AMENDATORY AGREEMENT

THIS AMENDATORY AGREEMENT is entered into between the CITY AND COUNTY OF DENVER (the "City"), a municipal corporation of the State of Colorado, and STANLEY CONSULTANTS, INC. (the "Design Consultant" or "Consultant"), an Iowa corporation registered to do business in Colorado, whose address is 8000 South Chester Street, Suite 500, Centennial, Colorado 80112.

RECITALS:

A. The Parties entered into an Agreement dated August 30, 2018 (the "Agreement") to provide professional design services described in the **Exhibit A Scope of Work**; and

B. The Parties wish to amend the Agreement to (1) extend the term of the Agreement,(2) increase the Maximum Contract Amount, and (3) expand the Scope of Work.

NOW THEREFORE, in consideration of the premises and the Parties' mutual covenants and obligations, the Parties agree as follows:

1. Capitalized terms used but not defined herein shall have the meaning given them in the Agreement.

2. Exhibit A Scope of Work is hereby amended by adding Exhibit A-1 Scope of Work attached hereto. All references to "Exhibit A" in the Agreement shall be amended to include "Exhibit A" and "Exhibit A-1".

3. Section 3.01 of the Agreement, entitled "<u>Fee for basic services</u>," is hereby deleted in its entirety and replaced with:

"3.01 <u>Fee for basic services</u>. The City agrees to pay the Design Consultant, as full compensation for its basic services rendered hereunder, a fee not to exceed **NINE HUNDRED FORTY-FOUR THOUSAND SEVEN HUNDRED SEVENTY DOLLARS AND SEVENTY-ONE CENTS (\$944,770.71)**, in accordance with the billing rates and project budget stated in **Exhibits**. The amounts budgeted for phases may be increased or decreased, and the amounts allocated for services and expenses adjusted, upon written approval of the Director or his designee, and subject to the Maximum Contract Amount stated in this Section 3."

4. In Section 3.04 of the Agreement, entitled "Maximum Contract Amount,"

subsection (a) is hereby deleted in its entirety and replaced with:

"3.04 <u>Maximum Contract Amount</u>.

(a) Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed **NINE HUNDRED FORTY-FOUR THOUSAND SEVEN HUNDRED SEVENTY DOLLARS AND SEVENTY-ONE CENTS (\$944,770.71)** (the "Maximum Contract Amount"). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Design Consultant beyond that specifically described in Exhibit A. Any services performed beyond those set forth therein are performed at Design Consultant's risk and without authorization under the Agreement."

5. Section 4.01 of the Agreement, entitled "**Term**," is hereby deleted in its entirety and replaced with:

"4.01. <u>Term.</u>

This Agreement will commence on November 1, 2018, and expire on October 2, 2021, unless sooner terminated as provided in this Agreement."

6. As herein amended, the Agreement is affirmed and ratified in each and every particular.

7. This Amendatory Agreement will not be effective or binding on the City until it has been fully executed by all required signatories of the City and County of Denver, and if required by Charter, approved by the City Council.

[THE BALANCE OF THIS PAGE IS INTENTIONALLY LEFT BLANK.]

Contract Control Number:	PWADM-201952448-01[201843158-01]
Contractor Name:	STANLEY CONSULTANTS, 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:

REGISTERED AND COUNTERSIGNED:

ATTEST:

By:

APPROVED AS TO FORM:

Attorney for the City and County of Denver

By:

By:

By:

Contract Control Number: Contractor Name: PWADM-201952448-01[201843158-01] STANLEY CONSULTANTS, INC.

