

Exhibit A

Primary Responses

Success: All data is valid!

							Numeric	
Status	Bid/No Bid Decision	#	Item	Quantity Required	Unit of Measure	Additional Notes	Unit Price	Total Cost
Grand Theater Plaza - Demolition								
Not Bidding	No Bid	#1-1	Demolition - Canopy Trees	2	Each	-		-
Not Bidding	No Bid	#1-2	Demolition - planting	1	Lump Sum	-		-
Not Bidding	No Bid	#1-3	Demolition - paving, flexipave, lighting, river rock, steel edging, and drains	1	Lump Sum	-		-
Not Bidding	No Bid	#1-4	Column and Wall Protection	541	Linear Feet	-		-
Not Bidding	No Bid	#1-5	Tree /Planting Protection	1	Lump Sum	-		-
Basket Total								\$ 0.00

Grand Theater Plaza - Hardscape

Not Bidding	No Bid	#2-1	P-1 standard concrete paving	1754	Sqaure Feet	-		-
Not Bidding	No Bid	#2-2	P-1 Concrete Paving - stairs	19	Cubic Yards	-		-
Not Bidding	No Bid	#2-3	P-2 Concrete Paving	143	Sqaure Feet	-		-
Not Bidding	No Bid	#2-4	P-3 concrete pavers - keystone	5646	Square Feet	-		-
Not Bidding	No Bid	#2-5	P-4 Integral color concrete paving	1414	Square Feet	-		-
Not Bidding	No Bid	#2-6	P-5 artificial turf	3570	Square Feet	-		-
Not Bidding	No Bid	#2-7	P-6 brick pavers	403	Square Feet	-		-
Not Bidding	No Bid	#2-8	M-1 stair guardrail	37	Linear Feet	-		-
Not Bidding	No Bid	#2-9	M-3 Aluminum edging @ gravel	289	Linear Feet	-		-
Not Bidding	No Bid	#2-10	SF-1 custom bench	6	Each	-		-
Not Bidding	No Bid	#2-11	SF-2 trash can	2	Each	-		-
Not Bidding	No Bid	#2-12	SF-3 recycling can	2	Each	-		-
Not Bidding	No Bid	#2-13	S-1 gravel	435	Square Feet	-		-
Not Bidding	No Bid	#2-14	Drains under gravel	20	Each	-		-
Not Bidding	No Bid	#2-15	French Drains	245	Linear Feet	-		-
Not Bidding	No Bid	#2-16	Solid PVC drain pipe	135	Linear Feet	-		-
Basket Total								\$ 0.00

Grand Theater Plaza - Electrical

Not Bidding	No Bid	#3-1	L1 Catenary Lights	6	Each	-		-
Not Bidding	No Bid	#3-2	L2 Catenary Lights	12	Each	-		-
Not Bidding	No Bid	#3-3	LP Light Pole	6	Each	-		-

Not Bidding	No Bid	#3-4	LP Catenary Cable System	1	Lump Sum	-		-
Not Bidding	No Bid	#3-5	Eaton Power Pedestal	1	Each	-		-
Not Bidding	No Bid	#3-6	WP/GFCI Receptacle	2	Each	-		-
Not Bidding	No Bid	#3-7	J Box flush with paving	4	Each	-		-
Not Bidding	No Bid	#3-8	1/2" Conduit	1	Lump Sum	-		-
Not Bidding	No Bid	#3-9	Breaker Box Room Work	1	Lump Sum	-		-
Basket Total								\$ 0.00

Grand Theater Plaza - Planting

Not Bidding	No Bid	#4-1	Creole Queen American Elm (3" cal.)	6	Each	-		-
Not Bidding	No Bid	#4-2	Bright 'N Tight Cherry Laurel (30 gal.)	8	Each	-		-
Not Bidding	No Bid	#4-3	Dwarf Palmetto (5 gal.)	100	Each	-		-
Not Bidding	No Bid	#4-4	Meadow Sedge (4" pot)	1725	Each	-		-
Not Bidding	No Bid	#4-5	Shenandoah Switch Grass (5 gal.)	40	Each	-		-
Not Bidding	No Bid	#4-6	Blue Foliage Indian Grass (3 gal.)	138	Each	-		-
Not Bidding	No Bid	#4-7	Holly Fern (3 gal.)	32	Each	-		-
Not Bidding	No Bid	#4-8	Turk's Cap (1 gal.)	22	Each	-		-
Not Bidding	No Bid	#4-9	Gulf Coast Penstemon (4" pot)	901	Each	-		-
Not Bidding	No Bid	#4-10	Bermudagrass / Zoro Zoysia Sod Repair	66	Square Feet	-		-
Not Bidding	No Bid	#4-11	Irrigation Repair	3735	Square Feet	-		-
Not Bidding	No Bid	#4-12	Bed Prep	3735	Square Feet	-		-
Not Bidding	No Bid	#4-13	Mulch	3735	Square Feet	-		-
Basket Total								\$ 0.00

Grand Theater Plaza - Hardscape Alternates

Not Bidding	No Bid	#5-1	P-1 Integral color concrete paving	1754	Square Feet	-		-
Not Bidding	No Bid	#5-2	P-1 Integral color concrete paving - stairs	1	Lump Sum	-		-
Not Bidding	No Bid	#5-3	P-3 concrete pavers - Wasau	5646	Square Feet	-		-
Not Bidding	No Bid	#5-4	P-4 stone pavers	1414	Square Feet	-		-
Not Bidding	No Bid	#5-5	P-4 concrete pavers - Keystone Greystone Blend	1414	Square Feet	-		-
Not Bidding	No Bid	#5-6	P-6 - sod	403	Square Feet	-		-
Not Bidding	No Bid	#5-7	S-2 - sub with M-3 aluminum edging	289	Linear Feet	-		-
Not Bidding	No Bid	#5-8	M-1 - 1/2" dia. Painted steel	37	Linear Feet	-		-

Not Bidding	No Bid	#5-9	M-2 Rain chain	12	Each	-		-
Not Bidding	No Bid	#5-10	Sculpture pedestal (concrete footing & steel)	6	Each	-		-
Not Bidding	No Bid	#5-11	Signs @ planting	6	Each	-		-
Basket Total		\$ 0.00						

Grand Theater Plaza - Electrical Alternates

Not Bidding	No Bid	#6-1	L3 Building Uplight	2	Each	-		-
Not Bidding	No Bid	#6-2	L4 Handrail Light and Drivers	1	Lump Sum	-		-
Not Bidding	No Bid	#6-3	L5 Under bench LED	78	Linear Feet	-		-
Basket Total		\$ 0.00						

Grand Theater Plaza - Zone 1 Front Slope Planting Alternates

Not Bidding	No Bid	#7-1	Planting Demolition	1	Lump Sum	-		-
Not Bidding	No Bid	#7-2	Demolition - segmented block wall planter edging @ sign	16	Linear Feet	-		-
Not Bidding	No Bid	#7-3	Tree /Planting Protection	1	Lump Sum	-		-
Not Bidding	No Bid	#7-4	Webberville Sedge (4" pot)	2615	Each	-		-
Not Bidding	No Bid	#7-5	Gulf Coast Penstemon (4" pot)	2615	Each	-		-
Not Bidding	No Bid	#7-6	Bermudagrass / Zoro Zoysia Sod Repair	376	Square Feet	-		-
Not Bidding	No Bid	#7-7	Irrigation Repair	4547	Square Feet	-		-
Not Bidding	No Bid	#7-8	Bed Prep	4547	Square Feet	-		-
Not Bidding	No Bid	#7-9	Mulch	4547	Square Feet	-		-
Not Bidding	No Bid	#7-10	S-2 Stone Edging	188	Linear Feet	-		-
Basket Total		\$ 0.00						

Grand Theater Plaza - Zone 2 Northeast Planting Alternates

Not Bidding	No Bid	#8-1	Planting Demolition	1	Lump Sum	-		-
Not Bidding	No Bid	#8-2	Demolition - Canopy Trees	1	Each	-		-
Not Bidding	No Bid	#8-3	Tree /Planting Protection	1	Lump Sum	-		-
Not Bidding	No Bid	#8-4	Dwarf Palmetto (5 gal.)	5	Each	-		-
Not Bidding	No Bid	#8-5	Shenandoah Switchgrass (5 gal.)	33	Each	-		-
Not Bidding	No Bid	#8-6	Indian grass (3 gal.)	45	Each	-		-
Not Bidding	No Bid	#8-7	Turk's Cap (1 gal.)	27	Each	-		-
Not Bidding	No Bid	#8-8	Leavensworth Sedge (4" pot)	856	Each	-		-
Not Bidding	No Bid	#8-9	Golden Groundsel (4" pot)	856	Each	-		-

Not Bidding	No Bid	#8-10	Lyre Leaf Sage Purple Knockout (4" pot)	289	Each	-	-
Not Bidding	No Bid	#8-11	Bermudagrass / Zoro Zoysia Sod Repair	186	Square Feet	-	-
Not Bidding	No Bid	#8-12	Irrigation Repair	1278	Square Feet	-	-
Not Bidding	No Bid	#8-13	Bed Prep	1278	Square Feet	-	-
Not Bidding	No Bid	#8-14	Mulch	1278	Square Feet	-	-
Not Bidding	No Bid	#8-15	S-2 Stone edging	93	Linear Feet	-	-
Basket Total		\$ 0.00					

Grand Theater Plaza - Zone 3 Northwest Planting Alternates

Not Bidding	No Bid	#9-1	Planting Demolition	1	Lump Sum	-	-
Not Bidding	No Bid	#9-2	Demolition - Canopy Trees	1	Each	-	-
Not Bidding	No Bid	#9-3	Demolition - Ornamental Trees	3	Each	-	-
Not Bidding	No Bid	#9-4	Tree /Planting Protection	1	Lump Sum	-	-
Not Bidding	No Bid	#9-5	Dwarf Palmetto (5 gal.)	11	Each	-	-
Not Bidding	No Bid	#9-6	American Beautyberry (5 gal.)	9	Each	-	-
Not Bidding	No Bid	#9-7	Indian grass (3 gal.)	65	Each	-	-
Not Bidding	No Bid	#9-8	Southern Wood Fern (3 gal.)	85	Each	-	-
Not Bidding	No Bid	#9-9	Cherokee Sedge (1 gal.)	191	Each	-	-
Not Bidding	No Bid	#9-10	Cardinal Flower (1 gal.)	125	Each	-	-
Not Bidding	No Bid	#9-11	Leavensworth Sedge (4" pot)	489	Each	-	-
Not Bidding	No Bid	#9-12	Golden Groundsel (4" pot)	489	Each	-	-
Not Bidding	No Bid	#9-13	Lyre Leaf Sage Purple Knockout (4" pot)	710	Each	-	-
Not Bidding	No Bid	#9-14	Irrigation Repair	2141	Square Feet	-	-
Not Bidding	No Bid	#9-15	Bed Prep	2141	Square Feet	-	-
Not Bidding	No Bid	#9-16	Mulch	2141	Square Feet	-	-
Basket Total		\$ 0.00					

Grand Theater Plaza - Zone 4 Sculpture Circle Planting Alternates

Not Bidding	No Bid	#10-1	Planting Demolition	1	Lump Sum	-	-
Not Bidding	No Bid	#10-2	Four Nerve Daisy (1 gal.)	332	Each	-	-
Not Bidding	No Bid	#10-3	Brakelights Red Yucca (1 gal.)	332	Each	-	-
Not Bidding	No Bid	#10-4	Mexican Feather Grass (1 gal.)	75	Each	-	-
Not Bidding	No Bid	#10-5	Texas Gayfeather (1 gal.)	75	Each	-	-
Not Bidding	No Bid	#10-6	Bermudagrass / Zoro Zoysia Sod Repair	34	Square Feet	-	-

Not Bidding	No Bid	#10-7	Irrigation Repair	421	Square Feet	-		-
Not Bidding	No Bid	#10-8	Bed Prep	421	Square Feet	-		-
Not Bidding	No Bid	#10-9	Mulch	421	Square Feet	-		-
Not Bidding	No Bid	#10-10	S-2 stone edging	17	Linear Feet	-		-
Not Bidding	No Bid	#10-11	Sculpture protection	1	Lump Sum	-		-
Basket Total		\$ 0.00						

Pocket Park - Demolition

Not Bidding	No Bid	#11-1	Existing trash and recycling removed, stored, and reinstalled	1	Lump Sum	-		-
Not Bidding	No Bid	#11-2	Remove existing concrete	1030	square feet	-		-
Not Bidding	No Bid	#11-3	Cut, cap, and remove existing irrigation	1	Lump Sum	-		-
Not Bidding	No Bid	#11-4	Remove existing degraded asphalt	554	square feet	-		-
Not Bidding	No Bid	#11-5	Existing fence and building protection	1	Lump Sum	-		-
Basket Total		\$ 0.00						

Pocket Park - Hardscape

Not Bidding	No Bid	#12-1	SF-3 bike rack	1	Each	-		-
Not Bidding	No Bid	#12-2	P-1 concrete paving	1153	square feet	-		-
Not Bidding	No Bid	#12-3	P-2 concrete paving (sidewalk and dismount strip)	136	square feet	-		-
Not Bidding	No Bid	#12-4	P-3 concrete paving	1581	square feet	-		-
Not Bidding	No Bid	#12-5	wood bench #1	1	Lump Sum	-		-
Not Bidding	No Bid	#12-6	wood bench #2	1	Lump Sum	-		-
Not Bidding	No Bid	#12-7	wood bench #3	1	Lump Sum	-		-
Not Bidding	No Bid	#12-8	artificial turf	2131	square feet	-		-
Not Bidding	No Bid	#12-9	shade structure	1	Lump Sum	-		-
Not Bidding	No Bid	#12-10	existing fence upgrade	1	Lump Sum	-		-
Not Bidding	No Bid	#12-11	new fence	78	linear feet	-		-
Not Bidding	No Bid	#12-12	earthwork	1	Lump Sum	-		-
Not Bidding	No Bid	#12-13	S-1 atrium drains and catch basins	6	Each	-		-
Not Bidding	No Bid	#12-14	artificial turf drainage & connection to box culvert	1	Lump Sum	-		-
Basket Total		\$ 0.00						

Pocket Park - Electrical

Not Bidding	No Bid	#13-1	L1 light poles (including luminaire, pole, and foundation)	3	Each	-		-
Not Bidding	No Bid	#13-2	L4 canopy light	5	Each	-		-
Not Bidding	No Bid	#13-3	L5 canopy light	5	Each	-		-
Not Bidding	No Bid	#13-4	Meter Panel/Pedestal	1	Lump Sum	-		-
Not Bidding	No Bid	#13-5	(1) NEMA 5/20r GFCI receptacle and conduit	1	Lump Sum	-		-
Not Bidding	No Bid	#13-6	(4) GFCI 120V receptacle for irrigation controller and conduit	1	Lump Sum	-		-
Not Bidding	No Bid	#13-7	Underground conduit and wire to all base bid and bid alt lighting locations	1	Lump Sum	-		-
Not Bidding	No Bid	#13-8	Underground conduit and wire from new utility service pole to meter panel	1	Lump Sum	-		-
Basket Total		\$ 0.00						

Pocket Park - Planting

Not Bidding	No Bid	#14-1	post oak (4" cal.)	1	Each	-		-
Not Bidding	No Bid	#14-2	yellow yucca (3 gal.)	34	Each	-		-
Not Bidding	No Bid	#14-3	taylor juniper (B&B)	23	Each	-		-
Not Bidding	No Bid	#14-4	lynn's legacy texas sage (5 gal.)	5	Each	-		-
Not Bidding	No Bid	#14-5	pale leaf yucca (3 gal.)	27	Each	-		-
Not Bidding	No Bid	#14-6	shenandoah switchgrass (5 gal.)	85	Each	-		-
Not Bidding	No Bid	#14-7	little bluestem (1 gal.)	37	Each	-		-
Not Bidding	No Bid	#14-8	rattlesnake master (1 gal.)	15	Each	-		-
Not Bidding	No Bid	#14-9	goldstrum black eyed susan (1 gal.)	43	Each	-		-
Not Bidding	No Bid	#14-10	giant coneflower (1 gal.)	17	Each	-		-
Not Bidding	No Bid	#14-11	fall aster (1 gal.)	11	Each	-		-
Not Bidding	No Bid	#14-12	meadow sedge (4" pot)	35	Each	-		-
Not Bidding	No Bid	#14-13	gulf coast penstemon (4" pot)	35	Each	-		-
Not Bidding	No Bid	#14-14	mexican feather grass (1 gal.)	309	Each	-		-
Not Bidding	No Bid	#14-15	pale purple coneflower (1 gal.)	309	Each	-		-
Not Bidding	No Bid	#14-16	four nerve daisy (4" pot)	219	Each	-		-
Not Bidding	No Bid	#14-17	winecup (4" pot)	219	Each	-		-
Not Bidding	No Bid	#14-18	cross vine (3 gal.)	11	Each	-		-
Not Bidding	No Bid	#14-19	Irrigation	1	Lump Sum	-		-
Not Bidding	No Bid	#14-20	Bed Prep	1870	Square Feet	-		-
Not Bidding	No Bid	#14-21	Mulch	1870	Square Feet	-		-



REQUEST FOR PROPOSALS

RFP # 25-32-C

LEWISVILLE GRAND THEATER PLAZA & OLD TOWN POCKET PARK

Proposals due by Tuesday, January 21, 2025

Issued on December 21, 2024

SPECIFICATIONS
RFP #25-32-C
Lewisville Grand Theater Plaza & Old Town Pocket Park

The City of Lewisville is accepting competitive sealed proposals to renovate the Grand Theater Plaza and build a Pocket Park.

GENERAL PROVISIONS

- **Schedule: Timeline is a critical component of this project. The estimated project schedule is eight (8) months or 240 calendar days.**
- **Quality of Proposal Response: Provide a company overview and the approach you plan to take for this project.**
- **Experience: Proposer must have a minimum of five (5) years of experience on similar projects. Provide examples of similar projects you have completed, and show a history of keeping projects on schedule and on budget.**
- **The contractor is to submit with their proposal all additional documents that require a signature that are allocated within these specifications. These documents can be found in the Files section of Bonfire, listed as “Required Documents”. Pricing should be submitted separately from all other documents.**
- Before work begins, a pre-construction meeting will be arranged wherein the contractor and representative(s) of the City will discuss procedures for the work to be completed.
- The contractor is responsible for supplying all equipment, labor, material, and supervision, as required for successfully completing services.
- The contractor shall designate a full-time superintendent who shall be always on the job site when work is being performed. The City’s representative will communicate only with the superintendent. The contractor may replace the designated superintendent after written notification to the City.
- The contractor hereby agrees to commence work within ten (10) working days of receipt of notice to proceed and complete the service within a reasonable amount of time after receipt of the notice to proceed, subject to extensions of time as provided by general and special conditions.
- The City will be responsible for notifying the public of the agreed upon start date and scope of work at least seventy-two (72) hours prior to the start of work.
- The contractor will provide a list of names and twenty-four (24) hour emergency phone numbers for all key personnel related to the project.
- The City may request a replacement of the designated superintendent after written notification to the contractor.

- Work hours shall be limited to the period between 7:00 A.M. and 5:00 P.M., Monday through Friday. The contractor will curtail any operation defined in an Ozone Action Day, issued by TCEQ. No work will be allowed on Saturdays without a written request to, and approval from, the City at least forty-eight (48) hours in advance. No work will be allowed on Sundays or holidays (listed below). Night work will not be allowed without a written request to, and approval from, the City at least forty-eight (48) hours in advance.

New Years Day
Martin Luther King's Birthday
Memorial Day
Juneteenth
Independence Day
Labor Day
Thanksgiving
Day After Thanksgiving
Christmas Eve
Christmas Day

- The City of Lewisville Scope of Work, in combination with Federal and State Americans with Disabilities Act (ADA) Design Standards, shall govern all work performed in the City of Lewisville. If a conflict arises, the inspector in charge of the project shall determine which specifications will be used. The contractor's field supervisor shall be required to obtain a copy of both, at the contractor's expense.
- A pay request may be submitted for payment of completed work. This pay request shall be itemized to reflect the completed quantities per bid item. A measurement of completed quantities will be conducted prior to the submittal of each pay request. The contractor's field supervisor and the City's representative shall conduct this measurement.
- Only items in the proposal are pay items. All costs in connection with the proper and successful completion of work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plans, equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the unit and lump sum prices bid. All work not specifically set forth as a pay item shall be considered a subsidiary obligation of the contractor, and all costs in connection therewith shall be included in the prices bid.
- The City may terminate the contract if the contractor consistently fails to perform the work in accordance with the contract documents including, but not limited to, failure to supply sufficient skilled workers, suitable materials, equipment, or otherwise violates in any substantial way any provisions of the contract documents. The City may, after giving the contractor seven (7) days written notice and to the extent permitted by law and regulations, terminate the services of the contractor from the site and take possession of the work.

Environmental Requirements

- Contractor shall follow all TECQ requirements and guidelines.

SCOPE OF WORK

Refer to the Specifications starting on page seven of this document. Plans can be found in the Files section of Bonfire.

