directives
- Change Orders
- Exhibit A Federal Appendices
- Exhibit B Equal Employment Opportunity Provisions
- Exhibit C Insurance Requirements
- Exhibit D Prevailing Wage Schedules
- Exhibit E Special Conditions

- Exhibit F Standard Specifications for Construction General Contract Conditions (2011 Edition) (the “Yellow Book”) (“General Conditions”) (Table of Contents attached as Exhibit F)
- Exhibit G Performance Bond
- Exhibit H Payment Bond
- Exhibit I Technical Specifications
- Exhibit J Contract Drawings
- Exhibit Invitation for Bids and Contractor’s Response to Invitation for Bids

In the event of an irreconcilable conflict between a provision of Article I through [redacted] of this Contract document and any other provisions of the Contract Documents such that it is impossible to give effect to both, the order of precedence to determine which document shall control to resolve such conflict is as follows, in descending order:

1. Exhibit A Federal Appendices
2. Contract
3. Change Directives
4. Change Orders
5. Exhibit B Equal Employment Opportunity Provisions
6. Exhibit E Special Conditions
7. Exhibit F Standard Specifications for Construction General Contract Conditions (2011 Edition) (the “Yellow Book”) (“General Conditions”) (Table of Contents attached as Exhibit F)
8. Exhibit C Insurance Requirements
9. Exhibit D Prevailing Wage Schedules
10. Exhibit I Technical Specifications
11. Exhibit J Contract Drawings
12. Exhibit Invitation for Bids and Contractor’s Response to Invitation for Bids
13. Exhibit G Performance Bond
14. Exhibit H Payment Bond
15. Notice to Proceed
16. Form of Final Receipt
17. Building Information Modeling (“BIM”) if applicable

The remaining order of precedence is established in General Conditions Title 4.

ARTICLE II. SCOPE OF WORK

Contractor shall furnish all labor and tools, supplies, equipment, superintendence, materials, and everything necessary for and required to do, perform, and complete all of the work described, drawn, set forth, shown, and included in the Contract Documents (the “Work”).

ARTICLE III. TERM OF CONTRACT

The Senior Vice President of Aviation – Airport Infrastructure Management (the “SVP-AIM”) will issue a written notice to proceed to Contractor (the “Notice to Proceed”), and Contractor shall begin performing the Work required under this Contract within ten (10) days of

such Notice to Proceed (the “**Commencement Date**”). Contractor shall fully complete the Work in its entirety within 720 consecutive calendar days from the date of the Notice to Proceed (“**Contract Time**”). Contractor is not authorized to commence work prior to its receipt of the Notice to Proceed.

ARTICLE IV. TERMS OF PAYMENT

The City agrees to pay Contractor for the performance and completion of all of the Work as required by the Scope of Work and the Contract Documents, and Contractor agrees to accept as its full and only compensation therefor, a total amount of **Contract Amount Dollars and Amount Cents (\$Click here to enter text..00)** (the “**Maximum Contract Amount**”). In no event will the City’s liability exceed the Maximum Contract Amount, as adjusted by duly authorized Change Orders in accordance with this Contract. The Parties specifically agree that any performance by Contractor hereunder shall not subject the City to any cost, charge, or fee not specified above.

ARTICLE V. VERIFIED STATEMENT OF CLAIMS

Colorado Revised Statutes § 38-26-107 (“**C.R.S.**”) requires that, in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to Contractor sufficient funds to insure the payment of any such claims. Should the City be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, Contractor agrees to pay to the City its costs and a reasonable attorney’s fee incurred in any such lawsuit. Because the City Attorney Staff does not bill the City for legal services on an hourly basis, Contractor agrees a reasonable fee shall be computed at the rate of two hundred dollars and no cents (\$200.00) per hour of City Attorney time.

ARTICLE VI. DISPUTES

All disputes arising under or related to this Contract shall be resolved by administrative hearing under the procedures described in *Exhibit F*, as modified by *Exhibit E*, if any, and the Denver Revised Municipal Code Section 5-17 (“**D.R.M.C.**”) and all related rules and procedures. The determination resulting from said administrative hearing shall be final, subject only to Contractor’s right to appeal the determination under Colorado Rule of Civil Procedure, Rule 106.

ARTICLE VII. DEFENSE AND INDEMNIFICATION

A. To the fullest extent permitted by law, Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or related to the work performed under this Contract that are due to the negligence or fault of the Contractor or the Contractor’s agents, representatives, subcontractors, or suppliers (“**Claims**”). This indemnity shall be interpreted in the broadest possible manner consistent with the applicable law to indemnify the City.

B. Contractor’s duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether suit has been filed and even if Contractor is not named as a Defendant.

C. Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending and investigating such Claims or seeking to enforce this indemnity obligation, including but not limited to time expended by the City Attorney Staff, whose costs shall be computed at the rate specified in Article V. Such payments on behalf of City shall be in addition to any other legal remedies available to City and shall not be considered City's exclusive remedy.

D. Insurance coverage requirements specified in this Contract shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.

E. This defense and indemnification obligation shall survive the expiration or termination of this Contract.

ARTICLE VIII. WAIVER OF C.R.S. § 13-20-801, et seq.

Notwithstanding any other provision of this Contract, Contractor specifically waives all of the provisions of C.R.S. §§ 13-20-801 et seq. as they may relate to Contractor's performance under this Contract.

ARTICLE IX. LIQUIDATED DAMAGES

If Contractor fails to achieve Substantial Completion of the Work within the Contract Time or fails to substantially complete the Work described in the Scope of Work within the time set forth in the Special Conditions, the City will suffer substantial damages, which damages would be difficult to accurately determine. The Parties hereto have considered the possible elements of damages and have agreed that the amount of liquidated damages for Contractor's failure to substantially complete the work within the Contract Time or to substantially complete the work described in any Milestone Areas shall be as provided in the Special Conditions. If Contractor shall fail to pay such liquidated damages promptly upon demand therefor, the Surety on its Performance Bond and Payment Bond shall pay such damages. Also, the City may withhold all, or any part of, such liquidated damages from any payment due to Contractor. Additional provisions relating to liquidated damages are set forth in the Construction Contract General Conditions and Special Conditions.

ARTICLE X. INSURANCE REQUIREMENTS

A. Contractor shall obtain and keep in force all of the minimum insurance coverage forms and amounts set forth in *Exhibit C* ("**Insurance Requirements**") during the entire term of this Contract, including any extensions of the Contract or other extended period stipulations stated in *Exhibit C*. All certificates of insurance and any required endorsements must be received and approved by DEN Risk Management before any airport access or work commences.

B. Unless specifically excepted in writing by DEN Risk Management, if Contractor shall be using subcontractors to provide any part of the services under this Contract, Contractor shall do one of the following:

1. Include all subcontractors performing services hereunder as insureds under its required insurance and specifically list on all submitted certificates of insurance required under *Exhibit C*; or
2. Ensure that each subcontractor provides its own insurance coverage in accordance with the requirements set forth in this Contract.

C. The City in no way warrants or represents the minimum limits contained herein are sufficient to protect Contractor from liabilities arising out of the performance of the terms and conditions of this Contract by Contractor, its agents, representatives, employees, or subcontractors. Contractor shall assess its own risks and maintain higher limits and/or broader coverage as it deems appropriate and/or prudent. Contractor is not relieved of any liability or other obligations assumed or undertaken pursuant to this Contract by reason of its failure to obtain or maintain insurance in sufficient amounts, duration, or types.

D. In no event shall the City be liable for any of the following: (i) business interruption or other consequential damages sustained by Contractor; (ii) damage, theft, or destruction of Contractor's inventory, or property of any kind; or (iii) damage, theft, or destruction of an automobile, whether or not insured.

E. The Parties understand and agree that the City, its elected and appointed officials, employees, agents and volunteers are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations and any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101, *et seq.*, or otherwise available to the City, its elected and appointed officials, employees, agents and volunteers.

ARTICLE XI. CONTRACT BINDING

It is agreed that this Contract shall be binding on and inure to the benefit of the Parties hereto, their heirs, executors, administrators, assigns, and successors.

ARTICLE XII. SEVERABILITY

If any part, portion, or provision of this Contract shall be found or declared null, void, or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having authority thereover, only such part, portion, or provision shall be affected thereby and all other parts, portions, and provisions of this Contract shall remain in full force and effect.

ARTICLE XIII. ASSIGNMENT

Contractor shall not assign, pledge or transfer its duties, obligations, and rights under this Contract, in whole or in part, without first obtaining the written consent of the CEO or their authorized representative. Any attempt by Contractor to assign or transfer its rights hereunder without such prior written consent shall, at the option of the CEO or their authorized representative, automatically terminate this Contract and all rights of Contractor hereunder.

ARTICLE XIV. APPROPRIATIONS

Payment will be in accordance with the provisions of the Contract Documents, including Title 9 of the General Conditions, and will be made solely and exclusively from funds appropriated or otherwise lawfully made available for the purposes of this Contract from the City and County of Denver Airport System Funds. The City has no obligation to make payments from any other fund or source or to make additional appropriations or allocations to such fund to satisfy such costs or other obligations.

ARTICLE XV. APPROVALS

In the event this Contract calls for the payment by the City of Five Million Dollars and no cents (\$5,000,000.00) or more, approval by the Denver City Council, acting by Resolution in accordance with Section 3.2.6 of the Charter of the City and County of Denver, is and shall be an express condition precedent to the lawful and binding execution and performance of this Contract.

ARTICLE XVI. JOINT VENTURE

If Contractor is a Joint Venture, the partners to the Joint Venture shall be jointly and severally liable to the City for the performance of all duties and obligations of Contractor which are set forth in the Contract.

ARTICLE XVII. NO DISCRIMINATION IN EMPLOYMENT

In connection with the performance of work under this Contract, Contractor agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender variance, marital status, or physical or mental disability; and Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

ARTICLE XVIII. COORDINATION OF SERVICES

Contractor agrees to perform its work under this Contract in accordance with the operational requirements of DEN, and all work and movement of personnel or equipment on areas included within the DEN site shall be subject to the regulations and restrictions established by the City or its authorized agents.

ARTICLE XIX. COMPLIANCE WITH ALL LAWS AND REGULATIONS

A. Contractor and its subcontractor(s) shall perform all work under this Contract in compliance with all existing and future applicable laws, rules, regulations, and codes of the United States and the State of Colorado and with the City Charter, ordinances, Executive Orders, and rules and regulations of the City.

B. Contractor shall perform all work in compliance with Executive Order 123 regarding Sustainability as may be directed by the City, including the requirement that all new City buildings and major renovations will be certified to the applicable LEED Gold Certification, with the goal of achieving LEED Platinum where economically feasible. Contractor also shall comply with all

applicable DEN design and construction standards, including the DEN Design Standards Manuals, which are incorporated herein by reference. Current versions can be found at:

<https://business.flydenver.com/bizops/bizRequirements.asp>.

ARTICLE XX. PREVAILING WAGE REQUIREMENTS

A. In addition to the Davis-Bacon Requirements contained in Exhibit A, Contractor shall comply with, and agrees to be bound by, all requirements, conditions and determinations of the City regarding the Payment of Prevailing Wages Ordinance, D.R.M.C. §§20-76 through 20-79, including, but not limited to, the requirement that every covered worker working on a City-owned or leased building or on City-owned land shall be paid no less than the prevailing wages and fringe benefits in effect on the date the bid or request for proposal was advertised. In the event a request for bids, or a request for proposal, was not advertised, Contractor shall pay every covered worker no less than the prevailing wages and fringe benefits in effect on the date funds for the Contract were encumbered.

Date bid or proposal issuance was advertised [Click here to enter text.](#)

B. Prevailing wage and fringe rates will adjust on the yearly anniversary of the actual date of bid or proposal issuance, if applicable, or the date of the written encumbrance if no bid/proposal issuance date is applicable. Unless expressly provided for in this Contract, Contractor will receive no additional compensation for increases in prevailing wages or fringe rates.

C. Contractor shall provide the Auditor of the City and County of Denver with a list of all subcontractors providing any services under the Contract.

D. Contractor shall provide the Auditor with electronically-certified payroll records for all covered workers employed under the Contract in a manner specified by the Auditor.

E. Contractor shall prominently post at the work site the current prevailing wage and fringe rates. The posting must inform workers that any complaints regarding the payment of prevailing wages or fringe benefits may be submitted to the Denver Auditor by calling 720-913-5000 or emailing auditor@denvergov.org.

F. If Contractor fails to pay workers as required by the Prevailing Wage Ordinance, Contractor will not be paid until documentation of payment satisfactory to the Auditor has been provided. The Auditor may enforce the Prevailing Wage Ordinance in a manner provided by law, including the Prevailing Wage Ordinance. The City also may, by written notice, suspend or terminate work if Contractor fails to pay required wages and fringe rates.

ARTICLE XXI. CITY PROMPT PAYMENT

A. Unless otherwise provided in this Contract, the City will make monthly progress payments to the Contractor for all services performed under this Contract based upon the Contractor's monthly invoices and in compliance with the General Conditions, as they may be modified in this Contract. The City's Prompt Payment Ordinance, D.R.M.C. §§ 20-107 to 20-118, applies to invoicing and payment under this Contract.

B. Final Payment to the Contractor shall not be made until after the Project is accepted, and all certificates of completion, record drawings and reproducible copies are delivered to the City, and the Contract is otherwise fully performed by the Contractor. In addition to retention, the City may, at the discretion of the Director, withhold reasonable amounts from billing and the entirety of the final payment until all such requirements are performed to the satisfaction of the Director.

C. Prompt Pay of MWBE Subcontractors. For contracts of one million dollars (\$1,000,000.00) and over to which D.R.M.C. § 28-72 applies, the Contractor is required to comply with the Prompt Payment provisions under D.R.M.C. § 28-72, with regard to payments by the Contractor to MWBE subcontractors. The Contractor shall make payment by no later than thirty-five (35) days from receipt by the Contractor of the subcontractor's invoice.

ARTICLE XXII. OWNERSHIP AND DELIVERABLES

Upon payment to Contractor, all records, data, deliverables, and any other work product prepared by Contractor or any custom development work performed by Contractor for the purpose of performing this Contract on or before the day of payment for such work shall become the sole property of the City. Upon request by the City, or based on any schedule agreed to by Contractor and the City, Contractor shall provide the City with copies of the data/files that have been uploaded to any database maintained by or on behalf of Contractor or otherwise saved or maintained by Contractor as part of the services provided to the City under this Contract. All such data/files shall be provided to the City electronically in a format agreed to by the Parties. Contractor also agrees to allow the City to review any of the procedures Contractor uses in performing any work or other obligations under this Contract, and to make available for inspection any and all notes, documents, materials, and devices used in the preparation for or performance of any of the scope of work, for up to six (6) years after termination of this Contract. Upon written request from the City, Contractor shall deliver any information requested pursuant to this Article within ten (10) business days in the event a schedule or otherwise agreed-upon timeframe does not exist.

ARTICLE XXIII. COLORADO OPEN RECORDS ACT

A. Contractor acknowledges that the City is subject to the provisions of the Colorado Open Records Act (“**CORA**”), C.R.S. §§ 24-72-201 *et seq.*, and Contractor agrees that it will fully cooperate with the City in the event of a request or lawsuit arising under such act for the disclosure of any materials or information which Contractor asserts is confidential or otherwise exempt from disclosure. Any other provision of this Contract notwithstanding, all materials, records, and information provided by Contractor to the City shall be considered confidential by the City only to the extent provided in CORA, and Contractor agrees that any disclosure of information by the City consistent with the provisions of CORA shall result in no liability of the City.

B. In the event of a request to the City for disclosure of such information, time and circumstances permitting, the City will make a good faith effort to advise Contractor of such request in order to give Contractor the opportunity to object to the disclosure of any material Contractor may consider confidential, proprietary, or otherwise exempt from disclosure. In the event Contractor objects to disclosure, the City, in its sole and absolute discretion, may file an application to the Denver District Court for a determination of whether disclosure is required or exempted. In the event a lawsuit to compel disclosure is filed, the City may tender all such material

to the court for judicial determination of the issue of disclosure. In both situations, Contractor agrees it will either waive any claim of privilege or confidentiality or intervene in such legal process to protect materials Contractor does not wish disclosed. Contractor agrees to defend, indemnify, and hold harmless the City, its officers, agents, and employees from any claim, damages, expense, loss, or costs arising out of Contractor's objection to disclosure, including prompt reimbursement to the City of all reasonable attorney's fees, costs, and damages the City may incur directly or may be ordered to pay by such court, including but not limited to time expended by the City Attorney Staff, whose costs shall be computed at the rate specified in Article V.

ARTICLE XXIV. EXAMINATION OF RECORDS AND AUDITS

A. Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access, and the right to examine, copy and retain copies, at City's election in paper or electronic form, any pertinent books, documents, papers and records related to Contractor's performance pursuant to this Contract, provision of any goods or services to the City, and any other transactions related to this Contract. Contractor shall cooperate with City representatives and City representatives shall be granted access to the foregoing documents and information during reasonable business hours and until the latter of six (6) years after the final payment under the Contract or expiration of the applicable statute of limitations. When conducting an audit of this Contract, the City Auditor shall be subject to government auditing standards issued by the United States Government Accountability Office by the Comptroller General of the United States, including with respect to disclosure of information acquired during the course of an audit. No examination of records and audits pursuant to this paragraph shall require Contractor to make disclosures in violation of state or federal privacy laws. Contractor shall at all times comply with D.R.M.C. 20-276.

B. Additionally, Contractor agrees until the expiration of six (6) years after the final payment under this Contract, any duly authorized representative of the City, including the CEO or their representative, shall have the right to examine any pertinent books, documents, papers and records of Contractor related to Contractor's performance of this Contract, including communications or correspondence related to Contractor's performance, without regard to whether the work was paid for in whole or in part with federal funds or was otherwise related to a federal grant program.

C. In the event the City receives federal funds to be used toward the services performed under this Contract, the Federal Aviation Administration ("FAA"), the Comptroller General of the United States and any other duly authorized representatives shall have access to any books, documents, papers and records of Contractor which are directly pertinent to a specific grant program for the purpose of making audit, examination, excerpts and transcriptions. Contractor further agrees that such records will contain information concerning the hours and specific services performed along with the applicable federal project number.

ARTICLE XXV. MINIMUM WAGE REQUIREMENTS

To the extent required by law, Contractor shall comply with and agrees to be bound by all requirements, conditions, and City determinations regarding the City's Minimum Wage Ordinance, D.R.M.C. §§ 20-82 through 20-84, including, but not limited to, the requirement that

every covered worker shall be paid no less than the City Minimum Wage in accordance with the City's Minimum Wage Ordinance. By executing this Contract, Contractor expressly acknowledges that Contractor is aware of the requirements of the City's Minimum Wage Ordinance and that any failure by Contractor, or any other individual or entity acting subject to this Contract, to strictly comply with the foregoing D.R.M.C. Sections shall result in the penalties and other remedies authorized therein.

ARTICLE XXVI. COMPLIANCE WITH DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

This Department of Transportation (DOT) 49 C.F.R. Part 26 ("Part 26") applies to this Project and will be incorporated into any contract entered into by the City and contained in the City and County of Denver Bid Documents. It is the policy of DOT and the City to ensure non-discrimination in the award and administration of DOT-assisted contracts financed in whole or in part with Federal funds. Consequently, the Bidders must fully comply with the DBE requirements of Part 26 in bidding and performing hereunder.

Part 26 provides for the adoption of a good faith goals program, to be administered by the Division of Small Business Opportunity (DSBO). As such, each bidder must comply with the terms and conditions of the Part 26 in making its bid and, if awarded the Contract, in performing all Work thereunder. A bidder's failure to comply with Part 26, any Rules or Regulations promulgated pursuant thereto, or any additional requirements contained herein may render a bid non-responsive and may constitute cause for rejection.

In accordance with the requirements of the Part 26, the Contractor is committed to, at a minimum, meet the participation goal of sixteen (16 %) established for this Project utilizing properly certified DBE subcontractors and suppliers.

ARTICLE XXVII. SENSITIVE SECURITY INFORMATION

Contractor acknowledges that, in the course of performing its work under this Contract, Contractor may be given access to Sensitive Security Information ("SSI"), as material is described in the Code of Federal Regulations, 49 C.F.R. Part 1520. Contractor specifically agrees to comply with all requirements of the applicable federal regulations, including but not limited to, 49 C.F.R. Parts 15 and 1520. Contractor understands any questions it may have regarding its obligations with respect to SSI must be referred to the DEN's Security Office.

ARTICLE XXVIII. DEN SECURITY

A. Contractor, its officers, authorized officials, employees, agents, subcontractors, and those under its control, shall comply with safety, operational, or security measures required of Contractor or the City by the FAA or TSA. If Contractor, its officers, authorized officials, employees, agents, subcontractors or those under its control, fail or refuse to comply with said measures and such non-compliance results in a monetary penalty being assessed against the City, then, in addition to any other remedies available to the City, Contractor shall fully reimburse the City any fines or penalties levied against the City, and any attorney fees or related costs paid by the City as a result of any such violation. Contractor must pay this amount within fifteen (15) days from the date of the invoice or written notice. Any fines and fees assessed by the FAA or TSA against the City due to

the actions of Contractor and/or its agents will be deducted directly from the invoice for that billing period.

B. Contractor is responsible for compliance with Airport Security regulations and 49 C.F.R. Parts 1542 (Airport Security) and 14 C.R.F. Parts 139 (Airport Certification and Operations). Any and all violations pertaining to Parts 1542 and 139 resulting in a fine will be passed on to and borne by Contractor. The fee/fine will be deducted from the invoice at time of billing.

ARTICLE XXIX. FEDERAL RIGHTS

A. This Contract is subject and subordinate to the terms, reservations, restrictions and conditions of any existing or future contracts between the City and the United States, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the City for airport purposes, and the expenditure of federal funds for the extension, expansion or development of the Denver Municipal Airport System.

1. General Civil Rights: Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal Assistance. This provision binds Contractor and sub-tier contractors from the bid solicitation period through the completion of the Contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.
2. Federal Fair Labor Standards Act: This Contract incorporates by reference the provisions of 29 C.F.R. Part 201, the Federal Fair Labor Standards Act (“FLSA”), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers. Contractor agrees to incorporate by reference the provisions of FLSA in all contracts and subcontracts resulting from this Contract. Contractor has full responsibility to monitor compliance to the referenced regulation. Contractor must address any claims or disputes arising from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.
3. Occupational Safety and Health Act: This Contract incorporates by reference the requirements of 29 C.F.R. Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. Contractor retains full responsibility to monitor its compliance and any subcontractor’s compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 C.F.R. Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.
4. Contractor covenants it will include the provisions of this section in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Federal Acts, Regulations and directives issued pursuant thereto. Contractor covenants

it will take action with respect to any subcontract or procurement as the City or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, Contractor may request the City to enter into any litigation to protect the interests of the City. In addition, Contractor may request the United States to enter into the litigation to protect the interests of the United States.

ARTICLE XXX. CITY EXECUTION OF CONTRACT

This Contract is expressly subject to, and shall become effective upon, the execution of all signatories of the City and, if required, the approval of Denver City Council. This Contract may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same.

ARTICLE XXXI. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS

The Contract, and any other documents requiring a signature hereunder, may be signed electronically by the City and/or Contractor in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Contract solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Contract in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

[SIGNATURE PAGES FOLLOW]

EXHIBIT A

FEDERAL CONSTRUCTION CONTRACT PROVISIONS

A1 ACCESS TO RECORDS AND REPORTS

A1.3 ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

A2 AFFIRMATIVE ACTION REQUIREMENT

A2.3 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: [*sponsor must insert established goal*]

Goals for female participation in each trade: 6.9

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good

faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is City and County of Denver, Colorado.

A3 BREACH OF CONTRACT TERMS

A3.3 BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the Contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

A BUY AMERICAN PREFERENCE

A .3.1 BUY AMERICAN PREFERENCE

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal

Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

A .3.2 Certificate of Buy American Compliance Total Facility

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark () or the letter “ ”.

Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States; or
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.

To faithfully comply with providing U.S. domestic products.

To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

- a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
- b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
- c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility”. The required documentation for a Type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

A .3.3 Certificate of Buy American Compliance Manufactured Product

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark () or the letter “ ”.

Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States;
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing U.S. domestic product.
3. To furnish U.S. domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

A CIVIL RIGHTS GENERAL

A .3.1 GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A CIVIL RIGHTS TITLE VI ASSURANCE

A .3.1 Title VI Solicitation Notice

The **Name of Sponsor** , in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, select disadvantaged business enterprises or airport concession disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A . .1 Title VI Clauses for Compliance with Nondiscrimination Requirements

Compliance with Nondiscrimination Requirements

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

1. **Compliance with Regulations** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor’s obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance** In the event of a Contractor’s noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

A . . Title VI List of Pertinent Nondiscrimination Acts and Authorities

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);

49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation Effectuation of Title VI of the Civil Rights Act of 1964);

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;

The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);

Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);

The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing

entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;

The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

Title I of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

A CLEAN AIR AND WATER POLLUTION CONTROL

A .3 CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.3 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives

compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

A COPELAND ANTI-KICKBACK ACT

A .3 COPELAND ANTI-KICKBACK ACT

Contractor must comply with the requirements of the Copeland "Anti- kickback" Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

A10 DAVIS-BACON REQUIREMENTS

A10.3 DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *e* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: *e* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or

advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

- (i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at www.dhs.gov/e-verify/ or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a

violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;
 - (2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
 - (4) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.
 - (D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
 - (ii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
4. Apprentices and Trainees.
- (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program,

who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any

employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5,

6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

- (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

A11 DEBARMENT AND SUSPENSION

A11.3.1 CERTIFICATION OF OFFERER BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

A11.3.2 CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.
2. Collecting a certification statement similar to the Certification of Offerer /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.3.1 SOLICITATION LANGUAGE SOLICITATIONS THAT INCLUDE A PROJECT GOAL

Information Submitted as a matter of bidder responsiveness: The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

Information submitted as a matter of bidder responsibility:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in its commitment within five days after bid opening.

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

A12.3.2 SOLICITATION LANGUAGE RACE GENDER NEUTRAL MEANS

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the Insert Name of Owner to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

**A12.3.3 PRIME CONTRACTS PROJECTS COVERED BY A DBE PROGRAM
DISADVANTAGED BUSINESS ENTERPRISES**

Contract Assurance § 2 .13 –

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Owner deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment §2 .2) –

The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than specify number days from the receipt of each payment the prime contractor receives from Name of recipient . The prime contractor agrees further to return retainage payments to each subcontractor within specify the same number as above days after the subcontractor’s work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Name of Recipient . This clause applies to both DBE and non-DBE subcontractors.

A13 DISTRACTED DRIVING WHEN DRIVING

A13.3 TEXTING WHEN DRIVING

In accordance with Executive Order 13513, “Federal Leadership on Reducing Text Messaging While Driving”, (10/1/2009) and DOT Order 3902.10, “Text Messaging While Driving”, (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant. In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

A1 ENERGY CONSERVATION REQUIREMENTS

A1 .3 ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201 *et seq.*).

A1 EQUAL EMPLOYEMENT OPPORTUNITY EEO

A1 .3.1 EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance *e e e*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**A1 .3.2 STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS**

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal social security number used on the Employer's quarterly Federal Tax Return, U.S. Treasury Department Form 941;
 - d. "Minority" includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to

achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a

union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.

- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246. 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

A1 FEDERAL FAIR LABOR STANDARDS ACT FEDERAL MINIMUM WAGE

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The *t t s t t* has full responsibility to monitor compliance to the referenced statute or regulation. The *t t s t t* must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

A18 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

A18.3 CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

A1 PROHIBITION of SEGREGATED FACILITIES

A1 .3 PROHIBITION OF SEGREGATED FACILITIES

- (a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.
- (b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

A20 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A20.3 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

A21 PROCUREMENT OF RECOVERED MATERIALS

A21.3 PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or
- 2) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

A22 RIGHT TO INVENTIONS

A22.3 RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

A23 SEISMIC SAFETY

A23.3 PROFESSIONAL SERVICE AGREEMENTS FOR DESIGN

SEISMIC SAFETY

In the performance of design services, the Consultant agrees to furnish a building design and associated construction specification that conform to a building code standard that provides a level of seismic safety substantially equivalent to standards as established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their building code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety. At the conclusion of the design services, the Consultant agrees to furnish the Owner a “certification of compliance” that attests conformance of the building design and the construction specifications with the seismic standards of NEHRP or an equivalent building code.

A23.3.2 CONSTRUCTION CONTRACTS

SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A2 TAX DELINQUENCY AND FELONY CONVICTIONS

A2 .3 CERTIFICATION OF OFFERER BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark () in the space following the applicable response. The applicant agrees that, if

awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government’s interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency’s SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions-

Felony conviction Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

A2 TERMINATION OF CONTRACT

A2 .3.1 TERMINATION FOR CONVENIENCE CONSTRUCTION EQUIPMENT CONTRACTS

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.

2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

1. completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
2. documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
3. reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
4. reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

TERMINATION FOR CONVENIENCE PROFESSIONAL SERVICES

The Owner may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of Consultant. Upon receipt of the notice of termination, except as explicitly directed by the Owner, the Contractor must immediately discontinue all services affected.

Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

A2 .3.2 TERMINATION FOR DEFAULT

TERMINATION FOR DEFAULT CONSTRUCTION

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights, and remedies associated with Owner termination of this contract due to default of the Contractor.

TERMINATION FOR DEFAULT EQUIPMENT

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract if the Contractor:

1. Fails to commence the Work under the Contract within the time specified in the Notice-to-Proceed;
2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms;
3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
4. Fails to comply with material provisions of the Contract;
5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements; or
6. Becomes insolvent or declares bankruptcy.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within 10 days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

TERMINATION FOR DEFAULT PROFESSIONAL SERVICES

Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.

The terminating party must provide the breaching party 7 days advance written notice of its intent to terminate the Agreement. The notice must specify the nature and extent of the breach, the conditions necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

a) **Termination by Owner:** The Owner may terminate this Agreement in whole or in part, for the failure of the Consultant to:

1. Perform the services within the time specified in this contract or by Owner approved extension;
2. Make adequate progress so as to endanger satisfactory performance of the Project; or
3. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

If, after finalization of the termination action, the Owner determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the Owner issued the termination for the convenience of the Owner.

b) **Termination by Consultant:** The Consultant may terminate this Agreement in whole or in part, if the Owner:

1. Defaults on its obligations under this Agreement;
2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
3. Suspends the Project for more than 180 days due to reasons beyond the control of the Consultant.

Upon receipt of a notice of termination from the Consultant, Owner agrees to cooperate with Consultant for the purpose of terminating the agreement or portion thereof, by mutual consent. If Owner and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the Owner's breach of the contract.

In the event of termination due to Owner breach, the Engineer is entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. Owner agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

A2 TRADE RESTRICTION CERTIFICATION

A2 .3 TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

A2 VETERAN S PREFERENCE

A2 .3 VETERAN S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

EXHIBIT B

**CITY AND COUNTY OF DENVER
RULES AND REGULATIONS AND BID
CONDITIONS OF THE
MANAGER OF PUBLIC WORKS**

**PERTAINING TO EQUAL EMPLOYMENT OPPORTUNITY
IN THE CITY AND COUNTY OF DENVER**

APPROVED FOR LEGALITY:

APPROVED AND ADOPTED:

/s/ _____
Attorney for the City and
County of Denver

/s/ _____
Manager of Public Works

Adopted and Published Pursuant to Article 111, Division 2 of Chapter 28
the Revised Municipal Code
of the City and County of Denver

These Rules and Regulations cancel and supersede any and all previous issued Rules and
Regulations on the subject

RULES AND REGULATIONS
REGARDING
EQUAL EMPLOYMENT OPPORTUNITY

Promulgated and adopted by the Manager of Public Works pursuant to and by authority of Article III, Division 2, Chapter 28 of the Revised Municipal Code of the City and County of Denver, and for the purpose of insuring that contractors, subcontractors and suppliers soliciting and receiving compensation for contract work from or through the City and County of Denver provide equal opportunity in employment without regard to race, color, creed, sex, national origin, age, religion, marital status, political opinion or affiliation or mental or physical handicap and meet certain requirements for the hiring, training, promotion and treatment during employment of members of ethnic groups subjected to differential treatment, including persons of African descent (Black), Spanish-surnamed (Hispanic), Asian-American and American Indian groups.

RULE I
DEFINITIONS

- A. "City" means the City and County of Denver.
- B. "Manager" shall mean the Manager of Public Works for the City and County of Denver.
- C. "Contract" means a contract entered into with the City and County of Denver, financed in whole or in part by local resources or funds of the City and County of Denver, for the construction of any public building or prosecution or completion of any public work.
- D. "Contractor" means the original party to a contract with the City and County of Denver, also referred to as the "general" or "prime" contractor.
- E. "Director" means the Director of the Mayor's Office of Contract Compliance.
- F. "Subcontractor" means any person, company, association, partnership, corporation, or other entity which assumes by subordinate agreement some or all of the obligations of the general or prime contractor.
- G. The Phrase "Bidding Specifications" as used in Article 111, Division 2 of Chapter 28 of the Revised Municipal Code shall include BID CONDITION, INVITATION TO BID AND NOTICE OF PROPOSAL.
- H. "Affirmative Action Program" means a set of specific and result-oriented procedures or steps to which a contractor commits himself to apply every good faith effort to employ members of ethnic minority groups, to include persons of African descent (Black), Spanish surnamed (Hispanic), Asian-American, American Indians, and persons with mental or physical handicap.
- I. "Mayor's Office of Contract Compliance" means the City agency established pursuant to Article III, Division 1 of Chapter 28 of the Denver Revised Municipal Code.

RULE II
NOTICE OF HEARING

When results of conciliation efforts are unsatisfactory to the Manager and he is informed in accordance with Article III, Division 2 of Chapter 28 of the Revised Municipal Code that a contractor or subcontractor has apparently failed to meet affirmative action and equal employment opportunity requirements after a reasonable period of notice to correct deficiencies, the Manager will, prior to imposition of any sanctions, afford the general contractor a hearing in order to determine whether the contractor or his subcontractors have failed to comply with the affirmative action and equal employment opportunity requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code or of the contract. Written notice of such hearing shall be delivered personally or sent by certified mail return receipt requested, to the contractor and to any subcontractor involved at least ten days prior to the date scheduled for the hearing.

RULE III
HEARING

- A. Contractors will appear at hearings and may be represented by counsel, and may present testimony orally and other evidence.
- B. Hearings shall be conducted by one or more hearing examiners designated as such by the Manager.
- C. The Director of the Mayor's Office of Contract Compliance may participate in hearings as a witness.
- D. Hearings shall be held at the place specified in the notice of hearing.
- E. All oral testimony shall be given under oath or affirmation and a record of such proceedings shall be made.
- F. All hearings shall be open to the public.
- G. The hearing officer shall make recommendations to the Manager who shall make a final decision.

REGULATIONS

REGULATION NO. 1. **ORDINANCE:** The Rules and Regulations of the Manager shall be inserted in the bidding specifications for every contract for which bidding is required.

REGULATION NO. 2. **EXEMPTIONS:** Each contract and subcontract, regardless of dollar amount, shall be subject to affirmative action requirements unless specifically exempted in writing individually by the Manager. Exemptions apply only to "affirmative action" in equal employment opportunity, and are not to be construed as condonation in any manner of "discrimination" or "discriminatory practices" in employment because of race, color, creed sex age national origin, religion, marital status, political opinion or mental or physical handicap.

REGULATION NO. 3. DIRECTOR OF CONTRACT COMPLIANCE: The Director of the Mayor's Office of Contract Compliance shall perform the duties assigned to such official by Article III, Division 2 of Chapter 28 of the Revised Municipal Code and by the Manager. (1) The Director of the Mayor's Office of Contract Compliance or designated representatives shall inform bidders and contractors of affirmative action procedures, programs, and goals in accordance with the ordinance at pre-bid and pre-construction conference; (2) make regular on-site inspections; (3) supply contractors and subcontractors with report forms to be completed by them when requested, and furnished to the Director of the Mayor's Office of Contract Compliance; and (4) review payroll records, employment records and practices of general contractors and their subcontractors and suppliers during the performance of any contract. The Director of the Mayor's Office of Contract Compliance shall promptly report apparent affirmative action deficiencies to the Manager.

REGULATION NO. 4. GOALS AND TIMETABLES: In general, goals and timetables should take into account anticipated vacancies and the availability of skills in the market place from which employees should be drawn. In addition, where discrimination in employment by a general contractor or any of his subcontractors is indicated, a corrective action program will take into account the need by the general contractor and his subcontractors to correct past discriminatory practices and reach goals of minority manpower utilization on a timely basis through such recruiting and advertising efforts as are necessary and appropriate.

REGULATION NO.5. AWARD OF CONTRACTS: It shall be the responsibility of the Director of the Mayor's Office of Contract Compliance to determine the affirmative action capability of bidders, contractors and subcontractors and to recommend to the Manager the award of contracts to those bidders, contractors and subcontractors and suppliers who demonstrate the ability and willingness to comply with the terms of their contract.

REGULATION NO. 6. PUBLICATION AND DUPLICATION: Copies of these Rules and Regulations as amended by the Manager from time to time, shall as soon as practicable and after Notice being published will be made a part of all City Contracts.

REGULATION NO. 7. NOTICE TO PROCEED: Prior to issuance of Notice to Proceed a sign-off will be required of the Director of the Mayor's Office of Contract Compliance or his designee.

REGULATION NO. 8. CONTRACTS WITH SUBCONTRACTORS: To the greatest extent possible the contractor shall make a good faith effort to contract with minority contractors, subcontractors and suppliers for services and supplies by taking affirmative actions which include but are not limited to the following:

1. Advertise invitations for subcontractor bids in minority community news media.
2. Contact minority contractor organizations for referral of prospective subcontractors.
3. Purchase materials and supplies from minority material suppliers.

REGULATION NO. 9. AGENCY REFERRALS: it shall be no excuse that the union with which the contractor or subcontractor has an agreement providing for referral, exclusive or otherwise, failed to refer minority employees.

REGULATION NO. 10. CLAUSES: The Manager shall include the appropriate clauses in every contract and the contractor shall cause to be inserted in every subcontract the appropriate clauses:

1. **APPENDIX A:** City and County of Denver Equal Opportunity Clause-ALL CONTRACTS funded only with City & County of Denver monies.
2. **APPENDIX B:** Equal Opportunity Clause (11246)-ALL FEDERAL ASSISTED
3. **APPENDIX C:** Section 3-Assurance of Compliance-HUD ASSISTED PROJECTS.
4. **APPENDIX D:** Section 3-Clause-HUD ASSISTED PROJECTS.

All amendments to the appendices shall be included by reference.

REGULATION NO. 11. SHOW CAUSE NOTICES: When the Manager has reasonable cause to believe that a contractor has violated Article III, Division 2 of Chapter 28 of the Revised Municipal Code, he may issue a notice requiring the contractor to show cause, within fifteen days why enforcement procedures, or other appropriate action to insure compliance, should not be instituted.

REGULATION NO. 12. BID CONDITIONS-AFFIRMATIVE ACTION REQUIREMENTS-EQUAL EMPLOYMENT OPPORTUNITY:

1. APPENDIX E:

The Bid Conditions- Affirmative Action Requirements-Equal Employment Opportunity as amended and published by the U.S. Department of Labor, Employment Standards Administration, Office of Federal Contract Compliance, shall be inserted verbatim for bidding specification for every non-exempt contract involving the use of Federal funds.

2. APPENDIX F:

The Bid Conditions- Affirmative Action Requirements-Equal Employment Opportunity as published by the Department of Public Works, City and County of Denver shall be inserted verbatim as bidding specifications for every non-exempt contract using City funds.

APPENDIX A

CITY AND COUNTY OF DENVER EQUAL OPPORTUNITY CLAUSE-ALL CONTRACTS

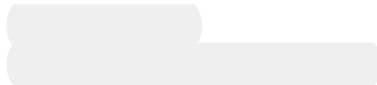
1. The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap.
3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. Each contractor will comply with all provisions of Article III, Division 2, Chapter 28 of the Revised Municipal Code, and the rules, regulations, and relevant orders of the Manager and Director.
5. The contractor will furnish all information and reports required by Article III, Division 2, Chapter 28 of the Revised Municipal Code, and by rules, regulations and orders of the Manager and Director or pursuant thereto, and will permit access to his books, records, and accounts by the Manager, Director or their designee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further City contracts in accordance with procedures authorized in Article III, Division 2, Chapter 28 of the Revised Municipal Code, or by rules, regulations, or order of the Manager.
7. The contractor will include Regulation 12 Paragraph 2 and the provisions of paragraphs (1) through (6) in every subcontract or purchase order unless, exempted by rules, regulations, or orders of the Manager issued pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, so that such provisions will be binding upon each subcontractor or suppliers. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

The applicant further agrees to be bound by the above equal opportunity clauses with respect to its own employment practices when it participates in City contracts. The contractor agrees to assist and cooperate actively with the Manager and the Director in obtaining compliance of subcontractors and suppliers with the equal opportunity clause and the rules, regulations and relevant orders of the Manager, and will furnish the Manager and the Director such information as they may require for the supervision of compliance, and will otherwise assist the Manager and Director in the discharge of the City's primary responsibility for securing compliance. The contractor further agrees to refrain from entering into any contract or contract modification subject to Article III, Division 2, Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who has not demonstrated eligibility for, City contracts.

The contractor will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the Manager and Director. In addition, the contractor agrees that failure or refusal to comply with these undertakings the Manager may take any or all of the following actions:

- A. Cancellation, termination, or suspension in whole or in part of this contract.
- B. Refrain from extending any further assistance to the applicant under the program with respect to which the failure occurred until satisfactory assurance of future compliance has been received from such applicant.
- C. Refer the case to the City Attorney for appropriate legal proceedings.

SUBCONTRACTS: Each prime contractor or subcontractor shall include the equal opportunity clause in each of its subcontracts.



**APPENDIX F
BID CONDITIONS
AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY**

For all Non-Exempt Construction Contracts to be Awarded by
the City and County of Denver, Department of Public Works

NOTICE

EACH BIDDER, CONTRACTOR OR SUBCONTRACTOR (HEREINAFTER THE CONTRACTOR) MUST FULLY COMPLY WITH THE REQUIREMENTS OF THESE BID CONDITIONS AS TO EACH CONSTRUCTION TRADE IT INTENDS TO USE ON THIS CONSTRUCTION CONTRACT, AND ALL OTHER CONSTRUCTION WORK (BOTH CITY AND NON-CITY) IN THE DENVER AREA DURING THE PERFORMANCE OF THIS CONTRACT OR SUBCONTRACT. THE CONTRACTOR COMMITS ITSELF TO THE GOALS FOR MINORITY MANPOWER UTILIZATION, AS APPLICABLE, AND ALL OTHER REQUIREMENTS, TERMS AND CONDITION OF THESE BID CONDITIONS BY SUBMITTING A PROPERLY SIGNED BID.

THE CONTRACTOR SHALL APPOINT A COMPANY EXECUTIVE TO ASSUME THE RESPONSIBILITY FOR THE IMPLEMENTATION OF THE REQUIREMENTS, TERMS AND CONDITIONS OF THESE BID CONDITIONS.

EULOIS CLECKLEY
Manager of Public Works
City and County of Denver



A. REQUIREMENTS --AN AFFIRM ATIVE ACTION PLAN:

Contractors shall be subject to the provisions and requirements of these bid conditions including the goals and timetables for minority' and female utilization, and specific affirmative action steps set forth by the Office of Contract Compliance. The contractor's commitment to the goals for minority, and female utilization as required constitutes a commitment that it will make every good faith effort to meet such goals.

1. GOALS AND TIMETABLES:

The goals and timetables for minority¹ and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade are as follows:

GOALS FOR MINORITY PARTICIPATION FOR EACH TRADE

From January 1, 1982
to 21.7% - 23.5%
Until Further Notice

GOALS FOR FEMALE PARTICIPATION FOR EACH TRADE

From January 1, 1982
to 6.9%
Until Further Notice

The goals for minority and female utilization above are expressed in terms of hours of training and employment as a proportion of the total number of hours to be worked by the contractor's aggregate workforce, which includes all supervisory personnel, in each trade, on all projects for the City and County of Denver during the performance of its contract (i.e., The period beginning with the first day of work on the City and County of Denver funded construction contract and ending with the last day of work).

The hours of minority and female employment and training must be substantially uniform throughout the length of the contract in each trade and minorities and females must be employed evenly on each of a contractor's projects. Therefore, the transfer of minority or female employees from contractor to contractor or from project to project for the purpose of meeting the contractor's goals shall be a violation of these Bid Conditions.

If the contractor counts the nonworking hours of apprentices they must be employed by the contractor during the training period; the contractor must have made a commitment to employ apprentices at the completion of their training subject to the availability of employment opportunities; and the apprentices must be trained pursuant to training programs approved by the Bureau of Apprenticeship and Training.

¹ "Minority" is defined as including, Blacks, Spanish Surname Americans, Asian-Americans, and American Indians, and includes both men and Minority women.



2. **SPECIFIC AFFIRMATIVE ACTION STEPS:**

No contractor shall be found to be in noncompliance solely on account of its failure to meet its goals, but will be given an opportunity to demonstrate that the contractor has instituted all the specific affirmative action steps specified and has made every good faith effort to make these steps work toward the attainment of its goals within the timetables, all to the purpose of expanding minority and female utilization in its aggregate workforce. A contractor, who fails to comply with its obligation under the Equal Opportunity Clause of its contract and fails to achieve its commitments to the goals for minority and female utilization has the burden of proving that it has engaged in an Affirmative Action Program directed at increasing minority and female utilization and that such efforts were at least as extensive and as specific as the following:

- a. The contractor should have notified minority and female organizations when employment opportunities were available and should have maintained records of the organization's response.
- b. The contractor should have maintained a file of the names and addresses of each minority and female referred to it by any individual or organization and what action was taken with respect to each such referred individual, and if the individual was not employed by the contractor, the reasons. If such individual was sent to the union hiring hall for referral and not referred back by the union or if referred, not employed by the contractor, the file should have documented this and their reasons.
- c. The contractor should have promptly notified the Department of Public Works, and Mayor's Office of Contract Compliance when the union or unions with which the contractor has collective bargaining agreements did not refer to the contractor a minority or female sent by the contractor, or when the contractor has other information that the union referral process has impeded efforts to meet its goals.
- d. The contractor should have disseminated its EEO policy within its organization by including it in any employee handbook or policy manual; by publicizing it in company newspapers and annual reports and by advertising such policy at reasonable intervals in union publications. The EEO policy should be further disseminated by conducting staff meetings to explain and discuss the policy; by posting of the policy; and by review of the policy with minority and female employees.
- e. The contractor should have disseminated its EEO policy externally by informing and discussing it with all recruitment sources; by advertising in news media, specifically including minority and female news media; and by notifying and discussing it with all subcontractors.
- f. The contractor should have made both specific and reasonably recurrent written and oral recruitment efforts. Such efforts should have been directed at minority and female organizations, schools with substantial minority and female enrollment, and minority and female recruitment and training organizations within the contractor's recruitment area.

- g. The contractor should have evidence available for inspection that all tests and other selection techniques used to select from among candidates for hire, transfer, promotion, training, or retention are being used in a manner that does not violate the OFCCP Testing Guidelines in 41 CFR Part 60-3.
- h. The contractor should have made sure that seniority practices and job classifications do not have a discriminatory effect.
- i. The contractor should have made certain that all facilities are not segregated by race.
- j. The contractor should have continually monitored all personnel activities to ensure that its EEO policy was being carried out including the evaluation of minority and female employees for promotional opportunities on a quarterly basis and the encouragement of such employees to seek those opportunities.
- k. The contractor should have solicited bids for subcontracts from available minority and female subcontractors engaged in the trades covered by these Bid conditions, including circulation of minority and female contractor associations.

NOTE: The Director and the Mayor's Office of Contract Compliance will provide technical assistance on questions pertaining to minority and female recruitment sources, minority and female community organizations, and minority and female news media upon receipt of a request for assistance from a contractor.

3. **NON-DISCRIMINATION:**

In no event may a contractor utilize the goals and affirmative action steps required in such a manner as to cause or result in discrimination against any person on account of race, color, religion, sex, marital status, national origin, age, mental or physical handicap, political opinion or affiliation.

4. **COMPLIANCE AND ENFORCEMENT:**

In all cases, the compliance of a contractor will be determined in accordance with its obligations under the terms of these Bid Conditions. All contractors performing or to perform work on projects subject to these Bid Conditions hereby agree to inform their subcontractors in writing of their respective obligations under the terms and requirements of these Bid Conditions, including the provisions relating to goals of minority and female employment and training.

A. **Contractors Subject to these Bid Conditions:**

In regard to these Bid Conditions, if the contractor meets the goals set forth therein or can demonstrate that it has made every good faith effort to meet these goals, the contractor shall be presumed to be in compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, the implementing regulations and its obligations under these Bid Conditions. In the event, no formal sanctions or proceedings leading toward sanctions shall be instituted unless the contracting or administering agency otherwise determines that the contractor is violating the Equal Opportunity Clause.

- 1. Where the Office of Contract Compliance finds that a contractor failed to comply with the requirements of Article 111, Division 2, Chapter 28 of the Revised Municipal

Code or the implementing regulations and the obligations under these Bid Conditions, and so informs the Manager, the Manager shall take such action and impose such sanctions, which include suspension, termination, cancellation, and debarment, as may be appropriate under the Ordinance and its regulations. When the Manager proceeds with such formal action it has the burden of proving that the contractor has not met the goals contained in these Bid Conditions. The contractor's failure to meet its goals shall shift to it the requirement to come forward with evidence to show that it has met the good faith requirements of these Bid Conditions.

2. The pendency of such proceedings shall be taken into consideration by the Department of Public Works in determining whether such contractor can comply with the requirements of Article 111, Division 2, Chapter 28 of the Revised Municipal Code, and is therefore a "responsible prospective contractor".
3. The Mayor's Office of Contract Compliance shall review the contractor's employment practices during the performance of the contract. If the Mayor's Office of Contract Compliance determines that the contractor's Affirmative Action Plan is no longer an acceptable program, the Director shall notify the Manager.

B. **Obligations Applicable to Contractors:**

It shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority or female employees. Discrimination in referral for employment, even if pursuant to provisions of a collective bargaining agreement, is prohibited by the National Labor Relations Act, as amended, Title VI of the Civil Rights Act of 1964, as amended, and Article III, Division 2, Chapter 28 of the Revised Municipal Code. It is the policy of the Department of Public Works that contractors have a responsibility to provide equal employment opportunity, if they wish to participate in City and County of Denver contracts. To the extent they have delegated the responsibility for some of their employment practices to a labor organization and, as a result, are prevented from meeting their obligations pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, such Contractors cannot be considered to be in compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, or its implementing rules and regulations.

C. **General Requirements**

Contractors are responsible for informing their subcontractors in writing regardless of tier, as to their respective obligations. Whenever a contractor subcontracts a portion of work in any trade covered by these Bid Conditions, it shall include these Bid Conditions in such subcontracts and each subcontractor shall be bound by these Bid Conditions to the full extent as if it were the prime contractor. The contractor shall not, however, be held accountable for the failure of its subcontractors to fulfill their obligations under these Bid Conditions. However, the prime contractor shall give notice to the Director of any refusal or failure of any subcontractor to fulfill the obligations under these Bid Conditions. A subcontractor's failure to comply will be treated in the same manner as such failure by a prime contractor.

1. Contractors hereby agree to refrain from entering into any contract or contract modification subject to Article 111, Division 2, Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who is determined not to be a "responsive" bidder for the City and County of Denver contracts pursuant to the Ordinance.
2. The contractor shall carry out such sanctions and penalties for violation of these Bid Conditions and the Equal Opportunity Clause including suspension, termination and cancellation of existing subcontracts and debarment from future contracts as may be ordered by the Manager pursuant to Article 111, Division 2, Chapter 28 of the Revised Municipal Code and its implementing regulations.
3. Nothing herein is intended to relieve any contractor during the term of its contract from compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, and the Equal Opportunity Clause of its contract with respect to matters not covered in these Bid Conditions.
4. Contractors must keep such records and file such reports relating to the provisions of these Bid Conditions as shall be required by the Office of Contract Compliance.
5. Requests for exemptions from these Bid Conditions must be made in writing, with justification, to the Manager of Public Works, City and County Building, Room 379, Denver, Colorado 80202, and shall be forwarded through and with the endorsement of the Director.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ [Bidder name], a corporation organized under the laws of the State of _____ [Bidder state], hereinafter referred to as the "Contractor" and _____ [Bond issuer], a corporation organized under the laws of the State of _____ [Bond company state], and authorized to transact business in the State of Colorado, hereinafter referred to as Surety, are held and firmly bound unto the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereinafter referred to as the "CITY", in the penal sum of _____ [Bid amount text] Dollars (\$ _____), lawful money of the United States of America, for the payment of which sum the Contractor and Surety bind themselves and their heirs, executors, administrators, successors and assigns, jointly and severally by these presents.

WHEREAS, the above Contractor has, as of the date of execution listed on the contract signature page, entered into a written contract with the City for furnishing all labor, materials, equipment, tools, superintendence, and other facilities and accessories for the construction of 202158849, Taxiway EE Construction, Denver International Airport, in accordance with the Technical Specifications, Contract Drawings and all other Contract Documents therefor which are incorporated herein by reference and made a part hereof, and are herein referred to as the Contract.

NOW, THEREFORE, the condition of this performance bond is such that if the Contractor:

1. Promptly and faithfully observes, abides by and performs each and every covenant, condition and part of said Contract, including, but not limited to, its warranty provisions, in the time and manner prescribed in the Contract, and
2. Pays the City all losses, damages (liquidated or actual, including, but not limited to, damages caused by delays in the performance of the Contract), expenses, costs and attorneys' fees, that the City sustains resulting from any breach or default by the Contractor under the Contract, then this bond is void; otherwise, it shall remain in full force and effect.

IN ADDITION, if said Contractor fails to duly pay for any labor, materials, team hire, sustenance, provisions, provender, or any other supplies used or consumed by said Contractor or its subcontractors in its performance of the work contracted to be done or fails to pay any person who supplies rental machinery, tools, or equipment, all amounts due as the result of the use of such machinery, tools, or equipment in the prosecution of the work, the Surety shall pay the same in an amount not exceeding the amount of this obligation, together with interest as provided by law.

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that any and all changes in the Contract or compliance or noncompliance with the formalities in the Contract for making such changes shall not affect the Surety's obligations under this bond and the Surety hereby waives notice of any such changes.

(End of Page)

IN WITNESS WHEREOF, said Contractor and said Surety have executed these presents as of this ____ day of _____, _____.

CONTRACTOR

By: _____
President

SURETY

By: _____
Attorney-in-Fact

(Accompany this bond with Attorney-in-Fact's authority from the Surety to execute bond, certified to include the date of the bond.)

CITY AND COUNTY OF DENVER

By: _____
MAYOR

By: _____
Chief Executive Officer
Denver International Airport

APPROVED AS TO FORM:

KRISTIN M. BRONSON, Attorney for the
City and County of Denver

By: _____
Assistant City Attorney

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ [Proposer name], a corporation organized under the laws of the State of _____ [Proposer state], hereinafter referred to as the "Contractor" and _____ [Bonding company name], a corporation organized under the laws of the State of _____ [Bonding company state], and authorized to transact business in the State of Colorado, hereinafter referred to as Surety, are held and firmly bound unto the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereinafter referred to as the "CITY", in the penal sum of _____ [Proposal amount text] Dollars (\$ _____), lawful money of the United States of America, for the payment of which sum the Contractor and Surety bind themselves and their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above Contractor has entered into a written contract with the City for furnishing all labor, materials, tools, superintendence, and other facilities and accessories for the construction of Contract No. _____ Denver International Airport, in accordance with the Technical Specifications, Contract Drawings and all other Contract Documents therefor which are incorporated herein by reference and made a part hereof, and are herein referred to as the Contract.

NOW, THEREFORE, the condition of this payment bond obligation is such that if the Contractor shall at all times promptly make payments of all amounts lawfully due to all persons supplying or furnishing it or its subcontractors with labor and materials, rental machinery, tools, or equipment, used or performed in the prosecution of work provided for in the above Contract and shall indemnify and save harmless the City to the extent of any and all payments in connection with the carrying out of such Contract which the City may be required to make under the law, then this obligation shall be null and void, otherwise, it shall remain in full force and effect;

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that any and all changes in the Contract, or compliance or noncompliance with the formalities in the Contract for making such changes shall not affect the Surety's obligations under this bond and the Surety hereby waives notice of any such changes.

[END OF PAGE]

IN WITNESS WHEREOF, said Contractor and said Surety have executed these presents as of this ____
day of _____, _____.

CONTRACTOR

By: _____
President

SURETY

By: _____
Attorney-in-Fact

(Accompany this bond with Attorney-in-Fact's authority from the Surety to execute bond, certified to include the date of the bond.)

CITY AND COUNTY OF DENVER

By: _____
MAYOR

By: _____
Chief Executive Officer
Denver International Airport

APPROVED AS TO FORM:

KRISTIN M. BRONSON, Attorney for the
City and County of Denver

By: _____
Assistant City Attorney

XII. ATTACHMENT 7, CERTIFICATE OF GOOD STANDING

CERTIFICATE OF GOOD STANDING

Please submit a Certificate of Good Standing
from the Office of the Secretary of the State of Colorado
for the proposing entity.

XIII. PREVAILING WAGES

PREVAILING WAGES

Prevailing Wage information is contained in the pages immediately following this page.

These pages are not included in the page numbering of this Contract document



TO: All Users of the City and County of Denver Prevailing Wage Schedules
FROM: Ryland Feno, Classification & Compensation Technician II
DATE: January 04, 2021
SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised prevailing wage rates for some building, heavy, highway, and residential construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor in accordance with the Davis-Bacon Act.

The effective date for this publication will be **Friday, January 01, 2021** and applies to the City and County of Denver for **HIGHWAY CONSTRUCTION PROJECTS** in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO20210009
Superseded General Decision No. CO20200009
Modification No. 0
Publication Date: 01/01/2021
(6 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor (DOL). The employer and the individual apprentice must be registered in a program which has received prior approval by the DOL. Any employer who employs an apprentice and is found to be in violation of this provision shall be required to pay said apprentice the full journeyman scale.

Attachments as listed above.

***Career Service Board approved to adjust all Davis Bacon classifications under \$13.00 to comply with the city's minimum wage. The effective date is August 15, 2019. See page 7 for reference.**

Office of Human Resources
201 W. Colfax Ave. Dept. 412 | Denver, CO 80202
p: 720.913.5751 | f: 720.913.5720
www.denvergov.org/humanresources

"General Decision Number: CO20210009 01/01/2021

Superseded General Decision Number: CO20200009

State: Colorado

Construction Type: Highway

Counties: Denver and Douglas Counties in Colorado.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021

* CARP9901-008 11/01/2019

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 26.50	10.32

ELEC0068-016 03/01/2011		

	Rates	Fringes
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation		
Zone 1.....	\$ 26.42	4.75%+8.68
Zone 2.....	\$ 29.42	4.75%+8.68

TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:
 Colorado Springs - Nevada & Bijou
 Denver - Ellsworth Avenue & Broadway
 Ft. Collins - Prospect & College
 Grand Junction - 12th & North Avenue
 Pueblo - I-25 & Highway 50
 All work outside of these areas shall be paid Zone 2 rates.

 ENGI0009-008 05/01/2018

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
(3)-Hydraulic Backhoe (Wheel Mounted, under 3/4 yds), Hydraulic Backhoe (Backhoe/Loader combination), Drill Rig Caisson (smaller than Watson 2500 and similar), Loader (up to and including 6 cu. yd.).....	\$ 28.25	10.70
(3)-Loader (under 6 cu. yd.) Denver County.....	\$ 28.25	10.70
(3)-Motor Grader (blade- rough) Douglas County.....	\$ 28.25	10.70
(4)-Crane (50 tons and under), Scraper (single bowl, under 40 cu. yd).....	\$ 28.40	10.70
(4)-Loader (over 6 cu. yd) Denver County.....	\$ 28.40	10.70
(5)-Drill Rig Caisson (Watson 2500 similar or larger), Crane (51-90 tons), Scraper (40 cu.yd and over),.....	\$ 28.57	10.70
(5)-Motor Grader (blade- finish)		

Douglas County.....	\$ 28.57	10.70
(6)-Crane (91-140 tons).....	\$ 29.55	10.70

 SUCO2011-004 09/15/2011

	Rates	Fringes
CARPENTER (Excludes Form Work)...	\$ 19.27	5.08
CEMENT MASON/CONCRETE FINISHER		
Denver.....	\$ 20.18	5.75
Douglas.....	\$ 18.75	3.00
ELECTRICIAN (Excludes Traffic Signal Installation).....	\$ 35.13	6.83
FENCE ERECTOR (Excludes Link/Cyclone Fence Erection).....	\$ 13.02	3.20
GUARDRAIL INSTALLER.....	\$ 12.89	3.20
HIGHWAY/PARKING LOT STRIPING:Painter		
Denver.....	\$ 12.62	3.21
Douglas.....	\$ 13.89	3.21
IRONWORKER, REINFORCING (Excludes Guardrail Installation).....	\$ 16.69	5.45
IRONWORKER, STRUCTURAL (Includes Link/Cyclone Fence Erection, Excludes Guardrail Installation).....	\$ 18.22	6.01
LABORER		
Asphalt Raker.....	\$ 16.29	4.25
Asphalt Shoveler.....	\$ 21.21	4.25
Asphalt Spreader.....	\$ 18.58	4.65
Common or General		
Denver.....	\$ 16.76	6.77
Douglas.....	\$ 16.29	4.25
Concrete Saw (Hand Held)....	\$ 16.29	6.14
Landscape and Irrigation....	\$ 12.26	3.16
Mason Tender- Cement/Concrete		
Denver.....	\$ 16.96	4.04
Douglas.....	\$ 16.29	4.25
Pipelayer		
Denver.....	\$ 13.55	2.41
Douglas.....	\$ 16.30	2.18
Traffic Control (Flagger)....	\$ 9.55	3.05

Traffic Control (Sets Up/Moves Barrels, Cones, Install Signs, Arrow Boards and Place Stationary Flags)(Excludes Flaggers).....	\$ 12.43	3.22
PAINTER (Spray Only).....	\$ 16.99	2.87
POWER EQUIPMENT OPERATOR:		
Asphalt Laydown		
Denver.....	\$ 22.67	8.72
Douglas.....	\$ 23.67	8.47
Asphalt Paver		
Denver.....	\$ 24.97	6.13
Douglas.....	\$ 25.44	3.50
Asphalt Roller		
Denver.....	\$ 23.13	7.55
Douglas.....	\$ 23.63	6.43
Asphalt Spreader.....	\$ 22.67	8.72
Backhoe/Trackhoe		
Douglas.....	\$ 23.82	6.00
Bobcat/Skid Loader.....	\$ 15.37	4.28
Boom.....	\$ 22.67	8.72
Broom/Sweeper		
Denver.....	\$ 22.47	8.72
Douglas.....	\$ 22.96	8.22
Bulldozer.....	\$ 26.90	5.59
Concrete Pump.....	\$ 21.60	5.21
Drill		
Denver.....	\$ 20.48	4.71
Douglas.....	\$ 20.71	2.66
Forklift.....	\$ 15.91	4.68
Grader/Blade		
Denver.....	\$ 22.67	8.72
Guardrail/Post Driver.....	\$ 16.07	4.41
Loader (Front End)		
Douglas.....	\$ 21.67	8.22
Mechanic		
Denver.....	\$ 22.89	8.72
Douglas.....	\$ 23.88	8.22
Oiler		
Denver.....	\$ 23.73	8.41
Douglas.....	\$ 24.90	7.67
Roller/Compactor (Dirt and Grade Compaction)		
Denver.....	\$ 20.30	5.51
Douglas.....	\$ 22.78	4.86
Rotomill.....	\$ 16.22	4.41
Screed		
Denver.....	\$ 22.67	8.38
Douglas.....	\$ 29.99	1.40

Tractor.....\$ 13.13 2.95

TRAFFIC SIGNALIZATION:

Groundsman

Denver.....\$ 17.90 3.41
 Douglas.....\$ 18.67 7.17

TRUCK DRIVER

Distributor

Denver.....\$ 17.81 5.82
 Douglas.....\$ 16.98 5.27

Dump Truck

Denver.....\$ 15.27 5.27
 Douglas.....\$ 16.39 5.27

Lowboy Truck.....\$ 17.25 5.27

Mechanic.....\$ 26.48 3.50

Multi-Purpose Specialty &

Hoisting Truck

Denver.....\$ 17.49 3.17
 Douglas.....\$ 20.05 2.88

Pickup and Pilot Car

Denver.....\$ 14.24 3.77
 Douglas.....\$ 16.43 3.68

Semi/Trailer Truck.....\$ 18.39 4.13

Truck Mounted Attenuator....\$ 12.43 3.22

Water Truck

Denver.....\$ 26.27 5.27
 Douglas.....\$ 19.46 2.58

 WELDERS - Receive rate prescribed for craft performing
 operation to which welding is incidental.

=====

**Office of Human Resources
Supplemental Rates
(Specific to the Denver Projects)
Revised 08/21/2019)**

Classification		Base	Fringe
Guard Rail Installer		\$13.00	\$3.20
Highway Parking Lot Striping: Painter		\$13.00	\$3.21
Ironworker (Ornamental)		\$26.05	\$12.00
Laborer	Removal of Asbestos	\$21.03	\$8.55
Laborer (Landscape & Irrigation)		\$13.00	\$3.16
Laborer: Traffic Control (Flagger)		\$13.00	\$3.05
Laborer: Stationary Flags(excludes Flaggers)		\$13.00	\$3.22
Line Construction	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck Crew	\$25.74	\$8.09
Millwright		\$28.00	\$10.00
Pipefitter		\$30.45	\$12.85
Plumber		\$30.19	\$13.55
Power Equipment Operator (Tunnels Above and Below Ground, shafts and raises):	Group 1	\$25.12	\$10.81
	Group 2	\$25.47	\$10.85
	Group 3	\$25.57	\$10.86
	Group 4	\$25.82	\$10.88
	Group 5	\$25.97	\$10.90
	Group 6	\$26.12	\$10.91
	Group 7	\$26.37	\$10.94
Power Equipment Operator	Group 1	\$22.97	\$10.60
	Group 2	\$23.32	\$10.63
	Group 3	\$23.67	\$10.67
	Group 4	\$23.82	\$10.68
	Group 5	\$23.97	\$10.70
	Group 6	\$24.12	\$10.71
	Group 7	\$24.88	\$10.79
Truck Driver	Group 1	\$18.42	\$10.00
	Group 2	\$19.14	\$10.07
	Group 3	\$19.48	\$10.11
	Group 4	\$20.01	\$10.16
	Group 5	\$20.66	\$10.23
	Group 6	\$21.46	\$10.31
Truck Driver: Truck Mounted Attenuator		\$13.00	\$3.22

Go to <http://www.denvergov.org/Auditor> to view the Prevailing Wage Clarification Document for a list of complete classifications used.



DENVER INTERNATIONAL AIRPORT PARTIAL LIEN RELEASE – CONSTRUCTION

Project: _____ Date: _____

City Contract No. _____ Current Subcontract
Amount: \$ _____

FROM: (1) Last Progress Payment for billing
Subcontractor _____ period ending _____ 20__

Address: _____ \$ _____

City/State: _____ (2) Progress invoiced for previous billing
period (if unpaid) _____ 20__

Telephone: _____ \$ _____

TO: (3) Progress invoiced for current billing
Contractor _____ period ending _____ 20__

Address: _____ \$ _____

City/State: _____ (4) **Total Paid to Date:**
\$ _____

() MBE/WBE () SBE () DBE () Non

The Undersigned hereby certifies that all costs, charges or expenses incurred by the undersigned or on behalf of the undersigned for any work, labor or services performed and for any materials, supplies or equipment provided on the above referenced Project or used in connection with the above referenced Subcontract (the "Work Effort") have been duly paid in full to date.

The Undersigned further certifies that each of the undersigned's subcontractors and suppliers that incurred or caused to be incurred, on their behalf, costs, charges or expenses in connection with the undersigned's Work Effort on the above referenced Project have been duly paid in full to date.

The Undersigned hereby (1) acknowledges receipt of the progress payment referred to above as the Last Progress Payment which, when added to the total of all previous progress payments, constitutes full payment, less retainage, for all labor, services, material and supplies which the undersigned has provided for use in and upon

the project described above through _____, 20____ and, (2) hereby releases the Contractor, surety, the City and County of Denver, and any intermediate subcontractor or supplier of any tier from any and all claims prior to the above mentioned date, except for the withheld retainage.

The Undersigned also hereby agrees that the Contractor, Surety, the City and County of Denver, and any intermediate subcontractor or supplier of any tier shall be released from any and all claims arising out of its performance or non-performance of any contract associated with the above project through _____, 20 _____, except for withheld retainage after it has received full payment, less retainage, of the amount invoiced for the current billing period.

