

EXHIBIT A

Primary Responses

Error: Check cell(s) B8

Status	#	Item	Description	Quantity Required	Unit of Measure	Numeric	Total Cost
						Unit Price	

General Improvements

Error: Missing value for 'Unit Price' in cell I8	#1-1	Mobilization [Bonds, Insurance, Start-up, Etc. (Max. 5% of Contract)]	Mobilization - Demobilization	1	Lump Sum		-
Error: Missing value for 'Unit Price' in cell I9	#1-2	Prepare ROW	Includes clearing and grubbing (trees under 6-inches in diameter)	1	Lump Sum		-
Error: Missing value for 'Unit Price' in cell I10	#1-3	Unclassified Excavation (Roadway)	.	1600	Cubic Yard		-
Error: Missing value for 'Unit Price' in cell I11	#1-4	Embankment	.	100	Cubic Yard		-
Error: Missing value for 'Unit Price' in cell I12	#1-5	Prepare and Implement SWPPP and Install and Remove Erosion Control BMP	Includes installing and removing erosion control BMP	1	Lump Sum		-
Error: Missing value for 'Unit Price' in cell I13	#1-6	Stockpile and Spread 4- Inch Depth Topsoil	.	2210	Square Yard		-
Error: Missing value for 'Unit Price' in cell I14	#1-7	Traffic Control	.	14	Month		-
Error: Missing value for 'Unit Price' in cell I15	#1-8	Project Signs	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I16	#1-9	Tree Removal (6"-12")	.	3	Each		-
Error: Missing value for 'Unit Price' in cell I17	#1-10	Tree Removal (13"-18")	.	1	Each		-
Error: Missing value for 'Unit Price' in cell I18	#1-11	Asphalt Pavement Removal	.	190	Square Yard		-
Error: Missing value for 'Unit Price' in cell I19	#1-12	Concrete Removal	.	7590	Square Yard		-
Error: Missing value for 'Unit Price' in cell I20	#1-13	Adjust Ex San Sew. Cleanout to Grade	.	3	Each		-
Error: Missing value for 'Unit Price' in cell I21	#1-14	Adjust Ex Water Valve to Grade	.	14	Each		-
Error: Missing value for 'Unit Price' in cell I22	#1-15	Adjust Sanitary Sewer Manhole to Grade	.	3	Each		-
Error: Missing value for 'Unit Price' in cell I23	#1-16	Stone Wall (Remove)	.	25	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I24	#1-17	Survey and construction staking	.	1	Lump Sum		-
Error: Missing value for 'Unit Price' in cell I25	#1-18	Video Project Area	.	1	Lump Sum		-
Basket Total							\$ 0.00

Paving Improvements

Error: Missing value for 'Unit Price' in cell I29	#2-1	8" Compacted Subgrade	.	4130	Square Yard		-
Error: Missing value for 'Unit Price' in cell I30	#2-2	6" Flexbase (Type A, Grade 1-2)	.	5230	Square Yard		-
Error: Missing value for 'Unit Price' in cell I31	#2-3	2" Type D HMAC	.	24	Tonnage		-
Error: Missing value for 'Unit Price' in cell I32	#2-4	4" Type B HMAC	.	44	Tonnage		-
Error: Missing value for 'Unit Price' in cell I33	#2-5	Prime Coat (0.2 Gal/SY)	.	42	Gallon		-

Error: Missing value for 'Unit Price' in cell I34	#2-6	8" Reinf. Concrete Pavement with 6" Integral Curb	.	4720	Square Yard		-
Error: Missing value for 'Unit Price' in cell I35	#2-7	8" Reinf. Concrete Integral Stained Pavement	.	500	Square Yard		-
Error: Missing value for 'Unit Price' in cell I36	#2-8	Reinforced Concrete Pavement Street Headers	.	209	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I37	#2-9	5" Stained/Stamped Concrete	.	84	Square Yard		-
Error: Missing value for 'Unit Price' in cell I38	#2-10	5" Reinf. Concrete Sidewalks	.	1760	Square Yard		-
Error: Missing value for 'Unit Price' in cell I39	#2-11	Concrete Sidewalk Lug	.	122	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I40	#2-12	6-9" Reinf. Concrete Curb (Sidewalk)	.	290	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I41	#2-13	6" Reinf. Concrete Curb and Gutter	.	32	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I42	#2-14	6" Concrete Pavement (Driveway) (High Early Strength Concrete 4,200psi @ 3 day)	.	230	Square Yard		-
Error: Missing value for 'Unit Price' in cell I43	#2-15	8" Concrete Pavement (Driveway) (High Early Strength Concrete 4,200psi @ 3 day)	.	1240	Square Yard		-
Error: Missing value for 'Unit Price' in cell I44	#2-16	Barrier Free Ramp (Type 1)	.	20	Each		-
Error: Missing value for 'Unit Price' in cell I45	#2-17	Barrier Free Ramp (Type 2)	.	1	Each		-
Error: Missing value for 'Unit Price' in cell I46	#2-18	CIP Integral Concrete Retaining Wall	.	100	Square Foot		-
Error: Missing value for 'Unit Price' in cell I47	#2-19	Pedestrian Rail (TxDOT Type F)	.	125	Linear Foot		-
Basket Total							\$ 0.00

Signing and Pavement Markings Improvements

Error: Missing value for 'Unit Price' in cell I51	#3-1	Reflective Pavement Mark (W) 4" (SLD)	.	3120	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I52	#3-2	Reflective Pavement Mark (W) 4" (DASH)	.	240	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I53	#3-3	Reflective Pavement Mark (W) 6" (SLD)	.	350	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I54	#3-4	Reflective Pavement Mark (W) 24" (SLD)	.	170	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I55	#3-5	Reflective Pavement Mark (Y) 4" (DASH)	.	490	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I56	#3-6	Reflective Pavement Mark (Y) 4" (SLD) (DBL)	.	900	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I57	#3-7	Reflective Pavement Mark (G) 24" (SLD)	.	520	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I58	#3-8	Reflective Pavement Mark (W) (ARROW)	.	26	Each		-
Error: Missing value for 'Unit Price' in cell I59	#3-9	Reflective Pavement Mark (W) (BIKE)	.	26	Each		-
Error: Missing value for 'Unit Price' in cell I60	#3-10	Reflective Pavement Mark (W) (SYMBOL)	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I61	#3-11	Reflective Pavement Mark (W) (WORD)	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I62	#3-12	Raised Pavement Marker (TYP II B-B)	.	4	Each		-
Error: Missing value for 'Unit Price' in cell I63	#3-13	Roadside Sign Assembly (Relocation)	.	14	Each		-

Error: Missing value for 'Unit Price' in cell I64	#3-14	Roadside Sign Assembly (New Installation)	.	18	Each		-
Basket Total	\$ 0.00						

Drainage Improvements

Error: Missing value for 'Unit Price' in cell I68	#4-1	18" RCP (CL III)	.	395	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I69	#4-2	21" RCP (CL III)	.	35	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I70	#4-3	Trench Safety System for Storm Drain Line	.	430	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I71	#4-4	Replace Inlet Top	.	1	Each		-
Error: Missing value for 'Unit Price' in cell I72	#4-5	4" Concrete Riprap	.	2	Cubic Yard		-
Error: Missing value for 'Unit Price' in cell I73	#4-6	Recessed 5' Curb Inlet	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I74	#4-7	Recessed 10' Curb Inlet	.	7	Each		-
Error: Missing value for 'Unit Price' in cell I75	#4-8	Recessed 15' Curb Inlet	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I76	#4-9	Std. 15' Curb Inlet	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I77	#4-10	Std. 10' Curb Inlet	.	1	Each		-
Basket Total	\$ 0.00						

Water Line Improvements

Error: Missing value for 'Unit Price' in cell I81	#5-1	Furnish and Install 10" Water Line Lowering	.	260	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I82	#5-2	Trench Safety System for Water Line	.	260	Linear Foot		-
Basket Total	\$ 0.00						

Lighting Improvements

Error: Missing value for 'Unit Price' in cell I86	#6-1	Pedestrian Light Fixtures	.	15	Each		-
Error: Missing value for 'Unit Price' in cell I87	#6-2	New Electrical Service	.	1	Each		-
Error: Missing value for 'Unit Price' in cell I88	#6-3	3 #10 Conductor, #10 Ground for Street Lighting	.	1560	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I89	#6-4	Duct Bank for Pedestrian Lighting	.	1560	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I90	#6-5	Duct Bank with Empty Conduit for Fiber	.	1720	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I91	#6-6	Pull Boxes for Fiber	.	7	Each		-
Error: Missing value for 'Unit Price' in cell I92	#6-7	Pull Boxes for Irrigation Controls	.	1	Each		-
Error: Missing value for 'Unit Price' in cell I93	#6-8	Pull Boxes	.	1	Each		-
Basket Total	\$ 0.00						

Landscaping and Irrigation Improvements

Error: Missing value for 'Unit Price' in cell I97	#7-1	Large Shade Trees, 3" cal.	.	3	Each		-
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Error: Missing value for 'Unit Price' in cell I98	#7-2	Ornamental Tree, 30 gal.	.	18	Each		-
Error: Missing value for 'Unit Price' in cell I99	#7-3	Shrubs, 3 gal.	.	325	Each		-
Error: Missing value for 'Unit Price' in cell I100	#7-4	Shrubs, 1 gal.	.	2548	Each		-
Error: Missing value for 'Unit Price' in cell I101	#7-5	Groundcover, 4" pot	.	480	Each		-
Error: Missing value for 'Unit Price' in cell I102	#7-6	Sod	.	6032	Square Foot		-
Error: Missing value for 'Unit Price' in cell I103	#7-7	Bed Prep/Soil Mix	.	335	Cubic Yard		-
Error: Missing value for 'Unit Price' in cell I104	#7-8	Hardwood Mulch	.	110	Cubic Yard		-
Error: Missing value for 'Unit Price' in cell I105	#7-9	Tree Root Barrier	.	60	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I106	#7-10	Bench	.	6	Each		-
Error: Missing value for 'Unit Price' in cell I107	#7-11	Trash Receptacle	.	10	Each		-
Error: Missing value for 'Unit Price' in cell I108	#7-12	Recycle Receptacle, Dome	.	10	Each		-
Error: Missing value for 'Unit Price' in cell I109	#7-13	Concrete Pads, Step Outs	.	468	Square Foot		-
Error: Missing value for 'Unit Price' in cell I110	#7-14	Water service for meter	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I111	#7-15	Meter	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I112	#7-16	Backflow	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I113	#7-17	Hydrometer	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I114	#7-18	Controller and Sensors	.	2	Each		-
Error: Missing value for 'Unit Price' in cell I115	#7-19	Wiring	.	2	Allowance		-
Error: Missing value for 'Unit Price' in cell I116	#7-20	Boxes	.	2	Allowance		-
Error: Missing value for 'Unit Price' in cell I117	#7-21	2" Sch. 40 Mainline	.	2350	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I118	#7-22	4" Sch. 40 Sleeves	.	1350	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I119	#7-23	3" Sch. 40 Sleeves	.	1700	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I120	#7-24	2" Sch. 40 Sleeves	.	1350	Linear Foot		-
Error: Missing value for 'Unit Price' in cell I121	#7-25	Turf Irrigation Area	.	1	Square Foot		-
Error: Missing value for 'Unit Price' in cell I122	#7-26	Drip Irrigation Area	.	10661	Square Foot		-
Error: Missing value for 'Unit Price' in cell I123	#7-27	Tree Irrigation Zone	.	2	Each		-
Basket Total	\$ 0.00						
Grand Total	\$ 0.00						



East College Street Improvements RFB #25-105-C

INTRODUCTION (See Specifications and Construction Plans for details)

The City of Lewisville is requesting competitive sealed bids from qualified contractors for the construction of East College Street. The project scope includes improvements to roadway infrastructure, lighting, landscaping, minor drainage, and utilities along East College Street, spanning approximately 2,100 feet from Railroad Street to Mill Street. Additionally, the construction will incorporate various supplementary elements as outlined in the plans and specifications.

BID BOND REQUIREMENTS

Bidders are required to submit a Bid Bond (with proper Power of Attorney) from a surety licensed to do business in the State of Texas, payable without recourse to the City of Lewisville, in an amount not less than five (5%) percent of the total amount of the base bid submitted to insure that the successful bidder will enter into a contract and execute all necessary bonds within ten (10) days after notice of award of the contract to them. **This bid security must be uploaded to Bonfire or**

included in the bid envelope along with the bid sheet for the bidder to be considered responsive.

The successful bidder will be required to furnish the following bonds from a surety licensed to do business in the State of Texas. These bonds, along with proper insurance papers, will be incorporated as part of the final contract documents and will remain in effect until the completion and acceptance of the project. Maintenance bonds shall be in effect based on their stated term after final acceptance of the project:

A bid bond equal to 5% of the project amount is to be included with the sealed bid; a payment bond and performance bond at the project amount and a maintenance bond for two years from the date of the final acceptance.

All bidders are notified that the qualification statement provided in the bid documents must be completed and submitted with the bid proposal. Failure to include this completed form with your bid may cause your bid to be disqualified as non-responsive.

The City is not responsible for any costs associated with the preparation of the bid from any vendor. Also, should a vendor bid an alternate; any test costs to prove equality of product will be at the expense of the vendor, not the City of Lewisville.

Each bidder is expected to inspect the site of the work and to inform himself regarding all local conditions. Ignorance of existing conditions of the site will not be a basis for any changes after the award of the bid.

Bids cannot be altered or amended after the submission deadline. Any interlineation, alteration, or erasure made before opening time must be initialed by the signee of the bid, guaranteeing authenticity.

In conformance with applicable statutes utilizing Federal Davis Bacon Wage Rates as adopted by the General Services Commission, the general prevailing wage rates in the locality in which the work is to be performed have been ascertained and such rate shall be the minimum paid for labor employed on this project; unless federal monies are used, in which case, specific wage decisions will be listed as part of the overall bid documents.

The City of Lewisville reserves the right to reject any and all bids, in whole or in part; to waive any informality in any bid. Award will be issued on the basis of lowest responsible bidder.

INSURANCE

Insurance shall be supplied by the awarded contractor within ten (10) days of notification of award, as detailed in this bid. Insurance must be approved by the City prior to the commencement of work and shall remain in effect throughout the entire duration of this project.

MISCELLANEOUS

All forms requiring either a signature or information to be filled in are to be returned with your bid. In addition, the language contained in the attached form entitled Purchase Order Terms and Conditions is made part of this request for bid through reference herein.

REQUEST FOR BIDS

Bids are to be submitted based on the specifications contained herein. Alternate bids will also be considered, provided the alternatives are clearly explained. All deviations from the specifications must be clearly identified and explained.

No telephone, email, or fax bids will be accepted. Bids may be accepted if delivered in person or by U.S. Postal Service, Federal Express, UPS, etc. or uploaded to Bonfire. The City is not

responsible for missing, lost, or late delivery. Any RFB responses received after the time set for opening will be returned to the bidder unopened.

The preparation of the bid will be at the total expense of the bidder. There is no expressed or implied obligation for the City of Lewisville to reimburse responding bidders for any expense incurred in the preparation of bids in response to this request.

The City reserves the right to reject all bids, to consider alternatives, to waive any formalities and irregularities, and to re-solicit bids. In addition, during the evaluation period, the City may, where it may serve the City's best interest, request additional information or clarifications from bidders, or allow corrections of errors or omissions.

Each bidder shall guarantee and honor its response to these specifications for a period of ninety (90) days, or until the City enters a contract with one of the bidders, whichever occurs first.

The RFB will be available to interested parties on Bonfire or may be picked up in person at the Purchasing office.

All questions pertaining to this bid must be submitted in writing via Bonfire.

Bids may be uploaded to Bonfire at <https://cityoflewisville.bonfirehub.com/portal> or a sealed RFB consisting of one (1) hard copy and one (1) PDF file on a USB flash drive, clearly marked with the RFB title and date.

**RFB: 25-105-C
EAST COLLEGE STREET IMPROVEMENTS**

Delivery address:
City of Lewisville
Finance Administration – Purchasing Division
Attn: Janine Carpenter, Senior Buyer
751 E Valley Ridge Blvd
Lewisville, TX 75057

Regardless of the chosen delivery method, it is the sole responsibility of contractor to ensure their complete submittal is inside the Finance Administration Department – Purchasing Division before the required time. The City will not be responsible for, without limitation, any delays occasioned by third parties. Late or emailed submittals shall not be accepted, without exception.

PRE-BID

A pre-bid conference will be held at the date and time specified on Bonfire. While attendance of the pre-bid conference is not mandatory, it is recommended due to the nature of the project.

PROPOSAL

City of Lewisville
Purchasing Office
151 West Church Street
P.O. Box 299002
Lewisville, Texas 75029-9002

EAST COLLEGE STREET IMPROVEMENTS PROJECT NO. G1817

Proposal of _____
(hereinafter called Bidder), a corporation organized and existing under the laws of the State of _____, a partnership, or an individual doing business as _____

(Strike out inapplicable terms).

To the City of Lewisville, Texas (Owner)

The undersigned Bidder, in response to the Notice to Bidders for the construction of the above project and in conformity with the bidding documents; having examined the plans, specifications, related documents and the site of the proposed work; being familiar with all of the conditions relating to the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, supplies, equipment, staking, testing, traffic control, superintendence, etc., for the construction of the project in accordance with the plans, specifications, and contract documents at the unit prices proposed herein.

The undersigned Bidder proposes, acknowledges and agrees to construct the entire project as shown on the plans, fully in accordance with the requirements of the plans, specifications, and the contract documents for the prices included in this Proposal and fully understands and agrees that the various items of material, labor and construction not specifically enumerated and provided for herein are considered subsidiary to the several items for which direct payment is specifically provided. Further, the undersigned agrees that one such subsidiary item is the protection, adjustment, maintenance, repair or replacement of all underground lines and services, whether shown on the plans or not, all to the full satisfaction of the City Engineer in a timely manner.

The undersigned Bidder agrees to begin work under the contract on or before the date specified in the written Notice to Proceed, and to fully complete the project within **420 calendar days**. It is specifically stated and understood that the entire construction including clean up shall be completed within the above stated time.

The undersigned Bidder has contacted, within 72 hours prior to bid opening, the Office of the City Engineer (972) 219-3490, and has determined that all Addenda are as follows:

Addendum No. 1 dated

(Signature)

Addendum No. 2 dated

(Signature)

Addendum No. 3 dated

(Signature)

The undersigned Bidder acknowledges that the Owner reserves the right to waive any informality and to reject any or all proposals.

The undersigned Bidder acknowledges and agrees that this Proposal shall be good and may not be withdrawn for 90 days from the date of bid opening.

The undersigned Bidder has shown unit prices and amounts and agrees that in the case of discrepancy, the unit prices shown in figures shall stand and that the amounts and total will be adjusted to correspond to the unit prices shown.

The undersigned Bidder agrees to execute the Agreement and furnish the required Performance Bond and Payment Bond within fifteen calendar days from the date of award of a contract by the City; and agrees that any delay in furnishing the signed Agreement and Bonds will result in liquidated damages being applied in accordance with Item 108.8.1. of the Standard Specifications.

