

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DENVER
THE MILE HIGH CITY

DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

Contract Documents

Contract Number: 202472628

2024 Citywide ADA Ramp & Concrete Repair A

February 12, 2024



NOTICE TO APPARENT LOW BIDDER

**Silva Construction, Inc.
154 Cisne Circle
Brighton, CO 80601**

The EXECUTIVE DIRECTOR OF THE DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE has considered the Bids submitted on **March 14, 2024**, for work to be done and materials to be furnished in and for:

CONTRACT 202472628 - 2024 Citywide ADA Ramp & Concrete Repair A

as set forth in detail in the Contract Documents for the City and County of Denver, Colorado. It appears that your Bid is fair, equitable, and to the best interest of the City and County; therefore, said Bid is hereby accepted at the bid price contained herein, subject to the approval and execution of the Contract Documents by the City in accordance with the Charter of the City and County of Denver, and to your furnishing the items specified below. The award is based on the total bid items: **Sixty (60) bid items (202-00019 through 630-00003)** the total estimated cost thereof being: **Two Million Six Hundred Thirty Thousand Forty Five Dollars and No Cents (\$2,630,045.00)**.

In accordance with the requirements set forth in the Contract Documents, you are required to furnish the following documents:

- a. Insurance Certificates: Workers' Compensation and Employer's Liability Insurance, Commercial General Liability, and Business Automobile Liability.
- b. Payment and Performance Bond along with One original Power of Attorney relative to Performance and/or Payment Bond.

All construction contracts made and entered into by the City and County of Denver are subject to Affirmative Action and Equal Opportunity Rules and Regulations, as adopted by the Manager of the Department of Transportation and Infrastructure, and each contract requiring payment by the City of one-half million dollars (\$500,000.00) or more shall first be approved by the City Council acting by ordinance or resolution and in accordance with Section 3.2.6 of the Charter of the City and County of Denver.

The Bid Security submitted with your Bid will be returned upon execution of the Contract and furnishing of the Performance Bond. In the event you should fail to furnish the Performance Bond or execute the contract within the time limit specified, said Bid Security will be retained by the City and County of Denver as liquidated damages, and not as a penalty for the delay and extra work caused thereby.



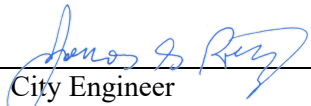
NOTICE TO APPARENT LOW BIDDER

CONTRACT NO. 202472628

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Dated at Denver, Colorado this 3rd day of May 2024.

CITY AND COUNTY OF DENVER

By: 
City Engineer
Department of Transportation and Infrastructure

cc: Treasury, DSBO, PM, Prevailing Wage, PRO, File

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DENVER
THE MILE HIGH CITY

DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

Bid Form Package

Contract Number: 202472628

2024 Citywide ADA Ramp & Concrete Repair A

February 12, 2024

**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE
SBE DEFINED POOL**

TABLE OF CONTENTS FOR BID FORM AND SUBMITTAL PACKAGE

BIDDER'S CHECKLIST BF-2
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BID FORM BF-6
BID BOND BF-11



This Checklist is provided solely for the assistance of the bidders, and need not be returned by Bidders with your BID FORM PACKAGE.

BIDDER'S CHECKLIST

These forms comprise the Bid Form and Submittal Package. Please note that a copy of the executed Bid Bond is to be submitted via QuestCDN at the time of bid opening, and that the original Bid Bond must be sent and received within 7 calendar days after the bid due date.

Bidders must utilize the Bid Worksheet in the online bidding section of QuestCDN to submit their bid item pricing. The totals from the worksheet are required on page BF-7 of the Submittal Package.

PAGE NO.	ACTION ITEM(S)	COMPLETE
BF-4 – BF-5	<ul style="list-style-type: none"> Use legal name, per Colorado Secretary of State (SOS). Provide contact and signatory information. Provide acknowledgment signature and attestation (if required). 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
BF-6	<ul style="list-style-type: none"> Use legal name, per Colorado Secretary of State (SOS). 	<input checked="" type="checkbox"/>
BF-7	<ul style="list-style-type: none"> Calculate Textura® Fee from chart on page BF-3. Write Total Base Bid Amount in words and figures in the space provided. If applicable, write out Add Alt amounts in words and figures. Provide surety/bid guarantee information. 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
BF-8	<ul style="list-style-type: none"> List all subcontractors who are performing work on this project. 	<input checked="" type="checkbox"/>
BF-9	<ul style="list-style-type: none"> Complete all blanks for bid acknowledgement. If Addenda have been issued, complete addenda acknowledgement. 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
BF-10	<ul style="list-style-type: none"> Complete appropriate sections and include signature(s) as required. If bidder is a corporation, include corporate seal as required. 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
BF-11	<ul style="list-style-type: none"> Fill in all Bid Bond blank spaces. Provide signatures as required. If bidder is a corporation, include corporate seal as required. Attach Surety Agents Power of Attorney <u>OR</u> Certified or cashier's check made out to the Manager of Revenue referencing Bidder's Company and Contract Number. 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

Textura® Construction Payment Management System (“Textura”)

Bidder recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (“Textura”) for this Project to request payment from the City and to pay all first tier subcontractors and suppliers and further record payment to all certified subcontractors or suppliers that are listed for participation towards any assigned program goal. All fees associated with Textura are to be paid by the bidder for billings for work performed. Bidders are required, when preparing a bid, to enter the price of Textura on the line provided for the service on the Bid Worksheet. The fee is all inclusive of all subcontractor, project and subscription fees associated with Textura. The bidder will calculate the fee based on their Base Bid Total (including Force Accounts and Allowances but not including any alternates, if applicable) and the table below, and then include it on the line item provided in the bid form labeled “**Textura® Fee**”. This expense becomes part of the contract and billable to the City. All costs including, but not limited to, costs associated with training, entering data, and/or utilizing Textura other than the Textura Construction Payment Management System Fee are overhead and shall not be reimbursed by the City. Bidder will be responsible for any tax on the Textura fee. As with other taxes, the City will not reimburse bidder for this cost and therefore this cost should be included in bidder’s bid. Textura will invoice the awarded bidder directly.

Project Value	Project Fee (GC + Sub Usage)
\$100,000.01 – 250,000.00	\$858.00
\$250,000.01 - \$500,000.00	\$1,787.50
\$500,000.01 - \$1,000,000.00	\$3,575.00
\$1,000,000.01 - \$3,000,000.00	\$6,435.00
\$3,000,000.01 - \$5,000,000.00	\$10,010.00
\$5,000,000.01 - \$10,000,000.00	\$13,455.00
\$10,000,000.01 - \$20,000,000.00	\$22,425.00
\$20,000,000.01 - \$50,000,000.00	\$35,750.00
\$50,000,000.01 - \$100,000,000.00	\$53,625.00
\$100,000,000.01 - \$200,000,000.00	\$76,050.00

For more information:

<http://www.denvergov.org/content/denvergov/en/contract-administration/bidding-process.html>

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**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE**

BID FORM AND SUBMITTAL PACKAGE ACKNOWLEDGMENT

CONTRACT NO. 202472628

2024 CITYWIDE ADA RAMP & CONCRETE REPAIR A

BIDDER: Silva Construction Inc
(Legal Name per Colorado Secretary of State)

ADDRESS: 154 Cisne Circle
Brighton, CO 80601

CONTACT PERSON FOR ALL MATTERS RELATING TO THIS DOCUMENT

NAME: José Silva **TITLE:** President
EMAIL: silvaconstruction254@gmail.com **PHONE NUMBER:** 303-710-0543

The undersigned bidder states that the undersigned bidder has received and had an opportunity to fully and thoroughly examine a complete set of the Contract Documents for **Contract No. 202472628 - 2024 Citywide ADA Ramp & Concrete Repair A**, made available to the undersigned bidder pursuant to Notice of Invitation for Bids dated February 12, 2024.

The undersigned bidder acknowledges that a complete and final set of the Contract Documents for the referenced Project, the components of which are identified below, are bound and maintained as the record set of Contract Documents by the Contract Administration Division of the Department of Transportation and Infrastructure and that this Record Set is available for examination by the undersigned bidder.

The undersigned bidder, having thoroughly examined each of the components identified below and contained in Contract Documents, **HEREBY SUBMITS THIS BID FORM AND SUBMITTAL PACKAGE**, fully understanding that the Contract Documents, as defined in Paragraph 1 of the contract, including this executed Bid Form and Submittal Package, constitute all of the terms, conditions and requirements upon which this submission is based and further understanding that, by submission of this Bid Form and Submittal Package, the City shall rely on the representations and commitments of the undersigned bidder contained herein.

The following completed documents comprising this Bid Form and Submittal Package will be included with and, by this reference, are expressly incorporated into the Contract Documents specified at Paragraph 1 of the Contract:

- Bid Form and Submittal Package Acknowledgment Form
- Bid Form
- Bid Bond
- Certificate of Insurance

The following designated documents constitute that portion of the Contract Documents made available by the Notice of Invitation for Bids, but not included in the Bid Form and Submittal Package:

- Notice of Invitation for Bids
- Instructions to Bidders
- Addenda (as applicable)
- Equal Employment Opportunity Provisions (Appendix A and Appendix F)
- Contract Form
- General Contract Conditions
- Special Contract Conditions
- Performance and Payment Bond
- Notice to Apparent Low Bidder
- Notice to Proceed
- Contractor's Certification of Payment Form
- Final/Partial Release and Certificate of Payment
- Change Orders (as applicable)
- Federal Requirements (as applicable)
- Prevailing Wage Rate Schedule(s)
- Technical Specifications
- Contract Drawings
- Accepted Shop Drawings

The undersigned bidder expressly assumes responsibility for the complete contents of these designated documents as bound together with the Bid Form and Submittal Package submitted herewith and designated the Contract Documents.

IN WITNESS WHEREOF, the undersigned bidder has signed personally or by duly authorized officer or agent and duly attested.

BIDDER: Silva Construction Inc **ATTEST:**

Name: Josi Silva

By:  _____

By: Josi Silva

Title: President

[SEAL]

**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE**

BID FORM

CONTRACT NO. 202472628

2024 CITYWIDE ADA RAMP & CONCRETE REPAIR A

BIDDER: Silva Construction Inc
(Legal Name per Colorado Secretary of State)

TO: The Manager of the Department of Transportation and Infrastructure
City and County of Denver
c/o Contract Administration
201 West Colfax, Dept. 614
Denver, Colorado 80202

The Undersigned Bidder, having examined the plans, technical specifications, and remainder of the proposed Contract Documents as designated and enumerated in the General and Special Contract Conditions and any and all addenda thereto; having investigated the location of and conditions affecting the proposed Work; and being acquainted with and fully understanding the extent and character of the Work covered by this bid, and all factors and conditions affecting or which may be affected by Work, HEREBY SUBMITS THIS BID, pursuant to an advertisement of a Notice of Invitation for Bids as published on **February 12, 2024**, to furnish all required materials, tools, appliances, equipment and plant; to perform all necessary labor and to undertake and complete: **Contract No. 202472628 - 2024 Citywide ADA Ramp & Concrete Repair A**, in Denver, Colorado, in full accordance with and conformity to the Plans, Technical Specifications, and Contract Documents hereto attached or by reference made a part hereof, at and for the following price(s) set forth on this Bid Form.

The following documents, which taken as a whole constitute the Contract Documents for this Project, and which are incorporated herein, by reference, were made available to the Bidder as provided in the Advertisement of Notice of Invitation for Bids, were received by the bidder, and form the basis for this bid:

Advertisement of Notice of Invitation for Bids
Instructions to Bidders
Article VII of Chapter 28, D.R.M.C.
Bid Bond
Addenda (as applicable)
Equal Employment Opportunity Provisions (Appendix A and Appendix F)
Bid Form
Contract Form
General Contract Conditions
Special Contract Conditions
Performance and Payment Bond

Notice to Apparent Low Bidder
Notice to Proceed
Contractor's Certification of Payment Form
Final/Partial Release and Certificate of Payment
Final Receipt
Change Orders (as applicable)
Federal Requirements (as applicable)
Prevailing Wage Rate Schedule(s)
Technical Specifications
Contract Drawings

2024 Citywide ADA Ramp & Concrete Repair A

Contract No. 202472628

200 days

Silva Construction, Inc.: Nationwide
Mutual Insurance Company

Bid Item	Description	Qty	Units	Unit Cost	Total Cost	Unit Bid	Total Bid
202-00019	REMOVAL OF INLET	5	EA	\$250.00	\$1,250.00	\$200.00	\$1,000.00
202-00033	REMOVAL OF SIPHON	5	EA	\$250.00	\$1,250.00	\$200.00	\$1,000.00
202-00200	REMOVAL OF SIDEWALK	640	SY	\$8.00	\$5,120.00	\$18.00	\$11,520.00
202-00201	REMOVAL OF CURBHEAD	150	LF	\$6.00	\$900.00	\$9.00	\$1,350.00
202-00203	REMOVAL OF CURB AND GUTTER	6100	LF	\$6.00	\$36,600.00	\$7.00	\$42,700.00
202-00204	REMOVAL OF COMBO CURB/GUTTER	3300	LF	\$6.00	\$19,800.00	\$10.00	\$33,000.00
202-00205	REMOVAL OF DETACHED SIDEWALK	2000	SY	\$14.00	\$28,000.00	\$15.00	\$30,000.00
202-00208	REMOVAL AND RESET FLAGSTONE (INCLUDES SALVAGE AND STORAGE)	60	SY	\$26.00	\$1,560.00	\$70.00	\$4,200.00
202-00210	REMOVAL OF CONCRETE PAVEMENT	3400	SY	\$13.00	\$44,200.00	\$15.00	\$51,000.00
202-00212	REMOVAL OF CONCRETE ADA CURB RAMP	6200	SY	\$21.00	\$130,200.00	\$16.00	\$99,200.00
202-00213	COMPRESSED AIR EXCAVATION FOR TREE ROOTS	45	HR	\$210.00	\$9,450.00	\$200.00	\$9,000.00
202-00214	WATER EXCAVATION FOR TREE ROOTS	45	HR	\$210.00	\$9,450.00	\$200.00	\$9,000.00
202-00215	TREE PROTECTION FENCE	10	EA	\$53.00	\$530.00	\$200.00	\$2,000.00
202-01000	REMOVAL AND RESET OF FENCE	35	LF	\$7.00	\$245.00	\$20.00	\$700.00
203-00200	UNCLASSIFIED EXCAVATION	140	CY	\$37.00	\$5,180.00	\$100.00	\$14,000.00
203-02330	3-MAN LABOR CREW	75	HR	\$53.00	\$3,975.00	\$60.00	\$4,500.00
206-00065	STRUCTURE BACK FILL (FLOW FILL)	15	CY	\$116.00	\$1,740.00	\$150.00	\$2,250.00
208-00050	STORM DRAINAGE INLET PROTECTION	140	EA	\$21.00	\$2,940.00	\$25.00	\$3,500.00
210-00810	RESET GROUND SIGN	60	EA	\$42.00	\$2,520.00	\$80.00	\$4,800.00
210-04010	ADJUST MANHOLE/PULLBOX	30	EA	\$63.00	\$1,890.00	\$140.00	\$4,200.00
210-04011	ADJUST INLET FRAME AND ADJUSTABLE CURBHEAD	13	EA	\$103.00	\$1,339.00	\$150.00	\$1,950.00
210-04020	RESET INLET GRATE,FRAME, AND ADJUSTABLE CURB BOX (NEW CASTING)	27	EA	\$1,200.00	\$32,400.00	\$900.00	\$24,300.00
212-00050	SODDING	120	SF	\$3.00	\$360.00	\$8.00	\$960.00
212-01200	RESTORE LANDSCAPING	14100	SF	\$5.00	\$70,500.00	\$1.00	\$14,100.00
212-01201	AMENDED TOP SOIL OR LANDSCAPE PLANTER'S SOIL MIX	220	CY	\$74.00	\$16,280.00	\$100.00	\$22,000.00
304-06000	AGGREGATE BASE COURSE	1350	TON	\$26.00	\$35,100.00	\$23.00	\$31,050.00
403-00720	HBP PATCH/OVERLAY	2800	TON	\$147.00	\$411,600.00	\$128.00	\$358,400.00
412-00000	24-HOUR HIGH EARLY STRENGTH CONCRETE	275	CY	\$63.00	\$17,325.00	\$60.00	\$16,500.00
412-00001	ADD PIGMENT TO CONCRETE	30	CY	\$79.00	\$2,370.00	\$140.00	\$4,200.00
412-00100	GEO TECH MATERIAL TESTING CONCRETE	30	EA	\$580.00	\$17,400.00	\$500.00	\$15,000.00
412-00400	4" CONCRETE PAVEMENT	22	SY	\$74.00	\$1,628.00	\$80.00	\$1,760.00

412-00600	6" CONCRETE PAVEMENT	1600	SY	\$74.00	\$118,400.00	\$85.00	\$136,000.00
412-00800	8" CONCRETE PAVEMENT	1600	SY	\$89.00	\$142,400.00	\$96.00	\$153,600.00
412-01000	10" CONCRETE PAVEMENT	72	SY	\$105.00	\$7,560.00	\$140.00	\$10,080.00
412-01200	12" CONCRETE PAVEMENT	30	SY	\$121.00	\$3,630.00	\$160.00	\$4,800.00
413-00100	CONCRETE PATCHING (STRUCTURAL SURFACE REPAIR <2" DEPTH)	60	SF-IN	\$20.00	\$1,200.00	\$20.00	\$1,200.00
601-00100	PAVESTONE STACKED PRE-CAST WALL BLOCK	160	SF	\$42.00	\$6,720.00	\$20.00	\$3,200.00
601-00400	REINFORCED VARIABLE HEIGHT CONCRETE RETAINING WALL	70	SF	\$76.00	\$5,320.00	\$20.00	\$1,400.00
601-06150	CONCRETE PATCHING (STRUCTURAL CURB REPAIR)	135	LF	\$24.00	\$3,240.00	\$20.00	\$2,700.00
604-14050	NUMBER 14 INLET (L=6')	4	EA	\$2,500.00	\$10,000.00	\$3,000.00	\$12,000.00
604-16050	SINGLE NUMBER 16 INLET	4	EA	\$2,500.00	\$10,000.00	\$3,000.00	\$12,000.00
604-18050	CHASE DRAIN AND TREAD PLATE (1' WIDTH)	4	LF	\$347.00	\$1,388.00	\$450.00	\$1,800.00
604-20050	CHASE DRAIN AND TREAD PLATE (2' WIDTH)	4	LF	\$347.00	\$1,388.00	\$450.00	\$1,800.00
608-00000	CONCRETE SIDEWALK	640	SY	\$53.00	\$33,920.00	\$78.00	\$49,920.00
608-00005	DETACHED CONCRETE SIDEWALK	2000	SY	\$68.00	\$136,000.00	\$78.00	\$156,000.00
608-00010	CONCRETE CURB RAMP	6350	SY	\$89.00	\$565,150.00	\$95.00	\$603,250.00
608-00018	TRUNCATED DOMES (SPECIAL CAST IRON) MATERIAL ONLY	320	SF	\$42.00	\$13,440.00	\$49.00	\$15,680.00
609-20000	CONCRETE GUTTER OVERLAY	1000	LF	\$24.00	\$24,000.00	\$16.00	\$16,000.00
609-21020	CURB & GUTTER TYPE II, SECTION 2B	6000	LF	\$27.00	\$162,000.00	\$35.00	\$210,000.00
609-21023	CURB & GUTTER TYPE IIB (9") CURBHEAD	150	LF	\$27.00	\$4,050.00	\$45.00	\$6,750.00
609-22021	COMBO CURB, GUTTER & SIDEWALK (2'-8")	2700	LF	\$45.00	\$121,500.00	\$63.00	\$170,100.00
609-22025	COMBO CURB, GUTTER & SIDEWALK (3'-11")	640	LF	\$45.00	\$28,800.00	\$70.00	\$44,800.00
610-00026	MEDIAN COVER MATERIAL (6" PATTERNED COLORED CONCRETE)	30	SY	\$105.00	\$3,150.00	\$150.00	\$4,500.00
613-07000	RESET PULL BOX	30	EA	\$89.00	\$2,670.00	\$230.00	\$6,900.00
623-00204	SPRINKLER SYSTEM/ADJUST SPRINKLER HEAD	675	EA	\$42.00	\$28,350.00	\$49.00	\$33,075.00
623-00205	SPRINKLER SYSTEM/NEW SPRINKLER HEAD	675	EA	\$53.00	\$35,775.00	\$49.00	\$33,075.00
623-00505	SPRINKLER SYSTEM/IRRIGATION RECONSTRUCTION	6800	LF	\$6.00	\$40,800.00	\$2.00	\$13,600.00
630-00000	TRAFFIC CONTROL - ARTERIAL/COLLECTOR	55	DAY	\$750.00	\$41,250.00	\$700.00	\$38,500.00
630-00002	TRAFFIC CONTROL - LOCAL	85	DAY	\$375.00	\$31,875.00	\$700.00	\$59,500.00
630-00003	TRAFFIC CONTROL - UNIFORMED TRAFFIC CONTROL	16	HR	\$90.00	\$1,440.00	\$140.00	\$2,240.00
	Engineers Estimate of Base Bid Total:				\$2,498,518.00		
					BID ITEMS TOTAL AMOUNT		\$2,623,610.00
					TEXTURA FEE		\$6,435.00
							\$2,630,045.00

Sum of estimated cost for item numbers 202-00019 through 630-00003 (Sixty [60]) bid items and the Textura Fee equals Total Base Bid Amount:

Two million six-hundred thirty thousand Fourty-five dollars and zero cents

Dollars (\$ 2,630,045.00)

If the Manager mails a written Notice of Apparent Low Bidder, addressed to the Bidder's business address stated on this Bid Form, the Undersigned Bidder shall, in accordance with the Contract Documents, be ready to, and shall, within five (5) days after the date of the Notice: (i) execute the attached form of Contract in conformity with this bid; (ii) furnish the required proofs of insurance; and (iii) furnish the required bond or bonds in the sum of the full amount of this bid, executed by a surety company acceptable to the Manager.

The Nationwide Mutual Insurance Co, a corporation of the State of Ohio, is hereby offered as Surety on said bond. If such surety is not approved by the Manager, another and satisfactory surety company shall be furnished.

Enclosed with this bid is a bid guarantee, as defined in the attached Instructions to Bidders, in the amount of 5%. The Undersigned Bidder agrees that the entire amount of this bid guarantee is to be paid to and become the property of the City as liquidated damages, and not as a penalty, if: (i) the bid is considered to be the best by the City; (ii) the City notifies the Undersigned Bidder that it is the Apparent Low Bidder; and (iii) the Undersigned Bidder fails to execute the Contract in the form prescribed or to furnish the required bond and proofs of insurance, within five (5) days after the date of such notification.

The following persons, firms or corporations are interested with the Undersigned Bidder in this bid: N/A

Name: _____ Name: _____

Address: _____ Address: _____

If there are no such persons, firms, or corporations, please so state in the following space: N/A

The Undersigned Bidder proposes to subcontract the following Work in accordance with General Contract Conditions, Title 5, SUBCONTRACTS, and represents that, to the greatest degree practical, all subcontractors known at the time of bid submittal have been identified.

Item of Work	Percent (%) of Total; Work	Proposed Subcontractor and Address
Self-Performing All		

(Copy this page if additional room is required.)

The undersigned Bidder acknowledges the right of the City to reject any or all bids submitted, to waive informalities in bids and to re-advertise this Project for bids.

The undersigned certifies that it has carefully checked all words and figures and all statements made in these Bid Forms.

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.

Business Address of Bidder: 154 Cisne Circle

City, State, Zip Code: Brighton, CO 80601

Telephone Number of Bidder: 303-710-0543

Fax No. 888-689-9850

Social Security or Federal Employer ID Number of Bidder: 26-3990896

Name and location of the last work of this kind herein contemplated upon which the Bidder was engaged:

2023 Citywide ADA Ramp & Concrete PH 3

For information relative thereto, please refer to:

Name: Derek Miles

Title: Project Manager

Address: 2000 W. 3rd Ave., Denver, CO 80223

The undersigned acknowledges receipt, understanding, and full consideration of the following addenda to the Contract Documents:

Addenda Number _____ Date _____

Addenda Number _____ Date _____

Addenda Number _____ Date _____

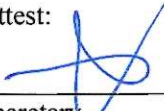
Dated this 14th day of March, 2024.

Signature of Bidder:

If an Individual: _____ doing business
as _____.

If a Partnership: _____
by: _____ General Partner.

If a Corporation: Silva Construction Inc
a Colorado Corporation,
by: Jose Silva, its President.

Attest:


Secretary (Corporate Seal)

If a Joint Venture, signature of all Joint Venture participants.

Firm: _____
Corporation (), Partnership () or () Limited Liability Company

By: _____ (If a Corporation)
Attest: _____
Title: _____
Secretary (Corporate Seal)

Firm: _____
Corporation (), Partnership () or () Limited Liability Company

By: _____ (If a Corporation)
Attest: _____
Title: _____
Secretary (Corporate Seal)

Firm: _____
Corporation (), Partnership () or () Limited Liability Company

By: _____ (If a Corporation)
Attest: _____
Title: _____
Secretary (Corporate Seal)

**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE**

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT Silva Construction, Inc., as Principal, and Nationwide Mutual Insurance Company, a corporation organized and existing under and by virtue of the laws of the State of Ohio, 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 full and just sum of Five Percent (5%) of the Total Bid Amount Dollars, (\$5% of Bid Amount), 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 March 14th, 2024, for the construction of: **Contract No. 202472628 - 2024 Citywide ADA Ramp & Concrete Repair A**, 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 therefore, 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 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.

Signed, sealed and delivered this 14th day of March, 2024.

ATTEST

Secretary Jose L. Silva, Secretary/Treasurer

Silva Construction, Inc.
Principal
By: Jose Silva
Title: Jose Silva, President

Nationwide Mutual Insurance Company
Surety
By: 
Tim Mitchell, Attorney-in-Fact
[SEAL]

Seal if Bidder is Corporation
(Attach Power-of-Attorney)

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:
TIM MITCHELL; WILLIAM R GREER;

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

UNLIMITED

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 20th day of August, 2021.



Antonio C. Albanese, Vice President of Nationwide Mutual Insurance Company

ACKNOWLEDGMENT

STATE OF NEW YORK COUNTY OF NEW YORK: ss

On this 20th day of August, 2021, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.



Stephanie Rubino McArthur
Notary Public, State of New York
No. 02MC6270117
Qualified in New York County
Commission Expires October 19, 2024

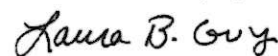


Notary Public
My Commission Expires
October 19, 2024

CERTIFICATE

I, Laura B. Guy, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 14th day of March, 2024.



Assistant Secretary

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DENVER
THE MILE HIGH CITY

DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

Bid Documents Package

Contract Number: 202472628

2024 Citywide ADA Ramp & Concrete Repair A

February 12, 2024

**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE
SBE Defined Pool**

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CITY AND COUNTY OF DENVER

**NOTICE OF INVITATION FOR BIDS
FOR CONTRACT NO. 202472628**

2024 CITYWIDE ADA RAMP & CONCRETE REPAIR A

BID SCHEDULE:

11:00 a.m., Local Time

March 14, 2024

Bids will be received and accepted via the online electronic bid service, www.QuestCDN.com. Bids must be submitted via QuestCDN no later than **March 14, 2024 at 11:00 a.m.** To access the electronic bid form, download the required documents from QuestCDN and click online bidding button at the top of the advertisement. Prospective bidders must be on the plan holders list at QuestCDN for bids to be accepted. Bidders will be charged a fee of \$30.00 to submit a bid electronically. All properly uploaded bids will then be opened, witnessed and read aloud.

GENERAL STATEMENT OF WORK:

The work will consist of removal of deficient concrete ADA ramps, curbs, gutters, sidewalk panels, valley gutters, concrete streets, and alley pavement. The concrete will be replaced to restore the structure to its original condition. If the asphalt pavement is damaged during construction the surrounding area will be removed and replaced with new asphalt. If landscaping and/or sprinklers are damaged during construction, they will be replaced.

PRE-BID MEETING:

A **virtual pre-bid meeting** will be held for this Project at **1:00 p.m.**, local time, on **February 21, 2024**. The teleconference call-in number and conference ID can be found on the project page at www.work4denver.com.