As additional consideration for the payments referenced above, the undersigned agrees to defend, indemnify and hold harmless the City, its officers, employees, agents and assigns and the above-referenced Contractor from and against all costs, losses, damages, causes of action, judgments under the subcontract and expenses arising out of or in connection with any claim or claims against the City or the Contractor which arise out of the Undersigned's performance of the Work Effort and which may be asserted by the Undersigned or any of its suppliers or subcontractors of any tier or any of their representatives, officers, agents, or employees.

It is acknowledged that this release is for the benefit of and may be relied upon by the City and the referenced Contractor.

The foregoing shall not relieve the undersigned of any obligation under the provisions of the Undersigned's subcontract, as the subcontract may have been amended, which by their nature survive completion of the Undersigned's work effort including, without limitation, warranties, guarantees, insurance requirements and indemnities.

Subcontractor: _____

Certified by: _____

Title: _____

Date: _____



DENVER INTERNATIONAL AIRPORT FINAL LIEN RELEASE – CONSTRUCTION (Subcontractor)

Project: _____

Date: _____

City Contract No. _____

Subcontractor Contract No. _____

Dated: _____, 20__

FROM:

Subcontractor: _____

(1) Last Progress Payment for billing
period ending _____, 20__

Address: _____

\$ _____

City/State: _____

(2) Does not apply

Telephone: _____

TO:

Contractor: _____

(3) Does not apply

Address: _____

City/State: _____

(4) **Total Paid to Date:**
\$ _____

() SBE () DBE () MBE () WBE () Non

The Undersigned hereby certifies that all costs, charges or expenses incurred by the undersigned or on behalf of the undersigned for any work, labor or services performed and for any materials, supplies or equipment provided on the above referenced Project or used in connection with the above referenced Subcontract (the "Work Effort") have been duly paid in full.

The Undersigned further certifies that each of the undersigned's subcontractors and suppliers that incurred or caused to be incurred, on their behalf, costs, charges or expenses in connection with the undersigned's Work Effort on the above referenced Project have been duly paid in full.

The undersigned Subcontractor hereby (1) acknowledges receipt of the progress payment referred to above as the Last Progress Payment which, when added to the total of all previous progress payments, constitutes full payment for all labor, services, materials and supplies which the undersigned has provided for use in and upon the project described above through _____, 20____ and, (2) hereby releases the Contractor, Surety, the City and County of Denver, and any intermediate subcontractor or supplier of any tier from any and all claims prior to the above mentioned date.

The Subcontractor also hereby agrees that the Contractor, Surety, the City and County of Denver, and any intermediate subcontractor or supplier of any tier shall be released from any and all claims arising out of its performance or non-performance of any contract associated with the above project.

As additional consideration for the payments referenced above, the undersigned agrees to defend, indemnify and hold harmless the City, its officers, employees, agents and assigns and the above-referenced Contractor from and against all costs, losses, damages, causes of action, judgments under the subcontract and expenses arising out of or in connection with any claim or claims against the City or the Contractor which arise out of the Undersigned's performance of the Work Effort and which may be asserted by the Undersigned or any of its suppliers or subcontractors of any tier or any of their representatives, officers, agents, or employees.

It is acknowledged that this release is for the benefit of and may be relied upon by the City and the referenced Contractor.

The foregoing shall not relieve the undersigned of any obligation under the provisions of the Undersigned's subcontract, as the subcontract may have been amended, which by their nature survive completion of the Undersigned's work effort including, without limitation, warranties, guarantees, insurance requirements and indemnities.

Subcontractor: _____

Certified by: _____

Title: _____

Date: _____



July 13, 2021

Taxiway EE Construction

IFB NO. 202158849

ADDENDUM NUMBER 1

This Addendum Number 1 supersedes and/or supplements all portions of the Bid Documents with which it conflicts. Proposers must acknowledge receipt of this addendum in the Attachment 1 Part 1 Bid Acknowledgement Letter.

Tony Deconinck

Tony Deconinck
Contract Administrator
Contract Services



DENVER INTERNATIONAL AIRPORT

TAXIWAY EE CONSTRUCTION

IFB NO. 202158849

ADDENDUM NUMBER 1

Scope of this Addendum

Addendum Number 1 includes modifications to the Invitation for Bid Documents issued July 1, 2021. These modifications are deemed necessary by the City and County of Denver.

BID FORMS

Please see attached for revisions.

PART II TECHNICAL SPECIFICATIONS

Please see attached for revisions.

PLANS

Please see attached for revisions.

The total number of pages (including cover sheet) contained in this Addendum Number 1 is eighty-four (84).

* * * * *

End of Addendum Number 1.

**ADDENDUM NO. 1
TO
PLANS FOR IMPROVEMENTS TO
DENVER INTERNATIONAL AIRPORT
DENVER, COLORADO
TAXIWAY EE GRADING, DRAINAGE, PAVING, AND LIGHTING
DEN CONTRACT NO. 202158849**

Bidders are informed that the above referenced Plans are modified as follows as of July 13, 2021.

1. BID FORMS

Delete Bid Forms and replace with attached Bid Forms.

Item P-1011 Remove Gravel Road – Item quantity for Schedule I changed to 2,280 SY.

Item P-220b Cement – Item added with a quantity for Schedule I of 1,000 Tons.

Item P-620e Type I Roadway Delineators – Item added with a quantity for Schedule I of 36 EA.

Item D-701a Install 24” Class V RCP – Item quantity for Schedule I changed to 3,366 LF.

Item D-701d Install 48” Class V RCP – Item quantity for Schedule I changed to 2,870 LF.

Item D-701g Remove 30” RCP – Item added with a quantity for Schedule I of 97 LF.

Item D-710b name changed to “Remove and Stockpile Existing Type “VH” Riprap” with a quantity for Schedule I of 230 CY.

Item D-710c Grouted Type “VH” Riprap (From On-Site Stockpile) – Item added with a quantity for Schedule I of 230 CY.

Item D-710d Grouted Type “VH” Riprap (New) – Item added with a quantity for Schedule I of 404 CY.

Item D-751c name changed to “Install Oversized Triple Type II Inlet” with a quantity for Schedule I of 1 EA.

Item D-751g name changed to “Remove Existing Inlet” with a quantity for Schedule I of 1 EA.

Item D-751i Tie to Existing Structure – Item quantity for Schedule I changed to 1 EA.

Item L-160a Furnish 250kW Generator for 35L ALSFII/17R LOC Temp Power (208Y/120V, 3-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160b Connect 250kW Generator for 35L ALSFII/17R LOC Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160c Operate 250kW Generator - Item added with a quantity for Schedule I of 2 Days

Item L-160d Furnish 50kW Generator for RTR-A Temp Power (208Y/120V, 3-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160e Furnish 50kW Generator for RTR-B Temp Power (208Y/120V, 3-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160f Furnish 50kW Generator for ASDE Temp Power (208Y/120V, 3-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160g Furnish 50kW Generator for 17R MALSR/35L LOC Temp Power (120/240V, 1-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160h Install 100A Power Inlet at RTR-A or RTR-B - Item added with a quantity for Schedule I of 2 EA

Item L-160i Connect 50kW Generator for ASDE Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160j Connect 50kW Generator for 17R MALSR/35L LOC Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160k Operate 50kW Generator - Item added with a quantity for Schedule I of 13 Days

Item L-160l Furnish 30kW Generator for 17R GS or 35L GS Temp Power (120/240V, 1-phase) - Item added with a quantity for Schedule I of 2 EA

Item L-160m Furnish 30kW Generator for DEN VOR Temp Power (120/240V, 1-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160n Connect 30kW Generator for 17R GS or 35L GS Temp Power - Item added with a quantity for Schedule I of 2 EA

Item L-160o Connect 30kW Generator for DEN VOR Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160p Operate 30kW Generator - Item added with a quantity for Schedule I of 6 Days

Item L-160q Furnish 15kW Generator for RTR-E Temp Power (120/240V, 1-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160r Operate 15kW Generator for RTR-E Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160s Furnish 10kW Generator for Midfield RVR Temp Power (120/240V, 1-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160t Connect 10kW Generator for Midfield RVR Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160u Operate 10kW Generator - Item added with a quantity for Schedule I of 2 Days

Item L-160v Furnish 5kW Generator for ASOS Temp Power (240V, 1-phase) - Item added with a quantity for Schedule I of 1 EA

Item L-160w Connect 5kW Generator for ASOS Temp Power - Item added with a quantity for Schedule I of 1 EA

Item L-160x Operate 5kW Generator - Item added with a quantity for Schedule I of 2 Days

Item L-160y Furnish 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power (120V, 1-phase) - Item added with a quantity for Schedule I of 2 EA

Item L-160z Connect 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power - Item added with a quantity for Schedule I of 2 EA

Item L-160aa Operate 1.8kW Generator - Item added with a quantity for Schedule I of 4 Days

2. PART II TECHNICAL SPECIFICATIONS

Division 2 Technical Specifications

Specification P-220 Cement Treated Soil Base Course

Replace specification P-220 in its entirety with the attached specification P-220.

Section 220-5.2 was modified to include measurement for cement.

Section 220-6.2 was modified to include payment for cement.

P-220b Cement – per ton was added to the pay items.

Specification P-620 Runway and Taxiway Marking

Replace specification P-620 in its entirety with the attached specification P-620.

Section 620-4.5 was added to include measurement for Type I Delineators.

Section 620-5.6 was added to include payment for Type I Delineators.

P-620e Type I Roadway Delineators – per each was added to the pay items.

Specification D-701 Pipe for Storm Drains and Culverts

D-701g Remove 30” RCP – per linear foot was added to the pay items.

Specification P-710 Rock Riprap

Replace specification P-710 in its entirety with the attached specification P-710.

Section 710-3.1a.(2) was modified to read Type “VH” in lieu of Type “H”.

Table 1 was modified to read Type “VH” in lieu of Type “H”.

Section 710-5.2 was modified to read Removal and Stockpiling of Existing Type “VH” riprap in lieu of Type “H” rock riprap grouted.

Section 710-5.3 was added to include measurement for Grouted Type “VH” Riprap (From On-Site Stockpile).

Section 710-5.4 was added to include measurement for Grouted Type “VH” Riprap (New).

Section 710-6.2 was modified to read Removal and Stockpiling of Existing Type “VH” riprap in lieu of Type “H” rock riprap grouted.

Section 710-6.3 was added to include payment for Grouted Type “VH” Riprap (From On-Site Stockpile).

Section 710-6.4 was added to include payment for Grouted Type “VH” Riprap (New).

D-710b was changed to read Remove and Stockpile Existing Type “VH” Riprap – per cubic yard.

D-710c Grouted Type “VH” Riprap (From On-Site Stockpile) – per cubic yard was added to the pay items.

D-710d Grouted Type “VH” Riprap (New) – per cubic yard was added to the pay items.

3. PLANS**Sheet G-004**

Replace sheet G-004 with the attached sheet G-004.

Modified summary of approximate quantities (table).

Modified note 13.

Added notes 26 through 31.

Sheets G-005

Replace sheet G-005 with the attached sheet G-005.

Modified summary of approximate quantities (table).

Sheet G-005a

Added sheet in its entirety.

Sheet C-102

Replace sheet C-102 with the attached sheet C-102.

Added storm sewer removal.

Changed the callout to read "Remove Existing Inlet".

Sheet CI107

Replace sheet CI107 with the attached sheet CI107.

Added a cross section for the vehicle turn around area.

Sheet C-301

Replace sheet C-301 with the attached sheet C-301.

Added a detail for bridging soft subgrade.

Sheet CG102

Replace sheet CG102 with the attached sheet CG102.

Added the installation of 24" RCP to this sheet.

Removed the callout to convert an inlet to a manhole.

Sheet CU501

Replace sheet CU501 with the attached sheet CU501.

Removed the inlet to manhole conversion detail.

Sheet CU502

Replace sheet CU502 with the attached sheet CU502.

Modified Detail 2.

Sheet CU102

Replace sheet CU102 with the attached sheet CU102.

Added the installation of 24" RCP to this sheet.

Removed the callout to convert an inlet to a manhole.

Sheets CU201 through CU209

Replace sheets CU201 through CU209 with the attached sheets CU201 through CU209.

Existing utility crossings were revised on plans and profiles on all sheets.

Grading and riprap for the outfall of the 48" RCP on Sheet CU208 have been revised.

Type M Riprap called out on Sheet CU209.

Proposed pavement has been shown in profiles where applicable.

Sheets CJ105 and CJ112 through CJ113

Replace sheets CJ105 and CJ112 through CJ113 with the attached sheets CJ105 and CJ112 through CJ113.

Added locations for Type I Roadway Delineators.

Sheet CJ502

Replace sheet CJ502 with the attached sheet CJ502.

Added details for Roadway Delineators.

Sheets E-770 and E-775 through E-776

Added sheets in their entirety to show temporary generator locations and details.

**** END OF ADDENDUM NO. 1 ****

BID PROPOSAL SUMMARY

Bidder Name: _____

SCHEDULE I TOTAL \$ _____

SCHEDULE II TOTAL \$ _____

TOTAL ALL SCHEDULES \$ _____

Bidder has examined the proposed site and is familiar with all site conditions.

Signature _____

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SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-100a	Contractor Quality Control Program (CQCP)	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
C-105a	Mobilization	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
013223a	Construction As-built Survey	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015050a	Textura Software Fee	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015525a	Flagger	HR	22,080	at the unit price of: _____ dollars and _____ cents.	\$
015525b	Gate Guard	HR	17,360	at the unit price of: _____ dollars and _____ cents.	\$
015525c	Gate Guard Shack	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015525d	Traffic Control	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015719a	Temporary Erosion Control	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
P-101a	Remove Portland Cement Concrete Pavement (Non-Reinforced, 17")	SY	2,484	at the unit price of: _____ dollars and _____ cents.	\$
P-101b	Remove Portland Cement Concrete Pavement (Reinforced, 17")	SY	425	at the unit price of: _____ dollars and _____ cents.	\$
P-101c	Remove Portland Cement Concrete Pavement (Non-Reinforced, 21")	SY	143	at the unit price of: _____ dollars and _____ cents.	\$
P-101d	Full Depth Asphalt Pavement Removal	SY	16,551	at the unit price of: _____ dollars and _____ cents.	\$
P-101e	Partial Depth Asphalt Pavement Removal	SY	158	at the unit price of: _____ dollars and _____ cents.	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-101f	Remove Permeable Base Course at the unit price of: _____ dollars and _____ cents.	SY	17,862	\$	\$
P-101g	Remove Cement Treated Base Course at the unit price of: _____ dollars and _____ cents.	SY	1,877	\$	\$
P-101h	Remove Cement Treated Subgrade at the unit price of: _____ dollars and _____ cents.	SY	2,356	\$	\$
P-101i	Remove Asphalt Road - Complete at the unit price of: _____ dollars and _____ cents.	SY	4,661	\$	\$
P-101j	Grind Cement Treated Base Course (0" to 1") at the unit price of: _____ dollars and _____ cents.	SY	300	\$	\$
P-101k	Pavement Marking Removal at the unit price of: _____ dollars and _____ cents.	SF	10,000	\$	\$
P-101l	Remove Gravel Road at the unit price of: _____ dollars and _____ cents.	SY	2,280	\$	\$
P-152a	Unclassified Excavation at the unit price of: _____ dollars and _____ cents.	CY	820,000	\$	\$
P-152b	Excavation for Undercut at the unit price of: _____ dollars and _____ cents.	CY	19,927	\$	\$
P-152c	Embankment (Common Fill) at the unit price of: _____ dollars and _____ cents.	CY	250,000	\$	\$
P-152d	Embankment (Stockpile Excess Material) at the unit price of: _____ dollars and _____ cents.	CY	472,000	\$	\$
P-152e	Upper Select Subgrade at the unit price of: _____ dollars and _____ cents.	CY	10,900	\$	\$
P-152f	Lower Select Subgrade at the unit price of: _____ dollars and _____ cents.	CY	98,000	\$	\$
P-152g	Subgrade Preparation (12") at the unit price of: _____ dollars and _____ cents.	SY	65,374	\$	\$
P-152h	Rock Excavation at the unit price of: _____ dollars and _____ cents.	CY	10,000	\$	\$
P-159a	Concrete Crushing at the unit price of: _____ dollars and _____ cents.	TON	2,950	\$	\$
P-220a	Cement Treated Soil Base Course at the unit price of: _____ dollars and _____ cents.	SY	65,374	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-220b	Cement at the unit price of: _____ dollars and _____ cents.	TON	1,000	\$	\$
P-304a	Cement Treated Base Course at the unit price of: _____ dollars and _____ cents.	SY	63,897	\$	\$
P-304Ca	CDOY Class 6 Roadway Base at the unit price of: _____ dollars and _____ cents.	CY	1,975	\$	\$
P-307a	Cement Treated Permeable Base Course (CTPB) 7" at the unit price of: _____ dollars and _____ cents.	SY	46,297	\$	\$
P-403a	Bituminous Surface Course at the unit price of: _____ dollars and _____ cents.	TON	9,068	\$	\$
P-403b	Bituminous Base Course at the unit price of: _____ dollars and _____ cents.	TON	17,670	\$	\$
P-501a	Cement Concrete Pavement (Non-Reinforced, 17") at the unit price of: _____ dollars and _____ cents.	SY	44,613	\$	\$
P-501b	Cement Concrete Pavement (Reinforced, 17") at the unit price of: _____ dollars and _____ cents.	SY	9,207	\$	\$
P-501c	Cement Concrete Pavement (Non-Reinforced, 21") at the unit price of: _____ dollars and _____ cents.	SY	6,523	\$	\$
P-501d	Cement Concrete Pavement (Reinforced, 21") at the unit price of: _____ dollars and _____ cents.	SY	1,965	\$	\$
P-501e	Bond Breaker Fabric at the unit price of: _____ dollars and _____ cents.	SY	62,308	\$	\$
P-610a	Cement Treated Base Repair at the unit price of: _____ dollars and _____ cents.	SY	150	\$	\$
P-620a	Pavement Markings, Waterborne at the unit price of: _____ dollars and _____ cents.	SF	44,754	\$	\$
P-620b	Pavement Markings, Metacrylate at the unit price of: _____ dollars and _____ cents.	SF	3,075	\$	\$
P-620c	Reflective Media at the unit price of: _____ dollars and _____ cents.	LB	1,796	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-620d	Stop Sign at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
P-620e	Type I Roadway Delineator at the unit price of: _____ dollars and _____ cents.	E/A	36	\$	\$
D-701a	Install 24" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	3,366	\$	\$
D-701b	Install 30" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	413	\$	\$
D-701c	Install 36" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	267	\$	\$
D-701d	Install 48" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	2,870	\$	\$
D-701e	Install 24" FES at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
D-701f	Install 48" FES at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
D-701g	Remove 30" RCP at the unit price of: _____ dollars and _____ cents.	LF	97	\$	\$
D-705a	Install 6" Underdrain (Perforated PVC) at the unit price of: _____ dollars and _____ cents.	LF	10,485	\$	\$
D-705b	Install 6" Underdrain (Non-Perforated PVC) at the unit price of: _____ dollars and _____ cents.	LF	2,510	\$	\$
D-705c	Repair Damaged Underdrain Pipe at the unit price of: _____ dollars and _____ cents.	LF	200	\$	\$
D-705d	Install Underdrain Cleanouts at the unit price of: _____ dollars and _____ cents.	E/A	80	\$	\$
D-705e	Remove Underdrain Pipe at the unit price of: _____ dollars and _____ cents.	LF	4,092	\$	\$
D-705f	Remove Underdrain Cleanouts at the unit price of: _____ dollars and _____ cents.	E/A	7	\$	\$
D-710a	Grouted Type "M" Riprap at the unit price of: _____ dollars and _____ cents.	CY	5	\$	\$
D-710b	Remove and Stockpile Existing Type "VH" Riprap at the unit price of: _____ dollars and _____ cents.	CY	230	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
D-701c	Grouted Type "VH" Riprap (From On-Site Stockpile)	CY	230	\$	\$
D-701d	Grouted Type "VH" Riprap (New)	CY	404	\$	\$
D-751a	Install New Triple Type II Inlet Structure	E.A	2	\$	\$
D-751b	Install New Double Type II Inlet Structure	E.A	7	\$	\$
D-751c	Install Oversized Triple Type II Inlet	E.A	1	\$	\$
D-751d	Install Airfield Manhole	E.A	2	\$	\$
D-751e	Install Type B Manhole	E.A	3	\$	\$
D-751f	Install Type P Manhole	E.A	2	\$	\$
D-751g	Remove Existing Inlet	E.A	1	\$	\$
D-751h	Install Underdrain Manholes	E.A	16	\$	\$
D-751i	Tie To Existing Structure	E.A	1	\$	\$
T-901a	Seeding (Seed Mix Design 2)	AC	235	\$	\$
T-905a	Topsotling	CY	49,248	\$	\$
T-908a	Hydraulic Mulching	AC	235	\$	\$
T-908b	Erosion Control Blankets	SY	86,527	\$	\$
L-108a	#8 AWG L-824C, 5000V Conductor	LF	194,000	\$	\$
L-110a	1W-2" Sch. 40 PVC Conduit in Earth	LF	550	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-110b	1W-2" Sch. 40 PVC Conduit in New Concrete Pavement	LF	7,580	\$	\$
L-110c	1W-2" Sch. 40 PVC Conduit in New Asphalt Pavement	LF	13,425	\$	\$
L-110d	8W-4" Sch. 40 PVC Concrete Encased Duct Bank	LF	1,800	\$	\$
L-110e	Broken Conduit Repair	E/A	2	\$	\$
L-110f	Remove Concrete Encased Duct Bank	LF	9,550	\$	\$
L-115a	Install New Electrical Manhole	E/A	3	\$	\$
L-115b	Adjust Existing Electrical Manhole	E/A	2	\$	\$
L-115c	Remove Existing Electrical Manhole	E/A	3	\$	\$
L-120c	Install L-847-2 Circuit Selector Switch	E/A	1	\$	\$
L-120d	Install L-847-3 Circuit Selector Switch	E/A	1	\$	\$
L-125a	L-852C LED Taxiway Unidirectional Centerline Light	E/A	3	\$	\$
L-125b	L-852C LED Taxiway Bidirectional Centerline Light (Single Circuit)	E/A	101	\$	\$
L-125c	L-852K LED Taxiway Bidirectional Centerline Light (Single Circuit)	E/A	80	\$	\$
L-125d	L-861T Quartz Taxiway Edge Light Mounted on L-867 Base Can	E/A	62	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125e	L-861T LED Taxiway Edge Light Mounted on L-867 Base Can	E/A	66	at the unit price of: _____ dollars and _____ cents.	\$
L-125f	L-861T LED Taxiway Edge Light Mounted on L-868 Base Can	E/A	1	at the unit price of: _____ dollars and _____ cents.	\$
L-125g	L-868B 3/4" Thick Cover Plate	E/A	6	at the unit price of: _____ dollars and _____ cents.	\$
L-125h	L-867B 3/8" Thick Cover Plate	E/A	4	at the unit price of: _____ dollars and _____ cents.	\$
L-125i	New 22" Deep L-868B Base Can in New Concrete Pavement	E/A	172	at the unit price of: _____ dollars and _____ cents.	\$
L-125j	New 26" Deep L-868B Base Can in New Concrete Pavement	E/A	10	at the unit price of: _____ dollars and _____ cents.	\$
L-125k	New L-867B Base Can in New Asphalt Pavement	E/A	121	at the unit price of: _____ dollars and _____ cents.	\$
L-125l	New L-867B Base Can in Existing Asphalt Pavement	E/A	7	at the unit price of: _____ dollars and _____ cents.	\$
L-125m	L-858 LED Guidance Sign - 2 Mod	E/A	2	at the unit price of: _____ dollars and _____ cents.	\$
L-125n	L-858 LED Guidance Sign - 3 Mod	E/A	10	at the unit price of: _____ dollars and _____ cents.	\$
L-125o	L-858 LED Guidance Sign - 4 Mod	E/A	1	at the unit price of: _____ dollars and _____ cents.	\$
L-125p	New Guidance Sign Foundation - 3 Mod	E/A	8	at the unit price of: _____ dollars and _____ cents.	\$
L-125q	New Guidance Sign Foundation - 4 Mod	E/A	1	at the unit price of: _____ dollars and _____ cents.	\$
L-125r	New Guidance Sign Foundation - 5 Mod	E/A	2	at the unit price of: _____ dollars and _____ cents.	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125s	Remove Existing Sign and Base at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-125t	Remove Fixture and Base Can at the unit price of: _____ dollars and _____ cents.	E/A	102	\$	\$
L-125u	Reconnect 2" Conduit at Location of Removed Base Can at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-125v	Remove and Replace Fixture or Sign ID Marker at the unit price of: _____ dollars and _____ cents.	E/A	215	\$	\$
L-125w	Remove and Replace Circuit ID Tag at the unit price of: _____ dollars and _____ cents.	E/A	92	\$	\$
L-125x	Cover Taxiway Edge Light at the unit price of: _____ dollars and _____ cents.	E/A	24	\$	\$
L-125y	Mask Off Taxiway Centerline Light at the unit price of: _____ dollars and _____ cents.	E/A	42	\$	\$
L-125z	Cover Guidance Sign at the unit price of: _____ dollars and _____ cents.	E/A	16	\$	\$
L-125aa	Edge Light Drain at the unit price of: _____ dollars and _____ cents.	E/A	9	\$	\$
L-132-5.1	Installation of New LLWAS Including All Equipment and Foundations, As Shown on Contract Documents at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$
L-132-5.2	Removal of Existing LLWAS Including All Equipment and Foundations at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$
L-132-5.3	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 4 Way 4 Inch at the unit price of: _____ dollars and _____ cents.	LF	6,000	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-132-5.4	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 2 Way 2 Inch	LF	1,400	\$	\$
L-132-5.5	#1/0 AWG, Bare Copper FAA Guard Wire Installed Above Duct Bank or Conduit, Including Ground Rods, Connections, and Terminations	LF	7,500	\$	\$
L-132-5.6	FAA Communications Manhole, 6 Feet by 6 Feet	EA	7	\$	\$
L-132-5.7	FAA Power Manhole, 6 Feet by 6 Feet	EA	4	\$	\$
L-132-5.8	2-#2 AWG and 1-#4 AWG Ground Cable Installed in Duct Bank or Conduit, Including All Connections and Terminations	LF	1,550	\$	\$
L-140a	Post-Construction Photometric Testing	LS	1	\$	\$
L-150-1	Fiber Optic Cable Installed in Innerduct in Duct or Conduit, Including Testing and Connections	LF	36,000	\$	\$
L-150-2	25 pair #22 AWG Type USE Cable, Installed in Duct Bank or Conduit	LF	800	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160a	Furnish 250kW Generator for 35L ALSFII/17R LOC Temp Power (208Y/120V, 3-phase)	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160b	Connect 250kW Generator for 35L ALSFII/17R LOC Temp Power	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160c	Operate 250kW Generator	DAY	2	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160d	Furnish 50kW Generator for RTR-A Temp Power (208Y/120V, 3-phase)	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160e	Furnish 50kW Generator for RTR-B Temp Power (208Y/120V, 3-phase)	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160f	Furnish 50kW Generator for ASDE Temp Power (208Y/120V, 3-phase)	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160g	Furnish 50kW Generator for 17R MAISR/35L LOC Temp Power (120/240V, 1-phase)	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160h	Install 100A Power Inlet at RTR-A or RTR-B	E/A	2	\$	\$
	at the unit price of: _____ dollars and _____ cents.				
L-160i	Connect 50kW Generator for ASDE Temp Power	E/A	1	\$	\$
	at the unit price of: _____ dollars and _____ cents.				

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160j	Connect 50kW Generator for 17R MALSR/35L LOC Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160k	Operate 50kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	13	\$	\$
L-160l	Furnish 30kW Generator for 17R GS or 35L GS Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-160m	Furnish 30kW Generator for DEN VOR Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160n	Connect 30kW Generator for 17R GS or 35L GS Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-160o	Connect 30kW Generator for DEN VOR Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160p	Operate 30kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	6	\$	\$
L-160q	Furnish 15kW Generator for RTR-E Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160r	Operate 15kW Generator for RTR-E Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160s	Furnish 10kW Generator for Midfield RVR Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160t	Connect 10kW Generator for Midfield RVR Temp Power at the unit price of: _____ dollars and _____ cents.	EA	1	\$	\$
L-160u	Operate 10kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	2	\$	\$
L-160v	Furnish 5kW Generator for ASOS Temp Power (240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	EA	1	\$	\$
L-160w	Connect 5kW Generator for ASOS Temp Power at the unit price of: _____ dollars and _____ cents.	EA	1	\$	\$
L-160x	Operate 5kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	2	\$	\$
L-160y	Furnish 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power (120V, 1-phase) at the unit price of: _____ dollars and _____ cents.	EA	2	\$	\$
L-160z	Connect 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power at the unit price of: _____ dollars and _____ cents.	EA	2	\$	\$
L-160aa	Operate 1.8kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	4	\$	\$

SCHEDULE I TOTAL \$ _____

SCHEDULE II

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-105a	Mobilization at the unit price of: _____ dollars and _____ cents.	LS	1		\$
P-501f	Pavement Spall Repair at the unit price of: _____ dollars and _____ cents.	SY	100	\$	\$
L-120a	Furnish L-847-2 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-120b	Furnish L-847-3 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
13410Aa	ALCMS Modifications at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$

SCHEDULE II TOTAL \$ _____

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Item P-220 Cement Treated Soil Base Course

DESCRIPTION

220-1.1 This item shall consist of constructing a base course by uniformly mixing soil, cement, and water. The mixed material shall be spread, shaped, and compacted in accordance with these specifications and in conformity to the dimensions and typical cross-section shown on the plans. Tests shall be required for each approved soil included within the treated layer.

Runway, taxiway, or apron pavements shall be built in a series of parallel lanes using a plan that reduces the number of longitudinal and transverse joints to a minimum.

MATERIALS

220-2.1 Cement. Cement shall conform to the requirements of ASTM C150, Type I/II.

220-2.2 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

220-2.3 Soil. The soil for this work shall consist of the upper most 18 inches of select embankment as placed and paid for by P-152b Upper Select Embankment.

220-2.4 Asphalt material. The types, grades, controlling specifications, and application temperatures for the asphalt materials used for curing the soil-cement shall be selected from the table below. The DEN Project Manager will approve the specific material used.

BITUMINOUS MATERIAL

Type and Grade	Specification	Application Temperature	
		Degrees °F	Degrees °C
Cutback Asphalt			
RC-70	ASTM D2028	120-160	50-70
RC-250	ASTM D2028	160-200	70-95
Emulsified Asphalt			
RS-1, SS-1	ASTM D977	75-130	25-55
CRS-1	ASTM D2397	75-130	25-55

MIX DESIGN

220-3.1 Proportions. Before the start of base course construction, tests shall be made on the soil or soil-aggregate material to be stabilized to determine the quantity of cement required for the mix design, to provide a minimum 200 psi unconfined compressive strength at 5 days.

Test specimens containing various amounts of cement shall be compacted per ASTM D558, and the optimum moisture determined for each test specimen. Samples at the optimum moisture shall be subjected to the wet-dry and the freeze-thaw test in accordance with ASTM D559 and ASTM D560, respectively. The specimens

41 shall be tested for compressive strength in accordance with ASTM D1633. Tests are required for each approved
42 soil which will be included in the treated layer.
43

44

45

CONSTRUCTION METHODS

46
47 **220-4.1 Control Strip.** The first half-day of construction shall be considered the control strip. The Contractor
48 shall demonstrate, in the presence of the DEN Project Manager, that the materials, equipment, and construction
49 processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain
50 specified density requirements shall be determined. The maximum compacted thickness may be increased to
51 a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and
52 operations will uniformly compact the lift to the specified density. The DEN Project Manager must witness
53 this demonstration and approve the lift thickness prior to full production.
54

55

56 Control strips that do not meet specification requirements shall be reworked, re-compacted or removed and
57 replaced at the Contractor's expense. Full operations shall not continue until the control strip has been accepted
58 by the RPR. The Contractor shall use the same equipment, materials, and construction methods for the
59 remainder of construction, unless adjustments made by the Contractor are approved by the DEN Project
60 Manager.

61

62 **220-4.2 Weather limitations.** The material shall not be mixed or placed while the atmospheric temperature is
63 below 40°F (4°C) or when conditions indicate that the temperature may fall below 40°F (4°C) within 24 hours,
64 or when the weather is foggy or rainy, or to soils that are frozen or contain frost, or when the underlying
65 material is frozen.

66

67 **220-4.3 Maintenance.** The material shall be maintained in a condition that will meet all specification
68 requirements. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, prior to
69 placement of additional material, the Contractor shall verify that materials still meet all specification
70 requirements. Equipment may be routed over completed sections of base course, provided that no damage
71 results and the equipment is routed over the full width of the completed base course. Any damage resulting to
72 the base course from routing equipment over the base course shall be repaired by the Contractor at their
73 expense.

74

75 **220-4.4 Equipment.** The course may be constructed with any equipment that will meet the requirements for
76 soil pulverization, cement application, mixing, water application, incorporation of materials, compaction,
77 finishing, and curing specified here.

78

79 **220-4.5 Preparation.** The area to be stabilized shall be graded and shaped to conform to the lines, grades and
80 cross-section shown on the plans. Any soft or yielding areas in the subgrade shall be removed and replaced
81 with acceptable soil and compacted to the specified density.

82

83 **220-4.6 Pulverization.** After completion of moist-mixing, the soil for the base course shall be pulverized so
84 that 100% by dry weight passes a 1-inch (25.0 mm) sieve and a minimum of 80% passes a No. 4 (4.75 mm)
85 sieve.

86

87 **220-4.7 Cement application, mixing, and finishing.** Mixing of the soil, cement, and water shall be
88 accomplished by one of the following methods to be approved by the DEN Project Manager.

89

90 **a.** Mix in Place Method. Shape pulverized material to the cross-section indicated. Cement shall be
applied so that when uniformly mixed with the soil, the specified cement content is obtained, and

91 a sufficient quantity of cement-treated soil is produced to construct a compacted cement-treated
92 course conforming to the lines, grades, and cross-section indicated. Immediately after the cement
93 has been distributed, it shall be mixed with the soil. The cement shall not be mixed below the
94 required depth. Continue mixing until the cement has been sufficiently blended with the soil to
95 prevent the formation of cement balls when water is applied. Determine moisture content of the
96 mixture immediately after completion of mixing of the soil and cement. Provide water supply and
97 pressure distributing equipment that will permit the application within three (3) hours of all mixing
98 water on the section being processed. Incorporate water in the mix so that concentration of water
99 near the surface does not occur. After all mixing water has been applied, continue mixing until the
100 water is uniformly distributed throughout the full depth of the mixture. Do not apply cement if
101 the soil moisture content exceeds the optimum moisture content specified for the cement-treated
102 mixture. After mixing is complete, the proportions of the mixture shall be in accordance with the
103 approved mix design.

104
105 **b.** Central Plant Mix Method. Cement application, mixing, and spreading. Mixing of the soil, cement,
106 and water shall be accomplished by the central-plant-mixed method. The soil, cement, and water
107 shall be mixed in either a batch or continuous-flow type pugmill. The plant shall be equipped with
108 feeding and metering devices that will add the soil, cement, and water into the mixer in the specified
109 quantities. Soil and cement shall be mixed sufficiently to prevent cement balls from forming when
110 water is added. Mixing shall continue until a uniform mixture of soil, cement, and water is obtained.

111
112 The mixture shall be hauled to the project in trucks equipped with protective covers. The mixture
113 shall be placed on the moistened subgrade in a uniform layer by an approved spreader. Not more
114 than 30 minutes shall elapse between the placement of soil-cement in adjacent lanes.

115
116 The layer of soil-cement shall be uniform in thickness and surface contour and of sufficient
117 quantity that the completed base conforms to the required line, grade and cross-section. Dumping
118 of the mixture in piles or windrows on the subgrade shall not be permitted.

119
120 Not more than 60 minutes shall elapse between the start of moist mixing and the start of
121 compaction of soil-cement.

122
123 **220-4.8 Compaction.** Compaction of the course shall begin within 30 minutes after mixing the cement into
124 the subgrade. All compaction operations shall be completed within 2 hours from the start of mixing.

125
126 The field density of the compacted mixture shall be at least 98% of the maximum density as determined by
127 ASTM D558. The in-place moisture content shall be determined in accordance with ASTM D2216. The
128 moisture content of the mixture at the start of compaction shall be within ± 2 percentage points of the optimum
129 moisture content. Maximum density refers to maximum dry density at optimum moisture content unless
130 otherwise specified.

131
132 **220-4.9 Finishing and curing.** After the final lift or course of treated subgrade has been compacted, it shall
133 be brought to the required lines and grades in accordance with the typical sections.

134
135 Finished portions of treated subgrade shall be protected to prevent equipment from marring, permanently
136 deforming, or damaging completed work.

137
138 Not later than 24 hours after completion of final finishing, the surface shall be cured by application of an
139 emulsified asphalt uniformly applied to the surface of the completed base course at the rate of approximately

140 0.2 gallons per square yard (0.91 l/m²). The curing material shall be maintained and applied as needed by the
141 Contractor during the 7-day protection period.

142
143 Sufficient protection from freezing shall be provided for at least 7 days after its construction or as approved by
144 the DEN Project Manager.

145
146 **220-4.10 Construction limitations.** At the end of each day's construction and/or when operations after
147 application of the cement are interrupted for more than 30 minutes, a straight transverse construction joint
148 shall be formed by a header or by cutting back into the compacted material to form a true vertical face.
149 Completed portions may be opened to light traffic, if approved by the DEN Project Manager, and provided
150 the curing is not impaired.

151
152 **220-4.11 Surface tolerance.** In those areas on which a subbase or base course is to be placed, the surface shall
153 be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or
154 failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-
155 compacted to grade until the required smoothness and accuracy are obtained and approved by the DEN Project
156 Manager. The Contractor shall perform all final smoothness and grade checks in the presence of the DEN
157 Project Manager. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's
158 expense.

159
160 **a. Smoothness.** The finished surface shall not vary more than +/- 3/8 inch (9 mm) when tested
161 with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The
162 straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m)
163 straightedge for the full length of each line on a 50-foot (15-m) grid.

164
165 **b. Grade.** The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-
166 0.05 feet (15 mm) of the specified grade.

167
168 **220-4.12 Acceptance sampling and testing.** Cement Treated Solid Base course shall be accepted for density
169 and thickness on an area basis. Two test will be made for density and thickness for each 1200 square yards
170 (1000 square meters), but not less than four (4) tests per day of production. Sampling locations will be
171 determined on a random basis per ASTM D3665.

172
173 **a. Density.** The DEN Project Manager shall perform all density tests.

174
175 Each area shall be accepted for density when the field density is at least 100% of the maximum
176 density of laboratory specimens compacted and tested per ASTM D558. The in-place field density
177 shall be determined per ASTM D1556 or ASTM D6938 using Procedure A, the direct transmission
178 method, and ASTM D6938 shall be used to determine the moisture content of the material. The
179 machine shall be calibrated in accordance with ASTM D6938. The in-place moisture content shall
180 be determined in accordance with ASTM D2216. Perform in-place density test immediately after
181 completion of compaction to determine degree of compaction. Maximum density refers to
182 maximum dry density at optimum moisture content unless otherwise specified. If the specified
183 density is not attained, the area represented by the failed test must be reworked and/or
184 recompacted at the Contractor's expense and two additional random tests made. This procedure
185 shall be followed until the specified density is reached. Maximum density refers to maximum dry
186 density at optimum moisture content unless otherwise specified.

187
188 **b. Thickness.** Depth tests shall be made by test holes or cores at least 3 inches (75 mm) in diameter
189 that extend through the base. The thickness of the base course shall be within +0 and -1/2 inch

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM P-220 CEMENT TREATED SOIL BASE COURSE
 AC 150/5370-10H

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

190 (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the
 191 presence of the DEN Project Manager for each subplot.

192
 193 Thickness measurements may be determined by survey if allowed by the DEN Project Manager.
 194 If survey measurements are used, the contractor shall provide survey prior to placement and after
 195 completion on a 25-foot (7.5 m) by 25-foot (7.5 m) survey grid.

196
 197 Where the thickness is deficient by more than 1/2-inch (12 mm), the material shall be removed to
 198 full depth and replaced, at Contractor's expense.

199
 200

METHOD OF MEASUREMENT

201

202
 203 **220-5.1** The quantity of cement treated soil base course shall be the number of square yards (square meter) of
 204 completed and accepted base course.

205
 206 ~~**220-5.2** The quantity of cement shall not be measured or paid for separately but will be considered incidental~~
 207 ~~to the project. The work under this item shall be considered subsidiary to other items of work. Cement shall~~
 208 be measured by the ton (kg).

209
 210

BASIS OF PAYMENT

211

212
 213 **220-6.1** Payment shall be made at the contract unit price per square yard (m²) for cement treated soil base
 214 course. This price shall be full compensation for furnishing all materials, except cement, and for all preparation,
 215 delivering, placing, and mixing of these materials; and for all labor, equipment, tools and incidentals necessary
 216 to complete the item.

217
 218 ~~**220-6.2** Payment shall be made at the contract unit price per ton (kg) for Cement shall be considered incidental~~
 219 ~~to the project. No payment shall be made for cement.~~ This price shall be full compensation for furnishing this
 220 material and for all delivery, placing, and incorporation of this material, and for all labor, equipment, tools, and
 221 incidentals necessary to complete the item.

222
 223

224 Payment will be made under:

225

226	Item P-220a	Cement Treated Soil Base Course - per square yard (square meter)
227	Item P-220b	Cement - per ton (kg)

228
 229

REFERENCES

230

231
 232 The publications listed below form a part of this specification to the extent referenced. The publications are
 233 referred to within the text by the basic designation only.

234

235 ASTM International (ASTM)

236

237	ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse 238 Aggregates
-----	-----------	--

239

240	ASTM C150	Standard Specification for Portland Cement
241		
242	ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
243		
244		
245	ASTM C1632	Standard Practice for Making and Curing Soil-Cement Compression and Flexure Test Specimens in the Laboratory ¹
246		
247		
248	ASTM C1633	Standard Test Methods for Compressive Strength of Molded Soil-Cement Cylinders
249		
250		
251	ASTM D558	Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
252		
253		
254	ASTM D559	Standard Test Methods for Wetting and Drying Compacted Soil-Cement Mixtures
255		
256		
257	ASTM D560	Standard Test Methods for Freezing and Thawing Compacted Soil-Cement Mixtures
258		
259		
260	ASTM D977	Standard Specification for Emulsified Asphalt
261		
262	ASTM D1556	Standard Test Method for Density and Unit Weight of Soil In-Place by the Sand Cone Method
263		
264		
265	ASTM D2027	Standard Specification for Cutback Asphalt (Medium-Curing Type)
266		
267	ASTM D2028	Standard Specification for Cutback Asphalt (Rapid-Curing Type)
268		
269	ASTM D2397	Standard Specification for Cationic Emulsified Asphalt
270		
271	ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
272		
273		
274	ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
275		
276		
277		
278		**END OF ITEM P-220**
279		

ITEM P-620 RUNWAY AND TAXIWAY MARKING

DESCRIPTION

620-1.1 This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the DEN Project Manager. The terms “paint” and “marking material” as well as “painting” and “application of markings” are interchangeable throughout this specification.

MATERIALS

620-2.1 MATERIALS ACCEPTANCE. The Contractor shall furnish manufacturer’s certified test reports, for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. This certification along with a copy of the paint manufacturer’s surface preparation; marking materials, including adhesion, flow promoting and/or floatation additive; and application requirements must be submitted and approved by the DEN Project Manager prior to the initial application of markings. The reports can be used for material acceptance or the DEN Project Manager may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the DEN Project Manager upon arrival of a shipment of materials to the site. All material shall arrive in sealed containers that are easily quantifiable for inspection by the DEN Project Manager.

620-2.2 MARKING MATERIALS.

TABLE 1. MARKING MATERIALS

Paint ¹				Glass Beads ²	
Type	Color	Fed Std. 595 Number	Application Rate Maximum	Type	Application Rate Minimum
Waterborne Type I or II	Yellow	33538	115 ft ² /gal (2.8 m ² /l)	Type I, Gradation A	7 lb/gal (0.85 kg/l)
Waterborne Type I or II	Black	37038	115 ft ² /gal (2.8 m ² /l)	Not Used	Not Used
Methacrylate	Yellow	33538	45 ft ² /gal (1.1 m ² /l)	Type I, Gradation A	15 lb/gal (1.8 kg/l)
Methacrylate	Black	37038	45 ft ² /gal (1.1 m ² /l)	Not Used	Not Used

¹ See paragraph 620-2.2a

² See paragraph 620-2.2b

- a. Paint.** Paint shall be waterborne or methacrylate in accordance with the requirements of this paragraph. Paint colors shall comply with Federal Standard No. 595.

Waterborne. Paint shall meet the requirements of Federal Specification TT-P-1952F, Type I or Type II. The non-volatile portion of the vehicle for all paint types shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis.

Methacrylate. Paint shall be a two component, minimum 99% solids-type system conforming to the following:

- 41 (1) **Pigments.** Component A. Percent by weight.
 42
 43 (a) **White:**
 44
 45 i. Titanium Dioxide, ASTM D476, type II shall be 10% minimum.
 46
 47 ii. Methacrylate resin shall be 18% minimum.
 48
 49 (b) **Yellow and Colors:**
 50
 51 i. Titanium Dioxide, ASTM D476, type II shall be 1% minimum. Organic
 52 yellow, other colors, and tinting as required to meet color standard.
 53
 54 ii. Methacrylate resin shall be 18% minimum.
 55
 56 (2) **Prohibited materials.** The manufacturer shall certify that the product does not contain
 57 mercury, lead, hexavalent chromium, halogenated solvents, nor any carcinogen as
 58 defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in
 59 relevant federal regulations.
 60
 61 (3) **Daylight directional reflectance:**
 62
 63 (a) **White:** The daylight directional reflectance of the white paint shall not be less than
 64 80% (relative to magnesium oxide), when tested in accordance with ASTM E2302.
 65
 66 (b) **Yellow:** The daylight directional reflectance of the yellow paint shall not be less than
 67 55% (relative to magnesium oxide), when tested in accordance with ASTM E2302.
 68 The x and y values shall be consistent with the federal Hegman yellow color
 69 standard chart for traffic yellow standard 33538, or shall be consistent with the
 70 tolerance listed below:
 71
 72 x .462 x .470 x .479 x .501
 73 y .438 y .455 y .428 y .452
 74
 75 (4) **Accelerated weathering.**
 76
 77 (a) **Sample preparation.** Apply the paint at a wet film thickness of 0.013-inch (0.33
 78 mm) to four 3 × 6-inch (8 × 15 cm) aluminum panels prepared as described in
 79 ASTM E2302. Air dry the sample 48 hours under standard conditions.
 80
 81 (b) **Testing conditions.** Test in accordance with ASTM G154 using both Ultra Violet
 82 (UV-B) Light and condensate exposure, 72 hours total, alternating four (4) hour UV
 83 exposure at 140°F (60°C), and four (4) hours condensate exposure at 104°F (40°C).
 84
 85 (c) **Evaluation.** Remove the samples and condition for 24 hours under standard
 86 conditions. Determine the directional reflectance and color match using the
 87 procedures in paragraph 3 above. Evaluate for conformance with the color
 88 requirements.

- 88 (5) **Volatile organic content.** Determine the volatile organic content in accordance with 40
89 CFR Part 60 Appendix A, Method 24.
90
91 (6) **Dry opacity.** Use ASTM E2302. The wet film thickness shall be 0.015 inch (0.38 mm).
92 The minimum opacity for white and colors shall be 0.92.
93
94 (7) **Abrasion resistance.** Subject the panels prepared in paragraph 620-2.2c(4) to the abrasion
95 test in accordance with ASTM D968, Method A, except that the inside diameter of the
96 metal guide tube shall be from 0.747 to 0.750 inch (18.97 to 19.05 mm). Five liters (17.5 lb
97 (7.94 kg)) of unused sand shall be used for each test panel. The test shall be run on two
98 test panels Both baked and weathered paint films shall require not less than 150 liters (525
99 lbs (239 kg) of sand for the removal of the paint films.
100
101 (8) **Hardness, shore.** Hardness shall be at least 60 when tested in accordance with ASTM
102 D2240.
103
104 (9) **Additional requirements for methacrylate splatter profiled pavement marking.**
105 Pavement markings of this type shall comply with all above requirements for methacrylate
106 paint, except as noted below:
107
108 (a) The thickness of the marking will be irregular ranging from 0.000 to 0.250
109 inches (0.00 to 6.4 mm), applied in a splatter pattern which comprises a
110 minimum of 80% of the visible line (when traveling at 5 mph the line appears
111 to be solid.).
112
113 (b) **The hardness shall be 48 Shore D minimum.**
114
115 b. **Reflective media.** Glass beads for white and yellow paint shall meet the requirements for
116 Federal Specification TT-B-1325D Type I, Gradation A.
117
118 Glass beads for red and pink paint shall meet the requirements for Type I, Gradation A.
119
120 Glass beads shall be treated with all compatible coupling agents recommended by the
121 manufacturers of the paint and reflective media to ensure adhesion and embedment.
122
123 Glass beads shall not be used in black paint.
124
125
126
127

CONSTRUCTION METHODS

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129 **620-3.1 WEATHER LIMITATIONS.** Painting shall only be performed when the surface is dry, and the
130 ambient temperature and the pavement surface temperature meet the manufacturer's recommendations in
131 accordance with paragraph 620-2.1. Painting operations shall be discontinued when the ambient or surface
132 temperatures does not meet the manufacturer's recommendations. Markings shall not be applied when the
133 wind speed exceeds 10 mph unless windscreens are used to shroud the material guns. Markings shall not be
134 applied when weather conditions are forecasts to not be within the manufacturers' recommendations for
135 application and dry time.
136

137 **620-3.2 EQUIPMENT.** Equipment shall include the apparatus necessary to properly clean the existing
138 surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting
139 equipment as may be necessary to satisfactorily complete the job.
140

141 The mechanical marker shall be an atomizing spray-type or airless type marking machine with automatic glass
142 bead dispensers suitable for application of traffic paint. It shall produce an even and uniform film thickness
143 and appearance of both paint and glass beads at the required coverage and shall apply markings of uniform
144 cross-sections and clear-cut edges without running or spattering and without over spray. The marking
145 equipment for both paint and beads shall be calibrated daily.
146

147 **620-3.3 PREPARATION OF SURFACES.** Immediately before application of the paint, the surface shall
148 be dry and free from dirt, grease, oil, laitance, or other contaminants that would reduce the bond between the
149 paint and the pavement. Use of any chemicals or impact abrasives during surface preparation shall be
150 approved in advance by the DEN Project Manager. After the cleaning operations, sweeping, blowing, or
151 rinsing with pressurized water shall be performed to ensure the surface is clean and free of grit or other
152 debris left from the cleaning process.
153

154 a. **Preparation of new pavement surfaces.** The area to be painted shall be cleaned by broom,
155 blower, water blasting, or by other methods approved by the DEN Project Manager to remove
156 all contaminants, including PCC curing compounds, minimizing damage to the pavement
157 surface.
158

159 b. **Preparation of pavement to remove existing markings.** Existing pavement markings shall be
160 removed by rotary grinding, water blasting, or by other methods approved by the DEN Project
161 Manager minimizing damage to the pavement surface. The removal area may need to be larger
162 than the area of the markings to eliminate ghost markings. After removal of markings on asphalt
163 pavements, apply a fog seal or seal coat to 'block out' the removal area to eliminate 'ghost'
164 markings.
165

166 c. **Preparation of pavement markings prior to remarking.** Prior to remarking existing
167 markings, loose existing markings must be removed minimizing damage to the pavement surface,
168 with a method approved by the DEN Project Manager. After removal, the surface shall be
169 cleaned of all residue or debris.
170

171 Prior to the application of markings, the Contractor shall certify in writing that the surface is dry
172 and free from dirt, grease, oil, laitance, or other foreign material that would prevent the bond of
173 the paint to the pavement or existing markings. This certification along with a copy of the paint
174 manufacturers application and surface preparation requirements must be submitted to the DEN
175 Project Manager prior to the initial application of markings.
176

177 **620-3.4 LAYOUT OF MARKINGS.** The proposed markings shall be laid out in advance of the paint
178 application. The locations of markings to receive glass beads shall be shown on the plans.
179

180 **620-3.5 APPLICATION.** A period of 30 days shall elapse between placement of surface course or seal coat
181 and application of the permanent paint markings. Paint shall be applied at the locations and to the
182 dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the
183 surface has been approved by the DEN Project Manager.
184

185 The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m),
186 and marking dimensions and spacing shall be within the following tolerances:

187
 188

MARKING DIMENSIONS AND SPACING TOLERANCE

Dimension and Spacing	Tolerance
36 inch (910 mm) or less	±1/2 inch (12 mm)
greater than 36 inch to 6 feet (910 mm to 1.85 m)	±1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	±2 inch (50 mm)
greater than 60 feet (18.3 m)	±3 inch (76 mm)

189

190 The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement
 191 with a marking machine at the rate shown in Table 1. The addition of thinner will not be permitted.

192

193 Glass beads shall be distributed upon the marked areas at the locations shown on the plans to receive glass
 194 beads immediately after application of the paint. A dispenser shall be furnished that is properly designed for
 195 attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at
 196 the rate shown in Table 1. Glass beads shall not be applied to black paint or green paint. Glass beads shall
 197 adhere to the cured paint or all marking operations shall cease until corrections are made. Different bead
 198 types shall not be mixed. Regular monitoring of glass bead embedment and distribution should be performed.

199

200 **620-3.6 APPLICATION-PREFORMED THERMOPLASTIC AIRPORT PAVEMENT**
 201 **MARKINGS.** Preformed thermoplastic pavement markings not used

202

203 **620-3.7 CONTROL STRIP.** Prior to the full application of airfield markings, the Contractor shall prepare a
 204 control strip in the presence of the DEN Project Manager. The Contractor shall demonstrate the surface
 205 preparation method and all striping equipment to be used on the project. The marking equipment must
 206 achieve the prescribed application rate of paint and population of glass beads (per Table 1) that are properly
 207 embedded and evenly distributed across the full width of the marking. Prior to acceptance of the control
 208 strip, markings must be evaluated during darkness to ensure a uniform appearance.

209

210 **620-3.8 RETRO-REFLECTANCE.** Reflectance shall be measured with a portable retro-reflectometer
 211 meeting ASTM E1710 (or equivalent). A total of 6 reading shall be taken over a 6 square foot area with 3
 212 readings taken from each direction. The average shall be equal to or above the minimum levels of all readings
 213 which are within 30% of each other.

214

215

MINIMUM RETRO-REFLECTANCE VALUES

Material	Retro-reflectance mcd/m ² /lux		
	White	Yellow	Red
Initial Type I	300	175	35
Initial Type III	600	300	35
Initial Thermoplastic	225	100	35
All materials, remark when less than ¹	100	75	10

216

¹ Prior to remarking determine if removal of contaminants on markings will restore retro-reflectance

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METHOD OF MEASUREMENT

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BASIS OF PAYMENT

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620-3.9 PROTECTION AND CLEANUP. After application of the markings, all markings shall be protected from damage until dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings. The Contractor shall remove from the work area all debris, waste, loose reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the DEN Project Manager. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and federal environmental statutes and regulations.

620-4.1 The quantity of markings for pavement markings, waterborne shall be measured by the number of square feet of painting.

620-4.2 The quantity of markings for pavement markings, methacrylate shall be measured by the number of square feet of painting.

620-4.3 The quantity of reflective media shall be paid for by the number of pounds (km) of reflective media.

620-4.4 The quantity of stop signs shall be paid for by the number of stop signs painted.

620-4.5 The quantity of Type I Roadway Delineators shall be paid for by the total number of delineators installed.

620-5.1 This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item complete in place and accepted by the DEN Project Manager in accordance with these specifications.

620-5.2 Payment for markings for pavement markings, waterborne shall be made at the contract price for by the number of square feet (square meters) of painting.

620-5.3 Payment for markings for pavement markings, methacrylate shall be made at the contract price for by the number of square feet (square meters) of painting.

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM P-620 RUNWAY AND TAXIWAY MARKING
 AC 150/5370-10H

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

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620-5.4 Payment for reflective media shall be made at the contract unit price for the number of pounds (km) of reflective media.

620-5.5 Payment for stop signs shall be made at the contract unit price for the total number of stop signs painted. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item complete in place and accepted by the DEN Project Manager in accordance with these specifications.

620-5.6 Payment for Type I Roadway Delineators shall be made at the contract unit price for the total number of delineators installed. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item complete in place and accepted by the DEN Project Manager in accordance with these specifications.

Payment will be made under:

Item P-620a	Pavement Markings, Waterborne - per square foot
Item P-620b	Pavement Markings, Metacrylate - per square foot
Item P-620c	Reflective Media – per pound
Item P-620d	Stop Sign – per each
Item P-620e	Type I Roadway Delineator – per each

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D476	Standard Classification for Dry Pigmentary Titanium Dioxide Products
ASTM D968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D1652	Standard Test Method for Epoxy Content of Epoxy Resins
ASTM D2074	Standard Test Method for Total, Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D2240	Standard Test Method for Rubber Property - Durometer Hardness
ASTM D7585	Standard Practice for Evaluating Retroreflective Pavement Markings Using Portable Hand-Operated Instruments
ASTM E303	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM P-620 RUNWAY AND TAXIWAY MARKING
 AC 150/5370-10H

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

303	ASTM E1710	Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer
304		
305		
306		
307	ASTM E2302	Standard Test Method for Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer
308		
309		
310		
311	ASTM G154	Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials
312		
313		
314	Code of Federal Regulations (CFR)	
315		
316	40 CFR Part 60, Appendix A-7, Method 24	
317		Determination of volatile matter content, water content, density, volume solids, and weight solids of surface coatings
318		
319		
320	29 CFR Part 1910.1200	Hazard Communication
321		
322	Federal Specifications (FED SPEC)	
323		
324	FED SPEC TT-B-1325D	Beads (Glass Spheres) Retro-Reflective
325		
326	FED SPEC TT-P-1952F	Paint, Traffic and Airfield Marking, Waterborne
327		
328	FED STD 595	Colors used in Government Procurement
329		
330	Commercial Item Description	
331		
332	A-A-2886B	Paint, Traffic, Solvent Based
333		
334	Advisory Circulars (AC)	
335		
336	AC 150/5340-1	Standards for Airport Markings
337		
338	AC 150/5320-12	<u>Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces</u>
339		
340		
341		
342		**END OF ITEM P-620**

ITEM D-701 PIPE FOR STORM DRAINS AND CULVERTS

DESCRIPTION

701-1.1 This item shall consist of the construction of pipe culverts and storm drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans.

MATERIALS

701-2.1 Materials shall meet the requirements shown on the plans and specified below. Underground piping and components used in drainage systems for terminal and aircraft fueling ramp drainage shall be noncombustible and inert to fuel in accordance with National Fire Protection Association (NFPA) 415.

701-2.2 PIPE. The pipe shall be of the type called for on the plans or in the proposal and shall be in accordance with the following appropriate requirements:

ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM C1479	Standard Practice for Installation of Precast Concrete Sewer, Storm Drain, and Culvert Pipe Using Standard Installations
ASTM C1840	Standard Practice for Inspection and Acceptance of Installed Reinforced Concrete Culvert, Storm Drain, and Storm Sewer Pipe
ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings

701-2.3 CONCRETE. Concrete for pipe cradles shall be in accordance with P-610.

701-2.4 RUBBER GASKETS. Rubber gaskets for rigid pipe shall conform to the requirements of ASTM C443. Rubber gaskets for PVC pipe, polyethylene, and polypropylene pipe shall conform to the requirements of ASTM F477. Rubber gaskets for zinc-coated steel pipe and precoated galvanized pipe shall conform to the requirements of ASTM D1056, for the "RE" closed cell grades. Rubber gaskets for steel reinforced thermoplastic ribbed pipe shall conform to the requirements of ASTM F477.

701-2.5 JOINT MORTAR. Pipe joint mortar shall consist of one part Portland cement and two parts sand. The Portland cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

701-2.6 JOINT FILLERS. Poured filler for joints shall conform to the requirements of ASTM D6690.

701-2.7 PLASTIC GASKETS. Plastic gaskets shall conform to the requirements of ASTM C990.

701-2.8. CONTROLLED LOW-STRENGTH MATERIAL (CLSM). Controlled low-strength material shall conform to the requirements of Item P-153. When CLSM is used, all joints shall have gaskets.

50 **701-2.9 PRECAST BOX CULVERTS.** Manufactured in accordance with and conforming to ASTM
51 C1433.

52
53 **701-2.10 PRECAST CONCRETE PIPE.** Precast concrete structures shall be furnished by a plant meeting
54 National Precast Concrete Association Plant Certification Program or American Concrete Pipe Association
55 QCast Plant Certification program.

56 57 58 CONSTRUCTION METHODS

59
60 **701-3.1 EXCAVATION.** The width of the pipe trench shall be sufficient to permit satisfactory jointing of
61 the pipe and thorough tamping of the bedding material under and around the pipe, but it shall not be less
62 than the external diameter of the pipe plus 12 inches (300 mm) on each side. The trench walls shall be
63 approximately vertical.

64
65 The Contractor shall comply with all current federal, state and local rules and regulations governing the safety
66 of men and materials during the excavation, installation and backfilling operations. Specifically, the
67 Contractor shall observe that all requirements of the Occupational Safety and Health Administration (OSHA)
68 relating to excavations, trenching and shoring are strictly adhered to. The width of the trench shall be
69 sufficient to permit satisfactorily jointing of the pipe and thorough compaction of the bedding material under
70 the pipe and backfill material around the pipe, but it shall not be greater than the widths shown on the plans
71 trench detail.

72
73 Where rock, hardpan, or other unyielding material is encountered, the Contractor shall remove it from below
74 the foundation grade for a depth of at least 8 inch (200 mm) or 1/2 inch (12 mm) for each foot of fill over
75 the top of the pipe (whichever is greater) but for no more than three-quarters of the nominal diameter of the
76 pipe. The excavation below grade should be filled with granular material to form a uniform foundation.

77 Where a firm foundation is not encountered at the grade established, due to soft, spongy, or other unstable
78 soil, the unstable soil shall be removed and replaced with approved granular material for the full trench width.
79 The DEN Project Manager shall determine the depth of removal necessary. The granular material shall be
80 compacted to provide adequate support for the pipe.

81
82 The excavation for pipes placed in embankment fill shall not be made until the embankment has been
83 completed to a height above the top of the pipe as shown on the plans.

84
85 In the event of ground water invasion of the trench, the contractor shall be responsible for all dewatering
86 work as subsidiary to the contract pay items. There will be no additional payment for pumping, dewatering
87 wells, over excavation, etc. due to ground water.

88
89 **701-3.2 BEDDING.** The bedding surface for the pipe shall provide a foundation of uniform density to
90 support the pipe throughout its entire length.

91
92 **a. Rigid pipe.** The pipe bedding shall be constructed uniformly for the full length of the pipe
93 barrel, as required on the plans. Bedding shall be in accordance with Item P-153, having a
94 thickness of at least 6 inches (150 mm) below the bottom of the pipe and extending up around
95 the pipe for a depth of not less than 30 percent of the pipe's vertical outside diameter. The layer
96 of bedding material shall cover at least 10 percent of the pipe's vertical diameter. When CLSM is
97 used, all joints shall have gaskets.

98
99 **b. Flexible pipe.** For flexible pipe, the bedding material shall be in accordance with Item P-153.

100
102 c. **Other pipe materials.** For PVC, polyethylene, polypropylene, or fiberglass pipe, the bedding
103 shall be in accordance with D-705.
104

105 **701-3.3 LAYING PIPE.** The pipe laying shall begin at the lowest point of the trench and proceed upgrade.
106 The lower segment of the pipe shall be in contact with the bedding throughout its full length. Bell or groove
107 ends of rigid pipes and outside circumferential laps of flexible pipes shall be placed facing upgrade.
108 Paved or partially lined pipe shall be placed so that the longitudinal center line of the paved segment
109 coincides with the flow line.

110
111 Elliptical and elliptically reinforced concrete pipes shall be placed with the manufacturer's reference lines
112 designating the top of the pipe within five degrees of a vertical plane through the longitudinal axis of the pipe.
113

114 **701-3.4 JOINING PIPE.** Joints shall be made with (1) cement mortar, (2) cement grout, (3) rubber gaskets,
115 (4) plastic gaskets, (5) coupling bands.
116

117 Mortar joints shall be made with an excess of mortar to form a continuous bead around the outside of the
118 pipe and shall be finished smooth on the inside. Molds or runners shall be used for grouted joints to retain
119 the poured grout. Rubber ring gaskets shall be installed to form a flexible watertight seal.
120

121 a. **Concrete pipe.** Concrete pipe may be either bell and spigot or tongue and groove. Pipe sections
122 at joints shall be fully seated and the inner surfaces flush and even. Concrete pipe joints shall be
123 sealed with butyl mastic meeting ASTM C990 or mortar when soil tight joints are required. Joints
124 shall be thoroughly wetted before applying mortar or grout.
125

126 b. **Metal pipe.** Metal pipe shall be firmly joined by form-fitting bands conforming to the
127 requirements of ASTM A760 for steel pipe and AASHTO M196 for aluminum pipe.
128

129 c. **PVC, Polyethylene, or Polypropylene pipe.** Joints for PVC, Polyethylene, or Polypropylene
130 pipe shall conform to the requirements of ASTM D3212 when leak resistant joints are required.
131 Joints for PVC and Polyethylene pipe shall conform to the requirements of AASHTO M304
132 when soil tight joints are required. Fittings for polyethylene pipe shall conform to the
133 requirements of AASHTO M252 or ASTM M294. Fittings for polypropylene pipe shall conform
134 to ASTM F2881, ASTM F2736, or ASTM F2764.
135

136 d. **Fiberglass pipe.** Joints and fittings shall be as detailed on the plans and in accordance with the
137 manufacturers recommendations.
138

139 **701-3.5 EMBEDMENT AND OVERFILL.** Pipes shall be inspected before any fill material is placed; any
140 pipes found to be out of alignment, unduly settled, or damaged shall be removed and re-laid or replaced at
141 the Contractor's expense.
142

143 **701-3.5-1 EMBEDMENT MATERIAL REQUIREMENTS**

144

145 a. **Concrete Pipe.** Embedment material and compaction requirements shall be in accordance with
146 the applicable Type of Standard Installation (Types 1, 2, 3, or 4) per ASTM C1479. If a concrete
147 cradle or CLSM embedment material is used, it shall conform to the plan details.
148

149 b. **Plastic and fiberglass Pipe.** Embedment material shall meet the requirements of ASTM
150 D3282, A-1, A-2-4, A-2-5, or A-3. Embedment material shall be free of organic material, stones

151 larger than 1.5 inches in the greatest dimension, or frozen lumps. Embedment material shall
152 extend to 12 inches above the top of the pipe.

153
154 **c. Metal Pipe.** Embedment material shall be granular as specified in the contract document and
155 specifications, and shall be free of organic material, rock fragments larger than 1.5 inches in the
156 greatest dimension and frozen lumps. As a minimum, backfill materials shall meet the
157 requirements of ASTM D3282, A-1, A-2, or A-3. Embedment material shall extend to 12 inches
158 above the top of the pipe.

159
160 **701-3.5-2 PLACEMENT OF EMBEDMENT MATERIAL.** The embedment material shall be compacted in
161 layers not exceeding 6 inches (150 mm) on each side of the pipe and shall be brought up one foot (30 cm)
162 above the top of the pipe or to natural ground level, whichever is greater. Thoroughly compact the
163 embedment material under the haunches of the pipe without displacing the pipe. Material shall be brought
164 up evenly on each side of the pipe for the full length of the pipe.

165
166 When the top of the pipe is above the top of the trench, the embedment material shall be compacted in layers
167 not exceeding 6 inches (150 mm) and shall be brought up evenly on each side of the pipe to one foot (30 cm)
168 above the top of the pipe. All embedment material shall be compacted to a density required under Item P-
169 152.

170
171 Concrete cradles and flowable fills, such as controlled low strength material (CLSM) or controlled density fill
172 (CDF), may be used for embedment provided adequate flotation resistance can be achieved by restraints,
173 weighing, or placement technique.

174
175 It shall be the Contractor's responsibility to protect installed pipes and culverts from damage due to
176 construction equipment operations. The Contractor shall be responsible for installation of any extra strutting
177 or backfill required to protect pipes from the construction equipment.

178
179 **701-3.6 OVERFILL.** Pipes shall be inspected before any overfill is in place. Any pipes found to be out of
180 alignment, unduly settled, or damaged shall be removed and relaid or replaced at the Contractor's expense.
181 Evaluation of any damage to RCP shall be evaluated based on AASHTO R73.

182
183 Overfill material shall be placed and compacted in layers as required to achieve compaction to at least 95
184 percent standard proctor per ASTM D698. The soil shall contain no debris, organic matter, frozen material,
185 or stones with a diameter greater than one half the thickness of the compacted layers being placed.

186
187 **701-3.7 INSPECTION REQUIREMENTS.** An initial post installation inspection shall be performed by the
188 DEN Project Manager no sooner than 30 days after completion of installation and final backfill. Clean or
189 flush all lines prior to inspection.