PROJECT LOCATIONS

All project locations will be within the city limits of the City of Lewisville, Texas.

INSURANCE AND BONDS

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

STORMWATER MANAGEMENT PLAN

Under the Authority of the Clean Water Act, the Environmental Protection Agency (EPA), and the City of Lewisville has endeavored to reduce and improve stormwater quality per the direction of the Texas Commission of Environmental Quality (TCEQ). The City of Lewisville has developed a Stormwater Management Plan. By signing this contract vendors accept to follow this Plan. Follow this link for a copy of the Stormwater Management Plan:

<https://www.cityoflewisville.com/about-us/city-departments/public-services/storm-water>

TERMINATION OF CONTRACT

Should the Contractor, in the opinion of the City, fail to faithfully comply with the intent of the Contract as executed or render an unsatisfactory performance of the work pertinent to the contract, this Contract may be promptly terminated, in whole or in part, by the City with seven (7) days written notice. In such event, nothing contained herein shall be construed or interpreted as to prevent the City from immediately entering another contract with another contractor for an unabated continuance of this service. Monies owed to the Contractor for services rendered to the date of termination shall not constitute a prolonging of the contract.

EVALUATION CRITERIA

Proposals will be considered by an evaluation committee consisting of City staff. Proposals will be scored with regards to the following criteria and associated weights:

- | | |
|--|-----|
| ● Proposed Price | 40% |
| ● Proposed Construction Schedule | 30% |
| ● Quality of Proposal Response to the Specifications | 20% |
| ● Previous Experience | 10% |

REQUEST FOR PROPOSALS

Proposals are to be submitted based on the specifications contained herein.

The preparation of response to this RFP will be at the total expense of the proposer. There is no expressed or implied obligation for the City of Lewisville to reimburse responders for any expense incurred in the preparation response to this request.

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

The RFP will be available to interested parties at <https://cityoflewisville.bonfirehub.com/portal> or may be picked up in person at the Purchasing office.

Proposals may be uploaded to Bonfire or sealed RFPs, one (1) original and one (1) PDF copy on a flash drive may be delivered to the City of Lewisville Purchasing Division office at the address below, in a sealed envelope or box, clearly marked:

RFP: 25-32-C
Lewisville Grand Theater Plaza & Old Town Pocket Park

Delivery address:
City of Lewisville
Finance Administration - Purchasing Division
Attn: Janine Carpenter, Senior Buyer
151 W. Church Street
Lewisville, TX 75057

All questions pertaining to this proposal must be submitted in writing via Bonfire. No verbal clarification will be given.

No telephone, email, or fax proposals will be accepted. Proposals 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 RFP responses received after the time set for opening will be returned to the proposer unopened.

Specifications, RFP proposal forms, and instructions to bidders are attached hereto. The preparation of the proposal will be at the total expense of the proposer. There is no expressed or implied obligation for the City of Lewisville to reimburse responding proposers for any expense incurred in the preparation of proposals in response to this request.

Alternate proposals will also be considered, provided the alternatives are clearly explained. All deviations from the specifications must be clearly identified and explained.

Each proposer shall guarantee and honor its response to these specifications for a period of one-

hundred and twenty (120) days, or until the City enters a contract with one of the proposers, whichever occurs first.

All forms requiring either a signature or requested information are to be returned with your proposal. In addition, the language contained in the attached form entitled Purchase Order Terms and Conditions is made part of this request for proposal through reference herein. An evaluation committee consisting of representatives from City departments will review proposals. Upon review of the proposals, the City may wish to interview proposers for clarification purposes at a time convenient, yet appropriate, for all parties.

The information contained herein is believed to be accurate and up to date but is not intended to be an expressed or implied warranty.

The City of Lewisville reserves the right to retain all proposals submitted. Submission of a proposal indicates the firm's acceptance of the conditions contained in this request for proposals, unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of Lewisville and the vendor selected.

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

All parties submitting proposals are expected to comply with federal, state, and local laws and regulations relative to the preparation of proposals and the services to be provided. Specifically, the services to be provided are expected to be in compliance with the Americans with Disabilities Act (ADA), as well as with federal and state confidentiality laws. All proposals that are submitted will be presumed to be in compliance with all applicable laws.

MISCELLANEOUS

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

TABLE OF CONTENTS

SECTION NUMBER	SECTION TITLE
DIVISION 01 – GENERAL REQUIREMENTS	
015639	Temporary Tree Protection
DIVISION 02 - EXISTING CONDITIONS	
024113	Selective Site Demolition
DIVISION 03 - CONCRETE	
033053	Landscape Cast-in-Place Concrete
033713	Shotcrete
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SECTION 015639 - TEMPORARY TREE PROTECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Temporary tree protection during construction.
 - 2. Removal.

1.2 REFERENCES

- A. Chain Link Fence Manufacturers Institute (CLFMI) - Product Manual.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Chain Link Fencing: Conform to CLFMI Product Manual.
 - 1. Framing: Type I or II - round posts.
 - 2. Fabric: CLFMI Standard Industrial, Heavy Residential service.
 - 3. Finish: Galvanized, to CLFMI Product Manual.
- B. Vinyl Mesh Fencing:
 - 1. Mesh: 4 foot high Guardian Orange Safety Fence by Tenax (www.tenax.net) or approved substitute, ultraviolet protected.
 - 2. Posts: 1.25 pound studded steel T-posts.
 - 3. Ties: Nylon.

PART 3 EXECUTION

3.1 GENERAL

- A. Protect existing trees and plants at site that are designated to remain where indicated on Drawings and at other locations where trees are subject to damage during construction.
- B. Do not permit vehicular traffic, parking, storage of materials, dumping of harmful chemicals or liquids, or standing or continuously running water within root zones.
- C. Supervise earthwork operations to prevent damage to root zones.
- D. Provide temporary barriers to height of 4 feet around individual or groups of trees and plants.
- E. Maintain barriers in good repair for duration of construction.
- F. Replace trees and plants that are damaged or destroyed due to construction operations.

3.2 CHAIN LINK BARRIERS

- A. Drill post holes into undisturbed or compacted soil.
- B. Set posts minimum 24 inches below grade.
- C. Backfill around posts in maximum 12 inch lifts; compact each lift to density of existing soil.
- D. Space posts maximum 6 feet on center.
- E. Stretch fabric taut and secure to posts with wire ties spaced maximum 16 inches on center.

3.3 VINYL MESH BARRIERS

- A. Drive posts into undisturbed or compacted soil.
- B. Space posts maximum 6 feet on center.

3.4 REMOVAL

- A. Remove temporary barriers upon completion of Project.

END OF SECTION

SECTION 024113 - SELECTIVE SITE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Removal of designated site construction.
 - 2. Identification of utilities.
- B. Related Sections:
 - 1. Division 01 - Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate areas for demolition, removal sequence and location of salvageable items, and location and construction of temporary work.

1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable code for demolition work and dust control.
- B. Obtain required permits from authorities.
- C. Notify affected utility companies before starting work and comply with their requirements.
- D. Conform to applicable codes when hazardous or contaminated materials are discovered.

1.4 PROJECT CONDITIONS

- A. Minimize interference with streets, walks, public right-of-ways, and adjacent facilities.
- B. If hazardous materials are discovered, notify Owner and Landscape Architect and await instructions.
- C. If materials or conditions are encountered that differ from those indicated in Contract Documents, cease work immediately, notify Landscape Architect and await instructions.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.1 PREPARATION

- A. Erect temporary barricades, warning devices, and controls.
- B. Temporarily or permanently disconnect utilities as required.

3.2 DEMOLITION

- A. Remove existing construction to extent indicated and as necessary to join new work to existing. Do not remove more than is necessary to allow for new construction.
- B. Do not damage work designated to remain.
- C. Minimize noise and spread of dirt and dust.

- D. Assign work to trades skilled in procedures involved.
- E. Plug ends of disconnected utilities with threaded or welded caps.
- F. Protect and support active utilities designated to remain. Post warning signs showing location and type of utility and type of hazard.
- G. Store items designated to remain property of Owner where directed by Owner.
- H. Remove and dispose of waste materials off site.

END OF SECTION

SECTION 033053 - LANDSCAPE CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Concrete formwork.
 - 2. Concrete reinforcement.
 - 3. Cast-in-place concrete.
 - 4. Concrete finishing.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary requirements.
 - 2. Section 321313 - Landscape Concrete Paving.

1.2 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. 301 - Structural Concrete for Buildings.
 - 2. 302.1 - Guide for Concrete Floor and Slab Construction.
 - 3. 305R - Hot Weather Concreting.
 - 4. 306R - Cold Weather Concreting.
 - 5. 318 - Building Code Requirements for Structural Concrete.
- B. ASTM International (ASTM):
 - 1. A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 2. A615/A 615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
 - 3. A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.
 - 4. C33/C33M - Standard Specification for Concrete Aggregates.
 - 5. C94/C94M - Standard Specification for Ready-Mixed Concrete.
 - 6. C150/C150M - Standard Specification for Portland Cement.
 - 7. C171/C171M - Standard Specification for Sheet Materials for Curing Concrete.
 - 8. C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete.
 - 9. C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
 - 10. C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
 - 11. D1752 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
- C. Concrete Reinforcing Steel Institute (CRSI) - Manual of Practice.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Descriptive data for color admixture and curing compound.
 - 2. Shop Drawings:
 - a. Include pertinent dimensions, openings, methods of construction, types of connections, materials, joint arrangement and details, ties and shores, location of framing, studding and bracing, and temporary supports.
 - b. Show means of leakage prevention for concrete exposed to view in finished construction.
 - c. Show sequence and timing of erection and stripping.
 - 3. Samples: 12 x 12 colored concrete samples in each color and finish.
 - 4. Concrete Mix Designs: Submit for each type of concrete.

1.4 QUALITY ASSURANCE

- A. Concrete Mix Design:
 - 1. In accordance with ACI 301, Method 1 or 2.
 - 2. Free from admixtures and additives not specifically approved by admixture manufacturer.
- B. Mockup:
 - 1. Construct mockup panel, minimum 4 feet long x 4 feet high.
 - 2. Illustrate full color and texture range, form ties, joints, corners, and reveals.
 - 3. Locate where directed.
 - 4. Approved mockup may remain as part of the Work.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Mix and deliver concrete to project ready mixed in accordance with ASTM C94.
- B. Schedule delivery so that pours will not be interrupted for over 15 minutes.
- C. Place concrete on site within 90 minutes after proportioning materials at batch plant.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Formwork:
 - 1. Forms: Wood, metal, or glass fiber type, tight fitting.
 - 2. Fasteners: Size as required, sufficient strength to maintain forms in place while concrete is placed.
 - 3. Form release agent: Nonstaining, colorless mineral oil that will not absorb moisture, stain concrete, or impair adhesion of coatings to be applied to concrete.
 - 4. Construction joints forms: Formed steel, with keyway.
 - 5. Form ties: Snap off type, adjustable length, 1 inch back break dimension, free of defects that could leave holes larger than 1 inch in concrete.
- B. Reinforcement:
 - 1. Bars: ASTM A615/A615M, deformed billet steel.
 - 2. Welded wire fabric: ASTM A1064/A1064M; furnish in flat sheets.
 - 3. Chairs, bolsters, bars supports, and spacers:
 - a. Sized and shaped for support of reinforcement during concrete placement.
 - b. Plastic coated steel for surfaces exposed to weather.
 - 4. Tie wire: Annealed steel, 16 gage minimum.
- C. Concrete Materials:
 - 1. Portland cement: ASTM C150/C150M, Type I or III as applicable.
 - 2. Aggregates: ASTM C33/C33M, clean, hard, durable, and uncoated.
 - a. Fine: Natural sand, free from silt, loam, and clay.
 - b. Coarse: Crushed stone, maximum size No. 467, Table No. 2.
 - 3. Admixtures:
 - a. Water reducing or water reducing/set retarding: ASTM C494/C494M, Type A or D.
 - b. Air entraining: ASTM C260/C260M.
 - c. Coloring: Refer to Materials Legend.
 - d. Waterproofing: Xypex Admix C-500 by Xypex Chemical Corporation or approved substitute.
- D. Expansion Joint Filler: ASTM D1752, Type 1, non asphaltic.
- E. Non Shrink Grout: Premixed, consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; 7,000 PSI compressive strength at 28 days.

- F. Curing Materials:
 - 1. Curing compound: ASTM C309/C309M, Type 1.
 - 2. Curing paper: ASTM C171/C171M, waterproof paper or polyethylene film.
- G. Bonding Agent: Two component modified epoxy resin.
- H. Water: Clean and potable.

2.2 MIXES

- A. Proportions: In accordance with ACI 301.
- B. Design concrete to yield following characteristics unless otherwise indicated:
 - 1. Minimum 28 day compressive strength: 3000 PSI.
 - 2. Slump:
 - a. Footings: 4 to 6 inches.
 - b. Other uses: 3 to 5 inches.
 - 3. Air entrainment: Provide air entraining admixture to produce 4 to 6 percent air by volume of concrete.
- C. Colored Concrete:
 - 1. Add coloring admixture to concrete in accordance with manufacturer's instructions.
 - 2. Provide uniformity of color.
- D. Waterproofed Concrete: Add waterproofing admixture in accordance with manufacturer's instructions.

2.3 FABRICATION

- A. Reinforcing: In accordance with CRSI Manual.

PART 3 EXECUTION

3.1 PREPARATION

- A. Notify Owner, Landscape Architect, and Testing Laboratory minimum 24 hours prior to placing concrete.
- B. Remove water and debris from forms and excavations before concrete is deposited.
- C. Provide devices for conveying concrete to point of deposit to prevent disturbing forms or reinforcing or segregating concrete.
- D. Clean reinforcement of loose rust, mill scale, dirt, oil, and other materials that could reduce bonding.
- E. Prepare previously placed and existing concrete surfaces by cleaning with steel wire brush and applying bonding agent in accordance with manufacturer's instructions.
- F. Where new concrete is doweled to existing, drill holes in existing concrete, insert steel dowels, and pack holes solid with non shrink grout.

3.2 INSTALLATION OF FORMWORK

- A. Construct forms tight to prevent loss of mortar.
- B. Clean contact and screed surfaces of hardened concrete and foreign materials prior to assembly.
- C. Apply form release agent to contact surfaces; follow manufacturer's instructions.

3.3 INSTALLATION OF REINFORCEMENT

- A. Bar Reinforcement: In accordance with ACI 301 and CRSI Manual.
- B. Wire Fabric:
 - 1. Install in longest practical length.
 - 2. Offset end laps in adjacent widths to prevent continuous lap.

3.4 PLACEMENT OF CONCRETE

- A. Place concrete in accordance with ACI 301 and ACI 318.
- B. Ensure reinforcement, inserts, and embedded parts are not disturbed during concrete placement.
- C. Deposit concrete as nearly as possible in its final position to minimize handling and flowing.
- D. Place concrete continuously between predetermined expansion, control, and construction joints.
- E. Do not place partially hardened, contaminated, or retempered concrete.
- F. Do not allow concrete to free fall over 8 feet; provide tremies, chutes, or other means of conveyance.
- G. Consolidate concrete with mechanical vibrating equipment. Hand compact in corners and angles of forms.
- H. Screed slabs to flatness tolerance of 1/4 inch in 10 feet.

3.5 FORM REMOVAL

- A. Remove forming materials in manner that will not damage surfaces of concrete; patch work damaged during form removal operations.
- B. Provide shoring and bracing as required.

3.6 PLACEMENT OF GROUT

- A. Remove loose and foreign matter from concrete; lightly roughen bonding surface. Thoroughly wet concrete surfaces; remove excess water.
- B. Mix grout in accordance with manufacturer's instructions. Do not retemper.
- C. Place grout continuously, by most practical means; avoid entrapped air. Do not vibrate grout.

3.7 FINISHING

- A. Concealed Formed Surfaces: Leave texture imparted by forms.
- B. Exposed Formed Surfaces:
 - 1. Rubbed finish:
 - a. While concrete is still green:
 - 1) Patch voids over 1/2 inch in diameter or depth.
 - 2) Remove fins and other protrusions by rubbing with Carborundum stone.
- C. Slabs:
 - 1. Finish surfaces in accordance with ACI 301 and ACI 302.1.
 - 2. Finish surfaces as specified in Section 321313.
- D. Allowable Tolerances: In accordance with ACI 301.

3.8 PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Provide artificial heat to maintain temperature of concrete above minimum specified temperature for duration of curing period.
- D. Keep forms sufficiently wet to prevent cracking of concrete or loosening of form joints.
- E. After form removal from board formed surfaces install 3/8 inch plywood as protection for exposed surfaces. Do not mechanically attach to concrete.

3.9 CURING

- A. Cure concrete in accordance with ACI 308:
 - 1. Horizontal surfaces: Use either curing paper or curing compound method.
 - 2. Vertical surfaces: Use either wet curing or curing compound method.

3.10 CLEANING

- A. Remove efflorescence, stains, oil, grease, and foreign materials from exposed surfaces.

END OF SECTION

SECTION 033713 - SHOTCRETE

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Pneumatically placed concrete for mounds under artificial turf.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. 318 - Building Code Requirements for Structural Concrete.
 - 2. 506 - Guide to Shotcrete.
- B. ASTM International (ASTM):
 - 1. C150/C150M - Standard Specification for Portland Cement.
 - 2. C330/C330M - Standard Specification for Lightweight Aggregates for Structural Concrete.
 - 3. C618 - Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete.
 - 4. C847 - Standard Specification for Metal Lath.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate profiles, dimensions, contours, reinforcement, accessories, and provisions to accommodate live load deflections and thermal movement.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 318 and ACI 506.
- B. Employ a professional engineer licensed in State in which Project is located to perform shotcrete design.

1.5 QUALIFICATIONS

- A. Applicator: Company specializing in performing the work of this Section with minimum 3 years experience.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Ensure materials and surrounding air temperature are a minimum 50 degrees F prior to, during, and 7 days after completion of work.
- B. During freezing or near freezing weather, provide equipment and cover to maintain minimum 50 degrees F and to protect work completed or work in progress.
- C. Suspend shotcrete operations during high winds, rainy weather, or near freezing temperatures when work cannot be protected.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Cement: ASTM C150/C150M, Type I, gray.

- B. Fly Ash: ASTM C618, maximum 2 percent loss on ignition.
- C. Aggregate and Water: Proportioned to achieve mix design.
- D. Additives:
 - 1. Waterproofing: Xypex Admix C-1000 by Xypex Chemical Corporation (www.xypex.com) or approved substitute.
 - 2. Other: As required by mix design.
- E. Lightweight Aggregate: ASTM C330/C330M.
- F. Curing Compound: Not detrimental to application of subsequent surface finish materials.
- G. Molds: Materials at Contractor's option to meet specified requirements.
- H. Metal Lath: ASTM C847, flat rib, 3/8 inch high, galvanized, weighing 3.4 pounds per square yard.
- I. Tie Wire: Galvanized steel, 16 gage, soft annealed.

2.2 SHOTCRETE MIX

- A. Aggregate and Water: Proportioned to achieve mix design.
- B. Conform to following requirements:
 - 1. Compressive strength (28 day minimum): 3,000 psi.
 - 2. Aggregate size: Maximum 3/8 inch.
 - 3. Air entrainment: 4 to 6 percent by weight.
 - 4. Slump: 1/2 to 1-1/2 inches.
 - 5. Fly ash content: Maximum 30 percent by weight of cementitious material in mix.
- C. Develop mix design to give good compaction and low percentage of rebound, but stiff enough not to sag.
- D. Add waterproofing admixture in accordance with manufacturer's instructions.
- E. Maintain quality control records during production of shotcrete. Make records available to Landscape Architect.
- F. Thoroughly mix shotcrete. Use mix within 45 minutes.

2.3 EQUIPMENT

- A. Mixing Equipment: Capable of thoroughly mixing aggregate, cement, and water in sufficient quantity to maintain continuous placement.
- B. Air Supply: Clean, dry air adequate for maintaining sufficient nozzle velocity, uniformly steady for work while simultaneously operating blow pipe for cleaning away rebound.
- C. Delivery Equipment: Capable of discharging aggregate-cement-water mixture accurately, uniformly, and continuously.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify supporting construction is true to line and dimension, and adequately braced against vibration.
- B. Ensure sufficient clearance to permit complete encasement.

- C. Ensure easy access to shotcrete surfaces for finishing, to permit uninterrupted application.

3.2 PREPARATION

- A. Determine operating procedures for placement in close quarters, extended distances, or around unusual obstructions where placement velocities and mix consistency must be adjusted.
- B. Clean and wet cementitious surfaces prior to receiving shotcrete. Keep porous surfaces damp for several hours prior to shotcreting.

3.3 ALIGNMENT CONTROL

- A. Provide alignment wires to establish thickness and plane of required surfaces.

3.4 APPLICATION OF METAL LATH

- A. Apply with end joints staggered. Secure end laps with tie wire where they occur between supports.
- B. Lap ends minimum 1 inch and sides minimum 1-1/2 inches.
- C. Secure to metal framing with wire ties at maximum 6 inches on center.
- D. Cut and secure lath at each side of expansion and control joints.

