

SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

TRAFFIC SIGNAL AND ADA IMPROVEMENTS

**TOWN OF ADDISON, TEXAS
PUBLIC WORKS AND ENGINEERING SERVICES
PROJECT NO: 2021-10-C
BID NUMBER 22-133**

JUNE 2022

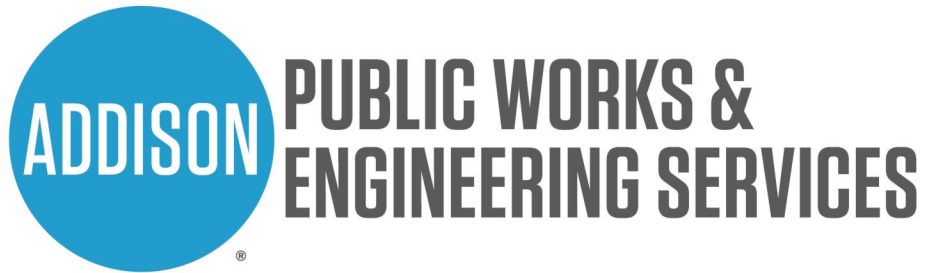
PREPARED BY

Kimley»»Horn

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**Dallas, Texas 75240
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TOWN OF ADDISON, TEXAS

MAYOR

Joe Chow

MAYOR PRO TEM:

Kathryn Wheeler

DEPUTY MAYOR PRO TEM:

Lori Ward

COUNCIL MEMBERS

Tom Braun

Darren Gardner

Guillermo Quintanilla

Eileen Resnik

CITY MANAGER

Wesley S. Pierson

DIRECTOR OF PUBLIC WORKS AND ENGINEERING SERVICES

Shannon Hicks, P.E.

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SECTION AB

ADVERTISEMENT FOR BIDS

ADVERTISEMENT FOR BIDS

1. The Town of Addison is requesting bids for the Bid of the Traffic Signal and ADA Improvements. **Bids will be accepted until 2:00 p.m., Thursday, June 30, 2022** at the Finance Building, 5350 Belt Line Rd., Dallas, Texas 75254 – Attention Purchasing Department, at which time responders names and bids will be publicly read aloud. Late bids will not be considered. The plans, specifications, quantities, pre-bid time and date, and other information are available on www.civcastusa.com. The plans, specifications, and quantities for the work to be done are also on file with Public Works & Engineering Services Department, Town of Addison, 16801 Westgrove Drive, Addison, Texas 75001, and such plans, specifications, and quantities may be examined without charge. The Town of Addison reserves the right to waive any formalities, to reject any and all bids, and to select the proposal deemed most advantageous to the Town of Addison.
2. The Contractor shall identify his bid on the outside of the envelope by writing the words **PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 22-133, TRAFFIC SIGNAL AND ADA IMPROVEMENTS.**

PAPER BIDS SHALL BE REQUIRED. AN ELECTRONIC COPY OF THE BID SHALL BE INCLUDED IN THE ENVELOPE WHEN THE PAPER BID IS SUBMITTED. A USB DRIVE IS PREFERRED.

3. Bids shall be accompanied by a bid bond in the same amount from a reliable surety company licensed by the State of Texas to act as a Surety and be listed on the current U.S. Treasury Listing of Approved Sureties, or a Binder of Insurance executed by a surety company licensed by the State of Texas to act as a surety or its authorized agent as a guarantee that the bidder will enter into a contract and execute a Performance Bond within ten (10) days after notice of award of contract to him.
4. Plans, specifications and bidding documents may be downloaded from www.civcastusa.com. The Town of Addison is a "free buyer", meaning that prospective bidders need only a free registration to sign up for plan updates. Bidders assume all risk for acquiring specs and/or plans from third party sites and plan rooms, as only www.civcastusa.com will be directly updated by Addison.
5. The right is reserved by the Mayor and the City Council as the interests of the City may require to reject any or all bids and to waive any formality in bids received and to select the proposal deemed most advantageous to the City.
6. The Bidder (Proposer) must supply all the information required by the Proposal Form.
7. A Performance Bond, Labor and Material Payment Bond, and Maintenance Bond will be required by the Owner; each Bond shall be in the amount of 100% of the total contract amount. Bonds shall be issued by a surety company licensed by the State of Texas to act as a Surety and be listed on the current U.S. Treasury Listing of Approved Sureties.
8. The Bidder (Proposer) must supply all the information required by the Bidder Qualification Statement.
9. **An optional pre-bid meeting will be held on Wednesday, June 15, 2022 at 2:00pm in the Town of Addison Service Center 16801 Westgrove Drive, Addison, Texas 75001. A site visit will follow this meeting.**

10. For information on bidding or work to be performed, please submit all questions on www.civcastusa.com. All questions must be received by 5:00pm on Wednesday, June 22, 2022. All questions received by this deadline will be answered by 5:00pm on Monday, June 27, 2022.

11. The project consists of constructing traffic signal and ADA improvements at the intersections of Belt Line Road & Addison Road, Belt Line Road & Beltway Drive, and Addison Road & Sojourn Drive. The improvements include, but are not limited to, traffic signal construction, curb ramp construction, sidewalk construction, median nose construction, and landscape/irrigation improvements.

Advertising:

June 7, 2022

June 14, 2022

June 21, 2022

SECTION IB

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

- A. PROJECT:** **TRAFFIC SIGNAL & ADA IMPROVEMENTS**, in the Town of Addison. The bids will be evaluated as stated in Section "O" of these Instructions to Bidders.
- B. PROJECT DESCRIPTION:** **The project consists of constructing traffic signal and ADA improvements at the intersections of Belt Line Road & Addison Road, Belt Line Road & Beltway Drive, and Addison Road & Sojourn Drive. The improvements include, but are not limited to, traffic signal construction, curb ramp construction, sidewalk construction, median nose construction, and landscape/irrigation improvements.**
- C. PROPOSALS:** Proposals must be in accordance with these instructions in order to receive consideration.
- D. DOCUMENTS:** Reference the Contract Agreement for a listing of Contract Documents to be included for this project.
- E. EXAMINATION OF DOCUMENTS AND SITE:** Bidders shall carefully examine the Bidding Documents and the construction site to obtain firsthand knowledge of the scope and the conditions of the Work. Each Contractor, Subcontractor and Sub-subcontractor, by submitting a proposal to perform any portion of the Work, represents and warrants that he has examined the Contract Documents and the site of the Work, and from his own investigation has satisfied himself as to the scope, accessibility, nature and location of the Work; the character of the equipment and other facilities needed for the performance of the Work; the character and extent of other work to be performed; the local conditions; labor availability, practices and jurisdictions; and other circumstances that may affect the performance of the Work. No additional compensation will be allowed by the Owner for the failure of such Contractor, Subcontractor or Sub-subcontractor to inform himself as to conditions affecting the Work.
- F. INTERPRETATION OF DOCUMENTS:** If any person contemplating submitting a bid for the proposed Contract is in doubt as to the meaning of any part of the Drawings, Specifications (Project Manual) or other proposed Contract Documents, he may submit questions to the Town of Addison, no later than 5:00pm on Wednesday, June 22, 2022. All questions received by this deadline will be answered by 5:00pm on Monday, June 27, 2022. Bidders should act promptly and allow sufficient time for a reply to reach them before preparing their bids. Any interpretation or clarification will be in the form of an Addendum duly issued. No alleged verbal interpretation or ruling will be held binding upon the Owner.
- G. SUBSTITUTIONS:** Conditions governing the submission of substitutions for specific materials, products, equipment and processes are in the Special Provisions. Requests for substitutions must be received by the Town of Addison seven (7) calendar days prior to the established bid date.
- H. ADDENDA:** Interpretations, clarifications, additions, deletions and modifications to the Documents during the bidding period will be issued in the form of Addenda and a copy of such Addenda will be released through www.civcastusa.com. It will be the responsibility of each

h person who has been issued a set of bid documents to secure all Addenda from www.civcastusa.com. Addenda will be a part of the Bidding Documents and the Contract Documents, and receipt of them shall be acknowledged in the Bid Form. All such interpretations and supplemental instructions will be in the form of written addenda to the contract documents which, if issued, will be released through www.civcastusa.com not later than three (3) calendar days prior to the date fixed for the opening of bids. If any bidder fails to acknowledge the receipt of such addenda in the space provided in the bid form, his bid will nevertheless be construed as though the receipt of such addenda had been acknowledged.

I. The Town may consider more factors than just price in awarding the contract in accordance with the requirements for competitive bidding under the Local Government Code Section 252.043. The criteria that will be considered are:

- the price;
- the offeror's experience and reputation;
- the quality of the offeror's goods or services;
- the impact on the ability of the Town to comply with rules relating to historically underutilized businesses;
- the offeror's safety record;
- the offeror's proposed personnel;
- whether the offeror's financial capability is appropriate to the size and scope of the project; and
- any other relevant factor specifically listed in the request for bids, proposals, or qualifications.

J. **COMPLETION TIME:** The selected contractor shall use the time period between the awarding of the contract at Town Council and the date of Notice to Proceed to submit materials and shop drawings for approval by **Kimley-Horn and Associates**. **Kimley- Horn** shall review and return these submittals in the most expedient manner possible to accommodate immediate material ordering.

- a. Upon receiving Notice to Proceed, the selected contractor shall have **330 calendar days** to construct the project and achieve substantial completion. Substantial completion for this project includes the following items:
 - i. Preliminary Punchlist walk-through with the Town performed.
- b. After substantial completion is reached, the contractor shall have **an additional 20 calendar days** to achieve 100% final completion. Final completion for this project shall include:
 - i. Punchlist items completed and approved by the Town;
 - ii. Site clean-up;
 - iii. Submittal of Record Drawings; and
 - iv. Execution of Maintenance Bond.

- K. PREPARATION OF BIDS:** Prices quoted shall include all items of cost, expense, taxes, fees and charges incurred by, or arising out of, the performance of the work to be performed under the Contract. Bids shall be submitted in duplicate and shall be signed in ink. Any bid on other than the required form will be considered informal and may be rejected. Erasures or other changes in a bid must be explained or noted over the initials of the bidder. Bids containing any conditions, omissions, unexplained erasures and alterations, or irregularities of any kind may be rejected as informal. The prices should be expressed in words and figures or they may be deemed informal and may be rejected. In case of discrepancy between the price written in the bid and that given in the figures, the price in writing will be considered as the bid. In the case of a discrepancy between a unit price and its extension, the unit price will govern. Failure to submit all requested information will make a bid irregular and subject to rejection. Bids shall be signed with name typed or printed below signature, and, if a partnership, give full name of all partners. Where bidder is a corporation, bids must be signed with the legal name of the corporation followed by the name of the state of incorporation and the legal signature of an officer authorized to bind the corporation to a contract.
- L. SUBMITTAL OF BIDS:** Sealed proposals will be received at the time, date and place stated in the Advertisement for Bids. Proposals shall be made on unaltered Proposal Forms furnished by the Town of Addison. Bidders shall submit proposals in an opaque, sealed envelope addressed to the Owner and plainly mark on the outside of the envelope the name and address of the bidder. The envelopes shall also be marked with the following project description:

PUBLIC WORKS AND ENGINEERING SERVICES BID NUMBER 22-133

TRAFFIC SIGNAL & ADA IMPROVEMENTS

An electronic copy of the bid shall be included in the envelope when the paper copy bid is submitted. A USB drive is preferred.

The Bid Bond must be completed and signed by each bidder and submitted with the bid. Submit Bids by mail or in person prior to the time for receiving bids set forth in the Advertisement for Bids issued by the Town.

Electronic bidding on www.civcastusa.com will not be considered for this project. The Town of Addison uses www.civcastusa.com to distribute bids and proposals. There will be NO COST to the contractor for the use of www.civcastusa.com.

- M. MODIFICATION AND WITHDRAWAL OF BIDS:** Prior to the time set for bid opening, bids may be withdrawn or modified. Bids may be modified only on the official bid form and must be signed by a person legally empowered to bind the bidder. No bidder shall modify, withdraw, or cancel his bid or any part thereof for sixty (60) calendar days after the time agreed upon for the receipt of bids.
- N. DISQUALIFICATION:** The Owner reserves the right to disqualify proposals, before or after the opening, upon evidence of collusion with intent to defraud or other illegal practices relating to this proposal upon the part of the bidder.
- O. SUBMISSION OF POST-BID INFORMATION:** Upon notification of acceptance, the selected bidder shall, within twenty-four (24) hours, submit the following:

1. A designation of the portions of the Work proposed to be performed by the bidder with his own force.
 2. A list of names of the Subcontractors or other persons or organizations, including those who are to furnish materials and equipment fabricated to a special design proposed for such portions of the Work as may be designated in the Bidding Documents or as may be requested by the Town of Addison. The bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the proposed Subcontractors and suppliers to furnish and perform the Work.
 3. Other information as required.
- P. AWARD:** The Owner reserves the right to accept any or to reject any bids without compensation to bidders and to waive irregularities and informalities. The Town of Addison Public Works & Engineering Services Department, in making its recommendation, will consider the following elements:
1. Whether the bidder is a contractor with experience in the type of work involved.
 2. Whether the bidder has adequate plant, equipment and personnel to perform the work properly and expeditiously.
 3. Whether the bidder has a suitable financial status and reputation for meeting obligations incident to work of the kind specified.
 4. Whether the bidder has complied with the terms and conditions.

Alternate items may or may not be awarded. Addition or deletion of other items or schedules will be governed by the *Standard Specifications for Public Works Construction – North Central Texas, November 2017, 5th Edition*, (hereinafter called SSPWC) Item 104.2 "Change or Modification of Contract".

- Q. EXECUTION OF THE CONTRACT:** The successful bidder will be required to enter into a contract with the Owner within ten (10) days of notice by the Owner that his bid has been accepted. Failure to enter into a contract within the established time limit shall be considered grounds for forfeiture of the bid bond.
- R. CONSTRUCTION SCHEDULE:** It is the Owner's desire to have the project completed and operational in as short a time as possible. The number of calendar days for completion of the project will begin with the date specified in the Notice to Proceed. The Notice to Proceed will be issued in a manner to facilitate a smooth construction of the project. The Contractor shall begin construction within ten (10) calendar days of the issuance of the Notice to Proceed.
- S. COST PLUS TIME BIDDING:** N/A
- T. FORM OF CONTRACT:** The contract for the construction of the project will be drawn up by the Owner. A sample form of agreement is included in the Contract Agreement Section.
- U. BONDS:** A Performance Bond, a Labor and Material Payment Bond and a Maintenance Bond will be required by the Owner. The Performance Bond and Payment Bond shall name the Town of Addison, and others as directed by the Town, as joint obligees. Sample forms have

been included in the Performance Bond, Payment Bond, and Maintenance Bond sections. (Contractor shall confirm the legal names of obligees prior to execution of Bonds.)

- V. BID SECURITY:** Bids shall be accompanied by a bid bond in the same amount from a surety company licensed to do business in the State of Texas as a guarantee that the bidder will enter into a contract and execute a Performance Bond and Payment Bond within ten (10) calendar days after notice of award of contract to him. Such bid bonds will be returned to all except the three lowest bidders within three (3) days after the opening of bids, and the remaining bid bonds will be returned promptly after the Owner has made an award of contract, or, if no award has been made within thirty (30) calendar days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.
- W. RESOLUTIONS:** If the bidder is a corporation, a copy of the resolution empowering the person submitting the bid to bind the bidder must be included with the bid.
- X. CONSTRUCTION STAKING:** Construction staking and re-staking will not be provided by the Owner. Benchmarks and Horizontal Control are shown on the plans. There is no separate bid item for staking, therefore, the contractor must include value for staking in the various bid items as subsidiary to the contract. Any staking or re-staking that is required shall be the responsibility of the Contractor and shall be at no cost to the Owner.
- Y. FINAL PAYMENT:** The general provisions for Final Payment shall be as stated in Item 109.5.4 of the SSPWC including all Amendments and Additions. Prior to final payment the Contractor shall provide the Owner with the following items:
1. A Contractor's Affidavit of Bills Paid in accordance with Section BP.
 2. A Consent of Surety Company to Final Payment.
 3. A complete set of record plans which indicate all construction variations from the original construction documents in accordance with the Special Provisions.
 4. A Two (2) years Maintenance Bond in accordance with Section MB.
 5. Acknowledgement that the project has been reviewed and accepted by TDLR.
- Z. PREVAILING WAGE RATES:** Wage rates paid on this project shall not be less than specified in the schedule of general prevailing rates of per diem wages as attached in the Special Provisions.
- AA. PRIORITY OF CONTRACT DOCUMENTS:** Reference the Contract Agreement for information regarding the priority of Contract Documents.

Information and Instruction Form

RESPONSES THAT DO NOT CONTAIN THIS COMPLETED FORM MAY NOT BE COMPLIANT

Section I Company Profile

Name of Business:

Business Address:

Contact Name:

Phone#:

Fax#:

Email:

Name(s) Title of Authorized Company Officers:

Federal ID #: W-9 Form: A W-9 form will be required from the successful bidder.

DUN #:

Remit Address: If different than your physical address:

Section II Instructions to Bidders

Electronic Bids: The Town of Addison uses BidSync to distribute and receive bids and proposals. There will be **NO COST** to the Contractor/Supplier for **Standard** bids or proposals. For **Cooperative Bids and Reverse Auctions ONLY**, the successful contractor/supplier agrees to pay BidSync a transaction fee of one percent (1%) of the total amount of all contracts for goods and/or services. **Cooperative Bids and Reverse Auctions** will be clearly marked on the bid documents. To assure that all contractors/suppliers are treated fairly, the fee will be payable whether the bid/proposal is submitted electronically, or by paper means. Refer to www.bidsync.com for further information.

Contractor/Supplier Responsibility: It is the contractor/suppliers responsibility to check for any addenda or questions and answers that might have been issued before bid closing date and time. Contractors/Suppliers will be

notified of any addenda and Q&A if they are on the invited list, they view the bid, or add themselves to the watch list.

Acknowledgement of Addenda: #1 #2 #3 #4 #5

Delivery of Bids: For delivery of paper bids our physical address is:

Town of Addison

5350 Beltline Road

Dallas, TX 75254

Attn: Purchasing Department

Contractor/Supplier Employees: No Contractor/Supplier employee shall have a direct or indirect financial interest in any contract with the town, or be directly or indirectly financially interested in the sale of land, materials, supplies or services to the town.

Deliveries: All deliveries will be F.O.B. Town of Addison. All Transportation Charges paid by the contractor/supplier to Destination.

Payment Terms: A Prompt Payment Discount of % is offered for Payment Made Within Days of Acceptance of Goods or Services. If Prompt Payments are not offered or accepted, payments shall be made 30 days after receipt and acceptance of goods or services or after the date of receipt of the invoice whichever is later.

Delivery Dates: Delivery Dates are to be specified in Calendar Days from the Date of Order.

Bid Prices: Pre-Award bid prices shall remain Firm and Irrevocable for a Period of _____ Days.

Exceptions: Contractor/Supplier does not take Exception to Bid Specifications or Other Requirements of this Solicitation. If neither exceptions box is checked, default shall be "No Exceptions"

Contractor/Supplier take the following Exception(s) to the Bid Specifications or Other Requirements of this Solicitation (Explain in Detail). If box checked but no exceptions are listed, default shall be "No Exceptions"

Historically Underutilized Business (HUB): It is the policy of the Town of Addison to involve HUBs in the procurement of goods, equipment, services and construction projects. Prime Contractors/Suppliers are encouraged to provide HUBs the opportunity to compete for sub-contracting and other procurement opportunities. A listing of HUBs in this area may be accessed at the following State of Texas Website.

<http://www.window.state.tx.us/procurement/cmb1/cmb1hub.html>.

HUB Owned Business Yes No Include a current copy of your HUB certification with your response or insert Certification number _____ and expire date _____.

Other Government Entities: Would bidder be willing to allow other local governmental entities to participate in this contract, if awarded under the same Terms and Conditions? Yes No

Bid Bond: Is Bid Bond attached if applicable? Yes No

Termination: The town at any time after issuance of this agreement, by 30 days written notice, has the absolute right to terminate this agreement for cause or convenience. Cause shall be the contractor/supplier's refusal or failure to satisfactorily perform or complete the work within the time specified, or failure to meet the specifications, quantities, quality and/or other requirements specified in the contract/purchase order. In such case the supplier shall be liable for any damages suffered by the town. If the agreement is terminated for convenience, the supplier has no further obligation under the agreement. Payment shall be made to cover the cost of material and work in process or "consigned" to the town as of the effective date of the termination.

Bidder Compliance: Bidder agrees to comply with all conditions contained in this Information and Instruction Form and the additional terms and conditions and specifications included in this request. The undersigned hereby agrees to furnish and deliver the articles or services as specified at the prices and terms herein stated and in strict accordance with the specifications and conditions, all of which are made a part of your offer. Your offer is not subject to withdrawal after the award is made.

The Town of Addison reserves the right to reject all or part of the offer and to accept the offer considered most advantageous to the town by item or total bid.

The Town of Addison will award to the lowest responsible bidder or to the bidder who provides goods or services at the best value for the Town.

I hereby certify that all of the information provided in sections I and II are true and accurate to the best of my knowledge.

Signature: Date:

Title:

Signature certifies no changes have been made to the content of this solicitation as provided by the Town of Addison.

10/17/17



Interested Parties

In 2015, the Texas Legislature adopted [House Bill 1295](#), which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least \$1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The Texas Ethics Commission was required to adopt rules necessary to implement that law, prescribe the disclosure of interested parties form, and post a copy of the form on the commission's website. The commission adopted the Certificate of Interested Parties form (Form 1295) on October 5, 2015. The commission also adopted new rules (Chapter 46) on November 30, 2015, to implement the law.

Filing Process

On January 1, 2016, the commission made available on its website a new filing application that must be used to file Form 1295. A business entity must use the application to enter the required information on Form 1295 and print a copy of the completed form, which will include a certification of filing that will contain a unique certification number. An authorized agent of the business entity must sign the printed copy of the form and have the form notarized. The completed Form 1295 with the certification of filing must be filed with the governmental body or state agency with which the business entity is entering into the contract.

The governmental entity or state agency must notify the commission, using the commission's filing application, of the receipt of the filed Form 1295 with the certification of filing not later than the 30th day after the date the contract binds all parties to the contract. The commission will post the completed Form 1295 to its website within seven business days after receiving notice from the governmental entity or state agency.

Information regarding how to use the filing application will be available on this site by January 1, 2016. https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm, please follow Instructional Video for Business Entities.

COVID-19 QUESTIONNAIRE

1. Have you experienced any of the following symptoms in the past 48 hours:

- Fever or Chills
- Cough
- Shortness of Breath or Difficulty Breathing
- Fatigue
- Muscle or Body Aches
- Headache
- New Loss of Taste or Smell
- Sore Throat
- Congestion or Runny Nose
- Nausea or Vomiting
- Diarrhea

2. Within the past 14 days, have you been in close physical contact (6 feet or closer for a cumulative total of 15 minutes) with:

- Anyone who is known to have laboratory-confirmed COVID-19?
or
- Anyone who has any symptoms consistent with COVID-19?

3. Are you isolating or quarantining because you may have been exposed to a person with COVID-19 or are worried that you may be sick with COVID-19?

4. Are you currently waiting on the results of a COVID-19 test?

PLEASE LET THE TOWN STAFF MEMBER KNOW IF “YES” TO ANY OF THESE QUESTIONS.

SECTION PF-1

PROPOSAL FORM

PROPOSAL FORM

_____, 2022

TO: The Honorable Mayor and Town Council
Town of Addison, Texas

Gentlemen:

The undersigned bidder, having examined the plans, specifications and contract documents, and the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all equipment and to perform labor and work necessary for completion of the work described by and in accordance with the Plans, Specifications and Contract for the following prices, to wit:

Signed by: _____

ACKNOWLEDGMENT OF ADDENDA:

The Bidder acknowledges receipt of the following addenda:

Addendum No. 1 _____

Addendum No. 2 _____

Addendum No. 3 _____

The following pages contain all bid items for:

BID SCHEDULE – TRAFFIC SIGNAL & ADA IMPROVEMENTS
BID NUMBER 22-133

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
BASE BID - ITEMS					
1	FURNISHING AND PLACING TOPSOIL (6")	36	SY		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
2	BLOCK SODDING	36	SY		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
3	DRILL SHAFT (TRF SIG POLE) (30 IN)	33	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
4	DRILL SHAFT (TRF SIG POLE) (36 IN)	39	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
5	DRILL SHAFT (TRF SIG POLE) (48 IN)	66	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
6	MOBILIZATION (MAX 5% PER TOWN OF ADDISON)	1	LS		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
7	ADJUSTING MANHOLES	1	LS		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
8	BARRICADES, SIGNS AND TRAFFIC HANDLING	6	MO		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
9	CONC CURB (TY II)	32	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
10	CONC SIDEWALKS (6")	82	SY		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
11	CURB RAMPS (TY 7)	17	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
12	CONDT (PVC) (SCH 40) (2")	290	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
13	CONDT (PVC) (SCH 40) (2") (BORE)	225	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
14	CONDT (PVC) (SCH 40) (3")	465	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
15	CONDT (PVC) (SCH 40) (4")	125	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
16	CONDT (PVC) (SCH 40) (4") (BORE)	940	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
17	CONDT (PVC) (SCH 80) (2")	40	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
18	ELEC CONDR (NO.6) BARE	1,795	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
19	ELEC CONDR (NO.6) INSULATED	90	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
20	GROUND BOX TY C (162911)W/APRON	16	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
21	REMOVE GROUND BOX	6	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
22	ELC SRV TY D 120/240 060(NS)SS(E)PS(U)	3	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
23	REFL PAV MRK TY I (W)8"(SLD)(090MIL)	45	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
24	REFL PAV MRK TY I (W)12"(SLD)(090MIL)	925	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
25	REFL PAV MRK TY 1 (W)24"(SLD)(090MIL)	195	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
26	PAVEMENT SEALER 4"	8	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
27	PAVEMENT SEALER 8"	45	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
28	PAVEMENT SEALER 12"	925	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
29	PAVEMENT SEALER 24"	195	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
30	PAVEMENT SEALER (ARROW)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
31	PAVEMENT SEALER (WORD)	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
32	RE PM W/RET REQ TY 1 (W)4"(BRK)(090MIL)	8	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
33	PREFAB PAV MRK TY C (W) (ARROW)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
34	PREFAB PAV MRK TY C (W) (WORD)	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
35	ELIM EXT PAV MRK & MRKS (4")	5	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
36	ELIM EXT PAV MRK & MRKS (12")	935	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
37	ELIM EXT PAV MRK & MRKS (24")	190	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
38	ELIM EXT PAV MRK & MRKS (ARROW)	2	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
39	PAV SURF PREP FOR MRK (4")	8	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
40	PAV SURF PREP FOR MRK (8")	45	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
41	PAV SURF PREP FOR MRK (12")	925	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
42	PAV SURF PREP FOR MRK (24")	195	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
43	PAV SURF PREP FOR MRK (ARROW)	2	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
44	PAV SURF PREP FOR MRK (WORD)	1	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
45	INSTALL HWY TRF SIG (ISOLATED)	3	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
46	REMOVING TRAFFIC SIGNALS	3	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
47	VEH SIG SEC (12")LED(GRN)	19	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
48	VEH SIG SEC (12")LED(GRN ARW)	13	EA		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
49	VEH SIG SEC (12")LED(YEL)	25	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
50	VEH SIG SEC (12")LED(YEL ARW)	19	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
51	VEH SIG SEC (12")LED(RED)	25	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
52	VEH SIG SEC (12")LED(RED ARW)	13	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
53	VEH SIG SEC (12")LED(GRN U-TURN ARW)	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
54	VEH SIG SEC (12")LED(YEL U-TURN ARW)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
55	VEH SIG SEC (12")LED(RED U-TURN ARW)	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
56	PED SIG SEC (LED)(COUNTDOWN)	16	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
57	BACK PLATE (12")(3 SEC)	23	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
58	BACK PLATE (12")(4 SEC)	13	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
59	BACK PLATE (12")(5 SEC)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
60	TRF SIG CBL (TY A)(14 AWG)(3 CONDR)	1,665	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
61	TRF SIG CBL (TY A)(14 AWG)(5 CONDR)	1,280	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
62	TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	2,785	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
63	TRF SIG CBL (TY A)(14 AWG)(20 CONDR)	1,455	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
64	TRF SIG CBL (TY C)(12 AWG)(2 CONDR)	3,010	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
65	INS TRF SIG PL AM (S)1 ARM(28')	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
66	INS TRF SIG PL AM(S)1 ARM(32')	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
67	INS TRF SIG PL AM(S)1 ARM(40')	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
68	INS TRF SIG PL AM(S)1 ARM(48')	3	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
69	INS TRF SIG PL AM(S)1 ARM(55')	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
70	INS TRF SIG PL AM(S)1 ARM(60')	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
71	PED POLE ASSEMBLY	10	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
72	PEDESTRIAN PUSH BUTTON POLE	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
73	PED DETECT PUSH BUTTON (APS)	20	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
74	PED DETECTOR CONTROLLER UNIT	3	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
75	VIVDS PROCESSOR SYSTEM	3	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
76	VIVDS CAMERA ASSEMBLY	12	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
77	VIVDS COMMUNICATION CABLE (COAXIAL)	2,065	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
78	CCTV FIELD EQUIPMENT (DIGITAL)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
79	CCTV MOUNT (POLE)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
80	CAT 5 ETHERNET CABLE	395	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
81	VEH SIG SEC (12")LED(BI-MODAL GRN/YEL ARW)	2	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
82	OPTICOM CABLE	1,780	LF		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
83	TYPE 721 OPTICOM DETECTOR	11	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
84	TYPE 764 PHASE SELECTOR	3	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
85	PROJECT SIGN	3	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
86	RELOCATE FIRE HYDRANT	1	EA		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$
87	RIPRAP (CONC)(6 IN)	1	CY		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$	\$

TOTAL AMOUNT BID-BASE BID - ITEMS

 (Total Amount Bid, Numerical Value)

and _____ Dollars
 _____ Cents

*The Owner reserves the right to delete any bid items or portions thereof. If the Owner elects to delete any portions of the PROJECT from the contract, then the contract can be awarded on that basis.

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
BASE BID - ALLOWANCES					
X1	CONTINGENCY CONSTRUCTION APPROVAL ALLOWANCE	1	LS		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$ 75,000.00	\$ 75,000.00
X2	PROJECT ALLOWANCE FOR LANDSCAPE IMPROVEMENTS	1	LS		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$ 25,000.00	\$ 25,000.00
X3	PROJECT ALLOWANCE FOR IRRIGATION IMPROVEMENTS	1	LS		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$ 25,000.00	\$ 25,000.00
X4	PROJECT ALLOWANCE FOR EROSION CONTROL	1	LS		
	Complete in Place, for the Sum of				
	_____ Dollars and				
	_____ Cents per unit			\$ 25,000.00	\$ 25,000.00

SUBTOTAL AMOUNT BID - BASE BID - ALLOWANCES

\$ 150,000.00
(SUBTOTAL Amount Bid, Numerical Value)

and One Hundred Fifty Thousand Dollars
Zero Cents

*The Owner reserves the right to delete any bid items or portions thereof. If the Owner elects to delete any portions of the PROJECT from the contract, then the contract can be awarded on that basis.

Item No.	Name of Pay Item with Unit Price in Words	Est. Quantity	Unit	Unit Price	SUBTOTAL Price
ALTERNATE BID - PAVERS & MEDIAN NOSE ALTERNATE					
A1	LANDSCAPE PAVERS	112	SY		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A2	REMOVING CONC (PAV)	11	SY		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A3	REMOVING CONC (MEDIANS)	67	SY		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A4	REMOVING CONC (CURB)	30	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A5	REWORK BS MTL (TY C) (8") (ORD COMP)	53	SY		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A6	CONC PVMT (CONT REINF)(FAST TRK)(12")	53	SY		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A7	CONC CURB & GUTTER (TY II)	56	LF		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$
A8	CONCRETE MEDIAN (NOSE)	3	SY		
	Complete in Place, for the Sum of				
	Dollars and				
	Cents per unit			\$	\$

SUBTOTAL AMOUNT BID - ALTERNATE BID - PAVERS & MEDIAN NOSE ALTERNATE

\$ _____
 (SUBTOTAL Amount Bid, Numerical Value)

and _____ Dollars
 _____ Cents

*The Owner reserves the right to delete any bid items or portions thereof. If the Owner elects to delete any portions of the PROJECT from the contract, then the contract can be awarded on that basis.

TOTAL AMOUNT OF BASE BID (ITEMS P1 THROUGH O1)

\$ _____ -

(Total Amount Bid,
Numerical Value)

_____ Dollars
and _____ Cents

(Total Amount Bid in Words)

***The Owner reserves the right to delete any bid items or portions thereof. If the Owner elects to delete any portions of the PROJECT from the contract, then the contract can be awarded on that basis.**

- NOTES:
1. All items, labor, materials, equipment, facilities, incidentals and work required for construction of the project are to be provided and installed by the Contractor as part of the project and payment for the cost of such shall be included in the price bid for the construction of the project.
 2. Prices must be shown in words and figures for each item listed in the Proposal. In the event of discrepancy, the words shall control.
 3. Materials, which are "tax exempt", are those items which are physically incorporated into the facilities constructed for the Town of Addison, as set forth in the Special Provisions. Materials include, but are not limited to purchased items such as water pipe, sanitary sewer pipe, storm drain pipe, etc.

Services, which are "not tax exempt", are those items which are used by the Contractor but are not physically incorporated into the Town of Addison's facility and/or items which are consumed by construction, as set forth in the Special Provisions. Services include, but are not limited to, items such as supplies, tools, skill and labor, the purchase, rental or lease of equipment, etc.

Name of Person Signing Bid

Signature of Person Signing Bid

Address

Telephone No. _____ Fax No. _____

T.I.N. (Tax Identification or Employer's Number)

If BIDDER is:

AN INDIVIDUAL

By _____ (Seal)
(Individual's Name)

doing business as _____

Business address: _____

Phone No. _____

A PARTNERSHIP

By _____ (Seal)
(Firm Name)

_____ (General Partner)

doing business as _____

Business address: _____

Phone No. _____

A CORPORATION

By _____
(Corporation Name)

(State of Incorporation)

By _____
(Name of Person Authorized to Sign)

(Title)

(Corporate Seal)

Attest _____
(Secretary)

Business address: _____

Phone No. _____



A JOINT VENTURE

By _____
(Name)

(Address)

By _____
(Name)

(Address)

(Each joint venture must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

SECTION BB
BID BOND

BID BOND

Bidder shall submit a bid bond equal to five percent (5%) of the bid price. Failure to submit a bid bond when required may deem the bid non-responsive. Bid Bonds may be submitted electronically with the executed original provided immediately upon request.

SECTION BQS

BIDDER QUALIFICATION STATEMENT

SECTION BQS

ALL BIDDERS ARE NOTIFIED THAT THE FOLLOWING QUALIFICATION STATEMENT MUST BE COMPLETED AND SUBMITTED WITH THE BID PROPOSAL

CONTRACTOR'S QUALIFICATIONS

The Contractor shall show that he has experience with similar projects that require working on traffic signals, curb ramps, sidewalks, median noses, and landscape/irrigation which will require the Contractor to plan his work efforts and equipment needs with these limitations in mind. The Contractor shall submit a complete list of ALL Municipal and Similar Non-Municipal current and completed projects for the past three (3) years for review. This list shall include the names of supervisors and type of equipment used to perform this work.

BIDDERS QUALIFICATION STATEMENT

**INFRASTRUCTURE AND DEVELOPMENT SERVICES BID NUMBER 22-133,
TRAFFIC SIGNAL & ADA IMPROVEMENTS**

Contractor: _____

Indicate One: _____ Sole Proprietor _____ Partnership _____ Other
 _____ Corporation _____ Joint Venture

Name: _____ Partner: _____

Title: _____ Title: _____

Address: _____ Address: _____

City: _____ City: _____

State & Zip: _____ State & Zip: _____

Phone: _____ Phone: _____

State and Date of Incorporation, Partnership, Ownership, Etc. _____

Location of Principal Office: _____

Contact and Phone at Principal Office: _____

Liability Insurance Provider and Limits of Coverage: _____

Workers Compensation Insurance Provider: _____

Surety (Performance and Payment): _____

Address: _____

Contact and Phone: _____

Superintendent and Backup Superintendent: (Work Resume - attach additional sheets.) (Safety Record – attached additional sheets; if needed show all verified safety violations.) The superintendent shall be able to communicate in English and not operate any equipment and have not had any verified job safety violations in the past five years. Any variations shall be reviewed by the OWNER for approval or denial. A job site shall be shut down if proper supervision is not provided.

Superintendent Name

Backup Superintendent Name

Safety Record – List ALL Verified Violations for Superintendent and Backup Superintendent with explanation, date and action taken to correct future safety violations:

Superintendent

Backup Superintendent

Total Number of Employees to be Associated with this Job: _____

Managerial _____ Administrative _____ Professional _____

Skilled _____ Semi-Skilled _____ Other _____

Percentage of work to be done by Bidder's Employees (Based on Dollars Bid): _____

Type(s) of work to be done by Bidder's Employees (examples: concrete paving, structural concrete, waterlines, sanitary sewer lines, storm pipe, storm inlets, excavation, lime, bridge fencing, etc.)

Access to Tools and Equipment: Percent Owned ____ Percent Rented ____

Number of Years in Business as a Contractor on Above Types of Works: _____

Type(s) of Work to be done by Sub-Contractors

Include Name, Address, and Phone Number of Sub-Contractor.

Use additional sheets if needed.

Type of Work

Sub-Contractor

List Equipment to be used on this project (Make/Model/Age of Major Equipment) Any Equipment not listed shall be reviewed by the OWNER for approval or rejection prior to use of Equipment on this project. (Use additional sheets if necessary)

Type of Equipment

Make

Model

Age (years)

List of ALL Municipal and Similar Non-Municipal current and completed projects for the past three (3) years. (Use additional sheets if necessary.)

1. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

2. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

3. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

4. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

5. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

6. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

7. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

8. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

9. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

10. Project: _____

Current Status: _____

Any Litigation Issues: Yes or No (Circle One) If Yes, explain: _____

Any Verified Safety Violations: Yes or No (Circle One) If Yes, explain: _____

Project Description: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Contact Person: _____ Phone: _____

Trade references (List Company, Address, Contact Person, and Phone):

Bank References (List Institution, Address, Contact Person, and Phone)

Claims and Suits (if the answer to any of the following questions is yes, please attached details):

1. Has your organization ever failed to complete any work awarded to it? _____
2. Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or officers? _____
3. Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years? _____
4. Within the last five (5) years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? _____

I, _____, being duly sworn deposes and says that the information provided herein is true and sufficiently complete so as not to be misleading.

Date this _____ day of _____, 20____.

Name of

Organization: _____

By: _____

Title: _____

STATE OF TEXAS

COUNTY OF DALLAS

BEFORE ME the undersigned authority, on this day personally appeared _____, known to me to be the person whose name subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____ 20____.

Notary Public in and for _____ County, Texas

CONSTRUCTION SERVICES AGREEMENT

[PROJECT TITLE]

(Bid # _____)

This CONSTRUCTION SERVICES AGREEMENT ("Agreement") is made as of the Effective Date by and between _____, hereinafter called "Contractor", and the **Town of Addison, Texas**, hereinafter called "City".

RECITALS

WHEREAS, City desires Contractor to perform certain work and services set forth in Section 1 (the "Scope of Services"), and

WHEREAS, Contractor has expressed a willingness to perform said work and services, hereinafter referred to only as "services", specified in the Contract Documents and Section 1 of this Agreement.

NOW, THEREFORE, for and in consideration of the covenants and promises made one to the other herein, City and Contractor agree as follows:

Section 1. Scope of Services

Upon issuance of a written notice to proceed by City, Contractor agrees to provide to City the necessary services, labor, materials, equipment and supplies to perform the _____ (the "Project"), such services being more fully described herein and pursuant to the plans and specifications identified in the Contract Documents.