190
191 **701-3.8 QUALITY ASSURANCE/QUALITY CONTROL**

192
193
194 **a. Qualifications.**

195
196 **(1) Pipe Manufacturer:** The Contractor shall submit verifiable information of satisfactory
197 manufacturing experience for the past 5 years with design and fabrication of reinforced
198 concrete pipe of similar size and design.

199
200 **(2) Installer:** Contractor shall submit verifiable information of satisfactory experience in the
201 installation of reinforced concrete storm sewer pipe of similar size and extent, with a

202 minimum of 5 years experience.

203

204 **b. Testing.** All pipe shall be certified by the pipe manufacturer.

205

206 **(1) Yard testing of Pipe for Certification.** Testing shall be performed in accordance with
207 ASTM C 443 on a minimum of two (2) lengths of pipe and one (1) complete joint for
208 every 500 linear feet of pipe, or less.

209

210 **(2) Testing of Installed Pipe.** ASTM C 1103 shall be followed to field test pipe joints. The
211 test procedure shall be used for joint acceptance of all installed concrete pipe. All field
212 joints shall be tested and certified before backfilling operations are allowed to begin.

213

214 Acceptance testing may involve hazardous materials, operations and equipment. These
215 specifications do not address the safety problems associated with the testing procedures. It
216 is the responsibility of the Contractor to establish appropriate safety and health practices.

217

218 **(3) Repair of Joints that Test as Unacceptable.** In the event of a reinforced concrete pipe
219 joint failing the in-place pressure test, identified above, the Contractor shall repair the joint
220 by injecting a chemical grout into the joint circumference.

221

222 The chemical grout shall be a non-flammable liquid which, when activated by water, forms
223 a flexible closed-cell polyurethane foam. The chemical grout shall be resistant to petroleum
224 products. The chemical grout shall be DE NEEF® Flex LV PURE or DE NEEF® Flex
225 SLV PURE, as applicable, manufactured by GCP Applied Technologies Inc., Cambridge,
226 MA 02140, or approved equal. Chemical grout shall be prepared, mixed, injected and
227 cured in accordance with the manufacturer's recommendations.

228

229 The equipment used to inject the chemical grout shall be of construction similar to that of
230 the pressure testing equipment. Chemical grout shall be injected into the joint at a
231 minimum 40 psi to insure the grout penetrates through the leak to the outside of the joint.

232

233 After injecting the chemical grout, the injection valves shall be shut off to prevent
234 backflow of the grout. The chemical grout shall have adequate time to cure prior to
235 removal of the injection equipment. The joint shall be retested after repair in accordance
236 with the pressure testing procedure described in these specifications.

237

238 **(4) Gasket Material Test.** Gaskets may be exposed to petroleum products. Gasket material
239 shall be certified to have complied with ASTM C 443 and petroleum resistant
240 characteristics of ASTM C 361.

241

242 **(5) Backfill Tests.** Refer to Section P-152 for test and test frequency.

243

244 **c. Submittals.** The Contractor shall make the following submittals to the Project Manager for
245 review and approval, or testing, as the case may be:

246

247 **(1) Pipe Design and Detail Drawings.** If the Contractor elects to use an alternate pipe, then
248 the Contractor shall prepare or cause to be prepared, complete design calculations, plans,
249 cross-sections, shop details for all pipe and accessories, and trench shoring/bracing system
250 design for all trenches 20 feet in depth or greater. All final design calculations, plans, and
251 shop drawings shall be sealed by a currently registered Professional Engineer in the State

- 252 of Colorado whose disciplines is in the field of civil or structural engineering.
 253
 254 **(2) Qualifications.** Refer to 701-3.8a.
 255
 256 **(3) Pipe Certification.** The Contractor shall submit the results and certifications for tested
 257 pipe made in the pipe manufacturer's shop (refer to Part 701-3.8a.(1)). The Contractor
 258 shall further provide certification of each spool piece of pipe as it is delivered to the job
 259 site. This certification shall accompany the pipe bill of lading.
 260
 261 **d. Pipe Field Joint Test Certification.** The Contractor shall maintain records of all pipe joint
 262 tests. A copy of these test records shall be turned over to the Project Manager with a letter
 263 certifying that all joints under construction have been tested in accordance with the specifications
 264 for joint seal and integrity.
 265
 266 **e. Pipe Manufacturer's QA/QC Program.** The manufacturer of reinforced concrete pipe shall
 267 have in place at all times an active Quality Assurance and Quality Control Program. A written
 268 copy of this program shall be on file in the manufacturer's shop at all times. The Contractor shall
 269 submit copies of the QA/QC Program to the Project Manager for review and approval prior to
 270 the start of manufacture of pipe.
 271
 272 **f. Mill Test Certificates.** The pipe manufacturer to retain on file a copy of mill certification
 273 reports for the reinforcing steel and cement used in the manufacture of the concrete pipe. An
 274 appropriate number of copies of said certifications shall be submitted to the Project Manager.
 275
 276 **g. Pipe Gasket Certification Test.** The Contractor shall selectively test the "O" ring synthetic
 277 rubber gasket material at an approved independent testing laboratory. Certified results shall be
 278 submitted to the Project Manager for review and approval.
 279
 280 **h. Inspection.** All pipe shall be inspected at the yard prior to shipment, at the point of receipt and
 281 when placed in the trench prior to backfilling. The Project Manager shall inspect all pipe to be
 282 used for damage prior to installation. Pipe shall be inspected for damage and compliance to the
 283 manufacturer's specifications and Contract Drawings. Units that are damaged shall be evaluated
 284 for the extent of damage. If, in the opinion of the Project Manager, damage is extensive enough
 285 to reduce the strength, durability, integrity, or ability to properly function with other parts of an
 286 installation (i.e. joint damage), the unit shall be rejected and the Contractor shall immediately
 287 remove the unit from the Project site. The Contractor may repair minor damage, if so authorized
 288 by the Project Manager, but at no cost to the City.
 289
 290

METHOD OF MEASUREMENT

293 **701-4.1** The length of pipe shall be measured in linear feet (m) of pipe in place, completed, and accepted. It
 294 shall be measured along the centerline of the pipe from end or inside face of structure to the end or inside
 295 face of structure, whichever is applicable. Each class, types and size of pipe shall be measured separately. All
 296 fittings shall be included in the footage as typical pipe sections in the pipe being measured.
 297

298 **701-4.2** Flared end sections shall be measured by the unit.
 299
 300

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM D-701 PIPE FOR STORM DRAINS AND CULVERTS
 AC 150/5370-10H

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

BASIS OF PAYMENT

701-5.1 These prices shall fully compensate the Contractor for furnishing all materials and for all preparation, excavation, and installation of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the item.

701-5.2 Payment will be made at the contract unit price per linear foot (meter) for each class and size of pipe.

701-5.3 Payment will be made at the contract unit price per each for flared end sections.

Payment will be made under:

Item D-701a	Install 24" Class V RCP - per linear foot
Item D-701b	Install 30" Class V RCP - per linear foot
Item D-701c	Install 36" Class V RCP - per linear foot
Item D-701d	Install 48" Class V RCP - per linear foot
Item D-701e	Install 24" FES - per each
Item D-701f	Install 48" FES - per each
Item D-701g	Remove 30" RCP - per linear foot

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M167	Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M190	Standard Specification for Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe Arches
AASHTO M196	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
AASHTO M219	Standard Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M243	Standard Specification for Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
AASHTO M252	Standard Specification for Corrugated Polyethylene Drainage Pipe
AASHTO M294	Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter
AASHTO M304	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter

351	AASHTO MP20	Standard Specification for Steel Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 900-mm (12- to 36-in.) Diameter
352		
353		
354	ASTM International (ASTM)	
355		
356	ASTM A760	Standard Specification for Corrugated Steel Pipe, Metallic Coated for Sewers and Drains
357		
358		
359	ASTM A761	Standard Specification for Corrugated Steel Structural Plate, Zinc Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
360		
361		
362	ASTM A762	Standard Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains
363		
364		
365	ASTM A849	Standard Specification for Post-Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe
366		
367		
368	ASTM B745	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
369		
370		
371	ASTM C14	Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe
372		
373		
374	ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
375		
376		
377	ASTM C94	Standard Specification for Ready Mixed Concrete
378		
379	ASTM C144	Standard Specification for Aggregate for Masonry Mortar
380		
381	ASTM C150	Standard Specification for Portland Cement
382		
383	ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
384		
385		
386	ASTM C506	Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
387		
388		
389	ASTM C507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe
390		
391		
392	ASTM C655	Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain and Sewer Pipe
393		
394		
395	ASTM C990	Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
396		
397		
398	ASTM C1433	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
399		
400		

401	ASTM D1056	Standard Specification for Flexible Cellular Materials Sponge or Expanded Rubber
402		
403		
404	ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
405		
406		
407	ASTM D3212	Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
408		
409		
410	ASTM D3262	Standard Specification for "Fiberglass" (Glass-Fiber Reinforced Thermosetting Resin) Sewer Pipe
411		
412		
413	ASTM D3282	Standard Practice for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
414		
415		
416	ASTM D4161	Standard Specification for "Fiberglass" (Glass-Fiber Reinforced Thermosetting Resin) Pipe Joints Using Flexible Elastomeric Seals
417		
418		
419	ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements
420		
421		
422	ASTM F477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
423		
424		
425	ASTM F667	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings
426		
427		
428	ASTM F714	Standard Specification for Polyethylene (PE) Plastic Pipe (DR PR) Based on Outside Diameter
429		
430		
431	ASTM F794	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe & Fittings Based on Controlled Inside Diameter
432		
433		
434	ASTM F894	Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe
435		
436		
437	ASTM F949	Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings
438		
439		
440	ASTM F2435	Standard Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe
441		
442		
443	ASTM F2562	Specification for Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage
444		
445		
446	ASTM F2736	Standard Specification for 6 to 30 in. (152 to 762 mm) Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe
447		
448		

ITEM D-710 ROCK RIPRAP

DESCRIPTION

710-2.1 This item shall consist of furnishing and placing of rock riprap as shown on the plans and called for in these specifications. Placing of riprap will include all bedding, fabric (if applicable), grout, and stones as indicated on the plans or as directed by the DEN Project Manager.

MATERIALS

710-3.1 STONE. All stone for rock riprap shall be sound, durable, and free from seams, cracks, and other defects and shall be as nearly rectangular as practicable. The stone shall have a specific gravity of at least 2.5. Broken concrete pieces obtained from the project may be used providing they meet the requirements contained herein.

a. Classification and Gradation of Riprap:

- (1) Type "M". Maximum size for Type "M" shall be 1 cubic foot with the maximum dimension 21 inches. Minimum dimension shall be 4 inches. The stone shall be well graded between 4 inches and 21 inches. Gradation shall meet the requirements of Table 1 below.
- (2) Type "VH". Maximum size for Type "VH" shall be 8 cubic feet with the maximum dimension 42 inches. Minimum dimension shall be 9 inches. The stone shall be well graded between 9 inches and 42 inches. Gradation shall meet the requirements of Table 1 below.

Table 1.

Riprap Designation	% Smaller Than Given Size By Weight	Intermediate Rock Dimension Inches	d ₅₀ * inches
Type M	70-100	21	12
	50-70	18	
	35-50	12	
	2-10	4	
Type VH	100	42	24
	50-70	33	
	35-50	24	
	2-10	9	

*d₅₀ = Mean particle size

Broken concrete pieces may be used in lieu of natural rock provided the dimensional requirements above are met, the pieces are sound and durable, and the material is approved by the DEN Project Manager prior to placing.

The nominal thickness of the completed riprap section, regardless of the type specified, shall be 1.5 times the mean diameter of the rock specified in Tables 1, 2, 3 and/or 4 of this specification.

710-3.2 BEDDING MATERIAL. The free draining material shall consist of a Colorado Department of Transportation (CDOT) Specification; Class B or Class C filter material, reference Table 5 below. Type L riprap shall use CDOT Class A bedding material, referenced in Table 5 below.

Table 5. Gradation Specifications for Filter Material

Sieve Size	Mass Percent Passing square Mesh Sieves		
	Class A	Class B	Class C
3"	100		
1 1/2"		100	
3/4"	20-90		100
No. 4	0-20	20-60	60-100
No.16		10-30	
No. 50		0-10	10-30
No. 100			0-10
No. 200	0-3	0-3	0-3

710-3.3 FILTER FABRIC. The filter fabric material to be placed under the non-grouted rock riprap shall be a non-woven polypropylene fabric having the following properties:

- a. Weight 8 ounces/square yard
- b. Tensile strength, wet Warp direction – 200 pounds
- c. Fill direction 275 pounds
- d. Mullen Burst (ASTM D 751) 400 psi
- e. Elongation-at-break 75 percent

710-3.4 CEMENT GROUT. Grout shall be composed of 560 pounds cement per cubic yard conforming to the requirements of ASTM C 150 Type I/II, 70 percent fine aggregate conforming to the requirements of ASTM C 33, and 30 percent No. 8 coarse aggregate conforming to the requirements of ASTM C 33, Class 4S.

The grout shall have an air content of 6 – 9% when tested in accordance with ASTM C 231, a slump of 5 – 9 inches when tested in accordance with ASTM C 143, and a minimum 28-day compressive strength of 2000 psi when sampled in accordance with ASTM C 31 and tested in accordance with ASTM C 39.

710-3.5 TESTING LABORATORY. The laboratory used to develop the grout mix design shall meet the requirements of ASTM C 1077 including accreditation. Accreditation shall include all test procedures required to develop the mix design. A certification signed by the manager of the laboratory stating it meets these requirements shall be submitted to the DEN Project Manager. The certification shall contain as a minimum:

- a. Qualifications of personnel; including the laboratory manager, supervising technician, and testing technicians involved in developing the mix design.
- b. Evidence of accreditation by a nationally recognized laboratory accreditation organization for all test methods used in developing the mix design.

80 **710-3.6 SUBMITTALS.** Contractor shall submit certification that the product delivered to the project
81 site will have values equal to or greater than those specified above.
82

- 83 a. Stone – Certification of Compliance detailing gradation and specific gravity.
84
85 b. Bedding Material – Certification of Compliance showing gradation.
86
87 c. Filter Fabric – Certification of Compliance.
88
89 d. Grout – The Contractor shall submit a mix design including all proposed materials to the
90 DEN Project Manager for the Grout at least thirty (30) days prior to use. The mix design and
91 materials will not be approved when the laboratory trial mix is older than two (2) years and
92 the Certificates of Compliance for the materials are the results from tests performed more
93 than one (1) year in the past.
94
95

96 CONSTRUCTION METHODS

97
98 **710-4.1 EXCAVATION.** The slopes shall be finished to a reasonably smooth and compact surface within
99 2 inches of the lines, surfaces, and elevations shown on the plans.
100

101 **710-4.2 ROCK RIPRAP.** The filter fabric shall be spread on the prepared subgrade to provide a
102 continuous, smooth, surface. After placing bedding material, the stone shall be spread on the filter fabric
103 so as to produce a compact, well graded mass of minimum voids. Spreading shall be done so as to cause
104 as little disturbance to the filter fabric as possible. Some rearranging of individual pieces may be required,
105 either by hand or equipment, to obtain a reasonably uniform surface.
106

107 **710-4.3 GROUTED RIPRAP.** When grouted riprap is specified, the stone shall be laid as set forth above
108 for rock riprap, except that filter fabric is not required. The spaces between the stones shall then be filled
109 with grout. Sufficient grout shall be used to completely fill all voids, except that the face surface of the
110 stone shall be left exposed. After grouting is completed, the surface shall be cured for a period of at least
111 three days.
112

113 **710-4.4 BATCH TICKETS.** A sample copy of the proposed batch ticket shall be submitted to the DEN
114 Project Manager for approval. Two copies of the batch ticket shall also be provided to the DEN Project
115 Manager or his representative for each batch of concrete prior to unloading at the site. Grout delivered
116 without a batch ticket containing complete information as specified shall be rejected. The Contractor shall
117 collect and complete the batch ticket at the placement site and deliver all batch tickets to the DEN Project
118 Manager's representative on a daily basis. The DEN Project Manager shall have access to the batch tickets
119 at any time during the placement. The following information shall be provided on each batch ticket:
120

- 121 a. Supplier's name and date
122
123 b. Truck number
124
125 c. Project number and location
126
127 d. Cubic yards batched
128
129 e. Time batched
130
131 f. Mix design number

132

133

g. Type, brand, and amount of each admixture

134

135

h. Type, brand, and amount of cement

136

137

i. Weights of fine and coarse aggregate

138

139

j. Moisture of fine and coarse aggregate

140

141

k. Gallons of batch water (including ice)

142

143

l. Water cement ration

144

145

m. Amount of water that can be added to the load prior to placement

146

147

The Contractor shall add the following information to the batch ticket at the placement site:

148

149

n. Gallons of water added by truck operator plus quantity of concrete in each truck each time water is added.

150

151

o. Number of revolutions of drum at mixing speed (for truck mixed concrete)

152

153

p. Discharge time

154

155

q. Location of batch in placement.

156

157

158

710-4.5 MIXING CONDITIONS. The grout shall be mixed only in quantities required for immediate use. Grout shall not be mixed while the air temperature is below 40°F without permission of the DEN Project Manager. If permission is granted for mixing under such conditions, aggregates or water, or both, shall be heated and the grout shall be placed at a temperature not less than 50°F nor more than 90°F. The Contractor shall be held responsible for any defective work, resulting from freezing or injury in any manner during placing and curing, and shall replace such work at his/her expense.

159

160

161

162

163

164

165

If the slump or air content of the load is below the specified amount at the time of arrival, the load can be adjusted prior to placement at the approval of the Contractor's Superintendent or authorized agent. Additional mixing shall be required as specified in ASTM C 94. Once placement has begun, no further adjustment shall be made. When additional water is added to the load the design water cement ratio shall not be exceeded. The amount of water that can be added to the load shall also be included on the batch ticket. Retempering of grout by adding water or any other material shall not be permitted.

166

167

168

169

170

171

172

The delivery of grout to the job shall be in such a manner that batches of grout will be deposited at uninterrupted intervals after placement has begun.

173

174

175

710-4.6 ACCEPTANCE SAMPLING AND TESTING. Grout will be accepted on the basis of the compressive strength specified in paragraph 2.4. The grout shall be sampled at the point of placement in accordance with ASTM C 172. Concrete cylindrical test specimens shall be made in accordance with ASTM C 31 and tested in accordance with ASTM C 39. Concrete strengths for acceptance shall be the average of at least two 6 by 12 in. or at least three 4 by 8 in. cylinders tested at 28 days. The grout shall be sampled every fifty cubic yards, or fraction thereof, per day. The contractor shall provide a suitable area or container at the project site for initial storage and curing (up to the first 48 hours after molding) of specimens cast for acceptance purposes. The container shall be capable of maintaining a temperature range of 60 to 80°F.

176

177

178

179

180

181

182

183 The DEN Project Manager's Quality Assurance Laboratory will make the actual tests on the specimens at
184 no expense to the Contractor.

185

186

187

METHOD OF MEASUREMENT

188

189 **710-5.1** Type "M" rock riprap grouted shall be measured by the cubic yard, to the dimensions of the riprap
190 as shown on the plans or as directed by the DEN Project Manager. Excavation, bedding, geotextile fabric,
191 and grout are included in the contract unit price for Type "M" riprap and no separate measurement of
192 payment will be made for them.

193

194 **710-5.2** ~~Type "H" rock riprap grouted~~ Removal and Stockpiling of Existing Type "VH" riprap shall be
195 measured by the cubic yard, to the dimensions of the riprap as shown on the plans or as directed by the
196 DEN Project Manager. Excavation, bedding, geotextile fabric, and grout are included in the contract unit
197 price for ~~Type "H"~~ Remove and Stockpile Existing Type "VH" riprap and no separate measurement of
198 payment will be made for them.

199

200 **710-5.3** Grouted Type "VH" Riprap (From On-site Stockpile) shall be measured by the cubic yard, to the
201 dimensions of the riprap as shown on the plans or as directed by the DEN Project Manager. Excavation,
202 bedding, geotextile fabric, and grout are included in the contract unit price for Grouted Type "VH" Riprap
203 (From On-site Stockpile) and no separate measurement of payment will be made for them.

204

205 **710-5.4** Grouted Type "VH" Riprap (New) shall be measured by the cubic yard, to the dimensions of the
206 riprap as shown on the plans or as directed by the DEN Project Manager. Excavation, bedding, geotextile
207 fabric, and grout are included in the contract unit price for Grouted Type "VH" Riprap (New) and no
208 separate measurement of payment will be made for them.

209

210

BASIS OF PAYMENT

211

212
213 **710-6.1** The accepted quantity of Type "M" rock riprap grouted will be paid for at the contract unit price
214 per cubic yard. The price shall be full compensation for furnishing and placing all material and for all labor,
215 equipment, tools, and incidentals necessary to complete the work prescribed in this item.

216

217 **710-6.2** The accepted quantity of ~~Type "H" rock riprap grouted~~ Remove and Stockpile Existing Type
218 "VH" will be paid for at the contract unit price per cubic yard. The price shall be full compensation for
219 furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete
220 the work prescribed in this item.

221

222 **710-6.3** The accepted quantity of Grouted Type "VH" Riprap (From On-site Stockpile) will be paid for at
223 the contract unit price per cubic yard. The price shall be full compensation for furnishing and placing all
224 material and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in
225 this item.

226

227 **710-6.4** The accepted quantity of Grouted Type "VH" Riprap (New) will be paid for at the contract unit
228 price per cubic yard. The price shall be full compensation for furnishing and placing all material and for
229 all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

230

231

TECHNICAL SPECIFICATIONS
DIVISION 2-AIRFIELD STANDARDS
ITEM D-710 ROCK RIPRAP

DENVER INTERNATIONAL AIRPORT
TAXIWAY EE GRADING, DRAINAGE,
PAVING, AND LIGHTING
CONSTRUCTION CONTRACT NO. 202158849

232 Payment will be made under:

233

234

Item D-710a Grouted Type "M" Riprap – Per Cubic Yard

235

~~Item D-710b Grouted Type "H" Riprap – Per Cubic Yard~~

236

Item D-710b Remove and Stockpile Existing Type "VH" Riprap – Per Cubic Yard

237

Item D-710c Grouted Type "VH" Riprap (From On-Site Stockpile) – Per Cubic Yard

238

Item D-710d Grouted Type "VH" Riprap (New) – Per Cubic Yard

239

240

241

TESTING REQUIREMENTS

242

243

ASTM C 31 Making and Curing Test Specimens in the Field

244

245

ASTM C 39 Compressive Strength of Cylindrical Concrete Specimens

246

247

ASTM C 138 Unit Weight, Yield, and Air Content of Concrete

248

249

ASTM C 143 Slump of Hydraulic Cement Concrete

250

251

ASTM C 172 Practice for Sampling Freshly Mixed Concrete.

252

253

ASTM C 231 Air Content of Freshly Mixed Concrete by the Pressure Method

254

255

MATERIAL REQUIREMENTS

256

257

ASTM C 33 Concrete Aggregates

259

260

ASTM C 94 Ready Mixed Concrete

261

262

ASTM C 150 Portland Cement

263

264

ASTM C 260 Air Entraining Admixtures for Concrete

265

266

ASTM D 751 Coated Fabric

267

268

269

****END OF ITEM D-710****

270

ITEM L-160 TEMPORARY GENERATORS

DESCRIPTION

160-1.1 This item shall consist of furnishing, connecting, and operating temporary generators to provide power to the equipment specified in the plans. Temporary generators may be used as the prime power source for FAA navaids or other equipment on the airfield or may be used as a backup/standby power source in the event of a utility power outage. Equipment shall be installed in accordance with the details in the plans, this specification, and any referenced specifications or standards. The equipment shall be installed at the locations and in accordance with the dimensions, layout, design, and details shown in the plans. This item shall include furnishing and installing all equipment, wiring, circuit breakers, cable, conduit, grounding systems, cable connections, testing of the installation, and all incidentals and appurtenances necessary to place the systems in operation as completed units to the satisfaction of the DEN Project Manager.

EQUIPMENT AND MATERIALS

160-2.1 GENERAL.

- a.** All equipment and materials covered by referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification when requested by the DEN Project Manager.
- b.** Manufacturer's certifications shall not relieve the Contractor of the responsibility to provide materials per these specifications. Materials supplied and/or installed that do not comply with these specifications shall be removed (when directed by the DEN Project Manager) and replaced with materials that comply with these specifications at the Contractor's cost.
- c.** All materials and equipment used to construct this item shall be submitted to the DEN Project Manager for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify products or models applicable to this project. Indicate all optional equipment and delete any non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment to which they apply on each submittal sheet. Markings shall be made bold and clear with arrows or circles (highlighting is not acceptable). The Contractor is solely responsible for delays in the project that may accrue directly or indirectly from late submissions or resubmissions of submittals.
- d.** The data submitted shall be sufficient, in the opinion of the DEN Project Manager, to determine compliance with the plans and specifications. The Contractor's submittals shall be provided in electronic pdf format, tabbed by specification section. The DEN Project Manager reserves the right to reject any and all equipment, materials or procedures that do not meet the system design and the standards and codes, specified in this document.

160-2.2 GENERATORS. Generators shall be supplied in the sizes, output voltage, and configurations specified. All generators shall be powered by diesel engines and shall be rated for continuous operation at their rated output power. Generators are to be furnished on a temporary basis and shall be on site for the duration of elements of work or event specified in the plans. Generators shall be removed from the project site at the

51 completion of the elements of work or events specified. Generators and associated equipment will remain the
52 contractor's property and will not be turned over to DEN or the FAA. Except where specifically called out,
53 new generators and associated equipment are not required. Generators and associated equipment may be used
54 or rented from an equipment rental agency.
55

56 57 INSTALLATION

58
59 **160-3.1 Standby Power Generators.** Prior to the start of work elements specified in the plans, the contractor
60 shall stage generators at the locations shown. All materials, including wire, cables, connectors, circuit breakers,
61 disconnect switches, etc. required for a complete installation shall be onsite at the contractor's yard or staged
62 at the facility location. In the event of a power outage, the contractor shall be prepared to connect and operate
63 the generator as quickly as possible. The contractor shall have electricians on call 24 hours per day during the
64 specified work elements prepared to respond to a power outage. Generators shall be rated for continuous
65 operation at their rated output power. In the event of an outage, the contractor shall connect the generator to
66 provide power to the facility per the details in the plans. The generator shall be operated for the duration of
67 the outage. The contractor shall provide all fuel and maintenance required to operate the generator for the
68 duration of the outage. Install equipment and provide locks as required to ensure that electricity can not be
69 backedfed from generator to utility transformer.
70

71 **160-3.2 Prime Power Generators.** At locations where commercial utility power to a facility is scheduled to
72 be disrupted, the contractor shall furnish and connect a generator per the details in the plans. The generator
73 shall be operated as the primary power source for the facility for the duration of the outage. The contractor
74 shall provide all materials, including wire, cables, connectors, circuit breakers, disconnect switches, etc. shown
75 on the plans and required for a complete installation. Generators shall be rated for continuous operation at
76 their rated output power. The contractor shall provide all fuel and maintenance required to operate the
77 generator for the duration of the outage.
78

79 **160-3.3 Installation of Generator Inlets.** Where shown on the plans, the contractor shall install a pin and
80 sleeve power inlet and a double throw disconnect switch to allow for connection to a generator in the event of
81 an outage of utility power. The inlet, double throw switch, conduit, conductors, etc. shall be of the types and
82 sizes shown on the drawings. The installation shall meet the requirements of the National Electrical Code.
83 Generator inlet and all associate materials and equipment shall be new.
84

85 86 METHOD OF MEASUREMENT

87
88 **160-4.1** The quantity of generators to be furnished under this item will be the number of each size and
89 configuration as specified. This item shall include furnishing all ancillary materials and parts, including, but not
90 limited to, cables, switches, circuit breakers, connectors, and fittings required for a complete installation. This
91 item includes furnishing, delivery, and removal of equipment only. Connection of generator to existing facilities
92 will be paid under a separate item. Operation and maintenance of generators will also be paid under a separate
93 item.
94

95 **160-4.2** The quantity generators to be connected under this item will be the number of each generator size and
96 configuration connected so that it can provide power to an airport facility. This item shall include all labor and
97 tools required to make generators operational to provide power to an airport facility. This item will only be
98 paid if there is a power outage, and the contractor is directed to connect a generator. If a generator is not
99 connected and used to supply power to a facility, no payment will be made under this item.
100

101 **160-4.3** The quantity of generators to be operated under this item will be the number of per day (24 hours per
 102 day) each size of generator is in use to supply power to a facility. This item will be paid to the nearest 1/4 of a
 103 day. This item shall include all maintenance and fuel required to keep the generator operational. The contractor
 104 shall supply as required to keep generators running continually when needed. If a generator is not used to
 105 supply power to a facility, no payment will be made under this item.
 106
 107

BASIS OF PAYMENT

108
 109
 110 **160-5.1** Payment will be made at the contract unit price for each generator furnished, connected, or operated
 111 or each pin and sleeve inlet installed. This price shall be full compensation for furnishing all materials and for
 112 all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals
 113 necessary to complete the item.
 114

115
 116 Payment will be made under:
 117

118	Item L-160a	Furnish 250kW Generator for 35L ALSFII/17R LOC Temp Power (208Y/120V, 3-phase) – per each
119	Item L-160b	Connect 250kW Generator for 35L ALSFII/17R LOC Temp Power – per each
120	Item L-160c	Operate 250kW Generator – per day
121	Item L-160d	Furnish 50kW Generator for RTR-A Temp Power (208Y/120V, 3-phase) – per each
122	Item L-160e	Furnish 50kW Generator for RTR-B Temp Power (208Y/120V, 3-phase) – per each
123	Item L-160f	Furnish 50kW Generator for ASDE Temp Power (208Y/120V, 3-phase) – per each
124	Item L-160g	Furnish 50kW Generator for 17R MALSR/35L LOC Temp Power (120/240V, 1-phase) – per each
125	Item L-160h	Install 100A Power Inlet at RTR-A or RTR-B – per each
126	Item L-160i	Connect 50kW Generator for ASDE Temp Power – per each
127	Item L-160j	Connect 50kW Generator for 17R MALSR/35L LOC Temp Power – per each
128	Item L-160k	Operate 50kW Generator – per day
129	Item L-160l	Furnish 30kW Generator for 17R GS or 35L GS Temp Power (120/240V, 1-phase) – per each
130	Item L-160m	Furnish 30kW Generator for DEN VOR Temp Power (120/240V, 1-phase) – per each
131	Item L-160n	Connect 30kW Generator for 17R GS or 35L GS Temp Power – per each
132	Item L-160o	Connect 30kW Generator for DEN VOR Temp Power – per each
133	Item L-160p	Operate 30kW Generator – per day
134	Item L-160q	Furnish 15kW Generator for RTR-E Temp Power (120/240V, 1-phase) – per each
135	Item L-160r	Operate 15kW Generator for RTR-E Temp Power – per each
136	Item L-160s	Furnish 10kW Generator for Midfield RVR Temp Power (120/240V, 1-phase) – per each
137	Item L-160t	Connect 10kW Generator for Midfield RVR Temp Power – per each
138	Item L-160u	Operate 10kW Generator – per day
139	Item L-160v	Furnish 5kW Generator for ASOS Temp Power (240V, 1-phase) – per each

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM L-160 TEMPORARY GENERATORS

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

151	Item L-160w	Connect 5kW Generator for ASOS Temp Power – per each
152	Item L-160x	Operate 5kW Generator – per day
153	Item L-160y	Furnish 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power (120V, 1-phase) – per each
154		
155	Item L-160z	Connect 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power – per each
156		
157	Item L-160aa	Operate 1.8kW Generator – per day
158		
159		

REFERENCES

160		
161		
162	Commercial Item Description (CID)	
163		
164	A-A 59544	Cable and Wire, Electrical (Power, Fixed Installation) Institute of Electrical and Electronic Engineers (IEEE)
165		
166		
167	Underwriters Laboratories (UL)	
168		
169	UL Standard 6	Electrical Rigid Metal Conduit – Steel
170		
171	UL Standard 514B	Conduit, Tubing, and Cable Fittings
172		
173	UL Standard 514C	Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers
174		
175	UL Standard 651	Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings
176		
177	UL Standard 651A	Type EB and A Rigid PVC Conduit and HDPE Conduit
178		
179	National Fire Protection Association (NFPA)	
180		
181	NFPA-70	National Electrical Code (NEC)
182		
183	NFPA-70E	Standard for Electrical Safety in the Workplace
184		
185		
186		**END OF ITEM L-160**



TAXIWAY EE
GRADING, DRAINAGE,
PAYING, AND LIGHTING

RESUME RECORD
NO. JUL. APPROXIMATE DATE CLOSURE
1. 1880 - FEB. 2012
2. 1880 - APRIL 2012
3. 1880 - APRIL 2012

SCALE: NO SCALE
DATE: APRIL 8, 2021
DRAWN BY:
CHECKED BY: A.P.A.
FAA APP NO.: G.L.G.
WORK BREAKDOWN NO.:
PERSON CONTRACT NO.: 201737847-TASK 10
OWNER CONTRACT NO.:
VOLUME NO.:
SHEET TITLE: RESUME ENTIRE SHEET
SUMMARY OF APPROXIMATE QUANTITIES (2 OF 3)
SHEET NO.: 1
G-005
JOB NO.: 201737847-TASK 10

SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNITS	SCHEDULE I		SCHEDULE II	
			ESTIMATE	AS BUILT	ESTIMATE	AS BUILT
T-991a	SEEDING (SEED MIX DESIGN 2)	AC	235		0	
T-991b	TOPSOILING	CY	49,249		0	
T-992a	HYDRAULIC MILLING	AC	235		0	
T-992b	EROSION CONTROL BLANKETS	SY	86,527		0	
L-108a	#1 AWG 1-6KAC 5000V CONDUCTOR	LF	194,000		0	
L-110a	1W2" SCH. 40 PVC CONDUIT IN EARTH	LF	550		0	
L-110b	1W2" SCH. 40 PVC CONDUIT IN NEW CONCRETE PAVEMENT	LF	7,890		0	
L-110c	1W2" SCH. 40 PVC CONDUIT IN NEW ASPHALT PAVEMENT	LF	13,625		0	
L-110d	8W4" SCH. 40 PVC CONCRETE ENCASED DUCT BANK	LF	1,800		0	
L-110e	BROKEN CONDUIT REPAIR	EA	2		0	
L-110f	REMOVE CONCRETE ENCASED DUCT BANK	LF	9,550		0	
L-115a	INSTALL NEW ELECTRICAL MANHOLE	EA	3		0	
L-115b	ADJUST EXISTING ELECTRICAL MANHOLE	EA	2		0	
L-115c	REMOVE EXISTING ELECTRICAL MANHOLE	EA	3		0	
L-120a	FURNISH 1-672 CIRCUIT SELECTOR SWITCH	EA	0		1	
L-120b	FURNISH 1-873 CIRCUIT SELECTOR SWITCH	EA	0		1	
L-120c	INSTALL 1-872 CIRCUIT SELECTOR SWITCH	EA	1		0	
L-120d	INSTALL 1-873 CIRCUIT SELECTOR SWITCH	EA	1		0	
L-125a	L-RECCLED TAXIWAY UNIDIRECTIONAL CENTERLINE LIGHT	EA	3		0	
L-125b	L-RECCLED TAXIWAY BIDIRECTIONAL CENTERLINE LIGHT (SINGLE CIRCUIT)	EA	101		0	
L-125c	L-82K LED TAXIWAY BIDIRECTIONAL CENTERLINE LIGHT (SINGLE CIRCUIT)	EA	80		0	
L-125d	L-81T QUARTZ TAXIWAY EDGE LIGHT MOUNTED ON L-867 BASE CAN	EA	62		0	
L-125e	L-81T LED TAXIWAY EDGE LIGHT MOUNTED ON L-867 BASE CAN	EA	66		0	
L-125f	L-81T LED TAXIWAY EDGE LIGHT MOUNTED ON L-868 BASE CAN	EA	1		0	
L-125g	L-888 3/4" THICK COVER PLATE	EA	6		0	
L-125h	L-878 3/8" THICK COVER PLATE	EA	4		0	
L-125i	NEW 2" DEEP L-888 BASE CAN IN NEW CONCRETE PAVEMENT	EA	172		0	
L-125j	NEW 2" DEEP L-888 BASE CAN IN NEW ASPHALT PAVEMENT	EA	10		0	
L-125k	NEW L-878 BASE CAN IN NEW ASPHALT PAVEMENT	EA	121		0	
L-125l	NEW L-878 BASE CAN IN EXISTING ASPHALT PAVEMENT	EA	7		0	
L-125m	L-881 LED GUIDANCE SIGN - 2 MOD	EA	2		0	
L-125n	L-881 LED GUIDANCE SIGN - 3 MOD	EA	10		0	
L-125o	L-881 LED GUIDANCE SIGN - 4 MOD	EA	1		0	
L-125p	NEW GUIDANCE SIGN FOUNDATION - 3 MOD	EA	8		0	
L-125q	NEW GUIDANCE SIGN FOUNDATION - 4 MOD	EA	1		0	
L-125r	NEW GUIDANCE SIGN FOUNDATION - 5 MOD	EA	2		0	
L-125s	REMOVE EXISTING SIGN AND BASE	EA	3		0	
L-125t	REMOVE FIXTURE AND BASE CAN	EA	192		0	
L-125u	RECONNECT Z CONDUIT AT LOCATION OF REMOVED BASE CAN	EA	2		0	
L-125v	REMOVE AND REPLACE FIXTURE OR SIGN ID MARKER	EA	215		0	
L-125w	REMOVE AND REPLACE CIRCUIT ID TAG	EA	82		0	
L-125x	COVER TAXIWAY EDGE LIGHT	EA	24		0	
L-125y	MASK OFF TAXIWAY CENTERLINE LIGHT	EA	42		0	
L-125z	COVER GUIDANCE SIGN	EA	16		0	
L-125aa	EDGE LIGHT DRAIN	EA	9		0	
L-125-1	INSTALLATION OF NEW L/WS INCLUDING ALL EQUIPMENT AND FOUNDATIONS, AS SHOWN ON CONTRACT DOCUMENTS	LS	1		0	
L-125-2	REMOVAL OF EXISTING L/WS INCLUDING ALL EQUIPMENT AND FOUNDATIONS	LS	1		0	
L-125-3	CONCRETE ENCASED, SCHEDULE 80 PVC, 6" DIA DUCT BANK 4 WAY 4 INCH	LF	6,600		0	
L-125-4	CONCRETE ENCASED, SCHEDULE 80 PVC, 6" DIA DUCT BANK 2 WAY 2 INCH	LF	1,400		0	
L-125-5	#10 AWG BARE COPPER FAA GUARD WIRE INSTALLED ABOVE DUCT BANK OR CONDUIT, INCLUDING GROUND RODS, CONNECTIONS, AND TERMINATIONS	LF	7,500		0	
L-125-6	FAA COMMUNICATIONS MANHOLE 6 FEET BY 6 FEET	EA	7		0	
L-125-7	FAA POWER MANHOLE 6 FEET BY 6 FEET	EA	4		0	
L-125-8	2-6" AND 1-8" AWG GROUND CABLE INSTALLED IN DUCT BANK OR CONDUIT, INCLUDING ALL CONNECTIONS AND TERMINATIONS	LF	1,650		0	
L-10a	POST-CONSTRUCTION PHOTOMETRIC TESTING	LS	1		0	
L-10-1	FIBER OPTIC CABLE INSTALLED IN INERDUCT INDUCT OR CONDUIT, INCLUDING TESTING AND CONNECTIONS	LF	30,000		0	
L-10-2	25 PAIR #22 AWG TYPE USE CABLE, INSTALLED IN DUCT BANK OR CONDUIT	LF	800		0	



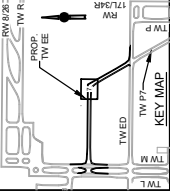
CITY & COUNTY OF DENVER INTERNATIONAL AIRPORT



JMATION

TAXIWAY EE GRADING, DRAINAGE, PAVING, AND LIGHTING

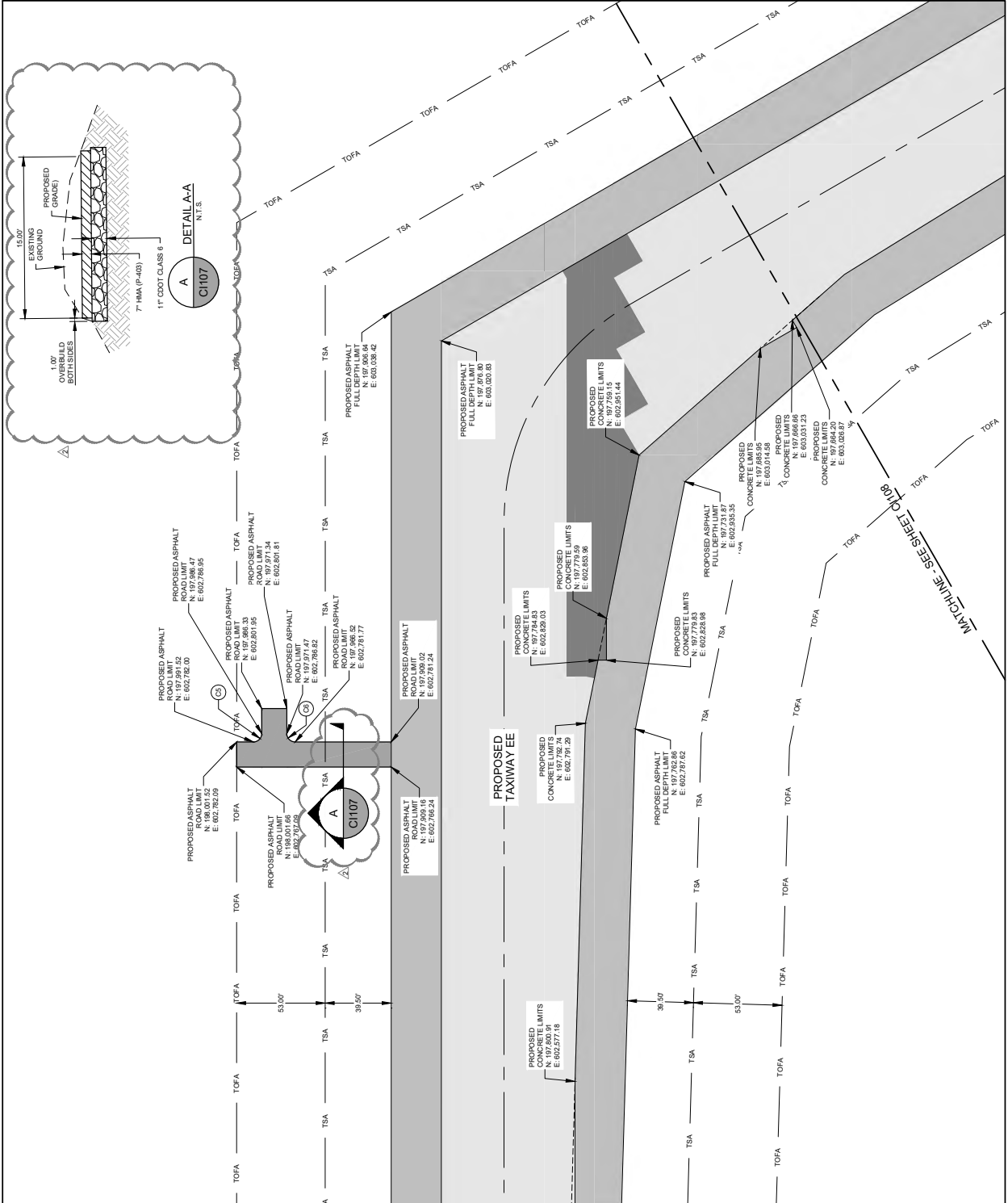
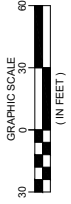
PROJECT RECORD table with fields: PLAN, REV, DATE, DRAWN BY, CHECKED BY, DATE, SCALE, etc.



- LEGEND: FULL DEPTH 17" CONCRETE, FULL DEPTH 21" CONCRETE, FULL DEPTH ASPHALT, PARTIAL DEPTH ASPHALT, EXISTING CONCRETE JOINTS

- NOTES: 1. SEE JOINT PLAN SHEETS C1101 TO C1111 FOR ADDITIONAL CONCRETE THICKNESS AND REINFORCEMENT INFORMATION. 2. SEE SHEETS C1101 THRU C1105 FOR JOINT AND PAVING DETAILS. 3. SEE SHEETS E-101 THRU E-111 FOR ELECTRICAL PLAN INFORMATION. 4. CONTRACTOR TO MATCH EXISTING ELEVATIONS OF CONCRETE PANEL CORNERS UNLESS SPOT ELEVATIONS HAS BEEN SHOWN. 5. SEE SHEETS C1101 THRU C1114 FOR ADDITIONAL UTILITY INFORMATION. 6. THE CEMENT TREATED BASE LAYER SHALL BE PROTECTED FROM MOISTURE AT ALL TIMES DURING CONSTRUCTION.

CURVE TABLE with columns: CURVE, RADIUS, LENGTH, ANGLE, TANGENT. Includes data for curves C5 and C6.



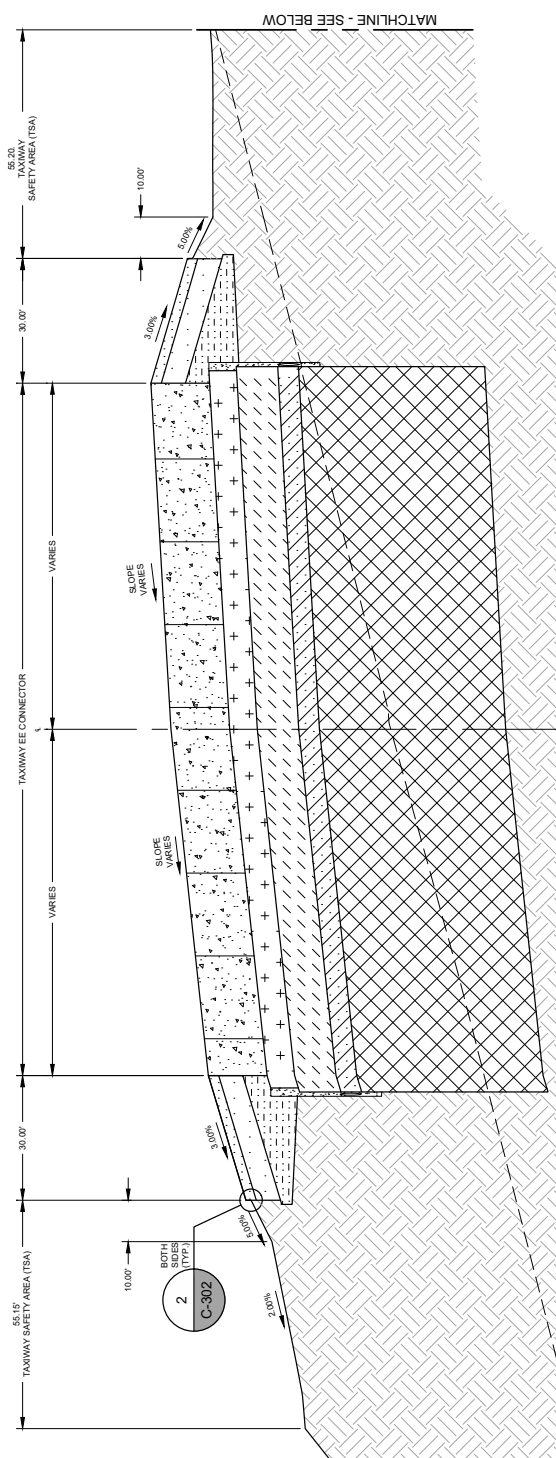
CITY & COUNTY OF DENVER
DENVER INTERNATIONAL AIRPORT



JVIATION
CONSTRUCTION

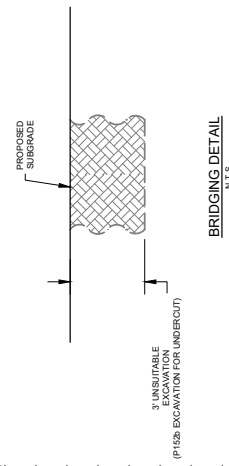
TAXIWAY EE
GRADING, DRAINAGE,
PAYING, AND LIGHTING

REVISION RECORD					
NO.	REV.	DATE	BY	DESCRIPTION	DATE
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2					
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NOTES:

- IF UNSUITABLE MATERIAL IS LESS THAN 3 FEET DEEP, REMOVE THE UNSUITABLE MATERIAL TO A FIRM BASE. REPLACE THE UNSUITABLE MATERIAL WITH STABILIZED SOFT SUBGRADE OR WITH COMMON EMBANKMENT MATERIAL IN AREAS OF EMBANKMENT.
- IF UNSUITABLE MATERIAL IS MORE THAN 3 FEET DEEP, FIRST REMOVE ANY REMAINING ORGANIC OR DELETERIOUS MATERIAL AT THE DIRECTION OF THE DEN PROJECT MANAGER, AND THEN STABILIZE THE REMAINING SOFT SUBGRADE WITH 3-INCH TO APPROXIMATE 1-FOOT THICK LIFT OVER THE SOFT SUBGRADE BY STABILIZATION SHALL CONSIST OF FIRST SPREADING AN APPROXIMATE 1-FOOT THICK LIFT OF CRUSHED BRIDGING MATERIAL TO LOW GROUND-PRESSURE (LGP) TRACKED EQUIPMENT AS NECESSARY TO AVOID DISTURBANCE OF THE UNDERLYING SOFT SUBGRADE. BRIDGING MATERIALS REQUIRED TO PROVIDE A SUFFICIENTLY STABLE SURFACE UPON WHICH TO PLACE THE INITIAL LIFT OF EMBANKMENT FILL. USE ONLY THE MINIMUM THICKNESS OF BRIDGING MATERIAL REQUIRED TO PROVIDE THE STABLE SURFACE. EMBANKMENT IN AREAS UNDER STRUCTURES AND COMMON EMBANKMENT MATERIAL IN AREAS OF EMBANKMENT.
- 3-INCH TO 8-INCH BRIDGING MATERIAL (RECYCLED CRUSHED AGGREGATE), AS APPROVED BY THE DEN PROJECT MANAGER, SHALL BE USED TO STABILIZE SOFT SUBGRADE. BRIDGING MATERIAL SHALL BE OBTAINED FROM THE DEN RUBBLE SITE. PLACEMENT OF BRIDGING MATERIAL INCIDENTAL TO PAVEMENT ITEM P-152 (EXCAVATION FOR UNDERCUT).



A
TYPICAL SECTION A-A
N.T.S.

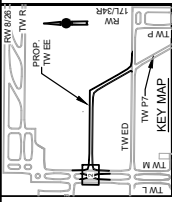
NOTES:

1. SEE DETAIL 1 ON SHEET C-302 FOR ADDITIONAL PAVEMENT SECTION INFORMATION.



TAXIWAY EE GRADING, DRAINAGE, PAVING, AND LIGHTING

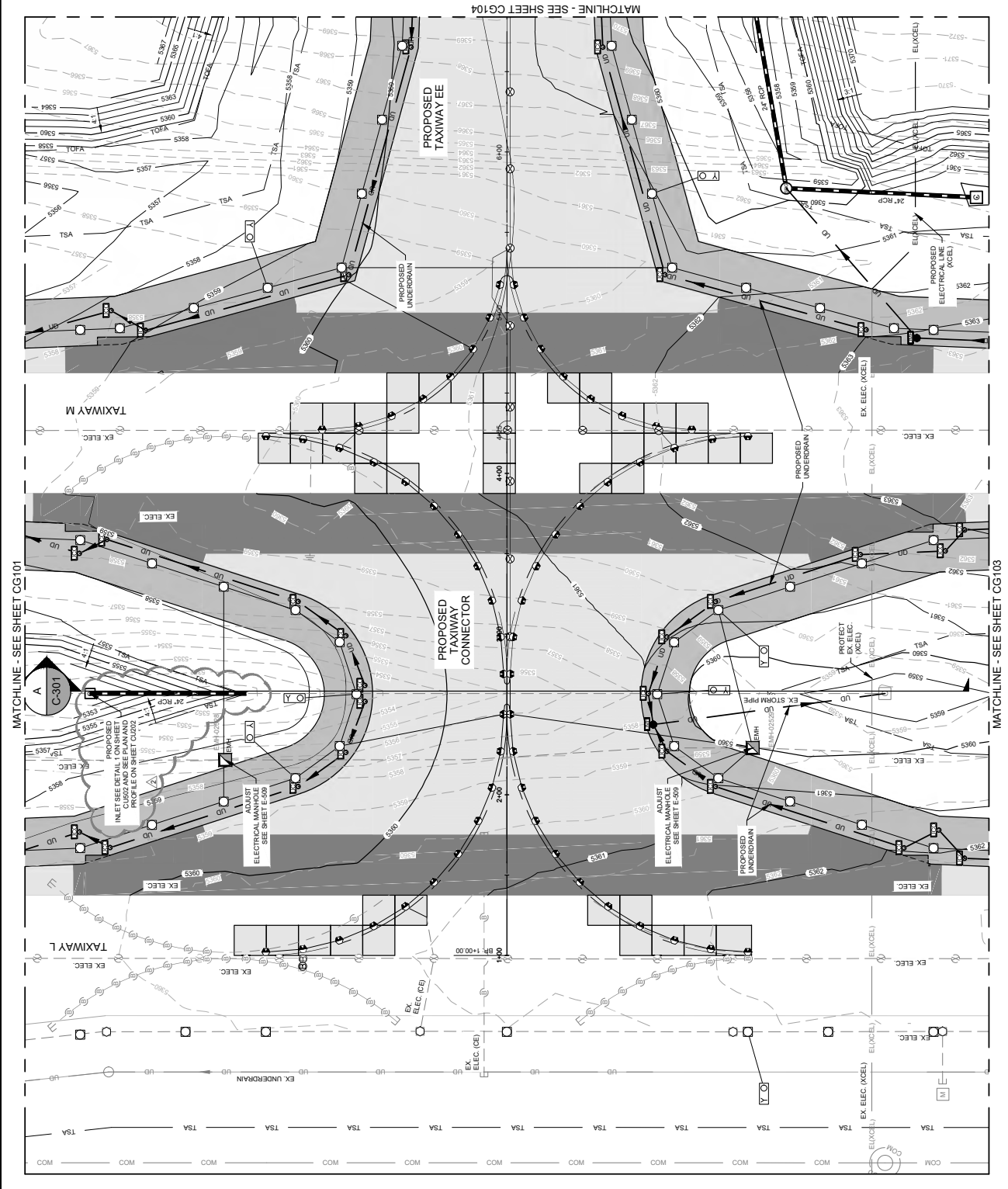
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DATE APPROVED	APR 11, 2021
DATE	APR 11, 2021
SCALE	1" = 80' (11" X 17")
DRAWN BY	A.P.A.
CHECKED BY	A.P.A.
PROJECT NO.	201737847-TASK 10
WORK BREAKDOWN	GRADING, DRAINAGE, PAVING, AND LIGHTING
CONTRACT NO.	201737847-TASK 10
VOLUME NO.	1
SHEET TITLE	GRADING PLAN AREA 2
SHEET NO.	CG 102
PROJECT NO.	201737847-TASK 10



GRADING LEGEND

- 5340 — EXISTING INDEX CONTOUR
- 5341 — EXISTING INTERMEDIATE CONTOUR
- 5342 — PROPOSED INDEX CONTOUR
- 5343 — PROPOSED INTERMEDIATE CONTOUR

- NOTES:**
 1. CONTRACTOR TO COORDINATE WITH LOCAL PROJECT MANAGER FOR ALL CONNECTIONS TO EXISTING SYSTEMS.
 2. PROPOSED CONTOURS REPRESENT FINAL DESIGN ELEVATIONS.
 3. EXISTING UTILITIES SHALL BE PROTECTED FROM INTRUSION OF DEBRIS FROM CONSTRUCTION ACTIVITIES RELATED TO GRADING ACTIVITIES.
 4. SEE SHEETS C-301-C-321 FOR TYPICAL SECTIONS.
 5. FOR TAXIWAY EE AND ALLUM ST. PLAN AND PROFILES SEE SHEETS CG201-CG213.
 6. SEE SHEETS C3101-C3114 FOR PROPOSED UNDERDRAIN PLAN.
 7. SEE SHEETS C2017-C2029 FOR PLAN AND PROFILES OF PROPOSED STORM PIPE AND STORM STRUCTURES.
 8. SEE SHEETS C4011-C4066 FOR UNDERDRAIN AND SOG DETAILS.
 9. SEE SHEET E-200 FOR ELECTRICAL NOTES AND LEGEND.
 10. SEE SHEETS E-101-E-111 FOR ELECTRICAL PLAN INFORMATION.
 11. SEE ADDITIONAL GENERAL GRADING NOTES ON SHEET CG001.
 12. SEE SHEETS E-160-E-183 FOR AIRFIELD ELEC. DUCTBANK INFORMATION PLAN.
 13. SEE SHEETS E-600-E-698 FOR FAA INFORMATION PLAN.
 14. SEE SHEETS E-200-E-700 FOR XCEL ENERGY INFORMATION PLAN.



MATCHLINE - SEE SHEET CG101

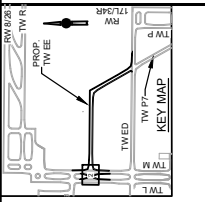
MATCHLINE - SEE SHEET CG104

MATCHLINE - SEE SHEET CG103



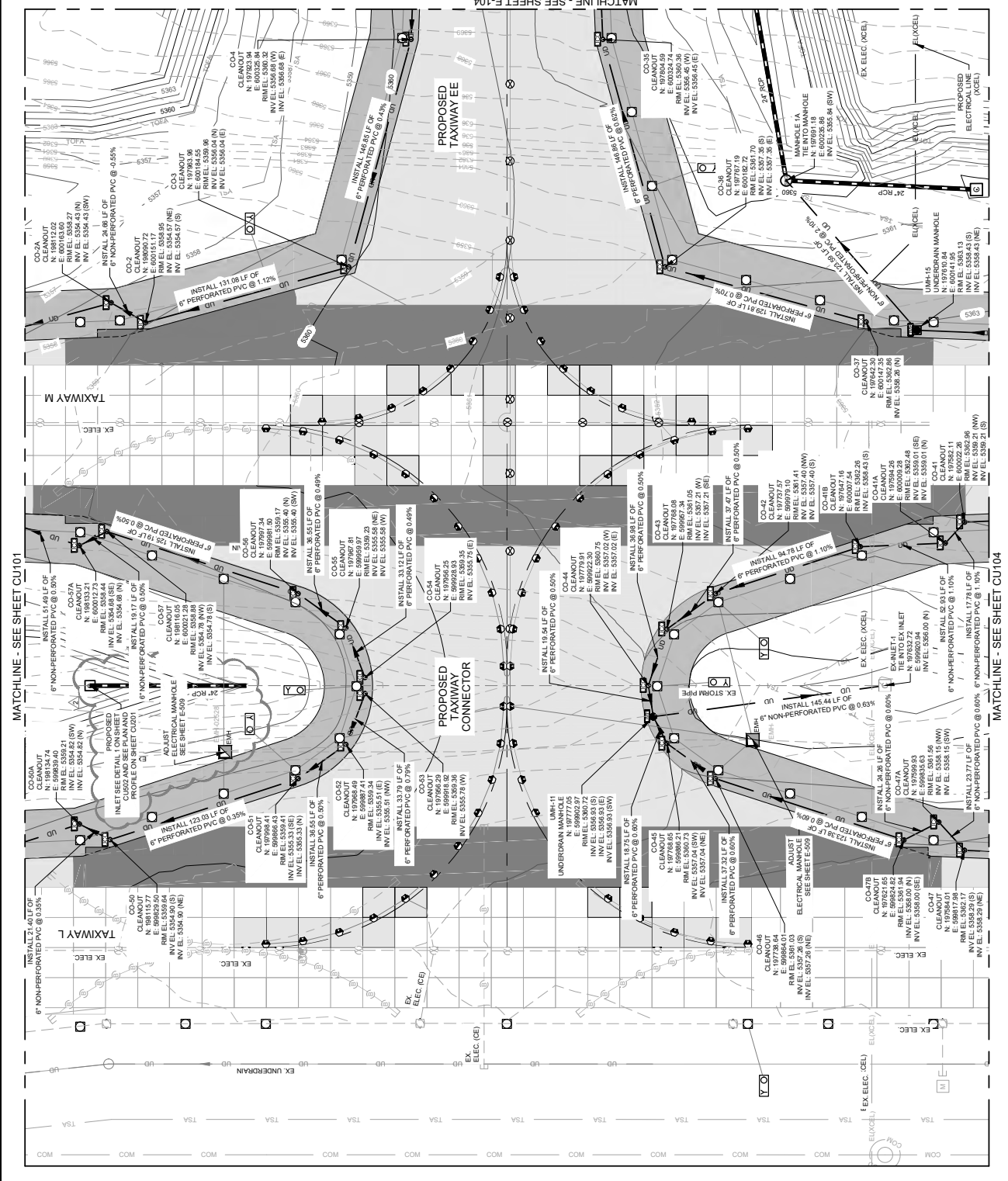
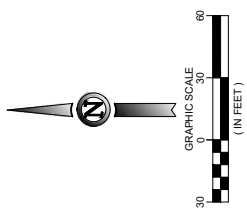
TAXIWAY EE GRADING, DRAINAGE, PAYING, AND LIGHTING

DATE	APRIL 8, 2021
DRAWN BY	A.P.A.
CHECKED BY	C.L.G.
FAA APP NO.	FAA-1000-0000-0000
WORK BREAKDOWN	201737847-TASK 10
CONTRACT NO.	201737847-TASK 10
VOLUME NO.	1
SHEET NO.	CUI102
TOTAL SHEETS	213
DATE PLOTTED	2/19/2019 10:14:00 AM



- LEGEND:**
- EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - SINGLE FLOW LINE
 - PERFORATED UNDERDRAIN
 - NON-PERFORATED UNDERDRAIN PIPE
 - RIPRAP PAD
 - UNDERDRAIN CLEANOUT
 - UNDERDRAIN MANHOLE
 - INSPECTION PIT

- NOTES:**
- SEE SHEETS C-301-C-301 FORTYPICAL SECTIONS.
 - SEE SHEETS C-001-C-005 FOR PLAN AND PROFILES OF PROPOSED STORMPIPE AND STORM STRUCTURES.
 - SEE SHEETS E-101-E-111 FOR ELECTRICAL INFORMATION.
 - SEE SHEETS E-160-E-163 FOR FIELD ELEC. DUCTBANK INFORMATION PLAN.
 - SEE SHEETS E-600-E-658 FOR FAA INFORMATION PLAN.
 - SEE SHEETS E-700-E-760 FOR XCEL ENERGY INFORMATION PLAN.