The undersigned Bidder has attached and made a part of this Proposal a bid security in conformance with Item 102.5. of the Standard Specifications and in accordance with the Notice to Bidders.

A 5% contingency line item will be included with the resulting contract and purchase order for this project. The contingency shall be used at the City's discretion and only upon written approval from the City. The amount listed as a contingency is not an obligation for payment from the City. Any unused contingency is retained by the City and is not payable to the Contractor.

Submitted:

(Signature)

(Name - Typed or Printed)

(Title)

(Seal, if corporation)

(Firm Name)

(Address)

(City/County/State/Zip Code)

(Telephone Number/Include Area Code)

(Date)

(Attest)

CONTRACTOR'S QUALIFICATIONS

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

The contractor shall show they have experience with similar projects that require working in confined areas in close proximity to many physical features (fences, utility poles, guy lines, gas lines and meters, sewer manholes, cleanouts, etc.) which requires the contractor to plan work efforts and equipment needs with these limitations in mind. The contractor shall submit a list of Public Works Projects successfully completed within the last five (5) years, including the names of supervisors and type of equipment used to perform this work.

BIDDER'S QUALIFICATION STATEMENT

Project: _____

Contractor: _____

Name: _____ Title: _____

Address: _____

Phone: _____ Email: _____

Type of Business:

☐ Sole Proprietor ☐ Partnership ☐ Corporation ☐ Joint Venture Other _____

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

Principal Office Address: _____

Principal Office Contact & Phone: _____

Insurance:

Insurance Agency Name: _____

Insurance Agency Address: _____

Contact Name: _____ Phone: _____

Liability Insurance Provided and Limits of Coverage: _____

Workers Compensation Insurance Provider: _____

Surety Bonding Company (Performance & Payment: _____

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, Water Lines, 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 Work: _____

Sub-Contractor Information (use additional sheets, if needed.):

Name: _____ Phone: _____

Address: _____

Type of Work _____

List the most current completed projects like the type of work bid (use additional sheets, if necessary.)

Project: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Equipment Used: _____

Contact Name: _____ Title: _____

Email: _____ Phone: _____

Project: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Equipment Used: _____

Contact Name: _____ Title: _____

Email: _____ Phone: _____

Project: _____

Owner/Agency: _____

Year Built: _____ Contract Price: _____

Equipment Used: _____

Contact Name: _____ Title: _____

Email: _____ Phone: _____

Trade References (attach additional sheets if needed):

Company: _____ Contact: _____

Address: _____

Email: _____ Phone: _____

Company: _____ Contact: _____

Address: _____

Email: _____ Phone: _____

Company: _____ Contact: _____

Address: _____

Email: _____ Phone: _____

Bank References (attach additional sheets if needed):

Institution: _____ Contact Name: _____

Address: _____ Phone: _____

Financial statements are not required as part of this bid package, however a balance sheet and income statement from the previous fiscal year shall be required from the apparent low bidder to be reviewed and approved by the Finance Director prior to contract award.

Claims and Suits (If the answer to any of the questions is yes, please attach details):

Has your organization ever failed to complete any work awarded to it? ☐ Yes ☐ No

Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or its officers? ☐ Yes ☐ No

Has your organization filed any lawsuits or requested arbitration regarding construction contracts within the last five years? ☐ Yes ☐ No

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?
☐ Yes ☐ No

PROPOSED SUBCONTRACT BREAKDOWN

1.	Subcontractor	_____
	Address	_____
	Phone #	_____
	Description of Work	_____
2.	Subcontractor	_____
	Address	_____
	Phone #	_____
	Description of Work	_____
3.	Subcontractor	_____
	Address	_____
	Phone #	_____
	Description of Work	_____
4.	Subcontractor	_____
	Address	_____
	Phone #	_____
	Description of Work	_____

Reference is made to Item 21 on Page SS-11

LIST OF SUPPLIERS

1.	Item Supplied	_____
	Supplier	_____
	Address	_____
	Phone #	_____
2.	Item Supplied	_____
	Supplier	_____
	Address	_____
	Phone #	_____
3.	Item Supplied	_____
	Supplier	_____
	Address	_____
	Phone #	_____
4.	Item Supplied	_____
	Supplier	_____
	Address	_____
	Phone #	_____

PERFORMANCE BOND

STATE OF TEXAS
COUNTY OF DENTON

KNOW ALL MEN BY THESE PRESENTS: That _____ of the City of _____, County of _____, and State of _____, as Principal, and _____ authorized under the laws of the State of Texas to act as Surety on bonds for Principal, are held and firmly bound unto the City of Lewisville (Owner), in the penal sum of _____ Dollars (\$_____) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract (Contract) with the Owner, dated the ____ day of _____, 20____ to construct:

EAST COLLEGE STREET IMPROVEMENTS PROJECT NO. G1817

which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform said Contract and shall in all respects duly and faithfully observe and perform all and singular the covenants, conditions and agreements in and by said Contract agreed and covenanted by the Principal to be observed and performed, and according to the true intent and meaning of said Contract and the Plans and Specifications hereto annexed, then this obligation shall be void; otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications, or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20__.

Principal

Surety

By:

By

Title:

Title

Address:

Address:

The name and address of the Resident Agent of Surety is:

Bond Number _____

PAYMENT BOND

**STATE OF TEXAS
COUNTY OF DENTON**

KNOW ALL MEN BY THESE PRESENTS: That _____ of the City of _____, County of _____, and State of _____, as Principal, and _____ authorized under the laws of the State of Texas to act as Surety on bonds for Principal, are held and firmly bound unto the City of Lewisville (Owner), in the penal sum of _____ Dollars (\$_____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract (Contract) with the Owner, dated the _____ day of _____, 20____ to construct:

**EAST COLLEGE STREET IMPROVEMENTS
PROJECT NO. G1817**

which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the work provided for in said Contract, then, this obligation shall be void; otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20____.

Principal	Surety
By:	By
Title:	Title
Address:	Address:

The name and address of the Resident Agent of Surety is:

MAINTENANCE BOND

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS:

That we, _____
(hereinafter called **Principal**), and _____, a corporation
organized under the laws of the State of _____ and authorized to do a surety business in the State
of Texas, (hereinafter called **Surety**), are held and firmly bound unto the City of Lewisville, Texas
(hereinafter called the **City**) in the full and just sum of _____,
lawful money of the United States of America, for the payment of which sum, well and truly to be made,
we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally,
firmly by these presents.

WHEREAS, said **Principal** has performed _____
improvements, which have been or are about to be completed and accepted by the **City** for the project
known as:

EAST COLLEGE STREET IMPROVEMENTS PROJECT NO. G1817

AND WHEREAS, it is required that the **Principal** should guarantee the project from defects
caused by faulty or defective materials, workmanship, or design for a period of two years from and after
the date of acceptance of the completed project by the **City**.

NOW, THEREFORE, if the **Principal** shall for a period of two years from and after the date of
acceptance of the completed project by the **City** replace any and all defects arising in said work whether
resulting from faulty or defective materials, workmanship, or design, then the above obligation shall be
null and void; otherwise the obligation shall remain in full force and effect for two years from the date of
acceptance of the completed project by the **City**.

The **City** shall notify the **Principal** in writing of any defects for which the **Principal** is
responsible and shall specify in said notice a reasonable time within which the **Principal** shall have to
correct said defects. If the **Principal** fails to correct said defects within the time specified in said notice,

the **City**, in its discretion, may permit the **Surety** to correct said defects. If the **City** allows the **Surety** to correct said defects, the **Surety** shall have sixty (60) days thereafter within which to take such action as it deems necessary to insure performance of the **Principal's** obligation.

If such defects are not corrected after the time period specified in the notice or after the expiration of the sixty (60) day time period, whichever is applicable, the **City** shall have the right to correct the defects, and the **Principal** and **Surety**, jointly and severally, shall pay all costs and expenses incurred by the **City** in correcting the defects, including, but not limited to, the engineer, legal and other costs, together with any damages either direct or consequential, which the **City** sustains, or may sustain, on account of the **Principal's** failure to correct the defects. In addition, the **City** shall have the right to contract for the correction of said defects and, upon acceptance of a bid in accordance with the **City's** normal bidding process, the **Principal** and **Surety** shall become immediately liable for the amount of the bid. In the event that the **City** commences legal proceedings for the collection thereof, interest shall accrue on said amount at the rate of six (6) percent per annum, beginning at the commencement of said legal proceedings.

If the City commences suit for collection of any sums due hereunder, the **Principal** and **Surety**, jointly and severally, agree to pay all costs and expenses incurred by the **City**, including, but not limited to, attorney's fees.

IN WITNESS WHEREOF, the parties have caused this instrument to be signed and sealed by their respective authorized officers this _____ day of _____ 20__.

Principal: _____

Surety: _____

By: _____

By: _____

_____, *Attorney-in-Fact*

Address: _____

Address: _____

Witness as to Principal

**CITY OF LEWISVILLE
PURCHASING DIVISION**

BOND REQUIREMENTS AND RETAINAGE

BONDS

The successful bidder will be required to furnish the following bonds from a surety licensed to do business in the State of Texas. These bonds, along with proper insurance papers, will be incorporated as part of the final contract documents and will remain in effect until the completion and acceptance of the project. Maintenance bonds shall be in effect based on their stated term after final acceptance of the project:

Project amount \$10,001 to \$24,999 – a payment bond at the project amount and a maintenance bond for one year from the date of final payment.

Project amount \$25,000 to \$99,999 – a payment bond at the project amount and a maintenance bond for two years from the date of the final payment.

Project amount \$100,000 and greater – a bid bond equal to five percent (5%) of the project amount is to be included with the sealed bid; a payment bond and performance bond at the project amount and a maintenance bond for two years from the date of the final payment.

RETAINAGE

Retainage will be based on the following: Fifteen percent (15%) retainage for contracts up to \$25,000; ten percent (10%) retainage for contracts more than \$25,000 and less than \$400,000; five percent (5%) retainage for contracts in excess of \$400,000.

**CITY OF LEWISVILLE
PURCHASING DIVISION**

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS: These instructions apply to all bids and become a part of the terms and conditions of any bid submitted.

BIDS must not be faxed, but are to be submitted to the City in one of the following manners:

- A. **Electronic Receipt:** Bidders are encouraged to submit bids to the City through Bonfire. The City is a member of this electronic bidding platform and the submittal of bids to the City is at no cost to the bidder. The internet site is www.gobonfire.com.

or

- B. **Paper Bid Receipt:** Paper bids may be submitted to the City. Bidders are to submit the original and one PDF copy of the bid on a flash drive in a sealed envelope to the Purchasing Division prior to response due date/time. The sealed envelope is to be marked on the outside with the bidder's name, address, the bid invitation number, and closing date recorded on the bottom left corner of the envelope.

Address to:

City of Lewisville
Finance Administration - Purchasing Division
151 W. Church St.
Lewisville, Texas 75057

Sealed bids must be submitted in sufficient time as to be received and time stamped at the above location on or before the published bid date and time shown on the bid invitation. Bids received after submission deadline shall be returned unopened and will be considered void and unacceptable. The City of Lewisville is not responsible for lateness of mail carrier, etc.

BID: The bidder should quote its lowest and best price, F.O.B. destination on each item bid. If delivery and shipping quantities affect unit bid price, multiple bids may be made so as to indicate "price break" quantities in order for the City to determine maximum economic benefits. Pricing for paper bids shall be entered on the Bid Sheet in ink or typewritten. Totals shall be entered in the "Total Price" column of the Bid Sheet. In all cases of discrepancy between unit price and extended price, the unit price will be presumed to be correct.

MAKE-MODEL Items must be the best and latest model available of the type specified. If the bid invitation indicates a specific brand of product, the brand listed is deemed to be descriptive and not restrictive and is used to indicate the type and quality level desired for comparison purposes. Bidders may offer an approved equal to the brand listed, unless otherwise noted. The City shall make the final determination as to the brand offered being an approved equal to the brand listed. A Complete catalog or brochure showing in detail the item offered must accompany the bid.

SPLIT-AWARD: Bidders may furnish pricing for all or any portion of the bid invitation. Unless the bidder specifies otherwise in his bid, the City may award the contract for any item or group of items shown on the bid invitation.

BID FORMS: Bids submitted on other than City forms, whether electronic or paper, or with different terms or provisions may not be considered as responsive bids.

Bids must be held firm for ninety (90) days to allow for evaluation unless otherwise noted in the bid document.

F.O.B./DAMAGE: Quotations shall be bid F.O.B. Inside Delivery, Municipal Facility, Lewisville, Texas, and shall include all delivery and packaging costs. The City of Lewisville assumes no liability for goods delivered in damaged or unacceptable condition. The successful bidder shall handle all claims with carriers, and in case of damaged goods, shall ship replacement goods immediately upon notification by the City of damage.

INVOICES: Invoices must be submitted by the successful bidder in duplicate to the City of Lewisville Accounts Payable, P O Box 299002, Lewisville, TX 75029-9002 or may be emailed to: accountspayable_col@cityoflewisville.com.

TAXES: The City of Lewisville is exempt from Federal Manufacturer's Excise, and State Sales taxes. TAX MUST NOT BE INCLUDED IN BID. Tax exemption certificates will be executed by the City and furnished upon request.

PRICING: Bids should be firm. If the bidder, however, believes it necessary to base its price on price adjustment, such a bid may be considered, but only as an alternate bid.

PAYMENT TERMS: Payment terms are net 30 days after the goods are provided or services are completed, as required, or a correct invoice is received, whichever is later.

DELIVERY PROMISE - PENALTIES: Bids MUST show the number of calendar days required to place the materials in the possession of the City. DO NOT quote shipping dates. Consistent failure of a bidder to meet his delivery promises without valid reason may be cause for removal from the Bidder's List. When Delivery delays can be foreseen, the bidder shall give prior notice to the Purchasing Division which shall have the right to extend the delivery due date if reasons for delay appear acceptable. Default in promised delivery, without acceptable reasons, or failure to meet specifications, authorizes the Purchasing Division to purchase the goods elsewhere, and charge any increase in cost and handling to the defaulting bidder.

PACKAGING: Unless otherwise indicated, items will be new, unused, and in first class condition in containers suitable for damage-free delivery and storage.

CORRESPONDENCE: The bid number must appear on ALL correspondence, inquiries, etc. pertaining to the bid.

DELIVERY TIMES: Deliveries will be acceptable only during normal working hours at the designated City Municipal Facility.

PATENT RIGHTS: The Vendor agrees to indemnify and hold the City harmless from any and all claims involving patent right infringement or copyrights on goods supplied.

EVALUATION: Response to the specification in this bid is of primary importance in determining the lowest responsible bid.

BID AWARD: Bids will be awarded either on Lowest Responsible Bid or Best Value. The Criteria used to determine Best Value is as follows:

- Purchase Price
- The reputation of the bidder and of the bidder's goods and service
- The quality of the bidder's goods or services
- The extent to which the goods or services meet the municipality's needs.
- The bidder's past relationship with the municipality.
- The impact on the ability of the city to comply with laws and rules relating to contracting with historically underutilized businesses and non-profit organizations employing persons with disabilities.

The total long-term cost to the city to acquire the bidders good or services (Life Cycle Costing).

Any other relevant factors that a private business would consider in selecting a bidder.

FUNDING: The City of Lewisville is a home-rule municipal government operated and funded on an October 1 to September 30 Fiscal Year; accordingly, the City reserves the right to terminate, without liability to the City any contract for which funding is not available.

RESERVATIONS: The City expressly reserves the right to:

- A. Waive as an informality, minor deviations from specifications.
- B. Waive any defect, irregularity or informality in any bid or bidding procedure.
- C. Reject or cancel any or all bids.
- D. Reissue a bid invitation.
- E. Extend the bid opening time and date.
- F. Procure any item by other means.
- G. Increase or decrease the quantity specified in the bid invitation, unless the Bidder specifies otherwise.
- H. Consider and accept an alternate bid as provided herein when most advantageous
- I. to the City.

ASSIGNMENT: The successful bidder shall not sell, assign, transfer or convey this contract in whole or in part, without the prior written consent of the City.

AUDIT: The City of Lewisville reserves the right to audit the records and performance of the successful bidder during the term of the contract and for three years after the contract is completed.

PROTESTS: All protests regarding the bid solicitation process must be submitted in writing to the City Purchasing Manager within five (5) working days following the opening of bids. This includes all protests relating to advertising of bid notices, deadlines, bid opening, and all other related procedures under the Local Government Code, as well as any protests relating to alleged improprieties with the bidding process.

This limitation does not include protests relating to staff recommendations as to award of this bid. Protests relating to staff recommendations may be directed to the City Council by contacting the City Secretary.

Failure to Protest within the time allotted shall constitute a waiver of any protest.

ALTERING BIDS: Bid cannot be altered or amended after submission deadline. Any interlineation, or alteration made before opening time for sealed bids must be initialed by the signer of the bid, guaranteeing authenticity.

CHANGE ORDERS: No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing by the City of Lewisville.

ADDENDA: Any interpretations, corrections or changes to this Invitation for Bid and Specifications will be made by ADDENDA. Sole authority to issue addenda shall be vested in the City of Lewisville. Bidders shall acknowledge receipt of all addenda on bid form.

MINIMUM STANDARDS FOR RESPONSIBLE PROSPECTIVE BIDDERS: A prospective bidder must affirmatively demonstrate bidder's responsibility. A prospective bidder must meet the following requirements:

- Have adequate financial resources, or the ability to obtain such resources as required;
- Be able to comply with the required or proposed delivery schedule;
- Have a satisfactory record of performance;
- Have a satisfactory record of integrity and ethics;
- Be otherwise qualified and eligible to receive an award; and
- The City of Lewisville may request representation and other information sufficient to determine bidder's ability to meet these minimum standards listed above.

BIDDER SHALL PROVIDE with this bid response, all documentation required. Failure to provide this information may result in rejection of bid.

SUCCESSFUL BIDDER SHALL defend, indemnify and save harmless the City of Lewisville and all its officers, agents and employees and all entities, their officers, agents and employees who are participating in this contract from all suits, actions, or other claims of any character,

name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful bidder shall pay any judgment with cost which may be obtained against the City of Lewisville and participating entities growing out of such injury or damages.

TERMINATION FOR DEFAULT: The City of Lewisville reserves the right to enforce the performance of this contract in any manner prescribed by law or deemed to be in the best interest of the City in the event of breach or default of this contract. The City reserves the right to terminate the contract immediately in the event the successful bidder fails to 1) meet delivery schedules, or 2) otherwise perform in accordance with these specifications. Breach of contract or default authorizes the City to award to another bidder. Purchase elsewhere and charge the full increase in cost and handling to the defaulting successful bidder.

TESTING: Testing may be performed at the request of the City without expense to the City.

REMEDIES: The successful bidder and City of Lewisville agree that each party have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

VENUE: This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in Denton County, Texas.

SILENCE OF SPECIFICATION: The apparent silence of these specifications as to any detail or to the omission from it of a detailed description concerning any point shall be regarded as meaning that only the best commercial products and practices are to prevail. All interpretations of the specifications in this bid shall be made on the basis of this statement.

DEVIATIONS from specifications and alternate bids must be clearly shown on the bid form with complete information attached to form. They may or may not be considered.

