# CITY OF GREELEY INVITATION FOR BID

(4) CBD Traffic Signal Upgrade Projects

BID #FD20-12-173

DUE JANUARY 28, 2021 BEFORE 2:00 P.M.



Serving Our Community It's A Tradition

The Office of the Purchasing Manager is a service division established to build effective partnerships through efficient and responsive procurement processes to obtain high quality goods and services for the best value.

### SECTION 00110 BID #FD20-12-173

### INVITATION FOR BID

The City of Greeley, Colorado is requesting **sealed** bids for (4) CBD Traffic Signal Upgrade Projects **on January 28**, **2021 before 2:00pm MST via electronic submission** and a Zoom meeting will be held at that time to publicly opened and read aloud all received bids. <u>No late or faxed bids will be accepted</u>. It is the responsibility of the vendor to ensure the solicitation documents are delivered to the correct address as noted in the Solicitation Documents. Solicitations delivered to other City of Greeley addresses may be deemed as late and not accepted.

Instructions for electronic submittal.

Email your Bid Response to purchasing@greeleygov.com. <u>purchasing@greeleygov.com Submit your Bid response</u> to this email only – please do not email to multiple people. Only email's sent to will be considered as responsive to the invitation to bid. Emails sent to other City emails may be considered as non-responsive and may not be reviewed.

Bids shall be submitted in a single Microsoft Word or PDF file under 20MB

The Bid number and Project name **must be noted** in the subject line, otherwise the Bid may be considered as non-responsive to the Bid.

Electronic submittals will be held, un-opened, until the time and date noted in the Bid documents or posted addenda.

The City of Greeley disseminates all bids through the Rocky Mountain E-Purchasing System site. Go to <u>http://www.RockyMountainBidSystem.com</u>, then "Bid Opportunities" and then select "The City of Greeley". Bids submitted to the City of Greeley must include Sections 00120, 00130, 00140, 00160 and 00500. Addenda must be acknowledged in Section 00120 of the bidding documents. Bidders failing to acknowledge any and all addenda may be considered non-responsive.

An optional pre-bid meeting will be held on January 15, 2021 at 10:00am MST via a Zoom meeting. All prospective bidders are encouraged to attend.

Invitation to a scheduled Zoom meeting.

Join Zoom Meeting https://greeleygov.zoom.us/j/87344808026

Meeting ID: 873 4480 8026 Passcode: 013929

Dial by your location +1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston)

Each bid shall be accompanied, by a bidder's bond executed by a surety company authorized to do business in Colorado, made payable to the City of Greeley, Colorado or by a certified check drawn on a bank which is insured by the Federal Deposit Insurance corporation made payable to the City of Greeley, Colorado, in an amount not less than five percent (5%) of the proposal sum as security that the successful bidder will enter into a contract to construct this project in accordance with the plans and specifications, and give bonds in the sum as hereafter provided. Checks accompanying bids not accepted will be returned.

The successful responsive and responsible bidder will be required to furnish a satisfactory performance bond and payment bond in the amount of the contract sum.

No bid shall be withdrawn after the opening of the bids without the consent of the City of Greeley, Colorado, for a period of sixty (60) days after the scheduled time of the receiving the bids.

All proposals will be confidential until a contract is awarded and fully executed. At that time, all proposals and documents pertaining to the proposals will be open for public inspection, except for the material that is proprietary or confidential. However, requests for confidentiality can be submitted to the Purchasing Contact provided that the submission is in accordance with the following procedures. This remains the *sole responsibility* of the offeror. The Purchasing Contact will make no attempt to cure any information that is found to be at a variance with this procedure. The offeror may not be given an opportunity to cure any variances after proposal opening. **Neither a proposal in its entirety, nor proposal price information will be considered confidential/proprietary**. Questions regarding the application of this procedure must be directed to the Purchasing Contact listed in this RFP.

"Public Viewing Copy: The City is a governmental entity subject to the Colorado Open Records Act, C.R.S. §§ 24-72-200.1 et seq. ("CORA"). Any bids/proposals submitted hereunder are subject to public disclosure by the City pursuant to CORA and City ordinances. Vendors may submit one (1) additional complete bid/proposal clearly marked "FOR PUBLIC VIEWING." In this version of the bid/proposal, the Vendor may redact text and/or data that it deems confidential or proprietary pursuant to CORA. Such statement does not necessarily exempt such documentation from public disclosure if required by CORA, by order of a court of appropriate jurisdiction, or other applicable law. Generally, under CORA trade secrets, confidential commercial and financial data information is not required to be disclosed by the City. Bids/Proposals may not be marked "Confidential" or 'Proprietary' in their entirety. All provisions of any contract resulting from this request for proposal will be public information."

The City of Greeley retains the right to reject any and all bids and to waive any informality as deemed in the best interest of the city.

Questions pertaining to the project may be directed to Doug Clapp via email: <u>doug.clapp@greeleygov.com</u> or at 970-350-9792. Deadline to receive questions is January 19, 2021 by 12:00pm/ Noon. Doug Clapp Purchasing Manager

Greeley Website 1/5/2021

# Section 00120

#### **BID PROPOSAL**

#### PROJECT: (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

The Undersigned, having become familiar with the local conditions affecting the cost of the work, plans, drawings, and specifications attached herewith, and with advertisement for bids, the form of bid and proposal, form of bond, all of which are issued and attached and on file in the office of the Project Manager, hereby bid and propose to furnish all the labor, materials, necessary tools, and equipment and all utility and transportation service necessary to perform and complete in a workmanlike manner all of the work required in connection with the construction of the items listed on the bidding schedule in accordance with the plans and specifications as prepared by the City of Greeley, Colorado, for the sums set forth in the Bidding Schedule.

The total bid shall be the basis for establishing the amount of the Performance and Payment Bond for this project. The total bid is based on the quantities shown in the bid proposal form and the dimensions shown on the plans.

The undersigned has carefully checked the Bidding Schedule quantities against the plans and specifications before preparing this proposal and accepts the said quantities as substantially correct, both as to classification and the amounts, and as correctly listing the complete work to be done in accordance with the plans and specifications.

The undersigned, agrees to complete and file a Performance and Payment Bond and further agrees to complete the contract by August 1, 2021. Official notice to proceed will not be issued until adequate Performance and Payment Bonds and other required documents are on file with the City of Greeley.

NOTE: Bidders should not add any conditions or qualifying statements to this bid as otherwise the bid may be declared irregular as being non responsive to the Invitation for bids. The following numbered Addenda have been received and the bid, as submitted, reflects any changes resulting from those Addenda: \_\_\_\_\_\_

ATTEST

DATE COMPANY NAME BY SIGNATURE TITLE

# Section 00130

### **Fee Proposal**

## PROPOSAL PRICE SCHEDULE

Provide all labor, material, and equipment for the Four (4) CBD Traffic Signal Upgrade Projects in accordance with the specifications and provisions contained in this bid. This includes all work and materials necessary to upgrade and operate traffic signals at the 10<sup>th</sup> Avenue & 10<sup>th</sup> Street, 10<sup>th</sup> Avenue & 13<sup>th</sup> Street, 11<sup>th</sup> Avenue & 10<sup>th</sup> Street, and 11<sup>th</sup> Avenue & 9<sup>th</sup> Street intersections. This work also includes installing signal equipment such as hand holes, traffic signal cabinets, wiring, push buttons, and other equipment indicated on plans provided in Appendix B, C, D, and E. All materials and labor shall be included in the base bid cost except City furnished materials and optional work listed below.

All pricing quoted shall be allowed to be negotiated prior to the signing of the contract. Pricing shall be in the format of the cost schedule contained below. Do not include cost and price figures anywhere except in the cost schedule. Alternative approaches for the pricing of the requested products and services may be provided; however, such alternate approaches shall be described separately and must be in addition to the format. Do not include cost or price figures anywhere except in the cost schedule. All pricing shall be guaranteed for 180 days from proposal submittal.

		Fou	r (4) CBD Traffic Signal Upgrade Project - F	•	
	Base Bi	d (Lum	\$		
W	ritten an	nount:			
	Option	al Proj	ect Costs		
#	Quant.	Unit	Description	\$/Unit	Total \$
1	12	SY	Concrete Sidewalk (6 Inch) Restoration		
2	46	LF	Curb and Gutter Type 2 (Section 11-b)		
3	11	EACH	Traffic Signal Face (12-12-12) (Install Only)		
4	14	EACH	Intersection Detection System and Base (Install Only)		
	OMPANY DDRESS:	NAME	:		

The City reserves the right to increase and/or decrease the scope of work subject to available funding.

(City) (State) (Zip) \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

AUTHORIZED SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

TITLE: DATE: \_\_\_\_\_

Phone No. -

# **COOPERATIVE PURCHASING STATEMENT**

The City of Greeley encourages and participates in cooperative purchasing endeavors undertaken by or on behalf of other governmental jurisdictions. To the extent, other governmental jurisdictions are legally able to participate in cooperative purchasing endeavors; the City of Greeley supports such cooperative activities. Further, it is a specific requirement of this proposal or Request for Proposal that pricing offered herein to the City of Greeley may be offered by the vendor to any other governmental jurisdiction purchasing the same products. The vendor(s) must deal directly with any governmental agency concerning the placement of purchase orders, contractual disputes, invoicing, and payment. The City of Greeley shall not be liable for any costs or damages incurred by any other entity.

#### BID BOND

#### KNOW ALL MEN BY THESE PRESENT, that we, the undersigned

as Principal, and \_\_\_\_\_\_ as Surety, are hereby held and firmly bound unto the City of Greeley, Colorado, as Owner, in the penal sum of \_\_\_\_\_\_ for the Payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

THE CONDITION of this obligation is such that whereas the Principal has submitted to the City of Greeley, Colorado, the accompanying bid and hereby made a part hereof to enter into a Contract Agreement for the construction of City of Greeley Project,

#### (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

WHEREAS, the Owner, as condition for receiving said bid, requires that the Principal to deposit with the Owner as Bid Guaranty equal to five percent (5%) of the amount of said bid.

NOW, THEREFORE,

(a) If said bid shall be rejected; or in the alternate,

(b) If said bid shall be accepted and the Principal shall execute and deliver a Contract Agreement (properly completed in accordance with said bid) and shall furnish a Performance and Payment Bond upon the forms prescribed by the Owner for the faithful performance of said Agreement; and shall in all other respects perform the agreement created by the acceptance of said bid;

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such bid; and said Surety does hereby waive notice of any such extension. Page 2 Bid Bond

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals this \_\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

	PRINCIPAL	SURETY	
Name: _			
Ву:			
Title: In-Fact:		Attorney	
in ructi	(Seal)	(Seal)	

NOTE: Surety Companies executing bonds must be authorized to transact business in the State of Colorado and be accepted to the Owner.

#### NOTICE OF PRE-BID CONFERENCE

### (4) CBD Traffic Signal Upgrade Projects – FD20-12-173#

A pre-bid conference will be held via a Zoom meeting:

On January 15, 2021 at 10:00 a.m. MST, via Zoom. All bidders are highly encouraged to attend.

Join Zoom Meeting https://greeleygov.zoom.us/j/87344808026

Meeting ID: 873 4480 8026 Passcode: 013929

Dial by your location +1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston)

Representatives of the City of Greeley will be present to answer questions.

Each bidder shall submit the following declaration of attendance, along with the other bid documents.

\*\*\*\*\*\*

I have attended the pre-bid conference

I have not attended the pre-bid conference \_\_\_\_\_

Name of Contracting Organization

Authorized Signature

Date

NOTICE OF AWARD

DATE:

TO:

### Re: (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

Dear Contractor:

The City of Greeley, Colorado (hereinafter called "the Owner") has considered the bids submitted for referenced work in response to its Invitation for Bids. You are hereby notified that your bid has been accepted for items and prices stated in the Bid Schedule in the amount of \$\_\_\_\_\_\_. You are required to execute the Contract Agreement, provide the necessary insurance certificates, the Performance and Payment Bonds within ten (10) days from the date of this Notice. If you fail to execute said Contract Agreement and furnish the necessary insurance certificates and bonds within the time allotted from this date, the Owner will be entitled to consider your rights arising out of the Owner's acceptance of your bid as abandoned and to demand payment of bid guaranty as damages. The Owner will be entitled to such other rights as may be granted by law. You are required to return an acknowledged copy of this Notice of Award and enclosures to Purchasing.

CITY OF GREELEY, COLORADO

By: Joel Hemesath

Title: Director of Public Works

ACKNOWLEDGMENT: Receipt of the foregoing Notice of Award accompanied with a Performance and Payment Bond form and a signed copy of the Contract Document is hereby acknowledged this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Bidder: \_\_\_\_\_

By: \_\_\_\_\_

#### CONTRACT

THIS AGREEMENT made and entered into this \_\_\_\_\_ day of \_\_\_\_, 20\_\_, by and between the City of Greeley, Colorado, and under the laws of the state of Colorado, party of the first part, termed in the Contract Documents as the "Owner" and \_\_\_\_\_ party of the second part, termed in the Contract Documents as "Contractor."

WITNESSETH: In consideration of monetary compensation to be paid by the Owner to the Contractor at the time and in the manner hereinafter provided, the said Contractor has agreed, and does hereby agree, to furnish all labor, tools, equipment and material and to pay for all such items and to construct in every detail, to wit:

#### PROJECT: (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

at the price bid on the Proposal Form of \$ \_\_\_\_\_\_ all to the satisfaction and under the general supervision of the Project Manager for the City of Greeley, Colorado.

The Contract Documents consist of this Agreement, the Conditions of the Contract (General, Supplementary and other Conditions), the Drawings, the Specifications, all Addenda issued prior to and all Modifications issued after execution of this Agreement. These form the Contract, and all are as fully a part of the Contract as if attached to this Agreement or repeated herein.

The Project Manager named herein shall interpret and construe the Contract Documents, reconciling any apparent or alleged conflicts and inconsistencies therein; and all of the work and all details thereof shall be subject to the approval and determination of the Project Manager as to whether or not the work is in accordance with Contract Documents. Said City Project Manager shall be the final arbiter and shall determine any and all questions that may arise concerning the Contract Documents, the performance of the work, the workmanship, quality of materials and the acceptability of the completed project. The decision of the Project Manager on all questions shall be final, conclusive and binding.

AND FOR SAID CONSIDERATION IT IS FURTHER PARTICULARLY AGREED BETWEEN THE PARTIES TO THIS AGREEMENT.

1. That construction and installation of the above enumerated work for the Owner shall be completed and ready for use in accordance with the time of completion described in the Bid form of this Contract. That the above enumerated work shall begin within ten (10) days of the official "Notice to Proceed". (Contract shall become void if work is not started at specified time.)

2. That said work and materials for the project covered by the Contract Documents shall be completely installed and delivered to the Owner, within the time above stated, clear and free from any and all liens, claims, and demands of any kind.

3. The full compensation to be paid the Contractor by the Owner pursuant to the terms of this Contract shall be payable as provided in the Contract Documents.

4. This Contract consists of the following component parts, all of which are as fully a part of the Contract as herein set out verbatim, or if not attached, as if hereto attached:

Section 00110: Invitation for Bid Section 00120: Bid Proposal Section 00130: Bid Schedule Section 00140: Bid Bond Section 00160: Pre-bid meeting Section 00210: Notice of Award Section 00310: Contract Section 00320: Performance Bond Section 00330: Payment Bond Section 00340: Certificate of Insurance Section 00350: Lien Waiver Release Section 00360: Debarment/Suspension Certification Statement Section 00410: Notice to Proceed Section 00420: Project Manager Notification Section 00430: Certificate of Substantial Completion Section 00440: Final Completion Section 00500: Subcontractors List Section 00510: General Conditions of the Contract

Section 00620: Special Provisions

Addenda Number \_\_\_\_\_ Inclusive

Any modifications, including change orders, duly delivered after execution of this Agreement.

**IN WITNESS WHEREOF**, the parties have caused this instrument to be executed as of the day and year first above written.

City of Greeley, Colorado

Contractor\_\_\_\_\_

Approved as to Substance

Authorized Signature

City Manager-Roy Otto

Printed Name

Reviewed as to Legal Form OFFICE OF THE CITY ATTORNEY

Title

Certification of Contract Funds Availability

City Attorney-Doug Marek

By: \_

Director of Finance-John Karner

#### PERFORMANCE BOND

Bond No.\_\_\_\_\_

KNOWN ALL MEN BY THESE PRESENTS: that

(Firm)	-
(Address)	_
(an Individual), (a Partnership), (a Corporation), hereinafter referred t	o as "the Principal", and
(Firm)	-
(Address)	

hereinafter referred to as "the Surety", are held and firmly bound unto the CITY OF GREELEY, 1000 10th Street, Greeley, CO. 80631, a Municipal Corporation, hereinafter referred to as "the Owner" in the penal sum of \_\_\_\_\_\_

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors and assigns, jointly and severally, firmly by these present.

THE CONDITIONS OF THIS OBLIGATION are such that whereas the Principal entered into a certain Contract Agreement with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, a copy of which is hereto attached and made a part hereof for the performance of City of Greeley Project,

### (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions and agreements of said Contract Agreement during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without Notice to the Surety and during the life of the guaranty period, and if he shall satisfy all claims and demands incurred under such Contract Agreement, and shall fully indemnify and save harmless the Owner from all cost and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, and then this obligation shall be void; otherwise to remain in full force and effect.

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 Agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Agreement or to the work or to the specifications.

Performance Bond Page 2

IN WITNESS WHEREOF, this instrument is executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

PROVIDED, FURTHER, that no final settlement between the Owner and Contractor shall abridge the right of any beneficiary hereunder, whose claims may be unsatisfied.

IN PRESENCE OF:	PRINCIPAL		
	By:		
(Corporate Coal)	(Addross)		
(Corporate Seal)	(Address)		
IN PRESENCE OF:	OTHER PARTNERS		
	Ву:		
	Ву:		
	Ву:		
IN PRESENCE OF:	SURETY		
	Ву:		
(Attorney-in-Fact)			
(SURETY SEAL)	(Address)		

NOTE: Date of Bond must not be prior to date of Contract Agreement. If Contractor is Partnership, all partners should execute bond.

IMPORTANT: Surety Company must be authorized to transact business in the State of Colorado and be acceptable to the Owner.

#### PAYMENT BOND

Bond No.\_\_\_\_\_

KNOWN ALL MEN BY THESE PRESENT: that
(Firm)

(Address)\_\_\_\_\_

(an Individual), (a Partnership), (a Corporation), hereinafter referred to as "the Principal", and (Firm)

(Address)\_\_\_\_\_

hereinafter referred to as "the Surety", are held and firmly bound unto the CITY OF GREELEY, 1000 10th Street, Greeley, Co. 80631, a Municipal Corporation, hereinafter referred to as "the Owner", in the penal sum of

in

lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION are such that whereas the Principal entered into a certain Contract Agreement with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the performance of

### (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

NOW, THEREFORE, if the Principal shall make payment to all persons, firms, subcontractors and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such Contract Agreement, and any equipment and tools, consumed, rented or used in connection with the construction of such work and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

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 Agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Agreement or to the work or to the specifications.

Payment Bond Page 2

IN WITNESS WHEREOF, this instrument is executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

PROVIDED, FURTHER, that no final settlement between the Owner and Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN PRESENCE OF:	PRINCIPAL
	Ву:
(Corporate Seal)	(Address)
IN PRESENCE OF:	OTHER PARTNERS
	Ву:
	Ву:
	Ву:
IN PRESENCE OF:	SURETY
	Ву:
(Attorney-in-Fact)	
(SURETY SEAL)	(Address)

NOTE: Date of bond must not be prior to date of Contract Agreement. If Contractor is Partnership, all partners should execute Bond.

IMPORTANT: Surety Company must be authorized to transact business in the State of Colorado and be acceptable to the Owner.

Client#:	12170	Section 0	0340		GREG			
ACORD <sub>TM</sub> CERTIF	ICAT	E OF	LIA	BILITY II	NSUR	ANCE		1M/DD/YYYY) <b>4/2013</b>
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.								
IMPORTANT: If the certificate holder is an the terms and conditions of the policy, cer certificate holder in lieu of such endorsem	rtain policies							
PRODUCER				CONTACT NAME:				
ABC Insurance Company P. O. Box 1234				PHONE (A/C, No, Ext):		FAX (A/C, N	lo):	
Anywhere, USA				E-MAIL ADDRESS: PRODUCER				
			-	CUSTOMER ID #:				
INSURED				INSURER(S) AFFORDING COVERAGE NAIC #				NAIC #
Sample Certificate			-	INSURER B :	ui riuing o			
				INSURER C :				
				INSURER D :				
				INSURER E :				
				INSURER F :				
						REVISION NUMBER:		2
THIS IS TO CERTIFY THAT THE POLICIES OF IN INDICATED. NOTWITHSTANDING ANY REQUIRE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN EXCLUSIONS AND CONDITIONS OF SUCH POLIC	MENT, TERM	OR CONDITIO	N OF ANY DED BY T	CONTRACT OR OTH	ER DOCUMEN BED HEREIN I	IT WITH RESPECT TO W	HICH THIS	
INSR ADI	DL SUBR R WVD	POLICY NUM			POLICY EXP (MM/DD/YYYY)	LI	MITS	
GENERAL LIABILITY						EACH OCCURRENCE	\$1,00	0,000
X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ <b>100</b> ,	,000
CLAIMS-MADE X OCCUR						MED EXP (Any one person)	\$5,00	0
						PERSONAL & ADV INJURY		0,000
						GENERAL AGGREGATE		0,000
GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AG	iG \$ <b>2,00</b> \$	0,000
POLICY     PRO- JECT     LOC       AUTOMOBILE LIABILITY     X						COMBINED SINGLE LIMIT (Ea accident)		0,000
ANY AUTO						BODILY INJURY (Per person		
SCHEDULED AUTOS						BODILY INJURY (Per accide	nt) \$	
X HIRED AUTOS						PROPERTY DAMAGE (Per accident)	\$	
X NON-OWNED AUTOS							\$	
							\$	
UMBRELLA LIAB OCCUR						EACH OCCURRENCE	\$	
EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$	
DEDUCTIBLE							\$	
RETENTION \$           WORKERS COMPENSATION							\$ [H-	
AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE						TORY LIMITS EI     E.L. EACH ACCIDENT	s100,	,000
OFFICER/MEMBER EXCLUDED? N// (Mandatory in NH)	•					E.L. DISEASE - EA EMPLO		
If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIM	ит \$ <b>500</b> ,	,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES City of Greeley is named as Additional Work Compensation. This insurance is	Insured on	General L	iability.	Waiver of subro	gation is in			
CERTIFICATE HOLDER				CANCELLATION				
City of Greeley 1000 10th St Greeley, CO 80631-3808				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.				
		AUTHORIZED REPRESENTATIVE						
				©1	988-2009 AC	ORD CORPORATION	All righ	ts reserved

### LIEN WAIVER RELEASE

TO: City of Greeley, Colorado (hereinafter referred to as "the OWNER".)

FROM: (hereinafter referred to as "the CONTRACTOR")

### PROJECT: (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

1. The CONTRACTOR does hereby release all Mechanic's Liens Rights, Miller Act Claim (40 USCA 270), Stop Notice, Equitable Liens and Labor and Material Bond Rights resulting from labor and/or materials, subcontract work, equipment or other work, rents, services or supplies heretofore furnished in and for the construction, design, improvement, alteration, additions to or repair of the above described project.

2. This release is given for and in consideration of the sum of \$ and other good and valuable consideration. If no dollar consideration is herein recited, it is acknowledged that other adequate consideration has been received by the CONTRACTOR for this release.

3. In further consideration of the payment made or to be made as above set forth, and to induce the OWNER to make said payment, the CONTRACTOR agrees to defend and hold harmless the OWNER, employees, agents and assigns from any claim or claims hereinafter made by the CONTRACTOR and/or its material suppliers, subcontractors or employees, servants, agents or assigns of such persons against the project. The CONTRACTOR agrees to indemnify or reimburse all persons so relying upon this release for any and all sums, including attorney's fees and costs, which may be incurred as the result of any such claims.

4. It is acknowledged that the designation of the above project constitutes an adequate description of the property and improvements for which the CONTRACTOR has received consideration for this release.

5. It is further warranted and represented that all such claims against the CONTRACTOR or the CONTRACTOR's subcontractors and/or material suppliers have been paid or that arrangements, satisfactory to the OWNER and CONTRACTOR, have been made for such payments.

6. It is acknowledged that this release is for the benefit of and may be relied upon by the OWNER, the CONTRACTOR, and construction lender and the principal and surety on any labor and material bond for the project.

Lien Waiver Release Page 2

7. In addition to the foregoing, this instrument shall constitute a \*\*\* (full, final and complete) \*\*\*(partial) release of all rights, claims and demands of the CONTRACTOR against the OWNER arising out of or pertaining to the above referenced project. If partial, all rights and claims on the project are released up to and including the day of Month, 20.

Dated this	day of	, 20	
CONTRACTOR			
Ву:			
Title:			
STATE OF	) )ss. )		
		pefore me this	day of,
20 by			
My Commission expires:			
		Notary Public	
***Strike when not appli	icable		

## (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

### Debarment/Suspension Certification Statement

The proposer certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal, State, County, Municipal or any other department or agency thereof. The proposer certifies that it will provide immediate written notice to the City if at any time the proposer learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstance.

DUNS # (Optional)
Name of Organization
Address
Authorized Signature
Fitle
Date

### NOTICE TO PROCEED

Month , 20

TO: NAME

### PROJECT: (4) CBD TRAFFIC SIGNAL UPGRADE PROJECTS – FD20-12-173

To Whom It May Concern:

You are hereby notified to commence work on the above-referenced project in accordance with the Contract Agreement dated Month  $\,$  , 20  $\,$  .

You are to complete this project by Month , 20

CITY OF GREELEY, COLORADO

Ву: \_\_\_\_\_

Title: \_\_\_\_\_

Signature

### PROJECT MANAGER NOTIFICATION

\_\_\_\_\_, 20\_\_\_\_\_

TO:

### PROJECT: (4) CBD Traffic Signal Upgrade Projects – FD20-12-173

The Owner hereby designates \_\_\_\_\_\_ as its Project Manager and authorizes this individual, under the authority of the Director of Public Works to make all necessary and proper decisions with reference to the project. Contract interpretations, change orders and other requests for clarification or instruction shall be directed to the Project Manager. The Director of Public Works shall be authorized to bind the Owner with respect to any decision made in accordance with the contract document.

### CITY OF GREELEY, COLORADO

Ву: \_\_\_\_\_

Title: \_\_\_\_\_

#### CERTIFICATE OF SUBSTANTIAL COMPLETION

#### TO: CONTRACTOR

#### PROJECT: (4) CBD TRAFFIC SIGNAL UPGRADE PROJECTS – FD20-12-173

Project or designated portion shall include: Describe Scope.

The work performed under this contract has been reviewed and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby established as Month , 20

The date of commencement of applicable warranties required by the Contract Documents is stipulated in Section 00440 - Certificate of Final Acceptance.

#### DEFINITION OF DATE OF SUBSTANTIAL COMPLETION

The Date of Substantial Completion of the Work or designated portion thereof is the date certified by the Project Manager when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

A list of items to be completed or corrected, prepared by the Contractor and verified and amended by the Project Manager is attached hereto. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. The date of commencement of warranties for items on the attached list is as stipulated in Section 00440 – Certificate of Final Acceptance.

The Owner shall operate and maintain the Work or portion of the Work described above from the Date of Substantial Completion and be responsible for all costs associated with the completed work excluding cost related to warrantee work. The Contractor will complete or correct the Work on the list of items attached hereto within days from the above Date of Substantial Completion.

Contractor

Owner

(Note--Owner's and Contractor's legal and insurance counsel should review and determine insurance requirements and coverage; Contractor shall secure consent of surety company, if any.)

### CERTIFICATE OF FINAL ACCEPTANCE

#### TO: CONTRACTOR

#### PROJECT NAME: (4) CBD TRAFFIC SIGNAL UPGRADE PROJECTS – FD20-12-173

The work performed under this contract has been reviewed and found to meet the definition of final acceptance. This Certificate of Final Acceptance applies to the whole of the work.

The Date of Final Acceptance of the Project designated above is hereby established as: Month , 20 at 2:00 pm. This date is also the date of commencement of applicable warranties associated with the Project described above and as required by the Contract Documents.

#### DEFINITION OF DATE OF FINAL ACCEPTANCE

The Date of Final Acceptance of the Work is the date certified by the City of Greeley's Project Manager when the work is 100% complete, in accordance with the Contract Documents, as amended by change order(s), or as amended below:

Amendment to the Certificate of Final Completion (if any): Decribe Ammendments.

The Contractor and/or the City Of Greeley shall define any claims or requests for additional compensation above (or as attachments to this document).

Final Acceptance shall not be achieved until the Contractor provides the City Of Greeley with all contract specified Contractor and Sub-contractor close out documents including final lien waivers, releases, insurances, manuals, training, test results, warranties, and other documents required by the Contract Documents, as amended.

Upon issuance of the Certificate of Final Acceptance the Contractor may submit an application for payment requesting final payment for the entire Work. Liquidated damages (if any) will be assessed at this time.

Contractor's acceptance of the final payment shall constitute a waiver by the Contractor of all claims arising out of or relating to the Work; except as noted under 'Amendment to the Certificate of Final Acceptance' above.

Agreed:

	20		20
Contractor's Representative	DATE	Project Manager (COG)	DATE



#### SECTION 00500 SUBCONTRACTORS/MATERIALS SUPPLIERS AND RELATED DATA

Firm Name:	City Contractors License #					
	Primary Contractor					
PROJECT:		Address:				
For each Subcontractor and/or M (use additional sheets as necessa	laterials Suppliers to be utilized, please provide the following inform ary):	nation				
Phone Number:	Fax Number:					
	f total work to be assigned					
	Percentage:	%				
Firm Name: Address:	City Contractors License #					
Phone Number:	Fax Number:					
	f total work to be assigned					
	Percentage:	%				
	City Contractors License #					
Address:						
Phone Number:	Fax Number:					
Proposed work and percentage of	f total work to be assigned					
	Percentage:	70				
	City Contractors License #					
Address:						
	Fax Number:					
Proposed work and percentage of	f total work to be assigned	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
	Percentage:	%				
Firm Name:	City Contractors License #					
Address:						
Phone Number:	Fax Number:					
Proposed work and percentage of	f total work to be assigned					
	Percentage:	%				

If the Primary Contractor adds any Subcontractors or Materials Suppliers during the duration of the project, the Primary Contractor will supply the City with an updated form before the Subcontractor or Materials Supplier will be allowed to work on the project.

# CITY OF GREELEY GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (REVISED MAY 2020)

## ARTICLE 1 DEFINITIONS

1.1 **Bidder**: An architect, engineer, individual, firm, partnership, corporation or combination thereof, submitting a Bid for the Work.

1.2 **Change Notice**: A document issued to the Contractor specifying a proposed change to the Contract Documents. Unless otherwise expressly stated on the face of the Change Notice, a Change Notice is a proposal which may result in a Change Order.

1.3 **Change Order**: A document issued to the Contractor modifying the Contract.

1.4 **Construction Contract**: The Contract Documents, including the Contract for construction (hereinafter "the contract") executed by the Contractor and the Owner covering the performance of the Work including the furnishing of labor, superintendence, materials, tools and equipment as indicated in the Contract Documents.

1.5 **Contract Documents**: Documents applicable to and specific to the construction of an individual Project, including the Contract and all other documents executed by the Contractor and Owner covering the performance of the work including but not limited to Specifications, Insurance Requirements, Contract Drawings, Conditions of the Contract (General and Supplementary), Owner Contractor Agreement, all Addenda, all change orders issued after execution of the Contract, Performance and Payment Bonds, and any other special provisions.

1.6 **Contract Drawings(Project Drawings)**: Contract drawings, The plans, to include but not limited to plans, profiles, typical cross sections, general cross-sections, elevations, schedules, schematics, notes and details which show locations, character, dimensions, and details of the Work.

1.7 **Contractor:** The individual, firm, partnership, or corporation, or combination thereof, private, municipal, or public, including joint ventures, which, as an independent contractor, has entered into a contract with the Owner, who is referred to throughout the Contract Documents by singular number and masculine gender.

1.8 **Days**: Unless otherwise designated, days mean calendar days.

1.9 **Extra Work**: Work not provided for in the Contract as awarded but found to be essential to the satisfactory completion of the Contract, within its intended scope. Reimbursement for extra work is governed by Article 28, CHANGES, or Article 31, CONTRACTOR PROPOSALS.

1.10 **Field Order**: A written order issued to a contractor by the Owner, or Project Manager, effecting a minor change or clarification with instructions to perform work not included in the contract. The work will eventually become a Change Order. A field Order is an expedient process used in an emergency or need situation that in many cases does not involve an adjustment to the contract sum or an extension of the contract sum or an extension of the contract time.

1.11 **Final Acceptance**: The formal written acceptance by the Owner of the completed Work.

1.12 **Force Account**: A method of payment, other than lump sum or unit price, for Work ordered by Change Order or by written notice from the Owner. Reimbursement for force account work is governed by Article 36, FORCE ACCOUNT WORK.

1.13 **Furnishing**: Manufacturing, fabricating and delivering to the site of the Work materials, plant, power, tools, patterns, supplies, appliances, vehicles and conveyances necessary or required for the completion of the Work.

1.14 **General Conditions (GC)**: A section of the Contract Documents which specifies, in general, the contractual conditions.

1.15 **General Terms**: Directed, required, permitted, ordered, designated, selected, prescribed or words of like import shall be understood to mean the direction, requirement, permission, order, designation, selection or prescription of the Project Manager. Approved, satisfactory, equal, necessary or words of like import shall be understood to mean approved by, acceptable to, satisfactory to, equal, necessary in the opinion of the Project Manager.

1.16 **Indicated**: A term meaning as shown on the Contract Drawings, or as specified and detailed in the Contract Documents.

1.17 **Installation, Install, or Installing**: Completely assembling, erecting and connecting material, parts, components, appliances, supplies and related equipment specified or required for the completion of the Work.

1.18 **Limit of Work**: Boundary within which the Work, excepting utility and drainage work in Public Right Of Way and Easements, is to be performed.

1.19 **Notice to Proceed**: Written notice from the Owner to the Contractor to proceed with the Work.

1.20 **Notice of Termination**: Written notice from the Owner to the Contractor to stop work under the Contract on the date and to the extent specified in the Notice of Termination.

1.21 **Owner**: The City of Greeley.

1.22 **Permanent Drainage Easement**: Area required to construct and maintain permanent drainage facilities for retention, release, and passage of surface water.

1.23 **Permanent Utility Easement**: Area required to construct and maintain utility facilities.

1.24 **Project**: That specific portion of the Work indicated in the Contract Documents.

1.25 **Project Manager**: The Owner's designated representative. The Project Manager has the authority to delegate portions of his responsibilities to others.

1.26 **Provide**: In reference to work to be performed by the Contractor, provide means furnish and install completely in place.

1.27 **Punch List**: Work determined to be incomplete or unacceptable at time of inspection for substantial completion.

1.28 **Samples**: Physical examples which illustrate materials, equipment, fixtures and workmanship which establish standards by which the Work will be judged.

1.29 **Schedule**: Acceptable schedules are BAR or GANTT Chart or CPM schedule.

1.30 **Shop Drawings**: Documents furnished by the Contractor to illustrate specific portions of the Work. Shop Drawings include drawings, diagrams, illustrations, schedules, charts, brochures, tables and other data describing fabrication and installation of specific portions of the Work.

1.31 **Specifications**: A document applicable to construction contracts containing the Technical Provisions.

1.32 **Subcontractor**: Any person, firm or corporation, other than the employees of the Contractor, who contracts with the Contractor to furnish labor, material or labor and materials, under this Contract.

1.33 **Special Provisions**: Provisions especially applicable to this Contract which invoke, modify and supplement the General Conditions which are included in the Contract Documents.

1.34 **Substantial Completion**: The state in the progress of Work when the Work, or a designated portion thereof, is sufficiently complete in accordance with the Contract Documents, so that Owner may access, occupy, use, and enjoy the Project, or designated portion thereof, for its intended purpose. Substantial Completion shall not occur until a temporary or permanent Certificate of Occupancy is issued and only minor punch list items remain for such Work.

1.35 **Technical Provisions**: Those provisions which specify the materials and execution of construction for work entering into the project.

1.36 **Work**: The construction, labor, materials, equipment, and contractual requirements as indicated in the Contract Documents, including alterations, amendments, or extensions thereto made by authorized changes.

1.37 **Work Site**: The area enclosed by the Limit of Work indicated in the Project Drawings and boundaries of local streets and public easements in which the Contractor is to perform work under the Contract. It shall also include areas obtained by the Contractor for use in connection with the Contract, when contiguous to the Limit of Work.

## ARTICLE 2 INTERPRETATION

2.1 The documents comprising the Contract Documents are complementary and indicate the construction and completion of the Work. Anything mentioned in the Contract Specifications and not shown on the Contract Drawings, or shown on the Contract Drawings and not mentioned in the Contract Specifications, shall be of like effect as if shown or mentioned in both.

2.2 Where "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the specifications or drawings accompanying this Contract unless stated otherwise.

2.3 References to Articles or Sections include sub articles or subsections under the Article Reference (for example, a reference to Article 2 is also a reference to 2.1 through 2.9, and references to paragraphs similarly include references to subparagraphs).