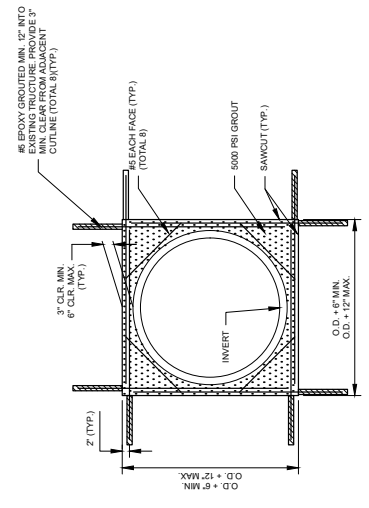
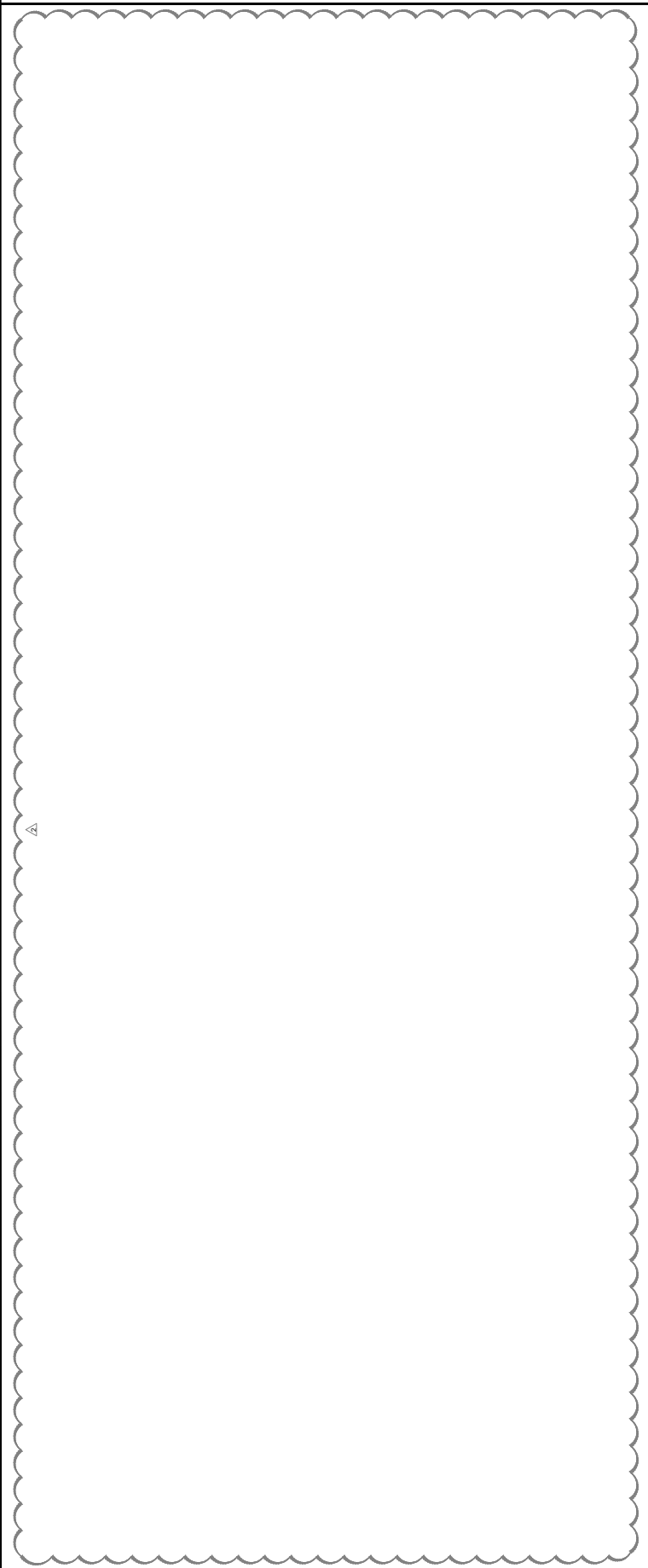
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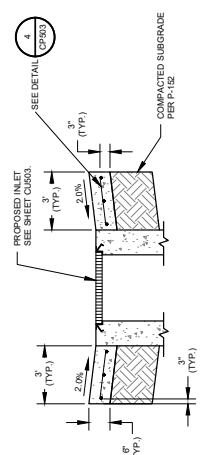
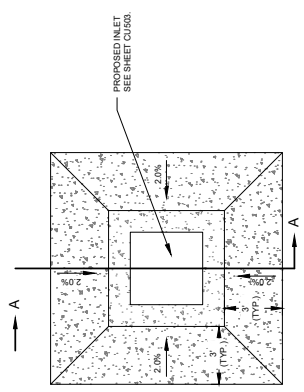
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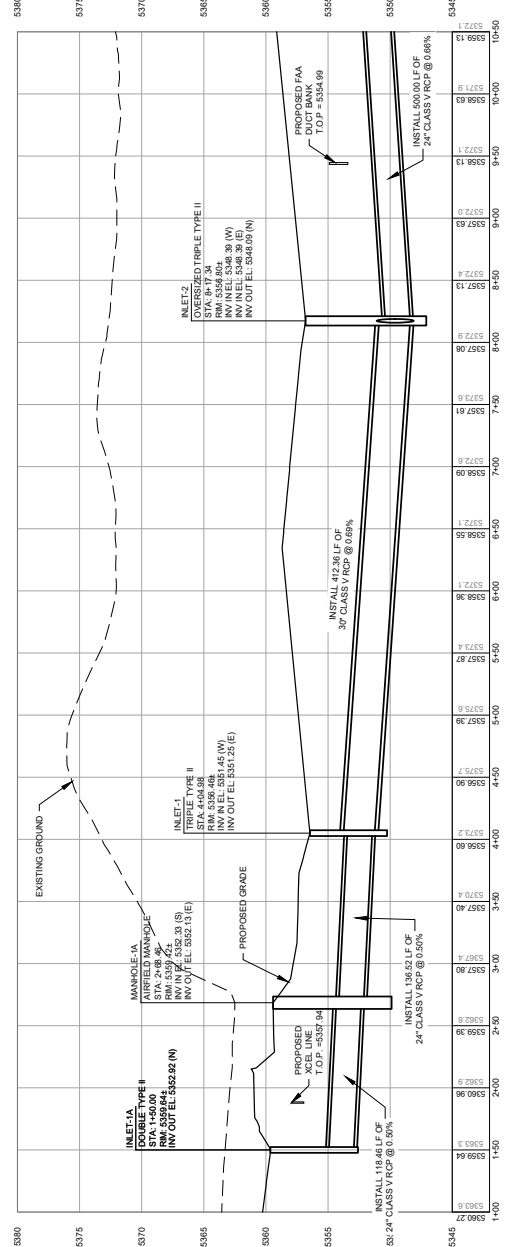
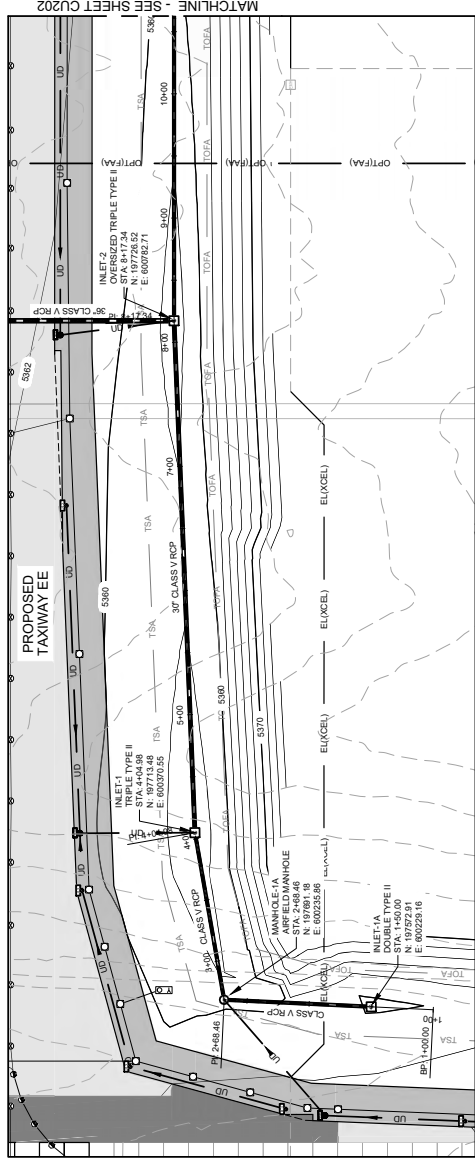
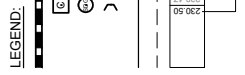
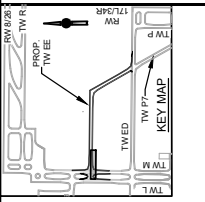
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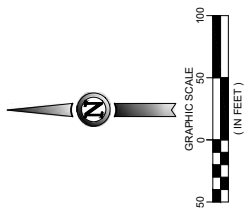
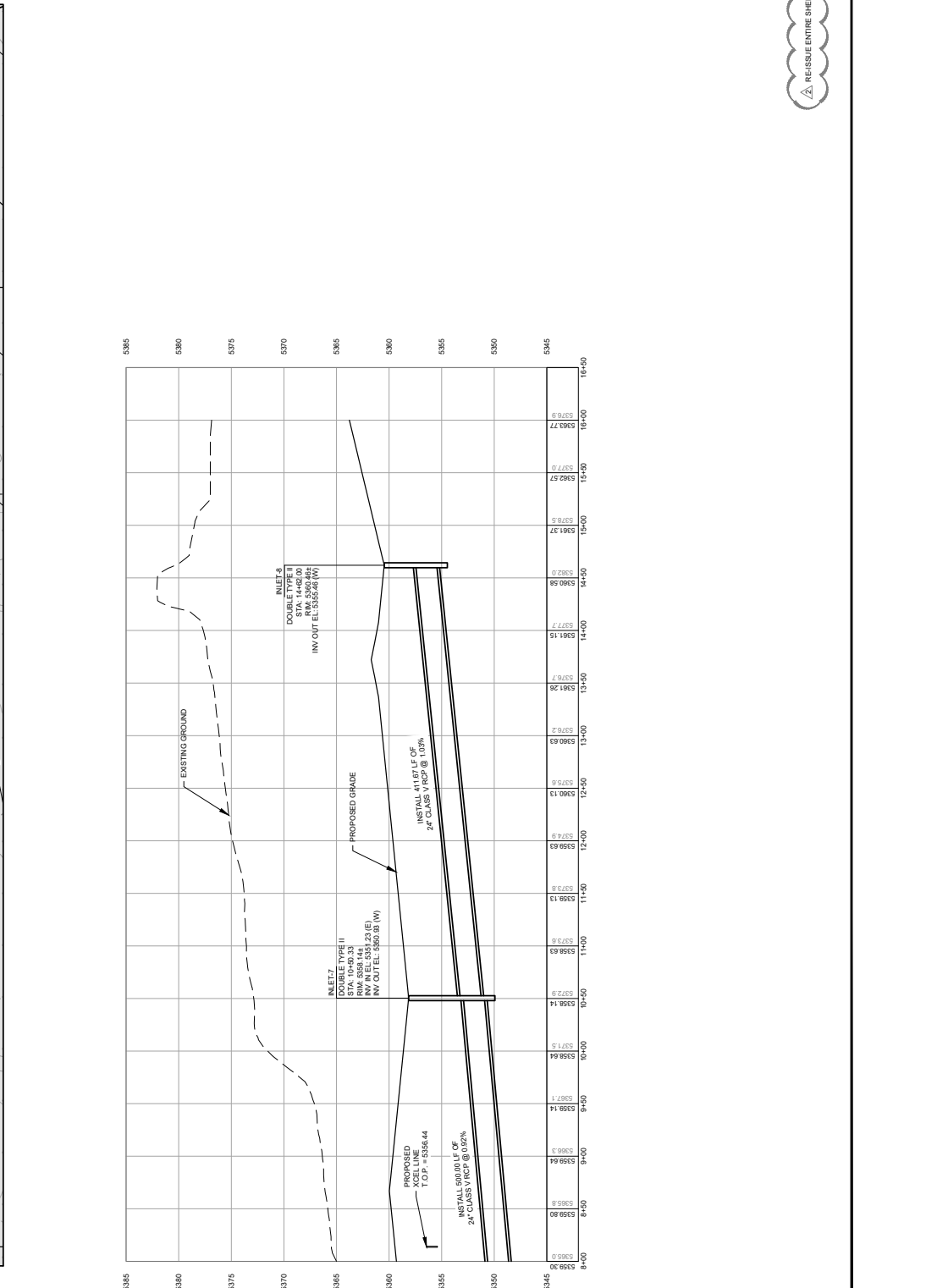
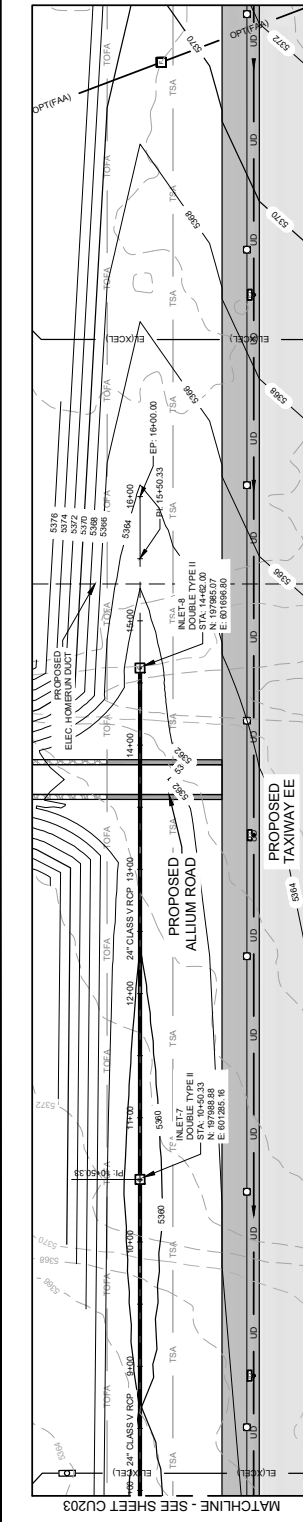




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AIRPORT

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RE-ISSUE ENTIRE SHEET

MATCHLINE - SEE SHEET CU203

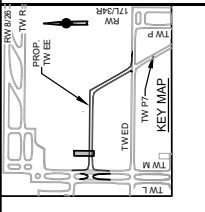
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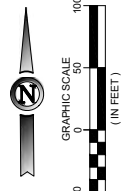
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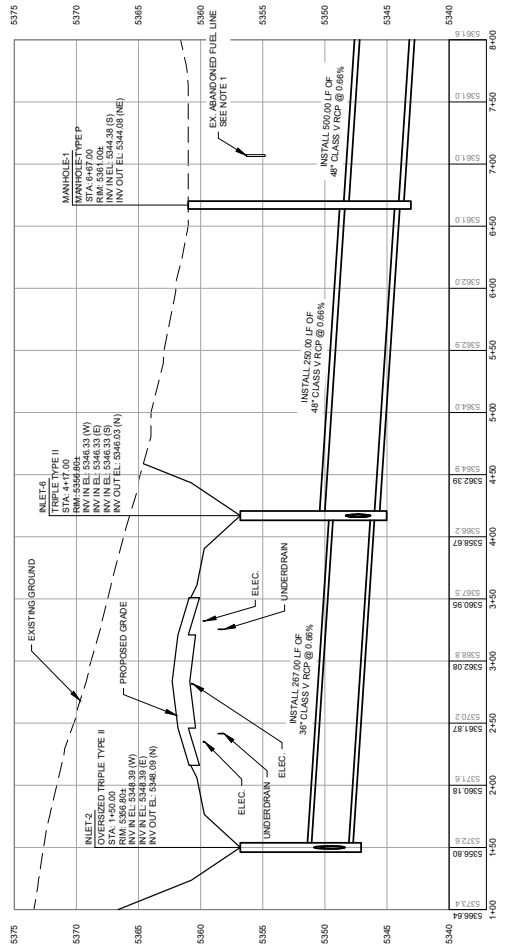
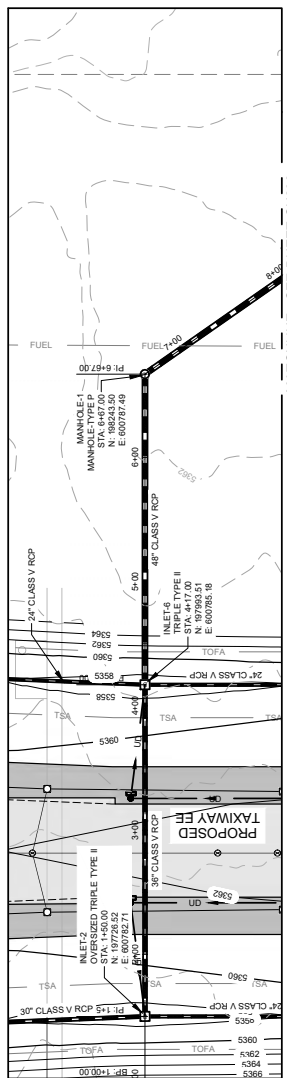
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PERSON CONTRACT NO.:
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PLAN AND
PROFILE
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DATE PLOTTED: 4/15/2021

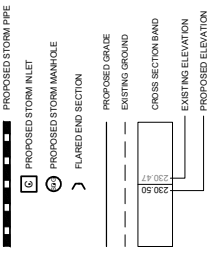
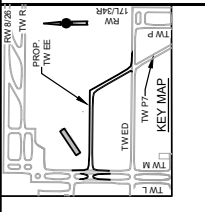


NOTES:
1. CONTRACTOR TO VERIFY DEPTH OF EXISTING UTILITY PRIOR TO CONSTRUCTION

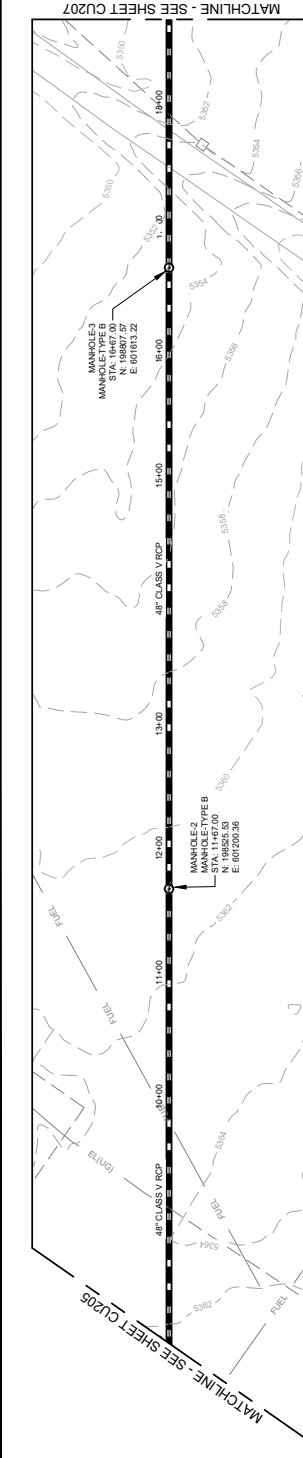


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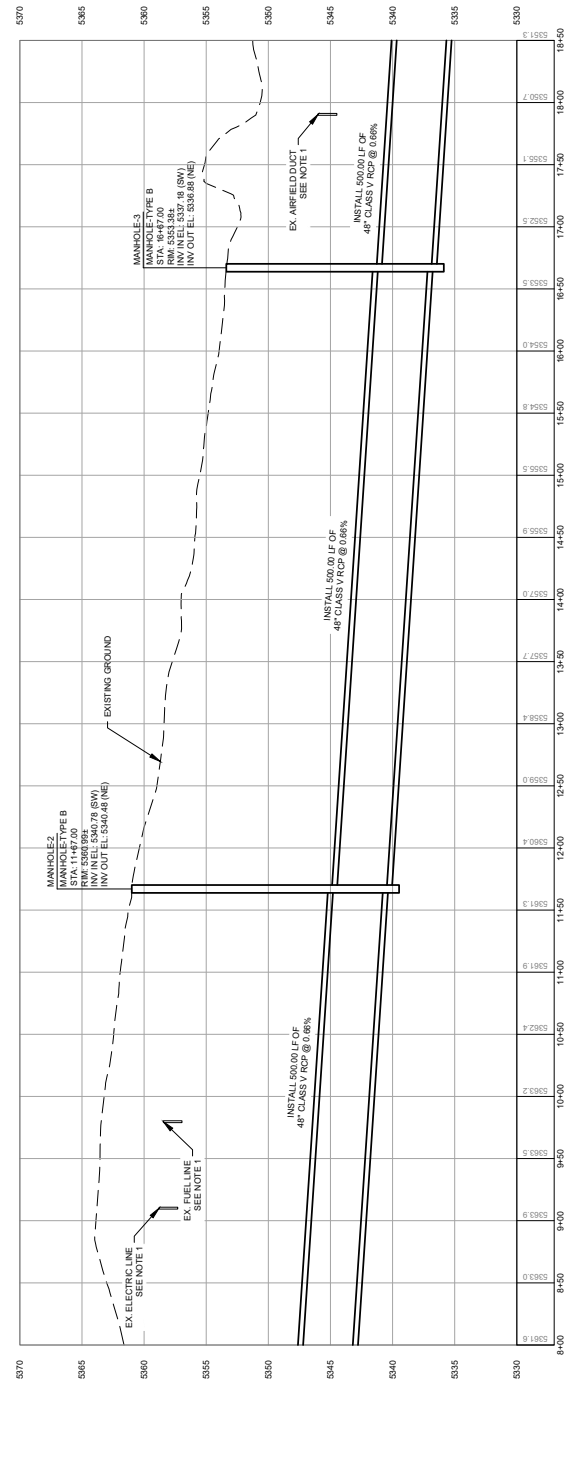


NOTES:
 1. CONTRACTOR TO VERIFY DEPTH OF EXISTING UTILITY PRIOR TO CONSTRUCTION



TAXIWAY EE GRADING, DRAINAGE, PAVING, AND LIGHTING

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 WORK BREAKDOWN:
 PERSON CONTRACT NO.:
 CONST. CONTRACT NO.:
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 SHEET NO.: CU206
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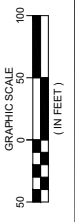
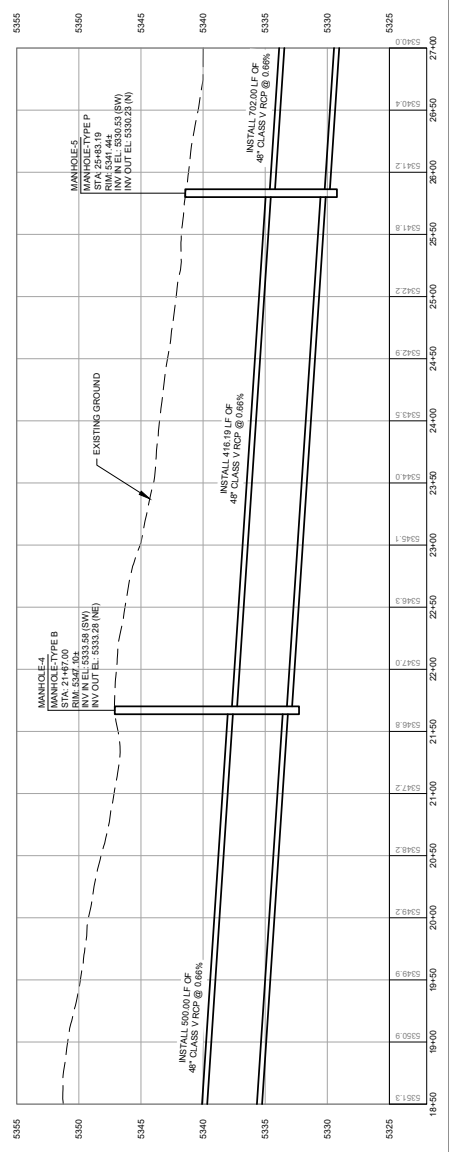
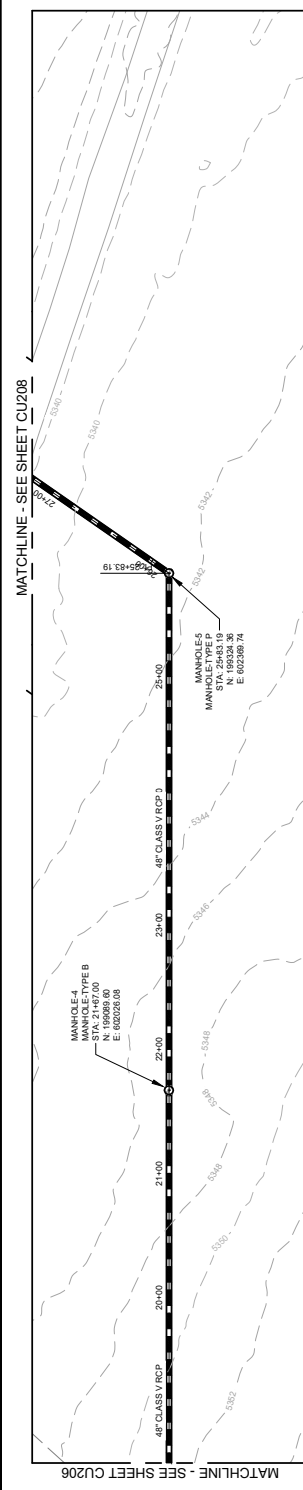
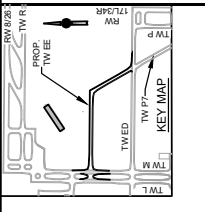


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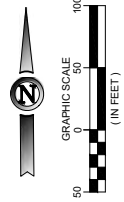
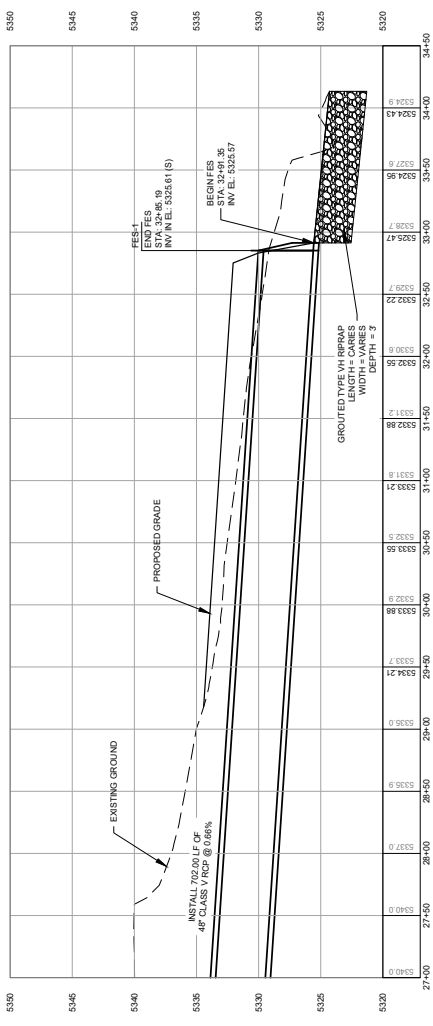
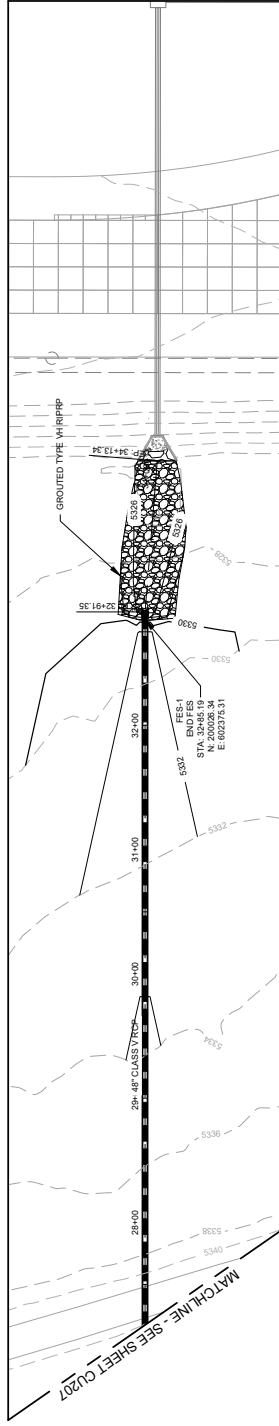
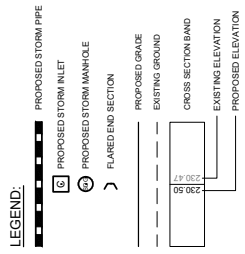
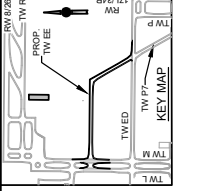


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INTERNATIONAL
AIRPORT



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100. REV. DATE 03-22-21



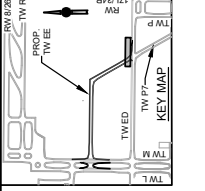
RE-ISSUE ENTIRE SHEET

CITY & COUNTY OF DENVER INTERNATIONAL AIRPORT

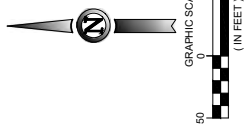
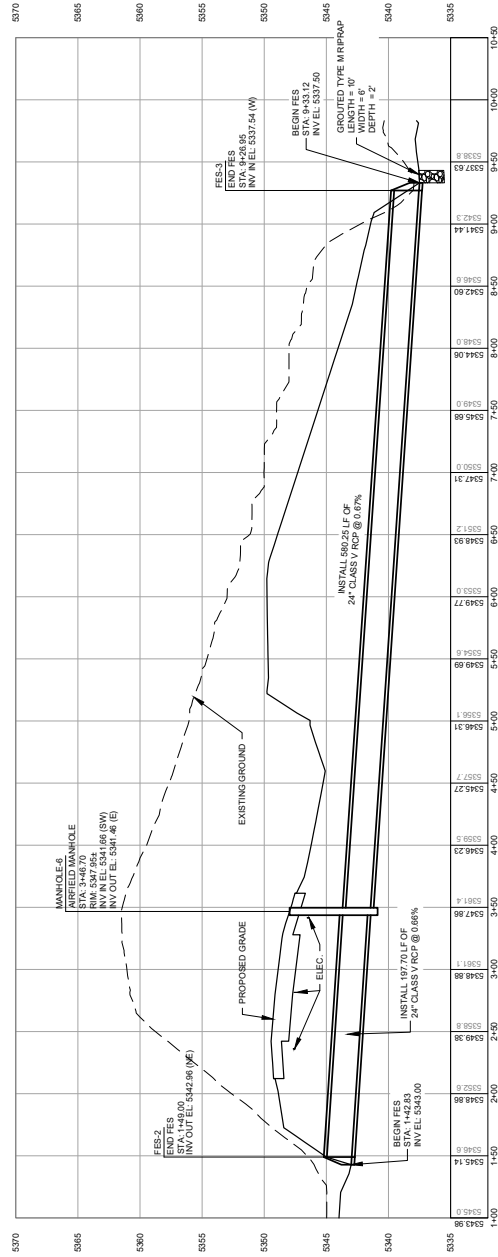
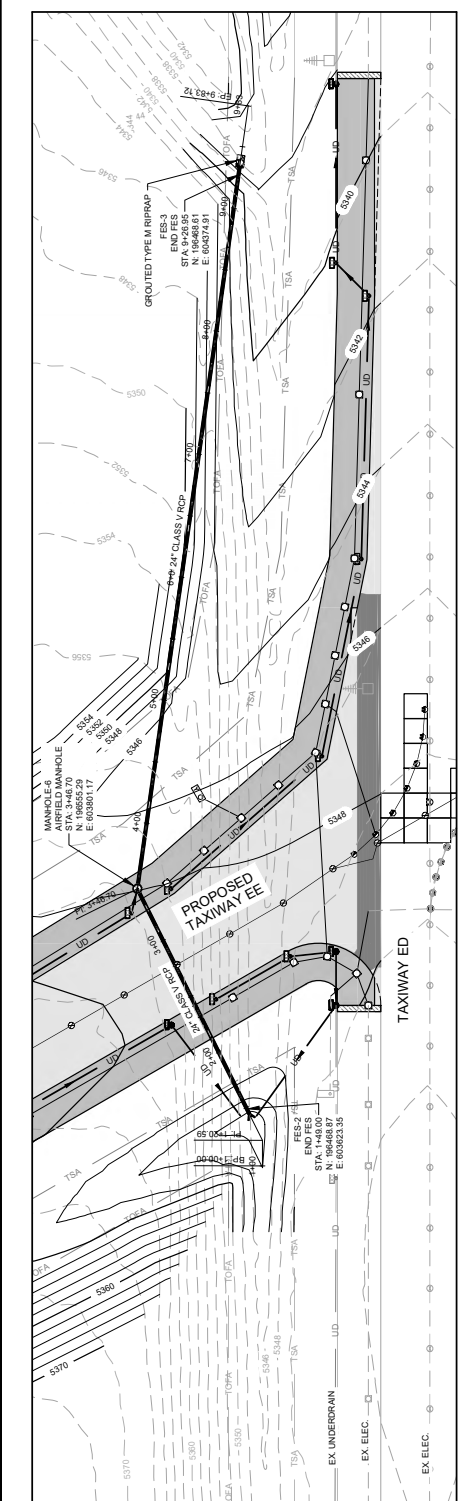


TAXIWAY EE GRADING, DRAINAGE, PAYING, AND LIGHTING

ISSUE RECORD	DATE
REV. 1	APRIL 8, 2021
REV. 2	APRIL 8, 2021
REV. 3	APRIL 8, 2021
REV. 4	APRIL 8, 2021
REV. 5	APRIL 8, 2021
REV. 6	APRIL 8, 2021
REV. 7	APRIL 8, 2021
REV. 8	APRIL 8, 2021
REV. 9	APRIL 8, 2021
REV. 10	APRIL 8, 2021
REV. 11	APRIL 8, 2021
REV. 12	APRIL 8, 2021
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REV. 14	APRIL 8, 2021
REV. 15	APRIL 8, 2021
REV. 16	APRIL 8, 2021
REV. 17	APRIL 8, 2021
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REV. 25	APRIL 8, 2021
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REV. 30	APRIL 8, 2021
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REV. 32	APRIL 8, 2021
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REV. 41	APRIL 8, 2021
REV. 42	APRIL 8, 2021
REV. 43	APRIL 8, 2021
REV. 44	APRIL 8, 2021
REV. 45	APRIL 8, 2021
REV. 46	APRIL 8, 2021
REV. 47	APRIL 8, 2021
REV. 48	APRIL 8, 2021
REV. 49	APRIL 8, 2021
REV. 50	APRIL 8, 2021



- LEGEND:**
- PROPOSED STORM PIPE
 - PROPOSED STORM INLET
 - PROPOSED STORM MANHOLE
 - FLARED END SECTION
 - PROPOSED GRADE
 - EXISTING GROUND
 - CROSS SECTION BAND
 - EXISTING ELEVATION
 - PROPOSED ELEVATION



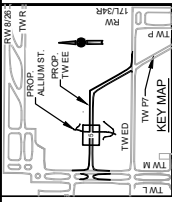
RE-ISSUE ENTIRE SHEET

CITY & COUNTY
of DENVER
DENVER
INTERNATIONAL
AIRPORT



TAXIWAY EE GRADING, DRAINAGE, PAVING AND LIGHTING

DATE	1 - 8/11/11
SCALE	1" = 80' (11' X 17')
DRAWN BY	MM
CHECKED BY	CWW
FAA PWD	MIN
WORK BREAKDOWN NO.	201727847-TASK XX
DESIGN CONTRACT NO.	201727847-TASK XX
CONST. CONTRACT NO.	
VOLUME NO.	1
SHEET TITLE	PAVEMENT MARKING PLAN AREA 5
SHEET NO.	CJ105
PROJECT NO.	02-03-213
DATE	2011/04/01

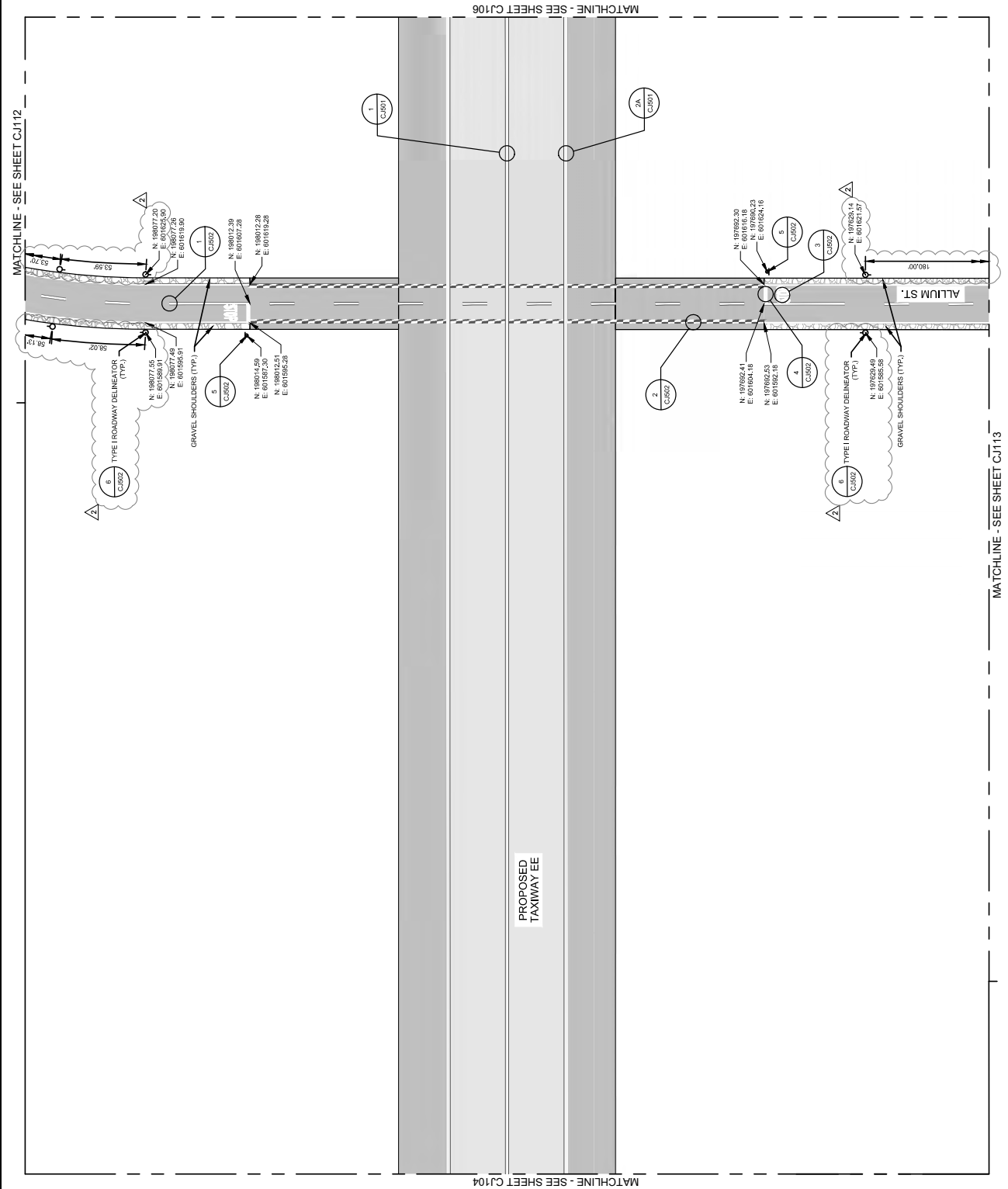
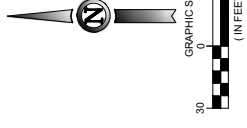


STRIPING LEGEND

[Pattern]	PROPOSED YELLOW TAXIWAY PAINT
[Pattern]	PROPOSED BLACK TAXIWAY PAINT
[Pattern]	PROPOSED WHITE TAXIWAY PAINT
[Pattern]	PROPOSED F/CC PAVEMENT
[Pattern]	PROPOSED ASPHALT PAVEMENT

NOTES:

1. ALL DIMENSIONS AND PAINT MARKINGS SHOWN IN THE PAVEMENT MARKING PLAN SHALL BE VERIFIED THROUGH SURVEY AND SOME DISCREPANCIES MAY EXIST BETWEEN THE PLANS AND THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THESE PLANS AND THE ACTUAL STRIPING PRESENT IN THE FIELD. ALL DIMENSIONS SHALL BE TO THE CENTERLINE UNLESS OTHERWISE NOTED. DIMENSIONS SHALL BE TO THE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL STRIPINGS SHALL HAVE A BLACK BORDER AT THE DIMENSIONS INDICATED ON THE DETAILS. SOME EXISTING PAVEMENT MARKINGS DO NOT CURRENTLY MEET THESE REQUIREMENTS. PERMANENT BLACK PAINT IS REQUIRED TO PROVIDE THE BLACK BORDER AROUND THESE MARKINGS.
3. CONTRACTOR WILL BE REQUIRED TO REPAINT ANY MARKINGS THAT ARE OUTSIDE THE PROJECT WORK OPERATIONS. REPAINTING OF THESE DAMAGED AREAS WILL BE AT THE CONTRACTOR'S EXPENSE.
4. PAINT SHOULD BE STORED IN A CLIMATE-CONTROLLED ENVIRONMENT IN ORDER TO MEET MANUFACTURER'S REQUIREMENTS. MATERIAL THAT DOES NOT MEET REQUIREMENTS SHALL BE REJECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PAINT MEETS ALL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PAINT MEETS ALL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PAINT MEETS ALL REQUIREMENTS.
5. ALL PERMANENT MARKING SHALL BE APPLIED DURING DAYLIGHT HOURS ONLY.
6. GLASS BEADS SHALL BE APPLIED TO ALL PERMANENT MARKINGS. THE TYPE AND SIZE OF GLASS BEADS SHALL BE AS SPECIFIED IN ITEM 620.
7. SEE SHEET C.J.100 FOR STRIPING DETAILS AND NOTES.
8. FINAL PAINT LAYOUT WILL BE CONFIRMED BY AIRPORT PRIOR TO CONSTRUCTION.
9. ALL CURING COMPOUND SHALL BE REMOVED FROM CONCRETE AND ALL AREAS THOROUGHLY CLEANED PRIOR TO STRIPING PAINT MARKINGS.
10. CONTRACTOR SHALL HAVE A COMPANY'S STANDARDS FOR AIRPORT MARKINGS ON SITE AT ALL TIMES. ANY CHANGES TO THE MARKING PLAN SHALL BE COORDINATED WITH THE ADVISORY CIRCULAR SHALL BE COORDINATED WITH THE DEN PROJECT MANAGER FOR DIRECTION.
11. HOLD BARS AND GEOGRAPHIC POSITION MARKINGS SHALL BE MARKED IN WMA PAINT.



MATCHLINE - SEE SHEET CJ104

MATCHLINE - SEE SHEET CJ113

PROPOSED
TAXIWAY EE

CITY & COUNTY
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INTERNATIONAL
AIRPORT

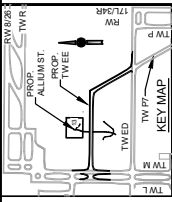


shrewsbury

TAXIWAY EE
GRADING, DRAINAGE,
PAVING AND LIGHTING

ISSUE RECORD	NO.	DATE	DESCRIPTION
1.	1	11/11/11	ISSUE
2.	2	11/11/11	ISSUE

DATE: 11/11/11 (11' X 17")
DRAWN BY: MAY 27, 2021
CHECKED BY: CWW
FAA P.N.O.: MIN
WORK BREAKDOWN NO.: 201727847-TASK XX
CONST. CONTRACTING NO.: 201727847-TASK XX
VOLUME NO.: 1
SHEET TITLE: PAVEMENT MARKING PLAN AREA 12
SHEET NO.: CJ112
PROJECT NO.: 09-03-213
DRAWING NO.: 201727847-TASK XX

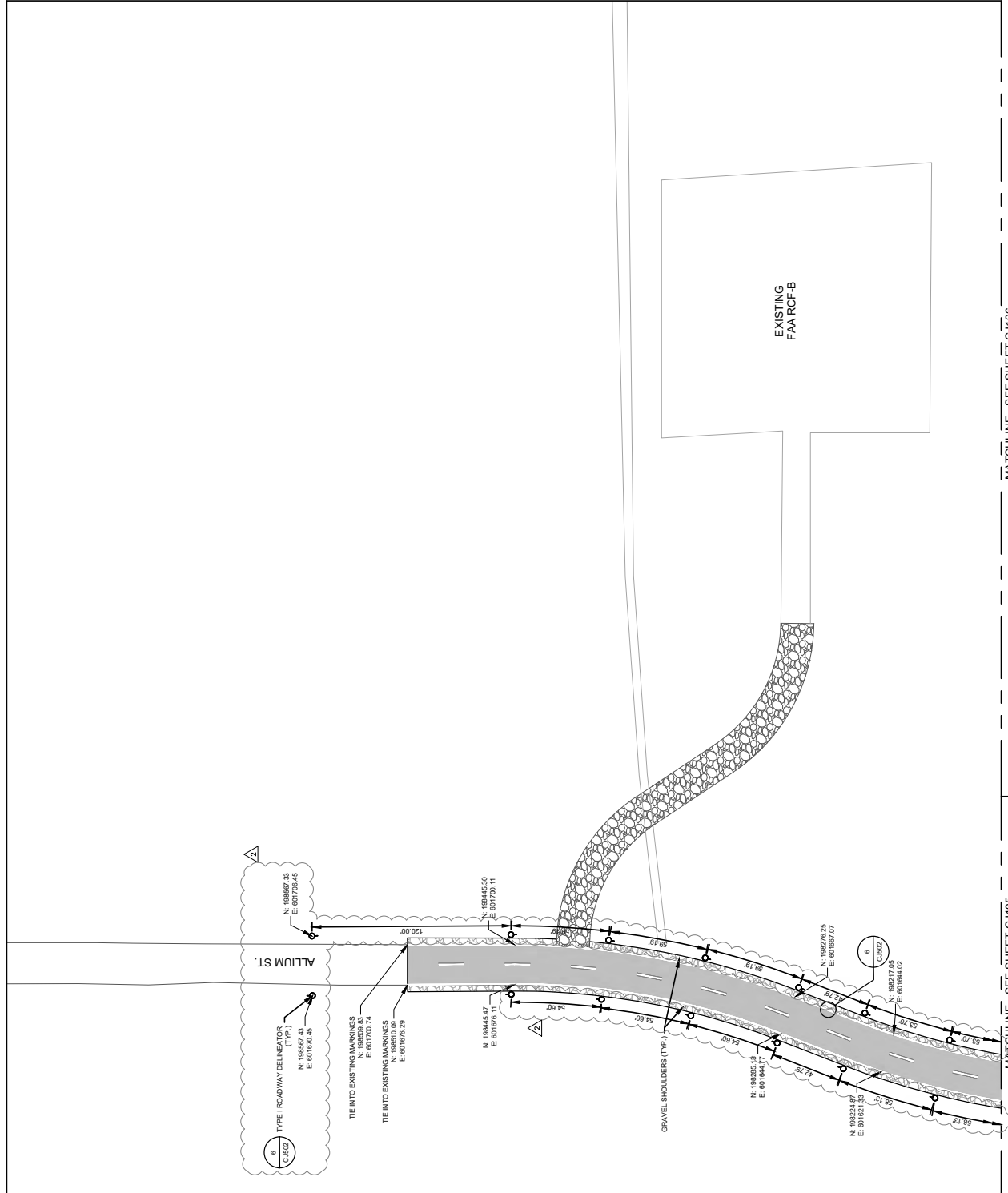


STRIPING LEGEND

	PROPOSED YELLOW TAXIWAY PAINT
	PROPOSED BLACK TAXIWAY PAINT
	PROPOSED WHITE TAXIWAY PAINT
	PROPOSED F/CC PAVEMENT
	PROPOSED ASPHALT PAVEMENT

NOTES:

- EXISTING PAVEMENT MARKINGS SHOWN IN THE PAVEMENT MARKING PLAN ARE FOR INFORMATION ONLY. DISCREPANCIES MAY EXIST BETWEEN THE PLANS AND THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL VERIFY THE EXISTING PAVEMENT MARKINGS AND THE ACTUAL STRIPING PRESENT IN THE PROJECT AREA AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- ALL STRIPING SHALL HAVE A BLACK BORDER AT THE DIMENSIONS INDICATED ON THE DETAILS. SOME EXISTING PAVEMENT MARKINGS DO NOT CURRENTLY HAVE A BLACK BORDER. PERMANENT BLACK PAINT IS REQUIRED TO PROVIDE THE BLACK BORDER AROUND THESE MARKINGS.
- CONTRACTOR WILL BE REQUIRED TO REPAINT ANY MARKINGS THAT ARE OUTSIDE THE PROJECT WORK AREA. REPAINTING OF THESE DAMAGED AREAS WILL BE AT THE CONTRACTOR'S EXPENSE.
- PAINT SHOULD BE STORED IN A CLIMATE-CONTROLLED ENVIRONMENT IN ORDER TO MEET MANUFACTURER'S REQUIREMENTS. MATERIAL THAT DOES NOT MEET REQUIREMENTS SHALL BE REJECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FOR THE APPLICATION OF PAINT. IT IS APPLIED OR AS APPROVED BY THE DEN PROJECT MANAGER.
- ALL PERMANENT MARKING SHALL BE APPLIED DURING DAYLIGHT HOURS ONLY.
- GLASS BEADS SHALL BE APPLIED TO ALL PERMANENT MARKINGS. THE TYPE AND SIZE OF GLASS BEADS SHALL BE AS SPECIFIED IN ITEM #200.
- GLASS BEADS SHALL NOT BE APPLIED TO BLACK PAINT.
- SEE SHEET C-601 TO C-609 FOR STRIPING DETAILS AND NOTES.
- FINAL PAINT LAYOUT WILL BE CONFIRMED BY AIRPORT PRIOR TO CONSTRUCTION.
- ALL CURING COMPOUND SHALL BE REMOVED FROM CONCRETE AND ALL AREAS THOROUGHLY CLEANED PRIOR TO STRIPING PAINT MARKINGS.
- CONTRACTOR SHALL HAVE A COPY OF THE CURRENT "FOR AIRPORT MARKINGS" ON SITE AT ALL TIMES. ANY CHANGES TO THE MARKING PLAN SHALL BE NOTICED IMMEDIATELY. THE MARKING PLAN SHEETS AND THE ADVISORY CIRCULARS SHALL BE COORDINATED WITH THE DEN PROJECT MANAGER FOR DIRECTION.
- HOLD BARS AND GEOGRAPHIC POSITION MARKINGS SHALL BE MARKED IN WHITE PAINT.

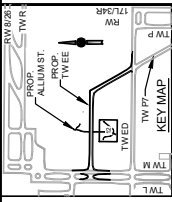


MATCHLINE - SEE SHEET CJ100

MATCHLINE - SEE SHEET CJ105

TAXIWAY EE GRADING, DRAINAGE, PAVING AND LIGHTING

REVISION	NO.	DATE	DESCRIPTION
1.	ADD	03-12-21	ISSUE RECORD
2.	REV	03-12-21	ADD COMMENTS
3.	REV	03-12-21	ADD COMMENTS
4.	REV	03-12-21	ADD COMMENTS
5.	REV	03-12-21	ADD COMMENTS
6.	REV	03-12-21	ADD COMMENTS
7.	REV	03-12-21	ADD COMMENTS
8.	REV	03-12-21	ADD COMMENTS
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10.	REV	03-12-21	ADD COMMENTS
11.	REV	03-12-21	ADD COMMENTS

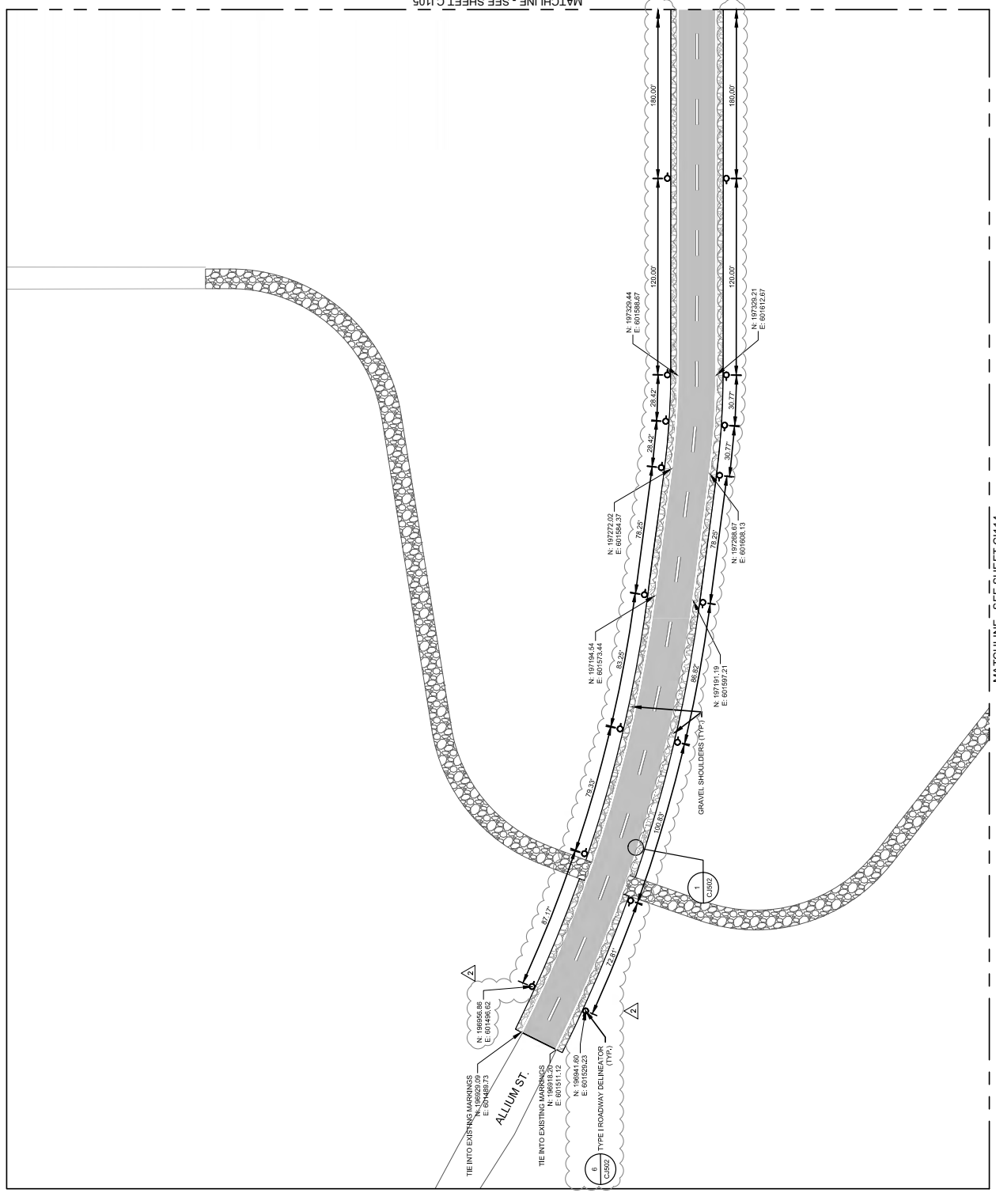
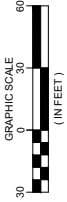


STRIPING LEGEND

	PROPOSED YELLOW TAXIWAY PAINT
	PROPOSED BLACK TAXIWAY PAINT
	PROPOSED WHITE TAXIWAY PAINT
	PROPOSED F/CC PAVEMENT
	PROPOSED ASPHALT PAVEMENT

NOTES:

- EXISTING SURFACE MARKINGS SHOWN IN THE PAVEMENT PLAN SHALL BE MAINTAINED UNLESS OTHERWISE NOTED. ANY DISCREPANCIES BETWEEN THE PAVEMENT PLAN AND THE ACTUAL SURFACE MARKINGS SHALL BE REPORTED TO THE DESIGNER IMMEDIATELY UPON DISCOVERY.
- ALL STRIPINGS SHALL HAVE A BLACK BORDER AT THE DIMENSIONS INDICATED ON THE DETAILS. SOME EXISTING PAVEMENT MARKINGS DO NOT CURRENTLY HAVE A BLACK BORDER. PERMANENT BLACK PAINT IS REQUIRED TO PROVIDE THE BLACK BORDER AROUND THESE MARKINGS.
- CONTRACTOR WILL BE REQUIRED TO REPAINT ANY MARKINGS THAT ARE OUTSIDE THE PROJECT WORK AREA. REPAINTING OF THESE DAMAGED AREAS WILL BE AT THE CONTRACTOR'S EXPENSE.
- PAINT SHOULD BE STORED IN A CLIMATE-CONTROLLED ENVIRONMENT IN ORDER TO MEET MANUFACTURER'S REQUIREMENTS. MATERIAL THAT DOES NOT MEET REQUIREMENTS SHALL BE REPAKAGED AND REAPPLIED TO THE PAVEMENT SURFACE. MATERIAL THAT DOES NOT MEET REQUIREMENTS SHALL BE REPAKAGED AND REAPPLIED TO THE PAVEMENT SURFACE. MATERIAL THAT DOES NOT MEET REQUIREMENTS SHALL BE REPAKAGED AND REAPPLIED TO THE PAVEMENT SURFACE.
- ALL PERMANENT MARKING SHALL BE APPLIED DURING DAYLIGHT HOURS ONLY.
- GLASS BEADS SHALL BE APPLIED TO ALL PERMANENT MARKINGS. THE BEAD TYPE AND BEAD SIZE SHALL BE AS SPECIFIED IN ITEM 620. GLASS BEADS SHALL NOT BE APPLIED TO BLACK PAINT.
- SEE SHEET C-100 TO C-109 FOR STRIPING DETAILS AND NOTES.
- FINAL PAINT LAYOUT WILL BE CONFIRMED BY AIRPORT PRIOR TO CONSTRUCTION.
- ALL CURING COMPOUND SHALL BE REMOVED FROM CONCRETE AND ALL AREAS THOROUGHLY CLEANED PRIOR TO STRIPING PAINT APPLICATIONS.
- CONTRACTOR SHALL HAVE A COPY OF THE CURRENT FOR AIRPORT MARKINGS ON SITE AT ALL TIMES. ANY CHANGES TO THE MARKINGS SHALL BE REPORTED TO THE DESIGNER IMMEDIATELY UPON DISCOVERY. ALL CHANGES SHALL BE COORDINATED WITH THE DEN PROJECT MANAGER FOR DIRECTION.
- HOLD BARS AND GEOGRAPHIC POSITION MARKINGS SHALL BE MARKED IN WHITE PAINT.

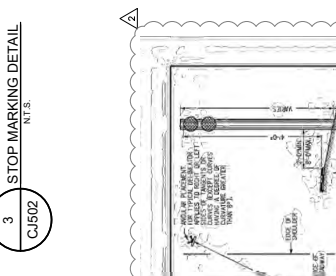
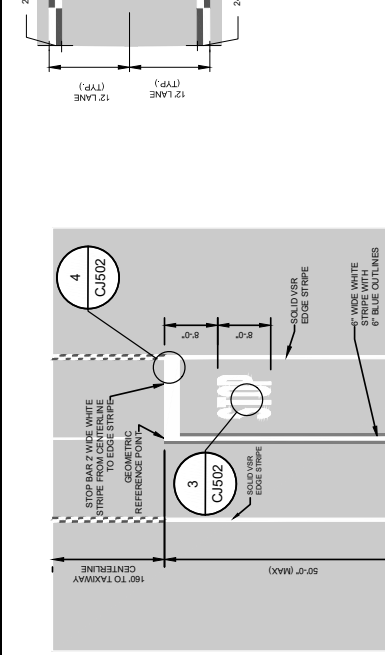
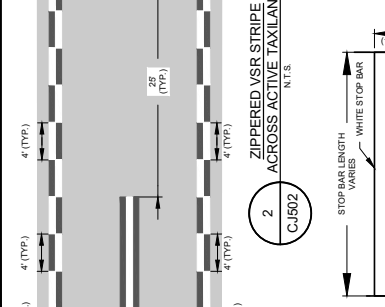
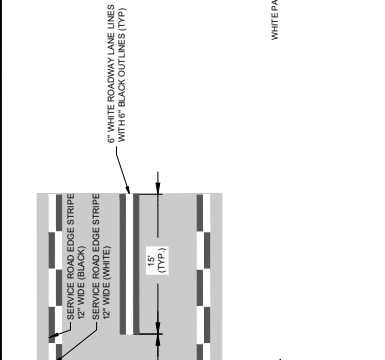
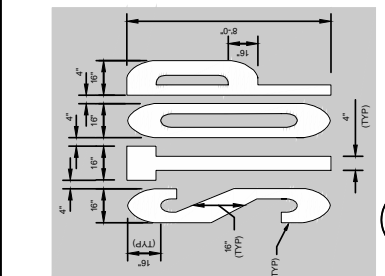


CITY & COUNTY
of DENVER
DENVER
INTERNATIONAL
AIRPORT



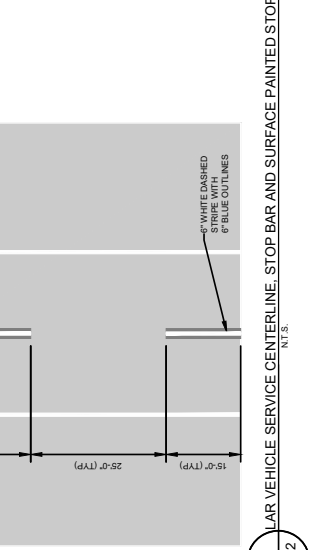
TAXIWAY EE
GRADING, DRAINAGE,
PAVING AND LIGHTING

ISSUE RECORD	NO. SCALE	NO. DATE	DRAWN BY	CHECKED BY	DATE
1. MIN. DATE: 01-18-21	NO SCALE	MAY 27, 2021	CMW		
2. MIN. DATE: 03-22-21					
3. MIN. DATE: 03-22-21					
4. MIN. DATE: 03-22-21					
5. MIN. DATE: 03-22-21					
6. MIN. DATE: 03-22-21					
7. MIN. DATE: 03-22-21					
8. MIN. DATE: 03-22-21					
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12. MIN. DATE: 03-22-21					

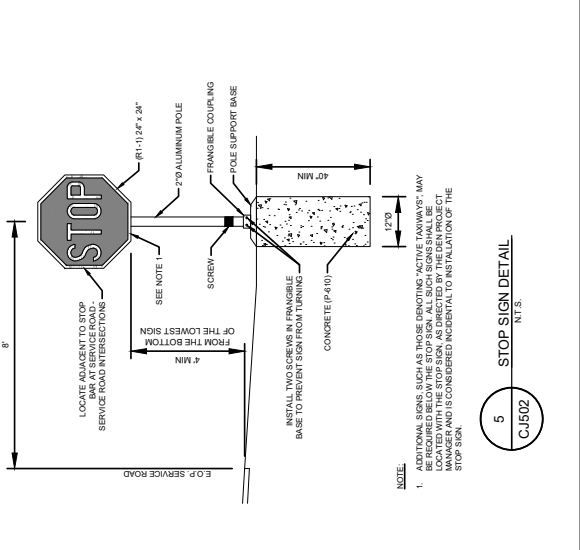
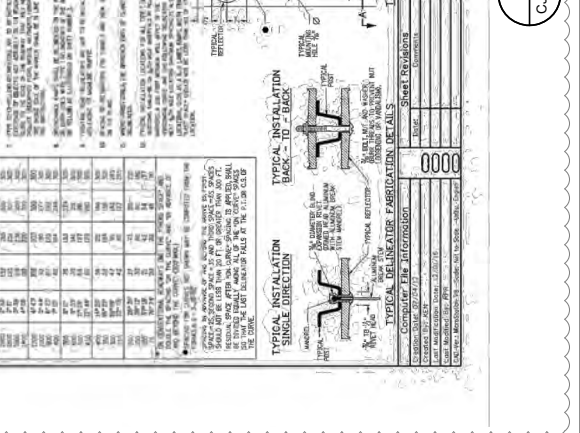
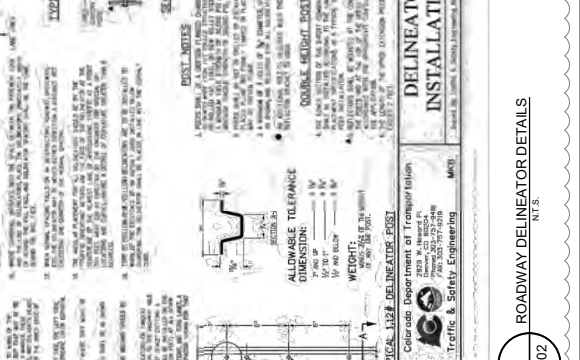
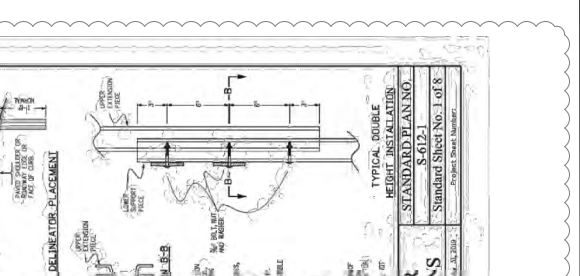


SPACING FOR DELINEATOR POSTS - MIN. SPACING - 12 FT. MAX. SPACING - 24 FT.

POST TYPE	POST SIZE	POST WEIGHT	MIN. SPACING	MAX. SPACING
1	12" DIA.	150 LB.	12 FT.	24 FT.
2	12" DIA.	250 LB.	12 FT.	24 FT.
3	12" DIA.	350 LB.	12 FT.	24 FT.
4	12" DIA.	450 LB.	12 FT.	24 FT.
5	12" DIA.	550 LB.	12 FT.	24 FT.
6	12" DIA.	650 LB.	12 FT.	24 FT.
7	12" DIA.	750 LB.	12 FT.	24 FT.
8	12" DIA.	850 LB.	12 FT.	24 FT.
9	12" DIA.	950 LB.	12 FT.	24 FT.
10	12" DIA.	1050 LB.	12 FT.	24 FT.
11	12" DIA.	1150 LB.	12 FT.	24 FT.
12	12" DIA.	1250 LB.	12 FT.	24 FT.
13	12" DIA.	1350 LB.	12 FT.	24 FT.
14	12" DIA.	1450 LB.	12 FT.	24 FT.
15	12" DIA.	1550 LB.	12 FT.	24 FT.
16	12" DIA.	1650 LB.	12 FT.	24 FT.
17	12" DIA.	1750 LB.	12 FT.	24 FT.
18	12" DIA.	1850 LB.	12 FT.	24 FT.
19	12" DIA.	1950 LB.	12 FT.	24 FT.
20	12" DIA.	2050 LB.	12 FT.	24 FT.
21	12" DIA.	2150 LB.	12 FT.	24 FT.
22	12" DIA.	2250 LB.	12 FT.	24 FT.
23	12" DIA.	2350 LB.	12 FT.	24 FT.
24	12" DIA.	2450 LB.	12 FT.	24 FT.
25	12" DIA.	2550 LB.	12 FT.	24 FT.
26	12" DIA.	2650 LB.	12 FT.	24 FT.
27	12" DIA.	2750 LB.	12 FT.	24 FT.
28	12" DIA.	2850 LB.	12 FT.	24 FT.
29	12" DIA.	2950 LB.	12 FT.	24 FT.
30	12" DIA.	3050 LB.	12 FT.	24 FT.



ISSUE RECORD
NO. SCALE
NO. DATE
DRAWN BY
CHECKED BY
DATE
FAVORABLE
WORKS BREAKDOWN
PERSON CONTRACT NO.
201727847-TASK XX
CONTRACT CONTRACT NO.
VOLUME NO.
SHEET TITLE
PAVEMENT
MARKING
DETAILS
SHEET NO.
CJ502
202 OF 213
20170415.DWG



ISSUE RECORD
NO. SCALE
NO. DATE
DRAWN BY
CHECKED BY
DATE
FAVORABLE
WORKS BREAKDOWN
PERSON CONTRACT NO.
201727847-TASK XX
CONTRACT CONTRACT NO.
VOLUME NO.
SHEET TITLE
PAVEMENT
MARKING
DETAILS
SHEET NO.
CJ502
202 OF 213
20170415.DWG

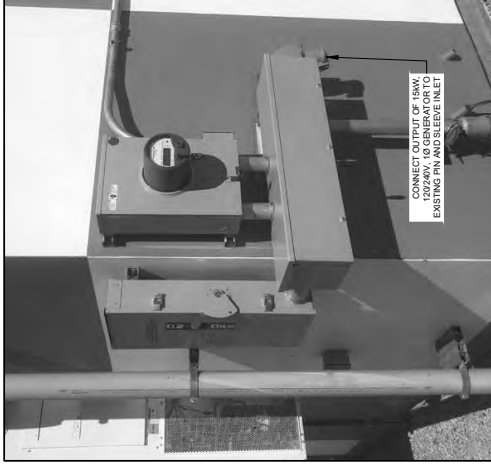


TAXIWAY EE
GRADING, DRAINAGE,
PAYING, AND LIGHTING

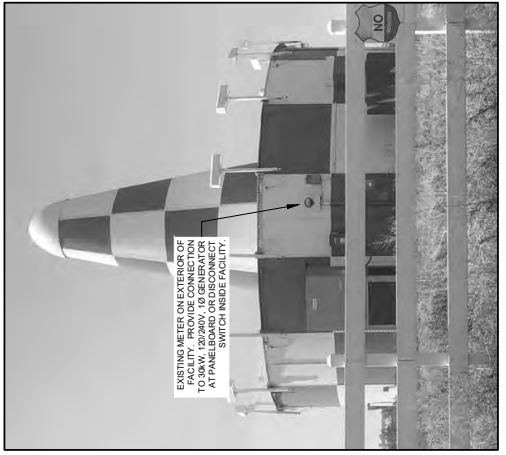
ISSUE RECORD	DATE
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NO. 99	
NO. 100	

TEMP GENERATOR CONNECTION DETAILS

SHEET NO. E-776
 NO. OF SHEETS 213
 PROJECT NO. 2017M110-140002



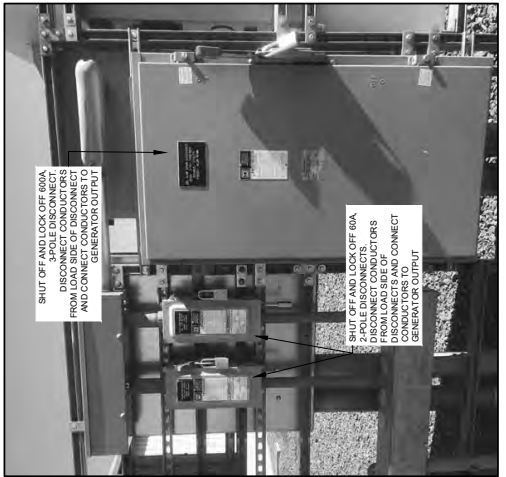
3 RTRE GENERATOR CONNECTION N.T.S. E-776



4 DENVOR GENERATOR CONNECTION N.T.S. E-776



2 MIDFIELD RVR GENERATOR CONNECTION N.T.S. E-776

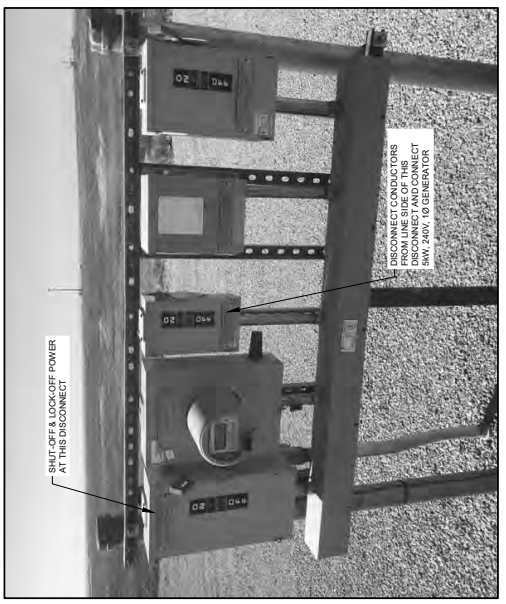


5 35L ALSR / 17R LOC GENERATOR CONNECTION N.T.S. E-776

NOTE: 17R4500 INLET HAS BREAKERS FOR CONNECTION TO EQUIPMENT AT THIS LOCATION. PROVIDE 60A, 3-POLE AND TWO 60A, 2-POLE CIRCUIT BREAKERS OR FUSIBLE DISCONNECTS TO PROVIDE OVERCURRENT PROTECTION FOR LOADS SERVED FROM THIS LOCATION.



1 17R MALSR / 35L LOC GENERATOR CONNECTION N.T.S. E-776



4 ASOS GENERATOR CONNECTION N.T.S. E-776

- GENERAL NOTES:
1. CONTRACTOR SHALL PROVIDE ALL FUEL AND MAINTENANCE EQUIPMENT REQUIRED TO OPERATE GENERATOR. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY GENERATOR TO BE COORDINATED WITH FAA. SEE SPECIFICATION L-160 FOR ADDITIONAL INFORMATION.
 2. CONTRACTOR SHALL PROVIDE ALL FUEL AND MAINTENANCE EQUIPMENT REQUIRED TO OPERATE GENERATOR. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY GENERATOR TO BE COORDINATED WITH FAA. SEE SPECIFICATION L-160 FOR ADDITIONAL INFORMATION.
 3. CONTRACTOR SHALL PROVIDE ALL FUEL AND MAINTENANCE EQUIPMENT REQUIRED TO OPERATE GENERATOR. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY GENERATOR TO BE COORDINATED WITH FAA. SEE SPECIFICATION L-160 FOR ADDITIONAL INFORMATION.
 4. CONTRACTOR SHALL PROVIDE ALL FUEL AND MAINTENANCE EQUIPMENT REQUIRED TO OPERATE GENERATOR. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY GENERATOR TO BE COORDINATED WITH FAA. SEE SPECIFICATION L-160 FOR ADDITIONAL INFORMATION.





July 21, 2021

Taxiway EE Construction

IFB NO. 202158849

ADDENDUM NUMBER 2

This Addendum Number 2 supersedes and/or supplements all portions of the Bid Documents with which it conflicts. Proposers must acknowledge receipt of this addendum in the Attachment 1 Part 1 Bid Acknowledgement Letter.

Tony Deconinck

Tony Deconinck
Contract Administrator
Contract Services



DENVER INTERNATIONAL AIRPORT

TAXIWAY EE CONSTRUCTION

IFB NO. 202158849

ADDENDUM NUMBER 2

Scope of this Addendum

Addendum Number 2 includes modifications to the Invitation for Bid Documents issued July 1, 2021. These modifications are deemed necessary by the City and County of Denver.

BID FORMS

Please see attached for revisions.

PART II TECHNICAL SPECIFICATIONS

Please see attached for revisions.

PLANS

Please see attached for revisions.

GEOTECHNICAL

Please see attached for revisions.

The total number of pages (including cover sheet) contained in this Addendum Number 2 is eighty-nine (89).