NO EMPLOYEE of the City of Lewisville who has a financial interest in a prospective vendor shall participate in submitting a bid or proposal to conduct work for the City.

NO EMPLOYEE of the City of Lewisville shall receive any compensation for or as a result of a contract for goods or services purchased by the City if that employee was in a position to influence the City with respect to the contract.

ELIGIBLE BIDDER: Bidders are limited to those persons or firms who are qualified and engaged in a full-time business and can assume liabilities for any performance or warranty service required.

REJECTED ITEM(S): Item(s) that are rejected for failure to meet prescribed minimum specifications shall be returned to the supplier at no cost to the City of Lewisville.

INDEMNITY: The City of Lewisville will not accept a contract that contains any provision causing the City of Lewisville to indemnify the vendor for any reason.

VENDOR AGREEMENT: Any vendor agreements (service, maintenance, etc.) to be signed by the City of Lewisville must be submitted with your bid.

EXHIBIT A

PURCHASE ORDER TERMS & CONDITIONS

Seller and Buyer agree to comply with the following terms and conditions. These Terms and Conditions along with the purchase order shall constitute a contract between the Seller and Buyer upon the Seller issuing an invoice and/or providing any of the goods and services described in the purchase order. In the event of a conflict between these Terms and Conditions and a separate written agreement between the Seller and Buyer, the terms of the separate written agreement shall prevail.

1. SELLER TO PACKAGE GOODS: Seller will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently packed as follows: (a) Seller's name and address; (b) Consignee's name, address and purchase order or purchase order release number and the supply agreement number if applicable; (c) Container number and total number of containers, e.g. box 1 of 4 boxes; and (d) the number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided. Goods shall be suitably packed to secure lowest transportation costs and to conform with requirements of common carriers and any applicable specifications. Buyer's count or weight shall be final and conclusive on shipments not accompanied by packing lists.

2. 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.

3. TITLE AND RISK OF LOSS: The title and risk of loss of the goods shall not pass to Buyer until Buyer actually receives and takes possession of the goods at the point or points of delivery.

4. DELIVERY TERMS AND TRANSPORTATION CHARGES: F.O.B. Inside Delivery, Municipal Facility, Lewisville, Texas, and shall include all delivery and packaging costs. The Buyer assumes no liability for goods delivered in damaged or unacceptable condition. The Seller shall handle all claims with carriers, and in case of damaged goods, shall ship replacement goods immediately upon notification by Seller of damage.

5. NO REPLACEMENT OF DEFECTIVE TENDER: Every tender or delivery of goods must fully comply with all provisions of this contract as to time of delivery, quality and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender provided, where the time for performance has not yet expired, the Seller may notify Buyer of his intention to cure and may then make a conforming tender within the contract time but not afterward.

6. PLACE OF DELIVERY: The place of delivery shall be that set forth on the purchase order. Any change thereto shall be effected by modification as provided for in Clause 20, "Modifications", hereof. The terms of this contract are "no arrival, no sale".

7. INVOICES AND PAYMENTS: (a) Seller shall submit separate invoices on each purchase order after each delivery. Invoices shall indicate the purchase order number, shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading, and the freight weigh bill when applicable, should be attached to the invoice. Mail to: City of Lewisville Accounts Payable, PO Box 299002 Lewisville, Texas 75029-9002. Payments shall be made thirty days after the goods are delivered to the Buyer, or a correct invoice is received, whichever is later. Suppliers should keep the Accounts Payable Office advised of any changes in remittance addresses. (b) Buyer's obligation is payable only and solely from funds available for the purpose of the purchase. Lack of funds shall render this contract null and void to the extent funds are not available and any delivered but unpaid for goods will be returned to Seller by Buyer. (c) Do not include Federal Excise, State or City Sales Tax. Buyer shall furnish tax exemption certificate, if required.

8. GRATUITIES: The Buyer may, by written notice to the Seller, cancel this contract without liability to Seller if it is determined by Buyer that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by the Seller, or any agent, or representative of the Seller, to any officer or employee of the City of Lewisville with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or the making or any determinations with respect to the performing of such a contract. In the event this contract is cancelled by Buyer pursuant to this provision, Buyer shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Seller in providing such gratuities.

9. SPECIAL TOOLS AND TEST EQUIPMENT: If the price stated on the face hereof includes the cost of any special tooling or special test equipment fabricated or required by Seller for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the Buyer and to the extent feasible shall be identified by the Seller as such.

10. WARRANTY PRICE: (a) The price to be paid by the Buyer shall be that contained in Seller's bid which Seller warrants to be no higher than Seller's current prices on orders by others for products of the kind and specification covered by this contract for similar quantities under similar or like conditions and methods of purchase. In the event Seller breaches this warranty, the prices of the items shall be reduced to the Seller's current prices on orders by others, or in the alternative, Buyer may cancel this contract without liability to Seller for breach or Seller's actual expense. (b) The Seller warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Seller for the purpose of securing business. For breach of violation of this warranty, the Buyer shall have the right in addition to any other right or rights to cancel this contract without liability and to deduct from the contract price, or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

11. WARRANTY PRODUCTS: Seller shall not limit or exclude any implied warranties and any attempt to do so shall render this contract voidable at the option of the Buyer. Seller warrants that the goods furnished will conform to the specifications, drawings and descriptions listed in the bid invitation and to the sample(s) furnished by Seller, if any. In the event of a conflict between the specifications, drawings and descriptions, the specifications shall govern.

12. SAFETY WARRANTY: Seller warrants that the product sold to Buyer shall conform to the standards promulgated by the U. S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event the product does not conform to OSHA standards, Buyer may return the product for correction or replacement at the Seller's expense. In the event Seller fails to make the appropriate correction within a reasonable time, correction made by Buyer will be at Seller's expense.

13. NO WARRANTY BY BUYER AGAINST INFRINGEMENTS: As part of this contract for sale Seller agrees to ascertain whether goods manufactured in accordance with the specifications attached to this contract will give rise to the rightful claim of any third person by way of infringement or the like. Buyer makes no warranty that the production of goods according to the specification will not give rise to such a claim, and in no event shall Buyer be liable to Seller for indemnification in the event that Seller is sued on the grounds of infringement or the like. If seller is of the opinion that an infringement or the like will result, he will notify Buyer to this effect in writing within two weeks after the signing of this contract. If Buyer does not receive notice and is subsequently held liable for the infringement of the like, Seller will save Buyer harmless. If Seller in good faith ascertains that production of the goods in accordance with the specifications will result in infringement or the like, this contract shall be null and void except that Buyer will pay Seller the reasonable cost of his search as to infringements.

14. RIGHT OF INSPECTION: Buyer shall have the right to inspect the goods at delivery before accepting them.

15. CANCELLATION: Buyer shall have the right to cancel for default all or any part of the undelivered portion of this order if Seller breaches any of the terms hereof including warranties of Seller or if the Seller becomes insolvent or commits acts of bankruptcy. Such right of cancellation is in addition to and not in lieu of any other remedies which Buyer may have in law or equity.

16. TERMINATION: The performance of work under this order may be terminated in whole or in part by the Buyer in accordance with this provision. Termination of work hereunder shall be effected by the delivery to the Seller of a "Notice of Termination" specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective. Such right of termination is in addition to and not in lieu of rights of Buyer set forth in Clause 15, herein.

17. FORCE MAJEURE: If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this contract then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the

obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability.

18.ASSIGNMENT DELEGATION: No right or interest in this contract shall be assigned or delegation of any obligation made by Seller without the written permission of the Buyer. Any attempted assignment or delegation by Seller shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.

19.WAIVER: No claim or right arising out of a breach of this contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved.

20.MODIFICATIONS: This contract may be modified or rescinded only by a writing signed by both of the parties or their duly authorized agents. This shall include any change orders.

21.INTERPRETATION PAROLE EVIDENCE: This writing is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this contract. Acceptance or acquiescence in a course of performance rendered under this contract shall not be relevant to determine the meaning of this contract even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this contract, the definition contained in the Code is to control.

22.APPLICABLE LAW: This contract shall be governed by the Uniform Commercial Code. Wherever the term "Uniform Commercial Code" is used, it shall be construed as meaning the Uniform Commercial Code as adopted in the State of Texas as effective and in force on the date of this contract.

23.ADVERTISING: Seller shall not advertise or publish, without Buyer's prior consent, the fact that Buyer has entered into this contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state or local government.

24.RIGHT TO ASSURANCE: Whenever one party to this contract in good faith has reason to question the other party's intent to perform he may demand that the other party give written assurance of his intent to perform. In the event that a demand is made and no assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the contract.

25.VENUE: Both parties agree that venue for any litigation arising from this contract shall lie in Denton County, Texas.

26.DISCLOSURE: Pursuant to Chapter 176 of the Texas Local Government Code, a person or agent of a person who contracts or seeks to contract with the City of Lewisville must complete a conflict of interest questionnaire if the person or agent has an affiliation or business relationship that might cause a conflict of interest with the City. The conflict of interest questionnaire, which is available online at ethics.state.tx.us, must be filed with the City Secretary of the City of Lewisville no later than the seventh business day after the person or agent begins contract discussions or negotiations with the City of Lewisville or submits to the City of Lewisville an application, response to a request for proposal or bid, correspondence, or another writing related to a potential agreement with the City of Lewisville. An updated conflict of interest questionnaire must be filed in accordance with Chapter 176 of the Local Government Code

Seller should consult with legal counsel if you have questions regarding its compliance with the requirements of Chapter 176. It is the responsibility of each person or agent who is contracting or seeking to contract with the City of Lewisville to comply with the filing requirements of Chapter 176.

27. INDEPENDENT CONTRACTOR: Seller shall be considered an independent contractor and not an agent, servant, employee, or representative of Buyer in the performance of the work. No term or provision herein or act of the Seller shall be construed as changing that status.

28. TERMINATION FOR DEFAULT: Buyer reserves the right to enforce the performance of any Purchase Order in any manner prescribed by law or deemed to be in the best interest of Buyer in the event of breach or default. The Buyer reserves the right to terminate any purchase order and/or agreement with the Seller in the event the Seller fails to: (a) meet delivery schedules, or (b) otherwise perform in accordance with these terms and conditions.

29. PROTESTS: All protests regarding the solicitation process must be submitted in written form to the Purchasing Manager within five (5) working days following the opening of bids/proposals. This includes all protests relating to legal advertisements, deadlines, bid/proposal openings, and all other related procedures under the Local Government Code

Post-award protests must be submitted in written form to the City Manager within five (5) working days after award. The protest must include, at a minimum, the name of protester, bid/proposal number or description of goods or services, and a statement of grounds for protest.

30. INDEMNIFICATION: SELLER AGREES TO DEFEND, INDEMNIFY AND HOLD BUYER, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY SELLER'S BREACH OF ANY OF THESE TERMS AND CONDITIONS OR BY ANY NEGLIGENT OR STRICTLY LIABLE ACT OR OMISSION, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY SELLER, ITS OFFICERS, AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THIS CONTRACT; EXCEPT THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF BUYER, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE SELLER AND BUYER, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO BUYER UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND NOT INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY OTHER PERSON OR ENTITY.

31. SEVERABILITY: In case any one or more of the provisions contained in these Terms and Conditions 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 provision thereof, and these Terms and Conditions shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

32. IMMIGRATION REFORM AND CONTROL ACT (8 U.S.C 1324a): The Buyer supports the Immigration Reform and Control Act (IRCA), which is a comprehensive scheme prohibiting the employment of unauthorized aliens in the United States. The Seller and its subcontractors shall at all times during the term of the contract with the Buyer comply with the requirements of IRCA and shall notify the Buyer within fifteen (15) working days of receiving notice of a violation of IRCA. The Seller also warrants that it has not had an IRCA violation within the last five (5) years. The Buyer may terminate a contract with the Seller if the Buyer determines that (a) the Seller or its subcontractors have been untruthful regarding IRCA violations in the preceding five (5) years or (b) the Seller or its subcontractors fail to timely notify the Buyer of an IRCA violation.

33. ADA COMPLIANCE: All goods and services provided to the Buyer must be compliant with the Americans with Disabilities Act and any amendments thereto (the "ADA") and all regulations promulgated pursuant to the ADA. Seller will be required to certify compliance, if required under the law or otherwise required by the Buyer.

34. PROTECTION OF RESIDENT WORKERS: The Buyer actively supports the Immigration and Nationality Act (INA), which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Seller shall establish appropriate procedures and controls so no services under the contract will be performed by any worker who is not legally eligible to perform such services or employment. The Buyer reserves the right to audit Seller's employment records to verify the existence of a completed Employment Eligibility Verification Form (I-9) for every worker performing services under the contract. The audit will be at the Buyer's expense.

35. TEXAS GOVERNMENT CODE CHAPTER 2252. Pursuant to Texas Government Code Chapter 2252, Subchapter F, Consultant affirms, by entering into this Agreement, that it is not identified on a list created by the Texas Comptroller of Public Accounts as a company known to have contracts with or provide supplies or services to Iran, Sudan, or a foreign terrorist organization.

36. TEXAS GOVERNMENT CODE CHAPTER 2271. Pursuant to Texas Government Code Chapter 2271, Consultant affirms that execution of this Agreement serves as written verification that Consultant: (1) does not boycott Israel, as defined by Texas Government Code Section 808.001; and (2) will not boycott Israel during the term of the Agreement. This section shall not apply if Consultant employs fewer than ten (10) full-time employees, or if the funds to be paid wholly or partly from public funds of the City under this Agreement are less than \$100,000.00.

37. TEXAS GOVERNMENT CODE CHAPTER 2274. Pursuant to Texas Government Code Chapter 2274, Consultant verifies the following:

- A. Consultant: (1) does not boycott energy companies, as defined by Texas Government Code Section 809.001; and (2) will not boycott energy companies during the term of this Agreement.
- B. Consultant: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association, as those terms are defined in that chapter; and (ii) will not discriminate during the term of this Agreement against a firearm entity or firearm trade association.

This section shall not apply if Consultant employs fewer than ten (10) full-time employees, if the funds to be paid wholly or partly from public funds of the City under this Agreement are less than \$100,000.00, or if this Agreement is otherwise exempted from the requirements of Texas Government Code Chapter 2274.

**CITY OF LEWISVILLE
PURCHASING DIVISION**

ADDITIONAL TERMS

ANTI-LOBBYING PROVISION

During the period between proposal / sealed bid submission date and the contract award, proposers, including their agents and representatives, shall not directly discuss or promote their proposal with any member of the City of Lewisville City Council or City staff except during City-Sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

This provision is not meant to preclude offerors from discussing other matters with City Council members or City staff. This policy is intended to create a level playing field for all potential offerors, assure that contract decisions are made in public, and to protect the integrity of the RFP / Bid Evaluation process. Violation of this provision may result in rejection of the offeror's proposal.

LAWS AND ORDINANCES

Laws and Ordinances: The Contractor shall always observe and comply with all Federal, State and local laws, ordinances and regulations which in any manner affect the Contract or the work and shall indemnify and save harmless the City against any claim arising from the violation of any such laws, ordinances and regulations whether by the Contractor or his employees.

PROTECTION OF RESIDENT WORKERS

Protection of Resident Workers: The City of Lewisville actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor and its Subcontractors shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment. The City reserves the right to audit Contractor's or Subcontractor's employment records to verify the existence of a completed Employment Eligibility Verification Form (I-9) for every worker performing services or manufacturing products under the Contract Documents. The audit will be at the City's expense.

IMMIGRATION REFORM AND CONTROL ACT

Immigration Reform and Control Act (8 U.S.C. §1324a): The City of Lewisville supports the Immigration Reform and Control Act (IRCA) which is a comprehensive scheme prohibiting the employment of unauthorized aliens in the United States. The Contractor shall submit a declaration signed under penalty of perjury of the laws of the State of Texas stating that it has not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Contractor shall ensure that its Subcontractors submit a declaration signed under penalty of perjury of the laws of the State of

Texas stating that they have not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Contractor and its Subcontractors shall at all times during the term of the contract with the City comply with the requirements of IRCA and shall notify the City within fifteen (15) working days of receiving notice of a violation of IRCA. The City may terminate a contract with the Contractor if the City determines that (a) the Contractor or its Subcontractors have been untruthful regarding IRCA violations in the preceding five (5) years; (b) if the Contractor fails to ensure that its Subcontractors submit the aforementioned declaration; or (c) the Contractor or its Subcontractors fail to timely notify the City of an IRCA violation.

Contractor Name

Authorized Signature

Date

**CITY OF LEWISVILLE
PURCHASING DIVISION**

STATE RECIPROCAL REQUIREMENT

The City of Lewisville, as a governmental agency of the State of Texas, may not award a contract for general construction, improvements, services or public works projects or purchases of supplies, materials, or equipment to a non-resident bidder unless the non-resident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a non-resident bidder to obtain a comparable contract in the state in which the non-resident's principal place of business is located (Section 2252.002 of the Government Code). Bidder shall answer all the following questions by encircling the appropriate response or completing the blank provided.

1. Where is your principal place of business? _____
2. Only if your principal place of business is not in the state of Texas, please indicate:
 - A. In which state is your principal place of business located? _____
 - B. Does that state favor resident bidders (bidders in your state) by some dollar increment or percentage? ☐ YES ☐ NO
 - C. If "YES", what is that dollar increment or percentage? _____

NON-COLLUSION STATEMENT

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firms, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employer or agent to any other person engaged in this type of business prior to the official opening of this bid.

Vendor:			
Address:			
City, State, Zip:			
Phone:			
Email:			
Bidder (Print Name):			
Bidder Signature:			
Job Title:			
Signature of company official authorizing this bid:			
Company Official (Print name):			
Job Title:			

Lewisville 2025 - Sustainability

Lewisville City Council unanimously adopted the Lewisville 2025 plan on July 14, 2014. The plan was developed after more than a year of public input and discussion that garnered hundreds of ideas and suggestions. That input was studied extensively by the Lewisville 2025 Steering Committee, City staff and professional consultants and formulated into the Lewisville 2025 plan. The plan provides a clear shared vision for the kind of community Lewisville wants to be when it turns 100 years old in 2025: a place that people choose to live, work and visit.

Lewisville 2025 identifies nine “Big Moves” to guide the community’s efforts toward being a thriving, desirable community. One of these Big Moves is sustainability. Lewisville defines sustainability in this way:

Limited resources, such as land, water, energy, clean air, natural assets, and public funds are used efficiently to provide a desirable quality of life and business climate today without reducing Lewisville’s ability to provide the desired quality of life and business climate for success of future generations.

The Purchasing Division’s goal is to support and encourage sustainable management practices through the purchase and use of materials, products and services that demonstrate environmental stewardship as well as fiscal and social responsibility. To that end, Lewisville will consider environmental factors such as but not limited to, recycled content, product life cycle, waste reduction, energy efficiency, toxicity, water consumption, and human health impacts when making purchasing recommendations. To assist City staff with evaluating these factors, prospective vendors may be required to provide specific information about their products and services that addresses environmental impacts.