ESTIMATED CONSTRUCTION COST:

The estimated cost of construction for this project is between \$2,250,000.00 and \$2,750,000.00.

DOCUMENTS AND BID INFORMATION AVAILABLE:

Contract Documents complete with Technical Specifications and, if applicable, construction drawings will be available on the first day of publication at: www.work4denver.com. To download digital Contract Documents at a cost of \$15.00 per download, reference eBid Document Number **#8960984**. Contact QuestCDN at 952-233-1632 or info@questcdn.com for assistance.

DEADLINE TO SUBMIT QUESTIONS: February 28, 2024 by 3:00 p.m. local time.

PREQUALIFICATION REQUIREMENTS:

Each bidder must be prequalified in category **1F(3) CONCRETE SIDEWALK, CURB, GUTTER AND ADA RAMPS** at or above the **\$3,000,000.00** 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 B2Gnow. To view the Rules and information on how to apply, please visit our website at www.denvergov.org/prequalification.

SMALL BUSINESS ENTERPRISE DEFINED POOL PARTICIPATION:

Article VII, of Chapter 28 of the Denver Revised Municipal Code (D.R.M.C.) grants authority to the Division of Small Business Opportunity (DSBO) to establish participation requirements under the Small Business Enterprise (SBE) defined pool program as related to expenditures and related contracts by and through the City and County of Denver. The participation requirement for this project is:

Small Business Enterprise (SBE) Defined Pool

Award will be strictly limited to SBE firms certified with the City and County of Denver on or before the bid due date. § 28-207 D.R.M.C. The SBE contractor self-performance requirement is 30%.

MISCELLANEOUS:

Contracts for construction, reconstruction, and remodeling are subject to the City prevailing wage rate requirements established pursuant to Section 20-76, D.R.M.C.

City contracts are subject to payment of City Minimum Wage established pursuant to Section 20-82 through 20-84 D.R.M.C.

As its best interest may appear, the City and County of Denver reserves the right to reject any or all bids and to waive informalities in bids.

A modified version of this Notice of Invitation for Bids and the Project's Statement of Quantities is available on the City and County of Denver's website at: www.work4denver.com.

Publication Dates: February 12, 13, 14, 2024
Published In: The Daily Journal

**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE**

STATEMENT OF QUANTITIES

ITEM NO.	DESCRIPTION	QTY	UNIT
202-00019	REMOVAL OF INLET	5	EA
202-00033	REMOVAL OF SIPHON	5	EA
202-00200	REMOVAL OF SIDEWALK	640	SY
202-00201	REMOVAL OF CURBHEAD	150	LF
202-00203	REMOVAL OF CURB AND GUTTER	6,100	LF
202-00204	REMOVAL OF COMBO CURB/GUTTER	3,300	LF
202-00205	REMOVAL OF DETACHED SIDEWALK	2,000	SY
202-00208	REMOVAL AND RESET FLAGSTONE (INCLUDES SALVAGE AND STORAGE)	60	SY
202-00210	REMOVAL OF CONCRETE PAVEMENT	3,400	SY
202-00212	REMOVAL OF CONCRETE ADA CURB RAMP	6,200	SY
202-00213	COMPRESSED AIR EXCAVATION FOR TREE ROOTS	45	HR
202-00214	WATER EXCAVATION FOR TREE ROOTS	45	HR
202-00215	TREE PROTECTION FENCE	10	EA
202-01000	REMOVAL AND RESET OF FENCE	35	LF
203-00200	UNCLASSIFIED EXCAVATION	140	CY
203-02330	3-MAN LABOR CREW	75	HR
206-00065	STRUCTURE BACK FILL (FLOW FILL)	15	CY
208-00050	STORM DRAINAGE INLET PROTECTION	140	EA
210-00810	RESET GROUND SIGN	60	EA
210-04010	ADJUST MANHOLE/PULLBOX	30	EA
210-04011	ADJUST INLET FRAME AND ADJUSTABLE CURBHEAD	13	EA
210-04020	RESET INLET GRATE,FRAME, AND ADJUSTABLE CURB BOX (NEW CASTING)	27	EA
212-00050	SODDING	120	SF
212-01200	RESTORE LANDSCAPING	14,100	SF
212-01201	AMENDED TOP SOIL OR LANDSCAPE PLANTER'S SOIL MIX	220	CY
304-06000	AGGREGATE BASE COURSE	1,350	TON
403-00720	HBP PATCH/OVERLAY	2,800	TON
412-00000	24-HOUR HIGH EARLY STRENGTH CONCRETE	275	CY
412-00001	ADD PIGMENT TO CONCRETE	30	CY
412-00100	GEO TECH MATERIAL TESTING CONCRETE	30	EA
412-00400	4" CONCRETE PAVEMENT	22	SY
412-00600	6" CONCRETE PAVEMENT	1,600	SY
412-00800	8" CONCRETE PAVEMENT	1,600	SY
412-01000	10" CONCRETE PAVEMENT	72	SY
412-01200	12" CONCRETE PAVEMENT	30	SY
413-00100	CONCRETE PATCHING (STRUCTURAL SURFACE REPAIR <2" DEPTH)	60	SF-IN
601-00100	PAVESTONE STACKED PRE-CAST WALL BLOCK	160	SF
601-00400	REINFORCED VARIABLE HEIGHT CONCRETE RETAINING WALL	70	SF
601-06150	CONCRETE PATCHING (STRUCTURAL CURB REPAIR)	135	LF
604-14050	NUMBER 14 INLET (L=6')	4	EA
604-16050	SINGLE NUMBER 16 INLET	4	EA
604-18050	CHASE DRAIN AND TREAD PLATE (1' WIDTH)	4	LF
604-20050	CHASE DRAIN AND TREAD PLATE (2' WIDTH)	4	LF
608-00000	CONCRETE SIDEWALK	640	SY

**CITY AND COUNTY OF DENVER
DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE**

STATEMENT OF QUANTITIES

ITEM NO.	DESCRIPTION	QTY	UNIT
608-00005	DETACHED CONCRETE SIDEWALK	2,000	SY
608-00010	CONCRETE CURB RAMP	6,350	SY
608-00018	TRUNCATED DOMES (SPECIAL CAST IRON) MATERIAL ONLY	320	SF
609-20000	CONCRETE GUTTER OVERLAY	1,000	LF
609-21020	CURB & GUTTER TYPE II, SECTION 2B	6,000	LF
609-21023	CURB & GUTTER TYPE IIB (9") CURBHEAD	150	LF
609-22021	COMBO CURB, GUTTER & SIDEWALK (2'-8")	2,700	LF
609-22025	COMBO CURB, GUTTER & SIDEWALK (3'-11")	640	LF
610-00026	MEDIAN COVER MATERIAL (6" PATTERNED COLORED CONCRETE)	30	SY
613-07000	RESET PULL BOX	30	EA
623-00204	SPRINKLER SYSTEM/ADJUST SPRINKLER HEAD	675	EA
623-00205	SPRINKLER SYSTEM/NEW SPRINKLER HEAD	675	EA
623-00505	SPRINKLER SYSTEM/IRRIGATION RECONSTRUCTION	6,800	LF
630-00000	TRAFFIC CONTROL - ARTERIAL/COLLECTOR	55	DAY
630-00002	TRAFFIC CONTROL - LOCAL	85	DAY
630-00003	TRAFFIC CONTROL - UNIFORMED TRAFFIC CONTROL	16	HR

CITY AND COUNTY OF DENVER INSTRUCTIONS TO BIDDERS

IB-1 INSTRUCTION TO BIDDERS

These Instructions to Bidders are a part of the Contract Documents and are intended to serve as a guide to bidders. They are general in nature and may be amended or supplemented as needed to support any one specific invitation to bid. Each bidder shall prepare its bid in strict compliance with all requirements of the Contract Documents and by careful application of these instructions.

IB-2 BIDDING

The copy of the Contract Documents contains the Bid Form and Submittal Package for this Project, which must be used to submit a bid hereunder. The bidder must fully complete, execute and submit this Bid Form and Submittal Package, along with any other specified components of the Contract Documents, via QuestCDN.com's electronic bidding platform as its bid for the referenced Project.

A bidder is not required to submit as part of its bid the entire set of Contract Documents distributed by the City pursuant to the Notice of Invitation for Bids, if the bidder executes and submits the Bidder Acknowledgment Form included with the Bid Form and Submittal Package as part of its bid. However, each bidder, by submitting its bid, shall be conclusively presumed to have received and reviewed all of the information contained in the Contract Documents as this term is further defined herein.

Bid guarantee will be accepted electronically as part of the Bid packet submitted via QuestCDN, The bid guarantee must be received by the City within seven calendar days following the bid opening date to:

Department of Transportation and Infrastructure
Attention: Contract Administration
201 W. Colfax Ave. Dept. 614
Denver, CO 80202

IB-3 CONTRACT DOCUMENTS AS PUBLISHED BY CITY

Each bidder shall be responsible for, and shall be deemed to have received, all the information contained in the Contract Documents as printed and distributed in hard copy by the City pursuant to the Notice of Invitation for Bids, including addenda, whether or not such bidder has reviewed all or part of the Contract Documents in either its hard copy form or in any other format. If organizations or companies other than the City or its design professional distribute the City's Contract Documents for review by prospective bidders, whether in hard copy or via electronic or other media, neither the City nor its design professional shall be responsible for the content, completeness or accuracy of any information distributed or transmitted by any such organization or company.

IB-4 COMPLETING AND SIGNING THE BID FORMS

The bidder must complete the Bid Form by legibly writing or printing in ink, in words and figures as required, all the bidder's prices offered for the Work to be performed. All blank spaces, which require a response of the bidder, must be properly completed in full. If in the process of evaluating a bid, words and figures, as written on the Bid Form by the bidder, do not agree, the written words will govern.

For Bid Forms requiring unit price bids, the bidder shall enter in the Bid Worksheet spaces provided a unit price for each item for which a quantity is given.

Each bidder must sign the Bid Form and give the bidder's current business address. 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 corporation, both the president and the secretary must sign and the seal of the corporation

must be affixed to be visible via electronic format. Signatures of other persons may be acceptable if the bid contains sufficient evidence, satisfactory to the City in its sole discretion, to indicate that the other persons are authorized to bind the bidder.

IB-5 UNACCEPTABLE BIDS

The City will not accept bids from Bidders not prequalified with the City (if prequalification is required for this project), in arrears to the City upon debt or contract, or which are defaulters (as surety or otherwise) upon any obligation to the City.

IB-6 INFORMAL AND UNBALANCED BIDS

Any alteration, interlineation, erasure, omission, deletion or addition by the bidder to the Bid Form and Submittal Package or other parts of the Contract Documents submitted with the Bid Form and Submittal Package, as originally issued to the bidder, shall render the accompanying bid informal and may constitute cause for rejection.

Any unauthorized addition, conditional or alternate bids, failure to provide a unit price, lump sum amount or authorized alternate item specified or other irregularities of any kind which tend to render the bid incomplete, indefinite or ambiguous shall render the bid informal and may constitute cause for rejection.

Bids that are unbalanced so that each item does not reasonably carry its own proportion of cost or that contain inadequate or unreasonable prices for any item may be rejected. Bids, which have not acknowledged all addenda to the Contract Documents issued for this bid, may also be rejected.

The right is reserved by the City to reject any or all bids and to waive any informalities where it is deemed by the City to be in the best interests of the City to do so.

IB-7 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 business enterprise.

IB-8 BID GUARANTEE

As a guarantee of good faith on the part of the bidder, each bid 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 corporate surety in favor of the City and County of Denver. If the bid of a bidder is acceptable and the bidder is notified by the Manager that it is considered to be the Apparent Low Bidder and said bidder fails to execute a contract in the form prescribed or to furnish a performance and payment bond with a legally responsible and approved surety or to furnish the required evidence of insurance or satisfy all conditions precedent to contract execution within five (5) 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 total bid unless otherwise specified in the Notice of Invitation for Bids and on the form appearing in the Contract Documents in the Bid Form and Submittal Package. Failure to submit a properly executed bid guarantee, on the form provided herein may, in the City's sole discretion, constitute cause for rejection.

Following award and execution of the Contract by the Apparent Low Bidder, or earlier in the sole discretion of the City, bid guarantees of all but the Apparent Low Bidder will be returned. When the Apparent Low Bidder executes the Contract and delivers to the City satisfactory performance and payment bonds, required insurance documentation, and has satisfied all conditions precedent to contract execution by the City, and after approval, if any, by the Council of the City of the proposed Contract with the Apparent Low Bidder,

the bid guarantee of the Apparent Low Bidder shall be returned. Such return shall be made within one hundred twenty (120) days from date bids are opened unless otherwise specified in the Special Contract Conditions.

IB-9 SITE INSPECTION AND INVESTIGATIONS

Prior to submitting a bid, the bidder is invited to inspect the work site and its surroundings. Although the bidder is not required to make such an inspection before bidding, for purposes of the Contract it shall be conclusively presumed that by failing to make such an inspection, the bidder has waived the right to later claim additional compensation or time extensions for conditions which would have been evident had the site been inspected.

Drawings and Technical Specifications, defining the Work to be done, were prepared on the basis of interpretation by the design professionals of information derived from investigations of the work site. Such information and data are subject to sampling errors, and the interpretation of the information and data depends to a degree on the judgment of the design professional. In view of this, the bidder is invited to make such additional investigations as the bidder's judgment dictates the need for such investigations. Information about the degree of difficulty of the Work to be done cannot totally be derived from either the Drawings or Technical Specifications or from the Manager or his representatives.

Since the bid information cannot be guaranteed, the Contractor shall have assumed the risks attendant to successful performance of the Work and shall never make claim for additional compensation 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 the bidding.

IB-10 INCONSISTENCIES

Any seeming inconsistencies or ambiguities between different provisions of the Contract Documents or any point which the bidder believes requires a decision or interpretation by the City must be inquired into by the bidder by addressing a formal written communication to the Manager of the Department of Transportation and Infrastructure and sending or delivering it to the office advertising this Project for bid at least forty-eight (48) hours, excluding Saturdays, Sundays, and holidays, before the time set for the opening of bids.

Information about the decision or interpretation made in response to any inquiry will be posted on www.work4denver.com. If the matter raised requires, in the sole discretion of the Manager, that an addendum to the bid documents be issued, such addendum will be published, and each bidder shall be required to acknowledge the addendum by signing and identifying it in the Bid Form when submitting the bid.

After bids are opened, all bidders must abide by the formal response of the Manager, as to any interpretation. The City shall not be bound, and the bidder shall not rely on any oral communication, interpretation clarification or determination of the Contract Documents prior to bid opening.

IB-11 WITHDRAWAL OF BID

A bidder may withdraw its bid at any time prior to the time for receipt of bids set forth in the Notice of Invitation for Bids by making written request upon the Manager of the Department of Transportation and Infrastructure. After such time, no bid may be withdrawn or modified.

Such request must be signed by the persons authorized to bind the bidder as defined in IB-4, **COMPLETING AND SIGNING BID FORMS**.

IB-12 WEBSITE

It shall be conclusively presumed that the bidder has, before submitting any bid, read and shall take full responsibility for all addenda, posted decisions, and other information relevant to the bid posted by the City on the www.QuestCDN.com website.

IB-13 PRE-BID MEETING

Bidders are urged to attend the pre-bid meeting(s) scheduled for this Project. Attendance is not mandatory; however, bidders will be held responsible for all information presented at such meeting(s).

IB-14 ADDENDA

As its best interests may require, the City may issue addenda to the Contract Documents. Such addenda shall be made available to all persons having purchased a set of Contract Documents as set forth in the Notice of Invitation for Bids contained herein. All bidders must acknowledge receipt of all addenda on the Bid Form at the time of submission of the bid.

IB-15 VIRTUAL BID OPENING

Unless otherwise suspended, delayed or canceled by posted notice from the Manager, bid opening will occur via teleconference at the time designated in the Notice of Invitation for Bid.

IB-16 EVALUATION OF BIDS AND BASIS OF BID SELECTION

Bids will be evaluated after being read out loud on the date and at the time designated in the legal advertisement. All bids will be reviewed for responsiveness to the requirements of the Contract Documents and whether or not the bids contain irregularities which could give any bidder an unfair advantage.

The Base Bid Total shall include the Textura Fee and any applicable allowances and/or force accounts. Alternates, if any are included in the bid, will be selected in the priority shown on the Bid Form, subject to the limits of available funds. Selection will be made on the basis of the lowest, total, responsive, qualified base bid plus the total of any alternates set forth on the Bid Form and selected by the City during evaluation. Bid selection will be subject to all requirements and special bidder qualifications contained herein and subject to approval of such resulting Contract in accordance with the Charter and Revised Municipal Code of the City and County of Denver. In addition to all other specified requirements, the City will correct arithmetical errors in all bids and corrected totals only will be considered as the basis of selection.

Upon concluding that the bid is, in fact, the lowest, total, responsive bid to the bidding conditions and that of a responsible, qualified bidder, the City will notify the Apparent Low Bidder.

As its best interests may appear, the City and County of Denver reserves the right to waive informalities in bids, to reject any and all bids and to rebid the Project.

IB-17 NOTICE TO APPARENT LOW BIDDER

The Notice to Apparent Low Bidder, a form of which is included in the Contract Special Conditions Section of the Contract Documents, is issued by the City directly to the selected bidder and informs the bidder that the Manager intends to seek approval of the execution of the Contract by the City in accordance with the Charter and Revised Municipal Code of the City and County of Denver. Specifically, it informs the bidder of its obligations with respect to execution of the Contract and instructs the bidder on how to proceed toward execution of the Contract. The City reserves the right to notify the Apparent Low Bidder, at any time within one hundred twenty (120) days from the date of the opening of the bids, that approval to contract with the Apparent Low Bidder shall be sought in accordance with the Charter and Revised Municipal Code of the City and County of Denver.

In accordance with the terms and conditions contained in the Bid Form and Submittal Package and any additional requirements set forth in the Notice to Apparent Low Bidder or elsewhere in the Contract Documents, the Apparent Low Bidder shall execute the Contract Form contained in the Contract Documents made available by the City for execution in the appropriate number of counterparts. The Apparent Low Bidder shall return the fully executed Contract Document sets, along with any supplemental documents required herein, to the City and shall comply with all other conditions precedent to Contract execution within five (5) days of the date of issuance of the Notice to Apparent Low Bidder by the City. Failure to comply with each of these requirements within five (5) days of the date of issuance of the Notice to Apparent Low Bidder by the City shall render the bid nonresponsive and may constitute cause for rejection.

Issuance of such Notice shall not, however, constitute a commitment on the part of the City or create any rights in the Apparent Low Bidder to any contract with the City.

IB-18 EXECUTION OF CONTRACT

The process of executing a contract requires action by both the apparent low bidder and the City. After the City notifies the Apparent Low Bidder, the successful bidder shall provide certain supplemental documents for incorporation into the Contract Documents. These supplemental documents shall include: the properly executed Certificate of Insurance Forms evidencing the apparent low bidder's satisfactory compliance with the insurance requirements set forth in the Contract Documents; a properly executed Payment and Performance Bond Form and appropriate Power of Attorney evidencing the Apparent Low Bidder's satisfactory compliance with the bonding requirements set forth in the Contract Documents; and documentation of compliance with any other conditions precedent to execution of the Contract by the City set forth in the Contract Documents. The insurance and bond forms contained in the Contract Special Conditions Section of the Contract Documents must be used in satisfying these supplemental document requirements. The City will prepare the Contract Documents by incorporating all of the documents submitted by the Apparent Low Bidder into an executable contract, which the Apparent Low Bidder will sign electronically.

From here, all of the documents are forwarded to the City Attorney who will, if the insurance and bonding offered is acceptable and if all other elements of the Contract Documents are in order, recommend that the Manager and the Mayor approve the documents and, when required by the City Charter, prepare an ordinance for submittal to City Council authorizing the execution of the Contract. The City Attorney shall in all applicable instances submit the proposed contract and ordinance to City Council. After City Council approval, the Contract shall be reviewed by the City Attorney and routed for execution by the Mayor, the Clerk for attestation and the Auditor for countersignature and registration. When the total process of contract execution is complete, a Notice to Proceed will be issued and a single executed copy of the Contract will be delivered to the Contractor. Any work performed or a material purchased prior to the issuance of Notice to Proceed is at the Contractor's risk.

IB-19 BONDING REQUIREMENTS

In accordance with the provisions of General Contract Conditions, Title 15, PERFORMANCE AND PAYMENT BONDS, the minimum bonding requirements for this Contract are set forth in the form **CITY AND COUNTY OF DENVER PERFORMANCE AND PAYMENT BOND** contained in the Special Conditions Section of the Contract Documents. Upon receipt of Notice to Apparent Low Bidder, the apparent low bidder must cause this form bond to be purchased, executed and furnished, along with appropriate Powers of Attorney and a surety authorization letter (in form similar to the one attached), to the City in accordance with the instructions contained herein.

IB-20 INSURANCE REQUIREMENTS

The minimum insurance requirements for this Contract are set forth in the Special Conditions Section of the Contract Documents. Bidders are urged to consider, in preparing a bid hereunder, that each condition, requirement or specification set forth in the form certificate must be complied with by the Contractor and all subcontractors performing Work on the Project, unless such requirements are specifically accepted in writing by the City's Risk Management Administrator. The Contractor must either include all subcontractors performing work hereunder as insureds under each required policy or furnish a separate certificate for each subcontractor. In either case, the Contractor shall insure that each subcontractor complies with all of the coverage requirements.

IB-21 PERMITS AND LICENSES

All permits, licenses and approvals required in the prosecution of the work shall be obtained and paid for by the Contractor.

IB-22 RESERVED

IB-23 PAYMENT OF CITY MINIMUM WAGE

Contractor shall comply with, and agrees to be bound by, all requirements, conditions, and City determinations regarding the City's Minimum Wage Ordinance, Sections 20-82 through 20-84 D.R.M.C, 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 foregoing D.R.M.C. Sections.

Instances in which a worker is covered by both Prevailing Wage rate requirements and City Minimum Wage rate requirements, Contractor shall pay every covered worker the greater of the two.

The services being requested in this solicitation may involve services that are covered pursuant to Division 3.75 of 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. Contractor agrees that any contract with the City shall include a requirement that Contractor will comply with the provisions of D.R.M.C. §§20-82 through 20-84, 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 Contract. Additionally, Contractor agrees that the contract shall require compliance with all current and future federal and state laws and City ordinances.

IB-24 TAX REQUIREMENTS

General. Bidders are referred to the General Contract Condition 323, TAXES, as to taxes to which they 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 Contract Conditions and not in lieu of them.

Sales and Use Tax. The City of Denver imposes consumer use tax on all construction and building materials used on any construction project located in Denver. Denver does not exempt governmental or charitable projects.

It is the responsibility of the Contractor and its subcontractors 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 include Denver sales/use tax, Occupational Privilege taxes, and shall not include in their bid amounts the exempt state, RTD, and Cultural Facilities District Sales and Use Taxes.

Denver Occupational Privilege Tax. Any employee working for a contractor, or a subcontractor, who earns \$500 or more 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.

IB-25 RESERVED

IB-26 SMALL BUSINESS ENTERPRISE (SBE) DEFINED POOL REQUIREMENTS

The Division of Small Business Opportunity (DSBO) has designated a Small Business Enterprise (SBE) requirement for this project, bid requirements for which are set forth in below. This procurement and resulting contract are governed by Article VII, of Chapter 28 of the Denver Revised Municipal Code (D.R.M.C.) (the “DSBO Ordinance”) and accompanying rules and regulations (collectively, the “SBE Program”). Throughout the life of the contract, the awarded Contractor (the “Contractor”) will be required to comply with the SBE Program. Failure by the Contractor to comply therewith during the performance of the contract is a material breach of the contract, which may result in the imposition of sanctions on the Contractor, as deemed appropriate by DSBO.

The City and County of Denver (“City”) is committed to advancing its vision of equity, diversity, inclusion, and sustainability through growing the capacity of historically underutilized businesses, which include SBE firms, providing significant contracting opportunities, and ensuring they benefit from said contracts.

Counting SBE Participation

During performance, accounting of SBE participation will be maintained for all purchase orders, task orders, and work orders, which participation will collectively be applied to the contract’s overall SBE self-performance attainment.

If the SBE is a supplier, the degree to which their participation counts towards satisfaction of the SBE self-performance requirement varies. If materials or supplies are obtained from a SBE manufacturer, one hundred percent (100%) of the cost of the materials or supplies counts toward the requirement. Sixty percent (60%) of the value of the commercially useful function performed by SBE regular dealers counts toward satisfaction of the requirement. Only the bona fide commissions earned by manufacturer representatives or brokers for their performance of a commercially useful function counts toward meeting the requirement. Therefore, Bidder must separate 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 SBE self-performance requirement.

Should any designated alternate be selected by the City for inclusion in the contract ultimately awarded, the SBE 30% self-performance requirement 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.

SBE Responsiveness Requirements

DSBO has designated this procurement as SBE defined pool. Accordingly, award will be strictly limited to certified SBE firms. § 28-207 D.R.M.C. Conditions of responsiveness are listed below; failure to submit a responsive submission constitutes cause for rejection thereof.

1. Certification

Before the bid due date, the bidder (“Bidder”) must be SBE certified by the City in the NAICS work code(s) that coincide with the scope of work they will be performing for SBE self-performance credit. DSBO maintains an SBE Directory (“Directory”), which is a current listing of SBEs that have been

certified by the City. The Directory may be accessed via the DSBO web site at <https://www.denvergov.org/dsbo>.

2. Joint Ventures

If Bidder is participating in a joint venture with a non-SBE firm, bidder must submit the firm's Joint Venture Agreement to DSBO **at least 10 working days prior to the bid-response submission**. The Joint Venture must be approved by DSBO.

A Joint Venture is an association of an SBE firm and one or more other non-SBE firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital efforts, skills and knowledge, and in which the SBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

DSBO will count a portion of the total dollar value of the joint venture contract toward the SBE self-performance requirement equal to the distinct, clearly defined portion of the work that the SBE performs with its own forces in a NAICS code in which the firm is SBE certified. The joint venture agreement **MUST** specify the services, dollar value, reporting structure, and details of the SBE's performance requirements associated with their percent of the joint venture ownership.

3. Authority

The DSBO Ordinance and rules and regulations promulgated pursuant thereto apply to this project and are incorporated into these solicitation documents by reference. Compliance with those, and any additional requirement contained herein, are conditions of responsiveness. The DSBO Ordinance, its accompanying rules and regulations, and additional SBE guidance are available here: <https://www.denvergov.org/dsbo>. Bidder is encouraged to contact the procuring agency/Buyer with specific questions related to compliance therewith, who will coordinate with DSBO to reply to Bidder's questions.

IB-27 DISCLOSURE OF INFORMATION

All submissions and other materials provided or produced pursuant to this Invitation for Bids may be subject to the Colorado Open Records Law, C.R.S. 24-72-201, et seq. As such, bidders are urged to review these disclosure requirements and any exceptions to disclosure of information furnished by another party and, prior to submission of a bid to the City, appropriately identify materials that are not subject to disclosure. In the event of a request to the City for disclosure of such information, the City shall advise the bidder of such request to give the bidder an opportunity to object to the disclosure of designated confidential materials furnished to the City. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and each bidder agrees to intervene in such lawsuit to protect and assert its claims of privilege against disclosure of such material. Each bidder further agrees to defend, indemnify and save and hold harmless the City, its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of the bidder's intervention to protect and assert its claims of privilege against disclosure under the Open Records Law including, but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

IB-28 GENERAL BIDDING INFORMATION

Bidders are instructed to contact the Contract Administrator designated below for this Project for pre-bid, post-bid and general City bidding information. Bidders can also visit www.work4denver.com for information, both general and project specific. The Contract Administrator assigned to this project is **Micaela Martinez** who can be reached via email at DOTI.Procurement@denvergov.org.

