City of Fayetteville Staff Review Form

2015-0055

Legistar File ID

2/17/2015

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

Submitted By	Submitted Date	Division / Department					
Chilis brown		Development Services Department					
Chris Brown	2/5/2015	Engineering /					

Action Recommendation:

Awarding a construction contract in the amount of \$149,191.00 to CAM Lawn Services, LLC for the installation of trees and shrubs within the median of Crossover Road and Garland Avenue (Bid #15-16) and approval of a project contingency of \$15,000.00.

Budget Impact:

4520.9555.5809.00	4520-Sales 1	Tax Constru	ction Bond			
Account Number		Fund Transportation Bond Street Improvements/ Crossover Road Street Improvements				
06035.2000	•					·
Project Number	P	Project Title				
Budgeted Item? Yes	Current Budget	\$	300,000.00			
	Funds Obligated	\$	853.05			
	Current Balance	\$	299,146.95			
Does item have a cost? Yes	Item Cost	\$	164,191.00			
Budget Adjustment Attached? No	Budget Adjustment	\$	-			
	Remaining Budget	\$	134,955.95			

Comments:



CITY COUNCIL AGENDA MEMO

MEETING OF FEBRUARY 17, 2015

TO: Mayor and City Council

THRU: Don Marr, Chief of Staff

Jeremy Pate, Development Services Director

Chris Brown, City Engineer

FROM: Alan Pugh, Staff Engineer

DATE: January 28, 2015

SUBJECT: Awarding a construction contract in the amount of \$149,191.00 to CAM

Lawn Services, LLC for the installation of trees and shrubs within the median of Crossover Road and Garland Avenue (Bid #15-16) and approval

of a project contingency of \$15,000.00.

RECOMMENDATION:

Staff recommends awarding a construction contract in the amount of \$149,191.00 to CAM Lawn Services, LLC for the installation of trees and shrubs within the median of Crossover Road and Garland Avenue (Bid #15-16) and approval of a project contingency of \$15,000.00.

BACKGROUND:

In 2007 the City Council approved the cross section for Crossover Road, Highway 265, between Township Ave and the northern City Limits at Ivey Lane. The approved cross section included a raised center median with intermittent turn lanes included at critical intersections. The ultimate approval of this cross section included much debate between including a raised center median or a continuous five-lane section with center turn lane. A review of the meeting minutes, drawings, figures and presentations do not provide a clear indication of whether the median was to include trees. Regardless of the outcome of this research, the Council did not appropriate funds for tree planting during the original approval process or in subsequent budgets and trees were not planted during the construction of the project.

The City now desires to enhance the urban environment while increasing the aesthetics of the center median and aiding to calm traffic through the installation of trees and shrubs within the median islands. Last year, the Transportation Committee recommended that staff prepare plans and receive bids for installation of trees on both Crossover Road, between Township and Joyce, and for Garland Avenue, north of North Street.

DISCUSSION:

On February 5, 2015 the City received two (2) valid construction bids with the low bid being \$149,191.00. For comparison purposes, the estimate for tree installation excluding contingency was \$285,783.00. The low bid was submitted by CAM Lawn Services who, based on the information provided, is a responsible bidder and appears to be capable of performing the work. The award will be contingent on the low bidder providing all of the required insurance

and bonds in order to enter into a contract to complete the project. A portion of the remaining funds will be utilized to reimburse the Water Department for work performed setting water meters and providing conduits to the medians in order for the contractor to install the irrigation system.

BUDGET/STAFF IMPACT:

The Transportation Bond Program is the proposed source for funding this project. The Staff Review Form indicates the current balance as well as the obligations associated with the fund. The total amount obligated for the construction contract is \$164,191.00 which includes the contingency.

Attachments:

Bid Tab Construction Contract

	City of Fayer				equest (PO)			Requisition No.: Date: 2/5/2015				
	All PO Requests shall be s Purchase sh	canned to				e-ar.gov.		P.O Number:				
Vendor #:	21902	Vendor Name:	(:	AM Lawn Servic	ces dba B&A Pro		nce	Mail ☑ YES ☐ NO	Legis 2015-			
Address:	325 County Line Road					FOB Point:		Taxable ☐ YES ☐ NO	Expected De			
City:	Springdale		State:	A	AR 72764		Ship to code:	Quotes Attached	1	,		
Requester:						Requester's	Employee #:	Extension:				
Item	Description	Quantity	Unit of Issue	Unit Cost	Extended Cost	Account	t Number	Project.Sub#	Inventory #	Fixed Asset #		
1	Trees & Shrubs	1		149,191.00	\$149,191.00	4520.955	5.5809.00	06035.2000				
2	Crossover & Garland				\$0.00							
3					\$0.00							
4					\$0.00							
5					\$0.00							
6					\$0.00							
7					\$0.00							
8					\$0.00							
9					\$0.00							
10		1			\$0.00							
*	Shipping/Handling		Lot		\$0.00							
	Special Instructions:							Subtotal: Tax: Total:	\$149,191.00 \$149,191.00	- -		
Approvals:												
Mayor:				Department Dire	ctor:			Purchasing Manager:				
Chief Finar	ncial Officer:			Budget Director:				IT Director:				
Dispatch M	lanager:			Utilities Manager	·			Other:				

DOCUMENT 00500 – AGREEMENT

BETWEEN OWNER AND CONTRACTOR

The installation of approximately 181 trees and 31 shrubs on Crossover Road as well as approximately 47 trees on Garland Avenue per the planting details along with the required irrigation systems for each location.

Documents. The work under this Contract includes, but is not limited to:

The Contract includes work in AHTD Right-of-way and work in City of Fayetteville Right-of-way.

Refer to Section 00400-Bid Form for quantities:

ARTICLE 2 - ENGINEER

2.01 The Contract Documents have been prepared by THE CITY OF FAYETTEVILLE Engineering Division and assumes all duties and responsibilities, and has the rights and authority assigned to THE CITY OF FAYETTEVILLE in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT TIME

3.01 <u>TIME OF THE ESSENCE</u>:

A. All time limits for milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

3.02 <u>DATES FOR SUBSTANTIAL COMPLETION AND FINAL PAYMENT:</u>

A. The Work will be Substantially Completed within <u>60</u> calendar days after the date when the Contract Times commence to run as provided in the GENERAL CONDITIONS, and completed and ready for final payment in accordance with the GENERAL CONDITIONS within <u>75</u> calendar days after the date when the Contract Times commence to run.

3.03 <u>LIQUIDATED DAMAGES</u>:

A. Owner and Contractor recognize that time is of the essence of this Agreement and that The City of Fayetteville will suffer financial loss if the Work is not completed within the time specified above, plus any extensions thereof allowed in accordance with the GENERAL CONDITIONS. The parties also recognize the delays, expense, and difficulties involved in proving the actual loss suffered by The City of Fayetteville if the Work is not Substantially Completed on time. Accordingly, instead of requiring any such proof, The City of Fayetteville and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay The City of Fayetteville Two Hundred Fifty Dollars (\$250.00) for each calendar day that expires after the time specified above in Paragraph 3.02 for Substantial Completion until the Work is Substantially Complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the time specified in Paragraph 3.02 for completion and readiness for final payment or any proper extension thereof granted by The City of Fayetteville, Contractor shall pay The City of Fayetteville Two

Hundred Fifty Dollars (\$250.00) for each calendar day that expires after the time specified for completion and readiness for final payment.

ARTICLE 4 - CONTRACT PRICE

- 4.01 The CITY OF FAYETTEVILLE agrees to pay, and the CONTRACTOR agrees to accept, as full and final compensation for all work done under this agreement, the amount based on the prices bid in the Proposal (BID FORM) which is hereto attached, for the actual amount accomplished under each pay item, said payments to be made in lawful money of the United States at the time and in the manner set forth in the Specifications.
- As provided in the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by ENGINEER as provided in the General Conditions. Unit prices have been computed as provided in the General Conditions.
- 4.03 Changes, modifications, or amendments in scope, price or fees to this contract shall not be allowed without a prior formal contract amendment approved by the Mayor and the City Council in advance of the change in scope, cost or fees.

ARTICLE 5 - PAYMENT PROCEDURES

5.01 SUBMITTAL AND PROCESSING OF PAYMENTS:

A. Contractor shall submit Applications for Payment in accordance with the GENERAL CONDITIONS. Applications for Payment will be processed by Engineer as provided in the GENERAL CONDITIONS.