Does Product or Service?	Yes	No	Details
Reduce energy consumption			
Reduce toxicity, including emissions			
Reduce waste			
Contain recyclable materials			
Reduce water consumption			
List other environmental impacts			

Attach supporting documentation if needed



STANDARD SPECIFICATIONS

The Standard Specifications for this project are the "Public Works Construction Standards", Fifth Edition (2017), as published under the authority of the North Central Texas Council of Governments.

A. Special Provisions to the General Provisions of the Standard Specifications:

1. Technical specifications (Special Specifications), if included, in the Contract document package shall supersede the standard specifications.
2. Prospective bidders may make written request to the City Engineer for clarification and alterations in the plans, specifications, and form of contract. Such request must be received by the City Engineer no later than 2:00 p.m. on the Thursday indicated in advertisement prior to the Thursday on which the bids are to be opened. The City Engineer will be the sole judge as to the necessity to an addendum or letter of clarification. Oral statements shall in no way be considered as part of the contract and will not be considered as binding.
3. Five (5) sets of the contract documents, exclusive of the "Public Works Construction Standards" referenced above will be furnished without charge to the CONTRACTOR for construction purposes. Additional copies may be obtained from the City at actual reproduction cost.
4. **Item 102.4. Preparation of Proposal:** Sentence 4 shall be changed to read: "In the cases of discrepancy between unit prices and amounts, the unit price shown in figures shall stand and the amount and total will be adjusted to correspond to the unit price shown".
5. **Item 103.3.1.1. Performance Bonds:** Paragraph (a) Performance Bond. The last sentence of this paragraph is hereby deleted and replaced with: This Bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appears within a period of two years from the date of acceptance of the improvements project by the Lewisville City Council.
6. **Item 103.3.3. Sureties: The following applies to Surety Bonds:**

Texas Government Code Title 10, Chapter 2253

"(d) A bond required by this section must be executed by corporate surety in accordance with Chapter 3503, Texas Insurance Code."

Texas Insurance Code Section 3503.005. Additional Requirements for Certain Bonds

"(a) A bond that is made, given, tendered, or filed under Chapter 53, Property Code, or Chapter 2253, Government Code, may be executed only by a surety company that is authorized to write surety bonds in this state. If the amount of the bond exceeds \$100,000, the surety company must also:

- (1) hold a certificate of authority from the United States secretary of the treasury to qualify as a surety on obligations permitted or required under federal law; or

- e. Personal Injury
 - f. Broad Form Property Damage
 - g. Explosion Collapse and Underground (XCU) Coverage (when applicable, Fire Damage, Medical Expense).
2. Workers' Compensation and Employer's Liability: Workers' Compensation limits as required by the Labor Code of the State of Texas and Statutory Employer's Liability minimum limits of \$100,000 per injury, \$300,000 per occurrence, and \$100,000 per occupational disease.
 3. Automobile Liability - \$500,000 Combined Single Limit. Limits can only be reduced if approved by the Risk Manager or designee.

C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductible or self-insured retentions must be declared to and approved by the City.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

1. General Liability and Automobile Liability Coverages
 - a. The City, its officers, officials, employees, Boards and Commissions and volunteers are to be added as "Additional Insured" as respects liability arising out of activities performed by or on behalf of the contractor, products and completed operations of the contractor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers. It is understood that the business auto policy under "Who is an Insured" automatically provides liability coverage in favor of the City.
 - b. The contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the contractor's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its officers, officials, employees, Boards and Commissions or volunteers.
 - d. The contractor's insurance shall apply separately to each insured against whose claim is made or suit is brought, except to the limits of the insured's liability.
2. Workers' Compensation and Employer's Liability Coverage

DWC-82, DWC-83, or DWC-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.

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 §406.096) - 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, owner-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 proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 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 governmental entity 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 governmental entity showing that coverage has been extended.

E. The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

(1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity 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.

(7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates 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 governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' 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 commission's Division of Self-Insurance Regulation. Providing false or misleading information may 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 governmental entity to declare the contract void if the contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

9. **Item 105.1.1. Priority of Contract Documents** is revised as follows: Insert the words "addenda (last over first)" between "Proposal" and "Special Provision".
10. **Item 105.1.3. Contract Drawings and Specifications:** Obtaining copies of NCTCOG Public Works Construction Standards is the responsibility of the CONTRACTOR.
11. **Item 105.2.2. Special Warranty:** The first sentence of this paragraph is hereby deleted and replaced with:
"If within two years after the final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within a longer or shorter period of time as may be prescribed by law or by the terms of any other special warranty on designated equipment, any of the work is found to be defective or not in accordance with the contract documents, the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so".
12. **Special Provision to Item 105.3. Shop Drawings, Product Data and Samples:** add the following:
"Review of Shop Drawings by the CITY and/or ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformance with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor. It being understood and agreed that the Engineer does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules or any means or methods reflected thereby in relation to the safety of either person or property during the contractor's performance hereunder."

"The CONTRACTOR shall engage the services of an acceptable testing laboratory company to perform all required testing services. The CONTRACTOR (not the OWNER) shall pay all costs for these services, including any retesting after failure to pass tests. The CONTRACTOR shall obtain OWNER'S acceptance of the testing laboratory before having the services performed."

Written reports of tests and engineering data furnished by CONTRACTOR for OWNER'S review shall be submitted as specified in Item 105.3, "Shop Drawings, Product Data and Samples" and as modified by the Special Specifications.

17. **Special Provisions to Item 107.2. Indemnification:** delete Item 107.2. in its entirety and substitute the following:

"The CONTRACTOR and his sureties shall indemnify, defend and save harmless the OWNER and all of their officers, agents and employees, Engineer and all of its officers and employees from all suits, actions or claims of any character, name and description brought for or on account of any injuries, including death or damages received or sustained by any person, persons or property on account of the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said contract; or on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER or Engineer growing out of such injury, including death or damage."

18. **Item 107.11. Supervision and Construction Procedures:** The CONTRACTOR'S attention is drawn to paragraphs 1 and 4 of this item and paragraphs 1 and 3 of Item 105.6.

19. **Item 107.24. Project Clean-Up:** All objectionable surplus and waste material due to construction shall be removed from the site at the CONTRACTOR'S expense.

20. **Item 108.1. Progress Schedule:** add the following paragraph:

"The CONTRACTOR shall submit to the OWNER a construction schedule setting out items of construction, road closings, detours, utility interruptions, limits, times and actual dates. If the schedule is acceptable to the OWNER, the OWNER will approve it; if the schedule is unacceptable, it will be returned to the CONTRACTOR for revision and resubmittal. If the CONTRACTOR wants to deviate from the approved schedule, he must submit a revised schedule to the OWNER for consideration. The entire work shall be prosecuted in a continuous manner in accordance with the approved schedule. Proposed stockpile locations must be approved by the OWNER prior to depositing material. The CONTRACTOR shall update this schedule on a monthly basis."

21. **Item 108.5. Subcontracts:** add the following paragraph:

"The CONTRACTOR shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than 50 percent of the value of all work embraced in the contract exclusive of items not commonly found in contract for similar work and exclusive of items that require highly specialized knowledge, craftsman and/or equipment not ordinarily available in the organization of CONTRACTORS performing

Delete from the first paragraph of 109.5.1: "The monthly estimate may include acceptable non-perishable materials delivered to the work; such payment shall be allowed on same percentage basis of the net invoice value as provided hereinafter."

Add in its place, the following:

The OWNER will pay for materials on hand only under the following conditions:

- a. The CONTRACTOR shall provide proof of payment for the materials.
 - b. The materials shall be secured in a manner acceptable to the OWNER.
 - c. Payment will not be made for small items, and other items not easily measured.
 - d. No payment will be made for small quantities of material on hand (less than 0.5 percent of the contract amount).
 - e. No payment for materials on hand will be made for items such as paint, mastics, cement, and other similar materials.
25. Delays associated with delivery of materials of appurtenances by the manufactures will not be considered for any extension of contract time. It shall be the sole responsibility of the CONTRACTOR to insure that the materials are manufactured and delivered on time.

Inclusive with this pay item is the requirement for adequate notification and instruction to be given to adjacent business and property owners and to the traveling public regarding interruptions or changes to established traffic flow patterns to, from, and along the work site. This item includes detours, barrels, panels, arrow boards, removing striping, temporary lane lines and or markers, construction signing and barricades, construction pavement markers, temporary asphalt, message words and all other work required to provide for passage of vehicular traffic for all phases of construction. Access must always be maintained to all houses and businesses. The amount bid for this item is paid over the duration of the project with the amount paid on each monthly progress estimate determined by the percent complete on all other bid items.

3. Payment for **“Prepare Right-of-Way”** is based on price bid per lump sum (LS). It includes the area within the limits of construction, construction staging area, and easement limits shown on the plans. Work includes, but is not limited to: all obstructions above or below ground such as trees, shrubs, stumps, brush, roots, vegetation, logs, trash, concrete, concrete driveways, concrete drainage structures, culverts, curb and gutter, asphalt pavement, fences, structures, foundations, lumber, scrap metal, abandoned appliances, sprinkler systems, abandoned utility pipes or conduits, and any other items *not included as pay items elsewhere in the contract documents* but are necessary to prepare permanent or temporary easements for construction. The maintenance or relocation of street signs is also considered as part of this item. This item also includes the protection of any trees, shrubs, fences, structures, signs, or other items that are to be preserved or relocated as shown on the plans. This pay item will also include removal of improvements or obstructions not specifically provided for in other pay items of the bid proposal. All materials removed shall be properly disposed of offsite in a timely manner. **Disposal of materials in City of Lewisville City limits must be taken to Republic Services.**
4. Payment for **“Survey and Construction Staking”** is based on the price bid per Lump Sum (LS) and includes placing stakes and markings to provide offsets and elevations to cut and fill to locate on the ground the designed structures/improvements included in the Project Drawings. Construction staking also includes staking easements and/or right of way if indicated on the plans. This item also includes “Field Checks” including measurements made after construction staking is completed and before construction work begins to ensure that structures marked on the ground are accurately located per Project Drawings.

It is the Contractor’s responsibility to coordinate staking such that construction activities are not delayed or negatively impacted. The Contractor is responsible for preserving and maintaining stakes. If, in the opinion of the City Inspector, enough stakes or markings have been lost, destroyed disturbed or omitted that the contracted work cannot take place, then the Contractor will be required to stake or re-stake the deficient areas.

The Contractor will verify that horizontal and vertical control data established in the design survey and required for construction survey is available and in place. For construction methods other than open cut, the Contractor shall perform construction survey and verify control data including, but not limited to, the following:

- Verification that established benchmarks and control are accurate.

and set on a slight angle toward the anticipated runoff source. When directed by the Engineer or designated representative, posts shall be set at specified intervals to support concentrated loads.

6. Payment for **"Video Project Area"** is based on the price bid per lump sum (LS) for the entire project area (all crossings). This item includes photography and videography of the entire project area pre-construction and post-construction. Pre-Construction photos and videos shall be produced and provided to the City prior to construction activities. Post-Construction photos and videos shall be produced and provided to the City after Final Completion.
7. Payment for **"Unclassified Excavation"** is based on the price bid per cubic yard (CY). All excavation, grading, and wasting of surplus and unsuitable material are included in this bid item. This item includes over-excavation of deleterious materials and replacement with competent soils or material as required for proper installation of fill.
8. Payment for **"Tree Removal (Various Sizes)"** is based on the price bid for each (EA) and is for trees six (6) inches in diameter and larger as shown on the demolition plan for removal. Removal of trees less than 6-inches in diameter are to be included in **Pay Item 2 - Prepare Right of Way**. Tree Removal is paid for using the bid unit price, regardless of the timing of removal during the contract time.
9. Payment for **"Asphalt Pavement Removal and Replacement"** is based on the bid per square yard (SY) and shall include full compensation for labor, materials, and incidentals to include the cost of saw cutting, removing, and disposing off-site the existing asphalt pavement. Neatly sawcut all flatwork along straight lines and to the nearest joint. Saw cuts shall be a minimum of two inches (2") deep and shall be straight and parallel. If any portion of the remaining asphalt surfacing is undercut by trenching operations, the Contractor shall saw cut, remove, and replace the affected area at their own expense. Disposal of materials in City of Lewisville City limits must be taken to Republic Services.

The asphalt pavement replacement shall follow specifications shown on detail 2.19 in the plans with the addition of adding another 1" of Hot Mix Asphalt for a total of 3" of Hot Mix Asphalt over 4" of concrete. All work shall be in accordance with City of Lewisville and NCTCOG.
10. Payment for **"Concrete Pavement Removal and Replacement"** is based on the bid per square yard (SY) and shall include full compensation for labor, materials, and incidentals to include the cost of saw cutting, removing, and disposing off-site the existing pavement, curb and gutter, driveways, alleys, sidewalks, flumes, concrete lined channel and rip rap. Neatly sawcut all flatwork along straight lines and to the nearest joint. The CONTRACTOR shall provide a saw cut joint at the limits of pavement removal. All materials removed shall be properly disposed of offsite in a timely manner. Disposal of materials in City of Lewisville City limits must be taken to Republic Services.
11. Payment for **"6-inch Flex Base (TY A, GR1-2)"** is based on a price bid per square yard (SY) and will be considered as an alternative subgrade to lime. Payment is the total compensation for

18. Payment for “**5-Inch Thick Concrete Sidewalk**” shall be made on the basis of the price bid per square yard (SY) and shall be total compensation for furnishing all labor, materials, equipment and any other incidentals necessary to complete the work. Concrete sidewalks shall be constructed in accordance with the City of Lewisville Standard Details and plan details. Connection to existing concrete sidewalks shall be subsidiary to this item.
19. Payment for “**Cast-In-Place Integral Concrete Wall (6 inch to 5 feet Max)**” shall be made on the basis of the price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, equipment and any other incidentals necessary to complete the work. Retaining wall shall be constructed in accordance with the plan details. Cost for retaining wall shall include excavation, form work, concrete, reinforcing steel, aggregate, select fill, weepholes, filter fabric, and connection to storm drains.
20. Payment for “**Grouted Rock Riprap**” shall be paid for by the square yard (SY) of the specified minimum thickness as shown on plans. The unit price shall include excavation, subgrade preparation, filter fabric, grout, stone, labor, tools, equipment, and incidentals necessary to complete the work in accordance with the plans, specifications, and details.
- Use spalls and small stones lighter than 25 pounds to fill open joints and voids in stone riprap, and place to a tight fit. Do not place mortar or grout when the air temperature is below 35 degrees Fahrenheit. Protect work from rapid drying for at least 3 days after placement.
- Unless otherwise approved, place filter fabric with the length running up and down the slope. Ensure fabric has a minimum overlap of 2 feet. Secure fabric with nails or pins. Use nails at least 2 inches long with washers or U-shaped pins with legs at least 9 inches long. Space nails or pins at a maximum of 10 feet in each direction and 5 feet along the seams. Alternative anchorage and spacing may be used when approved.
- Grouting:** Place stones with the flat surface facing upward parallel to the slope. Place the largest stones near the base of the slope. Fill spaces between the larger stones with stones of suitable size, leaving the surface smooth, tight, and conforming to the contour required. Prevent earth, sand, or foreign material from filling the spaces between the stones. After the stones are in place, thoroughly wet them, fill the spaces between them with grout, and pack. Sweep the surface with a stiff broom after grouting.
21. Payment for “**Embankment**” shall be made on the basis of price bid per cubic yard (CY) and shall be total compensation of the placement and compaction of all suitable materials obtained from excavation, borrow, and any other approved excavation in accordance with NCTCOG Item 203.7 “Embankment”.
22. Bid items for “**Signing and Pavement Markings**” shall be paid for on the basis of the unit price indicated. These items include all costs for the installation of all permanent pavement markings, all permanent and regulatory signs (including pole mounted street name signs), and the relocation

The two project signs shall be relocated, as directed by the City, as the work locations progress within each stage of construction.

8. Construction signing shall not be removed from the project until approved by the OWNER.
9. No existing street shall be closed except upon written authority from the OWNER.
10. The CONTRACTOR shall mark all trees to be removed and obtain approval of the City prior to removing them. All stumps shall be grounded to below the finished grade, using a stump grinder. Tree branches that overhang into the right-of-way shall be trimmed by the CONTRACTOR, if required, to facilitate the construction after approval has been obtained from the City. **Tree trimming shall be performed prior to the start of work in each street.** Trees to remain outside the right-of-way or easement on private property will be protected from damage by the CONTRACTOR. Employees of the CONTRACTOR (his subcontractors) will not part closer than ten (10) feet to any tree that is to remain.
11. The CONTRACTOR shall coordinate his activities with other CONTRACTOR'S working within, and close proximity to the project. To facilitate cooperation, regular progress meetings will be held among all CONTRACTOR'S.
12. Water and sanitary sewer service shall be maintained for all properties during construction. This includes the construction of temporary connections, if required. Temporary connections shall be considered subsidiary to the various bid items.
13. At the end of each day, the CONTRACTOR shall prepare the work to the satisfaction of the OWNER.
14. Prior to beginning construction, the CONTRACTOR shall contact all utility companies with utilities in the area and the property owners, 48 hours in advance of starting work. If necessary, test ditches will be dug to verify actual locations and conditions.

Frontier Communications	972-318-5186
Texas-New Mexico Power Company	972-420-4189
Spectrum	972-445-5555
City of Lewisville Public Services.....	972-219-3527
United States Post Office	(Fax) 972-436-7230
Atmos Energy	972-360-4428
For line locates, call	1-800-DIG-TESS (1-800-233-8377)
15. Information shown on these plans concerning type and location of underground utilities is not guaranteed to be accurate or all-inclusive. The CONTRACTOR is responsible for making his own determination as to type and location of underground utilities as may be necessary to avoid damage thereto. The CONTRACTOR shall verify location of

work. Nothing shall be stored or parked over the tree root system within the drip line area of any tree. The CONTRACTOR shall employ a certified arborist for all the work required for tree care to ensure utilization of the best agricultural practices and procedures.

20. The CONTRACTOR'S attention is directed to the requirement by Item 505.1 Open Cut – General Conduit Installation in the Standard Specifications for Public Works Construction. Specifically, the last paragraph of 505.1.6 the CONTRACTOR is required to provide, and to install at the end of each working day or when work is suspended, a temporary plug or watertight seal in the end of the utility main being installed under this contract. All caps (plugs) used shall be manufactured by the supplier of the pipe being used, or approved equal.