2.4 Referenced Standards: Material and workmanship specified by the number, symbol, or title of a referenced standard shall comply with the latest edition or revision thereof and amendments and supplements thereto in effect on the date of the Invitation to Bid except where a particular issue is indicated.

2.5 Precedence of Contract Documents: Except as provided by Paragraph 2.1 of this Article, the Construction Contract governs over other Contract Documents, except that a Change Order governs over the Contract and previously issued Change Orders. The Contract Conditions govern over the General Conditions.

2.6 Explanations: Should it appear that the Work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Contract Documents, the Contractor shall apply to the Owner for such explanation provided as part of the Contract. Disputes over questions of fact which are not settled by agreement shall be decided by Owner. Such decision thereon will be final, subject to remedies under Article 35, DISPUTES.

2.7 Should there be any conflict, detailed instructions govern over general instructions, detail drawings have precedence over small scale drawings, and dimensions have precedence over scale.

2.8 Omissions and Misdescriptions: The Contractor shall carefully study and compare all drawings, specifications, Contract Documents and other instructions; shall verify all dimensions on the Contract Drawings before laying out the Work; shall notify the Project Manager of all errors, inconsistencies or omissions which he may discover; and obtain specific instructions in writing before proceeding with the Work. The Contractor shall not take advantage of apparent errors or omissions which may be found in the Contract Documents, but the Project Manager shall be entitled to make such corrections therein and interpretations thereof as he may deem necessary for the fulfillment of their intent. The Contractor shall be responsible for all errors in construction which could have been avoided by such examination and notification, subject to remedies under Article 35, Disputes.

## ARTICLE 3 ENTITY OF CONTRACTOR

3.1 If the Contractor hereunder is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

## ARTICLE 4 LIABILITY AND INDEMNIFICATION

4.1 It is agreed that the Contractor assumes responsibility and liability for damages, loss or injury of any kind or nature whatever to persons or property caused by or resulting from or in connection with any act, action, neglect, omission, or failure to act when under a duty to act on the part of the Contractor or any of his officers, agents, employees, or subcontractors in his or their performance of the Work. The Contractor shall indemnify and hold harmless the Government, the State, the Owner and the Project Manager and their members, officers, agents, or employees from claims, losses, damages, charges, costs, or expenses, including attorney's fees, whether direct or indirect, to which they or any of them may be put or subjected to by reason of any such loss or injury.

## **ARTICLE 5**

# PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS AND LAND SURVEY MONUMENTS

5.1 A Contractor shall preserve and protect existing vegetation such as trees, shrubs, and grass on or adjacent to the work site which are not indicated to be removed and which do not unreasonably interfere with the construction work and he shall replace in kind any vegetation, shrubs and grass damaged by him at his own expense.

5.2 The Contractor shall protect from damage all utilities, structures, or improvements on or near the site of the Work and shall repair or restore any damage to such utilities, structures, or improvements resulting from failure to comply with the requirements of the Contract or the failure to exercise reasonable care in the performance of the Work. If the Contractor fails or refuses to repair any such damage promptly, the Owner may have the necessary work performed and charge the cost thereof to the Contractor.

5.3 All land survey monuments shall be protected from any damage by any work and/or shall be replaced by a licensed land surveyor licensed in the state of Colorado at the contractor's expense before final acceptance is issued.

### ARTICLE 6 CONTRACTUAL RELATIONSHIPS

6.1 No contractual relationship will be recognized under the Contract other than the contractual relationship between the Owner and the Contractor.

## ARTICLE 7 ASSIGNMENT

7.1 The performance of the Work under the Contract shall not be assigned except upon written consent of the Owner. Consent will not be given to any proposed assignment which would relieve the Contractor or his surety of their responsibilities under the Contract. The Contractor shall not assign any monies due or to become due to him under the Contract without the previous written consent of the Owner.

# ARTICLE 8 SUBCONTRACTORS

8.1 Unless otherwise required by the Contract Documents or the Bidding Documents, the Contractor, as soon as practicable after the award of the Contract, not to exceed 3 days, shall furnish to the Owner and the Project Manager, in writing the names of the subcontractors, persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Project Manager will promptly reply to the Contractor in writing whether or not the Owner or the Project Manager, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Project Manager to reply promptly shall constitute notice of no reasonable objections.

## ARTICLE 9 CONDITIONS AFFECTING THE WORK

9.1 The Contractor shall be responsible for taking steps reasonably necessary to ascertain the nature and location of the Work, and the general and local conditions which can affect the Work or the cost thereof. Failure by the Contractor to do so will not relieve him from responsibility for successfully performing work without additional expense to the Owner. The Owner will not be responsible for any understanding or representations concerning conditions, unless such understanding or representations are expressly stated in the Contract.

### ARTICLE 10 GRATUITIES AND CONFLICTS OF INTEREST

10.1 The Owner may, by written notice to the Contractor terminate the right of the Contractor to proceed under this Contract if it is found that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor or any director, officer or employee of the Owner or its Project Manager with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performance of such contract. The Owner's determination shall be final subject only to judicial review.

10.2 In the event this Contract is terminated for any reason, the Owner shall be entitled to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor.

10.3 No member, officer or employee of the Owner or of a local public body during his tenure or for one year thereafter shall have any interest, direct or indirect, in this Contract or the proceeds thereof. "Local public body" means the State, any political subdivision of the State, or any agency of the State or any political subdivision thereof.

10.4 The rights and remedies of the Owner provided in this article are not exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

# ARTICLE 11 WARRANTY OF WORK

11.1 Except where longer periods of warranty are indicated for certain items, the Contractor warrants work under the Contract to be free from faulty materials and workmanship for a period of not less than two years from date of Final Acceptance, which two year period shall be covered by the Performance Bond and Payment Bond as specified in this Contract. The Contractor shall immediately remedy, repair, or replace, without cost to the Owner and to the entire satisfaction of the Owner, defects, damages, or imperfections due to faulty materials or workmanship appearing in said work within said period of not less than two years. Remedied work shall carry the same warranty as the original work starting with the date of acceptance of the replacement or repair. Payment to the Contractor will not relieve him of any obligation under this Contract.

11.2 The Contractor, at no additional expense to the Owner, shall also remedy damage to equipment, the site, or the building or the contents thereof which is the result of any failure or defect in the Work, and restore any work damaged in fulfilling the requirements of the Contract. Should the Contractor fail to remedy any such failure or defect within a reasonable time but no longer than ten (10) days after receipt of notice thereof, the Owner will have the right to replace, repair, or otherwise remedy such failure or defect at the Contractor's expense.

11.3 Subcontractors', manufacturers', and suppliers' warranties and guarantees, expressed or implied, respecting any part of the Work and any material used therein shall be deemed obtained and

shall be enforced by the Contractor for the Benefit of the Owner without the necessity of separate transfer or assignment thereof.

11.4 The rights and remedies of the Owner provided in this Article are in addition to and do not limit any rights and remedies afforded by the Contract or by law.

## ARTICLE 12 MATERIAL

12.1 Unless otherwise indicated in this Contract, equipment, material and products incorporated in the Work covered by this Contract shall be new and of the grade specified in the Contract for the purpose intended. Unless otherwise specifically indicated, reference to equipment, material, product or patented process by trade names, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition, and the Contractor may, at his option, use any equipment, material, article, or process which is equivalent to that named, subject to the requirements of Paragraph 12.2 of this Article.

12.2 Within the scope of his authority, the Project Manager shall be the sole judge of the quality and suitability of proposed alternative equipment, material, article or process. The burden of proving the quality and suitability of the alternative shall be upon the Contractor. Information required by the Project Manager in judging an alternative shall be submitted for approval by the Contractor at the Contractor's expense prior to installation.

12.3 Where use of an alternative material involves redesign of or changes to other parts of the Work, the cost and the time required to affect such redesign or change will be considered in evaluating the suitability of the alternative material. Redesign and changes in other parts of the Work shall be at the Contractor's expense.

12.4 No action relating to the approval of alternative materials will be taken by the Project Manager until the request for substitution is made in writing by the Contractor accompanied by complete data as to the quality and suitability of the materials proposed. Such request shall be made in ample time to permit approval without delaying the Work.

12.5 Disposal of material outside the Work Site: The Contractor shall make his own arrangements for legally disposing of waste and excess materials outside the Work Site and he shall pay costs therefore.

12.6 Property rights in materials: The Contractor shall have no property right in materials after they have been attached or affixed to the Work or the soil, or after payment has been made by the Owner to the Contractor for materials delivered to the site of the Work, or stored subject to or under the control of the Owner as provided in Article 24, PROGRESS PAYMENTS.

## ARTICLE 13 WORKMANSHIP AND UNAUTHORIZED WORK

13.1 Work under this Contract shall be performed in a skillful and workmanlike manner. The Project Manager may, in writing, require the Contractor to remove from the work any employee the Project Manager determines incompetent, careless or otherwise objectionable.

13.2 Unauthorized work: Work performed beyond the lines and grades shown on the Contract Drawings, approved Working and Shop Drawings and Extra work done without written authorization, will be considered as unauthorized work, and the Contractor will receive no compensation therefore. If required by the Owner, unauthorized work shall be remedied, removed, or replaced by the Contractor's expense. Upon failure of the Contractor to remedy, remove or replace unauthorized work, the Owner may take courses of action set out in Paragraph 15.3 of Article 15, INSPECTION.

## ARTICLE 14 SUPERINTENDENCE BY CONTRACTOR

14.1 The Contractor shall give his personal superintendence to the Work or have a competent foreman or superintendent, hereinafter designated his authorized representative, satisfactory to the Owner, on the Work Site at all times during progress, with authority to act for him. There shall be provided at all times, a reasonable method of communication directly to the Contractor if the Owner experiences any problems or difficulties with the Superintendent.

# ARTICLE 15 INSPECTION/TESTING

15.1 Work (which term includes but is not restricted to materials, workmanship and manufacture and fabrication of components) will be subject to inspection and test by the Project Manager at all reasonable times and at all places prior to acceptance. Such inspection and test is for the sole benefit of the Owner and shall not relieve the Contractor of the responsibility of providing quality control measures to assure that the Work strictly complies with the Contract Documents. No inspection or test by the Project Manager shall be construed as constituting or implying acceptance. Inspection or test shall not relieve the Contractor of responsibility for damage to or loss of the material prior to acceptance, nor in any way affect the continuing rights of the Owner after acceptance of the completed Work.

15.2 The Contractor shall, at his own expense, replace any material or correct any workmanship found not to conform to the contract requirements, unless the Owner consents in writing to accept such material or workmanship with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises at his own expense.

15.3 If the Contractor does not promptly replace rejected material or correct the rejected workmanship, the Owner (1) may, by separate contract or otherwise, replace such material or correct such workmanship and charge the cost thereof to the Contractor, or (2) may terminate the Contractor's right to proceed in accordance with Article 38, TERMINATION FOR DEFAULT-DAMAGES FOR DELAY--TIME EXTENSIONS.

15.4 The Contractor shall give the Project Manager ample notification of inspections and tests, and the Project Manager will perform, except as otherwise specifically provided, said inspections and tests in such manner as not to unnecessarily delay the work. The Owner will have the right to charge to the Contractor any additional cost of inspection or test or when reinspection or retest is necessitated by prior rejection.

15.5 Should it be considered necessary, before acceptance of the entire work, to make an examination of work already completed by removing or tearing out same, the Contractor shall on request promptly furnish all necessary facilities, labor and material therefore. If such work is found to be defective or nonconforming in any material respect, due to the fault of the Contractor or his subcontractors, he shall defray the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, an equitable adjustment will be made in the contract price to compensate the Contractor for the additional services involved in such examination and reconstruction. If completion for the work has been delayed thereby, he will, in addition, be granted an equitable extension of time.

15.6 The Project Manager shall have access to the work during its construction. Work done and materials provided will be subject to the Project Manager's on-site and off-site inspection and approval. When work is to be performed during hours other than during his normal schedule, the Contractor shall so advise the Project Manager not less than 24 hours in advance. The Contractor shall provide access to the work for authorized representatives of the Owner.

15.7 The Project Manager's inspection and approval of work or materials shall not relieve the Contractor of any of his obligations to fulfill the requirements of the Contract Documents. Work and materials not meeting the requirements of the Contract shall not be incorporated in the Work. Unsuitable or substandard work or materials may be rejected by the Project Manager, notwithstanding that such work or materials may have been previously inspected by the Project Manager, or that payment therefore has been included in a progress payment.

## ARTICLE 16 PERMITS AND COMPLIANCE WITH LAWS

16.1 The Contractor shall without additional expense to the Owner be responsible for obtaining necessary licenses and permits and for complying with applicable Federal, State, County and Municipal laws, codes and regulations in connection with the commencement of the work. The Contractor is required to supply the Project Manager with complete and final copies of license and permits including final inspection documentation. The Contractor shall be required to obtain permits at his own expense. The Contractor shall protect, indemnify and hold harmless the Owner and the Project Manager and their members, officers, agents and employees against claims and liabilities arising from or based on the violation of requirements of law or permits whether by the Contractor, his employees, agents or subcontractors.

#### ARTICLE 17 RIGHTS IN LAND IMPROVEMENT

17.1 The Contractor shall make no arrangements with any person to permit occupancy or use of any land, structure or building within the work site for any purpose whatsoever, either with or without compensation, in conflict with any agreement between the Owner and any owner, former owner or tenant of such land, structure or building. The Contractor shall not occupy Owner property outside the work site without obtaining prior written approval from the Owner.

#### ARTICLE 18 DAMAGE TO THE WORK AND RESPONSIBILITY FOR MATERIALS

18.1 The Contractor shall be responsible for materials delivered and work performed until completion and final acceptance of the entire construction thereof.

18.2 The Contractor shall bear the risk of injury, loss or damage to any and all parts of the work for whatever cause, whether arising from the execution or from the non-execution of work. The Contractor shall rebuild, repair or restore work and materials which have been damaged or destroyed from any cause before completion and acceptance of the work and shall bear the expense thereof. The Contractor shall provide security and drainage and erect temporary structures as necessary to protect the work and materials from damage.

18.3 The Contractor shall be responsible for materials not delivered to the site for which any progress payment has been made to the same extent as if the materials were so delivered.

#### ARTICLE 19 EMERGENCIES

19.1 In an emergency affecting the safety of life, the work, or adjacent property, the Contractor shall notify the Project Manager as early as possible that an emergency exists. In the meantime, without special instruction from the Project Manager as to the manner of dealing with the emergency, the Contractor shall act at his own discretion to prevent such threatened loss or injury. As emergency work proceeds, the Project Manager may issue instruction, which the Contractor shall follow. The amount of compensation to which Contractor is entitled on account of emergency work will be determined in accordance with Article 28, CHANGES.

# ARTICLE 20 NOTICE TO PROCEED

20.1 The Owner will issue a Notice to Proceed to the Contractor within 15 days after the Contractor has executed the Contract and has delivered the specified bonds and Certificates of Insurance as required by the Owner. Except as specifically authorized in writing by the Owner, the Contractor is not authorized to perform work under the Contract until the effective date of the Notice to Proceed. Within 10 days after the effective date of such Notice to Proceed, the Contractor shall

commence work and shall diligently prosecute the Work to completion within the time limits specified. These time periods may be modified by mutual written agreement of both the Owner and Contractor.

# ARTICLE 21 PROGRESS SCHEDULE AND REQUIREMENTS FOR MAINTAINING PROGRESS

21.1 The Contractor shall, at the pre-construction meeting, prepare and submit to the Project Manager for approval a practicable schedule, showing the order in which the Contractor proposes to carry on the work, the date on which he will start the several salient features (including procurement of materials, plant and equipment) and the contemplated dates for completing the same. The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion at any time. The Contractor shall update the chart with the actual progress monthly or at such intervals as directed by the Project Manager, and shall immediately deliver three copies thereof. If the Contractor fails to submit a progress schedule within the time herein prescribed, the Project Manager may withhold approval of progress payment estimates until such time as the Contractor submits the required progress schedule.

21.2 The Contractor shall prosecute the work in accordance with the latest approved Progress Schedule. In the event, that the progress of items along the critical path is delayed, the Contractor shall revise his planning to include additional forces, equipment, shifts or hours as necessary to meet the time or times of completion specified in this Contract. Additional costs resulting therefrom will be borne by the Contractor. The Contractor shall make such changes when his progress at any check period does not meet at least one of the following two tests:

21.2.1 The percentage of dollar value of completed work with respect to the total amount of the Contract is within ten percentage points of the percentage of the Contract time elapsed, or;

21.2.2 The percentage of dollar value of completed work is within ten percentage points of the dollar value which should have been performed according to the Contractors own network analysis previously approved by the Project Manager.

21.3 Failure of the Contractor to comply with the requirements under this provision will be grounds for determination that the Contractor is not prosecuting the work with such diligence as will ensure completion within the time of completion specified in this Contract. Upon such determination, the Owner may terminate the Contractor's right to proceed with the work, or any separate part thereof, in accordance with Article 38, TERMINATION FOR DEFAULT--DAMAGES FOR DELAY-TIME EXTENSIONS of these General Conditions.

## ARTICLE 22 SUSPENSION OF WORK

22.1 The Owner reserves the right to suspend, delay or interrupt execution of the whole or any part of the work for such period of time as he may determine to be appropriate for his convenience.

22.2 If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of the Owner in the administration of this Contract or by his failure to act within the time specified in this Contract (or if no time is specified, within a reasonable time), an adjustment shall be made for any increase in the cost of performance of this Contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent (1) that performance would have been so suspended, delayed or interrupted by any other cause, including the fault or negligence of the Contractor or (2) for which an equitable adjustment is provided for or excluded under any other provision of this Contract.

22.3 No claim under this clause shall be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Owner in writing of the act of failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated is asserted in writing as soon as practicable after the termination of such suspension, delay, or interruption, but not later than the date of final payment under the Contract.

# ARTICLE 23 FINAL INSPECTION AND ACCEPTANCE

23.1 Final inspection: When the Contractor notifies the Project Manager in writing that the work has been completed, the Owner will make the final inspection for the purpose of ascertaining that the work has been completed in accordance with the requirements of the Contract Documents.

23.2 Acceptance of the work: When the Owner has made the final inspection and has determined that the work has been completed in accordance with the Contract Documents, the Owner will accept the work. Immediately upon and after Final Acceptance, the Contractor will be relieved of the duty of maintaining and protecting the work as a whole. The Contractor will be relieved of his responsibility for injury to persons or property or damage to the work which occurs after Final Acceptance, except that the Contractor will not be relieved of his responsibility for injury to persons or property arising from his duties and obligations under Article 4, LIABILITY AND INDEMNIFICATION.

23.3 Final Acceptance shall be final and conclusive, and no further performance of work shall be required except with regards to latent defects, fraud or such gross mistakes as may amount to fraud, or with regard to the Owner's rights under any warranty or guarantee. All punch list items must be completed and building permits provided to Owner before final acceptance is issued.

23.4 Date of Substantial Completion for all Work shall be within the number of calendar days bid by the Contractor on the Bid proposal.

23.5 Date of Final Completion shall be the date specified on the Certificate of Final Completion.

#### ARTICLE 24 PROGRESS PAYMENTS

24.1 The Owner will make progress payments monthly as the work proceeds, on estimates approved by the Project Manager. Payment will be made within 15 days after progress estimates are approved by the Project Manager and Department Head. On request of the Project Manager, the Contractor shall furnish a detailed estimate of the total contract price each showing the amount included therein for each principal category of the work, to provide a basis for determining the amount of progress payments. In the preparation of estimates, the Owner, at its sole discretion, may authorize material delivered on the site and preparatory work done to be taken into consideration which is to be submitted at the pre-construction meeting.

24.2 In making such progress payments, five percent of the estimated amount will be retained until Final Acceptance of the Contract work; in addition, the Owner shall retain from all Progress payments an amount equal to all statutory claims filed against the Contractor. Also, whenever the work is substantially complete, the Owner if it considers the amount retained to be in excess of the amount adequate for its protection, may release to the Contractor all or a portion of such excess amount. Substantial completion as used in this Paragraph 24.2 shall mean the following: Substantial completion of the work or a portion thereof shall be when, as determined by both the Project Manager and the Owner, the construction is sufficiently completed in accordance with the Contract Documents and any modification thereto as provided in the Contract to permit the Owner to occupy the work or a portion of the work for the use which it is intended.

24.3 Material and work covered by progress payments shall become the sole property of the Owner. This provision shall not be construed as relieving the Contractor from the sole responsibility for material and work upon which payments have been made, the restoration of damaged work or as waiving the right of the Owner to require the fulfillment of the terms of the Contract.

#### ARTICLE 25 PAYMENT TO SUBCONTRACTORS

25.1 The Contractor shall pay all subcontractors for and on account of work performed by such subcontractors in accordance with the terms of their respective subcontract. Prior to final payment an unconditional lien waiver release form will be required by the Owner.

# ARTICLE 26 PAYMENT OF TAXES

26.1 The price or prices for the work will include full compensation for taxes that the Contractor is or may be required to pay. The Contractor shall bear the risk of any added or increased taxes occurring during the prosecution of the work. A change in taxes shall under no circumstances entitle the Contractor to an adjustment under the Contract.

26.2 The Contractor's attention is directed to the fact that this project is exempt from payment of City of Greeley Sales and Use taxes, and such taxes must not be included in the amount of bid.

26.3 The Contractor shall pay all sales and use taxes required to be paid, shall maintain such records in respect of his work, which shall be separate and distinct from all other records maintained by the Contractor and shall be available for inspection by the Owner at any and all reasonable times, and shall furnish the Owner with such data, as may be necessary to enable the Owner to obtain any refunds of such taxes which may be available to the Owner under the laws, ordinances, rules or regulations applicable to such taxes. The Contractor shall require each of his subcontractors to pay all sales and use taxes required to be paid and to maintain such records and furnish the Contractor with such data as may be necessary to enable the Owner to obtain a refund of the taxes paid by such subcontractors.

# ARTICLE 27 FINAL PAYMENT

27.1 After the Work has been accepted by the Owner, subject to the provisions of Article 11, WARRANTY OF WORK and Article 23, FINAL INSPECTION AND ACCEPTANCE of these General Conditions, a final payment due the Contractor under this Contract shall be paid upon the presentation of properly executed voucher and after the Contractor shall have furnished the Owner with a release of all claims against the Owner arising by virtue of this Contract, other than claims in stated amounts as may be specifically excepted by the Contractor from the operation of the release. If the Contractor's claim to amounts payable under the contract has been assigned under the assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), a release may also be required of the assignee.

27.2 If any mechanic's or material man's lien or notice of claim of such lien is filed or recorded against the project for labor, materials, supplies or equipment claimed to have been furnished to or incorporated into the Work, or for other alleged contribution thereto, the Owner will have the right to retain from payments otherwise due the Contractor, in addition to other amounts properly withheld under this Article or under other provisions of the Contract, an amount equal to such lien or liens claimed.

27.3 Further, the Owner will have the right to retain from final payment an amount equal to all liquidated damages claimed by the Owner.

27.4 Retainages held by the Owner for any state or federal statutory claim arising out of the project will be held by the Owner in addition to all retainages held under the provisions of the Contract.

## ARTICLE 28 CHANGES

28.1 The Owner may, at any time, without notice to the sureties, by written notice or order designated or indicated to be a Change Notice or Change Order, make any change in the work within the general scope of the Contract in accordance with all of the Owner's processes and procedures whether or not set forth herein, including but not limited to changes:

28.1.1 In the Contract (including drawings and designs);

- 28.1.2 In the method or manner of performance of the work;
- 28.1.3 In Owner furnished facilities, equipment, materials, services, or site; or
- 28.1.4 Directing acceleration in performance of the work.

28.2 Any other order (which terms as used in Paragraph 28.2 of this Article shall include direction, instruction, interpretation, or determination) from the Project Manager, which causes any change, shall be treated as a Change Notice under this Article provided that the Contractor gives the Project Manager written notice stating the date, circumstances and source of the order, and that the Contractor regards the order as a Change Notice. The Contractor shall notify the Project Manager when he receives direction, instruction, interpretation or determination from any source which may cause any change in the work. Such notification shall be given to the Project Manager before the Contractor acts on said direction, instruction, interpretation or determination.

28.3 Except as herein provided, no order, statement, or conduct of the Architect/ Project Manager or any other person shall be treated as a change under this Article or entitle the Contractor to an equitable adjustment hereunder.

28.4 If any change under this Article causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the Work under this Contract, whether or not changed by an order, an equitable adjustment will be made and the Contract modified accordingly by a written Change Order; provided, however, that except for claims based on errors in the Contract Documents, no claim for change under Paragraph 28.2 of this Article will be allowed for costs incurred more than 20 days before the Contractor gives written notice as herein required; and provided that in the case of errors in the Contract Documents for which the Owner is responsible, the adjustment will include increased cost, reasonably incurred by the Contractor in attempting to comply with such errors in the Contract Documents. No claim shall be made for the type of errors in the Contract Documents which are set forth in Article 2, INTERPRETATION.

28.5 If the Contractor intends to assert a claim for an equitable adjustment under this Article, he shall, within 30 days after receipt of a written Change Order under Paragraph 28.1 of this Article or the furnishing of a written notice under Paragraph 28.2 of this Article, submit to the Project Manager a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended in writing by the Owner. The statement of claim hereunder may be included in the notice under Paragraph 28.2 of this Article.

28.6 No claim by the Contractor for an equitable adjustment hereunder will be allowed unless asserted as described in Paragraphs 28.4 and 28.5 above.

28.7 Payment will not be made under the provisions of this Article for such work or materials which are so required to be done or furnished in or about or for the performance of the Work and which are not mentioned, specified or indicated or otherwise provided for in this Contract or in the Contract Documents so far as such work or materials may be, in the opinion of the Project Manager, susceptible of classification under or reasonably inferred to be included in the Bid Items of the Bid Form.

28.8 In case the Contractor is ordered to perform work under this Article for which payments are not determined under Paragraph 28.7 of this Article, which in the opinion of the Owner it is impracticable to have performed by the Contractor's own employees, the Contractor will, subject to the approval of the Owner, be paid the actual cost to him of such work and, in addition thereto, a negotiated amount to cover the Contractor's superintendence, administration and other overhead expenses. The terms and conditions of any subcontract which the Contractor may propose to enter into in connection with work under the provision of this Article shall be subject to the written approval of the Project Manager before such subcontract is made. The contractor shall be responsible for the work of the subcontractors and shall be liable therefore as if he had performed the work directly.

28.9 In cases other than those described in Paragraphs 28.7 and 28.8 above, the Owner and the Contractor (on his own behalf and on behalf of his subcontractors) shall endeavor to negotiate a reasonable contract price and line adjustment in a Change Order on terms appropriate to the changed work. The Contractor will be required to submit a sufficiently detailed price proposal supported with sufficient documentation that (1) the Owner can determine that the proposal reflects all impacts on the Contract from work additions, deletions and modifications shown in the Change Notice being priced, (2) the proposed prices are set out in such a way that their reasonableness can be evaluated against prices based on adequate price competition, bid unit prices, established catalog or market prices of commercial items sold in substantial quantities to the general public, prices set by law or regulation, recognized published price lists and indices, independently developed cost estimates and other appropriate price comparisons, and (3) contract provisions relating to Contract changes costing over \$100,000.00 are complied with. If any prices or other aspects are conditional, such as on firm orders being made by a certain date or the occurrence or nonoccurrence of an event, the Contractor shall identify these aspects in his proposal. A negotiated Change Order shall set out prices, scheduling requirements, time extensions and all costs of any nature arising out of the issuance of a Change Notice except for those cost and time aspects explicitly reserved on the face of the Change Order. Except for these explicit reservations, the execution of a Change Order by both parties will be deemed accord and satisfaction of all claims of any nature arising from the issuance of the Change Notice negotiated.

28.10 In the event the Contractor and the Owner are unable to agree upon the Contractor's entitlement to an equitable adjustment or upon the amount thereof, or in the event that it is in the best interest of the Owner to have the Work proceed pending negotiation of amount of an equitable adjustment, the Owner may direct the Contractor to perform the Work in accordance with the Owner order, direction, instruction, interpretation, or determination, with any Contract price adjustments and progress payments for the Work to be determined on a Force Account basis in accordance with

Article 36. The Contractor shall continue diligently to perform the Contract in accordance with the Owner's order, direction, instruction, interpretation, or determination during negotiations with respect to the Contractor's entitlement to an equitable adjustment hereunder or to the amount of any Contract price adjustment or time extension. The Contractor and the Owner may agree on certain aspects of an equitable adjustment and take those aspects out of operation of Force Account provisions. In the event a mutually agreeable equitable adjustment cannot be made, the Contractor shall continue diligently to perform the orders as he proceeds with his remedies under Article 35, DISPUTES, and shall continue to receive compensation on a Force Account basis.

28.11 For contract changes, the Owner, State and Government or their representative shall have the audit and inspection rights as described below:

28.11.1 Where the agreed payment method for any contract changes is to be by cost reimbursement, time and material, labor hours or any combination thereof, the Contractor shall maintain and the Owner or its representatives shall have the right to examine books, records, documents and other evidence and accounting principles and practices sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of the contract changes under this sub article.

28.11.2 Contract changes exceeding \$100,000.00 in cost: For submitted cost and pricing data in connection with pricing a contract modification referred to in this sub article, unless such pricing is based on bid unit prices, adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the public, or prices set by law or regulation, the Owner or his representatives and the Comptroller General of the United States and his representatives who are employees of the United States shall have the right to examine all books, records, documents and other data of the Contractor related to the negotiation of or performance under the contract Change Orders for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data submitted. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted.

28.11.3 Contract changes exceeding \$10,000.00 but not \$100,000.00 in cost: The Owner or his representatives prior to the execution of any contract Change Order in this sub article or for a period of twelve months after execution shall, unless such pricing is based on bid unit prices, adequate price competition, established catalog of market prices or commercial items sold in substantial quantities to the public, or prices set by law or regulation, have the right to examine all books, records, documents, and other data of the Contractor relating to the negotiation and contract Change Order for the puppose of evaluating the accuracy, completeness, and currency of the data is submitted upon which negotiation is or has been based. To the extent the examination reveals inaccurate, incomplete or noncurrent data, the Project Manager may renegotiate the contract Change Order price based on such data.

28.11.4 Contract changes of less than \$10,000.00 in cost: The Owner may require from the Contractor appropriate documentation to support the prices being negotiated for contract changes

under this sub article, and may refuse to complete negotiations until satisfactory documentation is submitted.

28.11.5 Availability: The materials described in Paragraphs 28.11.1 and 28.11.2 above shall be available at the office of the Contractor at all reasonable times for inspection, audit or reproduction until three years from the date of final payment under this Contract and for records which relate to Article 35, DISPUTES, or litigations or the settlement of claims arising out of the negotiation or the performance of contract changes over 100,000.00, records shall be made available until such litigations or claims have been resolved.

28.11.6 The Contractor shall insert a clause containing all the provisions in this Paragraph 28.11, including this subparagraph 28.11.6, in all subcontracts hereunder except altered as necessary for proper identification of the contracting parties and Owner.

28.11.7 For the purposes of Paragraph 28.11 of this Article, costs shall include liquidated damages which would be assessed if extension(s) of time were not granted by contract Change Order.

28.11.8 The requirements of this audits and records article are in addition to other audit, inspection and record keeping provisions elsewhere in the Contract Documents.

28.12 Changes involving aggregate increases and decreases in excess of \$100,000.00 shall be subject to the following:

28.12.1 A change involves aggregate increases and decreases in excess of \$100,000.00 if the total value of work affected, without regard to the arithmetic sign, exceeds this amount; for example, a change order adding work in the amount of \$75,000.00 and deleting work in the amount of \$50,000.00 will be considered to involve aggregate increases and decreases of \$125,000.00.

28.12.2 The Contractor shall submit in support of all items not based upon unit prices or lump sum prices contained in the Contract or upon the established prices at which commercial items are sold in substantial quantities to the public, statements by his vendors that the prices charged the Contractor are not greater than the prices charged by the respective vendors to their most favored customers for the same items in similar quantities.

28.12.3 Price reductions for Defective Cost or Pricing Data--Pricing Adjustments: If any price, including profit and fee, negotiated in connection with any price adjustment was increased by any significant sums because:

28.12.3.1 The Contractor furnished cost or pricing data which were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data;

28.12.3.2 A subcontractor, pursuant to Paragraph 28.13 of this Article entitled Subcontractor Cost or Pricing Data--Pricing Adjustments or any subcontract provision therein required, furnished costs or pricing data which were not complete, accurate, and current as certified in the Subcontractor's Certificate of Current Cost or Pricing Data;

28.12.3.3 The subcontractor or his prospective subcontractor furnished cost or pricing data which were required to be complete, accurate, and current and to be submitted to support a subcontract cost estimate furnished by the Contractor but which were not complete, accurate, and current as of the date certified in the Contractor's Certificate of Current Cost or Pricing Data; or

28.12.3.4 The Contractor or a subcontractor or his prospective subcontractor furnished any data, not within subparagraphs 28.12.3.1, 28.12.3.2, or 28.12.3.3 above, which were not complete, accurate, and current as submitted, the price shall be reduced accordingly and the Contract shall be modified in writing as may be necessary to reflect such reduction. Any reduction in the Contract Price due to defective subcontract data of a prospective subcontractor, when the subcontract was not subsequently awarded to such subcontractor, will be limited to the amount (plus applicable overhead and profit markup) by which the actual subcontract, or actual cost to the Contractor if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor, provided the actual subcontract price was not affected by defective cost or pricing data.

28.13 Subcontract Cost of Pricing Data-- Pricing Adjustment:

28.13.1 When negotiating a change involving increases or decreases in excess of \$100,000.00, the Contractor shall require subcontractors hereunder to submit cost or pricing data under the following circumstances. Prior to award of any cost-reimbursement type, incentive or price redeterminable subcontract;

28.13.1.2 Prior to the award of any subcontract the price of which is expected to exceed \$100,000.00;

28.13.1.3 Prior to the pricing of any subcontract change modifications for which the price is expected to exceed \$100,000.00, except in the case of 28.13.1.2 and 28.13.1.3 where the price is based on adequate price competition, established catalog or market prices, commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

28.13.2 The Contractor shall require subcontractors to certify to the best of their knowledge and belief that the cost and pricing data submitted under subparagraph 28.13.1 of this Article are accurate, complete, and current as of the date of execution, which date shall be as close as possible to the date of agreement on the negotiated price of the contract Change Order.

28.13.3 The Contractor shall insert the substance of Paragraph 28.13 of this Article, including this subparagraph 28.13.3, in each subcontract hereunder which exceeds \$100,000.00.

# ARTICLE 29 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

29.1 The Contractor shall furnish a Performance Bond in the amount equal to one hundred percent (100%) of the Contract Sum as security for the faithful performance of this Contract and also a Labor and Material Payment Bond in an amount not less than one hundred percent (100%) of the

Contract Sum or in a penal sum not less than that prescribed by State, or local law, as security for the payment of all persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract. The Performance Bond and the Labor and Material Payment Bond may be in one or in separate instruments in accordance with local law and shall be delivered to the Owner not later than the date of execution of the Contract.

29.2 Performance Bonds, Labor and Material Payment Bonds and other such sureties shall provide that the surety and the Contractor are both jointly and severally liable and obligated under respective Bond or other surety agreement and shall incorporate acknowledge of applicable provisions of state law into all documents furnished in connection with the project.

#### ARTICLE 30 DIFFERING SITE CONDITIONS

30.1 The Contractor shall within 10 days of actual or constructive notice of a differing site condition, promptly, and before such conditions are disturbed, notify the Project Manager in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract. The Project Manager will promptly investigate the conditions, and if such conditions materially differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under the Contract, whether or not changed as a result of such conditions, an equitable adjustment may be made subject to Owner's approval and the Contract modified in writing accordingly.

30.2 No claim of the Contractor under this Article will be allowed unless the Contractor has given the notice required in Paragraph 30.1 of this Article.

30.3 No claim by the Contractor for an equitable adjustment hereunder will be allowed if asserted after final payment under this Contract.

# ARTICLE 31 CONTRACTOR PROPOSALS

31.1 The Contractor may at any time submit to the Project Manager for his review proposed modifications to the Contract Documents, supported by a cost/price proposal. Upon acceptance of the proposed modifications by the Owner, a Change Order will be issued. Denial of the proposed modification will neither provide the Contractor with any basis for claim for damages nor release the Contractor from contractual responsibilities. An equitable adjustment in the form of a contract price reduction will be made if the change results in a reduction of the cost of performance and the Contractor will not be entitled to share in said savings unless the proposal is made under Paragraph 31.2 of this Article. Except as provided in Paragraph 31.2 of this Article, the Contractor will not be compensated for any direct, incidental or collateral benefits or savings the Owner receives as a result of the proposal.

31.2 Value Engineering Change Proposals: The Contractor may submit to the Project Manager one or more cost reduction proposals for changing the Contract requirements. The Proposals shall be based upon a sound study made by the Contractor indicating that the proposal:

31.2.1 Will result in a net reduction in the Total Contract amount;

31.2.2 Will not impair any essential function or characteristic of the Work such as safety, service life, reliability, economy of operation, ease of maintenance and necessary standardized features.