Section 2. Term of Agreement

The term of this Agreement shall begin on the last date of execution hereof (the "Effective Date") and shall continue until Contractor completes the services required herein to the satisfaction of City and has been paid in full by City, unless sooner terminated in conformance with this Agreement.

Section 3. Contract Documents

(a) This Agreement is a part of the "Contract Documents", which include:

- (1) This Agreement, including all exhibits and addenda hereto;
- (2) City's plans, specifications, and all other contract documents for the Project contained in City's Bid # _____;
- (3) City's written notice(s) to proceed to the Contractor;
- (4) Properly authorized change orders;
- (5) Contractor's Bid Proposal ("Proposal" and/or "Response"); and
- (6) Any other materials distributed by the City that relate to the Project.

In the event there exists a conflict between any term, provision and/or interpretation of the Contract Documents, the documents shall take precedent and control in the order listed above in this section (which shall supersede any conflicting provision concerning priority of contract documents contained in the Bid Packet). If discrepancies are found that may impact Contractor's performance of the services for the Project, it shall be the Contractor's obligation to seek clarification as to which requirements or provisions control before undertaking any work on that component of the Project. Should the Contractor fail or refuse to seek a clarification of such conflicting or inconsistent requirements or provisions prior to any work on that

component of the Project, the Contractor shall be solely responsible for the costs and expenses - including additional time - necessary to cure, repair and/or correct that component of the Project.

Section 4. Contractor Obligations

(a) Performance of Services. To the extent reasonably necessary for Contractor to perform the services under this Agreement, Contractor shall be authorized to engage the services of any agents, assistants, persons, or corporations that Contractor may deem proper to aid or assist in the performance of the services under this Agreement with the prior written approval of City. The cost of such personnel and assistance shall be a reimbursable expense to Contractor only if authorized in writing in advance by City. Unless otherwise agreed, Contractor shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and all water, light, power, fuel, transportation and all other facilities necessary for the execution and completion of the work covered by the Scope of Services.

(b) Quality Materials. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of a good quality. Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials. Materials or work described in words that so applied have well known, technical or trade meaning shall be held to refer to such recognized standards. Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all materials, construction, installation and other services furnished by Contractor under this Agreement. Contractor shall, without additional compensation, correct or revise any errors or deficiencies in the installation and construction of the Project components to conform as shown in the Project drawings and specifications.

(c) Additional Services. Payment for extra work shall be as agreed in the work order. Should City require additional services not included under this Agreement, Contractor shall make reasonable effort to provide such additional services at mutually agreed charges or rates, and within the time schedule prescribed by City; and without decreasing the effectiveness of the performance of services required under this Agreement. All minor details of the work not specifically mentioned in the Scope of Services or Contract Documents but obviously necessary for the proper completion of the work, such as the proper connection of new work to old, shall be considered as incidental to and a part of the work for which the prices are set forth in this Agreement. Contractor will not be entitled to any additional compensation therefor unless specifically stated otherwise. Otherwise the terms "extra work" and "additional services" as used in this Agreement shall be understood to mean and include all work that may be required by City to be done by Contractor to accomplish any alteration or addition to the work as shown on the Project plans and drawings. It is agreed that Contractor shall perform all extra work under the direction of the City's representative when presented with a written work/change order signed by the City's representative, subject, however, to the right of Contractor to require written confirmation of such extra work order by City. No claims for extra services, additional services or changes in the services whatsoever, including any change in pricing or time for performance related to the services will be made by Contractor without first obtaining the City's written agreement and approval of a work/change order reflecting the same.

(d) Independent Contractor. It is understood and agreed by and between the parties that Contractor, while performing under this Agreement, is acting independently, and that City assumes no responsibility or liabilities to any third party in connection with Contractor's actions. All services to be performed by Contractor pursuant to this Agreement shall be in the capacity of an independent contractor, and not as an agent or employee of City. Contractor shall supervise the performance of its services and shall be entitled to control the manner and means by which its services are to be performed, subject to the terms of this Agreement. There is no intended third-party beneficiary to this Agreement.

(e) Inspection of Records. Contractor grants City and its designees the right to audit, examine or inspect, at City's election, all of Contractor's Records relating to the performance of services under this Agreement, during the term of the Agreement and any retention period herein. City's audit, examination or

inspection of Contractor's Records may be performed by a City designee, which may include its internal auditors or an outside representative engaged by City. Contractor agrees to retain Contractor's Records for a minimum of four (4) years following termination of the Agreement, unless there is an ongoing dispute under the contract; then, such retention period shall extend until final resolution of the dispute. "Contractor's Records" shall include any and all information, materials and data of every kind and character generated as a result of the services under this Agreement. City agrees that it will exercise its right to audit, examine or inspect Contractor's Records only during regular business hours. Contractor agrees to allow City and its designees access to all of Contractor's Records, Contractor's facilities and the current or former employees of Contractor, deemed necessary by City or its designee(s), to perform such audit, inspection or examination.

(f) Certification of No Conflicts. Contractor hereby warrants to the City that Contractor has made full disclosure in writing of any existing or potential conflicts of interest related to Contractor's services under this Agreement. In the event that any conflicts of interest arise after the Effective Date of this Agreement, Contractor hereby agrees immediately to make full disclosure to the City in writing.

(g) No Waiver of City's Rights. Neither City's review, approval or acceptance of, nor payment for any of the services required under this Agreement, shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Contractor shall be and remain liable to City in accordance with applicable law for all damages to City caused by Contractor's negligent performance of any of the services furnished under this Agreement.

(h) Rights-of-Access. City will obtain or furnish right-of-access to the Project site for Contractor to perform any required studies, surveys, tests or other necessary investigations in relation to the Scope of Services. Contractor will take all necessary and reasonable precautions to minimize damage to all personal and real property in the performance of such surveys, tests, studies and investigations.

(i) Compliance with Laws. Contractor shall comply with all laws, ordinances, rules and regulations governing Contractor's performance of this Agreement.

Section 5. Payment

(a) Compensation; Method of Payment. City agrees to pay Contractor for all services authorized in writing and properly performed by Contractor in a total amount not to exceed _____ (\$ _____) ("Contract Price"), subject to additions or deletions for changes or extras agreed upon in writing. Unless otherwise provided herein, payment to Contractor shall be monthly based on the Contractor's monthly progress report and detailed monthly itemized statement for services that shows the names of the Contractor's employees, agents, Contractors performing the services, the time worked, the actual services performed, and the rates charged for such services, in a form reasonably acceptable to City. City shall pay such monthly statements within thirty (30) days after receipt and City verification of the services.

(b) Deductions; Withholding. City may deduct from any amounts due or to become due to Contractor any sum or sums owing by Contractor to City. In the event of any breach by Contractor of any provision or obligation of this Agreement, or in the event of the assertion by other parties of any claim or lien against City, or the City's premises, arising out of Contractor's performance under this Agreement, City shall have the right to retain out of any payments due or to become due to Contractor an amount sufficient to completely protect the City from any and all loss, damage or expense therefrom, until the breach, claim or lien has been satisfactorily remedied or adjusted by Contractor. Additionally, City may, on account of subsequently discovered evidence, withhold the whole or part of any payment to such extent as may be necessary to protect itself from loss on account of:

- (1) defective work not remedied;
- (2) claims filed or reasonable evidence indicating possible filing of claims;

- (3) failure of Contractor to make payments promptly to subContractors or for material or labor which City may pay as an agent for the Contractor; or
- (4) damages to another Contractor or subcontractor.

When the above grounds are removed, or Contractor provides a surety bond or letter of credit satisfactory to City (to be determined in City's sole discretion) which will protect City in the amount withheld because of said grounds, City will release the amounts withheld.

Section 6. Performance Schedule

(a) Time for Performance. Contractor shall perform all services as provided for under this Agreement in a proper, efficient, timely, and professional manner in accordance with City's requirements. The time for performance under this Agreement is _____ () calendar days. Accordingly, Contractor shall complete all work related to the Project on or before _____ () calendar days following the date of City's written notice to proceed to Contractor.

(b) Extentions; Written Request Required. No allowance of any extension of time, for any cause whatever (including an event of Force Majeure), shall be claimed by or granted to Contractor, unless (i) Contractor shall have made written request to City for such extension within forty-eight (48) hours after the cause for such extension occurred, and (ii) City and Contractor have agreed in writing that such additional time shall be granted. As used in this section, the term "Force Majeure" shall mean that Contractor's performance of the services under this Agreement is prevented or delayed, in whole or in part, to such an extent that Contractor would not be able to complete the services (or any partial component thereof) within the time for performance set forth herein by reason of or through work strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, court judgment, act of God, pandemic, or other specific cause reasonably beyond Contractor's control and not attributable to its malfeasance, neglect or nonfeasance. Should Contractor timely request an extension of time due to an event of force majeure under this section, City and Contractor may agree in writing to suspended Contractor's performance until such disability to perform (other than a payment obligation) is removed; provided, that Contractor shall use commercially reasonable efforts to remove any such causes and resume performance of the services under this Agreement as soon as reasonably practicable.

(c) Costs of Delay. Contractor understands and agrees that time is of the essence of this contract, and that for each day of delay beyond the number of calendar days agreed upon for the completion of the work herein specified and contracted for (after due allowance for such extension of time as may otherwise be provided for extension of time herein), the Owner may withhold permanently from the Contract Price an amount equal to \$ _____ per day, which the parties agree represents a reasonable estimation of the actual costs that would be incurred by the City in the event of such delay. In the event Contractor's performance under this Agreement is delayed or interfered with, regardless of reason, Contractor shall not be entitled to any increase in fee or price, or to damages or additional compensation as a consequence of such delays.

Section 7. Ownership of Project; Bill of Sale; No Liens

(a) Title of Ownership. Contractor warrants that title to all services, including all equipment and materials incorporated into the Project, will pass to City no later than the time of final payment. Contractor further warrants that upon payment by City, all services for which payments have been received from City shall be free and clear of liens, claims, security interests or other encumbrances in favor of Contractor or any other person or entity whatsoever.

(b) Assignment; Bill of Sale. Contractor agrees, no later than the time of completion of the Project, to assign to City all manufacturer's warranties relating to equipment, materials and labor used in the Project and further agrees it will at all times perform the services in a manner that will, to the greatest extent

possible, preserve all manufacturer's warranties. If necessary as a matter of law, Contractor may retain the right to enforce directly any such manufacturers' warranties during the one year period following the date of acceptance of the Project by City; provided, that City's rights related to the same shall not be subordinate to Contractor's enforcement rights.

CONTRACTOR AGREES TO INDEMNIFY, DEFEND, AND SAVE CITY HARMLESS FROM ALL CLAIMS RELATED TO ANY DEMANDS OF SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, AND SUPPLIERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, ALL SUPPLIES ARISING OUT OF THE PERFORMANCE OF THIS AGREEMENT. CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE THAT ALL OBLIGATIONS DESCRIBED HEREIN HAVE BEEN PAID, DISCHARGED OR WAIVED UPON CITY'S WRITTEN REQUEST.

Section 8. Default; Termination; Abandonment

(a) Default by Contractor. Should Contractor fail to comply with any term or condition this Agreement applicable to Contractor, or become disabled and unable to comply with any provisions of this Agreement related to the quality or character of the services or time of performance, Contractor shall be deemed in default of this Agreement. If such default is not corrected within ten (10) days after written notice by City to Contractor, City may, at its sole discretion and without prejudice to any other right or remedy:

- (1) terminate this Agreement and be relieved of any further payment or consideration to Contractor except for all services determined by City to be satisfactorily completed prior to such termination. Payment for work satisfactorily completed shall be for actual costs incurred and non-refundable, including reasonable salaries and travel expenses of Contractor to and from meetings called by City at which Contractor is required to attend, but shall not include any loss of profit of Contractor. City may further proceed to complete the services in any manner deemed proper by City, either by the use of its own forces or by resubletting to others; or
- (2) City may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation, at Contractor's sole expense.

(b) Suspension or Termination by City. City may suspend or terminate this Agreement for cause or without cause at any time by giving written notice to Contractor. In the event suspension or termination is without cause, payment to Contractor, in accordance with the terms of this Agreement, will be made based on services reasonably determined by City to be satisfactorily performed as of the date of suspension or termination. Such payment will become payable upon delivery of all instruments of service to City and City's acceptance of the same. If City requires a modification of the services under this Agreement, and in the event City and Contractor fail to agree upon such modification(s), City shall have the option of terminating this Agreement and Contractor's services hereunder at no additional cost other than the payment to Contractor in accordance with the terms of this Agreement for the services reasonably determined by City to be properly performed prior to such termination date.

(c) Abandonment. If Contractor should abandon and fail or refuse to resume work within ten (10) days after written notification from the City, or if Contractor fails to timely comply with the orders of the City, when such orders are consistent with the Contract Documents, then, and in that case, where a performance bond(s) exists, the surety on the bond(s) may be notified in writing by City and directed to complete the work (at City's sole discretion), and a copy of said notice shall be delivered to Contractor. After receiving said notice of abandonment, Contractor shall not remove from the work any machinery, equipment, tools, materials or supplies then on the job, but the same, together with any materials and equipment under contract for the

work, may be held for use on the work by the City or the surety on the performance bond, or another Contractor in completion of the work; and Contractor shall not receive any rental or credit therefor, having hereby acknowledged that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement. In the event a surety fails to comply with City's written notice provided for herein, then the City may provide for completion of the work in either of the following elective manners:

- (1) the City may employ such labor and use such machinery, equipment, tools, materials and supplies as said City may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to Contractor, which shall be deducted and paid by City out of such amounts as may be due, or that may thereafter at any time become due to the Contractor under this Agreement. In case such expense is less than the sum which would have been payable under this Agreement if the same had been completed by the Contractor, then Contractor shall receive the difference. In case such expense is greater than the sum which would have been payable under this Agreement if the same had been completed by said Contractor, then the Contractor and/or its surety (ies) shall pay the amount of such excess to the City; or
- (2) the City may (under sealed bids when and in the manner required by law) let the contract to another Contractor for the completion of the work under substantially the same terms and conditions which are provided in this Agreement. In the case of any increase in cost to the City under the new contract as compared to what would have been the cost under this Agreement, such increase shall be charged to the Contractor and its surety (ies) shall be and remain bound therefor. However, should the cost to complete any such new contract prove to be less than what would have been the cost to complete under this Agreement, the Contractor and/or its surety (ies) shall be credited therewith.

(d) Remedies Cumulative. The remedies in this section are cumulative and nothing herein shall be deemed a waiver of any other remedy available to the City under this Agreement, including its remedies upon default provided herein above.

Section 9. Insurance

Contractor shall during the term hereof maintain in full force and effect all policies of insurance reasonably required by City and in compliance with the Contract Documents. Contractor's obligation to provide acceptable certificates of insurance is a material condition of this Agreement, and services under this Agreement shall not commence until certificates of insurance have been received, reviewed, and accepted by City. The minimum coverages and limits of liability for the policies of insurance required under this Agreement are maintained by and accessible through the City's purchasing department.

Section 10. Indemnification

(a) Release of liability. CITY SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE, OR INJURY OF ANY KIND OR CHARACTER TO ANY PERSON OR PROPERTY ARISING FROM THE SERVICES OF CONTRACTOR PURSUANT TO THIS AGREEMENT. CONTRACTOR HEREBY WAIVES ALL CLAIMS AGAINST CITY, ITS OFFICERS, AGENTS AND EMPLOYEES (COLLECTIVELY REFERRED TO IN THIS SECTION AS "CITY") FOR DAMAGE TO ANY PROPERTY OR INJURY TO, OR DEATH OF, ANY PERSON ARISING AT ANY TIME AND FROM ANY CAUSE

OTHER THAN THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF CITY OR BREACH OF CITY'S OBLIGATIONS HEREUNDER.

(b) Contractor's Indemnity Obligation. CONTRACTOR AGREES TO INDEMNIFY AND SAVE HARMLESS CITY FROM AND AGAINST ANY AND ALL LIABILITIES, DAMAGES, CLAIMS, SUITS, COSTS (INCLUDING COURT COSTS, REASONABLE ATTORNEYS' FEES AND COSTS OF INVESTIGATION) AND ACTIONS OF ANY KIND BY REASON OF INJURY TO OR DEATH OF ANY PERSON OR DAMAGE TO OR LOSS OF PROPERTY TO THE EXTENT CAUSED BY CONTRACTOR'S PERFORMANCE OF SERVICES UNDER THIS AGREEMENT OR BY REASON OF ANY NEGLIGENT ACT OR OMISSION ON THE PART OF CONTRACTOR, ITS OFFICERS, DIRECTORS, SERVANTS, EMPLOYEES, REPRESENTATIVES, CONSULTANTS, LICENSEES, SUCCESSORS OR PERMITTED ASSIGNS (EXCEPT WHEN SUCH LIABILITY, CLAIMS, SUITS, COSTS, INJURIES, DEATHS OR DAMAGES ARISE, IN WHOLE OR IN PART, FROM OR ARE ATTRIBUTED TO THE GROSS NEGLIGENCE OF CITY, IN WHICH CASE CONTRACTOR SHALL INDEMNIFY CITY ONLY TO THE EXTENT OR PROPORTION OF NEGLIGENCE ATTRIBUTED TO CONTRACTOR AND/OR ITS OFFICERS, DIRECTORS, SERVANTS, EMPLOYEES, REPRESENTATIVES, CONSULTANTS, LICENSEES, SUCCESSORS OR PERMITTED ASSIGNS AS DETERMINED BY A COURT OR OTHER FORUM OF COMPETENT JURISDICTION).

(c) Notice of Claim(s). Contractor shall promptly advise City in writing of any claim or demand against the City, related to or arising out of Contractor's acts or omissions under this Agreement and shall see to the investigation and defense of such claims or demand at Contractor's sole cost and expense; provided, that City, at its option and at its own expense, may participate in such defense without relieving Contractor of any of its obligations hereunder.

CONTRACTOR'S OBLIGATIONS UNDER THIS SECTION SHALL NOT BE LIMITED TO THE LIMITS OF COVERAGE OF INSURANCE MAINTAINED OR REQUIRED TO BE MAINTAINED BY CONTRACTOR UNDER THIS AGREEMENT. THE PROVISIONS OF THIS SECTION 11 SHALL SURVIVE TERMINATION OF THIS AGREEMENT.

Section 11. Notice

All notices required by this Agreement shall be in writing and addressed to the parties at the addresses set forth below (or to such other address that may be designated by the receiving party from time to time in accordance with this section). All notices shall be delivered by personal delivery, nationally recognized overnight courier (with all fees pre-paid), or e-mail of a PDF document (with confirmation of transmission) or certified or registered mail (in each case, return receipt requested, postage prepaid). Except as otherwise provided in this Agreement, a notice is effective only (a) upon receipt by the receiving party, and (b) if the party giving the notice has complied with the requirements of this Section.

Section 12. Sales and Use Taxes

Contractor understands and acknowledges that City is a governmental entity and exempt from the payment of sales and use taxes for certain materials and equipment conveyed to City as part of this Project or otherwise incorporated into the Project. City agrees to provide Contractor such documentation as may otherwise be required by state law to allow Contractor to avoid payment of sales and uses taxes for materials and equipment with respect to the Project to the extent allowed by law.

Section 13. Texas Government Code Verifications

(a) Contractor's execution of this Agreement shall serve as its acknowledgement and written verification that:

- (1) the requirements of Subchapter J, Chapter 552, Government Code, apply to this Agreement and Contractor agrees that the Agreement can be terminated if Contractor knowingly or intentionally fails to comply with a requirement of that subchapter;
- (2) pursuant to Texas Government Code Chapter 2270, that Contractor's organization does not presently boycott Israel and will not boycott Israel during the term of this Agreement; and
- (3) pursuant to Texas Government Code Chapter 2251, that Contractor's organization does not current discriminate against firearm and ammunition industries and will not for the term of the contract. Discriminating means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with the firearm or ammunition industry or with a person or entity doing business in the firearm or ammunition industry, but does not include an action made for ordinary business purposes.

Section 14. Miscellaneous

(a) Contractor shall not assign or sublet this Agreement, in whole or in part, without the prior written consent of City. (b) Contractor shall comply with all federal, state, county and municipal laws, ordinances, resolutions, regulations, rules, and orders applicable to the services under this Agreement. (c) The laws of the State of Texas shall govern this Agreement; and venue for any action concerning this Agreement shall be in the state district courts of Dallas County, Texas. The parties agree to submit to the personal and subject matter jurisdiction of said courts. (d) This Agreement contains the entire understanding of the parties with respect to the subject matter hereof and there are no oral understandings, statements or stipulations bearing upon the meaning or effect of this Agreement which have not been incorporated herein. (e) The exhibits attached hereto, if any, are incorporated herein and made a part hereof for all purposes. (f) Unless expressly provided otherwise herein, this Agreement may only be modified, amended, supplemented or waived by a mutual written agreement of the parties. (g) In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it. (h) Any of the representations and obligations of the parties, as well as any rights and benefits of the parties pertaining to a period of time following the termination of this Agreement shall survive termination. (i) This Agreement may be executed by the parties in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist of any number of copies hereof each signed by less than all, but together signed by all of the parties. (j) Each party represents that it has full capacity and authority to grant all rights and assume all obligations granted and assumed under this Agreement. (k) Subject to the provisions regarding assignment, this Agreement shall be binding on and inure to the benefit of the parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY –
SIGNATURES ON FOLLOWING PAGE(S)]

IN WITNESS WHEREOF, the parties have executed and delivered this Agreement as of the Effective Date.

For City:

For Contractor:

TOWN OF ADDISON, TEXAS

[CONTRACTOR ENTITY NAME]

By: _____
Wesley S. Pierson
City Manager

By: _____

Date: _____

Date: _____

Notice Address:

Notice Address:

Town of Addison
Attn: Wesley S. Pierson, City Manager
5300 Belt Line Road
Town of Addison, Texas 75254
E: wpierson@addisontx.gov

Attn: _____

E: _____

Addison Contract ID:
SAMPLE FORM CSA_v1.20220330

SECTION PrB
PERFORMANCE BOND

PERFORMANCE BOND

STATE OF TEXAS }
COUNTY OF DALLAS }

WHEREAS, _____ as principal ("Contractor") and _____, a corporation organized under the laws of _____ and being duly authorized to do business in the State of Texas, as surety ("Surety")(whether one or more), do hereby expressly acknowledge themselves to be held and bound to pay to the Town of Addison, Texas, a home-rule municipality organized and operating under the Constitution and laws of the State of Texas (the "Town"), its successors and assigns, and to all persons, firms, subcontractors and corporations who may furnish materials or labor under the contract as more fully described below, the sum of _____ Dollars in the lawful currency of the United States of America (\$) for the payment of which Contractor and Surety are liable to the Town, jointly and severally; and

WHEREAS, Contractor has this day entered into a written contract with the Town to build and construct _____

_____ which contract and the plans and specifications therein mentioned (collectively referred to hereinafter as the "Contract") are hereby expressly incorporated into and made a part hereof as though set forth at length; and

WHEREAS, this bond is given pursuant to Chapter 2253 of the Texas Government Code;

NOW, THEREFORE, if Contractor shall well, truly and faithfully perform all of the undertakings, duties, terms, conditions and agreements of the Contract; shall satisfy all claims and demands incurred under the Contract; shall fully indemnify and hold the Town harmless; shall reimburse and repay the Town for any outlay or expense which the Town may incur in making good any default, and shall promptly make payment to all persons, firms, subcontractors and corporations who may furnish materials or labor under the Contract, then this obligation shall be void; otherwise to remain in full force and effect. The obligations of Contractor and Surety under this bond apply both to the original Contract and to any extension or modification of the Contract and Surety agrees that no change, extension of time, addition, expansion or other modification of the Contract, the work to be done under the Contract, or the plans and specifications which are a part of the Contract shall in any manner affect the obligations of Surety under this bond, and Surety waives notice of any such change, extension of time, addition, expansion or other modification. The obligations of Contractor and Surety under this bond are performable and payable in Dallas County, Texas such that exclusive venue for any legal action pertaining to this bond shall lie in Dallas County, Texas. By their signatures below, the persons signing this bond warrant and represent that they are, respectively, duly authorized to sign on behalf of Contractor and Surety.

EXECUTED this the ____ day of _____, 2____.

CONTRACTOR: _____ SURETY: 1
By: _____ By: _____
Title: _____ Title: _____

ACKNOWLEDGMENTS
[Contractor]

STATE OF TEXAS }
COUNTY OF DALLAS }

Before me _____ (insert the name of the officer) on this day _____ personally appeared _____ known to me (or proved to me on the oath of _____) or through _____ (description of identity card or other document) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2____.

Notary Public in and for the State of Texas _____ Typed or Printed Name of Notary
My Commission Expires: _____

[Surety]

STATE OF TEXAS }
COUNTY OF DALLAS }

This instrument was acknowledged before me on the ____ day of _____, 2____ by _____ who is the _____ of the Surety, on behalf of Surety.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ____ day of _____, 2____.

Notary Public in and for the State of Texas _____ Typed or Printed Name of Notary
My Commission Expires: _____

1 Please see attached contact sheet for Surety and the Texas Department of Insurance.

Payment and Performance Bond Contact Sheet

(1) Claims:

All notices of claims shall be sent to the surety at the following address:

(Name of surety)

(Mailing address)

(Physical address)

(Phone number)

(2) Texas Department of Insurance Contact Number:

The address and contact information of the surety may otherwise be obtained by contacting the Texas Department of Insurance at the following toll free telephone number:

1-800-252-3439.

SECTION PyB
PAYMENT BOND

PAYMENT BOND

STATE OF TEXAS }
COUNTY OF DALLAS }

WHEREAS, _____, as principal ("Contractor") and _____, a corporation organized under the laws of _____ and being duly authorized to do business in the State of Texas, as surety ("Surety")(whether one or more), do hereby expressly acknowledge themselves to be held and bound to pay to the Town of Addison, Texas, a home-rule municipality organized and operating under the Constitution and laws of the State of Texas (the "Town"), its successors and assigns, and to all persons, firms, subcontractors and corporations who may furnish materials or labor under the contract as more fully described below, the sum of _____ Dollars in the lawful currency of the United States of America (\$) for the payment of which Contractor and Surety are liable to the Town, jointly and severally; and

WHEREAS, Contractor has this day entered into a written contract with the Town to build and construct _____

which contract and the plans and specifications therein mentioned (collectively referred to hereinafter as the "Contract") are hereby expressly incorporated into and made a part hereof as though set forth at length; and

WHEREAS, this bond is given pursuant to Chapter 2253 of the Texas Government Code;

NOW, THEREFORE, if Contractor shall promptly make payment to all persons, firms, subcontractors and corporations who may furnish materials or labor under the Contract, then this obligation shall be void; otherwise to remain in full force and effect. The obligations of Contractor and Surety under this bond apply both to the original Contract and to any extension of time or modification of the Contract and Surety agrees that no change, extension of time, addition, expansion or other modification of the Contract, the work to be done under the Contract, or the plans and specifications which are a part of the Contract shall in any manner affect the obligations of Surety under this bond, and Surety waives notice of any such change, extension of time, addition, expansion or other modification. The obligations of Contractor and Surety under this bond are performable and payable in Dallas County, Texas such that exclusive venue for any legal action pertaining to this bond shall lie in Dallas County, Texas. By their signatures below, the persons signing this bond warrant and represent that they are, respectively, duly authorized to sign on behalf of Contractor and Surety.

EXECUTED this the _____ day of _____, 2_____.

CONTRACTOR:

SURETY: 1

By: _____

By: _____

Title: _____

Title: _____

ACKNOWLEDGMENTS
[Contractor]

STATE OF TEXAS }
COUNTY OF DALLAS }

Before me _____ (insert the name of the officer) on this day _____ personally appeared _____ known to me (or proved to me on the oath of _____) or through _____ (description of identity card or other document) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2_____.

Notary Public in and for the State of Texas
My Commission Expires: _____

Typed or Printed Name of Notary

[Surety]

STATE OF TEXAS }
COUNTY OF DALLAS }

This instrument was acknowledged before me on the _____ day of _____, 2_____ by _____ who is the _____ of the Surety, on behalf of Surety.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2_____.

Notary Public in and for the State of Texas
My Commission Expires: _____

Typed or Printed Name of Notary

1 Please see attached contact sheet for Surety and the Texas Department of Insurance

Payment and Performance Bond Contact Sheet

(1) Claims:

All notices of claims shall be sent to the surety at the following address:

(Name of surety)

(Mailing address)

(Physical address)

(Phone number)

(2) Texas Department of Insurance Contact Number:

The address and contact information of the surety may otherwise be obtained by contacting the Texas Department of Insurance at the following toll free telephone number:

1-800-252-3439.

SECTION MB
MAINTENANCE BOND

MB 1

MAINTENANCE BOND – TWO YEAR

STATE OF TEXAS

COUNTY OF DALLAS

WHEREAS, _____, as principal ("Contractor") and _____, a corporation organized under the laws of _____ and being duly authorized to do business in the State of Texas, as surety ("Surety")(whether one or more), do hereby expressly acknowledge themselves to be held and bound to pay to the Town of Addison, Texas, a home-rule municipality organized and operating under the Constitution and laws of the State of Texas (the "Town"), its successors and assigns the sum of _____ Dollars in the lawful currency of the United States of America (\$) for the payment of which Contractor and Surety are liable to the Town, jointly and severally; and

WHEREAS, Contractor has this day entered into a written contract with the Town to build and construct which contract and the plans and specifications therein mentioned (collectively referred to hereinafter as the "Contract") are hereby expressly incorporated into and made a part hereof as though set forth at length; and

WHEREAS, under the Contract it is provided that the Contractor will maintain and keep in good repair all work to be performed and done under the Contract for a period of two (2) years from and after its date of final completion and written acceptance by the Town, and to do and perform all necessary work and repair any defective condition, it being understood that the purpose of this maintenance bond is to insure all warranties, express or implied, made or given by the Contractor to the Town and to cover all defective, inadequate or non-conforming conditions arising by reason of any materials or labor installed, provided, constructed or performed by the Contractor and in case the Contractor shall fail to correct any such conditions it is agreed that the Town may make such corrections and charge the cost of making those corrections against the Contractor and the Surety on this obligation, and the Contractor and Surety shall be subject to the liquidated damages provided in the contract, the plans and the specifications for each day's failure on its part to comply with the terms and provisions of the Contract;

NOW, THEREFORE, if the Contractor shall keep and perform its obligation to maintain the work and keep the work in repair for the full maintenance period of two (2) years as herein provided, then these presents shall be null and void and have no further effect, but if default shall be made by Contractor in the performance of its obligations, then these presents shall have full force and effect, and the Town shall have and recover from the Contractor and its Surety damages in the premises as provided and it is further understood and agreed that this obligation shall be a continuing one against the Contractor and the Surety and that successive recoveries may be had hereon for successive breaches until the full amount of this bond shall have been exhausted; and it is further understood that the obligation under this bond to maintain the work shall continue throughout the maintenance period and shall not be changed, diminished, or in any other manner affected during the term of this bond. The obligations of Contractor and Surety under this bond apply both to the original Contract and to any extension or modification of the Contract and Surety agrees that no change, extension of time, addition, expansion or other modification of the Contract, the work to be done under the Contract, or the plans and specifications which are a part of the Contract shall in any manner affect the obligations of Surety under this bond, and Surety waives notice of any such change, extension of time, addition, expansion or other modification. The obligations of Contractor and Surety under this bond are performable and payable in Dallas County, Texas such that exclusive venue for any legal action pertaining to this bond shall lie in Dallas County, Texas. By their signatures below, the persons signing this bond warrant and represent that they are, respectively, duly authorized to sign on behalf of Contractor and Surety.

EXECUTED this the _____ day of _____, 2_____.
CONTRACTOR: _____ SURETY: _____

By: _____ By: _____
Printed Name: _____ Printed Name: _____
Title: _____ Title: _____

Address of Principal: _____ Address of Surety: _____

ACKNOWLEDGMENTS
[Contractor]

STATE OF TEXAS
COUNTY OF DALLAS

Before me _____ (insert the name of the officer) on this day _____ personally appeared _____ known to me (or proved to me on the oath of _____) or through _____ (description of identity card or other document) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2_____.

Notary Public in and for the State of Texas _____ Typed or Printed Name of Notary
My Commission Expires: _____
[Surety]

STATE OF TEXAS
COUNTY OF DALLAS

This instrument was acknowledged before me on the ___ day of _____, 2____ by _____ who is the _____ of the Surety, on behalf of Surety.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 2_____.

Notary Public in and for the State of Texas _____ Typed or Printed Name of Notary
2-4-13 2 yr

SECTION BP

CONTRACTOR'S AFFIDAVIT OF BILLS PAID

CONTRACTOR'S AFFIDAVIT OF BILLS PAID

STATE OF TEXAS

COUNTY OF DALLAS

Personally, before me the undersigned authority, on this day appeared _____ who, being duly sworn, on oath, says that he is a legal representative of _____
(full name of Contractor as in contract)

and that the contract for the construction of the project, designated as

TRAFFIC SIGNAL & ADA IMPROVEMENTS

INFRASTRUCTURE AND DEVELOPMENT SERVICES BID NUMBER 22-133

has been satisfactorily completed and that all bills for materials, apparatus, fixtures, machinery and labor used in connection with the construction of this project have, to the best of my knowledge and belief, been fully paid.

Signature

Title

Sworn to and subscribed before me this _____ day of _____, 202_.

Notary Public in and for

_____ County, Texas

Instructions:

If the contractor is an individual, he shall sign the affidavit. If the contractor is a partnership, any partner may sign the affidavit. If the contractor is a corporation, a person authorized by the by-laws or by the Board of Directors shall sign the affidavit. If the Contractor is a joint-venture of individuals, any of the individuals may sign the affidavit. If the Contractor is a joint-venture of partnerships, or of individuals and partnerships, the affidavit may be signed by the individual or any partner of any partnership. If the contractor is a joint-venture in which a corporation is a party, separate affidavits must be executed in the name of the joint-venture: one by each corporation and one by each individual or partnership. Signatures for corporations should be by a duly authorized officer. If signature is by another, a showing of authority to sign must accompany the affidavit.

SECTION GP

GENERAL PROVISIONS

GENERAL PROVISIONS

The General Provisions of the Contract shall be as stated in the *Standard Specifications for Public Works Construction – North Central Texas, 5th Edition (2017)*, under Division 100, "General Provisions," Items 101.1 through 109.6 inclusive, as amended or supplemented and except as modified by the Special Provisions or Instructions to Bidders.



Town of Addison
GENERAL TERMS AND CONDITIONS

By submitting an Offer in response to the Solicitation, the Contractor/Seller (hereafter called Seller) agrees the Contract/Purchase Order shall be governed by the following terms and conditions for goods and services.

1. Applicability: These General Terms and Conditions and the Terms and Conditions, Specifications, Drawings and other requirements included in the Town of Addison's Request for Bid (collectively, "Terms and Conditions") are applicable to Contracts/Purchase Orders issued by the Town of Addison (hereinafter referred to as the "Town" or "Buyer") and the Seller (hereinafter referred to as the "Seller"). Any deviations must be in writing and signed by a representative of the Town's Purchasing Department and the Seller. No terms and conditions contained in the Seller's Proposal, Invoice or Statement shall modify the Terms and Conditions. If there is a conflict between the Terms and Conditions and Seller's response to the Town's request for bids or proposals documents (including the provisions of the Seller's form of contract/purchase order), the Terms and Conditions will take precedence and control.
2. Official Solicitation Notification: The Town utilizes the following for official notifications of solicitation opportunities: www.bidsync.com and the Dallas Morning News of Dallas County. These are the only forms of notification authorized by the Town for notifications of solicitation opportunities. The Town is not responsible for receipt of notifications or information from any source other than those listed. It shall be the Seller's responsibility to verify the validity of all solicitation information received from any source other than the Town. There will be NO COST to the Seller for using BidSync to respond to Town of Addison solicitations.
3. Seller to Package Goods: Seller shall package goods in accordance with good commercial practice. Each shipping container, shall be clearly and permanently marked as follows: (a) Seller's name and address; (b) consignee's name, address and purchase order or purchase change order number; (c) container number and total number of containers, e.g., "box 1 of 4 boxes"; and (d) number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided and agreed to in writing by Buyer. Goods shall be suitably packed to secure lowest transportation costs and to conform to requirements of common carriers and any applicable specifications. Town's count or weight shall be final and conclusive on shipments not accompanied by packing list. Unless otherwise stated in the Town's solicitation, all goods will be new, not used, rebuilt, reconditioned or recycled, will be in first class condition, and will be in containers suitable for site.
4. Shipment Under Reservation Prohibited: Seller is not authorized to ship the goods under reservation and no tender of a bill of lading will operate as a tender of goods.
5. Title and Risk of Loss: Title and risk of loss of the goods will not pass to the Town until the Town actually receives, takes possession of, and inspects and accepts the goods at the point or points of delivery.

6. Delivery Terms and Transportation Charges: Goods shall be shipped F.O.B. point of delivery; prices bid and quoted shall be F.O.B. point of delivery, and shall include all freight, delivery and packaging costs. Town shall have the right to designate what method of transportation shall be used to ship the goods. Town assumes and shall have no liability for goods damaged while in transit and or delivered in a damaged condition or that otherwise don't conform to the Terms and Conditions. Seller shall be responsible for and handle all claims with carriers, and in case of damaged or non-conforming goods shall ship replacement goods immediately upon notification by the Town of the same, and the Town may return such damaged or non-conforming goods at Seller's sole cost and expense, including costs and expense for freight, delivery, packaging, and shipping.

7. Right of Inspection and Rejection; Backorders: The Town shall have the right, and expressly reserves all rights under law, including, but not limited to the Uniform Commercial Code, to inspect the goods at delivery before accepting them, and to reject defective or non-conforming goods. Backorders delayed beyond a reasonable period of time, as determined by the Town Purchasing Manager, may be cancelled by the Town without liability of any kind whatsoever, and payment will not be made for such cancellations.

8. Acceptance of Incomplete or Non-Conforming Goods: If, instead of requiring immediate correction or removal and replacement of defective or non-conforming goods, Town prefers to accept such goods, Town may do so. Seller shall pay all claims, costs, losses and damages attributable to Town's evaluation of and determination to accept such defective or non-conforming deliverables. If any such acceptance occurs prior to final payment, Town may deduct such amounts as are necessary to compensate Town for the diminished value of the defective or non-conforming deliverables. If the acceptance occurs after final payment, such amount will be refunded to Town by Seller.

9. Substitution: Every delivery of goods by the Seller must comply with all provisions of this bid including the specifications, delivery schedule, quantity and quality, and the Terms and Conditions. Any delivery which does not conform to the Buyer's requirements shall constitute a breach of contract. Seller does not have authorization to make or tender substitute goods unless it is agreed to in writing by the Buyer and signed by an authorized representative of Buyer.

10. Payment:

(a) All proper invoices received by the Town will be paid within thirty (30) days of the Town's receipt and acceptance of the goods or of the invoice, whichever is later, unless other terms are specified on the face of the purchase order in the original printing. If payment is not timely made, interest shall accrue on the unpaid balance at the lesser of one percent per month or the maximum lawful rate; except, if payment is not timely made for a reason for which the Town may withhold payment hereunder, interest shall not accrue until ten (10) days after the grounds for withholding payment have been resolved.

(b) If partial shipments or deliveries are authorized by the Town, Seller will be paid for the partial shipment or delivery, as stated above, provided that the invoice matches the shipment or delivery.

(c) The Town may withhold or set off the entire payment or part of any payment otherwise due Seller to such extent as may be necessary on account of: (i) delivery of defective or non-conforming goods by Seller, or (ii) failure of the Seller to submit proper invoices with all required attachments and supporting documentation, or (iii) failure of Seller to deliver quantity of goods ordered (payment will be made for actual quantities delivered).

