

ORDINANCE 2018-06-21-0470

**AUTHORIZING A TASK ORDER TO A JOB ORDER CONTRACT PAYABLE TO F.A. NUNNELLY FOR THE UPPER APACHE CREEK LINEAR GREENWAY TRAIL SYSTEM IMPROVEMENTS TO INCLUDE TREE AND IRRIGATION INSTALLATION LOCATED IN COUNCIL DISTRICT 5, IN AN AMOUNT NOT TO EXCEED \$550,000.00, FUNDED FROM THE TREE CANOPY PRESERVATION AND MITIGATION FUND.**

\* \* \* \* \*

**WHEREAS**, the Westside Creek hike and bike trails consist of the Apache, Alazan, Martinez, Zarzamora and San Pedro tributaries; and

**WHEREAS**, these trails are an expansion of the Howard W. Peak Greenway Trail system which enhances the quality of life for San Antonio residents and visitors by preserving open space and providing outdoor recreation along creeks and rivers; and

**WHEREAS**, unlike the Leon and Salado Creek trails which are rich with existing tree canopy to provide abundant shade, the westside tributaries lack many of the trees that provide essential shade to trail users in a natural setting; and

**WHEREAS**, as part of this project, trees and irrigation will be installed along the Upper Apache Creek section on the City's west side, which extends approximately from S. Zarzamora St. to S. Brazos St; and

**WHEREAS**, this section of the trail is a mile long and passes through and by three city Parks: Cassiano Park, Escobar Park and Amistad Park; and

**WHEREAS**, the proposed tree enhancement includes the installation of 340 new native shade and ornamental trees of various size and species; and

**WHEREAS**, installation of the water meters and irrigation lines to support the trees are included in the project; and

**WHEREAS**, the project is anticipated to begin July 2018 and is estimated for completion in the fall of 2018; and

**WHEREAS**, this Project was selected to utilize the Job Order Contracting (JOC), an alternative Project delivery method which ten contractors were approved through Ordinance 2015-01-15-0013 by City Council on January 15, 2015; and

**WHEREAS**, the use of the JOC delivery method provides the City with on-call construction, renovation and maintenance services for City projects; and

**WHEREAS**, assignment of JOC contractors to specific jobs is based on the contractor's current workload, overall capacity, and familiarity with a specific facility, expertise in

SW/ah  
6/21/18  
Item No. 14

completing specific task and/or managing a specific trade needed to carry out the requested repair or rehabilitation; and

**WHEREAS**, of the ten contractors, F.A. Nunnelly, General Contractor, was selected to submit an estimate and project schedule for this Project; and

**WHEREAS**, F.A. Nunnelly has committed to 23% M/WBE and 3% AABE subcontractor participation; **NOW THEREFORE:**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:**

**SECTION 1.** The City Manager or her designee the Director of the Parks and Recreation Department or his designee, is authorized to execute a task order to a Job Order Contract with F.A. Nulley for the Upper Apache Creek Linear Greenway trail system tree and irrigation installation located in Council District 5, in the amount not to exceed of \$550,000.00, funded from the Tree Canopy Preservation and Mitigation Fund. A copy of the task order is attached hereto and incorporated herein for all purposes as **Attachment I**.

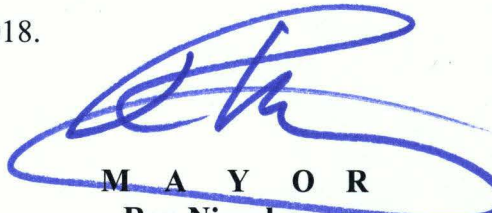
**SECTION 2.** Funding for this ordinance in the amount of \$550,000.00 is available in Fund 29619000, Cost Center 2616010001 General Ledger 5201040 as part of the Fiscal Year 2018 Budget.

**SECTION 3.** Payment not to exceed the budgeted amount is authorized to F.A. Nunnelly and should be encumbered with a purchase order.

**SECTION 4.** The financial allocations in this Ordinance are subject to approval by the Director of Finance, City of San Antonio. The Director of Finance may, subject to concurrence by the City Manager or the City Manager's designee, correct allocations to specific SAP Fund Numbers, SAP Project Definitions, SAP WBS Elements, SAP Internal Orders, SAP Fund Centers, SAP Cost Centers, SAP Functional Areas, SAP Funds Reservation Document Numbers, and SAP GL Accounts as necessary to carry out the purpose of this Ordinance.