3.5 APPLICATION OF SHOTCRETE

- A. Place applied shotcrete to prevent sagging.
- B. Direct nozzle perpendicular to surface to ensure maximum compaction with minimum rebound.
- C. Build up thickness by layers, in multiple passes of the nozzle over the work area. Cover reinforcement with the first layer.
- D. Allow each layer to take initial set before applying succeeding layers.
- E. After initial set of final layer, remove excess material outside of forms and alignment lines.
- F. Sound work with hammer for voids. Expose voids and replace with new shotcrete.
- G. Remove trapped rebound at construction and expansion joints.
- H. Finish surfaces uniform, free of voids and protrusions.
- I. Maintain surfaces wet for minimum of 7 days or apply curing compound.

3.6 PROTECTION

- A. Immediately after placement, protect shotcrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain shotcrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of shotcrete.

END OF SECTION

SECTION 040511 - LANDSCAPE MASONRY MORTARING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Mortar for masonry.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 321416 - Brick Unit Paving.
 - 3. Section 321440 - Stone Paving.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C144 - Standard Specification for Aggregate for Masonry Mortar.
 - 2. C150/C150M - Standard Specification for Portland Cement.
 - 3. C207 - Standard Specification for Hydrated Lime for Masonry Purposes.
 - 4. C270 - Standard Specification for Mortar for Unit Masonry.
- B. The Masonry Society (TMS) 402/602 - Building Code Requirements and Specifications for Masonry Structures.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples: 1/2 x 1/2 inch x 3 inch long colored mortar samples.
- B. Quality Control Submittals:
 - 1. Test reports: Indicating mortar compliance with ASTM C270.
 - 2. Delivery tickets: If mortar is delivered to site dry and pre-blended, furnish delivery tickets indicating quantity, mortar type, and date of manufacture.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with TMS 402/602.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver cement and lime in manufacturer's original, unopened packages or containers.
- B. Protect materials from moisture absorption and damage; reject damaged containers.
- C. Store aggregate to prevent inclusion of foreign matter.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Colorants:
 - 1. Cathay Pigments. (www.cathaypigments.com)
 - 2. Davis Colors. (www.daviscolors.com)
 - 3. Solomon Colors. (www.solomoncolors.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Portland Cement:
 - 1. ASTM C150/C150M, Type I.
 - 2. For exposed surfaces, provide cement from one source throughout project.
- B. Aggregate:
 - 1. ASTM C144, standard masonry type.
 - 2. For exposed surfaces, provide aggregate from one source throughout project.
- C. Lime: ASTM C207, Type S.
- D. Colorant: Pure mineral oxide type.
- E. Water: Clean and free from oils, acids, alkalis, organic matter, and other substances in amounts deleterious to mortar or metals in masonry.

2.3 MIXES

- A. Mortar Mixes: To ASTM C270, using the Property Method.
 - 1. Brick Unit Paving and Stone Paving:
 - a. Setting mortar: Type N, gray.
 - b. Pointing mortar: Type N; refer to Materials Legend for color.

2.4 MIXING

- A. Mix mortar in accordance with ASTM C270.
- B. Mix using mechanical mixer. Hand mixing not permitted.
- C. Mix approximately three-quarters of required water, all of cement and lime, and one-half of aggregate for minimum of 2 minutes.
- D. Add remainder of water and aggregate; mix for minimum of 3 minutes.
- E. Provide uniformity of color in exposed mortar.
- F. Colorant may not exceed 9 pounds per 94 pound bag of cement.
- G. Thoroughly mix ingredients in quantities needed for immediate use.
- H. Discard lumpy, caked, frozen, and hardened mixes.
- I. Mortar may be retempered by adding water as required. Use mortar within 2-1/2 hours after initial mixing at ambient temperatures below 80 degrees F and within 1-1/2 hours after initial mixing at ambient temperatures over 80 degrees F.
- J. Do not add accelerators, retarders, water repellents, antifreeze compounds, or other additives without Landscape Architect's approval.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Follow requirements specified in referenced sections.

END OF SECTION

SECTION 055005 - LANDSCAPE METAL FABRICATIONS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Shop fabricated metal components:
 - a. Art pedestal.
 - b. Rain chains.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 099605 - Landscape High-Performance Coatings.

1.2 REFERENCES

- A. American Architectural Manufacturers Association (AAMA) 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Architectural Extrusions and Panels.
- B. American Welding Society (AWS) D1.1/D1.1M - Structural Welding Code - Steel.
- C. ASTM International (ASTM):
 - 1. A36/A36M - Standard Specification for Carbon Structural Steel.
 - 2. A108 - Standard Specification for Steel Bars, Carbon, Cold-Finished, Standard Quality.
 - 3. A123/A123M - Standard Specification for Zinc (Hot-Galvanized) Coatings on Iron and Steel Products.
 - 4. A242/A242M - Standard Specification for High-Strength Low-Alloy Structural Steel.
 - 5. A283 - Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates, Shapes and Bars.
 - 6. A307 - Standard Specification for Carbon Steel Externally Threaded Standard Fasteners.
 - 7. A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - 8. A501/A501M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
 - 9. A588/A588M - Standard Specification for High-Strength Low-Alloy Structural Steel, up to 50 ksi (345 MPa) Minimum Yield Point, with Atmospheric Corrosion Resistance.
 - 10. A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
 - 11. A780/A780M - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
 - 12. A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
 - 13. C94/C94M - Standard Specification for Ready-Mixed Concrete.
- D. Society for Protective Coatings (SSPC) - Painting Manual.

1.3 SYSTEM DESCRIPTION

- A. Minimum Design Loads:
 - 1. Pedestrian loading:
 - a. Uniform load of 100 PSF.
 - b. Concentrated load of 300 pounds.
 - c. Maximum deflection under loading: L/240.
 - 2. Vehicular loading:
 - a. Uniform load of 500 PSF.
 - b. Concentrated load of 2000 pounds.
 - c. Maximum deflection under loading: L/240.
 - 3. Concentrated and uniform loads do not need to be applied simultaneously.

4. Perform design under direct supervision of Professional Structural Engineer licensed in State in which Project is located, with minimum 2 years experience in work of this Section.

1.4 SUBMITTALS

- A. Submittals for Review:
 1. Shop Drawings: Show dimensions, metal thicknesses, finishes, joints, attachments, and relationship of work to adjacent construction.
 2. Samples: 3 x 3 inch powder coating samples in specified color, on representative backing.
- B. Quality Control Submittals:
 1. Certificates of Compliance: Manufacturer's certification that powder coatings applied on Project components comply with referenced AAMA standards.
- C. Closeout Submittals:
 1. Maintenance Data: Provide information regarding touch-up, cleaning, and maintenance of powder coatings.

1.5 QUALITY ASSURANCE

- A. Powder Coating Applicator Qualifications:
 1. Minimum 2 years experience in work of this Section.
 2. Approved by coating manufacturer.
 3. Certified by AAMA.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Store steel above ground on platforms, skids, or other supports; separate with wooden separators.
- B. Protect steel from corrosion.
- C. Prevent damage to shop-applied coatings.
- D. Powder-Coated Steel:
 1. Apply manufacturer's standard protective coverings to finished surfaces.
 2. Deliver, store, and handle finished components in manner to prevent damage to finishes.
 3. Furnish touch-up paint along with each material shipment.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Steel:
 1. Shapes: ASTM A36/A36M.
 2. Plate: ASTM A283.
 3. Sheet: ASTM A1008/A1008M.
 4. Pipe: ASTM A501/A501M.
 5. Tube: ASTM A500/A500M.
 6. Bars: ASTM A108.
- B. Stainless Steel: ASTM A276/A276M or ASTM A666, Type 316.

2.2 ACCESSORIES

- A. Exposed Screws: Same material as metal being fastened; Phillips flat head, countersunk, unless noted otherwise.
- B. Bolts: ASTM A307, hexagonal head type.
- C. Primer Paint: SSPC Paint 15, Type 1, red oxide.

- D. Anchoring Cement: Non-shrink cementitious type.
- E. Concrete: ASTM C94/C94M; minimum 2500 psi 28 day strength, 2 to 3 inch slump.

2.3 FABRICATION

- A. Fit and shop assemble items in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- D. Exposed Mechanical Fastenings: Flush countersunk screws or bolts, unobtrusively located, consistent with design of component except where specifically noted otherwise.
- E. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.
- F. Conceal fastenings where possible.
- G. Welding:
 - 1. Use welds for permanent connections where possible. Grind exposed welds smooth.
 - 2. Tack welds prohibited on exposed surfaces.
 - 3. Steel shapes, plate, pipe, and tube: Conform to AWS D1.1/D1.1M.

2.4 FINISHES

- A. Painted components:
 - 1. Shop painted except steel to be encased in concrete and surfaces to be welded.
 - 2. Surface preparation and application: As specified in Section 099605.
- B. Galvanized: ASTM A123/A123M, to 2.0 ounces per square foot.
- C. Powder coated:
 - 1. Pretreat surfaces to receive coatings to recognized AAMA standard consisting of multi-stage cleaning and conversion processes using amorphous chromate, amorphous chrome phosphate, or non chrome pretreatment.
 - 2. Apply primer and finish coat in accordance with manufacturer's instructions to uniform surface free from blemishes.
 - 3. After application, cure coatings in accordance with manufacturer's recommended cure schedule including cure temperature and cure time.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install items in accordance with approved Shop Drawings.
- B. Install components plumb, level, and rigid.
- C. Welding: AWS D1.1/D1.1M. Grind and fill exposed welds; finish smooth and flush.
- D. Install sleeved components with anchoring cement.
- E. Prevent contact of dissimilar metals by use of zinc rich paint, bituminous coating, or non-absorptive gaskets.

3.2 ADJUSTING

- A. Touch up coated surfaces with same coating system as applied in shop.

- B. Clean and touch up galvanized coatings at welded and abraded surfaces in accordance with ASTM A780/A780M, Annex A2.
- C. Clean and touch up powder coatings in accordance with coating manufacturer's instructions.

3.3 SCHEDULE

- A. This Schedule includes principal items only; refer to Drawings for additional items not listed.
- B. Art Pedestal:
 - 1. Source: Refer to Material Schedule.
 - 2. Fabricate from steel of shapes and thicknesses indicated. Refer to Drawings.
 - 3. Reinforce with internal steel angles where required to resist applied loads.
 - 4. Cut intersections square to within 2 degrees and to length within 1/8 inch. Remove burrs from cut ends.
 - 5. Continuously weld connections. Grind welds smooth.
- C. Rain chains:
 - 1. Source: Refer to Material Schedule.
 - 2. Fabricate of stainless steel as indicated in Schedule.

END OF SECTION

SECTION 055205 - LANDSCAPE METAL RAILINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Stainless steel guard rails and handrails.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. American Welding Society (AWS) D1.6/D1.6M - Structural Welding Code - Stainless Steel.
- B. ASTM International (ASTM):
 - 1. A276/A276M - Standard Specification for Stainless Steel Bars and Shapes.
 - 2. A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
 - 3. E935 - Standard Specification for Performance of Permanent Metal Railing Systems and Rails for Buildings.
- C. National Association of Architectural Metal Manufacturers (NAAMM) AMP 503 - Finishes for Stainless Steel.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show dimensions, metal thicknesses, finishes, joints, attachments, and relationship of work to adjacent construction.
- B. Quality Control Submittals:
 - 1. Certificate of Compliance from Professional Structural Engineer performing system design.

1.4 SYSTEM DESCRIPTION

- A. Minimum Design Loads:
 - 1. Guard rails and handrails:
 - a. 50 pounds per linear foot applied in any direction at top, transferred via attachments and supports to supporting structure.
 - b. Concentrated 200 pound load applied in any direction at any point along top, transferred via attachments and supports to supporting structure.
 - c. Maximum deflection under loading: $L/120$.
 - 2. Concentrated and uniform loads do not need to be applied simultaneously.
 - 3. Perform design under direct supervision of Professional Structural Engineer licensed in State in which Project is located, with minimum 2 years experience in work of this Section.
- B. Fabricate guard rails and handrails in accordance with ASTM E935.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 years experience in work of this Section.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Store components above ground on platforms, skids, or other supports; separate with wooden separators.

- B. Protect steel from corrosion.
- C. Prevent damage to shop-applied coatings.

PART 2 PRODUCTS

2.1 MATERIALS - STAINLESS STEEL

- A. Stainless Steel: ASTM A276/A276M or ASTM A666, Type 316, rollable temper.

2.2 ACCESSORIES

- A. Exposed Screws: Same material as metal being fastened; Phillips flat head, countersunk, unless noted otherwise.
- B. Bolts: ASTM A307, hexagonal head type.
- C. Anchoring Cement: Non-shrink cementitious type.

2.3 FABRICATION

- A. Fabricate guardrails and handrails from stainless steel stock of sizes and types indicated.
- B. Make bends uniform and free from buckles and other defects.
- C. Cut intersections square to within 2 degrees and to length within 1/8 inch. Remove burrs from cut ends.
- D. Miter and cope intersections within 2 degrees, fit to within 1/8 inch.
- E. Continuously weld connections. Welding to conform to AWS D1.6/D1.6M:
 - 1. Use welds for permanent connections where possible. Grind exposed welds smooth.
 - 2. Tack welds prohibited on exposed surfaces.
- F. Where length exceeds that suitable for shipping and handling, fabricate in sections with concealed internal sleeves forming slip joints. Extend sleeves minimum 2 inches on both sides of joint; field weld and grind smooth.
- G. Exposed Mechanical Fastenings: Flush countersunk screws or bolts, unobtrusively located, consistent with design of component except where specifically noted otherwise.
- H. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.
- I. Conceal fastenings where possible.

2.4 FINISHES

- A. Stainless Steel: NAAMM AMP 503; No. 4 satin.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install items in accordance with approved Shop Drawings.
- B. Install components plumb, level, and rigid.

- C. Welding: AWS D1.6/D1.6M. Grind and fill exposed welds; finish smooth and flush.
- D. Install sleeved components with anchoring cement.
- E. Prevent contact of aluminum and dissimilar metals by use of zinc rich paint, bituminous coating, or non-absorptive gaskets.

END OF SECTION

SECTION 079205 - LANDSCAPE JOINT SEALANTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Joint sealants for other sections referencing this Section.
 - 2. Joint backup materials.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C920 - Standard Specification for Elastomeric Joint Sealants.
 - 2. C1193 - Standard Guide for Use of Joint Sealants.
 - 3. C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants.
 - 4. C1472 - Standard Guide for Calculating Movement and Other Effects When Establishing Sealant Joint Width.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Indicate sealants, primers, bond breakers, and accessories proposed for use.
 - 2. Samples:
 - a. 1/2 x 1/2 x 3 inch long joint sealant samples showing available colors.
 - b. 6 inch long joint backup material samples.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Minimum 2 years experience in work of this Section.

1.5 PROJECT CONDITIONS

- A. Do not apply sealants at temperatures below 40 degrees F unless approved by sealant manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. BASF Building Systems. (www.buildingsystems.basf.com)
 - 2. Dow Corning Corp. (www.dowcorning.com)
 - 3. GE Silicones. (www.siliconeforbuilding.com)
 - 4. Pecora Corp. (www.pecora.com)
 - 5. Sika Corp. (www.sikausa.com)
 - 6. Tremco, Inc. (www.tremcosealants.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Joint Sealant Type 1:
 - 1. ASTM C920, Grade P, multiple component polyurethane type, self-leveling and slope grades.
 - 2. Movement capability: Plus or minus 25 percent.
 - 3. Color: To be selected from manufacturer's full color range.

4. Uses: Joints in horizontal surfaces subject to pedestrian or vehicular traffic.

B. Joint Sealant Type 2:

1. ASTM C920, Grade NS, single component silicone type, nonstaining, non sag.
2. Movement capability: Plus or minus 50 percent.
3. Color: To be selected from manufacturer's full color range.
4. Uses: Joints in vertical surfaces.

2.3 ACCESSORIES

A. Primers, Bondbreakers, and Solvents: As recommended by sealant manufacturer.

B. Joint Backing:

1. ASTM C1330, bi-cellular polyethylene foam, preformed round joint filler, non absorbing, non staining, resilient, compatible with sealant and primer, recommended by sealant manufacturer for each sealant type.
2. Size: Minimum 1.25 times joint width.

2.4 MIXES

A. Mix sealants in accordance with manufacturer's instructions.

1. Mix with mechanical mixer; prevent air entrainment and overheating.
2. Continue mixing until color is uniform.

PART 3 EXECUTION

3.1 PREPARATION

- A. Remove loose and foreign matter that could impair adhesion. If surface has been subject to chemical contamination, contact sealant manufacturer for recommendation.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Protect adjacent surfaces with masking tape or protective coverings.
- D. Calculate joint dimensions in accordance with ASTM C1472.

3.2 APPLICATION

- A. Apply products in accordance with manufacturer's instructions.
- B. Install sealants and accessories in accordance with ASTM C1193.
- C. Install joint backing to maintain required sealant dimensions. Compress backing approximately 25 percent without puncturing skin. Do not twist or stretch.
- D. Use bondbreaker tape where joint backing is not installed.
- E. Fill joints full without air pockets, embedded materials, ridges, and sags.
- F. Tool sealant to smooth profile.
- G. Apply sealant within manufacturer's recommended temperature range.

3.3 CLEANING

- A. Remove masking tape and protective coverings after sealant has cured.
- B. Clean adjacent surfaces.

END OF SECTION

SECTION 093005 - LANDSCAPE TILING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Landscape tile finishes.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 079205 - Landscape Joint Sealants.

1.2 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. A108/A118/A136.1 - American National Standard for Installation of Ceramic Tile.
 - 2. A137.1 - Specifications for Ceramic Tile.
- B. ASTM International (ASTM) D4263 - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
- C. Tile Council of North America (TCNA) - Handbook for Ceramic, Glass, and Stone Tile Installation.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturer's installation, cleaning, and maintenance instructions.
 - 2. Samples:
 - a. Tile: Full size samples in each color.
 - b. Grout: 1/2 x 1/2 x 3 inch long samples showing available colors.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 3 years experience in work of this Section.
- B. Dynamic Static Coefficient of Friction for Tile Subject to Pedestrian Traffic: Minimum 0.42, tested in accordance with ANSI A137.1 using BOT-3000 tribometer.
- C. Mockup:
 - 1. Size: Minimum 4 x 4 feet.
 - 2. Show: Tile colors and patterns, joint profile, and control joint.
 - 3. Locate where directed.
 - 4. Approved mockup may remain as part of the Work.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver mortar and grout containers bearing hallmark certifying compliance with reference standards.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Do not install tile at temperatures below 50 degrees F, during precipitation, or when such conditions are forecast within 48 hours after installation.

1.7 MAINTENANCE

- A. Extra Materials: One unopened carton of each tile.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers - Setting and Grouting Materials:
 - 1. BASF Corporation. (www.buildingsystems.basf.com)
 - 2. Bostik, Inc. (www.bostik-us.com)
 - 3. Laticrete International, Inc. (www.laticrete.com)
 - 4. Mapei Corporation. (www.mapei.us)
 - 5. TEC. (www.tecspecialty.com)
- B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Tile: Refer to Materials Legend.

2.3 ACCESSORIES

- A. Latex-Portland Cement Mortar:
 - 1. Type: ANSI A118.4, polymer modified dry set type.
 - 2. Source: Laticrete 254 Platinum by Laticrete International, Inc. or approved substitute.
- B. Grout:
 - 1. Type: A118.3, epoxy type.
 - 2. Source: Laticrete Spectralock Pro Grout by Laticrete International, Inc. or approved substitute.
 - 3. Colors: To be selected from manufacturer's full color range.
- C. Joint Sealant: Specified in Section 079205.
- D. Water: Clean, potable.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean surfaces to remove loose and foreign matter that could impair adhesion.
- B. Remove ridges and projections. Fill voids and depressions with patching compound compatible with setting materials.
- C. Allowable Substrate Tolerances:
 - 1. Maximum variation in substrate surface: 1/8 inch in 8 feet.
 - 2. Maximum height of abrupt irregularities: 1/32 inch.
- D. Test concrete substrate to ASTM D4263; do not install tile until surfaces are sufficiently dry.

3.2 INSTALLATION OF TILE

- A. Install tile in accordance with ANSI A108.5, thin set with latex-Portland cement mortar.
- B. Minimize pieces less than one half size. Locate cuts to be inconspicuous.
- C. Lay tile to pattern furnished by Landscape Architect.
- D. Joint Width: 1/8 inch, plus or minus 1/16 inch.
- E. Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- F. Fit tile around projections and at perimeter. Smooth and clean cut edges. Ensure that trim will completely cover cut edges.
- G. Allow tile to set for a minimum of 48 hours before grouting.

H. Grout tile joints in accordance with ANSI A108.10 without excess grout.

I. Control Joints:

1. Provide control joints at maximum 12 feet on center.
2. Form joints per TCNA Method EJ-171.
3. Fill joints with joint sealant as specified in Section 079205.