5.02 PROGRESS PAYMENTS, RETAINAGE:

A. The City of Fayetteville shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment as recommended by Engineer, on or about the 15th day of each month during construction. All such payments will be measured by the schedule of values established in the GENERAL CONDITIONS (and in the case of Unit Price

Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

- Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Engineer shall determine, or The City of Fayetteville may withhold, in accordance with the GENERAL CONDITIONS.
 - a. 95% of Work Completed (with the balance being retainage). If Work has been 50% completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to The City of Fayetteville and Engineer, The City of Fayetteville on recommendation of Engineer, may determine that as long as the character and progress of the Work subsequently remain satisfactory to them, there will be no additional retainage on account of Work subsequently completed, in which case the remaining progress payments prior to Substantial Completion will be an amount equal to 100% of the Work Completed less the aggregate of payments previously made; and
 - b. 100% of Equipment and Materials not incorporated in the Work but delivered, suitably stored, and accompanied by documentation satisfactory to The City of Fayetteville as provided in the GENERAL CONDITIONS.
- 2. Upon Substantial Completion, The City of Fayetteville shall pay an amount sufficient to increase total payments to Contractor to 95% of the Contract Price (with the balance being retainage), less such amounts as Engineer shall determine, or The City of Fayetteville may withhold, in accordance with the GENERAL CONDITIONS.

5.03 FINAL PAYMENT:

A. Upon final completion and acceptance of the Work in accordance with the GENERAL CONDITIONS, The City of Fayetteville shall pay the remainder of the Contract Price as recommended by Engineer and as provided in the GENERAL CONDITIONS.

ARTICLE 6 - CONTRACTOR'S REPRESENTATIONS

- 6.01 In order to induce The City of Fayetteville to enter into this Agreement, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents including the Addenda and other related data identified in the Bid Documents.
 - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.
 - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
 - D. Contractor has carefully studied all:
 - (1) Reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site; and
 - (2) Reports and drawings of a Hazardous Environmental Condition, if any, at the Site. Contractor acknowledges that The City of Fayetteville and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated

in the Contract Documents with respect to Underground Facilities at or contiguous to the Site.

- E. Contractor has obtained and carefully studied (or assumes responsibility of having done so) all such additional supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance, and furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.
- F. Contractor does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performing and furnishing of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by The City of Fayetteville and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Contractor.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 7 - CONTRACT DOCUMENTS

7.01 <u>CONTENTS</u>:

- A. The Contract Documents which comprise the entire Agreement between The City of Fayetteville and Contractor concerning the Work consist of the following and may only be amended, modified, or supplemented as provided in the GENERAL CONDITIONS:
 - 1. This Agreement.
 - 2. Exhibits to this Agreement (enumerated as follows):
 - a. Notice to Proceed.
 - b. Contractor's Bid.
 - Documentation submitted by Contractor prior to Notice of Award.
 - 3. Performance, Payment, and other Bonds.
 - 4. General Conditions.
 - 5. Supplementary Conditions.
 - Specifications consisting of divisions and sections as listed in table of contents of Project Manual.

7. Drawings consisting of a cover sheet and sheets as listed in the table of contents thereof, with each sheet bearing the following general title:

CROSSOVER ROAD TREE PLANTING PHASE 1 – TOWNSHIP AVE TO JOYCE BLVD

- 8. Addenda numbers one (1) to two (2), inclusive.
- 9. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to the GENERAL CONDITIONS.

ARTICLE 8 - MISCELLANEOUS

8.01 TERMS:

A. Terms used in this Agreement which are defined in the GENERAL CONDITIONS shall have the meanings stated in the GENERAL CONDITIONS.

8.02 ASSIGNMENT OF CONTRACT:

A. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by Law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

DOCUMENT 00500 – AGREEMENT (continued)

8.03 <u>SUCCESSORS AND ASSIGNS</u>:

A. The City of Fayetteville and Contractor each binds himself, his partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

8.04 SEVERABILITY:

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon The City of Fayetteville and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

8.05 FREEDOM OF INFORMATION ACT:

A. City contracts and documents prepared while performing city contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the City of Fayetteville, the contractor will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et. seq.). Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.

8.06 LIENS:

A. No liens against this construction project are allowed. Arkansas law

(A.C.A. §§18-44-501 through 508) prohibits the filing of any mechanics' of
materialmen's liens in relation to this public construction project. Arkansas
law requires and the contractor promises to provide and file with the Circuit
Clerk of Washington County a bond in a sum equal to the amount of this
contract. Any subcontractor or materials supplier may bring an action for

non-payment or labor or material on the bond. The contractor promises to notify every subcontractor and materials supplier for this project of this paragraph and obtain their written acknowledgement of such notice prior to commencement of the work of the subcontractor or materials supplier.

IN WITNESS WHEREOF, The City of Fayetteville and Contractor have signed this Agreement in quadruplicate. One counterpart each has been delivered to Contractor and Engineer. Two counterparts each has been delivered to The City of Fayetteville. All portions of the Contract Documents have been signed, initialed, or identified by The City of Fayetteville and Contractor or identified by Engineer on their behalf.

This Agreement will be effective on	, 20, which is the
Effective Date of the Agreement.	
CONTRACTOR CAM LAWN SERVICES,	CITY OF FAYETTEVILLE
LLC	
By Asson Meroma	Ву:
Title: CREZATIONS -NHA	Title:
(SEAL)	(SEAL)
Attest	Attest
Address for giving notices	Address for giving notices
325 W. COUNTY LINE	
SPRINGDALE AR 727/4	

DOCUMENT 00500 - AGREEMENT (co)	ntinued)
License No. <u>0225950514</u>	(attach evidence of authority to
	sign and resolution or other documents
Agent for Service of process	authorizing execution of Agreement)
Mickey McFarlin	
(If Contractor is a corporation, attach evidence of authority to	Approved As to Form:
sign.)	Ву:
	Attorney For:

END OF DOCUMENT 00500



City of Fayetteville, Arkansas Purchasing Division

OFFICIAL BID TABULATION

Bid 15-16, Construction - Tree Planting, Garland and Crossover Thursday, February 5, 2015, 2:00 PM, Local Time

						CAM LAWN	SEI	RVI	CES LLC		JM LANDSCAPE Responsive Bid		s	ECOND NAT		
ITEM	DESCRIPTION	Est Qty	Unit		PRIC	E PER UNIT			TOTAL	PRICE PER UNIT	TOTAL		PRIC	E PER UNIT		TOTAL
						SCHE	UL	ΕA				Ų.			N.	
1A	Clearing, Grubbing, and Demolition	1	LS	x	\$	930.00	=	\$	930.00			х	\$	1,500.00	=	\$ 1,500.00
2A	4 Inch Topsoil Placement (Yard Areas)	750	SY	x	\$	2.98		\$	2,235.00			х	\$	1.00	=	\$ 750.00
за	Bermuda Sod	750	SY	х	\$	3.50	=	\$	2,625.00			х	\$	3.50	=	\$ 2,625.00
4A	Sign Relocation	32	EA	×	\$	82.00	=	\$	2,624.00			×	\$	175.00	110	\$ 5,600.00
5A.	Traffic Control and Maintenance	1	LS	х	\$	5,500.00	2	\$	5,500.00			x	\$	4,500.00		\$ 4,500.00
6A	Mobilization (Shall not exceed 5% of total Bid)	1	EA	х	\$	5,200.00	н	\$	5,200.00			×	\$	6,000.00	=	\$ 6,000.00
7A	Soil Amendment Condition 1A (Tree)	61	EA	×	\$	22.00	=	\$	1,342.00			×	\$	50.00	=	\$ 3,050.00
8A	Soil Amendment Condition 1B (Tree)	60	EA	×	\$	22.00	1	\$	1,320.00			x	\$	50.00	н	\$ 3,000.00
9A	Soil Amendment Condition 1C (Tree)	60	EA	х	\$	6.00		\$	360.00			x	\$	20.00	=	\$ 1,200.00
10A	Soil Amendment Condition 1A (Shrub)	11	EA	х	\$	4.00	н	\$	44.00			х	\$	10.00	×	\$ 110.00
11A	Soil Amendment Condtion 1B (Shrub)	10	EA	х	\$	4.00		\$	40.00			х	\$	10.00	п	\$ 100.00
12A	Soil Amendment Condition 1C (Shrub)	10	EA	×	\$	2,00	п	\$	20.00			х	\$	10.00	н	\$ 100.00
13A	Swamp White Oak (Quercus bicolor)	70	EA	х	\$	273.00		\$	19,110.00			х	\$	385.00	=	\$ 26,950.00
14A	London Planetree (Platanus x acerifolia)	13	EA	х	\$	261.00		\$	3,393.00			x	\$	385.00	=	\$ 5,005.00
15A	Fruitless Kentucky Coffee Tree (Gymnocladus dioicus)	55	EA	х	\$	273.00	п	\$	15,015.00			х	\$	385.00	п	\$ 21,175.00
16A	Shadblow Serviceberry (Amelanchier canadensis)	31	EA	x	5	51.00	п	\$	1,581.00			х	\$	30.00	н	\$ 930.00
17A	Blackgum (Nyssa Sylvatica)	43	EA	×	s	285.00		\$	12,255.00			×	\$	385.00	=	\$ 16,555.00
18A	Backflow Preventer w/Box	5	EA	х	\$	1,850.00	п	\$	9,250.00			x	\$	450.00	=	\$ 2,250.00
19A	Irrigation System	1	LS	х	\$	28,250.00	п	\$	28,250.00			x	\$	22,500.00	=	\$ 22,500.00
20A	Maintenance Bond	1	LS	×	\$	675.00		\$	675.00			×	\$	500.00	×	\$ 500.00
	SUBTO	OTAL SCHE	DULE A	88			88	\$	111,769.00		s -	88	***		88	\$ 124,400.00
			THE S			SCHEE	UL	EE			i ka e iii e					
1B	Clearing, Grubbing, and Demolition	Ť	LS	х	\$	520.00	=	\$	520.00			×	\$	1,000.00		\$ 1,000.00
2B	4 inch lopsoil placement (Yard Areas)	250	SY	x	\$	2.98		\$	745.00			×	\$	1.00		\$ 250.00
3B	Bermuda Sod	250	SY	х	\$	3.50	=	\$	875.00			х	\$	3,50	=	\$ 875.00
4B	Traffic Control and Maintenance	1	LS	х	\$	3,590.00	=	\$	3,590.00			×	\$	2,000.00	=	\$ 2,000.00
5B	Mobilization (Shall not exceed 5% of total Bid)	া,	LS	×	\$	1,650.00	=	\$	1,650.00			x	\$	1,500.00	п	\$ 1,500.00
βB	Swamp White Oak (Quercus bicolor)	15	EA	×	\$	273.00		\$	4,095.00			×	\$	385.00	n	\$ 5,775.00
7B	Shademaster Thronless Honelocust (Gleditsia triancanthos var inermis)	17	EA	x	\$	271.00		\$	4,607.00			×	\$	385.00	=	\$ 6,545.00
ВВ	Princeton American Elm (Ulmus americana 'Princeton')	15	EA	х	\$	296.00	=	\$	4,440.00			×	\$	385.00	=	\$ 5,775.00
9B	Backflow Preventer w/Box	4	EΑ	х	\$	1,850.00	×	\$	7,400.00			х	\$	450.00	11	\$ 1,800.00
10B	rrigation System	1	LS	х	\$	9,250.00	.11	\$	9,250.00			x	\$	12,500.00	187	\$ 12,500.00
12B	Maintenance Bond	1	LS	x	\$	250.00	ш	\$	250.00			х	\$	300.00	=	\$ 300.00
	SUBTO	OTAL SCHE	DULE B	88			88	\$	37,422.00		\$ -	8			88 88 88	\$ 38,320.00
	TOTAL BASE BID : (SCHEDULE A + SCHE	DULE B)		88	888		8	\$	149,191.00		\$.	8			88	\$ 162,720.00