**SECTION 5.** This ordinance is effective immediately upon the receipt of eight affirmative votes; otherwise, it is effective ten days after passage.

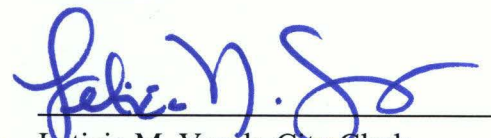
**PASSED AND APPROVED** this 21<sup>st</sup> day of June, 2018.




**M A Y O R**  
**Ron Nirenberg**

**ATTEST:**

**APPROVED AS TO FORM:**

  
Leticia M. Vacek, City Clerk

  
Andrew Segovia, City Attorney

<b>Agenda Item:</b>	14 ( in consent vote: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18A, 18B, 19, 20, 21, 22, 23, 24, 25A, 25B, 25C, 27, 28, 29, 30, 31, 34, 35A, 35B, 36, 37, 38, 39, 40, 41, 42, 43, 46, 47, 49, 50, 51, 52, 53, 54, 56A, 56B, 56C, 56D, 56E )						
<b>Date:</b>	06/21/2018						
<b>Time:</b>	09:39:05 AM						
<b>Vote Type:</b>	Motion to Approve						
<b>Description:</b>	Ordinance approving a task order to a Job Order Contract to F.A. Nunnelly for the Upper Apache Creek Linear Greenway trail system improvements to include tree and irrigation installation in an amount not to exceed \$550,000.00, funded from the Tree Canopy Preservation and Mitigation Fund. [María D. Villagómez, Assistant City Manager; Xavier D. Urrutia, Director, Parks & Recreation]						
<b>Result:</b>	Passed						
<b>Voter</b>	<b>Group</b>	<b>Not Present</b>	<b>Yea</b>	<b>Nay</b>	<b>Abstain</b>	<b>Motion</b>	<b>Second</b>
Ron Nirenberg	Mayor		x				
Roberto C. Treviño	District 1		x			x	
William Cruz Shaw	District 2		x				x
Rebecca Viagran	District 3		x				
Rey Saldaña	District 4		x				
Shirley Gonzales	District 5		x				
Greg Brockhouse	District 6		x				
Ana E. Sandoval	District 7		x				
Manny Pelaez	District 8		x				
John Courage	District 9		x				
Clayton H. Perry	District 10		x				

SW/ah  
6/21/18  
Item No. 14

# **ATTACHMENT I**



**F.A. NUNNELLY**  
GENERAL CONTRACTOR

**PROPOSAL & STATEMENT OF WORK**

Date: May 18, 2018  
Project: Westside Creeks Tree Planting Enhancements  
Coordinator: Ross Hosea

**This Proposal is offered as set forth per job walk between F.A. Nunnelly and COSA and is defined in an attached Design Drawings by Rialto Studio and Garza EMC dated 5-8-2018.**

The proposed scope of work only includes and be performed per construction documents including qualifications listed below.

1. No other work requirements are acknowledged except as clarified herein.
2. Prior to FA Nunnelly moving forward on this project a Purchase Order or Task Order Number must be provided in PrimeLink.

**General Assumptions and Clarifications:**

1. Full access to the work space.
2. No requirement for personnel to be escorted.
3. No additional work or repairs are included.
4. Work to be performed during normal business hours (Mon-Fri 8-5).
5. No liquidated damages.
6. Warranty of this scope of work will be limited to one year.
7. The following contingency and allowances are included in the project proposal price. Any contingency or allowance not utilized will be reimbursed to the owner. In the event that the contingency and allowance funds are exhausted, an increase to the contract price will be provided via change orders.
  - a. Project Contingency: \$40,000
  - b. Theft & Vandalisms Allowance: \$10,000
  - c. Impact Fees Allowance: \$10,000

**Scope of Work:**

1. Landscaping and Irrigation per Rialto Studio and Garza EMC plans dated 5-8-2018
2. All work will be done during normal working hours.
3. Provide certified payroll.
4. Taxes not included on materials or labor.