3.3 ADJUSTING

A. Remove and replace pieces that have been damaged during installation.

3.4 PROTECTION

A. Provide protection for completed work using nonstaining sheet coverings.

END OF SECTION

SECTION 099605 - LANDSCAPE HIGH-PERFORMANCE COATINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Polyurethane coating systems applied to exterior metal surfaces.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Manufacturer's data on materials proposed for use. Include product analysis, performance characteristics, and surface preparation materials and procedures.
 - 2. Samples: 3 x 3 inch coating samples in each color.

1.3 QUALITY ASSURANCE

- A. Applicator Qualifications: Minimum 2 years experience in work of this Section.

1.4 PROJECT CONDITIONS

- A. Apply coatings under dry and dust free conditions.
- B. Ambient Temperature: Between 60 and 90 degrees F.
- C. Humidity: Less than 50 percent.

1.5 MAINTENANCE

- A. Extra Materials: 1 gallon of each coating.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Contract Documents are based on products by Sherwin-Williams Company.
(www.sherwinwilliams.com)
- B. Equivalent products by following manufacturers are acceptable:
 - 1. Carboline Co. (www.carboline.com)
 - 2. Tnemec Co., Inc. (www.tnemec.com)
- C. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

- A. Landscape High Performance Coatings:
 - 1. Types: As scheduled at end of Section, or approved substitute.
 - 2. Colors: To be selected from manufacturer's full color range.

2.3 ACCESSORIES

- A. Thinners and Cleaners: Types recommended by manufacturer.

2.4 MIXES

- A. Mix materials in accordance with manufacturer's instructions.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean surfaces by SSPC SP6 - Commercial Blast Cleaning method.

3.2 APPLICATION

- A. Apply coatings in accordance with manufacturer's instructions.
- B. Apply primer immediately after surface preparation to prevent contamination of surface.
- C. Apply coatings uniformly without visible laps, sags, curtains, holidays, and objectionable brush marks.
- D. Allow each coat to cure completely before applying additional coats.
- E. Ensure that each coat is undamaged prior to applying succeeding coat.

3.3 ADJUSTING

- A. Touch up minor damage or refinish as required.

3.4 CLEANING

- A. Remove coatings from adjacent surfaces.

3.5 SCHEDULE

SURFACE	COATING TYPE	DRY FILM THICKNESS	NO. OF COATS
Ferrous Metals	Zinc-Clad III HS 100	3.0 to 5.0	1
	Macropoxy 646-100	5.0 to 10.0	1
	Pro Industrial Waterbased Acrolon 100 Polyurethane	2.0 to 4.0	1
Galvanized Metals	DTM Wash Primer	0.7 to 1.3	1
	Pro Industrial Waterbased Acrolon 100 Polyurethane	2.0 to 4.0 per coat	2

END OF SECTION

SECTION 310516 - AGGREGATE FILL

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Drainage aggregate fill.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 QUALITY ASSURANCE

- A. Furnish each aggregate from single source throughout Work.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Aggregate Fill:
 - 1. Exposed locations: Washed aggregate; refer to Materials Legend color and gradation.
 - 2. Concealed locations: Washed, crushed limestone, graded from 3/4 to 1-1/2 inches.
 - 3. Free from trash, debris, roots, topsoil, and other deleterious matter.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Place aggregate in maximum 8 inch compacted lifts to overall depth indicated.
- B. Compact to minimum 90 percent of relative density.
- C. Level and contour surfaces to elevations and gradients indicated.
- D. Where aggregate abuts other construction, align top surface of aggregate to within 1/2 inch of adjacent surfaces after compaction.

END OF SECTION

SECTION 31 22 16 FINE GRADING

PART 1 - GENERAL

1.1 SUMMARY:

- A. Section includes:
 - 1. Furnish all labor, material, equipment, related services and supervision necessary for or incidental to fine grading all disturbed areas within the limits of work as shown or indicated on the Drawings and/or as specified.
- B. Related Documents
 - 1. Drawings and General provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
 - 2. All other Divisions of the Contract Documents. Refer to each Division's specifications and drawings for all requirements, including but not limited to the following:
 - a. Earthwork – Section 31 20 00.
 - b. Topsoil – Section 32 91 19.16
 - c. Turf and Grasses – Section 32 92 10.
 - d. Planting – Section 32 93 10.

PART 2 - PRODUCTS

2.1 LIMITS OF WORK:

- A. The areas to be fine graded are all those disturbed areas within the limits of work as defined on the construction documents.

2.2 SEQUENCE OF WORK:

- A. Fine grading will not be attempted until all construction involving heavy equipment and vehicles is complete.
- B. After fine grading is accomplished, it shall be the Contractor's responsibility to protect all fine graded areas from vehicular traffic or other disruptive activities. Damages to the fine graded surfaces will be restored to a satisfactory condition as prescribed herein until the job is completed and accepted by the Architect.

2.3 FINE GRADING OPERATIONS:

- A. The following measures will be executed in the accomplishment of fine grading areas to be planted in turfgrass. The Contractor may elect to use additional or supplemental measures to accomplish fine grading.
 - 1. Fine grading will be executed with any or all of the following or other appropriate machinery: lightweight road grader, tractor box blade, discing machinery, weighted spike harrow, and weighted drags. Bull Dozer blades or front end loader buckets are not acceptable devices for fine grading operations.
 - 2. It is anticipated that some areas of earth embankment and high traffic areas may become overcompacted and resistant to proper grading. Such areas will be loosened and pulverized with discing machinery and will then be recompact to normal density before fine grading. The use of a watering truck to moisten dried and hardened areas may be necessary.

2.4 ACCEPTABILITY:

- A. The Architect will determine if fine graded areas are acceptable. Areas deemed unacceptable will be corrected and re-graded until they are acceptable.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Examine areas and conditions under which fine grading is to be performed and notify Owner/Architect of conditions detrimental to the proper and timely completion of the work.

3.2 PREPARATION:

- A. Provide adequate protective measures of shoring, bracing, piling, planking and cribbing to protect existing adjacent construction.
 - 1. Protect all reference points, benchmarks and monuments from dislocation or damage.
 - 2. Replace or repair immediately any points damaged, destroyed, or dislocated.
 - 3. Sprinkle and dampen all dusty material from the beginning of work to its completion.
 - 4. Protect and maintain all conduits, drains, inlets, sewers, pipes and wires that are to remain.
 - 5. Provide, erect and maintain all lights, barricades, warning signs and guards as necessary.
- B. The Contractor shall layout all work required and is responsible for all elevations, dimensions and verification of actual conditions. Refer discrepancies to the Architect for interpretation or required modifications.
- C. Remove grass, weeds, trees, shrubbery, roots and other vegetation from the areas to be fine graded. Tree roots of protected trees shall not be disturbed. Contractor shall remove vegetation and organic matter by hand labor in tree root zone areas
- D. Coordinate work with Architect in tree root zone areas.

3.3 PUMPING AND DRAINAGE:

- A. Keep fine graded areas free from water, ice and snow at all times. Prevent water from interfering with progress or quality of the work.

3.4 RECONDITIONING FINISHED GRADE:

- A. Where approved grades are compacted or disturbed by Contractor's subsequent operations or adverse weather, the finished grades shall be scarified and re-graded as specified herein prior to further construction thereon.

3.5 GRADING:

- A. Establish grades by means of grade stakes placed as required. Hold down subgrade to allow depths required for topsoil placement.
- B. Fine grade to the elevations required by the drawings.
- C. Imported topsoil, if required, will be furnished by the Contractor and installed in landscape planting and lawn turf areas as indicated on the landscape plan. Native topsoil will be placed in the areas from which they were salvaged from as per the drawings.
- D. Finish grade to the elevations required by the drawings and for proper drainage. At intermediate points, for which finish grades are not indicated, the finish grade shall be of uniform level of slope between points for which elevations are given. Round any abrupt changes in elevation.

- E. Laser grade athletic fields to be precision graded using laser leveling equipment to achieve a tolerance of 1/10 of an inch.

3.6 ADJUSTMENTS AND CLEANING:

- A. Settlement or washing that occurs in fine graded areas prior to acceptance of work shall be repaired and grades re-established to the required elevations and slopes.
- B. Cleanup all debris caused by the work of this section, keep the site clean and neat at all times.

END OF SECTION

SECTION 321313 - LANDSCAPE CONCRETE PAVING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Landscape concrete paving.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 033053 - Landscape Cast-in-Place Concrete.
 - 3. Section 079205 - Landscape Joint Sealants.

1.2 REFERENCES

- A. ASTM International (ASTM) D4819 - Standard Specification for Flexible Cellular Materials Made From Polyolefin Plastics.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Indicate products and accessories proposed for use.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 3 years experience in work of this Section including specialty finishes of types specified.
- B. Concrete Mix Design: Free from admixtures and additives not specifically approved by coloring admixture manufacturer.
- C. Mockups:
 - 1. Provide mockups of each concrete paving color and finish, minimum 10 x 10 feet.
 - 2. Show:
 - a. Each paving color.
 - b. Each paving finish.
 - c. Control and expansion joints.
 - 3. Locate where directed.
 - 4. Approved mockups may remain as part of the Work.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Concrete: As specified in Section 033053 except:
 - 1. Formwork:
 - a. Metal forms: Free of deformities, furnished in maximum practical lengths.
 - b. Wood forms: Good grade lumber, sound and free of warp, minimum 2 inch nominal thickness except where extremely short radii of curves require thinner forms.
 - 2. Dowels: Plain round bar dowels, conforming to reinforcing steel requirements.
 - 3. Exposed aggregate: Type, size, and color to match approved mockups.
 - 4. Coloring admixture: Refer to Materials Legend.

2.2 ACCESSORIES

- A. Joint Filler: ASTM D4819, Type II, closed cell polyethylene, non-staining, chemical resistant, ultraviolet stable, non-absorbent, with removable strip providing recess for joint sealant.

- B. Joint Sealant: Specified in Section 079205.
- C. Surface Retarder: Top Cast by Dayton Superior (www.daytonsuperior.com) or approved substitute.

2.3 MIXES

- A. Mix concrete in accordance with Section 033053.

PART 3 EXECUTION

3.1 CONSTRUCTION OF FORMS

- A. Construct formwork in accordance with Section 033053.
- B. Set forms accurately to required grades and alignment.
- C. Brace forms to withstand loads applied during concrete placement.
- D. Install flexible or curved forms of wood or metal for curves with radius of 300 feet or less.
- E. Align straight and curved sections at true tangent points without broken curves.
- F. Form curves uniform and smooth, to radius indicated.
- G. Leave forms in place for minimum 12 hours after completion of finishing operation.
- H. Provide expansion joints where paving abuts other construction, and at maximum 30 feet on center unless otherwise indicated on Drawings.
 - 1. Shape joint filler to concrete cross section and fasten in place.
 - 2. Provide holes for dowel bars maximum 1/8 inch larger than bar diameter.
 - 3. Provide 24 inch long No. 4 reinforcing bars or smooth steel dowels spaced maximum 24 inches on center, centered on expansion joint. Wrap one end of bars or dowels with two layers PVC tape.

3.2 PLACING REINFORCING

- A. Install reinforcement in accordance with Section 033053.
- B. Place reinforcing in middle third of flatwork.
- C. Stop alternate bars of reinforcing steel at control joints.
- D. Provide dowels at maximum 12 inches on center at expansion joints. Wrap one end of dowel in building paper or felt. Stop reinforcement on both sides of joint.

3.3 PLACING CONCRETE

- A. Place concrete in accordance with Section 033053.
- B. Place concrete continuously between predetermined expansion and control joints. Do not interrupt successive placement such that cold joints occur.
- C. Shape curbs and gutters to cross section indicated on Drawings.
- D. Strike off flatwork with screed, then float to uniform surface.
- E. Tool expansion joint edges and other exposed edges to smooth, dense surface with 1/8 inch radius.
- F. Seal expansion joints as specified in Section 079205.

- G. Provide control joints at maximum 10 feet on center unless otherwise indicated on Drawings. Saw joints within 24 hours after concrete placement, to 1/8 inch width and depth equal to 1/4 of slab depth.
- H. Installation Tolerances: Surfaces true to plane, in longitudinal direction to required grade, within plus or minus 1/4 inch in 10 feet, noncumulative.

3.4 FINISHING

- A. Broom Finish:
 - 1. Steel trowel and broom finish surfaces with striations running perpendicular to short dimension.
 - 2. Match approved mockup.
- B. Surface Retarded Finish:
 - 1. Trowel surfaces to required lines and grades. Do not overwork surfaces.
 - 2. After evaporation of initial bleed water but while concrete still contains high degree of moisture, spray apply surface retarder in accordance with manufacturer's instructions to full coverage.
 - 3. Allow retarder to dry for 4 to 24 hours.
 - 4. Do not remove retarder until concrete has set sufficiently to withstand washing.
 - 5. Wash and brush surfaces to remove overlying cement matrix and expose aggregate; final finish to match approved mockup.

END OF SECTION

SECTION 321413 - PRECAST CONCRETE UNIT PAVING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Precast concrete pavers.
 - 2. Filter fabric.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 079205 - Landscape Joint Sealants.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C33/C33M - Standard Specification for Concrete Aggregates.
 - 2. C136/C136M - Standard Test Method for Sieve Analysis for Fine and Coarse Aggregate.
 - 3. C144 - Standard Specification for Aggregate for Masonry Mortar.
 - 4. C836/C836M - Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course.
 - 5. C936/C936M - Standard Specification for Solid Concrete Interlocking Paving Units.
 - 6. C979/C979M - Standard Specification for Pigments for Integrally Colored Concrete.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Product Data: Descriptive data for pavers.
 - 2. Samples:
 - a. Full size samples in each profile and color.
 - b. 12 x 12 inch filter fabric samples.
 - c. Grout: 1/2 x 1/2 x 3 inch long samples showing available colors.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 years experience in work of this Section.
- B. Mockups:
 - 1. Size: Minimum 4 x 4 feet.
 - 2. Show: Paver color and texture, maximum color range, and paver pattern.
 - 3. Locate where directed.
 - 4. Approved mockups may remain as part of the Work.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store pavers off ground; prevent contact with materials that could cause staining or damage.
- B. Store joint sand above ground with vented waterproof covers.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements: Do not install mortar set pavers at temperatures below 50 degrees F, during precipitation, or when such conditions are forecast within 48 hours after installation.
- B. At end of working day and during rainy weather, cover mortar set pavers exposed to weather with waterproof coverings, securely anchored.

1.7 MAINTENANCE

- A. Extra Materials: 2 square feet of each color paver.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Precast Concrete Pavers:
1. Physical requirements: Meet ASTM C936/C936M.
 2. Coloring admixture: ASTM C979/C979M, pure mineral oxide, alkali resistant, colorfast, water insoluble, chemically inert, and weather resistant.
 3. Size, color, and surface finish: Refer to Materials Legend.
- B. Bedding Sand: ASTM C33/C33M, normal weight sand, graded per ASTM C136/C136M:

<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>
	3/8 inch 100
No. 4	95 to 100
No. 8	85 to 100
No. 16	50 to 85
No. 30	25 to 60
No. 50	10 to 30
No. 100	2 to 10

- C. Joint Sand:
1. ASTM C144, polymer modified joint sand produced specifically for placement in precast concrete paver joints.
 2. Source: Joint-Lock Paver Finishing Sand by Package Pavement Co., Inc. (www.packagepavement.com) or approved substitute.
 3. Color: To be selected from manufacturer's full color range.
- D. Setting and Grouting Materials: Laticrete International (www.laticrete.com) or approved substitute.
1. Mortar bed: Laticrete 3701 Fortified Mortar.
 2. Slurry bond coat and installation mortar: 254 Platinum.
 3. Crack isolation membrane: Hydro Ban XP.
 4. Grout: Permacolor Select; color to be selected from manufacturer's full color range.
- E. Waterproofing:
1. Type: ASTM C836/C836M, single component, modified polyurethane.
 2. Source: Tremproof 250 GC by Tremco (www.tremco.com) or approved substitute.
- F. Joint Sealants and Accessories: Specified in Section 079205.

2.2 ACCESSORIES

- A. Filter Fabric: Geosynthetic fabric manufactured specifically for use under paving.
- B. Cleaner: Type recommended by paver manufacturer.

PART 3 EXECUTION

3.1 INSTALLATION - SAND SET

- A. Place filter fabric over subgrade; install in accordance with manufacturer's instructions.
- B. Place bedding sand to minimum 1 inch uncompacted thickness. Screed off to true surface conforming to required line and grade.
- C. Place pavers in pattern indicated from straight reference line.
- D. Sequence laying to prevent placing pavers between previously placed units.

- E. Machine cut units at perimeter and around obstructions. Minimize units less than one-half normal size.
- F. Discard cracked, broken, chipped, stained, and otherwise damaged pavers.
- G. Vibrate to final level with plate type vibrator.
- H. After initial vibration, brush joint sand over surface and vibrate into joints.
- I. Place pavers with final surface 1/8 to 1/4 inch above drainage inlets, concrete collars, and drainage channels.
- J. Do not pass vibrator closer than 3 feet of unrestrained edges.
- K. Sweep off excess sand.
- L. Lightly water completed paving to set polymer sand.
- M. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 3/8 inch in 10 feet tolerance.

3.2 INSTALLATION - MORTAR SET

- A. Install pavers in accordance with setting and grouting manufacturer's instructions and TCNA Handbook.
 - 1. Apply slurry bond coat to concrete substrate.
 - 2. Apply mortar bed.
 - 3. Apply crack isolation membrane.
 - 4. Just prior to installing pavers, apply installation mortar to back of pavers.
- B. Support pavers over full bearing surface.
- C. Place pavers in pattern indicated from straight reference line. Maintain 3/8 inch joints between pavers and abutting vertical surfaces and protrusions.
- D. Fill joints with grout. Pack and work into voids. Tool joints to flush profile.
- E. Fill expansion joints with joint sealant as specified in Section 079205.
- F. Where pavers abut lawns or planting beds, apply waterproofing to edge of pavers, setting bed, and concrete subbase.
- G. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 1/4 inch in 10 feet tolerance.

3.3 CLEANING

- A. Protect adjacent and underlying surfaces.
- B. Apply cleaner in accordance with manufacturer's instructions.
- C. Thoroughly rinse surfaces with clean water after completion of cleaning; remove all traces of cleaning solution.

END OF SECTION

SECTION 321416 - BRICK UNIT PAVING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Brick pavers on mortar setting bed.
 - 2. Brick pavers on sand setting bed.
- B. Related Sections:
 - 1. Section 040513 - Masonry Mortaring.
 - 2. Section 079200 - Joint Sealants.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples: Stone and brick samples showing size, color, and surface texture.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 years experience in work of this Section.
- B. Perform Work in accordance with TMS 402/602.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Store stone and brick off ground; prevent contact with materials that could cause staining or damage.

1.5 PROJECT CONDITIONS

- A. Do not install mortar when surrounding air or substrate surface temperature is below 40 degrees F or above 90 degrees F during or 48 hours after completion of the work, or when wind velocity exceeds 15 MPH or relative humidity exceeds 70 percent.
- B. At end of working day and during rainy weather, cover work exposed to weather with waterproof coverings, securely anchored.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Brick Pavers: Refer to Drawings.
- B. Mortar: Specified in Section 040513.
- C. Bedding Sand: ASTM C33, normal weight sand, graded per ASTM C136:

<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>
3/8 inch	100
No. 4	95 to 100
No. 8	85 to 100
No. 16	50 to 85
No. 30	25 to 60
No. 50	10 to 30
No. 100	2 to 10

- D. Joint Sand:
 - 1. ASTM C144, polymer modified joint sand produced specifically for placement in paver joints.

2. Source: Joint-Lock Paver Finishing Sand by Package Pavement Co., Inc. (www.packagepavement.com) or approved substitute.

2.2 ACCESSORIES

- A. Filter Fabric: Geosynthetic fabric manufactured specifically for use under paving.
- B. Joint Sealants and Accessories: Specified in Section 079205.
- C. Cleaner: Type recommended by brick manufacturer.

PART 3 EXECUTION

3.1 INSTALLATION - MORTAR SET

- A. Set paver units in full mortar bed minimum 1-1/2 inches thick, to support pavers over full bearing surface.
- B. Place pavers in pattern indicated from straight reference line. Maintain 3/8 inch joints between pavers and abutting vertical surfaces and protrusions.
- C. Rake out joints to 3/8 inch depth.
- D. Fill joints with pointing mortar. Pack and work into voids. Tool joints to flush profile.
- E. Fill expansion joints with joint sealer as specified in Section 079205.
- F. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 1/4 inch in 10 feet tolerance.