-DocuSigned by: Mounta S. downwrgg -8A3FEC3B809B47D... By:

Marvinetta Hartwig

Name: _____

(please print)

Title: ________

(please print)

ATTEST: [if required]

By: _____

Name: _____

(please print)

Title: _____

(please print)



SCOPE OF WORK CITY AND COUNTY OF DENVER Mill Levy Package #15 - Additional Services

I. Introduction

The goal of the City and County of Denver (City) PW Transportation & Mobility is to improve public safety for all modes of transportation on city streets. The age and poor safety record of nineteen (19) traffic signals on 6th and 8th Avenue, two major roadways that connect Denver to the surrounding metro area, warrant a complete reconstruction to meet safety standards. The 2017 Mill 15 Traffic Signal Upgrade project is programmed to improve traffic safety on these two roadways by redesigning and reconstructing the 19 signals to meet current safety standards. The scope of work is to replace existing signals with new signals that follow current City standards and MUTCD criteria and also to reconstruct the intersections to comply with latest safety criteria. The locations of these 19 traffic signals are at the following intersections:

- 1. 6th & Speer/Sherman
- 2. 6th & Grant
- 3. 6th & Logan
- 4. 6th & Washington
- 5. 6th & Clarkson
- 6. 6th & Corona
- 7. 6th & Downing
- 7. 6th & Downing
 7. 8th & Willia

 8. 6th & Franklin/Gilpin
 8. 8th & York
- 9. 6th & Columbine/Elizabeth
- 1.8th & Grant
- 2.8th & Logan
- 3.8th & Washington
- 4. 8th & Clarksor 5. 8th & Corona 4.8th & Clarkson

 - 6. 8th & Downing
 - 7. 8th & Williams/High[MB]
 - 9.8th & Josephine
 - 10. 8th & Clayton/Detroit[MB]

The Mill 15 Traffic Signal Upgrade project is to redesign and reconstruct 19 traffic signals on the 6th and 8th Avenue corridors. Based on the agency's crash data, these 19 aging traffic signals on the two corridors have a poor safety record and the traffic signal upgrade project will improve safety by reconstructing the signals to meet all current City safety standards. All signal upgrades will include the standard mast arm signal poles and mast arms for greater stability, large 12" signal heads per lane and 16" countdown pedestrian signal faces for greater visibility, upgraded controllers and cabinet with standard UPS to keep the signal operating in an event of an electrical blackout, detection camera system for left turns and greater reliability, upgraded emergency preemption system for emergency vehicle services, and enhanced signing and striping package

Design of the traffic signals shall be per City standards and MUTCD criteria, and the intersection design will be geometric layout and vertical design of the curb ramps, sidewalk, curb and gutters, and curb returns for enhanced pedestrian and vehicular accesses. Additional civil design may include pavement, utility, roadway, drainage, and striping.

In addition to the traffic signal and the intersection design, traffic signal timing of the 19 intersections listed above, as well as the following four intersections is included in this project. This includes preparing Synchro models and TruTraffic files for each signal by time-of-day plan (AM, PM, All-Other-Times), traffic data collection, before and after run study, and signal timing work orders for each intersection.

- 1. 6th & Bannock
- 2. 6th & Broadway
- 3. 6th & Lincoln
- 4. 8th & Lincoln



II. Scope of Work

It is anticipated that this scope of services will consist of the following tasks:

- 1. Project Administration
- Survey and Right-of-Way
 A. Topographic and ROW Survey
 B. ROW Acquisition
- 3. Subsurface Utility Engineering
- 4. Conceptual Layout (No Additional Work)
- 5. Preliminary Design (No Additional Work)
- 6. Final Design Review (No Additional Work)
- 7. Final Construction Plans (No Additional Work)
- 8. Construction Specification & Engineer's Estimate of Probable Cost (No Additional Work)
- 9. Construction Bid Documents (AD Set) (No Additional Work)
- 10. Signal Timing
- 11. Design Progress/Coordination Meetings
- 12. Design Services During Construction

Task 1 - Project Administration

This task entails the effort required to set up, administer, coordinate and generally manage the overall project. Efforts include project set up, internal staff communications, coordination and meetings with the CCD Project Management Team, invoicing and project close out

Task 2– Survey and Right-of-Way

2A - Topographic and ROW Survey

This task includes professional surveying services in order to complete the project.