**F.A. NUNNELLY**  
GENERAL CONTRACTOR

## PROPOSAL & STATEMENT OF WORK

Date: May 18, 2018  
Project: Westside Creeks Tree Planting Enhancements  
Coordinator: Ross Hosea

### General Inclusions:

- Provide daily supervision of all work scope.
- Provide daily clean-up and final clean-up.

### General Exclusions:

- Premium time
- Work outside of what's listed above
- Handling of hazardous material or abatement
- Any additional asphalt repairs beyond utility trench repairs

**Material Scheduling & Acquisition approximately: 4-6 weeks - Approximate Construction Duration: 8 weeks.**

<b>Total Proposal:</b> <b>\$ 540,963</b>
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Sincerely,

Blaine Beckman  
VP of Operations  
F.A. Nunnelly General Contractor



**F.A. NUNNELLY**  
GENERAL CONTRACTOR

**Final Estimate**

Blaine Beckman  
F. A. Nunnelly General Contractor  
2015-01-20-0053\_01 - 2015 COSA JOC - 2015 - 2/01/2015 to 2/01/2016  
Westside Creeks Tree Planting Enhancement - 18407  
Blaine Beckman

**Estimator: Blaine Beckman**

**Westside Creeks Tree Planting**

Project Scope: New landscape and irrigation for Apache Creek. Includes change out of two oversized meters and one new irrigation meter. Minor electrical adds to existing electrical lighting systems to support new controls.

**Division Summary (MF04)**

01 - General Requirements	\$61,662.30	26 - Electrical	
02 - Existing Conditions	\$5,625.00	27 - Communications	
03 - Concrete		28 - Electronic Safety and Security	
04 - Masonry		31 - Earthwork	\$2,925.00
05 - Metals		32 - Exterior Improvements	\$1,675.00
06 - Wood, Plastics, and Composites		33 - Utilities	
07 - Thermal and Moisture Protection		34 - Transportation	
08 - Openings		35 - Waterway and Marine Transportation	
09 - Finishes		41 - Material Processing and Handling Equipment	
10 - Specialties	\$522.00	44 - Pollution Control Equipment	
11 - Equipment	\$1,264.00	46 - Water and Wastewater Equipment	
12 - Furnishings		48 - Electric Power Generation	
13 - Special Construction		Alternate	\$439,213.20
14 - Conveying Equipment		Trades	
21 - Fire Suppression		Assemblies	
22 - Plumbing		FMR	
23 - Heating, Ventilating, and Air-Conditioning (HVAC)		<b>MF04 Total (Without totalling components)</b>	<b>\$512,886.50</b>
25 - Integrated Automation			

**Totalling Components**

Priced Line Items	\$80,799.50	Nonpriced Line Items	\$432,087.00
RSMMeans SAN ANTONIO, TX CCI 2018, 83.20%	\$(13,574.32)	2015 COSA FANunnelly Normal Nonpriced (10.0000%)	\$43,208.70
2015 COSA FANunnelly Normal Priced (-22.0000%)	\$(14,789.54)	BOND (2.5800%)	\$13,232.47

**Priced/Non-Priced**

Total Priced Items:	25	\$80,799.50
Total Non-Priced Items:	7	\$432,087.00
	32	\$512,886.50