(d) The Town's payment obligations are payable only and solely from funds appropriated, budgeted, and available for the purpose of this purchase. The absence of appropriated and budgeted or other lawfully available funds shall render the Contract/Purchase Order null and void to the extent funds are not appropriated and budgeted or available and any goods delivered but unpaid shall be returned to Seller. The Town shall provide the Seller written notice of the failure of the Town to make an adequate appropriation and budget for any fiscal year to pay the amounts due under the Contract/Purchase Order, or the reduction of any appropriation to an amount insufficient to permit the Town to pay its obligations under the Contract/Purchase Order.

11. Invoicing: Send ORIGINAL INVOICE to address indicated on the purchase order. If invoice is subject to cash discounts the discount period will begin on the day invoices are received. So that proper cash discount may be computed, invoice should show amount of freight as a separate item, if applicable; otherwise, cash discount will be computed on total amount of invoice.

12. Taxes - Exemption: All quotations are required to be submitted LESS Federal Excise and State Sales Taxes. Tax Exemption Certificate will be provided by the Town for the successful Seller

13. Warranty - Price:

(a) Seller warrants the prices quoted in its bid are no higher than Seller's current prices on orders by others for like goods under similar terms of purchase.

(b) Seller certifies that the prices in Seller's bid have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.

(c) In the event of any breach of this warranty, the prices of the items will be reduced to Seller's current prices on orders by others, or in the alternative, the Town may cancel this Contract/Purchase Order without liability to Seller of any kind whatsoever. In addition to any other remedy available, the Town may deduct from any amounts owed to Seller, or otherwise recover, any amounts paid for items in excess of Seller's current prices on orders by others for like goods under similar terms of purchase.

14. Warranty – Title: Without limiting any provision of law, Seller warrants that it has good and indefeasible title to all goods furnished hereunder, and that the goods are free and clear of all liens, claims, security interests and encumbrances. **Seller shall indemnify and hold the Town harmless from and against all adverse title claims to the goods.**

15. Warranty (goods): If goods are sold and furnished to Seller in connection with these Terms and Conditions, Seller represents and warrants that the goods sold and furnished to the Town will be (i) free from defects in design, manufacture, materials and workmanship, (ii) be of merchantable quality and fit for ordinary use, (iii) be in full conformance with Buyer's specifications, drawings and data, with Seller's samples or models furnished in connection herewith, with Seller's express warranties, and with the terms and conditions of the Town's solicitation, and (iv) conform to all applicable Federal, State, and local laws, ordinances, rules, regulations, codes, and to all applicable standards and industry codes and standards. These warranties are in addition to all others given to the Buyer by the Seller or by law. Seller shall not limit, disclaim, or exclude these warranties or any implied warranties, and any attempt to do so shall render this Contract/Purchase Order voidable at the option of the Buyer, and any such limitations, disclaim, or exclusions shall be void and without force or effect.

Unless otherwise specified in a Contract/Purchase Order and approved by the Town in writing, the warranty period shall be at least one year from the date of acceptance of the goods or from the date of acceptance of any replacement goods. If during the warranty period, one or more of the above warranties are breached, Seller shall promptly upon receipt of demand either repair the defective or non-conforming goods, or replace the non-conforming or defective goods with fully conforming and non-defective goods, at the Town's option and at no additional cost to the Town. All costs incidental to such repair or replacement, including but not limited to, any packaging and shipping costs, shall be borne exclusively by Seller. The Town shall endeavor to give Seller written notice of the breach of warranty within thirty (30) days of discovery of the breach of warranty, but failure to give timely notice shall not impair the Town's rights hereunder.

If Seller is unable or unwilling to repair or replace defective or non-conforming goods as required by Town, then in addition to any other available remedy, Town may reduce the quantity of goods it may be required to purchase under the Contract/Purchase Order from Seller, and purchase conforming goods from other sources. In such event, Seller shall pay to Town upon demand the increased cost, if any, incurred by the Town to procure such goods from another source.

If Seller is not the manufacturer, and the goods are covered by a separate manufacturer's warranty, Seller shall transfer and assign such manufacturer's warranty to Town. If for any reason the manufacturer's warranty cannot be fully transferred to Town, Seller shall assist and cooperate with Town to the fullest extent to enforce such manufacturer's warranty for the benefit of Town.

16. Warranty (services): If services are provided to Seller in connection with these Terms and Conditions, Seller represents and warrants that all services to be provided to the Town will be fully and timely performed in a good and workmanlike manner in accordance with generally accepted industry standards and practices, the terms, conditions, and covenants of this Contract/Purchase Order, and all applicable Federal, State and local laws, ordinances, rules, regulations and codes. These warranties are in addition to all others given to the Buyer by the Seller or by law. Seller shall not limit, disclaim, or exclude these warranties or any implied warranties, and any attempt to

do so shall render this Contract/Purchase Order voidable at the option of the buyer, and any such limitations, disclaim, or exclusions shall be void and without force or effect.

Unless otherwise specified in the Contract/Purchase Order, the warranty period shall be at least one year from the date of final acceptance of the services by the Town. If during the warranty period, one or more of the above warranties are breached, Seller shall promptly upon receipt of demand perform the services again in accordance with above standard at no additional cost to the Town. All costs incidental to such additional performance shall be borne by the Seller. The Town shall endeavor to give the Seller written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach warranty, but failure to give timely notice shall not impair the Town's rights under this section.

If the Seller is unable or unwilling to perform its services in accordance with the above standard as required by the Town, then in addition to any other available remedy, the Town may reduce the amount of services it may be required to purchase under the Contract/Purchase Order from the Seller, and purchase conforming services from other sources. In such event, the Seller shall pay to the Town upon demand the increased cost, if any, incurred by the City to procure such services from another source.

17. Right to Assurance: Whenever one party to the Contract/Purchase Order in good faith has reason to question the other party's intent to perform, demand may be made to the other party for written assurance of the intent to perform. In the event that no assurance is given within the time specified after demand is made, the demanding party may treat this failure as an anticipatory repudiation of this Contract/Purchase Order.

18. Default: Seller shall be in default under this Contract/Purchase Order if Seller (a) fails to fully, timely and faithfully perform any of its material obligations under this Contract/Purchase Order (whether or not an obligation is "material" shall be determined by the Town), (b) fails to provide adequate assurance of performance as provided for herein, (c) becomes insolvent or seeks relief under the bankruptcy laws of the United States, or (d) makes a material misrepresentation in Seller's offer or response to Buyer's solicitation, or in any report or deliverable required to be submitted by Seller to the Town.

19. Termination for Cause or Convenience: The Town, at any time, by 30 days written notice to the Seller, has the absolute right to terminate this Contract/Purchase Order, in whole or in part, for cause or for convenience (that is, for any reason or for no reason whatsoever). "Cause" means the Seller's refusal or failure to perform or complete its obligations under this Contract/Purchase Order within the time specified and to the Town's satisfaction, or failure to meet the specifications, quantities, quality and/or other requirements specified in the Contract/Purchase Order. If the Town terminates this Contract/Purchase Order for cause, the Seller shall be liable for any damages suffered by the Town. If the agreement is terminated for convenience, the Seller has no further obligation under this Contract/Purchase Order. Upon receipt of a notice of termination, Seller shall promptly cease all further work pursuant to the Contract/Purchase Order, with such exceptions, if any, specified in the notice of termination. Payment shall be made to cover the cost of goods delivered and services performed and obligations incurred prior to the date of termination in accordance with the terms hereof.

20. Delay: Town may delay scheduled delivery or other due dates by written notice to Seller if the Town deems it is in its best interest. If such delay causes an increase in the cost of the work under the Contract/Purchase Order, the Town and the Seller shall negotiate an equitable adjustment for costs incurred by Seller in the Contract/Purchase Order price and execute an amendment to the Contract/Purchase Order. Seller must assert its right to an adjustment within thirty (30) days from the date of receipt of the notice of delay. Failure to agree on any adjusted price shall be handled under the Dispute Resolution process specified herein. However, nothing in this provision shall excuse Seller from delaying the delivery as notified. For purposes of these Terms and Conditions, "days" means calendar days.

21. **SELLER'S INDEMNITY OBLIGATION; INSURANCE**: See attached Town of Addison minimum requirements.

22. Gratuity: Town may, by written notice to Seller, cancel this Contract/Purchase Order without liability to Town if it is determined by Town that any gratuity, in the form of entertainment, gifts, or otherwise, was offered or given by Seller, or any officer, employee, agent or representative of Seller, to any officer, employee, or representative of Town with a view toward securing a contract or securing favorable treatment with regard to the awarding or amending, or the making or any determinations with respect to the performance of, a contract. In the event this Contract/Purchase Order is canceled by the Town pursuant to this provision, the Town shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by the Seller in providing such gratuities.

23. Notices: Unless otherwise specified, all notices, requests, or other communications required or appropriate to be given under this Contract/Purchase Order shall be in writing and shall be deemed delivered upon being hand-delivered or upon three (3) business days after postmarked if sent by U.S. Postal Service certified or registered mail, return receipt requested. Notices to Seller shall be sent to the address as specified by Seller. Notices to the Town shall be addressed to Town at 5300 Belt Line Road, Dallas, Texas 75254 and marked to the attention of the Town Finance Director.

24. No Warranty By Town Against Infringement: Seller represents and warrants to the Town that: (i) Seller shall provide the Town good and indefeasible title to all goods being sold and/or supplied to the Town, and (ii) such goods in accordance with the specifications in this Contract/Purchase Order will not infringe, directly or indirectly, any patent, trademark, copyright, trade secret, or any other intellectual property right of any kind of any third party; that no claims have been made by any person or entity with respect to the ownership or operation of such goods and the Seller does not know of any valid basis for any such claims. The Town's specifications regarding the goods shall in no way diminish Seller's warranties or obligations under this paragraph, and the Town makes no warranty that the production, development, or delivery of goods according to the specifications will not give rise to such a claim or will not impact such warranties of Seller, and in no event will Town be liable to Seller, its officers, employees, or agents (together, "Seller Parties") for indemnification or otherwise if Seller Parties or any of them is sued on the grounds of infringement or the like. If Seller is of the opinion that an infringement or the like will or may result, Seller shall promptly notify Town of that opinion. If Seller in good

faith ascertains, prior to production of the goods, that production of the goods according to the specifications will result in infringement or the like, this Contract/Purchase Order will be null and void, and neither Town nor Seller shall have any liability one to the other.

25. Assignment and Successors: The successful Seller shall not assign, transfer, pledge, subcontract, or otherwise convey (collectively, “assign” or “assignment”), in any manner whatsoever, any rights, duties, obligations, or responsibilities of Seller under or in connection with this Contract/Purchase Order, in whole or in part, without the prior written consent of the Town of Addison (and any such assignment without the prior written consent of the Town shall be null and void). Any person or entity to whom Seller assigns any right, duty or obligation shall, as a condition of such assignment, agree to comply with and abide by all provisions of this Contract/Purchase Order, and Seller shall promptly give the Town a true and correct copy of such agreement.

This Contract/Purchase Order shall be binding upon and inure to the benefit of the City and the Seller and their respective successors and authorized assigns, provided however, that no right or interest in the Contract/Purchase Order shall be assigned and no obligation shall be delegated by the Contractor without the prior written consent of the City. This Contract/Purchase Order does not and is not intended to confer rights or benefits on any person, firm or entity not a party hereto; it being the intention of the parties that there be no third party beneficiaries to this Contract/Purchase Order.

26. Waiver; Rights, Remedies: All waivers must be in writing and signed by the waiving party. The rights or remedies under this Agreement are cumulative to any other rights or remedies, which may be granted by law.

27. Modifications: This contract can be modified or amended only by a writing signed by both parties. No pre-printed or similar terms on any Seller invoice, order or other document shall have any force or effect to change the terms, covenants, and conditions of this Contract/Purchase Order.

28. Independent Contractor: Seller shall operate hereunder as an independent contractor and not as an officer, agent, servant or employee of the Town. Seller shall have exclusive control of, and the exclusive right to control, the details of its operations hereunder, and all persons performing same, and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants.

29. Interpretation: This Contract/Purchase Order is intended by the parties as a final, complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties or course of performance or usage of the trade shall be relevant to supplement or explain any term used in this Contract/Purchase Order. Although the Contract/Purchase Order may have been substantially drafted by one party, it is the intent of the parties that all provisions be construed in a manner to be fair to both parties, reading no provisions more strictly against one party or the other. Whenever a term defined by the Uniform Commercial Code, as enacted by the State of Texas, is used in this contract, the UCC definition shall control, unless otherwise defined in this Contract/Purchase Order.

30. Competitive Pricing: It is the intent of the Town to consider Interlocal Cooperative Agreements and State/Federal contracts in determining the best value for the Town.

31. Interlocal Agreement: Successful bidder (Seller) agrees to extend prices for the goods and/or services to be provided by Seller described in this Contract/Purchase Order to all entities that have entered into or will enter into joint purchasing interlocal cooperation agreements with the Town. The Town is a participating member of several interlocal cooperative purchasing agreements. As such, the Town has executed interlocal agreements, as permitted by law, including under Chapter 791 of the Texas Government Code, with certain other political subdivisions, authorizing participation in a cooperative purchasing program. The successful bidder (Seller) may be asked by the Town to provide products/services based upon the bid price to any other participant to a cooperative purchasing agreement, and the Seller agrees to do so (such provision will be pursuant to an agreement between Seller and such other participant, and the Town will have no liability or responsibility in connection therewith).

32. Right to Audit: The city shall have the right to examine and audit after reasonable notice any and all books and records, in any form or format whatsoever (including electronic), of Seller that may relate to this Contract/Purchase Order including, without limitation, the performance of Seller, its employees, agents, and subcontractors. Such books and records will be maintained in accordance with generally accepted accounting principles and shall, upon request and at the Town's request, be made available at a location designated by the Town. Seller shall, except for copying costs, otherwise bear all costs of producing such records for examination and copying by the Town. Unless otherwise agreed by the Town, such books and records must be made available to the Town within five business days after the Seller's receipt of a written notice from the Town requesting the same. The provisions of this paragraph shall survive the termination of this agreement. Seller shall retain all such books and records for a period of three (3) years after final payment on this Contract/Purchase Order or until all audit and litigation matters that the Town has brought to the attention of the Seller are resolved, whichever is longer. The Seller agrees to refund to the Town any overpayments disclosed by any such audit. The Seller shall include a similar audit right on behalf of the Town in all subcontractor agreements entered into in connection with this Contract/Purchase Order.

33. Correspondence: The Bid number must appear on all correspondence and inquiries pertaining to the Request for Bid or to quotes. The Purchase Order number must appear on all invoices or other correspondence relating to the Contract/Purchase Order.

34. Easement Permission: The contractor shall not enter or use private property except as allowed by easements shown on the contract documents or if the contractor obtains specific written permission from the property owner.

35. Alternates - Samples: If bidding on other than the item solicited by the Town, Seller's bid must identify the item's Trade Name, Manufacturer's Name and/or Catalog Number, and certify the item offered is equivalent to the item solicited by the Town. Descriptive literature must be submitted with alternate brands. Samples shall be furnished free of expense to the Town and if requested, may be returned at bidder's expense.

36. Error - Quantity: Bids must be submitted in units of quantity specified, extended, and totaled. In the event of discrepancies in extension, the unit prices shall govern.

37. Acceptance: The right is reserved to the Town to accept or reject all or part of the bid, and to accept the offer considered most advantageous to the Town by line item or total bid.

38. Term Contracts: Except as otherwise provided herein, prices must remain firm for the entire Contract/Purchase Order period, including any periods of extension or renewal. At the time of any renewal or extension of the Contract/Purchase Order, the Town or the Seller may request a price adjustment based upon the economy. All requests for a price adjustment must include detailed documentation and rationale to support the requested adjustment. The party to whom a request for price adjustment is made may, in its sole discretion, accept or reject the request. Any price adjustment must be mutually agreed upon in writing by the parties, and shall be effective for the applicable renewal term.

39. Term Contract Quantities: The quantities (if any) in the request for bid are estimated requirements and the Town reserves the right to increase or decrease the quantities or cancel any item to be furnished. The successful bidder (Seller) shall have no claim against the Town for anticipated profits for quantities diminished or deleted.

40. Term Contract Shipments: The Seller will make shipments under this Contract/Purchase Order only when requested and only in the quantities requested. Seller shall comply with minimum shipments or standard packaging requirements (if any) included in the Contract/Purchase Order.

41. Contract Renewal Options: In the event a clause for option to renew for an additional period is included in the request for bid, all renewals will be based solely upon the option and agreement between the Town and the Seller. Either party dissenting will terminate the Contract/Purchase Order in accordance with its initial specified term.

42. Electronic Signature – Uniform Electronic Transactions Act: The Town adopts Texas Business and Commerce Code Chapter 322, Uniform Electronic Transactions Act, allowing individuals, companies, and governmental entities to lawfully use and rely on electronic signatures.

43. Funding Out Clause: This Contract/Purchase Order may be terminated by the Town without notice and without penalty or liability in the event that (1) the Town lacks sufficient funds for this Contract/Purchase Order; (2) funds for this Contract/Purchase Order are not appropriated and/or budgeted by the City Council of the Town; and (3) funds for this Contract/Purchase Order that are or were to be provided by grant or through a third party are withheld, denied or are otherwise not available to the Town.

44. Dispute Resolution: Pursuant to subchapter I, Chapter 271, Texas Local Government Code, Seller agrees that, prior to instituting any lawsuit or other proceeding arising from any dispute or claim of breach under this Contract/Purchase Order (a "Claim"), the parties will first attempt to resolve the Claim by taking the following steps: (i) A written notice substantially describing the factual and legal basis of the Claim shall be delivered by the Seller to the Town

within one-hundred eighty (180) days after the date of the event giving rise to the Claim, which notice shall request a written response to be delivered to the Seller not less than fourteen (14) business days after receipt of the notice of Claim; (ii) if the response does not resolve the Claim, in the opinion of the Seller, the Seller shall give notice to that effect to the Town whereupon each party shall appoint a person having authority over the activities of the respective parties who shall promptly meet, in person, in an effort to resolve the Claim; (iii) if those persons cannot or do not resolve the Claim, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person, in an effort to resolve the Claim.

45. Disclosure of Certain Relationships: Chapter 176 of the Texas Local Government Code requires that any person, as defined in the statute, considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the Records Administrator of the Town not later than the 7th business day after the later of (a) the date the person (i) begins discussions or negotiations to enter into a contract with the local governmental entity, or (b) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity, or (b) the date the person becomes aware (i) of an employment or other business relationship with a local government officer, or a family member of the officer, described by the statute, or (ii) that the person has given one or more gifts described in the statute. See Section 176.006, Local Government Code. A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. The questionnaire may be found at www.ethics.state.tx.us/forms/CIQ.pdf By submitting a response to this request, Seller represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

46. Force Majeure: To the extent either the Town or Seller shall be wholly or partially prevented or delayed from the performance of this Contract/Purchase Order or of any obligation or duty under this Contract/Purchase Order placed on such party, by reason of or through work strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, court judgment, act of God, or other specific cause reasonably beyond the party's control and not attributable to its malfeasance, neglect or nonfeasance, then in such event, such party shall give notice of the same to the other party (specifying the reason for the prevention) and the time for performance of such obligation or duty shall be suspended until such disability to perform is removed.

47. BAFO: During evaluation process Town reserves the right to request a best and final offer upon completion of negotiations.

48. Silence of Specifications: The apparent silence of these specifications as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

49. Applicable Law: This agreement shall be governed by the laws of the State of Texas, including, when applicable, the Uniform Commercial Code as adopted by the State of Texas

(excluding any rule or principle that would refer to and apply the substantive law of another state or jurisdiction), as effective and in force on the date of this Contract/Purchase Order, without regard to its conflict of laws rules or the conflict of law rules of any other jurisdiction. The foregoing, however, shall not be construed or interpreted to limit or restrict the right or ability of the City to seek and secure injunctive or any other relief from any competent authority as contemplated herein.

50. Venue: This Contract/Purchase Order is performable in Dallas County, Texas, and venue for any suit, action, or legal proceeding under or in connection with this Contract/Purchase Order shall lie exclusively in Dallas County, Texas. Seller submits to the exclusive jurisdiction of the courts in Dallas County, Texas for purposes of any such suit, action, or proceeding hereunder, and waives any claim that any such suit, action, or legal proceeding has been brought in an inconvenient forum or that the venue of that proceeding is improper.

51. Cost of Response: Any cost incurred by the Seller in responding to the Request for Proposal is the responsibility of the Seller and cannot be charged to the Town.

52. Prohibition Against Personal Interest in Contracts: No Town of Addison officer or employee shall have a direct or indirect financial interest in any contract with the Town, or be directly or indirectly financially interested in the sale of land, materials, supplies or services to the Town.

53. Prior or Pending Litigation or Lawsuits: Each Seller must include in its proposal a complete disclosure of any alleged significant prior or ongoing contract failures, any civil or criminal litigation or investigation pending which involves the Seller or in which the Seller has been judged guilty or liable.

54. Severability: The invalidity, illegality, or unenforceability of any provision of this Contract/Purchase Order shall in no way affect the validity or enforceability of any other portion or provision of this Contract/Purchase Order. Any void or invalid provision shall be deemed severed from this Contract/Purchase Order and the balance of the Contract/Purchase Order shall be construed and enforced as if the Contract/Purchase Order did not contain the particular portion or provision held to be void. The parties further agree to reform the Contract/Purchase Order to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this section shall not prevent this entire Contract/Purchase Order from being void should a provision which is the essence of the Contract/Purchase Order be determined to be void.

55. Headings; "Includes": The headings of this Contract/Purchase Order are for convenience of reference only and shall not affect in any manner any of the terms and conditions hereof. The words "includes" and "including" are terms of enlargement and not of limitation or exclusive enumeration, and use of the terms does not create a presumption that components not expressed are excluded.

56. Conflict: When there is a conflict between the this purchase order (including, without limitation, these Terms and Conditions) and the Seller's invoice, this purchase order shall prevail.

57. Response Contractual Obligation; Waiver: This response, submitted documents, and any negotiations, when properly accepted by the Town, shall constitute a contract equally binding between the successful Seller and the Town. No different or additional terms will become part of this Contract/Purchase Order except as properly executed in an addendum or change order. **By submitting a bid, Seller waives any claim it has or may have against the Town, its officials, officers, employees, and agents, arising out of or in connection with the administration, evaluation, or recommendation of any bid, acceptance or rejection of any bid, and the award of a contract.**

58. No Waiver of Immunity. Notwithstanding any other of this Contract/Purchase Order, nothing in this Contract/Purchase Order shall or may be deemed to be, or shall or may be construed to be, a waiver or relinquishment of any immunity, defense, or tort limitation to which the Town, its officials, officers, employees, representatives, and agents are or may be entitled, including, without limitation, any waiver of immunity to suit.

59. No Boycotting Israel. The entity contract with the Town of Addison does not boycott Israel and will not boycott Israel during the term of the contract. Reference HB 89 as it relates to Chapter 2270 of the Texas Government Code. Boycott Israel means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

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SECTION SP

SPECIAL PROVISIONS

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SPECIAL PROVISIONS

1. **SCOPE OF WORK:** The Work to be performed under the provisions of these Contract Documents shall consist of furnishing all materials, labor, equipment, supplies and appurtenances; providing all construction, plant, equipment and tools; performing all necessary labor and supervision; and the construction complete, including all Work appurtenant thereto, the proposed improvements for: **TRAFFIC SIGNAL & ADA IMPROVEMENTS**.
2. **GENERAL:** This Work shall conform to the requirements of the Contract Documents as listed in the Contract Agreement. These Contract Documents are intended to be complementary. The Contractor shall do all work as provided in the Contract Documents shall do such additional Extra work as may be considered necessary to complete the work in a satisfactory and acceptable manner. The Contractor shall furnish all labor, tools, materials, machinery, equipment, and incidentals necessary to the satisfactory prosecution and completion of the Work.
3. **EXAMINATION OF SITE:** The Contractor acknowledges that he has investigated and satisfied itself as to the conditions affecting the Work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, or similar physical conditions at the site, conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the Work. The Contractor acknowledges that he has inspected the site of the Work and is familiar with the soil conditions to be encountered. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work. The Town of Addison assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Town and the Engineer of Record (**Kimley-Horn and Associates, Inc.**).
4. **SPECIFICATIONS:** Construction improvements shall be governed by the following published specifications and details (except as modified by these Special Provisions):

Standard Specification for Construction and Maintenance of Highways, Streets, and Bridges, Texas Department of Transportation (November 2014); Standard Specifications for Public Works Construction, North Central Texas - North Central Texas Council of Governments (5th edition, 2017); Town of Addison Standard Construction Details.

The Contractor shall keep copies of applicable Specifications on the Project site at all times.

Where reference is made to specifications compiled by other agencies, organizations or departments, such referenced specifications are hereby made a part of the Project Specifications.

Portions of TxDOT standards and specifications, latest editions, shall be incorporated into this contract by specific reference in the contract plans and specifications. In the event of

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conflict with other documents, TxDOT standards and specifications shall govern for construction materials and methods. In the event of conflict with other documents, Town of Addison contract documents shall govern for contract procedures and measurement and payment.

5. **SUBSURFACE INVESTIGATION:** Subsurface exploration to ascertain the nature of soils, including the amount of rock, if any, is the responsibility of any and all prospective Bidders. It shall be the responsibility of the Bidders to make such subsurface investigations as he deems necessary to determine the nature of the material to be encountered. Some preliminary subsurface exploration has been performed by the Town of Addison and the Engineer, and is provided to the Contractor in the Contract Documents. This information is provided only as preliminary and all bids shall be based on information obtained by the Contractor. The Town of Addison and the Engineer disclaim any responsibility for the accuracy, true location and extent of the soils information that has been prepared by others. They further disclaim responsibility for interpretation of that data by Bidders, as in projecting soil bearing values, rock profiles, soils stability and the presence, level and extent of underground water.
6. **HISTORICAL, SCIENTIFIC AND ARCHAEOLOGICAL DISCOVERIES:** Contractor shall immediately give an oral and written report to the Town of Addison of the discovery of any articles of historical, scientific, or archaeological significance. Contractor shall take all necessary steps to preserve the article and shall cease operations, which would affect the find until otherwise directed by the Town of Addison but continue with all other unaffected operations. The future operations of Contractor with respect to the discovery, including disposition of the articles, shall be decided by the Town of Addison. The Town of Addison shall have sole and exclusive title to any discovered articles.

The Town of Addison shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in Contractor's cost of, or the time required for performing any part of the work under the Contract, whether or not changed as a result of conditions, an equitable adjustment will be made and the Contract modified in writing accordingly.

No request by Contractor for an equitable adjustment to the Contract under this Section shall be allowed unless Contractor has given the written notice required. No request by Contractor for an equitable adjustment of the Contract for differing site conditions will be allowed or shall be made after final payment under the Contract.

ENVIRONMENTAL REQUIREMENTS: In addition to requirements set forth in other sections of the Contract, including the Plans and Specifications, Contractor shall ensure that the requirements of this Section are fulfilled and incorporated into its procedures and processes as well as those of any Subcontractors. All materials utilized by Contractor on the Project shall comply with all applicable local, state and federal laws and regulations.

A. Contractor is responsible for compliance with any requirements included in the Contract Documents regarding Hazardous Materials. If Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable

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precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by Contractor, Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Town of Addison in writing.

1. The term “Hazardous Materials” means any substance or compound, whether solid, liquid or gaseous: (i) which is listed, defined or regulated as a “hazardous substance”, “hazardous waste”, “extremely hazardous waste”, “solid waste”, “toxic substance”, “hazardous substance”, “hazardous material” or “regulated substance” or otherwise classified as hazardous or toxic, in or pursuant to any Environmental Law; or (ii) which is or contains asbestos, radon, any polychlorinated biphenyl, urea formaldehyde foam insulation, explosive or radioactive material, lead, or motor fuel or other volatile organic compounds; or (iii) which causes or poses a threat to cause a contamination or nuisance on the Project Site or any adjacent property, or (iv) which causes or poses a threat to cause a hazard to the environment or to the health, safety or welfare of persons on or about the Project Site.

2. The term “Environmental Law” means any federal, state or local law, statute, guidance or policy statement, ordinance, code, rule, regulation, license, authorization, decision, order, injunction or decree, which pertains to health, safety or the environment (including, but not limited to, ground, air, water or noise pollution or contamination, and underground or aboveground tanks) and shall include without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the Resource Conservation and Recovery Act of 1976, as amended, the Occupational Health and Safety Act, the Toxic Substances Control Act, the Texas Water Code and the Texas Solid Waste Disposal Act and any other state or federal environmental statutes.

B. If the material or substance was on the site prior to the issuance of the Notice to Proceed, the Town of Addison shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by Contractor and, in the event such material or substance is found to be present, to verify that it has been remediated to levels required by the Texas Commission on Environmental Quality. When the material or substance has been remediated, Work in the affected area shall resume upon written direction of the Town of Addison.

C. Except as provided in Subparagraph B., Contractor (with the Town of Addison’s prior written approval of the laboratory) shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by Contractor and, in the event such material or substance is found to be present, the Town of Addison shall determine whether Contractor or the Town of Addison shall have the substance remediated to levels required by the Texas Commission on Environmental Quality. When the material or substance has been remediated, Work in the affected area shall resume upon written direction of the Town of Addison. The Contract time shall not be extended and the Contract Price shall not be increased, unless the material or substance to be remediated

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were not introduced to the Work Site by Contractor, and Contractor shall then pay for (or reimburse the Town of Addison for) the testing and remediation.

D. The Town of Addison shall not be responsible under this Section for materials or substances Contractor brings or introduces to the Project Site. Contractor shall be responsible for the fault or negligence in the use and handling of materials or substances of Contractor, Subcontractor, Sub-subcontractor, or anyone directly or indirectly employed by any of them.

E. Contractor shall indemnify the Town of Addison and its affiliates for any and all damages incurred by the Town of Addison as a result of Contractor's actions with respect to all applicable state and federal environmental laws related to materials or substances Contractor brings to the Project Site, including but not limited to fines, penalties, costs of remediation and reasonable attorney's fees. No time extension shall be granted for breach of this provision.

F. Contractor agrees that it shall not transport to, use, generate, dispose of, or install at the Project Site any Hazardous Materials, except in accordance with applicable environmental laws. Further, in performing the Work, Contractor shall not cause any release of Hazardous Materials into, or contamination of, the environment, including the soil, the atmosphere, any water course or ground water unless required by the Contract Documents. In the event Contractor engages in any of the activities prohibited in this Section or fails to stop Work as provided in this Section, to the fullest extent permitted by law, Contractor hereby indemnifies and holds the Town of Addison, its affiliates and their respective officers, agents, employees and tenants harmless from and against any and all claims, damages, losses, causes of action, suits and liabilities of every kind, including but not limited to, expenses of litigation, court costs, punitive damages and attorneys' fees, arising out of, incidental to or resulting from the activities prohibited in this Section or Contractor's failure to stop Work as required. Contractor shall obtain from manufacturers and furnish to the Town of Addison Materials Safety Data Sheets (OSHA Form 20) for all materials incorporated into the Project by Contractor. The Town of Addison hereby agrees that, as between the Town of Addison and Contractor, the Town of Addison will be responsible for Hazardous Materials on site which existed prior to Contractor performing Work on the Project Site or which are introduced to the Project Site by the Town of Addison, except as provided in this Section. Contractor will not be considered the generator of Hazardous Materials on site which existed prior to Contractor performing Work on the Work Site or which are introduced to the Project Site by the Town of Addison. If the Hazardous Materials were on the Project Site prior to Contractor's presence on the Project Site or were introduced to the Project Site by the Town of Addison, then, if appropriate, the Town of Addison will make an equitable adjustment to the Contract.

G. Include in all construction subcontracts exceeding \$100,000, the following requirement: "Contractor is responsible for compliance with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act, Section 505 of the Clean Water Act, Executive Order 11738, and Environmental Protection Agency regulations."

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H. No request by Contractor for an equitable adjustment to the Contract under this Section shall be allowed unless Contractor has given the written notice required.

I. No request by Contractor for an equitable adjustment of the Contract for Hazardous Materials will be allowed or shall be made after final payment under the Contract.

7. **COMPLIANCE WITH LAWS:** The Contractor shall familiarize himself with the nature and extent of the Specifications, Plans, Project Site conditions, traffic and safety requirements, and shall fully comply with all local, state and federal laws, including all codes, ordinances, rules and regulations applicable to this Contract and the Work to be done hereunder, which exist or which may be enacted later by governmental bodies having jurisdiction or authority for such enactment. The Contractor shall comply with all federal, state and local laws, rules and regulations of every kind and nature applicable to the performance of its Work hereunder, and shall hold the Town of Addison and the Engineer harmless therefrom. No plea of ignorance or misunderstanding thereof will be considered.
8. **PERMITS, LICENSES. AND REGULATIONS:** Permits and licenses for the prosecution of the Work shall be secured and paid for by the Contractor. Any required permit fees will still be paid by the Contractor. Wherever the Work under this contract requires the obtaining of permits from the Town of Addison or other public authorities, duplicate copies of such permits shall be furnished to the Engineer by the Contractor hereunder before the Work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.**
9. **RIGHTS-OF-WAY AND EASEMENTS:** Rights-of-way and permanent easements, dedicated to the Town of Addison, will be secured for this Project and made a part of thereto. The Contractor shall obtain a right-of-way permit from the Town of Addison prior to beginning Work. When working within the public rights-of-way and easements, the Contractor shall at all times observe and comply with all Federal and State Laws, and Town of Addison ordinances and regulations which in any way affect the conduct of the Work or its operations, and shall observe and comply with all orders, laws, ordinances and regulations which exist or which may be enacted later by bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof will be considered. The Contractor and his Sureties shall indemnify and save harmless the Town of Addison, the Engineer and all of their officers, agents, and employees against any and all claims or liability arising from or based on the violation of any such law, ordinance, regulation, or order, whether it be by itself or its employees.

It shall be the responsibility of the Contractor, prior to the initiation of construction on easements through private property, to inform the property owner of its intent to begin construction. Before beginning construction in areas of public dedication, the Contractor shall inform the agency having jurisdiction in the area forty-eight (48) hours prior to initiation of the Work. All easements shall be cleaned up after use and restored to their original conditions or better.
10. **RESTRICTED WORK HOURS:** Per the Town of Addison Building Regulations, "It shall be unlawful for a person, firm or corporation to excavate, erect, build, construct,

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alter, repair or demolish any building or structure which has been issued or which is required to be issued a building permit by the Town of Addison between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday, and between the hours of 7:00 p.m. and 8:00 a.m. on Saturday and Sunday, if such activity is performed within a residential, apartment, or townhouse zoned area, or within three hundred (300) feet of an occupied residence, except in cases of urgent necessity or in the interest of public safety and convenience, and then only by permit of the City Manager.”

11. **COMPLIANCE WITH IMMIGRATION LAWS:** Contractor shall take all steps necessary to ensure that all of the Contractor’s employees are authorized to work in the United States as required by the Immigration Reform and Control Act of 1986.
12. **NON-DISCRIMINATION POLICY:** It is the policy of the Town of Addison to afford all people an equal opportunity to bid on any contract being let by the Town. The Town of Addison has a policy that prohibits discrimination against any person because of race, color, sex, or national origin, in the award or performance of any contract. The Town of Addison will require its employees, agents, and Contractors to adhere to this policy.
13. **ANTITRUST LAWS:** The Contractor hereby assigns to the Town of Addison any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States 15 U.S.C.A. Sec. 1, et seq. (1973).
14. **ABANDONMENT:** The Town of Addison reserves the right to abandon, without obligation to the Contractor, any part of the Project, or the entire Project, at any time before the Contractor begins any construction Work authorized by the Town of Addison. In case of total abandonment of the Project, the Contract becomes void. The Town of Addison may abandon portions of the Project at any time during the Project duration. In case of such partial abandonment, the Contractor shall not be due any payment for lost or unrealized profits on the abandoned portions of the Project.
15. **DISCREPANCIES:** If the Contractor, in the course of the Work, finds any discrepancy between the Contract Documents and the physical conditions of the Project, or any errors or omissions in Plans or in the layout as given by survey points and instructions, or if it appears that any Plan, Specification or other Contract Document is or may not be in compliance with any building code or other requirement of any governmental body, he shall immediately inform the Town of Addison and the Engineer in writing, and the Town of Addison and the Engineer shall promptly verify the same. Any Work done after such discovery, until authorized, will be done at the Contractor’s risk.
16. **PREPARATION OF STORM WATER POLLUTION PREVENTION PLAN:** A Storm Water Pollution Prevention Plan (SW3P) will be required for this project, the area disturbed on this project during construction exceed 1 acre.

This specification is not all inclusive of the requirements for an SW3P. The Contractor shall comply with all requirements of the TCEQ TPDES permit and the local authorities’ storm water ordinance and/or regulations.

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17. **ADDENDA:** Bidders desiring further information, or interpretation of the Plans and Specifications, must make written request for such information to the Engineer (not later than four (4) working days prior to the date set for the Bid opening. The ability to ask questions will close at **5:00 PM, Wednesday, June 22, 2022**. Answers to all such requests will be issued in the form of Addenda and a copy of such Addenda will be released through www.civcastusa.com. It will be the responsibility of each person who has been issued as set of Bidding Documents to secure all Addenda from www.civcastusa.com. Addenda will be bound with and made a part of the Contract Documents. No other explanation or interpretation will be considered official or binding. Should a Bidder find discrepancies in, or omissions from, the Plans, Specifications or Contract Documents, or should it be in doubt as to their meaning, it shall at once notify the Engineer in writing in order that a written addendum may be sent to all Bidders.
18. **PAY ITEMS:** Pay items provided are intended to be all-inclusive of the Work required on this Project. Work required by the Plans or Specifications but not provided with a specific pay item shall be considered incidental to other items of Work. Final payment to the construction Contractor shall not be made until all Work has been finally completed and verified in accordance with the construction contract, Plans and Specifications and have been finally accepted by the Town of Addison.
19. **QUANTITIES:** The quantities in the Bid Items are approximate and may represent quantities in excess of those actually installed. Final Payment will be based on the actual quantities installed and paid in accordance with the applicable Specifications.

Bid Items descriptions

Bid Item No. 1 - FURNISHING AND PLACING TOPSOIL (6")

This item shall consist of furnishing and placing topsoil at the locations shown in the drawings. Topsoil shall be installed in accordance with project specification, details, and notes, including TxDOT Item 160.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 2 - BLOCK SODDING

This item shall consist of furnishing and installation of block sodding at the locations shown in the drawings. Block sodding shall be installed in accordance with project specification, details, and notes, including TxDOT Item 162.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

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Bid Item No. 3 - DRILL SHAFT (30 IN)

Bid Item No. 4 - DRILL SHAFT (36 IN)

Bid Item No. 5 - DRILL SHAFT (48 IN)

This item shall consist of construction of drilled shafts of the different sizes at the locations shown in the drawings. Drilled shaft shall be installed in accordance with project specification, details, and notes, including TxDOT Item 416.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 6 - MOBILIZATION (5% MAX)

This item shall cover the lump sum cost for all charges for labor and for moving supplies, construction equipment and materials to the project site at the beginning of the project and for removing the same equipment and related supplies upon completion of the project, and for site cleanup. **See Special Provisions No. 25 for details for payment for this line Item.**

Bid Item No. 7 - ADJUSTING MANHOLES

This item shall consist of adjusting manholes at the locations shown in the drawings. Manholes shall be adjusted in accordance with project specification, details, and notes, including TxDOT Item 479.