*NOTICE: Bid award is contingent upon vendor meeting minimum specifications and formal authorization by City officials."

CERTIFIED:

P. Vice, Purchasing Manager

** Denotes Calculation Error

CROSSOVER ROAD TREE PLANTING-PHASE I

TOWNSHIP ST. TO JOYCE BLVD.

for the

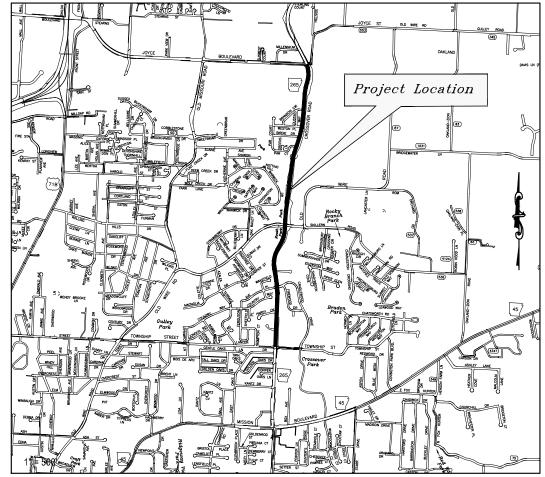
City of Fayetteville

PLAN INDEX

SHEET NO.	DESCRIPTION
1	COVER & INDEX
2	PLAN SHEET
3	PLAN SHEET
4	PLAN SHEET
5	PLAN SHEET
6	PLAN SHEET
7	PLAN SHEET
8	PLAN SHEET
9	LANDSCAPE DETAILS AND NOTES
10	IRRIGATION DETAILS AND NOTES
TC-1	TRAFFIC CONTROL
TC-2	TRAFFIC CONTROL
TC-3	TRAFFIC CONTROL
SHS-1	STANDARD HIGHWAY SIGNS
SHS-2	STANDARD HIGHWAY SIGNS