**Grand Total \$540,963.81**

**Final Estimate**

Estimator: Blaine Beckman				Westside Creeks Tree Planting			
Item	Description	UM	Quantity	Unit Cost	Total	Book	
<b>01 - General Requirements</b>							
1	01-31-13-20-0020 Field personnel, clerk, average Job setup, contracts, and closeout	Week	1.0000	\$780.00	\$780.00	RSM18FAC L, O&P	P
2	01-31-13-20-0160 Field personnel, general purpose laborer, average	Week	1.0000	\$2,575.00	\$2,575.00	RSM18FAC L, O&P	P
3	01-31-13-20-0220 Field personnel, project manager, maximum	Week	2.0000	\$4,500.00	\$9,000.00	RSM18FAC L, O&P	P
4	01-31-13-20-0280 Field personnel, superintendent, maximum	Week	8.0000	\$4,175.00	\$33,400.00	RSM18FAC L, O&P	P
5	01-31-13-30-0050 Insurance, standard builders risk, maximum	Job	500,000.0000	0.6400%	\$3,200.00	RSM18FAC O&P	P
6	01-32-13-50-0600 Scheduling, rule of thumb, CPM scheduling, small job (\$10 million)	Job	500,000.0000	0.0500%	\$250.00	RSM18FAC O&P	P
7	01-32-33-50-0500 Construction photographs, aerial photos, initial fly-over, 5 shots, digital images Drone videography - will provide copies of before and after to the city	Set	1.0000	\$455.00	\$455.00	RSM18FAC M, O&P	P
8	01-52-13-20-1350 Storage boxes, rent per month, 40' x 8'	Ea.	2.0000	\$121.00	\$242.00	RSM18FAC M, O&P	P
9	01-54-33-20-4880-4 Rent per month for rent loader, skid steer, wheeled, 10 CF, 30 HP	Ea.	1.0000	\$1,622.50	\$1,622.50	RSM18FAC E, O&P	P
10	01-54-33-40-1600-3 Rent per week for rent reflectorized barrels 1 to 99 barrels	Ea.	5.0000	\$17.60	\$88.00	RSM18FAC E, O&P	P
11	01-54-33-40-1670-4 Rent per month for rent barricade, portable with flasher 1 to 6 units Traffic control barricades for utility tie in connection	Ea.	10.0000	\$59.40	\$594.00	RSM18FAC E, O&P	P
12	01-54-33-40-6410-3 Rent per week for rent toilet portable chemical 8 weeks - one unit	Ea.	8.0000	\$72.60	\$580.80	RSM18FAC E, O&P	P
13	01-54-33-40-7660-4 Rent per month for rent, portable water tank	Ea.	1.0000	\$1,210.00	\$1,210.00	RSM18FAC E, O&P	P
14	01-56-23-10-1300 Barricades, barricade tape, polyethylene, 7 mils thick, 3" wide x 500' long roll	Ea.	8.0000	\$27.50	\$220.00	RSM18FAC M, O&P	P
15	01-56-26-50-0200 Temporary fencing, chain link, rented up to 12 months, 6' high, 11 ga, to 1000'	L.F.	450.0000	\$5.90	\$2,655.00	RSM18FAC M, L, O&P	P
16	01-58-13-50-0020 Project signs, sign, high intensity reflectorized, buy, excl. posts	Ea.	4.0000	\$27.50	\$110.00	RSM18FAC M, O&P	P
17	01-74-13-20-0020 Cleaning up, clean up after job completion, allow, min	Job	500,000.0000	0.3000%	\$1,500.00	RSM18FAC O&P	P
18	01-74-13-20-0052 Cleaning up, cleanup of floor area, continuous, per day, during construction	M.S.F.	40.0000	\$79.50	\$3,180.00	RSM18FAC M, L, E, O&P	P
<b>01 - General Requirements Total</b>						<b>\$61,662.30</b>	