IB-29 PAYMENT PROCEDURE REQUIREMENTS

Textura® Construction Payment Management System (“Textura”)

Bidder recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (“Textura”) for this Project to request payment from the City and to pay all first-tier subcontractors and suppliers and further record payment to all certified subcontractors or suppliers that are listed for participation towards any assigned program goal. All fees associated with Textura are to be paid by the bidder for billings for work performed. Bidders are required, when preparing a bid, to enter the price of Textura on the line provided for the service on the Bid Worksheet. The fee is all inclusive of all subcontractor, project and subscription fees associated with Textura. The bidder will calculate the fee based on their Base Bid Total (including Force Accounts and Allowances but not including any alternates, if applicable) and the table below, and then include it on the line item provided in the bid form labeled “Textura® Fee”. This expense becomes part of the contract and billable to the City. All costs including, but not limited to, costs associated with training, entering data, and/or utilizing Textura other than the Textura Construction Payment Management System Fee are overhead and shall not be reimbursed by the City. Bidder will be responsible for any tax on the Textura fee. As with other taxes, the City will not reimburse bidder for this cost and therefore this cost should be included in bidder’s bid. Textura will invoice the awarded bidder directly.

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**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.

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RULE 11 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.

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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.

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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.

Revised: 04/12/91

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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.

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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.

Revised: 10/02/90

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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.

MICHAEL D. MUSGRAVE
Manager of Public Works
City and County of Denver

Revised: 10/19/93

EEO-F1

A. **REQUIREMENTS --AN AFFIRMATIVE 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 minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade are as follows:

<p>GOALS FOR MINORITY PARTICIPATION FOR EACH TRADE</p> <p>From January 1, 1982 to 21.7% - 23.5% Until Further Notice</p>	<p>GOALS FOR FEMALE PARTICIPATION FOR EACH TRADE</p> <p>From January 1, 1982 to 6.9% Until Further Notice</p>
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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).

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

Revised: 10/02/90

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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.

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:

Revised: 11/12/82

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- 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.

Revised: 10/19/93

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- 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

Revised: 10/19/93

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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.

Revised: 10/19/93

EEO-F6

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".

Revised: 09/26/90

EEO-F7

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.

Revised: 10/19/93

EEO-F8

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.

Revised: 04/12/91

EEO-F9

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.

Revised: 04/12/91

EEO-F10

**CITY AND COUNTY OF DENVER
CONTRACT NO. 202472628**

2024 CITYWIDE ADA RAMP & CONCRETE REPAIR A

CONTRACT

THIS CONTRACT AND AGREEMENT, made and entered into by and between the City and County of Denver, a municipal corporation of the State of Colorado, hereinafter referred to as the "City," party of the first part, and contractor listed below, hereinafter referred to as the "Contractor," party of the second part,

**Silva Construction, Inc.
154 Cisne Circle
Brighton, CO 80601**

WITNESSETH, commencing on **February 12, 2024**, and for at least three (3) days the City advertised that sealed bids would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the following:

<p>CONTRACT NO. 202472628</p> <p>2024 CITYWIDE ADA RAMP & CONCRETE REPAIR A</p>

WHEREAS, bids pursuant to said advertisement have been received by the Manager of the Department of Transportation and Infrastructure, who has recommended that a Contract for said work be made and entered into with the above-named Contractor who was the lowest, responsive, qualified bidder therefore, and

WHEREAS, said Contractor is now willing and able to perform all of said work in accordance with said advertisement and its bid.

NOW THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual agreements hereinafter contained, and subject to the terms hereinafter stated, it is mutually agreed as follows:

1. CONTRACT DOCUMENTS

It is agreed by the parties hereto that the following list of documents, instruments, technical specifications, plans, drawings and other materials which are attached hereto and bound herewith, incorporated herein by reference or otherwise referenced in these documents constitute and shall be referred to either as the "Contract Documents" or the "Contract," and all of said documents, instruments, technical specifications, Plans, Drawings and other materials taken together as a whole constitute the Contract between the parties hereto, and they are as fully a part of this agreement as if they were set out verbatim and in full herein:

- Advertisement of Notice of Invitation for Bids*
- Instructions to Bidders*
- Article VII, Chapter 28, D.R.M.C.*
- Bid Bond*
- Addenda (as applicable)*
- Equal Employment Opportunity Provisions (Appendix A and Appendix F)*
- Bid Form*
- Contract Form*

General Contract Conditions
Special Contract Conditions
Performance and Payment Bond
Notice to Apparent Low Bidder
Notice to Proceed
Contractor's Certification of Payment Form
Final/Partial Release and Certificate of Payment
Change Orders (as applicable)
Federal Requirements (as applicable)
Prevailing Wage Rate Schedule(s)
Technical Specifications
Contract Drawings
Accepted Shop Drawings

2. SCOPE OF WORK

The Contractor agrees to and shall furnish all labor, tools, supplies, equipment, materials and everything necessary for and required to do, perform and complete all of the Work described, drawn, set forth, shown and included in said Contract Documents.

3. TERMS OF PERFORMANCE

The Contractor agrees to undertake the performance of the Work under this Contract within ten (10) days after being notified to commence work by issuance of a Notice to Proceed in substantially the form contained herein from the Manager and agrees to fully complete said Work within **200 (Two Hundred)** consecutive calendar days from the effective date of said Notice, plus such extension or extensions of time as may be granted in accordance with the provisions of the General Contract Conditions and any applicable Special Contract Conditions.

4. TERMS OF PAYMENT

The City agrees to pay the Contractor for the performance of all of the Work required under this Contract, and the Contractor agrees to accept as the Contractor's full and only compensation therefore, such sum or sums of money as may be proper in accordance with the price or prices set forth in the Contractor's Bid Form hereto attached and made a part hereof for **bid item numbers 202-00019 through 630-00003 (Sixty [60])** and the Textura Fee, the total estimated cost thereof being **Two Million Six Hundred Thirty Thousand Forty Five Dollars and Zero Cents (\$2,630,045.00)**. Adjustments to said Contract Amount and payment of amounts due hereunder shall be made in accordance with the provisions of the General Contract Conditions and any applicable Special Contract Conditions.

5. NO DISCRIMINATION IN EMPLOYMENT

In connection with the performance of work under the Agreement, the Contractor may not refuse to hire, discharge, promote, demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, ethnicity, citizenship, immigration status, gender, age, sexual orientation, gender identity, gender expression, marital status, source of income, military status, protective hairstyle, or disability. The Contractor shall insert the foregoing provision in all subcontracts.

6. COMPLIANCE WITH SBE DEFINED POOL SELECTION REQUIREMENTS:

(a) This Agreement is subject to Article VII of Chapter 28, Denver Revised Municipal Code ("D.R.M.C."), designated as §§ 28-201 to 28-236 (the "SBE Ordinance"), and the Rules and Regulations promulgated pursuant thereto. This Agreement is also subject to the defined selection pool requirements of the SBE Ordinance. The Contractor is a certified Small Business Enterprise

(“SBE”) and pursuant to § 28-208, D.R.M.C., the Contractor is required to self-perform a minimum of 30% of the contract work

- (b) Under § 28-222, D.R.M.C., the Contractor has an ongoing, affirmative obligation for the duration of this Agreement to comply with the SBE defined selection pool requirements and with the SBE self-performance requirements upon which this Agreement was awarded, unless the City initiates a material modification to the scope of work affecting this Agreement through change order, contract amendment, force account, or other modification under § 28-223, D.R.M.C. The Contractor acknowledges that:
- (1) It must establish and maintain records and submit regular reports, as required, which will allow the City to assess the Contractor’s compliance with the defined selection pool requirements and SBE self-performance requirements.
 - (2) Contractor shall have a continuing obligation to promptly inform DSBO in writing of any agreed upon increase or decrease in the scope of work of this Agreement, upon any of the bases under § 28-223, D.R.M.C., regardless of whether such increase or decrease in scope of work has been reduced to writing at the time of notification of the change to the City. Any increase in the scope of services of this Agreement, whether by amendment or other modification, which increases the dollar value of the Agreement, if such change is within the scope of work designated for performance by the Contractor at the time of award of this Agreement, shall be promptly submitted to the DSBO.
 - (3) The Contractor shall achieve defined selection pool requirements and self-performance requirements with respect to such changed scope of work by performing such work.
 - (4) The Contractor shall supply to DSBO documentation required by ordinance with respect to the increased dollar value of this Agreement. The Contractor shall not, during the term of this Agreement:
 - (i) Fail to in fact perform as an SBE to achieve the work scope originally listed at proposal submission in order to achieve defined selection pool and self-performance requirements; or
 - (ii) Modify or eliminate all or any portion of the scope of work upon which self-performance is based and the contract was awarded, unless directed by the City.
 - (5) Failure to comply with these provisions may subject the Contractor to sanctions set forth in § 28-229 of the SBE Ordinance.
 - (6) Should any questions arise regarding SBE and DSBO requirements the Contractor should consult the SBE Ordinance or may contact the DSBO representative at (720) 913-1999.

7. COMPLIANCE WITH DENVER WAGE LAWS

To the extent applicable to the Contractor’s provision of Services hereunder, the Contractor shall comply with, and agrees to be bound by, all rules, regulations, requirements, conditions, and City determinations regarding the City’s Minimum Wage and Civil Wage Theft Ordinances, Sections 58-1 through 58-26 D.R.M.C., including, but not limited to, the requirement that every covered worker shall be paid all earned wages under applicable state, federal, and city law in accordance with the foregoing D.R.M.C. Sections. By executing this Agreement, the Contractor expressly acknowledges that the Contractor is aware of the requirements of the City’s Minimum Wage and Civil Wage Theft Ordinances and that any failure by the Contractor, or any other individual or entity acting subject to this Agreement, to strictly comply with the foregoing D.R.M.C. Sections shall result in the penalties and other remedies authorized therein.

8. APPLICABILITY OF LAWS

The Agreement between the Contractor and the City shall be deemed to have been made in the City and County of Denver, State of Colorado and shall be subject to, governed by, and interpreted and construed by or in accordance with the laws of the State of Colorado and the Charter, Revised Municipal Code, Rules, Regulations, Executive Orders, Health Orders and fiscal rules of the City. As such, the Contractor shall at all times comply with the provisions of the Charter, Revised Municipal Code, Rules, Regulations, Executive

Orders and fiscal rules of the City, and those State of Colorado and Federal Laws, Rules and Regulations, which in any manner limit, control or apply to the actions or operations of the Contractor, any subcontractors, employees, agents or servants of the Contractor engaged in the Work or affecting the materials and equipment used in the performance of the Work, as the same may be, from time to time, promulgated, revised or amended. The Charter and Revised Municipal Code of the City and County of Denver, as the same may be amended from time to time, are hereby expressly incorporated into this Agreement as if fully set out herein by this reference. Without limiting the generality of the foregoing, the Contractor shall comply with any and all applicable public emergency or public health orders issued by any federal, state, municipal or local governmental entity, or any department or agency thereof, including the Colorado Department of Public Health & Environment (CDPHE) and the Denver Department of Public Health & Environment (DDPHE).

9. APPROPRIATION

The amount of money, which has been appropriated and encumbered for the purpose of this contract, to date, is equal to or in excess of the Contract Amount. The Manager, upon reasonable written request, will advise the Contractor in writing of the total amount of appropriated and encumbered funds, which remain available for payment for all Work under the Contract.

The issuance of any change order or other form or order or directive by the City which would cause the aggregate payable under the contract to exceed the amount appropriated for the contract is expressly prohibited. In no event shall the issuance of any change order or other form of order or directive by the City be considered valid or binding if it requires additional compensable work to be performed, which work will cause the aggregate amount available under the Contract to exceed the amount appropriated and encumbered for this Contract, unless and until such time as the Contractor has been advised in writing by the Manager that a lawful appropriation, sufficient to cover the entire cost of such additional work, has been made.

It shall be the responsibility of the Contractor to verify that the amounts already appropriated for this Contract are sufficient to cover the entire cost of such work, and any work undertaken or performed in excess of the amount appropriated is undertaken or performed in violation of the terms of this contract, without the proper authorization for such work, and at the Contractor's own risk.

10. RESERVED

11. ASSIGNMENT

The Contractor shall not assign any of its rights, benefits, obligations or duties under this Contract except upon the prior written consent and approval of the Manager to such assignment.

12. DISPUTES RESOLUTION PROCESS

It is the express intention of the parties to this Contract that all disputes of any nature whatsoever regarding the Contract including, but not limited to, any claims for compensation or damages arising out of breach or default under this Contract, shall be resolved by administrative hearing pursuant to the provisions of Section 56-106, D.R.M.C., or, as applicable, Section 28-33 D.R.M.C. for Small Business Enterprise disputes. The Contractor expressly agrees that this dispute resolution process is the only dispute resolution mechanism that will be recognized by the parties for any claims put forward by the Contractor, notwithstanding any other claimed theory of entitlement on the part of the Contractor or its subcontractors or suppliers.

13. 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.

14. PARAGRAPH HEADINGS

The captions and headings set forth herein are for convenience of reference only and shall not be construed so as to define or limit the terms and provisions hereof.

15. SEVERABILITY

It is understood and agreed by the parties hereto that, if any part, term, or provision of this Contract, except for the provisions of this Contract requiring prior appropriation and limiting the total amount to be paid by the City, is by the courts held to be illegal or in conflict with any law of the State of Colorado, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular part, term or provision held to be invalid.

16. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS

Contractor consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement 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 Agreement 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.

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Contract Control Number: DOTI-202472628-00
Contractor Name: Silva Construction, 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:

DOTI-202472628-00
Silva Construction, Inc.

By:  _____
D1F640111E47496...

Name: JOSE SILVA
(please print)

Title: President
(please print)

ATTEST: [if required]

By: _____

Name: _____
(please print)

Title: _____
(please print)

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CITY AND COUNTY OF DENVER

SPECIAL CONTRACT CONDITIONS

SC-1 CONSTRUCTION SPECIFICATIONS

Except as amended herein or in the attached/incorporated Technical Specifications, all Work performed under the terms of this Contract shall be governed by the applicable provisions of the following latest editions:

City and County of Denver:

*Standard Specifications for Construction, GENERAL CONTRACT CONDITIONS,
(2011 Edition)*

Transportation Standards and Details for the Engineering Division

City and County of Denver Traffic Standard Drawings

Wastewater Capital Projects Management

<https://www.denvergov.org/content/denvergov/en/wastewater-management/capital-projects-management.html>

Colorado Department of Transportation:

*Standard Specifications for Road and Bridge Construction
(Sections 200 through 700 of the 2019 Edition)*

Federal Highway Administration:

Manual on Uniform Traffic Control Devices for Streets & Highways (MUTCD)

Building & Fire Codes:

Building Code of the City and County of Denver

(International Building Code 2018 Series, City and County of Denver Amendments 2019)

<https://www.denvergov.org/content/denvergov/en/denver-development-services/help-me-find-/building-codes-and-policies.html>

The *Standard Specifications for Construction, GENERAL CONTRACT CONDITIONS* is available at:

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

Transportation Standards and Details for the Engineering Division and the Wastewater Management Division – *Standard Detail Drawings*, are available at <http://www.denvergov.org>.

The “*Colorado Department of Transportation Standard Specifications for Road and Bridge Construction*” is available for review on CDOT’s website at:

<https://www.codot.gov/business/designsupport/cdot-construction-specifications/2021-construction-specifications/2021-specs-book>.

The *Manual on Uniform Traffic Control Devices for Streets & Highways* is available for review at the Federal Highway Administration Website at: www.fhwa.dot.gov, The FHWA website also contains purchasing information.

SC-2 DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE (REPLACES GENERAL CONTRACT CONDITION 203)

As of January 1, 2020, the functions of Public Works are housed in the new Department of Transportation and Infrastructure. For purposes of this Contract all references (including, but not limited to, references appearing in the body of the contract, General Conditions, Special Conditions, Exhibits, Contract Documents or Policies and Procedures) to the Department of Public Works will have the same meaning as the Department of Transportation and Infrastructure.

Vested exclusively in the Department of Transportation and Infrastructure is the management and control of the design and construction of general and local public improvements undertaken by the City and County of Denver, except for: (i) work which is under the management and control of the Department of Aviation; (ii) that work performed by the Denver Board of Water Commissioners; (iii) any such work that the Mayor has specifically assigned to another department or agency; and (iv) work under the authority of the Department of Transportation and Infrastructure that is performed with the permission of the Manager of Transportation and Infrastructure by private entities at their own expense.

SC-3 MANAGER OF DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE (REPLACES GENERAL CONTRACT CONDITION 204)

General Condition 204 "Manager of Public Works" is hereby deleted in its entirety and replaced with the following:

As of January 1, 2020, the functions of Public Works are housed in the new Department of Transportation and Infrastructure. The Manager of Public Works / Executive Director of Public Works will become the Executive Director of Transportation and Infrastructure. Manager of Public Works, Executive Director of Public Works, Executive Director of Transportation and Infrastructure and Manager of Transportation and Infrastructure will have the same meaning for purposes of this Agreement.

SC-4 DEPUTY MANAGER / CITY ENGINEER

General condition 109 DEPUTY MANAGER is hereby deleted in its entirety and replaced with the following:

The "Deputy Manager" means the official who reports directly to the Manager and exercises supervisory responsibility in the City agency defined in Title 2 herein that is responsible for the Project. The Manager hereby designates the City Engineer as the Deputy Manager for purposes of this Contract. The City Engineer shall have responsibility for this Project and shall undertake all duties, responsibilities, rights and authority, including specific actions and decisions, delegated to the Deputy Manager under the various terms and conditions of this Contract.

SC-5 PROJECT DELIVERY ADMINISTRATION / CITY ENGINEER

Project Delivery Administration is a division of the Department of Transportation and Infrastructure and is supervised by the City Engineer, who is subordinate to the Manager of Transportation and Infrastructure. This Division is responsible for the planning, design, construction, operation and maintenance of all of the City's transportation facilities and the planning, design and construction of all of the City's wastewater facilities, except for the City's Municipal Airport System. All other references to the Transportation Division or the Deputy Manager of Public Works are deleted and replaced with references to the Engineering Division and the City Engineer, respectively.

SC-6 CITY DELEGATION OF AUTHORITY

With reference to General Contract Condition 109, DEPUTY MANAGER and General Contract Condition 212, CITY'S CONTRACT ADMINISTRATION LINE OF AUTHORITY, the Manager hereby designates the City Engineer as the City official responsible for those certain actions and decisions designated as the

responsibility of the Deputy Manager under the General Conditions and delegates to the City Engineer the authority necessary to undertake those responsibilities under this Contract. The City Engineer shall have supervisory responsibility over the Project Manager. Additionally, Contractor questions concerning the Plans and Technical Specifications shall be directed to:

Department of Transportation and Infrastructure:

Project Manager
Lindsey Chieduko

Telephone
303.446.3548

SC-7 PREVAILING WAGE REQUIREMENTS

General Contract Condition 1003 RATE AND FREQUENCY OF WAGES PAID (.2), is hereby deleted in its entirety and replaced with the following:

(.2) Contractor shall comply with, and agrees to be bound by, all requirements, conditions and City determinations regarding the Payment of Prevailing Wages Ordinance, Sections 20-76 through 20-79, D.R.M.C. 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 request for qualifications/proposals was advertised **February 12, 2024**.

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 Agreement, Contractor will receive no additional compensation for increases in prevailing wages or fringe benefits.

Contractor shall provide the Auditor with a list of all subcontractors providing any services under the contract.

Contractor shall provide the Auditor with electronically-certified payroll records for all covered workers employed under the contract.

Contractor shall prominently post at the work site the current prevailing wage and fringe benefit 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.

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 City may, by written notice, suspend or terminate work if Contractor fails to pay required wages and fringe benefits.

SC-8 LIQUIDATED DAMAGES

Should the Contractor fail to complete all Work within the Contract Time allocated under the Contract Form at Paragraph 3, TERMS OF PERFORMANCE, the Contractor shall become liable to the City and County of Denver for liquidated damages, and not as a penalty, at the rate of **\$1,000.00** for each Day that the Contractor exceeds the time limits herein specified, all in accordance with provisions of General Contract Condition 602, LIQUIDATED DAMAGES; ADMINISTRATIVE COSTS; ACTUAL DAMAGES.

Representative hourly rates for the City administrative costs described in General Contract Condition 602.2 shall be as follows for this Project:

Project Manager	\$69 per hour
Project Engineer	\$63 per hour
Inspector	\$49 per hour
Surveying, if necessary	\$100 per hour

SC-9 SUBCONTRACTS

In accordance with General Contract Condition 501, SUBCONTRACTS, no limit shall apply to that percentage of the Work, which may be sublet providing that the subcontractors receive prior approval in accordance with General Contract Condition 502, SUBCONTRACTOR ACCEPTANCE.

SC-10 PAYMENTS TO CONTRACTORS

The application for payment shall be submitted through Textura® Corporations Construction Management Website. Contractor recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (“Textura”) for this Project to request payment from the City and to pay all first tier subcontractors and suppliers and further record payment to all certified subcontractors or suppliers that are listed for participation towards any assigned SMWDBE program goal. Contractor further agrees that, to the fullest extent possible within Textura, 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 Textura, including, but not limited to, information related to Contractor and subcontractor billings. To that end, Contractor agrees it will activate any available settings within Textura 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:

<u>Agency/Firm</u>	<u>Name</u>	<u>Telephone</u>
Department of Transportation and Infrastructure	Lindsey Chieduko	303.446.3548

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, and its subcontractors of all tiers who have performed work, shall also submit to the Auditor and other appropriate officials of the City prior to submitting the payment application, information required by General Contract Condition 1004, REPORTING WAGES PAID.
4. Starting with the second payment application, the payment applications shall be accompanied by a completed Contractors’ Certification of Payment Form (CCP), listing all first tier subcontractors and suppliers and all certified subcontractors or suppliers that are listed for participation towards any assigned SMWDBE program goal. The final payment application must be accompanied by an executed Final Claim Release Form and Certificate of Contract Release Form from the Contractor.

If subcontractor or supplier payments are disbursed via Textura® CPM, those systems generated Release and CCP forms are acceptable.

Title 20, 2003 Final Settlement, section .2, item F is modified to read as follows:

F. At time of request for final payment, Contractor shall submit a complete and final, unconditional waiver or release of any and all lien and claim rights for all labor, equipment, and material used or furnished to complete the Work in the form and format generated within the Textura CPM system. Contractor shall also return an executed Certificate of Contract Release (below), upon request from the City.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

SC-11 CONTRACT FORMS

In accordance with the terms and conditions of the Contract Documents, the City requires the use of certain form documents in complying with or satisfying various obligations, notifications and conditions in contracting with the City or performing Work hereunder. These form documents are referenced by title throughout the Contract Documents for mandatory use as directed. The following are the forms that shall be utilized in accordance with the Contract Documents:

1. Performance and Payment Bond (Sample)
2. Performance and Payment Bond Surety Authorization Letter (Sample)
3. Contractor's Certification of Payment (Sample)
4. Final/Partial Release and Certificate of Payment Form (Sample)
5. Notice to Apparent Low Bidder (Sample)
6. Notice to Proceed (Sample)
7. Certificate of Contract Release (Sample)

SC-12 CONSTRUCTION INSPECTION BY THE CITY

General Condition 1701, CONSTRUCTION INSPECTION BY THE CITY, is modified as follows:

1701.1 Persons who are employees of the City or who are under contract to the City or the City as lessee will be assigned to inspect and test the Work. These persons may perform any tests and observe the Work to determine whether or not designs, materials used, manufacturing and construction processes and methods applied, and equipment installed satisfy the requirements of the drawings and specifications, accepted Shop Drawings, Product Data and Samples, and the General Contractor's warranties and guarantees. The General Contractor shall permit these inspectors unlimited access to the Work and provide means of safe access to the Work, which cost shall be included as a Cost of the Work without any increase to the Guaranteed Maximum Price. In addition, General Contractor shall provide whatever access and means of access are needed to off-site facilities used to store or manufacture materials and equipment to be incorporated into the Work and shall respond to any other reasonable request to further the inspector's ability to observe or complete any tests. Such inspections shall not relieve the General Contractor of any of its quality control responsibilities or any other obligations under the Contract. All inspections and all tests conducted by the City are for the convenience and benefit of the City. These inspections and tests do not constitute acceptance of the materials or Work tested or inspected, and the City may reject or accept any Work or materials at any time prior to the inspections pursuant to G.C. 2002, whether or not previous inspections or tests were conducted by the inspector or a City representative.

.2 Building Inspection will perform building code compliance inspections for structures designed for human occupancy. It is the General Contractor's responsibility to schedule and obtain these inspections. If a code compliance inspection results in identification of a condition which will be at variance to the Contract Documents, the General Contractor shall immediately notify the Project Manager and confirm such notification with formal correspondence no later than forty-eight (48) hours after the occurrence.

.3 When any unit of government or political subdivision, utility or railroad corporation is to pay a portion of the cost of the Work, its respective representatives shall have the right to inspect the Work. This inspection shall not make any unit of government or political subdivision, utility or railroad corporation a party to the Contract, and shall not interfere with the rights of either party.

SC-13 DISPOSAL OF NON-HAZARDOUS WASTE AT DADS

In accordance with the Landfill Agreement made between the City and Waste Management of Colorado, Inc., bidders will be required to haul dedicated loads (non-hazardous entire loads of waste) to the Denver-Arapahoe Disposal Site ("DADS") for disposal. DADS is located at Highway 30 and Hampden Avenue in Arapahoe County, Colorado. The City will pay all fees associated with such disposal, but the bidder shall be responsible for the costs of transporting the loads. Non-hazardous waste is defined as those substances and materials not defined or classified as hazardous by the Colorado Hazardous Waste Commission

pursuant to C.R.S. §25-15-101(6), as amended from time to time, and includes construction debris, soil and asbestos. Bidders shall not use Gun Club Road between I-70 and Mississippi Avenue as a means of access to DADS.

SC-14 PROHIBITION ON USE OF CCA-TREATED WOOD PRODUCTS

The use of any wood products pressure-treated with chromated copper arsenate (CCA) is prohibited. Examples of CCA-treated wood products include wood used in play structures, decks, picnic tables, landscaping timbers, fencing, patios, walkways and boardwalks.

SC- 15 WAIVER OF: PART 8 OF ARTICLE 20 OF TITLE 13, COLORADO REVISED STATUTES

The Contractor specifically waives all the provisions of Part 8 of Article 20 of Title 13, Colorado Revised Statutes regarding defects in the Work under this Construction Contract.

SC-16 ATTORNEY’S 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, the Contractor agrees to pay to the City its costs and a reasonable attorney’s fee which cost shall be included as a Cost of the Work.

Because the City Attorney Staff does not bill the City for legal services on an hourly basis, the Contractor agrees a reasonable fee shall be computed at the rate of one hundred dollars per hour of City Attorney time.

SC-17 INSURANCE

General Condition 1601 is hereby deleted in its entirety and replaced with the following:

(1) General Conditions: Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, including any extension thereof, during any warranty period, and for eight (8) years after the termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as A-VIII or better. Each policy shall require notification to the City in the event any of the required policies be canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, Contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City’s contract number. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

(2) Proof of Insurance: Contractor may not commence services or work relating to this Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance, preferably an ACORD form, complies with all insurance requirements of this Agreement. The City requests that the City’s contract number be referenced on the certificate of insurance. The City’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 the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.

(3) Additional Insureds: For Commercial General Liability, Auto Liability and Excess Liability/Umbrella (if required), Contractor and subcontractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.

(4) Waiver of Subrogation: For all coverages required under this Agreement, with the exception of Professional Liability, Contractor's insurer shall waive subrogation rights against the City.

(5) Subcontractors: All subconsultants, subcontractors, independent contractors, suppliers or other entities providing goods or services required by this Agreement shall be subject to all of the requirements herein. Contractor shall require all of its subcontractors and subconsultants of any tier to provide insurance coverage in types and amounts required by the Contractor, but in amounts of at least \$1,000,000 Commercial General Liability, Business Auto Liability insurance of \$1,000,000 combined single limit, statutory Workers' Compensation coverage, and \$1,000,000 professional liability for any subcontractor performing design or engineering work. Contractor agrees to provide proof of insurance for all such subcontractors, subconsultants, independent contractors, suppliers or other entities upon request by the City.

(6) 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 of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims.

(7) Commercial General Liability: Contractor shall maintain a Commercial General Liability insurance policy with minimum limits of \$1,000,000 for each bodily injury and property damage occurrence, \$2,000,000 products and completed operations aggregate (if applicable), and \$2,000,000 policy aggregate.