Measurement and payment shall be made on the basis of price bid per lump sum (LS) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 8 - BARRICADES, SIGNS, AND TRAFFIC HANDLING

This item shall include the lump sum cost for installation, maintenance, relocation, and removal of all traffic signs (street name, directional, informational or regulatory), barricades, temporary signs, temporary pavement markings (except those identified in the permanent pavement marking bid items), traffic control plan and all other traffic control measures necessary to provide for the safe travel of vehicles and pedestrians through, along, or around the construction site and for the protection of the workers on the project. All barricades and warning signs will conform to those sections of the Texas Manual on Uniform Traffic Control Devices, latest edition, as amended by the Texas Department of Transportation. **See Special Provisions No. 50 and 51 for additional information.**

Partial payment of the Lump Sum bid shall be limited as follows:

1. When 5% of the *adjusted contract amount is earned, 25% of the Lump Sum bid shall be paid.

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2. When 25% of the *adjusted contract amount is earned, 50% of the Lump Sum bid shall be paid. Previous payments under this item will be deducted from this amount.
3. When 50% of the *adjusted contract amount is earned, 75% of the Lump Sum bid shall be paid. Previous payments under this item will be deducted from this amount.
4. When all work under the contract is completed by the Contractor and accepted by the City, 100% of the Lump Sum bid shall be paid.
5. An overrun of the contract quantity will not be allowed under any circumstances unless the quantity is added by an approved change order.

Additional Notes - If the Contractor fails to provide properly maintain barricades, signs, and traffic control devices in compliance with the specifications, the Contractor will be considered in non-compliance with this item and payment may be delayed for this item.

Bid Item No. 9 – CONC CURB (TY II)

This item shall consist of furnishing and installation of concrete curb of the type shown at the locations shown in the drawings. Concrete curb shall be installed in accordance with project specification, details, and notes, including TxDOT Item 529.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 10 - 6" CONCRETE SIDEWALK

This item shall consist of furnishing and installation of 6" concrete sidewalks at the locations shown in the drawings. Concrete sidewalk shall be installed in accordance with project specification, details, and notes, including TxDOT Item 531.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 11 - CURB RAMPS (TYPE 7)

This item shall consist of furnishing and installation of curb ramps of the type shown at the locations shown in the drawings. Curb ramps shall be installed in accordance with project specification, details, and notes, including TxDOT Item 531.

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Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 12 - CONDT (PVC) (SCH 40) (2")

Bid Item No. 13 - CONDT (PVC) (SCH 40) (2") (BORE)

Bid Item No. 14 - CONDT (PVC) (SCH 40) (3")

Bid Item No. 15 - CONDT (PVC) (SCH 40) (4")

Bid Item No. 16 - CONDT (PVC) (SCH 40) (4") (BORE)

Bid Item No. 17 - CONDT (PVC) (SCH 80) (2")

This item shall consist of furnishing and installation of conduit of the type shown at the locations shown in the drawings. Conduit shall be installed in accordance with project specification, details, and notes, including TxDOT Item 618.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 18 - ELEC CONDR (NO. 6) BARE

Bid Item No. 19 - ELEC CONDR (NO. 6) INSULATED

This item shall consist of furnishing and installation of electrical conductors of the type shown at the locations shown in the drawings. Electrical conductors shall be installed in accordance with project specification, details, and notes, including TxDOT Item 618.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 20 - GROUND BOX TY C (162911) W/ APRON

This item shall consist of furnishing and installation of ground boxes of the type shown at the locations shown in the drawings. Ground boxes shall be installed in accordance with project specification, details, and notes, including TxDOT Item 624.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 21 - REMOVE GROUND BOX

This item shall consist of removal of ground boxes at the locations shown in the drawings. Ground boxes shall be removed in accordance with project specification, details, and notes, including TxDOT Item 624.

TRAFFIC SIGNAL & ADA IMPROVEMENTS

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 22 - ELEC SRV TY D 120/240 060 (NS) SS (E) PS (U)

This item shall consist of furnishing and installation of electrical services of the type shown at the locations shown in the drawings. Electrical services shall be installed in accordance with project specification, details, and notes, including TxDOT Item 628.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 23 - REFL PAV MRKG TY I (W) 8" SOLID

Bid Item No. 24 - REFL PAV MRKG TY I (W) 12" SOLID

Bid Item No. 25 - REFL PAV MRKG TY I (W) 24" STOP BAR MARKING

This item shall consist of furnishing and installation of reflective pavement markings of the type shown at the locations shown in the drawings. Reflective pavement markings shall be installed in accordance with project specification, details, and notes, including TxDOT Item 666.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 26 - PAVEMENT SEALER 4"

Bid Item No. 27 - PAVEMENT SEALER 8"

Bid Item No. 28 - PAVEMENT SEALER 12"

Bid Item No. 29 - PAVEMENT SEALER 24"

This item shall consist of furnishing and installation of pavement sealer of the type shown at the locations shown in the drawings. Pavement sealer shall be installed in accordance with project specification, details, and notes, including TxDOT Item 666.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 30 - PAVEMENT SEALER (ARROW)

Bid Item No. 31 - PAVEMENT SEALER (WORD)

This item shall consist of furnishing and installation of pavement sealer of the type shown at the locations shown in the drawings. Pavement sealer shall be installed in accordance with project specification, details, and notes, including TxDOT Item 666.

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Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 32 - REFL PAV MRKG TY I (W) 4" BROKEN

This item shall consist of furnishing and installation of reflective pavement markings of the type shown at the locations shown in the drawings. Reflective pavement markings shall be installed in accordance with project specification, details, and notes, including TxDOT Item 666.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 33 - PREFAB PAV MRK TY C (W) (ARROW)

Bid Item No. 34 - PREFAB PAV MRK TY C (W) (WORD)

This item shall consist of furnishing and installation of prefabricated pavement markings of the type shown at the locations shown in the drawings. Prefabricated pavement markings shall be installed in accordance with project specification, details, and notes, including TxDOT Item 668.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 35 - ELIM EXT PAV MRK & MRKS (4")

Bid Item No. 36 - ELIM EXT PAV MRK & MRKS (12")

Bid Item No. 37 - ELIM EXT PAV MRK & MRKS (24")

This item shall consist of removal of existing pavement markings of the type shown at the locations shown in the drawings. Pavement markings shall be removed in accordance with project specification, details, and notes, including TxDOT Item 677.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 38 - ELIM EXT PAV MRK & MRKS (ARROW)

This item shall consist of removal of existing pavement markings of the type shown at the locations shown in the drawings. Pavement markings shall be removed in accordance with project specification, details, and notes, including TxDOT Item 677.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

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Bid Item No. 39 - PAV SURF PREP FOR MRK (4")

Bid Item No. 40 - PAV SURF PREP FOR MRK (8")

Bid Item No. 41 - PAV SURF PREP FOR MRK (12")

Bid Item No. 42 - PAV SURF PREP FOR MRK (24")

This item shall consist of pavement surface preparation of the type shown at the locations shown in the drawings. Pavement surface preparation shall be installed in accordance with project specification, details, and notes, including TxDOT Item 678.

Measurement and payment shall be made on the basis of price bid per linear feet (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 43 - PAV SURF PREP FOR MRK (ARROW)

Bid Item No. 44 - PAV SURF PREP FOR MRK (WORD)

This item shall consist of pavement surface preparation of the type shown at the locations shown in the drawings. Pavement surface preparation shall be installed in accordance with project specification, details, and notes, including TxDOT Item 678.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 45 - INSTALL HWY TRF SIG (ISOLATED)

Bid Item No. 46 - REMOVING TRAFFIC SIGNALS

This item shall consist of furnishing and installation of all equipment necessary to make the traffic signal fully operational as well as removing existing equipment that is to be replaced or relocated in accordance with TxDOT Item 680 and appropriate TxDOT standard details. This work shall also include relocating battery backup units from existing cabinets, furnishing and installation of all signs, relocating ILSNs, and installing emergency vehicle preemption equipment.

Measurement and payment shall be made on the basis of price bid per each intersection controlled by a single traffic controller (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

TRAFFIC SIGNAL & ADA IMPROVEMENTS

Bid Item No. 47 - VEH SIG SEC (12") LED (GRN)

Bid Item No. 48 - VEH SIG SEC (12") LED (GRN ARW)

Bid Item No. 49 - VEH SIG SEC (12") LED (YEL)

Bid Item No. 50 - VEH SIG SEC (12") LED (YEL ARW)

Bid Item No. 51 - VEH SIG SEC (12") LED (RED)

Bid Item No. 52 - VEH SIG SEC (12") LED (RED ARW)

Bid Item No. 53 - VEH SIG SEC (12") LED (GRN U-TURN ARW)

Bid Item No. 54 - VEH SIG SEC (12") LED (YEL U-TURN ARW)

Bid Item No. 55 - VEH SIG SEC (12") LED (RED U-TURN ARW)

Bid Item No. 56 - PED SIG SEC (LED) (COUNTDOWN)

This item shall consist of furnishing and installation of traffic signal sections of the type shown at the locations shown in the drawings. Traffic signal sections shall be installed in accordance with project specification, details, and notes, including TxDOT Item 682.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 57 - BACK PLATE (12") (3 SEC)

Bid Item No. 58 - BACK PLATE (12") (4 SEC)

Bid Item No. 59 - BACK PLATE (12") (5 SEC)

This item shall consist of furnishing and installation of back plates of the type shown at the locations shown in the drawings. Back plates shall be installed in accordance with project specification, details, and notes, including TxDOT Item 682.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 60 - TRF SIG CBL (TY A) (14 AWG) (3 CONDR)

Bid Item No. 61 - TRF SIG CBL (TY A) (14 AWG) (5 CONDR)

Bid Item No. 62 - TRF SIG CBL (TY A) (14 AWG) (7 CONDR)

Bid Item No. 63 - TRF SIG CBL (TY A) (14 AWG) (20 CONDR)

Bid Item No. 64 - TRF SIG CBL (TY A) (12 AWG) (2 CONDR)

This item shall consist of furnishing and installation of traffic signal cables of the type shown at the locations shown in the drawings. Traffic signal cables shall be installed in accordance with project specification, details, and notes, including TxDOT Item 684.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

TRAFFIC SIGNAL & ADA IMPROVEMENTS

Bid Item No. 65 - INS TRF SIG PL AM (S) 1 ARM (28')

Bid Item No. 66 - INS TRF SIG PL AM (S) 1 ARM (32')

Bid Item No. 67 - INS TRF SIG PL AM (S) 1 ARM (40')

Bid Item No. 68 - INS TRF SIG PL AM (S) 1 ARM (48')

Bid Item No. 69 - INS TRF SIG PL AM (S) 1 ARM (55')

Bid Item No. 70 - INS TRF SIG PL AM (S) 1 ARM (60')

This item shall consist of furnishing and installation of traffic signal poles and mast arms of the type shown at the locations shown in the drawings. Traffic signal poles and mast arms shall be installed in accordance with project specification, details, and notes, including TxDOT Item 686.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 71 - PED POLE ASSEMBLY

Bid Item No. 72 - PED PUSH BUTTON POLE

This item shall consist of furnishing and installation of pedestrian signal poles of the type shown at the locations shown in the drawings. Pedestrian signal poles shall be installed in accordance with project specification, details, and notes, including TxDOT Item 687.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 73 - PED DETECT PUSH BUTTON (APS)

Bid Item No. 74 - PED DETECTOR CONTROLLER UNIT

This item shall consist of furnishing and installation of pedestrian detectors of the type shown at the locations shown in the drawings. Pedestrian detectors shall be installed in accordance with project specification, details, and notes, including TxDOT Item 688.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 75 - VIVDS PROCESSOR SYSTEM

Bid Item No. 76 - VIVDS CAMERA ASSEMBLY

This item shall consist of furnishing and installation of VIVDS equipment of the type shown at the locations shown in the drawings. VIVDS equipment shall be installed in accordance with project specification, details, and notes, including TxDOT Item 6002.

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Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 77 - VIVDS COMMUNICATION CABLE (COAXIAL)

This item shall consist of furnishing and installation of VIVDS communication cable of the type shown at the locations shown in the drawings. VIVDS communication cable shall be installed in accordance with project specification, details, and notes, including TxDOT Item 6002.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 78 - CCTV FIELD EQUIPMENT (DIGITAL)

Bid Item No. 79 - CCTV MOUNT (POLE)

This item shall consist of furnishing and installation of CCTV equipment of the type shown at the locations shown in the drawings. CCTV equipment shall be installed in accordance with project specification, details, and notes, including TxDOT Item 6010.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 80 - CAT 5 ETHERNET CABLE

This item shall consist of furnishing and installation of CAT 5 ethernet cable of the type shown at the locations shown in the drawings. CAT 5 ethernet cable shall be installed in accordance with project specification, details, and notes, including TxDOT Item 6089.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 81 - VEH SIG SEC (12") LED (BI-MODAL GRN/YEL ARW)

This item shall consist of furnishing and installation of traffic signal sections of the type shown at the locations shown in the drawings. Traffic signal sections shall be installed in accordance with project specification, details, and notes.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

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Bid Item No. 82 - OPTICOM CABLE

This item shall consist of furnishing and installation of opticom cable of the type shown at the locations shown in the drawings. Opticom cable shall be installed in accordance with project specification, details, and notes.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 83 - TYPE 721 OPTICOM DETECTOR

Bid Item No. 84 - TYPE 764 PHASE SELECTOR

This item shall consist of furnishing and installation of opticom equipment of the type shown at the locations shown in the drawings. Opticom cable shall be installed in accordance with project specification, details, and notes.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 85 - PROJECT SIGN

This item shall consist of furnishing and installation of a project sign in the locations approved by the OWNER. Each sign shall be constructed in accordance with the details found in Section PS of the Specification, details and notes, including NCTCOG Item 107.21.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 86 - RELOCATE FIRE HYDRANT

This item shall consist of relocation of fire hydrant at the locations shown in the drawings. Fire hydrant shall be relocated in accordance with project specification, details, and notes.

Measurement and payment shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. 87 - RIPRAP (CONC) (6")

This item shall consist of furnishing and installation of riprap of the type shown at the locations shown in the drawings. Riprap shall be installed in accordance with project specification, details, and notes, including TxDOT Item 432.

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Measurement and payment shall be made on the basis of price bid per cubic yard (CY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. X1 - CONTINGENCY CONSTRUCTION APPROVAL ALLOWANCE

This item will be used at the Owner's discretion to cover any unexpected costs associated with performing the work.

Bid Item No. X2 - PROJECT ALLOWANCE FOR LANDSCAPE IMPROVEMENTS

Projects of this type may require additional work which cannot be foreseen prior to construction. The cost for these modifications and/or additions will be reimbursed from this allowance if approved prior to performing the work. There is no guarantee that this allowance will be used at all. If used, it may be used in part or in whole at the Owner's discretion.

A project allowance of \$25,000 shall be given for any additional work associated with landscape improvements. Additional work shall be determined by the Owner. This work excludes any work listed and quantified on the bid proposal or work associated to complete bid items. As approved by Owner, Contractor will be given additional working days for additional quantities/work.

Bid Item No. X3 - PROJECT ALLOWANCE FOR IRRIGATION IMPROVEMENTS

Projects of this type may require additional work which cannot be foreseen prior to construction. The cost for these modifications and/or additions will be reimbursed from this allowance if approved prior to performing the work. There is no guarantee that this allowance will be used at all. If used, it may be used in part or in whole at the Owner's discretion.

This work includes repairing, replacing reconstructed and/or modifying any existing irrigation system or system component within the limits of the work area that is damaged or whose function/operation is adversely impacted by the construction of the proposed improvements, in a manner satisfactory to the adjacent property owners to whom they belong, and the Owner. This work includes repairing or replacing any damaged pipes, sprinkler heads, or other system components (i.e. valves, controllers, valve boxes, etc.), as well as adding additional lines and/or heads necessary to properly irrigate landscape or turf areas that are adjusted, modified, or reconfigured as a result of this project. All irrigation work must be performed by a licensed irrigator (Contractor must submit documentation/qualifications to Owner prior to work being performed).

A project allowance of \$25,000 shall be given for any additional work associated with irrigation improvements. Additional work shall be determined by the Owner. This work excludes any work listed and quantified on the bid proposal or work associated to complete bid items. As approved by Owner, Contractor will be given additional working days for additional quantities/work.

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Bid Item No. X4 - PROJECT ALLOWANCE FOR EROSION CONTROL

Projects of this type may require additional work which cannot be foreseen prior to construction. The cost for these modifications and/or additions will be reimbursed from this allowance if approved prior to performing the work. There is no guarantee that this allowance will be used at all. If used, it may be used in part or in whole at the Owner's discretion.

A project allowance of \$25,000 shall be given for any additional work associated with erosion control. Additional work shall be determined by the Owner. This work excludes any work listed and quantified on the bid proposal or work associated to complete bid items. As approved by Owner, Contractor will be given additional working days for additional quantities/work.

Bid Item No. A1 - LANDSCAPE PAVERS

This item shall consist of furnishing and installation of landscape pavers of the type shown at the locations shown in the drawings. Landscape pavers shall be installed in accordance with project specification, details, and notes, including TxDOT Item 528.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. A2 - REMOVING CONC (PAV)

Bid Item No. A3 - REMOVING CONC (MEDIANS)

This item shall consist of removing concrete pavement and medians of the type shown at the locations shown in the drawings. Concrete pavement and medians shall be removed in accordance with project specification, details, and notes, including TxDOT Item 104.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. A4 - REMOVING CONC (CURB)

This item shall consist of removing concrete curb of the type shown at the locations shown in the drawings. Concrete curb shall be removed in accordance with project specification, details, and notes, including TxDOT Item 104.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

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Bid Item No. A5 - REWORK BS MTL (TY C) (8") (ORD COMP)

This item shall consist of reworking base material of the type shown at the locations shown in the drawings. Base material shall be reworked in accordance with project specification, details, and notes, including TxDOT Item 251.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. A6 - CONC PVMT (CONT REINF) (FAST TRK) (12")

This item shall consist of furnishing and installation of concrete pavement of the type shown at the locations shown in the drawings. Concrete pavement shall be installed in accordance with project specification, details, and notes, including TxDOT Item 360.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. A7 - CONC CURB & GUTTER (TY II)

This item shall consist of furnishing and installation of concrete curb and gutter of the type shown at the locations shown in the drawings. Concrete curb and gutter shall be installed in accordance with project specification, details, and notes, including TxDOT Item 529.

Measurement and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

Bid Item No. A8 - CONCRETE MEDIAN (NOSE)

This item shall consist of furnishing and installation of concrete median nose of the type shown at the locations shown in the drawings. Concrete median nose shall be installed in accordance with project specification, details, and notes, including TxDOT Item 536.

Measurement and payment shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all materials, tools, equipment, labor, and any other incidentals necessary to complete the work.

20. **SUBSIDIARY WORK:** Any and all Work specifically governed by documentary requirements for the Project, such as conditions imposed by the Plans or these Special Provisions, in which no specific item for bid has been provided for in the Proposal, shall be considered as a subsidiary item of Work, the cost of which shall be included in the various bid items in the Proposal. Costs of CCTV, permits, inspection fees, traffic control,

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construction staking, surface restoration and cleanup are general items of Work which fall in the category of subsidiary Work. Any repairs or replacement of items damaged during demolition or as a result of new construction will be considered subsidiary. Limits of all Work requiring repair will be determined by the Town of Addison staff or the inspector. Extreme care should be taken during all demolition and construction operations.

21. **QUALIFICATION OF BIDS:** The Town of Addison reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work, and the right to disregard all nonconforming, non-responsive, unbalanced, or conditional Bids. The Town reserves the right to reject the Bid of any Bidder if the Town believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the Town. Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolve in favor of the correct sum.

To be considered responsive, the apparent two lowest Bidders are required to submit the Statement of Experience per Section BQS “Bidder Qualification Statement” within 5 days.

The apparent low two Bidders will be notified by the Engineer to request the information.

AWARD AND EXECUTION OF CONTRACT: For the purpose of award, each bid submitted shall consist of three parts whereby the correct summation of the products of the estimated quantities shown in the proposal, multiplied by their bid unit prices for the following parts:

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Bidders must fill bid proposal for all base bids and all additive alternates. The method of Award will be based on the lowest qualified bidder for all base bids plus any combination of the additive alternates depending on the availability of funds.

The Town reserves the right to accept whichever bid is determined to be in the best interest of the public and to reject all bids.

All payments will be based on actual quantities and bid unit prices.

22. **EXPLANATION OF CONTRACT TIME:** The term “Contract Time” as used in this Provision will mean the **330** calendar days (approx. 11 months) for substantial completion of the Work of the Contract from the date the Contract was executed. The term “calendar day” as used in this Article will mean every day shown on the calendar. Calendar days will be consecutively counted from commencement of Contract Time (issuance of a Notice to Proceed) regardless of weather, weekends, and holidays, suspensions of Contractor’s operations, delays or other events as described herein.

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In the event of a catastrophic event (i.e., war, invasion, riot, declared state of emergency, national strike, or other situations as declared by the Town of Addison) directly and substantially affecting the Contractor's operations on the Contract, the Contractor and the Town shall agree as to the number of calendar days to extend the Contract Time. In the event the Contractor and Town are unable to agree to the number of calendar days to extend the Contract Time, the Town shall unilaterally determine the number of calendar days to extend the Contract Time reasonably necessary and due solely to such catastrophic event and the Contractor shall have no right whatsoever to contest such determination, save and except that the Contractor establishes that the number of calendar days determined by the Town were arbitrary or without any reasonable basis.

Should the Contractor fail to complete the Contract on or before expiration of the Allowable Contract Time, as adjusted in accordance with the special provisions No. 78 of liquidated damage, the Town shall deduct from the moneys due the Contractor the Daily Value for each calendar day completion exceeds the Allowable Contract Time. The term "Allowable Contract Time" as used in this Article shall mean the Original Contract Time plus adjustments pursuant to the statements above. This deduction shall be the disincentive for the Contractor's failing to timely complete the Contract. **This shall be strictly enforced.**

23. **COPIES OF PLANS FURNISHED:** One (1) copy of 11" x 17" and one (1) electronic copy of the Plans shall be furnished to the successful Contractor, at no charge, for construction purposes.
24. **PRE-CONSTRUCTION CONFERENCE:** The successful Contractor, Engineer, and Town of Addison shall meet for a pre-construction conference before any of the Work begins on this Project. At this time, details of sequencing of the Work, contact individuals for each party, testing requirements, submittals, traffic control, time sensitive completion of the project and pay requests will be covered. Prior to the meeting, the Contractor shall prepare schedules showing the sequencing and progress of their Work and its effect on others. A final composite schedule will be prepared during this conference to allow an orderly sequence of Project construction.

Prior to the start of construction, Contractor shall video the construction area and property adjacent to construction in the presence of the City Inspector. The format shall be DVD. The video shall be narrated. The Contractor shall furnish the Town of Addison a copy of the video in DVD format prior to commencement of Project. This shall be subsidiary to Project.

25. **MOBILIZATION:** Mobilization and Demobilization includes the movement of all labor, equipment and supplies, establishment of facilities necessary for work, and other work and operations which must be performed and cost no directly attributable to other pay items, excluding bidding costs, which must be incurred in order to enable the Contractor to begin work on other contract items. And this item includes all work for removing all equipment and supplies and project site cleanup.

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Payment

- Partial Payments of the Lump Sum bid for Mobilization shall be limited as follows:
- When 1% of the *adjusted contract amount is earned, 50% of the Mobilization Lump Sum or 5% of the total contract amount shall be paid, whichever is less. Previous payments under this item will be deducted from this amount.
- When 5% of the *adjusted contract amount is earned, 75% of the Mobilization Lump Sum or 10% of the total contract amount shall be paid, whichever is less. Previous payments under this item will be deducted from this amount.
- When 10% of the *adjusted contract amount is earned, 100% of the Mobilization Lump Sum or 10% of the total contract amount shall be paid, whichever is less. Previous payments under this item will be deducted from this amount.
- When all work under the contract is completed by the Contractor and accepted by the Town, 100% of the Mobilization Lump Sum will be paid

26. **GENERAL SEQUENCE OF CONSTRUCTION:** Prior to the start of Work, the Contractor shall develop a detailed construction and sequence of construction schedule using the critical path method (CPM) and submit to the Town of Addison and Engineer for approval. The CPM shall reflect all definable features of Work and activities that shall cause minimum interference with traffic along, across and adjacent to the Project during construction. If the schedule or sequence becomes unworkable or unsatisfactory as Work proceeds, adjustments shall be made. During all phases of construction access to all existing businesses must be maintained at all times unless otherwise authorized in writing by the Town of Addison. Erosion control devices must be properly installed and maintained during all stages of construction.

1. The project schedule shall be prepared using Microsoft Project, Primavera P6 or other as approved by the OWNER. Electronic files in the scheduling software native format and PDF copies shall be included with all schedule submittals.
2. The Original Project Schedule submitted prior to construction and approved by the OWNER shall become the basis for measuring progress and evaluating whether the project is on schedule (Baseline schedule for the project). Once approved by the OWNER, the Original Project Schedule shall not be changed.
3. There shall be at a minimum one schedule Activity for each major bid item in the proposal. Many bid items will need to consist of multiple Activities.
4. The length of this project is such that many Activities or Sets of activities will be repeated for various stages of construction and segments of the roadway. Any repeated Activity must clearly identify the location and/or stage of construction.
5. The schedule must be based on clearly defined Activities, phases of construction and any project milestones. Schedule limits must be easily field verified.
6. All Activities must have Predecessor and Successor activities (except start and finish milestones). Independent or open-ended activities shall not be included.
7. The schedule must clearly identify relationship between Predecessor and Successor activities as “start-to-start”, “start-to-finish”, or “finish-to-finish”.

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8. Negative lag times shall not be permitted.
9. Activities with a duration of twenty days or greater shall be broken into sub-activities. (For example, if the activity for “Install Water Line A” has a duration of 21 days, it should be divided into sub-activities such as “Install Water Line A, Sta 0+00 to 15+00”, etc.)
10. Monthly schedule updates shall include actual start and completion dates for completed and ongoing Activities. Original Project Schedule dates must be shown for tracking purposes.
11. For activities behind schedule, a Recovery Plan must be submitted detailing how project will be brought back within schedule. This may include such measures as adding work crews, leasing additional equipment, or engaging subcontractors. Fragments or copies of the revised schedule reflecting proposed changes shall be used to document proposed plan revisions and their schedule impacts. Any additional costs resulting from Recovery Plan measures shall be at the contractor’s sole expense.
12. Activity durations reflected in the original schedule cannot be reduced without a Recovery Plan description reflecting what additional resources or actions will be implemented justifying the schedule change.

The Contractor must comply with all work area restrictions as indicated in the Plans unless specifically authorized in writing by the Town of Addison.

27. **PROJECT REPRESENTATIVE:** The Town of Addison, the Engineer, the Contractor(s), and any applicable public utilities shall designate a single individual within their organization to act as liaison for the Project. This individual shall be aware of the day to day activities on the Project, have authority to make decisions binding on the party, and serve as single point for coordination of activities with the other team members. The Contractor’s representative must be available to meet and discuss construction related issues on site or at the Town’s offices within 20 minutes of a request during working hours and throughout the entire construction period. Upon repeated failure of attendance at requested meetings, Contractor will be required to have a Project representative on-site at all times.
28. **COORDINATION WITH OTHERS:** In the event that other Contractors are doing Work in the same area simultaneously with this Project, the Contractor shall coordinate his proposed construction with that of the other Contractors. The Town of Addison and/or the Engineer shall mediate any disputes, and the Contractors shall comply with their decisions.
29. **INSURANCE:** Each insurance policy that the Contractor must furnish in accordance with these contract documents shall name the Town of Addison and the Engineer as additional insured. Contractor shall include in their bid package, a copy of their certificate of insurance showing compliance to the limits established by the Town of Addison.

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1.0 The Contractor shall agree to furnish and maintain continuously during the period of this agreement, any renewals or extension, insurance coverage meeting all of the following requirements:

1.1 Commercial General Liability Insurance at minimum combined single limits of \$1,000,000 per occurrence and \$2,000,000 general aggregate for Bodily Injury and Property Damage, which coverage shall include Products/Completed Operations, and XCU Hazards. Coverage for product/completed operations must be maintained for at least two (2) years after the construction Work has been completed. Coverage must be amended to provide for an each-project aggregate limit of insurance. Contractual Liability must be included.

1.2 Workers Compensation Insurance at statutory limits, including employer's liability coverage at minimum limits of \$1,000,000 each occurrence-each accident, \$1,000,000 by disease-each occurrence and \$1,000,000 by disease aggregate

1.3 Commercial Automobile Liability Insurance at minimum combined single limits of \$1,000,000 per occurrence for bodily injury and property damage, including owned, non-owned, and hired car coverage.

1.4 Umbrella Liability at minimum limits of \$1,000,000 each-occurrence \$4,000,000 aggregate with respect to primary commercial general liability, automobile liability and employer's liability policies.

1.5 Any Subcontractor(s) hired by the Contractor shall maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The Town accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

1.6 A comprehensive general liability insurance form may be used in lieu of a commercial general liability form. In this event, coverage must be written on an occurrence basis, at limits of \$1,000,000 each-occurrence, combined single limit and coverage must include a broad form comprehensive general liability endorsement, products/completed operations, XCU hazards and contractual liability.

2.0 With reference to the foregoing insurance requirements, Contractor shall specifically endorse applicable insurance policies as follows:

2.1 The Town shall be named as an additional insured with respect to general liability and automobile liability.

2.2 All liability policies shall contain no cross liability exclusions or insured versus insured restrictions.

2.3 A waiver of subrogation in favor of the Town of Addison shall be contained in the workers compensation and all liability policies.

2.4 All insurance policies shall be endorsed to require the insured to immediately notify the Town of Addison of any material changes in the insurance coverage.

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2.5 All insurance policies shall be endorsed to the effect that the Town will receive at least thirty (30) days notice prior to cancellation or non-renewal of the insurance.

2.6 All certificates shall be mailed to Town of Addison, Purchasing Dept., P.O. Box 9010, Addison, Texas 75001 or emailed to purchasing@addisontx.gov.

2.7 All insurance policies, which name the Town as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.

2.8 Required limits may be satisfied by any combination of primary and umbrella liability insurances.

2.9 Contractor may maintain reasonable and customary deductibles, subject to approval by the Town.

3.0 All insurance shall be purchased from an insurance company who meets the following requirements:

3.1 Must be issued by a carrier, which is rated "A-" VII or better by A.M. Best's Key Rating Guide.

3.2 Licensed and admitted to do business in the State of Texas and is a subscriber to the Texas Guaranty Fund.

4.0 All insurance must be written on forms filed with and approved by the Texas State Board of Insurance. Certificates of insurance shall be prepared and executed by the insurance company or its authorized agent and shall contain provisions representing and warranting the following:

4.1 Set forth all endorsements and insurance coverages according to requirements and instruction contained herein.

4.2 Shall specifically set forth the notice-of-cancellation or termination provisions to the Town.

5.0 Upon request, Contractor shall furnish the Town of Addison with certified copies of all insurance policies.

WORKERS' COMPENSATION INSURANCE COVERAGE:

A. Definitions.

Certificate of Coverage ("certificate") - A copy of a certificate of insurance, a certificate of authority to self insure issued by the Texas Workers' Compensation Commission (the "TWCC"), or a coverage agreement (TWCC-81, TWCC-82, TWCC-83 or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a Project, for the duration of the Project.

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Duration of the Project - includes the time from the beginning of the Work on the Project until the Contractor's/person's Work on the Project has been completed and accepted by the governmental entity.

Persons Providing Services on the Project ("Subcontractor" in Section 406.096 of the Texas Labor Code) - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the Project, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent Contractors, Subcontractors, leasing companies, motor carriers, Town-operators, employees of any such entity or employees of any entity which furnishes persons to provide services on the Project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a Project. "Services" does not include activities unrelated to the Project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The Contractor shall provide coverage, based on property reporting of classification codes and payroll amounts and filing of any coverage agreement, which meets the statutory requirements of Texas Labor Code, 401.011(44) for all employees of the Contractor providing services on the Project, for the duration of the Project.

C. The Contractor must provide a certificate of coverage to the Town of Addison prior to being awarded the contract.

D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the Project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the Town of Addison, showing that the coverage has been extended.

E. The Contractor shall obtain from each person providing services on the Project, and provide to the Town of Addison:

(1) a certificate of coverage, prior to that person beginning Work on the Project, so that the Town of Addison will have on file certificates of coverage showing coverage for all persons providing services on the Project; and,

(2) no later than seven days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;

F. The Contractor shall retain all required certificates of coverage on file for the duration of the Project and for one year thereafter.

G. The Contractor shall notify the Town of Addison in writing by certified mail or personal delivery, within 10 days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project.

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H. The Contractor shall post on each Project site a notice, in the text, form and manner prescribed by the TWCC, informing all persons providing services on the Project that they are required to be covered, and stating how a person may verify current coverage and report failure to provide coverage.

I. The Contractor shall contractually require each person with whom it contracts to provide Services on a Project to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Codes 401.011 (44) for all its employees providing services on the Project, for the duration of the Project;

(2) provide to the Contractor, prior to that person beginning Work on the Project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the Project, for the duration of the Project;

(3) provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the Project;

(4) obtain from each person with whom it contracts, and provide to the Contractor;

a. a certificate of coverage, prior to the other person beginning Work on the Project; and,

b. a new certificate of coverage showing extension of the coverage period, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the Project.

(5) retain all required certificates of coverage on file for the duration of the Project and for one year thereafter;

(6) notify the Town of Addison in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the Project; and

(7) contractually require each other person with whom it contracts to perform as required by paragraphs (1) - (7) with the certificate of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the Town of Addison that all employees of the Contractor who will provide services on the Project will be covered by worker's compensation coverage for the duration of the Project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the TWCC's Division of Self-Insurance Regulation. Providing false or misleading information may

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subject the Contractor to administrative penalties, criminal penalties, civil penalties or other civil actions.

K. The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the Town of Addison to declare the contract void if the Contractor does not remedy the breach within ten days after receipt of notice of breach from the Town.

The following is the form of notice of workers' compensation coverage prescribed by the TWCC. Pursuant to Section 110.110 (d) (7), this notice must be printed with a title in at least 30-point bold type, and text in at least 19-point nominal type, and shall be in both English and Spanish and any other language common to the worker population.

REQUIRED WORKERS' COMPENSATION COVERAGE

"The law requires that each person working on this site or providing services related to this construction Project must be covered by workers' compensation insurance. This includes persons providing, hauling or delivering equipment or materials, or providing labor or transportation or other service related to the Project, regardless of the identity of their employer or status as an employee.

"Call the Texas Workers' Compensation Commission (TWCC) at (512) 440-3789 to receive further information on the legal requirements for coverage, to verify whether your employer has provided the required coverage, or to report an employer's failure to provide coverage."

30. **RESOLUTION OF DISPUTES:** The parties hereby covenant and agree that in the event of any controversy, dispute, or claim, of whatever nature arising out of, in connection with or in relation to the interpretation, performance or breach of this Contract, including but not limited to any claims based on contract, tort or statute, before filing a lawsuit, the parties agree to submit the matter to Alternative Dispute Resolution pursuant to the laws of the State of Texas. The parties shall select a third party arbitrator or mediator from the current list of neutrals on file with the Alternative Dispute Resolution Administrator of the Dallas County District Courts or other mutually agreeable mediator or arbitrator. All forms of Alternative Dispute Resolution may be used except binding arbitration. The proceedings shall be conducted in accordance with the laws of the State of Texas.
31. **SHOP DRAWINGS:** The Contractor shall provide, review, approve and submit all shop drawings, product data and samples required by the Town of Addison, the Engineer and the Contract Documents in accordance with Item 1.28 of the Standard Specifications for Public Works Construction, North Central Texas Council of Governments. The Contractor shall electronically submit shop drawing for review to Kimley-Horn, who will review, comment and forward to the Town of Addison for acceptance.

Shop drawings shall include all items to be installed in the Project, including but not limited to:

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- | | | |
|--|---|--|
| <input type="checkbox"/> Concrete Mix Designs | <input type="checkbox"/> Traffic Control Plan | <input type="checkbox"/> Water Main Pipe/Fitting |
| <input type="checkbox"/> Storm Sewer Pipe | <input type="checkbox"/> Bridge Superstructure | <input type="checkbox"/> Valves & Boxes |
| <input type="checkbox"/> Rock Riprap | <input type="checkbox"/> Manholes & Vaults | <input type="checkbox"/> Backfill Materials |
| <input type="checkbox"/> Sanitary Sewer Pipe/Fitting | <input type="checkbox"/> Metal Beam Guard Fence | <input type="checkbox"/> Handrail Shop Drawings |

32. **PROJECT VIDEO:** Prior to the start of construction, Contractor shall video the construction area and property adjacent to construction in the presence of the City Inspector. The format shall be DVD. The video shall be narrated. The Contractor shall furnish the Town of Addison a copy of the video in DVD format prior to commencement of Project. This effort shall be considered as subsidiary to the various bids items for this Project (See Section 19).

33. **SAMPLES AND TESTS OF MATERIALS:** The Town of Addison shall designate and pay an independent testing laboratory to furnish testing for this Project. Random testing will be provided by the independent lab as necessary for compliance with the Specifications. The Contractor shall coordinate construction with the testing lab and the Town of Addison, and shall provide assistance to the testing labs by providing excavation, access, trench safety, materials for testing and any other Work required to insure all testing requirements are met. Work performed to accommodate testing will be a subsidiary item and no extra payment will be authorized. All costs for the field quality control testing shall be paid for by the Town of Addison, except for any and all re-testing, which shall be paid by the Contractor and such cost shall be deducted from monthly pay requests. As a guide, the Contractor shall be responsible for providing any test required by the Specifications.

All samples and tests shall be performed in accordance with the Standard Specifications for Public Works Construction, North Central Texas Council of Governments (5th Addition) as amended or supplemented.

34. **INSPECTION:** The Town of Addison and the Engineer reserve the right to inspect, test, measure or verify the construction Work for this Project as they deem necessary to ascertain that the Work is being accomplished in accordance with the standards and requirements set forth in the Contract Documents. Notwithstanding such reviews, the Contractor will be held responsible for the finished Work and any acceptance of the Work by the Town or governmental agencies will not relieve the Contractor from responsibility for the Work. The Town reserves the right to place full-time construction inspectors at the site of the Work. Costs for inspection services will be paid by the Town of Addison. The Contractor shall provide assistance to the Town of Addison and the Engineer by providing excavation, trench safety, or other Work necessary to facilitate inspection activities, and shall give sufficient notice well in advance of pending construction activities for scheduling of inspection services.

If the Specifications, the Town's instructions, laws, ordinances, or any public authority require any Work to be specially tested, the Contractor shall give the Town timely notice of its readiness for testing, and if the testing is by an authority other than the Town, of the

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date fixed for such testing. Tests by the Town shall be made promptly, and where practicable at the source of supply.

35. **ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS:** All haul roads and access routes and the location of job site trailers, staging areas, and storage areas shall be subject to the approval of the Town and the Engineer. The Contractor shall be responsible for obtaining a staging area for storage of equipment and materials and for employee parking. The Contractor is responsible for maintaining and repairing all roads and other facilities used during construction. Upon completion of the Project all existing roads and other disturbed areas shall be left in a condition equal to that at the time the Contractor commences Work on this Project.
36. **PROPERTY ACCESS:** Access to adjacent commercial property shall be maintained at all times unless otherwise directed by the Engineer and/or Town of Addison. Contractor shall also maintain sufficient access throughout the Project limits to the existing buildings and businesses during construction operations.
37. **PLANT, PROCEDURES, METHODS AND EQUIPMENT:** The Contractor shall determine the methods to be employed, the procedures to be followed, and equipment to be used on the Work under this contract, subject to the requirements of these Specifications and approval of the Engineer and Town of Addison. Only adequate and safe procedures, methods and equipment shall be used.

The Contractor shall so arrange his Work and provide such plant and equipment as is necessary in order to meet the progress requirements of the approved time schedule and to complete the Work within the period of time as specified in the Contract. Only such materials and equipment as are necessary for the construction of the Work under this contract shall be placed, stored or allowed to occupy any space at the site of the Work.

It is expressly agreed that the acceptance or approval of any order of procedure, methods or equipment submitted or employed by the Contractor shall not in any manner relieve the Contractor of responsibility for the safety, maintenance and repairs of any Work, or for the construction maintenance and safety of the Work hereunder, or from any liability whatsoever on account of any procedure or method employed by the Contractor.