31.2.3 Will not require an unacceptable extension of the contract completion time; and

31.2.4 Will require a change in the Contract Documents and such change is not already under consideration by the Owner.

31.3 The Owner may accept in whole or in part any proposal submitted pursuant to the previous Paragraph 31.2 by issuing a Change Order which will identify the proposal on which it is based. The Change Order will provide for an equitable adjustment in the Contract Price and will revise any other affected provisions of the Contract Documents. The equitable adjustment in the Contract price will be established by determining the net savings resulting from the accepted change. The net savings resulting from the change will be shared between the Contractor and the Owner on the basis of 50 percent for the Contractor and 50 percent for the Owner and will be limited to this contract for any one Value Engineering Change Proposal. Net savings will be determined by deducting from the estimated gross savings, the Contractor's costs of developing and implementing the proposal (including any amount attributable to a subcontractor) and the estimated amount of increased costs to the Owner resulting from the change, such as evaluation, implementation, inspection, related items, and the Owner-furnished material. Estimated gross savings will include Contractor's labor, material, equipment, overhead, profit and bond. The Contract price will be reduced by the sum of the Owner's costs and share of the net savings. For the purpose of this Article, the applicable provisions of Article 28, CHANGES, shall be used to determine the equitable adjustment to the Contract price.

31.4 The Owner will not be liable for delay in acting upon, or for failure to act upon, any proposal submitted pursuant to Paragraph 31.2 of this Article. The decision of the Owner as to the Acceptance or rejection of any such proposal under the Contract will be final. The submission of a proposal by the Contractor will not in itself affect the rights or obligations of either party under the Contract.

31.5 The Contractor shall have the right to withdraw part or all of any proposal he may make under Paragraph 31.2 of this Article at any time prior to acceptance by the Owner. Such withdrawal shall be made in writing to the Project Manager. Each such proposal shall remain valid for a period of 60 days from the date submitted. If the Contractor wishes to withdraw the proposal prior to the expiration of the 60-day period, he will be liable for the cost incurred by the Owner in reviewing the proposal. 31.6 The Contractor shall specifically identify any proposals under Paragraph 31.2 of this Article with the heading "Value Engineering Change Proposal", or the proposal will be considered as made under Paragraph 31.1 of this Article.

31.7 The Contractor, in connection with each proposal he makes for a Contract Change Notice under this Article shall furnish the following information:

31.7.1 a description of the difference between the existing Contract requirement and the proposed change, and the comparative advantages and disadvantages of each, justification when a function or characteristic of an item is being altered, and the effect of the change on the performance of the end item;

31.7.2 an analysis and itemization of the requirements of the Contract which must be changed if the Value Engineering Change Proposal is accepted and a recommendation as to how to make each such change (e.g., a suggested specification revision);

31.7.3 a separate detailed cost estimate for both the existing Contract requirement and the proposed change to provide an estimate of the reduction in costs, if any, that will result from acceptance of the Value Engineering Change Proposal taking into account the costs of development and implementation by the Contractor;

31.7.4 a prediction of any effects the proposed change would have on collateral costs to the Owner such Government-furnished property costs, costs of related items, and costs of maintenance and operation;

31.7.5 a statement of the time by which a contract modification accepting the Value Engineering Change Proposal must be issued so as to obtain the maximum cost reduction, noting any effect on the contract completion time or delivery schedule; and

31.7.6 identification of any previous submission of the Value Engineering Change Proposal to the Owner, including the dates submitted, the numbers of contracts involved, and the previous actions by the Owner, if known.

# ARTICLE 32 EXTENSION OF TIME

32.1 In addition to the provisions stated in Article 38, the Contractor will be granted an extension of time and will not be assessed liquidated damages for any portion of the delay in completion of the Work, performed under the latest approved progress schedule, arising from acts of God, war, fires, floods, epidemics, quarantine restrictions, freight embargoes, or weather more severe than the norm, provided that the aforesaid causes were not foreseeable and did not result from the fault or negligence of the Contractor, and provided further that the Contractor has taken reasonable precautions to prevent further delays owing to such causes, and has notified the Project Manager in writing of the cause or causes of delay within five days from the beginning of any such delay. Within 15 days after the end of the delay, the Contractor shall furnish the Project Manager with detailed

information concerning the circumstances of the delay, the number of days actually delayed, the appropriate Contract Document references, and the measures to be taken to prevent or minimize the delay. Failure to submit such information will be sufficient cause for denying the delay claims. The Owner will ascertain the facts and the extent of the delay, and its findings thereon will be final and conclusive to provisions under Article 35, DISPUTES. The extension of time granted for these reasons shall not be the basis for additional compensation for any costs incurred during the time of delay.

32.1.1 Every effort shall be made by the Contractor to complete the project within the "Contract Time". The "Contract Time" anticipates "Normal" weather and climate. The Contractor's schedule must anticipate normal adverse weather delays on all weather dependent activities. The following specifies the procedure for determining time extensions for unusually severe weather. Listed below are the anticipated numbers of calendar days lost to normal adverse weather for each month.

Monthly Anticipated Calendar Days Lost to Adverse Weather Conditions

# JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC (7) (4) (4) (4) (6) (3) (4) (2) (3) (2) (5)

The above schedule of anticipated adverse weather days will constitute the base line for monthly (or portion thereof) weather time evaluations. It is assumed that the work will be carried out Mondays through Fridays (holidays excepted) unless and approved construction schedule or written authorization from the Owner indicates otherwise.

An actual adverse weather day must prevent work for 50 percent or more of the Contractor's workday. When the Contractor anticipates documenting a weather day, he/she shall first notify the Project Manager or his/her designee observing the construction to determine whether or not work can proceed or if work is delayed due to adverse weather or the effects thereof. If in agreement, the Contractor shall formally request a weather day in writing to the Owner's Project Manager or his/her designee. The Contractor shall also notify the Owner's Project Manager in writing or his/her designee of any disagreement as to whether or not work could have proceeded on a given date within 2 calendar days of that date. The final decision regarding an adverse weather day will be made by the Project Manager or his/her designee.

The number of workdays delayed due to adverse weather or the effects thereof will then be converted to Calendar Days. Weekends and holidays will only count as calendar day delays if a workday delayed due to adverse weather is counted before and after the weekend/holiday. The number of calendar days of delay due to adverse weather or the impact thereof will then be compared to the monthly adverse weather schedule above. The Contract time period will then be increased by change order for the number of calendar days that are in excess of the above schedule and a new Contract Completion day and date will be set.

32.1.2 An extension of time will not be granted for a delay caused by a shortage of materials, except Owner-furnished materials, unless the Contractor furnishes to the Project Manager documentary

proof that he has diligently made every effort to obtain such materials from every known source within reasonable reach of the Work. The Contractor shall also submit proof that the inability to obtain such materials when originally planned did in fact cause a delay in final completion of the Work which could not be compensated for by revising the sequence of his operations. Only the physical shortage of material will be considered under these provisions as a cause for extension of time. No consideration will be given to any claim that material could not be obtained at reasonable, practical, or economical costs, unless it is shown to satisfaction of the Project Manager that such material could have been obtained only at exorbitant prices, entirely inconsistent with current rates taking into account the quantities involved and the usual practices in obtaining such quantities.

32.2 A Change Order will be furnished to the Contractor within a reasonable period of time after approval of a request for extension of time, specifying the number of days allowed, if any, and the new date for completion of the Work or specified portions of the Work.

32.3 See also Article 38, TERMINATION FOR DEFAULT--DAMAGES FOR DELAY--TIME EXTENSIONS.

## ARTICLE 33 NOTICE OF POTENTIAL CLAIM

33.1 The Contractor will not be entitled to additional compensation otherwise payable for an act or failure to act by the Owner, the happening of any event or occurrence, or any other cause, unless he shall have given the Project Manager a written notice of potential claim therefore as specified in this Article.

33.2 The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and insofar as possible, the amount of the potential claim. If based on an act or failure to act by the Owner, such notice shall be given to the Project Manager prior to the time that the Contractor has started performance of work giving rise to the potential claim for additional compensation. Notice shall be given within five days after the happening of the event or occurrence giving rise to the potential claim.

33.3 It is the intention of this Article that differences between the parties arising under and by virtue of the contract shall be brought to the attention of the Project Manager at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken.
33.4 The notice requirements of this Article are in addition to those required in other Articles of the General Conditions.

## ARTICLE 34 SUBMITTAL OF CLAIMS

34.1 Claims filed by the Contractor shall contain sufficient detail to enable the Owner to ascertain the basis and amount of said claims. The Owner will review and evaluate the Contractor's claims. It will be the responsibility of the Contractor to furnish when requested by the Project

Manager such further information and details as may be required to determine the facts or contention involved in his claims. Failure to submit such information and details will be sufficient cause for denying the Contractor's claims.

34.2 Each claim the Contractor may make for equitable adjustment on account of delay for any cause shall be accompanied by a progress schedule reflecting the effects of the delay and proposals to minimize these effects. If no progress schedule has been submitted to the Project Manager reflecting conditions prior to the delay for which relief is sought, then a progress schedule so reflecting these conditions shall be prepared and submitted with the claim.

34.3 Depending upon the grounds for relief and the nature of relief sought, additional submittals and conditions upon submitting claims may be required elsewhere in these General Conditions.

34.4 In no event shall claims be made after final payment is made under Article 27, FINAL PAYMENT, of these General Conditions.

34.5 Inasmuch as notice of potential claim requirements of Article 33, NOTICE OF POTENTIAL CLAIM, are intended to enable the Project Manager to investigate while facts are fresh and to take action to minimize or avoid a claim which might be filed thereafter, the Contractor's failure to make the required notice on time is likely to disadvantage the Owner. Therefore no claim for which a notice of potential claim is required will be considered unless the Contractor has complied with the notice of Article 33, NOTICE OF POTENTIAL CLAIM.

# ARTICLE 35 DISPUTES

35.1 General: Notwithstanding any other provisions of this Contract, disputes and disagreements by and between the Owner and the Contractor shall be resolved through progressive, sequential process of negotiation, mediation, and in certain cases, arbitration. For contracts which are for \$250,000 or less, amounts in dispute which are less than \$10,000 shall not progress beyond negotiation and shall ultimately be decided by the Owner if not by mutual agreement. For contracts which are for more than \$250,000, amounts in dispute which are less than \$25,000 should not progress beyond negotiation. For all contracts, amounts in dispute greater than those amounts set forth above, but less than \$100,000 shall be resolved through a sequential process of negotiation, mediation, and binding arbitration. Amounts in dispute which are \$100,000 or more shall be resolved through a sequential process of negotiation.

35.2 Negotiation: In the event of disputes, unsettled claims, questions or disagreements between the contractor and the City relating to or arising out of the provisions of this Contract, the representatives of those parties shall meet promptly in recognition of mutual interests and in a good faith effort to resolve the dispute. Either the Contractor or the City shall arrange for this meeting at a time and place within the City of Greeley, mutually acceptable to both parties, within fifteen (15) days of notification of the dispute, unsettled claim, question, or disagreement between the parties. Seven (7) days prior to the meeting, the initiating party shall deliver to the other party, a written and complete

summary of the evidence and arguments substantiating its claim. If the parties do not reach a solution within thirty (30) days after said initial meeting, then upon notice of either party to the other, the dispute, claim, question, or difference, may be referred to a mediator pursuant to Section 35.3. The parties can extend the negotiation period by mutual written agreement.

35.3 Mediation: If the dispute, claim, question, or difference is not resolved by negotiation within thirty (30) days after the initial meeting between the parties or within the extended period agreed upon, the parties agree to next request that the American Arbitration Association provide a mediator to assist the Owner and Contractor in resolving the dispute, claim, question, or difference. The rules of mediation shall be the Construction Industry Mediation Rules of the American Arbitration Association. A different mediation/dispute resolution agency may be selected for mediation upon the mutual written agreement between the parties. The dispute resolution agency shall select a qualified mediator who shall have a background in construction. The selected mediator may be rejected by the parties only for bias. The mediator shall have thirty (30) days from the time of appointment to meet with the parties and sixty (60) days from the time of the appointment to resolve the dispute unless the parties mutually consent to an extension of the sixty day deadline. All reasonable fees, costs, and expenses of the mediator, the mediator's association and the mediation agency, shall be borne equally by the parties. Each party shall bear the expense of its own counsel, experts, witnesses, and preparation and presentation of proofs at mediation.

The Contractor shall not cause a delay of work during mediation proceedings except by mutual agreement. All mediation proceedings shall be conducted in the City of Greeley, unless an alternate location is agreed upon in writing by the Owner and the Contractor.

# Amounts in dispute which are less than \$10,000 shall not progress beyond mediation.

35.4 Litigation prerequisites: The procedures enumerated in Sections 35.2 and 35.3 shall be a prerequisite to the filing of any litigation between the parties to the Contract. Failure of the Contractor to follow the provisions of Section 35.2 and Section 35.3 shall be a complete defense, and grounds for immediate dismissal of any litigation filed prior to Contractor engaging in negotiation and mediation with the City of Greeley as provided above. Litigation may be filed only if the amount in dispute is \$100,000 or more. In the event litigation is filed by and between the parties after mediation, venue and jurisdiction of any and all suits and causes of action in connection with this Contract shall lie exclusively in Weld County, Colorado.

35.5 Arbitration: After mediation, instead of litigation, any remaining unresolved controversy or claim arising out of or relating to this Contract or the performance or breach thereof, may be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. For amounts in dispute which are \$100,000 or more, arbitration shall be engaged only upon mutual written agreement by the Owner and the Contractor, and the written agreement shall specify whether the arbitration shall be binding or nonbinding; however, amounts in dispute which are less than \$100,000 shall necessarily be settled by binding arbitration. The sole arbitrator shall be appointed by the Arbitration Association, unless a different arbitrator or dispute resolution agency is mutually agreed upon. The award of the arbitrator shall be accompanied by a

reasoned opinion, and shall include findings of fact and conclusions. All fees and expenses of the arbitration, including the expense of each party's counsel, experts, witnesses, and preparation and presentation of proofs, shall be borne by the party against whom arbitration judgment is made.

35.6 Litigation: Each party shall bear its own litigation fees and expenses, including the expense of its counsel, experts, witnesses, and preparation and presentation of proofs, regardless of the prevailing party.

## ARTICLE 36 FORCE ACCOUNT WORK

36.1 This Article shall become operative upon failure of the Contractor and the Owner to arrive at an amount of compensation under Article 28, CHANGES. In the event that no equitable adjustment is arrived at either by mutual agreement or pursuant to the Article 35, DISPUTES, the compensation paid hereunder will be the total compensation.

36.2 Work Performed by or for Contractor: The Contractor will be paid for labor, materials, and equipment as hereinafter provided, except where agreement has been reached to pay in accordance with Paragraph 36.3 of this Article. The following percentages, as full compensation for profit, overhead and small tools, will be added to the totals computed as provided in subparagraphs 36.2.1 through 36.2.3 of this Article.

Labor 25 percent Materials 20 percent Equipment 10 percent

Labor, materials, and equipment shall be furnished by the Contractor or by a subcontractor. When work paid on a force account basis is performed by forces other than the Contractor's, the Contractor shall reach agreement with such other forces as to the distribution of the payment made by the Owner for such work and, except as specified herein, no additional payment therefore will be made by the Owner by reason of performance of work by a subcontractor or by others. In addition to the markups, if any, for labor, equipment, and materials, for subcontracted work, the Contractor may add an additional five percent markup. The cost of subcontracted work will be the actual cost to the contractor for work performed by a subcontractor as computed in accordance with this Paragraph 36.2 and its subparagraphs 36.2.1, 36.2.2, and 36.2.3.

36.2.1 Labor: The cost of labor used in performing the work, whether the employer is the Contractor or a subcontractor, will be the sum as determined on the basis of the following three subparagraphs:

36.2.1.1 The gross actual wages, including income tax withholdings but not including employer payments to or on behalf of workmen for health and welfare, pension, vacation, insurance and similar purposes.

36.2.1.2 To the gross actual wages, as defined in the previous subparagraph,

36.2.1.1, will be added a percentage based upon current State and Federal laws and applicable labor contracts concerning payments made to or on behalf of workmen other than actual wages, which percentage will constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to or on behalf of the workmen, other than actual wages as defined in the previous subparagraph 36.2.1.1 and the subsistence and travel allowance as specified in the following subparagraphs 36.2.1.3. The Contractor shall compute a separate percentage for each craft, or a composite percentage for all crafts, if so approved by the Owner. Computed percentages shall be submitted to the Project Manager for approval by the Owner.

36.2.1.3 Subsistence and travel allowance paid to workmen as required by established agreements.

36.2.1.4 The charges for labor shall include all classifications up to but not including foremen, and when authorized by the Owner, shall include foremen engaged in the actual and direct performance of the work. Labor charges shall not include charges for assistant superintendents, office personnel, timekeepers, and maintenance mechanics, unless authorized by the Owner in advance of the start of work.

36.2.2 Materials: The cost of materials required for the accomplishment of the work will be delivered cost to the purchaser, whether contractor or subcontractor, from the supplier thereof, except as the following are applicable:

36.2.2.1 If a cash or trade discount by the actual supplier is offered or available to the Contractor, it shall be credited to the Owner notwithstanding the fact that such discount may not have been taken.

36.2.2.2 If materials are procured by the Contractor by a method which is not a direct purchase from and a direct purchase from and a direct billing by the actual supplier, the cost of such materials will be deemed to be the price paid to the actual supplier, as determined by the Owner. No additional markup for supplier work will be allowed except to the extent of actual cost to the Contractor in handling the material, not to exceed five percent of the price paid to actual supplier.

36.2.2.3 If the materials are obtained from a supply or source owned wholly or in part by the Contractor, payment therefore will not exceed the price paid for similar materials furnished from said source on Contract Items or the current wholesale price for such materials delivered to the work site, whichever price is lower.

36.2.2.4 If the cost of the materials is, in the opinion of Owner, excessive, then the cost of such materials will be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned, delivered to the job site, less discounts as provided in subparagraph 36.2.2.1 of this Article.

36.2.2.5 If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost will be determined in accordance with subparagraph 36.2.2.4 of this Article.

36.2.2.6 The Contractor shall have no claims for costs and profit on Owner-furnished materials.

36.2.3 Equipment: The Contractor will be paid for the use of contractor-owned or rented equipment at the rental rates shown in the Colorado State Department of Highways Construction Equipment Rental Rate Schedule, except as modified below, which edition shall be the latest edition in effect at the time of commencement of the Force Account work. For equipment used in excess of eight hours per day, the rental rate shall be 60 percent of the listed hourly rate. If it is deemed necessary by the Contractor to use equipment not listed in the C.D.O.H. Construction Equipment Rental Rate Schedule, the Contractor shall furnish the necessary cost data and paid invoices to the Project Manager for his use in establishment of such rental rate.

36.2.3.1 The rates paid as above provided will include the cost of fuel, oil, lubricants, supplies, small tools, necessary attachments, repairs and maintenance, depreciation, storage, insurance and incidentals.

36.2.3.2 Equipment operators will be paid for as stipulated in subparagraph 36.2.1 of this Article.

36.2.3.3 Equipment shall be in good working condition and suitable for the purpose for which the equipment is to be used.

36.2.3.4 Unless otherwise specified, manufacturer-approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer of that equipment.

36.2.3.5 Individual pieces of equipment or tools having a net individual value of \$300 or less, whether or not consumed by use, will be considered to be small tools and no payment will be made therefore.

36.2.3.6 Compensation will not be allowed while equipment is inoperative due to breakdown. Except as specified in paragraph 36.2.3.7 of this Article, time will be computed in half and full hours. In computing the time for use of equipment, less than 30 minutes shall be considered one half hour.

36.2.3.7 Equipment at the Work Site: The time to be paid for use of equipment on the work site will be the time the equipment is in operation on the force account work being performed. The time will include the time required to move the equipment to location of the force account work and return it to the original location or to another location requiring no more time than that required to return it to its original location. Moving time will not be paid for if the equipment is used at the site of the force account work on other than such force account work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power. No

payment for loading and transporting will be made if the equipment is used at the site of the force account work on other than such force account work.

36.3 Special Items of Work: If the Owner and the Contractor, by agreement, determine that (a) an item of force account work does not represent a significant portion of the total Contract price, and (b) such items of work cannot be performed by the forces of the Contractor or the forces of any of his subcontractors, and (c) it is not in accordance with the established practice of the industry involved to keep the records which the procedure outlined in Paragraph 36.2 of this Article would require, charges for such special force account work items may be made on the basis of invoices for such work without complete itemization of labor, materials, and equipment rental costs. To such invoiced price, less a credit to the Owner for any cash or trade discount offered or available, will be added five percent of the discounted price, in lieu of the percentages provided in Paragraph 36.2 of this Article. In no event will the price paid exceed the current fair market value of such work plus five percent.

6.4 Records: The Contractor shall maintain his records to provide a clear distinction between the direct costs of work paid for on a force account basis and costs of other operations.

36.4.1 The Contractor shall prepare and furnish to the Project Manager, on the following work day, report sheets in duplicate of each day's work paid for on a force account basis. The daily report sheets shall itemize the materials used and shall cover the direct cost of labor and the charges for equipment, whether furnished by the Contractor, subcontractor, or other forces, except for charges described in Paragraph 36.3 of this Article. The daily report sheets shall provide names or identifications and classifications of workmen and the hourly rate of pay and hours worked. In addition, a report of the size, type and identification number of equipment and hours operated shall be furnished to the Project Manager. Daily report sheets shall be signed by the Contractor or his authorized agent.

36.4.2 Material changes shall be substantiated by valid copies of vendor's invoices or conformed copies, certified true by the Contractor. Such invoices shall be submitted with the daily report sheets. Should the vendor's invoices not be submitted within 20 days after the date of delivery of the material or 15 days after acceptance of the work, whichever comes first, the Owner reserves the right to establish the cost of such materials at the lower current wholesale prices at which such materials are available in the quantities concerned delivered to the location of the work, less any discounts provided in subparagraph 36.2.1. of this Article.

36.4.3 The Project Manager will compare his records with the daily report sheets furnished by the Contractor, make any necessary adjustment and compile the costs of work paid for on a force account basis on daily force account work report forms. When these daily reports are agreed upon and signed by the Project Manager, they shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit.

36.4.4 The Contractor's original cost records pertaining to work paid for a on a force account basis shall be retained and shall be open to inspection and audit as required by Article 28, CHANGES, and any other provisions of the Contract.

36.5 If, in the Project Manager's opinion, the Contractor or any of his subcontractors, in performing Force Account work, is not making efficient use of labor, material or equipment or is proceeding in a manner which makes Force Account work unnecessarily more expensive to the Owner, the Project Manager may, in whole or part, direct the Contractor in the deployment of labor, material and equipment. By way of illustration, inefficiency may arise in the following ways: (1) the timing of the work, (2) the use of unnecessary labor or equipment, (3) the use of a higher percentage of apprentices than in non-force account work, (4) failure to procure materials at the lowest price, or (5) using materials of quality higher than necessary.

# ARTICLE 37 TERMINATION FOR CONVENIENCE OF THE OWNER

37.1 The performance of Work under this contract may be terminated by the Owner in accordance with this Article in whole, or from time to time in part, whenever such termination is in the best interest of the Owner. Such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

37.2 After receipt of a Notice of Termination, and except as otherwise directed by the Owner, the Contractor shall:

37.2.1 Stop work under the Contract on the date and to the extent specified in the Notice of Termination.

37.2.2 Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the work under the Contract as is not terminated;

37.2.3 Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

37.2.4 Assign to the Owner in the manner, at the times, and to the extent directed by it, all of the rights, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the Owner will have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

37.2.5 Settle outstanding liabilities and claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Owner to the extent it may require, which approval or ratification shall be final for the purposes of this Article;

37.2.6 Transfer title and deliver to the Owner in the manner, at the times, and to the extent, if any directed by it, (a) the fabricated or unfabricated parts, work in process, completed work, supplies and other material procured as part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and (b) the completed or partially completed plans,

drawings, information, and other property, which, if the Contract had been completed, would have been required to be furnished to the Owner;

37.2.7 Use his best efforts to sell, in the manner, at the times, to the extent, and at the price or prices direction or authorized by the Owner, property of the types referred to in (37.2.5) above; provided, however, that the Contractor (a) shall not be required to extend credit to any purchaser and (b) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Owner; provided further that the proceeds of any such transfer or disposition will be applied in reduction of any payments to be made by the Owner to the contractor under this Contract or will otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as the Owner may direct;

37.2.8 Complete performance of each part of the work as shall not have been terminated by the Notice of Termination; and

37.2.9 Take such action as may be necessary, or as the Project Manager may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Owner has or may acquire an interest.

37.3 After receipt of a Notice of Termination, the Contractor shall submit to the Project Manager his termination claim, in the form and with certification prescribed by the Owner. Such claims shall be submitted promptly but in no event later than the earliest of the following: (1) one year from the effective date of termination or (2) thirty days after the remainder of the project has been accepted by the owner.

37.4 Subject to the provision of Paragraph 37.3, the contractor and the Owner may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of work pursuant to this Article, which amount or amounts may include an allowance for profit on work done; provided that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract price of work terminated. The Contract will be amended accordingly, and the Contractor will be paid the agreed amount.

37.5 In the event of failure of the Contractor and the Owner to agree, as provided in Paragraph 37.4, upon the whole amount to be paid the Contractor by reason of the termination of work pursuant to this Article, the Owner will pay the Contractor the amounts determined by the Owner as follows, but without duplication of any amounts agreed upon in accordance with Paragraph 37.4;

37.5.1 With respect to contract work performed prior to the effective date of the Notice of Termination, the total (without duplication of any items) of:

37.5.1.1 The cost of such work;

37.5.1.2 The cost of settling and paying claims arising out of the termination of work under subcontracts or orders as provided in subparagraph 37.2.5 above, exclusive of the amounts paid or

payable on account of supplies or materials delivered or services furnished by the subcontractor prior to the effective date of the Notice of Termination of work under this Contract, which amounts shall be included in the cost on account of which payment is made under 37.5.1 above.

37.5.1.3 A sum, as profit on 37.5.1.1 above, determined by the Owner to be fair and reasonable; provided, however, that if it appears that the Contractor would have sustained a loss on the entire Contract had it been completed, no profit shall be included or allowed under this subparagraph 37.5.1.3 and an appropriate adjustment shall be made by reducing the amount of the settlement to reflect the indicated rate of loss.

37.5.2 The reasonable cost of the preservation and property incurred pursuant to subparagraph 37.2.9 and any other reasonable cost incidental to termination of work under this Contract, including expense incidental to the determination of the amount due to the Contractor as the result of the termination of work under this Contract.

37.5.3 The total sum to be paid to the contractor under paragraph 37.5.1 above will not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the Contract price of the work terminated.

37.6 In arriving at the amount due the Contractor under this Article, there will be deducted (1) any claim which the Owner may have against the Contractor in connection with this Contract, (2) the agreed price for, or the proceeds of sale, of materials, supplies or other things acquired by the contractor or sold, pursuant to the provisions of this Article, and not otherwise recovered by or credited to the Owner and (3) the full amount of any statutory or other claim against the Contractor filed with the Owner.

37.7 Unless otherwise provided for in this Contract, or by applicable statute, the Contractor, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the Owner at all reasonable times at the office of the Contractor but without direct charge to the Owner, all his books, records, documents, electronic/digital media and other evidence bearing on the costs and expenses of the Contractor under this Contract and related to the work terminated hereunder, or to the extent approved by the Owner, or other authentic reproductions thereof.

37.8 The Contractor shall insert in all subcontracts that the subcontractor shall stop work on the date of and to the extent specified in a Notice of Termination from the Owner and shall require that any tier subcontractors insert the same provision in any tier subcontracts.

37.9 Under no circumstances is the Contractor entitled to anticipatory, unearned profits or consequential damages as a result of a termination or partial termination under this Article.

# ARTICLE 38 TERMINATION FOR DEFAULT

38.1 If, in the opinion of the Owner, the Contractor has failed to prosecute work, the Owner will notify the Contractor. The Contractor will then have 5 days to remedy the failure to prosecute work or to obtain the Owner's authorization for the delay or an extension of time as set forth in Article 32.

38.2 If the Contractor refuses or fails after reasonable notice as set forth above to prosecute Work, or any separable part thereof, with such diligence as will insure its completion within the time specified in this Contract, or refuses or fails to complete said Work within such time, the Owner may, by written notice to the Contractor, terminate for default his right to proceed with the Work or such part of the Work as to which there has been unauthorized delay. In such event the Owner may take over the work and prosecute the same to completion, by Contractor or otherwise, and may take possession of and utilize in completing the Work such materials, appliances, and plant as may be on the Work Site and necessary therefore. Whether or not the Contractor's right to proceed with the Work is terminated, he and his sureties shall be liable for any damage to the Owner resulting from his refusal or failure to complete the Work in the specified time.

38.3 If the Owner so terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such time as may be required for final completion of the Work together with any increased costs incurred by the Owner in completing the Work as further set forth in Article 41.

38.4 If, after Notice of Termination of the Contractor's right to proceed under the provisions of this Article, it is determined for any reason that the Contractor was not in default under the provisions of this Article or that the Contractor was entitled to an extension of time under Article 32, EXTENSION OF TIME, the rights and obligations of the parties shall be the same as if the Notice of Termination had been issued pursuant to Article 37, TERMINATION FOR CONVENIENCE OF THE OWNER.

38.5 The right to terminate for default and any other rights and remedies of the Owner provided in this clause are in addition to any other rights and remedies provided by law or under this Contract.

# ARTICLE 39 TERMINATION OF RIGHT TO PROCEED FOR CERTAIN DEFAULTS

39.1 In addition to the Owner's right to terminate for default under other Articles of this Contract, the Owner will have the right to terminate the Contractor's performance of work in whole or in part for default for any of the following reasons:

39.1.1 The Contractor's or subcontractor's performance of work is in violation of the terms of the Contract.

39.1.2 The Contractor or subcontractor has violated an authorized order or requirement of the Owner.

39.1.3 Abandonment of Contract.

39.1.4 Assignment or subcontracting of the Contract or any work under the Contract without approval of the Owner.

39.1.5 Bankruptcy or appointment of a receiver for the Contractor's property.

39.1.6 Performance of the Contractor in bad faith.

39.1.7 Contractor allowing any final judgment to stand against him for a period of 48 hours (excluding weekends and legal holidays).

39.2 If, in the opinion of the Owner, the Contractor is in default of the Contract, the Owner will notify the Contractor. If the Contractor fails to remedy or commence to remedy the default within five days after receipt of such notice, the Owner may terminate the Contractor's right to proceed with the Work or that portion of the Work which the Owner determines is most directly affected by the default.

39.3 If, after Notice of Termination of Contractor's right to proceed under this Article it is determined for any reason Contractor was not in default, the rights and obligations of the parties shall be the same as if the Notice of Termination had been issued pursuant to Article 37, TERMINATION FOR CONVENIENCE OF THE OWNER.

## ARTICLE 40 RIGHTS AND OBLIGATIONS OF PARTIES AT TERMINATION FOR DEFAULTS

40.1 This Article shall apply to terminations for defaults covered in Article 15, 38, and 39 of these General Conditions.

40.2 On receipt of a Notice of Termination from the Owner, the Contractor shall:

40.2.1 Stop all work under the Contract on the date and to the extent specified in the Notice of Termination.

40.2.2 Place no further orders or subcontracts for materials, equipment or services except as they relate to the performance of work covered by the Notice of Termination.

40.2.3 Cancel or terminate all orders or subcontracts to the extent that they relate to the performance of work covered by the Notice of Termination.

40.2.4 Comply with all other requirements of the Owner as may be specified in the Notice of Termination.

40.3 Upon the Owner termination of the Contractor's right to proceed with the Work because of the Contractor's default under the Contract, the Owner will have the right to complete the Work by whatever means and method it deems advisable. The Owner shall have the right to take possession of and use any or all the Contractor's materials, plat, tools, equipment and property of any kind provided by or on behalf of the Contractor for the purpose of the Work, or a portion of them, without being responsible to the Contractor for fair wear and tear. The Contractor shall have no rights in such property during their use by the Owner. The Owner will not be required to obtain the lowest prices for completing the Work but shall make such expenditures as, in the Owner's sole judgment, best accomplish such completion.

40.4 The expense of completing the Work, together with a reasonable charge for engineering, managerial and administrative services, as certified by the Owner, will be charged to the Contractor and the expense so charged will be deducted by the Owner out of such monies as may be due or may at any time thereafter become due to the Contractor. In case such expense is in excess of the sum which otherwise would have been payable to the Contractor under the Contract, the Contractor or his surety shall promptly pay the amount of such excess to the Owner upon notice from the Owner of the excess so due. The Owner may, in its sole discretion, withhold all or any part of any progress payments otherwise due the Contractor until completion and final settlement of the Work covered by the Notice of Termination of Contractor's right to proceed.

40.5 The Contractor shall insert in all subcontracts that the subcontractor will stop work on the date of or to the extent specified in a Notice of Termination from the Owner and shall require the subcontractors to insert the same provision in any tier subcontracts.

40.6 The Contractor shall immediately upon receipt communicate any Notice of Termination issued by the Owner to the affected subcontractors and suppliers at any tier.

40.7 Rights of Surety: The Surety on the Performance Bond provided for in this Contract shall not be entitled to take over the Contractor's performance of work in case of termination under this Article, except with the consent of the Owner.

## ARTICLE 41 LIQUIDATED DAMAGES

41.1 Time is of the essence of the Contract. In the event the Contractor fails to achieve Substantial Completion of the Work within the Contract Time, or fails to meet any other time requirement or the time limit set forth in the Contract, after due allowance for any extension or extensions of time made in accordance with the Contract, the Contractor shall pay to the Owner as fixed, agreed and liquidated damages, pursuant to the clause of the Contract entitled TERMINATION FOR DEFAULT—DAMAGES FOR DELAY—TIME EXTENSIONS, the sum of \$500.00 for each

calendar day of delay unless otherwise stated in the Special Provisions. Such liquidated damages shall be assessed for each and every day that the Contractor shall be in default. The Owner shall have the right to deduct said liquidated damages from any amount due or that may become due the Contractor, or to collect such liquidated damages from the Contractor or its surety.

41.2 Liquidated damages in the amount stipulated do not include any sums of money to reimburse the City for actual damages which may be incurred between Substantial Completion and Final Completion because of the Contractor's failure to achieve Final Completion within the Contract Time. For such delay in Final Completion, the Contractor shall reimburse the City, as a mitigation of City damages and not as a penalty, those administrative costs incurred by the City as a result of such failure.

41.3 Liquidated damages in the amounts stipulated do not include any sums of money to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the City will assess these extra costs against the Contractor, and these assessments will be in addition to the stipulated liquidated damages.

41.4 The City reserves all of its rights to actual damages from the Contractor for injury or loss suffered by the City from actions or omissions of the Contractor, including but not limited to any other breach or default of the Contract, outside of the scope of the above sections.

# ARTICLE 42 USE AND POSSESSION PRIOR TO COMPLETION

42.1 The Owner shall have the right to take possession of or use any completed or partially completed parts of the Work. Such possession or use will not be deemed an acceptance of Work not completed in accordance with the Contract. While the Owner is in such possession, the Contractor, notwithstanding the provisions of Article 18, DAMAGE TO WORK AND RESPONSIBILITIES FOR MATERIALS, will be relieved of the responsibility for loss or damage to the work other than that resulting from the Contractor's fault or negligence or breach of warranty. If such prior possession or use by the Owner delays the progress of the Work or causes additional expense to the Contractor, an equitable adjustment in the Contract price or the time of completion will be made, and the Contract will be modified in writing accordingly.

## ARTICLE 43 RIGHTS IN SHOP DRAWINGS AND WORKING DRAWINGS

43.1 Shop Drawings and Working Drawings, submitted to the Project Manager by the Contractor, subcontractor or any lower tier subcontractor pursuant to the Work, may be duplicated by the Owner and the Owner may use and disclose, in any manner and for any purpose, Shop Drawings and Working Drawings delivered under this Contract.

43.2 This Article, including this Paragraph 43.2, shall be included in all subcontracts hereunder at all tiers.

# ARTICLE 44 PATENT AND COPYRIGHT

44.1 The Contractor shall warrant that the materials, equipment or devices used on or incorporated in the Work shall be delivered free of any rightful claim of any third party for infringement of any United States patent or copyright. If notified promptly in writing and given authority, information and assistance, the Contractor shall defend, or may settle, at his expense, any suit or proceeding against the Owner or the Project Manager based on a claimed patent or copyright infringement which would result in a breach of his warranty. The Contractor shall pay all damages and costs awarded therein against the Owner or the Project Manager due to such breach. If any use of materials, equipment or devices is held to constitute an infringement and such use is enjoined, the Contractor shall, at his expense and option, either procure for the Owner the right to continue using said materials, equipment or devices, or replace same with noninfringing materials, equipment or devices, or modify same so it becomes noninfringing. The Contractor shall report to the Owner promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Contract of which the Contractor has knowledge. In the event of any claim or suit against the Owner on account of any alleged patent or copyright infringement arising out of the performance of this Contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Owner when requested by the Owner, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Owner except where the Contractor has agreed to indemnify the Owner. This clause shall be included in all subcontracts.

# ARTICLE 45 HISTORICAL, SCIENTIFIC AND ARCHAEOLOGICAL DISCOVERIES

45.1 All articles of historical, scientific or archaeological interest uncovered by the Contractor during progress of the Work shall be preserved in accordance with applicable law and reported immediately to the Project Manager. Further operations of the Contractor with respect to the find, including disposition of the articles, will be decided by the Owner in accordance with applicable law.