21. The following material tests will be required for the project:

- a. Trench Backfill Compaction: All trench backfill under roadbed areas shall be mechanically compacted as required by North Central Texas Council of Governments Specifications and these special site specific specifications. The testing laboratory will make tests of in-place density in accordance with ASTM D 698 of points selected by the City Inspector. All trenches shall be compacted to 95% of standard Proctor maximum dry density within the range of 1% below and 3% above the material's optimum moisture content. A minimum of one density test will be made for each 100 linear feet of every 8-inch loose lift of fill for water, storm drain and sanitary sewer construction. When backfill tested fails to meet the required density, trench backfill in the vicinity of the test, i.e. for a minimum of 50 feet in both directions from the test location, shall be removed and replaced with compaction. Thereafter, three tests shall be performed on the material removed and replaced, to determine if it is in accordance with the project compaction requirements.
- b. Pavement Subgrade: The testing laboratory will make tests of in-place subgrade density in accordance with ASTM D 2922-81 at points selected by the City Inspector. A minimum of one field density test shall be conducted per lift for each 5,000 square feet of pavement subgrade.
- c. Concrete: Four standard 6-inch test cylinders shall be made from each type or strength of concrete for each pouring operation, but not less than five cylinders from each 100 yards of concrete placed. For twenty-eight (28) day concrete test cylinders shall be made and cured, as prescribed by ASTM Specification C-31, and broken, one at seven (7) days, two at twenty-eight (28) days, and hold one, as prescribed by ASTM Specification C-39. For three (3) day concrete test cylinders shall be made and cured, as prescribed by ASTM Specification C-31, and broken, two at three (3) days, one at seven (7) days, and hold one, as prescribed by ASTM Specification C-39.

submitted to address times of completion of each stage of the construction sequence and projected dates of road closings, detours and utility interruptions. The CONTRACTOR shall update this schedule on a monthly basis.

The construction schedule shall address measures to be taken in the event of heavy rain or wet weather during construction. If, in the opinion of the City, wet weather renders unpaved streets or driveways impassable to traffic or prevents access to adjacent property by residents, the Contractor shall place gravel or crushed stone in the streets. The cost of furnishing or placing such materials shall be incidental to the unit cost of the various items of construction. Contractor's personnel shall be on call 24 hours a day to handle wet weather problems.

The CONTRACTOR must maintain access and utility services to all residents and property owners.

Pavement and utilities shall be constructed in short segments of approximately one block each within each stage. Driveways and sidewalks not under construction shall remain open for vehicular and pedestrian traffic.

The CONTRACTOR shall follow the sequence of construction provided in these plans. Any deviations from the plans must be submitted in writing to the CITY for approval.

Proper notification must be given to all affected property owners at least 48 hours in advance of all construction operations.

One lane of each roadway will remain open for one-way traffic at all times. No street shall be closed except upon written authority from the OWNER.

Streets may be closed down to down to one lane during construction if flaggers are present during normal working hours. Outside normal working hours two way traffic will need to be maintained.

The Contractor shall provide all barricades, signing, and traffic control devices required for maintaining traffic flow.

Access to private driveways must be maintained except during forming, paving and curing of the street and driveway.

Only one half of the street may be excavated at one time. The other half of the street shall not be excavated until the first half is constructed **(including driveways and sidewalk)** and opened to traffic. Concrete for street paving shall have a minimum compressive strength of 3,750 psi at 14 days.

At the end of each day, trenches shall be backfilled and streets maintained in an all-weather condition by the addition of asphalt millings, crushed stone or other means approved by the Engineer when permanent pavement is not in place. The temporary

- g. Watering – Sodded areas shall be watered by the CONTRACTOR as required to promote rapid growth of grass without unnecessary delay. The CONTRACTOR shall install a temporary irrigation system to water the grass in areas not covered by the permanent irrigation systems. Re-sodding shall be performed immediately, when required, without delay. Temporary irrigation, re-sodding, and replacing eroded topsoil are incidental to the contract.
- h. Acceptance – The CITY will accept sodding as complete upon establishment of a growth of grass covering all areas requiring seeding. The CONTRACTOR shall mow and maintain the grass until accepted.
- i. Payment – Payment will be per plan quantity. No measurement will be made.

Topsoil, sod and fertilizer required in areas disturbed by the CONTRACTOR outside of the designated areas shall be incidental to the project and not paid for separately. The CONTRACTOR shall pay for all water costs until grass is accepted by the CITY

30. Reinforced Concrete Paving for City Streets and Sidewalk

Reinforced concrete pavement shall be installed in accordance with the construction plans and Item 303 of the Standard Specifications. Sidewalks shall have a minimum compressive strength of 3,000 PSI @ 28 days. No super plasticizers will be allowed in concrete mixes. The minimum cement ratio shall be 8.0 sacks per cubic yard for 4,200 PSI @ 3 days concrete. Fly ash will not be permitted in street and sidewalk concrete on the project. Bar chairs area required to support reinforcing steel and dowel bars. Hand finish of concrete pavement will not be a separate pay item on the project.

Reinforcing steel shall be 60-ksi steel, No. 4 bars placed on 18-inch center-to-center spacing each way. All work required for joints (including anchor joints), sawcutting joints and joint sealant is included in these items.

Maximum joint spacing shall be 15 feet.

The CONTRACTOR shall submit mix designs and concrete break histories for approval prior to construction.

31. Storm Water Prevention Pollution Plan (SWPPP)

It shall be the full responsibility of the CONTRACTOR to acquire and comply with any and all permits as may be required to avoid delay of the project.

Prior to construction, the CONTRACTOR shall comply with Federal and State storm water management regulations. The plan shall employ measures to prevent erosion and siltation from the construction disturbance from reaching stream beds, channels, storm water structures, ponds, etc. The plan shall comply with the requirements of the “Integrated Storm Water Management Design Manual for Construction” published by NCTCOG. In the event of a conflict between these requirements and Federal and State pollution control laws, rules, and regulations or other Federal, State or Local agency

also describe how he plans to maintain those erosion and sediment controls in proper working order.

- h. The SWPPP must include both a General Vicinity Map and a Detailed Site Map. The site map must include all of the information listed in Part III, Section F (g) of the Construction General Permit. The CONTRACTOR may use the Erosion Control map from the Construction Plans, provided that it includes all of the necessary information. It is recommended that a separate site map be developed for the SWPPP, to avoid deficiencies.
- i. The SWPPP must clearly state whether or not any support activities, such as concrete or batch plants, are planned. This is because support activities do not always qualify for coverage under the Construction General Permit, and separate permit coverage may be necessary.
- j. If the project disturbs 10 acres or more with a common drainage location, and a sediment basin is not employed, the rationale for this decision must be documented in the SWPPP. The equivalent erosion and sediment control devices that are to be used must be described.
- k. Allow a minimum of 2 days for review of the SWPPP.
- l. The City of Lewisville does not currently utilize electronic submittal of Notices of Intent. **Construction will not be allowed to begin until 7 days after the NOI has been signed by the signatory authority and postmarked for delivery.** For this reason, early submission of the SWPPP and NOI are highly recommended.
- m. At least two copies of the completed SWPPP must be submitted to the City. One copy will be maintained by the Storm Water Division, and one other copy will be reviewed and returned to the CONTRACTOR.

The cost to the CONTRACTOR for the preparation of the SWPPP for the project shall be incidental to the various items of erosion control. The erosion control plan included in the project construction plans shall be incorporated into the SWPPP. Items required by the SWPPP that are not included as bid items are subsidiary to the various items of erosion control. The various bid items for erosion control shall include all costs for implementing and maintaining the Storm Water Pollution Prevention Plan, from the beginning of construction through final acceptance and establishment of grass coverage.

Any disturbed areas, whether inside or outside the project limits, where construction activities are complete or won't be worked on for 14 days, must be permanently or temporarily stabilized. **Stabilization measures must be initiated no later than one day after completing work in an area or determining that work will be temporarily stopped for more than 14 days in that area.** Temporary stabilization can include the use of erosion blankets such as Curlex or other methods approved by the City inspector. Permanent stabilization will require topsoil and sod, unless otherwise shown on the project landscaping plans.

39. Fire hydrants and other salvaged appurtenances shall be delivered to the City of Lewisville Public Services storage yard at 1100 North Kealy in the City of Lewisville. Salvaging existing fire hydrant assemblies is subsidiary to various bid items.

40. **Fire Hydrant Specifications**

a. General Specifications

All fire hydrants shall comply with AWWA C-502 for dry barrel fire hydrants.

All fire hydrants shall be compression type, closing with the line pressure. The valve opening shall be 5¼-inch only.

All fire hydrants shall have an oil compatible sealed lubrication reservoir and be furnished with biodegradable grease or oil from the point of manufacture.

All fire hydrants shall have a bronze operating nut 1½-inch pentagon point to flat. The operating nut may be fully covered with a cast-iron weather shield and protection device measuring 1½-inch point to flat to protect the bronze operating nut when opening and closing the hydrant.

All fire hydrants shall be furnished with a breakable flange traffic feature, one that permits a full 360-degree rotation of the hydrant nozzle section. Un-notched electroplated bolts and nuts must be used to retain the safety flange that connects the nozzle section to the lower barrel. Traffic flange repairs and other maintenance will not require Allen wrenches to accomplish.

The interior and exterior of the hydrant shoe shall be “fusion-bonded” with an epoxy coating. All other methods are unacceptable. A minimum of four stainless steel bolts and nuts shall secure the hydrant shoe to the lower barrel.

All hydrants shall be able to deliver the required flow with a friction loss not to exceed 5 PSIG at 1000 GPM, as per AWWA test procedure. Certification of this standard shall be furnished from an independent testing laboratory prior to approval. All tests must be performed at the testing company’s own facilities.

All fire hydrants shall be designed for 200 PSI working pressure and tested to 400 PSI hydrostatic pressure. All fire hydrants shall drain automatically when the main valve is closed and shall be an integral part of the main valve. Drain valves that operate by toggles, springs, or adjustable mechanisms are unacceptable. The upper plate shall be of bronze and incorporate two hard rubber drain facings that activate the drain ports, or a drain tube with all bronze crossarm and fusion bonded epoxy washer. The drain facings shall be attached to the upper valve plate with stainless steel screws or rolled pins. Other methods of attachment are unacceptable.

All fire hydrants shall have a field replaceable bronze main valve seat threaded into a bronze drain ring.

Water will be furnished free of charge by the OWNER to the CONTRACTOR in the amounts needed to properly fill and test the water line. The owner reserves the right, however, to charge the prevailing rate for water wasted through carelessness or neglect on the part of the CONTRACTOR. All other water required for the project will be at the CONTRACTOR'S expense. The CONTRACTOR shall obtain a temporary water meter (deposit reimbursed when the meter is returned) from the OWNER and meter all water used for the project.

43. Mailboxes

During paving operations existing mailboxes located in the public right-of-way shall be temporarily reset in the parkway outside of proposed pavement construction. After pavement construction, mailboxes shall then be moved back to the original location. Brick mailboxes shall be placed on a reinforced concrete pad with a minimum thickness of 6-inches. Brick mailboxes, in particular, shall be carefully handled in a single unit to avoid damage. The CONTRACTOR shall coordinate with the U.S. Postal Service to insure uninterrupted mail service to each residence.

44. Prevailing Wage Rate Determination

The General Services Commission has adopted the Federal Davis-Bacon wage rates for our use.

(2) "Public body" means a public body awarding a contract for a public work on behalf of the state or a political subdivision of the state.

(3) "Worker" includes a laborer or mechanic.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995. Amended by Acts 2001, 77th Leg., ch. 1422, Sec. 14.04, eff. Sept. 1, 2001.

Sec. 2258.002. APPLICABILITY OF CHAPTER TO PUBLIC WORKS.

(a) This chapter applies only to the construction of a public work, including a building, highway, road, excavation, and repair work or other project development or improvement, paid for in whole or in part from public funds, without regard to whether the work is done under public supervision or direction.

(b) This chapter does not apply to work done directly by a public utility company under an order of a public authority.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Sec. 2258.003. LIABILITY. An officer, agent, or employee of a public body is not liable in a civil action for any act or omission implementing or enforcing this chapter unless the action was made in bad faith.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

SUBCHAPTER B. PAYMENT OF PREVAILING WAGE RATES

Sec. 2258.021. RIGHT TO BE PAID PREVAILING WAGE RATES.

(a) A worker employed on a public work by or on behalf of the state or a political subdivision of the state shall be paid:

contract for a public work awarded by the state, the public body shall determine the general prevailing rate of per diem wages in the locality in which the public work is to be performed for each craft or type of worker needed to execute the contract and the prevailing rate for legal holiday and overtime work as follows. The public body shall conduct a survey of the wages received by classes of workers employed on projects of a character similar to the contract work both statewide and in the political subdivision of the state in which the public work is to be performed. The public body shall also consider the prevailing wage rate as determined by the United States Department of Labor in accordance with the Davis-Bacon Act (40 U.S.C. Section 276a et seq.), and its subsequent amendments, but only if the survey used to determine that rate was conducted within a three-year period preceding the date the public body calls for bids for the public work. The public body shall determine the general prevailing rate of per diem wages in the locality based on the higher of:

(1) the rate determined from the survey conducted in the political subdivision;

(2) the arithmetic mean between the rate determined from the survey conducted in the political subdivision and the rate determined from the statewide survey; and

(3) if applicable, the arithmetic mean between the rate determined from the survey conducted in the political subdivision and the rate determined by the United States Department of Labor.

(c) The public body shall determine the general prevailing rate of per diem wages as a sum certain, expressed in dollars and cents.

(d) A public body shall specify in the call for bids for the contract and in the contract itself the wage rates determined under this section.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Sec. 2258.024. RECORDS. (a) A contractor and subcontractor shall keep a record showing:

(1) the name and occupation of each worker employed by the contractor or subcontractor in the construction of the public work; and

(2) the actual per diem wages paid to each worker.

(b) The record shall be open at all reasonable hours to inspection by the officers and agents of the public body.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Sec. 2258.025. PAYMENT GREATER THAN PREVAILING RATE NOT PROHIBITED. This chapter does not prohibit the payment to a worker employed on a public work an amount greater than the general prevailing rate of per diem wages.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Sec. 2258.026. RELIANCE ON CERTIFICATE OF SUBCONTRACTOR. A contractor is entitled to rely on a certificate by a subcontractor regarding the payment of all sums due those working for the subcontractor until the contrary has been determined.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

SUBCHAPTER C. ENFORCEMENT; CIVIL AND CRIMINAL PENALTIES

2258.023, including a penalty owed to a public body or an affected worker, shall be submitted to binding arbitration in accordance with the Texas General Arbitration Act (Article 224 et seq., Revised Statutes) if the contractor or subcontractor and any affected worker do not resolve the issue by agreement before the 15th day after the date the public body makes its initial determination under Section 2258.052.

(b) If the persons required to arbitrate under this section do not agree on an arbitrator before the 11th day after the date that arbitration is required under Subsection (a), a district court shall appoint an arbitrator on the petition of any of the persons.

(c) A public body is not a party in the arbitration.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Sec. 2258.054. ARBITRATION AWARD; COSTS. (a) If an arbitrator determines that Section 2258.023 has been violated, the arbitrator shall assess and award against the contractor or subcontractor:

(1) penalties as provided by Section 2258.023 and this section; and

(2) all amounts owed to the affected worker.

(b) An arbitrator shall assess and award all reasonable costs, including the arbitrator's fee, against the party who does not prevail. Costs may be assessed against the worker only if the arbitrator finds that the claim is frivolous. If the arbitrator does not find that the claim is frivolous and does not make an award to the worker, costs are shared equally by the parties.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

contractor by a public body because of the subcontractor's violation.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Sec. 2258.058. CRIMINAL OFFENSE. (a) An officer, agent, or representative of the state or of a political subdivision of the state commits an offense if the person wilfully violates or does not comply with a provision of this chapter.

(b) A contractor or subcontractor of a public work under this chapter, or an agent or representative of the contractor or subcontractor, commits an offense if the person violates Section 2258.024.

(c) An offense under this section is punishable by:

- (1) a fine not to exceed \$500;
- (2) confinement in jail for a term not to exceed six months; or
- (3) both a fine and confinement.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Technical Specifications

SECTION 32 8000

LANDSCAPE IRRIGATION SYSTEM

PART 1 -- GENERAL

1.1 SCOPE:

- A. Furnish all work and materials, appliances, tools, equipment, facilities, transportation, and services necessary for and incidental to performing all operations in connection with the installation of underground sprinkler irrigation system complete, as shown on drawings and/or specified herein. When the term "Contractor" is used in this section, it shall refer to the irrigation Subcontractor.

1.2 QUALITY ASSURANCE:

The following Codes, Regulations, Reference Standards, and Specifications apply to work included in this section: ASTM: D2241, D2464, D2466, and D2564.

1.3 WARRANTY AND MAINTENANCE:

- A. The Contractor shall warranty material and workmanship for two year after final acceptance including repair and replacement of defective materials, workmanship, and repair of backfill settlement.
- B. Maintenance during warranty shall include, but not necessarily be limited to, the following:
 - 1. Adjustment of sprinkler height and plumb to compensate for settlement and/or plant growth.
 - 2. Backfilling of all trenches.
 - 3. Adjustment of head coverage (arc of spray) as necessary.
 - 4. Unstopping heads plugged by foreign material.
 - 5. Adjustment of controller as necessary to insure proper sequence and watering time.
 - 6. All maintenance necessary to keep the system in good operating order. Repair of damage caused by vandals, other contractors or weather conditions shall be considered extra to these specifications.
- C. Warranty and maintenance after final acceptance does not include alterations as necessitated by re-landscaping, re-grading, addition of trees or the addition, and/or changes in sidewalks, walls, driveways, etc.
- D. Maintenance shall continue for one month after final acceptance.

1.4 SUBMITTALS:

- A. The Contractor shall submit shop drawings or manufacturer's "cut sheet" for each type of sprinkler head, pipe, controller, valves, check valve assemblies, valve boxes, wire, conduit, fittings, and all other types of fixtures and equipment proposed to install on the job. The submittal shall include the manufacturer's name, model number, equipment capacity, and manufacturer's installation recommendation, if applicable, for each proposed item.
- B. No partial submittal will be accepted and submittals shall be neatly bound into a brochure and logically organized. After the submittal has been approved, substitutions will not be allowed except by written consent of the Landscape Architect.
- C. Shop drawings shall include dimensions, elevations, construction, details, arrangements, and capacity of equipment, as well as manufacturer's installation recommendations.

1.5 "APPROVED EQUAL" SUBSTITUTIONS:

Several items in this section and on the plans are specified by a manufacturer's brand name and catalog number, followed by the phrase "or approved equal". This is not intended to unduly restrict competitive procurements or bidding, but is done to assure a minimum standard of quality which is believed to be best for the item specified and to match existing equipment.

1.6 CODES/PERMITS:

- A. All work under this section shall comply with the provisions of these Specifications, as illustrated on the accompanying drawings, or as directed by the Owner and shall satisfy all applicable local codes, ordinances, or regulations of the governing bodies and all authorities having jurisdiction over this Project.
- B. Installation of equipment and materials shall be done in accordance with requirements of the National Electrical Code, City Plumbing Code, and standard plumbing procedures. The drawings and these Specifications are intended to comply with all the necessary rules and regulations; however, some discrepancies may occur, the Contractor shall immediately notify the Landscape Architect in writing of the discrepancies and apply for an interpretation. Should the discovery and notification occur after the execution of a contract, any additional work required for compliance with the regulations shall be paid for as covered by these Contract documents.
- C. The Contractor shall give all necessary notices, obtain all permits, and pay all costs in connection with his work; file with all governmental departments having jurisdiction; obtain all required certificates of inspection for his work and deliver to the Owner.
- D. The Contractor shall include in the work any labor, materials, services, apparatus, or drawings in order to comply with all applicable laws, ordinances, rules, and regulations whether or not shown on the drawings and/or specified.
- E. The installation of the irrigation system shall be made by an individual or firm duly licensed under Article No. 8751 VTCS, Titled "Licensed Irrigators Act", S.B. No. 259 as passed by the 66th Texas Legislature.