* * * * *

End of Addendum Number 2

**ADDENDUM NO. 2
TO
PLANS FOR IMPROVEMENTS TO
DENVER INTERNATIONAL AIRPORT
DENVER, COLORADO
TAXIWAY EE GRADING, DRAINAGE, PAVING, AND LIGHTING
DEN CONTRACT NO. 202158849**

Bidders are informed that the above referenced Plans are modified as follows as of July 21, 2021.

1. BID FORMS

Delete Bid Forms and replace with attached Bid Forms.

Item P-152b name changed to “Excavation for Undercut (Less Than 3’)” with a quantity for Schedule I of 14,950 CY.

Item P-152e Upper Select Subgrade – Item quantity for Schedule I changed to 32,700 CY.

Added Item P-152i Excavation for Undercut (Greater than 3’) with a quantity for Schedule I of 4,980 CY.

Item P-220b Cement – Item quantity for Schedule I changed to 1,500 Tons.

Item D-701c Grouted Type “VH” Riprap (From On-Site Stockpile) – Item number changed to D-710c Grouted Type “VH” Riprap (From On-Site Stockpile) with a quantity of 230 CY.

Item D-701d Grouted Type “VH” Riprap (New) – Item number changed to D-710d Grouted Type “VH” Riprap (New) with a quantity of 404 CY.

Item L-132-5.2 name changed to “Removal of Existing LLWAS Including All Equipment, EES, Tower and Foundations” with a quantity for Schedule I of 1 LS.

2. PART II TECHNICAL SPECIFICATIONS

Division 2 Technical Specifications

All changes to the technical specifications included in Addendum No 2 are in blue text in the applicable specification. Please note the changes shown in red text were from Addendum No. 1.

Specification P-152 Excavation, Subgrade, and Embankment

Replace specification P-152 in its entirety with the attached specification P-152.

Section 152-1.4b was modified to read “**b. Upper Select Embankment:** the upper 1.5 feet (.45 m).

Section 152-1.4c was modified to read “**c. The upper 1 foot (300 mm) of the Upper Select Embankment will be cement treated.**”

Section **152-1.4a. Cement Treated Upper Select Embankment** was changed to Section **152-1.4d. Cement Treated Upper Select Embankment.**

The first sentence of Section **152-1.4d. Cement Treated Upper Select Embankment** was changed to read “**d. Cement Treated Upper Select Embankment.** The Upper Select Embankment material, of which the upper 1 foot (300 mm) will be cement-treated, shall be an imported material free of unsuitable materials, with 100% passing the 1-inch sieve, no more than 45% retained on a No. 4 sieve, less than 50% passing the No. 200 sieve, a maximum Plasticity Index of 15, a maximum water soluble sulfates content of 0.5%, and less than 3% swell potential.”

The following pay items have been modified:

P-152b Excavation for Undercut – per cubic yard was changed to P-152b Excavation for Undercut (Less than 3’) – per cubic yard

P-152i Excavation for Undercut (Greater than 3’) – per cubic yard was added.

Specification P-220 Cement Treated Soil Base Course

Replace specification P-220 in its entirety with the attached specification P-220.

Section 220-2.3 was modified to read “220-2.3 Soil. The soil for this work shall consist of the upper most 12 inches of select embankment as placed and paid for by P-152e Upper Select Embankment.”

Section 220-6.1 The second sentence was modified to read “This price shall be full compensation for furnishing all materials, except soil and cement, and for all preparation, delivering, placing, and mixing of all materials; and for all labor, equipment, tools and incidentals necessary to complete the item.”

Specification D-751 Manholes, Catch Basins, Inlets and Inspection Holes

The following pay items have been modified:

D-751c Install New 36” x 48” Inlet – per each was changed to D-751c Install Oversized Type II Inlet – per each

D-751g Convert Existing Inlet to Manhole – per each was changed to D-751g Remove Existing Inlet – per each

3. PLANS

Sheet G-004

Replace sheet G-004 with the attached sheet G-004.

Modified summary of approximate quantities (table).

Modified note 13.

Modified notes 26 through 28.

Added notes 32 through 34.

Sheets G-005

Replace sheet G-005 with the attached sheet G-005.

Modified summary of approximate quantities (table).

Sheet C-302

Replace sheet C-302 with the attached sheet C-302.

Modified callouts to correctly identify project specifications.

Sheet CP501

Replace sheet CP501 with the attached sheet CP501.

Modified the callout on detail 5.

Modified note 1 for detail 5

Modified Joint Detail Notes 3 and 10

Removed Joint Detail Note 7

4. GEOTECHNICAL

Preliminary Geotechnical information has been included with this document.

**** END OF ADDENDUM NO. 2 ****

BID PROPOSAL SUMMARY

Bidder Name: _____

SCHEDULE I TOTAL \$ _____

SCHEDULE II TOTAL \$ _____

TOTAL ALL SCHEDULES \$ _____

Bidder has examined the proposed site and is familiar with all site conditions.

Signature _____

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SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-100a	Contractor Quality Control Program (CQCP)	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
C-105a	Mobilization	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
013223a	Construction As-built Survey	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015050a	Textura Software Fee	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015525a	Flagger	HR	22,080	at the unit price of: _____ dollars and _____ cents.	\$
015525b	Gate Guard	HR	17,360	at the unit price of: _____ dollars and _____ cents.	\$
015525c	Gate Guard Shack	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015525d	Traffic Control	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
015719a	Temporary Erosion Control	LS	1	at the unit price of: _____ dollars and _____ cents.	\$
P-101a	Remove Portland Cement Concrete Pavement (Non-Reinforced, 17")	SY	2,484	at the unit price of: _____ dollars and _____ cents.	\$
P-101b	Remove Portland Cement Concrete Pavement (Reinforced, 17")	SY	425	at the unit price of: _____ dollars and _____ cents.	\$
P-101c	Remove Portland Cement Concrete Pavement (Non-Reinforced, 21")	SY	143	at the unit price of: _____ dollars and _____ cents.	\$
P-101d	Full Depth Asphalt Pavement Removal	SY	16,551	at the unit price of: _____ dollars and _____ cents.	\$
P-101e	Partial Depth Asphalt Pavement Removal	SY	158	at the unit price of: _____ dollars and _____ cents.	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-101f	Remove Permeable Base Course at the unit price of: _____ dollars and _____ cents.	SY	17,862	\$	\$
P-101g	Remove Cement Treated Base Course at the unit price of: _____ dollars and _____ cents.	SY	1,877	\$	\$
P-101h	Remove Cement Treated Subgrade at the unit price of: _____ dollars and _____ cents.	SY	2,356	\$	\$
P-101i	Remove Asphalt Road - Complete at the unit price of: _____ dollars and _____ cents.	SY	4,661	\$	\$
P-101j	Grind Cement Treated Base Course (0" to 1") at the unit price of: _____ dollars and _____ cents.	SY	300	\$	\$
P-101k	Pavement Marking Removal at the unit price of: _____ dollars and _____ cents.	SF	10,000	\$	\$
P-101l	Remove Gravel Road at the unit price of: _____ dollars and _____ cents.	SY	2,280	\$	\$
P-152a	Unclassified Excavation at the unit price of: _____ dollars and _____ cents.	CY	820,000	\$	\$
P-152b	Excavation for Undercut (Less than 3') at the unit price of: _____ dollars and _____ cents.	CY	14,950	\$	\$
P-152c	Embankment (Common Fill) at the unit price of: _____ dollars and _____ cents.	CY	250,000	\$	\$
P-152d	Embankment (Stockpile Excess Material) at the unit price of: _____ dollars and _____ cents.	CY	472,000	\$	\$
P-152e	Upper Select Subgrade at the unit price of: _____ dollars and _____ cents.	CY	32,700	\$	\$
P-152f	Lower Select Subgrade at the unit price of: _____ dollars and _____ cents.	CY	98,000	\$	\$
P-152g	Subgrade Preparation (12") at the unit price of: _____ dollars and _____ cents.	SY	65,374	\$	\$
P-152h	Rock Excavation at the unit price of: _____ dollars and _____ cents.	CY	10,000	\$	\$
P-152i	Excavation for Undercut (Greater than 3') at the unit price of: _____ dollars and _____ cents.	CY	4,980	\$	\$
P-159a	Concrete Crushing at the unit price of: _____ dollars and _____ cents.	TON	2,950	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-220a	Cement Treated Soil Base Course at the unit price of: _____ dollars and _____ cents.	SY	65,374	\$	\$
P-220b	Cement at the unit price of: _____ dollars and _____ cents.	TON	1,500	\$	\$
P-304a	Cement Treated Base Course at the unit price of: _____ dollars and _____ cents.	SY	63,897	\$	\$
P-304Ca	CDOT Class 6 Roadway Base at the unit price of: _____ dollars and _____ cents.	CY	1,975	\$	\$
P-307a	Cement Treated Permeable Base Course (CTPB) 7" at the unit price of: _____ dollars and _____ cents.	SY	46,297	\$	\$
P-403a	Bituminous Surface Course at the unit price of: _____ dollars and _____ cents.	TON	9,068	\$	\$
P-403b	Bituminous Base Course at the unit price of: _____ dollars and _____ cents.	TON	17,670	\$	\$
P-501a	Cement Concrete Pavement (Non-Reinforced, 17") at the unit price of: _____ dollars and _____ cents.	SY	44,613	\$	\$
P-501b	Cement Concrete Pavement (Reinforced, 17") at the unit price of: _____ dollars and _____ cents.	SY	9,207	\$	\$
P-501c	Cement Concrete Pavement (Non Reinforced, 21") at the unit price of: _____ dollars and _____ cents.	SY	6,523	\$	\$
P-501d	Cement Concrete Pavement (Reinforced, 21") at the unit price of: _____ dollars and _____ cents.	SY	1,965	\$	\$
P-501e	Bond Breaker Fabric at the unit price of: _____ dollars and _____ cents.	SY	62,308	\$	\$
P-610a	Cement Treated Base Repair at the unit price of: _____ dollars and _____ cents.	SY	150	\$	\$
P-620a	Pavement Markings, Waterborne at the unit price of: _____ dollars and _____ cents.	SF	44,754	\$	\$
P-620b	Pavement Markings, Metacrylate at the unit price of: _____ dollars and _____ cents.	SF	3,075	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-620c	Reflective Media at the unit price of: _____ dollars and _____ cents.	LB	1,796	\$	\$
P-620d	Stop Sign at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
P-620e	Type I Roadway Delineator at the unit price of: _____ dollars and _____ cents.	E/A	36	\$	\$
D-701a	Install 24" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	3,366	\$	\$
D-701b	Install 30" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	413	\$	\$
D-701c	Install 36" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	267	\$	\$
D-701d	Install 48" Class V RCP at the unit price of: _____ dollars and _____ cents.	LF	2,870	\$	\$
D-701e	Install 24" FES at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
D-701f	Install 48" FES at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
D-701g	Remove 30" RCP at the unit price of: _____ dollars and _____ cents.	LF	97	\$	\$
D-705a	Install 6" Underdrain (Perforated PVC) at the unit price of: _____ dollars and _____ cents.	LF	10,485	\$	\$
D-705b	Install 6" Underdrain (Non-Perforated PVC) at the unit price of: _____ dollars and _____ cents.	LF	2,510	\$	\$
D-705c	Repair Damaged Underdrain Pipe at the unit price of: _____ dollars and _____ cents.	LF	200	\$	\$
D-705d	Install Underdrain Cleanouts at the unit price of: _____ dollars and _____ cents.	E/A	80	\$	\$
D-705e	Remove Underdrain Pipe at the unit price of: _____ dollars and _____ cents.	LF	4,092	\$	\$
D-705f	Remove Underdrain Cleanouts at the unit price of: _____ dollars and _____ cents.	E/A	7	\$	\$
D-710a	Grouted Type "M" Riprap at the unit price of: _____ dollars and _____ cents.	CY	5	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
D-710b	Remove and Stockpile Existing Type "VH" Riprap at the unit price of: _____ dollars and _____ cents.	CY	230	\$	\$
D-710c	Grouted Type "VH" Riprap (From On-Site Stockpile) at the unit price of: _____ dollars and _____ cents.	CY	230	\$	\$
D-710d	Grouted Type "VH" Riprap (New) at the unit price of: _____ dollars and _____ cents.	CY	404	\$	\$
D-751a	Install New Triple Type II Inlet Structure at the unit price of: _____ dollars and _____ cents.	EA	2	\$	\$
D-751b	Install New Double Type II Inlet Structure at the unit price of: _____ dollars and _____ cents.	EA	7	\$	\$
D-751c	Install Oversized Triple Type II Inlet at the unit price of: _____ dollars and _____ cents.	EA	1	\$	\$
D-751d	Install Airfield Manhole at the unit price of: _____ dollars and _____ cents.	EA	2	\$	\$
D-751e	Install Type B Manhole at the unit price of: _____ dollars and _____ cents.	EA	3	\$	\$
D-751f	Install Type P Manhole at the unit price of: _____ dollars and _____ cents.	EA	2	\$	\$
D-751g	Remove Existing Inlet at the unit price of: _____ dollars and _____ cents.	EA	1	\$	\$
D-751h	Install Underdrain Manholes at the unit price of: _____ dollars and _____ cents.	EA	16	\$	\$
D-751i	Tie To Existing Structure at the unit price of: _____ dollars and _____ cents.	EA	1	\$	\$
T-901a	Seeding (Seed Mix Design 2) at the unit price of: _____ dollars and _____ cents.	AC	235	\$	\$
T-905a	Topsoiling at the unit price of: _____ dollars and _____ cents.	CY	49,248	\$	\$
T-908a	Hydraulic Mulching at the unit price of: _____ dollars and _____ cents.	AC	235	\$	\$
T-908b	Erosion Control Blankets at the unit price of: _____ dollars and _____ cents.	SY	86,527	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-108a	#8 AWG L-824C, 5000V Conductor at the unit price of: _____ dollars and _____ cents.	LF	194,000	\$	\$
L-110a	1W-2" Sch. 40 PVC Conduit in Earth at the unit price of: _____ dollars and _____ cents.	LF	550	\$	\$
L-110b	1W-2" Sch. 40 PVC Conduit in New Concrete Pavement at the unit price of: _____ dollars and _____ cents.	LF	7,580	\$	\$
L-110c	1W-2" Sch. 40 PVC Conduit in New Asphalt Pavement at the unit price of: _____ dollars and _____ cents.	LF	13,425	\$	\$
L-110d	8W-4" Sch. 40 PVC Concrete Encased Duct Bank at the unit price of: _____ dollars and _____ cents.	LF	1,800	\$	\$
L-110e	Broken Conduit Repair at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-110f	Remove Concrete Encased Duct Bank at the unit price of: _____ dollars and _____ cents.	LF	9,550	\$	\$
L-115a	Install New Electrical Manhole at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-115b	Adjust Existing Electrical Manhole at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-115c	Remove Existing Electrical Manhole at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-120c	Install L-847-2 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-120d	Install L-847-3 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-125a	L-852C LED Taxiway Unidirectional Centerline Light at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-125b	L-852C LED Taxiway Bidirectional Centerline Light (Single Circuit) at the unit price of: _____ dollars and _____ cents.	E/A	101	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125c	L-852K LED Taxiway Bidirectional Centerline Light (Single Circuit)	E/A	80	\$	\$
L-125d	L-861T Quartz Taxiway Edge Light Mounted on L-867 Base Can	E/A	62	\$	\$
L-125e	L-861T LED Taxiway Edge Light Mounted on L-867 Base Can	E/A	66	\$	\$
L-125f	L-861T LED Taxiway Edge Light Mounted on L-868 Base Can	E/A	1	\$	\$
L-125g	L-868B 3/4" Thick Cover Plate	E/A	6	\$	\$
L-125h	L-867B 3/8" Thick Cover Plate	E/A	4	\$	\$
L-125i	New 22" Deep L-868B Base Can in New Concrete Pavement	E/A	172	\$	\$
L-125j	New 26" Deep L-868B Base Can in New Concrete Pavement	E/A	10	\$	\$
L-125k	New L-867B Base Can in New Asphalt Pavement	E/A	121	\$	\$
L-125l	New L-867B Base Can in Existing Asphalt Pavement	E/A	7	\$	\$
L-125m	L-858 LED Guidance Sign - 2 Mod	E/A	2	\$	\$
L-125n	L-858 LED Guidance Sign - 3 Mod	E/A	10	\$	\$
L-125o	L-858 LED Guidance Sign - 4 Mod	E/A	1	\$	\$
L-125p	New Guidance Sign Foundation - 3 Mod	E/A	8	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125q	New Guidance Sign Foundation - 4 Mod at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-125r	New Guidance Sign Foundation - 5 Mod at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-125s	Remove Existing Sign and Base at the unit price of: _____ dollars and _____ cents.	E/A	3	\$	\$
L-125t	Remove Fixture and Base Can at the unit price of: _____ dollars and _____ cents.	E/A	102	\$	\$
L-125u	Reconnect 2" Conduit at Location of Removed Base Can at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-125v	Remove and Replace Fixture or Sign ID Marker at the unit price of: _____ dollars and _____ cents.	E/A	215	\$	\$
L-125w	Remove and Replace Circuit ID Tag at the unit price of: _____ dollars and _____ cents.	E/A	92	\$	\$
L-125x	Cover Taxiway Edge Light at the unit price of: _____ dollars and _____ cents.	E/A	24	\$	\$
L-125y	Mask Off Taxiway Centerline Light at the unit price of: _____ dollars and _____ cents.	E/A	42	\$	\$
L-125z	Cover Guidance Sign at the unit price of: _____ dollars and _____ cents.	E/A	16	\$	\$
L-125aa	Edge Light Drain at the unit price of: _____ dollars and _____ cents.	E/A	9	\$	\$
L-132-5.1	Installation of New LLWAS Including All Equipment and Foundations, As Shown on Contract Documents at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$
L-132-5.2	Removal of Existing LLWAS Including All Equipment, EES, Tower and Foundations at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-132-5.3	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 4 Way 4 Inch	LF	6,000	\$	\$
L-132-5.4	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 2 Way 2 Inch	LF	1,400	\$	\$
L-132-5.5	#1/0 AWG, Bare Copper FAA Guard Wire Installed Above Duct Bank or Conduit, Including Ground Rods, Connections, and Terminations	LF	7,500	\$	\$
L-132-5.6	FAA Communications Manhole, 6 Feet by 6 Feet	EA	7	\$	\$
L-132-5.7	FAA Power Manhole, 6 Feet by 6 Feet	EA	4	\$	\$
L-132-5.8	2-#2 AWG and 1-#4 AWG Ground Cable Installed in Duct Bank or Conduit, Including All Connections and Terminations	LF	1,550	\$	\$
L-140a	Post-Construction Photometric Testing	LS	1	\$	\$
L-150-1	Fiber Optic Cable Installed in Innerduct in Duct or Conduit, Including Testing and Connections	LF	36,000	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-150-2	25 pair #22 AWG Type USE Cable, Installed in Duct Bank or Conduit	LF	800	\$	\$
L-160a	Furnish 250kW Generator for 35L ALSFII/17R LOC Temp Power (208Y/120V, 3-phase)	EA	1	\$	\$
L-160b	Connect 250kW Generator for 35L ALSFII/17R LOC Temp Power	EA	1	\$	\$
L-160c	Operate 250kW Generator	DAY	2	\$	\$
L-160d	Furnish 50kW Generator for RTR-A Temp Power (208Y/120V, 3-phase)	EA	1	\$	\$
L-160e	Furnish 50kW Generator for RTR-B Temp Power (208Y/120V, 3-phase)	EA	1	\$	\$
L-160f	Furnish 50kW Generator for ASDE Temp Power (208Y/120V, 3-phase)	EA	1	\$	\$
L-160g	Furnish 50kW Generator for 17R MALSR/35L LOC Temp Power (120/240V, 1-phase)	EA	1	\$	\$
L-160h	Install 100A Power Inlet at RTR-A or RTR-B	EA	2	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160i	Connect 50kW Generator for ASDE Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160j	Connect 50kW Generator for 17R MALSR/35L LOC Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160k	Operate 50kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	13	\$	\$
L-160l	Furnish 30kW Generator for 17R GS or 35L GS Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-160m	Furnish 30kW Generator for DEN VOR Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160n	Connect 30kW Generator for 17R GS or 35L GS Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	2	\$	\$
L-160o	Connect 30kW Generator for DEN VOR Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160p	Operate 30kW Generator at the unit price of: _____ dollars and _____ cents.	DAY	6	\$	\$
L-160q	Furnish 15kW Generator for RTR-E Temp Power (120/240V, 1-phase) at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-160r	Operate 15kW Generator for RTR-E Temp Power at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160s	Furnish 10kW Generator for Midfield RVR Temp Power (120/240V, 1-phase)	E/A	1	\$	\$
L-160t	Connect 10kW Generator for Midfield RVR Temp Power	E/A	1	\$	\$
L-160u	Operate 10kW Generator	DAY	2	\$	\$
L-160v	Furnish 5kW Generator for ASOS Temp Power (240V, 1-phase)	E/A	1	\$	\$
L-160w	Connect 5kW Generator for ASOS Temp Power	E/A	1	\$	\$
L-160x	Operate 5kW Generator	DAY	2	\$	\$
L-160y	Furnish 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power (120V, 1-phase)	E/A	2	\$	\$
L-160z	Connect 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power	E/A	2	\$	\$
L-160aa	Operate 1.8kW Generator	DAY	4	\$	\$

SCHEDULE I TOTAL \$ _____

SCHEDULE II

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-105a	Mobilization at the unit price of: _____ dollars and _____ cents.	LS	1		\$
P-501f	Pavement Spall Repair at the unit price of: _____ dollars and _____ cents.	SY	100	\$	\$
L-120a	Furnish L-847-2 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
L-120b	Furnish L-847-3 Circuit Selector Switch at the unit price of: _____ dollars and _____ cents.	E/A	1	\$	\$
13410Aa	ALCMS Modifications at the unit price of: _____ dollars and _____ cents.	LS	1	\$	\$

SCHEDULE II TOTAL \$ _____

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ITEM P-152 EXCAVATION, SUBGRADE, AND EMBANKMENT

DESCRIPTION

152-1.1 This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

152-1.2 CLASSIFICATION. All material excavated shall be classified as defined below:

- a. **Unclassified excavation.** Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature.
- b. **Rock excavation.** Rock excavation shall include all solid rock in ledges, in bedded deposits, in unstratified masses, and conglomerate deposits which are so firmly cemented they cannot be removed without blasting or using rippers. All boulders containing a volume of more than 1/2 cubic yard (0.4 m³) will be classified as "rock excavation."

152-1.3 UNSUITABLE EXCAVATION. Unsuitable material shall be disposed in designated waste areas as shown on the plans. Materials containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material suitable for topsoil may be used on the embankment slope when approved by the DEN Project Manager.

152-1.4 SELECT EMBANKMENT. Select Embankment shall consist of material as described below. There are 2 zones of Select Embankment Material:

- a. Lower Select Embankment: the lower 4.5 feet (1.4 m)
- b. Upper Select Embankment: the upper 1.5 feet (.445 m).
- c. The upper ~~8 inches (200 mm)~~ to 1 foot (300 mm) of the Upper Select Embankment will be cement treated.

Lower Select Embankment material shall consist of existing in-place select fill, including moisture conditioning of the existing on-site select fill. Moisture conditioning of the existing select fill shall be performed to a depth of 5 feet (1.5 m) below planned finished grades or to 3 feet (1 m) below existing site grades, whichever is greater. This will require over-excavation of existing soils using a maximum 8 inch (200 mm) lift thickness, and tested for classification (including gradation and Atterberg limits), swell-consolidation, and water soluble sulfates will not be required for Lower Select Embankment material consisting of in-place and moisture conditioned existing on-site select fill.

If required, imported Lower Select Embankment materials shall be free of unsuitable materials, including claystone, contain 100% passing the 3 inch (75 mm) sieve, less than 90% passing the No. 200 sieve, have a maximum Liquid Limit of 40, a maximum Plasticity Index of 30, and less than 3% swell potential. The swell sample shall be remolded to 95% of the maximum dry density at optimum moisture as determined by ASTM D 698 for initial acceptance of the proposed imported Lower Select Embankment Material. During placement of the imported Lower Select Embankment Material, the swell sample shall be obtained from the compacted in-place imported Lower Select Embankment Material.

51
52 The lower and upper select embankment materials should be properly moisture conditioned and compacted
53 in accordance with the specifications.
54

55 Upper Select embankment material shall be obtained from the borrow area indicated in the plans and shall
56 meet the requirements of the specification.
57

58 **a-d. Cement Treated Upper Select Embankment.** The Upper Select Embankment material, of
59 which the upper ~~8 inches (200 mm)~~ to 1 foot (300 mm) will be cement-treated, shall be an
60 imported material free of unsuitable materials, with 100% passing the 1-inch sieve, no more than
61 45% retained on a No. 4 sieve, less than 50% passing the No. 200 sieve, a maximum Plasticity
62 Index of 15, a maximum water soluble sulfates content of 0.5%, and less than 3% swell potential.
63 The swell sample shall be remolded to 95% of the maximum dry density at optimum moisture as
64 determined by ASTM D 698 for initial acceptance of the proposed Upper Select Embankment
65 material. During placement of the Upper Select Embankment material, the swell sample shall be
66 obtained from the compacted in-place Upper Select Embankment material.
67

68 **152-1.5 MATERIAL CLASSIFICATION.** Non-cohesive soils, for the purposes of determining
69 compaction control, are those with a plasticity index of less than 3 when tested in accordance with ASTM D
70 4318. Any other material shall be considered cohesive.
71

72 73 CONSTRUCTION METHODS

74
75 **152-2.1 GENERAL.** Before beginning excavation, grading, and embankment operations in any area, the area
76 shall be cleared or cleared and grubbed in accordance with Item P-151.
77

78 The suitability of material to be placed in embankments shall be subject to approval by the DEN Project
79 Manager. All unsuitable material shall be disposed of in waste areas as shown on the plans. All waste areas
80 shall be graded to allow positive drainage of the area and adjacent areas. The surface elevation of waste areas
81 shall be specified on the plans or approved by the DEN Project Manager.
82

83 When the Contractor's excavating operations encounter artifacts of historical or archaeological significance,
84 the operations shall be temporarily discontinued and the DEN Project Manager notified per Section 70,
85 paragraph 70-20. At the direction of the DEN Project Manager, the Contractor shall excavate the site in such
86 a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid
87 for as extra work.
88

89 Areas outside the limits of the pavement areas where the top layer of soil has become compacted by hauling
90 or other Contractor activities shall be scarified and disked to a depth of 4 inches (100 mm), to loosen and
91 pulverize the soil. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not
92 be permitted in the top 6 inches (150 mm) of the subgrade.
93

94 If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar
95 underground structures, the Contractor shall be responsible for and shall take all necessary precautions to
96 preserve them or provide temporary services. When such facilities are encountered, the Contractor shall
97 notify the DEN Project Manager, who shall arrange for their removal if necessary. The Contractor, at their
98 own expense, shall satisfactorily repair or pay the cost of all damage to such facilities or structures that may
99 result from any of the Contractor's operations during the period of the contract.
100

101 a. **Blasting.** Blasting shall not be allowed.

102

103 **152-2.2 EXCAVATION.** No excavation shall be started until the work has been staked out by the
104 Contractor and the DEN Project Manager has obtained from the Contractor, the survey notes of the
105 elevations and measurements of the ground surface. The Contractor and DEN Project Manager shall agree
106 that the original ground lines shown on the original topographic mapping are accurate, or agree to any
107 adjustments made to the original ground lines.

108

109 Digital terrain model (DTM) files of the existing surfaces, finished surfaces and other various surfaces were
110 used to develop the design plans.

111

112 Volumetric quantities were calculated by comparing DTM files of the applicable design surfaces and
113 generating Triangle Volume Reports. Electronic copies of DTM files and a paper copy of the original
114 topographic map will be issued to the successful bidder.

115

116 Volumetric quantities were calculated using design cross sections which were created for this project using the
117 DTM files of the applicable design surfaces and generating End Area Volume Reports. Paper copies of
118 design cross sections and a paper copy of the original topographic map will be issued to the successful bidder.

119

120 Existing grades on the design cross sections or DTM's, where they do not match the locations of actual spot
121 elevations shown on the topographic map, were developed by computer interpolation from those spot
122 elevations. Prior to disturbing original grade, Contractor shall verify the accuracy of the existing ground
123 surface by verifying spot elevations at the same locations where original field survey data was obtained as
124 indicated on the topographic map. Contractor shall recognize that, due to the interpolation process, the actual
125 ground surface at any particular location may differ somewhat from the interpolated surface shown on the
126 design cross sections or obtained from the DTM's. Contractor's verification of original ground surface,
127 however, shall be limited to verification of spot elevations as indicated herein, and no adjustments will be
128 made to the original ground surface unless the Contractor demonstrates that spot elevations shown are
129 incorrect. For this purpose, spot elevations which are within 0.1 foot (30 mm) of the stated elevations for
130 ground surfaces, or within 0.04 foot (12 mm) for hard surfaces (pavements, buildings, foundations, structures,
131 etc.) shall be considered "no change". Only deviations in excess of these will be considered for adjustment of
132 the original ground surface. If Contractor's verification identifies discrepancies in the topographic map,
133 Contractor shall notify the DEN Project Manager in writing at least two weeks before disturbance of existing
134 grade to allow sufficient time to verify the submitted information and make adjustments to the design cross
135 sections or DTM's. Disturbance of existing grade in any area shall constitute acceptance by the Contractor of
136 the accuracy of the original elevations shown on the topographic map for that area.

137

138 All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future
139 use in areas designated on the plans or by the DEN Project Manager. All suitable excavated material shall be
140 used in the formation of embankment, subgrade, or other purposes as shown on the plans. All unsuitable
141 material shall be disposed of as shown on the plans.

142

143 The grade shall be maintained so that the surface is well drained at all times.

144

145 When the volume of the excavation exceeds that required to construct the embankments to the grades as
146 indicated on the plans, the excess shall be used to grade the areas of ultimate development or disposed as
147 directed by the DEN Project Manager. When the volume of excavation is not sufficient for constructing the
148 embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

149

- 150 **a. Selective grading.** When selective grading is indicated on the plans, the more suitable material
151 designated by the DEN Project Manager shall be used in constructing the embankment or in
152 capping the pavement subgrade. If, at the time of excavation, it is not possible to place this
153 material in its final location, it shall be stockpiled in approved areas until it can be placed. The
154 more suitable material shall then be placed and compacted as specified. Selective grading shall be
155 considered incidental to the work involved. The cost of stockpiling and placing the material shall
156 be included in the various pay items of work involved.
157
- 158 **b. Undercutting.** Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for
159 safety areas, subgrades, roads, shoulders, or any areas intended for turf shall be excavated to a
160 minimum depth of 12 inches (300 mm) below the subgrade or to the depth specified by the
161 DEN Project Manager. Muck, peat, matted roots, or other yielding material, unsatisfactory for
162 subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be
163 disposed off the airport. The cost is incidental to this item. This excavated material shall be paid
164 for at the contract unit price per cubic yard (per cubic meter) for Unclassified Excavation. The
165 excavated area shall be backfilled with suitable material obtained from the grading operations or
166 borrow areas and compacted to specified densities. The necessary backfill will constitute a part
167 of the embankment. Where rock cuts are made, backfill with select material. Any pockets created
168 in the rock surface shall be drained in accordance with the details shown on the plans.
169 Undercutting will be paid as unclassified excavation.
170
- 171 **c. Over-break.** Over-break, including slides, is that portion of any material displaced or loosened
172 beyond the finished work as planned or authorized by the DEN Project Manager. All over-break
173 shall be graded or removed by the Contractor and disposed of as directed by the DEN Project
174 Manager. The DEN Project Manager shall determine if the displacement of such material was
175 unavoidable and their own decision shall be final. Payment will not be made for the removal and
176 disposal of over-break that the DEN Project Manager determines as avoidable. Unavoidable
177 over-break will be classified as “Unclassified Excavation.”
178
- 179 **d. Removal of utilities.** The removal of existing structures and utilities required to permit the
180 orderly progress of work will be accomplished by the Contractor as indicated on the plans. All
181 existing foundations shall be excavated at least 2 feet (60 cm) below the top of subgrade or as
182 indicated on the plans, and the material disposed of as directed by the DEN Project Manager. All
183 foundations thus excavated shall be backfilled with suitable material and compacted as specified
184 for embankment or as shown on the plans.
185
- 186 **e. Hazardous Materials.** Some material (equipment, debris, soil, wastes, etc.) may be affected by
187 hazardous constituents, chemicals or compounds used during oil and gas production, residential
188 development, public improvement construction or agricultural use. Material contaminated or
189 potentially contaminated with hazardous constituents, chemicals or compounds shall be assessed
190 by the contractor regarding the hazardous characteristic(s) of each material. The assessment will
191 be made in accordance with requirements specified by the Colorado Department of Public
192 Health and Environment (CDPHE) and the Colorado Department of Natural Resources - Oil
193 and Gas Conservation Commission (OGCC). The Contractor shall notify the DEN Project
194 Manager Engineer in writing immediately upon discovery or suspicion of the existence of such
195 hazardous material.
196

197 **152-2.3 Borrow excavation.** Borrow areas within the airport property are indicated on the plans. Borrow
198 excavation shall be made only at these designated locations and within the horizontal and vertical limits as
199 staked or as directed by the DEN Project Manager. All unsuitable material shall be disposed of by the

200 Contractor as shown on the plans. All borrow pits shall be opened to expose the various strata of acceptable
201 material to allow obtaining a uniform product. Borrow areas shall be drained and left in a neat, presentable
202 condition with all slopes dressed uniformly. Borrow areas shall not create a hazardous wildlife attractant.
203

204 The contractor shall distinguish borrow sources to distinguish materials to be used as common embankment
205 and select embankment. The Contractor shall prepare a Select Embankment Material Plan for select material
206 excavation and select material placement based on the plan information and the Contractor's further
207 exploration of upper select embankment material availability. The Select Embankment Material Plan shall
208 contain the results of the following investigation:
209

- 210 a. Select Borrow investigation for designated areas.
- 211
- 212 b. Test hole or pit explorations in runway/taxiway and select borrow areas at approximately 300' on
213 centers.
- 214
- 215 c. Sample testing at each exploration for depth of topsoil, depth of select material, elevation of
216 surface, and laboratory tests for Plasticity Index, sieve analysis, percent passing 200 sieve,
217 classification, soluble sulfates, and swell consolidation.
- 218
- 219 d. Detailed log of each test hole or pit.
- 220
- 221 e. Estimate of select material available in each area.
- 222

223 **152-2.4 DRAINAGE EXCAVATION.** Drainage excavation shall consist of excavating drainage ditches
224 including intercepting, inlet, or outlet ditches; or other types as shown on the plans. The work shall be
225 performed in sequence with the other construction. Ditches shall be constructed prior to starting adjacent
226 excavation operations. All satisfactory material shall be placed in embankment fills; unsuitable material shall
227 be placed in designated waste areas or as directed by the DEN Project Manager. All necessary work shall be
228 performed true to final line, elevation, and cross-section. The Contractor shall maintain ditches constructed
229 on the project to the required cross-section and shall keep them free of debris or obstructions until the
230 project is accepted.
231

232 **152-2.5 PREPARATION OF CUT AREAS OR AREAS WHERE EXISTING PAVEMENT HAS
233 BEEN REMOVED.** In those areas on which a subbase or base course is to be placed, the top 24 inches of
234 subgrade shall be compacted to not less than 100% of maximum density for non-cohesive soils, and 95% of
235 maximum density for cohesive soils as determined by ASTM D698. As used in this specification, "non-
236 cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.
237

238 **152-2.6 PREPARATION OF EMBANKMENT AREA.** All sod and vegetative matter shall be removed
239 from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by
240 plowing or scarifying to a minimum depth of 6 inches (150 mm) and shall then be compacted per paragraph
241 152-2.10.
242

243 Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or
244 broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part
245 excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12
246 inches (300 mm) and compacted as specified for the adjacent fill.
247

248 No direct payment shall be made for the work performed under this section. The necessary clearing and
249 grubbing and the quantity of excavation removed will be paid for under the respective items of work.

250
251 **152-2.7 CONTROL STRIP.** The first half-day of construction of subgrade and/or embankment shall be
252 considered as a control strip for the Contractor to demonstrate, in the presence of the DEN Project Manager,
253 that the materials, equipment, and construction processes meet the requirements of this specification. The
254 sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The
255 maximum compacted thickness may be increased to a maximum of 12 inches (300 mm) upon the
256 Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the
257 specified density. The DEN Project Manager must witness this demonstration and approve the lift thickness
258 prior to full production.

259
260 Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and
261 replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted
262 by the DEN Project Manager. The Contractor shall use the same equipment, materials, and construction
263 methods for the remainder of construction, unless adjustments made by the Contractor are approved in
264 advance by the DEN Project Manager.

265
266 **152-2.8 FORMATION OF EMBANKMENTS.** The material shall be constructed in lifts as established in
267 the control strip, but not less than 6 inches (150 mm) nor more than 12 inches (300 mm) of compacted
268 thickness.

269
270 When more than one lift is required to establish the layer thickness shown on the plans, the construction
271 procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify
272 that compaction requirements have been met. The Contractor shall rework, re-compact and retest any
273 material placed which does not meet the specifications.

274
275 The lifts shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the
276 DEN Project Manager. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall
277 not be incorporated or buried in the embankment.

278
279 Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained due to rain,
280 freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the
281 embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces
282 that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to
283 provide surface drainage at all times.

284
285 The material in each lift shall be within 0% to 2% of optimum moisture content before rolling to obtain the
286 prescribed compaction. The material shall be moistened or aerated as necessary to achieve a uniform
287 moisture content throughout the lift. Natural drying may be accelerated by blending in dry material or
288 manipulation alone to increase the rate of evaporation.

289
290 The Contractor shall make the necessary corrections and adjustments in methods, materials or moisture
291 content to achieve the specified embankment density.

292
293 The contractor will take samples of excavated materials which will be used in embankment for testing and
294 develop a Moisture-Density Relations of Soils Report (Proctor) in accordance with ASTM D698. A new
295 Proctor shall be developed for each soil type based on visual classification.

296
297 Density tests will be taken by the contractor for every 1,000 square yards of compacted embankment for each
298 lift which is required to be compacted, or other appropriate frequencies as determined by the DEN Project
299 Manager.

300
301 If the material has greater than 30% retained on the 3/4-inch (19.0 mm) sieve, follow AASHTO T-180
302 Annex Correction of maximum dry density and optimum moisture for oversized particles.
303

304 Rolling operations shall be continued until the embankment is compacted to not less than 95% of maximum
305 density for non-cohesive soils, and 90% of maximum density for cohesive soils as determined by ASTM
306 D698. Under all areas to be paved, the embankments shall be compacted to a depth of 24 inches and to a
307 density of not less than 95 percent of the maximum density as determined by ASTM D698. As used in this
308 specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined
309 by ASTM D4318.

310
311 On all areas outside of the pavement areas, no compaction will be required on the top 6 inches which shall be
312 prepared for a seedbed in accordance with Item T-9505.

313
314 The in-place field density shall be determined in accordance with ASTM D1556 or ASTM 6938 using
315 Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture
316 content of the material. The machine shall be calibrated in accordance with ASTM D6938.

317
318 The Contractor's laboratory shall perform all density tests in the DEN Project Manager's presence and
319 provide the test results upon completion to the DEN Project Manager for acceptance. If the specified
320 density is not attained, the area represented by the test or as designated by the DEN Project Manager shall be
321 reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the
322 specified density is reached.

323
324 Compaction areas shall be kept separate, and no lift shall be covered by another lift until the proper density is
325 obtained.

326
327 During construction of the embankment, the Contractor shall route all construction equipment evenly over
328 the entire width of the embankment as each lift is placed. Lift placement shall begin in the deepest portion of
329 the embankment fill. As placement progresses, the lifts shall be constructed approximately parallel to the
330 finished pavement grade line.

331
332 When rock, concrete pavement, asphalt pavement, and other embankment material are excavated at
333 approximately the same time as the subgrade, the material shall be incorporated into the outer portion of the
334 embankment and the subgrade material shall be incorporated under the future paved areas. Stones,
335 fragmentary rock, and recycled pavement larger than 4 inches (100 mm) in their greatest dimensions will not
336 be allowed in the top 12 inches (300 mm) of the subgrade. Rockfill shall be brought up in lifts as specified or
337 as directed by the DEN Project Manager and the finer material shall be used to fill the voids forming a dense,
338 compact mass. Rock, cement concrete pavement, asphalt pavement, and other embankment material shall not
339 be disposed of except at places and in the manner designated on the plans or by the DEN Project Manager.

340
341 When the excavated material consists predominantly of rock fragments of such size that the material cannot
342 be placed in lifts of the prescribed thickness without crushing, pulverizing or further breaking down the
343 pieces, such material may be placed in the embankment as directed in lifts not exceeding 2 feet (60 cm) in
344 thickness. Each lift shall be leveled and smoothed with suitable equipment by distribution of spalls and finer
345 fragments of rock. The lift shall not be constructed above an elevation 4 feet (1.2 m) below the finished
346 subgrade.

347
348 **152-2.9 PROOF ROLLING.** The purpose of proof rolling the subgrade is to identify any weak areas in the
349 subgrade and not for compaction of the subgrade. After compaction is completed, the subgrade area shall be

350 proof rolled with a 20 ton (18.1 metric ton) Tandem axle Dual Wheel Dump Truck loaded to the legal limit
351 with tires inflated to 80/100/150 psi (0.551 MPa/0.689 MPa/1.034 MPa) in the presence of the DEN Project
352 Manager. Apply a minimum coverage as specified by the DEN Project Manager, under pavement areas. A
353 coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that
354 deflect more than 1 inch (25 mm) or show permanent deformation greater than 1 inch (25 mm) shall be
355 removed and replaced with suitable material or reworked to conform to the moisture content and
356 compaction requirements in accordance with these specifications. Removal and replacement of soft areas is
357 incidental to this item.

358
359 **152-2.10 COMPACTION REQUIREMENTS.** The subgrade under areas to be paved shall be compacted
360 to a depth of 24 inches and to a density of not less than 95 percent of the maximum dry density as
361 determined by ASTM D698. The subgrade in areas outside the limits of the pavement areas shall be
362 compacted to a depth of 12 inches and to a density of not less than 95 percent of the maximum density as
363 determined by ASTM D698.

364
365 The material to be compacted shall be within $\pm 2\%$ of optimum moisture content before being rolled to
366 obtain the prescribed compaction (except for expansive soils). When the material has greater than 30 percent
367 retained on the $\frac{3}{4}$ inch (19.0 mm) sieve, follow the methods in ASTM D698, or procedures in AASHTO
368 T180 Annex for correction of maximum dry density and optimum moisture for oversized particles.] Tests
369 for moisture content and compaction will be taken at a minimum of 100 S.Y. of subgrade. All quality
370 assurance testing shall be done by the Contractor's laboratory in the presence of the DEN Project Manager,
371 and density test results shall be furnished upon completion to the DEN Project Manager for acceptance
372 determination.

373
374 The in-place field density shall be determined in accordance with ASTM D1556, or ASTM D6938 using
375 Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture
376 content of the material. The machine shall be calibrated in accordance with ASTM D6938 within 12 months
377 prior to its use on this contract. The gage shall be field standardized daily.

378
379 Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

380
381 If the specified density is not attained, the entire lot shall be reworked and/or re-compacted and additional
382 random tests made. This procedure shall be followed until the specified density is reached.

383
384 All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the
385 plans or as directed by the DEN Project Manager and the finished subgrade shall be maintained.

386
387 **152-2.11 FINISHING AND PROTECTION OF SUBGRADE.** Finishing and protection of the subgrade
388 is incidental to this item. Grading and compacting of the subgrade shall be performed so that it will drain
389 readily. All low areas, holes or depressions in the subgrade shall be brought to grade. Scarifying, blading,
390 rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the
391 lines and grades shown on the plans. All ruts or rough places that develop in the completed subgrade shall be
392 graded, re-compacted, and retested. The Contractor shall protect the subgrade from damage and limit hauling
393 over the finished subgrade to only traffic essential for construction purposes.

394
395 The Contractor shall maintain the completed course in satisfactory condition throughout placement of
396 subsequent layers. No subbase, base, or surface course shall be placed on the subgrade until the subgrade
397 has been accepted by the DEN Project Manager.

398

399 **152-2.12 HAUL.** All hauling will be considered a necessary and incidental part of the work. The Contractor
400 shall include the cost in the contract unit price for the pay of items of work involved. No payment will be
401 made separately or directly for hauling on any part of the work.
402

403 The Contractor's equipment shall not cause damage to any excavated surface, compacted lift or to the
404 subgrade as a result of hauling operations. Any damage caused as a result of the Contractor's hauling
405 operations shall be repaired at the Contractor's expense.
406

407 The Contractor shall be responsible for providing, maintaining and removing any haul roads or routes within
408 or outside of the work area, and shall return the affected areas to their former condition, unless otherwise
409 authorized in writing by the Owner. No separate payment will be made for any work or materials associated
410 with providing, maintaining and removing haul roads or routes.
411

412 **152-2.13 SURFACE TOLERANCES.** In those areas on which a subbase or base course is to be placed, the
413 surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required
414 smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm),
415 reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved
416 by the DEN Project Manager. The Contractor shall perform all final smoothness and grade checks in the
417 presence of the DEN Project Manager. Any deviation in surface tolerances shall be corrected by the
418 Contractor at the Contractor's expense.
419

420 **a. Smoothness.** The finished surface shall not vary more than +/- 1/2 inch (12 mm) when tested
421 with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The
422 straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m)
423 straightedge for the full length of each line on a 50-foot (15-m) grid.
424

425 **b. Grade.** The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-
426 0.05 feet (15 mm) of the specified grade.
427

428 On safety areas, turfed areas and other designated areas within the grading limits where no subbase or base is
429 to be placed, grade shall not vary more than 0.10 feet (30 mm) from specified grade. Any deviation in excess of
430 this amount shall be corrected by loosening, adding or removing materials, and reshaping.
431

432 **152-2.14 TOPSOIL.** When topsoil is specified or required as shown on the plans or under Item T-905, it
433 shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item
434 T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of finished
435 construction, the material shall be stockpiled at approved locations. Stockpiles shall be located as shown on
436 the plans and the approved CSPP, and shall not be placed on areas that subsequently will require any
437 excavation or embankment fill. If, in the judgment of the DEN Project Manager, it is practical to place the
438 salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without
439 stockpiling or further re-handling.
440

441 Upon completion of grading operations, stockpiled topsoil shall be handled and placed as shown on the plans
442 and as required in Item T-905. Topsoil shall be paid for as provided in Item T-905. No direct payment will
443 be made for topsoil under Item P-152.
444

445 **152-2.15 RESTORING BORROW AREAS.** The Contractor shall, upon completion of his borrow
446 excavation activities, prepare the borrow sites for planting by performing the following work:
447

448 **a.** Remove and bury all rock over 6" in dimension in accordance with rock disposal methods as

- 449 noted under Section 3.02 Excavation P-152.
 450
 451 b. Grade all sites to drain as indicated in these specifications and drawings.
 452
 453 c. Remove all trash and other foreign objects so that the areas can be reused for farming purposes.
 454
 455 d. Rip the borrow area site in a manner as approved by the DEN Project Manager. After the area is
 456 ripped to the 18 inch (450 mm) depth, the area ripped shall be treated on the surface to reduce
 457 excessive surface roughness or cloddiness and produce an area suitable for future seeding.
 458 Treatment may include discing, harrowing, cultipacking or other means as approved by the DEN
 459 Project Manager. In areas where rock is the predominant surface remaining, the Contractor may
 460 spread 18 inches (450 mm) of acceptable material over the rock areas as approved by the DEN
 461 Project Manager at no additional cost to the City.
 462

463 All work required to prepare the borrow area for planting as designated under this section shall be considered
 464 as incidental work.
 465
 466

METHOD OF MEASUREMENT

467
 468
 469 **152-3.1** Measurement for payment specified by the cubic yard (cubic meter) shall be computed by the
 470 comparison of digital terrain model (DTM) surfaces for computation of neat line design quantities. The end
 471 area is that bound by the original ground line established by field cross-sections and the final theoretical pay
 472 line established by cross-sections shown on the plans, subject to verification by the DEN Project Manager.
 473

474 **152-3.2** The quantity of Unclassified Excavation to be paid for shall be the number of cubic yards (cubic
 475 meters) measured in its original position. Measurement shall not include the quantity of materials excavated
 476 without authorization beyond normal slope lines, or the quantity of material used for purposes other than
 477 those directed.
 478

479 **152-3.3** The quantity of Excavation for Undercut to be paid for shall be the number of cubic yards (cubic
 480 meters) measured in its original position. Measurement shall not include the quantity of materials excavated
 481 without authorization beyond normal slope lines, or the quantity of material used for purposes other than
 482 those directed.
 483

484 **152-3.4** The quantity of Embankment (Common Select) in place shall be the number of cubic yards (cubic
 485 meters) measured in its final position.
 486

487 **152-3.5** The quantity of Embankment (Stockpile Excess Material) in place shall be the number of cubic
 488 yards (cubic meters) measured in its final position.
 489

490 **152-3.6** The quantity of Upper Select Subgrade to be paid for shall be the number of cubic yards (cubic
 491 meters) measured in its original position. Measurement shall not include the quantity of materials excavated
 492 without authorization beyond normal slope lines, or the quantity of material used for purposes other than
 493 those directed.
 494

495 **152-3.7** The quantity of Lower Select Subgrade to be paid for shall be the number of cubic yards (cubic
 496 meters) measured in its original position. Measurement shall not include the quantity of materials excavated
 497 without authorization beyond normal slope lines, or the quantity of material used for purposes other than
 498 those directed.

499
500 **152-3.8** The quantity of Subgrade Preparation (12") to be paid for shall be the number of square yards
501 (square meters) measured in its original position. Measurement shall not include the quantity of materials
502 excavated without authorization beyond normal slope lines.
503

504 **152-3.9** The quantity of Rock Excavation to be paid for shall be the number of cubic yards (cubic meters)
505 measured in its original position. Measurement shall not include the quantity of materials excavated without
506 authorization beyond normal slope lines, or the quantity of material used for purposes other than those
507 directed.
508

BASIS OF PAYMENT

509
510
511
512 **152-4.1** Unclassified Excavation payment shall be made at the contract unit price per cubic yard (cubic meter).
513 This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals
514 necessary to complete the item.
515

516 **152-4.2** For Excavation for Undercut, payment shall be made at the contract unit price per cubic yard (cubic
517 meter). This price shall be full compensation for furnishing all materials, labor, equipment, tools, and
518 incidentals necessary to complete the item.
519

520 **152-4.3** For Embankment (Common Fill), payment shall be made at the contract unit price per cubic yard
521 (cubic meter). This price shall be full compensation for furnishing all materials, labor, equipment, tools, and
522 incidentals necessary to complete the item.
523

524 **152-4.4** For Embankment (Stockpile Excess Material), payment shall be made at the contract unit price per
525 cubic yard (cubic meter). This price shall be full compensation for furnishing all materials, labor, equipment,
526 tools, and incidentals necessary to complete the item.
527

528 **152-4.5** Upper Select Subgrade payment shall be made at the contract unit price per cubic yard (cubic meter).
529 This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals
530 necessary to complete the item.
531

532 **152-4.6** Lower Select Subgrade payment shall be made at the contract unit price per cubic yard (cubic meter).
533 This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals
534 necessary to complete the item.
535

536 **152-4.7** Subgrade Preparation (12") payment shall be made at the contract unit price per square yard (square
537 meter). This price shall be full compensation for furnishing all materials, labor, equipment, tools, and
538 incidentals necessary to complete the item.
539

540 **152-4.8** Rock Excavation payment shall be made at the contract unit price per cubic yard (cubic meter). This
541 price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary
542 to complete the item.
543

544
545
546

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM P-152 EXCAVATION, SUBGRADE, AND EMBANKMENT
 AC 150/5370-10H

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

547 Payment will be made under:

548		
549	Item P-152a	Unclassified Excavation - per cubic yard
550	Item P-152b	Excavation for Undercut (Less than 3') – per cubic yard
551	Item P-152c	Embankment (Common Fill) - per cubic yard
552	Item P-152d	Embankment (Stockpile Excess Material) – per cubic yard
553	Item P-152e	Upper Select Subgrade - per cubic yard
554	Item P-152f	Lower Select Subgrade - per cubic yard
555	Item P-152g	Subgrade Preparation (12") - per square yard
556	Item P-152h	Rock Excavation - per cubic yard
557	Item P-152i	Excavation for Undercut (Greater than 3') – per cubic yard

558

559

REFERENCES

560

561 The publications listed below form a part of this specification to the extent referenced. The publications are
 562 referred to within the text by the basic designation only.

563

564 American Association of State Highway and Transportation Officials (AASHTO)

565

566	AASHTO T-180	Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop
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567

568

569 ASTM International (ASTM)

570

571	ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³ (600 kN-m/m ³))
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572

573

574	ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
-----	------------	--

575

576

577	ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2700 kN-m/m ³))
-----	------------	--

578

579

580	ASTM D6938	Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
-----	------------	---

581

582

583 Advisory Circulars (AC)

584

585	AC 150/5370-2	Operational Safety on Airports During Construction Software
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586

587 Software

588

589	FAARFIELD – FAA Rigid and Flexible Iterative Elastic Layered Design
-----	---

590

591 U.S. Department of Transportation

592

593	FAA RD-76-66	Design and Construction of Airport Pavements on Expansive Soils
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594

595

596

****END OF ITEM P-152****

Item P-220 Cement Treated Soil Base Course

DESCRIPTION

220-1.1 This item shall consist of constructing a base course by uniformly mixing soil, cement, and water. The mixed material shall be spread, shaped, and compacted in accordance with these specifications and in conformity to the dimensions and typical cross-section shown on the plans. Tests shall be required for each approved soil included within the treated layer.

Runway, taxiway, or apron pavements shall be built in a series of parallel lanes using a plan that reduces the number of longitudinal and transverse joints to a minimum.

MATERIALS

220-2.1 Cement. Cement shall conform to the requirements of ASTM C150, Type I/II.

220-2.2 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

220-2.3 Soil. The soil for this work shall consist of the upper most ~~48~~ 12 inches of select embankment as placed and paid for by P-152~~be~~ Upper Select Embankment.

220-2.4 Asphalt material. The types, grades, controlling specifications, and application temperatures for the asphalt materials used for curing the soil-cement shall be selected from the table below. The DEN Project Manager will approve the specific material used.

BITUMINOUS MATERIAL

Type and Grade	Specification	Application Temperature	
		Degrees °F	Degrees °C
Cutback Asphalt			
RC-70	ASTM D2028	120-160	50-70
RC-250	ASTM D2028	160-200	70-95
Emulsified Asphalt			
RS-1, SS-1	ASTM D977	75-130	25-55
CRS-1	ASTM D2397	75-130	25-55

MIX DESIGN

220-3.1 Proportions. Before the start of base course construction, tests shall be made on the soil or soil-aggregate material to be stabilized to determine the quantity of cement required for the mix design, to provide a minimum 200 psi unconfined compressive strength at 5 days.

Test specimens containing various amounts of cement shall be compacted per ASTM D558, and the optimum moisture determined for each test specimen. Samples at the optimum moisture shall be subjected to the wet-dry and the freeze-thaw test in accordance with ASTM D559 and ASTM D560, respectively. The specimens

41 shall be tested for compressive strength in accordance with ASTM D1633. Tests are required for each approved
42 soil which will be included in the treated layer.
43
44

45 CONSTRUCTION METHODS

46
47 **220-4.1 Control Strip.** The first half-day of construction shall be considered the control strip. The Contractor
48 shall demonstrate, in the presence of the DEN Project Manager, that the materials, equipment, and construction
49 processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain
50 specified density requirements shall be determined. The maximum compacted thickness may be increased to
51 a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and
52 operations will uniformly compact the lift to the specified density. The DEN Project Manager must witness
53 this demonstration and approve the lift thickness prior to full production.
54

55 Control strips that do not meet specification requirements shall be reworked, re-compacted or removed and
56 replaced at the Contractor's expense. Full operations shall not continue until the control strip has been accepted
57 by the RPR. The Contractor shall use the same equipment, materials, and construction methods for the
58 remainder of construction, unless adjustments made by the Contractor are approved by the DEN Project
59 Manager.
60

61 **220-4.2 Weather limitations.** The material shall not be mixed or placed while the atmospheric temperature is
62 below 40°F (4°C) or when conditions indicate that the temperature may fall below 40°F (4°C) within 24 hours,
63 or when the weather is foggy or rainy, or to soils that are frozen or contain frost, or when the underlying
64 material is frozen.
65

66 **220-4.3 Maintenance.** The material shall be maintained in a condition that will meet all specification
67 requirements. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, prior to
68 placement of additional material, the Contractor shall verify that materials still meet all specification
69 requirements. Equipment may be routed over completed sections of base course, provided that no damage
70 results and the equipment is routed over the full width of the completed base course. Any damage resulting to
71 the base course from routing equipment over the base course shall be repaired by the Contractor at their
72 expense.
73

74 **220-4.4 Equipment.** The course may be constructed with any equipment that will meet the requirements for
75 soil pulverization, cement application, mixing, water application, incorporation of materials, compaction,
76 finishing, and curing specified here.
77

78 **220-4.5 Preparation.** The area to be stabilized shall be graded and shaped to conform to the lines, grades and
79 cross-section shown on the plans. Any soft or yielding areas in the subgrade shall be removed and replaced
80 with acceptable soil and compacted to the specified density.
81

82 **220-4.6 Pulverization.** After completion of moist-mixing, the soil for the base course shall be pulverized so
83 that 100% by dry weight passes a 1-inch (25.0 mm) sieve and a minimum of 80% passes a No. 4 (4.75 mm)
84 sieve.
85

86 **220-4.7 Cement application, mixing, and finishing.** Mixing of the soil, cement, and water shall be
87 accomplished by one of the following methods to be approved by the DEN Project Manager.
88

89 a. Mix in Place Method. Shape pulverized material to the cross-section indicated. Cement shall be
90 applied so that when uniformly mixed with the soil, the specified cement content is obtained, and

91 a sufficient quantity of cement-treated soil is produced to construct a compacted cement-treated
92 course conforming to the lines, grades, and cross-section indicated. Immediately after the cement
93 has been distributed, it shall be mixed with the soil. The cement shall not be mixed below the
94 required depth. Continue mixing until the cement has been sufficiently blended with the soil to
95 prevent the formation of cement balls when water is applied. Determine moisture content of the
96 mixture immediately after completion of mixing of the soil and cement. Provide water supply and
97 pressure distributing equipment that will permit the application within three (3) hours of all mixing
98 water on the section being processed. Incorporate water in the mix so that concentration of water
99 near the surface does not occur. After all mixing water has been applied, continue mixing until the
100 water is uniformly distributed throughout the full depth of the mixture. Do not apply cement if
101 the soil moisture content exceeds the optimum moisture content specified for the cement-treated
102 mixture. After mixing is complete, the proportions of the mixture shall be in accordance with the
103 approved mix design.

104
105 **b.** Central Plant Mix Method. Cement application, mixing, and spreading. Mixing of the soil, cement,
106 and water shall be accomplished by the central-plant-mixed method. The soil, cement, and water
107 shall be mixed in either a batch or continuous-flow type pugmill. The plant shall be equipped with
108 feeding and metering devices that will add the soil, cement, and water into the mixer in the specified
109 quantities. Soil and cement shall be mixed sufficiently to prevent cement balls from forming when
110 water is added. Mixing shall continue until a uniform mixture of soil, cement, and water is obtained.

111
112 The mixture shall be hauled to the project in trucks equipped with protective covers. The mixture
113 shall be placed on the moistened subgrade in a uniform layer by an approved spreader. Not more
114 than 30 minutes shall elapse between the placement of soil-cement in adjacent lanes.

115
116 The layer of soil-cement shall be uniform in thickness and surface contour and of sufficient
117 quantity that the completed base conforms to the required line, grade and cross-section. Dumping
118 of the mixture in piles or windrows on the subgrade shall not be permitted.

119
120 Not more than 60 minutes shall elapse between the start of moist mixing and the start of
121 compaction of soil-cement.

122
123 **220-4.8 Compaction.** Compaction of the course shall begin within 30 minutes after mixing the cement into
124 the subgrade. All compaction operations shall be completed within 2 hours from the start of mixing.

125
126 The field density of the compacted mixture shall be at least 98% of the maximum density as determined by
127 ASTM D558. The in-place moisture content shall be determined in accordance with ASTM D2216. The
128 moisture content of the mixture at the start of compaction shall be within ± 2 percentage points of the optimum
129 moisture content. Maximum density refers to maximum dry density at optimum moisture content unless
130 otherwise specified.

131
132 **220-4.9 Finishing and curing.** After the final lift or course of treated subgrade has been compacted, it shall
133 be brought to the required lines and grades in accordance with the typical sections.

134
135 Finished portions of treated subgrade shall be protected to prevent equipment from marring, permanently
136 deforming, or damaging completed work.

137
138 Not later than 24 hours after completion of final finishing, the surface shall be cured by application of an
139 emulsified asphalt uniformly applied to the surface of the completed base course at the rate of approximately

140 0.2 gallons per square yard (0.91 l/m²). The curing material shall be maintained and applied as needed by the
141 Contractor during the 7-day protection period.

142
143 Sufficient protection from freezing shall be provided for at least 7 days after its construction or as approved by
144 the DEN Project Manager.

145
146 **220-4.10 Construction limitations.** At the end of each day's construction and/or when operations after
147 application of the cement are interrupted for more than 30 minutes, a straight transverse construction joint
148 shall be formed by a header or by cutting back into the compacted material to form a true vertical face.
149 Completed portions may be opened to light traffic, if approved by the DEN Project Manager, and provided
150 the curing is not impaired.

151
152 **220-4.11 Surface tolerance.** In those areas on which a subbase or base course is to be placed, the surface shall
153 be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or
154 failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-
155 compacted to grade until the required smoothness and accuracy are obtained and approved by the DEN Project
156 Manager. The Contractor shall perform all final smoothness and grade checks in the presence of the DEN
157 Project Manager. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's
158 expense.

159
160 **a. Smoothness.** The finished surface shall not vary more than +/- 3/8 inch (9 mm) when tested
161 with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The
162 straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m)
163 straightedge for the full length of each line on a 50-foot (15-m) grid.

164
165 **b. Grade.** The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-
166 0.05 feet (15 mm) of the specified grade.

167
168 **220-4.12 Acceptance sampling and testing.** Cement Treated Solid Base course shall be accepted for density
169 and thickness on an area basis. Two test will be made for density and thickness for each 1200 square yards
170 (1000 square meters), but not less than four (4) tests per day of production. Sampling locations will be
171 determined on a random basis per ASTM D3665.

172
173 **a. Density.** The DEN Project Manager shall perform all density tests.

174
175 Each area shall be accepted for density when the field density is at least 100% of the maximum
176 density of laboratory specimens compacted and tested per ASTM D558. The in-place field density
177 shall be determined per ASTM D1556 or ASTM D6938 using Procedure A, the direct transmission
178 method, and ASTM D6938 shall be used to determine the moisture content of the material. The
179 machine shall be calibrated in accordance with ASTM D6938. The in-place moisture content shall
180 be determined in accordance with ASTM D2216. Perform in-place density test immediately after
181 completion of compaction to determine degree of compaction. Maximum density refers to
182 maximum dry density at optimum moisture content unless otherwise specified. If the specified
183 density is not attained, the area represented by the failed test must be reworked and/or
184 recompacted at the Contractor's expense and two additional random tests made. This procedure
185 shall be followed until the specified density is reached. Maximum density refers to maximum dry
186 density at optimum moisture content unless otherwise specified.

187
188 **b. Thickness.** Depth tests shall be made by test holes or cores at least 3 inches (75 mm) in diameter
189 that extend through the base. The thickness of the base course shall be within +0 and -1/2 inch

TECHNICAL SPECIFICATIONS
 DIVISION 2-AIRFIELD STANDARDS
 ITEM P-220 CEMENT TREATED SOIL BASE COURSE
 AC 150/5370-10H

DENVER INTERNATIONAL AIRPORT
 TAXIWAY EE GRADING, DRAINAGE,
 PAVING, AND LIGHTING
 CONSTRUCTION CONTRACT NO. 202158849

190 (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the
 191 presence of the DEN Project Manager for each subplot.

192
 193 Thickness measurements may be determined by survey if allowed by the DEN Project Manager.
 194 If survey measurements are used, the contractor shall provide survey prior to placement and after
 195 completion on a 25-foot (7.5 m) by 25-foot (7.5 m) survey grid.

196
 197 Where the thickness is deficient by more than 1/2-inch (12 mm), the material shall be removed to
 198 full depth and replaced, at Contractor's expense.

199
 200

METHOD OF MEASUREMENT

201
 202
 203 **220-5.1** The quantity of cement treated soil base course shall be the number of square yards (square meter) of
 204 completed and accepted base course.

205
 206 ~~**220-5.2** The quantity of cement shall not be measured or paid for separately but will be considered incidental~~
 207 ~~to the project. The work under this item shall be considered subsidiary to other items of work. Cement shall~~
 208 be measured by the ton (kg).

209
 210

BASIS OF PAYMENT

211
 212
 213 **220-6.1** Payment shall be made at the contract unit price per square yard (m²) for cement treated soil base
 214 course. This price shall be full compensation for furnishing all materials, except soil and cement, and for all
 215 preparation, delivering, placing, and mixing of these all materials; and for all labor, equipment, tools and
 216 incidentals necessary to complete the item.

217
 218 ~~**220-6.2** Payment shall be made at the contract unit price per ton (kg) for Cement shall be considered incidental~~
 219 ~~to the project. No payment shall be made for cement.~~ This price shall be full compensation for furnishing this
 220 material and for all delivery, placing, and incorporation of this material, and for all labor, equipment, tools, and
 221 incidentals necessary to complete the item.

222
 223

224 Payment will be made under:

225
 226 Item P-220a Cement Treated Soil Base Course - per square yard (square meter)
 227 Item P-220b Cement - per ton (kg)

228
 229

REFERENCES

230
 231
 232 The publications listed below form a part of this specification to the extent referenced. The publications are
 233 referred to within the text by the basic designation only.

234
 235 ASTM International (ASTM)

236
 237 ASTM C136 Standard Test Method for Sieve or Screen Analysis of Fine and Coarse
 238 Aggregates

239

240	ASTM C150	Standard Specification for Portland Cement
241		
242	ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
243		
244		
245	ASTM C1632	Standard Practice for Making and Curing Soil-Cement Compression and Flexure Test Specimens in the Laboratory ¹
246		
247		
248	ASTM C1633	Standard Test Methods for Compressive Strength of Molded Soil-Cement Cylinders
249		
250		
251	ASTM D558	Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
252		
253		
254	ASTM D559	Standard Test Methods for Wetting and Drying Compacted Soil-Cement Mixtures
255		
256		
257	ASTM D560	Standard Test Methods for Freezing and Thawing Compacted Soil-Cement Mixtures
258		
259		
260	ASTM D977	Standard Specification for Emulsified Asphalt
261		
262	ASTM D1556	Standard Test Method for Density and Unit Weight of Soil In-Place by the Sand Cone Method
263		
264		
265	ASTM D2027	Standard Specification for Cutback Asphalt (Medium-Curing Type)
266		
267	ASTM D2028	Standard Specification for Cutback Asphalt (Rapid-Curing Type)
268		
269	ASTM D2397	Standard Specification for Cationic Emulsified Asphalt
270		
271	ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
272		
273		
274	ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
275		
276		
277		
278		**END OF ITEM P-220**
279		

Item D-751 Manholes, Catch Basins, Inlets and Inspection Holes

DESCRIPTION

751-1.1 This item shall consist of construction of manholes, catch basins, inlets, and inspection holes, in accordance with these specifications, at the specified locations and conforming to the lines, grades, and dimensions shown on the plans or required by the DEN Project Manager.

MATERIALS

751-2.1 MORTAR. Mortar shall consist of one part Portland cement and two parts sand. The cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

751-2.2 CONCRETE. Plain and reinforced concrete used in structures, connections of pipes with structures, and the support of structures or frames shall conform to the requirements of Item P-610.

751-2.3 PRECAST CONCRETE PIPE MANHOLE RINGS. Precast concrete pipe manhole rings shall conform to the requirements of ASTM C478. Unless otherwise specified, the risers and offset cone sections shall have an inside diameter of not less than 36 inches (90 cm) nor more than 48 inches (120 cm). There shall be a gasket between individual sections and sections cemented together with mortar on the inside of the manhole. Gaskets shall conform to the requirements of ASTM C443.

751-2.4 FRAMES, COVERS, AND GRATES. The castings shall conform to one of the following requirements:

- a. ASTM A48, Class 35B: Gray iron castings
- b. ASTM A47: Malleable iron castings
- c. ASTM A27: Steel castings
- d. ASTM A283, Grade D: Structural steel for grates and frames
- e. ASTM A536, Grade 65-45-12: Ductile iron castings
- f. ASTM A897: Austempered ductile iron castings

All castings or structural steel units shall conform to the dimensions shown on the plans and shall be designed to support the loadings, aircraft gear configuration and/or direct loading, specified.

Each frame and cover or grate unit shall be provided with fastening members to prevent it from being dislodged by traffic but which will allow easy removal for access to the structure.