## ARTICLE 46 SUBSTITUTIONS

46.1 Where reference is made to one or more proprietary products but restrictive descriptive material of only one manufacturer is used, it is understood that the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the plans and specifications and are compatible with the intent and purpose of the design, subject to the written approval of the Owner and the Project Manager. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design.

46.2 The Contractor may propose the substitutions of any material as a supplement to his bid with the monetary amount, additive or deductive as may be the case, clearly stated. Manufacturer's information, catalog numbers, and complete descriptive information shall be included with the proposed substitution. This shall be completely apart and separate from the base bid quotation and shall be solely for the information of the Owner, and the use of such proposed substitutions shall be strictly at the decision of the Owner. If substitution is accepted by the Owner, the Contract sum shall be adjusted from the base bid either up or down as indicated on the supplementary list.

# ARTICLE 47 INSURANCE

## 47.1 General

47.1.1 The Contractor shall provide from insurance companies, acceptable to the Owner, the insurance coverage designated hereinafter and pay all costs. The Contractor also indemnifies the Owner as further described in Article 4.

47.1.2 Before commencing work under this Agreement, the Contractor shall furnish the Owner with certificates of insurance specified herein showing the type, amount, class of operations covered, effective dates, and date of expiration of policies. Furthermore, each such certificate shall contain a valid provision or endorsement that the policy may not be cancelled, terminated, changed or modified without first giving ten (10) days written notice to the Owner, which notice must be sent registered mail, return receipt requested, to the Project Manager.

47.1.3 In case of the breach of any provision of this Article, the Owner, at his option, may take out and maintain, at the expense of the Contractor, such insurance as the Owner may deem proper at the Contractor's expense and may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Agreement.

47.1.4 The Contractor shall either: (1) require each of his subcontractors to procure and maintain during the life of his subcontract, subcontractors' comprehensive General Liability, Automobile Liability and Property Damage Liability Insurance of the type and in the same amounts as specified in this subparagraph, or (2) insure the activity of his subcontractors in his own policy.

47.1.5 Co-Insurance: The Contractor herein agrees to name the Owner as an insured party on all liability insurance policies provided for by this Article 47, INSURANCE.

47.1.6 No insurance shall be cancelled or otherwise voided during the Contract period, without at least 10 days prior written notice to the Owner, nor shall any insurance be invalidated should the insured waive any or all right of recovery against any party.

47.1.7 Liability insurance may be arranged by Comprehensive General Liability and

Comprehensive Automobile Liability policies for the full limits required; or by a combination of underlying Comprehensive Liability policies for lesser limits with the remaining limits provided by an Excess or Umbrella Liability policy.

47.1.8 The Owner shall purchase and maintain such boiler and machinery insurance as may be required by the Contract Documents or by law. This insurance shall include the interest of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.

47.1.9 Any loss insured under Article 47 is to be adjusted with the Owner and made payable to the Owner as trustee for the insured, as their interests may appear, subject to the requirements of any applicable mortgage clause. The Contractor shall pay each subcontractor a just share of any insurance monies received by the Contractor, and by appropriate share of any insurance monies received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require each subcontractor to make payments to his subcontractors in similar manner.

47.1.10 If the Contractor requests in writing that insurance for risks other than those described in this Article or other special hazards be included in the Owner's property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

47.1.11 The Owner as trustee shall have power to adjust and settle any loss with the insurers.

47.1.12 If the Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, such occupancy or use shall not commence prior to a time mutually agreed to by the Owner and Contractor and to which the insurance company or companies providing the property insurance have consented by endorsement to the policy or policies. This insurance shall not be cancelled or lapsed on account of such partial occupancy or use. Consent of the Contractor and of the insurance company or companies to such occupancy or use shall not be unreasonably withheld.

47.2 Workmen's Compensation and Employer's Liability Insurance:

47.2.1 The Contractor shall provide coverage and amounts as required by the Workmen's Compensation Act of the State of Colorado.

47.2.2 The Contractor shall provide Employer's Liability Insurance in an amount not less than \$100,000 for each occurrence.

47.2.3 The Contractor shall require any subcontractor to provide Workmen's Compensation and Employer's Liability Insurance in the same amounts for all of the subcontractor's employees to be engaged in work under this Agreement.

47.3 General Liability

47.3.1 General Liability Insurance shall be on a Comprehensive General Liability form and shall provide coverage for the following: Premises and Operations, Owners and Contractors Protective, Elevators, Independent Contractors, Products and Completed Operations, Contractual, Personal Injury, and Broad Form Property Damage; "XCU" exclusions must be deleted.

47.3.2 Minimum requirements for Comprehensive General Liability are: bodily injury, \$1,000,000.00 each person, \$2,000,000.00 each occurrence; property damage, \$1,000,000.00 each occurrence.

47.4 Automobile Liability

47.4.1 Comprehensive Automobile Liability Insurance shall include coverage for all owned motor vehicles and hired and non-owned motor vehicles.

47.4.2 Minimum requirements for Comprehensive Automobile Insurance are: bodily injury, \$1,000,000.00 each person, \$2,000,000.00 each occurrence; property damage, \$1,000,000.00 each occurrence.

47.5 Property Insurance:

47.5.1 The Owner may require the Contractor to purchase and maintain "Builder's Risk" Property Insurance for all work at the site to the full insurable value thereof. The Owner and the Project Manager shall be named as co-insured.

#### ARTICLE 48 UNCOVERING AND CORRECTION OF WORK

48.1 During construction, whenever materials requiring inspection in place by the Project Manager and the Owner to be permanently covered up, it shall be Contractor's responsibility to notify the Project Manager at least 24 hours in advance of commencement of such covering operation. In the event of failure by Contractor to give such notification, Contractor shall, at his own expense, uncover such portions of work as required by the Project Manager or the Owner, and reinstall such covering after satisfactory inspection and correction of any and all deficiencies.

# ARTICLE 49 EQUAL OPPORTUNITY

49.1 The Contractor agrees to comply with the letter and spirit of the Colorado Antidiscrimination Act of 1957, as amended, and other applicable laws respecting discrimination and unfair employment practices (24-34-402, CRS 1973, as amended). The Contractor shall be responsible for any discriminatory or unfair employment practices of his subcontractors.

Neither the Contractor nor any subcontractor will discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, religion, ancestry, mental or physical handicap, or age. Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, national

origin, sex, religion, ancestry, mental or physical handicap, or age. 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. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination. 49.2 Contractor and all subcontractors shall, in all solicitations or advertisement for employees placed by them or on their behalf, state that qualified applicants will receive consideration for employment without regard to race, creed, color, national origin, sex, religion, ancestry, mental or physical handicap, or age.

## ARTICLE 50 CLAIMS

50.1 The Contractor shall not assert any claim arising out of any act or omission by any officer, agent or employee of the Owner in the execution or performance of this Contract against such officer, agent or employee in his or her individual or official capacities.

50.2 The Contractor shall require each Separate Contract Design Professional or Contractor to agree in his Contract not to make any claim against the Owner, its officers, agents or employees, by reason of such Contract with the contractor.

50.3 Nothing in this Contract shall be construed to give any person other than the Owner and the Contractor any legal or equitable right, remedy or claim under this Contract; and it shall be held to be for the sole and exclusive benefit of the Owner and the Contractor.

## ARTICLE 51 NOTICES

51.1 Except as otherwise provided herein, any notice, approval, acceptance, request, bill, demand or statement hereunder from either party to the other shall be in writing and shall be deemed to have been given when either delivered personally or deposited in a U.S. mailbox in a postage prepaid envelope, addressed to the other party via certified mail. Notices to the Owner shall be addressed to the Project Manager by name. Either party may at any time change such address by delivering or mailing, as aforesaid, to the other party a notice stating the change and the changed address.

# **ARTICLE 52**

# LEGAL INSERTIONS, ERRORS, INCONSISTENCIES, OR DISCREPANCIES IN CONTRACT

52.1 It is the intent and understanding of the parties to this Contract that each and every provision of law required to be inserted in this Contract shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is deemed to be inserted herein, and if through mistakes or otherwise, any such provision is not inserted in correct form, then this Contract shall upon application of either party, be amended by such insertion so as to comply strictly with the law and without prejudice to the right of either party.

52.2 If this Contract contains any errors, inconsistencies, ambiguities, or discrepancies, including typographical errors, the Contractor shall request a clarification of same by writing to the Project Manager whose decision shall be binding upon the parties.

#### ARTICLE 53 CAPTIONS OR HEAD NOTES

53.1 The captions or head notes on articles or sections of this Agreement, and marginal notes are intended for convenience and reference purposes only and in no way define, limit or describe the scope or intent hereof, or of this Agreement not in any way affect this Agreement.

#### ARTICLE 54 EFFECTIVE AND BINDING

54.1 This Contract shall not become effective or binding upon the Owner unless it has been authorized and executed in accordance with the ordinances of the City of Greeley.

## ARTICLE 55 CONTRACTOR

55.1 All personnel assigned to the Project by the Contractor shall be required to cooperate fully with personnel of the Owner and if in the sole discretion of the Owner the Contractor's personnel fails so to cooperate, the Contractor shall relieve them of their duties on the Project when required by the Owner.

55.2 Within seven (7) consecutive calendar days after date of written notice to commence work, the Contractor shall designate in writing one person who, on his behalf, shall be responsible for coordinating all of the services to be rendered by the Contractor hereunder. Such designee shall be subject to the approval of the Owner. Any change to the approved designee shall be proposed in writing seven (7) days in advance and subject to Owner approval.

55.3 The Contractor shall engage, at his sole expense, all engineers, architects, cost estimators, lawyers, experts and Contractors as may be required for the proper performance of the Contract. The Contractor shall be responsible for the performance of the work of all architects, engineers, cost estimators, lawyers, experts and Contractors so engaged by him, including maintenance of schedules, correlation of their work and resolution of all difference between them. It is understood that all architects, engineers, cost estimators, lawyers, experts and Contractor are employees of the Contractor and not of the Owner, and the Contractor alone is responsible for their work.

55.4 All drawings, tracings, specifications, digital media/electronic files and other material prepared and furnished under and for this Contract shall become the property of the Owner upon substantial completion and/or their acceptance by the Owner and/or upon termination of the services

of the Contractor. Such documents shall be promptly delivered to the Owner upon demand and thereafter may be used by the Owner in whole or in part or in modified form, for those purposes it may deem advisable without further employment of, or payment of additional compensation to, the Contractor.

55.5 The Contractor shall not, without the prior written approval of the Owner, specify for the project, or necessarily imply the required use of any article, product, material, fixture or form of construction, the use of which is covered by a patent, or which is otherwise exclusively controlled by a particular firm or group of firms.

55.6 Should any claim be made or any action brought against the Owner relating to the design and satisfactory operation of the Project herein, the Contractor shall diligently render to the Owner without additional compensation any and all assistance which may be requested by the Owner.

55.7 The Owner's Project Manager's decision shall be final and binding upon the Contractor as to all matters arising in connection with or relating to this Contract. The Project Manager shall determine the amount, quality, acceptability and fitness of the work being performed hereunder and shall determine all matters relative to the fulfillment of this Contract on the part of the Contractor and such determination shall be final and binding on the Contractor. Acceptance by the Owner of any document hereunder and all supporting documents shall not relieve the Contractor of sole responsibility for work performed under this contract, including, but not limited to, the final design of the Project, including the plans, specifications and all supporting documents, except as to any feature thereof which the Owner had specifically directed in writing to be included over the written objection of the Contractor. In case any question shall arise, the decision of the Owner's Project Manager, who is hereby accepted by the Contractor as the arbiter, shall be a condition precedent to the right of the Contractor to receive any money under this Contract.

## ARTICLE 56 APPEALS

56.1 Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under this Contract which is not disposed of by Agreement shall be decided by the Project Manager, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Project Manager shall be final and conclusive unless, within fifteen (15) days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Project Manager a written notice of appeal.

56.2 In the event a decision of the Project Manager is the subject of an appeal, such dispute may be settled by appropriate legal proceeding, or, if the parties mutually agree, through arbitration or administrative process. Pending any binding arbitrative or administrative decision, appeal, or judgment referred to in this section or the settlement of any dispute arising under this Contract, the Contractor shall proceed diligently with the performance of this Contract.

56.3 Venue and jurisdiction of any suit, right, or cause of action arising under or in connection with this Contract shall lie exclusively in Weld County, Colorado.

#### ARTICLE 57 PROHIBITED INTEREST

57.1 No member, officer or employee of the City of Greeley shall have any financial or pecuniary interest, direct or indirect, in this Contract or the proceeds thereof.

#### ARTICLE 58 FINDINGS CONFIDENTIAL

58.1 Any reports, information, data, etc., available to or prepared or assembled by Contractor under this Contract shall not be made available to any individual or organization by Contractor without consent in writing from the Owner subject to applicable law.

#### ARTICLE 59 GENERAL PROVISIONS

59.1 Services and work performed by Contractor under this Contract shall conform to reasonable and normal professional standards known and accepted within the community.

59.2 No reports, graphics or other material produced directly or indirectly for the Owner under this Contract shall be the subject of an application for copyright or trademark by or on behalf of Contractor.

59.3 The laws of the State of Colorado and applicable Federal, state and local laws, regulations and guidelines shall govern hereunder.

59.4 The headings of the articles, clauses, and paragraphs of this Contract are inserted for reference purposes only and are not restrictive as to content.

59.5 This Contract and any subsequent amendment shall be deemed an original having identical legal effect, and all of which together constitute one and the same instrument.

59.6 Nothing contained herein shall be deemed to give any third party any claim or right of action against the Owner which does not otherwise exist without regard to this Contract.

59.7 Where a number of days is specified in this Contract it shall mean calendar days unless otherwise specified.

59.8 This Contract shall not be assigned, in whole or in part, without the written consent of the Project Manager and Contractor.

59.9 The Owner certifies the following;

A. An amount of money equal to or greater than the Contract amount has

been appropriated and budgeted for the Project which this Contract concerns.

B. No Change Order which requires additional compensable work to be performed by the Contractor will be issued by the Owner unless an amount of money has been appropriated and budgeted sufficient to compensate the Contractor for such additional compensable work unless such work is covered under the remedy-granting provisions of this Contract.

C. As used in this paragraph, "remedy granting provision" shall mean any clause of this Contract which permits additional compensation in the event of a specific contingency or event occurs. This term shall include, but not be limited to, change clauses, differing site conditions clauses, variation in quantities clauses, and termination for convenience clauses.

#### ARTICLE 60 CONTRACTOR ACCEPTANCE

60.1 The acceptance by the Contractor, his successors or assigns of any payment made on the final acceptance of the Project under this Contract or of any final payment due on termination of this Contract, shall constitute a full and complete release of the Owner from any and all claims, demands and causes of action whatsoever which the Contractor, his successors or assigns have or may have against the Owner under the provisions of this Contract.

60.2 No action shall be maintained by the Contractor, its successors or assigns, against the Owner on any claims based upon or arising out of this Contract or out of anything done in connection with this Contract unless such action shall be commenced within 180 days after the date of filing of the voucher for final payment hereunder in the office of the Finance Director, or within 180 days of the termination of this Contract.

#### ARTICLE 61 SUCCESSORS AND ASSIGNS

61.1 The Contractor binds itself, its partners, successors, assigns and legal representatives to the other party to this Contract and to the partners, successors, assigns and legal representatives of such other party with respect of all covenants of this Agreement. The Contractor shall not transfer, assign, or subcontract any interest in this Agreement.

#### ARTICLE 62 SEVERABILITY CLAUSE

62.1 If any provision of this Agreement is subsequently declared by legislative or judicial authority to be unlawful, unenforceable, or not in accordance with applicable laws, statutes, and regulations of the United States of America and the State of Colorado, all other provisions of this Agreement shall remain in full force and effect.

#### ARTICLE 63 AGREEMENT

63.1 This Agreement represents the entire and integrated Agreement between the Owner and the Contractor and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both Owner and Contractor.

#### ARTICLE 64 COLORADO LABOR

64.1 In accordance with C.R.S. §8-17-101, all parties contracting with the City of Greeley on public works projects shall employ Colorado labor to perform the work to the extent of not less than eighty percent (80%) of each type or class of labor in the several classifications of skilled and common labor employed on this project.

#### ARTICLE 65 ELECTRONIC SIGNATURE

65.1 The Contract Documents may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same document. The Contract Documents, including all component parts set forth above, may be executed and delivered by electronic signature by any of the parties and all parties consent to the use of electronic signatures.

#### ARTICLE 66 FORCE MAJEURE

66.1 To the extent that either party is not able to perform an obligation under this Agreement due to fire; flood; acts of God; severe weather conditions; strikes or labor disputes; war or other violence; acts of terrorism; plague, epidemic, pandemic, outbreaks of infectious disease or any other public health crisis, including quarantine or other employee restrictions; act of authority whether lawful or unlawful, compliance with any law or governmental order, rule, regulation or direction, curfew restriction, or other cause beyond that Party's reasonable control, that Party may be excused from such performance so long as such Party provides the other Party with prompt written notice describing the condition and takes all reasonable steps to avoid or remove such causes of nonperformance and immediately continues performance whenever and to the extent such causes are removed.

#### CONTRACT ADDENDUM COVID-19 RISK MITIGATION

#### 1) Implementation of Basic Infection Prevention Measures:

a. All Contractors and Subcontractors shall develop procedures for employees to report when they are sick or experiencing symptoms of COVID-19. At a minimum, these procedures will include temperature monitoring and symptom assessment as set forth below.

1) Contractors are required to insure that their employees and all of their subcontractor's employees conduct daily self-assessments for potential presence of COVID-19 upon their arrival at the worksite. The assessment must be carried out regardless of whether the employee believes he/she has been exposed to COVID-19.

2) Employees must ask themselves the following questions:

• Do I have a runny nose, sneezing, cough, sore throat, diarrhea, nausea or vomiting (not related to other health conditions such as known allergies or chronic illness)?

• Am I having trouble breathing in a manner that is out of the ordinary for me?

• Do I have a sore throat?

• Have I experienced an exposure or have I been in close contact with anyone experiencing the symptoms described above or who is suspected to have/diagnosed with COVID-19?

3) Contractors must insure that their employees and all of their subcontractor's employees have their temperature taken prior to or upon their arrival at the worksite.

• Taking temperatures is not done instead of the other health and hygiene requirements that have been set forth by the local, state and national authorities. Temperature taking is done in addition to those requirements.

4) Any symptoms identified by the Daily Self-Assessment or a confirmed temperature of 100.4° F or higher must result in the affected employee being sent home. The Contractor must follow federal, state, and local guidance to determine when the employee can return to the worksite.

- The Contractor shall immediately notify the Project Manager about any employees that are sent home due to temperature or COVID-19 symptoms.
- b. All personnel must comply with social distancing on construction worksites.

1) Reduce size of work crews: Teams should reduce the number of people in each work crew to the minimum number of people possible to perform the task safely, even

if the reduction of crew size means the job takes longer.

2) Minimize interaction between work teams: Even groups within the same project should avoid interaction across groups, to minimize possible viral spread if one worker contracts COVID-19. Approaches to avoiding contact between groups may include staggered shifts, compressed work weeks where different teams work different days, and maximizing geographic distance between different teams working on the same project.

3) Avoid contact with visitors: Visitors outside the typical work crew should avoid interaction with the team wherever possible. For example, if an inspector or materials delivery needs to enter the site, they should alert the work team (e.g. by honking the horn of their vehicle twice or through another established communication means) so that the work team can vacate the site while the external parties are present.

4) Maintain a 6 foot distance between employees wherever possible: Construction teams should make every effort to limit activities that cannot be performed within 6 feet of distance between COVID-19: MULTI-INDUSTRY CONSTRUCTION GUIDANCE 040120 1 workers. However, some core construction activities may require some proximity to complete (e.g., concrete pours, utility potholing, work in cranes, drainage pipe construction, among others). In these cases, construction crews must employ other aggressive measures to limit contact. Examples include requiring employees to face away from each other, the use of supplemental Personal Protection Equipment (PPE) like face shields or respirators, minimizing the number of people on a team, and retaining consistency within work teams to limit contact with parties external to that team.

5) Office work should be done remotely, whenever possible: Office functions associated with a project (e.g. accounting or records) should be done from home to the maximum extent practicable.

6) In-person meetings should be avoided: Office meetings and consultations should take place virtually, with participants working from home or their work truck, whenever possible. If an in-person meeting is absolutely necessary, that must be limited to fewer than ten people, and participants must maintain 6 foot distance at all times during the meetings. All surfaces should be wiped down before and after the meeting, and hand washing should also occur before and after the meeting.

7) Workers must not congregate during breaks: Construction workers should not congregate for lunch or other breaks.

8) Activity specific work plans: Contractors should consider all job activities and review how they can be accomplished using necessary social distancing and sanitation protocols.

c. General Recommendations for Routine Cleaning and Disinfection on the Jobsite:

1) Contractors and subcontractors should use disposable wipes to wipe down used communal items like tools, equipment and job-boxes.

2) Make wipes and disinfectant available in common areas and "shared" equipment to allow workers to clean equipment before and after use.

3) Before using Aerosol Disinfectants on Fall Protection Harnesses, Connectors or Rigging, consult the manufacturer recommendations for cleaning since these can deteriorate the fibers of the material.

4) Practice routine cleaning of frequently touched surfaces (for example: tables, workstations, doorknobs, handles, etc.) with household cleaners and EPA-registered disinfectants that are appropriate for the surface, following label instructions. Labels contain instructions for safe and effective use of the cleaning product, including precautions you should take when applying the product, such as wearing gloves and making sure you have good ventilation during use of the product.

d. General Recommendations on How to Clean and Disinfect Surfaces:

1) Wear disposable gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes. Consult the manufacturer's instructions for cleaning and disinfection products used. Clean hands immediately after gloves are removed.

2) If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.

3) For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective.

4) Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer's instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted. Prepare a bleach solution by mixing:

- 5 tablespoons (1/3rd cup) bleach per gallon of water or
- 4 teaspoons bleach per quart of water

5) A list of CDC-approved disinfectants against viruses (including COVID-19 virus), see: https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2 Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).

6) For soft (porous) surfaces such as carpeted floor and rugs, remove visible contamination, if present, and clean with appropriate cleaners indicated for use on these surfaces.

- e. Detailed Recommendations for Cleaning and Disinfecting on the Jobsite:
  - 1) Sanitation Units (Portable Toilets)
    - Evaluate and provide additional restrooms (with hand sanitizer) as needed.
    - Frequently or as needed, clean the surfaces that are dirty. They should be cleaned using a detergent or soap and water prior to disinfection.
    - Use an Aerosol Disinfectant or diluted household bleach solutions (mentioned in the section above) to disinfect the commonly used items on the unit (handles, locks, toilet seat, etc.).
    - With the promotion of frequent handwashing, it is more likely that the handwashing stations will need frequently or as needed refill of the water tank, soap/hand sanitizer dispensers and paper towel dispenser. It is recommended to add a morning and afternoon inspection of the units to guarantee they are serviceable.
  - 2) Project Site Offices, Conference Rooms, Break Areas and Other Common Areas:
    - Frequently or as needed, clean the surfaces that are dirty. They should be cleaned using a detergent or soap and water prior to disinfection.
    - Wipe down tables and chairs with household cleaners or disinfectant wipes that are appropriate for the surface, following label instructions.
    - Floor should be swept and disinfected with a diluted household bleach solution.
    - As there is no designated lunch break area on for field personnel, it is recommended that lunch breaks be taken in personal vehicles or segregated around the site. Please do not congregate in tool trailers or connex boxes. This will help maintain social distancing of 6 feet.
  - 3) Jobsite Entrances, Gates and Doors:
    - Routine cleaning of the pull handles, locks and/or panic devices on doors by wiping them down with household cleaners or disinfectant wipes that are appropriate for the surface, following label instructions.

4) Operators of Light and Heavy Equipment (Forklifts, Scissor Lifts, Excavators, Loaders, Scrapers, etc.)

- Prior to and after use, wipe down controls, seats, handrails or other frequently touched surfaces with household cleaners or disinfectant wipes that are appropriate for the surface, following label instructions.
- 5) Hand Hygiene and other Preventive Measures:
  - Employees should clean hands often, including immediately after removing gloves and after contact with any other person, by washing hands with soap and water for at least 20 seconds. If soap and water are

not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.

• Employees should follow normal preventive actions while at work and home, including recommended hand hygiene and avoiding touching eyes, nose, or mouth with unwashed hands.

#### 2. Update Safety Procedures

a. Contractors will update their safety procedures to implement the guidance issued by federal, state and local authorities related to COVID-19, as well as to implement the procedures required by this addendum.

b. Contractors will train employees on the updated safety policy.

c. Contractors will ensure that all subcontractors are aware of and follow Contractors updated safety policy.

#### 3. City of Greeley Project Sites Controls:

a. Site Isolation:

1) All Contractors and Subcontractor shall minimize or eliminate activities within City of Greeley facilities that require operations by City Staff. If City Staff and Contractor are required to be located in the same facilities, the Contractor shall coordinate with the Project Manager to minimize contact and reduce exposure.

2) All Contractors and Subcontractors shall eliminate face to face meetings to minimize possible of exposure. All questions, concerns, and construction related questions shall be address through phone communications.

3) Contractors shall notify the Project Manager prior to entering City facilities and provide information on work to be done and areas they will be in. Contractors shall not enter any administrative or occupied facilities without prior approval from the Project Manager.

4) If any employee of a Contractor or Subcontractor enter the site while sick, they will be immediately asked to leave. Contractors will not be compensated for this lost time.

b. Personal Protective Equipment (PPE):

1) All Contractors and Subcontractors shall wear non-medical face coverings while working on City of Greeley job sites.

2) Contractors shall require the use of additional PPE as recommended by federal, state and local authorities.

#### 4) City of Greeley contract controls:

a. To remain ahead of identified concerns, Contractors must reach out to their subcontractors and suppliers to ascertain potential sources of delay to ensure they give the proper notices to their owners.

b. Contractors must promptly notify the Project Manager of potential delays.

c. If a Contractor determines that a project or project phase must be shut down due to the COVID-19 pandemic, the Contractor shall immediately contact the Project Manager and submit a change order request.

1) Contractors must insure that the project site is left in a safe condition. Contractor shall insure periodic inspection of the project site.

2) Traffic control devices must continue to be inspected and maintained, so it is a best practice to minimize their need and use when a project is temporarily inactive.

d. Contractor will insure compliance with all CDC and OSHA requirements.

e. Contractor agrees that this addendum may be supplemented as additional guidance is received from federal, state and local authorities.

#### **SECTION 00620**

#### SPECIAL PROVISIONS

#### (4) CBD Traffic Signal Upgrade Projects

1. The City of Greeley, Colorado, "Design Criteria and Construction Specifications Manual" (DCCSM) latest edition is made a part of these specifications.

The Colorado Department of Transportation (CDOT) Standard Specifications for Road and Bridge Construction 2011, the CDOT M&S Standards latest edition 2011, and MGPEC are made a part of these specifications.

Manual on Uniform Traffic Control Devices (current edition), Federal Highway Administration, and the Colorado Supplement thereto.

The standard specifications outlined in this document are revisions and amendments to the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction. In situations where there is a conflict or question of interpretation, these specifications and any special provisions will prevail.

These specifications, the plans, any special provisions, and all supplemental documents are essential parts of a contract and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for the complete work. In case of a discrepancy, figured dimensions shall govern over scaled dimensions; plans shall govern over standard specifications; and special provisions shall govern over plans and standard specifications.

# ALL CONSTRUCTION WILL MEET THE AMERICANS WITH DISABILITIES ACT (ADA) CONSTRUCTION SPECIFICATIONS (LATEST EDITION).

2. The Contractor, prior to commencement of work, will be required to obtain all City permits for construction/maintenance work: See Permits Section #6 below.

The fee for this permit for the City of Greeley will be waived.

- 3. The date for the pre-construction meeting will be announced after the bids are opened and the contract has been awarded. The Contractor will be expected to present the City with the following items at the pre-construction meeting:
  - a. Bar Graph Construction Schedule. <u>Required and updated each week.</u>
  - b. Approved Traffic Control Plan and Traffic Control Supervisor.
  - c. Materials Suppliers List (see attached form).
  - d. Subcontractors List (see attached form).
  - e. Certificates of Insurance.
  - f. Equipment Lists
  - g. Permits for other agencies (State Cities, Towns, Railroad, etc.).
- 4. The City will not be responsible for any construction downtime due to failure on the Contractor's part to notify utility companies of conflicts. Utility Notification Center Company can be called at (1-800-922-1987) or Cell Phone No. 811.

- 5. A daily charge will be made against the Contractor for each calendar day that any work remains uncompleted after lapse of contract time. See schedule. This daily charge will be deducted from any money due the Contractor. The daily charge is a minimum of \$1000. This deduction will not be considered a penalty, but as liquidated damages. (See Notification to Contractor)
- 6. The Contractor will comply with the requirements of Section 01010, Paragraph 1.3G of the Street Construction Specifications (DCCSM). The Contractor will not do any construction work in the public right-of-way before receiving written approval of the Traffic Control Plan from the City. A Traffic Control Plan Review form must be completed and returned to Public Works Engineering, 1001 9<sup>th</sup> Avenue, Greeley, CO 80631, Phone 970-350-9882 (email address: Leroy.baca@greeleygov.com). A copy is attached behind the Special Provisions.

The Contractor will appoint a Traffic Control Supervisor (TCS) to this project. The TCS will not be required to be on site, but must be available twenty-four (24) hours a day. The name, <u>Mobil, and Office</u> phone number for the TCS will be provided to the City at the pre-construction meeting. Certification of all TCSs and/or Flaggers (Either CCA or ATTSA) will be submitted to the Traffic Department, Leroy Baca at 970-350-9882, Traffic Operations, 1300 A Street (Suite E), Greeley, Colorado, 80631, before work starts and as new personnel is added. The Contractor will also provide the name and phone number of a local traffic control company that will act as an alternate in case the designated TCS cannot be reached.

**The Contractor will be notified in writing when the traffic control for any work site is not acceptable.** The Contractor will not be allowed to continue work at that location until the problems are corrected. Failure to correct the traffic control deficiencies before continuance of the work will result in non-payment for the work at the locations in question. A Traffic Control Supervisor will be designated at the preconstruction meeting. The Traffic Control Supervisor will be able to address all concerns within sixty (60) minutes.

# Traffic control is to be paid as part of the lump sum price for the traffic signal project, and will not be paid separately.

- 7. No work shall be performed on local streets before 7:00 a.m. or after 6:00 p.m. each workday, Monday through Friday, unless otherwise approved by each City Project Representative. Costs incurred by the City to inspect the work performed outside these hours will be deducted from progress payments to the Contractor. Inspector overtime costs are approximately \$75/hour.
- 8. No work shall be performed on arterial or collector streets before 8:30 a.m. or after 4:00 p.m. each workday unless otherwise approved by the City Project Representative. Inspector overtime costs are approximately \$75/hour. (This item may be adjusted as requested by the Contractor and approved by the Project Representative.)
- 9. There shall be no work allowed on Saturdays or Sundays unless approved by the City Project Representative 48 hours in advance of these days. Work performed on these days is considered overtime hours.

**Traffic Control for all project locations.** Submit Request Form along with the site plan (MHT) per location of work zone. Forms will be fully filled out with Dates, Hours, location, etc.

- a. Master chronological list of locations and dates per location.
- b. ADA Standards SHALL will be met for pedestrians during work at each site.
- c. Traffic Control must meet MUTCD, CDOT and City of Greeley Standards. (Signs, Pavement Markings).

- d. Arterial Signalized Intersections and School Zones. No traffic control setups between 7:00 and 8:30 am and 3:30 to 6:30 pm. During rush hours and school terms or approved by project manager. Emergencies are the exception.
- e. No full road closures will be allowed except in special conditions or approved by project manager.
- f. No work will be permitted on Holidays except in case of an emergency or approved by project manager.
- g. Construction may not begin until all traffic control devices are in place.
- h. The Contractor shall remove all traffic control devices immediately upon completion of work or when no longer needed.
- i. When the traffic control is deemed insufficient, notice to the contractor will be given to rectify the insufficiency. If the contractor after one hour has not corrected the insufficiency the City reserves the right to temporarily suspend operations until compliance is obtained.
- j. When work is complete the Contractor is required to remove all traffic control devices immediately upon completion of work or when no longer needed.
- k. Locations in the City of Greeley for Time Restrictions. 9<sup>th</sup> and 10<sup>th</sup> St's. East or West bound from 10<sup>th</sup> Ave to 59<sup>th</sup> Ave No traffic control setups will be allowed before 8:30 am and traffic control opened and devices removed no later than 5:00 pm unless otherwise approved by project manager.
- 1. Arterial and Collector Streets. No work shall be performed on arterial or collector streets before 8:30 a.m. or after 4:00 p.m. each workday, Monday through Friday, unless otherwise approved by the City Project Representative.
- m. Local Streets. No work shall be performed on local streets before 7:00 a.m. or after 6:00 p.m. each workday, Monday through Friday, unless otherwise approved by the City Project Representative.
- 10. At the completion of the contract, the Contractor will cleanup all construction materials and leave the construction site in a condition approved by the City Project Representative.
- 11. Waste material, which is deemed not reusable by the City Project Representative, will be disposed of by the Contractor at his expense.
- 12. Intersections and driveways will be closed only for a minimum amount of time. The Contractor will coordinate driveway closures with property owners with final approval by each City Project Representative.
- 13. Removal of any and all signs will be coordinated with the City Project Representative.
- 14. The City of Greeley may supply the Contractor with four portable information signs, which will be moved by the Contractor to the various construction sites as the work progresses. This will be coordinated with the Project Representative. The Contractor will maintain the signs in good condition. (Cost per sign is \$400 each.) At the completion of the project, the signs will be cleaned and returned to the City Project Representative. Costs associated with this requirement will be included in the unit price of the work and will not be paid separately. Final payment will not be made until all signs are returned. Cost of the sign may be deducted from final payment.
- 15. Section 00340 Certificates of Insurance must be filled out as provided. Certificates of Insurance supplied by insurance agencies may be supplied by attachment, but Section 00340 will be completed and signed by each insurance agency.

#### 16. EXPERIENCE – ALL BIDDERS WILL FURNISH WITH THEIR BID A COMPLETE CLIENT LIST OF ALL PROJECTS COMPLETED OR IN PROGRESS FOR THE PAST TWO YEARS.

17. COLORADO DEPARTMENT OF LABOR AND EMPLOYMENT:

Section 8-17-101, C.R.S. – "...Colorado labor will be employed to perform the work in the extent of not less than 80 percent of each type or class of labor..."

Section 8-17-102, C.R.S. – "...all contracts let for public works will contain provisions for the preference in employment of Colorado labor."

- 18. Notification to Contractor to perform work: Contract.
- 19. All worksites shall have portable restroom facilities on job site. Total cost to be paid for by Contractor.

#### Scope of work and Informational Notes

#### **SCOPE OF WORK – (4) CBD Traffic Signal Upgrade Projects**

#### **INFORMATION SCHEDULE: A**

#### Schedule A is a lump sum bid with optional fees (Section 00130)

This is a lump sum item with optional fees includes all work and materials necessary to upgrade and operate traffic signals at the 10<sup>th</sup> Avenue & 10<sup>th</sup> Street, 10<sup>th</sup> Avenue & 13<sup>th</sup> Street, 11<sup>th</sup> Avenue & 10<sup>th</sup> Street, and 11<sup>th</sup> Avenue & 9<sup>th</sup> Street intersections. This work also includes installing signal equipment such as hand holes, traffic signal cabinets, wiring, push buttons, signal heads and other equipment indicated on plans provided in Appendix B, C, D, and E... The work specified below describes the installation of necessary material and equipment to complete traffic signal installations and/or electrical systems. All materials and labor shall be included in the base bid cost except for City furnished materials and optional work listed below. Incidental work includes performing traffic control, locates, and other associated work.

All work for this project shall be completed in accordance to the these specifications, the plans, any special provisions, and all supplemental documents including the current Colorado Department of Transportation specifications or City of Greeley specifications whichever is more stringent.

#### The City will furnish the following items:

- Video Detection Devices
- Traffic Signal Heads
- Pedestrian Push Buttons
- Pedestal Pole (without base)
- Traffic Signal Controller Cabinet & Operating Equipment
- Pull boxes

The optional work items not included as part of the base bid are provided in the table.

Optional Work Items	Unit	Total QTY
Concrete Sidewalk (6 Inch)	SY	12
Curb and Gutter Type 2 (Section 11-b)	LF	46
Traffic Signal Face (12-12-12) (Install		11
Only)	EACH	11
Intersection Detection System and Base		14
(Install Only)	EACH	14

The plans for the traffic signal contractor includes the new conduit/pull box locations as part of the project with "done by others" notes on the signal plan. This "done by others" work will be performed prior to May 1 by boring contractors. This boring contractor will bore conduit under the street and installs pull boxes on each end of this run. The Traffic Signal contractor shall performs all other work for the project.

Electrical equipment shall conform to the standards of the National Electrical Manufacturers Association. Material and work shall conform to the applicable requirements of the National Electrical Code and any local ordinance, which may apply.