3.2 INSTALLATION - SAND SET

- A. Place filter fabric over subgrade; install in accordance with manufacturer's instructions.
- B. Place bedding sand to minimum 1 inch uncompacted thickness. Screed off to true surface conforming to required line and grade.
- C. Place pavers in pattern indicated from straight reference line.
- D. Sequence laying to prevent placing pavers between previously placed units.
- E. Machine cut units at perimeter and around obstructions. Minimize units less than one-half normal size.
- F. Discard cracked, broken, chipped, stained, and otherwise damaged pavers.
- G. Vibrate to final level with plate type vibrator.
- H. After initial vibration, brush joint sand over surface and vibrate into joints.
- I. Place pavers with final surface 1/8 to 1/4 inch above drainage inlets, concrete collars, and drainage channels.
- J. Do not pass vibrator closer than 3 feet of unrestrained edges.
- K. Sweep off excess sand.
- L. Lightly water completed paving to set polymer sand.

- M. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 3/8 inch in 10 feet tolerance.

3.3 CLEANING

- A. Protect adjacent and underlying surfaces and plant materials.
- B. Apply cleaner in accordance with manufacturer's instructions.
- C. Thoroughly rinse surfaces with clean water after completion of cleaning; remove all traces of cleaning solution.

END OF SECTION

SECTION 321440 - STONE PAVING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Stone pavers.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 040511 - Landscape Masonry Mortaring.
 - 3. Section 079205 - Landscape Joint Sealants.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples:
 - a. Stone: 12 x 12 inch samples showing colors and surface textures.
 - b. Grout: 1/2 x 1/2 x 3 inch long samples showing available colors.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 years experience in work of this Section.
- B. Obtain each stone from a single quarry and from the same area within the quarry.
- C. Mockups:
 - 1. Size: Minimum 4 x 8 feet.
 - 2. Show: Paver sizes, colors and surface textures, maximum color range, and paver pattern.
 - 3. Locate where directed.
 - 4. Approved mockups may remain as part of the Work.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Store stone off ground; prevent contact with materials that could cause staining or damage.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Do not install pavers at temperatures below 50 degrees F, during precipitation, or when such conditions are forecast within 48 hours after installation.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Stone Pavers: Refer to Materials Legend.

2.2 ACCESSORIES

- A. Mortar: Specified in Section 040511.
- B. Setting and Grouting Materials (Over Concrete): Laticrete International (www.laticrete.com) or approved substitute.
 - 1. Setting mortar: Laticrete 3701 Fortified Mortar.
 - 2. Bond coat: 254 Platinum.
 - 3. Grout: Permacolor Select; color to be selected from manufacturer's full color range.

- C. Joint Sealants and Accessories: Specified in Section 079205.
- D. Cleaner: Type recommended by stone supplier.

PART 3 EXECUTION

3.1 INSTALLATION – MORTAR SET

- A. Install pavers in accordance with mortar manufacturer's instructions.
- B. Support pavers over full bearing surface.
- C. Place pavers to layout indicated on Drawings. Maintain 3/8 inch joints between pavers and abutting vertical surfaces and protrusions.
- D. Fill joints with mortar. Pack and work into voids. Tool joints to recessed profile.
- E. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 1/4 inch in 10 feet tolerance.

3.2 INSTALLATION – OVER CONCRETE

- A. Install pavers in accordance with setting and grouting manufacturer's instructions and TCNA Handbook.
 - 1. Apply bond coat to concrete substrate.
 - 2. Apply setting mortar.
 - 3. Just prior to installing stone, apply bond coat to back of stone.
- B. Support pavers over full bearing surface.
- C. Place pavers in pattern indicated from straight reference line. Maintain 3/8 inch joints between pavers and abutting vertical surfaces and protrusions.
- D. Fill joints with grout. Pack and work into voids. Tool joints to flush profile.
- E. Fill expansion joints with joint sealant as specified in Section 079205.
- F. Where pavers abut lawns or planting beds, apply waterproofing to edge of pavers, setting bed, and concrete subbase.
- G. Allowable Tolerances: Surfaces true to level or indicated slopes with plus or minus 1/4 inch in 10 feet tolerance.

3.3 CLEANING

- A. Protect adjacent and underlying surfaces and plant materials.
- B. Apply cleaner in accordance with manufacturer's instructions.
- C. Thoroughly rinse surfaces with clean water after completion of cleaning; remove all traces of cleaning solution.

END OF SECTION

SECTION 321500 - AGGREGATE SURFACING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Crushed stone.
 - 2. River rock.
 - 3. Stabilizer.
 - 4. Filter fabric.
 - 5. Herbicide.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregate.
 - 2. D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
 - 3. D4254 - Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples:
 - a. 1 pint of each proposed aggregate illustrating color, size, and gradation.
 - b. 12 x 12 inch filter fabric samples.

1.4 QUALITY ASSURANCE

- A. Furnish each aggregate from single source throughout Work.
- B. Perform sieve analysis on proposed decomposed granite in accordance with ASTM C136/C136M.
- C. Obtain stabilizer manufacturer's approval of decomposed granite aggregate sieve analysis prior to beginning installation.
- D. Mockups:
 - 1. Provide mockups showing each aggregate surfacing size and color range, surface texture, and overall workmanship.
 - 2. Size: Minimum 4 x 4 feet.
 - 3. Locate where directed.
 - 4. Approved mockups may remain as part of the Work.

1.5 PROJECT CONDITIONS

- A. Do not place aggregate on soft, muddy, or frozen surfaces.
- B. Do not install aggregate during precipitation or at temperatures below 40 degrees F.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Aggregate: Refer to Materials Legend.

2.2 ACCESSORIES

- A. Stabilizer: Stabilizer by Stabilizer Solutions, Inc. (www.stabilizersolutions.com) or approved substitute.
- B. Filter Fabric: Geosynthetic fabric manufactured specifically for use under paving.
- C. Staples: Galvanized steel, 6 inches long.
- D. Herbicide: Pre-emergent, non-selective type.

PART 3 EXECUTION

3.1 PREPARATION

- A. Correct irregularities in subgrade gradient and elevation by scarifying and reshaping.
- B. Compact subgrade to minimum 85 percent of ASTM D698 standard Proctor maximum dry density at or near optimum moisture content.
- C. Apply herbicide in accordance with manufacturer's instructions. Allow vegetation to die before proceeding.

3.2 INSTALLATION

- A. Place filter fabric over substrate; install in accordance with manufacturer's instructions.
- B. Secure filter fabric with staples spaced maximum 6 feet on center in two perpendicular directions.
- C. Spread aggregate over subgrade to minimum compacted thickness indicated. Where overall thickness exceeds 4 inches, place aggregate in two lifts of equal thickness.
- D. Level and contour surfaces to elevations and gradients indicated.
- E. Water aggregate to full depth without flooding and runoff.
- F. When aggregate is capable of supporting compaction equipment without damage, roller compact to minimum 95 percent of ASTM D4254 relative density at or near optimum moisture content.
- G. Use mechanical tamping equipment in areas inaccessible to compaction equipment.
- H. Where aggregate surfacing abuts other paving types, align top surface of aggregate to within 1/4 inch of adjacent surfaces after compaction.
- I. Final surface to be firm, stable, free of cracks, and slip-resistant.
- J. After compaction, apply herbicide in accordance with manufacturer's instructions.
- K. Tolerances:
 - 1. Maximum variation from flat surface: 1/2 inch in 10 feet.
 - 2. Maximum variation from thickness: 1/2 inch.
 - 3. Maximum variation from elevation: 1/2 inch.

END OF SECTION

SECTION 321813 - SYNTHETIC GRASS SURFACING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Synthetic grass surfacing.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate surfacing locations, seaming plan, method of joining seams, and direction of surfacing in each area.
 - 2. Samples: 12 x 24 inch surfacing samples.
 - 3. Warranty: Sample warranty form.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 years experience in work of this Section.

1.4 WARRANTIES

- A. Furnish manufacturer's standard warranty providing coverage against:
 - 1. Defective materials and workmanship.
 - 2. Excessive wear.
 - 3. Damage due to exposure to ultraviolet light.

1.5 MAINTENANCE

- A. Extra Materials: 10 square feet of extra surfacing.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Synthetic Grass Surfacing: Refer to Materials Legend.

2.2 ACCESSORIES

- A. Sand: Natural or manufactured sand, gradation as recommended by surfacing manufacturer.
- B. Perimeter Nailers: 100 percent HDPE lumber with ultraviolet inhibitors.
- C. Seaming Materials: As recommended by surfacing manufacturer.
- D. Infill: 12-30 mesh silica sand or SBR or EPDM rubber granules.
- E. Fasteners: Type recommended by surfacing manufacturer; hot-dip galvanized steel.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that subbase construction, compaction, and profile are acceptable to surfacing manufacturer.

3.2 INSTALLATION

- A. Install surfacing in accordance with manufacturer's instructions.
- B. Place sand over substrate at rate of 3 to 4 pounds per square foot. Lightly wet and roller compact to smooth, even surface.
- C. Lay out surfacing so that seams will be minimized, as inconspicuous as possible, and not located in heavy use locations.
- D. Install in widest roll width available, with rolls pointing in one direction and with blades inclined in same direction.
- E. Lay surfacing tight and flat on substrate, with uniform appearance. Provide monolithic color, pattern, and texture match within each area.
- F. Form seams flat, tight, and straight, free from ridges, gaps, and fraying.
- G. Fit surfacing tight to abutting surfaces and penetrations without gaps.
- H. Mechanically attach surfacing at perimeter and around penetrations.
- I. Weight seams overnight to prevent displacement.
- J. Place infill uniformly over synthetic grass to minimum rate of 3 pounds per square foot.

END OF SECTION

SECTION 323119 - METAL FENCES AND GATES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Shop fabricated steel fences and gates.
 - 2. Excavation for posts.
 - 3. Concrete post foundations.
 - 4. Gate hardware.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 099605 - Landscape High-Performance Coatings.

1.2 REFERENCES

- A. American Welding Society (AWS) D1.1/D1.1M - Structural Welding Code - Steel.
- B. ASTM International (ASTM):
 - 1. A36/A36M - Standard Specification for Carbon Structural Steel.
 - 2. A108 - Standard Specification for Steel Bars, Carbon, Cold-Finished, Standard Quality.
 - 3. A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - 4. C94/C94M - Standard Test Method for Ready-Mixed Concrete.
- C. Society for Protective Coatings (SSPC) - Painting Manual.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Include layout, spacing of components, post foundation dimensions, hardware, and schedule of components.
 - 2. Samples: 18 x 24 inch fence samples.

1.4 QUALITY ASSURANCE

- A. Fabricator and Installer Qualifications: Minimum 2 years experience in work of this Section.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Steel Shapes: ASTM A36/A36M.
- B. Steel Bars: ASTM A108.
- C. Steel Tube: ASTM A500/A500M.

2.2 ACCESSORIES

- A. Concrete: ASTM C94/C94M, minimum 2500 PSI compressive strength at 28 days, 3 to 5 inch slump.
- B. Gate Hardware: Refer to Materials Legend.

2.3 FABRICATION

- A. Fit and shop assemble fencing and gates in largest practical sections, for delivery to site.

- B. Fabricate with joints tightly fitted and secured.
- C. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- D. Welding to conform to AWS D1.1/D1.1M.
- E. Fabricate gates of same construction as fences.

2.4 FINISHES

- A. Ferrous Metals:
 - 1. Shop painted except steel to be encased in concrete and surfaces to be welded.
 - 2. Surface preparation and application: As specified in Section 099605.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install fences and gates in accordance with approved Shop Drawings.
- B. Drill holes for posts into undisturbed or compacted soil.
- C. Place concrete around posts in continuous pour, tamp and dome top away from post. Check for vertical and top alignment; brace posts until concrete has set.
- D. Install fences and gates plumb and true to line.
- E. Make grade adjustments and slope transitions smoothly.
- F. Welding to conform to AWS D1.1/D1.1M.
- G. Installation Tolerances:
 - 1. Maximum variation from plumb: 1/4 inch in 10 feet.
 - 2. Maximum offset from true position: 1 inch.

3.2 ADJUSTING

- A. Touch up scratches and abrasions in finish coat to match factory finish.
- B. Adjust gates to operate freely.

END OF SECTION

SECTION 323129 - WOOD FENCES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Excavation for posts.
 - 2. Steel posts.
 - 3. Wood fence.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. A153/A153M - Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware.
 - 2. C94/C94M - Standard Specification for Ready-Mixed Concrete.
 - 3. F900 - Standard Specification for Industrial and Commercial Swing Gates.
 - 4. F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc Coated (Galvanized) Welded, for Fence Structures.
- B. Western Red Cedar Lumber Association (WRCLA) - Grading Rules.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum 2 years experience in work of this Section.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Framing:
 - 1. Utilize existing framing where indicated.
 - 2. I-Beam Posts: ASTM A36/A36M.
 - 3. Base Plate: ASTM A283.
- B. Runners and Slats:
 - 1. Species: Western Red Cedar.
 - 2. Grade: WRCLA Standard and Better Grade..
 - 3. Edges: Square.
 - 4. Surfacing: Smooth surfaced.

2.2 ACCESSORIES

- A. Fasteners: Series 300 stainless steel.
- B. Concrete: ASTM C94/C94M, minimum 2500 PSI compressive strength at 28 days, 3 inch slump.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Post Spacing: As indicated on Drawings.
- B. Drill holes into undisturbed or compacted soil, with diameter equal to 3 times post diameter. Set posts minimum 30 inches below grade, with bottom of hole 3 inches below bottom of post.

- C. Place concrete around posts in continuous pour, tamp and dome top away from post.
 - 1. Check for vertical and top alignment; brace posts until concrete has set.
 - 2. Set with top of footing flush with finished grade.
- D. Install slats horizontally, in pattern indicated on Drawings. Secure to each post with fasteners, driven flush.

END OF SECTION

SECTION 323300 - SITE FURNISHINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Site furnishings.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate locations, dimensions, attachment, and relationship to adjacent construction.
 - 2. Product Data: Manufacturer's descriptive data.
 - 3. Samples: 3 x 3 inch samples showing each finish.

PART 2 PRODUCTS

2.1 MANUFACTURED UNITS

- A. Site Furnishings: Refer to Materials Legend.

2.2 ACCESSORIES

- A. Anchors: Type recommended by furnishing manufacturer for specific application; stainless or corrosion resistant coated steel with vandal resist heads.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install furnishings in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Set plumb, level, and rigid.

END OF SECTION

SECTION 32 91 19.16 - TOPSOIL

PART 1- GENERAL

1.1 SUMMARY:

- A. Section Includes
 - 1. This section specifies all soil material designated as "Topsoil" on the drawings or in the specifications.
- B. Related Documents
 - 1. Drawings and General provisions of the Contract, including General and Supplementary Conditions and Divisions 1 Specification Sections, apply to this Section.
 - 2. All other Divisions of the Contract Documents. Refer to each Division's Specifications and drawings for all requirements, including but not limited to the following:
 - a. Fine Grading – Section 31 22 16.
 - b. Turf and Grasses – Section 32 92 00.
 - c. Planting – 32 93 00.

1.2 SUBMITTALS:

- A. Samples
 - 1. Provide 1-quart samples for each soil unit making up the topsoil source.
 - 2. Each sample to be a composite of five to seven (5-7) sub-samples taken the full depth of proposed source. On stockpiles, discard upper 6 inches of soil before sampling.
 - 3. Place samples in plastic bags, seal, and place in second paper bag, and label.
- B. Test Reports
 - 1. Prior to starting work, submit 2 certified copies of soil test reports to the Architect for approval.
 - 2. Costs of all tests to be borne by the Contractor.

1.3 QUALITY ASSURANCE:

- B. All soil samples and testing shall comply with procedures specified in:
 - 1. U.S.D.A. Ag. Handbook 60: Diagnosis and Improvement of Saline and Alkali Soils.
- C. Testing Laboratories
 - 1. Certified facilities normally engaged in agronomic soil testing shall be utilized.
 - 2. Approval by the Owner's representative.
- D. Required Topsoil Tests
 - 1. Chemical analysis indicating:
 - a. Fertility: pH, nitrate nitrogen, ammonia nitrogen, phosphate phosphorous, potassium, calcium, magnesium, zinc, iron, and manganese.
 - b. Suitability: total salinity, boron, sodium, potassium, calcium, magnesium, chloride, and sulfate.
 - 2. Physical properties include:
 - a. Organic content
 - b. Particle size distribution

PART 2 - PRODUCTS

2.1 TOPSOIL:

- A. Topsoil for the work shall conform to the requirements included in this Section
 - 1. A natural, friable, loamy soil, typical of local topsoil which produces heavy vegetative growth, free from subsoil, weeds, sods, stiff clay, stones larger than ½ inch, toxic substances, debris, or other substances which may be harmful to plant growth.

2. The pH range shall be 6.5 to 7.5.
- B. Grading Analysis: Two inch sieve, 100 percent passing. Number 4 sieve, 90 percent minimum passing. Number 10 sieve, 80 percent minimum passing.
- C. Sand, silt and clay content:
 1. Sand: 20 to 75 percent.
 2. Silt: 10 to 60 percent.
 3. Clay: 5 to 30 percent.
- D. All topsoil shall be free from all herbicides and insecticides which may adversely affect growth of lawn or planting, or which may contain toxic materials.
- E. Do not deliver in muddy condition.
- F. The Contractor shall not use materials which do not conform to these criteria. At the discretion of the Landscape Architect, such material can either be amended to meet these requirements, or will be removed from the site and replaced with suitable material as specified.

PART 3 – EXECUTION

3.1 Not Used

END OF SECTION

SECTION 32 9210 - TURF AND GRASSES

PART 1 – GENERAL

1.1 SUMMARY:

- A. Section includes:
 - 1. Furnish all labor, material, equipment related services and supervision necessary for or incidental to the installation of the lawns and grasses as shown or indicated on the Drawings and/or as specified.
 - 2. Work Included:
 - a. Soil Preparation and Fine Grading.
 - b. Fertilization.
 - c. Grass Seeding.
 - d. Grass Sodding.
- B. Related Documents
 - 1. Drawings and General provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
 - 2. All other Divisions of the Contract documents. Refer to each Division 's specifications and drawings for all requirements, including but not limited to the following:
 - a. Fine Grading – Section 31 22 16.
 - b. Planting - Section 32 93 10.
 - c. Planting Maintenance - Section 32 95 10.

1.2 SUBMITTALS:

- A. Delivery Receipts and Invoices: Submit original delivery receipts and invoices for materials used.
- B. Product Data: Submit sample label or specification of fertilizer.
- C. Certificate: Submit State Certificate stating analysis of purity and germination of seed.
- D. Certificate: Submit State Certificate stating variety and purity of grass sprigs.
- E. Certificate: Submit State Certificate stating variety and purity of grass sod.
- F. Application Log: Submit daily log sheets of hydro mulch operations with the following information:
 - 1. Seed type and amount.
 - 2. Fertilizer analysis and amount.
 - 3. Mulch type and amount.
 - 4. Seeding additive type and amount.
 - 5. Number of loads-amount of water.
 - 6. Area covered.
 - 7. Equipment used-capacity and license number.
 - 8. Signature of nozzle man.
- G. Soil Fertility Test Reports:
 - 1. Submit analysis, test results and corrective recommendations to Architect.
 - 2. Two tests required of existing soil taken at different locations on the project site as directed by the Architect.

1.3 PROTECTION:

- A. Protect paving surfaces, curbs, utilities, plant materials, and other existing improvements from damage by heavy equipment.
- B. Locate and stake irrigation heads, valve risers and equipment prior to beginning soil preparation work.
- C. Exercise care to prevent the hydromulch slurry from being sprayed inside reservoir basins or drainage ditches and channels which may impede the free flow of rain water runoff or irrigation water.
- D. Clean paving and other surfaces of over-spray and spillage of hydro mulch slurry.

- E. During work and maintenance period, maintain topsoil in place at established grades. Replace topsoil and grass losses due to erosion.
- F. Protect in place work from damage by heavy equipment. Prepare, grade, level and replant damaged areas.

1.4 SUBSTANTIAL COMPLETION & PROJECT CLOSEOUT

- A. A Certificate of Substantial Completion will be issued when the Work performed under the Contract has been reviewed and found, to the Architect's best knowledge, information and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion thereof is also the date of commencement of applicable guarantees as specified.
- B. A list of items to be completed or corrected will be attached to the Certificate or Substantial Completion. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract documents.
- C. The Contractor will complete or correct the Work on the list of items within a specific number of days as shown on the Certificate of Substantial Completion.
- D. Upon completion and re-inspection of all corrected items listed, the Architect will recommend to the Owner that the work of this Section is ready for final acceptance.

1.5 QUALITY ASSURANCE:

- A. General: Comply with applicable Federal, State, County and local regulations governing landscape materials and work.
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide supervision by a qualified foreman.

1.6 GUARANTEE:

- A. Guarantee lawns and grasses for one year after date of Final Acceptance which is described in paragraph 1.7.D. At the end of this guarantee period, all lawn and grass areas will have achieved coverage of the specified grass at a density of 100% coverage, free of weeds, undesirable grass species, disease and insects. Replace dead materials and materials not in vigorous, thriving condition as soon as weather permits and on notification by the Architect.
- B. Replace lawns and grasses with same kind as originally planted, at no cost to the Owner. Protect irrigation system and other piping, conduit or other work during replacement. Repair damage immediately.

1.7 JOB CONDITIONS

- A. Do not install seed or sod on saturated or frozen soil.
- B. Sod installation shall be subject to suitability of the weather and other conditions affecting sod growth.