(8) Business Automobile Liability: Contractor shall maintain Business Automobile Liability, or its equivalent, with minimum limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement. If transporting wastes, hazardous material, or regulated substances, Contractor shall carry a pollution coverage endorsement and an MCS 90 endorsement on their policy. Transportation coverage under the Contractors Pollution Liability policy shall be an acceptable replacement for a pollution endorsement to the Business Automobile Liability policy.

(9) Additional Provisions:

(a) For claims-made coverage:

The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier

(b) Contractor shall advise the City 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.

SC-18 GREENPRINT DENVER REQUIREMENTS

In accordance with the City and County of Denver Executive Order 123: Greenprint Denver Office and Sustainability Policy, as amended, Contractor shall adhere to sections of Executive Order 123 pertinent to the construction of the built environment. This includes but is not limited to: all construction and renovation of buildings shall follow instructions and memorandum for high performance buildings; horizontal projects shall include the use of fly ash concrete and recycled aggregate where possible; and, all projects shall recycle construction and demolition waste, and install materials that contain recycled content whenever possible using the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED)

as guidance. Non-hazardous solid waste that is eligible for reuse or recycling is not subject to the DADS disposal requirement defined in SC-13.

A completed “Greenprint Denver Closeout Form for Construction Projects” shall be delivered to the Project Manager as a submittal requirement of Final Acceptance.

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

SC-19 EXAMINATION OF RECORDS AND AUDITS

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 Consultant’s performance pursuant to this Agreement, provision of any goods or services to the City, and any other transactions related to this Agreement. Consultant 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 three (3) years after the final payment under the Agreement or expiration of the applicable statute of limitations. When conducting an audit of this Agreement, 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 audit pursuant to this paragraph shall require Parties to make disclosures in violation of state or federal privacy laws. Parties shall at all times comply with D.R.M.C. 20-276.

SC-20 DEFENSE AND INDEMNIFICATION

Title 1602 is hereby deleted in its entirety and replaced with the following:

- (a) To the fullest extent permitted by law, the 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 Agreement 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. 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 Agreement 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 Agreement.

SC-21 CONSTRUCTION SURVEYS

Hereby Replaces General Contract Condition 318 General Contract Condition 318 CONSTRUCTION SURVEYS is hereby deleted in its entirety and replaced with the following:

The City does not take responsibility for the accuracy of any survey data provided by the City. The Contractor must establish and validate the accuracy of all survey data and ensure that all elements of the Work are correctly located. The Contractor must accurately determine and transfer the survey control information to the points of application to ensure that all elements of the Work are correctly located.

Any Work that the Contractor begins before confirming the reference points may be rejected. Should any reference points be obliterated or dislodged by operations that the Contractor controls, the Contractor will replace them subject to consultation with and approval by the Project Manager.

SC-22 PRESERVATION OF PERMANENT LAND SURVEY CONTROL MARKERS

Hereby Replaces General Contract Condition 319 General Contract Condition 319 PRESERVATION OF PERMANENT LAND SURVEY CONTROL MARKERS is hereby deleted in its entirety and replaced with the following:

Throughout the City there exists an extensive system of benchmarks and monuments installed for the purpose of maintaining a land survey control grid. Prior to the commencement of work on the Project, the Contractor shall tie out each existing survey monument and benchmark so that it can be reestablished after completion of the Work should it be damaged. The Contractor shall maintain all ties during construction. The Contractor shall reset and rehabilitate all survey monuments and benchmarks that existed prior to construction, but that were damaged or destroyed during construction, in accordance with City and State requirements at no cost to the City.

SC-23 USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS. The Contractor, its officers, agents, and employees shall cooperate and comply with the provisions of Executive Order 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-24 Title 311 NO EMPLOYMENT OF ILLEGAL ALIENS TO PERFORM WORK UNDER THE CONTRACT is hereby deleted in its entirety.

SC-25 DISPUTES

General Contract Condition 1301 DISPUTES is hereby deleted in its entirety and replaced with the following:

1301 DISPUTES

.1 It is the express intention of the parties that all disputes of any nature whatsoever regarding this Construction Contract including, but not limited to, any claims for compensation or damages arising out of breach or default under this Construction Contract, shall be resolved by administrative hearing pursuant to the provisions of Section 56-106, DRMC for Public Works Department Contracts, pursuant to the provisions of DRMC §5-17 for Department of Aviation contracts, or an alternative process that is established for a specific issue by the DRMC or associated rules and regulations.

.2 When the DRMC, or rules and regulations promulgated pursuant to the DRMC, provide an alternative review or resolution process for specific disputes that may arise out of this Construction Contract the more specific process set forth in the DRMC and associated rules and regulations controls.

.3 The Contractor expressly agrees that these dispute resolution processes are the sole and only dispute resolution mechanisms that will be recognized and employed by the parties for any claims put forward by the Contractor, notwithstanding any other claimed theory of entitlement on the part of the Contractor or its Subcontractors or Suppliers.

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PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to contracts with others in connection with this project, or the work to be performed thereunder, or the Technical Specifications and Plans accompanying the same, shall in any way affect its obligation on this bond and it does hereby waive notice of any change, extension of time, alteration or addition to the terms of the Contract, or contracts, or to the work, or to the Technical Specifications and Plans.

IN WITNESS WHEREOF, said Contractor and said Surety have executed these presents as of this 16th day of May, 2024.

Attest:



Secretary, Jose L. Silva

Silva Construction, Inc.

Contractor

By: Jose Silva

President, Jose Silva

Nationwide Mutual Insurance Company

Surety

By: Tim Mitchell
Attorney-In-Fact, Tim Mitchell

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

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

TIM MITCHELL; WILLIAM R GREER;

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

UNLIMITED

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 20th day of August, 2021.

Antonio C. Albanese, Vice President of Nationwide Mutual Insurance Company

ACKNOWLEDGMENT

STATE OF NEW YORK COUNTY OF NEW YORK: ss

On this 20th day of August, 2021, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.



Stephanie Rubino McArthur
Notary Public, State of New York
No. 02MC6270117
Qualified in New York County
Commission Expires October 19, 2024

Notary Public
My Commission Expires
October 19, 2024

CERTIFICATE

I, Laura B. Guy, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this ____ day of _____, _____.

Assistant Secretary

May 9th, 2024

City and County of Denver
Assistant City Attorney
201 W. Colfax Ave., Dept 1207
Denver, CO 80202

Re: Silva Construction, Inc.

Contract No: 202472628
Project Name: 2024 Citywide ADA Ramp & Concrete Repair A
Contract Amount: \$2,630,045.00
Bond Number: 7901181044

Dear Assistant Attorney:

Enclosed are the Performance and Payment Bonds for the referenced project. Because the agreement date is not known, the bonds and powers have not been dated.

We hereby authorize the Assistant City Attorney to date all bonds and powers of attorney to coincide with the date of the contract.

Please forward a copy of the contract date for this project to complete our file to [Tmitchell@trustedadvisors.agency].

Thank you.

Sincerely,



Tim Mitchell
Attorney-in-Fact
Nationwide Mutual Insurance Company



NOTICE TO APPARENT LOW BIDDER (SAMPLE)

Name
Address
City, State Zip

The EXECUTIVE DIRECTOR OF THE DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE has considered the Bids submitted on **March 14, 2024**, for work to be done and materials to be furnished in and for:

CONTRACT 202472628 - 2024 Citywide ADA Ramp & Concrete Repair A

as set forth in detail in the Contract Documents for the City and County of Denver, Colorado. It appears that your Bid is fair, equitable, and to the best interest of the City and County; therefore, said Bid is hereby accepted at the bid price contained herein, subject to the approval and execution of the Contract Documents by the City in accordance with the Charter of the City and County of Denver, and to your furnishing the items specified below. The award is based on the total bid items: (#) bid items (# through #) the total estimated cost thereof being: **(Contract Written Amount) (\$_____)**.

In accordance with the requirements set forth in the Contract Documents, you are required to furnish the following documents:

- a. Insurance Certificates: General Liability and Automotive Liability, Workman's Compensation and Employer Liability; and,
- b. Payment and Performance Bond along with One original Power of Attorney relative to Performance and/or Payment Bond; and,

All construction contracts made and entered into by the City and County of Denver are subject to Affirmative Action and Equal Opportunity Rules and Regulations, as adopted by the Manager of the Department of Transportation and Infrastructure, and each contract requiring payment by the City of one-half million dollars (\$500,000.00) or more shall first be approved by the City Council acting by ordinance or resolution and in accordance with Section 3.2.6 of the Charter of the City and County of Denver.

The Bid Security submitted with your Bid will be returned upon execution of the Contract and furnishing of the Performance Bond. In the event you should fail to furnish the Performance Bond or execute the contract within the time limit specified, said Bid Security will be retained by the City and County of Denver as liquidated damages, and not as a penalty for the delay and extra work caused thereby.

NOTICE TO APPARENT LOW BIDDER
CONTRACT NO. 202472628
Page 2

Dated at Denver, Colorado this _____ day of _____ 20__.

CITY AND COUNTY OF DENVER

By _____
Executive Director
Department of Transportation and Infrastructure

SAMPLE

City and County of Denver Department of Transportation & Infrastructure
201 West Colfax Avenue, Dept 608 | Denver, CO 80202
www.denvergov.org/doti

311 | POCKETGOV.COM | DENVERGOV.ORG | DENVER 8 TV



NOTICE TO PROCEED (SAMPLE)

Current Date

Name

Company

Street

City/State/Zip

CONTRACT NO. 202472628 - 2024 Citywide ADA Ramp & Concrete Repair A

In accordance with General Contract Condition 302 of the Standard Specifications for Construction, General Contract Conditions, 2011 Edition, you are hereby authorized and directed to proceed on _____ with the work of constructing contract number 202472628, as set forth in detail in the contract documents for the City and County of Denver.

SAMPLE

With a contract time of 200 calendar days, the project must be complete on or before _____.

If you have not already done so, you must submit your construction schedule, in accordance with General Contract Condition 306.2.B, to the Project Manager within 10 days. Additionally, you must submit your tax-exempt certificate, and copies of your subcontractors' certificates, in accordance with General Contract Condition 323.5, to the Project Manager as soon as possible. Failure to submit these certificates will delay processing of payment applications.

Sincerely,

By: _____
City Engineer

cc:

City and County of Denver Department of Transportation & Infrastructure
201 West Colfax Avenue, Dept 608 | Denver, CO 80202
www.denvergov.org/doti

311 | POCKETGOV.COM | DENVERGOV.ORG | DENVER 8 TV



CERTIFICATE OF CONTRACT RELEASE (SAMPLE)
202472628 - 2024 Citywide ADA Ramp & Concrete Repair A

Current Date
Name
Street Address
City, State, Zip

Upon receipt of the below stated amount from the City and County of Denver, as full and final payment of the cost of the improvements provided for in the foregoing contract, _____dollars and _____ cents (\$ _____), in cash, being the remainder of the full amount accruing to the undersigned by virtue of said contract; said cash also covering and including full payment for the cost of all work, extra work and material furnished by the undersigned in the construction of said improvements, and all incidentals thereto, and the undersigned hereby releases said City and County of Denver from any and all claims or demands whatsoever, regardless of how denominated, growing out of said contract.

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 further agrees to defend, indemnify and save 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.

And these presents are to certify that all persons performing work upon or furnishing materials for said improvements under the foregoing contract have been paid in full and this payment to be made as described herein is the last or final payment.

Contractor's Signature Date Signed

If there are any questions, please contact me by telephone at (###) ###-####. Please return this document to me via email at doti.procurement@denvergov.org.

Sincerely,

Contract Administration

City and County of Denver Department of Transportation & Infrastructure
201 West Colfax Avenue, Dept 608 | Denver, CO 80202
www.denvergov.org/doti

311 | POCKETGOV.COM | DENVERGOV.ORG | DENVER 8 TV

**DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE
FINAL/PARTIAL RELEASE AND CERTIFICATE OF PAYMENT (SAMPLE)
(PRIME CONTRACTOR)**

(PROJECT NO. and NAME)

Date: _____, 20__.

(NAME OF OWNER)

Contract #: _____.

(NAME OF PRIME CONTRACTOR)

Contract Value: \$ _____.

Current Progress Payment: \$ _____.

Date: _____.

Total Paid to Date: \$ _____.

Date of Last Work: _____.

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.

In consideration of \$_____ representing the Current Progress Payment referenced above and in further consideration of the Total Paid to Date, also referenced above, and other good and valuable consideration received and accepted by the undersigned this ____ day of _____, 20__, the Undersigned hereby releases and discharges the City and County of Denver (the "City"), the above referenced City Project, the City's premises and property and the above referenced Contractor from all claims, liens, rights, liabilities, demands and obligations, whether known or unknown, of every nature arising out of or in connection with the performance of the work effort.

As additional consideration for the payments referenced above, the undersigned agrees to defend, indemnify and save 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.

(Name of Contractor)

By: _____

Title: _____

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DENVER
THE MILE HIGH CITY

DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

Prevailing Wage Rates

Contract Number: 202472628

2024 Citywide ADA Ramp & Concrete Repair A

February 12, 2024

City and County of Denver



TIMOTHY M. O'BRIEN, CPA
AUDITOR

201 West Colfax Avenue, #705 • Denver, Colorado 80202
(720) 913-5000 • Fax (720) 913-5253 • denvergov.org/auditor

TO: All Users of the City and County of Denver Prevailing Wage Schedules
FROM: Luis Osorio Jimenez, Prevailing Wage Administrator
DATE: January 8, 2024
SUBJECT: Latest Change to Prevailing Wage Schedules

The effective date for this publication will be, **Tuesday, January 9, 2024**, and applies to the City and County of Denver for **HIGHWAY CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO 20240009
Superseded General Decision No. CO 20230009
Modification No. 0
Publication Date: 1/9/2024
(9 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.

In accordance to the amendment of Section 20-76, Division 3, Article IV, Chapter 20 of the Denver Revised Municipal Code enacted on Aug 21st, 2023, the Prevailing Wage Administrator is authorized to approve and adjust all Davis Bacon classifications under \$18.29 to comply with the city's minimum wage.

Caisson (smaller than Watson 2500 and similar), Loader (up to and including 6 cu. yd.).....\$ 33.14	14.20
(3)-Loader (under 6 cu. yd.) Denver County.....\$ 33.14	14.20
(3)-Motor Grader (blade- rough) Douglas County.....\$ 33.19	14.20
(4)-Crane (50 tons and under), Scraper (single bowl, under 40 cu. yd).....\$ 33.83	14.20
(4)-Loader (over 6 cu. yd) Denver County.....\$ 33.30	14.20
(5)-Drill Rig Caisson (Watson 2500 similar or larger), Crane (51-90 tons), Scraper (40 cu.yd and over),.....\$ 33.48	14.20
(5)-Motor Grader (blade- finish) Douglas County.....\$ 33.65	14.20
(6)-Crane (91-140 tons).....\$ 35.28	14.20

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).....	\$ 18.29 **	3.20
GUARDRAIL INSTALLER.....	\$ 18.29 **	3.20

HIGHWAY/PARKING LOT

STRIPING:Painter

Denver.....	\$ 18.29	**	3.21
Douglas.....	\$ 15.89	**	3.21

IRONWORKER, REINFORCING

(Excludes Guardrail

Installation).....	\$ 16.69	**	5.45
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IRONWORKER, STRUCTURAL

(Includes Link/Cyclone Fence

Erection, Excludes Guardrail

Installation).....	\$ 18.22		6.01
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LABORER

Asphalt Raker.....	\$ 16.29	**	4.25
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Asphalt Shoveler.....	\$ 21.21		4.25
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Asphalt Spreader.....	\$ 18.58		4.65
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Common or General

Denver.....	\$ 16.76	**	6.77
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Douglas.....	\$ 16.29	**	4.25
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Concrete Saw (Hand Held)....	\$ 16.29	**	6.14
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Landscape and Irrigation....	\$ 15.26	**	3.16
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Mason Tender-

Cement/Concrete

Denver.....	\$ 16.96	**	4.04
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Douglas.....	\$ 16.29	**	4.25
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Pipelayer

Denver.....	\$ 18.29	**	2.41
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Douglas.....	\$ 16.30	**	2.18
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Traffic Control (Flagger)....	\$ 18.29	**	3.05
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Traffic Control (Sets

Up/Moves Barrels, Cones,

Install Signs, Arrow

Boards and Place

Stationary Flags) (Excludes

Flaggers).....	\$ 18.29	**	3.22
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PAINTER (Spray Only).....	\$ 16.99	**	2.87
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POWER EQUIPMENT OPERATOR:

Asphalt Laydown

Denver.....	\$ 22.67		8.72
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Douglas.....	\$ 23.67		8.47
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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.....	\$ 18.29 **	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.....	\$ 18.29	3.41

Douglas.....	\$ 18.67		7.17
TRUCK DRIVER			
Distributor			
Denver.....	\$ 18.29		5.82
Douglas.....	\$ 16.98	**	5.27
Dump Truck			
Denver.....	\$ 18.29	**	5.27
Douglas.....	\$ 16.39	**	5.27
Lowboy Truck.....	\$ 18.29		5.27
Mechanic.....	\$ 26.48		3.50
Multi-Purpose Specialty & Hoisting Truck			
Denver.....	\$ 18.29		3.17
Douglas.....	\$ 20.05		2.88
Pickup and Pilot Car			
Denver.....	\$ 18.29	**	3.77
Douglas.....	\$ 16.43	**	3.68
Semi/Trailer Truck.....	\$ 18.39		4.13
Truck Mounted Attenuator....	\$ 18.29	**	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 the Prevailing Wage
Administrator for Supplemental Rates
(Specific to Denver projects)
Revision Date 01-01-2024**

Classification		Base	Fringe
Guard Rail Installer		\$18.29	\$3.20
Highway Parking Lot Striping: Painter		\$18.29	\$3.21
Ironworker (Ornamental)		\$26.05	\$12.00
Laborer	Removal of Asbestos	\$21.03	\$8.55
Laborer (Landscape & Irrigation)		\$18.29	\$3.16
Laborer: Traffic Control (Flagger)		\$18.29	\$3.05
Laborer: Stationary Flags (excludes Flaggers)		\$18.29	\$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		\$18.29	\$3.22

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

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DENVER
THE MILE HIGH CITY

DEPARTMENT OF TRANSPORTATION & INFRASTRUCTURE

Technical Specifications

Contract Number: 202472628

2024 Citywide ADA Ramp & Concrete Repair A

February 12, 2024



STREET MAINTENANCE DIVISION

SPECIAL PROVISIONS

STANDARD CONCRETE CONSTRUCTION DETAILS AND TECHNICAL SPECIFICATIONS

It is the intent of the City to use the City of Denver Public Works "Transportation Standards and Details for the Engineering Division" 2019 edition, the Wastewater Management Division Standard Details and Drawings (when applicable), the Department of Public Works "Standard Specifications For Construction General Contract Conditions" 2011 edition, and the Contractor shall additionally abide by all rules and guidelines as required by: City and County of Denver Right of Way Street Occupancy Permit.

It is further the intent of the City to use applicable specifications from the Colorado Department of Transportation "Standard Specifications for Road and Bridge" 2019 edition with revisions listed in the "Index of Revisions to the 2019 Colorado Department of Transportation Standard Specifications for Road and Bridge Construction."

INDEX OF REVISIONS TO THE

2019 CDOT Standard Specifications for Road and Bridge Construction

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203	EXCAVATION AND EMBANKMENT	TS-6
206	EXCAVATION AND BACKFILL FOR STRUCTURES	TS-8
208	EROSION CONTROL	TS-9
209	WATERING AND DUST PALLIATIVES	TS-23
210	RESET STRUCTURES	TS-24
212	SEEDING, FERTILIZER AND SODDING	TS-26
304	AGGREGATE BASE COURSE	TS-28
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401 & 403	PLANT MIX PAVEMENTS	TS-30
412	PORTLAND CEMENT CONCRETE PAVEMENT	TS-31
413	CONCRETE PATCHING AND CURB HEAD REPLACEMENT	TS-38
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604	MANHOLES, INLETS AND METER VAULTS	TS-43
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705	JOINT, WATERPROOFING AND BEARING MATERIALS	TS-70
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APPENDICES

- A. Field Measurement Report (FMR) Sample
- B. Annotated Revisions

**REVISION OF SECTION 201
CLEARING AND GRUBBING**

Section 201.01 of the Standard Specifications is hereby revised as follows:

The Contractor shall only perform work consisting of clearing, grubbing, removing, and disposing of vegetation and debris within 12” of the proposed concrete repair and only as needed to set forms and complete the required concrete construction or repairs unless otherwise directed by the Project Inspector/Manager.

Section 201.03 of the Standard Specifications shall be deleted and replaced with:

Clearing and Grubbing shall not be measured separately, and all costs associated with Clearing and Grubbing shall be included in the related concrete construction or repair work.

Section 201.04 of the Standard Specifications shall be deleted and replaced with:

Clearing and Grubbing shall not be paid separately, and all costs associated with Clearing and Grubbing shall be included in the related concrete construction or repair work.

When the Contract does not include pay items in Section 201, “Clearing and Grubbing”, the removal will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 201

**REVISION OF SECTION 202
REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

Section 202 of the Standard Specifications is hereby revised as follows:

All equipment, labor, hauling, sorting, removal, delivery and documentation of recyclable materials as per SC-20 "Greenprint Denver Requirements" will not be paid separately; all costs incurred by the Contractor to meet the requirements of SC-20 shall be included in the removal of the related appurtenance. All non-hazardous waste is to be hauled to Denver Arapahoe Disposal Site (DADS) as per "SC-12 DISPOSAL OF NON-HAZARDOUS WASTE AT DADS" of the Contract. All costs of removal, loading, hauling and disposal of all excavations, unsuitable and excess materials and removal items are included in the related Removal Pay Item and will not be paid separately.

Subsection 202.02 shall be revised to include the following:

The Project Inspector will mark the limits of removals in the field. All damage to structures to remain in place shall be repaired at the Contractor's expense.

Removals in the vicinity of trees to remain shall conform to applicable provisions of the Tree Retention and Protection specification, as prepared by Denver Forestry. It shall be the responsibility of the Contractor to notify the City of Denver Forestry and coordinate with the Construction Project Manager and the adjacent property owner for any damages to the tree or its roots.

Where work is proposed within a tree protection zone, the Contractor shall submit a work plan on how the work within these areas will be accomplished. The work shall be approved by the City Forester prior to the start of work. The methods for work in these areas can include the following:

1. Compressed air excavation tool.
2. Water excavation.
3. Other methods approved by the City Forester.

Tree protection fence shall be installed prior to any site activity and shall remain in place and maintained in condition in which they were installed until its removal is authorized by the City Forester or the Project Manager.

Subsection 202.03 is hereby replaced as follows:

All salvageable material shown on the plans shall be removed, without unnecessary damage, in sections or pieces that may be readily transported, and delivered by the Contractor to the location noted on the plans, or as directed by the Project Manager. The Contractor shall be held responsible for the safekeeping of all salvageable materials during the period of the Contract until they are delivered to the City. The Contractor shall make good or replace at the contractor's own expense any such materials damaged, stolen or otherwise lost prior to receipt by the City. All salvageable materials, as designated on the plans, shall remain the property of the City. The bid item "Removal and Reset Flagstone (Includes Salvage and Storage) shall include all costs associated with the means and method required to carefully remove, handle, palletize, and salvage existing flagstone, store the flagstone material,

transport as needed, prep subgrade as needed and reset flagstone at locations designated by the Project Inspector/Manager.

Subsection 202.07 is hereby replaced as follows:

All concrete pavement, sidewalks, structures, curbs, gutters, asphalt pavement, etc., designated for removal, shall be broken into pieces and disposed of outside the limits of the project at a concrete recycling site if possible, unless otherwise designated on the plans, or as directed by the Project Manager.

Old construction which abuts new construction, edges of pavement, sidewalks, curbs, etc., to be left in place shall be saw-cut at the nearest joint to true line with a vertical face.

Where old asphalt construction abuts new construction, edges of asphalt pavement, patching, etc., asphalt to be left in place shall be saw-cut to a neat vertical face with minimal jagged edges to the satisfaction of the Project Manager.

Removal of stone curb shall include the complete removal of the curb head and concrete foundation. No payment will be made for sprinkler relocation, utility relocation, etc., beyond the limits of construction as shown on the plans. Stone curb designated for salvage shall be carefully removed to prevent damage and delivered to the location indicated in the plans or specifications, or as directed by the Project Manager.

Subsection 202.08 shall be revised to include the following:

All trip hazards will be saw cut to fulfill the requirements of the Americans with Disabilities Act. Each offset will be tapered at a minimum 1:12 slope and shall have a smooth uniform appearance and texture. Method of trip hazard removal shall entail precise saw cutting of the concrete only. Grinding and/or pulverization of the concrete are not acceptable or allowed. Saw work shall be done with hand-held electrical powered equipment, capable of cutting at any angle and able to remove the concrete completely from all edges of the trip hazard and around obstacles that may be encountered. Saw cutting shall be taken to an absolute zero point of differential to the adjacent opposing side, and to both edges of the sidewalk to eliminate the trip hazard in its entirety over the full width of the sidewalk. The adjacent stone, along with any wall and/or obstacles abutting up to the sidewalk, shall not be cut into or marked in any way when saw cutting the trip hazard. Cutting into any landscaping, grass, rocks, walls, etc.; will not be permitted. Should damage occur to adjacent structures/landscaping the contractor shall repair the structure/landscaping at no cost to the project. Fugitive dust shall be collected using a high-powered dust control system that will prevent fugitive dust from going into the air. The suction device shall be attached to hand-held electrical powered cutting equipment to assure the maximum amount of fugitive dust will be collected before it has a chance to be released into the atmosphere. All debris and concrete dust that remains on the sidewalk shall be completely cleaned from the surface as well as the surrounding area, i.e. landscaping, walls, etc. and be hauled off and disposed of at an approved site. All costs incurred for disposal of waste material shall be included in unit cost and will not be paid for separately. Temporary asphalt ramps at trip hazards shall be removed at the time of cutting. No additional payment shall be made for removal of asphalt ramps. The maximum average vertical cut allowed for repair is 1 ½ inches. It is the Contractor's responsibility to adhere to the grades required (minimum of 1:12 slopes). Inspection and

approval of work shall not relieve the Contractor from achieving all requirements set forth in these specifications. The Contractor shall be responsible to repair any work improperly performed. There will be no additional payment for these repairs, if required.

Subsection 202.09 shall be revised to include the following:

Removal of asphalt mat from gutters shall be accomplished by planing, and/or scraping. If the existing gutter is to remain, the gutter shall be cleaned by sandblasting until the pan is completely clean of residue. Fugitive dust shall be collected using a high-powered dust control system that will prevent fugitive dust from going into the air. Gutters which are excessively (greater than one-quarter inch in depth) planed or damaged shall be removed and replaced by the Contractor at the Contractor's expense. If gutter is designated for removal, no separate payment shall be made for asphalt removal.

Subsection 202.11 shall be revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Removal of concrete paving, crosspans, curb ramps, driveways will be measured by area in square yards, regardless of thickness and includes re-grading.

Removal of asphalt mat will be measured by square yard. If the existing asphalt mat is over 9" asphalt mat will be paid at a prorated price determined by the Project Manager. If the asphalt mat is more than 5" and is over concrete pavement, both asphalt removal and concrete pavement removal will be paid. If the asphalt mat is less than 5" and is over concrete pavement, only concrete pavement removal will be paid.

Removal of asphalt mat (planing or milling) will be measured by the square yard, regardless of thickness.

Removal of trolley tracks will be measured by centerline lineal track foot, and shall include the removal of rails, ties, connections, cobblestones and concrete runners.

Removal of asphalt mat from concrete gutter and other concrete designated to remain shall be measured by the square yard. Removal of asphalt mat from gutter shall include sandblasting and compressed air cleaning as part of that pay item. Fugitive dust shall be collected using a high- powered dust control system that will prevent fugitive dust from going into the air.

Remove Siphon will be measured as a lump sum for each siphon and shall include: removing the connector pipe, two (2) inlets, grates and frames, any related materials, concrete, metal, sealant, debris, excavation and suitable backfill placed and compacted, all materials, labor equipment, hauling and disposal needed to complete this item.