#### PROJECT SUPERINTENDENT

The Contractor's Project Superintendent, designated at the pre-construction meeting, will be on the work site during all construction. If the Superintendent is unable to be on the job site, then a designee will be assigned with the authority to make all required decisions. A copy of the Special Provisions will be with the Project Foreman or his designate representative at all times.

### <u>The City of Greeley requires an English speaking Superintendent/Project Manager on the job site at all times to ensure clear communication between City Staff and Contractor.</u> <u>INFORMATION MANAGER</u>

#### TIME to COMPLETE Project is between May 1st and August 1st, 2021.

#### WARRANTY

The Contractor is responsible for providing a <u>TWO-YEAR</u> warranty to the City of Greeley for all work completed under this contract. The beginning of the <u>TWO-YEAR</u> warranty period will be established with the issuance of the Certificate of Substantial Completion. There will be no additional cost to the City for material, equipment, labor, and/or traffic control for warranty work. Warranty work will be completed in accordance with these contract specifications and within thirty (30) days of written notification by the City of Greeley Public Works Department, Transportation Services Division.

#### **PAYMENT**

Payment will be made in conformance with the General Conditions of the Contract and normally processed on a monthly basis. Invoices will be delivered by the 25<sup>th</sup> of the month to the City of Greeley Project Representative. All quantities shall be confirmed before invoices are paid.

#### FINAL PAYMENT

Payment will be made in conformance with the General Conditions of the Contract and normally processed on a monthly basis.

#### **LOCATION OF WORK**

9<sup>th</sup> Street & 11<sup>th</sup> Avenue 10<sup>th</sup> Street & 10<sup>th</sup> Avenue 10<sup>th</sup> Street & 11<sup>th</sup> Avenue 13<sup>th</sup> Street & 10<sup>th</sup> Avenue

#### **Traffic Signal Material and Installation Specifications**

#### TS-1 CONTROL OF WORK

#### B. Traffic Control

When the Contractor's operations create a condition hazardous to traffic or the public, the Contractor shall take the necessary precautions and provide adequate means to protect those who pass through or over the work, at no expense to the City. The City of Greeley has an agreement with Northern Colorado Traffic Control, 1712 First Avenue, Greeley, Colorado, 970-356-6881, to provide traffic control services. If you are interested in using them, they will perform the service at the rates covered by the agreement. If the Contractor shall appear to be negligent in

**6**Provisions

providing such warning or protective measures, the Superintendent may direct attention to the existence of a hazard, and the Contractor at no expense to the City shall install any measures required to protect the public.

Signal turn-on/turn-off and flashing entry/exit shall be done only at the on-site direction of the Superintendent.

#### C. Equipment List and Drawings

The Contractor shall submit to the Superintendent for approval a list of equipment and material which he proposes to install. The list shall include all materials that are identified on the plans or in the specifications by the performance characteristics, or by other means when it is necessary or customary in the trade. The list shall be complete as to name of manufacturer, size, and catalog number of unit, and shall be supplemented by such other data as may be required, including detailed scale drawings and wiring diagrams of any non-standard or special equipment and of any proposed deviation from the plans. If requested to do so, the Contractor shall submit for approval sample articles of the materials proposed for use.

The above data shall be submitted to the Superintendent (in as many copies or complete sets as required by the Superintendent) for checking, correction, and approval. Upon completion of checking, correction, or approval, the Superintendent will submit a letter of transmittal to the Contractor indicating acceptance or rejection of, or changes required for acceptance of, the above data.

The contractor shall supply "as-built drawings" upon completion of the work and prior to final payment.

D. Cooperation between Contractors

Street construction within the limits of the work may be under way by other Contractors during the period of the contract. The Contractor shall cooperate with any other Contractor under contract to the City or working under a utility agreement with the City. Coordination of work zone traffic control will be done by the City.

#### E. Coordination with Xcel Energy Company

Xcel Energy Company of Colorado crews will be installing street light fixtures in conjunction with the Contractor's work. Xcel Energy Company may be installing street lighting conduits in the same trenches as the traffic signal conduits. The Contractor shall coordinate his or work with Xcel Energy Company. All final <u>service</u> line connections shall be coordinated by the City and shall be made by Xcel Energy Company.

The contractor shall furnish and install a 12/2 UF with ground from Xcel Energy source to the end of the luminary arm.

#### TS-2 EXCAVATING AND BACKFILLING

#### A. Excavating

Blasting shall not be done within City limits.

When trenching, the trench shall be dug only as far in advance of the conduit as permitted by the Superintendent.

The trench bottom, regardless of whether it is existing, imported, or recompacted material, shall be shaped to provide a uniform and continuous bearing support for the conduit on solid and undisturbed material at every point between couplings. Couplings shall be provided for pipe. Excavations for conduit shall be two inches wider than the outside diameter of the conduit. Pipe shall not be installed in the trench until the subgrade preparation meets the above specifications, as determined by the Superintendent.

Surplus excavated material shall be removed and disposed of immediately by the Contractor. After each excavation is complete, the Contractor shall notify the Superintendent and under no circumstances shall any conduit or material

be covered without inspection and approval.

#### B. Backfilling

Excavation in trenches shall be backfilled to the original ground surface or to such grades as specified or shown on the drawings. Backfilling shall begin as soon as practical after the pipe has been placed and shall be carried on as rapidly as is consistent with construction in the open trench work area.

Complete cleanup shall proceed directly behind the backfilling to facilitate the return to normal conditions. The Contractor shall have sufficient equipment on the job at all times to assure timely backfilling and cleanup.

Backfilling and compacting shall be done as thoroughly as possible to prevent after-settlement. Depositing of the backfill shall be done so the impact of falling material will not damage the conduit. Grading over and around the work shall be done as directed by the Superintendent.

Backfilling of the conduit trenches shall be done by placing aggregate base course material CDOT Specification, Class 6, tamping in lifts of not more than six inches, to the bottom surface of the structural roadway material. The remaining portion of the excavation shall be backfilled with the same type of material used to construct the existing roadway surface.

Use of non-shrinking backfill material as outlined in City of Greeley Standards may be substituted for above.

When the trench excavation is within the right-of-ways of State or County highways, the backfilling of the trench, compaction of materials, sub-grade preparation, and surfacing shall be done in strict accordance with the requirements and specifications of the State or County Highway Department. Unless otherwise specified, this work shall be considered incidental to other portions of the contract.

The Contractor shall blade and compact the roadway after the trench has been backfilled, so it shall be passable to traffic at all times. The Contractor shall maintain the roadway in a condition acceptable to the Superintendent until final acceptance of the entire work by the City.

The Contractor shall remedy at no cost to the City any defects that appear in the backfill following completion and during the guarantee period.

#### C. Removing and Replacing Improvements

When a part of a square or slab of existing concrete sidewalk is broken or damaged, the entire square or slab shall be removed and the sidewalk reconstructed as specified above. The outline of areas to be removed in Portland Cement concrete shall be outlined and shall be cut to a minimum depth of 12" with an abrasive-type saw prior to removing the material. Cut for the remainder of the required depth may be made by any method satisfactory to the Engineer. Saw cuts shall be neat and true with no shattering or chipping of concrete adjacent to or outside of the removal area.

Cuts in existing bituminous pavement shall be saw cut or cut with a sharp-edged wheel roller.

Removed bituminous and concrete materials shall be hauled from the site and disposed of by and at the expense of the Contractor, at a suitable disposal site provided by the Contractor.

Trenches in the roadway shall be patched within five calendar days. The Contractor shall be responsible for maintaining trenches on a daily basis until the final patch is in place. In the event the Contractor cannot comply within the allotted time frame, the City may employ a secondary contractor to install the necessary patch, and back

charge the original Contractor for patch installation.

#### TS-3 CONDUIT

#### A. General

Conductors shall be run in conduit except when run in metal poles. A nylon pull line shall be left in each conduit run for future pulling of wires. Conduit shall be rigid PVC or galvanized rigid steel conforming to the plans, standard specifications, and/or the special provisions.

Electrical conduits running to the control cabinet shall enter from the bottom of the cabinet unless otherwise noted on the plans. Conduit runs shown on the plans are tentative as to routing and may be changed as directed by the Superintendent to avoid underground obstructions. In the event of any change from the location shown on the plans, accurate records shall be kept for as-built drawings, and necessary details submitted to the Superintendent before final payment is made.

#### B. PVC conduit

PVC conduit shall be manufactured of high-impact PVC, and shall conform to industry standards and commercial standards No. CS-207-60. Each length of PVC conduit and back of the various PVC fittings (expansion joints, couplings, adapter, etc.) shall bear the label of Underwriter's Laboratories, Inc. The conduit shall be of the size or sizes shown on the plans or indicated in the special provisions. All PVC conduits shall be schedule 40, except under any travel way HDPE SDR 11 shall be used. PVC conduit shall be used only for underground installations. Conduit used above ground shall be GRC.

A #8 AWG stranded copper conductor shall run continuously in all PVC conduits used for traffic signal circuits. This wire is used for bonding and grounding purposes.

A nylon pull line of not less than 500 lb. tensile strength shall run continuously in all conduits. Bare copper conductor and nylon pull line shall be supplied by the Contractor and shall be incidental to conduit installation.

#### C. Galvanized Rigid conduit

Conduit and fittings shall be galvanized rigid steel and shall be uniformly and adequately zinc-coated by the hotdipped process conforming to ASTM Designation A153. Joints shall be set up tight with squared ends. Fastenings shall be secured and of a type appropriate in design and dimensions for the particular application. Couplings, connectors, and fittings shall be approved types specifically designed and manufactured for the purpose. Fittings shall be installed to provide a good electrical grounding throughout the conduit system. Neither the interior nor the exterior of a six-inch sample cut from the center of a standard length of conduit, when tested in accordance with the applicable portion of ASTM Designation A239, shall show a fixed deposit of copper after four one-minute immersions in the standard copper sulphate solution. The interior of the rigid conduit shall have a galvanized coating. Each length shall bear the label of Underwriters' Laboratories, Inc., and shall conform to appropriate articles of the electrical code.

#### D. Conduit Installation

Conduit under railroad tracks shall not be less than 42 inches below the bottom of the tie or as specified by railroad code. It shall be the responsibility of the Contractor to obtain clearance from the railroad before any work is done within the railroad right-of-way. The minimum size of conduit to be used will be shown on the plans or as required on the wire layout sheets. Conduit smaller than 3/4-inch electrical trade size shall not be used, unless otherwise specified, except that grounding jumpers at service points may be enclosed in 2-inch conduit. Conduit installed for future use shall terminate in a pull box, and each conduit end shall also be capped. Each pull box (other than water valves) shall have a minimum of 6" of 3/4" rock and 4" clearance from the top of

the conduit to the bottom of the lid.

E. PVC conduit Installation

In bending PVC conduit, the following methods may be used.

1. A water bending process may be used consisting of a water-filled steel pipe four feet long, heated to the temperature that will render the PVC conduit pliable in approximately 30 seconds after insertion in the pipe. The conduit may then be bent to the desired angle and held in an appropriate jig for a cooling period of approximately 20 seconds.

2. The Contractor may use other methods of bending PVC conduit if the preceding method is found unsuitable because of climactic conditions, but only after demonstrating the proposed method to the Superintendent and receiving his approval.

Bends in PVC conduit shall be made and conform to all appropriate sections of the National Electrical Code or local codes governing bending radius, and number of bends allowed as applicable for rigid conduit.

Conduit bends, except factory bends, shall have a radius of not less than six times the inside diameter of the conduit. When factory bends are not used, conduit shall be bent without crimping or flattening using the longest radius practicable.

#### F. Termination of conduit

Galvanized rigid conduit terminations shall be fitted with insulating bushings to prevent chafing of wire on exposed edges. Threaded ends shall be protected with approved insulated metal ground bushings or insulated bushing material, and sealed by duct seal.

#### G. Pull Boxes

All pull boxes shall be polymer concrete type (or an approved equal) with size to be determined by the superintendent. Each pull box will have installed a 5/8" X 10' ground rod and all # 8 copper wires attached to the ground rod. All conduits shall enter the pull box from the bottom and sweep up. There shall be at least 4" clearance between the top of the conduit and the top of the box and no more than 6". Each box shall contain a minimum of 6" of 3/4" rock.

#### TS-4 Traffic Signal Equipment Removal

This projects includes removing existing traffic signal equipment including signal poles, mast arms, hand holes, and signal heads as indicated on the plans. All traffic signal equipment that is removed shall remain the property of City of Greeley. Poles will be stripped clean of all attached parts before transporting. The existing poles will be transported by the contractor to the City's Traffic Signal Yard on 8<sup>th</sup> Street. Any abandoned caisson or foundation shall be fully or partially removed and disposed of by the CONTRACTOR per the direction of the ENGINEER. Any conduit runs associated with an abandoned caisson or foundation shall be extended or abandoned as called for on the plans.

When existing traffic signal installations are modified or completely rebuilt, the CONTRACTOR shall work around existing traffic signal equipment until the new or modified traffic signal system has been installed and put into operation. Signal heads installed on standards or poles for new installation, which are not ready for actual electrical operation, shall be bagged with either black plastic or a suitable non-transparent material. The CONTRACTOR shall at all times maintain operation of a minimum of two (2) three section (red, yellow, and green) traffic signal heads and pedestrian heads (if required) for each roadway approach.

#### TS-5 CONCRETE FOUNDATIONS

#### A. General

Foundations shall be concrete conforming to City of Greeley Class "BZ" mix requirements.

After pouring the concrete, the anchor bolts shall be raised and lowered individually to eliminate any air pockets, and to allow proper alignment of the anchor bolts in the concrete prior to the setting of the concrete.

If the Contractor proposes any deviations in the pouring of foundations, the City Engineer prior to pouring of the concrete shall approve the deviations.

B. Poles, Standards, and Pedestal Foundations

Poles, standards, and pedestals shall not be erected until the foundation concrete has set at least seven days. Foundations for high-strain poles shall set a minimum of ten days. Equipment shall be plumbed or raked as required and directed by the Superintendent.

Foundations for poles shall normally be flush-top and shall be located as shown on the plans or as directed by the Superintendent. The maximum distance behind the curb for pole locations is desired. In locations where the roadway is not curbed, the top of the foundations shall be six inches plus or minus one-quarter inch above the grade of the edge of the pavement. Where foundations are located in the sidewalk, the foundation shall be two inches above the surface of the sidewalk. Expansion material shall be placed between the foundation and the sidewalk, with the top of the expansion material level with the sidewalk surface.

Poles that are to be painted, shall be washed with approved solvent, a two-part primer coat applied with an approved primer (Macro Poxy 846) and two-part epoxy paint (Sherman Williams code B65ST304) Federal Green.

The provisions in the above paragraph are general descriptions for normal roadway conditions. In certain cases, special foundation requirements may be indicated on the plans or required by the City Engineer. For example: where heavy excavations, embankments, sloping (rip-rap) areas near the roadway, or unusual soil conditions are encountered.

#### C. Controller Foundations

Controller foundations shall be concrete conforming to City of Greeley Class "B" mix requirements. Foundations for traffic signal controller cabinets, when located in sidewalks, shall rise above the sidewalk surface as shown on the plans. Foundations may also be approved fiberglass when approved by the Superintendent.

The foundation shall be caulked with an asphalt or silicon caulk, or "Rubberneck" sealant prior to placing the cabinet on the foundation.

#### TS-6 VEHICLE DETECTOR INSTALLATION

The vehicle detection system shall be specified by the City of Greeley, and shall be installed per manufacturer standards. Vehicle detection cameras shall be mounted on the mast arm poles as shown on the plans. The mounting of the cameras shall be in accordance with manufacturer's specification to provide proper operation of the devices. The vehicle detection system shall consist of the Trafisense 2 detectors for all four approaches complete with the communication manager, I/0 24 Module, connecting cables, mounting brackets as well as other hardware/software (items listed below) for a complete system.

Camera – Trafisense 2 632 w/sunshield (TFC) (S) TrafiSense TI BPL2 EDGE B&SIU (TFC) (S) TrafiSense 48V PS Assembly 12 Pos. Terminal Block w/24 male Terminal Forks Assembly Trafisense2 Cable Easy Pull 18/3C-1000 6' Pole & Mounting Bracket

#### TS-7 CABLE AND CONDUCTORS

A. General

Cable and conductors shall conform to the applicable I.M.S.A. Specifications and to these specifications. Multi conductor cable shall be copper and conform to IMSA Specification 19-1. The individual conductors in Multi conductor cable shall be 14 gauge stranded copper wire. Pedestrian push button wire shall be IMSA 19-1 AWG #16 Street light wire shall be 19-1 AWG 12, 3 conductor (Black, White, and Green) Cat 5e cable shall be OSP rated.

Opticom emergency priority equipment shall be wired with 3M cable designed specifically for this type of equipment. Opticom lead-in cables shall not be spliced. Opticom lead-in shall be color coded Purple.

All signal heads shall use IMSA 19-1 AWG 14-7 conductor.

All poles shall have a continuous run from traffic signal cabinet using IMSA 19-1 AWG 14-21 conductor.

Any detector cabling shall meet the manufacturer specifications.

Separate conduits for low voltage and high voltage conductors shall be provided in all signal installations. High voltage conductors shall be run in conduits separate from low voltage actuation lead-ins and telephone interconnect.

Opticom emergency priority equipment shall be wired with 3M cable designed specifically for this type of equipment.

Connections to signal heads, pushbuttons, and traffic controllers shall be secured to the screw type terminals in the traffic signal heads, pedestrian pushbuttons, and the traffic controller. The connectors shall be of the spade tongue type and shall be affixed to the conductors using a tool designed specifically for the connection of the connectors to the conductors. Wire nuts shall be used for the connections at all hand holes.

The wiring for each mast arm mounted signal head shall be taped with the appropriate number of bands, color coded by direction, to indicate signal head number, with the head furthest from the pole being number one.

Unused conductors in each cable shall be folded back on the cable and securely taped.

### City Of Greeley

#### 21 Conductor Cable Wiring

MAI	N STREET	SIDE	STREET					
CONDUCTOR	INDICATION	CONDUTOR	INDICATION					
RED	RED	RED/BLK	RED					
ORANGE	YELLOW	ORANGE/BLK	YELLOW					
GREEN	GREEN	GREEN/BLK	GREEN					
RED/WHT	RED ARROW	BLACK	RED ARROW					
ORANGE/RED	YELLOW ARROW	WHITE/BLACK	YELLOW ARROW					
GREEN/WHT	GREEN ARROW	BLUE	GREEN ARROW					
BLACK/WHT	DON'T WALK	BLACK/RED	DON'T WALK					
BLUE/WHT	WALK	BLUE/RED	WALK					
WHITE	SIGNAL NEUTRAL	BLUE/BLACK	SPARE / FYA					
WHITE/RED	PED NEUTRAL	RED/GRN	SPARE					
ORANGE/GRN	SPARE / FYA							
	SEVEN CONDUCTO	R CABLE WIRING						
CONDUCTOR		INDICATION						
RED	RED BALL OR ARROW	/ [3 SECTION] OR MAIN S	TREET DON'T WALK					
ORANGE	YELLOV	V BALL OR ARROW [3 SEC	TION]					
GREEN	GREEN BALL OR AF	ROW [3 SECTION] OR M	AIN STREET WALK					
WHITE/BLK	YELLOW ARROW [	5 SECTION] OR FLASHING	YELLOW ARROW					
BLUE	GREEN ARRO	W [5 SECTION] OR SIDE S	TREET WALK					
WHITE		NEUTRAL						
BLACK	SPARE	SPARE OR SIDE STREET DON'T WALK						

CABLE COLOR [TAPE] CODES						
NORTHBOUND	RED	LEFT TURN	WHITE			
SOUTHBOUND	GREEN	PEDESTRIAN	YELLOW			
EASTBOUND	ORANGE	RIGHT TURN	GRAY			
WESTBOUND	BLUE					

Separate Multi conductor cables shall be provided for each signal phase. Each mast arm mounted signal face shall be wired separately back to the pole base. The signal face farthest from the pole shall always be wired to accept a five-section signal face, whether that face is installed or not.

Unused conductors in each cable shall be folded back on the cable and securely taped.

Opticom lead-in cables shall not be spliced.

Connections to signal heads, pushbuttons, and traffic controllers shall be secured to the screw type terminals in the traffic signal heads, pedestrian pushbuttons, and the traffic controller. The connectors shall be of the spade tongue type and shall be affixed to the conductors using a tool designed specifically for the connection of the connectors to the conductors. Wire nuts shall be used for the connections at all pull boxes.

Sheath for detectors shall not be grounded.

The wiring for each mast arm mounted signal head shall be taped with the appropriate number of bands, color coded by direction, to indicate signal head number, with the head furthest from the pole being number one.

CONDUCTOR COLOR	INDICATION	TAPE COLOR
Northbound through Vehicles:		
Green		
Orange	Green	Red
Red	Yellow	Red
	Red	Red
Northbound Left Turns:		
Blue		
White/Blk	Green Arrow	Red + White
Red	Yellow Arrow	Red + White
	Red Arrow	Red + White
Northbound Right Turns:		
Green		
Orange	Green Arrow	Red + Gray
Red	Yellow Arrow	Red + Gray
	Red Arrow	Red + Gray
Northbound Pedestrians:		
Blue		
Black	Walk	Red + Yellow
	Don't Walk	Red + Yellow
Southbound through Vehicles:		
Green		
Orange	Green	Green
Red	Yellow	Green
	Red	Green
Southbound Left Turns:		
Green		
Orange	Green Arrow	Green + White
Red	Yellow Arrow	Green + White
	Red Arrow	Green + White

#### Seven conductor cable wiring

Southbound Right Turns:	I	
Green		
	Green Arrow	Green + Gray
Orange	Yellow Arrow	Green + Gray
Red	Red Arrow	Green + Gray
Southbound Pedestrians:		
Southbouna Peaestrians: Blue		
	Walk	Green + Yellow
Black	Don't Walk	Green + Yellow
	Don't walk	Green + Tenow
Eastbound through Vehicles:		
Green		
Orange	Green	Orange
Red	Yellow	Orange
Neu	Red	Orange
Eastbound Left Turns:		
Green		
Orange	Green Arrow	Orange + White
Red	Yellow Arrow	Orange + White
Neu	Red Arrow	Orange + White
Eastbound Right Turns:		
Green		
Orange	Green Arrow	Orange + Gray
Red	Yellow Arrow	Orange + Gray
Neu	Red Arrow	Orange + Gray
Eastbound Pedestrians:		
Blue	Walls	Oren as   Vallou
Black	Walk	Orange + Yellow
DIACK	Don't Walk	Orange + Yellow
Westbound through Vehicles:		
Green		
Orange	Green	Blue
Red	Yellow	Blue
	Red	Blue
Westbound Left Turns:		
Green		
Orange	Green Arrow	Blue + White
Red	Yellow Arrow	Blue + White
	Red Arrow	Blue + White
Westbound Right Turns:		
Green		
Orange	Green Arrow	Blue + Gray
Red	Yellow Arrow	Blue + Gray
	Red Arrow	Blue + Gray
Westbound Pedestrians:		
Blue	Walk	Blue + Yellow
Black	Don't Walk	Blue + Yellow
Other:		
White	Common Signal	
White/Black	Common Signal	
	Unused or Common Ped	

Opticom lead-in shall be color coded Purple.

The Contractor shall install two single conductor #6 AWG wire from the controller to the service connection pull box or service pole, leaving three extra feet of wire in the pull box.

#### TS-8 SERVICE SYSTEMS

#### A. General

Service points shown on the plans are approximate only. The exact location will be determined in the field by the Contractor, the Superintendent, and Xcel Energy Company.

Xcel Energy Company will make the electrical service connections. The Contractor shall be responsible for coordinating the service connection with Xcel Energy Company.

#### **B. Service Pole**

Conduit shall be strapped to the pole with rigid two-hole straps with #8 or #9 12" wood screws, or as shown on the plans. Plumber's tape, wire nails, or other means of fastening conduit shall not be used. In locations where it is necessary, conduits, covers, and gaskets shall be furnished and installed by the Contractor.

Conduit used in the service installation above ground shall be GRC of the size specified on the plans or special provisions. In areas where the GRC is coupled to PVC conduit used for the underground portion of the service run, the joining of the two conduits shall take place 18 inches underground utilizing a GRC factory elbow.

The conduit shall be securely bonded to the service pole when deemed necessary by the Superintendent, and shall also be bonded in a like manner to the service pole ground system.

#### A. General

Separate Purchase Orders may be issued for individual work projects. All invoices by the Contractor for work done shall be itemized by work item and location, and shall reference the applicable Purchase Order.

Items listed as **Furnish and Install** shall mean that the Contractor shall furnish and install the item, and shall furnish all other materials, equipment, and labor to complete the item.

Items listed as **Remove** shall mean that the Contractor shall remove the item and return it to the City at the Municipal Service Center, 1300 A Street, and exercising care not to damage or lose the removed item. The Contractor shall furnish all materials, equipment, and labor to complete the item. Items listed, as **Reset** shall mean that the Contractor shall remove the item and install it in its relocated position. The Contractor shall furnish all other materials, equipment, and labor to complete the item.

Items listed as **Replace** shall mean that the Contractor shall remove the existing item and return it to the City at the Municipal Service Center, exercising care not to damage or lose the removed item. The Contractor shall install in its place a similar but different item, as shown in the plans. The Contractor shall furnish all other materials, equipment, and labor to complete the item.

#### **B.** Trench, Backfill, and Restore

Trenching and backfilling shall not be paid for separately but included in the price of the conduit. Price and payment shall include all materials, equipment, and labor to remove and dispose of spoils and improvements, furnish and install backfill material, and replace and restore removed improvements

#### **C. Bored or Pushed Conduit**

Bored or pushed conduit will be paid for at the contract unit price per linear foot, measured from end point to end point. Price and payment shall include furnishing and installing conduit as shown on the plans or as directed by the Superintendent.

#### **D.** Conduit

Conduit installation will be paid for at the contract unit prices per linear foot. Prices and payment shall include furnishing and installing as shown on the plans or as directed by the Superintendent.

#### E. Pot Holing

All potholes in concrete or asphalt shall be restored per MEGPEC Item 18.3.7 (special provision) that states Pot Holes "shall be filled with flow fill up to the bottom of the existing pavement. The rest of the hole shall be filled to within one quarter (1/4) inch of the finished grade with a non-shrink grout." Other requirements for potholing work as specified in the City of Greeley's Design Criteria and Construction Specifications shall apply.

#### F. Pull Box

Pull box installation will be paid for at the contract unit price per each. Price and payment shall include installation as shown on the plans or as directed by the Superintendent. All pull boxes shall meet the ANSI/SCTE 77 2013-Tier 22 specification (or an approved equal) with the sizes as specified on the plans.

#### G. Cabinet Foundation (Furnish and Install)

Cabinet foundations will be paid for at the contract unit price per each. Price and payment shall include forming the foundation, furnishing and placing the ground rod, placing the anchor bolts, and furnishing and pouring the concrete. Cabinet foundation may be of the fiberglass type at the discretion of the Superintendent.

#### H. Cabinet Step Pad

Cabinet step pads will be paid for at the contract unit price per each. Price and payment shall include a concrete and/or a strong polymer concrete and reinforced pad with a heavy-weave.

#### I. Cabinet

Cabinet installations will be paid for at the contract unit price per each including the cost of the traffic signal controller and UPS unit. Price and payment shall include mounting the cabinet on the base and making all connections to render the cabinet fully operable. The traffic controller will be configured and provided by the City of Greeley. The cabinet will contain a UPS unit and generator connector specified by the City of Greeley.

#### J. Mast Arm Pole or Combination Pole

Mast arm pole or combination mast arm and street light pole installations will be paid for at the contract unit price per each. Price and payment shall include installing either a precast or field-poured foundation in conformance with current City of Greeley Standards or Colorado Department of Transportation Standards, the traffic signal pole associated mast arm as shown on the plans.

#### **K. Pedestal Pole**

Pedestal pole installations will be paid for at the contract unit prices per each for each size listed. Prices and payment shall include furnishing and installing a concrete foundation with two 2-inch conduits, furnishing and installing the ground rod, and installing the pole as shown on the plans.

#### L. Traffic Signal Head

Traffic signal head installations will be paid for at the contract unit price per each. Price and payment shall include making sure all hardware in and out of the head is tight. Assembling and attaching all mounting hardware, mounting the signal head as shown on the plans (including back plate). Furnishing and installing the cable to the pole base hand-hole, at the hand-hole splices shall be made with the appropriate size wire nuts. Signal head cabling shall extend 18" out of the hand hole. All splices and connections to render the traffic signal head fully operable. Signal heads shall be mounted 18' from the bottom of the signal head to pavement crown (left most head) when installed on the mast arm, the remaining heads on the arm to be level with this head. Sky-brackets (part # SB59-SCK) will be used to mount the traffic heads to the mast arms. Side of pole signal heads to be 10' from the bottom of the head to grade.

Pedestrian signal heads to be 8' from the bottom of the head to grade. Side of Pole Signals shall be mounted using 3/4" Band-it. Holes to facilitate wiring of signal and pedestrian heads are to be drilled and shall be a minimum of 3/4" in diameter. All holes will be deburred by filing with rat-tail file. Traffic signal heads shall be McCain traffic signal heads. Back plates shall have a 2" yellow retro-reflective outer border.

#### M. Traffic Signal Head Removal

Traffic signal head removals will be paid for at the contract unit price per each.

#### N. Pedestrian Push-button Assembly

Push-button assembly installations will be paid for at the contract unit price per each. Price and payment shall include furnishing, mounting the push-button assembly and making all connections to render the pushbutton fully operable. Buttons shall be mounted 38" from the ground. Mounting of the assembly shall be by drilling and tapping 1/4" X 20 holes and the hole for wiring shall be drilled a minimum of 3/4" diameter. Pedestrian push buttons shall be specified by the City of Greeley.

#### **O.** Pedestrian Instructional Sign

Pedestrian instructional sign (R10-3) shall not be paid for separately but included in the cost of the pedestrian push button. Price and payment shall include the following: drill and tap holes for 5/16" screws provided with the sign, and mount 9" x 12" sign, as shown on the plans.

#### P. Pedestrian Push-button Wire

Pedestrian push-button wire will be paid for at the contract unit price per linear foot, measured from the termination at the push-button assembly to the controller termination. Price and payment shall include making all connections to render the item fully operable. All wiring shall be paid for as a lump sum under the Wiring item.

#### **Q. Multi Conductor**

Multi conductor will be paid for at the contract unit price per linear foot, measured from the controller to the final hand-hole splice prior. (Multi conductor from the final hand-hole splice to the signal head is included in signal head installation unit pricing.) Price and payment shall include making all connections to render the item fully operable. All wiring shall be paid for as a lump sum under the Wiring item.

#### **R.** Grounding and Bonding Wire

# 8 AWG CU stranded wire will be paid for at the contract unit price per linear foot, measured from pull box to pull box and multiplied times the number of conduits. All wiring shall be paid for as a lump sum under the Wiring item.

#### **S. Service Entrance Wire**

One each black and white # 8 AWG CU stranded will be paid for at the contract unit price per linear foot, measured from the Utility termination point to the cabinet. All wiring shall be paid for as a lump sum under the Wiring item.

#### **T. Fire Preemption Unit and Timer**

Fire Preemption Unit and Timer installations will be paid for at the contract unit price per each. Price and payment shall include making all connections and configurations to render the item fully operable. The unit and timer shall use Global Traffic Technologies 722 dual-channel detectors and 764 Phase Selector card. The cost of the item shall also include troubleshooting services for 30 days after the traffic signal is operational.

#### **U. Fire Preemption Unit Wire**

Fire Preemption unit wire shall not be paid for separately but shall be included in the cost of the Fire Preemption Unit and Timer. Price and payment shall include furnishing and installing the wire and making all terminations necessary to make the Fire Preemption Unit fully operable. All fire preemption unit lead-in wire shall be continuous and un-spliced.

#### **V. LED Signal Indication**

LED signal indication will be paid for at the contract unit price per each.

#### W. Intersection Detection System

Intersection detection system shall be specified by the City of Greeley, installations for four approaches will be paid for at the contract unit price per each. Price and payment shall include making all connections and configurations to render the item fully operable. The cost of the item shall also include troubleshooting services for 30 days after the traffic signal is operational.

#### **X. Detection Cabling**

Video detection cables will not be paid for separately but shall be included in the cost of the Intersection Detection System. Price and payment shall include installing the wire as shown on the plans or as directed by the Superintendent.

#### Y. Communications Radio

If Communication Radio is specified, installation will be paid for at the contract unit price per each. Price and payment shall include making all connections to render the item fully operable. The communication radio shall be an Encom 5.8 GHz Broadband radio and antenna.



#### TEMPORARY TRAFFIC CONTROL WORK ZONES REVIEW FORM CITY OF GREELEY / DEPARTMENT OF PUBLIC WORKS 1001 9TH AVE GREELEY, CO. 80631 Office - (970) - 336-4091 Cellular - (970) - 539- 6213 Fax - (970) - 336-4142

Fax or return to the Transportation Services Division Office for Review.

BY SIGNING THIS DOCUMENT YOU WILL ASSUME ALL RESPONSIBILITY FOR SETTING UP THE TEMPORARY TRAFFIC CONTROL WORK ZONE BY MEETING OR EXCEEDING SET STANDARDS AND FOLLOWING THE M.U.T.C.D. MANUAL REQUIREMENTS, ALONG WITH THE STATE, FEDERAL, AND CITY OF GREELEY SPECIFICATIONS AND REGULATIONS. I have been offered a copy of this form and I have been advised to read it carefully.

Full Road Closures with complete Detour Routes will require a five (5) working day advance notice to have Method of Handling Traffic Plans reviewed. A 72 hour notice is strongly recommended prior to construction. This form and the (MHT) Plan SHALL are on the job site at all times.

In consideration of the acceptance of my entry, I do hereby acknowledge that I assume all risks and liability resulting from work performed. That I have acquired all permits, licenses, and fees required by the City of Greeley, and submitted a Method of Handling Traffic Control (MHT) along with this form.

I acknowledge that I have carefully read this "Temporary Traffic Control Review Form" and fully understand that I am (trained and/or certified) about the fundamental principles of TTC and responsible for the proper temporary traffic control setup and maintenance thru-out the duration ON the jobsite.