**Final Estimate**

Estimator: Blaine Beckman			Westside Creeks Tree Planting					
Item	Description	UM	Quantity	Unit Cost	Total	Book		
<b>02 - Existing Conditions</b>								
19	02-21-13-13-0300	Boundary & survey markers, lot location and lines, for large quantities, minimum Survey Layout of boundaries, irrigation, and planting	Acre	5.0000	\$1,125.00	\$5,625.00	RSM18FAC M, L, E, O&P	P
<b>02 - Existing Conditions Total</b>						<b>\$5,625.00</b>		
<b>10 - Specialties</b>								
20	10-14-53-20-0600	Signs, guide and directional signs, reflectorized, 12" x 18", excludes posts	Ea.	6.0000	\$87.00	\$522.00	RSM18FAC M, L, E, O&P	P
<b>10 - Specialties Total</b>						<b>\$522.00</b>		
<b>11 - Equipment</b>								
21	11-14-19-13-0020	Posts, portable for pedestrian traffic control, standard	Ea.	8.0000	\$158.00	\$1,264.00	RSM18FAC M, O&P	P
<b>11 - Equipment Total</b>						<b>\$1,264.00</b>		
<b>31 - Earthwork</b>								
22	31-25-14-16-1000	Synthetic erosion control, silt fence, install and maintain, remove, 3' high	L.F.	1,500.0000	\$1.95	\$2,925.00	RSM18FAC Grn, M, L, E, O&P	P
<b>31 - Earthwork Total</b>						<b>\$2,925.00</b>		
<b>32 - Exterior Improvements</b>								
23	32-01-17-20-1360	Flexible pavement patches, roadway, light traffic, hot pave patch, 80 S.F. & 4 inch depth, excludes trucking	Ea.	1.0000	\$715.00	\$715.00	RSM18FAC M, L, E, O&P	P
24	32-01-17-20-1360-1500	Flexible pavement patches, roadway, light traffic, hot asphalt haul truck, 8 C.Y. truck per day (Modified using 32-01-17-20-1500)	Day	1.0000	\$960.00	\$960.00	RSM18FAC L, E, O&P	P
<b>32 - Exterior Improvements Total</b>						<b>\$1,675.00</b>		
<b>Alternate</b>								
25	01-41-26-50-0020	Permits rule of thumb, most cities, minimum	Job	541,000.0000	0.7000%	\$3,787.00	CUSTOM O&P	N
26	26-01-40-51-3020	ELECTRICAL Conduit routing from existing power located at bridges to new controller locations. This pricing includes required lift rental to access systems up high. It is assumed we are tying into existing circuitry. Establishing new or additional circuitry is not included.	LSUM	1.0000	\$22,500.00	\$22,500.00	CUSTOM O&P	N
27	32-93-43-20-0100	LANDSCAPE AND IRRIGATION This includes landscape and irrigation work per Rialto Drawings dated 5-8-2018 (See attached proposal and itemized breakdown dated 5-17-2018)	LSUM	1.0000	\$320,800.00	\$320,800.00	CUSTOM Grn, O&P	N

**Final Estimate**

**Estimator: Blaine Beckman**

**Westside Creeks Tree Planting**

**Alternate**

Item	Description	UM	Quantity	Unit Cost	Total	Book
28 33-05-97-05-0020	UTILITIES This price includes changeout of 2 existing meters from 2" to 1" and includes the installation of an additional main tie-in with service piping and 1" meter.	LSUM	1.0000	\$25,000.00	\$25,000.00	CUSTOM M, L, E, O&P N
29 ALLOWANCE	THEFT & VANDALISM ALLOWANCE This project contingency is to be utilized in the event that vandalism occurs in a substantially complete section. Per COSA each of 3 sections will be segregated for each to achieve substantial completion.	LSUM	1.0000	\$10,000.00	\$10,000.00	CUSTOM O&P N
30 ALLOWANCE	IMPACT FEE ALLOWANCE This allowance is for anticipated cost for any required utility fees	LSUM	1.0000	\$10,000.00	\$10,000.00	CUSTOM O&P N
31 CONTINGENCY	PROJECT CONTINGENCY This is a project contingency to be utilized for any unforeseen or unanticipated scope. Some examples to be applied to contingency are as follows: Permitting that exceeds \$2500 Any asphalt patching that goes beyond repair of trench dimensions at utility tie in location Etc...	LSUM	1.0000	\$40,000.00	\$40,000.00	CUSTOM O&P N
32 Crew A-03B	A-03B Crew - 2018 - RSMMeans Standard Books O&P Dump truck and crew for trucking cost off spoil haul off. 3 park sections - 3 days of haul off total. Skidsteer rental priced seperately. A-03B (2018 - RSMMeans Standard Books) Labor Hours: 16 Equip Hours: 16 Daily Hours: 16  Crew Details: Code: EQMD Description: Equipment Operators, Medium Equipment Qty: 1 Hourly: 81.05 Daily: 648.4 Code: TRHV Description: Truck Drivers, Heavy Qty: 1 Hourly: 69.3 Daily: 554.4 Code: 015433205300 Description: Dump Truck, 12 C.Y., 400 H.P. Qty: 1 Hourly: 597.08 Code: 015433204710 Description: F.E. Loader, W.M., 2.5 C.Y. Qty: 1 Hourly: 575.52	Daily	3.0000	\$2,375.40	\$7,126.20	CUSTOM L, E, O&P P
<b>Alternate Total</b>						<b>\$439,213.20</b>
<b>Estimate Grand Total</b>						<b>540,963.81</b>



## BID FOR IRRIGATION AND LANDSCAPING INSTALLATION

To: Greg Vaughn, Project Manager

Date: May 17, 2018

Project: Westside Creek, Upper Apache  
San Antonio, TX

### SCOPE OF WORK:

TEFACY, LLC DBA MTZ Landscaping will provide supervision, labor, material, and equipment necessary to perform the services listed below:

**Tree Preservation** **\$21,723.00**

Protect trees from construction as per plan specifications to comfort all current city and state regulations.