ARK.HWY.DIST.NO.4



VICINITY MAP

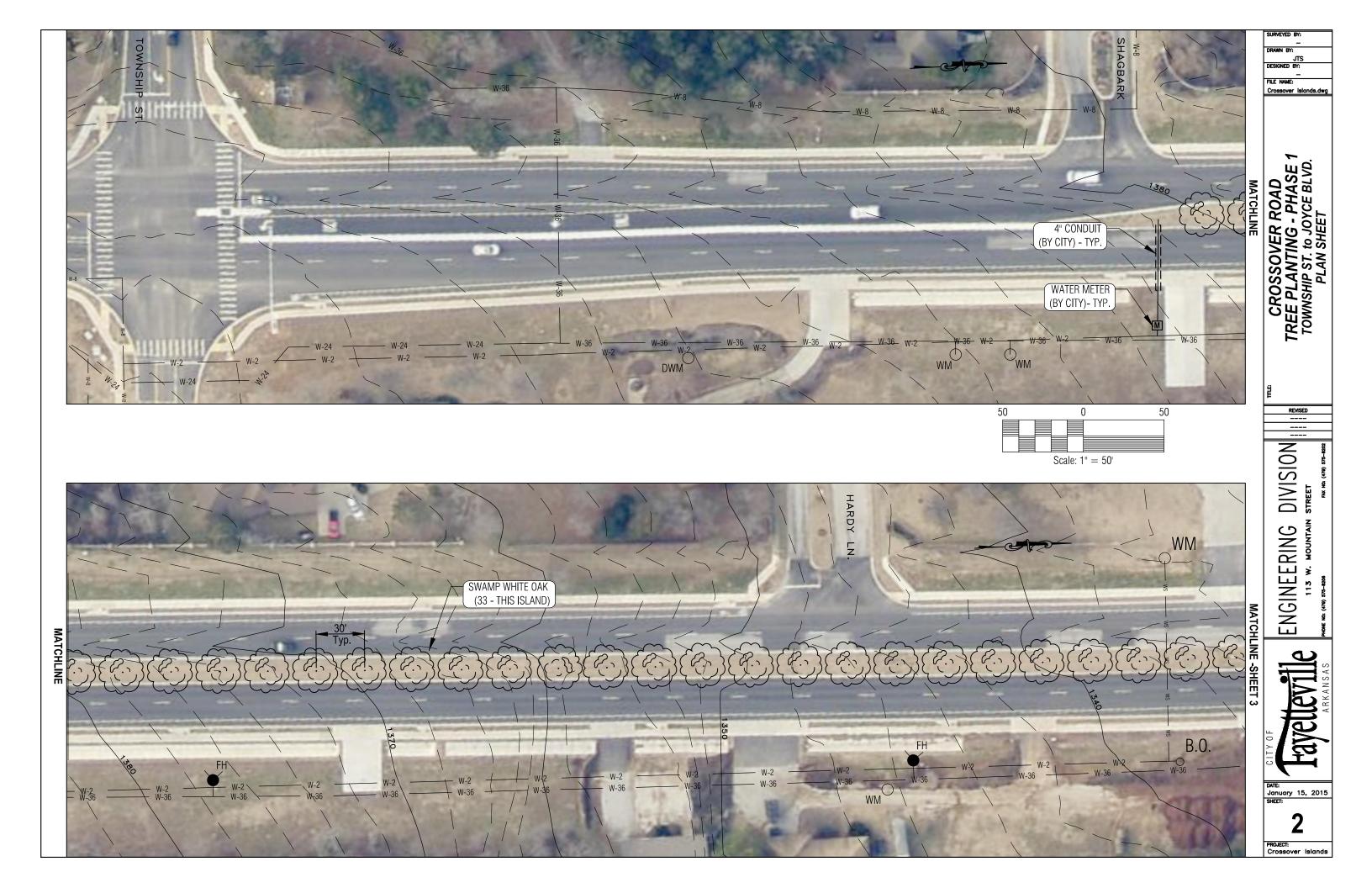


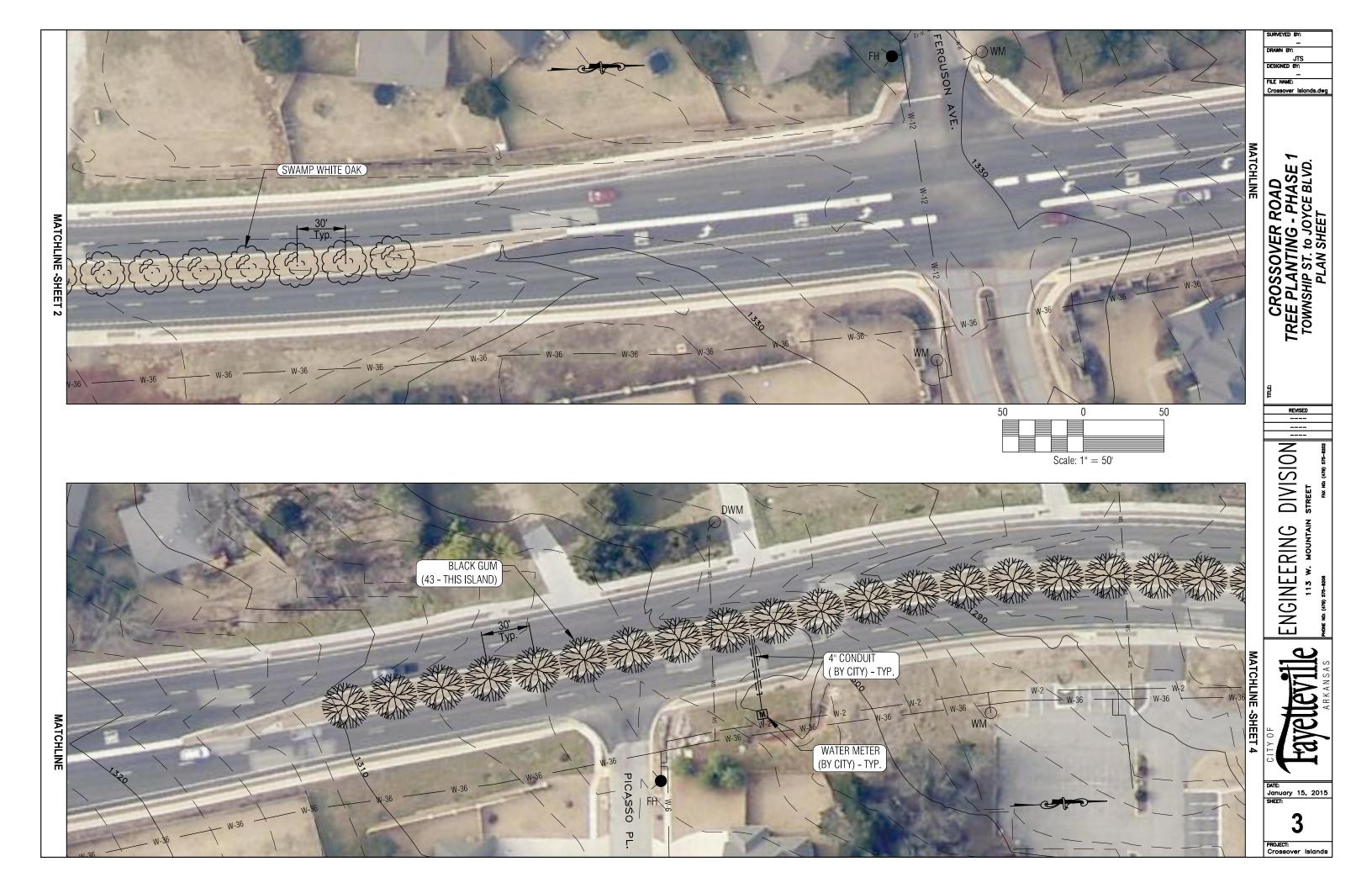


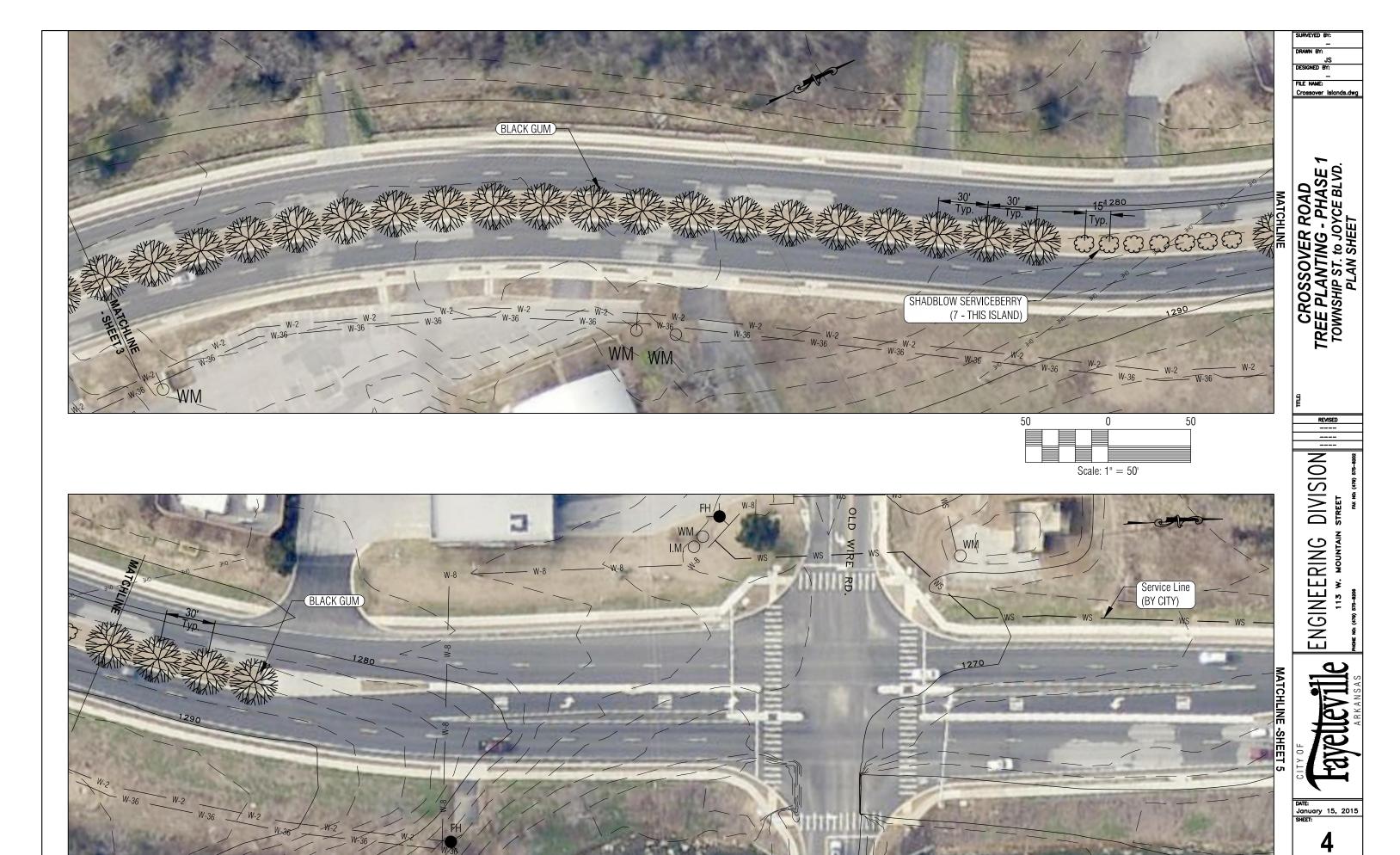
ENGINEERING DIVISION

PHONE: (479) 575-8206

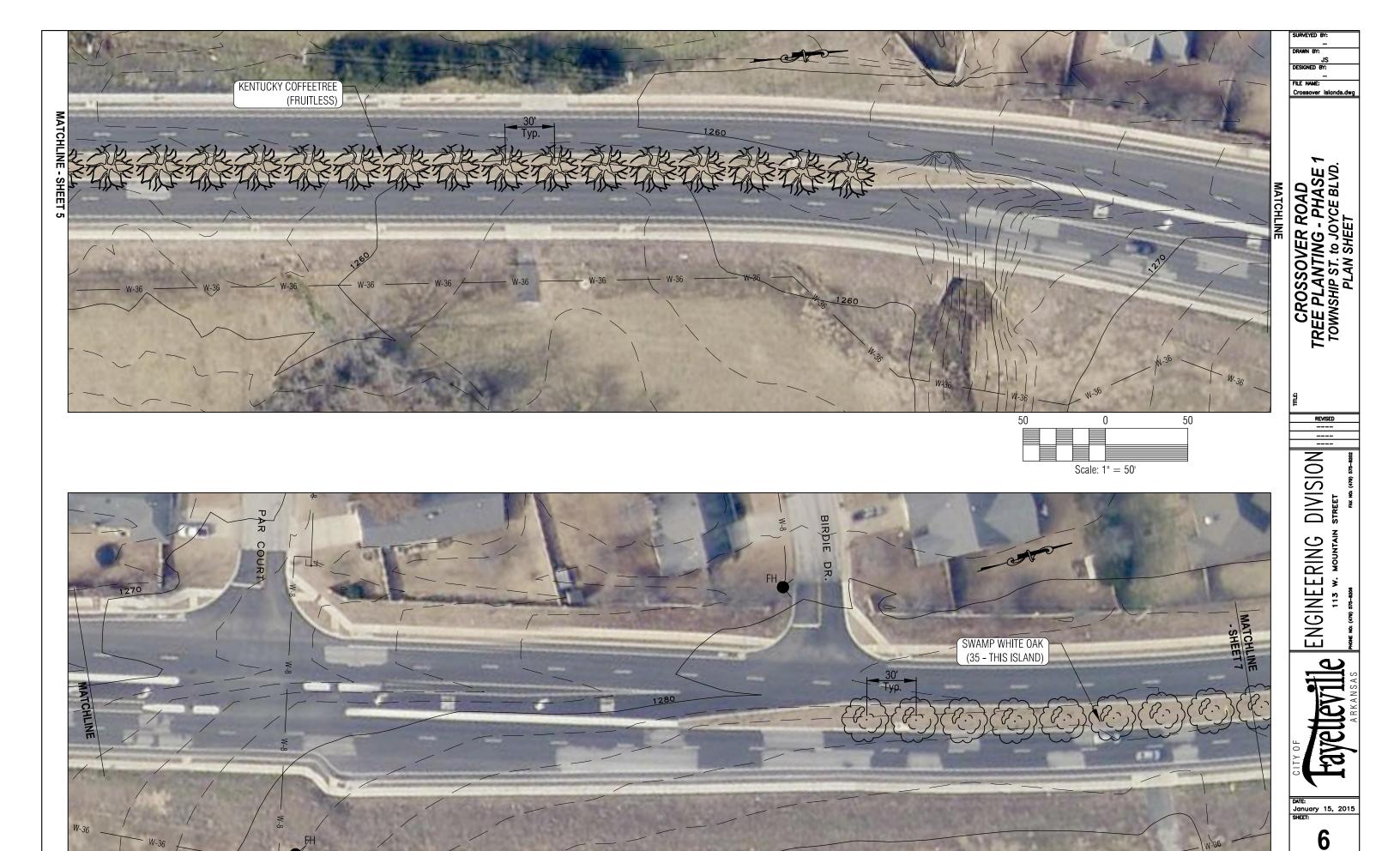
FAX NO: (479) 575-8202 PROJECT: ENGR. No. 8126











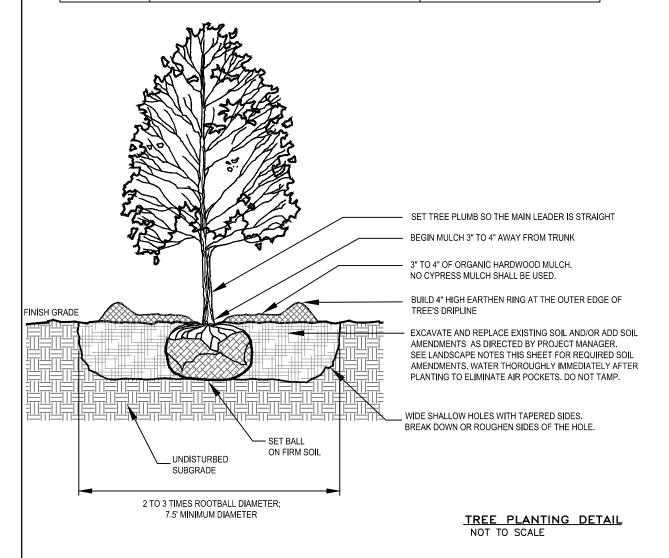
PROJECT: Crossover Islands



TREE PLANTING NOTES:

- 1. TREES SHALL BE 2" CALIPER MINIMUM.
- 2. THE HOLE FOR THE TREE SHALL BE EXCAVATED 2-3 TIMES THE SIZE OF THE ROOT BALL; MINIMUM DIAMETER SHALL BE 7.5 FEET.
- 3 STAKE ONLY IF NECESSARY AND AS DIRECTED BY THE PROJECT MANAGER
- 4. REMOVE ANY TWINE, STEEL WIRE, ROPE, FLAGGING, WRAPPING, OR GUARDS FROM TREE.
- 5. PRUNE ONLY DEAD OR BROKEN BRANCHES OR DOUBLE LEADERS AT TIME OF PLANTING.
- 6. ROOTBALL ROOT COLLAR SHALL BE VISIBLE. REMOVE EXCESS SOIL FROM TOP OF BALL IF NEEDED. SET TOP OF BALL 1" TO 2" ABOVE FINISHED GRADE TO ALLOW FOR SETTLING. AFTER SETTING BALL IN PLANTING HOLE, CUT AWAY OR REMOVE THE ENTIRE WIRE BASKET. CUT OR REMOVE ALL ROPES OR TWINE FROM BALL. CUT AWAY OR REMOVE BURLAP. IF ROOTBALL BEGINS FALLING APART DURING INSTALLATION OR WHILE REMOVING THE WIRE BASKET, CUT AWAY ONLY HALF OF THE BURLAP.