Where the Work under this contract requires permits from the Town of Addison, the State of Texas, or other public authorities, duplicate copies of such permits shall be furnished to the Engineer by the Contractor before the Work covered thereby is started. **NO WORK WILL BE ALLOWED TO PROCEED BEFORE REQUIRED PERMITS ARE OBTAINED AND DISTRIBUTED.**

38. **PARKING OF CONSTRUCTION EQUIPMENT:** During all other periods of time when the Contractor's or their sub-contractors equipment is not being actively used on the construction Work, the Contractor shall park the equipment at locations which are approved by the Town of Addison. The Contractor shall provide adequate barricades, markers and lights to protect the Town of Addison, the Engineer, the public and other

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Work. All barricades, lights, and markers must meet the requirements of the Town of Addison, State and Federal regulations.

39. **ZONING REQUIREMENTS:** During the construction of this Project, the Contractor shall comply with the present zoning requirements of the Town of Addison in the use of vacant property for storage purposes.
40. **IN PUBLIC ROADS AND PRIVATE DRIVES:** No public road shall be entirely closed overnight, unless approved by the Town of Addison. It shall be the responsibility of the Contractor to build and maintain all weather bypasses and detours, if necessary, and to properly light, barricade and mark all bypasses and detours that might be required on and across the roads involved in the Work included in this Contract.

The Contractor shall make every effort to complete construction and allow immediate access to adjacent property at driveway entrances located along the roadways. Towns or tenants of improvements where access and/or entrance drives are located shall be notified at least twenty-four (24) hours prior to the time the construction will be started at their driveways or entrances and informed as to the length of time driveways will be closed. Contractor shall at all times maintain at least one point of access into all properties, unless obtaining written permission from property owner to do otherwise with such written permission being provided to the Town's inspector.

The Contractor shall be responsible for all road and entrance reconstruction and repairs and maintenance of same for a period of two years from the date of Town of Addison's acceptance of the Work. In the event the repairs and maintenance are not made immediately to the satisfaction of the Town, and it becomes necessary for the Town to make such repairs, the Contractor shall reimburse the Town for the cost of such repairs.

The Contractor shall, at all times, keep a sufficient width of the roadway clear of dirt and other material to allow the free flow of traffic. The Contractor shall assume any and all responsibility for damage, personal or otherwise, that may be caused by the construction along roads and private drives.

41. **HAULING ON TOWN OF ADDISON STREETS:** The Contractor shall receive approval of its haul routes and type of equipment to be used prior to beginning construction. The Contractor shall be responsible for maintaining the cleanliness of existing paved roadways and shall provide equipment and manpower for that purpose.
42. **EXISTING POWER POLES & GUY WIRES:** The Contractor shall have the responsibility of coordinating with the proper authorities for the bracing, replacing or relocating of all utility poles and guy wires which interfere with the Work on this Project prior to beginning its construction operations. The Contractor will also be responsible for all damage to poles, guy wires, etc. that are damaged or destroyed by Contractor's operations.
43. **SAFETY RESTRICTIONS - WORK NEAR HIGH VOLTAGE LINES:** The contractor is responsibly for the site safety of the project. Contractor shall follow governing

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regulatory requirements when working near high voltage lines, including but not limited to, OSHA 1926 and Town of Addison requirements.

44. **PROTECTION OF EXISTING UTILITIES AND STRUCTURES:** The location and dimensions shown on the Plans relative to existing utilities and subsurface structures are based on the best records and/or field information available and are not guaranteed by the Town of Addison or the Engineer to be accurate as to location and depth. It shall be the Contractor's responsibility to verify locations of adjacent and conflicting utilities sufficiently in advance of its activities in order that he may negotiate such restrictive locations with the Town of Addison of the conflicting utility and/or make local adjustments to provide adequate clearances. The Contractor shall take all necessary precautions in order to protect all utilities and services encountered, whether or not they are indicated on the Plans. All damage to utilities resulting from Contractor's operations shall be restored at its expense. The Town of Addison and the Engineer assume no responsibility for failure to show any or all of these utilities or structures on the Plans, or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for Extra Work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or requires the building of special Work, provisions for which are not made in the Plans, in which case, provisions in these Specifications for Extra Work shall apply.
45. **PUBLIC UTILITIES AND OTHER PROPERTY TO BE CHANGED:** In case it is necessary to change or move the property of a public utility, such property shall not be moved or interfered with until authorized by the Town of Addison or the Engineer. The right is reserved for the Owner of public utilities to enter upon the limits of the Project for the purpose of making such changes or repairs of their property that may be made necessary by performance of the Contract. The Contractor shall be responsible for coordination with the Town of Addison and the Engineer, and all utility companies whose utility lines or streets may be affected by the proposed improvements. The Contractor shall observe the following:
- a. Prior to any excavation, the Contractor shall determine the locations of all existing water, gas, sewer, electric, telephone, telegraph, television, pipelines and other underground utilities and structures.
 - b. After commencing Work, the Contractor shall use every precaution to avoid interference with existing underground and surface utilities and structures, and protect them from damage.
 - c. Where the locations of existing underground and surface utilities and structures are indicated, these locations are generally approximate, and all items which may be encountered during the Work are not necessarily indicated. The Contractor shall determine the exact locations of all items indicated, and the existence and locations of all items not indicated.

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- d. The Contractor shall repair or pay for all damage caused by its operations to all existing utility lines, public property, and private property, whether it is below ground or above ground, and he shall defend and settle in total the cost of all lawsuits which may arise as a result of its operations.
 - e. To avoid unnecessary interferences or delays, the Contractor shall coordinate all utility removals, replacements and construction with the appropriate utility company, and then request written authorization from the Town of Addison or the Engineer. The Town of Addison and the Engineer will not be liable for damages due to delay as a result of the above.
46. **MAINTENANCE AND REPAIRS:** The Contractor shall maintain and keep in good repair all Work contemplated under these Plans, Specifications, and Plans which shall include the maintenance and repair of all existing streets, storm sewer crossings, utility crossings, temporary crossings for access to adjacent property, barricades, lights, and danger signals, and all Work which is necessary for the well-being of the general public. In the event the Contractor fails in its obligations to properly maintain the Work, the Town of Addison shall make such repairs as are necessary and the cost of such repairs shall be deducted from payment due the Contractor.
47. **PROTECTION OF WORK:** During performance and up to date of final acceptance, the Contractor shall be under the absolute obligation to protect the finished Work against damage, loss or injury. In the event of damage, loss or injury, the Contractor shall promptly replace or repair such Work, whichever the Town of Addison shall determine to be preferable. The obligation to deliver finished Work in strict accordance with the contract prior to final acceptance shall be absolute and shall not be affected by the Town of Addison's approval of or failure to prohibit means and methods of construction used by the Contractor. All risk of loss or damage to the Work shall be borne solely by the Contractor until final acceptance of all Work by the Town of Addison, as evidenced by the Town of Addison's issuance of a certificate of acceptance.
48. **PUBLIC CONVENIENCE AND SAFETY:** In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the Project site, including safety of all persons and property during performance of the Work. This requirement shall apply continuously and not be limited to normal Work hours.

Materials stored about the Work site shall be so placed, and the Work shall at all times be so conducted, as to cause no greater obstruction to the traveling public than is considered necessary by the Town of Addison. The materials excavated shall be placed so as not to endanger the Work or prevent free access to all fire hydrants, water valves, gas valves, manholes (telephone, telegraph or electrical conduits, and sanitary sewers) and fire alarm or police call boxes in the vicinity.

The Town of Addison reserves the right to remedy any neglect on the part of the Contractor as regards to the public convenience and safety which may come to the Town of Addison's

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attention, after 24 hours notice in writing to the Contractor, save in cases of emergency, when the Town of Addison shall have the right to remedy any neglect without notice; and, in either case, the cost of such Work done by the Town of Addison shall be deducted from the monies due or to become due the Contractor. The Contractor shall notify the Town of Addison and the Engineer when any street is to be closed or obstructed. The Contractor shall provide for emergency vehicle access at all times.

Where the Work passes over or through private property, the Town of Addison shall provide such right-of-way. The Contractor shall notify the proper representatives of any public utility, corporation, company or individual, not less than 48 hours in advance of Work which might damage or interfere with the operation of their property along or adjacent to the Work. The Contractor shall be responsible for all damage or injury to property of any character (except such as may be required by the provisions of the Contract Documents, or caused by agents or employees or the Town of Addison) by reason of any negligent act or omission on the part of the Contractor, its employees, agents or Subcontractors, or at any time due to defective Work or materials, or due to its failure to reasonably or properly prosecute the Work, and said responsibility shall not be released by the fact that the Work shall have been completed and accepted.

When and where any such damage or injury is done to public or private property on the part of the Contractor, he shall restore or have restored at its own cost and expense such property to a condition similar or equal to that existing before such damage was done, by repairing, rebuilding or otherwise restoring as he may be directed, or he shall make good such damage or injury in a manner acceptable to the property Town of Addison and the Engineer. In case of failure on the part of the Contractor to restore such property or make good such damage or injury, the Town of Addison may, upon 48 hour written notice under ordinary circumstances, and without notice when a nuisance or hazardous condition results, proceed to repair, rebuild or otherwise restore such property as may be determined necessary, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under this contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or its surety shall reimburse the Town of Addison for all such costs.

49. **PROTECTION OF PERSONS AND PROPERTY:** The Contractor shall have the responsibility to provide and maintain all warning devices and take all precautionary measures required by law or otherwise necessary to protect the Work and persons and property while said persons or property are approaching, leaving or within the Work site or any area adjacent to said Work site. No separate compensation shall be paid to the Contractor for the installation or maintenance of any protective measures, warning devices, barricades, lights, signs, or any other precautionary measures required by law or otherwise necessary for the protection of persons or property.

The Contractor shall assume all responsibilities to the general public in connection with the general public's immediate approach to and travel through the Work site and the area adjacent to said Work site.

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Where the Work is in or adjacent to any street, alley, sidewalk, public right-of-way or public place, the Contractor shall at its own cost and expense provide such flagmen and watchmen and furnish, erect and maintain such warning devices, barricades, lights, signs, and other precautionary measures for the protection of persons or property as may be prudent or necessary, or as required by law. The Contractor's responsibility for providing and maintaining flagmen, watchmen, warning devices, barricades, signs and lights and other precautionary measures shall not cease until the Project shall have been completed and accepted by the Town of Addison, and shall cease when the Town of Addison notifies the Contractor in writing of final Project acceptance.

If the Town of Addison discovers that the Contractor has failed to comply with applicable federal or state laws (by failing to furnish the necessary flagmen, warning devices, barricades, lights, signs or other precautionary measures for the protection of persons or property), the Town of Addison may order the Contractor to take such additional precautionary measures as required by law to protect persons and property. In addition, the Contractor shall be held responsible for all damages to the Work and other public or private property due to the failure of warning devices, barricades, signs, lights or other precautionary measures in protecting said property; and whenever evidence is found of such damage, the Town of Addison may order the damaged portion immediately removed and replaced by and at the cost and expense of the Contractor.

50. **TRAFFIC CONTROL:** It shall be the responsibility of the Contractor to provide traffic control during the construction as required by the State of Texas, the Town of Addison, and in accordance with the following additional requirements:
- a. The Contractor shall be required to furnish barricades, flares, flagmen, etc., for the protection of the public, employees and the Work.
 - b. The Contractor shall prosecute its Work in such a manner as to create a minimum of interruption to traffic along adjacent roadways.
 - c. The unit price bid under the appropriate bid item of the proposal shall cover all cost for providing signage, markings, lighting, barricades, flagmen and other devices and personnel required for traffic control during construction of the Project.
 - d. The Contractor shall not remove any regulatory sign, instructional sign, warning sign, street name sign or any other sign or signal which currently exists.
 - e. **The Contractor shall provide a comprehensive Traffic Control Plan to the Town of Addison for review, comment, and approval.** In the event the planned sequence of work is different in any way from that sequence of work provided for in the plans or where additional details are required to be reviewed and approved by Addison prior to any further work is performed. The Traffic Control Plan shall be designed in accordance with established standards and regulations and signed and sealed by a professional engineer, registered in the State of Texas. The plan should reflect the Contractor's proposed construction phasing and methodology and include the design

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layout for all proposed detour and traffic situations. This effort is paid by lump sum in bid item 8.

51. **BARRICADES, WARNING SIGNS, DETOURS AND SEQUENCE OF CONSTRUCTION:** Throughout the construction operations, streets and intersections will remain open to traffic by constructing the Work in stages. All streets, driveways, adjacent business and alleys shall remain open to traffic as far as is practicable.

A. **General Construction:** The Contractor shall plan its Work sequence in a manner that will cause minimum interference with aircraft operations during construction operations. Before beginning Work on this Project, the Contractor shall submit, for approval by the Town of Addison, a plan of construction operations outlining in detail a sequence of Work to be followed; setting out the method of handling traffic on streets, roads and driveways along, across and adjacent to the Work. If at any time during the construction, the Contractor's proposed plan of operation for handling traffic does not provide for safe comfortable movement, the Contractor shall immediately change its operations to correct the unsatisfactory conditions.

Ditches across the traffic lanes will be kept covered with a portable traffic-bearing surface at all times unless Work in the ditch is in progress. Only one lane of traffic may be closed at a time when Work is in progress in a ditch.

B. **Safety:** The Contractor shall provide, construct and maintain barricades and signs at locations set out in the Plans and in the Special Provisions in accordance with the Texas Manual on "Uniform Traffic Control Devices for Streets and Highways". In addition, he shall provide and maintain such other barricades and signs as deemed necessary by the Town or the Engineer, and provide and maintain, between sunset and sunrise, a sufficient number of lights at barricades and points of danger for the protection of vehicular and pedestrian traffic.

Barricades shall be placed in such a manner as not to interfere with the sight distance of drivers entering the street from side streets.

The Contractor shall keep traveled surfaces used in its hauling operation clear and free of dirt or other material.

The Contractor shall provide and maintain qualified flagmen at such points and for such periods of time as may be required to provide for the safety and convenience of public travel and Contractor's personnel.

52. **EXCAVATION SAFETY SYSTEMS:**

The Work performed under this section of the Specifications consists of providing trench safety systems consisting of shoring, sheeting, trench shield, and/or laid back slopes to meet the trench safety requirements of the Occupational Safety and Health Administration (O.S.H.A.), as required for this Project and specified herein.

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A. General: Trench safety systems shall be provided by the Contractor as provided in Subpart P - Excavation, Trenching and Shoring, Part 1926 of the Code of Federal Regulations which describes safety and health regulations as administered by the U.S. Department of Labor Occupational Safety and Health Administration (O.S.H.A.). The standards specified by the O.S.H.A. Regulations shall be the minimum allowed on this Project. It shall be the responsibility of the Contractor to design and install adequate trench safety systems for all trenches excavated on this Project.

The Contractor shall furnish to the Town for review, prior to beginning construction activity, a Trench Safety Plan for the entire Project. The trench safety plan must be prepared and sealed by a Professional Engineer registered in the State of Texas. In addition, all trench safety systems utilized in this Project must be designed by a Professional Engineer registered in the State of Texas. The Contractor shall be totally responsible for the safety of all persons involved in the construction of this Project.

B. Core Borings: Any core borings and soil data furnished by the Town are for the convenience of the Contractor. The Contractor shall be responsible for any additional soil or geotechnical information required. The Contractor shall be responsible for properly designed trench safety systems to be utilized for any type of subsurface condition found on this Project. The furnishing of soil information by the Town of Addison in no way relieves the Contractor of this obligation. If no core borings or soil data are furnished by the Town, it shall be the Contractor's responsibility to obtain whatever geotechnical information required for preparation of trench safety systems.

C. Inspections: In addition to the inspections of the trench and trench safety systems required of the Contractor by the O.S.H.A. Regulations, the Town may further inspect the Work. The Town shall have the right to reject any trench safety systems which he finds to be inadequate, and the Contractor shall immediately improve the system to comply with this specification.

D. Measurement and Payment: Measurement and payment of Trench Safety Systems shall be based on the actual linear footage of the pipe installed on the Project. The payment shall be full compensation for all planning, engineering, materials, equipment, fabrications, installation, recovery and all incidental Work required.

53. TRENCH EXCAVATION, BACKFILL AND COMPACTION: Trench excavation, backfill and compaction of water and sewer utility trenches shall be in accordance with Town of Addison Standards and with details shown on the Construction Plans.

A. Trench Excavation: If the stated maximum trench widths are exceeded, either through accident or otherwise, and if the Engineer determines that the design loadings of the pipe will be exceeded, the Contractor will be required to support the pipe with an improved trench bottom. The expense of such remedial measures shall be entirely the Contractor's own. All trenching operations shall be confined to the width of permanent rights-of-way, permanent easements and any temporary construction easements. All excavation shall be in strict compliance with the Trench Safety Systems Special Condition of this document.

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B. Trench Backfill: Trenches shall be backfilled above the top of the embedment material with approved backfill material per Town of Addison Standards for the appropriate pipe size, pipe material, depth, and soil condition.

C. Compaction: All trenches under proposed or existing pavement shall be compacted to within a range of 95% to 100% Standard Proctor Density. Trenches which lie outside limits of pavement shall be compacted to a minimum of 90% Standard Proctor Density (ASTM D-698).

54. **TRENCH WALLS:** The Contractor shall use shoring or a drag box in those areas where it is required to protect existing improvements. This shall be subsidiary to the linear foot cost of the pipe and not a separate pay item.
55. **SUSPENSION OF WORK RELATED TO DANGER:** In addition to the other remedies for suspension of the Work as provided for in the General Provisions and Special Provisions, the Town of Addison has the authority to suspend all work immediately if, in the Town of Addison's opinion, there is imminent danger to workers or the general public. If there is no imminent danger to workmen or the general public, but trench conditions are not in compliance with Federal Regulations 29 C.F.R. 1926.650-1926.652, the Town of Addison shall warn the Contractor who shall then immediately order all workmen in and adjacent to the trench away from the area. The Contractor must then bring the trench into compliance with the regulations. If the Contractor does not make the required corrections, all work on the Contract shall cease and the Town of Addison will issue a letter of Temporary Suspension of Work. The only work authorized after issuance of this letter is work approved by the regulations. Other work shall not be permitted until the Town of Addison issues a letter of Release of Temporary Suspension of Work. The Contractor shall not be entitled to additional compensation, an extension of time or payment of damages as a result of a temporary suspension of work under this provision.
56. **PROPERTY LINES AND MONUMENTS:** The Contractor shall protect all property corner markers, and when any such markers or monuments are in danger of being disturbed, they shall be properly referenced and if disturbed shall be reset at expense of the Contractor.
57. **CONSTRUCTION STAKING:** Construction staking will not be provided by the Town of Addison or Engineer. This item will be performed by the Contractor and shall be subsidiary to other bid items. The Contractor will also be responsible for maintaining stakes. If re-staking is required for any reason, it will be the Contractor's responsibility, including associated costs.

All construction staking shall be done under the supervision of a Registered Professional Land Surveyor registered in the State of Texas. The Contractor shall submit copies of cut sheets and field books for the construction of all paving, water, wastewater, and stormwater improvements to the Town of Addison for review prior to construction of the improvements. The information on the cut sheets and field books shall include but not be limited to the following:

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- a. Heading to include date, contract number, Project name, surveying firm, Contractor, and construction plan sheet number.
 - b. Location, description of street/line and street/line name, number, letter, etc. designation.
 - c. Benchmark Data: Location, description, and elevation.
 - d. Slope or percent of grade of each curb line or utility line.
 - e. Stations at 50 foot intervals and including all PC, PT, PI, PVC, PVI, PVT, PRC, grade changes, etc.
 - f. Offset description including distance to center line or back of curb and direction of offset; left, right, east, west, etc,
 - g. Cut to subgrade, pavement, top of curb, or flowline of the street or utility being staked.
 - h. Clarifying remarks such as top of curb, gutter, pavement, subgrade, manhole, cleanout, valve, tee, cross, fire hydrant, wastewater lateral, water service, etc.
 - i. Cut sheets shall be signed by a Texas Registered Professional Land Surveyor.
58. **DURING CONSTRUCTION:** During construction of the Work, the Contractor shall, at all times, keep the site of the Work and adjacent premises as free from material, debris and rubbish as is practicable and shall remove same from any portion of the site if, in the opinion of the Town of Addison or the Engineer, such material, debris or rubbish constitutes a nuisance or is objectionable. In case of failure on the part of the Contractor to maintain a clean site, the Town of Addison may, upon 24 hour written notice, clean the site, and the cost thereof shall be deducted from any monies due or to become due to the Contractor under its contract; or where sufficient contract funds are unavailable for this purpose, the Contractor or its surety shall reimburse the Town of Addison for all such costs.
59. **CONSTRUCTION TRAFFIC OVER PIPE LINES:** The design of the new pipes and the design of the existing pipe have been taken into account and provided for highway live loads. It is apparent, however, that certain construction vehicles could exceed this highway load condition under shallow bury conditions. It will be the responsibility of the Contractor to protect both the new line and the existing lines from these possibly excessive loads. The Contractor shall not at any time cross the existing or new pipe with a truck delivering new pipe to the site. Any damage to the existing or new pipe will be repaired or replaced by the Contractor to the satisfaction of the Town of Addison.

In locations where it is not permissible to cross the existing or proposed pipes without additional protection, the Contractor may elect to provide additional protection of the pipes, such as steel plates, so that more frequent crossings of the pipes are allowed. It still is, however, the responsibility of the Contractor to repair any damage to the existing or proposed lines if the damage results from any phase of its construction operation.

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60. **CONTRACTOR'S CONTINUING OBLIGATION:** Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the Town of Addison, nor the issuance of a certificate of Substantial Completion, nor any payment by Town of Addison to Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by Town of Addison, nor any act of acceptance by Town of Addison nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by the Town of Addison pursuant to final payment nor any correction of defective Work by Town of Addison will constitute an acceptance of Work not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents.
61. **IRRIGATION AND SPRINKLER REPAIR:** The Contractor shall maintain all existing irrigation systems within the limits of the Project during the duration of the contract, if necessary. The Contractor shall employ a licensed irrigator who is responsible for the repair or replacement of any damage to irrigation lines, valves, controllers, sprinklers, wiring and appurtenances which are damaged during construction. **This repair is subsidiary to the various other items bid. The Contractor will be responsible for any vegetation that dies as a result of damage to the irrigation system and replace it with equal vegetation at its own cost.**
62. **REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK:** All Work which has been rejected or condemned shall be repaired; or if it cannot be repaired satisfactorily, it shall be removed and replaced at the Contractor's expense. Defective materials shall be immediately removed from the Work site. Work done without line and grade having been provided; Work done beyond the line or not in conformity with the grades shown on the Plans or as provided, Work done without proper inspection; or any Extra or unclassified Work done without written authority and prior agreement in writing as to prices, shall be at the Contractor's risk and will be considered unauthorized, and at the option of the Town of Addison may not be measured and paid for and may be ordered removed at the Contractor's expense. Upon failure of the Contractor to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned Work or materials immediately after receiving notice from the Town of Addison, the Town will, after giving written notice to the Contractor, have the authority to cause defective Work to be remedied or removed and replaced, or to cause unauthorized Work to be removed and to deduct the cost thereof from any monies due or to become due the Contractor.
63. **DISPOSITION AND DISPOSAL OF MATERIALS:** All materials to be removed from the site including refuse and other debris shall become the property of the Contractor and shall be disposed of outside the limits of the Project. Contractor shall also comply with all applicable laws governing the spillage of debris while transporting to a disposal site.
64. **CLEAN-UP FOR FINAL ACCEPTANCE:** The Contractor shall make a final cleanup of all parts of the Work before acceptance by the Town of Addison. This cleanup shall include removal of all objectionable rock and other construction materials, and in general preparing the site of the Work in an orderly manner and appearance.

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65. **TV INSPECTION OF SANITARY SEWER/STORM SEWER:** Part of the final inspection of the wastewater systems on this Project shall include a closed circuit TV survey of the completed pipe installation, exclusive of services, and all imperfections in the installed facility revealed by the TV survey shall be remedied by the Contractor prior to acceptance of the Project as complete. All TV survey Work, including furnishing of necessary personnel, equipment and material shall be performed by the Contractor.
66. **TESTING REQUIREMENTS:** Testing shall be conducted in accordance with Town of Addison Specifications except as modified in the Special Provisions, Technical Specifications, or as noted on the plans. As a general guide, the Contractor shall be responsible for providing the following tests:
- (1) Pressure test, bacteriological tests for disinfection of water lines,
 - (2) Mandrel test for gravity sewer pipeline
 - (3) Vacuum test for SSMH for water tightness.
 - (4) Providing test results from manufacturer and as specified in Town of Addison Specifications (NTCOG).

No separate pay will be provided to perform any additional testing not usually performed by the independent testing lab referred to in Special Provision 33, unless otherwise note.

67. **SILICONE JOINT SEALANT:** Silicone joint sealant must be used in all instances where joint sealant applies to Portland Cement Concrete pavement and curbs. Payment for the use of silicone joint throughout this Project will in all cases be subsidiary to this contract at no extra cost.
68. **CLAIMS FOR DAMAGES OR INJURY:** General Provision Item 1.24.3 - SMALL CLAIMS FOR DAMAGE OR INJURY is amended to read as follows: "If any person files a claim against the Town of Addison or Contractor for personal injury or property damage resulting from, arising out of, or caused by, the operations of the Contractor, or any Work within the limits of the Project, the Contractor must either submit to the Town of Addison, a duly executed full release within thirty (30) days from the date of written claim, or immediately report the claim to its liability insurance carrier for their action in adjusting the claim. If the Contractor fails to comply with this provision within the stipulated time limit, it will be automatically deemed that the Contractor has appointed the Town as it's irrevocably Attorney-In-Fact authorizing the Town to report the claim directly with the liability insurance carrier. This provision is in and of itself a Power-of-Attorney from the Contractor to the Town which authorizes the Town to take said action on behalf of the Contractor without the necessity of the execution of any other document. If the Contractor fails to comply with the provisions of this item the Town, at its own discretion, may terminate this contract or take any other actions it deems appropriate. Any payment or portion thereof due the Contractor, whether it is a final payment, progress payment, payment out of retainage or refund payment may be withheld by the Town as is authorized by Item 109.4. Bankruptcy, insolvency or denial of liability by the insurance carrier shall not exonerate the Contractor from liability.

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As a result of the additional Work created to Town of Addison due to un-responded claims for damages by Contractor to third parties, Contractor shall incur penalties for failure to abide by this Special Provision.

Contractor shall respond to the claimant in writing regarding the status of the claim, including whether Contractor disputes the claim, wishes to settle, or will notify its liability insurance carrier regarding the claim. Contractor will be assessed a penalty by the Town of \$75.00 per claim, for its failure to respond to the claimant as described above within thirty days of its written notice of claim by the Town.

To ensure Contractor compliance, the Town of Addison shall be notified, by copied correspondence of responses or settlement by Contractor.”

69. **WAIVER OF CLAIMS:** The making and acceptance of final payment will constitute:

A. A waiver of all claims by Town of Addison against Contractor, except claims arising from unsettled Liens, from defective Work appearing after final inspection or failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by Town of Addison of any rights in respect of Contractor’s continuing obligations under the Contract Documents.

B. A waiver of all claims by Contractor against Town of Addison other than those previously made in writing and still unsettled.

70. **MECHANICS AND MATERIALMEN’S LIEN:** The Contractor shall be required to execute a release of mechanics and materialmen’s liens upon receipt of payment and shall ensure that the Project remains free and clear of all liens related to the Work. The Contractor shall have all liens removed by obtaining releases acceptable to the Town of Addison or shall bond around such liens by obtaining a discharge of all liens.

71. **CONTRACTOR’S AFFIDAVIT OF BILLS PAID:** The Contractor shall be required to execute the form provided in Section BP prior to the acceptance of the Project.

72. **PRODUCT RECORD DOCUMENTS:** The Contractor shall maintain record Plans and legibly annotate shop drawings to record changes made after review. A red felt-tip marking pen shall be used for all recording.

Maintenance of Documents: The Contractor shall maintain at the job site one record copy of the Contract Plans, Specifications, Shop Drawings, Change Orders, other modification to the Contract, field test records and other documents submitted by Contractor in compliance with specification requirements. These documents shall be maintained at the job site apart from documents used for construction. These documents are not to be used for construction purposes. The documents shall be maintained in clean, legible condition. The documents shall be made available at all times for inspection by the Town.

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Recording: Each document shall be labeled Project Record Copy in 2-inch high printed letters. The record documents shall be kept current. No Work shall be covered until required information has been recorded.

Contract Plans: The appropriate drawing shall be legibly marked to record, where applicable:

- a. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
- b. Field changes of dimension and detail made during construction process.
- c. Changes made by Change Order or Supplemental Agreement.
- d. Details not on original Contract Plans.
- e. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
- f. Changes made by Change Order or Supplemental Agreement.
- g. Other matters not originally specified.

Shop Drawing: The Contractor shall maintain the Shop Drawings as record drawings and legibly annotate shop drawings to record changes made after review.

Submittal: At the completion of the Project, the Contractor shall deliver record Plans to the Town. The transmittal letter shall be accompanied, in duplicate, with:

- a. Date, Project title and number.
- b. Contractor's name and address.
- c. Title and number of each record document.
- d. Certification that each document as submitted is complete and accurate.
- e. Signature of Contractor or its authorized representative.

73. **OWNERSHIP OF WORK AND MATERIALS:** All Work performed by Contractor pursuant to the Contract shall be the property of the Town of Addison. The Town of Addison shall own all construction, and any data, documents, plans, specifications, working papers, computer programs, photographs, or other material produced by Contractor pursuant to the Contract, and Contractor hereby assigns and transfers to the Town of Addison any and all copyrights for such material. To the extent that such programs used are internal, proprietary programs used by Contractor in the performance of the Work, Contractor will provide the Town of Addison such access to the programs as is necessary for the Town of Addison to be able to use the products and documents generated by the program, but Contractor is not required to transfer the copyrights or other intellectual

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property rights to the program to the Town of Addison. As security for partial, progress, or other payments, title to work for which such payments are made shall pass to the Town of Addison at the time of the payment. To the extent that title has not previously been vested in the Town of Addison by reason of payments, full title shall pass to the Town of Addison at delivery of the Work at the location specified in the Contract.

Unincorporated Work to which the Town of Addison has received title by reason of progress, partial or other payments shall be segregated from other Contractor or Subcontractor materials and clearly identified as the Town of Addison property. The Contractor shall be responsible for all materials until they have been incorporated into the Work and the Work has been finally accepted by the Town of Addison. The title transferred as above shall in each case be good, and free and clear of any and all security interests, liens, or other encumbrances. The Contractor promises and agrees that it will not pledge, hypothecate, or otherwise encumber the items in any way that would result in any lien, security interest, charge, or claim upon or against said items. The transfer of title as provided above shall not imply acceptance by the Town of Addison, nor relieve Contractor from the responsibility to strictly comply with the Contract, and shall not relieve Contractor of responsibility for any loss of or damage to such items.

The Contractor shall insert provisions in its subcontracts sufficient to ensure compliance with the content of this Section.

74. **DRAWINGS AND OTHER DATA:** All documents developed by Contractor in the performance of the Contract shall become the sole property of the Town of Addison and may be used by the Town of Addison on any other project without additional compensation to Contractor. Use by the Town of Addison of these documents on other projects does not confer any liability on Contractor.

The Town of Addison shall be considered the “person for whom the work was prepared” for the purpose of authorship in any copyrightable work under 17 U.S.C. § 201(b). With respect thereto, Contractor agrees not to assert or authorize others to assert any rights or establish any claim under the design related patent and copyright laws. All design drawings, as-built drawings and specifications, in any form, shall contain a copyright mark of the Town of Addison.

75. **TOWN OF ADDISON APPROVAL:** This Project is subject to final approval and acceptance by the Town of Addison. Final approval acceptance will not be given until the punch list items are completed to the Town’s satisfaction and as-built Plans are given to the Town of Addison.
76. **USE OF EXPLOSIVES:** The use of explosives by the Contractor to complete the Work shall be prohibited.
77. **POWER FOR CONSTRUCTION:** The Contractor shall contract with the local power provider and make the necessary arrangements for securing power required for the construction, including power required for temporary offices. There will be no separated

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pay item for connection into the existing power system or for the power required for construction purposes.

78. **LIQUIDATED DAMAGES:** If the Contractor fails to complete the Work within the time specified in the contract, the Contractor shall pay liquidated damages to the Town of Addison in the amount of \$ 1,000 for each calendar day of delay until the Work is completed or accepted.
79. **CONTRACT DELAY:** The parties anticipate that delays may be caused by or arise from any number of events during the course of the Contract, including, but not limited to, Work performed, disruptions, permitting issues, actions of subcontractors, suppliers, or other contractors, actions by third parties, weather, weekends, holidays, or other such events, forces or factors sometimes experienced in construction work. Such delays or events and their potential impacts on performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract, and shall not extend the Contract time for completion. Further, any and all costs or impacts whatsoever incurred by the Contractor in accelerating the Work to overcome or absorb such delays or events in an effort to complete the Contract prior to expiration of the Contract time to complete, regardless of whether the Contractor does so or not, shall be the sole responsibility of the Contractor in every instance.
80. **SUBCONTRACTORS:** No subcontract shall relieve Contractor of any of Contractor's obligations or liabilities under the Contract. Contractor shall be fully responsible and liable for the acts or omissions of all Subcontractors, including persons directly or indirectly employed by them, their guests and invitees. Contractor shall have sole responsibility for managing and coordinating the operations of its Subcontractors, including the settlement of disputes with or between them. Nothing contained in the Contract shall be deemed to create a contractual relationship between any Subcontractor, and the Town of Addison.

Contractor shall provide to the Town of Addison one (1) copy of all executed subcontracts associated with the Contract, including any changes or modifications to the subcontracts, within three (3) days of their execution. No Subcontractor shall be permitted to perform work associated with the subcontract until the Subcontractor (or Contractor on the Subcontractor's behalf) is in compliance with the insurance requirements specified elsewhere in the Contract, and has furnished satisfactory evidence of insurance to the Town of Addison.

81. **PAYMENTS TO SUBCONTRACTORS:** Contractor shall comply with the provisions of applicable laws and regulations relating to Contractor's relations with Subcontractors. Payments by Contractor to Subcontractors associated with the Town of Addison Contracts are subject to the time periods established in the Texas "Prompt Payment Act", contained in Chapter 2251 of the Texas Government Code.

All persons employed in the performance of the Work under the Contract, or any subcontracts hereunder, shall be paid not less than the general rates of per diem, holiday, and overtime wages prevailing in the locality of the Work of a similar character as detailed

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in the Special Provisions. Failure to comply with this provision shall subject Contractor to the penalties prescribed in Chapter 2258 of the Texas Government Code, as amended.

Contractor will include in each subcontract for property or services entered into by Contractor and a Subcontractor, including a supplier, for purposes of performing the Work under the Contract a payment clause that obligates Contractor to pay the Subcontractor for satisfactory performance under its subcontract within seven (7) days out of such amounts as are paid to Contractor by the Town of Addison under the Contract. A false certification to the Town of Addison under the provisions of the Payments clause may be a principal offense in violation of Section 37.10 of the Texas Penal Code.

- 82. USE OF COMPLETED PORTIONS OF THE WORK:** Whenever, as determined by the Town of Addison, any portion of the Work performed by Contractor is in a condition suitable for use, and the best interests of the Town of Addison requires such use the Town of Addison may take possession of or use such portion of the Work. Such use by the Town of Addison shall in no case be construed as final acceptance, and shall neither relieve Contractor of any of its responsibilities under the Contract, nor act as a waiver by the Town of Addison of any of the conditions thereof. Contractor shall not be liable for the cost of repairs, rework, or renewals, which may be required due to ordinary wear and tear resulting from such use. However, if such use increases the cost or delays the completion of remaining portions of the Work, Contractor shall notify the Town of Addison in writing as required by the Contract and shall be entitled to such additional compensation or extension of time, or both, as determined in accordance with the Contract.

If in the course of such use, the Work proves to not be in compliance with the Contract, the Town of Addison shall have the right to continue such use until such portion of the Work can, without injury to the Town of Addison, be taken out of service for correction of defects, errors, omissions, or replacement of unsatisfactory materials, as necessary for such portions of the Work to comply with the Contract. Contractor shall correct the Work as soon as practical, but not later than one (1) month after notification by the Town of Addison.

Contractor shall not use any permanently incorporated materials unless such use is approved in writing by the Town of Addison. Where Contractor's request is granted for the use of certain materials, Contractor shall properly use and maintain and, upon completion of its use and at its own expense, recondition such materials to the satisfaction of the Town of Addison.

- 83. COMPLETE AGREEMENT:** The Contract (including Attachments, the Special Provisions, other documents and manuals incorporated herein) is the full and complete agreement between the Town of Addison and Contractor with respect to the subject matter herein and supersedes any and all prior agreements between the parties hereto.
- 84. WAIVER:** The waiver by the Town of Addison of the breach of any provision of the Contract by Contractor shall in no way impair the right of the Town of Addison to enforce the provision for any subsequent breach thereof. All remedies provided hereunder are cumulative and are in addition to all other remedies available at law or in equity.

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85. **EXECUTION OF THE CONTRACT:** The Contract may be executed in multiple counterparts, each of which shall, for all purposes, be deemed an original but which together shall constitute one and the same instrument, and the signature pages from any counterpart may be appended to any other counterpart to assemble fully executed documents, and counterparts of the Contract may also be exchanged via electronic facsimile machines and any electronic facsimile of any party's signature shall be deemed to be an original signature for all purposes.

86. **DEFINITIONS:** The following definitions are added to the General Provisions and Special Provisions:

BIDDER: Any person, persons, partnership, company, firm, association, or corporation acting directly or through a duly authorized representative submitting a bid for the work contemplated.

PROJECT: The Town of Addison's overall objective and endeavor of which the Contract forms a part and ultimately creates, which encompasses all Contract Documents constructed to final completion and final acceptance.

TOWN ENGINEER (ENGINEER): Town Engineer or his/her authorized representative with the Town of Addison located at 16801 Westgrove Drive, Addison, Texas 75001.

CONSULTANT ENGINEER (DESIGN ENGINEER): The consultant engineer of record is Thomas W. Hartmann, PE (Texas Registered PE #109948) with Kimley-Horn and Associates, Inc. located at 13455 Noel Road, Two Galleria Office Tower, Suite 700, Dallas, Texas 75240.

WORKING DAY: A working day is defined as a calendar day not including Saturdays, Sundays, or legal holidays authorized in the list prepared by the City of Dallas for contract purposes, in which weather or other conditions not under the control of the Contractor shall permit the performance of the principal units of work underway for a continuous period of not less than 7 hours between 7 A.M. and 6 P.M. A principle unit of work shall be that unit which controls completion time of the contract. Nothing in this definition shall be construed as prohibiting the Contractor from working on Saturdays, if the Contractor so desires and permission of the Town of Addison has been granted. Work on Sundays shall not be permitted except in cases of extreme emergency and then only with the written permission of the Town of Addison. If Saturday or Sunday work is permitted, working time shall be charged on the same basis as weekdays. Where the working time is expressed as calendar days or a specific date, the concept of working days shall no longer be relevant to the contract.

87. **MODIFICATIONS TO THE LANGUAGE OF THE GENERAL PROVISIONS:** The General Provisions are modified as follows:

A. Add the following words to the General Provisions before the word "Certificates" found on the fourth line of Section 103.4.1:

"When permitted by law,"

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- B. Delete the sentence “A model Certificate of Insurance is illustrated in Model Form A.6 in Appendix A.” beginning on the ninth line of Section 103.4.1 of the General Provisions and replace with the following:

“Certificates of Insurance shall be provided on a state approved form.”

- C. Delete the following sentence beginning on the second line of the fifth subparagraph of Section 104.2.1 of the General Provisions:

“The foregoing notwithstanding, the total original Contract amount shall not be increased more than 25 percent; the CONTRACTOR, by submission of a bid and execution of the Contract, is deemed to consent to the OWNER’S right to reduce the total original Contract amount by more than 25 percent.”