Task Description

- Supplemental topographic field survey for the following locations
 - o 6th Avenue and Downing Street (SE quadrant)
 - o 6th Avenue and Washington Street (NE quadrant)

Survey services to be provided per the "Guidelines for Survey Control for Design of City Projects" as described on the following webpage:

https://www.denvergov.org/content/denvergov/en/right-of-way-services/survey/guidelines-survey-control-design-of-city-projects.html

CCD will provide preliminary right-of-way information and digital aerial images via AutoCAD files. Existing right-of-way will be surveyed and shown on the plans. It is assumed that CCD will provide all necessary Right of Entry agreements



2B – ROW Acquisition

H. C. Peck & Associates, Inc. will provide land right-of-way acquisition services for four (4) locations. This task includes the activities required to acquire one (1) permanent easement and four (4) temporary construction easements from four (4) owners assuming no relocation and utilizing narrative appraisals. All activities will be performed in compliance with applicable laws, regulations, policies, and procedures.

Right-of-way acquisition activities include:

- Research and preparation of four (4) title commitment, plus one update
- Research and preparation of an eminent domain appraisal
- Preparation of Notices of Intent, offer letters and Summaries of Just Compensation, final offer letters, PSAs, conveyance documents
- Conduct negotiations with the owner for the acquisition of the property rights to be acquired based on the approved fair market value
- Obtain subordination agreement
- Close acquisition

Right-of-way acquisition services were determined based on the following easement information:

Intersection	<u>Quadrant</u>	Easement Type
6 th /Washington	NE	TE
6 th /Corona	NW	TE
6 th /Downing	SE	TE
6 th /Franklin	S (mid-block)	TE
6 th /Franklin	S (mid-block)	PE

Task 3 – Sub-Surface Utility Engineering Services

HCL Engineering and Surveying, LLC will provide Sub-Surface Utility Engineering (SUE) services for this project. A Professional Engineer licensed in the State of Colorado will conduct, document, stamp and seal a Sub-Surface Utility Engineering investigation of the 19 project areas to determine existing sub-surface utility conditions within the project limits. The SUE investigation will include:

- Contacting all utility providers and collecting available utility records within the project limits
- Providing guidance as to what utility Quality Level to attempt for any utilities that the HCL Engineer believes do not need to be depicted as Quality Level B
- Attempting to identify all known and unknown utilities except as noted above within the project limits to a Quality Level B and depict those utilities at their actual achieved Utility Quality Level
- From a combination of all information, HCL will depict the following attributes on the plans or within an SUE Report: ownership, type, size, encasement, and material
- The SUE Investigation will satisfy ASCE 38-02 and Senate Bill 18-167 requirements
- HCL will confirm the accuracy of the sub-surface utility marks that were marked by HCL during the topographic survey phase of the project in order to depict the utilities as Quality Level B.

HCL will submit an AutoCAD 2017 or later CAD electronic file of the updated topographic survey with the additional utility information incorporated. The SUE Quality Level B plan set, signed and stamped by a Professional Engineer, will be submitted electronically (PDF).



Task 4 – Conceptual Layouts

No Additional Work

Task 5 & 6 – 60% and 90% Plans

No Additional Work

Task 7 – Final Construction Plans

No Additional Work

Task 8 – Construction Specifications & Engineer's Estimate of Probable Cost

No Additional Work

Task 9 – Construction Bid Documents (Ad Set)

No Additional Work

Task 10 – Signal Timing

Task 10 is to collect traffic counts, conduct before and after runs and prepare Synchro models and TruTraffic files for each time-of-day plan (AM, PM).