Subsection 202.12 is hereby deleted and replaced as follows:

The accepted quantities will be paid for at the contract unit price for each of the pay items

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listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

Clearing and grubbing includes any and all excavation, removal and hauling to DADS of all existing landscape materials including soil, sodding, plants, shrubs, landscape rock of any size or gradation, brick, stone pavers, stacked block wall, edging material, landscape fabric and fencing is included in the cost of the related work and is included in the cost of the related work and will not be paid separately unless otherwise noted under "PAY ITEMS".

Payment will be made under:

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Remove Inlet	EA
Remove Siphon	EA
Removal of Sidewalk	SY
Removal of Detached Sidewalk	SY
Removal of Curbhead	LF
Removal of Curb and Gutter	LF
Removal of Combination Curb, Gutter and Sidewalk	LF
Removal and Reset Flagstone (Includes Salvage and Storage)	SY
Removal of Concrete Ramp	SY
Removal of Concrete Pavement	SY
Removal and Reset of Fence	LF
Compressed air excavation for tree roots	EA (per tree)
Water excavation for tree roots	EA (per tree)
Tree protection fence	EA (per tree)

When the Contract does not include pay items in Section 202, "Removal of Structures and Obstructions", the removal will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 202

**REVISION OF SECTION 203
EXCAVATION AND EMBANKMENT**

Section 203 of the Standard Specifications is hereby revised as follows:

Subsection 203.04 shall include the following:

The Contractor shall protect and promptly dewater and recondition all excavations from water regardless of source.

Subsection 203.05 (c), first paragraph, shall include the following:

Approved backfill material shall be Class 6 Recycled Concrete or other material approved by the Project Manager.

Subsection 203.07 shall include the following:

Unless otherwise indicated on the plans, the density requirements for embankment material shall be: clay soils – 95% of the maximum density determined in accordance with AASHTO T-99; granular soils – 95% of the maximum density determined in accordance with AASHTO T-180.

Proof rolling of the subgrade shall be required. Proof rolling shall be done after specified compaction has been obtained. Adequate compaction shall be demonstrated by the absence of rutting, pumping, or deflection following a proof roll of the test strip using any piece of construction equipment that is a pneumatic tired vehicle (100 psi tire pressure) and exerts a minimum 18-kip per axle load. Areas found to be weak and those areas which failed shall be ripped, scarified, dried or wetted as necessary and re-compacted to the requirements for density and moisture at the Contractor's expense.

Where unsuitable material is encountered below proposed subgrade, the Project Manager may require the Contractor to remove the unsuitable materials and backfill to the finished grade with Class 6 Recycled Concrete, or other approved material. The Project Manager may designate as unsuitable those soils that are detrimental to the finished roadway. All unsuitable material shall be disposed of as directed. Excavation including unsuitable material, hauling and disposal of unsuitable material and concrete or any debris related to infrastructure removal (except asbestos or radioactive material), installation of aggregate base course, grading and compaction of suitable material or aggregate base course to proposed subgrade elevation will be paid for as outlined in Subsection 203.11.

Subsection 203.11 is hereby deleted and replaced as follows:

Muck Excavation, Barrow, Embankment Material, Stripping, Blading and Dozing will be paid for as follows: the top 6" shall be included in the cost of the related work. Excavation over 6" will be measured and paid for as unclassified excavation, payment will be for depth minus 6". Proof rolling, blading, wetting, drying, dozing and sub-grade reconditioning, will not be measured and paid for separately, but shall be included in the cost of the work.

Haul and disposal will not be measured and paid for separately but shall be included in the cost of the work.

Unclassified Excavation will only be measured for payment at work locations where new ADA ramps are constructed replacing sidewalk or existing landscaped areas , a ramp is lowered to meet the grade and slope requirements, or a new crossspan is installed. Unclassified excavation will be paid for as follows: the top 6" shall be included in the cost of the related

work. Depths greater than 6” will be paid for as unclassified excavation, payment will be for depth minus 6”. The measurement for Unclassified Excavation shall be equal to the newly constructed ADA Ramp/crossspan area in square yards multiplied by the depth of soil removed and converted to cubic yards for example; Take the area of the ADA ramp/crossspan measured in square yards then multiply by 1/3 for a quantity that is one foot of depth per square yard and convert that volume to cubic yards of Unclassified Excavation. 3-Man Labor Crew will be measured as the actual number of hours worked and shall include with each application for payment the name, date and hours worked agreed to daily as directed by the City’s Construction Project Manager.

Payment will be made under:

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Unclassified Excavation (Greater than 6”)	CY
3-Man Labor Crew	HR

Payment for the replacement of unsuitable material shall be as follows: payment for replacement of unsuitable material shall be for the quantity that is placed in the excavated area at the respective unit price for the material that is approved by the Engineer and used.

When the contract does not include pay items for Unclassified Excavation and Embankment Material, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 203

**REVISION OF SECTION 206
EXCAVATION AND BACKFILL FOR STRUCTURES**

Section 206 of the Standard Specifications is hereby revised as follows:

Subsection 206.02 shall include the following:

For areas between the flowline and property lines the Contractor shall only use Class 6 Recycled Concrete.

Flow fill may only be used between the flowlines in the street and only if approved by the Project Manager.

Subsection 206.03 is hereby deleted and replaced as follows:

The Contractor is required to provide submittals for approval for both Class 6 Recycled Concrete and Structural Backfill (Flow Fill).

Only Structural Backfill (Flow fill) will be considered for payment and shall be measured by cubic yards delivered. For acceptance and payment, the Contractor must provide copies of load tickets with a summary in tabular form to the Project Manager for review with each pay application for which payment for this item is requested.

Payment will be made under:

PAY ITEM

PAY UNIT

Structural Back Fill (Flow Fill)

CY

When the contract does not include pay items for Excavation and Backfill for Structures these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 206

REVISION OF SECTION 208 EROSION CONTROL

Section 208 of the Standard Construction Specifications is hereby removed in its entirety and replaced with the following:

PART I: DEFINITIONS

Definitions used for this Section shall consist of those listed in Title 1 of the City and County of Denver "Standard Specifications for Construction, General Contract Conditions", 2011 edition.

Definitions used for this Section hereby incorporate those identified within the City and County of Denver Construction Activities Stormwater Manual (CASM).

Additional Definitions applicable to this Section are listed heretofore:

Basis of Payment: The terms under which "Work" is paid, as a designated "Pay Item" in accordance with the quantity measured and the "Pay Unit."

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, installation of devices, maintenance procedures, and other management practices deployed to stabilize the construction site to prevent or reduce the pollution of State Waters (see definition below). Stormwater BMPs can be classified as "structural" (i.e., devices installed or constructed on a site) or "non-structural" (procedures, such as modified landscaping practices).

Colorado Department of Health and Environment (CDPHE): State of Colorado, Water Quality Control Division responsible for issuance of State Construction Stormwater Permit.

Construction Activities Stormwater Discharge Permit (CASDP): Permit issued by the City for compliance with City & County of Denver Revised Municipal Code and Department of Public Works Rules & Regulations concerning the discharge of pollutants in storm generated runoff from construction sites to Municipal Separate Storm Sewer System (MS4, see definition below) or State Waters, via the Municipal Separate Storm Sewer System (MS4).

Construction Activities Stormwater Manual (CASM): City and County of Denver Construction Activities Stormwater Manual (CASM), 2010 edition.

Colorado Department of Transportation (CDOT): State agency that has published standards for Erosion Control with accompanying Erosion Control Supervisor certification courses.

Erosion Control Supervisor (ECS): The Erosion Control Supervisor is assigned by the Contractor to perform duties as described in this Section. The ECS shall be properly trained in BMPs per requirements of Part V below, and shall be under the direction of a Professional Engineer licensed in the State of Colorado when performing any modifications to the Project Stormwater Management Plan (SWMP), as required by CDPHE.

Final Stabilization: Point of construction when all ground surface disturbing activities at the site have been completed and uniform vegetative cover has reached 70% of pre-disturbance vegetative cover (as judged by comparison to nearest fallow vegetation), or equivalent permanent features have been employed. At this point, all temporary BMPs can be removed, all construction and equipment maintenance wastes have been disposed of properly; and all elements of the Stormwater Management Plan have been completed.

Major SWMP Modification: Changes to the original SWMP that removes or adds additional area to the Project, or modifies the hydrology or drainage of the Project. A Major SWMP Modification requires the submission of revised Stormwater Management Plan (SWMP) elements to the Permit Authority for review and approval. Any adjustments to a SWMP must be performed either by or under the direction of a Professional Engineer licensed in the State of Colorado.

Minor SWMP Modification: Modification to the SWMP that does NOT increase the scope or change hydrology of the Project but: modifies/improves specific BMPs in use at site, indicates progression in phasing of the Project, or specifies relocation of previously approved BMPs within the Project. Any adjustments to a SWMP must be performed either by or under the direction of a Professional Engineer licensed in the State of Colorado.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- a) owned or operated by a State, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of stormwater or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the Federal Clean Water Act that discharges to State Waters;
- b) designed or used for collecting or conveying stormwater;
- c) which is not a combined sewer; and
- d) which is not part of a Publicly Owned Treatment Works (POTW).

Permit Authority: The Department authorized by the City to review and process CASDP Applications for Capital and/ or governmental sponsored Projects. The responsible City department serving as the Permit Authority is the Engineering, Regulatory and Analytics Office. As a clarification, the Denver Department of Development Services is the single intake point for all permits

Permit Enforcement Authority: The Department authorized by the City to inspect and enforce CASDP Rules and Conditions for all construction Projects within the City's MS4 Boundary. The responsible City department serving as the Permit Enforcement Authority is the Wastewater Management Division of the Department of Public Works.

State Construction Stormwater Permit: Colorado Revised Statutes require that all construction sites/development Projects, which by definition, disturb one or more acres in area, shall be covered by a State issued general permit for construction activities. Information on the application requirements for the State permit can be obtained by phone at 303-692-3500; or by

visiting their offices located at 4300 Cherry Creek Drive South, Denver, CO 80246 – 1530 or on the Web at: <https://www.colorado.gov/pacific/cdphe/news/water-quality-permits>

State Waters: Any and all surface waters which are contained in or flow in or through this State, not to include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

Examples of State Waters include, but are not limited to, perennial streams, intermittent or ephemeral gulches and arroyos, ponds, lakes, reservoirs, irrigation canals or ditches, wetlands, stormwater conveyances (when they discharge to a surface water), and groundwater.

Stormwater Management Plan (SWMP): The Stormwater Management Plan contains the requirements necessary to accomplish all the following:

The SWMP establishes a minimum standard to construct, install, maintain, and remove required BMPs during the life of the Contract to prevent or minimize pollution of stormwater due to erosion, sediment transport, and construction related pollutant generated during all phases of the Project. A SWMP consists of the following elements:

- (i) CASDP Narrative Worksheet with Narrative Report. The Narrative Report and supporting documents should fully address the methods to be used to prevent sediment, debris, and other pollutants from entering the MS4 and/ or State Waters in and around the Project area. Proposed structural and non-structural BMPs should be described with sufficient implementation detail to ensure that the logical phases of the proposed construction Project meet the performance standards listed in the CASM.
- (ii) Proposed site drawings and Best Management Practice (BMP) installation details as they apply to the site conforming to the Urban Storm Drainage Criteria Manual, Vol. 3, "Best Management Practices", most current version as issued by the Urban Drainage and Flood Control District (UDFCD), or those established by the City's Department of Public Works. If erosion control drawings were included within the bid documents for the Project, they shall be used for bid purposes and initial planning/ deployment of BMPs on the Project. If provided drawings are signed/ sealed by a Professional Engineer, they have been pre-approved by the Permit Authority and may be used without revision for purposes of submitting for CASDP. If provided drawings do not have signature/ seal of Professional Engineer licensed by the State of Colorado, they will require revision by the Contractor with Professional Engineer signature/ seal prior to submission to the City and County of Denver for CASDP.
- (iii) Supporting documentation related to proposed BMPs that are not currently identified in UDFCD Vol. 3 or as otherwise published by the City.

Any preparation of or adjustments to a SWMP must be performed either by or under the supervision of a Professional Engineer licensed in the State of Colorado. SWMP elements submitted to the City

shall also meet currently established criteria of the CDPHE as the SWMP must meet all local, State and Federal requirements.

Substantial Completion of Erosion Control: Point of construction when permanent BMPs have been installed, initial growth is in place, and the site is waiting for vegetative cover to reach 70% of pre-disturbance vegetative cover.

PART II: DESCRIPTION

This Work shall consist of constructing, installing, maintaining, and removing when required, BMPs during the life of the Contract until Final Stabilization to prevent or minimize erosion, sedimentation, and pollution of any waters including storm, drainage-ways, MS4, State Waters, and/ or wetlands. Work under this Section includes the Contractor obtaining required Permits, utilizing SWMP elements provided in the Contract, and/ or SWMP elements specifically prepared by the Contractor as defined herein. The work shall also consist of providing on-going maintenance and monitoring of the SWMP as may be necessary due to the specific and/or dynamic needs of the Project as well as meet all requirements set forth within the CASM.

The Contractor shall coordinate the construction of temporary BMPs with the construction of permanent BMPs to assure economical, effective, and continuous erosion and sediment control and water pollution prevention throughout the construction period until Final Stabilization is achieved

When a provision of this Section or an order by the Permit Enforcement Authority requires that an action be immediate or taken immediately, it shall be understood that the Contractor shall at once begin effecting completion of the action and pursue it to completion in a manner acceptable to the Permit Enforcement Authority, and in accordance with applicable Permitting requirements.

PART III: MATERIALS

The materials to be used for BMPs shall conform to each specific detail as set forth within the Project SWMP or as noted on the Contract Drawings.

PART IV: EROSION CONTROL PERMIT STATUS

The current SWMP status for the Project is as follows:

A SWMP is currently not required for this project as the proposed disturbed area and/ or proximity to stream does not meet the minimum criteria for requiring a CASDP. However, the responsibilities for minimizing sediment pollution from the Project have not been waived, and as such, the City hereby requires the Contractor to perform as specified in the following notes. Because a SWMP and CASDP are not necessary for the Project, all cost for performance of the following notes shall not be paid for separately, but shall be included in the work.

“A CASDP Permit will not be required for this project, however, the Contractor and/or their authorized agents shall ensure that all potential pollutants generated during demolition, excavation, trenching, boring, grading, or other construction Work associated with this

permit, be prevented from discharge to stormwater conveyance systems in the vicinity of the Project.

The Contractor and/or their authorized agents shall remove all sediment, mud, construction debris, or other potential pollutants that may have been discharged to or, accumulate in the flow lines of storm drainage appurtenances and public rights of ways of the City and County of Denver as a result of construction activities associated with this Project. All removals shall be conducted in a timely manner.

The Contractor shall be held responsible for remediation of any adverse impacts to the MS4, State Waters, waterways, wetlands, and or other public or private properties, resulting from work done as part of this Project.

The Contractor and/or their authorized agents shall insure that all loads of cut and fill material imported to or exported from the Project shall be properly covered to prevent loss of the material during transport on public rights of way.” (Sec.49-552; Denver Revised Municipal Code)

Approved erosion and sediment control ‘Best Management Practices’ shall be maintained and kept in good repair for the duration of the Project. All necessary maintenance and repair shall be completed immediately upon discovery of any deficiency or defect.

The Contractor and/or their authorized agents shall implement the following Best Management Practices (BMPs) on site during construction. Best Management Practice (BMP) installation details and maintenance shall conform to the Urban Storm Drainage Criteria Manual, Vol. 3, "Best Management Practices", most current version as issued by the Urban Drainage and Flood Control District (UDFCD), or those established by the City’s Department of Public Works.

1. VEHICLE TRACKING CONTROL: This BMP is required at all access points to a construction site that are used by vehicular traffic or construction equipment.
2. INLET PROTECTION: This BMP is required on all existing or proposed storm sewer inlets in the vicinity of the construction site that may receive site runoff. The BMP must be appropriate to the type of storm inlet and appropriate for the ground surface at the inlet.
3. INTERIM SITE STABILIZATION: This BMP is required to provide a measure for preventing the discharge of sediment from construction sites where overlot grading or other site disturbance has occurred. This BMP is particularly necessary on sites where construction activities/disturbance will be limited to small areas of the project site.

Acceptable BMPs include:

- a. Preserving existing vegetation
- b. Seeding and planting
- c. Mulching
- d. Mulching and seeding

- e. Temporary/Permanent re-vegetation operations
 - f. Chemical soil stabilizer application (requires Permit Enforcement Authority approval)
4. **WASTE MANAGEMENT/CONTAINMENT:** This BMP requires that all construction wastes, fuels, lubricants, chemical wastes, trash, sanitary wastes, contaminated soils or debris shall be contained on site, protected from contact with precipitation or surface runoff, periodically removed from the construction site, and properly disposed of.
 5. **SPILL PREVENTION /CONTAINMENT:** This BMP defines the measures proposed for preventing, controlling, or containing spills of fuel, lubricants, or other pollutants; and protecting potential pollutants from contact with precipitation or runoff.
 6. **CHUTE WASHOUT CONTAINMENT:** Water used in the cleaning of ready mixed concrete truck delivery chutes shall be discharged into a predefined, bermed containment area on the job site. The required containment area is to be bermed so that wash water is totally contained. Wash water discharged into the containment area shall be allowed to infiltrate or evaporate. Dried concrete waste shall be removed from the containment area and properly disposed of. The direct or indirect discharge of water containing waste concrete to the storm sewer system is prohibited (Sec.56-102a, c; Denver Revised Municipal Code).
 7. **STREET SWEEPING:** This BMP requires that paved surfaces which are adjacent to construction sites be swept in a timely manner when sediment and other materials are tracked or discharged on to them. Either sweeping by hand or use of street sweepers is acceptable. Street sweepers using water while sweeping is preferred in order to minimize dust. Flushing off paved surfaces with water is prohibited.
 8. **PERIMETER CONTROL:** This BMP requires that a construction site install a perimeter control measure along the edge of the construction site, to prevent, or filter the discharge of surface runoff from the construction site. The type of perimeter control used shall be determined based on site conditions and location. Maintenance and repair of the control measure shall occur as needed, in a timely manner.
 9. **STOCK PILES:** Soils that will be stockpiled for more than thirty (30) days shall be protected from wind and water erosion within fourteen (14) days of stockpile construction. Stabilization of stockpiles located within 100 feet of an MS4 or State Waters, or with slopes 3 to 1 or greater shall be completed within seven (7) days following stockpile construction. Stabilization and protection of the stockpile may be accomplished by any of the following: Mulching, Temporary/Permanent Revegetation Operations, Chemical Soil Stabilizer Application (requires Permit Enforcement Authority approval), or erosion control matting/Geotextiles. If stockpiles are located within 100 feet of top of bank of an MS4 or State Waters, a drainage-way or the site perimeter, additional sediment controls shall be required.
 10. **SAW CUTTING OPERATIONS:** The Contractor shall protect all storm sewer facilities adjacent to any location where pavement cutting operations involving wheel cutting, saw cutting, or abrasive water jet cutting are to occur. The Contractor shall remove and properly dispose of all waste products generated by said cutting

operations on a daily basis or as needed throughout the work day. The discharge of any water contaminated by waste products from cutting operations to the storm sewer system is prohibited. (Sec.56-102a, c; Denver Revised Municipal Code).

PART V: CONSTRUCTION REQUIREMENTS

A) SCHEDULES:

At least 10 working days prior to the beginning of any construction work, the Contractor shall submit for approval a schedule for accomplishment of temporary and permanent BMPs shown in the SWMP. This schedule shall specifically indicate the sequence of clearing and grubbing, earthwork operations, and construction of temporary and permanent BMPs. The schedule shall include BMPs for all areas within the Project boundaries, including but not limited to, haul roads, borrow pits, and storage and other staging sites. Work shall not be started until the BMP schedule has been approved in writing by the Project Manager, and on-site pre-construction inspection is performed and approved by CCD's NPDES inspector. Once the work has started, and during the active construction period, the Contractor shall update the schedule for all BMPs on a regular basis, and as required to keep the SWMP in compliance.

B) CONSTRUCTION IMPLEMENTATION: The Contractor shall incorporate into the Project all BMPs that are appropriate for the current phase of work, as outlined in the accepted schedule.

C) UNFORSEEN CONDITIONS: The Contractor shall direct the ECS (under the supervision of a Professional Engineer licensed in the State of Colorado) to design and implement BMPs for correcting conditions unforeseen during design of the Project, or as possible for emergency situations, which arise during construction. The Project's SWMP, UDFCD Vol 3 standards and details, and CDOTs "Erosion Control and Storm-Water Quality Guide," and any approved modification to these documents as proposed by the Contractor, shall be used as reference documents for the purpose of designing appropriate BMPs. Measures and methods proposed by the Contractor to deal with unforeseen conditions shall be reviewed and approved in writing by the Permit Enforcement Authority and the Project Manager prior to implementation and construction.

In an emergency situation, the Contractor shall use best judgment for immediately responding to the emergency situation as it arises, and shall notify the Permit Enforcement Authority and ECS of the emergency situation and BMPs employed in response as soon as practical after installation.

D) PERMITS:

The Contractor shall obtain all required permits for the Project including those required by federal, state, and local agencies. The Contractor shall obtain (or transfer from the City when specified) required erosion control and water quality permits and shall be responsible for compliance with all requirements under any such permits.

E) EROSION CONTROL SUPERVISOR:

Contractor shall assign to the Project an employee or subcontractor to serve as Erosion Control Supervisor (ECS). The ECS shall be a person other than the Contractor's superintendent, foreman, or equivalent supervisory position. The ECS shall be experienced in aspects of BMP construction and

have satisfactorily completed a Colorado DOT or equivalent ECS training program authorized by the City. Proof that this requirement has been met shall be submitted to the Project Manager at least ten working days prior to the beginning of any soil disturbance work. A list of authorized ECS training programs is available from the City upon request. Additionally, per definition, the ECS shall be under the direction of a Professional Engineer licensed in the State of Colorado when performing any modifications to the Project Stormwater Management Plan (SWMP).

The ECS shall be responsible for oversight of the implementation, maintenance, and revision of the SWMP for the duration of the Project. CCD requires the ECS to fulfill responsibilities as outlined by CDPS such as having financial control and authority to implement BMPs. The ECS's responsibilities shall be as follows:

- 1) Ensure compliance with all water quality permits or certifications in effect during the construction work.
- 2) Supervise the installation, construction, and maintenance of all BMPs specified in the Contract and coordinate the construction of BMPs with all other construction operations.
- 3) Direct the implementation of suitable BMPs as necessary to correct unforeseen conditions or emergency situations. Direct the dismantling of those features when their purpose has been fulfilled due to completion of each Project phase unless the Permit Enforcement Authority agrees that the features be left in place.
- 4) Attend the preconstruction conference, erosion control preconstruction inspection, Project scheduling meetings, weekly construction/ field meetings, substantial completion and final stabilization inspections, and other meetings regarding construction that could impact water quality.
- 5) Evaluate all non-stormwater coming onto the site, such as springs, seeps, and landscape irrigation return flow. If such flow is identified, the ECS shall propose appropriate SWMP modifications to the Contractor to protect off-site water from becoming contaminated with sediment or other pollutants.
- 6) Coordinate with the Contractor to implement necessary actions to reduce anticipated or presently existing water quality or erosion problems resulting from construction activities.
- 7) Coordinate with the Contractor to ensure all labor, material, and equipment deployed to meet SWMP requirements is judged appropriately.
- 8) During construction, update and record the following items in the SWMP as changes occur:
 - (i) Construction boundaries (may require Major SWMP Modification)
 - (ii) Areas of disturbance (may require Major SWMP Modification)
 - (iii) Areas used for storage of construction materials, equipment, soils, or wastes.
 - (iv) Location of any dedicated asphalt or concrete batch plants.
 - (v) Location of construction offices and staging areas.
 - (vi) Location of work access routes during construction.
 - (vii) Location of borrow and waste.
 - (viii) Location of temporary and permanent stabilization

The ECS shall start a new site map before the current one becomes illegible. All site maps shall remain with the SWMP paperwork.

9) Amend the SWMP whenever there are: additions, deletions, or changes in locations of BMPs SWMP revisions shall be recorded immediately. Items shall be dated and signed at time of occurrence. Specifically, amendments shall include the following:

- (i) A change in design, construction, operation, or maintenance of the site which would require the implementation of new or revised BMPs; or
- (ii) Changes when the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity.
- (iii) Changes when temporary BMPs are no longer necessary from changes in Project phase and are removed. All inspection and maintenance activities or other repairs shall be documented.

All inspection and maintenance activities or other repairs shall be documented. The SWMP and documentation shall be kept on the Project site at all times.

- 10) Modify the site map with arrows to indicate direction of surface and storm water flowing across the Project site.
- 11) When adding, or revising BMPs in the SWMP, amend the narrative to explain what, when, where, why, and how the BMP is being used, and add a detail to the SWMP.
- 12) If using existing topography, vegetation, etc. as a BMP, label it as such in the SWMP site map; amend the Narrative to explain when, why, and how the BMP is being used in the SWMP.
- 13) Record on the SWMP, and implement the approved plan for concrete and asphalt saw cutting, grinding, and milling containment and removal.
- 14) Update the potential pollutants list in the SWMP throughout construction meeting CASDP requirements.
- 15) Spills, leaks, or overflows that result in the discharge of pollutants shall be documented on the inspection form. The ECS shall record the time and date, weather conditions, reasons for spill, and how it was remediated. The ECS shall immediately report to the Contractor and Project Manager the following instances of noncompliance:
 - (i) Noncompliance which may endanger health or environment.
 - (ii) Spills or discharge of hazardous substance or oil which may cause pollution of the City MS4 or State Waters.
 - (iii) Discharge of stormwater which may cause an exceedance of a water quality standard.
- 16) Perform a thorough inspection of the stormwater management system at least every seven (7) days and within 24 hours after any precipitation or snowmelt event with the potential to cause surface erosion. If no land disturbing construction activities are present during a storm event, post-storm event inspections shall be conducted prior to commencing any new land disturbing construction activities, but no later than seventy-two (72) hours following the storm event. The inspection records shall be kept on-site in a written or previously approved format. Inspections shall be conducted during the progress of the work, during work suspensions, or until Final Stabilization of all disturbed areas is approved by Permit Enforcement Authority and shall include the following services at a minimum:
 - (i) The construction site perimeter, disturbed areas, and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential

- for, pollutants entering the drainage system. BMPs identified in the SWMP shall be observed to ensure that they are operating correctly.
- (ii) The description of potential pollutant sources, and the BMPs identified in the SWMP, shall be revised and modified as appropriate based on the results of the inspection as soon as practicable after such inspection. Modification to the SWMP shall be implemented in a timely manner and in accordance with applicable Permit requirements.
 - (iii) The operator shall keep a record of inspections. Uncontrolled releases of sediment or polluted storm water or measurable quantities of sediment found off the site shall be recorded with a brief explanation as to the measures taken to prevent future releases as well as any measures taken to clean up the sediment that has left the site. Inspection records shall be made available to the City upon request. Note: documentation of uncontrolled releases at site DOES NOT alleviate any State or Federal requirements for reporting of discharges or upset conditions. Care shall be taken to ensure compliance with all regulatory requirements at site.
 - (iv) Seven (7) day inspections are required during construction and at all times until Final Stabilization has been achieved. Seeding and mulching of disturbed areas does NOT count as final stabilization until such time as 70% pre-disturbed vegetative cover has been achieved. Sites with growth in place sufficient to deter erosion that have not yet achieved final stabilization may petition the City to grant an alternative inspection schedule while awaiting additional growth for final stabilization. These inspections must be conducted in accordance with the above paragraphs.

F) APPLYING BMPs TO STABILIZE SITE:

The duration of the exposure of incomplete construction to the effects of weather shall be as short as practicable. BMPs such as: seeding, surface roughening, mulching, applying tackifier, use of geotextiles and matting, permanent landscaping, or other selected BMPs shall be applied within fourteen (14) calendar days of completion of grading/soil disturbance activities to stabilize the construction site unless disturbed area is within 100 feet of an MS4 or State Waters or has slopes of 3 to 1 or greater in which case BMPs shall be implemented within seven (7) calendar days of completion of grading activities. Disturbed areas where work is temporarily halted shall be temporarily stabilized within seven (7) days after the activity ceased unless work is to be resumed within thirty (30) calendar days after the activity ceased.