1.8 PROGRESS MEETINGS

- A. Contractor shall attend all progress meetings as requested by the Architect/Owner during installation.

1.9 QUANTITY VERIFICATION:

- A. The bidding contractor is responsible for the inclusion of all materials, labor and equipment as outlined in the plans and specification. The plant list is provided to the bidding contractor as a convenience and the quantities are approximate. VERIFICATION OF ALL QUANTITIES IS THE SOLE RESPONSIBILITY OF THE BIDDING CONTRACTOR. Any discrepancies must be reported to the Architect prior to submittal of bid.

PART 2 – PRODUCTS

2.1 GRASS:

- A. Bermuda Kentucky Blue Grass, Zoysia and Saint Augustine Sod:
1. Sod shall be nursery grown on cultivated agricultural soils. Sod shall have been mowed regularly and carefully and otherwise maintained from planting to harvest.
 2. Sod shall be of species indicated.
 3. Thickness of Cut: Sod shall be cut to the supplier's standard width and length. Maximum allowable deviation from standard widths and lengths shall be plus or minus .25 inches on width and plus or minus 5% on length.
 4. Broken strips and torn or uneven ends will not be accepted.
 5. Strength of Sod Strips: Sod strips shall be strong enough to support their own weight and retain their size and shape if suspended vertically when grasped in the upper 10% of the section.
 6. Moisture Content: Sod shall not be harvested or transplanted when moisture content (excessively wet or dry) may adversely affect its survival. Sod shall be stored in a compact group to prevent drying out or freezing.
 7. Time Limitations: Sod shall be harvested, delivered and transplanted within a 30 hour period unless a suitable preservation method is approved by the Architect prior to delivery. Sod not transplanted within this period shall be inspected for approval by the Landscape Architect prior to its installation.
 8. Thatch: Sod shall be free of thatch.
 9. Diseases, Nematodes and Insects: Sod shall be free of diseases, nematodes and soil-borne insects.
 10. Weeds: Sod shall be free of objectionable grassy and broadleaf weeds.

2.2 FERTILIZER:

- A. Fertilizer shall be a product uniform in composition, free flowing, and suitable for application with approved equipment.
1. Deliver fertilizer to site in fully labeled original containers.
 - a. Fertilizer which has been exposed to high humidity and moisture has become caked or otherwise damaged, making it unsuitable for use, will not be acceptable.
 2. Application Rates:
 - a. Seeding and Hydro Mulch Initial Application:
 1. Bioform 4-2-4S, Garrett Juice, Turf Pro or approved equal.
 - b. Seeding and Hydro Mulch Second Application:
 1. Garden-Ville 7-2-2, GreenSense 6-2-4, Marshall Grain 7-2-2 or approved equal.
 - c. Sprigging and Sod Initial Application:
 1. Garden-Ville 7-2-2, GreenSense 6-2-4, Marshall Grain 7-2-2 or approved equal.
 - d. Sprigging and Sod Second Application:
 1. Garden-Ville 7-2-2, GreenSense 6-2-4, Marshall Grain 7-2-2 or approved equal.
- B. Vinegar – 20% Solution: GreenSense, Marshall Grain, Garden-Ville or equal.

2.3 EROSION BLANKET:

- A. Curlex Blanket manufactured by American Excelsior Company (817 640-2161) or equal.

PART 3 – EXECUTION

3.1 GENERAL:

- A. Execute grass planting operations across slope and parallel to finished grade contours.

3.2 PRE-PLANT WEED CONTROL:

- A. Irrigated and non-irrigated Grass Areas:
 - 1. If grassy or broadleaf weeds exist on site at the beginning of work, spray with a non-selective systemic contact herbicide, as recommended and applied by an approved licensed landscape pest control advisor and applicator. Leave sprayed plants intact for at least 15 days to allow systemic kill.
 - 2. Clear and remove these existing weeds by mowing or grubbing off all plant parts at least .25 inches below the surface of the soil over the entire area to be planted.
- B. Irrigated Grass Areas Only:
 - 1. After irrigation system is operational, apply water for 5 to 10 days as needed to achieve weed germination. Apply contact herbicides and wait as needed before planting. Repeat as needed.
 - 2. Maintain lawn and grass areas weed free until final acceptance by Owner utilizing mechanical and chemical treatment.

3.3 SOIL PREPARATION:

- A. Tillage:
 - 1. Tillage shall be accomplished to loosen all areas of compacted soil. When placement of topsoil is specified, till compacted areas prior to placement.
 - 2. Till with heavy duty disc, rototiller, or chisel-type breaking plow, chisels set not more than 10 inches apart. Till to a depth of 1 to 3 inches.
 - 3. Initial tillage shall be done in crossing pattern for double coverage then followed by a disc harrow.
- B. Cleaning:
 - 1. Remove debris, building materials, rubbish, weeds, and stones larger than 1 inch in diameter.
 - 2. Use Rock Pick or other machinery to gather surface stones larger than 1 inch in diameter.
- C. Fine Grading:
 - 1. After tillage and placement of topsoil, level, fine grade, and drag with a weighted spike harrow or float drag.
 - 2. Eliminate ruts, depressions, humps and objectionable soil clods.

3.4 FERTILIZING:

- A. The fertilizer types and rates specified herein are applicable unless countermanded by the soil fertility test corrective recommendations, in which case they will be applicable.
- B. Bermuda & Zoysia Grass and Sodding:
 - 1. Initial Application: Apply no more than 5 days prior to commencement of sprigging or sodding operations at a rate of 20 pounds per 1,000 square feet. Incorporate into soil with a chain harrow.
 - 2. Second and Third Applications: Apply every 25 days after sprigging or sodding at a rate of 10 pounds per 1,000 square feet.
 - 3. Irrigate the area with a minimum of .25 inches of water to properly incorporate the fertilizer into the turf.

3.5 PLANTING SOD

- A. Weather Conditions:
 - 1. Schedule work for periods of favorable weather.

2. Sod placement on days which, in the judgment of the Landscape Architect, are too hot, cold, sunny, dry or windy for optimal installation may be prohibited.
- B. Placement Pattern:
1. The first row shall be laid in a straight line with subsequent rows parallel to the first row and tightly abutting each other.
 2. Lateral joints shall be staggered. Care shall be exercised to insure that the sod is neither stretched nor overlapped. Joints must be butted tightly to prevent voids that could permit air to dry out root.
 3. Immediately after placing, sod shall be pressed firmly into contact with bed by tamping or rolling to eliminate air pockets. Following tamping, screened topsoil shall be used to fill all cracks and excess soil shall be worked into the sod with rakes or other suitable equipment. Sod shall not be smothered with excess fill soil.
 4. On slopes steeper than 3 to 1, sod shall be secured by galvanized pins, wood pegs or other methods approved by the Landscape Architect.
 5. Immediately after sodding operations have been completed, the entire surface shall be compacted with a roller or other approved equipment. The completed area after sodding shall be uniformly even, firm and true to finished grade lines.
- C. Watering:
1. Initial Installation: Water must be applied within 2 hours of exposure of the sod to sun or wind. Water newly laid sod until saturation of the entire area is apparent. As a result of initial irrigation, standing water may be present and moderate to heavy run off may occur. Continue to irrigate on a daily basis in shorter durations so the entire area stays thoroughly wet but without standing water. The length of irrigation time and frequency of applications will vary at different locations due to weather conditions and individual site characteristics.
 2. After 7 to 10 days: Check for new root growth by lifting corners of sod blocks. If consistent root growth over the entire site is observed, water applications can be reduced to once every other day.
 3. After 12 to 14 days: Recheck for additional rooting. If sod blocks are difficult to pull up or additional new roots are present allow the area to dry to the extent that mowing can be performed.

3.6 GRASS CONVERSION:

- A. Conversion of temporary grass to permanent grass:
1. Spray temporary grass with an approved herbicide - 95% kill rate minimum.
 2. Scalp dead grass with mowing equipment.
 3. Lightly scarify soil surface using a verticut machine or like equipment.
 4. Apply permanent grass seed as specified.

3.7 GRADING:

- A. Maintain existing established grades, protect true and even during operations.

3.8 EROSION CONTROL:

- A. During work and maintenance period, maintain topsoil in place at established grades. Replace topsoil and turfgrass losses due to erosion.

3.9 CLEAN-UP:

- A. Remove excess material and debris from site.

3.10 MAINTENANCE:

- A. Until Final Acceptance, maintain lawn and grass areas by watering, mowing, weeding, spraying, cleaning and replacing as necessary to keep the turf and grass in a vigorous, healthy condition.
1. Watering: As necessary. Provide temporary above ground sprinklers over un-irrigated areas including temporary water meter if required. Water cost will be paid separately

by the Owner or General Contractor unless noted differently on the drawings or bid form.

2. Mowing:
 - a. Bermuda Grass Sod, Hydro mulch & Sprigging: Mow newly planted grass areas weekly after initial growth reaches 1.5 to 2 inches.
 - b. Annual Rye Grass: Mow newly planted grass areas after initial growth reaches 2 to 3 inches. Additional mowings may be required as directed by the Owner and Architect.
 - c. Buffalo Grass Sod: Mow newly planted grass areas after initial growth reaches 1.5 to 2 inches. Additional mowings may be required as directed by the Owner and Architect.
 - d. Buffalo Grass Seeding: Mow newly planted grass areas after initial growth reaches 2 to 3 inches. Additional mowing may be required as directed by the Owner and Architect.
 - e. Weeping Love Grass and Native Grasses: Mow only for weed control.
 - f. Saint Augustine Sod: Mow newly planted grass areas weekly at a height of 2 to 3 inches after initial growth reaches 3 inches.
3. Weeding: Remove weeds and foreign grass over lawn and grass areas at least once a week. Herbicides may be used only when approved by the Owner and Architect.
4. Follow landscape maintenance procedures outlined in specification section 32 95 10 –Planting Maintenance.

END OF SECTION

SECTION 32 93 10 - PLANTING

PART 1 – GENERAL

1.1 SUMMARY:

- A. Section Includes:
 - 1. Furnish all labor, material, equipment, related services and supervision necessary for or incidental to the installation of the trees, plants and groundcovers as shown or indicated on the Drawings and/or as specified.
 - 2. Work Included:
 - i. Trees.
 - ii. Shrubs.
 - iii. Groundcovers.
 - iv. Steel Edging.
 - v. Mulching.
 - vi. Bed Preparation.
- B. Related documents
 - 1. Drawings and General provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
 - 2. All other Divisions of the Contract Documents. Refer to each Division's specifications and drawings for all requirements, including but not limited to the following:
 - i. Fine Grading - Section 31 22 16.
 - ii. Turf and Grasses - Section 32 92 10.
 - iii. Planting Irrigation - Section 32 94 00.
 - iv. Planting Maintenance - Section 32 95 10.

1.2 REFERENCE STANDARDS:

- A. American Standard for Nursery Stock, Edition approved April 14, 2014 by American National Standards Institute, Inc. – plant material.

1.3 SUBMITTALS:

- A. Delivery Receipts and Invoices: Submit original delivery receipts and invoices for materials used.
- B. Product Data: Submit manufacturer's product data sheets for proprietary products in accordance with Section 01 33 00.
- C. Samples:
 - 1. Submit three samples each of small trees and shrubs for the Architect's approval. When approved, tag and maintain as representative samples for finally installed plant materials. Samples may be used to complete installation provided they remain tagged until final acceptance of entire installation.
 - 2. Submit photos of trees and source nursery information to the Architect for review prior to tree tagging. Architect will tag trees at source nursery prior to project delivery.
 - 3. Submit for approval sufficient representative quantities of sandy loam, composted organic material, steel edging, mulch, peat moss and crushed rock. Samples shall be approved by the Architect before use on project.
- D. Soil Fertility Test Reports:
 - 1. Submit analysis, test results and corrective recommendations to Architect.
 - 2. Two tests required of existing soil taken at different locations on the project site as directed by the Architect.
 - 3. One test required of the specified composted organic material mixed in equal parts with the existing topsoil.

1.4 DELIVERY, STORAGE AND HANDLING:

- A. Deliver packaged materials in containers showing weight, analysis and name of manufacturer.
- B. Protect materials from deterioration during delivery and while stored at the site.

1.5 PROJECT CONDITIONS:

- A. Site Inspection:
 - 1. It is the bidding contractor's responsibility to review all site conditions, as they relate to the proposed project, prior to submission of a bid. Any issues or concerns will be submitted to the Architect prior to bidding. Submission of a bid will indicate that the bidding contractor has made a site inspection.
- B. Utilities:
 - 1. Determine locations of underground utilities and perform work in a manner which will avoid possible damage. Do not permit heavy equipment such as trucks to damage utilities. Hand excavate, as required to minimize possibility of damage to underground utilities. Maintain grade stakes until removal is directed.
 - 2. Coordinate with irrigation work to prevent damage to temporary risers of underground sprinkling system and obstruction of work located in landscape areas.
- C. Protections:
 - 1. Do not move equipment over existing or newly placed structures without the Architect's approval.
 - 2. Provide board roading as required to protect paving and soft soil.
 - 3. Protect other improvements from damage, with protection boards, ramps and protective sheeting as required.
 - 4. Locate and stake irrigation heads, valve risers and equipment prior to beginning soil preparation work.
 - 5. During work and maintenance period, maintain topsoil and prepared soil in place at established grades. Replace topsoil, prepared soil and mulch due to erosion.
- D. Delivery and Storage:
 - 1. Store materials in area covered with protective sheeting.
 - 2. If balled plants cannot be planted within 24 hours after delivery to site, protect root balls by heeling in with sawdust or other approved material.

1.6 SUBSTANTIAL COMPLETION & PROJECT CLOSEOUT:

- A. A Certificate of Substantial Completion will be issued when the Work performed under the Contract has been reviewed and found, to the Architect's best knowledge, information and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion thereof is also the date of commencement of applicable guarantees as specified.
- B. A list of items to be completed or corrected will be attached to the Certificate of Substantial Completion. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- C. The Contractor will complete or correct the Work on the list of items within a specific number of days as shown on the Certificate of Substantial Completion.
- D. Upon completion and re-inspection of all corrected items listed, the Architect will recommend to the Owner that the work of this Section is ready for final acceptance.

1.7 QUALITY ASSURANCE:

- A. General: Comply with applicable Federal, state, county and local regulations governing landscape materials and work.
- B. Installer Qualifications: The bidding company will specialize in landscape installation with 5 years documented experience. The contractor will staff the project with a competent superintendent and the necessary assistants as approved by the Architect. The superintendent will not be changed except with the consent of the Architect and Owner. The superintendent must have a minimum 5 years experience with similar projects.
- C. Personnel: Employ only experience personnel who are familiar with the required work. Provide adequate supervision by a qualified foreman.

1.8 GUARANTEE:

- A. Guarantee plants and trees for one year after date of Final Acceptance which is described in paragraph 1.7.D. Replace dead materials and materials not in vigorous, thriving condition as soon as weather permits and on notification by the Architect. Replace plants, including trees, which have partially died thereby damaging shape, size or symmetry.
- B. Replace plants and trees with same kind and sizes as originally planted, at no cost to the Owner. At direction of the Architect, trees may be replaced at start of next year's planting or digging season. In such cases, remove dead trees immediately. Protect irrigation system and other piping, conduit or other work during replacement. Repair damage immediately.

1.9 PROGRESS MEETINGS:

- A. Contractor shall attend all progress meetings as requested by the Architect/Owner during installation.

1.10 QUANTITY VERIFICATION:

- A. The bidding contractor is responsible for the inclusion of all materials, labor, and equipment as outlined in the plans and specification. The plant list is provided to the bidding contractor as a convenience and the quantities are approximate. VERIFICATION OF ALL QUANTITIES IS THE SOLE RESPONSIBILITY OF THE BIDDING CONTRACTOR. Any discrepancies must be reported to the Landscape Architect prior to submittal of bid.
- B. The Contractor is required to install the specified type and quantity of composted organic material purchased from the specified supplier. Soil Building Systems will e-mail the Architect, as orders are being placed, for verification that the specified material, quantity and supplier are being used.

PART 2 – PRODUCTS

2.1 PLANTS:

- A. General: Plants shall be well-formed No. 1 grade or better nursery stock in accordance with requirements of reference standards, subject to the Architect's approval. Listed plant heights are from tops of plant balls to the nominal tops of plants.
- B. Shrubs and Groundcovers: Nursery grown, healthy, vigorous, bushy, well branched, of normal habit of growth for species, free from disease, insects, eggs and larvae. Specified sizes shall be before pruning, and plants shall be measured with their branches in normal position. The Architect prior to installation will approve all plants.

- C. Ornamental and Shade Trees: Healthy, vigorous, full branches, well shaped, trunk diameter and height requirements as specified. Balls shall be firm, neat, slightly tapered and well burlaped. Trees with loose or broken balls at time of planting shall be rejected. Each tree will be approved by the Architect prior to installation. Balls shall be 10 inches in diameter for each 1 inch of caliper. All balled and burlaped trees and shrubs will be dug and stored for a minimum of 60 days prior to planting on this project. All trees shall have excess soil removed from the top of the root ball so the root flare is exposed.
- D. Caliper: Trees 4 inches and less are measured 6 inches above top of root ball. Trees over 4 inches are measured 12 inches above top of root ball.
- E. Trees connected to stakes at the nursery are not acceptable and will be rejected.

2.2 SOIL PREPARATION MATERIALS:

- A. Sandy Loam: Fertile, dark sandy loam free of rubble, stones, lumps, plant roots and reasonably free of weeds. Loam containing nut grass or Dallisgrass shall be rejected.
- B. Commercial Fertilizer: Complete fertilizer, uniform in composition, dry and free flowing. Deliver to site in original unopened containers, each bearing manufacturer's guaranteed statement of analysis. Lesco 14-14-14 landscape and ornamental fertilizer with micronutrients.
- C. Composted Organic Material: Soil Building Systems 'Ph Balanced' Compost with a ph of 5.5 to 6.5 and shall be free of treated or used lumber, pine bark or mushroom compost waste. 97% Of the material shall pass through a .5 inch screen and 100% shall pass through a .75 inch screen.

2.3 MISCELLANEOUS MATERIALS:

- A. Crushed Rock: Washed .75 inch to 1.5 inches in diameter.
- B. Tree Staking: Per construction details
- C. Mulch: Partially decomposed dark brown fine shredded hardwood bark mulch.
- D. Filter Fabric: Mirafi 140N by Celanese Fibers Marketing Co. or equal.
- E. Fertilizer Tablets: BioPlex Planting Tablets, 15 gram, 12-8-8. BioPlex @ 1-800-441-3573
- F. Edging: Per construction drawings.
- G. 4 inch PVC pipe and cap CUA 55 200.
- H. Water: Provided by Owner.
- I. Technical Concentrate and Plant Enhancer: BioPlex @ 1-800-441-3573
- J. Pre-Emergent Herbicide: Barracade or Pre-M.

PART 3 – EXECUTION

3.1 EXAMINATION AND PREPARATION:

- A. Examine sub-grade and other related construction for defects that adversely affect Work.
- B. Do not proceed until unsatisfactory conditions have been corrected.
- C. Plant trees and shrubs during normal seasons for such work in the project location and only when weather conditions are suitable.
- D. Plant trees and shrubs after final grades are established and prior to planting of lawns.
- E. Additional soil amendments may be required per soil test results.

3.2 BED PREPARATION:

- A. When grassy or broadleaf weeds are present, spray with Roundup, a non-selective systemic herbicide, for 100% control. When Nut Sedge is present, spray with Manage, a selective post emergent herbicide, for 100% control. Application of post emergent herbicides is to be performed by a licensed applicator.
- B. Layout and stake beds for Architect's approval prior to installation of steel edging and planting.

- C. Excavate existing soil from beds as needed to allow for installation of the specified organic compost and mulch. Excavated materials will be removed from the site as required by the Architect and Owner.
- D. Provide 4 inches of composted organic material in shrub and groundcover beds.
- E. Till to a depth of 8 inches.
- F. Add commercial fertilizer at 7 pounds per 1,000 square feet of bed area and apply prior to application of mulch.
 - 1. The fertilizer type and rate specified herein is applicable unless countermanded by the soil fertility test corrective recommendations, in which case they will be applicable.
- G. Grade beds to allow for free flow of surface water to the bed edge and away from buildings. Beds will be mounded 2 inches to 3 inches and tapered at the edges to meet existing grade.

3.3 SHRUB AND GROUNDCOVER SPACING:

- A. Place plants in position on bed areas before containers have been removed. Obtain approval from Architect. Do not remove burlap from shrubs.
- B. Plant where located, setting plants with tops of balls even with tops of beds, and compact soil carefully around each plant ball.
- C. Remove binding materials (such as twine, nylon cord, and wire) from plant trunk.
- D. Water each plant thoroughly with hoses to eliminate air pockets.
- E. Carefully prune plants to remove dead or broken branches and hand-rake bed areas to smooth, uneven surfaces.
- F. Architect reserves the right to interchange or shift locations of plants prior to planting.
- G. Apply pre-emergent herbicide, at the recommended rate, three weeks after plant installation has been completed and prior to mulch installation.