- Collect traffic data before construction ("before" travel time runs for each corridor, AM and PM peak hour turn movement counts for the following intersections: 8th & Lincoln, 6th & Lincoln, 6th & Broadway, 6th & Bannock)
- Prepare Synchro models and TruTraffic files for each time-of-day plan (AM, PM). Synchro will be used to optimize cycle lengths, phase sequences, phase splits, and intersection offsets. Synchro files will be submitted to CCD and optimized using TruTraffic. A time-space analysis will be performed using both Synchro and TruTraffic and time-space diagrams will be submitted to CCD for comments.

Task 11 – Design Progress/Coordination Meetings

Task 11 is to attend coordination meetings, as necessary, during the design phase of the project. This task covers project management coordination meetings, consultant team coordination meetings and miscellaneous meetings with CCD staff and outside entities. It is anticipated that up to 3 additional meetings will be required for SUE and/or ROW acquisition coordination.

Task 12 – Design Services During Construction

Task 12 provides design services during construction to support the City and County of Denver with requests for information, submittal reviews, and additional design support, as needed. Services will be on a time & materials basis not to exceed \$10,000.



III. Schedule

The tasks outlined in this scope are anticipated to be completed 2 years after Notice to Proceed.

Items to be provided by the City and County of Denver:

- Digital aerial photos of each intersections if necessary
- Right-of-way mapping for each intersection (AutoCAD format)
- City and County of Denver Signal Standard Drawings in AutoCad 2000 format
- All necessary Right-of-Entry agreements

IV. Scope of Services – Assumptions/Exclusions

The following are the Stanley team's additional assumptions and/or exclusions to the above scope of services:

- SURVEY/ROW
 - It is assumed that City and County of Denver right-of-way permit fee will not be required as part of this project/scope.
 - A full right-of-way plan set is not part of this scope.
 - Right of entry to private properties will be obtained by the City and County of Denver.
- ROW ACQUISITION SERVICES
 - o It is assumed that relocations are not required for any parcel.
 - Litigation support is not included in the base proposal.
 - Title insurance is not included in the base proposal.
- SUB-SURFACE UTILITY ENGINEERING
 - Deliverable format and expectations will be determined during a SUE kickoff/coordination meeting
 - Quality Level A test holes are not included in HCL's scope and fee.
 - SUE limits are defined as being 150' from the center of the intersections in each direction as stated in HCL's original scope for the topographic survey phase of the project.
 - Potholing is excluded from the contract.