- D. Add the following word before the word “decide” found on the second line of Section 105.7.1 of the General Provisions:

“initially”

- E. Add the following word after the word “work” found on the fifth line of Section 105.7.1 of the General Provisions:

“, subject to the agreement of the Owner”

- F. Delete the following sentence beginning on the sixth line of Section 105.7.1 of the General Provisions:

“Engineer shall determine the amount and quality of work performed and materials furnished, and Engineer’s decision and estimates shall be final.”

- G. Delete Section 105.9.3 of the General Provisions titled “Inspection Overtime” in its entirety.

- H. Delete Section 107.3 of the General Provisions titled “Indemnification” in its entirety and replace with the following:

“THE CONTRACTOR AGREES TO INDEMNIFY, SAVE, PROTECT, DEFEND, AND HOLD HARMLESS THE OWNER, ITS AFFILIATES AND THEIR OFFICERS, DIRECTORS, AGENTS, INVITEES, AND EMPLOYEES (“INDEMNIFIED PARTIES”) FROM AND AGAINST ANY AND ALL LIABILITY, COST, DAMAGE, EXPENSES, FINES AND ALL REASONABLE LEGAL FEES AND COURT COSTS, CLAIMS, LOSSES, CAUSES OF ACTION, SUITS, AND LIABILITY OF ANY KIND, INCLUDING ALL

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EXPENSES OF LITIGATION AGAINST THE INDEMNIFIED PARTIES, WHETHER OR NOT CAUSED IN PART BY ANY ACT OR OMISSION OF A PERSON OR ENTITY INDEMNIFIED HEREUNDER, OR WHETHER LIABILITY IS IMPOSED UPON SUCH PERSON OR ENTITY, FOR ANY LOSS, INJURY, DAMAGE OR DEATH ARISING FROM OR OUT OF THE CONTRACTOR'S ACTS OR OMISSIONS, INCLUDING, BUT NOT LIMITED TO CONTRACTOR'S NEGLIGENT OR GROSSLY NEGLIGENT PERFORMANCE OF THE WORK; NEGLIGENT OR GROSSLY NEGLIGENT USE OR MISUSE OF OWNER'S PROPERTY; NEGLIGENT OR INTENTIONAL ACTIONS, ERRORS OR OMISSIONS AND THOSE OF ITS EMPLOYEES, OFFICERS, DIRECTORS, AGENTS OR SUBCONTRACTORS; VIOLATION OF ANY FEDERAL, STATE OR MUNICIPAL LAWS, REGULATIONS AND/OR ORDINANCES; CONTRACTOR'S OR ITS SUBCONTRACTOR'S USE OF PROPERTY, EQUIPMENT, VEHICLES, OR MATERIALS; DEFECTIVE WORKMANSHIP; NEGLIGENT OR GROSSLY NEGLIGENT USE OR MISUSE OF UTILITIES; OR SUBCONTRACTORS', EMPLOYEES', AGENTS', OFFICERS', OR DIRECTORS' NEGLIGENCE OR INTENTIONAL TORTS. IT IS THE EXPRESS INTENT OF CONTRACTOR TO INDEMNIFY THE INDEMNIFIED PARTIES FROM THE CONSEQUENCES OF THEIR JOINT AND/OR CONCURRENT NEGLIGENCE AND/OR SOLE NEGLIGENCE. IN THE EVENT OF FAILURE BY THE CONTRACTOR TO FULLY PERFORM IN ACCORDANCE WITH THIS INDEMNIFICATION PARAGRAPH, EACH OF THE INDEMNIFIED PARTIES, AT ITS OPTION, AND WITHOUT RELIEVING CONTRACTOR OF ITS OBLIGATIONS HEREUNDER, MAY SO PERFORM, BUT ALL COSTS AND EXPENSES SO INCURRED BY ANY OF THE INDEMNIFIED PARTIES IN THAT EVENT SHALL BE REIMBURSED BY CONTRACTOR TO THE INDEMNIFIED PARTIES, OR ANY OF THEM, AND UNTIL REIMBURSED BY CONTRACTOR SHALL BEAR INTEREST, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENT UNDER THE LAWS OF THE STATE OF TEXAS. THIS INDEMNIFICATION SHALL NOT BE LIMITED TO DAMAGES, COMPENSATION OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKERS' COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFIT ACTS.

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IN THE EVENT THIS CONTRACT RELATES TO A PROJECT OTHER THAN A SINGLE FAMILY HOUSE, TOWNHOUSE, DUPLEX, OR LAND DEVELOPMENT DIRECTLY RELATED THERETO OR A PUBLIC WORKS PROJECT OF A MUNICIPALITY THEN THE INDEMNITY PROVISIONS INCLUDED HEREIN SHALL BE LIMITED SUCH THAT SUBCONTRACTOR SHALL NOT BE REQUIRED TO INDEMNIFY, HOLD HARMLESS OR DEFEND CONTRACTOR OR ANY THIRD PARTIES AGAINST A CLAIM CAUSED BY THE NEGLIGENCE OR FAULT, THE BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR THE BREACH OF CONTRACT OF AN INDEMNIFIED PARTY, ITS AGENT OR EMPLOYEE, OR ANY THIRD PARTY UNDER THE CONTROL OR SUPERVISION OF THE INDEMNIFIED PARTY, OTHER THAN SUBCONTRACTOR OR ITS AGENT, EMPLOYEE, OR SUBCONTRACTOR OF ANY TIER EXCEPT THAT SUBCONTRACTOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND THE INDEMNIFIED PARTY AGAINST ANY CLAIMS FOR THE BODILY INJURY OR DEATH OF AN EMPLOYEE OF SUBCONTRACTOR, ITS AGENTS, OR ITS SUBCONTRACTORS OF ANY TIER.

NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, THE INDEMNITY PROVISIONS INCLUDED HEREIN SHALL BE LIMITED SUCH THAT CONTRACTOR SHALL NOT BE REQUIRED TO INDEMNIFY, HOLD HARMLESS OR DEFEND OWNER OR ANY THIRD PARTIES AGAINST A CLAIM CAUSED BY THE NEGLIGENCE OR FAULT, THE BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR THE BREACH OF CONTRACT OF THE INDEMNIFIED PARTIES, ITS AGENT OR EMPLOYEE, OR ANY THIRD PARTY UNDER THE CONTROL OR SUPERVISION OF THE INDEMNIFIED PARTIES, OTHER THAN CONTRACTOR OR ITS AGENT, EMPLOYEE, OR SUBCONTRACTOR OF ANY TIER EXCEPT THAT CONTRACTOR SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND THE INDEMNIFIED PARTIES AGAINST ANY CLAIMS FOR THE BODILY INJURY OR DEATH OF AN EMPLOYEE OF CONTRACTOR, ITS AGENTS, OR ITS SUBCONTRACTORS OF ANY TIER.”

- I. Add the following language after Section 103.3.1.4 of the General Provisions:

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“103.3.1.5. Maintenance Bond. A good and sufficient bond in an amount not less than **100-percent** of the approximate total of the Contract, as evidenced by the proposed tabulation, or conditioned on the full and proper maintenance and repair of the Work to be done and performed for a period of one year from the date of final acceptance of the Work and the Contractor will do all necessary backfilling that may arise on account of sunken conditions in ditches, or otherwise, and do and perform the necessary Work and repair any defective condition growing out of or arising from the improper laying or construction of same, or on account of any breaking of same caused by the Contractor in construction of same, or on account of any defect arising in any of the Work laid or constructed by the Contractor or on account of improper excavation or backfilling, it being understood that the purpose of this Section is to cover all defective conditions arising by reason of defective materials, Work, or labor performed by the Contractor.”

J. Add the following language after Section 104.2.5. of the General Provisions:

“104.2.6. Change Orders. A Change Order is a written instrument and signed by the Owner, Contractor and Engineer stating their agreement upon all of the following:

- (1) the change in the Work;
- (2) the amount of the adjustment, if any, in the Contract Sum;
and
- (3) the extent of the adjustment, if any, in the Contract Time.

In the event the Contractor proposes a Change Order, the Contractor shall provide sufficient detail for such Change Order to allow analysis and review by the Engineer.

Agreement on any Change Order shall constitute final agreement on the Work which is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the Contract Sum and the Contract Time. In the event a Change Order increases the Contract Sum, the Contractor shall include the Work covered by such Change Orders in Applications for Payment as if such Work were originally part of the Contract Documents.

The Contractor, upon receipt of written notification by the Owner or the Engineer of a proposed item or change in Work, shall prepare as soon as possible a Change Order on the form provided by the Owner. If the Change Order is returned to the Contractor for additional information or if the scope of the proposed change in the Work is modified by additions, deletions or other revisions, the Contractor shall revise the Change Order accordingly and resubmit the revised Change Order to the Owner and Engineer.”

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- K. Delete the language in Section 105.2.1 of the General Provisions and replace it with the following language:

“105.2.1. WORKMANSHIP: If the OWNER notifies the CONTRACTOR in writing of defective work, the CONTRACTOR shall correct the deficiencies within five (5) calendar days of the Notice at no additional cost to the OWNER. If the defective work is not corrected within five (5) calendar days, or the CONTRACTOR is not making satisfactory progress (in the opinion of the OWNER) to correct the deficiencies, the OWNER may withhold future payments for All Work until the defective work has been corrected to the satisfaction of the OWNER.”

- L. Add the following language after Section 105.10 of the General Provisions:

“105.10.2. GUARANTEE AFTER COMPLETION: Unless otherwise specified in the technical section of these specifications, the CONTRACTOR shall, after test and acceptance, and for a period of one year from date of final written acceptance by the OWNER or within such longer or shorter period of time as may be prescribed by law or by the terms of any other applicable special warranty on designated equipment or portions of work as required by the Contract Documents, rebuild, repair, or replace any and all items which have proven defective due to unsatisfactory material and/or workmanship. Upon written notice from the OWNER, the CONTRACTOR shall immediately make any repairs that may be ordered, or such repairs will be made by the Owner at the expense of the CONTRACTOR or the CONTRACTOR’S Surety. In case of an emergency where delay would cause serious loss or damage, the Owner may undertake to have the defects repaired without previous notice. The expense of all repairs, including all emergency repairs, shall be borne by the CONTRACTOR or the CONTRACTOR’S Surety, at no cost to the Owner. This obligation shall survive termination of the Contract.

105.10.3. OFFSET PROGRESS PAYMENTS: OWNER may, at its option, offset any progress payment or final payment under the Contract Documents against any debt (including taxes) lawfully due to OWNER from Contractor, regardless of whether the amount due arises pursuant to the terms of the Contract Documents or otherwise and regardless of whether or not the debt due to OWNER has been reduced to judgment by a court.

105.10.4. FINAL ACCEPTANCE AND PAYMENT: This Project is subject to final inspection and final acceptance by the Owner. Whenever the Work provided for by the Contract shall have been completely performed on the part of the CONTRACTOR,

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including, but not limited to compliance with North Central Texas Council of Governments Standard Specifications for Public Works Construction, October 2004 Section 202.6.4.6., the CONTRACTOR shall notify the OWNER that the Work is ready for final inspection. The OWNER will then make such final inspection and if the work is satisfactory and in accordance with the specifications and contract documents, the OWNER shall issue a certificate of acceptance to the CONTRACTOR and submit a request to accept the Work performed by the CONTRACTOR and payment of a final estimate under the terms of which the OWNER will release 100% of the retainage, plus the unpaid portions of the final estimate as the OWNER deems advisable.

Whenever the improvements provided for by the Contract shall have been completely performed on the part of the Contractor, as evidenced in the certificate of acceptance, and all required submissions provided to the OWNER, a final estimate showing the value of the Work shall be prepared by the OWNER as soon as the necessary measurements and computations can be made. All prior estimates upon which payments have been made are subject to necessary corrections or revisions in the final payment. The amount of this final estimate, less any sums that have been previously paid, deducted or retained under the provisions of the contract, shall be paid the CONTRACTOR within 30 days after the final acceptance by the OWNER, provided the CONTRACTOR has furnished to the OWNER a consent of Surety and satisfactory evidence that all indebtedness connected with the Work and all sums of money due for any labor, materials, apparatus, fixtures, or machinery furnished for and used in the performance of the Work have been paid or otherwise satisfied, or that the person or persons to whom the same may respectively be due have consented to such final payment. This requirement is not intended and shall not be construed to recognize subcontractors for the purpose of privity of contract, and no third party benefit rights shall be obtained through these provisions for final payment. The acceptance by the CONTRACTOR of the final payment as aforesaid shall operate as and shall be a release to the OWNER from all claims or liabilities under the Contract, including all subcontractor claims, for anything done or furnished or relating to the Work under the Contract or for any act or neglect of said OWNER relating to or connected with the Contract.

All warranties and guarantees shall commence from the date of the certificate of acceptance. No interest shall be due the CONTRACTOR on any partial or final payment, or on the retainage.

105.10.5. RIGHT TO AUDIT CONTRACTOR'S RECORDS:
By execution of the Contract, CONTRACTOR grants the OWNER

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the right to audit, at Owner's election, all of CONTRACTOR'S records and billings relating to the performance of the Work under the Contract. CONTRACTOR agrees to retain such records for a minimum of three (3) years following completion of the Work under this Contract. OWNER agrees that it will exercise the right to audit only at reasonable hours."

- M. Add the following language after Section 107.6 of the General Provisions:

"107.6.1. COMPENSATION AND ACKNOWLEDGEMENT OF WORK: The CONTRACTOR shall receive and accept compensation, as herein provided, as full payment for furnishing all labor, tools, material, equipment and incidentals; for performing all Work contemplated and embraced under the Contract; for all loss or damage arising out of the nature of the Work, or from the action of the elements; for any unforeseen defects or obstruction which may arise or be encountered during the prosecution of the Work and before its final acceptance by the OWNER; for all risks of whatever description connected with the prosecution of the Work; for all expense incurred by or in consequence of suspension or discontinuance of such prosecution of the Work as herein specified; for any infringement of patents, trademarks or copyrights; and for completing the Work in an acceptable manner according to the Plans and Specifications."

- N. Add the following language after Section 107.12 of the General Provisions:

"107.12.1. COOPERATION OF THE CONTRACTOR: The CONTRACTOR shall give to the work the consistent attention necessary to facilitate the progress thereof, and the CONTRACTOR shall cooperate with the OWNER, and with other CONTRACTORS in every way possible.

The OWNER and the OWNER'S representatives shall at all times have free access to the Work whenever it is in preparation or progress and the contractor shall provide safe, convenient and proper facilities for such access and inspection."

- O. Delete Section 107.5 of the General Provisions and replace it with the following:

"107.5. VENUE AND CHOICE OF LAW

The Owner, the Contractor, and the Contractor's sureties agree that this Contract shall be performed in Dallas, Dallas County, Texas, and if legal action is necessary in connection therewith, exclusive venue shall lie in Dallas County, Texas. The terms and provisions of the Contract Documents shall be construed in accordance with the laws and court decisions of the State of Texas."

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- P. Delete the following language (which is the first paragraph) from Section 109.5.1. of the General Provisions:

“Between the 25th day and the last day of each month, the Owner shall make an approximate estimate of the value of the work done during the month under the specifications. Whenever the said estimate or estimates of work done since the last previous estimate exceeds \$100 in amount, a percentage of such estimate sum shall be paid the Contractor on or before the 15th day of the month next following. The monthly estimate may include acceptable nonperishable materials delivered to the work; such payment shall be allowed on the same percentage basis of the net invoice value as provided hereinafter. The percent retained by the owner shall normally be up to 10 percent at completion, unless otherwise stated. At the midpoint, or at any subsequent time, if the owner determines that the progress of the Contract is satisfactory in all respects, it may at its discretion cease to retain additional funds until the completion of the project, or until progress ceases to be satisfactory. The owner shall make the sole determination in this matter.”

- Q. Add the following language after Section 109.5.1. of the General Provisions:

“109.5.1.1. Applications for Payment. Applications for progress payment (“Application for Payment”) will be submitted no more often than monthly and shall be submitted on the dates set forth in the Agreement. Each Application for Payment shall be (1) sworn to and notarized, (2) supported by such data substantiating the Contractor’s right to payment as the Owner or Engineer may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for in the Contract Documents, and (3) submitted by the Contractor for review to the Engineer in form and substance as mandated by the Owner. The Contractor’s Application for Payment shall be segregated and detailed in a manner satisfactory to the Owner.

In each Application for Payment, the Contractor shall certify that such Application for Payment represents a just estimate of portion of the Work that is complete as of the last day covered by the Application for Payment and shall also certify by sworn affidavit as follows:

‘There are no known mechanics’ or materialmen’s liens outstanding at the date of this Application, all due and payable bills with respect to the Work have been paid to date or shall be paid from the proceeds of this Application for Payment, there is no known basis for filing of any mechanics’ or materialmen’s liens on the Work, and waivers

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from all subcontractors and materialmen have been or, at the time of payment, will be obtained in such form as to constitute an effective waiver of lien under the applicable laws of the State of Texas.’

109.5.1.2. Lien Waivers. Concurrent with each Application for Payment, the Contractor shall execute and furnish a waiver and release of its lien rights current through the effective date of such Application for Payment conditioned upon receipt of the payment that is the subject of the application. Beginning with the second Application for Payment, the Contractor shall also deliver with each such Application as a condition precedent to payment thereof, waivers of lien from each of the Subcontractors, Sub-subcontractors, and suppliers current through the effective date of the previous Application of Payment. The Contractor shall also execute and obtain any other reasonable forms as the Owner may require in order to assure an effective waiver and release of mechanics’ and materialmen’s liens in compliance with the laws of the State of Texas. The Contractor shall, if any Subcontractor, Sub-subcontractor or supplier refuses to furnish a release in full, furnish a bond satisfactory to the Owner to indemnify against any lien.”

88. CONTRACTOR REPRESENTATIONS: By entering into the Contract, the Contractor makes the following representations to the Town of Addison:

- A. Contractor has examined and carefully studied the Bidding Documents and the related data identified in the Bidding Documents.
- B. The Contractor has visited the Project site where the goods are to be installed or services will be provided and become familiar with and is satisfied as to the observable local conditions that may affect cost, progress, or the furnishing of goods and services, if required to do so by the Bidding Documents, or if, in the Contractor’s judgment, any local condition may affect cost, progress, or the furnishing of goods and services.
- C. The Contractor is familiar with and is satisfied as to all Laws and Regulations in effect as of the date of the bid that may affect cost, progress, and the furnishing of goods and services.
- D. The Contractor has carefully studied, considered, and correlated the information known to the Contractor; information commonly known to sellers of similar goods doing business in the locality of the Project site where the goods will be installed or where services will be provided; information and observations obtained from the

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Contractor's visits, if any, to the Project site where the goods will be installed or services will be provided; and any reports and drawings identified in the Bidding Documents regarding the Project site where the goods will be installed or where services will be provided, with respect to the effect of such information, observations, and documents on the cost, progress, and performance of the Contractor's obligations under the Bidding Documents.

- E. The Contractor has given the Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that the Contractor has discovered in the Bidding Documents, and the written resolution (if any) thereof by the Engineer is acceptable to the Contractor.
 - F. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for furnishing the goods and services for which the bid is submitted
 - G. The Contractor acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of bids, and final payment for all unit price bid items will be based on actual quantities, determined as provided in the Contract Documents. The Contractor also acknowledges that each unit price includes an amount considered by the Contractor to be adequate to cover the Contractor's overhead and profit for each separately identified item.
- 89. PREVAILING WAGE RATES:** Wage rates paid on this Project shall not be less than specified in the schedule of general prevailing rates of per diem wages as set forth below in the Davis Bacon Act General Decision No. TX130035:

General Decision Number: TX20210025 01/01/2021

Superseded General Decision Number: TX20200025

State: Texas

Construction Type: Highway

Counties: Archer, Callahan, Clay, Collin, Dallas, Delta,
Denton, Ellis, Grayson, Hunt, Johnson, Jones, Kaufman, Parker,

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Rockwall, Tarrant and Wise Counties in Texas.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least

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the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/01/2021

* SUTX2011-007 08/03/2011

Rates Fringes

CONCRETE FINISHER (Paving and

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Structures).....\$ 14.12

ELECTRICIAN.....\$ 19.80

FORM BUILDER/FORM SETTER

Paving & Curb.....\$ 13.16

Structures.....\$ 13.84

LABORER

Asphalt Raker.....\$ 12.69

Flagger.....\$ 10.06

Laborer, Common.....\$ 10.72

Laborer, Utility.....\$ 12.32

Pipelaye.....\$ 13.24

Work Zone Barricade

Servicer.....\$ 11.68

POWER EQUIPMENT OPERATOR:

Asphalt Distributor.....\$ 15.32

Asphalt Paving Machine.....\$ 13.99

Broom or Sweeper.....\$ 11.74

Concrete Pavement

Finishing Machine.....\$ 16.05

Concrete Saw.....\$ 14.48

Crane Operator, Lattice

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Boom 80 Tons or Less.....	\$ 17.27
Crane Operator, Lattice	
Boom over 80 Tons.....	\$ 20.52
Crane, Hydraulic 80 Tons	
or Less.....	\$ 18.12
Crawler Tractor.....	\$ 14.07
Excavator, 50,000 pounds	
or less.....	\$ 17.19
Excavator, over 50,000	
pounds.....	\$ 16.99
Foundation Drill , Truck	
Mounted.....	\$ 21.07
Foundation Drill, Crawler	
Mounted.....	\$ 17.99
Front End Loader 3 CY or	
Less.....	\$ 13.69
Front End Loader, over 3 CY.	\$ 14.72
Loader/Backhoe.....	\$ 15.18
Mechanic.....	\$ 17.68
Milling Machine.....	\$ 14.32
Motor Grader, Fine Grade....	\$ 17.19
Motor Grader, Rough.....	\$ 16.02
Pavement Marking Machine....	\$ 13.63
Reclaimer/Pulverizer.....	\$ 11.01
Roller, Asphalt.....	\$ 13.08

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Roller, Other.....\$ 11.51
Scraper.....\$ 12.96
Small Slipform Machine.....\$ 15.96
Spreader Box.....\$ 14.73

Servicer.....\$ 14.58

Steel Worker (Reinforcing).....\$ 16.18

TRUCK DRIVER

Lowboy-Float.....\$ 16.24
Off Road Hauler.....\$ 12.25
Single Axle.....\$ 12.31
Single or Tandem Axle Dump
Truck.....\$ 12.62
Tandem Axle Tractor with
Semi Trailer.....\$ 12.86
Transit-Mix.....\$ 14.14

WELDER.....\$ 14.84

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

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example:
PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing

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the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

TRAFFIC SIGNAL & ADA IMPROVEMENTS

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor

200 Constitution Avenue, N.W.

TRAFFIC SIGNAL & ADA IMPROVEMENTS

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

90. NO BOYCOTT ISRAEL: Pursuant to Texas Government Code Chapter 2270, Contractor's execution of this Agreement shall serve as verification that the Contractor does not presently boycott Israel and will not boycott Israel during the term of this Agreement.

END OF GENERAL DECISION

SECTION PS

PROJECT SIGN

PROJECT SIGN

1. Quantity

Two (2) Project Designation signs will be constructed and installed on the project site as directed by the Owner. It will be the responsibility of the Contractor to maintain the sign in a presentable condition at all times during construction. Maintenance will include painting and repairs as directed by the City Engineer or his appointee. The locations of the signs will be given to the Contractor by the Town of Addison at the Pre-Construction Conference.

2. Material

Sign shall be constructed of 3/4-inch thick smooth finish fir plywood (Grade A-C, exterior or better).

Sign will be securely mounted to 6" x 6" square posts. Nuts and bolts will not protrude from face of sign. Posts will be mounted to a support system that will provide adequate stabilization to ensure the sign will not fall over in heavy winds. Sand bags or other techniques may be necessary to protect sign.

3. Dimensions

Size of sign will be four feet tall and six feet wide. The height and arrangement of the lettering shall be in accordance with the attached detail.

4. Paint

Sign will be one-sided and will have a white background. Text will be black, except for the word "Addison!" which will be a blue color approved by the City Engineer. The paint will be an outdoor paint and will be maintained throughout the project in proper order. The quality of the paint, painting, and lettering on the signs shall be approved by the City Engineer or his appointee.

5. Payment

Project Signs will be a separate pay item. This will include all labor, equipment, tools, and incidentals necessary to complete and install the work.

The Town of



**PLEASE PARDON THE TEMPORARY
INCONVENIENCE DURING THIS PROJECT**

“PROJECT NAME”

CONTRACTOR: _____

ESTIMATED COMPLETION DATE: XXX

AN ADDISON PROJECT

FOR MORE INFORMATION, PLEASE CALL (972) 450-2871

SECTION TS

TECHNICAL SPECIFICATIONS

STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (North Central Texas) - Fifth Edition 2017

For this project, the Standard Specifications for Public Works Construction, North Central Texas, as prepared by the North Central Texas Council of Governments, and Town of Addison Standard Construction Details, shall govern all work to be done, together with any additional Technical Specifications included herein.

The following is a listing of technical specification sections that are anticipated for use on this project.

Site Protection & Preparation	Division 200
Roadway Construction	Division 300
Roadway Maintenance & Rehabilitation	Division 400
Underground Construction	Division 500
Conduit & Appurtenance Rehabilitation Structures	Division 600
Misc. Construction & Materials	Division 700
	Division 800

TXDOT STANDARD SPECIFICATION

The Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges Adopted by the Texas Department of Transportation November 1, 2014 are included in the contract by reference and are available as a separate document from TxDOT at the following link: <https://www.txdot.gov/business/resources/txdot-specifications.html>)

The following is a listing of technical specifications that are anticipated for use on this project.

Item 160	Topsoil
Item 162	Sodding for Erosion Control
Item 416	Drilled Shaft Foundations
Item 432	Riprap
Item 479	Adjusting Manholes and Inlets
Item 500	Mobilization
Item 502	Barricades, Signs, and Traffic Handling
Item 529	Concrete Curb, Gutter, and Combined Curb and Gutter
Item 531	Sidewalks
Item 618	Conduit
Item 620	Electrical Conductors
Item 624	Ground Boxes
Item 628	Electrical Services
Item 666	Retroreflectorized Pavement Markings

Item 668	Prefabricated Pavement Markings
Item 677	Eliminating Existing Pavement Markings and Markers
Item 678	Pavement Surface Preparation for Markings
Item 680	Highway Traffic Signals
Item 682	Vehicle and Pedestrian Signal Heads
Item 684	Traffic Signal Cables
Item 686	Traffic Signal Pole Assemblies (Steel)
Item 687	Pedestal Pole Assemblies
Item 688	Pedestrian Detectors and Vehicle Loop Detectors

The following is a listing of special specifications that are anticipated for use on this project.

SS6002	Video Imaging Vehicle Detection System
SS6010	Closed Circuit Television (CCTV) Field Equipment
SS6089	Ethernet Cable and Connectors

Special Specification 6002

Video Imaging Vehicle Detection System



1. DESCRIPTION

Install a Video Imaging Vehicle Detection System (VIVDS) that monitors vehicles on a roadway via processing of video images and provides detector outputs to a traffic controller or similar device.

A VIVDS configuration for a single intersection will consist of variable focal length cameras, VIVDS card rack processor system, and all associated equipment required to setup and operate in a field environment, including a video monitor and laptop (if required), connectors, and camera mounting hardware.

The system is composed of these principal items: the cameras, the field communications link between the camera and the VIVDS processor unit, and the VIVDS processor unit along with a PC, video monitor, or associated equipment required to setup the VIVDS and central control software to communicate to the VIVDS processor.

The VIVDS Card Rack Processor must be either NEMA TS 2 TYPE 1 or TYPE 2. TYPE 2 must have RS 485 SDLC.

2. DEFINITIONS

- 2.1. **VIVDS Processor Unit.** The electronic unit that converts the video image provided by the cameras, generates vehicle detections for defined zones, and collects vehicular data as specified.
- 2.2. **VIVDS Processor System.** One or more VIVDS processor modular units required to handle the number of camera inputs.
- 2.3. **Central Control.** A remotely located control center, which communicates with the VIVDS. The VIVDS operator at the central control has the ability to monitor the operation and modify detector placement and configuration parameters. The equipment that constitutes central control is comprised of a workstation microcomputer along with the associated peripherals as described in this Special Specification.
- 2.4. **Field Setup Computer.** A portable microcomputer used to set up and monitor the operation of the VIVDS processor unit. If required to interface with the VIVDS processor unit, the field setup computer with the associated peripherals described in this Special Specification and a video monitor, also described in this Special Specification, must be supplied as part of the VIVDS.
- 2.5. **Field Communications Link.** The communications connection between the camera and the VIVDS processor unit. The primary communications link media may be coaxial cable or fiber optic cable.
- 2.6. **Remote Communications Link.** The communications connection between the VIVDS processor unit and the central control.
- 2.7. **Camera Assembly.** The complete camera or optical device assembly used to collect the visual image. The camera assembly consists of a charged coupled device (CCD) camera, environmental enclosure, sun shield, temperature control mechanism, and all necessary mounting hardware.
- 2.8. **Occlusion.** The phenomenon when a vehicle passes through the detection zone but the view from the sensor is obstructed by another vehicle. This type of occlusion results in the vehicle not being detected by the sensor or when a vehicle in one lane passes through the detection zone of an adjacent lane. This type of occlusion can result in the same vehicle being counted in more than one lane.

- 2.9. **Detection Zone.** The detection zone is a line or area selected through the VIVDS processor unit that when occupied by a vehicle, sends a vehicle detection to the traffic controller or freeway management system.
- 2.10. **Detection Accuracy.** The measure of the basic operation of a detection system (shows detection when a vehicle is in the detection zone and shows no detection when there is not a vehicle in the detection zone).
- 2.11. **Live Video.** Video being viewed or processed at 30 frames per second.
- 2.12. **Lux.** The measure of light intensity at which a camera may operate. A unit of illumination equal to one lumen per square meter or to the illumination of a surface uniformly one meter distant from a point source of one candle.
- 2.13. **Video Monitor.** As a minimum must be a 9-in. black and white monitor with BNC connectors for video in and out.

3. FUNCTIONAL CAPABILITIES

The system software must be able to detect either approaching or departing vehicles in multiple traffic lanes. A minimum of 4 detector outputs per video processor module card and each card must have a minimum of 24 detection zones. Each zone and output must be user definable through interactive graphics by placing lines or boxes in an image on a video or VGA monitor. The user must be able to redefine previously defined detection zones.

The VIVDS must provide real time vehicle detection (within 112 milliseconds (ms) of vehicle arrival).

The VIVDS processor unit must be capable of simultaneously processing information from various video sources, including CCTV video image sensors and video tape players. The video sources may be, but are not required to be, synchronized or line-locked. The video must be processed at a rate of 30 times per second by the VIVDS processor unit.

The system must be able to detect the presence of vehicles in a minimum of 12 detection zones within the combined field of view of all cameras (a minimum of 12 detection zones per camera input to the VIVDS processor unit).

Provide detection zones that are sensitive to the direction of vehicle travel. The direction to be detected by each detection zone must be user programmable.

The VIVDS processor unit must compensate for minor camera movement (up to 2% of the field of view at 400 ft.) without falsely detecting vehicles. The camera movement must be measured on the unprocessed video input to the VIVDS processor unit.

The camera must operate while directly connected to VIVDS Processor Unit.

Once the detector configuration has been downloaded or saved into the VIVDS processor unit, the video detection system must operate with the monitoring equipment (monitor or laptop) disconnected or online.

When the monitoring equipment is directly connected to the VIVDS processor unit, it must be possible to view vehicle detections in real time as they occur on the field setup computer's color VGA display or the video monitor.

4. VEHICLE DETECTION

- 4.1. **Detection Zone Placement.** The video detection system must provide flexible detection zone placement anywhere within the combined field of view of the image sensors. Preferred presence detector configurations must be lines or boxes placed across lanes of traffic or lines placed in line with lanes of traffic. A single detector must be able to replace one or more conventional detector loops. Detection zones must be able to

be fully overlapped. In addition, detection zones must have the capability of implementing “AND” and “OR” logical functions including presence, extension and delay timing. These logical functions may be excluded if provisions are made to bring each detector separately into the controller and the controller can provide these functions.

- 4.2. **Detection Zone Programming.** Placement of detection zones must be by means of a graphical interface using the video image of the roadway. The monitor must show images of the detection zones superimposed on the video image of traffic while the VIVDS processor is running.

The detection zones must be created by using the mouse or keypad to draw detection zones on the monitor. The detection zones must be capable of being sized, shaped and overlapped to provide optimal road coverage and detection. It must be possible to upload detector configurations to the VIVDS processor unit and to retrieve the detector configuration that is currently running in the VIVDS processor unit.

The mouse or keypad must be used to edit previously defined detector configurations so as to fine tune the detection zone placement size and shape. Once a detection configuration has been created, the system must provide a graphic display of the new configuration on its monitor. While this fine-tuning is being done, the detection must continue to operate from the detector configuration that is currently called.

When a vehicle occupies a detection zone, the detection zone on the live video must indicate the presence of a vehicle, thereby verifying proper operation of the detection system. With the absence of video, the card must have an LED that will indicate proper operation of the detection zones.

Provide detection zones that are sensitive to the direction of vehicle travel. The direction to be detected by each detection zone must be user programmable. The vehicle detection zone should not activate if a vehicle traveling any direction other than the one specified for detection occupies the detection zone. Cross-street and wrong way traffic should not cause a detection.

- 4.3. **Design Field of View.** The video detection system must reliably detect vehicle presence in the design field of view. The design field of view must be defined as the sensor view when the image sensor is mounted 24 ft. or higher above the roadway, when the camera is adjacent (within 15 ft.) to the edge of the nearest vehicle travel lane, and when the length of the detection area is not greater than 10 times the mounting height of the image sensor. Within this design field of view, the VIVDS processor unit must be capable of setting up a single detection zone for point detection (equivalent to the operation of a 6 ft. x 6 ft. inductive loop). A single camera, placed at the proper mounting height with the proper lens, must be able to monitor up to and including 5 traffic lanes simultaneously.

- 4.4. **Detection Performance.** Detection accuracy of the video detection system must be comparable to properly operating inductive loops. Detection accuracy must include the presence of any vehicle in the defined detection zone regardless of the lane, which the vehicle is occupying. Occlusion produced by vehicles in the same or adjacent lanes must not be considered a failure of the VIVDS processor unit, but a limitation of the camera placement. Detection accuracy (a minimum of 95%) must be enforced for the entire design field of view on a lane by lane and on a time period basis. When specified on the plans, furnish up to 24 continuous hours of recorded video of all installed intersection cameras within the 30 day test period for verification of proper camera placement, field of view, focus, detection zone placement, processor setup and operation. The video from each camera must show vehicle detections for all zones.

- 4.5. **Equipment Failure.** Either camera or VIVDS processor unit must result in constant vehicle detection on affected detection zones.

5. VIVDS PROCESSOR UNIT

- 5.1. **Cabinet Mounting.** The VIVDS processor unit must be rack mountable.
- 5.2. **Environmental Requirements.** The VIVDS processor unit must be designed to operate reliably in the adverse environment found in the typical roadside traffic cabinet. It must meet the environmental

requirements set forth by the latest NEMA (National Electrical Manufacturers Association) TS1 and TS2 standards as well as the environmental requirements for Type 170, Type 179 and 2070 controllers. Operating temperature must be from -30°F to +165°F at 0% to 95% relative humidity, non-condensing.

5.3. **Electrical.** The VIVDS must have a modular electrical design.

The VIVDS must operate within a range of 89 to 135 VAC, 60 Hz single phase. Power to the VIVDS must be from the transient protected side of the AC power distribution system in the traffic control cabinet in which the VIVDS is installed.

Serial communications to the field setup computer must be through an RS 232, USB or Ethernet port. This port must be able to download the real time detection information needed to show detector actuations. A connector on the front of the VIVDS processor unit must be used for serial communications.

The unit must be equipped with RS 170 (monochrome) or RS170A (color) composite video inputs video inputs, so that signals from image sensors or other synchronous or asynchronous video sources can be processed in real time. BNC connectors on the front of the VIVDS processor unit or video patch panel must be used for all video inputs.

The unit must be equipped with a single RS 170 composite video output. This output must be capable of corresponding to any one of the video inputs, as selected remotely via the field setup computer or front panel switch. Multiple video outputs requiring external cable connections to create a combined single video output must not be acceptable. A BNC or RCA connector must be used for video output on the front of the processor unit. Any other video formats must be approved by a Department TRF Signal Operation Engineer before use.

Software upgrades or changes must be presented to and approved by the Department's TRF-TM Division before use. Failure to do so will be grounds for termination of contract and probation for responsible parties.

The unit software and the supervisor software must include diagnostic software to allow testing the VIVDS functions. This must include the capability to set and clear individual detector outputs and display the status of inputs to enable setup and troubleshooting in the field.

6. CAMERA ASSEMBLY

6.1. **Camera.** The video detection system must use medium resolution, monochrome image sensors as the video source for real time vehicle detection. The cameras must be approved for use with the VIVDS processor unit by the supplier of the VIVDS. As a minimum, each camera must provide the following capabilities:

- Images must be produced with a Charge Coupled Device (CCD) sensing element with horizontal resolution of at least 480 lines for black and white or 470 lines for color and vertical resolution of at least 350 lines for black and white or color. Images must be output as a video signal conforming to RS170.
- Useable video and resolvable features in the video image must be produced when those features have luminance levels as low as 0.1 lux for black and white, and as low as 1.0 lux for color, for night use.
- Useable video and resolvable features in the video image must be produced when those features have luminance levels as high as 10,000 lux during the day.
- The camera must include an electronic shutter or auto-iris control based upon average scene luminance and must be equipped with an electronic shutter or auto-iris lens with variable focal length and variable focus that can be adjusted without opening up the camera housing to suit the site geometry. The variable focal length must be adjustable from 6 mm to 34 mm.

6.2. **Camera and Lens Assembly.** The camera and lens assembly must be housed in an environmental enclosure that provides the following capabilities:

- The enclosure must be waterproof and dust tight to the latest NEMA 4 specifications.

- The enclosure must allow the camera to operate satisfactorily over an ambient temperature range from -30°F to +140°F while exposed to precipitation as well as direct sunlight.
- The enclosure must allow the camera horizon to be rotated in the field during installation.
- The enclosure must include a provision at the rear of the enclosure for connection of power and video signal cables fabricated at the factory. Input power to the environmental enclosure must be nominally 115 VAC 60 Hz.
- A thermostatically controlled heater must be at the front of the enclosure to prevent the formation of ice and condensation, as well as to assure proper operation of the lens's iris mechanism. The heater must not interfere with the operation of the camera electronics, and it must not cause interference with the video signal.
- The enclosure must be light colored or unfinished and must include a sun shield to minimize solar heating. The front edge of the sunshield must protrude beyond the front edge of the environmental enclosure and must include provision to divert water flow to the sides of the sunshield. The amount of overhang of the sun shield must be adjustable to block the view of the horizon to prevent direct sunlight from entering the lens. Any plastics used in the enclosure must include ultra violet inhibitors.
- The total weight of the image sensor in the environmental enclosure with sunshield must be less than 10 lb.
- When operating in the environmental enclosure with power and video signal cables connected, the image sensor must meet FCC class B requirements for electromagnetic interference emissions.

The video output of the cameras must be isolated from earth ground. All video connections for the cameras to the video interface panel must also be isolated from earth ground.

Use waterproof, quick disconnect connectors to the image sensor for both video and power.

Provide a camera interface panel capable of being mounted to sidewalls of a controller cabinet for protection of the VIVDS processor unit, camera video and power inputs/outputs. The panel must consist of, as a minimum, 4 Edco CX06 coax protectors, an Edco ACP-340 for the cameras and VIVDS processor unit power, a 10 amp breaker, a convenience outlet protected the ACP-340 and a terminal strip with a minimum of sixteen 8-32 binder head screws. The terminal strip must be protected by a piece of 1/8 in. Plexiglas.

When the connection between the image sensor and the VIVDS processor unit is coaxial cable, the coaxial cable used must be a low loss, 75 ohm, precision video cable suited for outdoor installation, such as Belden 8281 or a Department-approved equal.