Clearing and grubbing operations shall be scheduled and performed to minimize both the area of the Project disturbed at a given time and the amount of time that disturbed areas remain open. BMPs, such as temporary seeding, are required between successive construction stages when disturbed areas will not be stable or active for thirty (30) calendar days or more. No payment will be made for additional work required because the Contractor has failed to properly coordinate the BMP schedule, thus causing previously stabilized areas to be disturbed by operations that could have been performed prior to the stabilization. Upon failure of the Contractor to coordinate the permanent BMPs with the grading operations in a manner to effectively control erosion and prevent water pollution, the Permit Enforcement Authority can suspend the Contractor's grading operations and the Project Manager can withhold monies due to the Contractor on current estimates until such

time that all aspects of the work are coordinated in an acceptable manner.

G) WORK OUTSIDE LIMITS OF CONSTRUCTION: Non-contiguous areas outside the limits of construction that are used by the Contractor that include, but are not limited to, borrow pits, haul routes, storage and disposal areas, field offices, maintenance, batching areas, etc., shall have appropriate BMPs implemented by the Contractor at the Contractor's expense. Should said areas meet applicable CASDP Permit criteria, the Contractor shall obtain a separate CASDP or amend existing CASDP for each area as applicable at no additional expense to the City.

H) MAINTENANCE: The Contractor shall continuously maintain erosion and sediment control BMPs on a daily basis or as directed by the ECS so that they function properly during and after construction (including work suspensions) until Final Stabilization has been approved by the Permit Enforcement Authority Maintenance includes, but is not limited to, the following items:

- (i) From the time seeding and mulching work begins until the date the Project has reached Substantial Completion of Erosion Control, the Contractor shall keep all seeded areas stabilized at all times. Any damage to seeded areas or to mulch materials shall be promptly repaired.
- (ii) All inspection sediment removal, and BMP maintenance activities to comply with all Federal, State & Local erosion control permit requirements until Final Stabilization is reached.
- (iii) All removal and replacement of existing BMPs due to damage to same suffered either by the contractor, outside agencies, the public, or acts of God.
- (iv) All required mechanical and/ or manual street sweeping.
- (v) Discretionary changes required of any regulatory enforcement officer.

If the Contractor fails to maintain the BMPs in accordance with the Contract, or as directed, the City may at the expiration of a period of 48 hours, after having given the Contractor written notice, proceed to maintain BMPs as deemed necessary. The cost thereof will be deducted from any compensation due, or which may become due to the Contractor under this Contract.

I) MINOR SWMP MODIFICATIONS: Shall be made in the field by the Contractor and thoroughly documented in the Contractor's SWMP narrative and drawings. Should the Permit Enforcement Authority deem minor field modifications inadequate, the Contractor may be required to a) make specific modifications as requested by the Permit Enforcement Authority or b) Return to the original approved design specifications. Minor SWMP Modifications are allowed, covered under the original CASDP, and required as part of standard maintenance and operation.

J) MAJOR SWMP MODIFICATION: The City reserves the right to require changes in the Work or Project Limits that may require a Major Modification to the SWMP and/ or CASDP due to unforeseen circumstances. Should this occur, the Contractor will be responsible for the following (as applicable) and applying for CASDP amendment:

- (i) Make required revisions to comply with changing Federal or State rulemaking if it occurs within timeframe of the Project
- (ii) Make required revisions due to unforeseen or unplanned conditions leading to deficient Drawings/ SWMP (hazardous materials encountered, landfills, expansion

of work limits, etc.)

- (iii) Prepare revised SWMP elements endorsed by a Professional Engineer licensed in the State of Colorado.

K) SUBSTANTIAL COMPLETION OF EROSION CONTROL: When a CASDP is required for the Project, Substantial Completion of the Project as defined by the City and County of Denver General Contract Conditions cannot be reached until Substantial Completion of Erosion Control has been granted. Granting of Substantial Completion of Erosion Control must be requested by the Contractor and be approved by the Permit Enforcement Authority in the form of a "Certificate of Substantial Completion of Erosion Control".

L) FINAL STABILIZATION: Granting of Final Stabilization must be requested by the Contractor and be approved by the Permit Enforcement Authority. Other permanent soil stabilization techniques may be proposed, in writing, by the Contractor and used upon approval, in writing, by the Project Manager and Permit Enforcement Authority.

The Contractor shall follow the following procedures for approval of Final Stabilization:

- (i) The Contractor shall file Inactivation Request for Construction Activities Stormwater Discharge Permit (available within CASDP guidance documents) with the Permit Enforcement Authority.
- (ii) The Contractor shall coordinate with the Permit Enforcement Authority to hold a Final Inactivation Inspection.
- (iii) If passing, the Permit Enforcement Authority transmits a letter of approval for Final Stabilization.
- (iv) If not passing, the Permit Enforcement Authority transmits a letter of denial for Final Stabilization with associated inspection report to Contractor.
- (v) Stabilization, inspection and maintenance requirements shall continue until confirmation of having met final closure requirements have been granted in writing by the Permit Enforcement Authority.
When Final Stabilization has been reached, the Permit Enforcement Authority shall issue a "Certificate of Final Stabilization".
- (vi) Once the Inactivation request is approved by the City and County of Denver, the contractor can apply to close the State Stormwater Permit.

M) FINAL ACCEPTANCE:

CASDP obligations (including reaching Final Stabilization) may hinder the ability to reach Final Acceptance for the overall Project as defined in the City General Contract Conditions.

PART VI: CONSTRUCTION OF BMPs

BMPs shall be constructed so that they conform to all requirements as set forth within the Project SWMP. They shall meet all requirements set forth within each BMP detail and shall be installed and maintained so that they function in an effective and operable manner.

PART VI: METHOD OF MEASUREMENT

Because a SWMP and CASDP are not necessary for the Project, all cost for performance of the Best Management Practices, with the exception of inlet protection, shall not be paid for separately but shall be included in the work. Inlet protection shall be paid on a per unit basis.

Removal of sediment & trash that is or is not generated by construction activities will not be measured separately but shall be included in the work.

Any excavation required for the removal of sediment from traps, basins, areas adjacent to silt fences and erosion bales, and any other cleanout excavation of accumulated sediment, and removal of check dams or storm drain inlet protection will not be measured separately but shall be included in the work.

PART VII: BASIS OF PAYMENT

Because a SWMP and CASDP are not necessary for the Project, all cost for performance of the Work to furnish, install, maintain, replace (if not due to contractor negligence), remove, and dispose of BMPs specified in the Contract shall not be paid for separately, but shall be included in the work. Only Storm Drainage Inlet Protection will be measured and each Bid Item unit includes all materials, equipment and labor necessary to protect each inlet regardless of the size, type or timeframe as per the current City of Denver Stormwater Management Plans / (SWMP) requirements. The cost for any corrective actions required by the State or City due to contractor’s failure to obtain or comply with applicable Permits will be borne by the Contractor, including fines and penalties. In the case of failures on the part of the Contractor in controlling erosion, sedimentation, and/or water pollution, the City may provide the necessary corrective actions. All corrective action costs, including Project Managing costs, will be charged to the Contractor, and appropriate deduction will be made from the Contractor’s monthly pay estimate.

The sole remedy for additional costs associated with installation of BMPs as required by regulatory agencies to ensure compliance with local and State requirements shall be included in the cost of the adjacent concrete repair work as provided in the Bid Schedule of this Contract. The Contractor however may submit a separate itemized Change Order for any required Major SWMP Modification proposed by the City during the course of the Project.

All other work required as set forth in this Revised Section 208–Erosion Control including all materials, equipment and labor, to permit, set-up, maintain, document, remove and clean-up all erosion control BMP’s as per current City of Denver Stormwater Management Plans/ (SWMP) requirements will not be paid separately; all costs incurred by the Contractor to meet the requirements of this Section regarding Erosion Control unless provided for in the Bid shall be included in the related appurtenance.

Payment will be made under:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Storm Drainage Inlet Protection	EA

Only Storm Drainage Inlet Protection will be measured for payment and each Bid Item unit includes all materials, equipment and labor necessary to protect each inlet regardless of the size or type as per the current City of Denver Stormwater Management Plans / (SWMP)

requirements. All other work required as set forth in this Revised Section 208 –Erosion Control including all materials, equipment and labor, to permit, set-up, maintain, document, remove and clean-up all erosion control BMP's as per current City of Denver Stormwater Management Plans /(SWMP) requirements will not be paid separately; all costs incurred by the Contractor to meet the requirements of this Section regarding Erosion Control unless provided for in the Bid shall be included in the related appurtenance. When the contract does not include pay items for Erosion Control, these items will not be paid for separately but shall be included in the work.

Payment for each BMP item will be full compensation for all work, materials and equipment required to furnish, install, maintain, remove, and dispose of it. BMPs as deployed per the SWMP requiring replacement due to Contractor negligence and or carelessness shall be provided at the Contactor's expense.

Temporary BMPs required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or for the Contractor's convenience, shall be performed at the Contractor's expense.

If the Contractor fails to complete construction within the approved contract time, payment will not be made for Section 208 pay items for the period of time after expiration of the approved contract time. These items shall be provided at the Contractor's expense.

The cost for any corrective actions required by the State or City due to contractor's failure to obtain or comply with applicable Permits will be borne by the Contractor, including fines and penalties. In the case of failures on the part of the Contractor in controlling erosion, sedimentation, and/or water pollution, the City may provide the necessary corrective actions. All corrective action costs, including Project engineering costs, will be charged to the Contractor, and appropriate deduction will be made from the Contractor's monthly pay estimate.

The sole remedy for additional costs associated with installation of BMPs as required by regulatory agencies to ensure compliance with local and State requirements shall be per unit BMP as provided in the Bid Schedule of this Contract. The Contractor however may submit a separate itemized Change Order for any required Major SWMP Modification proposed by the City during the course of the Project.

When the contract does not include pay items for Erosion Control these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 208

**REVISION OF SECTION 209
WATERING AND DUST PALLIATIVES**

Section 209 of the Standard Specifications is hereby revised as follows:

Subsections 209.07 and 209.08 shall be revised as follows:

Watering and Dust Palliatives will not be measured and paid for separately but shall be included in the cost of the work.

END OF REVISION OF SECTION 209

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**REVISION OF SECTION 210
RESET STRUCTURES**

Section 210 of the Standard Specifications is hereby revised as follows:

Subsection 210.09 shall include the following:

Signs and traffic signals shall be reset in accordance with the City and County of Denver Transportation Engineering Services requirements needed to remove and restore existing signage and at locations indicated on the plans, or as directed by the Project Manager. It will be the Contractor's responsibility to supply and install any new materials needed to restore the signs and traffic signals to service at the new location.

Subsection 210.10 shall include the following:

Manholes, water meters, inlet castings, valve boxes and pull boxes shall be adjusted in accordance with the applicable standards of the Utility Owner. The Contractor shall be responsible for determining the proper Utility Owner and coordinating these adjustments. Survey range boxes shall be adjusted as directed by the Project Manager. Bid Item "Reset Inlet Grate, Frame and Adjustable Curbhead with new castings" will include for each existing single inlet all materials, equipment and labor, to remove and dispose of the existing castings and provide and place new castings with mounting hardware, grout and up to 1 course of standard brick riser as per Wastewater Standard Details DRWG NO. S-716 and all other labor, equipment, materials and hauling and disposal necessary to complete the work. Both Bid Items; "Adjust Inlet Frame" and "Adjustable Curbhead and reset Inlet Frame, Grate and Adjustable Curbhead" shall include all related work required to construct the rebar reinforced 8" x 12" x inlet width concrete Curb Head Beam as per Wastewater Standard Details Drawings 616.1-3. Restoration of landscaping beyond 12" limits outlined on the plans and/or as marked in the field by the Project Manager will not be paid for.

Subsection 210.12 shall include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Subsection 210.13 shall be revised to include the following:

The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage.

PAY ITEMS

PAY UNIT

Reset Ground Sign	EA
Adjust Manhole, Meter, Valve Box, Pull Box	EA
Adjust Inlet Frame and Adjustable Curb Head	EA
Reset Inlet Grate, Frame and Adjustable Curbbox (New Castings)	EA

When the contract does not include pay items for Reset Structures, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 210

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**REVISION OF SECTION 212
SEEDING, FERTILIZER AND SODDING**

Section 212 of the Standard Specifications is hereby revised as follows:

All landscape restoration will be completed and accepted prior to consideration of the reduction of retainage. Normally landscape restoration will start as soon as possible after concrete construction has been completed but landscape restoration shall be completed within 7 calendar days after the date the adjacent concrete was poured. Minor exceptions may be requested by the Contractor in writing for consideration by the Project Manager during cold weather months when landscape work is not practical.

Subsection 212.01 shall include the following:

This work shall include restoring all existing landscaping that is within twelve inches (12") of the concrete repair reconstruction areas that are damaged as a result of the reconstruction activity. The bid item "Restore Landscaping, In Kind" item shall apply to all landscaping within the limits of construction unless agreed upon in writing by the Project Manager in advance of the related concrete repair work. Materials used to restore landscaping shall be replaced "in-kind" unless otherwise approved by the Project Manager. All landscaped area to be restored shall be backfilled and compacted with native soil so that they may have a minimum of 4" and a maximum of 6" of amended topsoil or planter's mix placed in lieu of existing backfill material in the top 4" cross sectional vertical area below finish grade that is hand tamped and topped off to avoid settlement. Amended topsoil or planter's mix shall be 70% top soil with 30% compost and the source must be submitted and approved by the Project Manager prior to use. Seeding areas larger than twelve inches must include hydraulic mulching with all costs to be included in the square foot price of "Restore Landscaping, In-Kind". Only at the direction of the Project Manager will sodding be accepted in lieu of seeding. Amended Top Soil and Planter's Mix samples and mix design and supplier must be submitted for approval prior to use.

"Restore Landscaping, In Kind" shall include restoring all landscaping that is disturbed within the limits of construction. This includes any and all landscape plants, trees, shrubs, or other materials including concrete, asphalt, pavers or blocks (concrete or brick), landscape rock, sodding, flowers, shrubs and landscape timbers or statuaries. The Contractor shall be required to maintain the landscaping planting in accordance with Section 214.

Subsection 212.01 shall include the following:

Work performed in areas under the jurisdiction of Denver Parks and Recreation Department shall conform to the standards of that Department. All costs related to acquiring the Denver Parks ROW permit are included in the Restore Landscaping, In-Kind Pay Item and will not be paid separately.

Subsection 212.07 is hereby revised to include the following:

Only the work restoring existing landscaping that is within twelve inches (12") of the concrete repair reconstruction areas that are damaged as a result of the reconstruction activity will be measured for payment. Any areas beyond twelve inches (12") that are

damaged by the Contractor will not be measured for payment and will be repaired by the Contractor at no expense to the City. Copies of Top Soil load tickets including a summary sheet shall be submitted for review and acceptance in advance of each pay application. All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Landscaping work must be completed within 10 days of request to contractor of repair.

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Sodding	SF
Restore Landscaping, In-Kind	SF
Amended Top Soil or Landscape Planter's Soil Mix	CY

When the contract does not include pay items for landscape repair, top soil, fertilizer, seeding or sodding, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 212

**REVISION OF SECTION 304
AGGREGATE BASE COURSE**

Section 304 of the Standard Specifications is hereby revised as follows:

Subsection 304.01 is revised as follows:

This work includes any type of removal or excavation of in-fill material, loading, removal, hauling and disposal of unsuitable materials and consists of furnishing and placing aggregate base course, only if required or at the direction of the Project Inspector or Project Manager on prepared sub-grade. The Contractor shall work to minimize the removal of suitable undisturbed existing subgrade when performing the removal of existing concrete or asphalt infrastructure or grading existing soil.

Subsection 304.06 is revised as follows:

All material within the street section shall be compacted to 95% of maximum density as determined in accordance with AASHTO T-99; all areas outside the street section shall be compacted to 95% of the maximum density determined in accordance with AASHTO T-180. It is the Contractor’s responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal approved by the City Project Manager. Quality Control testing, reports and submittals will not be paid for separately but shall be included in the work.

Subsection 304.07 is hereby revised as follows:

Aggregate Base Course will be measured by the ton. All quantities to be submitted for payment must include copies of the load tickets, delivered to the project location, accompanied by a summary including the load ticket number supplier, date and weight in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and must be submitted for review and acceptance in advance of each pay application.

Subsection 304.08 is hereby revised as follows:

Payment for the accepted quantities of Aggregate Base Course measured per ton shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including excavation, removal, hauling and disposal of removal items, excavation of subgrade material, installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation.

PAY ITEM

PAY UNIT

Aggregate Base Course (Class 6) (Complete in-Place)

TN

When the contract does not include pay items for Aggregate Base Course, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 304

**REVISION OF SECTION 306
RECONDITIONING**

Section 306 of the Standard Specifications is hereby revised as follows:

Subsection 306.01 shall be revised to include the following:

All existing subgrade on alleys and streets from back of curb to back of curb shall be reconditioned.

Subsection 306.02 shall be revised to include:

Unless otherwise indicated on the plans, the density requirements for reconditioning shall be:

- Clay Soils - 95% of the maximum density determined in accordance with AASHTO T 99
- Granular Soils - 95% of the maximum density determined in accordance with AASHTO T 180

It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and compile comprehensive reports as per Pre-construction submittal approved by the City Project Manager. Quality Control material testing, reports and submittals will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum, the QCP shall include the following:

1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
2. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
3. Sub-grade compaction and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance High Early Strength Concrete is used.
4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 306.04 is revised as follows:

Reconditioning will not be measured and paid for separately but shall be included in the work.

END OF REVISION OF SECTION 306

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**REVISION OF SECTION 401 AND 403
PLANT MIX PAVEMENTS**

Sections 401 and 403 of the Standard Specifications for Road and Bridge Construction are hereby deleted and replaced with the Metropolitan Government Pavement Engineers Council (MGPEC) Pavement Design Standards and Construction Specification Manual Item 20.,

All Asphalt Mix Designs are a required submittal and must be approved prior to use in the City and County of Denver. The Contractor is required to submit a detailed list of paving equipment for approval by the Project Manager prior to commencing any construction activities.

It is the Contractor’s responsibility to provide Quality Control testing for material density and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work. Quality Control material testing, reports and submittals will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum, the QCP shall include the following:

1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
2. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
3. Asphalt tests shall be at the request of the Project Manager as needed for Quality Control in critical conditions.
4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

METHOD OF MEASUREMENT

Item 27.5 of the MGPEC specifications is hereby revised as follows:

All work performed will be measured by the ton based on copies of the approved supplier’s asphalt load tickets provided with a summary table with each Application for Payment Tack Coat will not be measured and paid for separately but shall be included in the cost of the work.

Payment will be made under:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
HBP Patch/Overlay SX(75) PG 64-22	TON

When the contract does not include pay items for Plant Mix Pavements, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 401 / 403

**REVISION OF SECTION 412
PORTLAND CEMENT CONCRETE PAVEMENT**

Section 412 of the Standard Specifications is hereby revised as follows:

Subsection 412.01 shall be revised to include the following:

This work shall also include concrete streets, driveways, crosspans, valley gutter, bus pads and alley paving.

Subsection 412.03 shall be revised to include the following:

All Portland Cement Concrete Pavement used on this Contract shall meet the requirements of MGPEC Item 30 Designation P-DR concrete with a minimum 20% Class F or N fly ash. Polypropylene fibers shall be included and shall be FIBERMESH® or APPROVED EQUIVALENT. Length of fibers shall be as recommended by the manufacturer. Add 1.5 pounds FIBERMESH® or APPROVED EQUIVALENT per cubic yard of concrete. The Contractor is required to submit copies of all concrete batch tickets for loads delivered during the previous pay period with each Application for Payment to the Project Manager on the Contract. All Portland cement concrete mix designs must be approved prior to use in the City and County of Denver.

It is the Contractor's responsibility to provide Quality Control for material properties and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum, the QCP shall include the following:

1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
2. Hand finishing shall be performed under the supervision of a Craftsman holding an ACI Flatwork Finisher certificate or another approved finisher certificate.
3. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
4. Concrete tests will be one per 300 cubic yards of concrete, minimum one per week. Additional tests may be performed as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance High Early Strength Concrete is used.
5. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 412.04 shall be deleted and replaced with Subsection 601.05, with the following revisions: Non-chloride (up to 1 percent by weight of cement) or Type C or E accelerators may be used under the following conditions:

- a) The median daily temperature is less than 55 degrees (Average of previous

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- three days).
- b) The date of placement is between September 30th and May 30th.
- c) The concrete temperature may not exceed 80 degrees F prior to placement.

Difficulties encountered as a result of use of accelerators, the costs of associated delays, and corrective action costs shall be borne by the Contractor.

When High Early Strength Concrete is requested by the City's Project Manager for the convenience of the City, the concrete mix designs shall be submitted to the Project Manager for approval. High Early strength concrete shall meet the requirements of MPGPEC Item 30 and develop a strength of 3000 psi (minimum required for additional payment) in 24 hours or less. The additional charge per cubic yard paid for high early concrete will be compensation only for the difference in concrete cost per cubic yard when directed to be used by the Project Manager. If high early concrete is placed by the contractor without the request of the City the entire additional cost will be borne by the contractor. When directed by the Project Manager, a maturity meter shall be used to monitor on-site maturity of pavement concrete. The Contractor shall provide the Project Manger data outlining an established maturity versus strength relationship for the concrete mixture being used. This correlation may be achieved by casting and curing cylinders on site, monitoring temperature and maturity of cylinders and paving concrete versus time, and testing cylinders at time intervals to establish the correlation.

When High Early Strength Concrete is requested by the City's Project Manager for the convenience of the City, a strength of 3000 psi shall be achieved within 24 hours and a strength of 4500 psi (minimum required for additional payment) shall be achieved in 28 days or less. The additional charge per cubic yard will be paid for High Early Strength Concrete will be compensation only for the difference in concrete cost per cubic yard and extra labor per yard for all work performed using High Strength Concrete when directed to be used by the Project Manager. If High Early Strength Concrete is placed by the contractor without the request of the City the entire additional cost will be borne by the contractor.

Subsection 412.07 shall be revised to include the following:

The Contractor is required to submit a detailed breakdown of paving equipment, vibratory devices, finishing tools, and provisions for protection from or avoidance of damage from weather impacts. This information shall be submitted for approval by the Project Manager prior to commencing any construction activities.

Subsection 412.12 shall be revised to include the following:

The Contractor shall insure that new concrete items built under this contract drain properly and, as such, there are no areas of standing water on new concrete items.

The Contractor shall protect all new concrete items built under this Contract against defacement, or other injury, from any cause. If said damage cannot be adequately repaired to the satisfaction of the Project Manager or if there are any areas of standing water, the Contractor shall remove and replace the unacceptable items at Contractor's expense.

Subsection 412.13(a) 1, shall be deleted and replaced with the following:

Longitudinal Construction Joints.

Deformed steel tie bars of specified length, size, spacing, and material shall be placed perpendicular to the longitudinal joints by an approved method. When adjacent lanes of pavement are constructed separately, Grade 40 (not Grade 60) tie bars may be bent at right angles against the form of the first lane constructed and straightened into final position before the concrete of the adjacent lane is placed. If epoxy-coated steel tie bars are bent and then straightened into final position, at the Project Manager's discretion the bars shall be repainted with epoxy coating prior to placement of the adjacent concrete. The tie bars shall be inserted into the plastic state concrete between the auger and the vibrators. Other methods of the bar placement may be acceptable if the Contractor can demonstrate satisfactory performance of his alternate method. Proposals of alternate methods or additional costs associated with other methods shall be at the Contractor's expense.

Subsection 412.13(b), delete the first sentence and replace it with the following:

Weakened plane joints shall be formed by sawing to the depth specified on the drawings, in accordance with the requirements of this subsection or as otherwise approved by the Project Manager, except as follows: The contractor shall adhere to the City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), joints shall be formed initially by deep tooling or "soft-cut" methods, followed by sawing at the first available time within the ordinance.

Subsection 412.13(b) 2, delete the first and second paragraphs and replace with the following:

Transverse weakened plane joints shall be formed by sawing a groove in hardened concrete in accordance with City of Denver Transportation Standards and Details for the Engineering Division as per STD. DWG. NO. 11.3 Concrete Pavement Joint Sealant plan details. The Contractor shall cut the transverse and longitudinal joints to the width and depth required in accordance with City of Denver Transportation Standards and Details for the Engineering Division. The cut shall be made with a power-driven saw. Any damage to the concrete pavement such as spalling or fracturing shall be repaired by the Contractor as directed by the Project Manager at no cost to the project. The joints shall be immediately flushed with water to remove any sawing residue from the joint and pavement surface.

If concrete approaches or any widening beyond the width of the initial pass is constructed subsequent to the driving lanes, transverse weakened plane joints shall immediately be formed in the approaches extending from any joints in the driving lanes.

Subsection 412.13(b) 2, shall be revised to include the following:

The time schedule for sawing weakened plane joints shall be as follows: Every second joint shall be sawed 2 to 12 hours after pavement placement, provided the concrete has sufficiently set so as to preclude the dislodging of aggregate particles by the saw. Unless otherwise directed by the Project Manager, the exact time of sawing shall be determined by the Contractor and will be dependent on weather conditions, ambient temperature, mix characteristics and other factors that may affect the setting time of the concrete. Every effort shall be made to saw early enough to control or limit random cracking. The intermediate joints shall be sawed prior to opening to traffic, but in no case, longer than 48 hours after

placement of the concrete.

The Contractor shall adhere to the City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36). In the event that the need for saw cutting is anticipated during restricted time periods, a "soft-cut" saw shall be used before restricted hours, or deep tooling of joints shall be performed on plastic concrete, followed by saw cutting of the concrete as soon as possible during unrestricted hours. At the discretion of the Project Manager, saw cutting will be prohibited between 10:00 p.m. and 7:00 a.m.

Subsection 412.14 and referenced Section 711.01 Concrete Curing Materials shall be modified, allowable curing compound types and specification for all Portland Cement Concrete Pavement placed on this Contract shall be a combination cure-sealer that meets or exceeds ASTM C 1315 Type I, Class A (clear, non-yellowing). The compound must be an acrylic copolymer type, non-freezing solvent based, with a minimum of 25% solids content. Compound must be VOC compliant in accordance with EPA 40 CFR Part 59. The final gloss appearance will serve as proof of application.

The Contractor shall use the cure-sealer according to the manufacturers recommendations so that when applied it will not adversely affect the skid resistance of the pavement.

Subsection 412.18 shall be deleted and replaced with the following:

This work shall consist of sawing, cleaning and sealing Portland cement concrete pavement joints for new pavements. All Joint Sealing methods and products must be submitted to and approved by the Project Manager in advance of scheduling the work.

Cleaning, repairing and proper curing of any spalls, fractures, breaks or voids in the concrete surface of the joints shall be accomplished at least 4 days prior to installing the backer rod material or joint sealant. Joint sealing or resealing shall be performed only when the ambient and pavement temperatures are 50 degrees F or higher, unless otherwise approved by the Project Manager. The pavement surface and joints shall be dry and the sealant shall not be placed unless the weather conditions are dry. The sealant shall be placed a minimum of 4 days after joints are washed clean.

The Contractor shall thoroughly clean the joint and adjacent pavement for a width of not less than one inch on each side of the joint of all scale, dirt, dust, residue, or any foreign material that will impair bonding of the joint sealant. Immediately prior to the placement of backer rod material and the sealant, the joints shall be cleansed using a minimum of 100 psi compressed air.

Work shall be stopped when and if it is found that there is oil or moisture in the compressed air. Work shall not resume until suitable adjustments are made. The Contractor is to check for such oil or moisture at the start of every work cycle and periodically during the cycle using a Project Manager approved method. The backer rod shall be placed in such a manner that the grade for the proper depth of the sealant material is maintained. Under no conditions shall the Contractor place the backer rod material or the sealant if there is dust, moisture, oil or any foreign material on that portion of the concrete that is to receive the backer rod material

or joint sealant.

A copy of the manufacturer's recommendations pertaining to the heating and application of the sealant shall be submitted to the Project Manager prior to the beginning of work, and these recommendations shall be adhered to by the Contractor, with such exceptions as this specification may require.