3.4 PLANTING:

- A. Ornamental Trees and Large Shrubs:
 - 1. Plant trees and shrubs in pits 3 times greater in diameter than root ball. Top 1/3 of backfill will be 20% compost mixed with 80% native soil. Bottom 2/3 of backfill will be 100% native soil. Carefully settle by watering to prevent air pockets.
 - 2. Add fertilizer tablets at the rate of four (4) per 1 inch caliper for trees and four (4) per 24 inches of height for large shrubs. Follow label directions for placement of tablets.
 - 3. Carefully prune trees to remove dead and broken branches.
 - 4. Place root ball in the center of the hole. Do not handle tree by the trunk to place in hole. Scarify and roughen sides of hole where glazed by mechanical excavation.
 - 5. Make sure the root flare is 2 inches higher than the adjacent soil elevation. The top of the terminal roots at the outer edge of the root ball should be even with or slightly higher than the adjacent soil elevation. Set root ball on undisturbed soil.
- B. Shade Trees:
 - 1. Plant trees in pits 3 times greater in diameter than root ball. Top 1/3 of backfill will be 20% compost mixed with 80% native soil. Bottom 2/3 of backfill will be 100% native soil. Carefully settle by watering to prevent air pockets.
 - 2. Add four (4) fertilizer tablets per caliper inch. Follow label directions for placement of tablets.
 - 3. Carefully prune trees to remove dead and broken branches.
 - 4. Place root ball in the center of the hole. Do not handle tree by the trunk to place in hole. Scarify and roughen sides hole where glazed by mechanical excavation.
 - 5. Make sure the root flare is 2 inches higher than the adjacent soil elevation. The top of the terminal roots at the outer edge of the root ball should be even with or slightly higher than the adjacent soil elevation. Set root ball on undisturbed soil.
- C. Shrubs Outside Of Beds:

1. Plant shrubs in pits as sized below. Backfill mix will be 50% existing soil and 50% compost. Excess excavated material will be removed from the site as required by the Landscape Architect and Owner. Set root ball on undisturbed soil.

Container Size

Pit Size

1 Gallon	10" Diameter x 8" Depth
2 Gallon	14" Diameter x 10" Depth
3 Gallon	16" Diameter x 12" Depth
5 Gallon	20" Diameter x 14" Depth
7 Gallon	24" Diameter x 16" Depth

2. Add fertilizer tablets at the rate of four (4) tablets per 24 inches of plant height. Place tablets. Follow label directions for placement of tablets..
3. Carefully prune plants to remove dead and broken branches.

3.5 SUMMER DIGGING & TRANSPLANTING:

- A. To minimize transplant shock, plant decline, defoliation or loss to all balled and burlaped plants.
 1. Apply Technical Concentrate and Plant Enhancer to plants 24 to 96 hours prior to digging or transplanting.
 2. Apply with both a foliar and root drench at identical dilutions of 1.0 fl. oz. (low stress conditions) to 3.0 fl. oz. (high stress conditions) per inch of trunk diameter or each 24 inches of plant height. Mix into 5 to 10 gallons of water for each 1 inch of trunk diameter and 24 inches of plant height.
 3. Re-apply in 15 to 30 days or sooner if extreme environmental stress requires. Re-apply at either a rate of 1 to 3 fl. oz. per inch of trunk diameter or 5 to 7 fl. oz. per 5 to 10 gallons of water.

3.6 TREE SUMPS:

- A. Perform percolation test for each tree pit and install sump detail only when satisfactory drainage does not occur within 24 hours.
- B. Excavate sump pit to a minimum depth of 4 feet 6 inches below bottom of root ball and a minimum of 12 inch diameter.
- C. Install 4 inch diameter PVC pipe and cap. The portion of pipe in crushed rock is to be perforated.
- D. Place crushed rock per tree planting detail.
- E. Place filter fabric over top of crushed rock and 12 inches up side of tree pit.
- F. Paint PVC cap, color to be selected. Drill 5/8 inch diameter hole in top of cap.

3.7 GUYING TREES:

- A. Guy trees immediately after planting as shown on planting details.
- B. All conifer and juniper variety of trees will be guyed per the tree planting detail.
- C. All container grown and containerized trees will be guyed per the tree planting detail.
- D. All balled and burlaped trees are not required to be guyed but maybe guyed with the Architects approval.
- E. It will be the Landscape Contractor's responsibility to maintain trees in a plumb position through the warranty period whether they are guyed or not.
- F. The landscape contractor will remove and dispose of tree guying materials at the end of the one year guarantee period.

3.8 MULCHING:

- A. After planting has been completed and approved by Architect, cover all bare soil around plants. The depth shall vary depending on the plants being mulched. Large plants will receive a 2 inch depth and plants in 4 inch pots and smaller will receive a 1 inch depth. At no time will mulch come in contact with the stems of plants. Delay mulching in shrub

beds until after application of pre-emergent herbicide and near substantial completion of the project.

3.9 EDGING:

- A. Install per manufacturer's requirements. The top of edging will be 1 inch above the adjacent turf elevation and 2 inches above planting areas.

3.10 CLEANUP:

- A. During work, keep premises neat and orderly including organization of storage areas. Trash, including debris resulting from removing weeds or rocks from planting areas, preparing beds, or planting plants, shall be removed from site daily as work progresses.
- B. Keep sidewalks, streets and courtyard areas clean by sweeping or hosing.

3.11 MAINTENANCE:

- A. Water will be provided by the Owner. Provide necessary hoses and other watering equipment required to complete work.
- B. Until Final Acceptance, maintain plantings and trees by watering, cultivating, weeding, spraying, cleaning and replacing as necessary to keep the landscape in a vigorous, healthy condition and rake bed areas as required.
- C. Follow landscape maintenance procedures outlined in Specification Section 32 95 10 – Planting Maintenance.

3.12 PLANT SCHEDULE:

- A. Refer to schedule on drawings.

END OF SECTION

SECTION 329413 - METAL LANDSCAPE EDGINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Landscape edgings.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM) B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Samples: 12 inch long edging samples.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Steel Sheet: ASTM A1001/A1001M.

2.2 COMPONENTS

- A. Metal Landscape Edging:
 - 1. Source: Refer to Materials Legend.
 - 2. Material: Extruded aluminum.
 - 3. Finish:
 - a. Powder coat: Factory applied, refer to Materials Legend for color.
- B. Stakes: Aluminum, 12 inches long, finished to match edging.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install edging to lines and profiles indicated.
- B. Secure with stakes located at ends and maximum 30 inches on center. Double stake joints.

3.2 ADJUSTING

- A. Touch up damaged powder coatings to match factory finish.

END OF SECTION

SECTION 32 95 10 - PLANTING MAINTENANCE

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Landscape Maintenance Contractor shall furnish all labor, equipment and products necessary to maintain newly planted landscaping leaving plants in a vigorous, healthy state through the end of the stated maintenance period. This organic maintenance program shall consist of watering, weeding, fertilizing, disease and insect pest control, pruning, aerating, protective spraying and any other procedures consistent with good organic horticultural practices necessary to insure normal, vigorous and healthy growth of all landscape materials under this contract. Trash and debris will be removed from the project during each regular site visit. Maintenance shall begin following final acceptance of the landscape installation.
- B. The Landscape Maintenance Contractor shall be responsible for the use of all his/her materials, labor and equipment. Injury to plant material caused by such maintenance, labor and equipment shall be corrected and repaired by the Landscape Maintenance Contractor at his/her expense. This includes both reseeding areas damaged by tractor treads when mowing is conducted at an inappropriate time, as determined by the Owner or his/her agent, and replacement of any plants, hardscape, or other amenities on the site when damaged by the Contractor's equipment, materials, or agent(s).

1.02 RELATED DOCUMENTS:

- A. Planting Irrigation - Section 32 94 00.
- B. Planting –Section 32 93 00.
- C. Turf and Grasses –Section 32 92 00.

1.03 INSURANCE:

- A. Contractor shall provide to the Owner, at his own expense, evidence of adequate Workman's Compensation, General Liability and Property Damage Liability, subject to approval of the Owner.

1.04 CLEAN UP:

- A. All debris, tools, surplus materials, equipment, etc. shall be removed after each regular visit from the maintenance crew. The site shall be left in a neat, acceptable condition such as to meet the approval of the Owner.

1.05 LICENSE REQUIREMENTS:

- A. Pesticide: The Contractor shall be a licensed pesticide applicator or employ a licensed certified pesticide applicator for the treatment of insects and diseases as required by the Texas Pesticide Laws and Regulations of the Texas Department of Agriculture. The Owner may require documentation of such certification as necessary for his records.
- B. Herbicide: The Contractor shall possess a permit or employ a person who possesses a permit to apply herbicide as required by the Texas Herbicide Law of the Texas Department of Agriculture. The Owner may require documentation of such certification as necessary for his records.
- C. Irrigation: The Contractor shall possess an irrigator's license issued by the State of Texas and the Texas Board of Irrigators or employ such a licensed irrigator to perform the irrigation system maintenance. The irrigation system shall be maintained under the supervision of the licensed irrigator who shall be on the site at all times during this work.

The Owner may require documentation of such license for his records. The Contractor shall verify and adhere to the requirements and codes of any controlling utility authorities.

PART 2 - PRODUCTS

2.01 COMMERCIAL FERTILIZER:

- A. Complete fertilizer, uniform with composition, dry and free flowing, delivered to site in original unopened containers, each bearing manufacturer's guaranteed statement of analysis.
 - 1. Shrubs & groundcover at 10-20-10 analysis.
 - 2. Turf at 15-5-10 analysis.
 - 3. Turf at 21-0-0 analysis.
 - 4. Trees at 32-7-7 analysis (Injecto-Feed).
 - 5. Trees at 0-4-4 analysis (Agri-Plex).

2.02 SOIL FERTILITY TEST:

- B. The Contractor will be required to furnish the Owner with two (2) soil fertility reports including corrective recommendations.
- C. The exact location of each soil sample taken will be provided by the Architect or Owner.
- D. Soil fertility testing will be conducted by a laboratory making organic recommendations. Texas Plant and Soil Lab, E. K. Chandler, 5115 W. Monte Cristo Rd., Edinburg, TX 78539, (956) 383-07399 (must ask for organic recommendations).

2.03 MULCH:

- A. Shredded hardwood mulch (provide by Soil Building Systems or approved equal.).

2.04 WATER:

- A. Water will be supplied by the Owner.

2.05 PLANT REPLACEMENT:

- A. It will be the responsibility of the Contractor to replace any and all plant material that is dead or damaged due to non-performance of the contracted scope of work, un-supervised personnel or un-supervised subcontractors.

2.06 PESTICIDES AND HERBICIDES:

- A. Pesticides and herbicides shall be of the type that is commercially available.

PART 3 - EXECUTION

3.01 TREE, SHRUB AND GROUNDCOVER MAINTENANCE:

- A. The Scope of Work for plant maintenance includes all possible means required to preserve the plants and vegetative material existing within the site in a healthy and vigorous growing condition to insure their successful establishment. Plant maintenance shall include, as a minimum, the following items.
 - 1. Pruning: All trees and shrubs, within the limits of landscape maintenance, shall be pruned by the Contractor to the satisfaction of the Owner. Pruning shall be done in accordance with accepted pruning practices as set forth by the National Arborist Association in Pruning Standards for Shade Trees (current edition). Dead or damaged

limbs on trees and shrubs, including sucker-growth on trunks of trees, are to be removed. Crape Myrtles will be pruned in late winter only to remove dead wood, crossing limbs and ground suckers. Suckers will be removed as needed throughout the year. All pruned materials shall become the property of the Contractor and shall be disposed of in a manner acceptable to the Owner. Unless directed differently in the contract documents, pruning shall be accomplished once during the term of this contract.

2. Insect, Disease, and Animal Control: The Contractor shall inspect the plants and planted areas once each two (2) weeks or as approved by the Owner. The Contractor shall be required to notify the Owner in writing of problems with insects, diseases, or animals as such problems arise. The Contractor also shall recommend corrective measures in writing.
3. The Contractor shall treat the plants and/or the planted areas in accordance with accepted methods of horticultural practices and the Texas Department of Agriculture guidelines regarding the use of pesticides. The Contractor also shall follow the manufacturer's instructions for the use and application of any pesticides.
4. Bed Maintenance: The Contractor shall maintain the plant basins and beds free of weeds and grass or other material detrimental to the growth of the plants or appearance at the site. Herbicides, when used by the Contractor, will under no circumstances be used on days where the wind could cause drift hazard to desirable plants. The Contractor shall also follow the manufacturer's instructions for the use and application of any herbicide. Two pre-emergent herbicide applications will be made per year along with manual weeding and post emergent herbicide applications as required. All shrub and groundcover beds shall be fertilized two (2) times per year at a rate of 2 lbs. Per 1,000 square feet. Hardwood mulch shall be maintained to a minimum depth of two (2) inches, in all bed areas.
5. Re-staking, re-guying, and re-bracing of Plants: Any damaged or destroyed stakes, guys or braces shall be replaced by the Contractor. This shall include any adjustment to the staking or guying to prevent girdling of plants. Adjustment will be made to tighten wires and cables as required.
6. Seasonal Color: All seasonal color beds will be changed three (3) times per year, Spring, Summer and Fall. Each seasonal color change will include the following:
 - a. Four inch pots spaced triangularly at 9 inches on center - plant species to be selected by the Owner or Owner's Representative.
 - b. Organic fertilizer applied at 20 pounds per 1,000 square feet.
 - c. Horticultural cornmeal applied at 20 pounds per 1,000 square feet.
 - d. Two inches of compost tilled into the existing soil.
7. Tree Mulching and Fertilization:
 - a. Maintain a 2" layer of shredded hardwood mulch over all tree root balls in turf
 - b. areas. Add new mulch as required.
 - c. b. Deep root fertilize all trees with a combination of Injecto-Feed 32-7-7 and Agri-Plex 0-4-4 with 2 percent magnesium, 2 percent water soluble magnesium, 3 percent sulfur, .02 percent boron, 5 percent iron, .5 percent manganese and .5 percent zinc. Mix 20 pounds of Injecto-Feed and 1 gallon of Agri-Plex in 100 gallons of water. Apply this solution at the rate of 5 gallons per inch trunk diameter measured at breast height. Space injection points at 2.5 foot intervals starting 2 feet beyond the drip line. Apply .5 gallon of solution per injection site. Soil injections should be made 6 to 8 inches deep using an injector probe at 150 to 200 PSI. Keep fertilizer solution agitated during application. Where trees are closely spaced and have overlapping treatment areas, inject only once in those areas. Do not double inject these areas. For trees growing in wells surrounded by concrete, water or other hard surfaces, drench the top of the root ball with 10 to 15 gallons of fertilizer solution.

3.02 TURF AND GRASS MAINTENANCE:

A. Bermuda Grass:

1. Mowing and Trimming: All lawns shall be mowed approximately every seven days April thru September, three (3) times per month in March and October and once monthly November thru February. All sidewalks and curbs shall be edged, and trimming around all trees and other objects within turf areas shall occur in concurrence with the maximum mowing cycles. The Contractor shall use power equipment as approved by the Owner. Nylon cord trimmers shall not be used near tree trunks or in beds around plant material.
2. Fertilization: Bermuda Grass shall be fertilized in March, May, July and September for a total of four (4) applications. Approximately 1.5 to 2 lbs. nitrogen will be applied per 1,000 square feet per application. Various analyses and blends of fertilizers can be used based on soil tests results..
3. Weed Control: Bermuda Grass shall be treated with two (2) pre-emergent herbicide and four (4) post-emergent herbicide applications for a total of six (6) applications. Herbicide applications will only be required on established stands.
4. Insect, Disease and Animal Control: The Contractor shall inspect all lawn areas once each two (2) weeks or as approved by the Owner. The Contractor shall be required to notify the Owner in writing of problems with insects, diseases, or animals as such problems arise. The Contractor also shall recommend corrective measures in writing.

B. Buffalo Grass:

1. Mowing and Trimming: Mow one (1) time in March to remove dead foliage. Leave in its natural condition the rest of the year.
2. Fertilization: Buffalo Grass shall be fertilized in March and June for a total of (2) applications. Apply 1 to 2 lbs. of actual nitrogen per 1,000 square feet per season.
3. Weed Control: Buffalo Grass shall be treated with two (2) pre-emergent herbicide and two (2) post-emergent herbicide applications for a total of four (4) applications
4. Insects, Disease and Animal Control: The Contractor shall inspect all lawn areas once each two (2) weeks or as approved by the Owner. The Contractor shall be required to notify the Owner in writing of problems with insects, diseases, or animals as such problems arise. The Contractor also shall recommend corrective measures in writing.

3.03 IRRIGATION SYSTEM OPERATION AND MAINTENANCE:

- A. The scope of work for the operation and maintenance of the permanent irrigation system shall consist of the monitoring, adjustment, repair and proper operation of the existing irrigation system as required to ensure adequate moisture to the plant material existing on the project. The existing condition of the system and any known deficiencies will be corrected by the Contractor upon approval by the Owner. The Contractor shall insure that all irrigation zones, rain sensors and freeze sensors are operating correctly. Include seasonal draining and winterizing of irrigation system when required.
- B. System repairs will include monitoring of the system on a year round bi-weekly basis and reporting of all damaged or trouble areas to the Owner. The Contractors personnel shall repair any damage that may have occurred during the mowing cycle and set automatic systems to correct time requirements. Any damage not the fault of the Landscape Maintenance Contractor shall be assessed and brought to the attention of the Owner with an estimate of the subsequent costs to make the repairs. In the event the irrigation system fails due to the Contractor's actions or neglect, the Contractor shall furnish plant irrigation by a method and quantity approved by the Owner.

END OF SECTION

SECTION 334300 - LANDSCAPE DRAINAGE

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Area drains.
 - 2. Drain lines.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D2564 - Standard Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems.
 - 2. D2729 - Standard Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
 - 3. D2855 - Standard Practice for Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show layout of drainage fittings and lines, including locations, elevations, slopes, pipe sizes, and accessories.
 - 2. Product Data: Manufacturer's data for drain fittings showing physical properties and installation procedures.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Drainage Pipe:
 - 1. ASTM D2729, polyvinyl chloride (PVC) material, bell and spigot style solvent sealed ends, non-perforated.
 - 2. Fittings: PVC.
 - 3. Joints: ASTM D2855, solvent weld type with ASTM D2564 solvent cement.
- B. Drain Fittings: Refer to Materials Legend.

PART 3 EXECUTION

3.1 EXCAVATION

- A. Trench for drainage pipe.
- B. Hand trim excavations to required shape and elevations.
- C. Remove large stones and obstructions.

3.2 INSTALLATION

- A. Install drainage pipe and fittings in accordance with manufacturer's instructions, at required flow line and grade.
- B. Provide minimum 0.5 percent uniform slope.

- C. Solvent weld joints.
- D. Place drain fittings in accordance with manufacturer's instructions.
- E. Backfill and compact without damage to pipe or fittings.

3.3 FIELD QUALITY CONTROL

- A. Test drain fittings and drainage lines for free flow prior to covering.
- B. If free flow is not present, remove obstructions and repeat test.

END OF SECTION

SECTION 334600 - SUBDRAINAGE

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Subdrainage system.
 - 2. Filter fabric and drainage fill.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. D2564 - Standard Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems.
 - 2. D2729 - Standard Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
 - 3. D2855 - Standard Practice for Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings.

1.3 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Show layout of drainage lines, including locations, elevations, slopes, pipe sizes, and accessories.
 - 2. Product Data: Manufacturer's data for filter fabric and drainage pipe, showing physical properties and installation procedures.
 - 3. Samples: 12 x 12 inch filter fabric samples.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Drainage Pipe:
 - 1. ASTM D2729, polyvinyl chloride (PVC) material, bell and spigot style solvent sealed ends, perforated, diameter as indicated on Drawings, with filter fabric wrap.
 - 2. Fittings: PVC.
 - 3. Joints: ASTM D2855, solvent weld type with ASTM D2564 solvent cement.

2.2 ACCESSORIES

- A. Filter Fabric: Open weave polyolefin or polyester, free draining.
- B. Drainage Fill: Washed crushed stone or gravel, graded from 3/4 to 1-1/2 inches.

PART 3 EXECUTION

3.1 EXCAVATION

- A. Trench for drainage pipe.
- B. Hand trim excavations to required shape and elevations.
- C. Remove large stones and obstructions that could perforate filter fabric.

3.2 INSTALLATION

- A. Place filter fabric in trench, extending up and over sides. Lap ends 6 inches minimum and secure.
- B. Place drainage fill to level of bottom of pipe, minimum 6 inch depth. Shape to required cross section and flow line. Hand or machine compact.
- C. Install drainage pipe and fittings in accordance with manufacturer's instructions, at required flow line and grade.
- D. Place pipe with perforations facing down.
- E. Provide minimum 0.5 percent uniform slope.
- F. Solvent weld joints.
- G. Fill around sides and over top of pipe with drainage fill, minimum 6 inches thick. Fold filter fabric over top of drainage fill from both sides; lap and secure.
- H. Backfill and compact without damage to filter fabric.