Camera mounting hardware must allow for vertical or horizontal mounting to the camera enclosure. Pelco AS-0166-4-62 or equivalent is acceptable.

7. FIELD COMMUNICATION LINK

The field communications link must be a one way communications connection from the camera to the equipment cabinet. The primary communications link media may be coaxial cable or fiber optic cable accompanied by a 3 conductor minimum 18 AWG, 24 VDC or 115 VAC camera power cable, or appropriate cable as approved.

The following requirements must govern for the various types of field communications link media described on the plans:

- 7.1. **Coaxial Cable.** In locations where the plans indicate coaxial cable is required as the primary communications link, this cable must be of the RG 59 type with a nominal impedance of 75 ohms. All cable must have a polyethylene dielectric with copper braid shield having a minimum of 98% shield coverage and not greater than 0.78 dB attenuation per 100 feet at 10 MHz with a minimum 18 AWG external 3 conductor power cable or approved equivalent as directed.

- 7.2. **Fiber Optic Cable.** If shown on the plans, furnish fiber optic cable in accordance with the Special Specification for fiber optic cable.
- 7.3. **Twisted Wire Pairs.** Must be Belden 9556 or equivalent 18 AWG TWP control cable.

All connection cables must be continuous from the equipment cabinet to the camera. No splices of any type will be permitted.

Install lightning and transient surge suppression devices on the processor side of the field communications link to protect the peripheral devices. The suppression devices must be all solid state. Lightning protection is not required for fiber optic communication lines. The devices must present high impedance to, and must not interfere with, the communications lines during normal operation. The suppression devices must not allow the peak voltage on any line to exceed 300% of the normal operating peak voltage at any time. The response time of the devices must not exceed 5 nanoseconds.

8. VIVDS SET-UP SYSTEM

The minimum VIVDS set-up system, as needed for detector setup and viewing of vehicle detections, must consist of a field setup computer and Windows based interface software (if required) or a video monitor with interface software built-in to the VIVDS processor unit. Live video (30 frames per second) must be available on the field setup computer to determine proper operation of detectors. The field set-up computer as a minimum, must have an NTSC video input port or equivalent.

If a field setup computer is required for system set-up, it must be supplied by the supplier of the VIVDS.

The field setup computer must include all necessary cabling and a Windows based program to interface with the VIVDS processor unit. This software must provide an easy to use graphical user interface and support all models/versions of the supplied VIVDS.

Live video with the detection overlaid is required for field verification of the system.

9. TEMPORARY USE AND RETESTING

- 9.1. **Temporary Use.** When shown on the plans, the VIVDS equipment must be used to provide vehicle detection on a temporary basis. When the permanent vehicle detection system and related equipment are installed and made operational, the VIVDS equipment must be carefully removed and delivered to the location shown on the plans.
- 9.2. **State Retesting and Acceptance.** Before acceptance, all VIVDS equipment may be retested by the Department, even if the system was operating properly before removal. Repair or replace any equipment damaged during removal or transport and any equipment that does not meet the various test requirements.

10. OPERATION FROM CENTRAL CONTROL

The central control must transmit and receive all information needed for detector setup, monitor the vehicle detection, view the vehicle traffic flow at a rate of 2 frames per second or greater for telephone, or 5 frames per second or greater for ISDN lines (as specified by the plans), and interrogate all required stored data. The remote communications link between the VIVDS processor unit and central control may be dial-up (telephone or ISDN lines) or dedicated twisted wire pair communications cable which may be accompanied with coaxial cable or fiber-optic cable, as shown on the plans. Communications with the central control must not interfere with the on-street detection of the VIVDS processor. Quality of the video at 2 frames per second rate must be such that the view with the traffic flow is clear and in focus.

11. INSTALLATION AND TRAINING

The supplier of the video detection system must supervise the installation and testing of the video and computer equipment. A factory certified representative from the supplier must be on site during installation.

If the field setup computer is furnished by the Department, such installation and testing must be done at the time that training is conducted.

Provide up to 2 days of training to personnel of the Department in the operation, setup and maintenance of the video detection system. Provide instruction and materials for a maximum of 20 persons and conduct at a location selected by the Department. The Department will be responsible for any travel and room and board expenses for its own personnel.

Instruction personnel are required to be certified by the equipment manufacturer. The User's Guide is not an adequate substitute for practical, classroom training and formal certification by an approved agency.

Formal levels of factory authorized training are required for installers, contractors, and system operators. All training must be certified by the manufacturer.

12. WARRANTY, MAINTENANCE, AND SUPPORT

The video detection system must be warranted to be free of defects in material and workmanship for a period of 5 yr. from date of shipment from the supplier's facility. During the warranty period, the supplier must repair with new or refurbished materials, or replace at no charge, any product containing a warranty defect provided the product is returned FOB to the supplier's factory or authorized repair site. Return product repair or replaced under warranty by the supplier with transportation prepaid. This warranty does not apply to products damaged by accident, improperly operated, abused, serviced by unauthorized personnel or unauthorized modification.

During the warranty period, technical support must be available from the supplier via telephone within 4 hr. of the time a call is made by a user, and this support must be available from factory certified personnel or factory certified installers.

Ongoing software support by the supplier must include updates of the VIVDS processor unit and supervisor software (if a field setup computer is required for set up). Provide these updates free of charge during the warranty period. The update of the VIVDS software to be NTCIP compliant must be included.

The supplier must maintain a program for technical support and software updates following expiration of the warranty period. Make this program available to the Department in the form of a separate agreement for continuing support.

The supplier must maintain an ongoing program of technical support for the wireless camera system. This technical support must be available via telephone or personnel sent to the installation site.

The supplier must maintain an adequate inventory of parts to support maintenance and repair of the camera system.

13. MEASUREMENT

The VIVDS will be measured as each major system component furnished, installed, made fully operational, and tested in accordance with this Special Specification or as directed.

The VIVDS communication cable will be measured by the foot of the appropriate media type furnished, installed, made fully operational, and tested in accordance with this Specification, other referenced Special Specifications or as directed.

When the VIVDS is used on a temporary basis, the VIVDS will be measured as each system furnished, installed, made fully operational, including reconfiguration and removal if required by the plans, and tested in accordance with this Special Specification or as directed.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

When recorded video is required by the plans it will be paid for by each camera recorded.

14. PAYMENT

The work performed, materials, and all accompanying software furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "VIVDS Processor System," "VIVDS Camera Assembly," "VIVDS Central Control," "VIVDS Set-up System," "VIVDS Temporary," "VIVDS Communication Cable (Coaxial)," "VIVDS Communication Cable (Fiber Optic)," and "VIVDS Video Recording." These prices are full compensation for furnishing, placing, and testing all materials and equipment, and for all tools, labor, equipment, hardware, operational software packages, supplies, support, personnel training, shop drawings, documentation, and incidentals. A 3-conductor power cable must be included with the communication cable.

These prices also include any and all interfaces required for the field and remote communications links along with any associated peripheral equipment, including cables; all associated mounting hardware and associated field equipment; required for a complete and fully functional visual image vehicle detection system component.

Special Specification 6010

Closed Circuit Television (CCTV) Field Equipment



1. DESCRIPTION

Furnish, install, relocate, or remove closed circuit television (CCTV) field equipment at locations shown on the plans, or as directed.

2. MATERIALS

2.1. **General Requirements.** Fabricate, provide, assemble, and install materials that are new, corrosion resistant and in strict accordance with the details shown on the plans and in the specifications.

Provide CCTV field equipment that is compatible with software currently in operation in order to interface with the existing equipment and software located in the Department's Traffic Management Control (TMC) Centers across the state.

CCTV field equipment to include the following:

- color video camera units,
- camera lenses, filters, control circuits and accessories,
- camera housing,
- medium duty pan and tilt units with click and drag position control,
- camera control receivers,
- local field control unit (if required for operation),
- video and camera control and power cable connectors and assemblies,
- video, data, and power surge suppression, and
- built-in ID generator.

2.2. **Functional Requirements for Analog CCTV.** Provide color video cameras that are solid state design and that meet the following functional requirements:

2.2.1. **General.**

2.2.1.1. **Digital Signal Processing (DSP):**

- digital zoom with manual override functionality,
- auto and manual iris control,
- auto and manual exposure control with built in frame buffer,
- auto and manual focus control, and
- built-in ID generator, with white letters on black outline minimum or approved equivalent.

2.2.1.2. **Image Pickup Device.** Single chip interline transfer solid state color matrix charge-coupled device (CCD) or complementary metal-oxide semiconductor (CMOS) sensor. Provide a sensor having a minimum of 752 (H) X 480 (V) effective pixels.

2.2.1.3. **Resolution.** Greater than 350 lines vertical and greater than 460 lines horizontal, interlaced 2:1, measured per EIA-170A Standard. No discernible interlace jitter or line pairing on the viewing monitor. System limiting resolution that conforms to FCC regulations for broadcast signals.

2.2.1.4. **Frame Rate.** Adjustable frame rate frequency up to 30 frames per second.

- 2.2.1.5. **Encoded NTSC Video Signal Format.** Conformance to the National Television Standards Committee (NTSC) specification and produce NTSC compatible video in accordance with EIA-170A Standard, governed by the Electronic Components Association (ECA), for video output 1 V p-p composite also known as 140 IRE units per Institute of Radio Engineers (IRE). Provide up to 16 dB automatic gain control (AGC).
- 2.2.1.6. **Output Impedance.** 75 ohms \pm 5%.
- 2.2.1.7. **Aspect Ratio.** Width to height aspect ratio of 4:3.
- 2.2.1.8. **Image Quality.** Ability to produce clear, free from distortion, usable video images of the areas, vehicles, objects, and other subjects visible from a roadside CCTV site. Ensure that video produced by the camera is true, accurate, distortion free, and free from transfer smear, oversaturation, and any other image defect that negatively impacts image quality under all lighting and weather conditions in both color and monochromatic modes.
- 2.2.1.9. **Over Exposure Protection.** Minimize glare and incur no permanent damage to the camera when pointed directly at strong light sources, including the sun, for brief periods of time.
- 2.2.1.10. **Geometric Distortion.** Zero.
- 2.2.1.11. **Signal to Noise Ratio (AGC Off).** 50 dB Minimum (weighted at 4.5 MHz).
- 2.2.1.12. **Electronic Shutter Speed.** Automatic shutter that is user selectable down to at least 1/10,000 sec.
- 2.2.1.13. **Electronic Image Stabilization.** User selectable on or off electronic image stabilization at 5 Hz and 10 Hz minimum.
- 2.2.1.14. **Day (Color) and Night (Mono).** Auto and manual switchover and iris control with user selectable modes for auto and manual control capabilities.
- 2.2.1.15. **Auto White Balance.** Color quality that is maintained by a continuous through the lens automatic white balance for color temperatures from 2850 K to greater than 5100 K with less than 10 IRE units unbalance.
- 2.2.1.16. **Inverted Operation.** Automatic or manual activation image inversion or "flip" operation when rotating through 0° or 180° vertical tilt positions.
- 2.2.1.17. **Mean Time Before Failure.** A minimum of 43,800 hr. or 5 yr. without mechanical malfunction or failure. Act of God failures are exempt.
- 2.2.2. **Lens.** Provide an integral lens assembly for each camera with the following features:
- an f/1.6 or better glass multi-coated zoom lens with variable focal lengths with a minimum 30X zoom range,
 - 10X auto and manual digital zoom minimum, and
 - automatic and manual focus and iris control.
- Provide lenses with capabilities for remote control of the zoom, focus, and iris operations. Mechanical or electrical means provided to protect the motors from overrunning in extreme positions. Lens and controller system capable of both auto iris and remote manual iris operation. Capabilities of lens for auto and manual zoom and focus control. Motorized iris as opposed to auto iris type, for system control capability.
- 2.2.3. **Network Interface Requirements.** Provide equipment that is compatible with the Department's Lonestar™ software and can be integrated into the Department's TMC CCTV control sub-systems through NTCIP 1205 Version 1.08 or latest Department approved version, Open Network Video Interface Forum (ONVIF), or approved equal. Support Cohu, Pelco D, Pelco P protocols, or approved equal for control.

Provide equipment that is compatible with other devices using Telecommunications Industry Association/Electronic Industries Alliance (TIA/EIA)-232 or EIA-422/485 at a rate of 9600 bps.

Provide camera equipment that supports local and remote configuration and management. Configuration and management functions must include access to all user-programmed features, including but not limited to, network configuration, video settings, device monitoring, control setting, and security functions. Configuration and management is achieved through serial login, telnet login, web-based interface, or manufacturer software. Provide manufacturer software with camera for local configuration, system maintenance and management control.

- 2.3. **Functional Requirements for Digital CCTV.** Provide color video cameras that produce digital video in standard definition or high definition that meet the following functional requirements:
- 2.3.1. **General.**
- 2.3.1.1. **Digital Signal Processing (DSP):**
- digital zoom,
 - auto and manual iris control,
 - auto and manual exposure control with built in frame buffer,
 - auto and manual focus control, and
 - built-in ID generator, with white letters on black outline minimum or approved equivalent.
- 2.3.1.2. **Image Pickup Device.** 1.2 megapixel (1,200,000 pixels), or better, progressive scan digital CCD or CMOS sensor.
- 2.3.1.3. **Resolution.** Support the following resolutions:
- 720p (1280 x 720 pixel array),
 - D1 (720 x 480 pixel array),
 - CIF (352 x 240 pixel array), and
 - VGA (640 x 480 pixel array) at a minimum dependent on video stream configuration.
- 2.3.1.4. **Frame Rate.** Allow user selectable frame rates at 30, 15, 7, 4, 2, and 1 frames per second.
- 2.3.1.5. **Data Rate.** Scalable from 64 kbps to 8 Mbps
- 2.3.1.6. **Video Stream Format.** Allow simultaneous encoding and transmission, of a minimum, two configurable digital video streams in conformance with the Moving Picture Experts Group's MPEG-4 part 10 (H.264) and Motion JPEG (MJPEG) video compression technology in accordance with the ISO and IEC requirements detailed in the ISO/IEC 14496-10 standard or most current version. Support configuration of the following at a minimum:
- H.264,
 - MJPEG,
 - H.264 + H.264, and
 - H.264 + MJPEG.
- 2.3.1.7. **Video Stream.** Support both uni-cast (one-to-one) and multi-cast (one-to-many).
- 2.3.1.8. **Aspect Ratio.** Support width to height aspect ratio of 4:3 or 16:9 dependent on TMC monitor video format functionality.
- 2.3.1.9. **Image Quality.** Ensure that video produced by the camera is true, accurate, distortion free, and free from transfer smear, oversaturation, and any other image defect that negatively impacts image quality under all lighting and weather conditions in both color and monochromatic modes.

- 2.3.1.10. **Wide Dynamic Range (WDR).** Operation with manual override option.
- 2.3.1.11. **Over Exposure Protection.** Minimize glare and incur no permanent damage to the camera when pointed directly at strong light sources, including the sun, for brief periods of time.
- 2.3.1.12. **Geometric Distortion.** Zero.
- 2.3.1.13. **Signal to Noise Ratio (AGC Off).** 50 dB minimum (weighted at 4.5 MHz).
- 2.3.1.14. **Electronic Shutter Speed.** Automatic shutter that is user selectable down to at least 1/10,000 sec.
- 2.3.1.15. **Electronic Image Stabilization.** User selectable on or off electronic image stabilization at 5 Hz and 10 Hz minimum.
- 2.3.1.16. **Day (Color) and Night (Mono).** Auto and manual switchover and iris control with user selectable modes for auto and manual control capabilities.
- 2.3.1.17. **Auto White Balance.** Color quality that is maintained by a continuous through the lens automatic white balance for color temperatures from 2850 K to greater than 5100 K with less than 10 IRE units unbalance.
- 2.3.1.18. **Inverted Operation.** Automatic image inversion or "flip" when rotating through 0° or 180° vertical tilt positions when not an integrated unit.
- 2.3.1.19. **Mean Time Before Failure.** A minimum of 43,800 hr. or 5 yr. without mechanical malfunction or failure. Act of God failures are exempt.

2.3.2. **Lens.** Provide an integral lens assembly for each camera with the following features:

- an f/1.6 or better glass multi-coated zoom lens with variable focal lengths with a minimum 18X zoom range,
- 10X auto and manual digital zoom minimum, and
- automatic and manual focus and iris control.

Provide lenses with capabilities for remote control of the zoom, focus, and iris operations. Mechanical or electrical means provided to protect the motors from overrunning in extreme positions. Lens and controller system capable of both auto iris and remote manual iris operation. Capabilities of lens for auto and manual zoom and focus control. Motorized iris as opposed to auto iris type, for system control capability.

2.3.3. **Network Interface Requirements.**

Provide CCTV field equipment that can integrate with the Department's Lonestar™ software and can be integrated into the Department's TMC CCTV control sub-systems through NTCIP 1205 Version 1.08 or higher, Open Network Video Interface Forum (ONVIF), or approved equal. Support CoVu, Pelco D or Pelco P protocols, or approved equal for control.

Provide camera equipment with a Local Area Network (LAN) connection that supports the requirements detailed in the IEEE 802.3 Standard for 10/100 Ethernet connections for half-duplex or full-duplex and provide auto negotiation. Provide equipment with a minimum of 1 Ethernet port, which has a 10/100 Base-TX connection. Provide connectors that conform to EIA and TIA requirements.

Support, at a minimum, RTP, RTSP, UDP/IP, TCP/IP, IPv4, HTTP, IGMPv2, DHCP, NTP, IEEE 802.1x, Ethernet 802.3u, and Telnet.

Provide camera equipment that supports local and remote configuration and management. Configuration and management functions must include access to all user-programmed features, including but not limited to, network configuration, video settings, device monitoring, control setting, and security functions. Configuration

and management is achieved through serial login, telnet login, web-based interface, or manufacturer software. Provide manufacturer software with camera for local configuration, system maintenance and management control.

- 2.4. **Cable Assembly.** Provide camera power and communication cable assembly equipped with cables used for video feed, camera control including PTZ function, communications signaling, and power supply. Camera power and communication cable can be configured as a composite cable or series of isolated cables. The following cable functions may be required depending on the data and video communication interface requirements, as shown on the plans.
- 2.4.1. **Serial.** Provide shielded twisted pair serial based communication cable rated for outdoor use in conformance to EIA RS-232/422/485 Standards, governed by the Electronic Components Association (ECA). Provide serial based conversion hardware, if necessary, to achieve this function.
- 2.4.2. **Video.** Provide coaxial cable, rated for outdoor use, between the camera and the communications equipment interface that is a mid-range RG-59/U type with a solid center conductor with 100% shield coverage, with a cellular polyethylene dielectric, or a cable as recommended by the manufacturer of the CCTV field equipment.
- 2.4.3. **Ethernet.** Provide a shielded twisted pair (STP) Category 5E (or equivalent) at a minimum rated for outdoor use in conformance to TIA/EIA 568B Standard. Cable must not exceed an attenuation of 30 dB per 300 ft. of cable at 100 MHz.
- 2.4.4. **Power.** Provide 3-wire, insulated for 300 V minimum, 115 VAC or 24 VAC power cabling between the camera and the power supply. If 24 VAC power is required, provide needed power supply conversion equipment.

Power may be achieved through Power over Ethernet (PoE) through a power supply or mid-span PoE injector, to be subsidiary to the camera unit, and must conform to the IEEE 802.3af or IEEE 802.3at standard or latest revision.

Provide power and communication cable assembly the entire length of the camera support structure from the camera to the cabinet with an additional 25 ft. of slack in the cabinet. Determine the appropriate length required for each site. The cable assembly is subsidiary to the camera unit.

Provide any necessary data, video, or power conversion hardware necessary to successfully integrate the camera unit into the field equipment cabinet hardware components and onto the communications backbone.

- 2.5. **Video Encoding Interoperability.** Digital video encoders and decoders are necessary to convert the analog signal to digital, transport digital packets via UDP/IP over fiber optic, copper Ethernet, wireless, or leased line networks and convert the digital packets back to an analog signal for viewing on a display monitor. Video encoding and decoding equipment may be achieved through software or hardware means. Ensure camera's encoded video is interoperable with hardware and software decoders from other manufacturers. Ensure the camera's encoded video can be decoded by a minimum of two other manufacturer's software or hardware decoders that are currently in use by the Department. Contact the Department for decoders supported prior to procurement of camera unit.
- 2.6. **Camera Housing.** Provide camera housing assembly and hardware material that reflects sunlight.
- Provide camera housing with a sunshield to reduce the solar heating of the camera. The total weight of the camera (including housing, sunshield, and all internal components) must not exceed 35 lb.
- Construct viewing window in such a way that unrestricted camera views can be obtained at all camera and lens positions.
- Provide gaskets at cable entry point to the camera housing to prevent moisture or dust entry.

When shown on the plans or identified in the general notes, provide heating or cooling functionality with temperature sensors to maintain internal temperatures within the manufacturer required operating temperature range.

- 2.7. **Pan-Tilt Unit.** Furnish and install a medium duty anodized aluminum weatherproof pan-tilt-unit at each camera site, conforming to National Electrical Manufacturer's Association (NEMA) 4X and IP-66 rating or better, when not integral to the camera unit and housing. Provide mounting adapter and required attachment hardware to install the pan-tilt-unit to the pole or mounting bracket. Identify the type of mounting bracket and bolt pattern on shop drawings.

Provide a unit capable of a minimum of 180° vertical range of movement and horizontal movement of 360°, full, continuous rotation movement.

Provide a unit that has a pan and tilt speed of 20° per second minimum and is user adjustable through the full speed range. Unit must be capable of simultaneous pan-tilt movements with variable pan-tilt positioning control allowing variable speeds that are proportional through the zoom range.

Provide pan-tilt unit with a drive accuracy and drive repeatability of less than 1° and has an automatic pre-position speed of 120° per second minimum to a user defined preset position that is user adjustable.

Provide a pan-tilt unit, when not integral to the camera housing, capable of maintaining static position and does not move by more than 1.0° in any direction in speeds greater than 35 mph.

Ensure that the pan-tilt unit has seals and gaskets to protect the motors, gears, and cables and that the seals and gaskets are resistant to ozone, ultraviolet radiation, and other pollutants inherent to all local environmental conditions.

When shown on the plans or identified in the general notes, provide pan-tilt unit with heater that conforms to NEMA 4X standard when not integral to the camera unit and housing.

- 2.8. **Preset Functions.** Provide a camera unit capable of storing a minimum 62 presets for pan, tilt, zoom, and focus settings.

Provide a camera unit capable of user programmable tours with a minimum of 4 tours of up to 32 presets per tour. Any tours may be programmed for panning tours.

Provide a camera unit capable of user programmable sector zones with a minimum of 8 zones allowing right and left pan limitations.

Provide a camera unit capable of user programmable privacy zones with a minimum of 8 zones. Capable of click and drag position control through software.

- 2.9. **Control Receivers.** Provide a camera unit with an integrated camera control receiver, unless otherwise directed, that will execute all camera and lens functions as well as forward communication of commands for the pan-tilt functions to the pan-tilt control receiver. Mount the pan-tilt control receiver inside the pan-tilt unit.

The control receiver receives the data from the camera controller, it decodes the digital command data signals transmitted through the communication transmission interface, checks for errors, and acts on valid data to drive the pan-tilt unit and the camera controls.

Local field control is achieved through compatible control software on a laptop or through local control unit hardware located inside the field cabinet that can be EIA 19 in. rack or shelf mountable. Document that the camera control receiver and pan-tilt control receiver will execute all camera, lens, and pan-tilt functions through a laptop interface or through use of the local control unit hardware. Provide local control unit hardware only when shown on the plans or identified in the general notes.

- 2.10. **Connectors.** Provide and install connectors that are compatible with the communications equipment interfaces identified in Article 2.3.3 and Article 2.4. Supply all mating connectors. Provide all connector pins and mating connectors that are plated to achieve good electrical connection and resistance to corrosion.
- 2.11. **Source ID Generator.** Use a built-in ID Generator to insert camera ID over each of the camera-generated videos.
- Provide a minimum of 2 lines of alpha numeric, case specific, text supporting a minimum of 20 ASCII characters per line, with a minimum character height of 20 pixels, that is user programmable for displaying any combination of ID information consisting of camera, preset, privacy mask, low pressure warning, compass, and time and date at a minimum.
- Allow user selectable location of text to be displayed on the video image at the extreme top or bottom. Text display on the side of the image display prohibited .
- Automatically display the programmed ID with its associated video signal that can be turned on or off by user command.
- In the event of loss of signal or video signal failure, ID Generator automatically passes through failure message to display over video.
- Submit list of available text displays to the Department as part of documentation requirements.
- 2.12. **Cabinet Installation.** Install video communication equipment in a pole mounted equipment cabinet or in a ground mounted equipment cabinet as shown on the plans. Meet the following criteria:
- Contains all the lightning protection devices for data and video.
- Grounded to earth ground.
- Provide connectors for all inputs and outputs for data and video and additional ports for testing video and communications. Use the external connectors for testing and for connections to communication devices.
- 2.13. **Surge Protection.** Provide surge protection for the camera meeting the following requirements:
- mounting adapter – Electrically bonded to mounting structure,
 - pan-tilt mechanism – Electrically bonded to mounting adapter,
 - camera housing – Electrically bonded to pan-tilt mechanism, and
 - power and control cable surge protector – Integrated into cabinet surge protection system.
- 2.14. **Power Requirements.** Provide CCTV field equipment meeting all of its specified requirements when the input power is 115 VAC \pm 20%, 60 Hz \pm 3 Hz, and that maximum power required does not exceed 200 W including optional equipment.
- Provide appropriate voltage conversion, power injectors, or other power supply hardware if the camera equipment or any camera-related ancillary devices requires operating voltages other than 115 VAC \pm 20%, such as 24 VAC, 12 VDC from solar power systems, or rely on PoE. Appropriate voltage converters or injectors must accept an input voltage of 115 VAC or 12 VDC from solar power systems as shown on the plans.
- 2.15. **Primary Input Power Interruption.** Provide CCTV field equipment that meets all the requirements in Section 2.1.4., "Power Interruption" of the NEMA Standard TS2 for Traffic Control System, or most current version.
- 2.16. **Power Service Transients.** Provide CCTV Field Equipment that meets the requirements for Section 2.1.6., "Transients, Power Service" of the NEMA Standard TS2, or most current version.

- 2.17. **Power Service Protection.** Provide equipment that contains readily accessible, manually resettable or replaceable circuit protection devices (such as circuit breakers or fuses) for equipment and power source protection. Provide circuit breakers or fuses sized appropriately such that no wire, component, connector, PC board or assembly is subjected to current loads in excess of their respective design limits upon failure of any single circuit element or wiring.
- 2.18. **Modular Design.** Provide CCTV field equipment hardware installed inside the cabinet that is modular in design that can be either shelf mountable or EIA 19 in. rack mountable. Clearly identify modules and assemblies with name, model number, serial number and any other pertinent information required to facilitate equipment maintenance.
- 2.19. **Connectors and Harnesses.** Make all external connections by means of connectors that are uniquely keyed to preclude improper hookups. Color-code and appropriately label with UV resistant material all wires to and from the connectors. Provide connecting harnesses of appropriate length and terminated with matching connectors for interconnection with the communications system equipment. Provide plated pins and mating connectors to improve conductivity and are corrosion resistant. All connectors utilizing solder type connections must have each soldered connection covered by a piece of heat shrink tubing securely shrunk to protect the connection for short circuiting.
- Provide a wiring diagram detailing wire function and connector pin-out.
- 2.20. **Environmental Design Requirements.** Provide equipment that conforms to NEMA TS2-2003 (R2008), International Electrotechnical Commission (IEC) 60529, and NEMA 250-2008, or most current version, for the following categories:
- 2.20.1. **Temperature.** Provide equipment that conforms to NEMA TS2 Section 2.1.5.1, or latest revision, and meets all the specified requirements during and after being subjected to any combination of the following conditions:
- ambient temperature range of -30 to 165°F,
 - temperature shock not exceeding 30°F per hour,
 - relative humidity of 0 to 100%,
 - moisture condensation on all exterior surfaces caused by temperature changes, and
 - provisions for a heater and blower function will be required to maintain internal temperatures within the manufacturer's operating temperatures for temperature ranges internal to the camera unit not conforming to NEMA TS2 Standard 2.1.5.1.
- 2.20.2. **Vibration.** Provide equipment that conforms to NEMA TS2 Section 2.1.9 and Section 2.2.3, or most current version, and meets all the specified requirements during and after being subjected to a vibration of 5 to 30 Hz up to 0.5 g applied in each of three mutually perpendicular planes for 30 min.
- 2.20.3. **Shock.** Provide equipment that conforms to NEMA TS2 Section 2.1.10 and Section 2.2.4, or most current version, and does not yield permanent mechanical deformation or any damage that renders the unit inoperable when subjected to a shock of 10 g applied in each of three mutually perpendicular planes for 30 min.
- 2.20.4. **Environmental Contaminants.** Provide equipment that conforms to IEC 60529 Section 14.2.6, or most current version, for IP 66 or greater rating when providing a pressurized unit.
- Provide equipment that conforms to IEC 60529 Section 14.2.7, or most current version, for IP 67 or greater rating when providing a non-pressurized unit.
- 2.20.5. **External Icing.** Provide equipment that is tested to conform to NEMA 250-2003 Section 5.6, or latest revision.

- 2.20.6. **Corrosion.** Provide equipment that is tested to conform to NEMA 250-2003 Section 5.10, or latest revision, when located in coastal Districts. Coastal Districts are Beaumont (BMT), Corpus Christi (CRP), Houston (HOU), Pharr (PHR), and Yoakum (YKM).
- 2.20.7. **Wind Rating.** Operational in adverse weather conditions and able to withstand wind loads in accordance with Department's basic wind velocity zone map standard as shown on the plans without permanent damage to mechanical and electrical equipment.

3. CONSTRUCTION

- 3.1. **General.** Maximize standardization and consistency by utilizing industry standard techniques in equipment design and construction, with the minimum number of parts, subassemblies, circuits, cards, and modules. Design equipment for ease of maintenance.

Provide mounting bracket assemblies or apparatus to mount equipment on the following structures as detailed in the plans or on the ITS standards:

- ITS Pole,
- overhead sign bridge or cantilever overhead sign structure ,
- retaining wall, and
- concrete column or parapet.

Provide mounting bracket design with documentation submittal for approval prior to fabrication. Include all mounting plates, screws, bolts, nuts, washers, and ancillary hardware needed to fabricate the entire mounting bracket.

- 3.2. **Mechanical Components.** Provide stainless steel external screws, nuts and locking washers. Self-tapping screws are not acceptable.

Provide parts that are made of corrosion resistant material; examples include: plastic, stainless steel, anodized aluminum, or brass.

Protect all materials used in construction from fungus growth and deterioration due to sustained moisture.

Separate dissimilar metals by an inert dielectric material.

- 3.3. **Wiring.** Provide wiring that meets the requirements of the National Electrical Code (NEC) most current version. Provide wires that are cut to proper length before assembly. It is not acceptable to "double-back" wires to take up slack inside the cabinet. Lace wires neatly with nylon lacing or plastic straps. Organize cables neatly inside the cabinet and secure cables with clamps. Provide service loops at connection points when connecting to hardware inside the cabinet. No splicing of cables or exposed wiring is allowed. Clearly label all wiring.

- 3.4. **Relocation of CCTV Field Equipment.** Perform the relocation in strict conformance with the requirements herein and as shown on the plans. Completion of the work will present a neat, workmanlike, and finished appearance. Maintain safe construction practices during relocation.

Inspect the existing CCTV field equipment, with a representative from the Department, and document any evidence of damage prior to removal. Conduct a pre-removal test in accordance with the testing requirements contained in this Item to document operational functionality. Remove and deliver to the Department, existing CCTV field equipment that fail inspection.

Prior to removal of existing CCTV field equipment, disconnect and isolate the power cables from the electric power supply and disconnect all communication cabling from the equipment located inside the cabinet. Coil and store power and communication cabling inside the cabinet until such time that it can be relocated.

Remove existing CCTV field equipment as shown on the plans only at such time as authorized by the Engineer.

Use care to prevent damage to any support structures. Any portion of CCTV field equipment or camera pole structure damaged or lost will be replaced by the Contractor at his expense. Contractor to document and report to the Department any existing damage to equipment prior to removal.

Make all arrangements for connection to the power supply and communication source including any permits required for the work to be done under the Contract. Provide wire for the power connection at least the minimum size indicated on the plans and insulated for 600 V. Meet the requirements of the NEC most current version.

- 3.5. **Removal of CCTV Field Equipment.** Disconnect and isolate any existing electrical power supply prior to removal of existing CCTV field equipment,

Perform removal in strict conformance with the requirements of this Specification, and the lines, grades, details and dimensions shown on the plans. Completion of the work will present a neat, workmanlike, and finished appearance.

Any portion of the CCTV field equipment or cabinet internal components damaged or lost will be replaced by the Contractor (with items requiring the approval of the Engineer) at no cost to the Department.

All materials not designated for reuse or retention by the Department will become the property of the Contractor and be removed from the project site at the Contractor's expense. Deliver items to be retained by the Department to a location shown on the plans or general notes. The Contractor is fully responsible for any removed equipment until released by the Engineer.

- 3.6. **Contractor Experience Requirements.** Contractor or designated subcontractor must meet the following experience requirements:

- 3.6.1. **Minimum Experience.** Three years of continuous existence offering services in the installation of CCTV camera systems.

- 3.6.2. **Completed Projects.** Three completed projects consisting of a minimum of 5 cameras in each project where the personnel installed, tested and integrated CCTV cameras on outdoor, permanently mounted structure(s) and related camera control and transmission equipment. The completed CCTV camera system installations must have been in continuous satisfactory operation for a minimum of 1 yr.

- 3.6.3. **Equipment Experience.** Three projects (may be the three in the preceding paragraph) in which the personnel worked in cooperation with technical representatives of equipment suppliers to perform specific stages of work. The Contractor will not be required to furnish equipment on this project from the supplier who furnished documentation demonstrating this experience.

Submit the names, addresses and telephone numbers of the references that can be contacted to verify the experience requirements given above.

- 3.7. **Documentation Requirements.** Provide a minimum of 2 complete sets of operation and maintenance manuals in bound hard copy format, as well as an electronic copy in Adobe PDF format on a CD/DVD or removable flash drive that include the following:

- complete and accurate wiring schematic diagrams,
- complete installation procedures,
- compliance matrix documenting conformance to this specification,
- complete performance specifications (Functional, electrical, mechanical and environmental) on the unit,
- complete parts list including names of vendors for parts not identified by universal part number such as JEDEC, RETMA, or EIA,

- pictorial of component layout on circuit board,
- ID Generator list of text display options,
- complete maintenance and trouble-shooting procedures,
- complete stage-by-stage explanation of circuit theory and operation,
- testing procedures and blank test forms,
- recovery procedures for malfunction,
- instructions for gathering maintenance assistance from manufacturer, and
- provide the Department with certification documentation verifying conformance with environmental and testing requirements contained in the special specification. Certifications may be provided by the manufacturer or through independent labs.

Identify material which is copyrighted or proprietary in nature as part of the documentation submittal. The Department will comply with sensitive material and secure submittal documentation and not distribute without written approval.

3.8. **Testing.**

3.8.1. **New Installations.** Unless otherwise shown on the plans, perform the following tests on the applicable equipment or systems.

3.8.1.1. **Test Procedures Documentation.** Provide 5 copies of the test procedures to include tests identified in Article 5.1.2 through Article 5.1.7 inclusive and blank data forms to the Engineer for review and comment as part of material documentation requirements for each test required on this project. Include the sequence of the tests in the procedures. The Engineer will comment, approve, or reject test procedures within 30 days after Contractor submittal of test procedures. Contractor to resubmit if necessary rejected test procedures for final approval within 10 days. Review time is calendar days. Conduct all tests in accordance with the approved test procedures.

Record test data on the data forms, as well as quantitative results. No bid item measurement or payment will be made until the Engineer has verified the test results meet the minimum requirements of the specification. The data forms for all tests, except design approval tests, must be signed by an authorized representative of the Contractor.

Provide written notice to the Engineer within 48 hr. of discovery of any testing discrepancy identified during testing by the Contractor. Furnish data forms containing the acceptable range of expected results as well as the measured values.

3.8.1.2. **Design Approval Test.** Conduct a design approval test on one randomly selected unit from the prototype design manufacturing run. If only 1 design prototype is manufactured, perform this test on that unit. If supplying multiple types of the equipment, provide and test a sample of each type.

Certification from an independent testing laboratory of a successfully completed design approval test is acceptable. Ensure that the testing by this laboratory is performed in accordance with the requirements of this specification. Failure of independent tests to comply with the requirements of this specification will be grounds for rejection of any certification.

Provide a copy of the certification to the District in which this contract is executed. The data forms for the design approval tests must be signed by an authorized representative (company official) of the equipment manufacturer or by an authorized representative of an independent testing facility.

Notify the Engineer 10 working days before conducting this testing. The Department may witness all the tests. Perform the following tests:

- 3.8.1.2.1. **Power Service Transients.** Provide equipment that meets the performance requirements, specified in this Item, when subjected to the power service transients as specified in Section 2.2.7.2, "Transient Tests (Power Service)" of the NEMA TS2 standard, most current version.
- 3.8.1.2.2. **Temperature and Condensation.** Provide equipment that meets the performance requirements, specified in this Item, when subjected to the following conditions in the order specified below:
- stabilize the equipment at -30°F and test as specified in Sections 2.2.7.3, "Low-Temperature Low-Voltage Tests" and 2.2.7.4, "Low-Temperature High-Voltage Tests" of the NEMA TS2 standard, most current version
 - allow the equipment to warm up to room temperature in an atmosphere having relative humidity of at least 40%. Operate the equipment for 2 hr., while wet, without degradation or failure, and
 - stabilize the equipment at 165°F and test as specified in Sections 2.2.7.5, "High-Temperature High Voltage Tests" and 2.2.7.6, "High-Temperature Low-Voltage Tests" of the NEMA TS2 standard, most current version.
- 3.8.1.2.3. **Relative Humidity.** Provide equipment that meets the performance requirements, specified in this Item, within 30 min. of being subjected to a temperature of 165°F and a relative humidity of 18% for 48 hr.
- 3.8.1.2.4. **Vibration.** Provide equipment that shows no degradation of mechanical structure, soldered components, or plug-in components and operates in accordance with the manufacturer's equipment specifications after being subjected to the vibration tests as described in Section 2.2.8, "Vibration Test" of the NEMA TS2 standard, most current version.
- 3.8.1.2.5. **Power Interruption.** Provide equipment that meets the performance requirements, specified in this Item, when subjected to nominal input voltage variations as specified in Section 2.2.10 "Power Interruption Test" of the NEMA TS2 standard, most current version.
- 3.8.1.3. **Demonstration Test.** Conduct a demonstration test on applicable equipment at an approved Contractor facility. The Contractor may submit procedures and results from previous contracts in the same District as this Contract provided the materials and equipment are identical, provided results are less than 5 yr. old. Notify the Engineer 10 working days before conducting this testing. The Department may witness all the tests. Perform the following tests:
- 3.8.1.3.1. **Examination of Product.** Examine each unit carefully and document that the materials, design, construction, markings and workmanship comply with the requirements of this Item.
- 3.8.1.3.2. **Continuity Tests.** Check the wiring to determine conformance with the requirements of the appropriate paragraphs in this Item.
- 3.8.1.3.3. **Operational Test.** Operate each unit for at least 15 min. to permit equipment temperature stabilization and an adequate number of performance characteristics to ensure compliance with the requirements of this Item.
- 3.8.1.4. **Field Acceptance (Stand-Alone) Test.** Conduct a field acceptance test for each unit after installation as required by the Engineer in order to demonstrate compliance with the functional requirements with this Item. Exercise all stand-alone (non-network) functional operations. Notify the Engineer 5 working days before conducting this test. The field acceptance test may consist of the following:
- 3.8.1.4.1. **Physical Construction.** Document physical construction is completed in accordance with the plans and specification.
- 3.8.1.4.2. **Electrical and Communication.** Document that all connectors for grounding, surge suppression, and electrical distribution are tightened correctly. Document all power supplies and circuits are operating under the proper voltages. Document all power and communications cables are terminated correctly, secured inside the cabinet, and fitted with appropriate connectors.