1.7 EXISTING UTILITIES:

- A. Locations and elevations of various utilities included with the scope of this work have been obtained from the most reliable sources available and should serve as a general guide without

guarantee to accuracy. The Contractor shall examine the Site and verify to his own satisfaction the locations and elevation of all utilities and availability of utilities and services required. The Contractor shall inform himself as to their relation to the work and the submission of bids shall be deemed as evidence thereof. The Contractor shall repair at his own expense, and to the satisfaction of the Owner, for damage to any utility shown or not shown on the plans.

- B. Should utilities not shown on the plans be found during excavations, Contractor shall promptly notify the Owner for instructions as to further action.
- C. Contractor shall make necessary adjustments in the layout as may be required to connect to existing stub-outs, should such stub-outs not be located exactly as shown and as may be required to work around existing work, at no increase in cost to the Owner. All such work will be recorded on record drawings and turned over to the Owner prior to final acceptance.

1.8 RECORD DRAWINGS:

- A. Record dimensioned locations and depths for each of the following:
 - 1. Point of connection.
 - 2. Sprinkler pressure line routing (provide dimensions for each 100 lineal feet (maximum) along each routing, and for each change in directions).
 - 3. Gate valves.
 - 4. Sprinkler control valves (buried only).
 - 5. Control wire routing.
 - 6. Other related items as may be directed by the Landscape Architect.
- B. Locate all dimensions from two permanent points (buildings, monuments, sidewalks, curbs, or pavements).
- C. Record all changes which are made from the Contract drawings, including changes in the pressure and non-pressure lines.
- D. Record all required information on a set of blackline prints of the Contract drawings. Do not use these prints for any other purpose.
- E. Maintain information daily. Keep Contract drawings at the Worksite at all times and available for review by the Owner's representative.
- F. When record drawings have been approved by the Owner's Representative, transfer all information to a set of reproducible mylars using permanent India ink. Changes using ball-point pen are not acceptable. Make dimensions accurately at the same scale used on original Drawings, or larger. If photo reduction is required to facilitate controller chart housing, notes or dimension must be a minimum 1/4 inch in size.
- G. Reproducible mylars will be furnished by the Owner cost for printing and handling.

1.9 CONTROLLER CHARTS:

- A. Do not prepare charts until record drawings have been approved by the Owner's representative.
- B. Provide one controller chart for each automatic controller installed.
 - 1. Chart may be a reproduction of the record drawing, if the scale permits fitting within the

controller door. If photo reduction prints are required, keep reduction to maximum size possible to retain full legibility.

2. Chart shall be blackline print of the actual system, showing the area covered by that controller.
- C. Identify the area of coverage of each remote control valve, using a distinctly different pastel color, drawn over the entire area of coverage.
- D. Following approval of charts by the Owner's representative, they shall be hermetically sealed between two layers of 20 mil. thick plastic sheet.
- E. Charts must be completed and approved prior to final acceptance of the irrigation system.

1.10 OPERATING AND MAINTENANCE MANUALS:

- A. Provide individual bound manuals detailing operating and maintenance requirements for irrigation systems.
- B. Manuals shall be delivered to the Owner's representative for review and approval no later than 10 days prior to completion of work. Revise manual as required.
- C. Provide descriptions of all installed materials and systems in sufficient detail to permit maintenance personnel to understand, operate, and maintain the equipment.
- D. Provide the following in each manual:
 1. Index sheet, stating Irrigation Contractor's name, address, telephone number, and name of person to contact.
 2. Duration of guarantee period.
 3. Equipment list providing the following for each item:
 - a. Manufacturer's name.
 - b. Make and model number.
 - c. Name and address of local manufacturer's representative.
 - d. Spare parts list in detail.
 - e. Detailed operating and maintenance instructions of major equipment.
 4. Recommended programs for watering by season.

1.11 CHECKLIST:

- A. Provide a signed and dated checklist, and deliver to the Owner's representative prior to final acceptance of the work.
- B. Use the following format:
 1. Plumbing permits: if none required, so note.
 2. Material approvals: approved by and date.
 3. Pressure line tests: by whom and date.
 4. Record Drawings: received by and date.
 5. Controller charts: received by and date.
 6. Materials furnished: received by and date.
 7. Operation and maintenance manuals: received by and date.
 8. System and equipment operation instructions: received by and date.

9. Manufacturer's warranties if required: received by and date.
10. Written guarantee: received by and date.

1.12 ELECTRIC POWER:

Irrigation controllers are solar powered. No conventional electric service is required.

1.13 WATER FOR TESTING:

Unless noted otherwise on the plans or elsewhere, furnish all water necessary for testing, flushing, and jetting.

1.14 BORINGS, SLEEVES AND ELECTRICAL CONDUITS:

Sleeves and electrical conduits are the responsibility of the Irrigation Contractor to install prior to paving or related construction and should be installed as noted on the drawings and specifications. Contractors shall be responsible for locating all sleeves and conduits at no additional cost to the Authority. Borings under existing paving will be required where noted on the drawings and shall be provided at no additional cost to the Owner. Borings shall be a minimum of 18 inch depth and new pipes shall be incased in sleeves as noted on the plans.

PART 2 -- PRODUCTS

2.1 GENERAL:

Unless otherwise noted on the plans, all materials shall be new and unused. The irrigation equipment catalog numbers used for reference in these Specifications are to establish minimum quality standards and may be substituted with an "approved equal" as outlined in Paragraph 1.5 of this section.

2.2 POLYVINYL CHLORIDE PIPE (PVC PIPE):

PVC pipe manufactured in accordance with ASTM Standards noted herein.

- A. Marking and Identification: PVC pipe shall be continuously and permanently marked with following information: Manufacturer's name, size, type of pipe, and material, SDR number, Product Standard number, and the NSF (National Sanitation Foundation) Seal.
- B. PVC pipe fittings: Shall be of the same material as the PVC pipe specified and compatible with PVC pipe furnished. Solvent weld type shall be Schedule 40.
- C. PVC Pipe: Shall be Class 200 solvent weld, SDR-21, PS 22-70 for all sizes 3/4 inch to 3 inches. All 1/2 inch pipe shall be solvent weld SDR- 13.5, Class 315. Mainline pipe size 4" and larger shall be PVC o-ring gasket type with ductile iron fittings by Harco Industries.
- D. Flexible PVC Risers (Nipples): All flexible PVC nipples shall be made from virgin PVC material, and shall comply with ASTM D2287, shall be tested at 200 P.S.I. static pressure for 2 hours and have a quick burst rating of a minimum 400 P.S.I. Flexible PVC pipe nipples shall be factory assembled only.
- E. Pipe sleeves: Shall be Class 200 solvent weld, SDR-21, PSD 22-70 for all sizes 3/4 inch to 2

inches; all 1/2 inch pipe shall be solvent weld SDR-13.5, Class 315; and located as shown on drawings.

2.3 SWING JOINTS:

Swing joints shall be O-ring seal type, Lasco or approved equal.

2.4 WIRE AND SPLICES:

- A. All valve wire shall be single strand solid copper, minimum 14 gauge with type UF insulation which is Underwriters Laboratory approved for direct underground burial when used in a National Electrical Code Class II Circuit (30 volts AC or less) as per Articles 725 and 300. Voltage drop shall be taken into consideration.
- B. All connectors shall be UL listed, rated 600 volt, for PVC insulated wire. No wire splices shall be buried.
- C. All wire connectors shall have a two-piece PVC housing which, when filled with resin epoxy and pressed together, forms a permanent, one-piece, moisture-proof wire splice.

2.5 QUICK COUPLING VALVES:

- A. Quick coupling valves shall be composed of a bronze cast body with a purple, (NP) cover.
- B. The valve shall accept a single lug 3/4 inch bronze valve key for operation.
- C. Provide one coupler and one hose swivel ell for every five quick coupling valves shown on the plans.

2.6 MANUAL VALVES:

- A. Manual valves 2-1/2 inches and smaller shall be all brass, globe type with composition disc rated at 150 pounds W.O.G. Manual valve size 4" and larger shall be Kennedy cast iron type.
- B. All valves shall have wheel handles unless cross handles are called for on the plan.

2.7 VALVE BOXES:

- A. A box shall be provided for all valves.
- B. Valve boxes shall be made of high-strength plastic suitable for turf irrigation purposes.
- C. Boxes shall be suitable in size and configuration for the operability and adjustment of the valve.
- D. Extension sections will be used as appropriate to the depth of piping.
- E. All valve box covers shall bolt down or have locking mechanisms and shall be colored green or black as selected by the Contracting Officer.

2.8 POP-UP SPRAY, BUBBLERS AND ROTARY HEADS:

- A. Sprinkler heads are specified on the drawings. Spray heads shall have a minimum 4 inch pop-up.
- B. The sprinkler body and all related parts shall be plastic cycolac or polycarbonate. They shall have a spring retraction for positive return action of the pop-up nozzle.
- C. The spring for retraction and the adjustable nozzle screw shall be made of corrosion resistant materials.

2.9 DRIPPERLINE WITH PRESSURE COMPENSATING EMITTERS

Dripperline shall be of nominal sized one-half ($\frac{1}{2}$ ") inch low density, ultra-violet-resistant, linear polyethylene tubing with internal pressure-compensating, continuous self-cleaning, integral drippers at a specified interval. The tubing shall be brown in color throughout and shall conform to an outside diameter (O.D.) of 0.66" and an inside diameter (I.D.) of 0.56". The dripperline shall be capable of a discharge rate of 0.4, 0.6, or 0.9 gallons per hour (GPH) between operating pressures of 7 - 70 psi for each individual dripper.

The individual continuous self-cleaning, pressure compensating drippers shall be welded to the inside of the tubing wall. The drippers shall be constructed of three individual pieces:

- A. A black-colored dripper containing a filtration system on the inlet side, compensation cell, and recessed chamber with a water outlet,
- B. A hard plastic diaphragm retainer with color denoting discharge rate, with chamfered edges and a recessed groove in the center extending the full length of the diaphragm and,
- C. A flexible elastomer diaphragm that allows pressure to build up within the chamber to purge sediment or other debris that may not have been captured by the disc filter.

Dripper spacings shall be available in the following on-center intervals - 12", 18", and 24".

2.9.1 BARBED INSERT FITTINGS

All barbed insert fittings shall be constructed of molded, ultra-violet-resistant, black colored plastic having a nominal inside dimension (I.D.) of 0.24"

Each fitting shall have a minimum of two ridges or barbs per outlet with a raised barb nearest the fitting outlet. All fittings shall be of one manufacturer and shall be available in one of the following end configurations:

- barbed insert fittings,
- male pipe threads (MPT) with barbed insert fittings, or
- female pipe threads (FPT) with barbed insert fittings.

2.10 CONTROLLERS:

- A. Electric irrigation controller shall be capable of operating the number of stations as indicated on the drawings. The system is designed to operate one section valve at a time, per controller unless otherwise noted. The controller is specified on the drawings.
- B. Solenoids shall be latching DC type.
- C. Operation of the controller shall be full automatic, incorporating one 24 hour clock and 14 day calendar per controlled number of electric valves shown on the plan to start the sprinkling cycle any hour or hours of the day or night of any day or days over a repeating 14 day period.
- D. The controller shall be capable of repeating watering cycles as required with a maximum delay between the ending of one cycle and the beginning of the next not to exceed 2 hours. Control shall provide optional semi-automatic operation whereby the automatic cycle may be started independent of the clock and manual operation whereby any station may be operated by hand independent of all timing mechanism. The choice of automatic day or hour programming shall be available to the operator on the face of the control panel without the use of tools.
- E. The automatic controller shall be equipped with rainproof housing.

2.11 ELECTRIC REMOTE CONTROL VALVES:

- A. Electric remote control valves shall have plastic bodies and covers and shall be globe-type diaphragm valves of normally closed design. The valves are specified on the drawings.
- B. Operation shall be accomplished by means of integrally mounted heavy-duty 24-V DC solenoid complying with National Electrical Code, Class II Circuit. Solenoid coil shall be potted in epoxy resin within a plastic coated stainless steel housing. Solenoids shall be completely waterproof, suitable for direct underground burial.
- C. A flow stem adjustment shall be included in each valve.

2.12 BACKFLOW PREVENTER (DOUBLE CHECK VALVE):

- A. A double gate valve, double check assembly shall be located and sized as shown on the plans. The double check valve is specified on the drawings.
- B. Construction shall be all brass for sizes 3/4 inch to 2 inches.
- C. This assembly shall be installed in a box and shall conform to the City Plumbing Codes.

2.13 TEMPERATURE SENSORS & RAIN SENSORS:

- A. Rain and freeze sensors shall be provided and installed as noted on the plans.

PART 3 -- EXECUTION

3.1 INSTALLATION, GENERAL:

- A. Design Pressure: This irrigation system has been designed to operate with a minimum static inlet water pressure as indicated on the drawings. The Contractor shall take a pressure reading prior to beginning construction. If the pressure reading is 5% less than above, the Contractor shall notify the Owner's Representative.
- B. Contractor Responsibility: The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in equipment usage, area dimensions or water pressure exist that might not have been considered in the engineering. Such obstructions or differences shall be brought to the attention of the Owner's Representative in writing. In the event this notification is not performed, the Contractor shall assume full responsibility for any revision necessary.
- C. Staking: Before installation is started, place a stake or flag where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by the Landscape Architect before proceeding.
- D. Piping Layout: Piping layout is diagrammatic. Route piping around existing trees and root zones in such a manner as to avoid damage to plantings. Do not dig within the ball of newly planted trees or shrubs.
- E. In areas where trees are present, trenches will be adjusted on site to provide a minimum clearance of four times the trunk diameter of the tree (at its base) between any tree and any trench.
- F. All material and equipment shall be delivered to the Worksite in unbroken reels, cartons or other packaging to demonstrate that such material is new and of a quality and grade in keeping with the intent of these Specifications.

3.2 EXCAVATION AND TRENCHING:

- A. The Contractor shall perform all excavation to the depth indicated in these Specifications and Contract drawings. The banks of trenches shall be kept as nearly vertical as practicable. Trenches shall be wide enough to allow a minimum of 4" between parallel pipelines or electrical wiring. Where rock excavation is required, or where stones are encountered in the bottom of the trench that would create a concentrated pressure on the pipe, the rock or stones shall be removed to a depth of six (6) inches minimum below the trench depth indicated. The over depth rock excavation and all excess trench excavation shall be backfilled with loose, moist earth or sand, thoroughly tamped. Whenever wet or otherwise unstable soil that is incapable of properly supporting the pipe is encountered in the trench bottom, such shall be removed to a depth and length required, and the trench backfilled to trench bottom grade as hereinafter specified, with course sand, fine gravel or other suitable material.
- B. Bottom of trench grade shall be continued past ground surface deviations to avoid air pockets and low collection points in the line. The minimum cover specifications shall govern regardless of variations in ground surface profile and the occasional deeper excavation required at banks and other field conditions. Excavation shall be such that a uniform trench grade variation will occur in all cases where variations are necessary.
- C. Trench excavation shall comprise the satisfactory removal and disposition of all materials, and shall include all shoring and sheeting required to protect the excavation and to safeguard employees.
- D. During excavation, material suitable for backfilling shall be stockpiled in an orderly manner a

sufficient distance back from edge of trenches to avoid overloading and prevent slides or cave-ins. Material unsuitable for backfilling shall be wasted as directed by the Owner's Representative. When excavated material is of a rocky nature and the topsoil or any other layer of excavated material is suitable for pipe bedding and backfill in the vicinity of the pipe, such material shall be separately stockpiled for use in such bedding and pipe backfill operations, unless satisfactory imported material is used.

- E. All excavations and backfill shall be unclassified and covered in the basic bid. No additional compensation will be allowed for rock encountered.
- F. Restore all surfaces, existing underground installations, etc., damaged or cut as a result of the excavations to their original conditions in a manner acceptable to the Owner's Representative.

3.3 PIPE INSTALLATION:

- A. Sprinkler Mains: Sprinkler mains are that portion of piping from water source to electric valves. This portion of piping is subject to surges since it is a closed portion of the sprinkler system. Sprinkler mains shall be installed in a trench with a minimum of 18 inches of cover.
- B. Lateral Piping: Lateral piping is that portion of piping from electrical valve to sprinkler heads. This portion of piping is not subject to surges since it is an "open end" portion of the sprinkler system. Lateral piping shall be installed in a trench with a minimum of 12 inches of cover.

3.4 PVC PIPE AND FITTING ASSEMBLY:

- A. Solvent: Use only solvent recommended by manufacturer to make solvent-welded joints following standards noted herein. Thoroughly clean pipe and fittings of dirt, dust, and moisture with an approved PVC primer before applying solvent.
- B. PVC to Metal Connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 or "Teflon" tape on threaded PVC to metal joints. Use only light wrench pressure.
- C. Threaded PVC Connections: Where required, use threaded PVC adapters into which pipe may be welded.
- D. Remove lumber, rubbish, and rocks from trenches. Provide firm, uniform bearing for entire length of each pipeline to prevent uneven settlement. Wedging or blocking of pipe will not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean during and after laying pipe.
- E. PVC pipe shall not be installed where there is water in the trench, nor shall PVC pipe be laid when temperature is 40 deg. F or below or when rain is imminent. PVC pipe will expand and contract as the temperature changes. Therefore, pipe shall be snaked from side to side of trench bottom to allow for expansion and contraction.

3.5 HYDROSTATIC TESTS:

Pressure Test: After the pipe is laid, the joints completed, and the trench partially backfilled, leaving the joints exposed for examination, the newly laid piping or any valved section of main pressure line piping shall, unless otherwise specified, be subjected for four hours to a hydrostatic pressure test of normal city water pressure. Each valve shall be opened and closed during the test. Enclosed pipe, joints, fittings, and valves shall be carefully examined during the partially open

trench test. Joints showing visible leakage shall be replaced or remade, as necessary. Cracked or defective pipe, joints, fittings, or valves discovered in consequence of this pressure test shall be repeated until the test results are satisfactory. All replacement and repair shall be at contractor's cost.

3.6 CONTROL WIRE INSTALLATION:

- A. All control wire less than 500 feet in length shall be continuous without splices or joints from the controller to the valves. Connections to the electric valves shall be made within 18 inches of the valve using connectors specified in Paragraph 2.4 of this section, unless otherwise approved by the Owner's Representative in writing.
- B. All control wires shall be installed at least 18 inches deep. Contractor shall obtain the Owner's Representative's approval for wire routing when installed in a separate ditch. Control wires may be installed in a common ditch with piping; however, wires must be installed a minimum of 4 inches below or to one side of piping.
- C. All wire passing under existing or future paving, sidewalk, construction, etc., shall be encased in PVC Schedule 40 conduit extending at least 2 feet beyond edges of paving, sidewalks, or construction.

3.7 BUBBLER HEADS:

- A. Provide heads and nozzles as specified and install in locations as shown on the Contract Drawings.
- B. Contractor will be required to adjust heads as necessary after establishment of grass or other plant material.