TREE/SHRUB PLANTING LIST						
COMMON	SWAMP WHITE OAK	LONDON PLANETREE	BLACKGUM	SHADBLOW SERVICEBERRY		
BOTANICAL	QUERCUS BICOLOR	PLATANUS X ACERIFOLIA	GYMNOCLADUS DIOICUS(FRUITLESS CULTIVAR REQUIRED)	NYSSA SYLVATICA	AMELANCHIER CANADENSIS	
CULTIVARS		OPTIONAL: "COLUMBIA" OR "LIBERTY"	REQUIRED: "ESPRESSO" OR "J.C. MCDANIEL (PRARIE TITAN)"			
MINIMUM SIZE	2" B&B	2" B&B	2" B&B	2" B&B	5 GALLON	
SPACING	30' O.C.	30' O.C.	30' O.C.	30' O.C.	15' O.C.	
LOCATION	AS SHOWN ON PLAN	AS SHOWN ON PLAN	AS SHOWN ON PLAN	AS SHOWN ON PLAN	AS SHOWN ON PLAN	
TOTAL NUMBER	MBER 70 13		55	43	31	
ALTERNATIVE TREES	: IN THE EVENT THAT A SPEC	CIES IS NOT AVAILABLE, REPI	LACE WITH ONE OF THE FOL	LOWING (REFERENCE SP2 FO	OR REQURIEMENTS)	
COMMON		THORNLESS HONEYLOCUST		NUTTA	LL OAK	
BOTANICAL	GLEDI	TSIA TRIACANTHOS VAR. INE	RMIS	QUERCUS NUTA	ALLI OR TEXANA	
CULTIVARS	OPTIONAL:	"STREET KEEPER" OR "SHAD	EMASTER"		•	

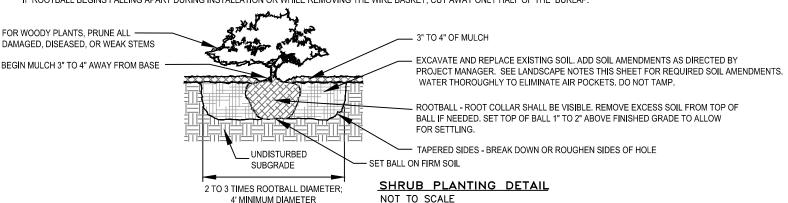


LANDSCAPE NOTES:

- 1. BEFORE PLANTING, AMEND SOIL AT PLANTING LOCATION AS SHOWN ON TREE/SHRUB PLANTING DETAIL AND FURTHER DESCRIBED BELOW:
 - a. Field ID: CANDLEW (Sample Number: 3226783) use: 2/3 existing soil with 1/3 mix of 50% topsoil and 50% compost at planting location. Mix in powder micro/macro nutrient product containing mycorrhizal fungi stimulator
 - b. Field ID: FULXO (Sample Number: 3226785) use: 2/3 existing soil with 1/3 mix of 50% topsoil and 50% compost at planting location. Mix in powder micro/macro nutrient product containing mycorrhizal fungi stimulator.
 - c. Field ID: FIREST (Sample Number: 3226786) use: existing soil. Mix in powder micro/macro nutrient product containing mycorrhizal fungi stimulator at planting location.
- 2. REQUIRED AMENDMENTS FOR EACH TREE/SHRUB LOCATION WILL BE DETERMINED IN THE FIELD. FOR BIDDING PURPOSES, 1/3 OF THE TREES/SHRUBS WILL BE ASSUMED TO RECEIVE TREATMENT NOTED IN 1(a) ABOVE, 1/3 WILL BE ASSUMED TO RECEIVE (1b), AND 1/3 WILL BE ASSUMED TO RECEIVE 1(c).
- 3. SOIL Ph SHOULD BE ABOVE 5 PREFERABLY BETWEEN 6.0 AND 6.5. IMPORTED SOIL SHOULD BE TESTED TO DETERMINE LIME AND FERTILIZER RATES.
- 4. ALL PLANTS MUST BE HEALTHY, VIGOROUS AND FREE OF PESTS AND DISEASE.
- 5. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL
- 6. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED ON THE PLANT LIST.
- 7. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED, UNLESS SPECIFIED OTHERWISE, AND MUST MEET ALL REQUIREMENTS SPECIFIED.
- 8. ALL TREES AND SHRUBS SHALL BE INSTALLED PER STANDARD CITY OF FAYETTEVILLE PLANTING DETAILS.
- 9. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE CITY OF FAYETTEVILLE BEFORE, DURING, AND AFTER CONSTRUCTION.
- 10. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED WITH A 4" LAYER OF ORGANIC HARDWOOD MULCH. MULCH SHALL NOT BE PLACED IMMEDIATELY ADJACENT TO TREE TRUNKS, BUT SHALL BE KEPT AT LEAST 3" FROM ROOT COLLAR AT THE SOIL LINE. MULCH SHALL BE CLEAN, FREE OF DEBRIS, WEEDS, DISEASE, INSECTS, PESTS, EGGS, OR LARVAE. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 11. MULCH WILL BE PROVIDED BY CITY OF FAYETTEVILLE, HOWEVER, CONTRACTOR WILL BE RESPONSIBLE FOR PICKUP/DELIVERY AND INSTALLATION. THE FACILITY IS LOCATED AT 1708 S. ARMSTRONG AVE. AND ARRANGEMENTS FOR PICKUP DAY/TIME CAN BE MADE BY CONTACTING JEFF COLES AT (479) 575-8227.
- 12. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION AT NO COST TO THE OWNER
- 13. ANY DAMAGE TO EXISTING FEATURES, INCLUDING UTILITIES, NOT SPECIFICALLY CALLED OUT FOR REMOVAL/REPLACEMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE FIXED OR REPLACED AS DIRECTED BY AND AT NO ADDITIONAL COST TO THE OWNER.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- 15. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING MATERIAL (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) IN ALL PLANTING AREAS DURING CONSTRUCTION UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER. REFERENCE SP-2 FOR ADDITIONAL WARRANTY REQUIREMENTS.
- 16. ANY MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
- 17. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO ANY PLANTING. LOCATE ALL UTILITIES, IRRIGATION LINES AND SITE LIGHTING CONDUITS BEFORE CONSTRUCTION BEGINS
- 18. ALL STREET TREES SHALL BE 2" MINIMUM CALIPER, WITH A SINGLE DOMINATE CENTRAL LEADER. MULTI-LEADERED TREES WILL NOT BE ACCEPTABLE WITHOUT PRIOR APPROVAL FROM

SHRUB PLANTING NOTES:

- 1. SHRUBS SHALL BE MINIMUM 5 GALLON
- 2. THE HOLE FOR THE SHRUB SHALL BE EXCAVATED 2-3 TIMES THE SIZE OF THE ROOT BALL; MINIMUM DIAMETER SHALL BE 4 FEET
- 3. REMOVE ANY TWINE, ROPE, FLAGGING, WRAPPING, OR GUARDS FROM SHRUB.
- 4. PRUNE ONLY DEAD OR BROKEN BRANCHES OR DOUBLE LEADERS AT TIME OF PLANTING.
- 5. ROOTBALL ROOT COLLAR SHALL BE VISIBLE. REMOVE EXCESS SOIL FROM TOP OF BALL IF NEEDED. SET TOP OF BALL 1" TO 2" ABOVE FINISHED GRADE TO ALLOW FOR SETTLING. AFTER SETTING BALL IN PLANTING HOLE, CUT AWAY OR REMOVE THE ENTIRE WIRE BASKET. CUT OR REMOVE ALL ROPES OR TWINE FROM BALL. CUT AWAY OR REMOVE BURLAP. IF ROOTBALL BEGINS FALLING APART DURING INSTALLATION OR WHILE REMOVING THE WIRE BASKET, CUT AWAY ONLY HALF OF THE BURLAP.



FILE NAME:

Crossover Islands.dw

CROSSOVER ROAD
TREE PLANTING - PHASE 1
TOWNSHIP ST. to JOYCE BLVD.
LANDSCAPE DETAILS AND NOTES

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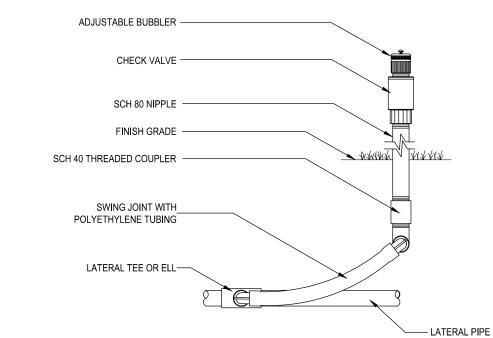
anuary 15, 2015 SHEET



IRRIGATION NOTES:

- 1. CITY OF FAYETTEVILLE WILL PROVIDE WATER SERVICE, INCLUDING TAPPING THE MAIN, INSTALLING REQUIRED SERVICE LINE AND INSTALLING WATER METER. THESE ITEMS SHOULD NOT BE INCLUDED
- 2. ALL OTHER ITEMS NOT MENTIONED IN NOTE 1 ABOVE ASSOCIATED WITH PROVIDING A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM SHALL BE PROVIDED IN BASE BID.
- 3. IRRIGATION SYSTEM SHALL INCLUDE A SINGLE EMITTER AT EACH PLANT. EMITTERS SHALL BE CAPABLE OF DISTRIBUTING 0.6 GALLONS PER HOUR EVENLY TO EACH PLANT THROUGHOUT EACH ZONE.
- 4. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS SHOWING PROPOSED IRRIGATION LAYOUT, INCLUDING NUMBER OF ZONES PROPOSED, FOR OWNER APPROVAL PRIOR TO ORDERING OR INSTALLING ANY IRRIGATION COMPONENTS. THE DRAWINGS SHALL INCLUDE ALL ITEMS REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL IRRIGATION SYSTEM.
- 5. CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, INCLUDING PLUMBING PERMITS, ASSOCIATED WITH INSTALLATION OF SYSTEM.

- 1) FINISH GRADE
- (2) FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS:
- (3) EASY FIT COUPLING
- (4) SUBTERRANEAN EMITTER BOX
- (5) POLYETHELENE SUBSURFACE TUBING
- 6 PVC SCH 40 EL
- 7 3-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- (8) BRICK (1 OF 2)



RISER ASSEMBLY

1. ALLOW A MINIMUM OF 6-INCHES OF TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

(3) (4) (5)

FLUSH POINT

CURB & GUTTER TO METER/WATER SERVICE TREE (TYP ZONE CONTROL KIT WITH BATTERY POWERED CONTROLLER (SIZED TO ACCOMODATE LATERAL FLOW DEMAND) PVC SUBSURFACE MANIFOLD PIPE (SCH. 40) SHRUB (TYP.) 1/2" POLYETHYLENE SUBSURFACE TUBING: FULLY ADJUSTABLE BUBBLER (SEE SPECIFICATIONS)

IRRIGATION LAYOUT

MULTIPLE TREE/SHRUB DETAIL

PROJECTED CANOPY LINE OF TREE OR SHRUB (TYPICAL)

7 ROOT BALL (TYPICAL)

PVC SCH 40 TEE OR EL

(3)

FLUSH POINT (SEE DETAIL THIS SHEET)

BACKFLOW PREVENTER WITH BOX (PER CITY OF FAYETTEVILLE SPECIFICATIONS)

1. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE

CHANGE OF DIRECTION.

FILE NAME: Crossover Islands.dwg

CROSSOVER ROAD
TREE PLANTING - PHASE 1
TOWNSHIP ST. to JOYCE BLVD.
IRRIGATION DETAILS AND NOTES

DIVISION

ENGINEERING

January 15, 2015 SHEET:

GARLAND AVENUE TREE PLANTING

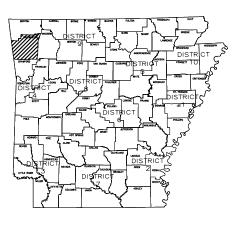
MT. COMFORT RD. TO JANICE AVE.

for the

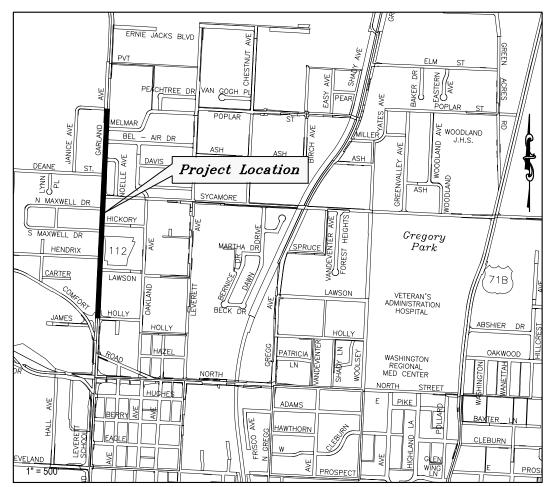
City of Fayetteville

PLAN INDEX

SHEET NO.	DESCRIPTION
1	COVER & INDEX
2	PLAN SHEET
3	PLAN SHEET
4	PLAN SHEET
5	LANDSCAPE DETAILS AND NOTES
6	IRRIGATION DETAILS AND NOTES
TC-1	TRAFFIC CONTROL
TC-2	TRAFFIC CONTROL
TC-3	TRAFFIC CONTROL
SHS-1	STANDARD HIGHWAY SIGNS
SHS-2	STANDARD HIGHWAY SIGNS