TASK DESCRIPTION	Principal	Project Manager	Task Manager- QAQC Mgr	Sr. Engineer II	Sr. Engineer I	Engineer II	Engineer I	Engineer in Training II	Design Specialist	Sr Designer II/G.I.S.	Admin Support	TOTAL HOURS
1. Project Administration						1	1	1		1	1	I
1.1 Project Set Up	1	2	0	0	0	0	0	0	0	0	6	9
1.2 General Administration & Management of Project	0	32	0	0	0	0	0	0	0	0	32	64
1.3 Project Close Out	1	2	0	0	0	0	0	0	0	0	2	5
TOTAL TASK 1	2	36	0	0	0	0	0	0	0	0	40	78
2A. Survey/ROW	0	0	4	0	0	0	0	0	0	0	0	
2A.1 Import Survey	0	0	4	0	0	0	4	0	0	0	0	4
2A.2 Review Survey TOTAL TASK 2A	0	0	8	0	0	0	4	0	0	0	0	8
TOTAL TASK ZA	U	0	0	v	U	V	-	V	V	U	V	12
2B. ROW Acquisition												
TOTAL TASK 2B	0	0	0	0	0	0	0	0	0	0	0	0
	-		-	-	-	-	-	-	-	-	-	· · ·
3. Sub Surface Utility Engineering Services												
3.1 Import Survey	0	0	4	0	0	0	0	0	0	0	0	4
3.2 Review Survey & Deliverables	0	4	4	0	0	0	4	0	0	0	0	12
TOTAL TASK 3	0	4	8	0	0	0	4	0	0	0	0	16
		1		1	1	1	1	1	1	1		
4. Conceptual Layout												
TOTAL TASK 4	0	0	0	0	0	0	0	0	0	0	0	0
		·	•					·	• •	<u>.</u>	·	
5. Preliminary Design (60% Submittal- Plans)												
TOTAL TASK 5	0	0	0	0	0	0	0	0	0	0	0	0
6. Final Design Review (90% Submittal- Plans)						1	1		1	1	1	1
TOTAL TASK 6	0	0	0	0	0	0	0	0	0	0	0	0
7. Final Construction Plans			1	1		1						
TOTAL TASK 7	0	0	0	0	0	0	0	0	0	0	0	0
8. Construction Specifications & Engineer's Esitmate of Probable Cost	•	•	•	•	•	•	•	•	•	•	•	•
TOTAL TASK 8	0	0	0	0	0	0	0	0	0	0	0	0
9. Construction Bid Documents (Ad Set)												
9. Construction Bid Documents (Ad Set) TOTAL TASK 9	0	0	0	0	0	0	0	0	0	0	0	0
	<u> </u>											· · · · · · · · · · · · · · · · · · ·
10. Signal Timing												
10.1 Collect Traffic Counts and Other Traffic Data	1	8	0	8	0	20	0	0	0	12	0	49
10.1 Object Hame Counts and Outer Hame Data 10.2 Prepare Synchro Models and Tru-Traffic Files	1	8	0	12	0	30	0	0	0	0	0	51
TOTAL TASK 10	2	16	0	20	0	50	0	0	0	12	0	100
		1			1							ı
11. Design Progress/Coordination Meetings												
11.1 Coordination Meetings = 3 meetings	0	12	0	0	0	0	0	0	0	0	0	12
11.2 Coordination Meeting Minutes	0	3	0	0	0	0	0	0	0	0	3	6
TOTAL TASK 11	0	15	0	0	0	0	0	0	0	0	3	18
12. Design Services During Construction												
12.1 RFIs, Submittal Review, Misc. Support	4	8	7	4	4	5.5	4	4	4	20	8.5	73.0
TOTAL TASK 12	4	8	7	4	4	5.5	4	4	4	20	8.5	73.0
			1		1	1	1	1	1	1	1	
GRAND TOTAL TASKS 1 - 12:	8	79	23	24	4	55.5	12	4	4	32	51.5	297

10/23/2019

PROPOSAL **CITY AND COUNTY OF DENVER**

Mill Levy Package 15

Summary - Intersection Design and Construction Documents

Labor:	Classification	Hours	Rate	Total			
	Principal	8	249.59	\$1,996.72			
	Project Manager	79	143.52	\$11,338.08			
	Task Manager-QAQC Mgr	23	185.15	\$4,258.45			
	Sr. Engineer II	24	195.07	\$4,681.68			
	Sr. Engineer I	4	157.02	\$628.08			
	Engineer II	55.5	126.22	\$7,005.21			
	Engineer I	12	101.50	\$1,218.00			
	Engineer in Training II	4	93.34	\$373.36			
	Design Specialist	4	140.64	\$562.56			
	Sr Designer II/G.I.S.	32	120.94	\$3,870.08			
	Admin Support	51.5	80.14	\$4,127.21			
		297		\$40,059.43			
Subconsultants:	Company			Total			
	HCL Engineering & Surveying	LLC.					
	(Survey)	\$6,750.00					
	(SUE)	\$95,000.00					
	HC Peck & Associates, Inc. (ROW Acquisition) Stantec						
	All Traffic Data, Inc.			\$5,797.00 \$4,000.00			
			-	\$150,685.00			
Expenses:	Description			Total			
	Mileage, Reproduction, Delivery Service, Postage						
				\$0.00			
	TOTAL FOR DESIGN & REVIEW DOCUMENTS						
	will be used for	(\$40,744,43) *					

(\$40,744.43) ** these additional services TOTAL ADDITIONAL FUNDS REQUESTED

\$150,000.00