All castings shall be thoroughly cleaned. After fabrication, structural steel units shall be galvanized to meet the requirements of ASTM A123.

50 **751-2.5 STEPS.** The steps or ladder bars shall be gray or malleable cast iron or galvanized steel. The steps shall
51 be the size, length, and shape shown on the plans and those steps that are not galvanized shall be given a coat
52 of asphalt paint, when directed.

53
54 **751-2.6 PRECAST INLET STRUCTURES.** Manufactured in accordance with and conforming to ASTM
55 C913.

56
57 **751-2.7 REINFORCING STEEL.** All reinforcing steel shall conform to ASTM A615, Grade 60.
58
59

60 CONSTRUCTION METHODS

61
62 **751-3.1 UNCLASSIFIED EXCAVATION.**

63
64 a. The Contractor shall excavate for structures and footings to the lines and grades or elevations,
65 shown on the plans, or as staked by the DEN Project Manager. The excavation shall be of
66 sufficient size to permit the placing of the full width and length of the structure or structure
67 footings shown. The elevations of the bottoms of footings, as shown on the plans, shall be
68 considered as approximately only; and the DEN Project Manager may direct, in writing, changes
69 in dimensions or elevations of footings necessary for a satisfactory foundation.
70

71 b. Boulders, logs, or any other objectionable material encountered in excavation shall be removed.
72 All rock or other hard foundation material shall be cleaned of all loose material and cut to a firm
73 surface either level, stepped, or serrated, as directed by the DEN Project Manager. All seams or
74 crevices shall be cleaned out and grouted. All loose and disintegrated rock and thin strata shall be
75 removed. Where concrete will rest on a surface other than rock, the bottom of the excavation shall
76 not be disturbed and excavation to final grade shall not be made until immediately before the
77 concrete or reinforcing is placed.
78

79 c. The Contractor shall do all bracing, sheathing, or shoring necessary to implement and protect the
80 excavation and the structure as required for safety or conformance to governing laws. The cost of
81 bracing, sheathing, or shoring shall be included in the unit price bid for the structure.
82

83 d. All bracing, sheathing, or shoring involved in the construction of this item shall be removed by
84 the Contractor after the completion of the structure. Removal shall not disturb or damage finished
85 masonry. The cost of removal shall be included in the unit price bid for the structure.
86

87 e. After excavation is completed for each structure, the Contractor shall notify the DEN Project
88 Manager. No concrete or reinforcing steel shall be placed until the DEN Project Manager has
89 approved the depth of the excavation and the character of the foundation material.
90

91 **751-3.2 CONCRETE STRUCTURES.** Concrete structures which are to be cast-in-place within the project
92 boundaries shall be built on prepared foundations, conforming to the dimensions and shape indicated on the
93 plans. When claystone (undisturbed natural or fill) is encountered in the base of the excavation within paved
94 areas as determined by the DEN Project Manager, the material shall be over-excavated to a depth of 3 feet
95 below and 3 feet beyond the sides of the base of the structure. The over-excavation shall be replaced with Select
96 Embankment material meeting the requirements for Item P-152. The Select Embankment material shall be
97 placed in 8 inch thick loose lifts, moisture conditioned and compacted to the requirements of Item P-152. The
98 construction shall conform to the requirements specified in Item P-610. Any reinforcement required shall be
99 placed as indicated on the plans and shall be approved by the DEN Project Manager before the concrete is
100 placed.

101
102 All invert channels shall be constructed and shaped accurately to be smooth, uniform, and cause minimum
103 resistance to flowing water. The interior bottom shall be sloped to the outlet.
104

105 **751-3.3 PRECAST CONCRETE STRUCTURES.** Precast concrete structures shall be furnished by a plant
106 meeting National Precast Concrete Association Plant Certification Program or another DEN Project Manager
107 approved third party certification program.
108

109 Precast concrete structures shall conform to ASTM C478. Precast concrete structures shall be constructed on
110 prepared or previously placed slab foundations conforming to the dimensions and locations shown on the
111 plans. All precast concrete sections necessary to build a completed structure shall be furnished. The different
112 sections shall fit together readily. Joints between precast concrete risers and tops shall be full-bedded in cement
113 mortar and shall: (1) be smoothed to a uniform surface on both interior and exterior of the structure or (2)
114 utilize a rubber gasket per ASTM C443. The top of the upper precast concrete section shall be suitably formed
115 and dimensioned to receive the metal frame and cover or grate, or other cap, as required. Provision shall be
116 made for any connections for lateral pipe, including drops and leads that may be installed in the structure. The
117 flow lines shall be smooth, uniform, and cause minimum resistance to flow. The metal or metal encapsulated
118 steps that are embedded or built into the side walls shall be aligned and placed in accordance to ASTM C478.
119 When a metal ladder replaces the steps, it shall be securely fastened into position.
120

121 When required by the DEN Project Manager, the precast manufacturer shall provide detailed structural analysis
122 of the structure being provided that considers the live and dead loads exposed to the structure. The analysis
123 shall be signed and sealed by an engineer registered in the state of installation normally performing structural
124 engineering.
125

126 **751-3.4 INLET AND OUTLET PIPES.** Inlet and outlet pipes shall extend through the walls of the
127 structures a sufficient distance beyond the outside surface to allow for connections. They shall be cut off flush
128 with the wall on the inside surface of the structure, unless otherwise directed. For concrete or brick structures,
129 mortar shall be placed around these pipes to form a tight, neat connection.
130

131 **751-3.5 PLACEMENT AND TREATMENT OF CASTINGS, FRAMES, AND FITTINGS.** All
132 castings, frames, and fittings shall be placed in the positions indicated on the plans or as directed by the DEN
133 Project Manager, and shall be set true to line and elevation. If frames or fittings are to be set in concrete or
134 cement mortar, all anchors or bolts shall be in place before the concrete or mortar is placed. The unit shall not
135 be disturbed until the mortar or concrete has set.
136

137 When frames or fittings are placed on previously constructed masonry, the bearing surface of the masonry shall
138 be brought true to line and grade and shall present an even bearing surface so the entire face or back of the
139 unit will come in contact with the masonry. The unit shall be set in mortar beds and anchored to the masonry
140 as indicated on the plans or as directed by the DEN Project Manager. All units shall set firm and secure.
141

142 After the frames or fittings have been set in final position, the concrete or mortar shall be allowed to harden
143 for seven (7) days before the grates or covers are placed and fastened down.
144

145 **751-3.6 INSTALLATION OF STEPS.** The steps shall be installed as indicated on the plans or as directed
146 by the DEN Project Manager. When the steps are to be set in concrete, they shall be placed and secured in
147 position before the concrete is placed. When the steps are installed in brick masonry, they shall be placed as
148 the masonry is being built. The steps shall not be disturbed or used until the concrete or mortar has hardened
149 for at least seven (7) days. After seven (7) days, the steps shall be cleaned and painted, unless they have been
150 galvanized.
151

152 When steps are required with precast concrete structures they shall meet the requirements of ASTM C478. The
153 steps shall be cast into the side of the sections at the time the sections are manufactured or set in place after
154 the structure is erected by drilling holes in the concrete and cementing the steps in place.

155
156 When steps are required with corrugated metal structures, they shall be welded into aligned position at a vertical
157 spacing of 12 inches (300 mm).

158
159 Instead of steps, prefabricated ladders may be installed. For concrete structures, the ladder shall be held in place
160 by grouting the supports in drilled holes.

161
162 **751-3.7 BACKFILLING.**

163
164 a. After a structure has been completed, the area around structures outside the paved areas shall be
165 backfilled with approved native material, in horizontal layers not to exceed 8 inches (200 mm) in
166 loose depth, and compacted to the density required in Item P-152. Each layer shall be deposited
167 evenly around the structure to approximately the same elevation. The top of the fill shall meet the
168 elevation shown on the plans or as directed by the DEN Project Manager. Structures inside paved
169 areas shall be backfilled with Controlled Low Strength Material (CLSM) material meeting the
170 requirements of P-153. The CLSM shall be placed to the elevation of the bottom of the Cement
171 Treated Base layer of the pavement section.

172
173 b. Backfill shall not be placed against any structure until approved by the DEN Project Manager. For
174 concrete structures, approval shall not be given until the concrete has been in place seven (7) days,
175 or until tests establish that the concrete has attained 75% of the design strength to withstand any
176 pressure created by the backfill and placing methods.

177
178 c. Backfill shall not be measured for direct payment. Performance of this work shall be considered
179 an obligation of the Contractor covered under the contract unit price for the structure involved.

180
181 **751-3.8 CLEANING AND RESTORATION OF SITE.** After the backfill is completed, the Contractor
182 shall dispose of all surplus material, dirt, and rubbish from the site. Surplus dirt may be deposited in
183 embankments, shoulders, or as approved by the DEN Project Manager. The Contractor shall restore all
184 disturbed areas to their original condition. The Contractor shall remove all tools and equipment, leaving the
185 entire site free, clear, and in good condition.

186
187 **751-3.9 QUALITY ASSURANCE/QUALITY CONTROL.**

188
189 a. **Qualifications.** The Contractor shall meet the same qualifications for precast pipe structures as
190 are identified in Item D-701 and shall impose all qualifications on its pipe manufacturer. Should
191 the Contractor elect to cast-in-place junction structures, the Contractor shall be able to
192 demonstrate experience with similar structures.

193
194 b. **Tests.** Tests for precast concrete pipe structures (including pipe joints) shall have imposed the
195 same tests as for precast pipe in Item D-701. Refer to Item P-610 for cast-in-place concrete test
196 requirements. All backfill material shall be tested for compaction in accordance with Items D-701
197 and P-152.

198
199 c. **Inspections.** Inspection for precast concrete pipe structures shall follow inspection procedures
200 identified in Item D-701 for precast pipe and those of Item P-152 for excavation. Inspection for
201 cast-in-place concrete structures shall follow Item P-610.

202

203 **d. Submittals.**

- 204
- 205 (1) Materials. Materials shall be submitted in accordance with Items P-610 and D-701.
- 206
- 207 (2) Designs and Drawings. If the Contractor elects to use an alternative pipe, then the
- 208 Contractor shall design or cause the pipe manufacturer to design all precast pipe structures
- 209 to the specified criteria. The Contractor shall submit support calculations, installation
- 210 drawings, and detail drawings for review and approval by the Project Manager prior to
- 211 proceeding with fabrication of structures. Calculations, drawings, and details shall be sealed
- 212 and signed by a Professional Engineer currently registered in the State of Colorado.

213

214 Should the Contractor elect to substitute and construct precast and/or cast-in-place

215 concrete structures, the Contractor shall submit full designs and details, as above, sealed and

216 signed by a Professional Engineer currently registered in the State of Colorado.”

217

218

219 **METHOD OF MEASUREMENT**

220

221 **751-4.1** Manholes, catch basins, inlets, and inspection holes shall be measured by the unit.

222

223

224 **BASIS OF PAYMENT**

225

226 **751-5.1** The accepted quantities of manholes, catch basins, inlets, and inspection holes will be paid for at the

227 contract unit price per each in place when completed. This price shall be full compensation for furnishing all

228 materials and for all preparation, excavation, backfilling and placing of the materials; furnishing and installation

229 of such specials and connections to pipes and other structures as may be required to complete the item as

230 shown on the plans; and for all labor equipment, tools and incidentals necessary to complete the structure.

231

232

233 Payment will be made under:

234

235	Item D-751a	Install New Triple Type II Inlet Structure - per each
236	Item D-751b	Install New Double Type II Inlet Structure - per each
237	Item D-751c	Install Oversized Triple Type II Inlet New 36"x48" Inlet - per each
238	Item D-751d	Install Airfield Manhole - per each
239	Item D-751e	Install Type B Manhole – per each
240	Item D-751f	Install Type P Manhole – per each
241	Item D-751g	Convert Remove Existing Inlet to Manhole – per each
242	Item D-751h	Install Underdrain Manholes – per each
243	Item D-751i	Tie To Existing Structure – per each

244

245

246 **REFERENCES**

247

248 The publications listed below form a part of this specification to the extent referenced. The publications are

249 referred to within the text by the basic designation only.

250

251 ASTM International (ASTM)

252

253 ASTM A27 Standard Specification for Steel Castings, Carbon, for General Application

254		
255	ASTM A47	Standard Specification for Ferritic Malleable Iron Castings
256		
257	ASTM A48	Standard Specification for Gray Iron Castings
258		
259	ASTM A123	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
260		
261		
262	ASTM A283	Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates
263		
264		
265	ASTM A536	Standard Specification for Ductile Iron Castings
266		
267	ASTM A897	Standard Specification for Austempered Ductile Iron Castings
268		
269	ASTM C32	Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)
270		
271		
272	ASTM C144	Standard Specification for Aggregate for Masonry Mortar
273		
274	ASTM C150	Standard Specification for Portland Cement
275		
276	ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets.
277		
278		
279	ASTM C478	Standard Specification for Precast Reinforced Concrete Manhole Sections
280		
281	ASTM C913	Standard Specification for Precast Concrete Water and Wastewater Structures.
282		
283		
284		
285	American Association of State Highway and Transportation Officials (AASHTO)	
286		
287	AASHTO M36	Standard Specification for Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains
288		
289		
290		
291		**END OF ITEM D-751**
292		

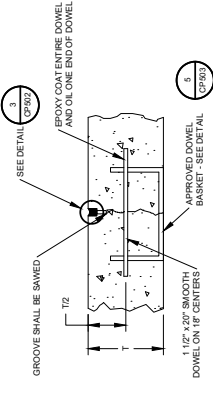
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CONCRETE PAVEMENT THICKNESS TABLE

TYPE	T	T2	T3	T4	T5	T6
FALL STRENGTH PCC PAVEMENT	17"	9.5"	5.987"	4.25"	5.25"	21.25"

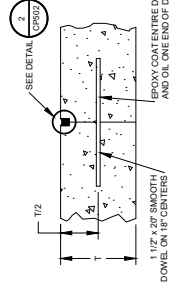
JOINT DETAIL NOTES:

1. THE EDGE OF THE PAVEMENT FOR ANY OTHER JOINT AT AN ANGLE OF LESS THAN 90° UNLESS SHOWN ON THE PLANS.
2. DOWEL BASKETS SHALL BE FIRMLY ATTACHED TO THE EXISTING UNDERLYING COURSE PRIOR TO PLACING P.C.C.
3. IF THE CONTRACTOR ELECTS TO VARY FROM THE PLAN, SUBMIT A JOINT TYPE PATTERN CONSISTENT WITH THE NEW PLAN TO THE DEN PROJECT MANAGER WITHIN 10 BUSINESS DAYS PRIOR TO START OF PAVING.
4. PAVEMENT AREAS WHERE THICKENED EDGE JOINTS OCCUR SHALL BE FINAL SURFACE AND MAINTAIN A MINIMUM DEPTH OF 10.5" FROM THE FINAL SURFACE.
5. ANY PAVEMENT SHOWN WITH THICKENED EDGE JOINTS WILL BE PAD FOR AS NOMINAL THICKNESS (T) PAVEMENT.
6. DOWEL DRILLING METHOD SHALL BE CAPABLE OF MAINTAINING DRILL HOLES WITHIN 1/4" AT THE END OF THE DOWEL DRILL HOLES SHALL BE ACCURATELY LAD OUT SO THAT THE MAXIMUM DEVIATION DOES NOT EXCEED 1/8" PER FOOT OF LENGTH. THE DOWEL DRILL HOLES SHALL BE DRILLED IN THE DIRECTION DRILL HOLE DIAMETER TO BE APPROXIMATELY 1.78" FOR 1.42" DOWELS. BAR POSITIONING SHALL BE WITHIN A 1/4" TOLERANCE IN HORIZONTAL AND VERTICAL PLANES.
7. ALL JOINTS SHALL BE CONSTRUCTED ON A COMPACTED GRANULAR SUBGRADE.
8. FOR PRECOMPRESSED EXPANDING SEALANT, EPOXY ADHESIVE TO BE APPLIED TO BOTH SIDES OF JOINT PER MANUFACTURER RECOMMENDATIONS.
9. CONCRETE FACES FOR ALL JOINTS SHALL BE CONSTRUCTED VERTICAL.
10. THE DOWEL BAR OR THE BAR BASKING SHALL BE STARTED FROM THE INSIDE OF THE JOINT 1/2" TO 1" INCH SPACING FROM THE JOINT EDGE. THE DOWEL BAR SHALL BE FULLY ENCASED IN THE PCC. THE REMAINING OPENING IS GREATER THAN 18 INCHES THEN A 3/4" DIA. BAR SHALL BE USED. THE CENTER OF THE REMAINING SPACE BETWEEN BASKETS IS LESS THAN 18 INCHES, NO DOWEL BAR SHALL BE REQUIRED.
11. PLACEMENT OF NEW DOWELS OR TIES SHALL BE ADJACENT TO EXISTING DOWELS OR TIES SAWCUT DURING REMOVAL OPERATIONS BUT NO CLOSER THAN 2 BAR DIAMETERS.

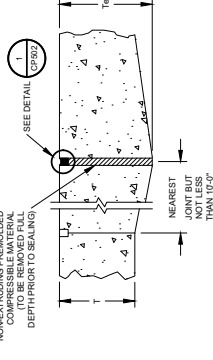


NOTE:
1. ANY PORTION OF THE BASKET IN CONTACT WITH THE SURFACE, INCLUDING CUT OR BOND BREAKER, SHALL BE PLASTIC OR EPOXY COATED.

2 TYPE C - DOWELED CONTRACTION JOINT.
N.T.S.
CP501

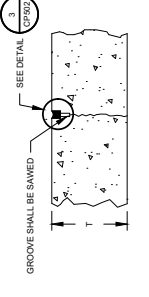


4 TYPE E - DOWELED CONTRACTION JOINT.
N.T.S.
CP501

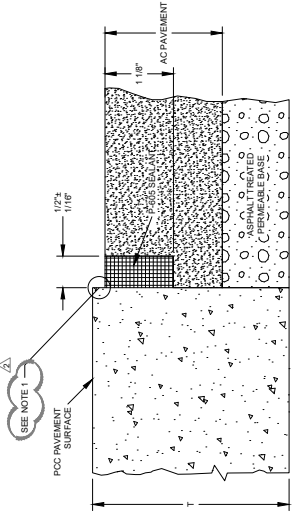


NOTE:
1. FOR ALL TYPE A JOINT SEALANT MATERIAL REPLACEMENT, CONTRACTORS ARE REQUIRED TO COMPLETE FULL DEPTH SAWCUT TO ACHIEVE CORRECT JOINT WIDTH.

1 TYPE A - THICKENED EDGE ISOLATION JOINT.
N.T.S.
CP801



3 TYPE D - DUMMY CONTRACTION JOINT.
N.T.S.
CP501



NOTES:
1. ASPHALT ELEVATION AT PCC JOINT SHALL BE 1/16\"/>

5 TYPE G - CONSTRUCTION JOINT BETWEEN PCC AND AC.
N.T.S.
CP501

Summary of Laboratory Test Results



Project No: 522.05/220-056 Project Name: DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			pH	Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI						AASHTO	USCS
B-01	0.5~1.5	MC	15.8		0.0	44.0	56.0	28	13	15		0.00	0.4% @ 200 psf	--		A-6(5)	CL
B-01	2.0~3.0	MC	12.3		0.0	46.3	53.7	24	13	11			0.1% @ 200 psf	--		A-6(3)	CL
B-01	5.0~6.0	MC	15.3			60.4	38.6	26	14	12		0.04	0.0% @ 200 psf	--		A-6(1)	SC
B-01	10.0~11.0	MC	16.7				99.7	61	21	40			7.3% @ 200 psf	--		A-7-6(45)	CH
B-02	0.5~5.0	GRAB			0.0	2.8	97.2	52	14	38		0.65		--		A-7-6(39)	CH
B-02	0.5~1.5	MC	21.1	106.4							8.0	0.67		--		--	--
B-02	2.0~3.0	MC	18.8	111.9										--		--	--
B-02	5.0~10.0	GRAB			0.0	2.2	97.8	48	15	33		1.24		--		A-7-6(34)	CL
B-02	5.1~6.1	MC	18.2	112.5										--		--	--
B-02	10.0~15.0	GRAB			0.0	2.3	97.7	52	15	37				--		A-7-6(39)	CH
B-02	10.1~11.1	MC	14.8	119.7									15.2% @ 200 psf	--		--	--
B-02	15.0~20.0	GRAB												--		--	--
B-02	15.1~16.1	MC	16.4	118.0									11.1% @ 200 psf	--		--	--
B-02	25.0~25.8	MC	17.9	113.9										--		--	--
B-03	0.5~1.5	MC	19.1	109.6										--		--	--
B-03	1.0~15.0	GRAB			0.0	3.0	97.0	51	15	36		1.43		--		A-7-6(37)	CH
B-03	2.0~3.0	MC	13.3	112.7										--		--	--
B-03	5.0~6.0	MC	15.9	115.2										--		--	--
B-03	10.0~11.0	MC	16.6	113.0								0.36		--		--	--
B-03	15.0~16.0	MC	15.5	116.8								1.08	10.9% @ 200 psf	--		--	--
B-03	16.0~25.0	GRAB			0.0	1.3	98.7	52	14	38		0.66		--		A-7-6(40)	CH
B-03	20.0~21.0	MC	11.4	124.4									14.8% @ 200 psf	--		--	--
B-03	25.0~25.9	MC	16.3	115.7										--		--	--
B-04	0.5~5.0	GRAB			0.0	25.7	74.2	36	14	22		0.14		--		A-6(14)	CL
B-04	0.5~1.5	MC	18.9	108.5										--		--	--

Summary of Laboratory Test Results



Project No: 522.05/220-056 Project Name: DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification		
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI					AASHTO	USCS	
B-04	2.0-3.0	MC	7.4	110.7						0.41			--	--	--	--	
B-04	5.0-6.0	MC	8.0	112.0											--	--	
B-04	6.0-15.0	GRAB			0.0	26.7	73.3	26	14	12	8.1	0.13	--	--	A-6(6)	CL	
B-04	10.0-11.0	MC	11.0	110.1							3.2% @ 200 psf				--	--	
B-04	15.0-16.0	MC	7.6	108.8							0.6% @ 200 psf				--	--	
B-04	16.0-22.0	GRAB			0.0	14.5	85.5	32	10	22	7.8	0.11			--	A-6(17)	CL
B-04	20.0-21.0	MC	11.3	115.9							4.6% @ 200 psf				--	--	
B-04	25.0-26.0	MC	7.9	124.0											--	--	
B-04	30.0-30.8	MC	15.1	118.6											--	--	
B-05	0.5-5.0	GRAB			14.9	85.1		40	13	27	7.9	0.03			--	A-6(22)	CL
B-05	0.5-1.5	MC	17.5	110.7								0.00			--	--	
B-05	2.0-3.0	MC	9.4	87.5											--	--	
B-05	5.0-10.0	GRAB			16.7	83.1		34	15	19	7.7	0.51			--	A-6(14)	CL
B-05	5.1-6.1	MC	5.4	109.4											--	--	
B-05	10.0-15.0	GRAB			13.8	86.1		38	12	26	7.7	0.73			--	A-6(21)	CL
B-05	10.1-11.1	MC	13.1	117.2								0.05	2.1% @ 200 psf		--	--	
B-05	15.0-20.0	GRAB			9.5	90.3		38	12	26	7.8	0.18			--	A-6(22)	CL
B-05	15.1-16.1	MC	13.0	117.0			87.0						7.4% @ 200 psf		--	--	
B-05	20.1-21.1	MC	15.5	113.4									4.0% @ 200 psf		--	--	
B-05	25.1-26.1	MC	9.3	111.1											--	--	
B-05	30.0-30.8	MC	13.7	116.8											--	--	
B-06	0.5-5.0	GRAB			9.5	90.2		43	14	29	7.9	0.04			--	A-7-6(26)	CL
B-06	0.5-1.5	MC	21.4	88.6											--	--	
B-06	2.0-3.0	MC	10.9	106.6								0.38			--	--	
B-06	5.0-6.0	MC	8.7	109.5											--	--	

Summary of Laboratory Test Results



Project No: 522.05/220-056 Project Name: DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI					AASHTO	USCS
B-06	6.0-12.0	GRAB			13.1	86.8	30	14	16	7.8	1.41		--	A-6(12)	CL	
B-06	10.0-11.0	MC	11.0	114.9							0.07	2.2% @ 200 psf	--	--	--	
B-06	13.0-23.0	GRAB			14.0	86.0				7.9	0.30		--	--	--	
B-06	15.0-16.0	MC	14.6	115.5		81.3						2.7% @ 200 psf	--	--	--	
B-06	20.0-21.0	MC	9.5	113.5								6.2% @ 200 psf	--	--	--	
B-06	25.0-25.5	MC	4.4	111.1									--	--	--	
B-07	0.5-2.0	GRAB			0.0	92.5	45	16	29	8.50	0.03		--	A-7-6(28)	CL	
B-07	0.5-1.5	MC	20.2	105.7									--	--	--	
B-07	2.0-6.0	GRAB			11.3	88.2	41	15	26	8.18	0.40		--	A-7-6(23)	CL	
B-07	2.1-3.1	MC	9.4	108.9									--	--	--	
B-07	5.0-6.0	MC	11.8	108.9							1.44		--	--	--	
B-07	8.0-13.0	GRAB			10.1	89.9	39	14	25	8.47	1.48		--	A-6(22)	CL	
B-07	10.0-11.0	MC	15.6	115.4									--	--	--	
B-07	15.0-16.0	MC	10.8	116.4							0.07	6.3% @ 200 psf	--	--	--	
B-07	16.0-20.0	GRAB			5.2	74.7	31	11	20	8.34	0.49		--	A-6(12)	CL	
B-07	20.0-21.0	MC	11.1	117.9		88.6						4.1% @ 200 psf	--	--	--	
B-07	25.0-26.0	MC	10.9	125.7								7.9% @ 200 psf	--	--	--	
B-07	30.0-30.6	MC	11.9	120.5									--	--	--	
B-08	0.0-5.0	GRAB	20.6		0.0	92.3	45	21	24					A-7-6(24)	CL	
B-08	0.5-1.5	MC	20.2		0.0	94.3	41	17	24		0.00		--	A-7-6(23)	CL	
B-08	2.0-3.0	MC	9.9		0.0	91.2	45	18	27				--	A-7-6(26)	CL	
B-08	5.0-6.0	MC	6.7		0.0	78.3	32	19	13		0.47		--	A-6(9)	CL	
B-08	6.0-10.0	GRAB	14.3		0.0	72.6	38	16	22				--	A-6(14)	CL	
B-08	15.0-15.8	SH	10.6		0.0	71.1	30	14	16			1.7% @ 200 psf	--	A-6(9)	CL	
B-08	15.8-20.0	GRAB	18.6		0.0	68.3	28	14	14				--	A-6(7)	CL	



Summary of Laboratory Test Results

Project No: 522.05/220-056 Project Name: DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			pH	Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI					AASHTO	USCS
B-09	0.5-5.0	GRAB			0.0	8.6	91.4								--	--
B-09	0.5-1.5	MC	21.6	102.8											--	--
B-09	2.0-3.0	MC	19.7	104.4			83.4								--	--
B-09	5.0-8.0	GRAB				8.6	90.9								--	--
B-09	5.1-6.1	MC	13.2	106.6						0.40					--	--
B-09	10.0-18.0	GRAB				10.7	89.2	36	10	26					A-6(22)	CL
B-09	10.1-11.1	MC	14.7	116.3											--	--
B-09	15.0-16.0	MC	14.3	118.2			75.9								--	--
B-09	20.0-28.0	GRAB			10.0			26	15	11					A-6(9)	--
B-09	20.1-21.1	MC	10.4	118.2							0.14				--	--
B-09	25.0-26.0	MC	8.1	127.1			59.2					4.1% @ 200 psf			--	--
B-09	30.0-31.0	MC	5.7	123.1								1.1% @ 200 psf			--	--
B-09	35.0-35.4	MC	7.1	125.2											--	--
B-10	0.5-9.0	GRAB													--	--
B-10	0.5-1.5	MC	16.4	114.4											--	--
B-10	2.0-3.0	MC	10.1	110.4							1.10				--	--
B-10	5.0-6.0	MC	17.2	115.7		1.8	98.2					2.4% @ 200 psf			--	--
B-10	9.0-10.0	MC	9.6	108.9											--	--
B-10	10.0-14.0	GRAB				54.7	45.0								--	--
B-10												% @ psf			--	--
B-10	15.0-16.0	MC	6.3	95.4		78.7	21.3					-0.5% @ 200 psf			--	--
B-10	20.0-21.0	MC	3.6	113.2								-0.4% @ 200 psf			--	--
B-10	25.0-25.3	MC	3.4	116.8											--	--
B-11	0.0-5.0	GRAB	17.1		0.0	8.8	91.2	39	18	21					A-6(19)	CL
B-11	0.5-1.5	MC	21.1		0.0	18.4	81.6	37	22	15	0.58				A-6(12)	CL



Summary of Laboratory Test Results

Project No: 522.05/220-056 Project Name: DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			pH	Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI						AASHTO	USCS
B-11	2.0-3.0	MC	14.0		0.0	10.5	89.5	36	23	13						A-6(12)	CL
B-11	5.0-6.0	MC	10.7		0.0	10.5	89.5	33	19	14	0.46					A-6(12)	CL
B-11	10.0-11.0	SH	9.8		0.0	40.2	59.8	25	13	12		-0.1% @ 200 psf				A-6(4)	CL
B-11	11.0-15.0	GRAB	24.4		0.0	41.2	58.8	26	14	12						A-6(4)	CL
B-11	15.0-16.0	SH	8.8		0.0	45.7	54.3	26	13	13		0.1% @ 200 psf				A-6(4)	CL
B-12	0.5-10.0	GRAB				4.8	95.1									--	--
B-12	0.5-1.5	MC	23.9	100.1												--	--
B-12	2.0-3.0	MC	12.4	115.7							2.04					--	--
B-12	5.0-6.0	MC	15.0	117.2			97.3									--	--
B-12	10.0-11.0	MC	18.1	109.7												--	--
B-12	11.0-14.0	GRAB				36.8	63.0									--	--
B-12	15.0-16.0	MC	6.6	110.5			31.5					0.3% @ 200 psf				--	--
B-12	16.0-25.0	GRAB				55.7	44.1									--	--
B-12	20.0-21.0	MC	8.3	125.9								1.0% @ 200 psf				--	--
B-12	25.0-25.8	MC	10.1	118.5												--	--
B-13	0.5-8.0	GRAB			0.0	9.6	90.4	55	16	39						A-7-6(37)	CH
B-13	0.5-1.5	MC	22.7	102.3			79.4									--	--
B-13	2.0-3.0	MC	19.0	105.6							2.01	17.8% @ 200 psf				--	--
B-13	5.0-6.0	MC	20.8	106.8							0.37	17.7% @ 200 psf				--	--
B-13	9.0-13.0	GRAB			0.0	2.5	97.5	49	13	36						A-7-6(37)	CL
B-13	10.0-11.0	MC	14.9	117.8							1.10	13.4% @ 200 psf				--	--
B-13	14.0-19.0	GRAB			0.0	2.3	97.7	48	12	36						A-7-6(37)	CL
B-13	15.0-16.0	MC	17.0	114.5			99.0									--	--
B-13	20.0-21.0	MC	7.6	117.2												--	--
B-13	25.0-25.6	MC	9.1	110.5												--	--



Summary of Laboratory Test Results

Project No: 522.05/220-056 Project Name DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			pH	Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI						AASHTO	USCS
B-14	0.0-5.0	GRAB	14.8		0.0	10.4	89.6	52	18	34						A-7-6(32)	CH
B-14	0.5-1.5	MC	19.6		0.0	6.4	93.6	42	18	24	0.00			--		A-7-6(23)	CL
B-14	2.0-3.0	MC	18.9		0.0	9.6	90.4	42	17	25				--		A-7-6(23)	CL
B-14	5.0-6.0	MC	15.5		0.0	44.5	55.5	40	18	22	0.22			--		A-6(9)	CL
B-15	0.5-8.0	GRAB			0.0	7.0	93.0	48	15	33	0.00	0.0% @ 200 psf		--		A-7-6(32)	CL
B-15	0.5-1.5	MC	23.7	97.0										--		--	--
B-15	2.0-3.0	MC	13.6	111.6			76.7					6.5% @ 200 psf		--		--	--
B-15	5.0-6.0	MC	1.9	132.7							0.46	3.2% @ 200 psf		--		--	--
B-15	9.0-17.0	GRAB			0.0	18.3	81.7	34	13	21				--		A-6(15)	CL
B-15	10.0-11.0	MC	6.3	108.2			45.5				0.16	0.3% @ 200 psf		--		--	--
B-15	15.0-16.0	MC	8.9	124.6										--		--	--
B-15	18.0-25.0	GRAB			0.0	10.9	89.1	37	13	24				--		A-6(20)	CL
B-15	20.0-21.0	MC	18.6	112.4			93.4							--		--	--
B-15	25.0-25.6	MC	6.4	106.0										--		--	--
B-16	0.5-10.0	GRAB			0.0	9.5	90.5	43	16	27				--		A-7-6(25)	CL
B-16	0.5-1.5	MC	22.1	93.5			94.7					0.4% @ 200 psf		--		--	--
B-16	2.0-3.0	MC	15.7	107.2							0.45	3.9% @ 200 psf		--		--	--
B-16	5.0-6.0	MC	11.0	112.5			82.5				0.64	7.3% @ 200 psf		--		--	--
B-16	10.0-20.0	GRAB	13.1	115.3	0.0	11.3	88.7	41	13	28				--		A-7-6(24)	CL
B-16	10.1-11.1	MC			0.0	8.2	91.8	42	12	30	0.77	4.0% @ 200 psf		--		A-7-6(27)	CL
B-16	15.0-16.0	MC	31.7	100.3			98.0							--		--	--
B-16	20.0-21.0	MC	7.3	105.9										--		--	--
B-16	25.0-25.8	MC	19.2	110.7										--		--	--
B-17	0.0-5.0	GRAB	13.7		0.0	15.0	85.0	47	19	28				--		A-7-6(24)	CL
B-17	0.5-1.5	MC	20.6		0.0	4.6	95.4	46	18	28	0.01			--		A-7-6(28)	CL



Summary of Laboratory Test Results

Project No: 522.05/220-056 Project Name DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			pH	Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI						AASHTO	USCS
B-17	2.0-3.0	MC	12.3		0.0	12.1	87.9	44	18	26		0.20		--		A-7-6(23)	CL
B-17	5.0-6.0	MC	12.5		0.0	9.2	90.8	40	19	21		6.0% @ 200 psf		--		A-6(20)	CL
B-17	6.0-10.0	DRY CORE	17.6		0.0	5.8	94.2	55	20	35						A-7-6(36)	CH
B-17	10.0-11.0	MC	16.8		0.0	4.2	95.8	42	18	24						A-7-6(24)	CL
B-18	0.5-12.0	GRAB			0.0	11.9	88.1	52	19	33		2.28		--		A-7-6(31)	CH
B-18	0.5-1.5	MC	19.1	108.6										--		--	--
B-18	2.0-3.0	MC	21.2	101.7			95.2							--		--	--
B-18	5.0-6.0	MC	21.8	106.8									15.6% @ 200 psf	--		--	--
B-18	10.0-11.0	MC	17.9	112.3								2.48	6.4% @ 200 psf	--		--	--
B-18	12.0-25.0	GRAB				8.6	89.7	38	14	24				--		A-6(21)	CL
B-18	15.0-16.0	MC	15.3	118.0			91.0						5.5% @ 200 psf	--		--	--
B-18	20.0-21.0	MC	17.1	114.7										--		--	--
B-18	25.0-25.3	MC	14.8	120.4			97.6							--		--	--
B-19	0.0-5.0	GRAB	19.3		0.0	7.8	92.2	54	22	32						A-7-6(32)	CH
B-19	0.5-1.5	MC	22.0		0.0	9.5	90.5	50	18	32		0.39		--		A-7-6(30)	CH
B-19	2.0-3.0	MC	15.9		0.0	17.6	82.4	50	21	29		1.70		--		A-7-6(24)	CH
B-19	5.0-6.0	MC	18.3		0.0	6.1	93.9	68	19	49		0.28		--		A-7-6(51)	CH
B-19	10.0-11.0	MC	16.7		0.0	2.0	98.0	55	20	35			11.7% @ 200 psf	--		A-7-6(38)	CH
B-20	0.0-5.0	GRAB	12.8		0.0	21.6	78.4	45	17	28						A-7-6(21)	CL
B-20	0.5-1.5	MC	20.6		1.0	12.1	86.9	42	17	25		0.32		--		A-7-6(22)	CL
B-20	2.0-3.0	MC	9.6		0.0	11.1	88.9	46	16	30						A-7-6(27)	CL
B-20	5.0-6.0	MC	13.4		0.0	16.4	83.6	45	15	30		1.57		--		A-7-6(25)	CL
B-20	10.0-11.0	MC	20.5		0.0	3.0	97.0	77	24	53						A-7-6(59)	CH
B-20	11.0-15.0	DRY CORE	17.1		0.0	1.7	98.3	62	21	41						A-7-6(45)	CH
B-20	15.0-16.0	MC	18.8		0.0	4.4	95.6	62	20	42						A-7-6(45)	CH

Summary of Laboratory Test Results



Project No: 522.05/220-056 Project Name DEN Taxiway EE Design Services, Denver International Airport (DEN)

Boring No.	Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg			pH	Water Soluble Sulfate (%)	% Swell (+) / Consolidation (-)	Unconf. Comp. Strength (psf)	R-Value	Classification	
	Depth (ft)	Sample Type			Gravel > #4 (%)	Sand (%)	Fines < #200 (%)	LL	PL	PI						AASHTO	USCS
B-20	16.0-20.0	DRY CORE	16.4		0.0	6.3	93.7	45	17	28						A-7-6(27)	CL
B-21	0.5-1.5	MC	22.3		0.0	6.9	93.1	44	18	26	0.03			--		A-7-6(25)	CL
B-21	2.0-3.0	MC	16.4		0.0	19.1	80.9	45	14	31						A-7-6(24)	CL
B-21	5.0-6.0	MC	14.6		0.0	14.4	85.6	52	17	35	1.50					A-7-6(31)	CH
B-21	10.0-11.0	MC	18.3		1.0	11.4	87.6	57	21	36						A-7-6(34)	CH
B-21	15.0-16.0	MC										10.0% @ 200 psf		--		--	--
B-21	20.0-21.0	MC										8.4% @ 200 psf		--		--	--
B-22	0.0-10.0	GRAB	13.1		0.0	8.5	91.5	48	19	29						A-7-6(28)	CL
B-22	0.5-1.5	MC	18.1		0.0	6.3	93.7	45	18	27	0.02			--		A-7-6(27)	CL
B-22	2.0-3.0	MC	19.0		0.0	4.2	95.8	40	18	22						A-6(22)	CL
B-22	5.0-6.0	MC	11.1		0.0	13.8	86.2	53	15	38	0.06			--		A-7-6(33)	CH
B-22	10.0-11.0	MC	12.7		0.0	13.9	86.1	53	18	35						A-7-6(31)	CH
B-22	15.0-16.0	MC										5.7% @ 200 psf		--		--	--
B-22	20.0-21.0	MC										10.3% @ 200 psf		--		--	--
B-23	0.0-3.0	GRAB	21.3		0.0	18.5	81.5	39	18	21						A-6(17)	CL
B-23	0.5-1.5	MC	22.0		0.0	7.0	93.0	45	18	27	0.03			--		A-7-6(26)	CL
B-23	2.0-3.0	MC	14.7		0.0	6.3	93.7	42	18	24						A-7-6(23)	CL
B-23	3.0-5.0	GRAB	7.6		0.0	28.6	71.4	33	16	17						A-6(10)	CL
B-23	5.0-6.0	MC	6.9		0.0	6.5	93.5	28	15	13	0.01			--		A-6(11)	CL
B-23	6.0-10.0	DRY CORE	6.9		4.0	44.3	51.7	29	22	7						A-4(1)	CL-ML
B-23	10.0-15.0	DRY CORE	11.0		0.0	54.9	45.1	31	20	11						A-6(2)	SC
B-23	15.0-16.0	MC										-0.2% @ 200 psf		--		--	--
B-23	16.0-20.0	DRY CORE	12.7		0.0	47.5	52.5	34	17	17						A-6(5)	CL



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DENVER INTERNATIONAL AIRPORT
TAXIWAY EE
BORING PLAN

DATE: APRIL 8, 2021

SHEET: 1 OF 1

Printed July 21, 2021 @ 12:44 PM by: Rickard, Jeremy
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Project: DEN Taxiway EE Design Services

Project Number: 522.05/220-056

Legend for Symbols Used on Borehole Logs

Sample Types



Auger Cuttings



Dry Core Sampler



Grab of Bulk Sample

Modified California Sampler
(2.5 inch OD, 2.0 inch ID)

Shelby Tube

Lithology Symbols (see Boring Logs for complete descriptions)



USCS Low Plasticity Clay



Claystone



USCS Low to High Plasticity Clay



USCS Low Plasticity Silty Clay



USCS Low Plasticity Sandy Clay



USCS Silt



Sandstone



Interbedded claystone and sandstone



USCS Silty Sand



Topsoil



Weathered Bedrock

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Lab Test Standards

Moisture Content	ASTM D2216
Dry Density	ASTM D7263
Sand/Fines Content	ASTM D421, ASTM C136, ASTM D1140
Atterberg Limits	ASTM D4318
AASHTO Class.	AASHTO M145, ASTM D3282
USCS Class.	ASTM D2487
(Fines = % Passing #200 Sieve)	
Sand = % Passing #4 Sieve, but not passing #200 Sieve)	

Other Lab Test Abbreviations

pH	Soil pH (AASHTO T289-91)
S	Water-Soluble Sulfate Content (AASHTO T290-91, ASTM D4327)
Chl	Water-Soluble Chloride Content (AASHTO T291-91, ASTM D4327)
S/C	Swell/Consolidation (ASTM D4546)
UCCS	Unconfined Compressive Strength (ASTM D2166)
R-Value	Resistance R-Value (ASTM D2844)
DS (C)	Direct Shear cohesion (ASTM D3080)
DS (phi)	Direct Shear friction angle (ASTM D3080)
Re	Electrical Resistivity (AASHTO T288-91)
PtL	Point Load Strength Index (ASTM D5731)

Notes

- "Penetration Resistance" on the Boring Logs refers to the uncorrected N value for SPT samples only, as per ASTM D1586. For samples obtained with a Modified California (MC) sampler, drive depth is 12 inches, and "Penetration Resistance" refers to the sum of all blows. Where blow counts were > 50 for the 3rd increment (SPT) or 2nd increment (MC), "Penetration Resistance" combines the last and 2nd-to-last blows and lengths; for other increments with > 50 blows, the blows for the last increment are reported.
- The Modified California sampler used to obtain samples is a 2.5-inch OD, 2.0-inch ID (1.95-inch ID with liners), split-barrel sampler with internal liners, as per ASTM D3550. Sampler is driven with a 140-pound hammer, dropped 30 inches per blow.
- "ER" for the hammer is the Reported Calibrated Energy Transfer Ratio for that specific hammer, as provided by the drilling company.



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-01

Boring Began: 5/25/2021 **Total Depth:** 21.0 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5359.6 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197867.40000 E: 599987.60000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5355	5	Hand	100		3-7	10	0.0 - 10.0 ft. SANDY LEAN CLAY, brown, stiff.	15.8		56.0	28	15	A-6 (5) CL	S=0.004% S/C=0.4% @200 psf	
		Hand	100		7-9	16		12.3		53.7	24	11	A-6 (3) CL	S/C=0.1% @200 psf	
		Hand	100		3-5	8		15.3		38.6	26	12	A-6 (1) SC	S=0.043% S/C=0% @200 psf	
5350	10	Hand	100		18-40	58	10.0 - 21.0 ft. CLAYSTONE, dark grey with olive brown, very hard.	16.7		99.7	61	40	A-7-6 (45) CH	S/C=7.3% @200 psf	
5345	15	Hand	100		28-50/5"	50/5"									
5340	20	Hand	100		24-45	69									
Bottom of Hole at 21.0 ft.															
5335															
5330															

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-02

Boring Began: 5/25/2021 **Total Depth:** 25.8 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5366.4 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197864.70000 E: 600285.10000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365	5	[Symbol]	5-8	13	[Symbol]	0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist, stiff.	21.1	106.4	97.2	52	38	A-7-6 (39) CH	pH=8.0 S=0.672% Cl=0.0123% Re=293ohm/cm
			9-20	29		0.5 - 2.0 ft. CLAY-WEATHERED CLAYSTONE, brown, moist, stiff, iron staining, calcareous, gypsum.	18.8	111.9					
5360	10	[Symbol]	12-20	32	[Symbol]	2.0 - 7.0 ft. weathered CLAYSTONE, gray to brown, moist, very stiff to hard, iron staining.	18.2	112.5	97.8	48	33	A-7-6 (34) CL	pH=8.0 S=1.237% Cl=0.0192% Re=233ohm/cm
			7.0 - 19.0 ft. CLAYSTONE, gray to brown, moist, hard to very hard, iron staining.	14.8		119.7	S/C=15.15% @200 psf						
5355	15	[Symbol]	50/12	50/12	[Symbol]	19.0 - 21.0 ft. CLAYSTONE cemented, light gray, damp, very hard.	16.4	118.0	97.7	52	37	A-7-6 (39) CH	S/C=11.13% @200 psf
			50/10	50/10									
5345	20	[Symbol]	50/1	50/1	[Symbol]	Bottom of Hole at 25.8 ft.	17.9	113.9					
			50/10	50/10									

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ / GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-03

Boring Began: 5/25/2021 **Total Depth:** 25.9 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5372.6 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197825.30000 E: 600484.70000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5370	5	5-11	16		0.0 - 0.5 ft. TOPSOIL-SANDY CLAY , brown, moist, stiff, minor grass vegetation. 0.5 - 2.0 ft. SANDY CLAY , brown to gray, moist, stiff, iron staining, calcareous, gypsum, transitions to CLAYSTONE. 2.0 - 18.0 ft. WEATHERED CLAYSTONE , gray to brown, moist, hard, iron staining, calcareous, gypsum.	19.1	109.6	97.0	51	36	A-7-6 (37) CH	pH=8.0 S=1.431% Ch=0.0287% Re=249ahm·cm	
	11	11-22	33			13.3	112.7						
	13	13-24	37			15.9	115.2						
	12	12-24	36			16.6	113.0						
	14	14-27	41			15.5	116.8						
5355	18	18-32	50		18.0 - 25.9 ft. SLIGHTLY SILTY CLAYSTONE , gray-brown-rust to dark gray, moist, hard to very hard, iron staining, calcareous, gypsum.	11.4	124.4	98.7	52	38	A-7-6 (40) CH	pH=7.9 S=0.663% Ch=0.0218% Re=269ahm·cm S/C=14.82% @200 psf	
	20												
	25	50/11	50/11			16.3	115.7						
Bottom of Hole at 25.9 ft.													

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-04

Boring Began: 5/25/2021 **Total Depth:** 30.8 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5369.3 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197898.50000 E: 600685.40000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365	5	[Symbol]	4-6	10	[Hatched]	0.0 - 0.5 ft. TOPSOIL-SANDY CLAY , brown, moist to wet, stiff, minor grass and vegetation.	18.9	108.5	74.2	36	22	A-6 (14) CL	S=0.41% pH=7.6 S=0.142% Ch=0.0008% Re=644ohm·cm
			10-12	22		0.5 - 2.0 ft. SANDY CLAY , brown, moist, stiff, calcareous.	7.4	110.7					
			50/12	50/12		2.0 - 5.0 ft. LEAN CLAY with sand, reddish brown, damp to moist, very stiff, calcareous, iron staining.	8.0	112.0					
5360	10	[Symbol]	50/12	50/12	[Hatched]	5.0 - 17.0 ft. CLAYSTONE , sandy, light gray to light brown, damp to moist, hard to very hard, minor iron staining.	11.0	110.1	73.3	26	12	A-6 (6) CL	pH=8.1 S=0.133% Ch=0.0161% Re=455ohm·cm S/C=3.16% @200 pcf
			50/8	50/8			7.6	108.8					
5350	20	[Symbol]	50/8	50/8	[Hatched]	17.0 - 30.8 ft. SANDY TO SLIGHTLY SILTY CLAYSTONE , gray to dark gray, moist, very hard, iron staining.	11.3	115.9	85.5	32	22	A-6 (17) CL	pH=7.8 S=0.114% Ch=0.0095% Re=462ohm·cm S/C=4.64% @200 pcf
			50/7	50/7			7.9	124.0					
5340	30	[Symbol]	50/9	50/9	[Hatched]		15.1	118.6					

Bottom of Hole at 30.8 ft.

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ / GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-05

Boring Began: 5/25/2021 **Total Depth:** 30.8 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5369.7 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197859.30000 E: 600865.30000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365	5	[Hand icon]	5-6	11	[Diagonal hatching]	0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist, stiff, minor grass and vegetation.	17.5	110.7	85.1	40	27	A-6 (22) CL	S=0% pH=7.9 S=0.03% Ch=0.0008% Re=978ohm.cm
			8-9	17		0.5 - 4.0 ft. SANDY CLAY, brown, moist, stiff, calcareous.	9.4	87.5					
5365	5	[Hand icon]	10-10	20	[Diagonal hatching]	4.0 - 8.0 ft. CLAY, severely weathered claystone, light brown to gray, dry to moist, medium dense, minor iron staining.	5.4	109.4	83.1	34	19	A-6 (14) CL	pH=7.7 S=0.51% Ch=0.004% Re=442ohm.cm
						8.0 - 27.0 ft. CLAYSTONEM, sandy in parts, reddish brown to gray, damp to moist, hard to very hard, iron staining.							
5360	10	[Hand icon]	50/11	50/11	[Diagonal hatching]		13.1	117.2	86.1	38	26	A-6 (21) CL	S=0.05% S/C=2.06% @200 psf pH=7.7 S=0.731% Ch=0.0007% Re=853ohm.cm
5355	15	[Hand icon]	50/7	50/7	[Diagonal hatching]		13.0	117.0	87.0	38	26	A-6 (22) CL	S/C=7.43% @200 psf pH=7.8 S=0.178% Ch=0.0052% Re=432ohm.cm
5350	20	[Hand icon]	50/8	50/8	[Diagonal hatching]		15.5	113.4					S/C=3.97% @200 psf
5345	25	[Hand icon]	50/6	50/6	[Diagonal hatching]		9.3	111.1					
5340	30	[Hand icon]	50/9	50/9	[Diagonal hatching]	27.0 - 30.8 ft. SANDY CLAYSTONE, tan and brown, damp to moist, very hard, iron staining.	13.7	116.8					
Bottom of Hole at 30.8 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-06

Boring Began: 5/25/2021
Boring Completed: 5/25/2021
Drilling Method(s): Solid-Stem Auger (4" OD)
Driller: Vine Laboratories
Drill Rig: CME 750X
Hammer Type: Automatic (hydraulic), ER: 80%

Total Depth: 25.5 ft
Ground Elevation: 5371.0 ft
Coordinates: N: 197819.80000 E: 601084.80000
Location: Denver International Airport (DEN), City and County of Denver, Colorado
Night Work:
Logged By: R. Lepro
Final By: D. Hunt

Weather Notes: Sunny, 40°F-70°F
Inclination from Horiz.: Vertical

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5370			3-4	7		0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist, stiff, minor grass and vegetation.	21.4	88.6					
			8-15	23		0.5 - 5.0 ft. CLAY, brown to dark brown, moist, stiff to very stiff, calcareous.	10.9	106.6	90.2	43	29	A-7-6 (26) CL	S=0.38% pH=7.9 S=0.04% Cl=0.0007% Re=853ohm·cm
5365	5		14-28	42		5.0 - 20.0 ft. CLAYSTONE, SANDY IN PARTS, light brown to brown, damp to moist, hard to very hard, iron staining.	8.7	109.5					
5360	10		50/11	50/11			11.0	114.9	86.8	30	16	A-6 (12) CL	pH=7.8 S=1.405% Cl=0.0166% Re=383ohm·cm S=0.07% S/C=2.16% @200 pcf
5355	15		50/10	50/10			14.6	115.5	81.3				S/C=2.68% @200 pcf
5350	20		50/7	50/7		20.0 - 24.0 ft. SILTY TO CLAYEY SANDSTONE WITH INTERBEDDED CLAYSTONE IN PARTS, brown to light gray, damp to moist, very hard, iron staining.	9.5	113.5	86.0				pH=7.9 S=0.295% Cl=0.0138% Re=396ohm·cm S/C=6.19% @200 pcf
5345	25		50/6	50/6		24.0 - 25.5 ft. SILTY TO CLAYEY SANDSTONE, light brown to light gray, damp to moist, very hard, minor iron staining.	4.4	111.1					
Bottom of Hole at 25.5 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ / GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-07

Boring Began: 5/25/2021 **Total Depth:** 30.6 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5375.0 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197892.90000 E: 601285.40000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5370	5		5-7	12		0.0 - 0.5 ft. TOPSOIL-CLAY , brown, moist to wet, stiff, minor grass and vegetation. 0.5 - 8.0 ft. CLAY , brown to reddish brown, moist, very stiff, minor iron staining, calcareous, gypsum.	20.2	105.7	92.5	45	29	A-7-6 (28) CL	pH=8.50 S=0.03% Re=100ahm.cm
			10-7	17			9.4	108.9					
			12-16	28			11.8	108.9	88.2	41	26	A-7-6 (23) CL	pH=8.18 S=0.4% Re=100ahm.cm S=1.44%
5365	10		16-32	48		8.0 - 24.0 ft. CLAYSTONE, SANDY IN PARTS , light gray to brown, damp to moist, hard to very hard, minor iron staining.	15.6	115.4	89.9	39	25	A-6 (22) CL	pH=8.47 S=1.48% Re=430ahm.cm
5360	15		50/11	50/11			10.8	116.4					
5355	20		50/7	50/7		24.0 - 30.6 ft. SANDY CLAYSTONE , brown to dark gray, moist to damp, very hard, iron staining.			74.7	31	20	A-6 (12) CL	pH=8.34 S=0.49% Re=450ahm.cm
5350	25		50/6	50/6			11.1	117.9					
5345	30		50/7	50/7									S/C=7.85% @200 psf
Bottom of Hole at 30.6 ft.													
5340													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-08

Boring Began: 5/25/2021 **Total Depth:** 35.5 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5378.7 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197853.60000 E: 601485.10000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
		✕	100		3-5	8		0.0 - 1.5 ft. SANDY LEAN CLAY, brown, stiff.	20.2		94.3	41	24	A-7-6 (23) CL	S=0.003%
		✕	100		6-7	13		1.5 - 7.0 ft. SILT, light brown, medium dense.	9.9 20.6		91.2 92.3	45 24	27 24	A-7-6 (26) CL A-7-6 (24) CL	
		✕	100		9-9	18			6.7		78.3	32	13	A-6 (9) CL	S=0.465%
5370	10	✕	100		21-44	65		7.0 - 35.5 ft. CLAYSTONE, sandy, light brown to light gray, very hard.	14.3		72.6	38	22	A-6 (14) CL	
		✕	100		38-50/2"	50/2"			10.6		71.1	30	16	A-6 (9) CL	S/C=1.7% @200 pcf
5360	20	✕	100		21-50/3"	50/3"			18.6		68.3	28	14	A-6 (7) CL	
		✕	100		50/5.5"	50/5.5"									
5350	30	✕	100		50/5"	50/5"									
		✕	100		50/5"	50/5"		- very hard cemented lens @ 32'.							
		✕	100		50/5"	50/5"		Bottom of Hole at 35.5 ft.							
5340															

BORING LOG 522.05 -- 220-056, TAXIWAY EE7-20-21 GPJ, GEG BORING LOGS TEMPLATE.GDT, TAXIWAY EE LIBRARY.GLB 7/20/21

DRAFT



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-09

Boring Began: 5/25/2021 **Total Depth:** 35.4 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5381.8 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197814.60000 E: 601647.70000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5380	0.0 - 0.5 ft	Hand	4-6	10	TOPSOIL-SANDY CLAY, brown, moist, stiff.	21.6	102.8						
	0.5 - 8.0 ft	Hand	4-6	10		CLAY, light brown to reddish brown, moist, stiff, slightly calcareous to calcareous, minor iron staining, rock fragments.	19.7	104.4	83.4				
5375	5	Hand	5-7	12	SANDY CLAYSTONE, light gray to light brown, damp to moist, hard to very hard.	13.2	106.6	90.9					S=0.4%
5370	10	Hand	15-32	47		14.7	116.3						
5365	15	Hand	50/11	50/11		14.3	118.2	75.9	36	26	A-6 (22) CL		
5360	20	Hand	50/7	50/7	CLAYSTONE, sandy, light gray to reddish brown, damp to moist, very hard, minor iron staining.	10.4	118.2						S=0.14%
5355	25	Hand	50/6	50/6		8.1	127.1	59.2	26	11	A-6 (9)	S/C=4.14% @200 psf	
5350	30	Hand	50/6	50/6	5.7	123.1						S/C=1.05% @200 psf	
	35	Hand	50/5	50/5		7.1	125.2						

Bottom of Hole at 35.4 ft.

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ / GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-10

Boring Began: 5/24/2021
Boring Completed: 5/24/2021
Drilling Method(s): Solid-Stem Auger (4" OD)
Driller: Vine Laboratories
Drill Rig: CME 750X
Hammer Type: Automatic (hydraulic), ER: 80%

Total Depth: 25.3 ft
Ground Elevation: 5377.7 ft
Coordinates: N: 197887.70000 E: 601848.30000
Location: Denver International Airport (DEN), City and County of Denver, Colorado
Logged By: R. Lepro
Final By: D. Hunt

Weather Notes: Sunny, 40°F-70°F
Inclination from Horiz.: Vertical

Groundwater Levels: Not Observed			
Symbol	-	-	-
Depth	-	-	-
Date	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
						0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist to wet, minor grass and vegetation.							
			6-16	22		0.5 - 2.0 ft. SANDY CLAY, brown, moist, stiff.	16.4	114.4					
5375			11-13	24		2.0 - 4.0 ft. WEATHERED CLAYSTONE, SANDY IN PARTS, gray to brown, moist, very stiff, calcareous, iron staining.	10.1	110.4				S=1.1%	
	5		11-29	40		4.0 - 9.0 ft. WEATHERED CLAYSTONE, brown, moist, hard.	17.2	115.7	98.2			S/C=2.4% @200 pcf	
5370													
	10		50/10	50/10		9.0 - 25.3 ft. CLAYEY SANDSTONE, light gray, damp, very hard, weak cementation.	9.6	108.9				S/C=0.01% @200 pcf	
5365									45.0				
	15		50/5	50/5			6.3	95.4	21.3			S/C=0.47% @200 pcf	
5360													
	20		50/5	50/5			3.6	113.2				S/C=0.44% @200 pcf	
5355													
	25		50/4	50/4			3.4	116.8					
Bottom of Hole at 25.3 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-11

Boring Began: 5/25/2021 **Total Depth:** 30.5 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5377.2 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197849.00000 E: 601986.10000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5375	0-2.0	Hand	100		5-10	15	0.0 - 2.0 ft. SANDY LEAN CLAY, brown, very stiff.	21.1		81.6	37	15	A-6 (12) CL	S=0.576%	
5375	2.0-10.0	Hand	100		16-27	43	2.0 - 10.0 ft. CLAY, light gray, damp, hard to very stiff.	14.0 17.1		89.5 91.2	36 39	13 21	A-6 (12) CL A-6 (19) CL		
5370	5	Hand	100		17-6-10	16		10.7		89.5	33	14	A-6 (12) CL	S=0.456%	
5365	10	Hand	100		7-30	37	10.0 - 30.5 ft. CLAYSTONE, sandy, light gray, hard to very hard.	9.8		59.8	25	12	A-6 (4) CL	S/C=0.1% @200 psf	
5360	15	Hand						24.4		58.8	26	12	A-6 (4) CL		
5360	15	Hand	100		34-50/6"	50/6"		8.8		54.3	26	13	A-6 (4) CL	S/C=0.1% @200 psf	
5355	20	Hand	100		32-50/4"	50/4"									
5350	25	Hand	100		50/5"	50/5"									
5345	30	Hand	100		50/4"	50/4"									
Bottom of Hole at 30.5 ft.															

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-12

Boring Began: 5/24/2021 **Total Depth:** 25.8 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5379.5 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197809.10000 E: 602247.70000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
			3-4	7		0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist to wet, stiff, minor grass and vegetation.	23.9	100.1					
			10-19	29		0.5 - 2.0 ft. SANDY CLAY, brown, moist, stiff, calcareous.							
						2.0 - 4.0 ft. WEATHERED CLAYSTONE WITH SILTY TO CLAYEY SANDSTONE IN PARTS, brown to gray, moist, very stiff to hard, calcareous, minor iron staining.	12.4	115.7				S=2.04%	
5375	5		12-28	40		4.0 - 14.0 ft. CLAYSTONE, dark gray to brown, moist, hard, high iron staining.	15.0	117.2	95.1 97.3				
									63.0				
5370	10		15-25	40			18.1	109.7				S=0.72%	
5365	15		50/7	50/7		14.0 - 25.8 ft. SILTY SANDSTONE, CLAYEY IN PARTS, light brown to gray, damp, very hard, minor iron staining.	6.6	110.5	31.5			S/C=0.25% @200 psf	
5360	20		50/7	50/7			8.3	125.9	44.1			S/C=0.99% @200 psf	
5355	25		50/10	50/10			10.1	118.5					
Bottom of Hole at 25.8 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-13

Boring Began: 5/24/2021 **Total Depth:** 25.6 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5373.7 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197882.20000 E: 602448.30000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
			4-5	9		0.0 - 0.5 ft. TOPSOIL-SANDY CLAY , brown, moist to wet, stiff, minor grass and vegetation.	22.7	102.3	79.4				
			14-21	35		0.5 - 2.0 ft. SANDY CLAY , brown, moist to wet, stiff.							
5370						2.0 - 7.0 ft. WEATHERED CLAYSTONE , gray to dark gray, moist, hard, highly calcareous, iron staining, gypsum.	19.0	105.6					S=2.01% S/C=17.84% @200 pcf
	5		11-23	34				90.4		55	39	A-7-6 (37) CH	S=0.37% S/C=17.71% @200 pcf
						7.0 - 19.0 ft. CLAYSTONE , gray to dark gray, moist, very hard, iron staining.							
5365													
	10		50/11	50/11			14.9	117.8					S=1.1% S/C=13.35% @200 pcf
									97.5				
5360													
	15		50/11	50/11			17.0	114.5					
									97.7				
5355													
	20		50/7	50/7		19.0 - 25.6 ft. SILTY TO CLAYEY SANDSTONE , light gray to light brown, damp, very hard, minor iron staining.	7.6	117.2					
5350													
	25		50/7	50/7			9.1	110.5					
Bottom of Hole at 25.6 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-14

Boring Began: 5/25/2021 **Total Depth:** 30.3 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5370.7 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Hollow-Stem Auger (8" OD) **Coordinates:** N: 197842.80000 E: 602648.00000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5370			100		3-5	8		0.0 - 3.0 ft. LEAN TO FAT CLAY, brown, stiff.	19.6		93.6	42	24	A-7-6 (23) CL	S=0.002% S/C=0.8% @200 pcf
			100		3-7	10			14.8		89.6	52	34	A-7-6 (32) CH	S/C=1.2% @200 pcf
								3.0 - 8.0 ft. SANDY LEAN CLAY, olive gray to light brown, hard.	18.9		90.4	42	25	A-7-6 (23) CL	
5365	5		100		9-29	38			15.5		55.5	40	22	A-6 (9) CL	S=0.215% S/C=7.7% @200 pcf
								8.0 - 12.0 ft. SILTY SAND, light gray, very dense.							
5360	10		100		28-50/5"	50/5"									
								12.0 - 30.3 ft. CLAYSTONE with cemented sandstone lens, light gray to gray + white, hard to very hard.							
5355	15														
								- dry core sampler refusal in cemented sandstone @ 18'.							
5350	20		100		50/5.5"	50/5.5"									
5345	25		100		50/2"	50/2"									
5340	30		100		50/1"	50/1"		Bottom of Hole at 30.3 ft.							

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-15

Boring Began: 5/24/2021 **Total Depth:** 25.6 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5371.2 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197803.50000 E: 602847.60000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5370	0-3	Hand	2-3	5	0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist, stiff, Roots.	23.7	97.0					S=0% S/C=0% @200 psf	
	3-4	Hand	4-15	19	0.5 - 2.0 ft. SANDY CLAY, brown, moist, stiff.								
	4-5	Hand			2.0 - 4.0 ft. LEAN CLAY WITH SAND, light brown to light gray brown, damp to moist, very stiff.	13.6	111.6	76.7				S/C=6.46% @200 psf	
	5-5.5	Hand			4.0 - 8.0 ft. SANDY CLAY, light gray brown, damp, hard, moderate cementation, calcareous.			93.0	48	33	A-7-6 (32) CL		
5365	5-15	Hand	22-15	37		1.9	132.7					S=0.46% S/C=3.23% @200 psf	
	10-10.5	Hand			8.0 - 14.0 ft. SILTY SANDSTONE, light gray, damp, very hard.								
5360	10-15	Hand	50/8	50/8		6.3	108.2	45.5				S=0.16% S/C=0.29% @200 psf	
	15-15.5	Hand			14.0 - 18.0 ft. INTERBEDDED SANDSTONE AND CLAYSTONE, SILTY TO CLAYEY, light brown, damp, very hard.			81.7	34	21	A-6 (15) CL		
5355	15-20	Hand	50/7	50/7		8.9	124.6						
	20-20.5	Hand			18.0 - 24.0 ft. CLAYSTONE, dark brown, moist, hard to very hard.								
5350	20-25	Hand	50/12	50/12		18.6	112.4	93.4					
	25-25.5	Hand			24.0 - 25.6 ft. SILTY TO SLIGHTLY CLAYEY SANDSTONE, light brown to brown, damp to moist, very hard.			89.1	37	24	A-6 (20) CL		
5345	25	Hand	50/7	50/7		6.4	106.0						
Bottom of Hole at 25.6 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-16

Boring Began: 5/24/2021 **Total Depth:** 25.8 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5368.7 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197839.20000 E: 603041.70000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
			4-5	9		0.0 - 0.5 ft. TOPSOIL-SANDY CLAY, brown, moist, stiff, Roots.	22.1	93.5	94.7				S/C=0.43% @200 psf
			4-13	17		0.5 - 10.0 ft. LEAN CLAY, light brown to tan, damp to moist, stiff, highly calcareous.	15.7	107.2					S=0.45% S/C=3.88% @200 psf
5365	5		7-8	15			11.0	112.5	90.5 82.5	43	27	A-7-6 (25) CL	S=0.64% S/C=7.27% @200 psf
5360	10		16-28	44		10.0 - 25.8 ft. INTERBEDDED CLAYSTONE AND SANDSTONE, gray to brown, moist to damp, hard to very hard, iron staining.			91.8	42	30	A-7-6 (27) CL	S=0.77% S/C=4.01% @200 psf
5355	15		15-22	37			13.1 31.7	115.3 100.3	88.7 98.0	41	28	A-7-6 (24) CL	
5350	20		50/10	50/10			7.3	105.9					
5345	25		50/10	50/10			19.2	110.7					
Bottom of Hole at 25.8 ft.													

BORING LOG 522.05 -- 220-056_TAXIWAY EE7-20-21.GPJ / GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-17

Boring Began: 5/25/2021 **Total Depth:** 30.5 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/25/2021 **Ground Elevation:** 5369.6 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Hollow-Stem Auger (8" OD) **Coordinates:** N: 197652.30000 E: 603104.70000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests	
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index			
5365	5	[Symbol]	100		3-10	13	[Hatched Pattern]	0.0 - 5.5 ft. SANDY LEAN CLAY, brown, stiff to very stiff.	20.6		95.4	46	28	A-7-6 (28) CL	S=0.01%	
			100		9-11	20			13.7		85.0	47	28	A-7-6 (24) CL		S=0.199%
									12.3		87.9	44	26	A-7-6 (23) CL		
5360	10	[Symbol]	100		6-9	15	[Hatched Pattern]	5.5 - 15.0 ft. CLAYSTONE with sandstone lens, light brown, hard.	12.5		90.8	40	21	A-6 (20) CL	S/C=6% @200 pcf	
									17.6		94.2	55	35	A-7-6 (36) CH		
									16.8		95.8	42	24	A-7-6 (24) CL		
5355	15	[Symbol]	100		14-27	41	[Hatched Pattern]	15.0 - 19.0 ft. SANDY CLAYSTONE, olive gray, hard.								
5350	20	[Symbol]	100		20-28	48	[Hatched Pattern]	19.0 - 27.0 ft. CLAYSTONE, dark gray, hard to very hard.								
5345	25	[Symbol]	100		29-50/5.5"	50/5.5"	[Hatched Pattern]									
5340	30	[Symbol]	6100		50/6"	50/6"	[Dotted Pattern]	27.0 - 30.5 ft. SANDSTONE, light brown to dark brown, very hard.								
Bottom of Hole at 30.5 ft.																