ARK.HWY.DIST.NO.4



VICINITY MAP

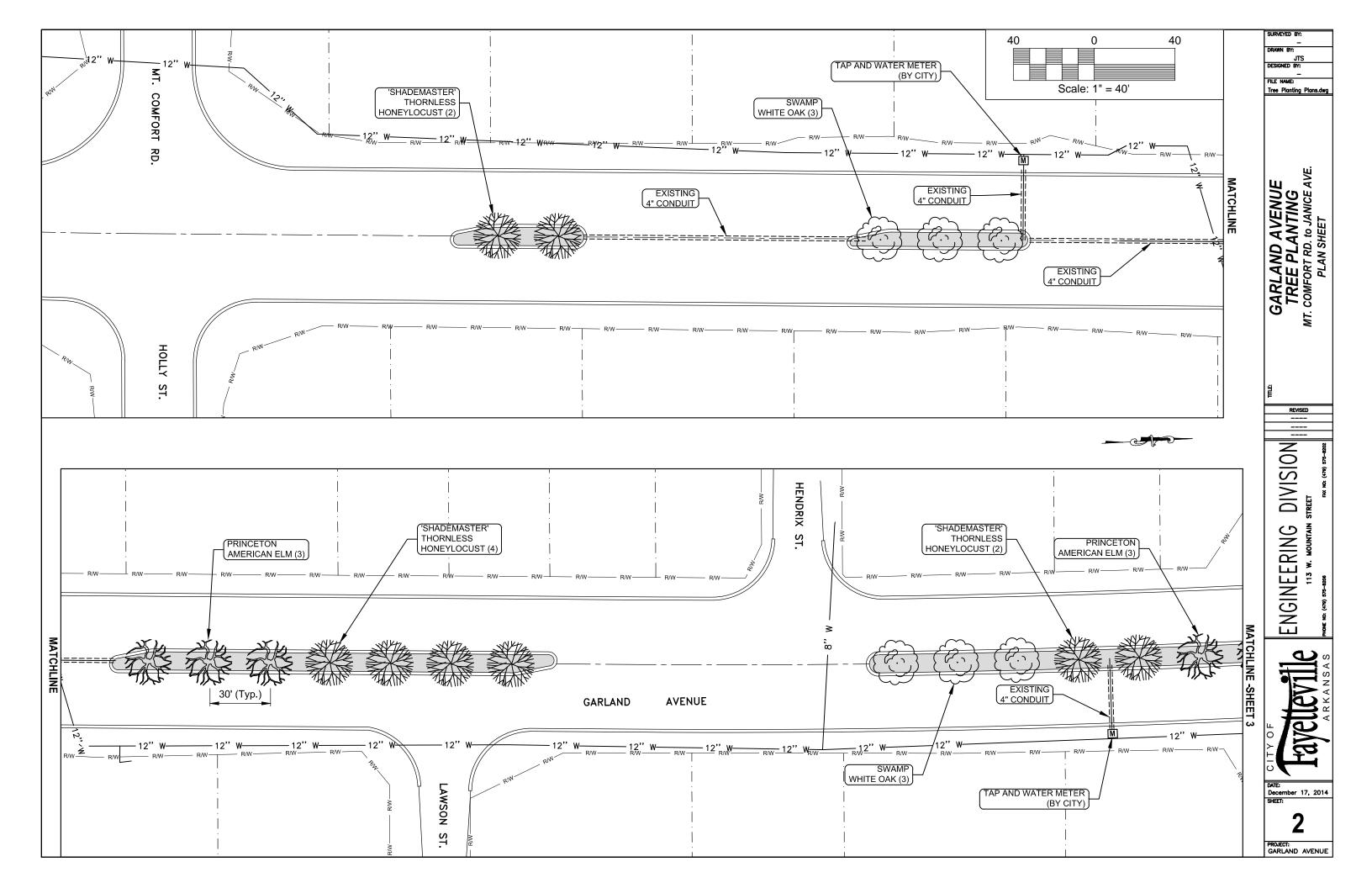


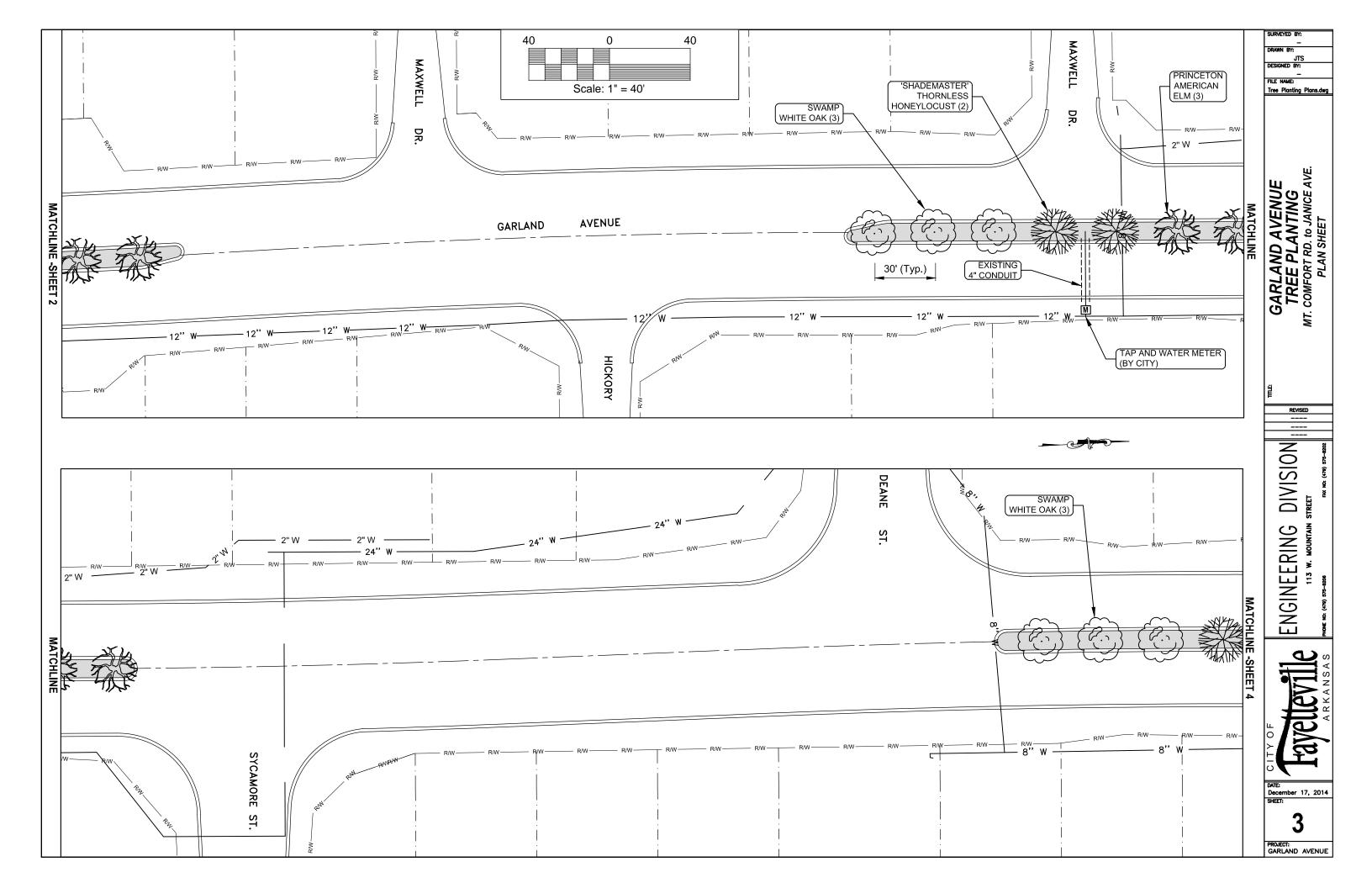
ENGINEERING DIVISION

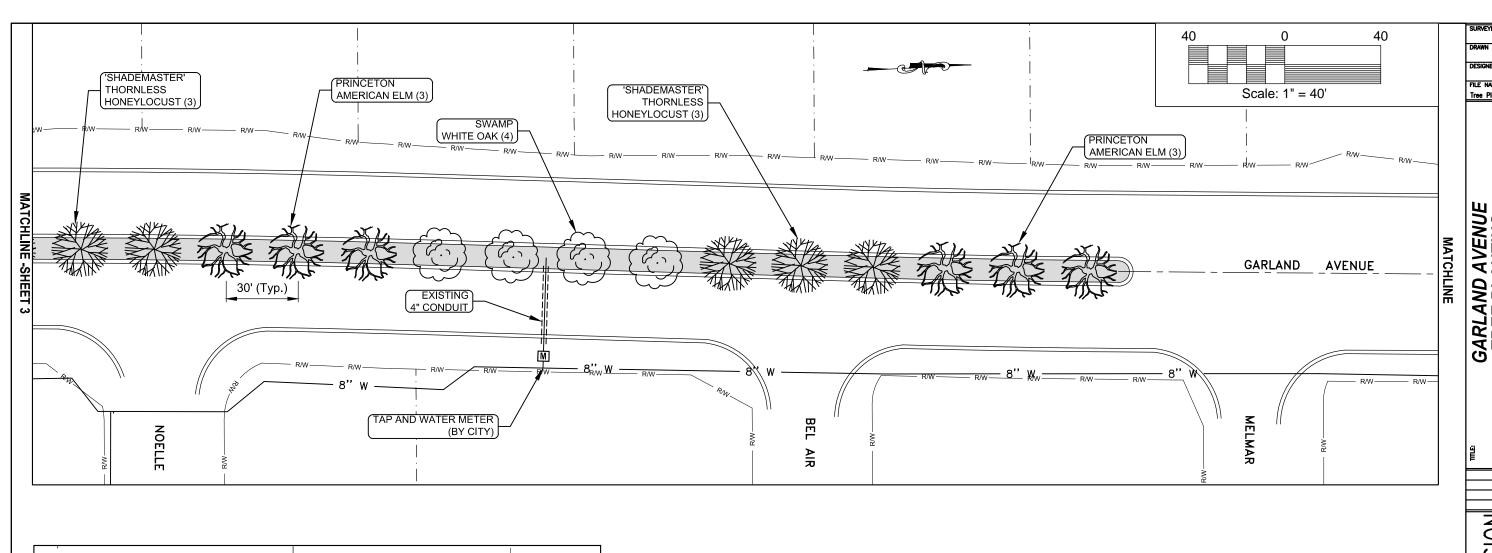
PHONE: (479) 575-8206

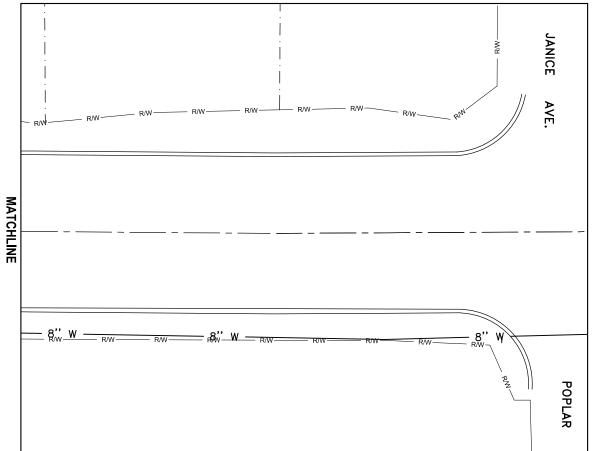
FAX NO: (479) 575-8202











PLANT SCHEDULE

SIZE(min.)	I. COND.	COMMON NAME	BOTANICAL NAME	
2"	B&B ·	Swamp White Oak (SWO)	Quercus bicolor	
2"	B&B ·	'Shademaster Thornless Honeylocust (HL)	Gleditsia triacanthos var. inermis	
2"	B&B ·	Princeton American Elm (PE)	Ulmus americana 'Princeton'	器
	B&B -	Princeton American Elm (PE)	Ulmus americana 'Princeton'	验

Tree Planting Plans.dwg

GARLAND AVENUE TREE PLANTING MT. COMFORT RD. to JANICE AVE. PLAN SHEET

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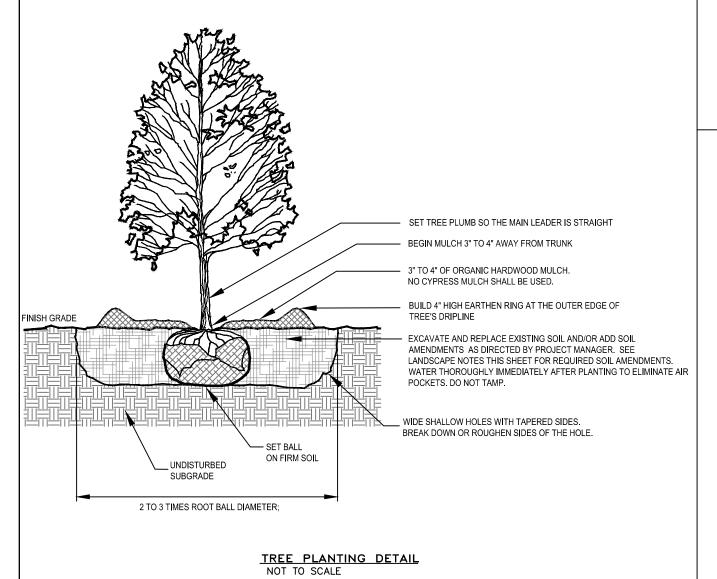
DIVISION

ENGINEERING
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PROJECT: GARLAND AVENUE

TREE PLANTING NOTES:

- 1. TREES SHALL BE 2" CALIPER MINIMUM.
- 2. THE HOLE FOR THE TREE SHALL BE EXCAVATED 2-3 TIMES THE SIZE OF THE ROOT BALL.
- 3. STAKE ONLY IF NECESSARY AND AS DIRECTED BY THE PROJECT MANAGER.
- 4. REMOVE ANY TWINE, STEEL WIRE, ROPE, FLAGGING, WRAPPING, OR GUARDS FROM TREE.
- 5. PRUNE ONLY DEAD OR BROKEN BRANCHES OR DOUBLE LEADERS AT TIME OF PLANTING.
- 6. ROOTBALL ROOT COLLAR SHALL BE VISIBLE. REMOVE EXCESS SOIL FROM TOP OF BALL IF NEEDED. SET TOP OF BALL 1" TO 2" ABOVE FINISHED GRADE TO ALLOW FOR SETTLING. AFTER SETTING BALL IN PLANTING HOLE, CUT AWAY OR REMOVE THE ENTIRE WIRE BASKET. CUT OR REMOVE ALL ROPES OR TWINE FROM BALL. CUT AWAY OR REMOVE BURLAP. IF ROOTBALL BEGINS FALLING APART DURING INSTALLATION OR WHILE REMOVING THE WIRE BASKET, CUT AWAY ONLY HALF OF THE BURLAP.