Print Name Signature	Date
Description of Work:	City Permit No
Project Location and/or Street Address:	
Does job require: (Please Circle Appropriate One(s)) ROAD CLOSURE LAN	E CLOSURE SHOULDER CLOSURE SIDEWALK CLOSURE
OTHER	
Work Schedule: Start Date Finish Date	Requested Time(s) from:am/pm toam/pm
CONTRACTOR / SUBCONTRACTOR / CITY DEPT. PERFORMING WORK	TRAFFIC CONTROL COMPANY USED
Company Name	Company Name
Address	Address
City State Zip	City State Zip
Office Phone	Office Phone
Mobile Phone	Mobile Phone
Fax	Fax
Work Site Contact:	Work Site Contact:
Temporary Traffic Control Supervisor (TCS) Responsible for Job Site:	Temporary Traffic Control Supervisor (TCS) Responsible for Job Site:
TCS Contact Name	TCS Contact Name
PLEASE CHECK APPRO	DPRIATE BOX(S)
□ PRIVATE JOB □ CIP □ CITY MAINTANCE □ OTHER	TRAFFIC CONTROL CO. DOING TRAFFIC CONTROL SETUP
CONTRACTOR / CITY DEPT. SETTING UP OWN TRAFFIC CONTROL	EQUIP. RENTAL ONLY FROM TRAFFIC CONTROL COMPANY
0	FFICE USE
COMMENTS:	
MHT Accepted MHT Resubmitted For Extension Date(s)	From To
MHT Denied REVIEVED BY:	Date:
	2 () Provisions

## Summary of Approximate Quantities

### Four (4) CBD Traffic Signal Upgrade Projects Summary of Approximate Quantities

CDOT Item			10th Ave at	10th Ave at	11th Ave at	11th Ave at	Total
Code	Item Description	Unit	10th St	13th St	10th St	9th St	Qty
202-00200	Removal of Sidewalk	SY	8	2	0	2	12
202-00200	Removal of Curb and Gutter	LF	9	12	3	22	46
202-00220	Removal of Asphalt Mat	SY	17	28	4	13	62
202-00220	Reset Pull Box	EACH	17	28	3	13	5
202-00827	Removal of Traffic Signal Equipment	LACIT	1	1	1	1	4
202-00828			L		1	L	4
202-00848	Removal of Traffic Signal Controller and Cabinet	LS	1	1	1	1	4
202-00858	Removal of Pedestal Pole	EACH	0	0	0	1	1
	Removal of Concrete Foundation and						
202-00950	Slab	SY	0	0	0	1.2	1.2
210-00865	Reset Pedestrian Signal Head	EACH	6	6	4	6	22
212-01200	Landscape Restoration	LS	1	1	1	1	4
403-00721	Hot Mix Asphalt (Patching) (Asphalt)	SY	17	28	4	13	62
613-01200	2 Inch Electrical Conduit (Schedule 80 PVC)	LF	140	175	95	150	560
613-01310	3 Inch Electrical Conduit (Schedule 80 PVC)	LF	115	230	85	150	580
613-10000	Wiring	LS	1	1	1	1	4
614-72858	Pedestal Pole (3 foot - 6 Inch (install Only with Base )	EACH	1	1	1	1	4
614-72858	Pedestrian Push Button (Install Only)	EACH	8	8	8	8	32
514-75848	Traffic Signal Cabinet (Install Only)	EACH	1	1	1	1	4
	Polymer Controller Cabinet Base (Install Only)	EACH	1	1	1	1	4
	Traffic Signal Pedestal Pole (Install Only						
614-84455	with Base)	EACH	2	3	2	3	10
630-00003	Uniformed Traffic Control (by City)	Hour	8	1	8	8	25
	Optiona	Bid Iten	ns				
608-00006	Concrete Sidewalk (6 Inch) Restoration	SY	8	2	0	2	12
609-21020	Curb and Gutter Type 2 (Section 11-b)	LF	9	12	3	22	46
614-70337	Traffic Signal Face (12-12-12) (Install Only)	EACH	2	4	3	2	11
614-72896	Intersection Detection System and Base (Install Only)	EACH	4	4	3	3	14

### CITY OF GREELEY, COLORADO PUBLIC WORKS DEPARTMENT - TRANSPORTATION DIVISION

#### SIGNALIZED INTERSECTION MODIFICATIONS PROJECT <u>TRAFFIC SIGNAL IMPROVEMENTS</u> 11TH AVENUE AT 9TH STREET



# **DESIGN PLANS**

Print Date: 6/25/2020	_	c c	Sheet Revisions		NG	As Constructed		. IMPROVEMENTS AT 9TH STREET	Project No./Code
File Name: 118063-03 SIG TTL-01.dwg Horizontal Scale: Vertical Scale:	$\mathbb{R}-X$	Date	Comments	Initials	City of	No Revisions:	_	SHEET	_
6300 South Syracuse Way, Suite 600 Centennial, CO 80111 Phone: 303 721 1440					Public Works Dept Transportation Division 1001 9th Avenue	Revised:		Structure Numbers	-
ULLEVIG         Phone: 303,721.1440           www.FHUENG.com         Phone: 303,721.1440	0				Great. From the Ground Up. Greeley, CO 80631 (970) 350-9881	Void:			Sheet Number 1

#### INDEX OF SHEETS

SHEET NO	CURCET	DESCRIPTION
<u>SHEET NO.</u>	<u>SUBSET</u>	DESCRIPTION
1	TTL-01	TITLE SHEET
2	GN-01	GENERAL NOTES
3	SAQ-01	SUMMARY OF APPROXIMATE QUANTITIES
4	CG-01	ROADWAY CONSTRUCTION
5	RSIG-01	RESET AND REMOVAL TRAFFIC SIGNAL PLAN
6	PSIG-01	PROPOSED TRAFFIC SIGNAL PLAN
7	SUE-01	SUBSURFACE UTILITY ENGINEERING PLAN

### 2ND DRAFT JUNE 25, 2020

#### TRAFFIC SIGNAL GENERAL NOTES:

- THIS PROJECT CONSISTS OF REMOVING PULL BOXES. TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. AND 1. FURNISHING AND INSTALLING TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. FOR SPECIFIC DETAILS OF INFRASTRUCTURE REMOVAL AND INSTALLATION, SEE THE CORRESPONDING SECTIONS OF THESE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF GREELEY'S STANDARDS AND SPECIFICATIONS. THE COLORADO DEPARTMENT OF TRANSPORTATION'S (CDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019", CDOT'S "STANDARD PLANS, 2019", AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION".
- ALL LOCATIONS OF PROJECT ITEMS ARE APPROXIMATE. THE EXACT PLACEMENT OF PROJECT INFRASTRUCTURE SHALL BE 2. DETERMINED BY CITY STAFF. ALL QUANTITY TABULATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE REPSONSIBLE FOR INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL CALL THE CITY OF GREELEY (ART PEREZ, 970-539-6211) PRIOR TO ANY TRAFFIC SIGNAL WORK. .3. THE CITY OF GREELEY SHALL FURNISH TRAFFIC SIGNAL HEADS, PEDESTRIAN PUSH BUTTONS AND SIGNS, INTERSECTION DETECTION CAMERAS, AND THE TRAFFIC SIGNAL CONTROLLERS AND CABINETS.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF GREELEY ON THE TRAFFIC SIGNAL CONTROLLER CABINET CUT-OVER 4. AND REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT. THE CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNAL OPERATIONS BY TEMPORARILY INSTALLING TRAFFIC SIGNAL WIRING AND SPLICES BETWEEN THE TRAFFIC SIGNAL POLE AND THE EXISTING PULL BOX WHILE NEW CONDUIT IS INSALLTED TO THE NEW PULL BOXES IN EACH INTERSECTION CORNER. A UNIFORMED TRAFFIC CONTROL OFFICER MUST BE PRESENT TO AID IN CONTROLLING TRAFFIC WHEN THE TRAFFIC SIGNALIS NOT IN OPERATION. TRAFFIC CONTROL PLANS MUST MEET MUTCD STANDARDS AND THE CITY S TEMPORARY TRAFFIC CONTORL SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE CITY OF GREELEY FOR APPROVAL PRIOR TO THE START OF 5. ANY WORK THAT MAY IMPACT VEHICLE OR PEDESTRIAN TRAFFIC. TRAFFIC CONTROL PLANS MUST BE PREPARED BY AN INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION (IMSA) CERTIFIED WORK ZONE TEMPORARY TRAFFIC CONTROL TECHNICIAN.
- NO CONSTRUCTION VEHICLES SHALL BE IN THE TRAVELED WAY AT ANY TIME WITHOUT APPROPRIATE CONSTRUCTION TRAFFIC 6. CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A TRAFFIC CONTROL PERMIT FROM THE CITY OF **GREELEY**
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE MOVEABLE. ALL SUCH DEVICES SHALL BE REMOVED BY THE 7. CONTRACTOR FROM THE WORK SITE AT THE END OF EACH WORK DAY.
- 8. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS, AND SHALL COORDINATE BORING AND TRENCHING ACTIVITIES SO THAT UTILITY COMPANIES CAN HAVE PERSONNEL ON SITE, IF THEY SO DESIRE. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT PHONE NO. 811 TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. A SUBSURFACE UTILITY ENGINEERING (SUE) INVESTIGATION WAS CONDUCTED BY BASELINE ENGINEERING CORPORATION AND IS INCLUDED ON SHEET NO. 7.
- THE CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGED UTILITIES CAUSED BY THEIR CONSTRUCTION ACTIVITY. UTILITY 9. REPLACEMENT OR REPAIR SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.
- ALL WORK SHALL BE CONDUCTED WITHIN PUBLIC RIGHT-OF-WAY, WITH THE APPROPRIATE PUBLIC PERMITS ON THE JOB SITE 10. AT ALL TIMES. THE CONTRACTOR SHALL OBTAIN ALL SUCH PERMITS REQUIRED BY THE CITY OF GREELEY.
- THE CONTRACTOR SHALL ENSURE THAT NO MATERIALS, EQUIPMENT, OR VEHICLES ARE STAGED OR PARKED NEAR WETLAND OR 11. DRAINAGE AREAS, THE CONTRACTOR SHALL REMOVE IN A TIMELY MANNER ALL SEDIMENT, MUD, DEBRIS OR OTHER POTENTIAL POLLUTANTS WHICH MAY BE DISCHARGED TO, OR ACCUMULATE IN, THE FLOW LINES AND PUBLIC RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- 12. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES AND USE BEST MANAGEMENT PRACTICES (BMP) TO CONTROL THE FLOW OF SOILS/DEBRIS, ETC. INTO STATE WATERS. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE CITY OF GREELEY FOR APPROVAL BEFORE BEGINNING WORK THAT DISTURBS EXISTING GROUND.
- 1.3 BACKFILL OF EXCAVATED AREAS WILL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE ASSOCIATED WORK.
- THE CONTRACTOR SHALL USE AN APPROPRIATE AND APPROVED MEANS FOR CAPTURING AND REMOVAL OF ANY AND ALL 14. CONCRETE WASHOUT. SUCH WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE PROJECT.
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Ś	HOLT & Centennial, CO 80111 Phone: 303.721.1440	$\square$				1001 9th Avenue Greeley, CO 80631		Detaile
-		$\bigcirc$				Great. From the Ground Up. (970) 350-9881	Void:	Subset

- 17. STREET, BUILDING E, GREELEY, CO 80631.
- 18. THE CABINET FIBER OPTIC PATCH PANEL.
- 19. THE TRAFFIC ENGINEER AND/OR HIS DESIGNEE.
- CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY FOR THE OPERATION OF THE SYSTEM AND SHALL CONTACT THE CITY 20.
- 21. EXISTING GROUND.
- ANY OTHER ADDITIONAL DATA REQUIRED BY THE CITY.

#### SUPPLEMENTAL UTILITY CONTACT LIST:

SEE SUBSURFACE UTILITY INVESTIGATION DATA FOR UTILITY CONTACT INFORMATION. CITY OF GREELEY CONTACT INFORMATION INCLUDES:

CITY	OF	GREELEY	ENGINEERING	DAVE W
CITY	OF	GREELEY	WATER & SEWER	BOB N
CITY	OF	GREELEY	TRAFFIC	ART PEF
CITY	OF	GREELEY	STORMWATER	ERIC WE

16. THE CONTRACTOR SHALL REPLACE ANY DAMAGED LANDSCAPING. INCLUDING TOPSOIL, GRASS, IRRIGATION SYSTEM COMPONENTS, TREES, SHRUBS, GROUND COVERS AND MULCH, TO ITS ORIGINAL CONDITION. SOD SHALL MATCH EXISTING. IN NON-SODDED AREAS, SOIL PREPARATION, SEEDING (NATIVE), MULCHING (WEED FREE) AND MULCH TACKIFIER SHALL BE USED.

ALL REMOVED TRAFFIC SIGNAL EQUIPMENT SHALL BE RETURNED TO THE CITY OF GREELEY TRAFFIC SIGNAL SHOP AT 1300 A

THE CONTRACTOR SHALL GENTLY REMOVE THE EXISTING LATERAL FIBER OPTIC CABLE FROM THE EXISTING SIGNAL CONTROLLER CABINET AND NEATLY COIL WITHIN COMMUNICATIONS PULL BOX OUTSIDE CABINET. THE CITY OF GREELEY SHALL PULL EXISTING LATERAL FIBER OPTIC CABLE FROM COMMUNICATION PULL BOX INTO NEW SIGNAL CONTROLLER CABINET AND TERMINATE IN

ALL SIGNAL CABLE IS TO BE CONTINUOUS FROM CONNECTIONS MADE IN THE HANDHOLE COMPARTMENT OF THE SIGNAL POLE BASE TO THE TERMINAL COMPARTMENT IN THE CONTROLLER CABINET. SPLICING WILL NOT BE PERMITTED UNLESS VERIFIED BY

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22. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUPPLY 2 SETS OF RECORD DRAWINGS, CORRECTED PLANS AND

- 970-350-9796 VELLS
- VFAL 970-350-9811
- REZ 970-350-9398
- FIS 970-350-9856

TRAFFIC SIGNAL IMPROVEMENTS 11TH AVENUE AT 9TH STREET GENERAL NOTES       Project No./Code         ner:       RRF structure         er:       DEM         Numbers       Structure		
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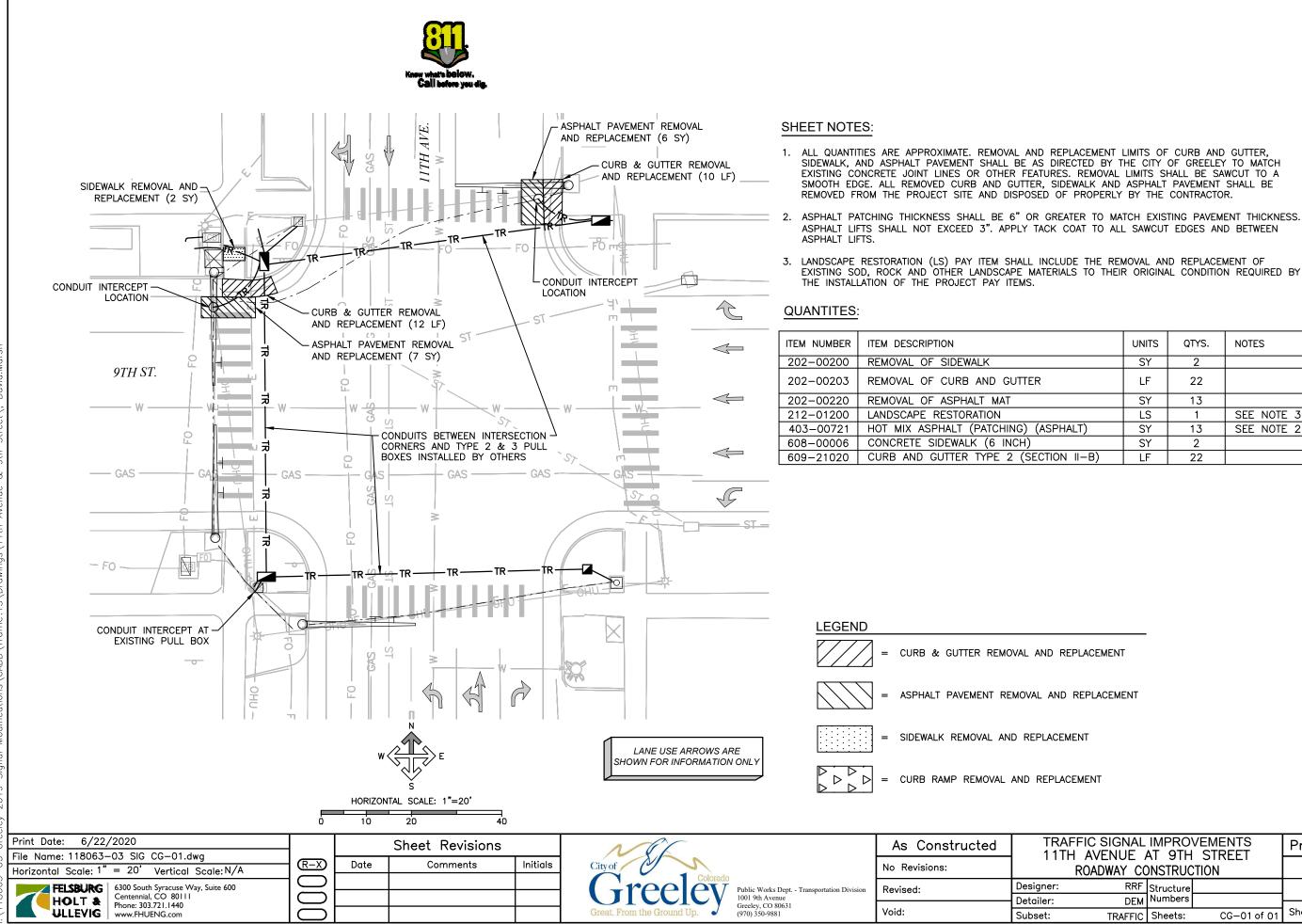
#### SUMMARY OF APPROXIMATE QUANTITIES

CDOT ITEM	ITEM DESCRIPTION	UNIT		AVE AT ST	COMMENTS
CODE			Plan	As Const.	
202-00200	REMOVAL OF SIDEWALK	SY	2		
202-00203	REMOVAL OF CURB AND GUTTER	LF	22		
202-00220	REMOVAL OF ASPHALT MAT	SY	13		
202-00827	REMOVAL OF PULL BOX	EACH	1		
202–00828	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	LS	1		TRAFFIC SIGNAL CABLING AND LEAD-IN CABLE
202-00848	REMOVAL OF TRAFFIC SIGNAL CONTROLLER AND CABINET	EACH	1		
202-00858	REMOVAL OF PEDESTAL POLE	EACH	1		
202-00950	REMOVAL OF CONCRETE FOUNDATION AND SLAB	SY	1.2		REMOVAL OF PEDESTAL POLE
210-00865	RESET PEDESTRIAN SIGNAL HEAD	EACH	6		
212-01200	LANDSCAPE RESTORATION	LS	1		
403-00721	HOT MIX ASPHALT (PATCHING) (ASPHALT)	SY	13		
608-00006	CONCRETE SIDEWALK (6 INCH)	SY	2		
609-21020	CURB AND GUTTER TYPE 2 (SECTION II-B)	LF	22		
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	150		
613-01300	3 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	150		
613-10000	WIRING	LS	1		
614-70337	TRAFFIC SIGNAL FACE (12-12-12) (INSTALL ONLY)	EACH	2		
614-72858	PEDESTAL POLE (3 FOOT 6 INCH) (INSTALL ONLY)	EACH	1		PEDESTRIAN PUSH BUTTON PO
614-72861	PEDESTRIAN PUSH BUTTON (INSTALL ONLY)	EACH	8		
614-72896	INTERSECTION DETECTION SYSTEM AND BASE (INSTALL ONLY)	EACH	3		
614-75855	TRAFFIC SIGNAL CONTROLLER & CABINET (INSTALL ONLY)	EACH	1		
	POLYMER CONTROLLER CABINET BASE (INSTALL ONLY)	EACH	1		
614-84455	TRAFFIC SIGNAL PEDESTAL POLE (INSTALL ONLY)	EACH	3		
630-00003	UNIFORMED TRAFFIC CONTROL (BY CITY)	HOUR	8		SIGNAL CUT-OVER

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Centennial, CO 80111	$\square$				1001 9th Avenue		Detailer
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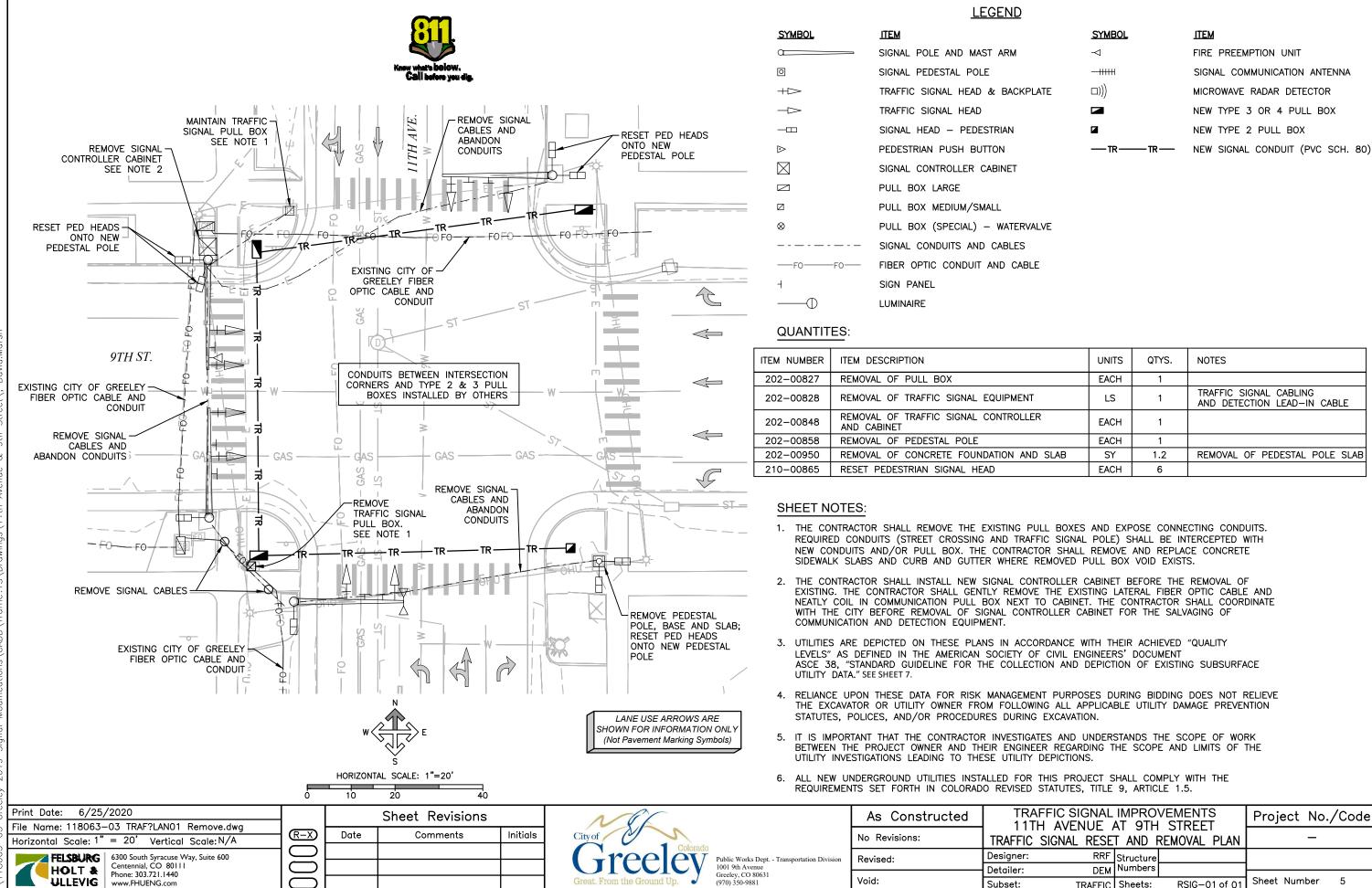
D DETECTION
SLAB
POLE

TRAFFIC 11TH A		Project No.	/Code		
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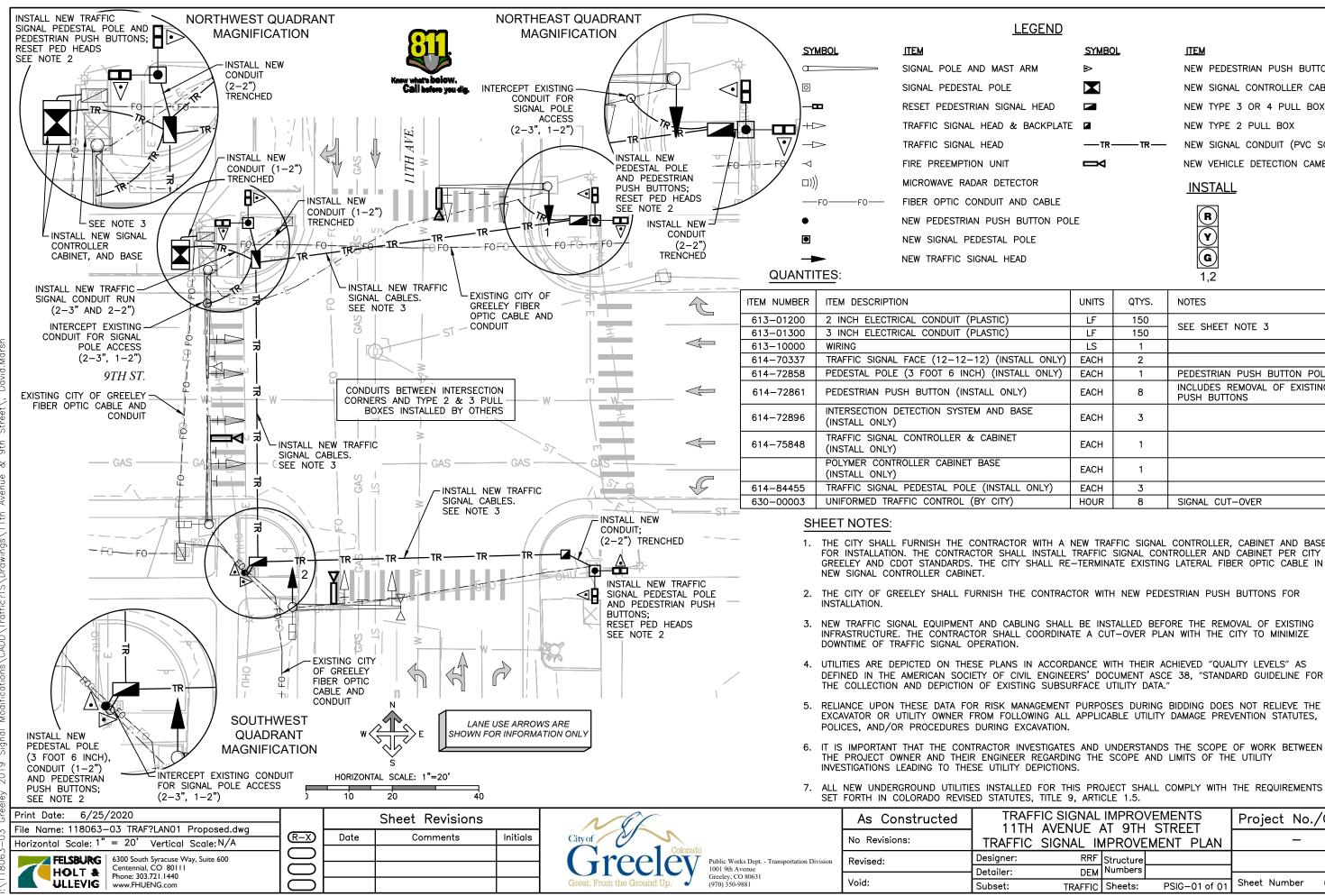
UNITS	QTYS.	NOTES
SY	2	
LF	22	
SY	13	
LS	1	SEE NOTE 3
SY	13	SEE NOTE 2
SY	2	
LF	22	
	SY LF LS SY SY	SY         2           LF         22           SY         13           LS         1           SY         13           SY         2

TRAFFIC SIGNAL	Project No.	/Code		
ROADWAY CO	1			
ner: RRF	Structure			
er: DEM	Numbers			
et: TRAFFIC	Sheets:	CG-01 of 01	Sheet Number	4



	UNITS	QTYS.	NOTES
	EACH	1	
MENT	LS	1	TRAFFIC SIGNAL CABLING AND DETECTION LEAD-IN CABLE
ROLLER	EACH	1	
	EACH	1	
N AND SLAB	SY	1.2	REMOVAL OF PEDESTAL POLE SLAB
	EACH	6	

TRAFFIC SIGNAL IMPROVEMENTS 11TH AVENUE AT 9TH STREET	Project No./Code
FIC SIGNAL RESET AND REMOVAL PLA	N –
THE SIGNAL RESET AND REMOVAL TEA	
ner: RRF Structure	
er: DEM Numbers	
t: TRAFFIC Sheets: RSIG-01 of	01 Sheet Number 5



ITEM

— TR —

NEW PEDESTRIAN PUSH BUTTON
NEW SIGNAL CONTROLLER CABINET
NEW TYPE 3 OR 4 PULL BOX
NEW TYPE 2 PULL BOX
NEW SIGNAL CONDUIT (PVC SCH. 80)
NEW VEHICLE DETECTION CAMERA

INSTALL



	UNITS	QTYS.	NOTES
C)	LF	150	SEE SHEET NOTE 3
C)	LF	150	SEE SHEET NOTE 5
	LS	1	
NSTALL ONLY)	EACH	2	
ISTALL ONLY)	EACH	1	PEDESTRIAN PUSH BUTTON POLE
ONLY)	EACH	8	INCLUDES REMOVAL OF EXISTING PUSH BUTTONS
) BASE	EACH	3	
NET	EACH	1	
	EACH	1	
TALL ONLY)	EACH	3	
TY)	HOUR	8	SIGNAL CUT-OVER

THE CITY SHALL FURNISH THE CONTRACTOR WITH A NEW TRAFFIC SIGNAL CONTROLLER, CABINET AND BASE FOR INSTALLATION. THE CONTRACTOR SHALL INSTALL TRAFFIC SIGNAL CONTROLLER AND CABINET PER CITY OF GREELEY AND CDOT STANDARDS. THE CITY SHALL RE-TERMINATE EXISTING LATERAL FIBER OPTIC CABLE IN

INFRASTRUCTURE. THE CONTRACTOR SHALL COORDINATE A CUT-OVER PLAN WITH THE CITY TO MINIMIZE

DEFINED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS' DOCUMENT ASCE 38, "STANDARD GUIDELINE FOR

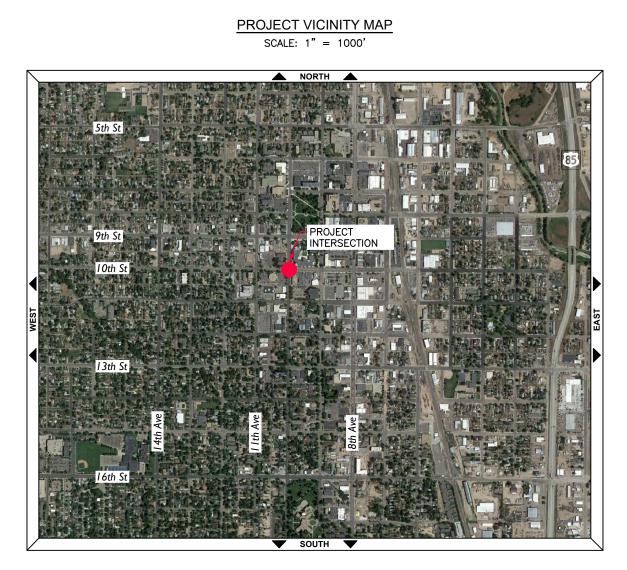
5. RELIANCE UPON THESE DATA FOR RISK MANAGEMENT PURPOSES DURING BIDDING DOES NOT RELIEVE THE EXCAVATOR OR UTILITY OWNER FROM FOLLOWING ALL APPLICABLE UTILITY DAMAGE PREVENTION STATUTES,

7. ALL NEW UNDERGROUND UTILITIES INSTALLED FOR THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS

TRAFFIC SIGNAL IMPROVEMENTS 11TH AVENUE AT 9TH STREET	Project No./Code	
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t: TRAFFIC Sheets: PSIG-01 of 01	Sheet Number 6	

# CITY OF GREELEY, COLORADO PUBLIC WORKS DEPARTMENT - TRANSPORTATION DIVISION

## SIGNALIZED INTERSECTION MODIFICATIONS PROJECT <u>TRAFFIC SIGNAL IMPROVEMENTS</u> 10TH AVENUE AT 10TH STREET



# **DESIGN PLANS**

0	Print Date: 6/25/2020 File Name: 118063-03 SIG TTL-01.dwg	-		Sheet Revisions		NG	As Constructed	TRAFFIC SIGNAL 10TH AVENUE A	IMPROVEMENTS	Project No./Code
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3063	FELSBURG 6300 South Syracuse Way, Suite 600 Centennial, CO 80111	$ \square$				Public Works Dept Transportation Division 1001 9th Avenue	Revised:		Structure	
118	ULLEVIG Vertennal, CO 80111 Phone: 303.721.1440 www.FHUENG.com					Greeley CO 80631	Void:		Numbers Sheets: TTL-01 of 01	Sheet Number 1
<u>.</u>								Subset: TITLE	Sheets: IIL-UI of UI	

### INDEX OF SHEETS

SHEET NO.	SUBSET	DESCRIPTION
1	TTL-01	TITLE SHEET
2	GN-01	GENERAL NOTES
3	SAQ-01	SUMMARY OF APPROXIMATE QUANTITIES
4	CG-01	ROADWAY CONSTRUCTION
5	RSIG-01	RESET AND REMOVAL TRAFFIC SIGNAL PLAN
6	PSIG-01	PROPOSED TRAFFIC SIGNAL PLAN
7	SUE-01	SUBSURFACE UTILITY ENGINEERING PLAN

# 2ND DRAFT JUNE 25, 2020

#### TRAFFIC SIGNAL GENERAL NOTES:

- THIS PROJECT CONSISTS OF REMOVING PULL BOXES. TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. AND 1. FURNISHING AND INSTALLING TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. FOR SPECIFIC DETAILS OF INFRASTRUCTURE REMOVAL AND INSTALLATION, SEE THE CORRESPONDING SECTIONS OF THESE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF GREELEY'S STANDARDS AND SPECIFICATIONS. THE COLORADO DEPARTMENT OF TRANSPORTATION'S (CDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019", CDOT'S "STANDARD PLANS, 2019", AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION".
- ALL LOCATIONS OF PROJECT ITEMS ARE APPROXIMATE. THE EXACT PLACEMENT OF PROJECT INFRASTRUCTURE SHALL BE 2. DETERMINED BY CITY STAFF. ALL QUANTITY TABULATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE REPSONSIBLE FOR INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL CALL THE CITY OF GREELEY (ART PEREZ, 970-539-6211) PRIOR TO ANY TRAFFIC SIGNAL WORK. .3. THE CITY OF GREELEY SHALL FURNISH TRAFFIC SIGNAL HEADS, PEDESTRIAN PUSH BUTTONS AND SIGNS, INTERSECTION DETECTION CAMERAS, AND THE TRAFFIC SIGNAL CONTROLLERS AND CABINETS.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF GREELEY ON THE TRAFFIC SIGNAL CONTROLLER CABINET CUT-OVER 4. AND REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT. THE CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNAL OPERATIONS BY TEMPORARILY INSTALLING TRAFFIC SIGNAL WIRING AND SPLICES BETWEEN THE TRAFFIC SIGNAL POLE AND THE EXISTING PULL BOX WHILE NEW CONDUIT IS INSALLTED TO THE NEW PULL BOXES IN EACH INTERSECTION CORNER. A UNIFORMED TRAFFIC CONTROL OFFICER MUST BE PRESENT TO AID IN CONTROLLING TRAFFIC WHEN THE TRAFFIC SIGNALIS NOT IN OPERATION. TRAFFIC CONTROL PLANS MUST MEET MUTCD STANDARDS AND THE CITY S TEMPORARY TRAFFIC CONTORL SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE CITY OF GREELEY FOR APPROVAL PRIOR TO THE START OF 5. ANY WORK THAT MAY IMPACT VEHICLE OR PEDESTRIAN TRAFFIC. TRAFFIC CONTROL PLANS MUST BE PREPARED BY AN INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION (IMSA) CERTIFIED WORK ZONE TEMPORARY TRAFFIC CONTROL TECHNICIAN.
- NO CONSTRUCTION VEHICLES SHALL BE IN THE TRAVELED WAY AT ANY TIME WITHOUT APPROPRIATE CONSTRUCTION TRAFFIC 6. CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A TRAFFIC CONTROL PERMIT FROM THE CITY OF **GREELEY**
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE MOVEABLE. ALL SUCH DEVICES SHALL BE REMOVED BY THE 7. CONTRACTOR FROM THE WORK SITE AT THE END OF EACH WORK DAY.
- 8. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS, AND SHALL COORDINATE BORING AND TRENCHING ACTIVITIES SO THAT UTILITY COMPANIES CAN HAVE PERSONNEL ON SITE, IF THEY SO DESIRE. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT PHONE NO. 811 TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. A SUBSURFACE UTILITY ENGINEERING (SUE) INVESTIGATION WAS CONDUCTED BY BASELINE ENGINEERING CORPORATION AND IS INCLUDED ON SHEET NO. 7.
- THE CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGED UTILITIES CAUSED BY THEIR CONSTRUCTION ACTIVITY. UTILITY 9. REPLACEMENT OR REPAIR SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.
- ALL WORK SHALL BE CONDUCTED WITHIN PUBLIC RIGHT-OF-WAY, WITH THE APPROPRIATE PUBLIC PERMITS ON THE JOB SITE 10. AT ALL TIMES. THE CONTRACTOR SHALL OBTAIN ALL SUCH PERMITS REQUIRED BY THE CITY OF GREELEY.
- THE CONTRACTOR SHALL ENSURE THAT NO MATERIALS, EQUIPMENT, OR VEHICLES ARE STAGED OR PARKED NEAR WETLAND OR 11. DRAINAGE AREAS, THE CONTRACTOR SHALL REMOVE IN A TIMELY MANNER ALL SEDIMENT, MUD, DEBRIS OR OTHER POTENTIAL POLLUTANTS WHICH MAY BE DISCHARGED TO, OR ACCUMULATE IN, THE FLOW LINES AND PUBLIC RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- 12. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES AND USE BEST MANAGEMENT PRACTICES (BMP) TO CONTROL THE FLOW OF SOILS/DEBRIS, ETC. INTO STATE WATERS. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE CITY OF GREELEY FOR APPROVAL BEFORE BEGINNING WORK THAT DISTURBS EXISTING GROUND.
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-	ULLEVIG www.FHUENG.com	$\square$				Great. From the Ground Up. (970) 350-9881	Void:	Subset

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- 21. EXISTING GROUND.
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CITY	OF	GREELEY	WATER & SEWER	BOB N
CITY	OF	GREELEY	TRAFFIC	ART PEF
CITY	OF	GREELEY	STORMWATER	ERIC WE

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- 970-350-9796 VELLS
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- REZ 970-350-9398
- FIS 970-350-9856