James W. Grey Jr. #622, May 8, 2018, Project #1735-1

**Irrigation Installation** **\$40,650.00**

Installation of functional irrigation system as per per plan specifications to comfort all current city and state regulations. Includes sleeving material and boaring under sidewalks as per plans and specs

Katherine A. Valadez #18083, May 8, 2018, Project #1735-1

**Tree Installation** **\$254,401.25**

Installation of planting material as per plan specifications to comfort all current city and state regulations.

James W. Grey Jr. #622, May 8, 2018, Project #1735-1

**Disturbed Areas** **\$1,775.00**

Prep and re-sod damaged areas disturbed by construction. Approx. 1,400 sf. Using solid buffalo sod.

**Temporary Irrigation** **\$2,250.00**

Installation of temporary irrigation system to newly installed solid sod establishment to comfort all current city and state regulations.

The estimated cost for the landscaping and irrigation installation for the project described above is **\$320,799.25**.

The entire job will be conducted in a professional and timely manner. *All work and material are guaranteed as per our specifications. The price above of **\$320,799.25** includes:*

*Tools, Materials, Material, Labor, Equipment, and delivery fees. No tax included for this Tax*



TEFACY, LLC DBA MTZ LANDSCAPING • P.O. BOX 15372 • SAN ANTONIO • TEXAS • 78212 • P. 210-380-0674

*Exempt Project.*

*MTZ Landscaping does not provide water and is not held liable for any costs associated with any water systems.*

**Proposed by MTZ Rep:**

**FA NUNELLY:**

**Anna Martinez, 210-380-0674 Date: 5/18/2018**

\_\_\_\_\_ **Date** \_\_\_\_\_



**WESTSIDE CREEKS TREE PLANTING ENHANCEMENTS - UPPER APACHE**

PREPARED BY: Anna L. Martinez

DATE: 5/17/18

**\*NOTE: THIS LIST MAY NOT BE COMPLETE AND MAY INCLUDE INFORMATION NOT ON THE PLANS. CONTRACTOR IS ALSO RESPONSIBLE FOR ADDITIONAL OR MISSING ITEMS THAT MAY BE FOUND ON THE PLANS. THOSE ITEMS MUST STILL BE INCLUDED IN THE BID.**