3.8 DRIP EQUIPMENT:

- A. Dripperline can be installed in one of the four following methods:
 - Over-excavation: Over-excavate the entire area to a depth of 2" to 4" below finish grade. Plant all specimen trees and shrubs 15 gallon size and larger, then place dripperline at the row spacing interval indicated on the plans.
 - Pipe Pulling: Where ground disruption is to be minimized, pneumatic tire, pipe-pulling machinery shall be used. Potholes shall be used at the ends of each run for making connection to supply and exhaust headers of rigid PVC pipe or polyethylene pipe.
 - Trenching: Hand or mechanically trench to the pipe depth indicated on the plans or in these specifications and backfill flush with finish grade. Avoid mechanically trenching within the dripline of existing trees. Hand-trench around existing tree roots when roots of 2" and larger are encountered. Remove all rock 1½" and larger when excavating and remove from site. Do not backfill trenches with rock that will come in direct contact with tubing or rigid PVC piping.
- B. Placement of Rigid PVC Piping: Install pipe in a serpentine (snaked) manner to allow for expansion and contraction in trench before backfilling. Install pipes at temperatures over 40°F. Pipe markings shall face upward out of the trench whenever possible.
- C. Dripperline: Dripperline can be installed with the water outlets facing up, down, or sideways. In irregular areas, some water outlets could end up too close to fixed improvements and may have to be capped off with a dripper plug ring.

- D. Cover: Install underground piping horizontally and as evenly as possible to a maximum depth of 4", unless otherwise specified. (Typical pipe depth is 2" shrub beds, 4" in turf unless periodic aeration is anticipated, and then pipe depth should be lowered to 6".)
- E. Barbed Insert Fittings: Connect dripperline to barbed insert fittings by pushing the tubing on and over both barbs of the fitting until the tubing has seated against another piece of tubing or has butted against another portion of the barbed fitting. For water pressures in excess of the 30 psi, or the maximum stated system pressure for the dripperline, whichever is less, use stainless steel clamps as noted in paragraph 3.2.4, "Pipe Clamping" on all barbed fittings".
- F. Clamping: When design-operating pressure exceeds 30 psi, or maximum stated system pressure for the dripperline, whichever is less, stainless steel pipe clamps shall be used. Slip clamps over tubing before slipping tubing over barbed insert fitting. Place clamp between the first and second ridge of the barbed fittings and crimp the "ear" of the clamp tightly. Crimp the "ear" twice to ensure proper seating.

3.8 QUICK COUPLING VALVES:

- A. Quick coupling valves shall be installed with the underside of flange flush with the finished grade.
- B. Quick coupling valves shall be installed on a swing joint assembly as detailed on the drawings.
- C. Under the warranty, the Contractor shall return after grass is established and adjust valves and valve boxes to proper grade.

3.9 MANUAL VALVES:

- A. Manual valves shall be sized and located where shown on the Contract drawings.
- B. Valve boxes shall be adjusted to be flush with finished grade. The Contractor will be required to adjust after establishment of grass.
- C. Valve boxes shall be properly supported and of sufficient construction that tractors and mowers crossing over the boxes will not push boxes down and crush the pipe, valve, or box.

3.10 VALVE AND VALVE BOX PLACEMENT:

- A. All manual, electric, and quick coupling valves shall be in boxes as specified in Paragraph 2.7 of this section, and shall be set with a minimum of six (6) inches of space between their top surface and the bottom of the valve box. The base of the box shall be filled with pea gravel as
- B. Valves shall be fully opened and fully closed to ensure that all parts are in operating condition.
- C. Valve boxes shall be set plumb, vertical, and concentric with the valve stem.
- D. Any valve box which has moved from this required position so as to prevent the use of the operating wheel of the valve shall be reset by the Contractor at his own expense.

3.11 SOLAR POWERED CONTROLLER:

- A. The controller shall be located as shown on the plans and shall be capable of operating the number of stations indicated.
- B. The system is designed to operate one section at a time, per controller, unless otherwise noted on the plans in strict accordance with the manufacturer's published installation instructions.

3.12 ELECTRIC REMOTE CONTROL VALVES:

- A. Remote control valves shall be located and sized as shown on the plans. All electrical connections shall be made when the weather is dry with connection kits as specified in Paragraph 2.4 of this section in strict accordance with manufacturer's recommended procedures. All remote control valves shall be installed in a horizontal position, in accordance to the manufacturer's published installation instructions.
- B. It shall be the responsibility of the Contractor to furnish and install the proper size wire on each of the low voltage circuits from the master control center to the various electric remote control valves.
- C. Consideration shall be given to each circuit for allowance of voltage drop and economy consistent with accepted practices of electrical installation. Under no circumstances shall the voltage of any branch circuit be reduced more than proper due to length of run exceeding the maximum allowable for the wire size used.

3.13 BACKFILL AND COMPACTION:

- A. After system is operating and required tests and inspections have been made, the trenches shall be carefully backfilled with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand, gravel, soft shale, or other approved materials, free from large clods of earth or stone. Rock, broken concrete, or pavement, and large boulders shall not be used as backfill material. The backfill shall be thoroughly compacted and evened with the adjacent soil level.
- B. Compact trenches in areas to be planted by thoroughly flooding the backfill. Compact all other areas by flooding or hand tamping. The jetting process may be used in areas when flooding.
- C. Backfill for all trenches, regardless of the type of pipe covered, shall be compacted to a minimum of 90% density.
- D. Any trenches improperly backfilled, or where settlement occurs, shall be reopened to the depth required for compaction, then refilled and compacted with the surface restored to the required grade and left in a completed surface condition as described above.
- E. Specifically tamp backfill under heads and around the flange of heads for one foot (1') by a suitable means after trench backfill has dried from flooding to prevent heads loosening in the ground.

3.14 FINAL ADJUSTMENT:

- A. After installation has been completed, make final adjustment of sprinkler system prior to Owner's Representative's final inspection.

- B. Completely flush system to remove debris from lines by removing nozzle from heads on ends of lines and turning on system.
- C. Check sprinklers for proper operation and proper alignment for direction of throw.
- D. Check each section for operating pressure and balance to other sections by use of flow adjustment on top of each valve.
- E. After system is thoroughly flushed and ready for operation, each section of sprinklers shall be adjusted to control pressure at heads. Use the following method, one section at a time:
 - 1. Remove last head on section and install a temporary riser above grade. Install tee with pressure gauge attached on top of riser and re-install head with nipple onto tee.
 - 2. Correct operating pressure at last head of each section as follows: Spray Heads - 30-35 psi.
 - 3. After replacing head, at grade, tamp thoroughly around head.
 - 4. Drip zone valve pressure regulating devices shall be set at not to exceed 40 psi.

3.15 CLEAN-UP:

- A. The Worksite shall be thoroughly cleaned of all waste materials and all unused or salvaged materials, equipment, tools, etc.
- B. After completion of the work, areas disturbed shall be leveled and the Worksite shall be raked clean and left in an orderly condition.

END OF SECTION

SECTION 32 92 20
LAWN TURFGRASS PLANTING

PART 1 GENERAL

1.01 SCOPE

A. The work in this section includes all soil preparation, fertilization, planting and other requirements associated with turfgrass planting. Furnish all labor, materials, equipment and services required as herein specified and as indicated on the drawings. T

1.02 SUBMITTALS

A. All delivery receipts and copies of invoices for materials used for this work shall be subject to checking by the Owner's Representative.

B. Various samples, certificates and specifications for seed, fertilizer and other materials shall be submitted for approval by the Owner as required by subsequent sections of this specification.

PART 2 – PRODUCTS

2.01 TURFGRASS

A. Bermuda Grass Sod: Turfgrass sod shall be a hybrid of "Cynodon dactylon", commonly known and marketed as TifTuf™ Bermuda Grass. Sod shall consist of leaf blades, stolons, rhizomes and roots with healthy, virile system of dense, thickly matted roots throughout the soil of the sod. The sod pad shall be not less than three-quarter (3/4") inches thick. Sod shall be alive, healthy, vigorous, free of insects, disease, stones and undesirable foreign materials and grasses. The grass shall have been mowed prior to sod cutting so that the height of the grass shall not exceed two (2") inches. Sod shall not be harvested or planted when the moisture condition of the sod is so excessively wet or dry that its survival will be affected. All sod shall be harvested, delivered and planted within a thirty-six (36) hour period. Sod shall be protected from exposure to wind, sun and freezing. If sod is stacked, it shall be kept moist and shall be stacked roots-to-roots and grass-to-grass.

1. Prior to planting, provide the Owner's Representative with the State Certificate stating the analysis of the sod.

2. All sod shall be the same thickness. Sod sections shall be rectangular and may vary in length, but the width of all sod sections must be equal. Broken or torn sod pads will be unacceptable.

B. St. Augustine Grass Sod: Turfgrass sod shall be a variety of "Stenotaphrum secundatum". Sod shall consist of leaf blades, stolons and roots with healthy, virile system of dense, thickly matted roots throughout the soil of the sod. The sod pad shall be not less than three-quarter (3/4") inches thick. Sod shall be alive, healthy, vigorous, free of insects, disease, stones and undesirable foreign materials and grasses. The grass shall have been mowed prior to sod cutting so that the height of the grass shall not exceed three (3") inches. Sod shall not be harvested or planted when the moisture condition of the sod is so excessively wet or dry that its survival will be affected. All sod shall be harvested, delivered and planted within a thirty-six (36) hour period. Sod shall be protected from exposure to wind, sun and freezing. If sod is stacked, it shall be kept moist and shall be stacked roots-to-roots and grass-to-grass.

1. Prior to planting, provide the Owner's Representative with the State Certificate stating the analysis of the sod.

2. All sod shall be the same thickness. Sod sections shall be rectangular and may vary in length, but the width of all sod sections must be equal. Broken or torn sod pads will be unacceptable.

C. Rye Grass Seed: Turfgrass seed shall be "Lolium perenne" (Perennial Rye Grass). The seed shall be harvested no more than one (1) year prior to planting and shall be free of weed seed to the limits allowable under the Federal Seed Act and applicable seed laws. The seed shall be at least ninety-five (95%) percent pure and shall have a minimum ninety (90%) percent germination rate. Seed shall be labeled in accordance with U.S. Department of Agriculture rules and regulations.

1. Prior to planting, provide the Owner's Representative with the State Certificate stating the analysis of purity and seed germination.

2.02 FERTILIZER

A. Fertilizer shall be a commercial product, uniform in composition, free flowing and suitable for application with approved equipment. Fertilizer shall be delivered to the site in fully labeled original containers. Fertilizer that has been exposed to high humidity and moisture or has been damaged making it unsuitable for use will not be acceptable.

B. Fertilizer for the initial planting application shall have an N-P-K ratio of 4-5-1 (19-26-5). The phosphorus content must be derived from monoammonium phosphate to stimulate vigorous development of new roots, stolons and rhizomes.

1. Submit a sample label or specification of the fertilizer for the Owner's approval.

PART 3 – EXECUTION

3.01 GENERAL

A. Areas within or adjacent to the project limits that have been disturbed by construction activities shall be identified and prepared for sod installation. This may include cutting and removing areas of existing turf to create a clean, consistent transition at the edges.

B. The Contractor must determine the type of sod to be planted in each location based on matching the species of the existing, disturbed turf areas.

C. All turf planting shall be executed across the slope parallel to the finish grade contours.

3.02 SCHEDULE

A. Any sod areas not established by September 15 shall be planted with sod that has been over seeded with Rye Grass at the turf farm prior to delivery to the site. The Contractor will still be responsible for producing an acceptable coverage of grass as specified.

B. Grass planting can only proceed upon approval of the fine grading by the Owner's Representative.

3.03 SOIL PREPARATION

A. Soil shall be tilled to loosen the soil, destroy any existing vegetation and to prepare an acceptable planting bed. All turf areas shall be tilled to a depth of five (5") inches.

B. Soil shall be cleaned of all debris, building materials, rubbish, weeds and stones larger than three-quarter (3/4") inches in diameter. All collected materials shall be removed off-site.

C. After tilling and cleaning, the areas to be planted shall be leveled, fine graded and drug with a float drag or a weighted spike harrow. The end result shall be a planted area free of ruts, depressions, humps and any soil clods.

3.04 FERTILIZATION

A. The initial planting fertilizer application shall be applied at a rate of nine (9 lbs.) pounds per one thousand (1,000 sq. ft.) square feet or four hundred (400 lbs.) pounds per acre.

1. Fertilizer shall be applied over sodded areas within forty-eight (48) hours after planting.

3.05 SOD PLANTING

A. Prior to laying the sod, the planting bed shall be raked smooth and moistened to a depth of four (4") inches, but not to the extent of causing puddling.

B. Sod shall be laid smoothly and butted end to end with staggered joints.

C. The sod shall be pressed firmly into contact with the subgrade by rolling in order to eliminate all air pockets, to provide a true and even surface and to ensure rooting without displacement of the sod or deformation of the surfaces of the sodded area.

D. Following rolling, fine screened soil of good quality shall be used to fill any cracks between sod sections. Excess soil shall be worked into the grass with suitable equipment and shall be well watered. The texture of the fill soil shall be such that it will not smother the grass.

3.07 PROTECTION

- A. No heavy equipment shall be moved over the planted turf areas. Any areas disturbed prior to acceptance shall be tilled, regraded, leveled and replanted.
- B. It will be the Contractor's responsibility to protect all paved surfaces, utilities, plant material and any other improvements from damage during grassing operations. Any damage will be repaired at no cost to the Owner.
- C. The Contractor will be responsible for locating and protecting all irrigation equipment during grassing operations.

3.08 IRRIGATION SYSTEM

- A. Existing irrigation systems shall be protected during sod installation. Any privately-owned irrigation components damaged during construction shall be repaired or restored to pre-construction conditions.
- B. Sod areas shall be watered with a temporary irrigation system and/or hand watering if not covered by individual property owners' existing irrigation systems. Temporary irrigation must be approved by the Owner prior to installation. Once the non-irrigated turfgrass has achieved an acceptable stand of grass the temporary irrigation system must be removed.

3.09 ESTABLISHMENT AND ACCEPTANCE

- A. Regardless of unseasonable climatic conditions or any other adverse conditions affecting grassing operations, the germination and growth of turf grasses, it shall be the sole responsibility of the Contractor to produce uniform coverage.
- B. Uniform coverage in sodded areas shall be defined as no visible joints showing or felt between sod sections and all sod sections must be firmly rooted to the subgrade.

3.10 POST PLANTING MAINTENANCE

- A. Maintenance shall begin immediately after grass is planted. All planted areas will be protected and maintained by watering, weeding and replanting as necessary for at least thirty (30) days after planting and for as long as necessary to establish uniform coverage of the specified grass. All areas which do not achieve uniform coverage at the end of thirty (30) days will continue to be replanted and maintained by the Contractor until the turfgrass is completely covered and accepted.
- B. Apply at least one-half (1/2 ") inch of water over the entire planted area every three (3) days until grass is established. Contractor shall water thoroughly, and infrequently once grass is established to encourage deep root growth. Water will be paid for by the Owner as long as it is not used in a wasteful manner.
- C. Once grass is established the turf areas must be mowed at least once a week at a height of two (2") inches until the end of the growing season or until the project is completed. The Contractor shall anticipate at least four (4) mowing as a part of this contract.
- D. All turf areas adjacent to pavement or planting beds shall be edged as required to maintain a neat appearance.

3.11 EROSION CONTROL

- A. Throughout the grow-in and maintenance period it is the Contractor's responsibility to maintain the topsoil in place at the finish grade. Any topsoil or turfgrass losses due to erosion will be replaced by the Contractor until establishment and acceptance is achieved.

3.12 CLEAN UP

- A. The Contractor shall remove any excess material or debris brought to the site or uncovered during grassing operations.

3.13 GUARANTEE

- A. The Contractor shall guarantee that all materials used for grassing operations are the type, quality and quantity specified.

END OF SECTION

SECTION 32 9300

SHRUB, PERENNIAL AND GROUND COVER PLANTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fine grading of bed areas, soil preparation and planting associated with shrubs, perennial plants, decorative grasses and ground cover planting.

1.02 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Certification: Submit certificates of inspection as may be required by governing authorities to accompany shipments. For standard products, submit manufacturer's certified analysis. For other materials, submit analysis by a recognized laboratory made in accordance with methods established by Association of Official Agricultural Chemists, wherever applicable.
 - 1. Submit a product specification and a one (1 qt.) quart sample of the compost for the Owner's approval.
 - 2. Submit a product specification and a one (1 qt.) quart sample of the mulch for the Owner's approval.
 - 3. Submit a product specification and a one (1 qt.) quart sample of the fertilizer for the Owner's approval.
- C. Planting Schedule: Submit proposed planting schedule indicating anticipated dates and locations for each type planting.
- D. Maintenance Instructions: Submit typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work during entire year. Submit prior to expiration of required maintenance period.
- E. Material Sources: Submit to Owner's Representative, a list of all plant materials and their source, accompanied by photographs of representative specimens at source nursery or farm. This list shall be submitted no later than three days after Notice to Proceed.

1.03 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. All shrubs, native grass and ground cover shall be warranted for one (1) year; warranty begins upon final acceptance by the Owner.
- C. At the end of the warranty period an inspection will be made by the Owner and Contractor. Any plant material that is dead or does not exhibit a satisfactory growth condition shall be removed and replaced with plant material that is similarly sized with the surrounding plant material at no cost to the Owner.

PART 2 PRODUCTS

2.01 SOIL AMENDMENTS

- A. Compost: Compost shall be a fully composted cotton burr based organic material acidified with sulfur. This material shall have been composted for at least four (4) months at temperatures exceeding one hundred fifty (150o) degrees. Compost shall be coarsely screened and free of fungus, grass or weed seed, debris or any toxic substance. Compost suppliers must be a member of the United States Composting Council.
 - 1. Use compost produced by Back to Nature, Inc. Slaton, TX; 888.282.2000, Soil Building Systems, Dallas, TX; 972.831.8181 or accepted substitution.

2.02 MULCH

- A. Mulch: Shredded hardwood mulch free of stones, clay or other foreign debris and dye.

2.03 FERTILIZER

- A. Fertilizer shall be a naturally occurring organic glauconite with an N-P-K ration of 0-2-5.
 - 1. Use Texas Green Sand available from Soil Building Systems, Dallas, TX, 972.831.8181, or Living Earth Technologies, Inc. Dallas, TX, 972.869.4332, or Garden Ville, Austin, TX 888.655.6115 or an approved equal.

2.04 WATER

- A. Water shall be available at the site via the irrigation system. Water required in connection with planting will be furnished by the Owner provided it is not used in a wasteful manner. Any hose or other watering equipment shall be provided by the Contractor.