TRAFFIC SIGNAL IMPROVEMENTS       Project No./Code         10TH AVENUE AT 10TH STREET       —         GENERAL NOTES       —         ner:       RRE Istructure					
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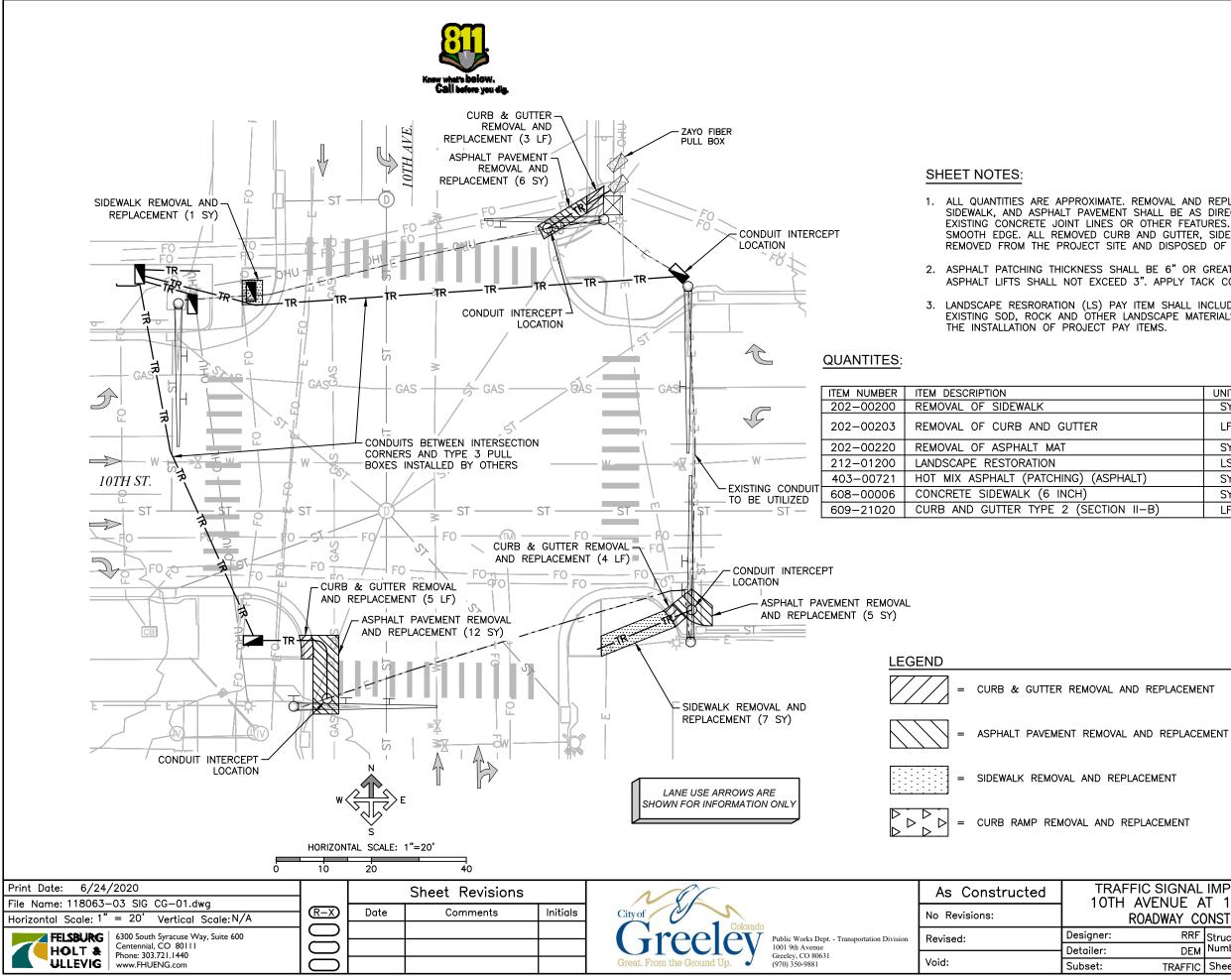
#### SUMMARY OF APPROXIMATE QUANTITIES

COMMENTS	AVE AT 1 ST	1	UNIT	ITEM DESCRIPTION	CDOT_ITEM		
	As Const.	Plan			CODE		
		8	SY	REMOVAL OF SIDEWALK	202-00200		
		9	LF	REMOVAL OF CURB AND GUTTER	202-00203		
		17	SY	REMOVAL OF ASPHALT MAT	202-00220		
		1	EACH	REMOVAL OF PULL BOX	202-00827		
TRAFFIC SIGNAL CABLING / LEAD-IN CABLE		1	LS	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	202-00828		
		1	EACH	REMOVAL OF TRAFFIC SIGNAL CONTROLLER AND CABINET	202-00848		
		6	EACH	RESET PEDESTRIAN SIGNAL HEAD	210-00865		
		1	LS	LANDSCAPE RESTORATION	212-01200		
		17	SY	HOT MIX ASPHALT (PATCHING) (ASPHALT)	403-00721		
		8	SY	CONCRETE SIDEWALK (6 INCH)	608-00006		
		9	LF	CURB AND GUTTER TYPE 2 (SECTION II-B)	609-21020		
		140	LF	2 INCH ELECTRICAL CONDUIT (PLASTIC)	613-01200		
		115	LF	3 INCH ELECTRICAL CONDUIT (PLASTIC)	613-01300		
		1	LS	WIRING	613-10000		
		2	EACH	TRAFFIC SIGNAL FACE (12-12-12) (INSTALL ONLY)	614-70337		
PEDESTRIAN PUSH BUTTON		1	EACH	PEDESTAL POLE (3 FOOT 6 INCH) (INSTALL ONLY)	614-72858		
		8	EACH	PEDESTRIAN PUSH BUTTON (INSTALL ONLY)	614-72861		
		4	EACH	INTERSECTION DETECTION SYSTEM AND BASE (INSTALL ONLY)	614-72896		
		1	EACH	TRAFFIC SIGNAL CONTROLLER & CABINET (INSTALL ONLY)	614-75848		
		1	EACH	POLYMER CONTROLLER CABINET BASE (INSTALL ONLY)			
		2	EACH	TRAFFIC SIGNAL PEDESTAL POLE (INSTALL ONLY)	614-84455		
SIGNAL CUT-OVER		8	HOUR	UNIFORMED TRAFFIC CONTROL (BY CITY)	630-00003		

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SIGNAL CONI 10TH AVENI		Project No.,	/Code		
JMMARY OF AF	PRC	QUANTITIES	—		
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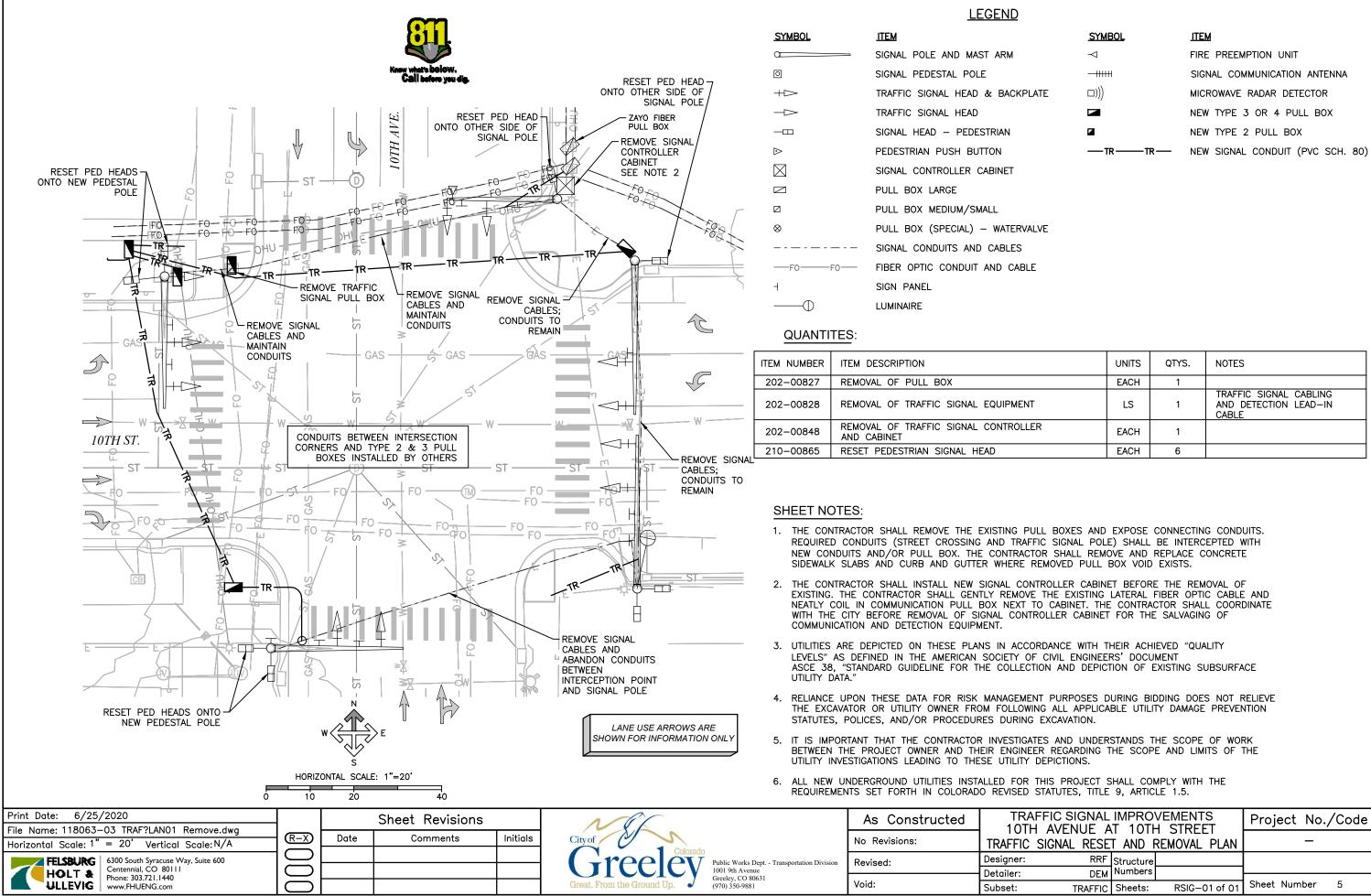
1. ALL QUANTITIES ARE APPROXIMATE. REMOVAL AND REPLACEMENT LIMITS OF CURB AND GUTTER, SIDEWALK, AND ASPHALT PAVEMENT SHALL BE AS DIRECTED BY THE CITY OF GREELEY TO MATCH EXISTING CONCRETE JOINT LINES OR OTHER FEATURES. REMOVAL LIMITS SHALL BE SAWCUT TO A SMOOTH EDGE. ALL REMOVED CURB AND GUTTER, SIDEWALK AND ASPHALT PAVEMENT SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR.

2. ASPHALT PATCHING THICKNESS SHALL BE 6" OR GREATER TO MATCH EXISTING PAVEMENT THICKNESS. ASPHALT LIFTS SHALL NOT EXCEED 3". APPLY TACK COAT TO ALL SAWCUT EDGES.

3. LANDSCAPE RESRORATION (LS) PAY ITEM SHALL INCLUDE THE REMOVAL AND REPLACEMENT OF EXISTING SOD, ROCK AND OTHER LANDSCAPE MATERIALS TO THEIR ORIGINAL CONDITION REQUIRED BY

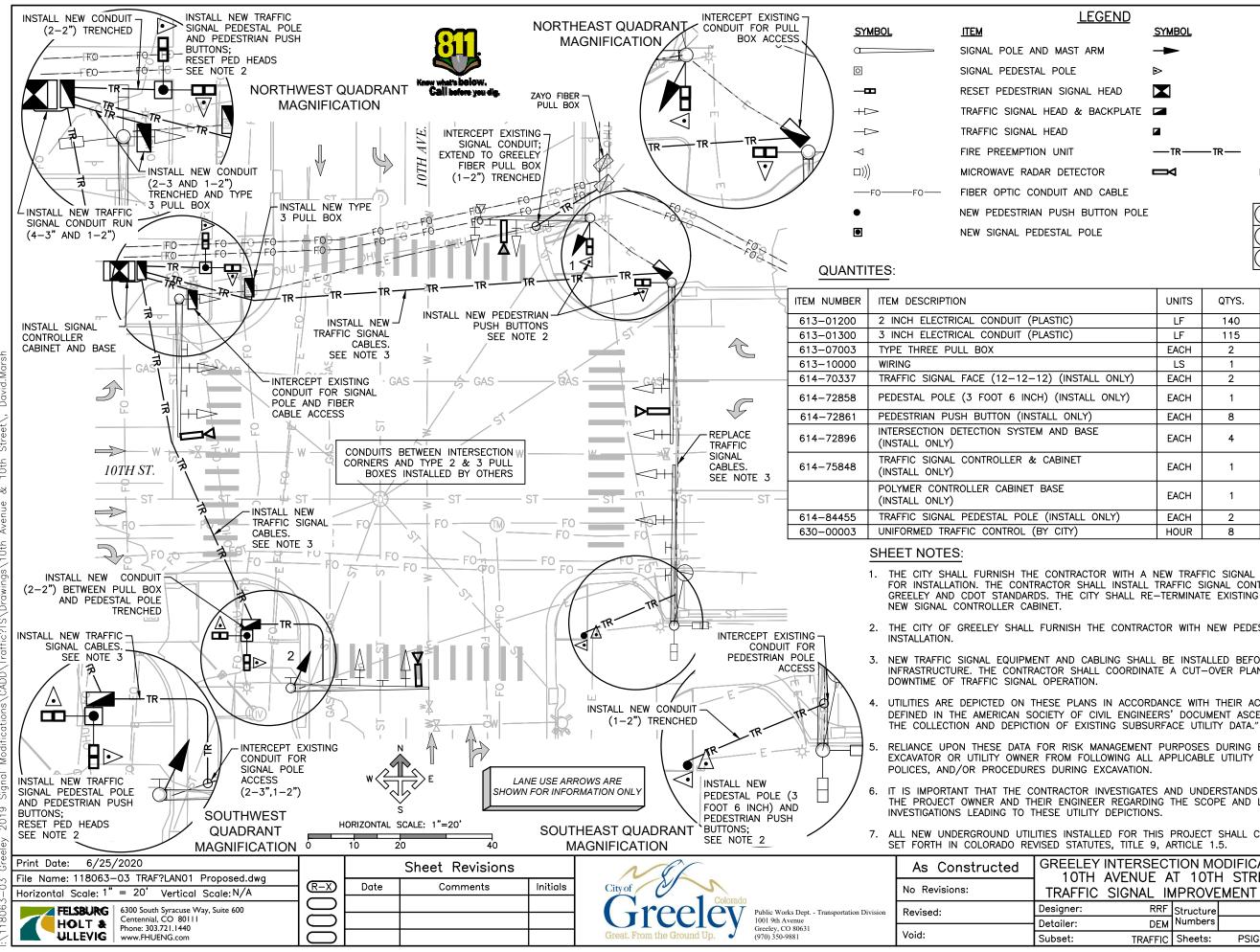
	UNITS	QTYS.	NOTES
	SY	8	
२	LF	9	
	SY	17	
	LS	1	SEE NOTE 3
(ASPHALT)	SY	17	SEE NOTE 2
	SY	8	
CTION II-B)	LF	9	

TRAFFIC SIGNAL	Project No./Code			
ROADWAY CO	-			
ner: RRF	Structure			
er: DEM	Numbers			
et: TRAFFIC	Sheets:	CG-01 of 01	Sheet Number	4

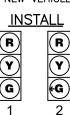


	UNITS	QTYS.	NOTES
	EACH	1	
PMENT	LS	1	TRAFFIC SIGNAL CABLING AND DETECTION LEAD-IN CABLE
ROLLER	EACH	1	
	EACH	6	

TRAFFIC SIGN 0TH AVENUE		Project No.	/Code	
		-		
FIC SIGNAL RE	<u>.SEI AND</u>	REMOVAL PLAN		
ner: F	RF Structure			
er: D	EM Numbers			
t: TRAF	FIC Sheets:	RSIG-01 of 01	Sheet Number	5



<u>LEGEND</u>		
	SYMBOL	ITEM
ST ARM	-	NEW TRAFFIC SIGNAL HEAD
E		NEW PEDESTRIAN PUSH BUTTON
SNAL HEAD		NEW SIGNAL CONTROLLER CABINET
& BACKPLATE		NEW TYPE 3 OR 4 PULL BOX
		NEW TYPE 2 PULL BOX
-	—TRTR	
TECTOR		NEW SIGNAL CONDUIT (PVC SCH. 80) NEW VEHICLE DETECTION CAMERA



UNITS	QTYS.	NOTES
LF	140	SEE SHEET NOTE 4
LF	115	SEE SHEET NOTE 4
EACH	2	
LS	1	
EACH	2	
EACH	1	PEDESTRIAN PUSH BUTTON POLE
EACH	8	
EACH	4	
EACH	1	
EACH	1	
EACH	2	
HOUR	8	SIGNAL CUT-OVER
	LF LF EACH EACH EACH EACH EACH EACH EACH	LF     140       LF     115       EACH     2       LS     1       EACH     2       EACH     1       EACH     4       EACH     1       EACH     1

THE CITY SHALL FURNISH THE CONTRACTOR WITH A NEW TRAFFIC SIGNAL CONTROLLER, CABINET AND BASE FOR INSTALLATION. THE CONTRACTOR SHALL INSTALL TRAFFIC SIGNAL CONTROLLER AND CABINET PER CITY OF GREELEY AND CDOT STANDARDS. THE CITY SHALL RE-TERMINATE EXISTING LATERAL FIBER OPTIC CABLE IN

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3. NEW TRAFFIC SIGNAL EQUIPMENT AND CABLING SHALL BE INSTALLED BEFORE THE REMOVAL OF EXISTING INFRASTRUCTURE. THE CONTRACTOR SHALL COORDINATE A CUT-OVER PLAN WITH THE CITY TO MINIMIZE

UTILITIES ARE DEPICTED ON THESE PLANS IN ACCORDANCE WITH THEIR ACHIEVED "QUALITY LEVELS" AS DEFINED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS' DOCUMENT ASCE 38, "STANDARD GUIDELINE FOR

RELIANCE UPON THESE DATA FOR RISK MANAGEMENT PURPOSES DURING BIDDING DOES NOT RELIEVE THE EXCAVATOR OR UTILITY OWNER FROM FOLLOWING ALL APPLICABLE UTILITY DAMAGE PREVENTION STATUTES,

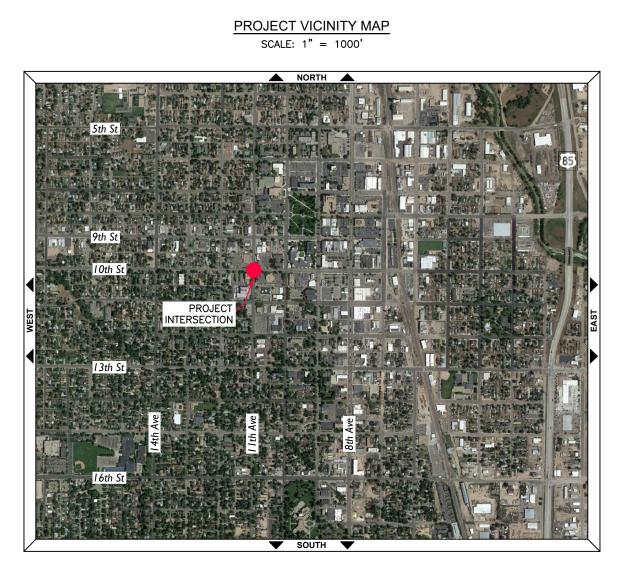
IT IS IMPORTANT THAT THE CONTRACTOR INVESTIGATES AND UNDERSTANDS THE SCOPE OF WORK BETWEEN THE PROJECT OWNER AND THEIR ENGINEER REGARDING THE SCOPE AND LIMITS OF THE UTILITY

ALL NEW UNDERGROUND UTILITIES INSTALLED FOR THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS

ELEY INTERSE OTH AVENUE		Project No./	Code	
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# CITY OF GREELEY, COLORADO PUBLIC WORKS DEPARTMENT - TRANSPORTATION DIVISION

## SIGNALIZED INTERSECTION MODIFICATIONS PROJECT <u>TRAFFIC SIGNAL IMPROVEMENTS</u> 11TH AVENUE AT 10TH STREET



# **DESIGN PLANS**

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Phone: 303.721.1440 Www.FHUENG.com	00				Great. From the Ground Up. Greeley, CO 80631 (970) 350-9881	Void:			Sheet Number 1

### INDEX OF SHEETS

<u>SHEET NO.</u>	<u>SUBSET</u>	DESCRIPTION
1	TTL-01	TITLE SHEET
2	GN-01	GENERAL NOTES
3	SAQ-01	SUMMARY OF APPROXIMATE QUANTITIES
4	CG-01	ROADWAY CONSTRUCTION
5	RSIG-01	RESET AND REMOVAL TRAFFIC SIGNAL PLAN
6	PSIG-01	PROPOSED TRAFFIC SIGNAL PLAN
7	SUE-01	SUBSURFACE UTILITY ENGINEERING PLAN

# 2ND DRAFT JUNE 25, 2020

#### TRAFFIC SIGNAL GENERAL NOTES:

- THIS PROJECT CONSISTS OF REMOVING PULL BOXES. TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. AND 1. FURNISHING AND INSTALLING TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. FOR SPECIFIC DETAILS OF INFRASTRUCTURE REMOVAL AND INSTALLATION, SEE THE CORRESPONDING SECTIONS OF THESE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF GREELEY'S STANDARDS AND SPECIFICATIONS. THE COLORADO DEPARTMENT OF TRANSPORTATION'S (CDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019", CDOT'S "STANDARD PLANS, 2019", AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION".
- ALL LOCATIONS OF PROJECT ITEMS ARE APPROXIMATE. THE EXACT PLACEMENT OF PROJECT INFRASTRUCTURE SHALL BE 2. DETERMINED BY CITY STAFF. ALL QUANTITY TABULATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE REPSONSIBLE FOR INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL CALL THE CITY OF GREELEY (ART PEREZ, 970-539-6211) PRIOR TO ANY TRAFFIC SIGNAL WORK. .3. THE CITY OF GREELEY SHALL FURNISH TRAFFIC SIGNAL HEADS, PEDESTRIAN PUSH BUTTONS AND SIGNS, INTERSECTION DETECTION CAMERAS, AND THE TRAFFIC SIGNAL CONTROLLERS AND CABINETS.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF GREELEY ON THE TRAFFIC SIGNAL CONTROLLER CABINET CUT-OVER 4. AND REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT. THE CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNAL OPERATIONS BY TEMPORARILY INSTALLING TRAFFIC SIGNAL WIRING AND SPLICES BETWEEN THE TRAFFIC SIGNAL POLE AND THE EXISTING PULL BOX WHILE NEW CONDUIT IS INSALLTED TO THE NEW PULL BOXES IN EACH INTERSECTION CORNER. A UNIFORMED TRAFFIC CONTROL OFFICER MUST BE PRESENT TO AID IN CONTROLLING TRAFFIC WHEN THE TRAFFIC SIGNALIS NOT IN OPERATION. TRAFFIC CONTROL PLANS MUST MEET MUTCD STANDARDS AND THE CITY S TEMPORARY TRAFFIC CONTORL SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE CITY OF GREELEY FOR APPROVAL PRIOR TO THE START OF 5. ANY WORK THAT MAY IMPACT VEHICLE OR PEDESTRIAN TRAFFIC. TRAFFIC CONTROL PLANS MUST BE PREPARED BY AN INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION (IMSA) CERTIFIED WORK ZONE TEMPORARY TRAFFIC CONTROL TECHNICIAN.
- NO CONSTRUCTION VEHICLES SHALL BE IN THE TRAVELED WAY AT ANY TIME WITHOUT APPROPRIATE CONSTRUCTION TRAFFIC 6. CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A TRAFFIC CONTROL PERMIT FROM THE CITY OF **GREELEY**
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE MOVEABLE. ALL SUCH DEVICES SHALL BE REMOVED BY THE 7. CONTRACTOR FROM THE WORK SITE AT THE END OF EACH WORK DAY.
- 8. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS, AND SHALL COORDINATE BORING AND TRENCHING ACTIVITIES SO THAT UTILITY COMPANIES CAN HAVE PERSONNEL ON SITE, IF THEY SO DESIRE. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT PHONE NO. 811 TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. A SUBSURFACE UTILITY ENGINEERING (SUE) INVESTIGATION WAS CONDUCTED BY BASELINE ENGINEERING CORPORATION AND IS INCLUDED ON SHEET NO. 7.
- 9. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGED UTILITIES CAUSED BY THEIR CONSTRUCTION ACTIVITY. UTILITY REPLACEMENT OR REPAIR SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.
- ALL WORK SHALL BE CONDUCTED WITHIN PUBLIC RIGHT-OF-WAY, WITH THE APPROPRIATE PUBLIC PERMITS ON THE JOB SITE 10. AT ALL TIMES. THE CONTRACTOR SHALL OBTAIN ALL SUCH PERMITS REQUIRED BY THE CITY OF GREELEY.
- THE CONTRACTOR SHALL ENSURE THAT NO MATERIALS, EQUIPMENT, OR VEHICLES ARE STAGED OR PARKED NEAR WETLAND OR 11. DRAINAGE AREAS, THE CONTRACTOR SHALL REMOVE IN A TIMELY MANNER ALL SEDIMENT, MUD, DEBRIS OR OTHER POTENTIAL POLLUTANTS WHICH MAY BE DISCHARGED TO, OR ACCUMULATE IN, THE FLOW LINES AND PUBLIC RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- 12. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES AND USE BEST MANAGEMENT PRACTICES (BMP) TO CONTROL THE FLOW OF SOILS/DEBRIS, ETC. INTO STATE WATERS. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE CITY OF GREELEY FOR APPROVAL BEFORE BEGINNING WORK THAT DISTURBS EXISTING GROUND.
- 1.3 BACKFILL OF EXCAVATED AREAS WILL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE ASSOCIATED WORK.
- THE CONTRACTOR SHALL USE AN APPROPRIATE AND APPROVED MEANS FOR CAPTURING AND REMOVAL OF ANY AND ALL 14. CONCRETE WASHOUT. SUCH WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE PROJECT.
- FOR ANY LANDSCAPE IRRIGATION SYSTEMS THAT WILL BE IMPACTED BY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL 15. COORDINATE WITH THE PROPERTY OWNER OR THEIR MAINTENANCE REPRESENTATIVE A MINIMUM OF 5 WORKING DAYS IN ADVANCE OF STARTING WORK IN THE AREA. WITH PROPER AND TIMELY NOTIFICATION, THE IRRIGATION OWNER CAN MARK AND IDENTIFY IRRIGATION SYSTEM COMPONENTS TO BE PROTECTED, BUT SHOULD NOT BE ASSUMED TO BE ALL INCLUSIVE OF ALL IRRIGATION SYSTEM COMPONENTS. NO LANDSCAPE AREAS SHALL BE WITHOUT WATERING SERVICES DURING THE GROWING SEASON. IF THE IRRIGATION SERVICE IS INTERRUPTED FOR MORE THAN THREE DAYS, THE CONTRACTOR SHALL MANUALLY WATER IMPACTED AREAS, AND POSSIBLY REPLACE PLANTINGS IN AFFECTED LANDSCAPE AREAS. ANY LANDSCAPE RESTORATION WORK SHALL ONLY BE CONSIDERED COMPLETE WHEN THE LANDSCAPE AND IRRIGATION SYSTEM IS RESTORED TO ITS ORIGINAL CONDITION AND APPROVED BY THE OWNER OR MAINTAINING PERSONNEL (THE CONTRACTOR SHALL ALLOW VISUAL INSPECTION OF ANY REPAIR WORK PRIOR TO BURIAL).

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- 17. STREET, BUILDING E, GREELEY, CO 80631.
- 18. THE CABINET FIBER OPTIC PATCH PANEL.
- 19. THE TRAFFIC ENGINEER AND/OR HIS DESIGNEE.
- CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY FOR THE OPERATION OF THE SYSTEM AND SHALL CONTACT THE CITY 20.
- 21. REPLACEMENT. PULL BOXES SHALL NOT BE INSTALLED WITHIN CURB RAMPS. ALL PULL BOXES SHALL BE FLUSH WITH EXISTING GROUND.
- ANY OTHER ADDITIONAL DATA REQUIRED BY THE CITY.

#### SUPPLEMENTAL UTILITY CONTACT LIST:

	UTILITY INVESTIGATION PPLEMENTED CONTACT	
CITY OF GREELEY	ENGINEERING	DAVE WELL
CITY OF GREELEY	WATER & SEWER	BOB NEAL
CITY OF GREELEY	TRAFFIC	ART PEREZ
CITY OF GREELEY	STORMWATER	ERIC WEIS

16. THE CONTRACTOR SHALL REPLACE ANY DAMAGED LANDSCAPING, INCLUDING TOPSOIL, GRASS, IRRIGATION SYSTEM COMPONENTS, TREES, SHRUBS, GROUND COVERS AND MULCH, TO ITS ORIGINAL CONDITION. SOD SHALL MATCH EXISTING. IN NON-SODDED AREAS, SOIL PREPARATION, SEEDING (NATIVE), MULCHING (WEED FREE) AND MULCH TACKIFIER SHALL BE USED.

ALL REMOVED TRAFFIC SIGNAL EQUIPMENT SHALL BE RETURNED TO THE CITY OF GREELEY TRAFFIC SIGNAL SHOP AT 1300 A

THE CONTRACTOR SHALL GENTLY REMOVE THE EXISTING LATERAL FIBER OPTIC CABLE FROM THE EXISTING SIGNAL CONTROLLER CABINET AND NEATLY COIL WITHIN COMMUNICATIONS PULL BOX OUTSIDE CABINET. THE CITY OF GREELEY SHALL PULL EXISTING LATERAL FIBER OPTIC CABLE FROM COMMUNICATION PULL BOX INTO NEW SIGNAL CONTROLLER CABINET AND TERMINATE IN

ALL SIGNAL CABLE IS TO BE CONTINUOUS FROM CONNECTIONS MADE IN THE HANDHOLE COMPARTMENT OF THE SIGNAL POLE BASE TO THE TERMINAL COMPARTMENT IN THE CONTROLLER CABINET. SPLICING WILL NOT BE PERMITTED UNLESS VERIFIED BY

OF GREELEY TO SCHEDULE THE INSPECTION. UPON COMPLETION AND COMMISSIONING OF THE SIGNAL, TESTING SHALL BEGIN. THE COMPLETE TRAFFIC SYSTEM SHALL BE FULLY OPERATIONAL AND FULLY TESTED AT THE COMPLETION OF THE PROJECT. THE LOCATION OF ALL PULL BOXES AND CONDUIT SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY OF GREELEY PRIOR TO INSTALLATION. THE LOCATION OF PULL BOXES SHALL BE CHOSEN TO MINIMIZE OR AVOID ANY NECESSARY SIDEWALK

22. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUPPLY 2 SETS OF RECORD DRAWINGS, CORRECTED PLANS AND

BY SURVEYING AND MAPPING, LLC (SAM) FOR UTILITY CONTACT CLUDES: NELLS 970-350-9796 NEAL 970-350-9811 REZ 970-350-9398

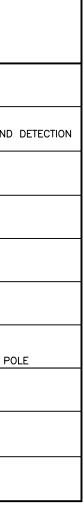
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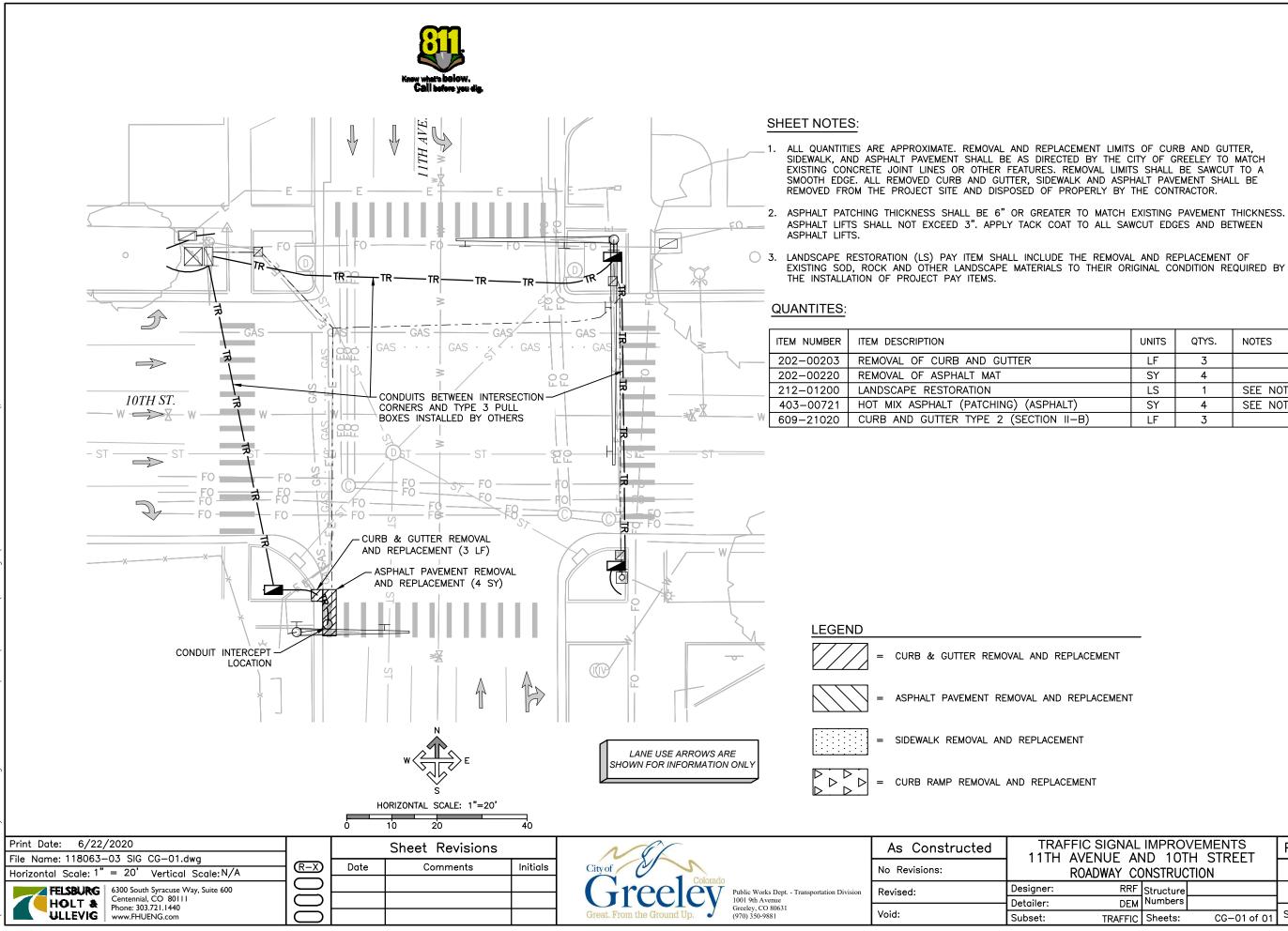
#### SUMMARY OF APPROXIMATE QUANTITIES

CDOT ITEM	ITEM DESCRIPTION	UNIT		AVE AT I ST	COMMENTS
CODE			Plan	As Const.	COMMENTS
202-00203	REMOVAL OF CURB AND GUTTER	LF	3		
202-00220	REMOVAL OF ASPHALT MAT	SY	4		
202-00827	REMOVAL OF PULL BOX	EACH	3		
202–00828	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	LS	1		TRAFFIC SIGNAL CABLING AND LEAD-IN CABLE
202-00848	REMOVAL OF TRAFFIC SIGNAL CONTROLLER AND CABINET	EACH	1		
210-00865	RESET PEDESTRIAN SIGNAL HEAD	EACH	4		
212-01200	LANDSCAPE RESTORATION	LS	1		
403-00721	HOT MIX ASPHALT (PATCHING) (ASPHALT)	SY	4		
609-21020	CURB AND GUTTER TYPE 2 (SECTION II-B)	LF	3		
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	95		
613-01300	3 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	85		
613-10000	WIRING	LS	1		
614-70337	TRAFFIC SIGNAL FACE (12–12–12) (INSTALL ONLY)	EACH	2		
614-72858	PEDESTAL POLE (3 FOOT 6 INCH) (INSTALL ONLY)	EACH	1		PEDESTRIAN PUSH BUTTON PC
614-72861	PEDESTRIAN PUSH BUTTON (INSTALL ONLY)	EACH	8		
614-72896	INTERSECTION DETECTION SYSTEM AND BASE (INSTALL ON	Y)EACH	3		
614-75848	TRAFFIC SIGNAL CONTROLLER & CABINET (INSTALL ONLY)	EACH	1		
	POLYMER CONTROLLER CABINET BASE (INSTALL ONLY)	EACH	1		
614-84455	TRAFFIC SIGNAL PEDESTAL POLE (INSTALL ONLY)	EACH	2		
630-00003	UNIFORMED TRAFFIC CONTROL (BY CITY)	HOUR	8		SIGNAL CUT OVER