ELEMENT	QTY	UNIT	COST	TOTAL	
<b>GENERAL CONDITIONS</b>					
GENERAL CONDITIONS ( MOBILIZATION, BONDS, CLEAN UP, ETC.)	1	LS	\$ 25,748.00	\$ 25,748.00	
<b>GENERAL CONDITIONS TOTAL</b>					<b>\$ 25,748.00</b>
<b>LANDSCAPE</b>					
ANAQUA (3" CAL)	7	EA	\$860.50	\$ 6,023.50	
MEXICAN BUCKEYE (#15 CONT)	27	EA	\$223.75	\$ 6,041.25	
CEDAR ELM (2" CAL)	16	EA	\$353.75	\$ 5,660.00	
CEDAR ELM (4" CAL)	23	EA	\$1,550.00	\$ 35,650.00	
LACEY OAK (1.5" CAL)	15	EA	\$200.33	\$ 3,004.95	
LACEY OAK (3" CAL)	12	EA	\$921.59	\$ 11,059.08	
MONTERREY OAK (6" CAL)	16	EA	\$3,200.00	\$ 51,200.00	
MEXICAN PLUM (#15 CONT)	13	EA	\$150.00	\$ 1,950.00	
MEXICAN PLUM (3" CAL)	19	EA	\$950.00	\$ 18,050.00	
LIVE OAK (2" CAL)	20	EA	\$300.00	\$ 6,000.00	
LIVE OAK (4" CAL)	18	EA	\$1,550.00	\$ 27,900.00	
PECAN (4" CAL)	12	EA	\$1,550.00	\$ 18,600.00	
POSSUMHAW HOLLY (#15 CONT)	39	EA	\$150.00	\$ 5,850.00	
TEXAS REDBUD (2" CAL)	42	EA	\$350.00	\$ 14,700.00	
RETAMA (36" BOX)	11	EA	\$667.50	\$ 7,342.50	
MEXICAN SYCAMORE (3" CAL)	15	EA	\$950.00	\$ 14,250.00	
MEXICAN OLIVE (#15 CONT)	35	EA	\$150.00	\$ 5,250.00	
TREE STAKES	340	EA	\$8.00	\$ 2,720.00	
PLANTING SOIL MIX (BACKFILL AT TREES)	50	CY	\$ 40.00	\$ 2,000.00	
BUFFALO SOD (AREA DISTURBED BY IRRIGATION SLEEVE BORING)	50	SY	\$ 6.00	\$ 300.00	
MULCH (3" depth)	434	CY	\$ 25.00	\$ 10,850.00	
<b>LANDSCAPE TOTAL</b>					<b>\$ 254,401.28</b>
<b>IRRIGATION</b>					
1" ISOLATION GATE VALVE INSTALLED (PER DETAIL 1-L5.4)		EA	\$ 295.00	\$ -	
1" PRESSURE REGULATOR INSTALLED (PER DETAIL 1-L5.4)	3	EA	\$ 275.00	\$ 825.00	
1" BACKFLOW PREVENTER W/ WYE-STRAINER INSTALLED (PER DETAIL 1-L5.4)	3	EA	\$ 290.00	\$ 870.00	
1" MASTER VALVE INSTALLED (PER DETAIL 1-L5.4)	3	EA	\$ 150.00	\$ 450.00	
1" FLOW SENSOR INSTALLED (PER DETAIL 1-L5.4)	3	EA	\$ 480.00	\$ 1,440.00	
1" AIR RELIEF VALVE INSTALLED (PER DETAIL 1-L5.4)	3	EA	\$ 172.79	\$ 518.37	
SYSTEM CONTROLLER & STEEL CABINET INSTALLED (PER DETAIL 2-L5.4)	3	EA	\$ 500.00	\$ 1,500.00	
WEATHER SENSOR INSTALLED (PER DETAIL 3-L5.4)	3	EA	\$ 175.00	\$ 525.00	
QUICK COUPLING VALVE INSTALLED (PER DETAIL 5-L5.4)	16	EA	\$ 40.00	\$ 640.00	
ZONE CONTROL VALVE INSTALLED (PER DETAIL 6-L5.4)	21	EA	\$ 150.00	\$ 3,150.00	
SYSTEM CONTROL WIRING, #14 AWG SOLID COPPER INSTALLED (PER DETAIL 8-L5.4)	24873	EA	\$ 0.38	\$ 9,451.74	
(NOTE: TRACER WIRE & ADDITIONAL WIRES ON DETAIL 2-L5.4)				\$ -	
RAINBIRD 1804-SAM-PRS W/RAINBIRD 1402 NOZZLE INSTALLED (PER DETAIL 7-L5.4)	626	EA	\$ 5.00	\$ 3,130.00	
.75" FLEXIBLE PVC SCH. 40 PIPE	4400	LF	\$ 0.75	\$ 3,300.00	
.75" PVC SCH. 40 PIPE		LF	\$ 0.95	\$ -	
1" PVC SCH. 40 PIPE	2254	LF	\$ 1.10	\$ 2,479.40	
1.25" PVC SCH. 40 PIPE	1020	LF	\$ 1.25	\$ 1,275.00	
1.5" PVC SCH. 40 PIPE	4897	LF	\$ 1.50	\$ 7,345.50	
4" PVC SCH. 40 IPS PIPE (SLEEVES, INSTALLED PER DETAIL 4-L5.4)	500	LF	\$ 7.50	\$ 3,750.00	
				\$ -	
TEMPORARY IRRIGATION FOR BUFFALO SOD ESTABLISHMENT	500	LS	\$ 4.50	\$ 2,250.00	
<b>IRRIGATION TOTAL</b>					<b>\$ 40,650.01</b>
<b>TOTAL</b>					<b>\$ 320,799.29</b>