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ / GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-18

Boring Began: 5/24/2021 **Total Depth:** 25.3 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5367.8 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 197482.60000 E: 603150.50000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** R. Lepro
Final By: D. Hunt

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365			6-9	15	0.0 - 4.0 ft. CLAY WITH SEVERELY WEATHERED CLAYSTONE, gray to brown, moist to wet, stiff, iron staining, calcareous.	19.1	108.6	95.2					S=2.28%
			5-10	15		21.2	101.7						
5360	5		7-15	22	4.0 - 12.0 ft. WEATHERED CLAYSTONE, dark gray to brown, moist, stiff, iron staining, calcareous, gypsum.	21.8	106.8	88.1	52	33	A-7-6 (31) CH		S/C=15.58% @200 psf
			9-19	28		17.9	112.3						
5355	10		9-19	28	12.0 - 18.0 ft. SANDY CLAYSTONE, light brown to brown, damp to moist, very hard.	15.3	118.0	91.0					S/C=5.47% @200 psf
			21-42	63									
5350	15		21-42	63	17.0 - 18.0 ft. moderate cementation.			89.7	38	24	A-6 (21) CL		
			17-31	48									
5345	20		17-31	48	18.0 - 25.3 ft. CLAYSTONE, gray to dark gray, moist, hard, minor iron staining.								
			50/4	50/4									
Bottom of Hole at 25.3 ft.													

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-19

Boring Began: 5/24/2021
Boring Completed: 5/24/2021
Drilling Method(s): Solid-Stem Auger (4" OD)
Driller: Vine Laboratories
Drill Rig: CME 750X
Hammer Type: Automatic (hydraulic), ER: 80%

Total Depth: 25.5 ft
Ground Elevation: 5368.1 ft
Coordinates: N: 197278.80000 E: 603358.70000
Location: Denver International Airport (DEN), City and County of Denver, Colorado
Logged By: J. Shekoski
Final By: M. Lim

Weather Notes: Sunny, 40°F-70°F
Inclination from Horiz.: Vertical

Groundwater Levels: Not Observed

Symbol	Depth	Date
-	-	-
-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365	5	Hand	100		3-8	11	0.0 - 3.0 ft. SANDY LEAN CLAY, brown, stiff to very stiff.	22.0		90.5	50	32	A-7-6 (30) CH	S=0.385%	
	5	Hand	100		10-15	25		19.3 15.9		92.2 82.4	54 50	32 29	A-7-6 (32) CH A-7-6 (24) CH		S=1.7%
5360	10	Hand	100		9-15	24	3.0 - 7.0 ft. SANDSTONE, tanish brown, very stiff.	18.3		93.9	68	49	A-7-6 (51) CH	S=0.276%	
	10	Hand	100		11-21	32		16.7		98.0	55	35	A-7-6 (38) CH		S/C=11.7% @200 pcf
5355	15	Hand	100		12-26	38	7.0 - 19.0 ft. CLAYSTONE with sandstone lenses, olive-gray-brown with light gray, hard.								
	15	Hand	100		12-26	38									
5350	20	Hand	100		43-50/4"	50/4"	19.0 - 25.5 ft. SANDSTONE, light gray, very hard.								
	20	Hand	100		43-50/4"	50/4"									
5345	25	Hand	100		50/5"	50/5"	Bottom of Hole at 25.5 ft.								
	25	Hand	100		50/5"	50/5"									

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-20

Boring Began: 5/24/2021
Boring Completed: 5/24/2021
Drilling Method(s): Hollow-Stem Auger (8" OD)
Driller: Vine Laboratories
Drill Rig: CME 750X
Hammer Type: Automatic (hydraulic), ER: 80%

Total Depth: 31.0 ft
Ground Elevation: 5366.9 ft
Coordinates: N: 197086.20000 E: 603424.40000
Location: Denver International Airport (DEN), City and County of Denver, Colorado
Logged By: J. Shekoski
Final By: M. Lim

Weather Notes: Sunny, 40°F-70°F
Inclination from Horiz.: Vertical

Groundwater Levels: Not Observed

Symbol	Depth	Date
-	-	-
-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365			100		4-6	10		0.0 - 3.0 ft. SANDY LEAN CLAY, brown, stiff to very stiff.	20.6		86.9	42	25	A-7-6 (22) CL	S=0.323%
			100		10-18	28			12.8		78.4	45	28	A-7-6 (21) CL	
	5							3.0 - 6.5 ft. SILTY SAND, tan brown, medium dense.	9.6		88.9	46	30	A-7-6 (27) CL	
5360			100		9-17	26		6.5 - 23.5 ft. SANDY CLAYSTONE, olive brown with gray, hard to very hard.	13.4		83.6	45	30	A-7-6 (25) CL	S=1.565%
	10		100		13-26	39			20.5		97.0	77	53	A-7-6 (59) CH	
5355									17.1		98.3	62	41	A-7-6 (45) CH	
	15		100		14-28	42			18.8		95.6	62	42	A-7-6 (45) CH	
5350									16.4		93.7	45	28	A-7-6 (27) CL	
	20		100		20-50/5.5"	50/5.5"									
5345															
	25		100		22-50/3.5"	50/3.5"		23.5 - 31.0 ft. SANDSTONE, light brown, very hard.							
5340															
	30		100		23-50/5"	50/5"									
5335	Bottom of Hole at 31.0 ft.														

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)
Project Number: 522.05/220-056 **Boring No.:** B-21

Boring Began: 5/24/2021 **Total Depth:** 31.0 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5366.6 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 196893.60000 E: 603490.20000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5365		◆	100		2-4	6	[Diagonal Hatching]	0.0 - 5.0 ft. SANDY LEAN CLAY , brown, medium stiff to stiff.	22.3		93.1	44	26	A-7-6 (25) CL	S=0.028%
		◆	100		4-11	15			16.4		80.9	45	31	A-7-6 (24) CL	
5360	5	◆	100		4-27	31	[Diagonal Hatching]	5.0 - 15.0 ft. CLAYSTONE , olive brown and gray + white, hard.	14.6		85.6	52	35	A-7-6 (31) CH	S=1.501%
5355	10	◆	100		6-15	21	[Diagonal Hatching]	15.0 - 31.0 ft. CLAYSTONE with trace sandstone , olive brown, hard.	18.3		87.6	57	36	A-7-6 (34) CH	
5350	15	◆	100		10-20	30	[Diagonal Hatching]								
5345	20	◆	100		13-25	38	[Diagonal Hatching]								S/C=8.4% @200 psf
5340	25	◆	100		18-39	57	[Diagonal Hatching]								
5335	30	◆	100		15-34	49	[Diagonal Hatching]								
Bottom of Hole at 31.0 ft.															

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ / GEG BORING LOGS TEMPLATE.GDT / TAXIWAY EE LIBRARY.GLB 7/20/21



Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-22

Boring Began: 5/24/2021 **Total Depth:** 30.5 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5365.1 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Solid-Stem Auger (4" OD) **Coordinates:** N: 196756.40000 E: 603653.90000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index		
5360	5	[Symbol]	100		6-9	15	[Hatched Pattern]	0.0 - 10.5 ft. CLAY with sand lenses , brown, stiff to very stiff.	18.1		93.7	45	27	A-7-6 (27) CL	S=0.017%
			100		6-14	20			19.0		95.8	40	22	A-6 (22) CL	
5360	5	[Symbol]	100		10-17	27	[Hatched Pattern]	0.0 - 10.5 ft. CLAY with sand lenses , brown, stiff to very stiff.	13.1		91.5	48	29	A-7-6 (28) CL	S=0.058%
			100						11.1		86.2	53	38	A-7-6 (33) CH	
5355	10	[Symbol]	100		12-21	33	[Hatched Pattern]	10.5 - 30.5 ft. CLAYSTONE with SANDSTONE , tan brown, hard to very hard.	12.7		86.1	53	35	A-7-6 (31) CH	
5350	15	[Symbol]	100		20-38	58									
5345	20	[Symbol]	100		25-44	69	[Hatched Pattern]	10.5 - 30.5 ft. CLAYSTONE with SANDSTONE , tan brown, hard to very hard.							S/C=10.3% @200 psf
5340	25	[Symbol]	100		50/5.5"	50/5.5"									
5335	30	[Symbol]	100		50/5.5"	50/5.5"									
Bottom of Hole at 30.5 ft.															

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21.GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21

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Project Name: DEN Taxiway EE Design Services
Denver International Airport (DEN)

Project Number: 522.05/220-056 **Boring No.:** B-23

Boring Began: 5/24/2021 **Total Depth:** 36.0 ft **Weather Notes:** Sunny, 40°F-70°F
Boring Completed: 5/24/2021 **Ground Elevation:** 5363.0 ft **Inclination from Horiz.:** Vertical
Drilling Method(s): Hollow-Stem Auger (8" OD) **Coordinates:** N: 196563.90000 E: 603719.70000
Driller: Vine Laboratories **Location:** Denver International Airport (DEN), City and County **Night Work:**
Drill Rig: CME 750X **of Denver, Colorado**
Hammer Type: Automatic (hydraulic), ER: 80% **Logged By:** J. Shekoski
Final By: M. Lim

Groundwater Levels: Not Observed			
Symbol	Depth	Date	
-	-	-	-
-	-	-	-

Elevation (feet)	Depth (feet)	Sample Type/ Advancement Method	Rock		Soil Samples		Lithology	Material Description	Moisture Content (%)	Dry Density (pcf)	Fines Content (%)	Atterberg Limits		AASHTO & USCS Classifications	Field Notes and Other Lab Tests				
			Recovery (%)	RQD (%)	Blows per 6 in	Penetration Resistance						Liquid Limit	Plasticity Index						
5360	5	[Symbol]	100		5-9	14	[Hatched Pattern]	0.0 - 4.0 ft. SANDY LEAN CLAY , brown, stiff to very stiff.	22.0	[Symbol]	93.0	45	27	A-7-6 (26) CL	S=0.028%				
									21.3		81.5	39	21			A-6 (17) CL			
	100		10-10	20	14.7	93.7			42		24	A-7-6 (23) CL							
													A-6 (10) CL						
5350	10	[Symbol]	100		6-9	15	[Hatched Pattern]	4.0 - 12.5 ft. SILTY CLAY , tan brown, stiff.	7.6	[Symbol]	71.4	33	17	A-6 (11) CL	S=0.014%				
									6.9		93.5	28	13			A-4 (1) CL-ML			
	75								6.9		51.7	29	7			A-6 (2) SC			
5340	20	[Symbol]	100				[Hatched Pattern]	12.5 - 30.0 ft. CLAYSTONE with sand lens , olive, hard to very hard.	11.0	[Symbol]	45.1	31	11	A-6 (5) CL	S/C=0.2% @200 psf				
	100		16-19	35															
5330	30	[Symbol]	100		17-37	54	[Hatched Pattern]	30.0 - 36.0 ft. CLAYSTONE , dark grey, hard.	12.7	[Symbol]	52.5	34	17						
	100		19-50	69															
5330	35	[Symbol]	100		14-23	37	[Hatched Pattern]			[Symbol]									
			100		20-25	45													
Bottom of Hole at 36.0 ft.																			

BORING LOG 522.05 -- 220-056 TAXIWAY EE7-20-21 GPJ GEG BORING LOGS TEMPLATE.GDT TAXIWAY EE LIBRARY.GLB 7/20/21



July 19, 2021

Project No. 522.05/220-056

Jviation, A Woolpert Company
Mr. Benito Gonzales, PE
720 South Colorado Blvd., Ste 1200-S
Glendale, CO 80246

**Subject: Memorandum for Borrow Source Study
Addendum No. 2 (7-21-21)
For Taxiway EE Select Embankment Material
Denver International Airport, Colorado**

Dear Mr. Gonzales:

Rocksol Consulting Group, Inc. (Rocksol) and Granite Engineering Group, Inc. (GEG) are currently performing the borrow source study for the proposed Taxiway EE at Denver International Airport in Denver, Colorado. A potential borrow source area has been identified and is presented in Figure 1.



Figure 1. Borrow Source Study Area and Boring Locations

*Memo for Borrow Source Study (Addendum No. 2, 7-21-21)
Taxiway EE Select Embankment Materials*

A total of twenty-three (23) borings are currently planned for the borrow source study. The field drilling is being performed during the week of 7-19-21 and will take two (2) days to complete. Additional borings may be performed to focus on the areas where suitable materials are observed during field exploration. These boring locations are also presented in Figure 1. The laboratory testing will consist of soil classifications (gradation, Atterberg Limits), soluble sulfate content, proctor and swell potential and will be completed within 15 business days after the field exploration is completed. The test results will be used to evaluate the suitability of the materials for use in lower zone and upper zone select embankment materials per DEN P-152 Specifications.

A preliminary desktop evaluation of the borrow materials has been performed by RockSol and GEG using the United States Geologic Survey (USGS) "Geologic Map of The Greater Denver Area, Front Range Urban Corridor, Colorado, 1979", and the Websoil Survey provided by United States Department of Agriculture, Natural Resources Conservation Service (NRCS). The preliminary desktop evaluation presented herein is to provide preliminary information for identifying potential borrow sources for upper and lower zones embankment materials.

Based on the USGS geologic map, the borrow source study area is located within the Windblown Sand (Qes) and Post-Piney Creek and Piney Creek Alluvium (Upper Holocene) (Qp) formations. The Windblown Sand formation consists of fine to medium sand derived mainly from alluvium of major streams and distributed east and southeast of source area by wind. The Post-Piney Creek and Piney Creek Alluvium consists of gravel, sand, silt, and clay of modern stream flood plains.

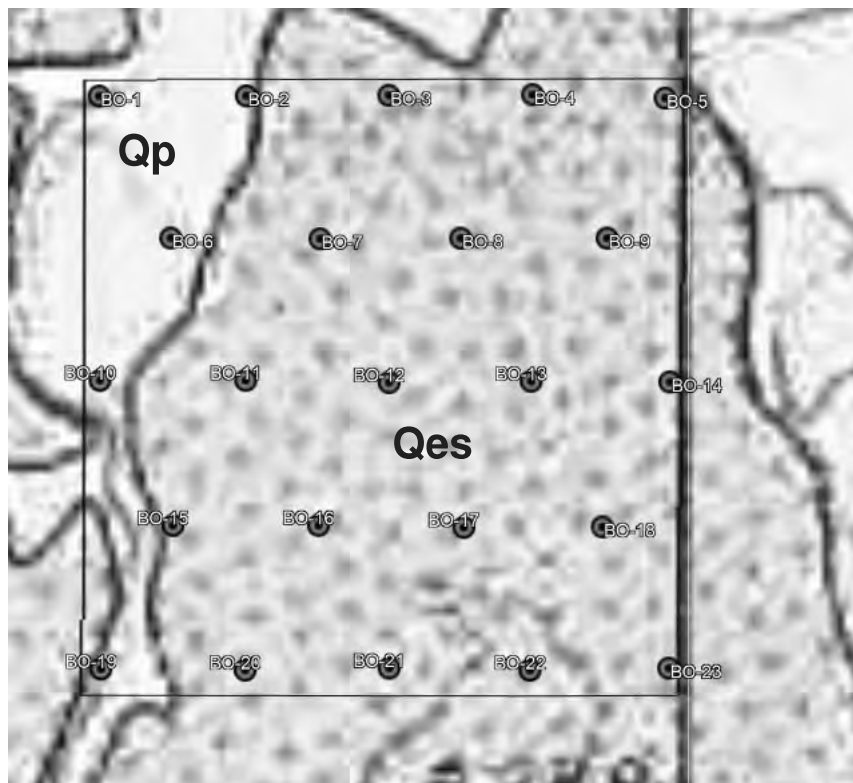


Figure 2. USGS Formation Map

Based on the NRCS soil survey, the surficial soil series within the borrow source study area consists of Ascalon (AsB, AsC, AsD), Vona (VnD), Nunn (NIB), and Platner (PIB, PIC) series. The Ascalon series is comprised of fine sandy loam with some clay soils, the Vona series is comprised of sandy loam to loamy sand, the Vunn series is comprised of clay loam, and the Platner series is comprised of sandy loam. The Ascalon and Vona series are believed to be suitable for DEN P-152 upper zone embankment, the Platner series may be suitable for DEN P-152 upper zone

Memo for Borrow Source Study (Addendum No. 2, 7-21-21)
Taxiway EE Select Embankment Materials

embankment, and the Vunn series may not be suitable for DEN P-152 upper zone embankment, but potentially will be suitable for DEN P-152 lower zone embankment materials. The Ascalon and Vona series are mainly located on the east half of the borrow source study area and the upper zone embankment materials may come from this area.

The materials in the borrow source study area likely suitable for DEN P-152 upper zone embankment materials are presented in Figure 3. It is important to note that the suitability of the material is based on the USGS geologic map and NRCS soil survey, and will be further evaluated by the borrow source study. The results of the borrow source study should be used for identifying the excavation limits of the borrow source both horizontally and with depth.

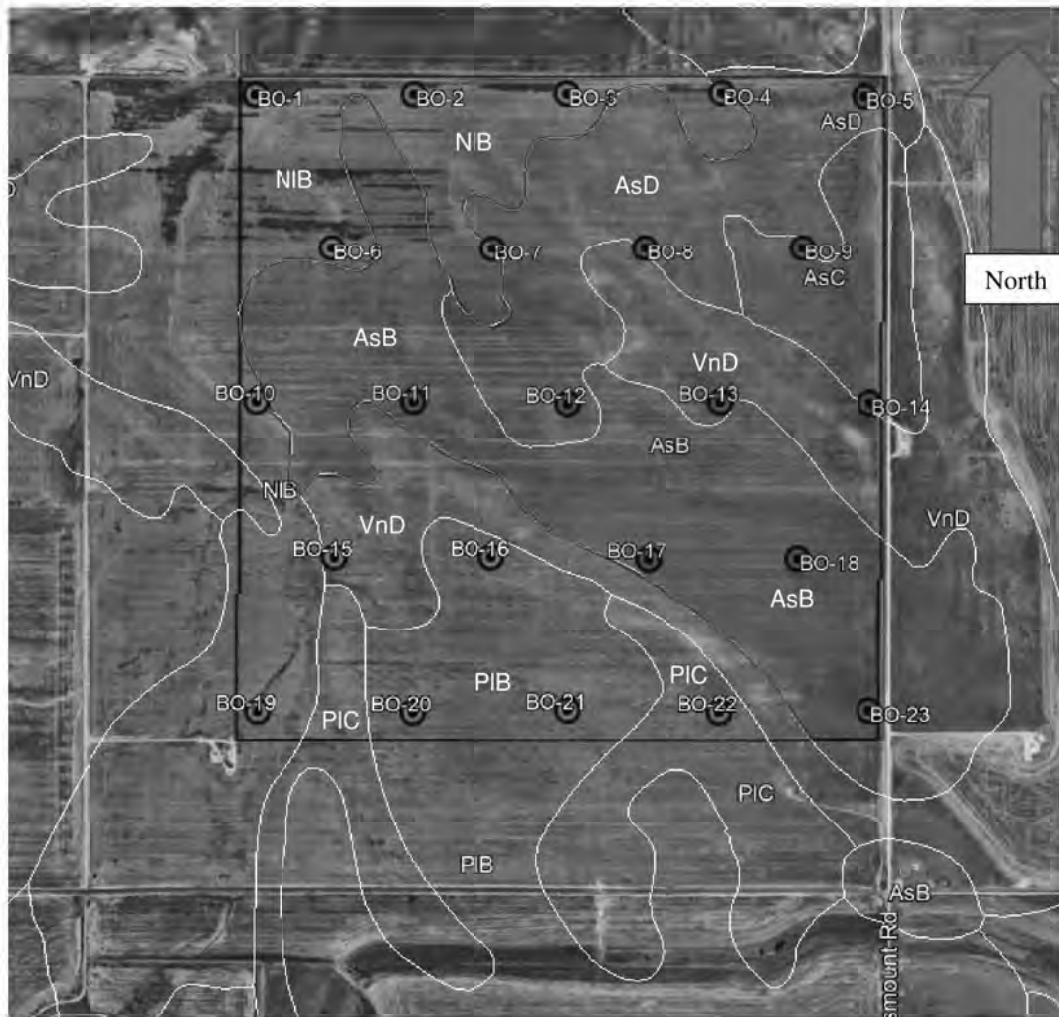


Figure 3. Potential Suitable Materials for Upper Zone Embankment Materials

Construction Quality Program

The borrow source study is being performed to assist the owner, design team and contractors to identify a potential source, or sources, of suitable upper zone and lower zone embankment materials per DEN P-152 requirements. The borrow source study was performed in a relatively large area to evaluate a “global” condition of the potential borrow source. After the contractor identifies the exact layout of the borrow source based on this study and other factors (mobilization, ease of access, permit, availability of materials, etc.), additional evaluation should be performed by contractor to confirm that the materials within the proposed borrow source meet the DEN P-152 embankment materials requirements. The additional evaluation should be performed in a

Memo for Borrow Source Study (Addendum No. 2, 7-21-21)
Taxiway EE Select Embankment Materials

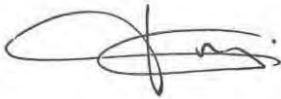
grid pattern with borings spacing not more than 100 feet. The borings should be drilled to 5-feet below the bottom of the planned excavation, and laboratory testing should be planned to evaluate the properties of each strata encountered in these borings.

Limitations

The comments and recommendations presented in this memorandum are based upon the available information, and other information discussed in this memo. The final suitability of the borrow source should follow the results of our borrow source study and confirmation testing performed by the contractor.

This memorandum was prepared in substantial accordance with generally accepted standards of practice for geotechnical engineering in Colorado. No warranties, express or implied, are intended or made.

Respectfully,
ROCKSOL CONSULTING GROUP, INC.
GRANITE ENGINEERING GROUP, INC.



Hai Ming Lim, PE
Project Manager

Digitally signed by Donald G. Hunt
DN: cn=Donald G. Hunt, o=RockSol Consulting Group, Inc., ou, email=hunt@rocksol.com, c=US
Date: 2021.07.21 09:41:17 -0500

Donald G. Hunt
Donald Hunt, PE
Project Manager



July 22, 2021

Taxiway EE Construction

IFB NO. 202158849

ADDENDUM NUMBER 3

This Addendum Number 3 supersedes and/or supplements all portions of the Bid Documents with which it conflicts. Proposers must acknowledge receipt of this addendum in the Attachment 1 Part 1 Bid Acknowledgement Letter.

Tony Deconinck

Tony Deconinck
Contract Administrator
Contract Services



DENVER INTERNATIONAL AIRPORT

TAXIWAY EE CONSTRUCTION

IFB NO. 202158849

ADDENDUM NUMBER 3

Note: Addendum No. 3 was issued as there was a slight problem when Addendum 2 was published; not all of the answers posted because of a quirk of BidNet that some of the responses were “saved” but not marked as “ready for publication”. This error was discovered and the remainder of the answers were published officially on BidNet, which automatically generates an addendum whenever questions are answered.

The total number of pages (including cover sheet) contained in this Addendum Number 3 is two (2).

* * * * *

End of Addendum Number 3



INVITATION FOR BID

TAXIWAY EE CONSTRUCTION

CONTRACT NO. 202158849

July 1, 2021

BID SUBMITTAL REQUIREMENTS

The following is a checklist for reference when compiling the Bid submission. The documents listed below are required:

- Bid Forms - all complete and signed
 - ✓ • Bid Letter – filled out completely and acknowledge all addenda
 - ✓ • Bid Data Forms – all forms completed and submitted
 - ✓ • Disclosure of Legal & Administrative Proceedings & Financial Conditions
 - ✓ • Form W-9
 - ✓ • Certificate of Good Standing
 - ✓ • Bid Bond (scan of executed bid bond in submittal)

- DSBO Forms
 - ✓ • Commitment to DBE Participation
 - ✓ • Form 1A – List of Proposed Subcontractors, Subconsultants, and/or Suppliers
 - ✓ • Letter(s) of Intent

- Diversity Survey
 - ✓ • Diversity and Inclusiveness in City Solicitations (online survey – include the completed survey with your Bid submission)

- Financial Forms
 - ✓ • Schedule of Prices/Values and Quantities

- XXI. Appendix A – Contract Provisions:
 - Section A4.3.2 Certificate of Buy American Compliance for Total Facility
 - Section A4.3.3 Certificate of Buy American Compliance for Manufactured Products

VI. ATTACHMENT 1, BID FORMS

Attachment 1, Part 1 Bid Acknowledgement Letter

CONTRACT NAME: Taxiway EE Construction
Contract No.: 202158849
Bid Letter

BIDDER Flatiron Constructors, Inc.

Chief Executive Officer
City and County of Denver
Business Management Services (Procurement) Office
Airport Office Building, Room 8810
Denver International Airport
8500 Peña Boulevard
Denver, Colorado 80249

This letter is in response to the Notice of Invitation for Bids first published on July 1, 2021, for Contract No. 202158849, Denver International Airport, Taxiway EE Construction.

This contract is for: construction of a new taxiway (TW) EE and associated infrastructure. This taxiway will be located north and parallel to existing Taxiway ED, leading from Taxiway L, across Taxiway M, eastbound to the departure threshold of Runway 17L via extended Taxiway P7. The scope of work will include grading, drainage, utility relocation, airfield paving, airfield pavement marking, airfield electrical, and signage.

The undersigned Bidder declares that it has carefully examined the location of the proposed work and has carefully read and examined all of the Contract Documents which include, but are not limited to, the Contract Drawings, Technical Specifications, Construction Contract General Conditions, Special Conditions, Instruction to Bidders, and EEO provisions, and hereby proposes to furnish all labor, materials, equipment, tools, transportation and services, and to discharge all duties and obligations necessary and required to perform and complete the Work as required in the Contract Documents which are provided herewith and by this reference made a part hereof for the prices shown in the bid forms and totaled below:

TOTAL BASE BID Amount: Forty two million four hundred five thousand six hundred

forty three

_____ Dollars and Ninety Cents

(\$ 42,405,643.90).

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents:

Addenda Nos.: 1, 2, 3

The undersigned agrees that this bid is a firm offer to the City to perform and complete the Contract described above which cannot be withdrawn for one hundred twenty (120) calendar days after the bids are opened or until after a contract for the work described in these bid documents is fully executed by the City, whichever date is earlier.

The undersigned Bidder hereby agrees to appear at Denver International Airport, Business Management Services Office, Room 8810, Airport Office Building, at any time within ten (10) business days from the date of a written notice from the CEO to do so, mailed, emailed, or faxed to the business address of Bidder and at that time the Bidder shall: (1) deliver an executed Contract which conforms with this bid; (2) furnish the required performance and payment bonds in the sum of the Total Contract Bid Amount shown above, executed by a surety company acceptable to the CEO; and (3) furnish the required insurance documents.

Enclosed herewith is a bid guarantee, as defined in the Instructions to Bidders, in the amount of which bid guarantee the undersigned Bidder agrees is to be paid to and become the property of the City as liquidated damages should the bid be considered to be the best by the City and the undersigned Bidder notified that it is the apparent low bidder and it fails to enter into contract in the form prescribed and to furnish the required performance and payment bonds and evidences of insurance within ten (10) business days as stipulated above.

Attached and incorporated herein are the proposed Schedule of Prices and Quantities and Bid Data Forms. All of the forms must be completed. Bidder acknowledges that the City may incorporate, at its option, any or all of the data submitted by the Bidder into a contract arising out of this Bid.

The undersigned Bidder acknowledges the right of the City to waive informalities in the bids, to reject any or all bids submitted, and to re-advertise for bids.

The undersigned certifies that it has examined and is fully familiar with all of the provisions of the Contract Documents and is satisfied that they are accurate; that it has carefully checked all words and figures and all statements made in these Bid forms; and that it has satisfied itself with respect to the actual site conditions and the nature and location of the Work, the general and local conditions which may be encountered in the performance of the Work, and other matters which in any way affect the Work or the cost thereof.

[CERTIFICATION AND SIGNATURE ON FOLLOWING PAGES]

This bid is submitted upon the declaration that neither, I (we), nor, to the best of my (our) knowledge, none of the members of my (our) firm or company have either directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this bid.

Dated this 30th day of July, 2021.

BUSINESS ADDRESS OF BIDDER: 385 Interlocken Crescent, Suite 900

City, State, Zip Code: Broomfield, CO 80021

Telephone Number of Bidder: (303) 485-4050

Fax Number of Bidder: (303) 485-7684

Social Security or Employer Id. No. of Bidder: 84-1245002

Email Address: mountaincentral@flatironcorp.com

SIGNATURE OF BIDDER:

PRINT NAME OF BIDDER:



Flatiron Constructors, Inc.

Attest:

(Corporate Seal)

Grant Johns

Kevin McCormick

By: Grant Johns

~~Secretary~~

Kevin McCormick, Division Finance Manager

~~President~~

Grant Johns, District Operations Manager

**ACTION BY UNANIMOUS WRITTEN CONSENT
OF THE BOARD OF DIRECTORS**

FLATIRON CONSTRUCTORS, INC.

The undersigned, being the sole member of the board of directors (the "**Board**") of Flatiron Constructors, Inc., a Delaware corporation (the "**Corporation**") pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, does hereby waive all notice of the time, place and purposes of a meeting and does hereby consent to and adopt the resolutions set forth below to have the same force and effect as a unanimous vote of the directors of the Corporation at a duly-convened meeting of the Board called and held for the purpose of acting upon proposals to adopt such resolutions.

WHEREAS, the Board has determined that it is in the best interest of the Corporation to appoint certain management employees as authorized signatories with power of attorney to act on behalf of the Corporation (an "Authorized Signatory"); and

WHEREAS, such Authorized Signatories must have the authority to execute certain contracts and other instruments necessary to bind the Corporation in furtherance of the Corporation's projects and in the administration of its operations.

NOW, THEREFORE, BE IT

RESOLVED, that the Board hereby appoints **Grant Johns** as an Authorized Signatory of the Corporation, effective **October 26, 2020** to act in this capacity until his authority is rescinded; and

FURTHER RESOLVED, that an Authorized Signatory of the Corporation shall have the authority to execute contracts and other instruments on behalf of the Corporation in accordance with internal policies and procedures, and shall perform such other duties and exercise such other powers as assigned to him by the Board, the Chief Executive Officer, Chief Financial Officer the Chief Operating Officer, or other Officers of the Corporation.

IN WITNESS WHEREOF, the undersigned has executed this Written Consent the 29th day of October 2020.

DIRECTOR:


Adolfo Valderas, Executive Chairman

**ACTION BY UNANIMOUS WRITTEN CONSENT
OF THE BOARD OF DIRECTORS**

FLATIRON CONSTRUCTORS, INC.

The undersigned, being the sole member of the board of directors (the "**Board**") of Flatiron Constructors, Inc., a Delaware corporation (the "**Corporation**") pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, does hereby waive all notice of the time, place and purposes of a meeting and does hereby consent to and adopt the resolutions set forth below to have the same force and effect as a unanimous vote of the directors of the Corporation at a duly-convened meeting of the Board called and held for the purpose of acting upon proposals to adopt such resolutions.

WHEREAS, the Board has determined that it is in the best interest of the Corporation to appoint certain management employees as authorized signatories with power of attorney to act on behalf of the Corporation (an "Authorized Signatory"); and

WHEREAS, such Authorized Signatories must have the authority to execute certain contracts and other instruments necessary to bind the Corporation in furtherance of the Corporation's projects and in the administration of its operations.

NOW, THEREFORE, BE IT

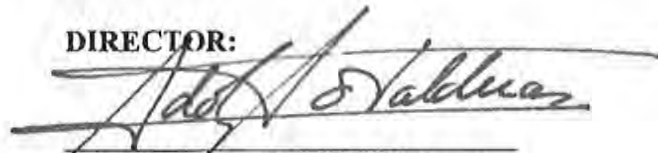
RESOLVED, that the Board hereby appoints **Kevin McCormick** as an Authorized Signatory of the Corporation, effective **October 26, 2020** to act in this capacity until his authority is rescinded; and

FURTHER RESOLVED, that an Authorized Signatory of the Corporation shall have the authority to execute contracts and other instruments on behalf of the Corporation in accordance with internal policies and procedures, and shall perform such other duties and exercise such other powers as assigned to him by the Board, the Chief Executive Officer, Chief Financial Officer the Chief Operating Officer, or other Officers of the Corporation.

IN WITNESS WHEREOF, the undersigned has executed this Written Consent the 29th day of

OCTOBER 2020.

DIRECTOR:



Adolfo Valderas, Executive Chairman

Attachment 1, Part 2 Disclosure of Legal and Administrative Proceedings and Financial Condition

**City and County of Denver
Denver International Airport
(Please use this form)**

If no disclosure required in accordance with II-13, please sign affirmation statement.

The undersign affirms that Flatiron Constructors, Inc (Bidder) ~~has not been involved in any legal or administrative proceedings which involve a claim in excess of Fifty Thousand Dollars (\$50,000.00);~~ has not filed bankruptcy within the last ten (10) years; has not been debarred or suspended from bidding/proposing on any Federal, State or local government procurements; and neither the Bidder nor its key employees have been convicted of a bid/Bid-related crime, violation or felony in the last five (5) years.

Signature  Title District Operations Manager

Print Name Grant Johns

Date 07/30/2021

If disclosure is required in accordance with II-13, please use the following space to provide information. If additional space is needed, please attach additional pages.

Please see attached list regarding any legal or administrative proceedings.

CONFIDENTIAL/PRIVILEGED

Flatiron Constructors, Inc.'s ("Flatiron") focus is on client relationships and our commitment to excellence. However, as with any general contractor with a volume of business consistent of Flatiron's size, claims leading to litigation and arbitration may occur. We have no litigation or arbitration which could, if adversely determined, have a material adverse effect on the solvency of Flatiron.

Litigation and Arbitration* Over Past Five Years:

Name of Matter: UDOT, State of Utah v. Flatiron/Harper, a JV; Flatiron Constructors, Inc.; et al (SR-92)

Date Commenced: 4/6/2015

Court / Docket No.: 1503000055, District Court in Utah County, State of Utah

Parties: Utah Department of Transportation, State of Utah v. Flatiron/Harper, a JV; Flatiron Constructors, Inc.; Harper Contracting, Inc.; Travelers Casualty and Surety; Federal Insurance Co.; Fidelity and Deposit Co.; Zurich American Insurance Co.

Issue: Project owner brought suit against FHJV for alleged workmanship issues. FHJV counterclaimed for delay damages and unpaid change orders.

Status: Settled and dismissed.

Name of Matter: URS Corporation v. Flatiron Constructors, Inc., et al. (I-405)

Date Commenced: 2/26/2016

Court / Docket No.: 16-2-04770-34; Superior Court in the County of Thurston, State of Washington

Parties: URS Corporation v. Flatiron Constructors, Inc.; Washington State Department of Transportation; Liberty Mutual Insurance Company; Travelers Casualty and Surety Company of America; Fidelity and Deposit Company of Maryland/Zurich American Insurance Company; Federal Insurance Company; The Continental Insurance Company; XL Specialty Insurance Company

Issue: Suit brought by designer against Flatiron on a design/build project alleging nonpayment. Flatiron has counterclaims against designer for design performance issues.

Status: Settled.

Name of Matter: A.H. Beck Foundation Co., Inc. vs. Flatiron Constructors, Inc. (Carolina Bays)

Date Commenced: 10/13/2016

Court / Docket No.: 2016-CP-26-06534, Horry County Court of Common Pleas, State of South Carolina

Parties: A.H. Beck Foundation Co., Inc. v. Flatiron Constructors, Inc.; Liberty Mutual; Travelers Casualty; Fidelity & Deposit Co.; Zurich American Insurance Co.; Federal Insurance Co.; Continental Insurance Co.; XL Specialty Insurance

Issue: Breach of contract action brought by subcontractor against Flatiron for payment withheld by Flatiron due to performance issues.

Status: Resolved prior to answering.

Name of Matter: Flatiron Constructors, Inc. v. Transystems Corp. (Carolina Bays)

Date Commenced: 4/26/2018

Court / Docket No.: 2018CP2602633, Horry County Court of Common Pleas, State of South Carolina

Parties: Flatiron Constructors, Inc.; Transystems Corporation

Issue: Flatiron claims damages from Owner's representative.

Status: Matter stayed.

Name of Matter: Van's Equipment v. Cherry Creek Recycling; Flatiron Constructors; et al – Bond Claim (Pena)

Date Commenced: 12/19/2016

Court / Docket No.: 2016CV34309, Denver City and County District Court, State of Colorado

Parties: Van's Equipment Denver LLC v. Cherry Creek Recycling, LLC; Asset Acquisition Authority, Inc. d/b/a Regional Transportation District; Denver Transit Constructors, LLC; Zurich American Ins. Co.; Travelers Casualty and Surety Co.; Federal Ins. Co.; Liberty Mutual Ins. Co.; City and County of Denver; American Southern Home Ins. Co. and Flatiron Constructors, Inc.

Issue: Action filed by second tier subcontractor against Flatiron and its subcontractor for payment against bond.

Status: Settled and Dismissed.

Name of Matter: Site Development v. Consulting Engineers; URS; Flatiron Constructors et al. – Bond Claim (I-405)

Date Commenced: 02/15/2017

Court / Docket No.: 18-2-00602-34, Thurston County Superior Court, State of Washington

Parties: Site Development Associates, LLC d/b/a SDA Engineers v. KPFF, Inc. d/b/a Consulting Engineers; URS Corp.; Flatiron Constructors, Inc.; WA State Dept. of Transportation; Liberty Mutual Ins. Co.; Travelers Casualty and Surety Co. of America; Fidelity and Deposit Co. of MD/Zurich American Ins. Co.; Federal Ins. Co.; The Continental Ins.; XL Specialty Ins.
Issue: Action filed by Subcontractor for claim against bond.
Status: Settled.

Name of Matter: Concrete Coring Co. v. Cherry Creek Recycling; Flatiron Constructors, Inc., et al. – Bond Claim (Pena)
Date Commenced: 6/6/2017
Court / Docket No.: 2017CV033033; District Court, City and County of Denver, State of Colorado
Parties: Allison & Hailey, Inc. d/b/a Concrete Coring Company v. Cherry Creek Recycling, LLC; Flatiron Constructors, Inc.; Liberty Mutual Insurance Company; and City and County of Denver
Issues: Action filed by second tier subcontractor against Flatiron and its subcontractor for payment.
Status: Dismissed.

Name of Matter: Concrete Coring Co. v. Cherry Creek Recycling; Flatiron Constructors, Inc., et al. – Bond Claim (Pena)
Date Commenced: 6/6/2017
Court / Docket No.: 2017CV033033; District Court, City and County of Denver, State of Colorado
Parties: Allison & Hailey, Inc. d/b/a Concrete Coring Company v. Cherry Creek Recycling, LLC; Flatiron Constructors, Inc.; Liberty Mutual Insurance Company; and City and County of Denver
Issues: Action filed by second tier subcontractor against Flatiron and its subcontractor for payment.
Status: Dismissed.

Name of Matter: William D. Hillen, a Corporation v. Flatiron Constructors, Inc.
Date Commenced: 8/30/2018
Court / Docket No.: 2018CV31536; District Court, County of Adams, State of Colorado
Parties: William D. Hillen, a Corporation v. Flatiron Constructors, Inc.
Issues: Action filed by subcontractor arising out of its performance.
Status: Settled.

Name of Matter: Codale Electric Supply v. Voltiac, et al. (SR 89)
Date Commenced: 10/27/2015
Parties: Flatiron Construction, Inc.; Voltiac
Issues: Flatiron was the general contractor on the project. Voltiac was subcontractor. Codale was supplier to Voltiac. Voltiac did not pay Codale. Codale sued Voltiac and Flatiron's bond. Flatiron paid off claim against bond and received an assignment of the claim against Codale. Flatiron now has a judgment against Voltiac that it is trying to collect. Judgment received by Flatiron against subcontractor for amounts Flatiron paid subcontractor's supplier. Action to enforce judgment is ongoing.
Status: Judgment received by Flatiron.

Name of Matter: Horizontal Boring v. Flatiron Constructors, Inc. et al.
Date Commenced: 12/06/2018
Parties: Horizontal Boring; Flatiron Constructors, Inc.; Liberty Mutual Insurance Company; Travelers Casualty and Surety Company of America; Fidelity and Deposit Company of Maryland Zurich American Insurance Company; Federal Insurance Company; Pacific Indemnity Company; The Continental Insurance Company; Berkshire Hathaway Specialty Insurance Company.
Issues: A boring subcontractor, who was default terminated by Flatiron, claims their boring efforts were impacted by poor permeation grouting. Flatiron has counterclaimed for damages incurred to address the subcontractor's failure to perform.
Status: Settled.

Name of Matter: Florida Miscellaneous Steel Products, Inc., d/b/a Florida Structural Steel; Tampa Tanks & Welding, Inc., d/b/a Tampa Tank, Inc. v. Flatiron Constructors, Inc.
Date Commenced: 4/03/2019
Parties: Florida Miscellaneous Steel Products, Inc., d/b/a Florida Structural Steel; Tampa Tanks & Welding, Inc., d/b/a Tampa Tank, Inc. and Flatiron Constructors, Inc.
Issues: Steel fabricator and erector asserted claims against Flatiron Constructors, Inc. for monies allegedly owed for work performed. Flatiron Constructors, Inc. has a claim against the Plaintiffs for impacts suffered due to Plaintiffs' poor performance.
Status: Settled.

Name of Matter: SAK Sisters Contractors v. Flatiron Constructors, Inc.

Date Commenced: July 19, 2019

Parties: SAK Sisters Contractors; Flatiron Constructors, Inc.

Issue: A flagging contractors, who failed to perform and provide required contractual obligations in relation to payroll, filed suit to recover monies that it contended were owed.

Status: Settled.

Name of Matter: Arrow Electric Service, Inc. v. Flatiron Constructors, Inc. et al.

Date Commenced: November 12, 2019

Parties: Arrow Electric Service, Inc., Flatiron Constructors, Inc., Liberty Mutual Insurance Company, Travelers Casualty and Surety Company of America, Continental Insurance Company, The Continental Insurance Company, Federal Insurance Company, Fidelity and Deposit Company of Maryland, Zurich American Insurance Company, XL Specialty Insurance Company, and Berkshire Hathaway Specialty Insurance Company

Issue: Subcontractor alleged Flatiron owed it monies for work performed; Flatiron had counterclaim for impacts caused by subcontractor's performance.

Status: Settled.

Name of Matter: Blue Ribbon Staffing, Inc. v. Flatiron Constructors, Inc et al.

Date Commenced: April 23, 2020

Parties: Parties: Arrow Electric Service, Inc., Flatiron Constructors, Inc., Liberty Mutual Insurance Company, Travelers Casualty and Surety Company of America, Continental Insurance Company, The Continental Insurance Company, Federal Insurance Company, Fidelity and Deposit Company of Maryland, Zurich American Insurance Company, and Berkshire Hathaway Specialty Insurance Company

Issue: Plaintiff alleged it provided services to a subcontractor of Flatiron who was terminated. Plaintiff alleges it was not paid. Flatiron and its bonding company denied the claim.

Status: Pending

Name of Matter: Flatiron Constructors, Inc v. Colorado Department of Transportation

Date Commenced: November 10, 2020

Parties: Flatiron Constructors, Inc. and Colorado Department of Transportation

Issue: Flatiron claims it suffered cost and schedule impacts arising from to CDOT's inability to obtain an right-of-way CDOT was obligated to provide.

Status: Pending

*Above does not include insured personal injury or auto-related death, litigation/arbitration involving joint ventures or employment related litigation.

Attachment 1, Part 3 Contract Information

- 1. Name of Bidder/Contractor: Flatiron Constructors, Inc.
- 2. Type of business entity: Corporation

NOTE: If bidder is a partnership or joint venture, give full names of all partners or joint venturers. Bid must be signed by all joint venturers. If bidder is a limited liability company, bid must be signed by authorized manager (may be signed by member-manager if LLC is organized to allow management by members).

- 3. Prequalified by City and County of Denver as Construction Contractor : Categories: 3C. Concrete Airfield Paving
 Monetary Limit: \$50,000,000 (see attached annual prequalification letter and project specific permission letter.)

- 4. Address of Contractor: Flatiron Constructors, Inc.
385 Interlocken Crescent, Suite 900
Broomfield, CO 80021

Telephone: 303-485-4050 Fax: 303-485-7684
Email Address: mountaincentral@flatironcorp.com

- 5. Established where and when: Delaware, 1999
- 6. Contractor's Banks: J.P. Morgan Chase Bank

7. Principal Officers of Contractor (managers and members if LLC):

Name: <u>Nick Polce</u>	Name: <u>Grant Johns</u>
Title: <u>Vice President & Division Manager</u> <u>Officer</u>	Title: <u>District Operations Manager</u>

Name: <u>Keven McCormick</u>	Name: _____
Title: <u>Division Finance Manager</u>	Title: _____

8. Bidder's/Contractor's City and County of Denver Contractor License if it has obtained one: License No.: _____
 Class: _____

A contractor license is required prior to start of construction but not prior to bid submittal.

9. Bidder's/Contractor's state of incorporation (state of organization if an LLC or partnership): Delaware

10. Bidder's Surety: Liberty Mutual

11. Surety's State of Incorporation: Delaware

12. Address of Contractor in other areas (if different from No. 4): N/A

13. Name and address of person to receive payments: W. Todd Bennett, Treasurer
385 Interlocken Crescent, Suite 900
Broomfield, CO 80021

14. If the Bidder/Contractor is a joint venture, it shall attach a certified copy of the joint venture agreement. The joint venture agreement will not be included as a Contract Document.

15. The Bidder/Contractor shall identify all applicable labor agreements (if any) to be used in the performance of the Work:

General Wage Decision No. CO2020009 Superseded General Decision No.
CO2020009 Modification No. 0 Publication Date: 01/01/2021



July 20, 2021

Ms. Katie DePorter
Flatiron Constructors, Inc.
7001 Tower Road
Denver, CO 80249

Dear Ms. DePorter:

The Contractor's Prequalification Board has reviewed the Project Specific Permission Application submitted by your firm. The Board has recommended that your firm be allowed to bid on the upcoming Taxiway EE Construction project at DEN. The Executive Director of the Department of Aviation and I have reviewed the recommendation and approve your prequalification.

Compliance with the "Rules for Prequalification of Construction Contractors" with the Departments of Aviation and Public Works of the City and County of Denver is necessary in order to ensure acceptable bids. Should you wish to bid on any other project in which the cost of construction is estimated to exceed your bid limit, or if you intend to participate in excess of \$1,000,000 in a joint venture, you must submit a written request for further consideration by the Prequalification Board.

We appreciate your interest in bidding on City and County of Denver contracts and look forward to working with you in the future. Should you have any questions concerning the prequalification process, do not hesitate to contact us at Doti.prequal@denvergov.org.

Sincerely,

Adam Phipps, Executive Director
Department of Transportation & Infrastructure

cc: Prequalification Board File

City and County of Denver Department of Transportation & Infrastructure
Office of the Executive Director
201 W. Colfax Avenue, Dept. 608 | Denver, CO 80202
www.denvergov.org/doti
Phone: 720-865-8630



July 12, 2021

Ms. Katie DePorter
Flatiron Constructors, Inc.
7001 Tower Road
Denver, CO 80249

Dear Ms. DePorter:

The Contractor's Prequalification Board has reviewed the application submitted by your firm. The Board has recommended that your firm be allowed to bid City and County of Denver construction projects requiring approval in the following categories **1A-Heavy Civil at \$50,000,000.00, 1F(2)-Concrete Roadway Paving at \$20,000,000.00, 1F(5)-Concrete Pavement Rehabilitation at \$6,000,000.00, 1G(1)-Major Bridge Work at \$25,000,000.00, 3C-Concrete Airfield Paving at \$25,000,000.00.** The Executive Director of the Department of Aviation and I have reviewed the recommendation and approve your prequalification. Your firm will not need to prequalify for bids that open prior to Thursday, June 30, 2022.

Compliance with the "Rules for Prequalification of Construction Contractors" with the Departments of Aviation and Public Works of the City and County of Denver is necessary in order to ensure acceptable bids. Should you wish to bid on any other project in which the cost of construction is estimated to exceed your bid limit, or if you intend to participate in excess of \$1,000,000 in a joint venture, you must submit a written request for further consideration by the Prequalification Board.

We appreciate your interest in bidding on City and County of Denver contracts and look forward to working with you in the future. Should you have any questions concerning the prequalification process, do not hesitate to contact us at 720.865.2539.

Sincerely,



Eulois Cleckley, Executive Director
Department of Transportation & Infrastructure

cc: Prequalification Board File

City and County of Denver Department of Transportation & Infrastructure
Office of the Executive Director
201 W. Colfax Avenue, Dept. 608 | Denver, CO 80202
www.denvergov.org/dotd
Phone: 720-865-8630

Attachment 1, Part 4 List of Proposed Non-DBE SubcontractorsBidder Company Name: Flatiron Constructors, Inc.IFB Name: Taxiway EE ConstructionIFB No.: 202158849

Bidder shall list below the name, business address, work assignment and dollar value of each subcontractor that is **not** a DBE subcontractor that will perform work or labor or provide services to the Bidder relating to this Contract in an amount greater than one and one-half percent (1.5%) of the Bidder's total bid. Only one (1) subcontractor for each portion of the work shall be listed. Any proposed subcontractors to be utilized by the Bidder that are certified as a Small Business Enterprise (SBE) shall also be listed on the "List of Proposed Subcontractors" attached to this IFB.

If the Bidder does not identify a subcontractor to perform portions of the work which could be subcontracted on this form or the List of Proposed DBE Subcontractors, the Bidder, if it is awarded the Contract, agrees not to subcontract such portions that exceed one and one-half percent (1.5%) of the total bid amount until the Contractor has advised the SVP of AIM in writing of the reasons why the subcontractor was not listed in the Bid submission and complied with the requirements of General Condition 502.

If the Bidder is awarded the Contract and does not enter into a subcontract with a subcontractor listed below or on the List of Proposed DBE Subcontractors, the Bidder agrees not to subcontract any of the work assignment identified for that subcontractor until the Bidder has advised the SVP of AIM in writing of the reasons why a different subcontractor is being used and has obtained approval.

Subcontractor Information	Work Assignment	Subcontract Dollar Value
Name: <u>Kelley Trucking Inc.</u> Address: <u>6201 McIntyre St</u> <u>Golden, CO 80403</u> Phone: <u>303.279.4150</u>	Earthwork	\$ 6,261,282
Name: <u>Brannan Companies</u> Address: <u>2500 Brannan Way</u> <u>Denver, CO 80229</u> Phone: <u>303.534.1231</u>	Asphalt Paving	\$ 3,483,002

Attachment 1, Part 4 List of Proposed Non-DBE Subcontractors

<p>Name: <u>Royal Electric Company</u></p> <p>Address: <u>8481 Carbide Court</u> <u>Sacramento, CA 95828</u></p> <p>Phone: <u>916.226.2100</u></p>	<p>Electrical Supplier</p>	<p>\$ 9,999,999.99</p>
<p>Name: _____</p> <p>Address: _____</p> <p>Phone: _____</p>		
<p>Name: _____</p> <p>Address: _____</p> <p>Phone: _____</p>		
<p>Name: _____</p> <p>Address: _____</p> <p>Phone: _____</p>		

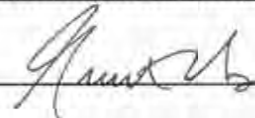
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Attachment 1, Part 5 Certification of Non-Segregated Facilities

The Bidder must certify that it does not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder certifies further that it will not maintain or provide for its employees segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion or national origin because of habit, local custom or any other reason. The Bidder agrees that (except where it has obtained identical certification from proposed subcontractors for specific time period) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding Ten Thousand Dollars (\$10,000) which are not exempt from the provisions of the equal opportunity clause and that it will retain such certification in its files.

Dated: 07/30/2021

Bidder Company Name: Flatiron Constructors, Inc.

By:  Grant Johns

Title: District Operations Manager

Attachment 1, Part 6 Equal Opportunity Report Statement

The Bidder shall review, complete, sign and submit with its Bid this Equal Opportunity Report Statement (Statement). A Bid may be considered unresponsive and may be rejected, in the City's sole discretion, if the Bidder fails to provide the fully executed Statement or fails to furnish required data. The Bidder shall also, prior to award, furnish such other pertinent information regarding its own employment policies and practices as well as those of its proposed subcontractors as the FAA, the Owner or the Executive Vice Chairman of the President's Committee may require.

The Bidder shall furnish similar Statements executed by each of its first tier and second-tier subcontractors and shall obtain similar compliance by such subcontractors before awarding subcontracts. No subcontract shall be awarded to any non-complying subcontractor.

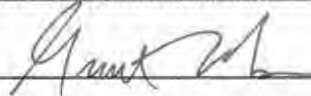
Equal Opportunity Report Statement as Required in 41 CFR 60-1.7(b)

The Bidder shall complete the following statements by checking the appropriate blanks. Failure to complete these blanks may be grounds for rejection of Bid:

1. The Bidder has ___ has not x developed and has on file at each establishment affirmative action programs pursuant to 41 CFR 60-1.40 and 41 CFR 60-2.
2. The Bidder has x has not ___ participated in any previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended.
3. The Bidder has x has not ___ filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
4. The Bidder does x does not ___ employ fifty (50) or more employees.

Dated: 07/30/2021

Bidder Company: Flatiron Constructors, Inc.

By:  Grant Johns

Title: District Operations Manager



July 30, 2021

Reference Page 42-Attachment 1, Part 6- Equal Opportunity Report Statement

Question 1- See the following.

It has been interpreted that 41 CFR 60-1.40 and 41 CFR 60-2 applies to "non-construction contractors" and not "construction contractors". However, it is important to note that Flatiron complies with Executive Order 11246 as listed in 41 CFR 60-4 and regularly passes EEO compliance audits on DOT projects across the nation. We absolutely have a very strong EEO and Affirmative action plan and policy in place for all of our projects and offices, and can provide upon request.

385 Interlocken Crescent
Suite 900
Broomfield, Colorado 80021

P +1.000.000.0000
F +1.000.000.0000

FLATIRONCORP.COM
A HUBSPRINT Company

Attachment 1, Part 7 Bid Bond

Bidder Flatiron Constructors, Inc

DENVER INTERNATIONAL AIRPORT
Taxiway EE Construction
Contract No. 202158849

Bid Bond

KNOW ALL MEN BY THESE PRESENTS

THAT Flatiron Constructors, Inc, as Principal, and Liberty Mutual Insurance Company, a corporation organized and existing under and by virtue of the laws of the State of Massachusetts, and authorized to do business within the State of Colorado as Surety, are held and firmly bound unto the City and County of Denver, Colorado, as Obligee, in the full and just sum of Five Percent of Amount Bid Dollars and _____ Cents (\$ 5% of Bid) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents:

WHEREAS, the said Principal is herewith submitting its Bid, dated on July 30, 2021, _____, for the construction of Contract No. 202158849, Taxiway EE Construction, Denver International Airport, as set forth in detail in the contract documents for the City and County of Denver, Colorado, and said Obligee has required as a condition for receiving said Bid that the Principal deposit specified bid security in the amount of not less than five percent (5%) of the amount of said Bid, as it relates to work to be performed for the City, conditioned that in event of failure of the Principal to execute the Contract for such construction and furnish required Performance and Payment Bond if the Contract is offered him, that said sum be paid immediately to the Obligee as liquidated damages, and not as a Penalty, for the Principal's failure to perform.

The condition of this obligation is such that if the aforesaid Principal shall, within the period specified therefor, on the prescribed form presented to him for signature, enter into a written Contract with the Obligee in accordance with his bid as accepted, and give Performance and Payment Bond with good and sufficient surety or sureties, upon the form prescribed by the Obligee, for the faithful performance and the proper fulfillment of said Contract, or in the event of withdrawal of said bid within the time specified, or upon the payment to the Obligee of the sum determined upon herein, as liquidated damages and not as a Penalty, in the event the Principal fails to enter into said Contract and give such Performance and Payment Bond within the time specified, then this Obligation shall be null and void, otherwise to remain in full force and effect.

[END OF PAGE]

Signed, sealed and delivered this 20th day of July, 2021

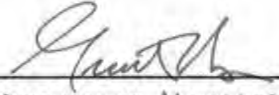
Attest:


Kevin McCarroll

Secretary *Division Finance Manager*
[SEAL if bidder a corporation]

Flatiron Constructors, Inc

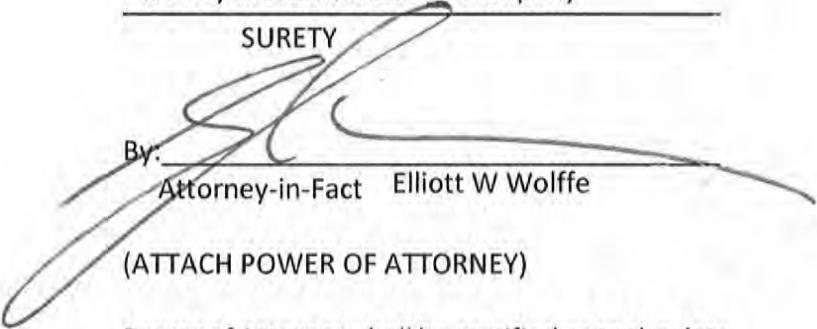
PRINCIPAL

By: GRANT JOHNS 
~~President~~ DISTRICT OPERATIONS MANAGER



Liberty Mutual Insurance Company

SURETY

By: 
Attorney-in-Fact Elliott W Wolffe

(ATTACH POWER OF ATTORNEY)

Power of Attorney shall be certified as to the date of bid.

CORPORATE ACKNOWLEDGMENT

Form 152

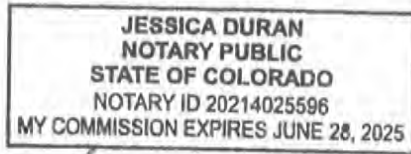
STATE OF

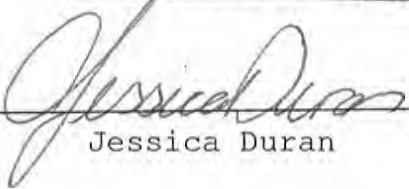
COUNTY OF

On this 30th day of July, 2021, before me personally
came Grant Johns to me known, who, being by me
duly sworn, did depose and say that she/he resides in Denver, Colorado
that she/he is the District Operations Manager of the

Flatiron Constructors, Inc. the corporation
described in and which executed the above instrument that she/he knows the seal of said
corporation; that the seal affixed to said instrument is such corporate seal; that it was so
affixed by order of the Board of Directors of said corporation, and that she/he signed
her/his name thereto by like order.

(SEAL)





Jessica Duran


CORPORATE ACKNOWLEDGMENT

Form 152

STATE OF NEW JERSEY
COUNTY OF BERGEN

On this 20th day of July, 2021 before me personally came Elliott W. Wolffe to me known, who, being by me duly sworn, did depose and say that she/he resides in Livingston, New Jersey that she/he is the ATTORNEY IN FACT of the LIBERTY MUTUAL INSURANCE COMPANY the corporation described in and which executed the above instrument that she/he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

(SEAL)

A handwritten signature in cursive script, appearing to read "Bianca L. Meli", is written over a horizontal line.

BIANCA L. MELI

**NOTARY PUBLIC, STATE OF NEW JERSEY
MY COMMISSION EXPIRES**

SEPTEMBER 30, 2024



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8204080-974460

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Charo J. Rosemond; Elliott W. Wolfe; James Baldassare Jr.; John F. Surano; Krista A. Burke; Lisa M. Scavetta; Maria L. Spadaccini; Nicholas F. Walsh; Sherryanne M. DePirro

all of the city of Saddle Brook state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 3rd day of August, 2020.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: [Signature]
David M. Carey, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 3rd day of August, 2020 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: [Signature]
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 20th day of July, 2021.



By: [Signature]
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



LIBERTY MUTUAL INSURANCE COMPANY
FINANCIAL STATEMENT — DECEMBER 31, 2020

Assets		Liabilities	
Cash and Bank Deposits	\$2,058,007,542	Unearned Premiums.....	\$8,448,706,991
*Bonds — U.S Government.....	2,209,760,437	Reserve for Claims and Claims Expense	23,879,216,613
*Other Bonds.....	15,902,755,586	Funds Held Under Reinsurance Treaties.....	343,068,613
*Stocks	18,517,107,230	Reserve for Dividends to Policyholders.....	1,192,716
Real Estate.....	193,169,809	Additional Statutory Reserve	77,397,000
Agents' Balances or Uncollected Premiums.....	6,970,170,469	Reserve for Commissions, Taxes and	
Accrued Interest and Rents.....	118,399,147	Other Liabilities	6,279,510,804
Other Admitted Assets.....	12,079,597,645	Total	\$39,029,092,737
		Special Surplus Funds.....	\$178,155,102
		Capital Stock.....	10,000,075
		Paid in Surplus	10,945,045,214
		Unassigned Surplus.....	7,886,674,737
		Surplus to Policyholders	19,019,875,128
Total Admitted Assets	<u>\$58,048,967,865</u>	Total Liabilities and Surplus	<u>\$58,048,967,865</u>



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.
The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2020, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 25th day of March, 2021.

TAMIKOLAJEWSKI

Assistant Secretary

Attachment 1, Part 8 Schedule of Prices and Quantities

SCHEDULE OF PRICES AND QUANTITIES

The Schedule of Prices and Quantities forms which apply to this contract are contained in the pages immediately following this page.

These pages are not included in the page numbering of this contract document.

BID PROPOSAL SUMMARY

Bidder Name: **FLATIRON CONSTRUCTORS, INC.**

SCHEDULE I TOTAL \$ **42,108,643.90**

SCHEDULE II TOTAL \$ **297,000.00**

TOTAL ALL SCHEDULES \$ **42,405,643.90**

Bidder has examined the proposed site and is familiar with all site conditions.


Signature

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SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-100a	Contractor Quality Control Program (CQCP) at the unit price of: _____ eight hundred forty thousand _____ dollars and _____ zero _____ cents.	LS	1	\$ 840,000.00	\$ 840,000.00
C-105a	Mobilization at the unit price of: _____ two million one hundred ten thousand _____ dollars and _____ zero _____ cents.	LS	1	\$ 2,110,000.00	\$ 2,110,000.00
013223a	Construction As-built Survey at the unit price of: _____ six hundred thousand _____ dollars and _____ zero _____ cents.	LS	1	\$ 600,000.00	\$ 600,000.00
015050a	Textura Software Fee at the unit price of: _____ thirty two thousand five hundred _____ dollars and _____ zero _____ cents.	LS	1	\$ 32,500.00	\$ 32,500.00
015525a	Flagger at the unit price of: _____ forty _____ dollars and _____ zero _____ cents.	HR	22,080	\$ 40.00	\$ 883,200.00
015525b	Gate Guard at the unit price of: _____ forty four _____ dollars and _____ zero _____ cents.	HR	17,360	\$ 44.00	\$ 763,840.00
015525c	Gate Guard Shack at the unit price of: _____ one hundred five thousand _____ dollars and _____ zero _____ cents.	LS	1	\$ 105,000.00	\$ 105,000.00
015525d	Traffic Control at the unit price of: _____ three hundred fifty thousand _____ dollars and _____ zero _____ cents.	LS	1	\$ 350,000.00	\$ 350,000.00
015719a	Temporary Erosion Control at the unit price of: _____ seven hundred fifty thousand _____ dollars and _____ zero _____ cents.	LS	1	\$ 750,000.00	\$ 750,000.00
P-101a	Remove Portland Cement Concrete Pavement (Non-Reinforced, 17") at the unit price of: _____ fifty six _____ dollars and _____ zero _____ cents.	SY	2,484	\$ 56.00	\$ 139,104.00
P-101b	Remove Portland Cement Concrete Pavement (Reinforced, 17") at the unit price of: _____ sixty three _____ dollars and _____ zero _____ cents.	SY	425	\$ 63.00	\$ 26,775.00
P-101c	Remove Portland Cement Concrete Pavement (Non-Reinforced, 21") at the unit price of: _____ seventy _____ dollars and _____ zero _____ cents.	SY	143	\$ 70.00	\$ 10,010.00
P-101d	Full Depth Asphalt Pavement Removal at the unit price of: _____ five _____ dollars and _____ zero _____ cents.	SY	16,551	\$ 5.00	\$ 82,755.00
P-101e	Partial Depth Asphalt Pavement Removal at the unit price of: _____ forty _____ dollars and _____ zero _____ cents.	SY	158	\$ 40.00	\$ 6,320.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-101f	Remove Permeable Base Course at the unit price of: _____ one dollar _____ dollars and _____ fifty _____ cents.	SY	17,862	\$ 1.50	\$ 26,793.00
P-101g	Remove Cement Treated Base Course at the unit price of: _____ twenty four _____ dollars and _____ zero _____ cents.	SY	1,877	\$ 24.00	\$ 45,048.00
P-101h	Remove Cement Treated Subgrade at the unit price of: _____ twenty four _____ dollars and _____ zero _____ cents.	SY	2,356	\$ 24.00	\$ 56,544.00
P-101i	Remove Asphalt Road - Complete at the unit price of: _____ six _____ dollars and _____ zero _____ cents.	SY	4,661	\$ 6.00	\$ 27,966.00
P-101j	Grind Cement Treated Base Course (0" to 1") at the unit price of: _____ twelve _____ dollars and _____ zero _____ cents.	SY	300	\$ 12.00	\$ 3,600.00
P-101k	Pavement Marking Removal at the unit price of: _____ one _____ dollars and _____ fifty _____ cents.	SF	10,000	\$ 1.50	\$ 15,000.00
P-101l	Remove Gravel Road at the unit price of: _____ twenty _____ dollars and _____ zero _____ cents.	SY	2,280	\$ 20.00	\$ 45,600.00
P-152a	Unclassified Excavation at the unit price of: _____ one _____ dollars and _____ forty _____ cents.	CY	820,000	\$ 1.40	\$ 1,148,000.00
P-152b	Excavation for Undercut (Less than 3') at the unit price of: _____ sixteen _____ dollars and _____ zero _____ cents.	CY	14,950	\$ 16.00	\$ 239,200.00
P-152c	Embankment (Common Fill) at the unit price of: _____ three _____ dollars and _____ zero _____ cents.	CY	250,000	\$ 3.00	\$ 750,000.00
P-152d	Embankment (Stockpile Excess Material) at the unit price of: _____ two _____ dollars and _____ fifty _____ cents.	CY	472,000	\$ 2.50	\$ 1,180,000.00
P-152e	Upper Select Subgrade at the unit price of: _____ thirty five _____ dollars and _____ zero _____ cents.	CY	32,700	\$ 35.00	\$ 1,144,500.00
P-152f	Lower Select Subgrade at the unit price of: _____ eight _____ dollars and _____ zero _____ cents.	CY	98,000	\$ 8.00	\$ 784,000.00
P-152g	Subgrade Preparation (12") at the unit price of: _____ five _____ dollars and _____ zero _____ cents.	SY	65,374	\$ 5.00	\$ 326,870.00
P-152h	Rock Excavation at the unit price of: _____ seven _____ dollars and _____ zero _____ cents.	CY	10,000	\$ 7.00	\$ 70,000.00
P-152i	Excavation for Undercut (Greater than 3') at the unit price of: _____ twenty six _____ dollars and _____ zero _____ cents.	CY	4,980	\$ 26.00	\$ 129,480.00
P-159a	Concrete Crushing at the unit price of: _____ fifteen _____ dollars and _____ zero _____ cents.	TON	2,950	\$ 15.00	\$ 44,250.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-220a	Cement Treated Soil Base Course	SY	65,374	\$ 6.00	\$ 392,244.00
	at the unit price of: _____ six _____ dollars and _____ zero _____ cents.				
P-220b	Cement	TON	1,500	\$ 190.00	\$ 285,000.00
	at the unit price of: _____ one hundred ninety _____ dollars and _____ zero _____ cents.				
P-304a	Cement Treated Base Course	SY	63,897	\$ 20.00	\$ 1,277,940.00
	at the unit price of: _____ twenty _____ dollars and _____ zero _____ cents.				
P-304Ca	CDOT Class 6 Roadway Base	CY	1,975	\$ 16.00	\$ 31,600.00
	at the unit price of: _____ sixteen _____ dollars and _____ zero _____ cents.				
P-307a	Cement Treated Permeable Base Course (CTPB) 7"	SY	46,297	\$ 27.00	\$ 1,250,019.00
	at the unit price of: _____ twenty seven _____ dollars and _____ zero _____ cents.				
P-403a	Bituminous Surface Course	TON	9,068	\$ 130.00	\$ 1,178,840.00
	at the unit price of: _____ one hundred thirty _____ dollars and _____ zero _____ cents.				
P-403b	Bituminous Base Course	TON	17,670	\$ 115.00	\$ 2,032,050.00
	at the unit price of: _____ one hundred fifteen _____ dollars and _____ zero _____ cents.				
P-501a	Cement Concrete Pavement (Non-Reinforced, 17")	SY	44,613	\$ 80.00	\$ 3,569,040.00
	at the unit price of: _____ eighty _____ dollars and _____ zero _____ cents.				
P-501b	Cement Concrete Pavement (Reinforced, 17")	SY	9,207	\$ 96.00	\$ 883,872.00
	at the unit price of: _____ ninety six _____ dollars and _____ zero _____ cents.				
P-501c	Cement Concrete Pavement (Non Reinforced, 21")	SY	6,523	\$ 81.00	\$ 528,363.00
	at the unit price of: _____ eighty one _____ dollars and _____ zero _____ cents.				
P-501d	Cement Concrete Pavement (Reinforced, 21")	SY	1,965	\$ 170.00	\$ 334,050.00
	at the unit price of: _____ one hundred seventy _____ dollars and _____ zero _____ cents.				
P-501e	Bond Breaker Fabric	SY	62,308	\$ 3.00	\$ 186,924.00
	at the unit price of: _____ three _____ dollars and _____ zero _____ cents.				
P-610a	Cement Treated Base Repair	SY	150	\$ 65.00	\$ 9,750.00
	at the unit price of: _____ sixty five _____ dollars and _____ zero _____ cents.				
P-620a	Pavement Markings, Waterborne	SF	44,754	\$ 2.60	\$ 116,360.40
	at the unit price of: _____ two _____ dollars and _____ sixty _____ cents.				
P-620b	Pavement Markings, Metacrylate	SF	3,075	\$ 6.50	\$ 19,987.50
	at the unit price of: _____ six _____ dollars and _____ fifty _____ cents.				