The sealant material shall be hot applied into the joint using equipment and techniques recommended by the joint sealant manufacturer. The surface of the finished joint seal shall have a flat level surface that is $3/16 \pm 1/16$ inch below the surface of the concrete pavement. Sealant not placed within these tolerances will not be measured and paid for, and the Contractor shall remove the joint sealant material and clean and reseal these joints in accordance with the criteria outlined in the special provision at no additional cost to the project. If, in the opinion of the Project Manager, the Contractor shows an inconsistency in his ability to fill the joints to the required dimensions, the Contractor shall cease his operations until such time as he can comply with the required criteria in a consistent manner.

In addition, the Project Manager may elect to check for bonding or adherence to the sides of the joint. Material shall conform to Subsection 705.01(a).

The joint material must withstand a 20 pound pull force applied perpendicular to the joint as indicated in "COLORADO PROCEDURE 67-90".

Subsection 412.22 shall be deleted and replaced with the following:

The pavement shall be cleaned and opened to traffic in accordance with the time requirements shown on the plans or in the specifications.

Pavement shall not be opened until it has reached a compressive strength of 3000 psi in-place, regardless of the curing time required by the Traffic Control Plan. The TCP may necessitate the required compressive strength to be attained within 72 hours or less.

Subsection 412.23 shall be revised to include the following:

Payment under Concrete Pavement shall be full compensation for all materials and labor required to complete the various pavement sections, including the areas of thickened edges, driveways, bus pads and alley paving.

New curb and gutter that is adjacent to new concrete pavement will not be measured and paid for separately but included in the square yard measurement for concrete pavement. Measurement and payment will be to back of curb except where curb ramp limits overlap.

This work shall also include concrete streets, driveways, crosspans, bus pads and alley paving with the finished area measured by the square yard and paid by their respective thickness as Concrete Pavement.

Geo-Tech Material Testing Concrete quantities to be measured will include all equipment,

materials and labor to sample concrete at the site of the pour, perform air and slump test, batch weight, make cylinders, transport to lab and perform cylinder strength compression break tests (at 7, 14 and two at 28 days unless otherwise specified for high early strength concrete by the Project Inspector/Manager) for 4 cylinders for each test including report as outlined in Subsection 412.03 all to be completed by a Certified Laboratory/Personnel. Concrete strength test reports submitted to the Project Manager in advance of each Pay Application to be considered for payment.

The accepted quantities for "Concrete Pavement (-") will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, joint sealing, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

When authorized for use by the Project Manager/Inspector the accepted quantities for "High Early Strength Concrete" and "Concrete Class D (Colored)" will be compensation only for the difference in concrete cost per cubic yard and extra labor per yard for all work performed using "High Early Strength Concrete" and Concrete Class D(Colored) will be measured by the cubic yard based on copies of the approved supplier's concrete load tickets provided with a summary in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, with each Application for Payment. Copies of all concrete tickets are required for concrete used during that pay period; a separate summary is required for the Quantity of High Early Strength Concrete and includes the ticket number, date and address where it was poured.

PAY ITEMS

PAY UNIT

24-Hour High Early Strength Concrete	CY
Concrete Class D (Colored)	CY
Geo-Tech Material Testing Concrete	EA
(_") Concrete Pavement	SY

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints and sealant will not be paid for separately but shall be included in the related concrete work.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

When the contract does not include pay items for Portland Cement Concrete Pavement, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 412

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**SECTION 413
CONCRETE PATCHING AND CURB HEAD REPLACEMENT**

DESCRIPTION

413.01 This work consists of patching and curb head replacement on existing concrete pavement.

MATERIALS

413.02 Concrete patching material must be a one component system that requires an exact addition of water. They must meet the following performance requirements at maximum water.

A.	Bond Strength: ASTM C-882	1 Day 7 Days	1500 psi. 2500 psi.
B.	Length Change: ASTM C-157	28 Days Dry 28 Days Wet	-0.05% +0.05%
C.	Compressive Strength: ASTM C-109	2 Hours 1 Day 7 Days	2500 psi. 5000 psi. 7000 psi.

Aggregate shall consist of 3/8" clean, washed and dried gravel or crushed stone of reasonably uniform quality throughout.

Fusion-Crete®, Transpo T-17 Methyl Methacrylate Polymer Concrete Patching Material, Five Star® Highway Patch, U.S. Grout Corporation® Cementitious Grout, Catch Pavement®, HD-50 Horizontal Repair Mortar by Dayton® Superior® Corporation are all approved concrete patching material. Concrete patching material brand and technical specifications shall be submitted for approval.

CONSTRUCTION REQUIREMENTS

413.03 Preparation of Concrete Surface:

Remove all grease, oil, dirt, curing compounds, laitance and other deleterious materials from the concrete. Roughen the surfaces by sand blasting and provide a near vertical face on the edges of existing concrete to ensure bond. Loose or broken concrete shall be removed. If any existing rebar reinforcing is exposed, it shall be sandblasted. All surfaces shall be thoroughly saturated, and free standing excess water shall be removed with clean compressed air before applying the structural repair material. Minimum depth of patching is 1/2 inches.

413.04 Placing Concrete Patch Material:

Carefully read and understand the manufacturer's instructions as printed on the container.

The mixing operation should be close to the repair area. A mortar mixer is recommended. For small quantities, an electric drill and paddle mixer is recommended. The mixing order for mortar type mixer shall be as follows:

1. Clean water shall be placed in the mixer at the rate specified on the container instructions. Water content is critical; do not deviate from the amount specified.
2. When temperatures exceed 90° F, a prepackaged set retarder shall be used as recommended by the manufacturer. Add retarder to mixing water, maximizing dispersion in the mix.
3. For pours with greatest depth exceeding 3", 3/8-inch clean washed pea gravel shall be added to the mix at a rate not to exceed 25 lbs. per 50 lb. pail.
4. Add the repair material. This sequence is important in order to produce a consistent mix and to reduce mixing time. Allow approximately 3 minutes mixing time.
5. When pouring large volumes of material, special consideration should be given to maintaining a continuous flow of material producing a wet leading edge. More than one mixer may be necessary to deliver enough material to insure no cold joints.

Place the mixed material into the prepared area, starting from one side of the repair and working to the other side. Do not place the repair material in lifts. Work the material firmly into the bottom and sides of the repair. Screed the material to the desired level. Close up edges of the repair with a trowel. Finish the material to the desired texture. Do not re-temper the material. Clean the mixer and tools periodically with water to prevent build-up, especially in hot temperatures. As soon as the material sets, all exposed surfaces must be thoroughly saturated for 30 minutes.

413.05 Concrete Curb Head Replacement. Concrete curb head that was paved with the concrete pavement shall be constructed as follows:

1. Remove broken curb head and concrete pieces from sound concrete.
2. Place no. 4 deformed vertical bars, 18" O.C. by drilling. Place no. 4 horizontal bars across vertical bars.
3. Prior to pouring new curb head, sand blast existing concrete pavement at curb head location or use other cleaning method as approved by the Project Manager.
4. Saturate sand blasted area and remove standing water immediately prior to replacing concrete.
5. Consolidate concrete by use of high frequency internal vibrators.
6. Provide 1/8" open joint in curb head at existing contraction joints in concrete pavement.

METHOD OF MEASUREMENT

413.05 All type of Concrete Patching (Structural "--") shall include removal and hauling of the
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material to be removed and also includes surface preparation and removal of loose material and cleaning of the existing concrete surface as per material supplier's recommendations according to the material product data sheets included in the submittal for any and all materials used for Concrete Patching (Structural "-"). Concrete surface patch shall be measured by the average of depth measured in inches patching multiplied by the square foot or as required by the Project Manager. All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

BASIS OF PAYMENT

413.06 The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

PAY ITEMS

PAY UNIT

Concrete Patching (Structural surface repair)
Concrete Patching (Structural Curbhead)

SF-IN
LF

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints and sealant will not be paid for separately but shall be included in the related concrete work.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

All work necessary and incidental to the concrete patching and curb head replacement will not be measured and paid for separately but shall be included in the work.

END OF SECTION 413

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**REVISION OF SECTION 601
STRUCTURAL CONCRETE**

Section 601 of the Standard Specifications is hereby revised as follows:

Subsection 601.06, Item 7, is modified as follows:

(7) Supplier's Mix I.D. number

Subsection 601.07, (d) is deleted. Self-contained mobile mixers will not be allowed.

METHOD OF MEASUREMENT

601.19 Shall be revised as follows:

Pavestone® or equivalent product acceptable to the adjacent property owner as needed to repair or reconstruct existing stacked concrete block wall will be measured by the square foot of vertical face. Re-enforced Variable Height Concrete Retaining Wall will be constructed 8" thick between 9"-12" with Fibermesh® or approved equivalent only and 8" wall thickness from 12"-30" including #4 rebar placed 12" on center each way (minimum) with vertical to horizontal "L" rebar integrated into monolithically poured adjacent 8" thickened concrete flatwork thickened to 8" for a minimum of 24" from the vertical face be used as directed by the Project Inspector/Manager for Re- enforced Variable Height Concrete Retaining Walls greater than 9" to be measured by the square foot of the vertical face and SF area of 24" wide thickened horizontal adjacent concrete flatwork as directed by the Project Inspector/Manager. All type of Concrete Patching (Structural "-") shall include removal and hauling of the material to be removed and also includes surface preparation and removal of loose material and cleaning of the existing concrete surface as per material supplier's recommendations according to the material product data sheets included in the submittal for any and all materials used for Concrete Patching (Structural "-"). Curb head repair or replacement will be measured by the lineal foot along the front of the curb head. All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

BASIS OF PAYMENT

601.20 The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Pavestone® Stacked Pre-cast Wall Blocks	SF
Reinforced Variable Height Concrete Retaining Wall	SF
Concrete Patching (Structural Curbhead)	LF

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Payment shall be full compensation for labor, equipment and materials including, but not limited to, grade 60 reinforcing #4 rebar, soil reconditioning, grading, backfill and soil including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 601

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**REVISION OF SECTION 604
MANHOLES, INLETS, METER VAULTS, AND CHASE DRAINS**

Section 604 of the Standard Specifications is hereby revised as follows:

CONSTRUCTION REQUIREMENTS

Subsection 604.04 (c) shall include the following:

Inlets shall be constructed in accordance with the most current version of the Department of Public Works City and County of Denver Wastewater Management Division Standard Details.

Single #16 Inlets are shown on sheet S-616.1

#14 Inlet (L=6') are shown on sheet S-620.1 and S-620.2

Sidewalk chase drain and tread plate shall be constructed in accordance with the current version of the City of Denver Public Works Transportation Standards and Details for the Engineering Division Standard Drawing 8.1.

METHOD OF MEASUREMENT

Subsection 604.06 shall be replaced with the following:

The unit price bid per inlet structure shall include all of the Contractor's costs of whatsoever nature. The price bid shall include: furnishing, transporting, and installing all materials; excavation, including over-excavation to remove unsuitable foundation materials; hauling and disposal of excess material, concrete, pipe collars, reinforcement steel, mortar and grout; manhole lids, rings, covers, grates, frames and curb boxes; open throat construction; galvanized steel rods; manhole steps; concrete ribbed deflectors; backfilling and compaction; removal and replacement of pavement, base coarse, sub-base materials, sod, decorative landscaping and any other surfacing materials; constructing and shaping of the base and invert; replacement of curb, gutter and sidewalk between the transitions as stipulated on the Details; and all other related and necessary materials, work, and equipment required to construct the storm inlet.

BASIS OF PAYMENT

Subsection 604.07 shall include the following:

The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Number 14 Inlet	EA
Single Number 16 Inlet	EA
Chase drain and tread plate (1' width)	LF
Chase drain and tread plate (2' width)	LF

Payment shall be full compensation for labor, equipment and materials including, but not limited to, grade 60 reinforcing #4 rebar, soil reconditioning, grading, backfill and soil including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control joints or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 604

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**REVISION OF SECTION 608
SIDEWALKS, BIKEWAYS AND
CURB RAMPS**

Section 608 of the Standard Specifications is hereby revised as follows:

As a condition acceptance and of payment the Contractor must certify and shall be responsible to ensure that All Concrete Sidewalk and all Concrete Curb ramps shall be constructed by and additionally meet the requirements of the City of Denver Public Works Transportation Standards and Details for the Engineering Division. It shall be the Contractor's responsibility to assess the existing conditions and notify the Project Manager in advance of the work of any existing field conditions, obstacles or conflicts that might inhibit any section of sidewalk or curb ramp from meeting the design criteria outlined in the City of Denver Public Works Transportation Standards and Details for the Engineering Division. All concrete used for Sidewalks, Curb Ramps and Bikeways shall be MGPEC Item 30 Designation EXT-DR and shall be reinforced with polypropylene fibers. Polypropylene fibers shall be FIBERMESH® or APPROVED EQUIVALENT. Length of fibers shall be as recommended by the manufacturer. Add 1.5 pounds FIBERMESH® or APPROVED EQUIVALENT per cubic yard of concrete.

Subsection 608.02 shall be deleted in its entirety and replaced with the following:

Materials shall meet the requirements specified in subsection 705.11 joint Fillers. Portland cement concrete for sidewalks, curb ramps and bikeways shall meet the requirements of MGPEC Item 30 Designation EXT-DR. The concrete shall have a minimum 20% Class F or N fly ash and shall include polypropylene fibers. The concrete curb ramp shall include the cost of an approved truncated dome material and its installations. A sample of the truncated dome material shall be submitted to the Project Manager for approval prior to construction. Only cast-iron ADA dome panels will be paid separately and will cover only the cost of the ADA cast iron dome panel material. The use of calcium chloride, as permitted under Revision of Section 412, subsection 412.04, is prohibited in colored concrete. It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum, the QCP shall include the following:

1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
2. Hand finishing shall be performed under the supervision of a Craftsman holding an ACI Flatwork Finisher certificate or another approved finisher certificate.
3. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
4. Concrete tests will be one per 300 cubic yards of concrete, minimum one per week.

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Additional tests may be performed as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance High Early Strength Concrete is used.

5. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 608.03(a) shall be revised as follows:

Delete the third sentence and add:

Where excavation or fill to the finished grade elevation results in subgrade of unsuitable soil, the Project Manager or Project Inspector may designate the unsuitable material to be removed and replaced with approved material. Removal or reconditioning of unsuitable material, excavation and backfill with Class 6 Recycled Concrete, in accordance with Revision of Section 203.05(c), or other material approved by the Project Manager shall not be paid separately but is included in the cost of the related concrete bid item. Excavation to proposed subgrade elevation will not be paid for separately but shall be included in the work associated with Section 201, Clearing and Grubbing or Section 202, Removal of Structures and Obstructions. Any forming and curb work to match existing surrounding landscaped or paved areas is included in the cost of the curb ramp and measured by the square yard of finished area.

Subsection 608.03(d) shall be revised to include the following:

Finishing shall occur only after the disappearance of bleed water. The addition of superficial water to the surface of the concrete to assist in finishing operations will not be permitted. Sprinkling of water or Con-film onto the freshly poured surface will not be permitted. Use of an approved finishing aid may be allowed with prior approval from the Project Manager.

Contractor shall stamp each curb ramp with the company name and construction year. Each continuous section of sidewalk shall be stamped with the contractor name and construction year.

Subsection 608.03(e) shall be revised to include the following:

For Bikeways, control joints shall be zip-strip or saw cut to a minimum depth of $\frac{1}{4}$ of the total slab thickness and no greater than $\frac{1}{4}$ inch wide. Control joints shall be spaced at 10 feet on center or as noted on the plans. Any damage to the concrete such as spalling, dislodging of aggregate particles, or cracking will be repaired by the Contractor at no additional cost to the Project. If said damage cannot be adequately repaired to the satisfaction of the Project Manager, the Contractor shall remove and replace the damaged concrete at no additional cost to the Project.

Subsection 608.03(f) shall be revised to include the following:

The Contractor shall insure that new concrete items built under this contract drain properly and, as such, there are no areas of standing water on new concrete items.

The Contractor shall protect all new concrete items built under this Contract against defacement, or other injury, from any cause. If said damage cannot be adequately repaired to

the satisfaction of the Project Manager, the Contractor shall remove and replace the unacceptable items at Contractor's expense.

Subsection 608.05 shall be revised to include the following:

Only Concrete Curb Ramp areas poured 6" thick that may include variable height curb as directed by the Project Inspector and are placed at a slope that meets minimum and maximum slope requirements as per the latest revision of the City of Denver Transportation Standards and Details for the Engineering Division with respect to ADA accessibility standards shall be measured as Concrete Curb Ramp. Any variable height curb poured monolithically with the Concrete Curb Ramp will not be paid separately but shall be measured by the exposed square yard surface area and paid as Concrete Curb Ramp. The accepted quantities for "Concrete Sidewalk/Curb Ramp will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

When authorized for use by the Project Manager/Inspector the accepted quantities for "High Early Strength Concrete" and/or "Concrete Class D (Colored)" will be compensation only for the difference in concrete cost per cubic yard and extra labor per yard for all work performed using "High Early Strength Concrete" and will be measured by the cubic yard based on copies of the approved supplier's concrete load tickets provided with a summary in tabular form with each Application for Payment.

Copies of all concrete tickets are required for concrete used during that pay period; a separate summary is required for the Quantity of High Early Strength Concrete and includes the ticket number, date and address where it was poured.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

PAY ITEM

PAY UNIT

Concrete Sidewalk	SY
Detached Concrete Sidewalk	SY

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Concrete Curb Ramp	SY
Truncated Domes (Special Cast Iron) Material Only	SF

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 608

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REVISION OF SECTION 609 CURB AND GUTTER

Section 609 of the Standard Specifications is hereby revised as follows:

All Concrete Gutter Overlay, Variable Height Curb Head with reinforcement, Curb and Gutter and Combination Curb, Gutter and Sidewalk shall additionally meet the requirements of the City of Denver Public Works Transportation Standards and Details for the Engineering Division. All concrete used shall be Portland Cement Concrete Pavement and shall meet the requirements of MGPEC Item 30 Designation EXT-DR with 20 % minimum Class F or N fly ash and shall be reinforced with polypropylene fibers.

Polypropylene fibers shall be FIBERMESH® or APPROVED EQUIVALENT. Length of fibers shall be as recommended by the manufacturer. Add 1.5 pounds FIBERMESH® or APPROVED EQUIVALENT per cubic yard of concrete.

Subsection 609.01 shall be revised to include the following:

Concrete Gutter Overlay
Variable Height Curb with Reinforcement
Curb and Gutter
Combination Curb, Gutter and Sidewalk

Subsection 609.02 shall be revised as follows:

Reference to Section 703.07, Bed Course Material, shall be deleted.

Additionally, Joint Filler must be approved by the Project Manager.

Reference to Class B concrete shall be deleted and replaced with the following:

Concrete shall conform to the requirements for Class "P" concrete as specified in subsections 601.02 and 601.03. When curb machines are used, the Contractor will be permitted to use AASHTO M 43 Size 57 or 67 aggregate in lieu of the coarse aggregate specified in Table 601-1, and a lesser slump will be permitted.

It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Pre- construction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum, the QCP shall include the following:

1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
2. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
3. Sub-grade compaction and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance High Early Strength Concrete is used.

4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 609.03(a) shall be revised as follows:

Where excavation or fill to the finished grade elevation results in subgrade of unsuitable soil, the Project Manager or Project Inspector may designate the unsuitable material to be removed and replaced with approved material. Removal or reconditioning of unsuitable material, excavation and backfill with Class 6 Recycled Concrete, in accordance with Revision of Section 203.05(c), or other material approved by the Project Manager shall not be paid separately but is included in the cost of the related concrete bid item.

Subsection 609.03(c) shall be revised to include the following:

The Contractor shall protect all new concrete items built under this Contract against defacement, or other injury, from any cause. If said damage cannot be adequately repaired to the satisfaction of the Project Manager, the Contractor shall remove and replace the unacceptable items at Contractor's expense.

Subsection 609.03(d) shall be revised to include the following:

For construction of curb and gutter adjacent to existing concrete pavement, the joint pattern shall match that of the concrete pavement. The joint pattern shall be approved by the Project Manager prior to construction.

Subsection 609.03(i) shall be revised to include the following:

The Contractor shall insure that new concrete items built under this contract drain properly and, as a condition of acceptance for payment, there shall be no areas of standing water on new concrete items.

Subsection 609.04 shall be revised to include the following:

Variable Height Curb with Reinforcement shall be used only at the request of the Project Manager and shall reference City of Denver Public Works Transportation Standards and Details STD. DWG. NO. 10.4 For Alley Curb Head.

Subsection 609.06 shall be revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Subsection 609.07 shall be revised to include the following:

The accepted quantities for Concrete Gutter Overlay, Curb & Gutter Type (), Section (' ") and Combination Curb, Gutter and Sidewalk (' "), Median Cover (6" Patterned Colored Concrete) will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time

and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

When authorized for use by the Project Manager/Inspector the accepted quantities for "High Early Strength Concrete" and "Concrete Class D (Colored)" will be compensation only for the difference in concrete cost per cubic yard and labor per yard for all work performed using High Early Strength Concrete and will be measured by the cubic yard based on copies of the approved supplier's concrete load tickets provided with a summary in tabular form with each Application for Payment.

Copies of all concrete tickets are required for concrete used during that pay period; a separate summary is required for the Quantity of High Early Strength Concrete and includes the ticket number, date and address where it was poured.

PAY ITEM

PAY UNIT

Concrete Gutter Overlay	LF
Curb & Gutter, Type (), (Section ' ' ")	LF
Combination Curb, Gutter and Sidewalk ('___")	LF
Median Cover Material (6" Patterned Colored Concrete)	SY

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints and sealant will not be paid for separately but shall be included in the related concrete work.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

Excavation to proposed sub-grade elevation will not be paid for separately but shall be included in the related curb & gutter.

END OF REVISION OF SECTION 609

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**REVISION OF SECTION 612
TUBULAR MARKER (CITY POST SM)**

Section 612 of the Standard Specifications is hereby revised for this project as follows:

Subsection 612.01 shall be revised to include the following:

This work consists of the installation and furnishing of tubular markers in accordance with these specifications and in conformity with the lines, grades and details shown on the plans or established.

Subsection 612.02 shall be revised to include the following:

(d) *Tubular Marker (City Post SM)*. The City Post Surface Mount is a high-performance channelizer post system comprised of a tubular marker, a top cap and an integrated mounting base that work together for superior impact resistance and rebound.

All city posts shall be capable of sustaining a minimum of direct wheel-over impacts at 70 MPH (112 km/h) without damage to the posts or as approved equivalent by the City.

The City Post SM Surface Mount shall consist of a system comprised of a tubular marker, a top cap and an integrated mounting base assembly. The tubular marker portion shall consist of round post a minimum of 3.15" in diameter, with 0.125" thick walls (minimum). All posts shall be constructed of UV-stabilized thermos-plastic polyurethane or approved equivalent by the City. The tubular marker mounting base assembly portion shall be permanently bonded to the mounting base assembly. The post assembly shall be affixed to the roadway with mechanical fasteners appropriate for the roadway surface (concrete or asphalt). This includes the Dewalt Screw Anchor Mfr. Model # PFM1411280.

The tubular marker top cap portion shall also be permanently bonded to a polyurethane top cap. The Top Cap shall be provided with name of the manufacturer and a plurality of holes to allow the escapement of air when impacted and prevent the collection of rubbish or debris into the tubular marker of the post.

Subsection 612.03 shall be revised to include the following:

Spacing, location, color of reflectors, color of tape and placement of tubular markers shall be as shown on the plans.

Subsection 612.04 shall be revised to include the following:

Tubular Markers will be measure by the actual number of the various types installed and accepted.

Subsection 612.05 shall be revised to include the following:

Payment will be made under:

PAY ITEM

PAY UNIT

Tubular Marker (SM) (Surface Mount)

Each

When the contract does not include pay items for Tubular Markers, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 612

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**REVISION OF SECTION
613 LIGHTING**

Subsection 613.12 is revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Adjust Pull Box	EA

When the contract does not include pay items for Lighting, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 613

REVISION OF SECTION 623 IRRIGATION SYSTEM

Section 623 of the Standard Specifications is revised as follows: Subsection

623.01 is revised to include the following:

Irrigation systems within twelve inches (12") of the reconstruction areas which are damaged as a result of the reconstruction activity will be repaired and paid for. Irrigation systems beyond this limit which are damaged by the Contractor will be repaired by the Contractor at no expense to the City.

Subsection 623.02 is revised to include the following:

Materials required to be replaced shall be of like kind to those removed. If like kind materials are unavailable, the Contractor may substitute comparable materials of comparable quality, if approved by the Project Manager.

Materials used in areas under the jurisdiction of the City and County of Denver Parks and Recreation Department shall comply with the current specifications of that department.

Subsection 623.28 is revised to include the following:

Pipes and fittings will be measured by the lineal foot, regardless of type, size or manufacturer and shall be paid under "Sprinkler System – Irrigation Reconstruction."

New Sprinkler heads will be measured per each, regardless of type, size or manufacturer, and shall be paid under "Sprinkler System – Sprinkler Head."

Sprinkler heads to be adjusted will be measured per each regardless of type, size or manufacturer, and shall be paid under "Sprinkler System – Adjust Sprinkler Head."

PVC sleeves are required to be placed under new concrete as needed for current or future use and will be measured by the lineal foot, regardless of type, size or manufacturer and shall be paid under "Sprinkler System – Irrigation Reconstruction."

Irrigation work must be completed within 10 days of request to contractor of repair.

Subsection 623.32 is revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

PAY ITEM

PAY UNIT

Sprinkler System – New Sprinkler Head	EA
Sprinkler System – Adjust Sprinkler Head	EA
Sprinkler System – Irrigation Reconstruction	LF

When the contract does not include pay items for Irrigation System, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 623

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**REVISION OF SECTION 625
CONSTRUCTION SURVEYING**

Section 625 of the Standard Specifications is hereby clarified with the following:

The Contractor shall furnish all equipment, materials and qualified personnel/labor as needed for construction staking and to establish lines and grades as necessary to complete the work and ensure drainage.

When the contract does not include pay items for Construction Surveying, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 625

TS-57

REVISION OF SECTION 626 MOBILIZATION

Section 626 of the Standard Specifications is revised as follows:

Section 626.01 shall be revised to including the following:

Prior to starting work the Contractor's staff including superintendents, foreman, lead workers, TCS, ECS, concrete lead-workers and sub-contractors shall attend a 2-hour preconstruction meeting that will include ADA ramp construction training and forum to coordinate, identify and discuss operating procedures regarding sensitive contract issues. The Contractor's TCS and designated lead worker may also be required to attend meetings specific to areas sensitive to the MHT including the Central Business District (Downtown between Broadway to Speer Boulevards from Colfax Avenue to I-25) and major arterial lane closures (Downtown Construction Coordination Meetings). The list of work locations for this project is not included within this Contract document. A sample of the "Potential Work Locations Map" is included in the APPENDICES at the end of the Technical Specifications. The scope of work with the locations will be assigned utilizing the "Work Initiation Form" by a location or groups of locations after the Notice to Proceed. Work assignments may be requested in these "Potential Work Locations" or other requested locations where spot repairs are needed utilizing the Work Initiation Form by the Project Manager. Concrete repair locations are citywide and generated through complaints or follow the City of Denver's current and projected Annual Street Paving Program with the focus on building curb ramps. There is no guarantee that all the locations assigned will be done under the Contract or that the locations will be done in any priority order. The Project Manager may revise, add or delete locations for which the Contractor will arrange Blue Stake locates; City of Denver Right-of-Way and Denver Parks permits and coordinate notification with all affected municipal, utility and property owner and provide on a weekly basis a three-week work schedule in advance to the Project Manager for approval prior to performing the work for each and all the assigned work locations. The Contractor shall normally not schedule work on Saturdays, Sundays, City of Denver observed Holidays or City of Denver furlough days. The Contractor must submit in writing requests to work longer than normal work hours (8 hours per day and 40 hours per week) or on Holidays or weekends the written request must be submitted to and approved by the Project Manager 48 hours in advance of the scheduled work.

Section 626.02 of the Standard Specifications is hereby revised as follows:

Payment for mobilization will be made if directed by Project Manager to mobilize farther than 1 mile before 20 cubic yards of concrete is placed.

Meeting attendance by the contractor's personnel shall not be measured and paid for separately but shall be included in the price of the work.

END OF REVISION OF SECTION 626

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**REVISION OF SECTION 627 and 708
PAVEMENT MARKING**

Section **627** of the Standard Specifications is hereby revised for this project as follows:

Subsection **627.03 (c)** is revised as follows:

Roadways constructed under traffic.