2.05 PLANT MATERIAL

- A. The names and locations of all plants are noted on the drawings. The nomenclature of all plant material is per Hortus Third by L.H. Bailey. Plant materials not conforming to this reference will be rejected.
- B. Quality and Size:
 - 1. All plant materials shall be first class representatives of their normal species or variety unless otherwise specified. Plants shall have a habit of growth that is normal for their species and shall be healthy, shapely, well rooted and vigorous. All plant materials shall be free from insects, pests, plant diseases and injuries. The containers of all plants delivered to the site shall be free from weeds or grasses which could be considered noxious or objectionable. All plant material shall be equal to or exceed the size requirements specified on the plans. Plants shall be measured after pruning with branches in their normal position. The requirement for measurement, branching, grading and quality of plants generally follows the code of standards currently recommended by the American Association of Nurserymen, in the American Standard for Nursery Stock.
- C. The Owner must approve all plant material prior to planting. Plant material having the following features may be subject to rejection:
 - 1. Excessive amount of abrasions to the bark.
 - 2. Dried or damaged root system.
 - 3. Dried or damaged top wood of deciduous plants or dried, damaged foliage and top wood on evergreens.
 - 4. Prematurely opened or damaged buds.
 - 5. Disease or insect infestation, including eggs or larvae.
 - 6. Dry, loose, cracked, broken or undersized root balls or containers which do not conform to the sizes shown on the plans.
 - 7. Evidence of heating, molding, freezing, wind burn, sun scald, etc.
 - 8. Root-bound or overgrown.
 - 9. Plants with bench balls (roots repacked with soil).
 - 10. Plant balls encased in non-biodegradable plastic or other impervious material.
 - 11. Field grown or collected plants transferred into containers for less than six (6) months.
 - 12. Plants with disfiguring knots or fresh cut branches greater than one (1") inch that have not completely calloused.
 - 13. Plants that do not exhibit a normal balance between height and spread for their species.
 - 14. Plant containers that are not structurally sound.
 - 15. Plants in containers with a less than a three-quarter (3/4) planting medium depth.
 - 16. Any physical damage or adverse condition that would prevent thriving growth or cause an unacceptable appearance.
 - 17. Plants that do not meet the size requirements shown on the plans.
- D. The balls of B&B plants which cannot be planted immediately planted upon delivery shall be covered with moist soil or mulch or otherwise protected from drying winds and the sun.
- E. All plants shall be watered as necessary until planting.
- F. All plants shall conform to the measurements specified in the Plant Schedule included in the drawings. The specified sizes shall be the minimum size acceptable for each plant variety.
- G. All plants shall be nursery grown. Nursery grown plants shall be defined as plants which are healthy, vigorous plants lined out in rows at a nursery and which are annually cultivated, sprayed, pruned and fertilized in accordance with good horticultural practices.
- H. Plants larger in size than specified in the Plant Schedule may be used if approved by the Owner's Representative and there is no additional cost.

- I. Plants designated as B&B on the plans shall be balled and burlapped. Plants shall be dug with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap or similar materials and bound with twine, cord or wire mesh. Where necessary, to prevent breaking or cracking of the ball during the delivery and planting process, the ball may be secured to a platform.
- J. No plant shall be bound with wire or rope at any time so as not to damage the bark or break the branches.
- K. Substitutions will not be permitted unless approved by the Owner. The Contractor must make every effort to locate and acquire the specified plants in a timely manner.
- L. Plants shall be loaded and protected during delivery and after arrival at the project site against wind damage or other injuries and at no time shall plants be stored on paved surfaces or allowed to dry out.
- M. All plants shall be handled so that roots are adequately protected at all times from drying out and from injury.

PART 3 EXECUTION

3.01 LAYOUT

- A. Location and spacing for plants and outline of areas to be planted shall be as denoted by stem location or by notations on the plans.

3.02 BED PREPARATION

- A. Prior to bed preparation the Contractor shall apply Round-Up herbicide to all bed areas. Follow manufacturer's recommendations as to the timing requirements for effective weed control.
- B. Planting areas shall be dug and soil fully prepared, graded and made ready to receive the plant material before delivery of plant material. After planting, all beds shall be finished graded 1 inch above the adjacent grade to allow for settling.
- C. Plant beds shall be excavated to a depth of 3 inches to accommodate 4 inches of compost. After the compost is spread the beds shall be tilled to a depth of 8 inches.
- D. Texas Green Sand shall be tilled into the prepared soil mix at a rate of 80 pounds per 1,000 square feet.
- E. The bed edge for all beds not enclosed by concrete paving or mow curbs shall be steel edging.

3.03 SETTING THE PLANTS

- A. All plants shall be planted in pits or beds as shown on the plans, centered and set to touch such depth that the top of the root ball will be 1 to 2 inches above finished grade. Root flare must be visible after planting. Each plant shall be planted plumb and faced to give the best appearance or relationship to adjacent plants or structures. Twine or wire shall be cut so that the burlap covering the top of the B&B root balls can be pulled back. Burlap shall not be pulled out from under root balls. All broken or frayed roots shall be cut off cleanly.
- B. Soil shall be placed carefully in planting pits to avoid injury to roots and to fill all voids. When the planting pit is nearly filled, add water and fertilizer and allow it to soak away.

3.04 GRADING

- A. After planting all bed areas shall be fine graded to slope soil as shown on the plans.

3.05 MULCHING

- A. After fine grading all bed areas will be covered with 2 inches of mulch completely covering the entire bed area. Root flares must be visible after mulching.

3.06 CLEANUP

- A. After planting all excess soil, bed preparation material, fertilizer and plant containers shall be removed from the site.

3.07 MAINTENANCE

- A. The Contractor is responsible for watering, weed control and other necessary maintenance until final acceptance of all work.

END OF SECTION

SECTION 32 9340

TREE PLANTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Trees, preparation of planting pits and planting area soil preparation including excavation, backfilling, and disposal of surplus and unsuitable excavated material. Planting of trees includes mulching, trimming, and staking.

1.02 REFERENCE STANDARDS

- A. ANSI/ANLA Z60.1 - American National Standard for Nursery Stock; 2004.

1.03 SUBMITTALS

- A. Product Certification: Submit certificates of inspection as may be required by governing authorities to accompany shipments. For standard products, submit manufacturer's certified analysis. For other materials, submit analysis by a recognized laboratory made in accordance with methods established by Association of Official Agricultural Chemists, wherever applicable.
- B. Planting Schedule: Submit proposed planting schedule indicating anticipated dates and locations for each type planting.
- C. Maintenance Instructions: Submit typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work during entire year. Submit prior to expiration of required maintenance period.
- D. Material Sources: Submit to Owner's Representative, a list of all plant materials and their source. This list shall be submitted no later than three days after Notice to Proceed.

1.04 QUALITY ASSURANCE

- A. General: Comply with all applicable federal, state, county and local regulations governing landscape materials and work.
- B. Employ only experienced personnel familiar with required work. Provide adequate supervision by qualified foremen.
- C. Substitutions: Do not make plant material substitutions without Owner's permission. If required landscape material is not obtainable, submit proof of non-availability to Owners Representative, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified. There will be no additional cost to the Owner for substitutions past bid opening.
- D. Provide quantity, size, genus, species, and variety of trees indicated and scheduled for landscape work and complying with applicable requirements of ANSI Z60.1, "American Standard for Nursery Stock".
- E. Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including four (4") caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions, do not measure from branch or root tip-to-tip.
- F. Inspection: Owner's Representative may choose to inspect plants either at place of growth or at site before planting, for compliance with requirement for genus, species, variety, size, and quality. Owner's Representative retains right to further inspect plants for size and condition of balls and root systems, insects, injuries, and latent defects, and to reject unsatisfactory or defective materials at any time during progress of work. Remove rejected plant materials immediately from project site and replace with acceptable material at no additional cost to the Owner.
- G. Notify owner's representative of sources of plant materials thirty (30) days in advance of delivery to project site.

1.05 DELIVERY, HANDLING AND STORAGE

- A. Do not prune trees prior to delivery unless approved by the Owner's Representative. Provide adequate protection of the root systems and foliage from drying wind and sun. Do not bend or bind trees in such a manner that would damage the bark, break branches or destroy the trees natural shape. Provide protective coverings during delivery. Any tree in full leaf will be sprayed with an anti-desiccant prior to delivery. Do not drop balled and burlapped stock during delivery.
- B. Deliver trees after preparations for planting have been completed and then plant
 1. immediately. Storage of plant materials in medians or rights-of-way will not be allowed. If
 2. tree planting is delayed for more than six (6) hours after delivery set the trees in the shade,
 3. protect them from the weather and construction damage and keep the roots moist.
 4. Set balled stock on ground and cover with soil, peat moss, saw dust or other acceptable
 - a. material.
 5. Do not remove trees from their containers until they are ready to be planted.
 6. While waiting to be planted trees shall not be stored on pavement or any surfaces which reflect a large amount of heat during storage.
 7. Periodically water root system of trees stored on site using a fine mist spray. Water as often as necessary to maintain root systems in a moist condition.
 8. All trees shall be handled carefully so that the roots are adequately protected from drying out and from injury. The balls of balled and burlapped trees which cannot be planted immediately upon delivery shall be "heeled in" for protection with soil, mulch or other acceptable material.

1.06 JOB SITE CONDITIONS

- A. Timing: Plant trees during normal seasons for such work in location of project. Plant flowering trees during the spring planting season, except as otherwise acceptable to Owner's Representative.
- B. Coordination with Lawns: Protect existing lawn areas to the greatest extent practical during construction. Seed or sod all areas disturbed during construction with approved seasonal grass.
- C. Coordination with Irrigation System: If irrigation installation is to be installed by Contractor, the irrigation system must be fully operational prior to commencement of landscape and tree planting operations. Report potential conflicts with the irrigation system to the Owner's Representative.

1.07 WARRANTY

- A. Warranty all plant materials for a period of one year after date of final acceptance against defects including death and unsatisfactory growth, but excepting defects resulting from neglect by Owner, abuse or damage by others, or unusual phenomena or incidents which are beyond Contractor's control.

PART 2 PRODUCTS

2.01 PLANT MATERIAL

- A. General: Provide plant material grown in a recognized nursery in accordance with good horticultural practice, with healthy root systems developed by transplanting or root pruning. Provide only healthy stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, or disfigurement. Trunks will be centered in root ball. Fresh pruning cuts larger than 1/2 inch can be cause for rejection of plant material.
- B. Size: Provide plant material of the sizes indicated in planting list and in accordance with dimensional relationship requirements of ANSI Z60.1 for kind and type of plant material required. Plant material of larger size than specified may be used if acceptable to Owner's Representative; in which case, increase size of root balls proportionately and at no additional cost to Owner. It is the Contractor's responsibility to verify plant quantities where formal arrangements of consecutive order of trees are shown, select stock for uniform height and spread.

2.02 DECIDUOUS TREES

- A. Provide trees of height and caliper indicated where shade trees are required, provide single stem trees with straight trunk and intact leader where small trees of upright or spreading type are required, provide trees with single stem, branched or pruned naturally according to species and type, and with relationship of caliper and branching recommended by ANSI Z60.1, unless otherwise indicated.

2.03 REQUIREMENTS FOR CONTAINER GROWN STOCK

- A. General: Provide healthy, vigorous, well-rooted plant materials established in container in which they are sold. Provide balled and burlapped stock, when required trees exceed maximum size recommended by ANSI Z60.1 for container grown stock.
- B. Established container stock is defined as a tree grown in or transplanted into a container and grown in the container for a length of time sufficient to develop new fibrous roots, so that root mass will retain its shape and hold together when removed from container.
- C. Containers: Use rigid containers that will hold ball shape and protect root mass during shipping. Provide trees established in containers of not less than minimum sizes recommended by ANSI Z60.1 for kind, type, and size of trees required.

2.04 MISCELLANEOUS MATERIALS

- A. Mulch: Provide shredded cypress bark mulch or hardwood bark mulch to a depth of at least 3" in the planting basin to cover root ball. Do not place mulch directly against the trunk of the tree.
- B. Root-ball Stabilization: Trees shall be stabilized by means of an at-grade or sub-grade root stabilization system that does not employ the use of stakes, posts or guys. The recommended system is the Root Anchor™ Underground Tree Staking System by Tree Stake Solutions, LLC. Product shall be approved by the Landscape Architect prior to installation.
- C. Tree Guying: Utilize materials previously established or approved by City of Lewisville Parks and Recreation maintenance personnel.
- D. All other materials not specifically described but required for a complete and proper installation may be selected by the Contractor subject to the approval of the Owner's Representative.
- E. Post Emergent Herbicide: "Round Up" or accepted substitution may be utilized in the planting basin to control weeds until final acceptance of the project. All chemicals must be applied by a Licensed Chemical Applicator.

2.05 PLANTING MIXTURE - TREE PLANTING

- A. Soil for use in back-filling tree pits shall be the excavated soil from the planting pit unless otherwise specified by Owner's Representative.
- B. Existing topsoil shall be free of all rocks and rock chips over three-quarters (3/4) in diameter, as well as all trash, vegetation, and other debris.

PART 3 EXECUTION

3.01 TREE PLANTING

- A. Cooperate with other contractors and trades working in and adjacent to landscape work areas. Examine drawings that show development of entire site and become familiar with scope of other work required.
- B. Layout individual tree locations and areas for multiple plantings. Stake locations and outline areas and secure Owner Representative's acceptance before start of planting work. Make minor adjustments as may be requested by Owner's Representative.
- C. Excavation: Excavate pits, beds, and trenches according to drawings with vertical but "rough" sides. Leave soil in bottom of pit undisturbed. Avoid creating smooth or "glazed" sides of pit. Do not excavate tree pits until preliminary approval has been obtained from the Owner's Representative.
- D. Immediately dispose of unsuitable subsoil removed from landscape excavations. Do not mix with planting soil or use as back-fill.

- E. Utilities: Have existing utilities field located prior to excavating. Notify Owner's Representative of potential conflicts.
- F. Obstructions: If rock, underground construction, or other obstructions are encountered in excavation for planting of trees, notify Owner's Representative. New locations may be selected by Owner's Representative or change order may be issued to direct removal of obstructions to depth of not less than 6 inches below required planting depth.
- G. Drainage: Test all planting pits for adequate percolation. If subsoil conditions indicate retention of water in planting areas, or if seepage or other evidence indicating presence of underground water exists, notify Owner's Representative before backfilling. A change order may be issued to direct installation of drain tile or other measures beyond drainage requirement indicated.

3.02 PREPARATION OF TREE PLANTING SOIL

- A. Before backfilling, clean soil of roots, plants, sod, stones, clay lumps, any other extraneous materials harmful or toxic to plant growth, and dispose of off site. Use only existing soil from the site as back-fill.
- B. Setting and Back-filling: Set tree root ball on undisturbed soil, plumb and in center of pit or trench with top of ball one to two inches above finished landscape grades. Carefully remove cover and sides of wooden boxes after partial back filling so as not to damage root-balls. Completely remove any nylon, plastic, or wire materials from the top half of the root-ball. Remove pallets, if any, before setting. Do not use stock if ball is cracked or broken before or during planting operation. When set, place back-fill (existing native soil) around base and sides of ball, and work each layer to settle back-fill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer or back-fill.
- C. Construct water retention basin as directed in plans, at least 4 inches high and twice the diameter of the root-ball.
- D. Mulch pits, trenches, and planted areas. Provide at least a 3 inch layer of mulch on top of the root-ball. Do not place mulch against trunk of tree.
- E. Unless otherwise directed by Owner's Representative, do not cut tree leaders, and remove only injured or dead branches. Any pruning shall be in accordance with standard horticultural practices. Stake trees immediately after planting. If after pruning, the plant has become misshapen or changed in appearance, the plant will be rejected.
- F. Stake trees of 2 inches or greater caliper. Stake trees of less than 2 inch caliper only as required to prevent wind "tip-out". Trees that require staking shall be staked in accordance with the tree planting and staking methods previously established by City of Lewisville Parks and Recreation maintenance personnel.

3.03 MAINTENANCE

- A. Maintain all trees until final acceptance by Owner. Prune, water, cultivate, and weed as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees to proper grades or vertical position as required. Spray as required to keep trees free of insects and disease. Renew mulch as needed.
- B. Plants shall be in good, healthy, and disease-free condition. All planted areas shall be free of weeds and debris before site is accepted by Owner.

3.04 WARRANTY PERIOD AND REPLACEMENT

- A. Warranty period for all plant material shall be for one year. Warranty period begins at the date of final acceptance of the project by the Owner.
- B. Replace, without cost to Owner, and as soon as weather conditions permit, all dead plants and all plants not in vigorous, thriving condition, as determined by the Owner's Representative during and at the end of Warranty Period. Plants shall be free of dead or dying branches and branch tips, and shall bear foliage of a normal density, size, and color. Replacement shall closely match adjacent specimens of the same species and shall be subject to all requirements of this specification.

3.05 PROTECTION

- A. Protect stored and planted trees from damage.

END OF SECTION

VENDOR SUPPLEMENTAL INFORMATION

The following information is required for contract development.

1. In what state was your business formed? _____
2. Provide the following information for the person authorized to execute contracts on behalf of your organization:

Name _____ Title _____
Email Address _____ Telephone No. _____
Mailing Address _____ City _____ State _____ Zip _____

3. Provide the following information for the contact person authorized to implement this contract on behalf of your organization:

Name _____ Title _____
Email Address _____ Telephone No. _____
Mailing Address _____ City _____ State _____ Zip _____

4. Provide the following information for the person authorized to receive notices and communications regarding this contract on behalf of your organization:

Name _____ Title _____
Email Address _____ Telephone No. _____
*Physical Business Address _____ City _____ State _____ Zip _____

**Notices and communications will be mailed to this physical address*

5. Select and complete one of the following:

- a. ☐ **Sole Proprietorship**
- i. Legal name of Sole Proprietor: _____
- ii. Physical business address: _____
City _____ State _____ Zip _____
- b. ☐ **General Partnership**
- i. Legal name of Partnership: _____
- ii. Physical business address: _____
City _____ State _____ Zip _____

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VENDOR SUPPLEMENTAL INFORMATION

- c. ☐ **Limited Partnership**
- i. Legal name of Limited Partnership: _____
- ii. General Partner(s):
- If a legal entity, name of the entity: _____
 - If an individual, name of the individual: _____
- iii. Physical business address: _____
- City _____ State _____ Zip _____
- d. ☐ **Corporation**
- i. Legal name of Corporation: _____
- ii. Physical business address _____
- City _____ State _____ Zip _____
- e. ☐ **Limited Liability Company**
- i. Legal name of Limited Liability Company: _____
- ii. Physical business address _____
- City _____ State _____ Zip _____
- f. ☐ **Other Entity (not listed)**
- i. Legal name and type of Company: _____
- ii. Physical business address _____
- City _____ State _____ Zip _____

6. Does your business have 10 or more full-time employees? ☐ No ☐ Yes

7. a. Are you a publicly traded business? ☐ No ☐ Yes – where traded: _____

b. Are you a wholly owned subsidiary of a publicly traded business? ☐ No ☐ Yes – which publicly traded business: _____

8. a. Is your business registered with the Texas Secretary of State? ☐ No ☐ Yes

b. If yes, please provide records or screenshot(s) from the Texas Secretary of State's website reflecting the name or names for which your business has been registered.

In signing this form, I acknowledge that I have read the above and state that the information contained therein is true and correct.

Signature: _____ Date: _____

Print Name: _____ Print Title: _____

CITY OF LEWISVILLE
PURCHASING DIVISION

EXCEPTIONS

Bid _____

On the lines below, please list any exceptions taken to this bid invitation

ITEM #	DESCRIPTION

Signature: _____

Company: _____

Date: _____

No exceptions taken to this bid invitation.

Signature: _____

Company: _____

Date: _____