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
P-620c	Reflective Media	LB	1,796	\$ 3.00	\$ 5,388.00
P-620d	Stop Sign	EA	2	\$ 500.00	\$ 1,000.00
P-620e	Type I Roadway Delineator	EA	36	\$ 100.00	\$ 3,600.00
D-701a	Install 24" Class V RCP	LF	3,366	\$ 250.00	\$ 841,500.00
D-701b	Install 30" Class V RCP	LF	413	\$ 275.00	\$ 113,575.00
D-701c	Install 36" Class V RCP	LF	267	\$ 425.00	\$ 113,475.00
D-701d	Install 48" Class V RCP	LF	2,870	\$ 500.00	\$ 1,435,000.00
D-701e	Install 24" FES	EA	2	\$ 3,000.00	\$ 6,000.00
D-701f	Install 48" FES	EA	1	\$ 4,000.00	\$ 4,000.00
D-701g	Remove 30" RCP	LF	97	\$ 30.00	\$ 2,910.00
D-705a	Install 6" Underdrain (Perforated PVC)	LF	10,485	\$ 60.00	\$ 629,100.00
D-705b	Install 6" Underdrain (Non-Perforated PVC)	LF	2,510	\$ 80.00	\$ 200,800.00
D-705c	Repair Damaged Underdrain Pipe	LF	200	\$ 70.00	\$ 14,000.00
D-705d	Install Underdrain Cleanouts	EA	80	\$ 1,000.00	\$ 80,000.00
D-705e	Remove Underdrain Pipe	LF	4,092	\$ 15.00	\$ 61,380.00
D-705f	Remove Underdrain Cleanouts	EA	7	\$ 200.00	\$ 1,400.00
D-710a	Grouted Type "M" Riprap	CY	5	\$ 180.00	\$ 900.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
D-710b	Remove and Stockpile Existing Type "VH" Riprap at the unit price of: _____ nine _____ dollars and _____ zero _____ cents.	CY	230	\$ 9.00	\$ 2,070.00
D-710c	Grouted Type "VH" Riprap (From On-Site Stockpile) at the unit price of: _____ one hundred _____ dollars and _____ zero _____ cents.	CY	230	\$ 100.00	\$ 23,000.00
D-710d	Grouted Type "VH" Riprap (New) at the unit price of: _____ two hundred _____ dollars and _____ zero _____ cents.	CY	404	\$ 200.00	\$ 80,800.00
D-751a	Install New Triple Type II Inlet Structure at the unit price of: _____ thirty five thousand _____ dollars and _____ zero _____ cents.	EA	2	\$ 35,000.00	\$ 70,000.00
D-751b	Install New Double Type II Inlet Structure at the unit price of: _____ twenty thousand _____ dollars and _____ zero _____ cents.	EA	7	\$ 20,000.00	\$ 140,000.00
D-751c	Install Oversized Triple Type II Inlet at the unit price of: _____ twenty thousand _____ dollars and _____ zero _____ cents.	EA	1	\$ 20,000.00	\$ 20,000.00
D-751d	Install Airfield Manhole at the unit price of: _____ twenty thousand _____ dollars and _____ zero _____ cents.	EA	2	\$ 20,000.00	\$ 40,000.00
D-751e	Install Type B Manhole at the unit price of: _____ thirty thousand _____ dollars and _____ zero _____ cents.	EA	3	\$ 30,000.00	\$ 90,000.00
D-751f	Install Type P Manhole at the unit price of: _____ thirty five thousand _____ dollars and _____ zero _____ cents.	EA	2	\$ 35,000.00	\$ 70,000.00
D-751g	Remove Existing Inlet at the unit price of: _____ eight hundred fifty _____ dollars and _____ zero _____ cents.	EA	1	\$ 850.00	\$ 850.00
D-751h	Install Underdrain Manholes at the unit price of: _____ fifteen thousand _____ dollars and _____ zero _____ cents.	EA	16	\$ 15,000.00	\$ 240,000.00
D-751i	Tie To Existing Structure at the unit price of: _____ two thousand five hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 2,500.00	\$ 2,500.00
T-901a	Seeding (Seed Mix Design 2) at the unit price of: _____ two hundred seventy five _____ dollars and _____ zero _____ cents.	AC	235	\$ 275.00	\$ 64,625.00
T-905a	Topsoiling at the unit price of: _____ ten _____ dollars and _____ zero _____ cents.	CY	49,248	\$ 10.00	\$ 492,480.00
T-908a	Hydraulic Mulching at the unit price of: _____ one thousand two hundred _____ dollars and _____ zero _____ cents.	AC	235	\$ 1,200.00	\$ 282,000.00
T-908b	Erosion Control Blankets at the unit price of: _____ two _____ dollars and _____ zero _____ cents.	SY	86,527	\$ 2.00	\$ 173,054.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-108a	#8 AWG L-824C, 5000V Conductor at the unit price of: _____ seven _____ dollars and _____ zero _____ cents.	LF	194,000	\$ 7.00	\$ 1,358,000.00
L-110a	1W-2" Sch. 40 PVC Conduit in Earth at the unit price of: _____ forty four _____ dollars and _____ zero _____ cents.	LF	550	\$ 44.00	\$ 24,200.00
L-110b	1W-2" Sch. 40 PVC Conduit in New Concrete Pavement at the unit price of: _____ forty four _____ dollars and _____ zero _____ cents.	LF	7,580	\$ 44.00	\$ 333,520.00
L-110c	1W-2" Sch. 40 PVC Conduit in New Asphalt Pavement at the unit price of: _____ forty eight _____ dollars and _____ zero _____ cents.	LF	13,425	\$ 48.00	\$ 644,400.00
L-110d	8W-4" Sch. 40 PVC Concrete Encased Duct Bank at the unit price of: _____ five hundred _____ dollars and _____ zero _____ cents.	LF	1,800	\$ 500.00	\$ 900,000.00
L-110e	Broken Conduit Repair at the unit price of: _____ three hundred seventy six _____ dollars and _____ zero _____ cents.	EA	2	\$ 376.00	\$ 752.00
L-110f	Remove Concrete Encased Duct Bank at the unit price of: _____ thirty _____ dollars and _____ zero _____ cents.	LF	9,550	\$ 30.00	\$ 286,500.00
L-115a	Install New Electrical Manhole at the unit price of: _____ forty four thousand _____ dollars and _____ zero _____ cents.	EA	3	\$ 44,000.00	\$ 132,000.00
L-115b	Adjust Existing Electrical Manhole at the unit price of: _____ sixteen thousand _____ dollars and _____ zero _____ cents.	EA	2	\$ 16,000.00	\$ 32,000.00
L-115c	Remove Existing Electrical Manhole at the unit price of: _____ six thousand _____ dollars and _____ zero _____ cents.	EA	3	\$ 6,000.00	\$ 18,000.00
L-120c	Install L-847-2 Circuit Selector Switch at the unit price of: _____ six thousand _____ dollars and _____ zero _____ cents.	EA	1	\$ 6,000.00	\$ 6,000.00
L-120d	Install L-847-3 Circuit Selector Switch at the unit price of: _____ five thousand _____ dollars and _____ zero _____ cents.	EA	1	\$ 5,000.00	\$ 5,000.00
L-125a	L-852C LED Taxiway Unidirectional Centerline Light at the unit price of: _____ two thousand five hundred _____ dollars and _____ zero _____ cents.	EA	3	\$ 2,500.00	\$ 7,500.00
L-125b	L-852C LED Taxiway Bidirectional Centerline Light (Single Circuit) at the unit price of: _____ two thousand _____ dollars and _____ zero _____ cents.	EA	101	\$ 2,000.00	\$ 202,000.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125c	L-852K LED Taxiway Bidirectional Centerline Light (Single Circuit)	EA	80	\$ 2,000.00	\$ 160,000.00
	at the unit price of: two thousand dollars and zero cents.				
L-125d	L-861T Quartz Taxiway Edge Light Mounted on L-867 Base Can	EA	62	\$ 750.00	\$ 46,500.00
	at the unit price of: seven hundred fifty dollars and zero cents.				
L-125e	L-861T LED Taxiway Edge Light Mounted on L-867 Base Can	EA	66	\$ 750.00	\$ 49,500.00
	at the unit price of: seven hundred fifty dollars and zero cents.				
L-125f	L-861T LED Taxiway Edge Light Mounted on L-868 Base Can	EA	1	\$ 750.00	\$ 750.00
	at the unit price of: seven hundred fifty dollars and zero cents.				
L-125g	L-868B 3/4" Thick Cover Plate	EA	6	\$ 600.00	\$ 3,600.00
	at the unit price of: six hundred dollars and zero cents.				
L-125h	L-867B 3/8" Thick Cover Plate	EA	4	\$ 550.00	\$ 2,200.00
	at the unit price of: five hundred fifty dollars and zero cents.				
L-125i	New 22" Deep L-868B Base Can in New Concrete Pavement	EA	172	\$ 4,000.00	\$ 688,000.00
	at the unit price of: four thousand dollars and zero cents.				
L-125j	New 26" Deep L-868B Base Can in New Concrete Pavement	EA	10	\$ 4,300.00	\$ 43,000.00
	at the unit price of: four thousand three hundred dollars and zero cents.				
L-125k	New L-867B Base Can in New Asphalt Pavement	EA	121	\$ 2,250.00	\$ 272,250.00
	at the unit price of: two thousand two hundred and fifty dollars and zero cents.				
L-125l	New L-867B Base Can in Existing Asphalt Pavement	EA	7	\$ 1,500.00	\$ 10,500.00
	at the unit price of: one thousand five hundred dollars and zero cents.				
L-125m	L-858 LED Guidance Sign - 2 Mod	EA	2	\$ 7,000.00	\$ 14,000.00
	at the unit price of: seven thousand dollars and zero cents.				
L-125n	L-858 LED Guidance Sign - 3 Mod	EA	10	\$ 8,000.00	\$ 80,000.00
	at the unit price of: eight thousand dollars and zero cents.				
L-125o	L-858 LED Guidance Sign - 4 Mod	EA	1	\$ 10,000.00	\$ 10,000.00
	at the unit price of: ten thousand dollars and zero cents.				
L-125p	New Guidance Sign Foundation - 3 Mod	EA	8	\$ 7,000.00	\$ 56,000.00
	at the unit price of: seven thousand dollars and zero cents.				

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-125q	New Guidance Sign Foundation - 4 Mod	EA	1	\$ 8,000.00	\$ 8,000.00
	at the unit price of: _____ eight thousand _____ dollars and _____ zero _____ cents.				
L-125r	New Guidance Sign Foundation - 5 Mod	EA	2	\$ 8,500.00	\$ 17,000.00
	at the unit price of: _____ eight thousand five hundred _____ dollars and _____ zero _____ cents.				
L-125s	Remove Existing Sign and Base	EA	3	\$ 2,500.00	\$ 7,500.00
	at the unit price of: _____ two thousand five hundred _____ dollars and _____ zero _____ cents.				
L-125t	Remove Fixture and Base Can	EA	102	\$ 1,000.00	\$ 102,000.00
	at the unit price of: _____ one thousand _____ dollars and _____ zero _____ cents.				
L-125u	Reconnect 2" Conduit at Location of Removed Base Can	EA	2	\$ 1,500.00	\$ 3,000.00
	at the unit price of: _____ one thousand five hundred _____ dollars and _____ zero _____ cents.				
L-125v	Remove and Replace Fixture or Sign ID Marker	EA	215	\$ 80.00	\$ 17,200.00
	at the unit price of: _____ eighty _____ dollars and _____ zero _____ cents.				
L-125w	Remove and Replace Circuit ID Tag	EA	92	\$ 60.00	\$ 5,520.00
	at the unit price of: _____ sixty _____ dollars and _____ zero _____ cents.				
L-125x	Cover Taxiway Edge Light	EA	24	\$ 65.00	\$ 1,560.00
	at the unit price of: _____ sixty five _____ dollars and _____ zero _____ cents.				
L-125y	Mask Off Taxiway Centerline Light	EA	42	\$ 55.00	\$ 2,310.00
	at the unit price of: _____ fifty five _____ dollars and _____ zero _____ cents.				
L-125z	Cover Guidance Sign	EA	16	\$ 230.00	\$ 3,680.00
	at the unit price of: _____ two hundred thirty _____ dollars and _____ zero _____ cents.				
L-125aa	Edge Light Drain	EA	9	\$ 1,300.00	\$ 11,700.00
	at the unit price of: _____ one thousand three hundred _____ dollars and _____ zero _____ cents.				
L-132-5.1	Installation of New LLWAS Including All Equipment and Foundations, As Shown on Contract Documents	LS	1	\$ 1,450,000.00	\$ 1,450,000.00
	at the unit price of: _____ one million four hundred fifty thousand _____ dollars and _____ zero _____ cents.				
L-132-5.2	Removal of Existing LLWAS Including All Equipment, EES, Tower and Foundations	LS	1	\$ 160,000.00	\$ 160,000.00
	at the unit price of: _____ one hundred sixty thousand _____ dollars and _____ zero _____ cents.				

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-132-5.3	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 4 Way 4 Inch	LF	6,000	\$ 450.00	\$ 2,700,000.00
	at the unit price of: _____ four hundred fifty _____ dollars and _____ zero _____ cents.				
L-132-5.4	Concrete Encased, Schedule 80 PVC, FAA Duct Bank, 2 Way 2 Inch	LF	1,400	\$ 300.00	\$ 420,000.00
	at the unit price of: _____ three hundred _____ dollars and _____ zero _____ cents.				
L-132-5.5	#1/0 AWG, Bare Copper FAA Guard Wire Installed Above Duct Bank or Conduit, Including Ground Rods, Connections, and Terminations	LF	7,500	\$ 15.00	\$ 112,500.00
	at the unit price of: _____ fifteen _____ dollars and _____ zero _____ cents.				
L-132-5.6	FAA Communications Manhole, 6 Feet by 6 Feet	EA	7	\$ 42,000.00	\$ 294,000.00
	at the unit price of: _____ forty two thousand _____ dollars and _____ zero _____ cents.				
L-132-5.7	FAA Power Manhole, 6 Feet by 6 Feet	EA	4	\$ 42,000.00	\$ 168,000.00
	at the unit price of: _____ forty two thousand _____ dollars and _____ zero _____ cents.				
L-132-5.8	2-#2 AWG and 1-#4 AWG Ground Cable Installed in Duct Bank or Conduit, Including All Connections and Terminations	LF	1,550	\$ 28.00	\$ 43,400.00
	at the unit price of: _____ twenty eight _____ dollars and _____ zero _____ cents.				
L-140a	Post-Construction Photometric Testing	LS	1	\$ 150,000.00	\$ 150,000.00
	at the unit price of: _____ one hundred fifty thousand _____ dollars and _____ zero _____ cents.				
L-150-1	Fiber Optic Cable Installed in Innerduct in Duct or Conduit, Including Testing and Connections	LF	36,000	\$ 20.00	\$ 720,000.00
	at the unit price of: _____ twenty _____ dollars and _____ zero _____ cents.				

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-150-2	25 pair #22 AWG Type USE Cable, Installed in Duct Bank or Conduit at the unit price of: _____ twelve _____ dollars and _____ zero _____ cents.	LF	800	\$ 12.00	\$ 9,600.00
L-160a	Furnish 250kW Generator for 35L ALSFII/17R LOC Temp Power (208Y/120V, 3-phase) at the unit price of: _____ three thousand five hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 3,500.00	\$ 3,500.00
L-160b	Connect 250kW Generator for 35L ALSFII/17R LOC Temp Power at the unit price of: _____ twenty eight thousand _____ dollars and _____ zero _____ cents.	EA	1	\$ 28,000.00	\$ 28,000.00
L-160c	Operate 250kW Generator at the unit price of: _____ one thousand six hundred _____ dollars and _____ zero _____ cents.	DAY	2	\$ 1,600.00	\$ 3,200.00
L-160d	Furnish 50kW Generator for RTR-A Temp Power (208Y/120V, 3-phase) at the unit price of: _____ two thousand six hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 2,600.00	\$ 2,600.00
L-160e	Furnish 50kW Generator for RTR-B Temp Power (208Y/120V, 3-phase) at the unit price of: _____ two thousand six hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 2,600.00	\$ 2,600.00
L-160f	Furnish 50kW Generator for ASDE Temp Power (208Y/120V, 3-phase) at the unit price of: _____ two thousand six hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 2,600.00	\$ 2,600.00
L-160g	Furnish 50kW Generator for 17R MALSR/35L LOC Temp Power (120/240V, 1-phase) at the unit price of: _____ two thousand six hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 2,600.00	\$ 2,600.00
L-160h	Install 100A Power Inlet at RTR-A or RTR-B at the unit price of: _____ six thousand five hundred _____ dollars and _____ zero _____ cents.	EA	2	\$ 6,500.00	\$ 13,000.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160i	Connect 50kW Generator for ASDE Temp Power at the unit price of: _____ nine thousand five hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 9,500.00	\$ 9,500.00
L-160j	Connect 50kW Generator for 17R MALSR/35L LOC Temp Power at the unit price of: _____ nine thousand five hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 9,500.00	\$ 9,500.00
L-160k	Operate 50kW Generator at the unit price of: _____ two thousand three hundred _____ dollars and _____ zero _____ cents.	DAY	13	\$ 2,300.00	\$ 29,900.00
L-160l	Furnish 30kW Generator for 17R GS or 35L GS Temp Power (120/240V, 1-phase) at the unit price of: _____ two thousand four hundred _____ dollars and _____ zero _____ cents.	EA	2	\$ 2,400.00	\$ 4,800.00
L-160m	Furnish 30kW Generator for DEN VOR Temp Power (120/240V, 1-phase) at the unit price of: _____ four thousand two hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 4,200.00	\$ 4,200.00
L-160n	Connect 30kW Generator for 17R GS or 35L GS Temp Power at the unit price of: _____ six thousand two hundred _____ dollars and _____ zero _____ cents.	EA	2	\$ 6,200.00	\$ 12,400.00
L-160o	Connect 30kW Generator for DEN VOR Temp Power at the unit price of: _____ six thousand two hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 6,200.00	\$ 6,200.00
L-160p	Operate 30kW Generator at the unit price of: _____ two thousand four hundred _____ dollars and _____ zero _____ cents.	DAY	6	\$ 2,400.00	\$ 14,400.00
L-160q	Furnish 15kW Generator for RTR-E Temp Power (120/240V, 1-phase) at the unit price of: _____ two thousand two hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 2,200.00	\$ 2,200.00
L-160r	Operate 15kW Generator for RTR-E Temp Power at the unit price of: _____ one thousand three hundred _____ dollars and _____ zero _____ cents.	EA	1	\$ 1,300.00	\$ 1,300.00

SCHEDULE I

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
L-160s	Furnish 10kW Generator for Midfield RVR Temp Power (120/240V, 1-phase)	EA	1	\$ 2,200.00	\$ 2,200.00
	at the unit price of: two thousand two hundred dollars and zero cents.				
L-160t	Connect 10kW Generator for Midfield RVR Temp Power	EA	1	\$ 4,200.00	\$ 4,200.00
	at the unit price of: four thousand two hundred dollars and zero cents.				
L-160u	Operate 10kW Generator	DAY	2	\$ 1,200.00	\$ 2,400.00
	at the unit price of: one thousand two hundred dollars and zero cents.				
L-160v	Furnish 5kW Generator for ASOS Temp Power (240V, 1-phase)	EA	1	\$ 2,400.00	\$ 2,400.00
	at the unit price of: two thousand four hundred dollars and zero cents.				
L-160w	Connect 5kW Generator for ASOS Temp Power	EA	1	\$ 4,100.00	\$ 4,100.00
	at the unit price of: four thousand one hundred dollars and zero cents.				
L-160x	Operate 5kW Generator	DAY	2	\$ 1,100.00	\$ 2,200.00
	at the unit price of: one thousand one hundred dollars and zero cents.				
L-160y	Furnish 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power (120V, 1-phase)	EA	2	\$ 1,100.00	\$ 2,200.00
	at the unit price of: one thousand one hundred dollars and zero cents.				
L-160z	Connect 1.8kW Generator for LLWAS 14 or LLWAS 17 Temp Power	EA	2	\$ 550.00	\$ 1,100.00
	at the unit price of: five hundred fifty dollars and zero cents.				
L-160aa	Operate 1.8kW Generator	DAY	4	\$ 1,100.00	\$ 4,400.00
	at the unit price of: one thousand one hundred dollars and zero cents.				

SCHEDULE I TOTAL \$ 42,108,643.90

SCHEDULE II

Item No.	Description	Units	Estimated Quantity	Unit Price	Total
C-105a	Mobilization	LS	1	50,000.00 \$	50,000.00
P-501f	Pavement Spall Repair	SY	100	1,200.00 \$	120,000.00
L-120a	Furnish L-847-2 Circuit Selector Switch	EA	1	19,000.00 \$	19,000.00
L-120b	Furnish L-847-3 Circuit Selector Switch	EA	1	28,000.00 \$	28,000.00
13410Aa	ALCMS Modifications	LS	1	80,000.00 \$	80,000.00

SCHEDULE II TOTAL \$ 297,000.00

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VII. ATTACHMENT 2, DBE FORMS

DSBO FORMS

The DSBO forms which apply to this contract are contained in the pages immediately following this page.

These pages are not included in the page numbering of this contract document.



DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO) COMMITMENT TO DBE PARTICIPATION

This page must be completed by all Bidders/Proposers to indicate their commitment towards satisfying the DBE participation goal. The commitment will be incorporated into the contract and thereby the selected Bidder/Proposer's will be held to that commitment. (Please check the appropriate box):

COMPLETE IF YOU ARE A NON-DBE PRIME:

The City and County of Denver has specified a 16 % DBE Participation goal on this project. The Bidder/Proposer is committed to meeting 16 % DBE Participation on the contract.

COMPLETE IF YOU ARE A DBE PRIME:

The City and County of Denver has specified a _____ % DBE Participation goal on this project. The Bidder/Proposer is a certified DBE with the City and County of Denver and is committed to meeting _____ % DBE Participation on the contract.

COMPLETE IF YOU ARE UNABLE TO MEET PROJECT GOAL:

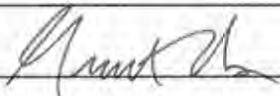
The City and County of Denver has specified a _____ % DBE Participation goal on this project. The Bidder/Proposer is unable to meet this project goal but is committed to a _____ % DBE Participation on the contract. The Bidder/Proposer must make adequate good faith efforts to meet this goal in order to be deemed responsive. The Bidder/Proposer must submit a detailed statement and documentation of their good faith efforts. Award of the contract will be conditioned on meeting the requirements of this section, in accordance with C.F.R. 49 part 26.

The undersigned Bidder/Proposer hereby agrees and understands that they must comply with their DBE commitments in this project in conformity with the Requirements, Terms, and Conditions of this DBE Procurement/Contract Language.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative): 

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaincentral@flatironcorp.com



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
1A - LIST OF PROPOSED SUBCONTRACTORS,
SUBCONSULTANTS, AND/OR SUPPLIERS**

City & County of Denver Contract No.: 202158849

The undersigned proposes to utilize all listed firms. Any certified firm listed must be certified by the City and County of Denver and a **Letter of Intent (LOI)** submitted for each. If additional pages are required, please copy and attach the second page. This form must be updated and submitted to DSBO when subcontractors, subconsultants, and/or suppliers are added throughout the contract duration.

Contractor/Consultant		
Name of Firm: Flatiron Constructors, Inc.	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Grant Johns		
Signature: 	Date: 07/30/2021	
Address: 385 Interoak Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	
Total Contract Value \$: 42,405,643.90	Self-Performing Contract Value \$: 18,284,598	

Subcontractors, Subconsultants, and/or Suppliers		
Name of Firm: Allstate Sweeping, Inc.	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Martha Krueger		
Phone: 303.293.8700	Email: bhollis@allstatesweeping.net	
Type of Service: Sweeping	Contract Value \$: 255,000	
Anticipated Start Date: 2/2022	Anticipated Completion Date: 10/2023	

Name of Firm: Vine Laboratories, Inc.	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Amy Norwood		
Phone: 303.662.1166	Email: anorwood@vinelaboratories.com	
Type of Service: QC Testing	Contract Value \$: 785,000	
Anticipated Start Date: 2/2022	Anticipated Completion Date: 10/2023	

Name of Firm: Infinity Solutions Inc.	<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Joseph Jimenez		
Phone: 303.229.6885	Email: jjimenez@infinitysurvey.net	
Type of Service: Surveying	Contract Value \$: 582,000	
Anticipated Start Date: 2/2022	Anticipated Completion Date: 10/2023	



Name of Firm: Harvey Contractors Inc. dba American Striping Co.		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Alejandra Harvey			
Phone: 303.495.5950		Email: alejandra@americanstripingcompany.com	
Type of Service: Pavement Marking		Contract Value \$: 120,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: RamCo Trucking Services		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Denise Tolmich			
Phone: 303.906.8335		Email: denise@ram-cotrucking.com	
Type of Service: Trucking		Contract Value \$: 400,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: J.P. Meyer Trucking & Construction, Inc.		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Jean Meyer			
Phone: 303.426.0966		Email: jeaniemey3@gmail.com	
Type of Service: Trucking		Contract Value \$: 500,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: Aggregate Logistics, LLC		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Toni Castiglioni			
Phone: 720.421.5222		Email: tonicastiglioni@yahoo.com	
Type of Service: Gravel Merchant Wholesaler		Contract Value \$: 1,590,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: J.P. Meyer Trucking & Construction, Inc.		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Jean Meyer			
Phone: 303.426.0966		Email: jeaniemey3@yahoo.com	
Type of Service: Asphalt Trucking		Contract Value \$: 120,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: Pynergy, LLC dba Pynergy Petroleum		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Darrell Jackson			
Phone: 303.292.5005		Email: djackson@pynergy.com	
Type of Service: Fuel Merchant Wholesalers		Contract Value \$: 489,074	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	



Name of Firm: Airport Lighting Systems, Inc.		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Courtney Denney			
Phone: 817.912.0400		Email: cd@airportlighting.com	
Type of Service: Airfield Lighting Supply		Contract Value \$: 375,448	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: Danielles Approach LLC		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Danielle Geary			
Phone: 402.649.3075		Email: dapproachllc@gmail.com	
Type of Service: Fiber Optic Install, LLWAS Install		Contract Value \$: 999,110	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: American Sign & Barricade Co		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Rhonda Collins			
Phone: 303.885.0481		Email: rhonda@americansgn.com	
Type of Service: Traffic Control, Flagging		Contract Value \$: 400,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm: B&L Supply of Colorado		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input checked="" type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative: Robert Schafer			
Phone: 720.307.2255		Email: r.schafer@blsupplyco.com	
Type of Service: Electrical Equipment & Materials Supply		Contract Value \$: 200,000	
Anticipated Start Date: 2/2022		Anticipated Completion Date: 10/2023	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	

Name of Firm:		<input type="checkbox"/> MWBE (v) <input type="checkbox"/> SBE (v) <input type="checkbox"/> DBE (v) <input type="checkbox"/> EBE (v)	
Firm's Representative:			
Phone:		Email:	
Type of Service:		Contract Value \$:	
Anticipated Start Date:		Anticipated Completion Date:	



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Self-Performing:

 Yes No

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative):

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaincentral@flatironcorp.com

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Allstate Sweeping Inc.

 MWBE(V) SBE(V)
 EBE(V) DBE(V)

Firm's Representative: Beth Krueger

Title: President

Signature:

Date: 7/27/21

Address: 10150 E 106th Ave

City: Brighton

State: Co.

Zip: 80601

Phone: 303-293-8700

Email: bkrueger@allstatesweeping.n

Scope of Work: Street Sweeping

NAICS Code(s): 561790, 237310, 238990, 488490, 561730

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 255,000

0.60 %

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:

Firm's Representative:

Title:

Signature:

Date:

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.



October 28, 2020

Martha Krueger
Allstate Sweeping, Inc.
P. O. Box 308
Brighton, CO 80601

Dear: Martha Krueger:

The Division of Small Business Opportunity is pleased to inform you that Allstate Sweeping, Inc. is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Allstate Sweeping, Inc. is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 488490: STREET CLEANING SERVICE
NAICS 561730: LANDSCAPE CARE AND MAINTENANCE SERVICES
NAICS 561790: POWER WASHING BUILDING EXTERIORS

The anniversary date of your firm's DBE certification is October 31, 2021. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

A handwritten signature in black ink, appearing to read "Adrina Gibson", written in a cursive style.

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: Grant Johns	Title: District Operations Manager	
Signature (Firm's Representative):	Date: 07/30/2021	
Address: 385 Interlocken Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: VINE Laboratories, Inc.	<input checked="" type="checkbox"/> MWBE(v)	<input checked="" type="checkbox"/> SBE(v)
Firm's Representative: Amy Norwood	<input checked="" type="checkbox"/> EBE(v)	<input checked="" type="checkbox"/> DBE(v)
Signature:	Title: President	
Address: 6455 E. 56th Avenue		
City: Commerce City	State: CO	Zip: 80022
Phone: 303-662-1166	Email: anorwood@vinelaboratories.com	
Scope of Work: QC Management, testing and inspections		
NAICS Code(s): 541330		

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 785,000	1.85 %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:	
Firm's Representative:	Title:
Signature:	Date:

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.

Amy Norwood
Vine Laboratories, Inc.
6455 E. 56th Avenue
COMMERCE CITY, CO 80022

Dear Amy Norwood:

The Division of Small Business Opportunity is pleased to inform you that Vine Laboratories, Inc. is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Vine Laboratories, Inc. is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 236220: PROJECT MANAGEMENT (INACTIVE EFFECTIVE 02-12-2020) NAICS 237110: STORM SEWER CONSTRUCTION NAICS 237310: CULVERTS, HIGHWAY, ROAD AND STREET, CONSTRUCTION NAICS 237310: POT HOLE FILLING, HIGHWAY, ROAD, STREET OR BRIDGE NAICS 238910: CORE DRILLING AND TEST BORING FOR CONSTRUCTION NAICS 238910: EXCAVATION CONTRACTORS NAICS 238910: SOIL TEST DRILLING NAICS 541330: CONSTRUCTION ENGINEERING SERVICES NAICS 541380: GEOTECHNICAL TESTING LABORATORIES OR SERVICES

The anniversary date of your firm's DBE certification is August 31, 2021. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

Adrina Gibson
Director of the Division of Small Business Opportunity Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org

City and County of Denver
Office of Economic Development
<http://www.denvergov.org/oed>
<http://denver.mwdbe.com>



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: Grant Johns		Title: District Operations Manager
Signature (Firm's Representative):		Date: 07/30/2021
Address: 385 Interlocken Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Infinity Solutions Inc,		<input checked="" type="checkbox"/> MWBE(v) <input checked="" type="checkbox"/> SBE(v) <input type="checkbox"/> EBE(v) <input checked="" type="checkbox"/> DBE(v)
Firm's Representative: Joe Jimenez		Title: President
Signature:		Date: July 27, 2021
Address: 10465 Melody Drive, Suite 225		
City: Northglenn	State: Colorado	Zip: 80234
Phone: 303-229-6885	Email: jjimenez@infinitysurvey.net	

Scope of Work: Professional Land/Construction Surveying

NAICS Code(s): 541340 & 541370

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 582,000	1.37 %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:	
Firm's Representative:	Title:
Signature:	Date:

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.



August 4, 2020

Joseph Jimenez
Infinity Solutions Incorporate
10465 Melody Drive, Suite 225
Suite 225
Northglenn, CO 80234

Dear: Joseph Jimenez:

The Division of Small Business Opportunity is pleased to inform you that Infinity Solutions Incorporate is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Infinity Solutions Incorporate is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 541340: DRAFTING SERVICES
NAICS 541370: GEOGRAPHIC INFORMATION SYSTEM (GIS) BASE MAPPING SERVICES
NAICS 541370: LAND SURVEYING SERVICES

The anniversary date of your firm's DBE certification is August 31, 2021. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

A handwritten signature in black ink, appearing to read "Adrina Gibson", is written over a light blue horizontal line.

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: Grant Johns		Title: District Operations Manager
Signature (Firm's Representative):		Date: 07/30/2021
Address: 385 Interlocken Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Harvey Contractors DBA American Striping Company		<input checked="" type="checkbox"/> MWBE(V) <input checked="" type="checkbox"/> SBE(V) <input type="checkbox"/> EBE(V) <input checked="" type="checkbox"/> DBE(V)
Firm's Representative: Tony Ciccio		Title: Estimator
Signature:		Date: 7.27.21
Address: 6829 S. Dawson Cir		
City: Centennial	State: CO	Zip: 80126
Phone: 303.495.5950	Email: tony@americanstripingcompany.com	
Scope of Work: Pavement Markings - 237310		

NAICS Code(s): Pavement Markings - 237310

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 120,000	0.28 %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:	
Firm's Representative:	Title:
Signature:	Date:

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.



Alejandra Harvey <alejandra@americanstripingcompany.com>

Denver: DBE Approval

City and County of Denver <denver@mwdbe.com>
Reply-To: City and County of Denver <denver@mwdbe.com>
To: Alejandra@americanstripingcompany.com

Thu, Mar 4, 2021 at 2:05 PM



Alejandra Harvey
Harvey Contractors Inc. DBA American Striping Company
6829 S Dawson Cir
CO - Colorado
Centennial, CO 80112

Dear: Alejandra Harvey:

The Division of Small Business Opportunity is pleased to inform you that Harvey Contractors Inc. DBA American Striping Company is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Harvey Contractors Inc. DBA American Striping Company is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 237310: AIRPORT RUNWAY LINE PAINTING (E.G., STRIPING)
NAICS 237310: PAINTING LINES ON HIGHWAYS, STREETS AND BRIDGES
NAICS 237310: PARKING LOT MARKING AND LINE PAINTING
NAICS 237310: RUNWAY, AIRPORT, LINE PAINTING (E.G., STRIPING)
NAICS 237310: SIGN ERECTION, HIGHWAY, ROAD, STREET, OR BRIDGE

The anniversary date of your firm's DBE certification is March 31, 2022. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,



Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO) LETTER OF INTENT (LOI)

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Self-Performing:

 Yes No

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative):

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaincentral@flatironcorp.com

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Ram Co Trucking Services

 MWBE(v) SBE(v)
 EBE(v) DBE(v)

Firm's Representative: Denise Tolmich

Title: President

Signature:

Date:

Address: 15497 County Road 10

City: Fort Lupton

State: CO

Zip: 80621

Phone: 303-906-8335

Email: denise@ram-cotrucking.com

Scope of Work: Trucking / Hauling / Durable Goods

NAICS Code(s): 45120, 484110, 484220

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 400,000

0.94 %

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:

Firm's Representative:

Title:

Signature:

Date:

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this Letter of Intent shall be null and void.



December 14, 2020

Denise Tolmich
Ram-Co Trucking Services DBA Ram-Co Trucking Services
15497 County Road 10
Fort Lupton, CO 80621

Dear: Denise Tolmich:

The Division of Small Business Opportunity is pleased to inform you that Ram-Co Trucking Services DBA Ram-Co Trucking Services is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Ram-Co Trucking Services DBA Ram-Co Trucking Services is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 425120: DURABLE GOODS AGENTS AND BROKERS, WHOLESALE TRADE
NAICS 484110: GENERAL FREIGHT TRUCKING, LOCAL
NAICS 484220: DUMP TRUCKING (E.G., GRAVEL, SAND, TOP-SOIL)
NAICS 484220: GRAVEL HAULING, LOCAL
NAICS 484220: SAND HAULING, LOCAL
NAICS 484220: TANKER TRUCKING (E.G., CHEMICAL, JUICE, MILK, PETROLEUM), LOCAL
NAICS 484220: TOP-SOIL HAULING, LOCAL

The anniversary date of your firm's DBE certification is August 31, 2021. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

A handwritten signature in black ink, appearing to read "Adrina Gibson".

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): <u>Flatiron Constructors, Inc.</u>		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: <u>Grant Johns</u>	Title: <u>District Operations Manager</u>	
Signature (Firm's Representative): <u>[Signature]</u>	Date: <u>07-30-21</u>	
Address: <u>385 Interlocken Crescent Suite 900</u>		
City: <u>Broomfield</u>	State: <u>CO</u>	Zip: <u>80021</u>
Phone: <u>303-4854050</u>	Email: <u>mountaincenter@flatironcorp.com</u>	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: <u>J.P. Meyer Trucking & Construction LLC</u>		<input checked="" type="checkbox"/> MWBE(v) <input checked="" type="checkbox"/> SBE(v) <input type="checkbox"/> EBE(v) <input checked="" type="checkbox"/> DBE(v)
Firm's Representative: <u>Jeanie Meyer</u>	Title: <u>President</u>	
Signature: <u>Jeanie Meyer</u>	Date: <u>7-28-21</u>	
Address: <u>21999 Tall Grass Trail # 5</u>		
City: <u>Golden</u>	State: <u>CO</u>	Zip: <u>80403</u>
Phone: <u>303-426-0966</u>	Email: <u>jeanie.mey.3@gmail.com</u>	
Scope of Work: <u>trucking</u>		

NAICS Code(s): 484230 trucking + 425120-Grocery

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ <u>500,000.</u>	<u>1.17</u> %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:	Title:
Firm's Representative:	Date:
Signature:	

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this Letter of Intent shall be null and void.



Denver Economic Development & Opportunity
101 W. Colfax Avenue, Suite 850 | Denver, CO 80202
www.denvergov.org/economicdevelopment
720-913-1999

April 6, 2021

Jean Meyer
J.P. Meyer Trucking & Construction, Inc.
21999 Tall Grass Trail, #5
Golden, CO 80403

Dear: Jean Meyer:

The Division of Small Business Opportunity is pleased to inform you that J.P. Meyer Trucking & Construction, Inc. is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

J.P. Meyer Trucking & Construction, Inc. is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 425120: WHOLESALE TRADE AGENTS AND BROKERS
NAICS 484220: DUMP TRUCKING (E.G., GRAVEL, SAND, TOP-SOIL)
NAICS 484220: GRAVEL HAULING, LOCAL
NAICS 484220: SAND HAULING, LOCAL
NAICS 484220: TOP-SOIL HAULING, LOCAL

The anniversary date of your firm's DBE certification is May 31, 2022. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

A handwritten signature in black ink, appearing to read 'Adrina Gibson', written in a cursive style.

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: Grant Johns		Title: District Operations Manager
Signature (Firm's Representative):		Date: 07/30/2021
Address: 385 Interlocken Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Aggregate Logistics, LLC		<input checked="" type="checkbox"/> MWBE(v) <input type="checkbox"/> SBE(v)
Firm's Representative: Tom Castiglioni		<input type="checkbox"/> EBE(v) <input checked="" type="checkbox"/> DBE(v)
Signature:		Title: President
Address: PO Box 393		Date: 7-23-21
City: Timnath	State: CO	Zip: 80547
Phone: 720-421-5222	Email: tonicastiglioni@upham.com	
Scope of Work: Aggregate Sales		
NAICS Code(s): 423320		

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 1,590,000	3.74 %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:	
Firm's Representative:	Title:
Signature:	Date:

*If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.*

City and County of Denver: DBE Approval

From: City and County of Denver (denver@mwdbe.com)

To: tonicastiglioni@yahoo.com

Date: Friday, July 17, 2020, 07:05 PM MDT

Toni Castiglioni
Aggregate Logistics, LLC
P.O. Box 393
Timnath, CO 80547

Dear Toni Castiglioni:

The Division of Small Business Opportunity is pleased to inform you that Aggregate Logistics, LLC is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Aggregate Logistics, LLC is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 327320: READY-MIX CONCRETE MANUFACTURING AND DISTRIBUTING
NAICS 423320: GRAVEL, CONSTRUCTION, MERCHANT WHOLESALERS
NAICS 423320: STONE, BUILDING OR CRUSHED, MERCHANT WHOLESALERS
NAICS 423930: RECYCLABLE MATERIALS (E.G., GLASS, METAL, PAPER) MERCHANT WHOLESALERS
NAICS 424310: TEXTILES (EXCEPT BURLAP, FELT) MERCHANT WHOLESALERS
NAICS 484110: GENERAL FREIGHT TRUCKING, LOCAL
NAICS 484220: DUMP TRUCKING (E.G., GRAVEL, SAND, TOP-SOIL)
NAICS 484220: GRAVEL HAULING, LOCAL
NAICS 484220: SAND HAULING, LOCAL
NAICS 484220: TOP-SOIL HAULING, LOCAL

The anniversary date of your firm's DBE certification is October 31, 2021. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org

City and County of Denver
Office of Economic Development
<http://www.denvergov.org/oed>
<http://denver.mwdbe.com>

This message was sent to: tonicastiglioni@yahoo.com
Sent on: 7/17/2020 8:05:05 PM
System ReferenceID: 110268713



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Self-Performing:

 Yes No

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative):

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaIncentral@flatironcorp.com

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: J.P. Meyer Trucking & Construction, Inc.

 MWBE(V) SBE(V) EBE(V) DBE(V)

Firm's Representative: Jeanie Meyer

Title: President

Signature:

Date: 4-28-21

Address: 21994 Fall Grass Trail

City: Golden

State: CO

Zip: 80403

Phone: 303-426-9313

Email: Jeaniemey3@gmail.com

Scope of Work: trucking

NAICS Code(s): 484220 Trucking & 425120 Broker

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 120,000

0.28%

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm: Branton Sand and Gravel, LLC

Firm's Representative: Phillip Miller

Title: Estimator/Project Manager

Signature:

Date: 7/29/21

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.



Denver Economic Development & Opportunity
101 W. Colfax Avenue, Suite 850 | Denver, CO 80202
www.denvergov.org/economicdevelopment
720-913-1999

April 6, 2021

Jean Meyer
J.P. Meyer Trucking & Construction, Inc.
21999 Tall Grass Trail, #5
Golden, CO 80403

Dear: Jean Meyer:

The Division of Small Business Opportunity is pleased to inform you that J.P. Meyer Trucking & Construction, Inc. is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

J.P. Meyer Trucking & Construction, Inc. is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 425120: WHOLESALE TRADE AGENTS AND BROKERS
NAICS 484220: DUMP TRUCKING (E.G., GRAVEL, SAND, TOP-SOIL)
NAICS 484220: GRAVEL HAULING, LOCAL
NAICS 484220: SAND HAULING, LOCAL
NAICS 484220: TOP-SOIL HAULING, LOCAL

The anniversary date of your firm's DBE certification is May 31, 2022. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

A handwritten signature in black ink, appearing to read 'Adrina Gibson'.

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: Grant Johns	Title: District Operations Manager	
Signature (Firm's Representative):	Date: 07/30/2021	
Address: 385 Interlocken Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Pynergy Petroleum Company, LLC	<input type="checkbox"/> MWBE(v) <input type="checkbox"/> SBE(v)
	<input type="checkbox"/> EBE(v) <input checked="" type="checkbox"/> DBE(v)
Firm's Representative: Darrell Jackson	Title: President
Signature:	Date: July 29, 2021
Address: 5480 Brighton Blvd.	
City: Commerce City	State: CO Zip: 80022
Phone: 303-292-5005	Email: djackson@pynergy.com
Scope of Work: Fuel/Diesel Supply	

NAICS Code(s): 424720

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 489,074.00	$815,124 \times 60\% = 489,074$	1.15 %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm: Kelley Trucking Inc.	
Firm's Representative: Michael M. Easley	Title: Vice President, Estimating
Signature:	Date: July 29, 2021

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.

Darrell Jackson

From: City and County of Denver <denver@mwdbe.com>
Sent: Friday, July 9, 2021 12:45 PM
To: Darrell Jackson
Subject: Denver: DBE Approval



Darrell Jackson
Pynergy, LLC DBA Pynergy Petroleum Company, LLC
5480 Brighton Blvd
Commerce City, CO 80022

Dear: Darrell Jackson:

The Division of Small Business Opportunity is pleased to inform you that Pynergy, LLC DBA Pynergy Petroleum Company, LLC is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Pynergy, LLC DBA Pynergy Petroleum Company, LLC is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

- NAICS 424690: CHEMICALS (EXCEPT AGRICULTURE) (E.G., AUTOMOTIVE, HOUSEHOLD, INDUSTRIAL, PHOTOGRAPHIC) MERCHANT WHOLESALERS
- NAICS 424720: FUEL OIL MERCHANT WHOLESALERS (EXCEPT BULK STATIONS, TERMINALS)
- NAICS 424720: LUBRICATING OILS AND GREASES MERCHANT WHOLESALERS (EXCEPT BULK STATIONS, TERMINALS)
- NAICS 445120: CONVENIENCE FOOD STORES
- NAICS 447110: CONVENIENCE FOOD WITH GASOLINE STATIONS

The anniversary date of your firm's DBE certification is August 31, 2022. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: TAXIWAY EE

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Self-Performing:

 Yes No

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative):

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaincentral@flatironcorp.com

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: AIRPORT LIGHTING SYSTEMS, INC.

 MWBE(v) SBE(v) EBE(v) DBE(v)

Firm's Representative: COURTNEY DENNEY

Title: PRESIDENT

Signature:

Date: JULY 27, 2021

Address: 651 INDUSTRIAL BLVD

City: GRAPEVINE

State: TEXAS

Zip: 76051

Phone: 817-912-0400

Email: CD@AIRPORTLIGHTING.COM

Scope of Work: MATERIAL SUPPLIER

NAICS Code(s): 423610, 488119, 488190

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 375,448

 $5625,747 \times 60\% = 375,448$

0.88 %

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm: Royal Electric

Firm's Representative: Randy Sondreal

Title: Chief Estimator

Signature:

Date: 7/30/2021

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.

Thomas C. Wolfe

From: City and County of Denver <denver@mwdbbe.com>
Sent: Monday, June 7, 2021 1:21 AM
To: Courtney Denney
Subject: Denver: DBE Approval



Courtney Denney
Airport Lighting Systems, Inc.
651 Industrial Blvd.
Grapevine, TX 76051

Dear: Courtney Denney:

The Division of Small Business Opportunity is pleased to inform you that Airport Lighting Systems, Inc. is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

Airport Lighting Systems, Inc. is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

NAICS 423610: LIGHTING FIXTURES, ELECTRIC, MERCHANT WHOLESALERS

The anniversary date of your firm's DBE certification is June 30, 2022. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,



Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Self-Performing:

 Yes No

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative):

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaincentral@flatironcorp.com

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: Danielles Approach LLC

 MWBE(V) SBE(V) EBE(V) DBE(V)

Firm's Representative: Danielle Geary

Title: President

Signature:

Date: 7/29/21

Address: 311 W Norfolk Ave Ste. 200

City: Norfolk

State: NJ

Zip: 08101

Phone: 402-649-3075

Email: dapproachllc@gmail.com

Scope of Work: Fiber optic install
LWAS install

NAICS Code(s): 238210

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 999,110

2.35 %

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm: Royal Electric

Firm's Representative: Randy Sondreal

Title: Chief Estimator

Signature:

Date: 7/30/2021

*If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this **Letter of Intent** shall be null and void.*

Danielle Kubes

Danielle's Approach, LLC DBA N/A

311 W Norfolk Ave., Ste 200

Norfolk, NE 68701

Re: Disadvantaged Business Enterprise (DBE) Certification

Dear Kubes,

The Colorado Department of Transportation Civil Rights & Business Resource Center is pleased to inform you that Danielle's Approach, LLC DBA N/A has been certified as a Colorado Disadvantaged Business Enterprise (DBE). Danielle's Approach, LLC DBA N/A is listed on the Colorado Unified Certification Program (UCP) DBE Directory at <http://www.coloradodbe.org/>.

Work Codes

In accordance with 49 CFR 26, Danielle's Approach, LLC DBA N/A has been certified in the following work codes:

NAICS 237310: AIRPORT RUNWAY CONSTRUCTION

NAICS 238210: AIRPORT RUNWAY LIGHTING CONTRACTORS

You may request a work code change if you do not believe the assigned work codes sufficiently represent the work performed by Danielle's Approach, LLC DBA N/A. Work code change request forms (CDOT Form #1311) can be downloaded online at <http://www.codot.gov/business/civilrights/dbe/dbe-documents/work-code-change-request>. Completed forms must be submitted by email to dot_civilrights@state.co.us or by regular mail to:

Colorado Department of Transportation
Civil Rights & Business Resource Center
4201 E. Arkansas Avenue, Room 150
Denver, CO 80222

Annual Update

Your firm's DBE Certification must be updated annually by submitting a No Change Affidavit and the firm's most recent tax return on or before its anniversary date. The anniversary date of your firm's certification is December 31, 2021. Forty five (45) days prior to this anniversary date, you will receive a courtesy reminder to submit the firm's annual update documents through CDOT's online certification management system at <http://cdot.dbesystem.com>. However, CDOT is not responsible for undelivered notices. Failure to complete and submit your firm's annual update documents may result in decertification and removal from the Colorado UCP DBE Directory.

Changes to Your Business

You must notify the Civil Rights & Business Resource Center of any changes that occur in your firm's legal structure, ownership, management, control, and/or work performed within thirty (30) days of the change. Please include any available supporting documentation in your notice.

If you have questions or require assistance, please contact our office at (303) 757-9234 or dot_civilrights@state.co.us.

Sincerely,

Zoe Demuth-George
Certification Analyst
Colorado Department of Transportation
Civil Rights & Business Resource Center

CDOT Division of Project Support

2829 West Howard Place

Denver, CO 80204

303-757-9234 Office

303-952-7091 Fax

cdot@dbesystem.com

<https://cdot.dbesystem.com>

This message was sent to: dapproachllc@gmail.com

Sent on: 12/30/2020 10:27:45 AM

System ReferenceID:



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.		Self-Performing: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Firm's Representative: Grant Johns	Title: District Operations Manager	
Signature (Firm's Representative):	Date: 07/30/2021	
Address: 385 Interlocken Crescent, Suite 900		
City: Broomfield	State: CO	Zip: 80021
Phone: 303-485-4050	Email: mountaincentral@flatironcorp.com	

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE, at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE.

Name of Firm: American Sign and Barricade Co.	<input checked="" type="checkbox"/> MWBE(v) <input checked="" type="checkbox"/> SBE(v) <input type="checkbox"/> EBE(v) <input checked="" type="checkbox"/> DBE(v)
Firm's Representative: Rhonda Collins	Title: President
Signature: Rhonda Collins	Date: 7-30-2021
Address: 14883 E. Hinsdale Ave #3	
City: Englewood	State: CO Zip: 80112
Phone: 303-885-0481	Email: Rhonda@americansgn.com
Scope of Work: Traffic Control	

NAICS Code(s): 561990 - 339950

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 400,000	0.94 %
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C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm:	
Firm's Representative:	Title:
Signature:	Date:

Ms. Rhonda Collins
American Sign & Striping Company DBA American Sign & Barricade Co.
4883 E. Hinsdale Avenue Unit 3
Englewood, CO 80112

Re: Updated Disadvantaged Business Enterprise (DBE) Certification

Dear Ms. Collins,

The Colorado Department of Transportation Civil Rights & Business Resource Center is pleased to inform you that the DBE certification for American Sign & Striping Company DBA American Sign & Barricade Co. has been updated. American Sign & Striping Company DBA American Sign & Barricade Co. will remain listed on the Colorado Unified Certification Program (UCP) DBE Directory at <http://www.coloradodbe.org/>.

Work Codes

In accordance with 49 CFR 26, American Sign & Striping Company DBA American Sign & Barricade Co. will remain certified in the following work codes:

AICS 237310: PAINTING LINES ON HIGHWAYS, STREETS AND BRIDGES
AICS 237310: SIGN ERECTION, HIGHWAY, ROAD, STREET, OR BRIDGE
AICS 238910: DEMOLITION CONTRACTOR
AICS 339950: SIGNS AND SIGNBOARDS (EXCEPT PAPER, PAPERBOARD) MANUFACTURING
AICS 561990: FLAGGING (I.E., TRAFFIC CONTROL) SERVICES

You may request a work code change if you do not believe the work codes assigned sufficiently represent the work performed by American Sign & Striping Company DBA American Sign & Barricade Co.. Work code change request forms (CDOT Form #1311) can be downloaded online at <http://www.codot.gov/business/civilrights/dbe/dbe-documents/work-code-change-request>. Completed forms must be submitted by email to dot_civilrights@state.co.us or by regular mail to:

Colorado Department of Transportation
Civil Rights & Business Resource Center
329 W. Howard Place, Suite 139
Denver, CO 80204

Annual Update

Your firm's DBE Certification must be updated annually by submitting a No Change Affidavit and the firm's most recent tax return on or before its anniversary date. The anniversary date of your firm's certification is October 31, 2021. Forty-five (45) days prior to the anniversary date, you will receive a courtesy notice reminding you to submit the firm's annual update documents through CDOT's online certification management system at <http://cdot.dbesystem.com>. However, DOT is not responsible for undelivered notices. Failure to update your firm's certification by the anniversary date may result in decertification and removal from the Colorado UCP DBE Directory.

Changes to Your Business

You must notify the Civil Rights & Business Resource Center of any changes that occur in your firm's legal structure, ownership, management, control, and/or work performed within thirty (30) days of the change. Please include any available supporting documentation in your notice.

If you have questions or require assistance, please contact our office at (303) 757-9234 or dot_civilrights@state.co.us.

Rochelle Moore
Certification Analyst
Colorado Department of Transportation
Civil Rights & Business Resource Center

DOT Division of Project Support
829 West Howard Place
Denver, CO 80204
303-757-9234 Office
303-952-7091 Fax
dot@dbesystem.com
<https://cdot.dbesystem.com>

This message was sent to: rhonda@americansgn.com
Sent on: 10/6/2020 11:57:23 AM
System ReferenceID:



**DIVISION OF SMALL BUSINESS OPPORTUNITY (DSBO)
LETTER OF INTENT (LOI)**

Contract No.: 202158849

Project Name: Taxiway EE Construction

A. The undersigned Bidder/Proposer intends to engage the undersigned MWBE, SBE, EBE or DBE to perform work if awarded the contract. This Letter of Intent must be Signed by the Bidder/Proposer and MWBE, SBE, EBE or DBE. Certified self-performing Prime must complete both sections A and B. If the MWBE, SBE, EBE or DBE is a lower tier, section C must be completed and signed by the firm directly utilizing the certified firm.

Bidder/Proposer (Name of Firm): Flatiron Constructors, Inc.

Self-Performing:

 Yes No

Firm's Representative: Grant Johns

Title: District Operations Manager

Signature (Firm's Representative):

Date: 07/30/2021

Address: 385 Interlocken Crescent, Suite 900

City: Broomfield

State: CO

Zip: 80021

Phone: 303-485-4050

Email: mountaincentral@flatironcorp.com

B. The Following Section is To Be Completed by the MWBE, SBE, EBE or DBE; at any tier. Identify the scope of the work and NAICS code(s) to be performed and/or supply item that will be provided by the MWBE, SBE, EBE or DBE:

Name of Firm: B & L Supply of Colorado

 MWBE(v) SBE(v)
 EBE(v) DBE(v)

Firm's Representative: Robert Schaffer

Title: Business Development

Signature:

Date: 7-30-2021

Address: 555 W 48th Ave Unit D

City: Denver, CO

State: CO

Zip: 80216

Phone: 720 307 2255

Email: R.Schaffer@blsupplyco.com

Scope of Work: provide Electrical Equipment and Materials

NAICS Code(s): 423440 423510 423610 423710 423720

The Bidder/Proposer intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is:

\$ 200,000

$$\$ 333,333 \times 60\% = \$ 200,000$$

0.47 %

C. Lower Tier Utilization: If the certified firm is not a direct first tier subcontractor, subconsultant, and/or supplier to the Bidder/Proposer, please indicate the name of the firm that is utilizing the certified firm:

Name of Firm: Royal Electric

Firm's Representative: Randy Sondreal

Title: Chief Estimator

Signature:

Date: 7/30/2021

If the above-named Bidder/Proposer is not determined to be the successful Bidder/Proposer, this Letter of Intent shall be null and void.



September 22, 2020

Clifton Boyd
B&L Supply Inc of Colorado
7042 S Revere Pkwy
Unit 450
CO
Centennial, CO 80112

Dear: Clifton Boyd:

The Division of Small Business Opportunity is pleased to inform you that B&L Supply Inc of Colorado is certified as a Disadvantaged Business Enterprise (DBE) pursuant to the US Department of Transportation's Regulation 49 CFR Part 26. Your firm will be listed on the Colorado Unified Certification Program's (UCP) on-line directory of eligible DBEs at www.coloradodbe.org.

B&L Supply Inc of Colorado is eligible to participate as a DBE on US Department of Transportation financially-assisted projects in Colorado in the work codes appearing as part of your firm's listing on the directory as eligible to be counted toward DBE participation. It is your responsibility to manage your firm's work codes to ensure they are correct.

- NAICS 423440: BALANCES AND SCALES (EXCEPT LABORATORY) MERCHANT WHOLESALERS
- NAICS 423510: PIPE, METAL, MERCHANT WHOLESALERS
- NAICS 423610: LIGHTING FIXTURES, ELECTRIC, MERCHANT WHOLESALERS
- NAICS 423610: WIRING SUPPLIES MERCHANT WHOLESALERS
- NAICS 423710: FASTENERS (E.G., BOLTS, NUTS, RIVETS, SCREWS) MERCHANT WHOLESALERS
- NAICS 423710: POWER HANDTOOLS (E.G., DRILLS, SANDERS, SAWS) MERCHANT WHOLESALERS
- NAICS 423720: PLUMBING SUPPLIES MERCHANT WHOLESALERS

The anniversary date of your firm's DBE certification is September 30, 2021. You will be notified prior to the anniversary date that eligibility must be re-evaluated. However, if you do not receive notification from this office, it is your responsibility to contact us. Pursuant to 49 CFR 26.83(i), submittal of this information is required to ensure that there is no interruption of your firm's status as a certified DBE. If any changes occur in the firm's legal structure, ownership, management, control, or work performed, you must notify the division immediately.

Sincerely,

A handwritten signature in black ink, appearing to read "Adrina Gibson".

Adrina Gibson
Director of the Division of Small Business Opportunity
Office of Economic Development | City and County of Denver
P: (720) 913-1701 | adrina.gibson@denvergov.org

VIII. ATTACHMENT 3, FORM W-9

FORM W-9

Please complete the Request for Taxpayer Identification Number
and Certification (FORM W-9) and submit with your Bid.

These pages are not included in the page numbering of this contract document.

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. Flatiron Constructors, Inc.	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
<input type="checkbox"/> Individual/sole proprietor or single-member LLC <input checked="" type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate	Exempt payee code (if any) _____
<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.	Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
<input type="checkbox"/> Other (see instructions) ▶ _____	
5 Address (number, street, and apt. or suite no.) See instructions. 385 Interlocken Crescent, Suite 900	Requester's name and address (optional)
6 City, state, and ZIP code Broomfield, CO 80021	
7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number										
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Employer identification number										
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8	4	-	1	2	4	5	0	0	2	

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ▶	Date ▶ 07.30.2021
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.

You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.

You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor ⁴

For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

***Note:** The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

IX. ATTACHMENT 4, INSURANCE REQUIREMENTS

INSURANCE REQUIREMENTS

The insurance requirements relative to this contract are contained in the pages immediately following this page.

These pages are not included in the page numbering of this contract document.

X. ATTACHMENT 5, DIVERSITY AND INCLUSIVENESS IN CITY SOLICITATIONS

For the City or the City Agency to consider a bid/Bid, Bidders must complete the on-line Diversity and Inclusiveness in City Solicitations Form – then **print the completed form and include the hard copy as part of Bidder's bid/Bid documents. A Bid or response to a solicitation by a Bidder that does not include this completed form shall be deemed non-responsive.**

Click on the following link to access the on-line form:

<https://fs7.formsite.com/CCDenver/form161/index.html>

Using the form found in link above, please state whether you have a Diversity and Inclusiveness program for employment and retention, procurement and supply chain activities or customer service, and provide the additional information requested on the form. The information provided on the Diversity and Inclusiveness in City Solicitations Form will provide an opportunity for City Bidders to describe their own diversity and inclusiveness practices. Bidders are not expected to conduct intrusive examinations of their employees, managers or business partners in order to describe diversity and inclusiveness measures. Rather, the City simply seeks a description of the Bidder's current practices, if any. Diversity and Inclusiveness information provided by City Bidders in response to City solicitations for services or goods will be collated, analyzed and made available in reports consistent with City Executive Order No. 101. However, no personally identifiable information provided by or obtained from Bidders will be in such reports.

**Insert the completed hard copy of the Diversity and Inclusiveness
in City Solicitations Form immediately following this page.**

Reference #	13940679
Status	Complete
Business Email Address	mountaincentral@flatironcorp.com
Enter Email Address of City and County of Denver contact person facilitating this solicitation.	contract.procurement@flydenver.com
Please provide the City Agency that is facilitating this solicitation:	Denver International Airport
Project Name	DEN Taxiway EE Construction
Solicitation No. (Check Below if Not Applicable)	202158849
Name of Your Company	Flatiron Constructors, Inc.
What Industry is Your Business?	Construction/Landscape/Maintenance Services
Address	385 Interlocken Crescent, Suite 900
City	Broomfield
State	Colorado
Zip Code	80021
Business Phone Number	303-485-4050
Business Facsimile Number	303-485-7684
1. How many employees does your company employ?	Over 100
Number of Full Time:	3473
Number of Part Time:	0
2. Do you have a Diversity and Inclusiveness Program?	Yes
2.1. Employment and retention?	Yes
2.2. Procurement and supply chain activities?	Yes
2.3. Customer Service?	No
3. Provide a detailed narrative of your company's diversity and inclusiveness principles and programs. This may include, for example, (i) diversity and inclusiveness employee training programs, equal opportunity policies, and the budget amount spent on an annual basis for workplace diversity; or (ii) diversity	EEO Policy which prohibits discrimination and encourages diversity in all employment decisions; Inclusion of EEO Policy and diversity principles into Code of Conduct; Core Values which include a platform around people and integrity; Regular training programs for all levels of employees around EEO policies and principles; Utilization of a third party business for minority outreach in recruiting; Incorporation of DBE/MWBE subcontractor/vendor program and targets; Creation of DIGG an internal Diversity & Inclusion Growth Group, acting as a business resources group. DiGG's goals include increasing diversity and inclusion in talent attraction retention and

and inclusiveness training and information to improve customer service. (If Not Applicable, please type N/A below)

development, and advancement, build inclusive culture and influence business strategy. Digg is also responsible for the creation of multiple affinity groups.

4. Does your company regularly communicate its diversity and inclusiveness policies to employees?

Yes

If you answered Yes to Question 4, how does your company regularly communicate its diversity and inclusiveness policies to employees? (Select all that apply)

- Employee Training
- Pamphlets
- Public EEO Postings
- Other (Email)

5. How often do you provide training and diversity and inclusiveness principles?

Quarterly

5.1 What percentage of the total number of employees generally participate?

76-100%

6. State how you achieve diversity and inclusiveness in supply and procurement activities. This may include, for example, narratives of training programs, equal opportunity policies, diversity or inclusiveness partnership programs, mentoring and outreach programs, and the amount and description of budget spent on an annual basis for procurement and supplier diversity and inclusiveness. (If Not Applicable, please type N/A below)

-Implementation of project based DBE/MWBE/SBE subcontractor/vendor program and targets including; Training programs; Outreach programs; Bonding Programs; Mentorship programs.

-Inclusion of and requirement to comply with company's EEO Policy, Business Partner Code of Conduct, and all applicable discrimination laws in all supply chain contracts.

-Current development of national DBE/MWBE/SBE third party program including, Outreach programs, Bonding Programs, and Mentorship programs.

7. Do you have a diversity and inclusiveness committee?

Yes

7.1 If Yes, how often does it meet?

Other

8. Do you have a budget for diversity and inclusiveness efforts?

Yes

9. Does your company integrate diversity and inclusion competencies into executive/manager performance evaluation plans?

No

I attest that the information represented herein is true, correct and complete, to the best of my knowledge.

Check Here if the Above Statement is True.

Name of Person Completing Form

Jessica Duran




Today's Date

07-12-2021

Last Update	2021-07-12 13:39:48
Start Time	2021-07-12 13:17:06
Finish Time	2021-07-12 13:39:48
IP	65.132.210.116
Browser	IE
Device	Desktop
Referrer	https://fs7.formsite.com/CCDenver/form161/index.html

faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is City and County of Denver, Colorado.

A3 BREACH OF CONTRACT TERMS

A3.3 BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the [*Contractor* | *Consultant*] or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

A4 BUY AMERICAN PREFERENCE

A4.3.1 BUY AMERICAN PREFERENCE

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal

Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

A4.3.2 Certificate of Buy American Compliance – Total Facility

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark () or the letter "X".

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States; or
 - b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

- a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
- b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
- c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
- e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation


Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “facility”. The required documentation for a Type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “facility” component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

<p>07/30/2021</p> <hr/> <p>Date</p> <hr/> <p>Flatiron Constructors, Inc.</p> <hr/> <p>Company Name</p>	 <hr/> <p>Signature</p> <hr/> <p>District Operations Manager</p> <hr/> <p>Title</p>
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A4.3.3 Certificate of Buy American Compliance – Manufactured Product

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (☐) or the letter “X”.

Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

- a) Only installing steel and manufactured products produced in the United States;
- b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
- c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing U.S. domestic product.
3. To furnish U.S. domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

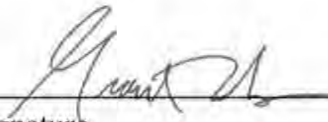
Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

<p>07/30/2021 <hr/> Date</p> <p>Flatiron Constructors, Inc. <hr/> Company Name</p>	 <hr/> Signature <p>District Operations Manager <hr/> Title</p>
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A5 CIVIL RIGHTS – GENERAL

A5.3.1 GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.3.1 Title VI Solicitation Notice

The **(Name of Sponsor)**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, [select disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A22.3 RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

A23 SEISMIC SAFETY

A23.3 PROFESSIONAL SERVICE AGREEMENTS FOR DESIGN

SEISMIC SAFETY

In the performance of design services, the Consultant agrees to furnish a building design and associated construction specification that conform to a building code standard that provides a level of seismic safety substantially equivalent to standards as established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their building code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety. At the conclusion of the design services, the Consultant agrees to furnish the Owner a "certification of compliance" that attests conformance of the building design and the construction specifications with the seismic standards of NEHRP or an equivalent building code.

A23.3.2 CONSTRUCTION CONTRACTS

SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A24 TAX DELINQUENCY AND FELONY CONVICTIONS

A24.3 CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark () in the space following the applicable response. The applicant agrees that, if

awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions-

Felony conviction: Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

A25 TERMINATION OF CONTRACT

A25.3.1 TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.

XII. ATTACHMENT 7, CERTIFICATE OF GOOD STANDING

CERTIFICATE OF GOOD STANDING

Please submit a Certificate of Good Standing
from the Office of the Secretary of the State of Colorado
for the proposing entity.

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE OF FACT OF GOOD STANDING

I, Jena Griswold, as the Secretary of State of the State of Colorado, hereby certify that,
according to the records of this office,

FLATIRON CONSTRUCTORS, INC.

is an entity formed or registered under the law of Delaware, has complied with all
applicable requirements of this office, and is in good standing with this office. This entity has
been assigned entity identification number 20011042545.

This certificate reflects facts established or disclosed by documents delivered to this office on
paper through 07/29/2021 that have been posted, and by documents delivered to this office
electronically through 07/30/2021 @ 08:38:57.

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, and issued this
official certificate at Denver, Colorado on 07/30/2021 @ 08:38:57 in accordance with applicable law.
This certificate is assigned Confirmation Number 13335985.



Jena Griswold

Secretary of State of the State of Colorado

*****End of Certificate*****
Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Validate a Certificate page of the Secretary of State's Web site, <http://www.sos.state.co.us/biz/CertificateSearchCriteria.do> entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, <http://www.sos.state.co.us/> click "Businesses, trademarks, trade names" and select "Frequently Asked Questions."