LANDSCAPE NOTES:

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FILE NAME: Tree Planting Plans.dwg

GARLAND AVENUE
TREE PLANTING
MT. COMFORT RD. to JANICE AVE.
LANDSCAPE DETAIL AND NOTES

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ENGINEERING



GARLAND AVE

IRRIGATION NOTES:

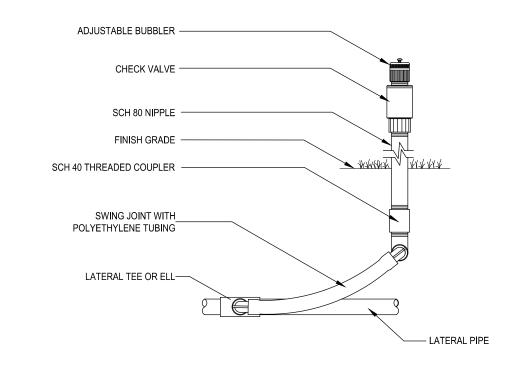
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(3) (4) (5)

- (2) FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS:
- (3) EASY FIT COUPLING

1 FINISH GRADE

- (4) SUBTERRANEAN EMITTER BOX
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- 6 PVC SCH 40 EL
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- (8) BRICK (1 OF 2)



RISER ASSEMBLY

1. ALLOW A MINIMUM OF 6-INCHES OF TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

FLUSH POINT

CURB & GUTTER TO METER/WATER SERVICE TREE (TYP ZONE CONTROL KIT WITH BATTERY POWERED CONTROLLER (SIZED TO ACCOMODATE LATERAL FLOW DEMAND)

> **IRRIGATION LAYOUT** MULTIPLE TREE DETAIL

1. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

ENGINEERING

FILE NAME:

Tree Planting Plans.dwg

GARLAND AVENUE
TREE PLANTING
MT. COMFORT RD. to JANICE AVE.
IRRIGATION DETAILS AND NOTES

REVISED

DIVISION

PROJECT: GARLAND AVE

2 PVC SUBSURFACE MANIFOLD PIPE (SCH. 40)

(3) PVC SCH 40 TEE OR EL

1/2" POLYETHYLENE SUBSURFACE TUBING:

FULLY ADJUSTABLE BUBBLER (SEE SPECIFICATIONS)

PROJECTED CANOPY LINE OF TREE OR SHRUB (TYPICAL)

(7)ROOT BALL (TYPICAL)

FLUSH POINT (SEE DETAIL THIS SHEET)

BACKFLOW PREVENTER WITH BOX (PER CITY OF FAYETTEVILLE SPECIFICATIONS)