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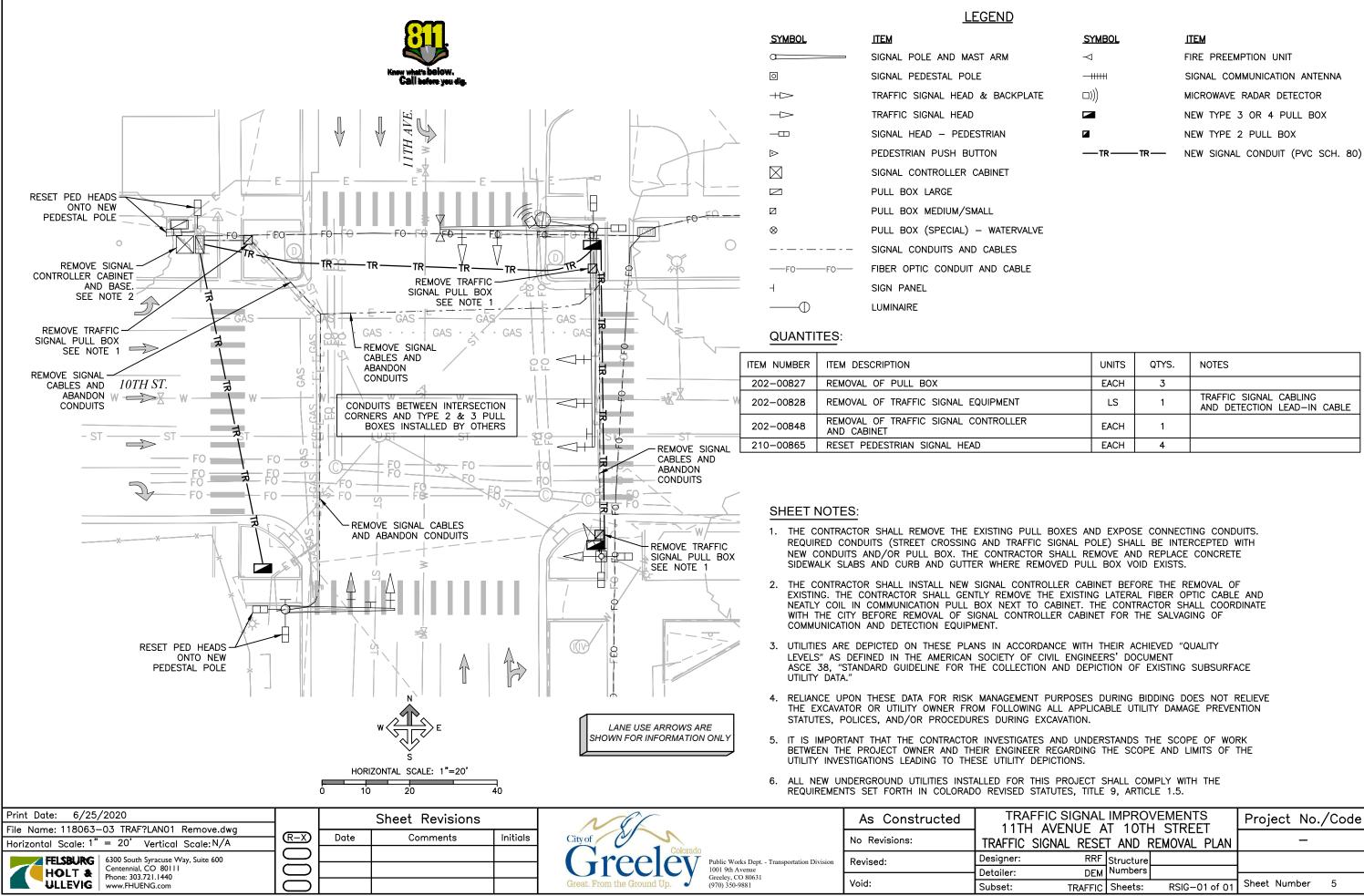


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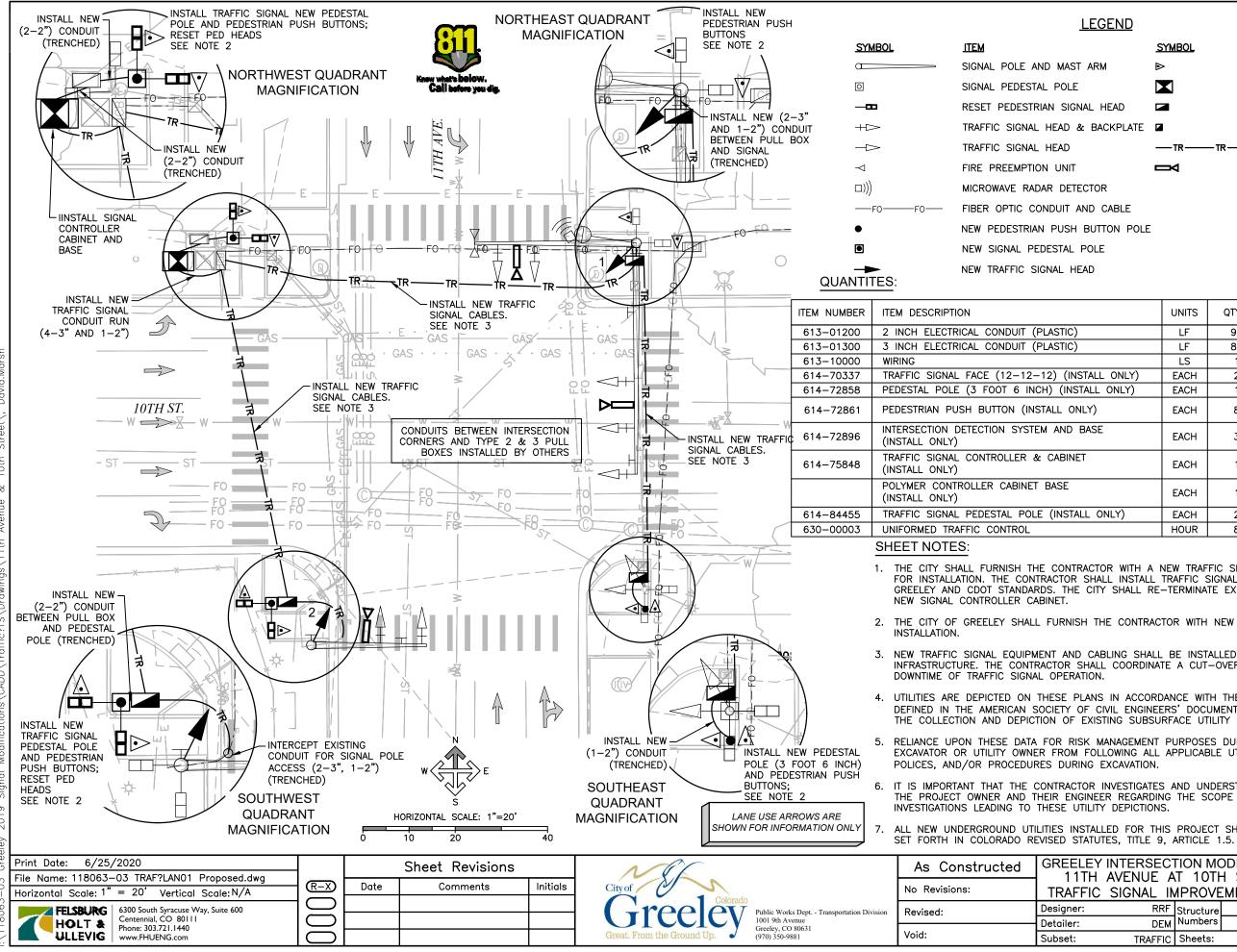
	UNITS	QTYS.	NOTES
	LF	3	
	SY	4	
	LS	1	SEE NOTE 3
SPHALT)	SY	4	SEE NOTE 2
TION II-B)	LF	3	

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	UNITS	QTYS.	NOTES
	EACH	3	
ENT	LS	1	TRAFFIC SIGNAL CABLING AND DETECTION LEAD-IN CABLE
DLLER	EACH	1	
	EACH	4	

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### **LEGEND**

	SYMBOL
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& BACKPLATE	
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ITEM

— TR —

NEW	PEDESTRIAN PUSH BUTTON
NEW	SIGNAL CONTROLLER CABINET
NEW	TYPE 3 OR 4 PULL BOX
NEW	TYPE 2 PULL BOX
NEW	SIGNAL CONDUIT (PVC SCH. 80)
NEW	VEHICLE DETECTION CAMERA

INSTALL



UNITS	QTYS.	NOTES
LF	95	SEE NOTE 4
LF	85	SEE NOTE 4
LS	1	
EACH	2	
EACH	1	PEDESTRIAN PUSH BUTTON POLE
EACH	8	INCLUDES REMOVAL OF EXISTING PUSH BUTTONS
EACH	3	
EACH	1	
EACH	1	
EACH	2	
HOUR	8	SIGNAL CUT-OVER
	LF LF EACH EACH EACH EACH EACH EACH	LF       95         LF       85         LS       1         EACH       2         EACH       3         EACH       1         EACH       2

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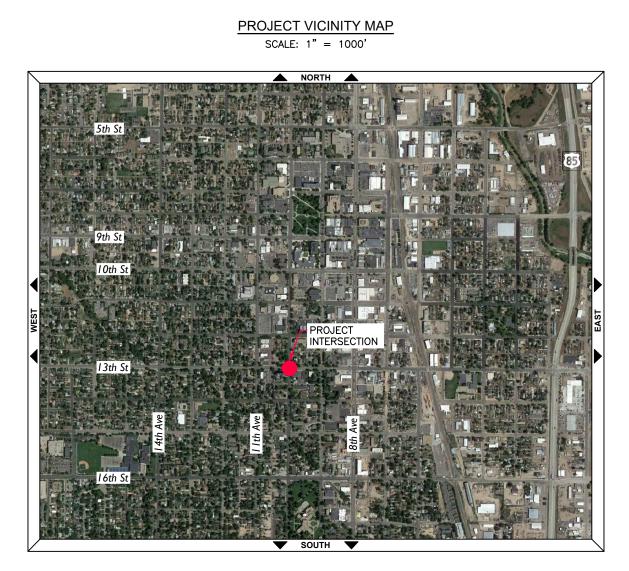
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# CITY OF GREELEY, COLORADO PUBLIC WORKS DEPARTMENT - TRANSPORTATION DIVISION

## SIGNALIZED INTERSECTION MODIFICATIONS PROJECT <u>TRAFFIC SIGNAL IMPROVEMENTS</u> 10TH AVENUE AT 13TH STREET



# **DESIGN PLANS**

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# 2ND DRAFT JUNE 25, 2020

#### TRAFFIC SIGNAL GENERAL NOTES:

- THIS PROJECT CONSISTS OF REMOVING PULL BOXES. TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. AND 1. FURNISHING AND INSTALLING TRAFFIC SIGNAL CABLING AND TRAFFIC SIGNAL EQUIPMENT. FOR SPECIFIC DETAILS OF INFRASTRUCTURE REMOVAL AND INSTALLATION, SEE THE CORRESPONDING SECTIONS OF THESE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF GREELEY'S STANDARDS AND SPECIFICATIONS. THE COLORADO DEPARTMENT OF TRANSPORTATION'S (CDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019", CDOT'S "STANDARD PLANS, 2019", AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION".
- ALL LOCATIONS OF PROJECT ITEMS ARE APPROXIMATE. THE EXACT PLACEMENT OF PROJECT INFRASTRUCTURE SHALL BE 2. DETERMINED BY CITY STAFF. ALL QUANTITY TABULATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE REPSONSIBLE FOR INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL CALL THE CITY OF GREELEY (ART PEREZ, 970-539-6211) PRIOR TO ANY TRAFFIC SIGNAL WORK. .3. THE CITY OF GREELEY SHALL FURNISH TRAFFIC SIGNAL HEADS, PEDESTRIAN PUSH BUTTONS AND SIGNS, INTERSECTION DETECTION CAMERAS, AND THE TRAFFIC SIGNAL CONTROLLERS AND CABINETS.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF GREELEY ON THE TRAFFIC SIGNAL CONTROLLER CABINET CUT-OVER 4. AND REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT. THE CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNAL OPERATIONS BY TEMPORARILY INSTALLING TRAFFIC SIGNAL WIRING AND SPLICES BETWEEN THE TRAFFIC SIGNAL POLE AND THE EXISTING PULL BOX WHILE NEW CONDUIT IS INSALLTED TO THE NEW PULL BOXES IN EACH INTERSECTION CORNER. A UNIFORMED TRAFFIC CONTROL OFFICER MUST BE PRESENT TO AID IN CONTROLLING TRAFFIC WHEN THE TRAFFIC SIGNALIS NOT IN OPERATION. TRAFFIC CONTROL PLANS MUST MEET MUTCD STANDARDS AND THE CITY S TEMPORARY TRAFFIC CONTORL SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO THE CITY OF GREELEY FOR APPROVAL PRIOR TO THE START OF 5. ANY WORK THAT MAY IMPACT VEHICLE OR PEDESTRIAN TRAFFIC. TRAFFIC CONTROL PLANS MUST BE PREPARED BY AN INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION (IMSA) CERTIFIED WORK ZONE TEMPORARY TRAFFIC CONTROL TECHNICIAN.
- NO CONSTRUCTION VEHICLES SHALL BE IN THE TRAVELED WAY AT ANY TIME WITHOUT APPROPRIATE CONSTRUCTION TRAFFIC 6. CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A TRAFFIC CONTROL PERMIT FROM THE CITY OF GREELEY.
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE MOVEABLE. ALL SUCH DEVICES SHALL BE REMOVED BY THE 7. CONTRACTOR FROM THE WORK SITE AT THE END OF EACH WORK DAY.
- 8. THE CONTRACTOR SHALL COMPLY WITH ARTICLE 1.5 OF TITLE 9, CRS ("EXCAVATION REQUIREMENTS") WHEN EXCAVATING IS PLANNED IN THE AREA OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITIES AT LEAST TWO (2) BUSINESS DAYS, NOT INCLUDING THE ACTUAL DAY OF NOTICE, PRIOR TO COMMENCING SUCH OPERATIONS, AND SHALL COORDINATE BORING AND TRENCHING ACTIVITIES SO THAT UTILITY COMPANIES CAN HAVE PERSONNEL ON SITE, IF THEY SO DESIRE. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT PHONE NO. 811 TO HAVE LOCATIONS OF UNCC REGISTERED LINES MARKED BY MEMBER COMPANIES. ALL OTHER UNDERGROUND FACILITIES SHALL BE LOCATED BY CONTACTING THE RESPECTIVE OWNER. UTILITY SERVICE LATERALS SHALL BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. A SUBSURFACE UTILITY ENGINEERING (SUE) INVESTIGATION WAS CONDUCTED BY BASELINE ENGINEERING CORPORATION AND IS INCLUDED ON SHEET NO. 7.
- THE CONTRACTOR SHALL REPLACE OR REPAIR ANY DAMAGED UTILITIES CAUSED BY THEIR CONSTRUCTION ACTIVITY. UTILITY 9. REPLACEMENT OR REPAIR SHALL BE AT NO ADDITIONAL COST TO THE PROJECT.
- ALL WORK SHALL BE CONDUCTED WITHIN PUBLIC RIGHT-OF-WAY, WITH THE APPROPRIATE PUBLIC PERMITS ON THE JOB SITE 10. AT ALL TIMES. THE CONTRACTOR SHALL OBTAIN ALL SUCH PERMITS REQUIRED BY THE CITY OF GREELEY.
- THE CONTRACTOR SHALL ENSURE THAT NO MATERIALS, EQUIPMENT, OR VEHICLES ARE STAGED OR PARKED NEAR WETLAND OR 11. DRAINAGE AREAS, THE CONTRACTOR SHALL REMOVE IN A TIMELY MANNER ALL SEDIMENT, MUD, DEBRIS OR OTHER POTENTIAL POLLUTANTS WHICH MAY BE DISCHARGED TO, OR ACCUMULATE IN, THE FLOW LINES AND PUBLIC RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- 12. THE CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES AND USE BEST MANAGEMENT PRACTICES (BMP) TO CONTROL THE FLOW OF SOILS/DEBRIS, ETC. INTO STATE WATERS. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE CITY OF GREELEY FOR APPROVAL BEFORE BEGINNING WORK THAT DISTURBS EXISTING GROUND.
- 1.3 BACKFILL OF EXCAVATED AREAS WILL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE ASSOCIATED WORK.
- THE CONTRACTOR SHALL USE AN APPROPRIATE AND APPROVED MEANS FOR CAPTURING AND REMOVAL OF ANY AND ALL 14. CONCRETE WASHOUT. SUCH WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCIDENTAL TO THE PROJECT.
- FOR ANY LANDSCAPE IRRIGATION SYSTEMS THAT WILL BE IMPACTED BY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL 15. COORDINATE WITH THE PROPERTY OWNER OR THEIR MAINTENANCE REPRESENTATIVE A MINIMUM OF 5 WORKING DAYS IN ADVANCE OF STARTING WORK IN THE AREA. WITH PROPER AND TIMELY NOTIFICATION, THE IRRIGATION OWNER CAN MARK AND IDENTIFY IRRIGATION SYSTEM COMPONENTS TO BE PROTECTED, BUT SHOULD NOT BE ASSUMED TO BE ALL INCLUSIVE OF ALL IRRIGATION SYSTEM COMPONENTS. NO LANDSCAPE AREAS SHALL BE WITHOUT WATERING SERVICES DURING THE GROWING SEASON. IF THE IRRIGATION SERVICE IS INTERRUPTED FOR MORE THAN THREE DAYS, THE CONTRACTOR SHALL MANUALLY WATER IMPACTED AREAS, AND POSSIBLY REPLACE PLANTINGS IN AFFECTED LANDSCAPE AREAS. ANY LANDSCAPE RESTORATION WORK SHALL ONLY BE CONSIDERED COMPLETE WHEN THE LANDSCAPE AND IRRIGATION SYSTEM IS RESTORED TO ITS ORIGINAL CONDITION AND APPROVED BY THE OWNER OR MAINTAINING PERSONNEL (THE CONTRACTOR SHALL ALLOW VISUAL INSPECTION OF ANY REPAIR WORK PRIOR TO BURIAL).

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- STREET, BUILDING E, GREELEY, CO 80631.
- 18. THE CABINET FIBER OPTIC PATCH PANEL.
- 19. THE TRAFFIC ENGINEER AND/OR HIS DESIGNEE.
- CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY FOR THE OPERATION OF THE SYSTEM AND SHALL CONTACT THE CITY 20.
- 21. REPLACEMENT. PULL BOXES SHALL NOT BE INSTALLED WITHIN CURB RAMPS. ALL PULL BOXES SHALL BE FLUSH WITH EXISTING GROUND.
- ANY OTHER ADDITIONAL DATA REQUIRED BY THE CITY.

#### SUPPLEMENTAL UTILITY CONTACT LIST:

INCLUDES:

CITY	OF	GREELEY	ENGINEERING	DAVE W
CITY	OF	GREELEY	WATER & SEWER	BOB N
CITY	OF	GREELEY	TRAFFIC	ART PEF
CITY	OF	GREELEY	STORMWATER	ERIC WE

16. THE CONTRACTOR SHALL REPLACE ANY DAMAGED LANDSCAPING. INCLUDING TOPSOIL, GRASS, IRRIGATION SYSTEM COMPONENTS, TREES, SHRUBS, GROUND COVERS AND MULCH, TO ITS ORIGINAL CONDITION. SOD SHALL MATCH EXISTING. IN NON-SODDED AREAS, SOIL PREPARATION, SEEDING (NATIVE), MULCHING (WEED FREE) AND MULCH TACKIFIER SHALL BE USED.

17. ALL REMOVED TRAFFIC SIGNAL EQUIPMENT SHALL BE RETURNED TO THE CITY OF GREELEY TRAFFIC SIGNAL SHOP AT 1300 A

THE CONTRACTOR SHALL GENTLY REMOVE THE EXISTING LATERAL FIBER OPTIC CABLE FROM THE EXISTING SIGNAL CONTROLLER CABINET AND NEATLY COIL WITHIN COMMUNICATIONS PULL BOX OUTSIDE CABINET. THE CITY OF GREELEY SHALL PULL EXISTING LATERAL FIBER OPTIC CABLE FROM COMMUNICATION PULL BOX INTO NEW SIGNAL CONTROLLER CABINET AND TERMINATE IN

ALL SIGNAL CABLE IS TO BE CONTINUOUS FROM CONNECTIONS MADE IN THE HANDHOLE COMPARTMENT OF THE SIGNAL POLE BASE TO THE TERMINAL COMPARTMENT IN THE CONTROLLER CABINET. SPLICING WILL NOT BE PERMITTED UNLESS VERIFIED BY

OF GREELEY TO SCHEDULE THE INSPECTION. UPON COMPLETION AND COMMISSIONING OF THE SIGNAL, TESTING SHALL BEGIN. THE COMPLETE TRAFFIC SYSTEM SHALL BE FULLY OPERATIONAL AND FULLY TESTED AT THE COMPLETION OF THE PROJECT. THE LOCATION OF ALL PULL BOXES AND CONDUIT SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY OF GREELEY PRIOR TO INSTALLATION. THE LOCATION OF PULL BOXES SHALL BE CHOSEN TO MINIMIZE OR AVOID ANY NECESSARY SIDEWALK

22. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUPPLY 2 SETS OF RECORD DRAWINGS, CORRECTED PLANS AND

#### SEE SUBSURFACE UTILITY INVESTIGATION DATA FOR UTILITY CONTACT INFORMATION. SUPPLEMENTED CONTACT INFORMATION

- 970-350-9796 VELLS
- VFAL 970-350-9811
- REZ 970-350-9398
- FIS 970-350-9856

TRAFFIC SIGNAL 10TH AVENUE A	Project No./Code		
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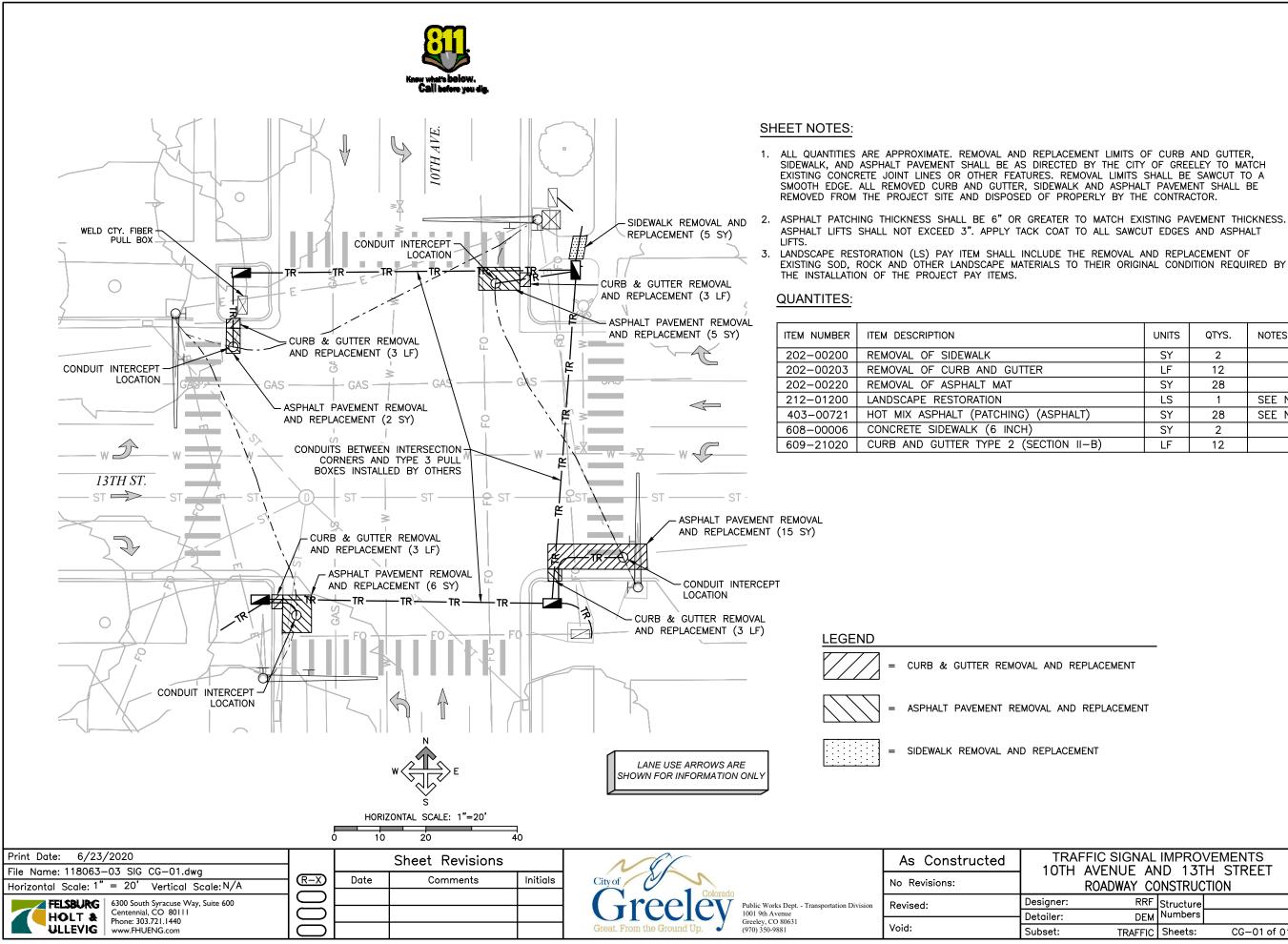
#### SUMMARY OF APPROXIMATE QUANTITIES

CDOT_ITEM	ITEM DESCRIPTION			AVE AT H ST	COMMENTS
CODE		UNIT	Plan	As Const.	
202-00200	REMOVAL OF SIDEWALK	SY	2		
202-00203	REMOVAL OF CURB AND GUTTER	LF	12		
202-00220	REMOVAL OF ASPHALT MAT	SY	28		
202-00828	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	LS	1		TRAFFIC SIGNAL CABLING AN LEAD-IN CABLE
202-00848	REMOVAL OF TRAFFIC SIGNAL CONTROLLER AND CABINET	EACH	1		
210-00865	RESET PEDESTRIAN SIGNAL HEAD	EACH	6		
212-01200	LANDSCAPE RESTORATION	LS	1		
403-00721	HOT MIX ASPHALT (PATCHING) (ASPHALT)	SY	28		
608-00006	CONCRETE SIDEWALK (6 INCH)	SY	2		
609-21020	CURB AND GUTTER TYPE 2 (SECTION II-B)	LF	12		
613-01200	2 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	175		
613-01300	3 INCH ELECTRICAL CONDUIT (PLASTIC)	LF	230		
613-10000	WIRING	LS	1		
614-70337	TRAFFIC SIGNAL FACE (12-12-12) (INSTALL ONLY)	EACH	4		
614-72858	PEDESTAL POLE (3 FOOT 6 INCH) (INSTALL ONLY)	EACH	1		PEDESTRIAN PUSH BUTTON F
614-72861	PEDESTRIAN PUSH BUTTON (INSTALL ONLY)	EACH	8		
614-72896	INTERSECTION DETECTION SYSTEM AND BASE (INSTALL ONLY)	EACH	4		
614-75848	TRAFFIC SIGNAL CONTROLLER & CABINET (INSTALL ONLY)	EACH	1		
	POLYMER CONTROLLER CABINET BASE (INSTALL ONLY)	EACH	1		
614-84455	TRAFFIC SIGNAL PEDESTAL POLE (INSTALL ONLY)	EACH	3		
630-00003	UNIFORMED TRAFFIC CONTROL (BY CITY)	HOUR	8		

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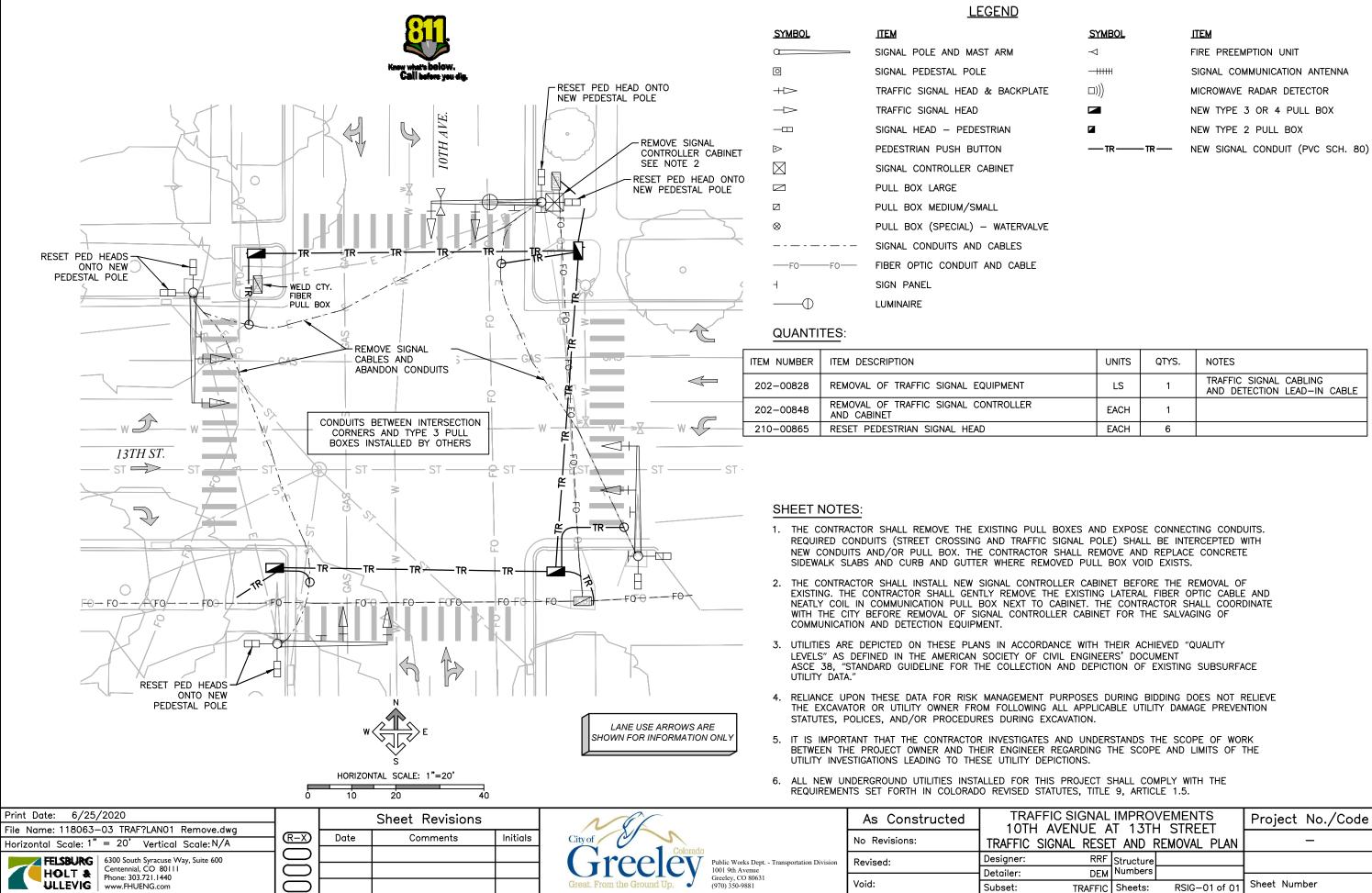


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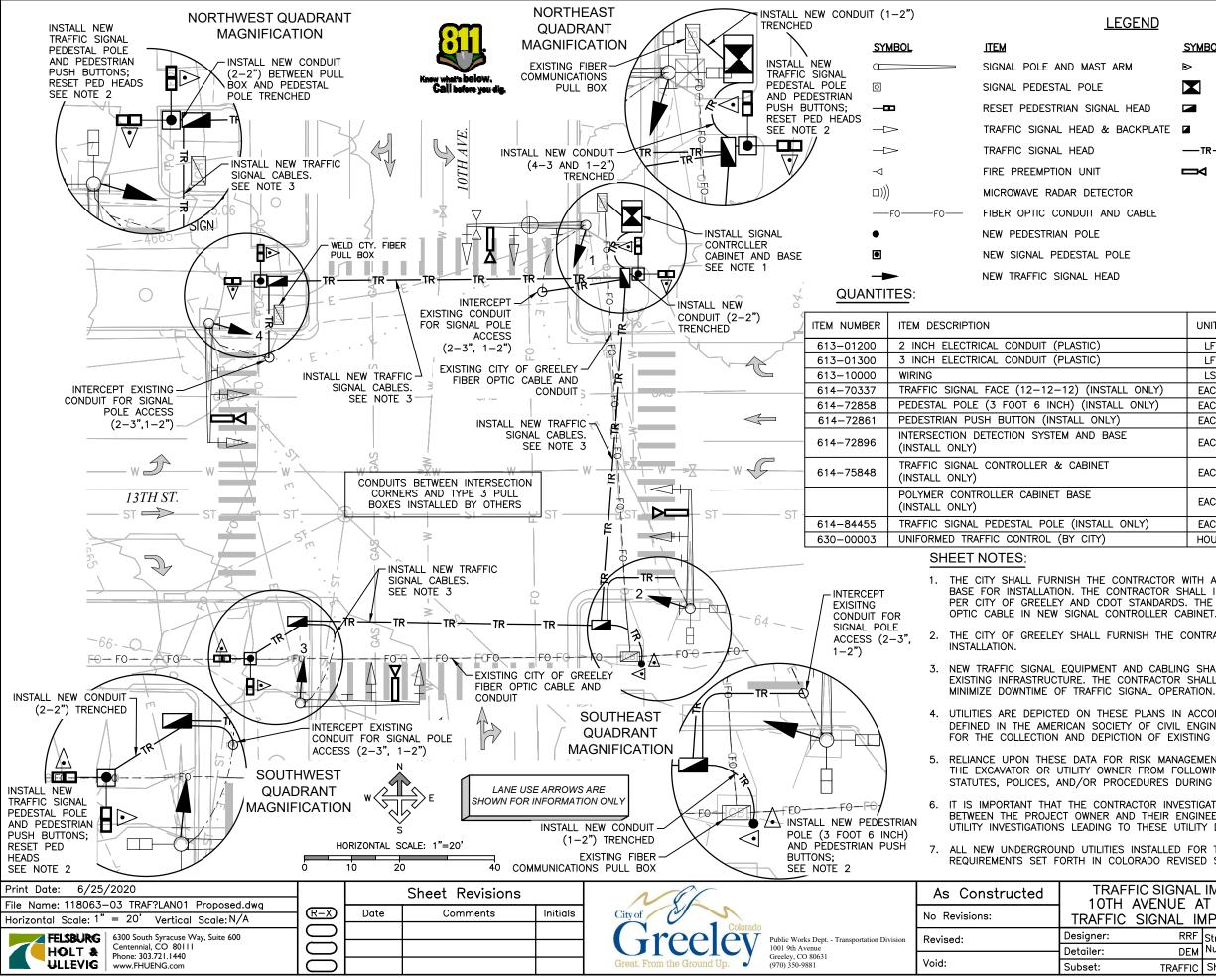


	UNITS	QTYS.	NOTES
	SY	2	
	LF	12	
	SY	28	
	LS	1	SEE NOTE 3
SPHALT)	SY	28	SEE NOTE 2
	SY	2	
ION II-B)	LF	12	

TRAFFIC SIGNAL	Project No.,	/Code		
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### LEGEND

<u>SYMBOL</u>
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#### ITEM

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NEW PEDESTRIAN PUSH BUTTON
NEW SIGNAL CONTROLLER CABINET
NEW TYPE 3 OR 4 PULL BOX
NEW 2 PULL BOX
NEW SIGNAL CONDUIT (PVC SCH. 80
NEW VEHICLE DETECTION CAMERA

#### INSTALL

R  $(\mathbf{Y})$ G 1, 2, 3, 4

	UNITS	QTYS.	NOTES
C)	LF	175	SEE NOTE 3
C)	LF	230	SEE NOTE 5
	LS	1	
NSTALL ONLY)	EACH	4	
ISTALL ONLY)	EACH	1	PEDESTRIAN PUSH BUTTON POLE
ONLY)	EACH	8	
) BASE	EACH	4	
NET	EACH	1	
	EACH	1	
TALL ONLY)	EACH	3	
TY)	HOUR	8	SIGNAL CUT-OVER

THE CITY SHALL FURNISH THE CONTRACTOR WITH A NEW TRAFFIC SIGNAL CONTROLLER, CABINET AND BASE FOR INSTALLATION. THE CONTRACTOR SHALL INSTALL TRAFFIC SIGNAL CONTROLLER AND CABINET PER CITY OF GREELEY AND CDOT STANDARDS. THE CITY SHALL RE-TERMINATE EXISTING LATERAL FIBER

THE CITY OF GREELEY SHALL FURNISH THE CONTRACTOR WITH NEW PEDESTRIAN PUSH BUTTONS FOR

NEW TRAFFIC SIGNAL EQUIPMENT AND CABLING SHALL BE INSTALLED BEFORE THE REMOVAL OF EXISTING INFRASTRUCTURE. THE CONTRACTOR SHALL COORDINATE A CUT-OVER PLAN WITH THE CITY TO

4. UTILITIES ARE DEPICTED ON THESE PLANS IN ACCORDANCE WITH THEIR ACHIEVED "QUALITY LEVELS" AS DEFINED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS' DOCUMENT ASCE 38. "STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA.

RELIANCE UPON THESE DATA FOR RISK MANAGEMENT PURPOSES DURING BIDDING DOES NOT RELIEVE THE EXCAVATOR OR UTILITY OWNER FROM FOLLOWING ALL APPLICABLE UTILITY DAMAGE PREVENTION STATUTES, POLICES, AND/OR PROCEDURES DURING EXCAVATION.

6. IT IS IMPORTANT THAT THE CONTRACTOR INVESTIGATES AND UNDERSTANDS THE SCOPE OF WORK BETWEEN THE PROJECT OWNER AND THEIR ENGINEER REGARDING THE SCOPE AND LIMITS OF THE UTILITY INVESTIGATIONS LEADING TO THESE UTILITY DEPICTIONS.

ALL NEW UNDERGROUND UTILITIES INSTALLED FOR THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN COLORADO REVISED STATUTES, TITLE 9, ARTICLE 1.5.

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