3.3 FIELD QUALITY CONTROL

- A. Test drainage lines for free flow prior to covering.
- B. If free flow is not present, remove obstructions and repeat test.

END OF SECTION

PROPOSAL

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

LEWISVILLE GRAND THEATER PLAZA & OLD TOWN POCKET PARK

Proposal of _____
(hereinafter called Proposer), 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 Proposer, in response to the Notice to Proposers 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 Proposer 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, in a timely manner.

The undersigned Proposer 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 **240 calendar days**. It is specifically stated and understood that the entire construction including clean up shall be completed within the above stated time.

Proposal: Lewisville Grand Theater Plaza & Old Town Pocket Park

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

The undersigned Proposer acknowledges and agrees that this Proposal shall be good and may not be withdrawn for 60 days from the date of proposal opening.

The undersigned Proposer 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 Proposer 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.

The undersigned Proposer has attached and made a part of this Proposal a bid security in accordance with the Bond Requirements and Retainage document.

A 10% contingency 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)

PROPOSER'S ACCEPTANCE OF EVALUATION METHODOLOGY

WAIVER OF CLAIMS: EACH PROPOSER BY SUBMISSION OF A RESPONSE TO THIS REQUEST FOR PROPOSALS ("RFP") WAIVES ANY CLAIMS IT HAS OR MAY HAVE AGAINST THE OWNER, ITS EMPLOYEES, OFFICERS, AGENTS, REPRESENTATIVES, AND THE MEMBERS OF OWNER'S GOVERNING BODY, CONNECTED WITH OR ARISING OUT OF THIS RFP, INCLUDING THE ADMINISTRATION OF THE RFP AND THE RFP EVALUATION. SUBMISSION OF A PROPOSAL INDICATES PROPOSER'S ACCEPTANCE OF THE EVALUATION TECHNIQUE AND PROPOSER'S RECOGNITION THAT SOME SUBJECTIVE JUDGMENTS MUST BE MADE BY THE OWNER DURING THE EVALUATION OF PROPOSALS. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, EACH PROPOSER ACKNOWLEDGES THAT THE BASIS OF SELECTION AND THE EVALUATIONS SHALL BE MADE PUBLIC AFTER THE CONTRACT IS AWARDED AND WAIVES ANY CLAIM IT HAS OR MAY HAVE AGAINST THE ABOVE-NAMED PERSONS, DUE TO INFORMATION CONTAINED IN SUCH EVALUATIONS.

Firm Name: _____ **Date:** _____

Authorized Signature: _____

Printed Name: _____

SIGNATURE PAGE

TYPE OR PRINT:

FIRM NAME
TITLE

AUTHORIZED REPRESENTATIVE &

STREET ADDRESS and/or P.O. BOX NO.

() _____
A/C PHONE NUMBER

CITY/STATE/ZIP CODE

() _____
A/C FAX NUMBER

FIRM'S TAX IDENTIFICATION NUMBER

E-MAIL ADDRESS

_____ /	
SIGNATURE	DATE

CITY OF LEWISVILLE DISCLOSURE OF INTEREST

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 (7th) 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 they 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.

**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. Seller: (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. Seller: (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 Buyer 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:			

**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.

VENDOR REFERENCES

Please list at least three (3) references of **current** customers who can verify the quality of service your company provides. The City prefers local customers of similar size and scope of work to this bid. *THIS FORM MUST BE RETURNED WITH YOUR BID.* Attach additional sheets as needed.

REFERENCE ONE:

Government/Company Name: _____

Address: _____

Contact Name and Title: _____

Contact Phone: _____ **Contact Email:** _____

Contract Period: _____ **Contract Amount:** _____

REFERENCE TWO:

Government/Company Name: _____

Address: _____

Contact Name and Title: _____

Contact Phone: _____ **Contact Email:** _____

Contract Period: _____ **Contract Amount:** _____

REFERENCE THREE:

Government/Company Name: _____

Address: _____

Contact Name and Title: _____

Contact Phone: _____ **Contact Email:** _____

Contract Period: _____ **Contract Amount:** _____

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

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 _____

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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

CSP #25-32-C

Lewisville Grand Theater Plaza & Old Town Pocket Park

Addendum No. 1

The bid document for the above referenced project is amended as follows:

Questions from Bonfire:

Question: Is there an engineers estimate available for this bid.

Answer: The total estimate for both the plaza and pocket park is \$1,014,142.07, not including alternates. The Grand Theater Plaza estimate is \$550,456.87 and the Old Town Pocket Park estimate is \$463,685.20.

Question: On Paving P-1 is the contractor to provide a mock up of Topcast 03/Acid Etch and Topcast 05/Sandblast for the city to select for the finish?

Answer: The contractor will provide a mockup.

Question: On sheet GL001 P-4 bid alternate 1 has 2 different sizes that depend on whether the city selects base bid P-3 or alternate P-3 can this be separated in the bid form as well or can some clarification be provided on which number we are supposed to go with.

Answer: It can be separated on the bid form.

Question: Is there an estimated start date for this project.

Answer: The estimated start date is March 2025.

Question: Are there plans available for the alternate planting areas?



Answer: No.

Question: Are there plans or as-builts of the existing irrigation that can be referenced for the proposed irrigation repairs.

Answer: The City's irrigation supervisor will assist the contractor with available plans during the kick-off meeting.

Question: What is the engineer's estimate for this project?

Answer: The total estimate for both the plaza and pocket park is \$1,014,142.07, not including alternates. The Grand Theater Plaza estimate is \$550,456.87 and the Old Town Pocket Park estimate is \$463,685.20.

Question: Who pays for construction materials testing?

Answer: The City.

Question: Who pays for construction water usage?

Answer: The Contractor.

Question: Steel Planter including concrete foundation - Item 15-5. Can we get some more information or a detail sheet on this item?

Answer: Not currently available. The City and architect consultant will provide further details when the submittal is provided.

Question: Hi, Could you please let me know the start date. Thank you.

Answer: The estimated start date is March 2025.



Question: Is an estimate available?

Answer: The total estimate for both the plaza and pocket park is \$1,014,142.07, not including alternates. The Grand Theater Plaza estimate is \$550,456.87 and the Old Town Pocket Park estimate is \$463,685.20.

Question: Can you direct us to the location of the S-2 Gravel #15-8 for the Pocket Park? I cannot find this on the plans.

Answer: S-2 is Stone Edging in the Material Legend.

Question: Will your team be separating out scaffolding, decking, hoists, swing stages, dance floors (Decking), and shoring out to a scaffolding contractor directly or will you be placing this scope in the General Contractors cope?

Answer: It will not be separated out. It will be under the scope of the General Contractor.

Questions from pre-proposal meeting:

Question: Your goal is to be done by Fall 2025, and the proposal form lists 240 calendar days. Roughly when are you wanting this project completed by?

Answer: By Thanksgiving 2025 would be ideal.

Question: When do you expect this to go to Council?

Answer: Early March is the anticipated timeframe to present to Council.

Question: Is solar lighting an acceptable sub for lighting on this project.



Answer: We would have to look into it more, but due to the location of the pocket park, we are not sure if there is enough sunlight to make solar panels work.

Question: Do you have the exact street addresses for both locations?

Answer: The Grand Theater is located at 100 N Charles St, Lewisville, TX 75057. The Old Town Pocket Park will be located between Sullivan Old Town BBQ (301 S Mill St, Lewisville, TX 75057) and The Mill Old Town Apartments (535 S Mill St, Lewisville, TX 75057).

Question: Liquidated damages?

Answer: \$500/day or \$1,000/day.

Question: Is there a site visit scheduled?

Answer: No.

Question: Are you offering any incentives to submit a proposal?

Answer: No.

Proposers are advised to acknowledge receipt of Addendum No. 1 by filling in the appropriate blanks contained in the Proposal Form and, if applicable, the outer envelope of their bid.

CITY OF LEWISVILLE
PRE-PROPOSAL
RFP #25-32-C Pre-Proposal Meeting
1:00 P.M., Monday, January 6, 2025

	NAME (PRINT)	COMPANY	PHONE NUMBER	EMAIL ADDRESS
1	Janine Carpenter <i>JC</i>	City of Lewisville	972-219-3766	jcarpenter@cityoflewisville.com
2	Randy Simon <i>RS</i>	City of Lewisville	972-219-3749	rsimon@cityoflewisville.com
3	ERIC ReBB	CORTEX Construction	972-333-0634	eric@CORTXCONSTRUCTION.COM
4	JAMES GRIER	Ratliff Hardscape	972-436-2508	bids@ratliffhardscape.com
5	Joel Gill	Fain Group	817-888-5965	jgill@faingp.com
6	JESS ELLISON	Fonroche Lighting America	682-551-0991	jessica.ellison@fonroche.us
7	Joe Montero	CC-C General Contractors	832-232-1551	Hunter@CCCTexas.com
8	Russell Herndon	Gecko Green	469-918-0626	RHERNDON@GECKOGREEN.COM
9	Jared Pickett	J.B. & Co	972-515-3643	Joel@joelbrownco.com
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City of Lewisville

CSP #25-32-C

Lewisville Grand Theater Plaza & Old Town Pocket Park

Addendum No. 2

The bid document for the above referenced project is amended as follows:

- The deadline for submissions has been extended to Tuesday, January 28, 2025, at 1:00 p.m. local time.
- The proposal opening will now be held on Tuesday, January 28, 2025, at 1:30 p.m. local time, at the location listed in Bonfire.
- The deadline for questions has been extended to Tuesday, January 21, 2025, at 11:00 a.m. local time.
- NCTCOG Standard Specifications have been uploaded to the Files section of Bonfire.
- The 02 – Required Documents file has been updated to remove the insurance requirements. This project will be held to the insurance requirements listed in the NCTCOG Standard Specifications.

Proposers are advised to acknowledge receipt of Addendum No. 2 by filling in the appropriate blanks contained in the Proposal Form and, if applicable, the outer envelope of their bid.

STANDARD SPECIFICATIONS

The Standard Specifications for this project are the "Public Works Construction Standards" (Fifth Edition dated 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 offerors may submit a request in the *Messages* section in the project's Bonfire portal for clarification and alterations in the plans, specifications, and form of contract. Such request must be received by the City no later than the questions due date specified on the project calendar in Bonfire. The City 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. One (1) electronic set 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 paper copies may be obtained from the City at actual reproduction cost.
4. **Item 102.3 Examination of Plans, Specifications and Site of the Work:** Add the following paragraph after Paragraph 2:

The CONTRACTOR may take borings at the site to satisfy his self as to subsurface conditions prior to bidding.

5. **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".
6. **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.

7. **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
- (2) have obtained reinsurance for any liability in excess of \$100,000 from a reinsurer that:
 - (A) is an authorized reinsurer in this state; and
 - (B) holds a certificate of authority from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

“(b) To determine whether the surety on the bond or the reinsurer holds a certificate of authority from the United States secretary of the treasury, a party may conclusively rely on the list published in the Federal Register by the United States Department of the Treasury, covering the date on which the bond was executed, of the companies holding certificates of authority as acceptable sureties on federal bonds and as acceptable reinsuring companies. A purchaser, insurer of title, or lender acquiring or insuring an interest in or title to real property may also conclusively rely on, and is protected by, a statement on a recorded bond or a sworn, recorded statement by the surety that refers to the specific recorded bond and states that, at the time the bond was executed, the surety complied with Subsection (a)(1) or (2).”

8. **Item 103.4. Insurance:** delete and replace with the following:

Vendor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the vendor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Vendor's bid.

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage “occurrence” form CG 00 01 (10 01). **“Claims Made” form is unacceptable.**
2. Workers’ Compensation insurance as required by the Labor Code of the State of Texas, including Employers’ Liability Insurance.
3. Automobile Liability – as required by the State of Texas, covering all owned, hired, or non-owned vehicles. Automobile Liability is only required if vehicle(s) will be used under this contract. Coverage not required for delivery services.

B. MINIMUM LIMITS OF INSURANCE

Vendor shall maintain throughout contract limits not less than:

1. Commercial General Liability: \$500,000 per occurrence/\$1,000,000 aggregate for bodily injury, personal injury and property damage. Policy will include coverage for:
 - a. Premises – Operations
 - b. Broad Form Contractual Liability
 - c. Products and Completed Operations
 - d. Use of Contractors and Subcontractors
 - e. Personal Injury
 - f. Broad Form Property Damage
 - g. If applicable, Explosion Collapse and Underground (XCU) Coverage, Fire Damage, and Medical Expenses.

NOTE: The aggregate loss limit applies to each project.

2. Workers’ Compensation and Employer’s Liability: Workers’ Compensation Statutory limits as required by the Labor Code of the State of Texas and Employer’s Liability minimum limits of \$500,000 per injury, \$500,000 per occurrence, and \$500,000 per occupational disease.

3. Automobile Liability - \$500,000 Combined Single Limit. Limits can only be reduced if approved by the HR Director or designee.
4. Builders' Risk Insurance (as applicable) – Completed value form, insurance carried must equal the completed value of the structure.

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/commissions and volunteers are to be added as "Additional Insured" as respects liability arising out of activities performed by or on behalf of the vendor, products and completed operations of the vendor, 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. The coverage shall include defense of claims against the City as additional insured.
 - b. The vendor's insurance coverage shall be primary and non-contributory 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 vendor'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, and employees, Boards and Commissions or volunteers.
 - d. The vendor'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. Waiver of Subrogation – All coverages
Each insurance policy required by this exhibit shall waive all rights of subrogation against the City, its officers, officials, employees, and volunteers for losses arising from work performed by the vendor for the City.
3. Notice of Cancellation - All Coverages

Each insurance policy required by this exhibit shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given the City, or ten (10) days prior written notice for non-payment of premium.

E. ACCEPTABILITY OF INSURERS

The City prefers that Insurance be placed with insurers with an A.M. Best's rating of no less than **A-:VI, or A or better** by Standard and Poors.

F. VERIFICATION OF COVERAGE

Contractor shall furnish the City with certificates of insurance affecting coverage required. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of Insurance must be provided on forms approved by the Texas Department of Insurance. City will not accept Memorandums of Insurance or Binders as proof of insurance. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

G. HOLD HARMLESS AND INDEMNIFICATION

THE CONSULTANT/CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY, 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 CONSULTANT'S/CONTRACTOR'S BREACH OF ANY OF THESE TERMS AND CONDITIONS OR BY ANY NEGLIGENT OR STRICTLY LIABLE ACT OR OMISSION OR INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY, CONSULTANT/CONTRACTOR, ITS OFFICERS, AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THIS AGREEMENT; EXCEPT THAT THE INDEMNITY PROVIDED FOR IN THE PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF THE CITY, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE CONSULTANT/CONTRACTOR AND THE CITY, 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 THE CITY UNDER TEXAS LAW AND WITHOUT

WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW AND THE CITY'S REASONABLE ATTORNEY'S FEES SHALL BE REIMBURSED IN PROPORTION TO THE CONSULTANT'S LIABILITY. 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.

H. PROOF OF INSURANCE

Contractor is required to submit proof of insurance on a form acceptable to the City of Lewisville. Certificates of Insurance similar to the ACCORD form are acceptable. City will not accept Memorandums of Insurance or Binders as proof of insurance. City, at its own discretion, may require a copy of any policy presented to the City.

I. STATE REQUIREMENTS FOR WORKERS COMPENSATION INSURANCE

As required by 28 Tex.Admin.code §110.110(c)(7):

A. Definitions:

Certificate of coverage ("certificate")- A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (DWC-81, 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.

F. The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

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

H. The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Insurance, Division of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

I. The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

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

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

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

(4) obtain from each other person with whom it contracts, and provide to the contractor:

(a) a certificate of coverage, prior to the other person beginning work on the project; and

(b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

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

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

(7) contractually require each 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."

13. **Special Provision to Item 105.4. "Construction Stakes":** is amended to the extent that the CITY and/or ENGINEER will provide initial horizontal and vertical control and construction staking for this project. The CITY and/or ENGINEER will provide the following construction staking:

- a. Verify and re-establish the design baseline and monuments set for horizontal and vertical control.
- b. The CITY and/or ENGINEER will provide clearing limits, offset line and grade stakes for pavement back of curb (rough and final cut), storm drain and water lines as applicable, including appurtenances. The offset distance shall be determined by the CONTRACTOR. Lost or destroyed stakes will be replaced at the CONTRACTOR'S expense. A minimum of five (5) days notice must be given before staking.

The CONTRACTOR shall provide any additional stakes and other materials and incidentals necessary for the correct construction of all facilities at no additional charge. It is the CONTRACTOR'S sole responsibility to ensure the correctness of all stakes and that the work is constructed to the lines and grades shown on the plans.

14. **Item 105.6 Supervision by Contractor:** The CONTRACTOR shall designate a **full-time superintendent who shall be on the job site at all times during construction including times when work is being performed by subcontractors**. The OWNER'S Representative will communicate only with the superintendent. The CONTRACTOR may replace the designated superintendent by written notification to the OWNER.

15. **Special Provision to Item 105.7.1. Authority of the Engineer:** add the following:

“The CITY and/or ENGINEER shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the CITY and/or ENGINEER shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the CITY and/or ENGINEER shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR’S or sub-contractor’s agents, or employees or any other person, firm or corporation performing or attempting to perform any of the work.”

- 16. Item 106.5: Samples and Tests of Materials:** Delete the first and last paragraphs on Item 106.5 and replace with the following:

“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 work of the character embraced in the contract". For the purpose of evaluating the percentage of work performed by subcontractors, the cost of all equipment, supplies, and materials used or installed on the project by subcontractors shall be considered as part of the work of subcontractors. This will apply even if the contractor supplies and pays for some or all equipment, supplies, or materials used by subcontractors.

22. Item 108.8. Delays; Extension of Time; Liquidated Damages: Delete the first paragraph of Section 108.8. and replace with the following:

“The CONTRACTOR hereby agrees that no work will be performed on CITY holidays or on Sundays. In addition, he agrees that work will be performed between 7:00 a.m. and sunset on weekdays and between 8:00 a.m. and 6:00 p.m. on Saturdays. The only exception to the preceding will be the performance of work in response to emergency situations and/or when directed to work by the OWNER. Also, the CONTRACTOR hereby concurs that the preceding has been taken into account in setting the contract time.” The CONTRACTOR will be responsible for reimbursing the City of Lewisville for overtime charges for construction inspection services on Saturdays, Sundays and all City holidays. The overtime charges will be \$111.80 per hour and a minimum of four (4) hours will be charged for each occurrence of such service. The overtime charges will be billed on a monthly basis. Failure to pay for these services will result in delaying the final acceptance and payment.

“The CONTRACTOR shall be entitled to an extension of working time under this contract only when claim for such extension is submitted to the OWNER in writing by the CONTRACTOR within seven days from and after the time when any alleged cause of delay shall occur; and then only when such time is approved by the OWNER. In adjusting the working time for the completion of the project, the OWNER will consider delays due to acts of God, or the public enemy, acts of the OWNER, fires, floods, epidemics and quarantine restrictions. The OWNER may, but is not obligated to, take into account any unforeseeable causes of delay which the OWNER considers beyond the control and without the fault or negligence of the CONTRACTOR. It is anticipated that during the course of the contract,

inclement weather (rain or freezing temperatures) will hinder or prevent work. The contract time has been established assuming that up to 20% of the contract days will be inclement weather days, during which no work can be performed. No extension of time will be granted for such inclement weather days. The OWNER may grant an extension of time for inclement weather days beyond 20% of the contract time, but is under no obligation to do so.”

23. **Item 109.3. Payment for Extra Work:** Replace the first sentence of 109.3.1. General; with the following:

“No work shall be undertaken which requires extra payment without having executed a change order or field change approved by the CONTRACTOR and the OWNER, except when specifically ordered to do so in writing.”

24. **Item 109.5. Monthly Estimate, Partial Payments, Retainage, Final Inspection, Acceptance and Final Payment**

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 ensure that the materials are manufactured and delivered on time.



City of Lewisville

CSP #25-32-C

Lewisville Grand Theater Plaza & Old Town Pocket Park

Addendum No. 3

The bid document for the above referenced project is amended as follows:

Questions from Bonfire:

Question: Do you have a Geotech report available for this project?

Answer: No. We don't have Geotech.

Question: Will you be supplying CAD files for the project upon award?

Answer: Yes, we will provide CAD files.

Question: Can the scales for the plans be verified for accuracy? Sheet PL101 calls for 1" – 10' but the graphic scale provided does not match up to 1". Some sheets have different scales but do not have any measurements to check for accuracy.

Answer: PL1.01 scale is verified to be 1" = 10'-0" and the graphic scaled matches in the CAD file.

Question: Water Jet Steel Wall – 1. What Gauge steel is required for the wall material?

Answer: We have done a thorough search through our documents and cannot find this note. We are not aware of this note in our set.

Proposers are advised to acknowledge receipt of Addendum No. 3 by filling in the appropriate blanks contained in the Proposal Form and, if applicable, the outer envelope of their bid.