All multi-lane roadways, arterial roadways, and major collectors must be striped at the end of the day with full compliance pavement markings. Paint may be used for temporary markings.

All other roadways must be tabbed at minimum at the end of each day with a minimum of 8" tabs for lane lines and centerline markings.

Layouts for striping shall match existing conditions and roadway striping must be confirmed with Traffic Engineering Services prior to installation of final striping. Existing conditions shall be determined by an on-site inspection.

Final striping must be installed within 5 days from completion of the paving.

Final striping shall be completed with the following materials:

- Cross walks, stop lines and word symbols shall be completed with preformed thermoplastic pavement marking.
- Lane markings shall be completed with extruded thermoplastic pavement markings.
- Preference is to complete edge lines and center lines with extruded thermoplastic pavement markings. However, edge lines and centerlines may use epoxy with the approval of the Project Manager and Traffic Engineering Services.

Subsection 627.13 is revised as follows:

The materials and installation of pavement markings shall be price reduced for failure to install within 10 days upon receipt of written request from Traffic Engineering Services or the Engineer/Project Manager.

	> 10 days and < 30 days after	≥ 30 days and < 60 days after	≥ 60 days and < 90 days after	≥ 90 days
% Price Reduction	20 %	50 %	70 %	85 %

Delete the third paragraph of 627.13 and replace with the following:

Sandblasting will not be measured and paid for separately but shall be included in the work.

**REVISION OF SECTIONS 627 and 708
PAVEMENT MARKING WITH WATERBORNE PAINT**

Sections 627 and 708 of the Standard Specifications are hereby revised for this project as follows:

Delete subsection 627.04 and replace with the following:

627.04 Pavement Marking with Waterborne Base Paint. Striping shall be applied when the air and pavement temperatures are no less than 52 °F for waterborne paint. The pavement surface shall be dry and clean. Surface cleaning shall be required when there is deicing material on the road. Weather conditions shall be conducive to satisfactory results.

The Contractor shall utilize equipment that meets the following requirements, as approved:

- (1) Equipment shall permit traffic to pass safely within the limits of the roadway surface and shoulder while operating.
- (2) Equipment shall be designed for placement of both solid and broken line stripes with a reasonably clean-edged stripe of the width and location as shown on the contract.
- (3) Equipment shall have a glass bead dispenser directly behind, synchronized with the paint applicator. Each applicator shall have individual control and automatic skip control that will paint a strip with a gap as shown in the contract.
- (4) The equipment may be equipped with a heat exchanger to heat the paint to reduce drying time.
- (5) The operation shall include a trailing vehicle equipped with a flashing arrow board.

The Contractor shall prevent traffic from crossing a wet stripe. Stripes which have been marred or picked up by traffic before they have dried shall be repaired at the Contractor's expense. Removal of paint from vehicles that crossed wet paint shall be at the Contractor's expense.

The water-based paint and stripes shall fall within the following minimum and maximum ranges:

	DESCRIPTION	MINIMUM	MAXIMUM
Alignment	Lateral Deviation	N/A	2.0 inch per 200 ft
Paint	Coverage rate per gallon of paint	100 sq. ft	110 sq. ft
	Thickness	20 mil	N/A
	Width of painted lines	4 inch	N/A
	Width Variance	N/A	1/4 inch
Water-Based Paint	Dry time to no tracking conditions	N/A	60 seconds
Beads	Application rate per gallon of paint	5 lbs 3 oz	6 lbs 3 oz

Delete subsection 708.01 and replace with the following:

708.01 General. This specification covers ready-mix paints and coatings. Paints and coatings shall be manufactured eight weeks or less prior to delivery to the project. Each paint container shall be labeled with the name and address of the manufacturer, trade name or trademark, type of paint, number of gallons, batch number, and date of manufacture.

Paints shall be free of foreign material that is capable of clogging screens, valves, pumps, and other parts of the application equipment. Paint shall not contain the following:

- (1) Benzene
- (2) Chlorinated solvents
- (3) Ethylene glycol ethers
- (4) Ethylene glycol acetates
- (5) Lead
- (6) Mercury
- (7) Chromium
- (8) Cadmium
- (9) Petroleum products

The Contractor shall obtain certification in writing from the manufacturer showing that the product is free of the materials described above and that it meets or exceeds the requirements of 29 CFR 1910.1200.

Paints shall not form a surface skin within 48 hours in three-quarter filled, tightly closed containers. Paint and coating pigments shall be lead free, and shall not thicken, become granular, or curdle in their containers.

Delete subsection 708.05 and replace with the following:

708.05 Pavement Marking Materials. Pavement marking materials shall be selected from the Department's Approved Products List (APL). Prior to start of work, a Certified Test Report (CTR) for all pavement marking materials shall be submitted in accordance with subsection 106.13.

For white paint, the color after drying shall be a flat-white, free from tint, and shall provide the maximum amount of opacity and visibility under both daylight and artificial light. For yellow paint, the Federal Standard 595B shall be used to designate colors and the ASTM E308 shall be used to quantitatively define colors. After drying, the yellow paint shall visually match Federal Standard 595B color chip number 33538, and shall be within 6 percent of central color, PR-1 Chart, where $x = 0.5007$ and $y = 0.4555$ (The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant D65.)

(a) *Acrylic Waterborne Paint.* Acrylic waterborne paint shall be a lead-free, 100 percent Acrylic resin polymer waterborne product. The finished product shall maintain its consistency during application at temperatures compatible with conventional equipment.

Waterborne paint shall meet all of the following requirements:

Performance Requirements: The paint shall be water resistant and shall show no softening, blistering or loss in gloss.

ACRYLIC WATERBORNE PAINT

Property	Minimum	Maximum	Test Method
Nonvolatile portion of vehicle (white and yellow), %	42.5		
Pigment Composition			
(white and yellow), % by weight	58.0	62.0	ASTM D 4451 ASTM D 3723
White Paint			
Titanium Dioxide		10.0%; 1.0 lb/gal	ASTM D 476, Type III
Calcium Carbonate, %		92.0	ASTM D 1199, Type GC-II
Yellow Paint			
Titanium Dioxide		5.0%; 0.2 lb/gal	ASTM D 476, Type III
Calcium Carbonate		93.0	ASTM D 1199, Type GC-II
Organic Yellow Pigments, %	5.0		
Yellow Iron Oxide		0.063%; 0.025 lb/gal	ASTM D 768
Vehicle Composition, 100% acrylic polymers, (white and yellow), %		43.0	FTMS 141C - Method 4031 or Method 4053.1
Properties of the Finished Paint			
Total Non-volatiles, (solids) % by weight			
White Paint, %	77.0		FTMS 141C - Method 4053.1, ASTM D 2369, or
Yellow Paint, %	76.0		ASTM D 4758
Density, lbs/gal ¹			
White and Yellow Paint	14.0		ASTM D 1475 using U.S. Standard weight per gallon cup as defined in U.S. Military Standard 4566A
Consistency (Viscosity) White and Yellow, Krebs-Stormer Units	85	95	ASTM D 562
Freeze Thaw Stability	Shall complete 5 or more test cycles successfully		ASTM D 2243
	3		ASTM D 1210
Hydrogen ion content: pH	9.6		ASTM E 70
Directional Reflectance: [15 mil Wet Film]			ASTM E 1347
White, dried	85		
Yellow, dried	50		
Dry Opacity (Contrast Ratio): [15 mil Wet Film]			ASTM D 2805
White Paint	0.95		
Yellow Paint	0.88		

¹Density shall not vary more than 0.3 lbs/gal between batches

REVISION OF SECTIONS 627 and 713

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THERMOPLASTIC PAVEMENT MARKING
(Extruded Thermoplastic Pavement Marking for Lane Markings, Edge Lines and Center Lines)

Specifications for Extruded Thermoplastic Pavement Marking as specified in Sections 627.06 and 713.12 are specified without revision for lane markings and edge lines.

REVISION OF SECTIONS 627 and 713
PREFORMED THERMOPLASTIC PAVEMENT MARKING
(for Cross walks, Stop lines and Word Symbols)

Sections 627 and 708 of the Standard Specifications are hereby revised for this project as follows:

SECTION 627.09 Preformed Thermoplastic Pavement Marking. The markings shall consist of a resilient white or yellow thermoplastic product with glass beads uniformly distributed throughout the entire cross sectional area. Legends and symbols shall be capable of being affixed to bituminous pavements by heating.

The markings shall conform to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures. The material shall have resealing characteristics with the capability of fusing with itself and previously applied thermoplastic markings under normal use.

The preformed thermoplastic markings shall be packaged in a protective plastic film with cardboard stiffeners where necessary to prevent damage in transit. The carton in which the material is packed shall be clearly labeled for ease of identification.

- (a) *Application.* Application temperature shall be as recommended by the manufacturer. The pavement and air temperature shall be as recommended by the manufacturer at the time of application. The material shall be applied using a heating method recommended by the manufacturer. The contractor shall provide the Engineer a copy of the manufacturer's installation recommendations prior to beginning work. The pavement shall be clean dry and free from debris. The preformed thermoplastic markings may be installed on top of existing thermoplastic markings after all loose material has been removed. The preformed thermoplastic markings shall not be installed on top of existing preformed plastic pavement markings without first removing the existing markings to a depth that insures removal of the adhesive backing of the preformed plastic. It shall not be installed on top of pavement marking paint without first removing paint.
- (b) *Equipment.* The Contractor shall use a heating method specifically recommended by the manufacturer for the installation of preformed thermoplastic markings.

SECTION 713.14 Preformed Thermoplastic Material

- (a) *General.* Preformed thermoplastic markings shall be composed of aggregates, pigments, binders and Glass beads, and shall conform to AASHTO designation M 249 with the exception of the relevant differences due to the fact that the material is supplied in a preformed state. The

material shall be either alkyd or hydrocarbon based. Only preformed thermoplastic pavement markings material listed on the Departments approved products list may be used.

(b) *Physical Requirements.*

1. Graded Glass Beads. The material shall contain a minimum of 30 percent graded glass beads by weight. The beads shall be clear and transparent. Twenty percent or less shall consist of irregular, fused spheroids, or silica. The refractive index shall be at least 1.50.
2. Pigments. White – Sufficient titanium dioxide pigment shall be used to insure a color similar to Federal Highway White, Color Number 17886, conforming to Federal Standard 595. Yellow – Sufficient yellow pigment shall be used to insure a color similar to Federal Highway Yellow, Color Number 13655, conforming to Federal Standard 595. The yellow pigment shall be organic and contain no lead chromate.
3. Skid Resistance. The surface of the preformed thermoplastic markings shall provide a minimum resistance value of 45 BPN when tested according to ASTM E 303.
4. Thickness. The material shall be supplied at a minimum thickness of 90 mils.
5. Environmental Resistance. The preformed thermoplastic material shall be resistant to deterioration due to exposure to sunlight, water, oil, gasoline, salt and adverse weather conditions.
6. Application. The top surface material must have regularly-spaced indents which provide a visual cue during application that the material has reached a molten state indicating satisfactory adhesion and proper bead embedment has been achieved. Installation must be a no preheated of surface material.

Subsection 627.13 shall include the following:

Payment shall be made under:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Epoxy Pavement Marking (Lane Marking Alternative)	Gallon
Preformed Thermoplastic Pavement Marking (X-Walk, Stop Line)	Square Foot

When the contract does not include pay items for Pavement Marking Material, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTIONS 627 and 713

REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

Section 630 of the Standard Specifications is hereby revised as follows:

Subsection 630.01 shall be modified to read:

...as required by, these plans and special specifications, conform to the Manual on Uniform Traffic Control Devices for Streets and Highways.

Subsection 630.02 through 630.08 shall be as provided in the MUTCD, latest edition. In addition, the following shall apply:

Traffic Control. Traffic control through the construction area is the responsibility of the Contractor. Before starting construction, the Contractor shall submit, in writing, the proposed Method of Handling Traffic (MHT) for the initial phase of construction. When a different MHT is required for a subsequent construction phase, it must be submitted two weeks prior to starting that phase. All proposed MHTs shall be approved, in writing, by the Project Manager. No phase of construction shall start until an acceptable MHT has been received and approved by the Project Manager. The proposed methods shall include, as a minimum, the following:

A detailed diagram that shows the location of all sign placements, including advance construction signs (if not previously approved) and speed limit signs; method, length and time duration for lane closures; and location of flag persons.

Certain traffic control devices may be used for more than one operation or phase.

Number of hours for uniformed traffic control shall be tabulated for submittal.

Approval of the proposed MHT is intended to indicate those devices for which payment is to be made. Such approval does not relieve the Contractor of liability specifically assigned to him under the contract. The Contractor shall erect and maintain warning lights, signs, barricades, and sufficient safeguards around all excavations, embankments, and obstructions.

Non-metallic drums may be substituted for vertical panel channelizing devices.

The Contractor shall, at the preconstruction conference, designate one of his employees, other than the Superintendent, to be responsible for traffic control management. Traffic control shall be the primary duty of this employee. This responsibility shall include management of the Contractor's signing and all other details covered by the Specifications which contribute to the convenience, safety, and orderly movement of traffic and to the comfort of the traveling public. The designated employee shall be certified as a worksite traffic supervisor by either the American Traffic Safety Services Association (ATSSA) or the Colorado Contractors Association (CCA) and shall have a current Department flaggers certificate. A copy of the Traffic

Control Supervisor's certifications shall be provided to the Engineer at the preconstruction conference.

This employee should be on site during working hours when working on an arterial and may be required by the Project Manager to remain on site when working on local roads. This employee should check all traffic control devices before and after the a.m. and p.m. rush hours and periodically throughout the day. Traffic control management shall be maintained on a 24-hour per day basis. The Contractor shall make arrangements so that the Traffic Control Supervisor or his approved representative will be available on every working day, "on call" at all times and available upon the Project Manager's request at other than normal working hours. The Traffic Control Supervisor shall have an up-to-date copy of part VI of the MUTCD, pertaining to traffic controls for street and highway construction, as well as the City and County Traffic Barricade manual, available at all times.

If the proposed traffic control affects a signalized intersection or digging will occur within 100 feet of a signalized intersection the contractor will be required to provide Uniformed Traffic Control (UTC). The contractor must use off duty Denver Police.

The flagger's STOP/SLOW sign paddle shall be 18 inches with letters six inches high.

Subsections 630.09 through 630.14 of the Standard Specifications shall apply except as otherwise provided herein.

Subsection 630.09 (4) shall be revised to include the following:

Access to driveways shall be maintained at all times during construction. The Contractor shall coordinate driveway work with the property owner.

The amount paid per day shall not exceed one unit of Traffic Control for an Arterial, one unit of traffic control for Local/Collector and includes all materials, equipment, personnel and traffic controls plans to conform to all Rules & Regulations for any Street Occupancy Request required to complete the assigned work by the City of Denver, adjacent municipalities and CDOT.

Subsection 630.15 shall be revised to include the following:

When the contract bid schedule includes Traffic Control pay items as a lump sum per day:

The PAY UNIT: LS/DAY for Traffic Control Arterial/Collector and Traffic Control Local shall be defined for the purposes of this Contract only include a work day when the Contractor is on-site completing some phase of the assigned repair work from 12:00 midnight to 12:00 midnight, furthermore weekends, City Holidays, City furlough days and days the Contractor is not on-site completing work other than Traffic Control are not included in this Pay Item. Traffic Control devices will not be measured but will be paid for on a lump Sum basis. For a complete road closure in a residential street for a crossspan removal and repair the traffic control shall be paid as 1 LS/DAY of Traffic Control Arterial/Collector for that application for the entire duration at that location that shall include set-up, maintenance and take down for as many days needed to complete work at that location.

Payment shall be for arterial/collector or local per day, whichever is greater.

Payment for traffic control shall be as follows:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Traffic Control Arterial/Collector*	LS/DAY
Traffic Control Local*	LS/DAY
Uniformed Traffic Control Officer	HOUR

* - The designation of which roads are Arterial/Collector and which roads are Local and shall be determined by the City's Right of Way Permitting Department. Arterials and collector streets generally have center line striping.

When the contract bid schedule does not include pay items for Traffic Control; Payment for all Traffic Control shall be included in the work.

END OF REVISION OF SECTION 630

**REVISION OF SECTION 631
PUBLIC INFORMATION SERVICES**

DESCRIPTION

631.01 The work consists of providing various public involvement activities for the project.

REQUIREMENTS

631.02 The Contractor shall provide the following public information services on an ongoing basis throughout the duration of the project:

631.02.1 A contact person and phone number for the project shall be designated by the Contractor at the pre-construction meeting. This individual shall be primarily responsible for maintaining communications with the Project Manager and affected businesses and property owners.

631.02.2 The Contractor will also distribute door hang tags to all property owners adjacent to construction and also all residences and businesses impacted by construction or road closures or detours no less than 48 hours (as per General Contract Conditions Section 703) prior to commencing removal operations, outlining the proposed work as well as the company name, phone number, and contact person familiar with the project. The hang tag template shall be supplied by the City and it shall be the Contractor's responsibility to produce an adequate number of hang tags one week in advance to properly notify all affected property owners/residents. Occasionally as needed supplemental written notices will be required to be delivered one week in advance at the direction of the Project Manager for issues such as construction conflicts related to business access, special landscape, and fence or tree removal. The cost of delivering the door hang tags and any other letter or notice to the public shall not be paid for separately, it is included in the related work.

631.02.3 The Contractor shall maintain a written log detailing the time, date, name, contact information, location, nature of the call or complaint and resolution (if needed) regarding any and all contacts from constituents. The Contractor will revise and submit a current copy of this log with each Application for Payment.

METHOD OF MEASUREMENT

631.03 Public information services will not be measured and paid for separately but shall be included in the work.

END OF SECTION 631

TS-69

**REVISION OF SECTION 705
JOINT, WATERPROOFING AND BEARING MATERIALS**

Section 705 of the Standard specifications is hereby revised for this project as follows:

Subsection 705.01(a) shall be revised to include the following:

Sealant shall be heated only for the time limit recommended by the manufacturer. Also, the sealant shall not be reheated more times than recommended by the manufacturer.

Subsection 705.01 shall be revised to include the following:

(c) Hot Joint Sealants, Concrete Pavement. Hot-poured joint sealer material for concrete slab joints shall conform to the requirements of ASTM D 1190 or ASTM D 3405 and to the following:

Mortar blocks for the bond test shall be as described in ASTM D 1191

Coal tar base material is not acceptable.

The shipping containers shall be marked by the manufacturer with the name of the material, the name and brand of the manufacturer, the weight, the batch number and the safe heating temperature.

The materials shall be stored in accordance with manufacturer's recommendations, but they shall not be exposed to ambient temperatures in excess of 125 degrees F, or stored in direct sunlight.

The sealer material shall be melted in a heating kettle, or tank, constructed as a double boiler, with a space between the inner and outer shells filled with oil, asphalt, or other material for heat transfer and for positive temperature control.

The heating and melting unit shall be equipped so that the heat may be adjusted to provide control of the temperature of the heating medium used for melting the sealer material. The sealer material shall not be subjected to temperatures in excess of 450 degrees F at any stage or time during the melting operation.

When the contract bid schedule does not include pay items for Joint, Waterproofing and Bearing Materials; Payment for all Joint, Waterproofing and Bearing Materials shall be included in the work.

END OF REVISION OF SECTION 705

TS-70

**REVISION OF SECTION 711
CONCRETE CURING MATERIALS AND ADMIXTURES**

711.01 Concrete Curing Materials shall be modified; Liquid Membrane-Forming Compounds for Curing Concrete AASHTO M148, TYPE curing compound is deleted and shall additionally require:

For all Portland Cement Concrete Pavement placed between April 1st and September 14th, a white wax cure shall be used that meets or exceeds ASTM C-309.

For all Portland Cement Concrete Pavement placed between September 15th and March 31st, a combination cure-sealer shall be used that meets or exceeds ASTM C 1315 Type I, Class A (clear, non-yellowing). The compound must be an acrylic copolymer type, non-freezing solvent based, with a minimum of 25% solids content. Compound must be VOC compliant in accordance with EPA 40 CFR Part 59. The final gloss appearance will serve as proof of application.

The Contractor shall use the cure-sealer according to the manufacturers recommendations so that when applied it will not adversely affect the skid resistance of the pavement. The cure-sealer shall be applied 5 days after placement or when concrete meets 80% of design strength.

Curing materials, finishing aids, and admixtures not listed may be used with prior approval from the Project Manager.

The Contract does not include separate pay items for Concrete Curing Materials; these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 711

TS-71

APPENDICES

- A. **Field Measurement Report (FMR) Sample** **TS-69**
- B. **Annotated Revisions** **TS-71**

TS-72

A. Field Measurement Report (FMR) Sample



**CITY AND COUNTY OF DENVER
DEPARTMENT OF PUBLIC WORKS**

FIELD MEASUREMENT REPORT

Contract		Project Name		Locations Measured	
[20XXXXXXX]		[Project Name]			
Name	Title	Company			
[Project Manager]		Office of Asset Management			
[Contractor Signer]		[Contracting Business]			

*Signatures certify that all of the information contained in this report has been reviewed and found to be acceptable. Furthermore, it shall represent the attendee's concurrence with the quantities or agreements outlined below.

Item Description	Item Number	Units	Bid Qty	Measured QTY	Notes Comments
REMOVAL OF INLET	202-00019	EA		-	
REMOVAL OF SIPHON	202-00033	EA		-	
REMOVAL OF SIDEWALK	202-00200	SY		-	
REMOVAL OF CURBHEAD	202-00201	LF		-	
REMOVAL OF CURB AND GUTTER	202-00203	LF		-	
REMOVAL OF COMBO CURB/GUTTER	202-00204	LF		-	
REMOVAL OF DETACHED SIDEWALK	202-00205	SY		-	
REMOVAL AND RESET FLAGSTONE (INCLUDES SALVAGE AND STORAGE)	202-00208	SY		-	
REMOVAL OF CONCRETE PAVEMENT	202-00210	SY		-	
REMOVAL OF CONCRETE ADA CURB RAMP	202-00212	SY		-	
REMOVAL OF ASPHALT MAT	202-00220	SY		-	
REMOVAL AND RESET OF FENCE	202-01000	LF		-	
UNCLASSIFIED EXCAVATION	203-00200	CY		-	
3-MAN LABOR CREW	203-02330	HR		-	
STRUCTURE BACK FILL (FLOW FILL)	206-00065	CY		-	
STORM DRAINAGE INLET PROTECTION	208-00050	EA		-	
RESET GROUND SIGN	210-00810	EA		-	
ADJUST MANHOLE/PULLBOX	210-04010	EA		-	
ADJUST INLET FRAME AND ADJUSTABLE CURBHEAD	210-04011	EA		-	
RESET INLET GRATE, FRAME, AND ADJUSTABLE CURB BOX (NEW CASTING)	210-04020	EA		-	
SODDING	212-00050	SF		-	
RESTORE LANDSCAPING	212-01200	SF		-	
AMENDED TOP SOIL OR LANDSCAPE PLANTER'S SOIL MIX	212-01201	CY		-	
AGGREGATE BASE COURSE	304-06000	TON		-	
HBP PATCH/OVERLAY	403-00720	TON		-	
24-HOUR HIGH EARLY STRENGTH CONCRETE	412-00000	CY		-	
ADD PIGMENT TO CONCRETE	412-00001	CY		-	
GEO TECH MATERIAL TESTING CONCRETE	412-00100	EA		-	
4" CONCRETE PAVEMENT	412-00400	SY		-	
6" CONCRETE PAVEMENT	412-00600	SY		-	
8" CONCRETE PAVEMENT	412-00800	SY		-	
10" CONCRETE PAVEMENT	412-01000	SY		-	
12" CONCRETE PAVEMENT	412-01200	SY		-	
CONCRETE PATCHING (STRUCTURAL SURFACE REPAIR <2" DEPTH)	413-00100	SF-IN		-	
PAVESTONE STACKED PRE-CAST WALL BLOCK	601-00100	SF		-	
REINFORCED VARIABLE HEIGHT CONCRETE RETAINING WALL	601-00400	SF		-	
CONCRETE PATCHING (STRUCTURAL CURB REPAIR)	601-06150	LF		-	
NUMBER 14 INLET (L=6')	604-14050	EA		-	
SINGLE NUMBER 16 INLET	604-16050	EA		-	
CHASE DRAIN AND TREAD PLATE (1' WIDTH)	604-18050	LF		-	
CHASE DRAIN AND TREAD PLATE (2' WIDTH)	604-20050	LF		-	
CONCRETE SIDEWALK	608-00000	SY		-	
DETACHED CONCRETE SIDEWALK	608-00005	SY		-	
CONCRETE CURB RAMP	608-00010	SY		-	
TRUNCATED DOMES (SPECIAL CAST IRON) MATERIAL ONLY	608-00018	SF		-	
CONCRETE GUTTER OVERLAY	609-20000	LF		-	

Prepared by	[Project Manager]	Project Manager	
	Printed Name	Title	Signature
Accepted for Contractor by	[Contractor Signer]	Treasurer	
	Printed Name	Title	Signature





**CITY AND COUNTY OF DENVER
DEPARTMENT OF PUBLIC WORKS**

FIELD MEASUREMENT REPORT

Contract	Project Name	Date of Meeting	Locations Measured
[20XXXXXXXX]	[Project Name]	Agreed via Electronic Correspondance	
Name	Title	Company	
[Project Manager]		Office of Asset Management	
[Contractor Signer]		[Contracting Bussiness]	

*Signatures certify that all of the information contained in this report has been reviewed and found to be acceptable. Furthermore, it shall represent the attendee's concurrence with the quantities or agreements outlined below.

Item Description	Item Number	Units	Bid Qty	Measured QTY	Notes Comments
CURB & GUTTER TYPE II, SECTION 2B	609-21020	LF		-	
CURB & GUTTER TYPE IIB (9") CURBHEAD	609-21023	LF		-	
COMBO CURB, GUTTER & SIDEWALK (2'-8")	609-22021	LF		-	
COMBO CURB, GUTTER & SIDEWALK (3'-11")	609-22025	LF		-	
MEDIAN COVER MATERIAL (6" PATTERNED COLORED CONCRETE)	610-00026	SY		-	
RESET PULL BOX	613-07000	EA		-	
SPRINKLER SYSTEM/ADJUST SPRINKLER HEAD	623-00204	EA		-	
SPRINKLER SYSTEM/NEW SPRINKLER HEAD	623-00205	EA		-	
SPRINKLER SYSTEM/IRRIGATION RECONSTRUCTION	623-00505	LF		-	
SURVEY MONUMENT	626-00001	EA		-	
SURVEY MONUMENT - BP2 (TYPE 5'S)	626-00003	EA		-	
MONUMENT BOX	626-00005	EA		-	
ADJUST MONUMENT BOX	626-00007	EA		-	
TRAFFIC CONTROL - ARTERIAL/COLLECTOR	630-00000	DAY		-	
TRAFFIC CONTROL - LOCAL	630-00002	DAY		-	
TRAFFIC CONTROL - UNIFORMED TRAFFIC CONTROL	630-00003	HR		-	
TEXTURA PER CONTRACTS ADMINISTRATION	TEXTURA	LS		-	
ADDITIONAL LINE ITEMS	-	EA		-	

Prepared by	[Project Manager]	Project Manager	
	Printed Name	Title	Signature
Accepted for Contractor by	[Contractor Signer]	Treasurer	
	Printed Name	Title	Signature



B. Annotated Revisions Since Last Publication

202 – The following was added: “Where work is proposed within a tree protection zone, the Contractor shall submit a work plan on how the work within these areas will be accomplished. The work shall be approved by the City Forester prior to the start of work. The methods for work in these areas can include the following:

1. Compressed air excavation tool.
2. Water excavation.
3. Other methods approved by the City Forester.

Tree protection fence shall be installed prior to any site activity and shall remain in place and maintained in condition in which they were installed until its removal is authorized by the City Forester or the Project Manager.”

212 – Following statement was added “Landscaping work must be completed within 10 days of request to contractor of repair.”

612 – Section added for Tubular Marker (City Post SM).

623 - Following statement was added “Irrigation work must be completed within 10 days for request to contractor of repair.

627, 708, 713 - Sections for Pavement Marking added.

629 – Section deleted