- 3.8.1.4.3. **Video Signal.** For analog signal format, conduct an impedance test, through a short 75 ohm coaxial cable, to an oscilloscope waveform monitor to ensure 75 ohm output impedance to conform with NTSC standards.
- Through use of a digital, hand-held, battery operated meter, conduct a test and measure the following video signal characteristics, if applicable:
- 3.8.1.4.3.1. **Sync.** Document the amplitude of the video synchronizing pulse and check for correct video level, coaxial cable continuity, and correct termination level is 40 IRE.
- 3.8.1.4.3.2. **Luminance.** Document the white level and correct brightness setting is 100 IRE.
- 3.8.1.4.3.3. **Composite.** Document the overall amplitude of the video signal is at 140 IRE or 1 V peak to peak.
- 3.8.1.4.3.4. **Color Burst.** Document color burst amplitude at 40 IRE.
- 3.8.1.4.3.5. **Ground-loop.** Document that no ground loop exists in the video picture. Ground loop voltages in the video signal causes bars to be present on the video picture.
- Document video image is present and free from over-saturation and any other image defect in both color and monochrome modes.
- Document video support of unicast and multicast video transmission modes.
- Document the video signal from the camera is present and of consistent quality at all connection points between the camera, the cabinet, and any video conversion hardware.
- 3.8.1.4.4. **Communication.** For digital camera models, document network connection to the camera through ping or telnet session from a remote PC. For analog camera models, document serial data transmission to execute control through serial ports.
- 3.8.1.4.5. **Pan-Tilt Mechanism.** Exercise pan, tilt, zoom, and focus in all directions and execute a minimum of 3 other unique programming commands, specified by the Department, to ensure that the communication link between the cabinet and the camera is functioning properly.
- 3.8.1.5. **System Integration Test.** Conduct a system integration test on the complete functional system. Demonstrate all control and monitor functions for each system component for 72 hr. Notify the Engineer 10 working days before conducting this testing. The Department may witness all the tests.
- Provide systems integration test procedures for proper adjustment and calibration of subsystem components. Proper adjustment and calibration involves documenting settings used to meet functional requirements while providing a margin for adjustment when future conditions change. Utilize the Department control software (when available) to perform subsystem testing. At a minimum, utilize this software to verify commands and confirms, as well as, detector actuations and occupancy dwell time. The Contractor is responsible for being familiar with any existing Department equipment and software.
- The failure of any one component material or equipment item in a system integration test is justification for rejecting the entire subsystem. Each subsystem component must function as a complete integrated subsystem for a minimal continuous 72 hr. period during the system integration test.
- 3.8.1.6. **Final Acceptance Test.** Following completion of the demonstration test, standalone test, and system integration test for all subsystems, provide completed data forms containing all of the data taken, including quantitative results for all tests, a set of "as built" working drawings, and a written request to begin a data communication and final acceptance test. Provide "as built" working drawings indicating the actual material, equipment, and construction of the various subsystem components, including established and calculated XY coordinates based on project control points provided by the Engineer, when shown on the plans. Perform field surveying and calculations under the supervision of and sealed by a licensed land surveyor.

Within 10 calendar days of the request, execute a data communications test using a Department supplied software program or Contractor supplied software approved by the Department. The data communications test may be executed by the Engineer or the Contractor with the prior approval of the Engineer. The purpose of this test is to verify that the communications plant will operate with application software provided by the State.

Perform the data communications test for a period of 72 hr. If a message error or component failure occurs anywhere in the network, resume the test once repairs are completed. All components of the communications network must operate as an integral system for the duration of the test.

A message error is defined as the occurrence of a parity error, framing error, or data error in any component of the message. The error free message rate is defined as the ratio of the number of messages in which no message error occurs to the number of messages transmitted. The error free message rate must exceed 99.99% for acceptable transmission quality, both for the system as a whole, and for each component of the network.

Provide all additional test results to the Engineer for review once a successful data communications test has been completed. If all the requirements of this specification have been satisfied, contract time will stop and all subsystems will be placed into operation and operate as a complete system for a period of 90 days.

Notify the Engineer of any defects suspected in integration or function of material or equipment. Investigate any suspected defects and correct if necessary. Provide a report of finding within 2 calendar days of notice of any suspected defects. Describe the nature of the any defects reported and any corrective action taken in the report. The integrated subsystems must operate defect free as a single complete system for a minimum of 72 continuous hours during a 30 calendar day review period. If the number of defects or frequency of failures prevents any subsystems from operating as described above, the Engineer may reject the entire subsystem(s) integration test results and resume contract time. Provide any necessary corrections and resubmit subsystem(s) integration test results and a request to begin a final acceptance test which may include "as built" plans and a data communications test.

The CCTV field equipment under this Item will not be accepted until the system, inclusive of all subsystems, has operated satisfactorily for a period of 90 days and in full compliance with the plans and specifications after approval of all submitted test results and reports.

- 3.8.1.7. **Consequences of Test Failure.** If a unit fails a test, submit a report describing the nature of the failure and the actions taken to remedy the situation prior to modification or replacement of the unit. If a unit requires modification, correct the fault and then repeat the test until successfully completed. Correct minor discrepancies within 30 days of written notice to the Engineer. If a unit requires replacement, provide a new unit and then repeat the test until successfully completed. Major discrepancies that will substantially delay receipt and acceptance of the unit will be sufficient cause for rejection of the unit.

Failure to satisfy the requirements of any test is considered a defect and the equipment is subject to rejection by the Engineer. The rejected equipment may be offered again for retest provided all noncompliance has been corrected.

If a failure pattern develops in similar units within the system, implement corrective measures, including modification or replacement of units, to all similar units within the system as directed. Perform the corrective measures without additional cost or extension of the contract period.

- 3.8.1.7.1. **Consequences of Design Approval Test Failure.** If the equipment fails the design approval test, correct the fault within 30 days and then repeat the design approval test until successfully completed.
- 3.8.1.7.2. **Consequences of Demonstration Test Failure.** If the equipment fails the demonstration test, correct the fault within 30 days and then repeat the demonstration test until successfully completed.
- 3.8.1.7.3. **Consequences of Field Acceptance (Stand-Alone) Test Failure.** If the equipment fails the stand-alone test, correct the fault within 30 days and then repeat the stand-alone test until successfully completed.

3.8.1.7.4. **Consequence of System Integration Test Failure.** If the equipment fails the system integration test, correct the fault within 30 days and then repeat the systems integration test until successfully completed.

3.8.1.7.5. **Consequences of Final Acceptance Test Failure.** If a defect within the system is detected during the final acceptance test, document and correct the source of failure. Once corrective measures are taken, monitor the point of failure until a 30 consecutive day period free of defects is achieved.

If after completion of the initial test period, the system downtime exceeds 72 hr. or individual points of failure have not operated for 30 consecutive days free of defects, extend the test period by an amount of time equal to the greater of the downtime in excess of 72 hr. or the number of days required to complete the performance requirement of the individual point of failure.

3.8.2. **Relocation and Removal.**

3.8.2.1. **Pre-Test.** Provide 5 copies of the test procedures to include tests of the basic functionality of the unit and blank data forms to the Engineer for review and comment as part of material documentation requirements. Functionality tests may include, but are not limited to, physical inspection of the unit and cable assemblies, lens iris and zoom control, video signal, and pan-tilt mechanism. Include the sequence of the tests in the procedures along with acceptance thresholds. The Engineer will comment, approve, or reject test procedures within 30 days after Contractor submittal of test procedures. Contractor to resubmit if necessary rejected test procedures for final approval within 10 days. Review time is calendar days. Conduct all tests in accordance with the approved test procedures.

Conduct basic functionality testing prior to removal of CCTV field equipment. Test all functional operations of the equipment in the presence of representatives of the Contractor and the Department. Ensure that both representatives sign the test report indicating that the equipment has passed or failed each function. Once removed, the equipment becomes the responsibility of the Contractor until accepted by the Department. Compare test data prior to removal and test data after installation. The performance test results after relocation must be equal to or better than the test results prior to removal. Repair or replace those components within the system which failed after relocation but which passed prior to removal.

3.8.2.2. **Post Test.** Testing of the CCTV field equipment is for the purpose of relieving the Contractor of maintenance of the system. The Contractor will be relieved of the responsibility for maintenance of the system in accordance with Item 7, "Legal Relations and Responsibilities", after a successful test period. The Contractor will not be required to pay for electrical energy consumed by the system.

After all existing CCTV field equipment has been installed, conduct approved continuity, stand alone, and equipment system tests. Furnish test data forms containing the sequence of tests including all of the data taken as well as quantitative results for all tests. Submit the test data forms to the Engineer at least 30 days prior to the day the tests are to begin. Obtain Engineer's approval of test procedures prior to submission of equipment for tests. Send at least 1 copy of the data forms to the Engineer.

Conduct an approved stand-alone test of the equipment installation at the field site(s). At a minimum, exercise all stand-alone (non-network) functional operations of the field equipment with all of the equipment installed per the plans as directed by the Engineer. Complete the approved data forms with test results and turn over to the Engineer for review and either acceptance or rejection of equipment. Give at least 30 working days notice prior to all tests to permit the Engineer or his representative to observe each test.

The Department will conduct approved CCTV field equipment system tests on the field equipment with the central equipment. The tests will, as a minimum, exercise all remote control functions and display the return status codes from the controller.

If any unit fails to pass a test, prepare a report and deliver it to the Engineer. Describe in the report the nature of the failure and the corrective action needed. If the failure is the result of improper installation or damage during reinstallation, reinstall or replace the unit and repeat the test until the unit passes successfully, at no additional cost to the Department or extension of the Contract period.

- 3.9. **Warranty.** Warrant the equipment against defects or failure in design, materials, and workmanship for a minimum of 3 yr. or in accordance with the manufacturer's standard warranty if that warranty period is greater. The start date of the manufacturer's standard warranty will begin after the equipment has successfully passed all tests contained in the final acceptance test plan. Any CCTV field equipment with less than 90% of its warranty remaining after the final acceptance test is completed will not be accepted by the Department. Guarantee that equipment furnished and installed for this project performs according to the manufacturer's published specifications. Assign, to the Department, all manufacturer's normal warranties or guarantees on all electronic, electrical, and mechanical equipment, materials, technical data, and products furnished for and installed on the project.

CCTV field equipment will be repaired or replaced at the Contractor's expense prior to completion of the final acceptance test plan in the event of a malfunction or failure. Furnish replacement parts for all equipment within 10 days of notification of failure by the Department.

- 3.10. **Training.** Conduct a training class for a minimum of 24 hr., unless otherwise directed, for up to 10 representatives designated by the Department on procedures of installation, operations, programming hardware settings, IP programming, port settings, testing, maintenance, troubleshooting, and repair of all equipment specified within this specification. Submit to the Engineer for approval, 10 copies of the training material at least 30 days before the training begins. Conduct training within the local area unless otherwise authorized by the Engineer. Consider operations through Department's Lonestar software when developing training modules.

4. MEASUREMENT

This Item will be measured by each CCTV field equipment unit and mounting apparatus furnished, installed, relocated, or removed, of the types specified as shown on the plans, or as directed.

5. PAYMENT

- 5.1. **Furnish and Install.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit bid price for "CCTV Field Equipment (Analog)", "CCTV Field Equipment (Digital)", and "CCTV Field Controller". This price is full compensation for making fully operational CCTV field equipment including any voltage converters or injectors, cables and connectors as shown on the plans; and all documentation, testing, training, software, equipment, labor, materials, tools, and incidentals.

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" for CCTV field equipment mounting assemblies will be paid for at the unit bid price for "CCTV Mount (Pole)", "CCTV Mount (Post)", "CCTV Mount (Wall)", "CCTV Mount (Parapet)", "CCTV Mount (Pendant)", and "CCTV Mount (Mast)". This price is full compensation for furnishing and installing mounting bracket assemblies, mounting bracket hardware; and all equipment, labor, materials, tools, equipment, and incidentals necessary to mount CCTV field equipment to mounting structures as shown on the plans.

- 5.2. **Install Only.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit bid price for "CCTV Field Equipment (Analog) (Install Only)" and "CCTV Field Equipment (Digital) (Install Only)." This price is full compensation for making fully operational CCTV field equipment including any voltage converters or injectors, furnishing and installing additional cables and connectors as shown on the plans; and all documentation, testing, training, software, equipment, labor, materials, tools, and incidentals.
- 5.3. **Relocate.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" for relocation of CCTV field equipment will be paid for at the unit bid price for "Relocate CCTV Field Equipment." This price is full compensation for relocating and making fully operational existing CCTV field equipment as shown on the plans; furnishing and installing additional cables or connectors as shown on the plans; for testing, delivery and storage of components designated for salvage or reuse; and all testing, training, software, equipment, labor, materials, tools, and incidentals.

- 5.4. **Remove.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" for removal of CCTV field equipment will be paid for at the unit bid price for "Remove CCTV Field Equipment." This price is full compensation for removing existing CCTV field equipment as shown on the plans; removal of cables and connectors; for testing, delivery and storage of components designated for salvage; and all testing training, software, equipment, labor, materials, tools, and incidentals.

Special Specification 6089

Ethernet Cable and Connectors



1. DESCRIPTION

Furnish, install, test, document, and warranty network cable and connectors as shown on the plans and as detailed in the Special Specifications.

2. MATERIALS

2.1. **Cable Type.** Unshielded Twisted Pair (UTP) Category 5e.

2.2. **Electrical Requirements.**

2.2.1. **Cable Standard.** Meets TIA/EIA 568-C.2 cable standards. Must be industrial outdoor and UV rated.

2.2.2. **Maximum Frequency.** Maximum frequency shall be 100 MHz +/- 15%.

2.2.3. **Attenuation.** Cable must not exceed an attenuation of 22 dB per 300 ft. of cable at 100 MHz.

2.2.4. **Velocity Factor.** Velocity factor, reference to the free space electromagnetic wave propagation speed, must not be less than 74% of the free space velocity.

2.2.5. **Impedance.** Nominal impedance of the cable and connector must be 100 ohms.

2.2.6. **Capacitance.** Capacitance of the cable must not exceed 14 picofarads per foot of cable.

2.2.7. **Power Sum Equal-Level Far End Crosstalk (PS-ELFEXT)** 20.8 dB min at 100 MHz.

2.2.8. **Near-End Crosstalk (NEXT)** 35 dB min at 100 MHz.

2.2.9. **Return Loss.** 20.1 dB at 100 MHz.

2.3. **Connectors.**

2.3.1. **Type and Manufacturer.** Connectors must be of the model designated by the cable manufacturer for the cable supplied and provided by the same manufacturer.

2.3.2. **Electrical.** Termination connectors must be male RJ 45. Provide connectors and the cable supplied by the same manufacturer. Connectors must be a constant impedance type. Connectors must not contain any ferrous or other materials or design features which may lead to the generation of intermodulation products.

2.3.3. **Mechanical.** Connectors must be constructed to maintain the mechanical integrity of the cable within the nominal load limits of the cable. Connectors must prevent the entry and collection of moisture to the cable and electrical connection point.

3. CONSTRUCTION

3.1. **Installation.** Install cable with the proper connectors, jumper cable and miscellaneous hardware where indicated on the plans, necessary to make the site ready for testing and functional operation. Cable installation must be in accordance with the cable manufacturer's installation instructions.

- 3.2. **Testing.** Terminate cable into a load impedance equal to the nominal impedance of the cable and a sweep return loss measurement must be made after installation at the site. Frequency range must be from 25 MHz to 100 MHz. Terminated cable must present a return loss of not less than $(20 \text{ dB} + 2 \text{ times the cable loss})$ at any frequency within the test range.
- 3.3. **Documentation.** Provide 2 copies of the certification sweep measurement of the cable.
- 3.4. **Warranty.** Cable and connector's warranty must be in accordance with the Special Specification 6005, "Testing, Training, Documentation, Final Acceptance, and Warranty."

4. **MEASUREMENT**

This item will be measured by the foot of cable furnished, installed, spliced, connected, and tested.

5. **PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" and will be paid for at the unit price bid for "Ethernet Cable Cat 5." This price will be full compensation for furnishing and installing all cable and connectors, for pulling through conduit or duct, testing, splicing, connecting, tagging and labeling, and for all materials, labor, tools, equipment, documentation, and incidentals.

Town of Addison Irrigation Specifications

Revised 6/14/19

These revised specifications supersede any and all others. However, any discrepancies between the approved construction plans and those of the Town **MUST** be brought to the attention of the Town's designated representative for a final determination. The contractor will present the Town's representative an as-built plan at the final walk-through, along with three Bucker VO75 brass quick coupling keys with brass hose-end swivels. A laminated zone map must also be supplied by the contractor. This map is to have each zone section on the plan separately colored so as to allow each zone to be easily discernible. A laminated numerical listing of each zone along with a description of each shall be supplied in each controller cabinet.

- 1.** All work is to be accomplished by or directly supervised at all times by an on-site Irrigator currently licensed by the State of Texas.

- 2.** The contractor shall verify the water pressure before the installation begins. If the static pressure is different than that of the design pressure, contact the designer and Town's representative immediately so changes can be made. Design pressure shall not be greater than 60 psi. Send a fax to the Parks dept. at 972-450-2834 or email the Town's Irrigation Supervisor with the current dated and timed static pressure reading. Design head to head with no single head coverage. Use appropriate size nozzles for a given landscape area so as not to spray onto or over paved surfaces or structures. Do not exceed manufacturer's recommendations.

- 3.** The irrigation installer is responsible for resetting head and/or box height due to settling and after turf, groundcover, shrubs, trees, and mulch is added to the landscape areas. The irrigation contractor must supply a workmanship warranty for (1) year from date of final acceptance.

- 4.** Plans are diagrammatic and field adjustments are often necessary. For this reason, prior to trenching, valve locations and head layout with flags needs to be done and approved by the Town's irrigation inspector. Not doing so may result in the relocation of heads and/or valves at the irrigation contractor's expense.

5. Water Taps: Unless otherwise noted, water taps will be 2" in size. **Note:** This does not imply that a 2" meter will be used; see Water Meters below. All parts must conform to the Town of Addison Water Department specifications and are the responsibility of the irrigation contractor to provide. Inspection of taps by the Water Department Representative must occur. Excavation and tap permits are required. Contact the Town of Addison Water Department at (972) 450-2871.

6. Water Meters: Only meter types approved by the Town of Addison Water Department with an electronic encoder register and touch pad reader and two (2) brass flanges are acceptable. Meter lay lengths must be in accordance with the Town of Addison Water Department's specifications, housed in an approved and appropriately sized (to be determined by the Town's Irrigation Inspector) galvanized metal meter can and cast metal lid. New stainless-steel bolts and nuts must be used in the installation along with new neoprene gaskets. The box should slightly above final grade using concrete pavers to support and prevent sinking. Backfill inside the box, 3" below meter base, with at least 6" of washed 1" rock. Connection to the main must be approved and inspected by the Town's Water Department Inspector and all tap materials are to be purchased at the expense of the contractor and must comply with the Town of Addison's specifications.

Note: Meter size shall not exceed 1 ½" in size unless written approval is given by the Town of Addison Parks Department. All portions of this installation must adhere to the Town of Addison Water Department specifications as well.

7. Backflow Devices: Only Wilkins 350XL series inline check valve assemblies with the stainless-steel ball valve handles and nuts are to be used. The irrigation contractor shall provide and install plugs for the test cocks in accordance to the Town of Addison Water Department specifications. Connect the device to the water meter via a separate brass flange, neoprene gasket and stainless-steel nuts and bolts. Install to the flange a Teflon taped copper nipple and soldered copper pipe of sufficient length to center the DCA within its housing. The device will be housed in an appropriate size, (to be determined by the Town's Irrigation Inspector) rectangular Oldcastle composite box with a cast metal lid using concrete pavers for proper stability and height adjustment. Backfill inside the box, 3" below device bottom, with at least 6" of washed 1" rock. The irrigation contractor shall be responsible for the DCA testing in accordance with State of Texas law, using a Licensed Backflow Assembly Tester registered with the Town of Addison Water Department. Copies of the results must be given to both the Town of Addison Parks and Water Departments.

Note: All portions of this installation must adhere to the Town of Addison Water Department specifications as well.

8. Sleeves: All paving must have Town approved sleeve sizes and quantities present. It is the responsibility of the irrigation contractor to notify the Town's Irrigation Inspector of any area where sleeves should be present but are not and provide such materials at his cost. Any paving installed without sleeves will necessitate a bore and subsequent materials at the irrigation contractor's expense. All sleeves 2" and smaller will be Schedule 40 PVC with size and location noted on the plan. Larger sizes will be Class 200. All piping underneath paving, including sidewalks, must be sleeved. All sleeves are to be belled end PVC pipe. A minimum length of 12 inches of sleeve material must extend beyond the pavement. Sleeving sizing must be adequate to allow all pipes to move freely within them.

9. Glue and Primer: Use Turftite brand glue and a good quality purple primer on all PVC pipe and fittings. Avoid excessive use and wipe excess glue off of all joints and fittings with a clean rag.

10. Pipe: All main line pipe 2" and smaller is to be Schedule 40 belled PVC; larger sizes are to be Class 200 belled PVC with a minimum depth of 14" and a maximum depth of 16". Put not more than two (2) pipes in any one trench and separate the main line from the lateral line with at least 2" of cover. Class 200 belled PVC lateral piping is to be used with a minimum depth of 12" and a maximum depth of 14". No 1/2" piping will be allowed on drip zones; 3/4" is the least size permissible. Note: In certain circumstances the Town of Addison may approve the use of 'funny pipe' in the installation of pop-up heads. The Town Inspector reserves the right to determine if and when 'funny pipe' will be allowed. When authorized, use only Toro pipe with Toro barb fittings, and provide a minimum of 24" of 'funny pipe' between the threaded fitting and the head.

11. Fittings: No crosses/4-ways are permitted. Separate tees, 45's, elbows and other fittings by at least 12". Reduction tees are preferred over use of single reducer bushings. Multiple reducer bushings will not be accepted. Only Spears and/or Lasco fittings are permitted. Allow 18" outside of sleeve before the first fitting. No 45-degree elbows on 1" and larger pipe are allowed.

12. Valves:

A. Master Valves: Every point of connection to the water supply system shall have an Weathermatic 11000 series valve as the Master Valve, housed in a standard (large) Armor rectangular plastic valve box with 4-6" of 1" washed gravel placed underneath the valve in such a manner as to prevent soil infiltration into the box. The gravel must be 2" from the bottom of the valve body. A minimum of 3" of the valve box must extend below the bottom of the valve. If necessary, use valve box extensions. Use a good quality filter fabric to close off any openings between the valve box and PVC pipe. Use concrete pavers or bricks placed under the edges of valve box for stability. Note: The valve box must not rest on pipe. A Blue wire shall be used as the station wire for the Master Valve.

B. Station Valves: Only Weathermatic 11000 series valves are permitted. A Ball Valve will be installed before every station or zone valve. They are to be located within standard (large) Armor rectangular plastic valve boxes with 4-6" of 1" washed gravel placed underneath the valve in such a manner as to prevent soil infiltration into the box. The gravel must be 2" from the bottom of the valve body. A minimum of 3" of valve box must extend below bottom of valve. If necessary, use valve box extensions. Use a good quality filter fabric to close off any openings between the valve box and PVC pipe. Use concrete pavers or bricks placed under the edges of the valve box for stability. Note: The valve box must not rest on pipe.

C. Ball Valves: Female threaded plastic Spears or Lasco ball valves with a positive T-handle cut off must be installed on every 200' of mainline for isolation purposes. A ball valve is also required to be installed before every station valves. Use 10" Armor valve box with a minimum of 3" extending below the bottom of valve and fill to the bottom of valve with a minimum of 4-6" of 1" washed gravel placed underneath the valve in such a manner as to prevent soil infiltration into the box. A minimum of 3" of the valve box must extend below the bottom of valve. If necessary, use valve box extensions. Use concrete pavers or bricks placed under the edges of the valve box for stability. Note: The valve box must not rest on pipe.

D. Quick Coupler Valves: Use only Rain Bird single lug 3/4" quick coupling valves with a metal top. They are to be connected to a threaded fitting. Teflon tape and appropriate length of gray

schedule 80 nipples and schedule 40 fittings are to be used for the swing joint. Secure to 18" long by 1/2" thick steel rebar with a stainless-steel worm screw clamp. House QCV in a 10" round plastic Armor valve box with a purple lid. Install a Spears ball valve prior to each QCV. Bricks or pavers need to be installed under the edges of valve boxes for stability. Backfill the bottom of the box with 1" washed gravel half way up body of valve. Note: The valve box must not rest on pipe.

E. Flowmeters: Purchase from a certified Rainbird supplier and install appropriately sized Creative Sensor Technology (CST) flow meter. Follow all installation instructions as approved by the manufacturer and Rainbird. House in a standard (large) Armor rectangular plastic valve box with 4-6" of 1" washed gravel placed underneath the valve in such a manner as to prevent soil infiltration into the box. Use concrete pavers or bricks placed under the edges of valve box for stability. Note: The valve box must not rest on pipe. The irrigation contractor must also purchase from Rain Bird and install PE-39 shielded flow meter cable and install within continuous 3/4" or larger gray PVC conduit with 6" or larger J-boxes placed every 200' or where 360 degrees of fittings are installed; only gray sweep fittings are permitted. Only a continuous run of cable is allowed; no splices will be allowed except at the point of connection to the flow meter. Connections at the flow meter must first be soldered and then water proofed within a 3-M DBY connector. Note: Certain requirements must also be met regarding installation order and distances of separation between DCA, flow meter, master valve and the first fitting. It is the responsibility of the irrigation contractor to adhere to these requirements. At final walk through, proper operation of the flow meter at the controller must be demonstrated by the irrigation contractor.

13. Heads: All heads shall be installed using polyethylene green nipples (3/4"x6" for rotors and 1/2"x6" for pop-ups) screwed into threaded fittings unless noted otherwise. No swing joints on 4" pop-ups or rotors will be allowed. Note: In certain circumstances the Town of Addison may approve the use of 'funny pipe' in the installation of pop-up heads. The Town Inspector reserves the right to determine if and when 'funny pipe' will be allowed. When authorized, use only Toro pipe with Toro barb fittings, and provide a minimum of 24" of 'funny pipe' between the threaded fitting and the head.

A. Pop-ups – Only Toro 570ZXF series are permitted. Install $\frac{3}{4}$ " above the finished grade.

a. 4-inch pop-ups: Bermuda and Zoysia turf, for tree bubblers within turf areas use Hunter PCN 10 bubbler nozzles on spray heads.

b. 6-inch pop-ups with no side inlet: St. Augustine and Fescue turf and very low ground cover (less than 6" at mature height).

c. 12-inch pop-ups with side inlet: Ground cover and low growing shrubs. The ground cover and shrubs should not be more than 12" at maturity. The Town Inspector reserves the right to determine if and when side inlets installed using 'funny pipe' verses the bottom inlet will be allowed.

B. Nozzles: Only fixed arc Toro MPR Plus nozzles shall be acceptable unless otherwise noted in these specifications.

C. Bubblers - Use $\frac{1}{2}$ " Schedule 80 risers with shrub adapter and Hunter PCN 10, 1 gpm, bubbler nozzles for all tree wells with tree grates. Risers shall be a minimum of 2" below bottom of tree grates with nozzle 2" above mulch. Use (2) bubblers 180-degree opposed.

D. Rotors - Only Hunter PGP series are permitted, unless otherwise specified by the Town of Addison. Install $\frac{3}{4}$ " above finished grade.

14. Drip: Use Netafim products only. Use 0.6 gph pressure compensated self flushing dripper tubing with 12" emitter spacing. Install appropriate pressure reducer and filter in one standard rectangular plastic valve box and a ball valve (see Section 12 C) and station valve (see Section 12 B) in another standard rectangular plastic valve box. Use 17 mm Netafim barbed fittings. Secure tubing to the ground every 3' or less with heavy duty jute netting pins from Dallas Bag and Burlap or approved equal. Use air relief valves housed in 10" round valve boxes. Use a 12" Toro pop-up with the nozzle totally closed as an 'indicator flag' on each drip zone. Adhere to all Netafim design and installation specifications.

Note: Drip will not be authorized for installation on turf applications.

Note: On bed applications, do not bury the drip lines. Install them on the soil surface and secure them with the pins specified above. Space the pins at a distance adequate enough to keep the tubing flat and in

place; do not exceed 3'. Cover the tubing with a minimum of 3" of shredded hardwood mulch.

15. Risers: Use Schedule 80 PVC risers with Weathermatic LXS Series shrub head adapters, a Schedule 40 threaded coupling, and a ½"x6" green poly cut-off nipple screwed into the threaded fitting in the ground. The irrigation inspector reserves the right to determine placement of risers versus pop-ups.

16. Wiring: All wires will be 14-gauge UF. Station wires will be red. Common wires will be white. Master valve wires will be blue. Anytime the wiring changes direction, such as at an elbow or a tee, allow a loop of at least 12 inches alongside the fitting at that location. Only continuous wire runs are permissible. Wire should follow the main line where possible and lay along a single side not crossing over lateral lines. Wire is to be placed under the mainline with 2" of dirt between wire and pipe.

17. Wire Connectors: Use only DBY connectors for all field wire splices other than at the station valves themselves. Allow at least 36" of pigtailed wire at each splice. Use King One Step tan colored connectors for all station valve splices. All station valve splices are to be housed in standard (large) Armor rectangular plastic valve boxes. All field splices are to be in 10" round Armor plastic valve boxes or standard rectangular Amor plastic valve boxes at the discretion of the Town's representative.

18. Backfilling: Prior to any backfilling of trenches, an inspection by the Town's irrigation representative must take place and any necessary changes implemented; otherwise manual excavation to enable proper inspection will be necessary. Use clean and approved topsoil to backfill all pipe to a depth. All heads and boxes are to be backfilled to grade with clean topsoil. No rocks greater than 1" in size are allowed. Compact trenches to alleviate settling. Minimal depth of coverage is 12".

19. Valve sequencing must be performed by the contractor and in an order approved by the Town Irrigation Inspector. At least 12" of extra station wiring within the bottom of the pedestal is necessary for each zone and must be of neat and orderly appearance.

20. Any deficiencies in coverage noted by the Town's irrigation inspector will be rectified at the cost of the contractor.

21. Controller: A Town irrigation representative will determine the type of controller to be used. All controllers shall have a concrete pad of 36"x36"x6". Pad will be set at 3" above final grade. Install the controller after the concrete pad is completely cured (two days). Use only appropriately sized stainless-steel bolts, washers and nuts to secure the controller to the concrete pad. All wiring is to enter the pedestal via appropriately sized PVC sweep elbows extending at least 1" through and 6" out from under the pad. Control/Master Valve wiring, flow meter wiring and 120-V service wiring are to be separated with each having its own access elbow. An additional spare ¾" sweep elbow for phone service is to be installed as well. All national and local codes must be followed during the installation.

A. A/C controller – Only an appropriately sized Rain Bird ESP12LXMEF controller w/ Flow Smart Module with the number of required ESPLXMSM 8 or 12 modules for the specific application housed in an ESPLXMMSS Stainless Steel Cabinet (for EXP-LX modular controller) with a LXMMSSPED Stainless Steel Pedestal is permitted. Components may only be purchased from a certified Rain Bird supplier. The entire installation must conform to manufacturer's and Rain Bird's specifications. Requirements include the installation of Rain Bird approved grounding configurations. Each controller must have a functional wireless Mini-click freeze and rain sensor with a Hunter bypass switch installed in an approved location and by an approved method. The location of the sensors shall be determined by the Town's irrigation inspector.

B. Battery and/or Solar Operated Controllers - Only LEIT controllers will be acceptable. Install rain and freeze sensors on these controllers with SKIT8821-4 installation kit. Install on galvanized thick wall galvanized poles and set controller panel to height above finished grade to be determined by Town's representative.

C. Rain Bird Central Control: Only an appropriately sized Rain Bird ESP12LXMEF controller w/ Flow Smart Module with the number of required ESPLXMSM 8 or 12 modules for the specific application housed in an ESPLXMMSS Stainless Steel Cabinet (for EXP-LX modular controller) with a LXMMSSPED Stainless Steel Pedestal is permitted. The controller must include all necessary hardware, to include but not limited to a

proper sized Omni antenna, cables, etc., and/or software to ensure reliable radio communication and operation with the Town's central control system. Refer to the below-listed controller configurations. Radio is the mode of communication to be utilized. Components may only be purchased from a certified Rain Bird supplier.

Single (Client) Controller:

Single stand-alone (Client) controller with (Server) base controller within operational distance:

Note: The radio signal strength at the (Client) controller location shall be tested prior to purchase. Poor signal strength may necessitate another configuration.

Install RS-232 Comm cartridge

Install 902-928 MHZ SS Radio Modem (RB-SS-TN9B)

Install appropriately sized 900 MHz Omni antenna and brackets

Use all necessary and proper cables/connectors for installation

Multiple Controllers:

1) To link two (2) side by side controllers with base controller within operational distance:

Controller# 1:

Install RS-232 Comm cartridge and include an

IQFSCMLXME Flow Smart Connection Module

Install 902-928 MHZ SS Radio Modem (RB-SS-TN9B)

Install appropriately sized 900 MHz Omni antenna

Use all necessary and proper cables/connectors for the installation

Controller# 2:

Install RS-232 cartridge and include an

IQFSCMLXME Flow Smart Connection Module

Connect two controllers using PE-39 cable

Use all necessary and proper cables/connectors for the installation

2) For Server/Client Configuration for multiple controllers at multiple locations w/ radio communication:

Note: A radio survey **MUST** be completed by Rain Bird personnel prior to purchase/use of radio product.

Server Controller:

Install a 3G GPRS VPN communication cartridge and properly sized external GP antenna (IQEXTANTGP)
Install 902-928 MHZ SS Radio Modem (RB-SS-TN9B)
Install appropriately sized 900 MHz Omni antenna
Use all necessary and proper cables/connectors for the installation

Client Controller:

Install RS-232 Comm cartridge
Install 902-928 SS Radio Modem (RB-SS-TN9B)
Install appropriately sized 900 MHz Omni antenna
Use all necessary and proper cables/connectors for the installation

Controllers shall be connected to a Creative Sensor Technology (CST) flow meter (same size as the mainline), utilizing PE-39 shielded cable (see section '12. Valves:', subsection 'E. Flowmeters' above for specifics to this installation), and where needed/required an ISF-304-00 CST Isoflow two output flow sensor isolator w/ leads or a CBF-100 CST Combiflow. The entire installation must conform to manufacturer's and Rain Bird's specifications and be approved by the Town's irrigation inspector prior to and be inspected during installation. Requirements include the installation of Rain Bird approved grounding configurations and distances of separation from water meter to DCA to master valve to flow meter and the first fitting. Each controller must have a functional Mini-click freeze and rain sensor with a Hunter bypass switch installed in an approved location and by an approved method.

22. Communication is the key. **If you are unsure of anything, CALL** Raul Rivera, Town of Addison Parks Department Irrigation Supervisor: Cell (214) 208-8776.

SECTION IS

ADDITIONAL INSURANCE REQUIREMENTS

TOWN OF ADDISON, TEXAS
TOWN OF ADDISON INSURANCE GUIDELINES

REQUIREMENTS

Contractors performing work on TOWN OF ADDISON property or public right-of-way shall provide the TOWN OF ADDISON a certificate of insurance or a copy of their insurance policy(s) (and including a copy of the endorsements necessary to meet the requirements and instructions contained herein) evidencing the coverages and coverage provisions identified herein within ten (10) days of request from TOWN OF ADDISON. Contractors shall provide TOWN OF ADDISON evidence that all subcontractors performing work on the project have the same types and amounts of coverages as required herein or that the subcontractors are included under the contractor's policy. Work shall not commence until insurance has been approved by TOWN OF ADDISON.

All insurance companies and coverages must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must have a A.M. Best's rating A:VII or greater.

Listed below are the types and minimum amounts of insurances required and which must be maintained during the term of the contract. TOWN OF ADDISON reserves the right to amend or require additional types and amounts of coverages or provisions depending on the nature of the work.

TYPE OF INSURANCE	AMOUNT OF INSURANCE	PROVISIONS
1. Workers' Compensation Employers' Liability to include: (a) each accident (b) Disease Policy Limits (c) Disease each employee	Statutory Limits per occurrence Each accident \$1,000,000 Disease Policy Limits \$1,000,000 Disease each employee \$1,000,000	TOWN OF ADDISON, and Cobb, Fendley & Associates, Inc. to be provided a <u>WAIVER OF SUBROGATION AND 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A:VII rated or above.
2. Commercial General (Public) Liability to include coverage for: a) Bodily Injury b) Property damage c) Independent Contractors d) Personal Injury e) Contractual Liability	Bodily Injury/Property Damage per occurrence \$1,000,000, General Aggregate \$2,000,000 Products/Completed Aggregate \$2,000,000, Personal Advertising Injury per occurrence \$1,000,000, Medical Expense 5,000	TOWN OF ADDISON, and Cobb, Fendley & Associates, Inc. to be listed as <u>ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A:VII rated or above.
3. Business Auto Liability to include coverage for: a) Owned/Leased vehicles b) Non-owned vehicles c) Hired vehicles	Combined Single Limit \$1,000,000 per occurrence for bodily injury and property damage	TOWN OF ADDISON, and Cobb, Fendley & Associates, Inc. to be listed as <u>ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A:VII-rated or above.
4. Umbrella or Excess Liability Policy over Commercial General Liability and Automobile Liability limits of \$1 million per occurrence	Minimum \$4 million per occurrence excess \$1 million underlying per occurrence	TOWN OF ADDISON, and Cobb, Fendley & Associates, Inc. to be listed as <u>ADDITIONAL INSURED and provided 30 DAY NOTICE OF CANCELLATION</u> or material change in coverage. Insurance company must be A:VII-rated or above.

Certificate of Liability Insurance forms (together with the endorsements necessary to meet the requirements and instructions contained herein) may be **faxed** to the Purchasing Department: **972-450-7074** or **emailed to: purchasing@addisontx.gov**. Questions regarding required insurance should be directed to the Purchasing Manager.

With respect to the foregoing insurance,

1. All liability policies shall contain no cross liability exclusions or insured versus insured restrictions applicable to the claims of the Town of Addison.
2. All insurance policies shall be endorsed to require the insurer to immediately notify the Town of Addison, Texas of any material change in the insurance coverage.
3. All insurance policies shall be endorsed to the effect that the Town of Addison, Texas will receive at least thirty (30) days' notice prior to cancellation or non-renewal of the insurance.
4. All insurance policies, which name the Town of Addison and Kimley-Horn and Associates, Inc. as an additional insured, must be endorsed to read as primary coverage regardless of the application of other insurance.
5. Insurance must be purchased from insurers that are financially acceptable to the Town of Addison and licensed to do business in the State of Texas.

All insurance must be written on forms filed with and approved by the Texas Department of Insurance. Upon request, Contractor shall furnish the Town of Addison with complete copies of all insurance policies certified to be true and correct by the insurance carrier.

This form must be signed and returned with your quotation. You are stating that you do have the required insurance and if selected to perform work for TOWN OF ADDISON, will provide the certificates of insurance (and endorsements) with the above requirements to TOWN OF ADDISON within 10 working days.

A CONTRACT/PURCHASE ORDER WILL NOT BE ISSUED WITHOUT EVIDENCE AND APPROVAL OF INSURANCE.

AGREEMENT

I agree to provide the above described insurance coverages within 10 working days if selected to perform work for TOWN OF ADDISON. I also agree to require any subcontractor(s) to maintain insurance coverage equal to that required by the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The Town accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

Project/Bid# _____

Company: _____

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Printed Name: _____

Signature: _____ **Date:** _____