### **UTILITY PERMIT**

PERMIT NO: 2018-H-294-173

### STATE ROAD INFORMATION

County:	Section:	State Road No:	Beginning Mile Post:	Ending Mile Post:
DUVAL		21		

### APPLICANT INFORMATION

The Utility Agency Owner (UAO) shall be identified in this Applicant Information Box. When the UAO is a City or County and desires to have the Utility Builder make a joint permit applicant, as prescribed in Section 2.1(4) of the 2017 Utility Accommodation Manual (UAM), the Utility Builder shall also be identified in this Applicant Information Box. A Utility Builder alone cannot apply for a utility permit without the City or County adding them as a joint applicant.

Utility Agency/Owner (UAO) Utility Builder (only applicable when the UAO is a City or County) Name: JEA (Elizabeth DiMeo) Name: JEA (Elizabeth DiMeo) Contact Person: Contact Person: 21 W. Church Street T-4 Address: Address: N/A City: Jacksonville City: N/A State: **FLORIDA** State: N/A Zip: 32202 Zip: N/A Telephone: (904) 665-8139 Telephone: Email: dimeea@jea.com Email:

### WORK DESCRIPTION

The Applicant(s) requests permiss below and as depicted in the incorp	sion from the Florida Department of Transportation (FDOT) to construct, operate, and maintain the utili- porated documentation.	ities as de	scribed
	lle: Installation of a JEA 30-inch sewage force main in a 48-inch steel casing pipe installed by aug 21) between City of Jacksonville streets Confederate Point Road and Cedar Hills Boulevard.	er jack an	ıd bore
Utility Work No: JEA Project 800	03534		
	Additional sheets are attached and are incorporated into this permit	Yes 🗵	No □
I	For FDEP certification, the FDOT agency report is attached in accordance with UAM Section 2.4.1 (13)	Yes □	No ⊠

### TRAFFIC CONTROL (TCP)

☐ The TCP will comply with the following 600 series	index(es) 600, 603, 604, 613,	660	
☐ A TCP has been attached and incorporated into this	permit application in complian	ce with UAM Section 2.4.2	
MOT Technician's contact information (may be supplied	ed at the two (2) business day n	otification to FDOT):	
Name:	Telephone	Email:	

### COMMENCEMENT OF WORK

The UAO and/or Utility Builder shall commence actual construction in good faith within sixty (60) calendar days after approval of the permit application. If the beginning date is more than sixty (60) calendar days from the date of approval, the UAO and/or Utility Builder must review the permit with the FDOT Approving Engineer listed to make sure no changes have occurred to the transportation facility that would affect the permit's continued approval. The UAO and/or Utility Builder shall make good faith efforts to expedite the work and complete the work within the calendar days indicated.

Anticipated Start Date: 9/4/2018

Calendar days needed to completed: 45

# **APPROVED**

2018-H-294-173 Julian McKinley 6/12/2018

### UTILITY PERMIT

PERMIT NO: 2018-H-294-173

### APPLICANT SIGNATURE

By the below signature(s) the UAO and/or Utility Builder agree(s) to construct, operate, and maintain the work as noted in the above Work Description, shown in plans and incorporated documents, in compliance with the UAM, all instructions noted in the FDOT Special Instructions Box, and special instructions incorporated into this permit. The UAO and/or Utility Builder declares, the location of all existing utilities that it owns or has an interest in, both aerial and underground, are accurately shown on the plans of the work areas. In accordance with UAM Section 2.8, the UAO and/or Utility Builder further declares that a letter of notification was delivered to the owners of other facilities within the work areas and that those listed below are the only facility owners known to be involved or potentially impacted by the proposed work.

Date Notified: Name of other facility owners (attach additional sheets if necessary).

8/7/2017 FDOT ITS
8/7/2017 AT&T
8/7/2017 FPL Fibernet
8/7/2017 COJ Traffic Signal
8/7/2017 JEA Power
8/7/2017 JEA FOC
8/7/2017 Comcast
8/7/2017 Teco Gas

8/7/2017 FDOT Lighting-DBI

Utility Agency/Owner Utility Builder (when applicable)

Signature: ELIZABETH DIMEO (digital Date: 4/11/2018 Signature: N/A Date: N/A

signature)

Name (printed): **ELIZABETH DIMEO**Name (printed): **N/A** 

Title: N/A

### FDOT PROJECT INFORMATION

Pursuant to UAM Section 2.1(10), the utility work is within FDOT projects listed below and must have a Utility Work Schedule for each project approved prior to commencement of work within the FDOT project limits:

There are NO FDOT constructions (proposed or underway). This work is NOT related to an approved Utility Work Schedule.

### FDOT SPECIAL INSTRUCTIONS

In accordance with UAM Section 2.7, FDOT incorporates the below and attached special instructions into this permit.

\*\*UTILITY PERMIT WORK SHALL NOT COMENCE WITHIN FDOT RIGHT OF WAY BEFORE MAY 01, 2019.\*\*

### PERMIT APPROVAL

By signature below, FDOT gives permission to the UAO and /or Utility Builder to construct, operate, and maintain the utilities indicated in this Utility Permit in compliance with the UAM, all incorporated documents, and special instructions. Any changes to the approved work must be approved by the FDOT's Approving Engineer and attached and incorporated into this permit in accordance with UAM Section 2.11.

Approving Engineer: Julian McKinley (digital signature) Date: 6/12/2018

Name: Julian McKinley

Title: N/A

Notification of Utility Work to be provide to Telephone (904) 360-5376 or Email: richard.harvey@dot.state.fl.us

An FDOT Representative is required to be present on the worksite prior to commencement of work. Yes 🗵 No 🗆

Rep. Name: Richard Harvey Telephone (904) 360-5372 Email: richard harvey @col.s atc.f. us

Rule 14-46.001 F.A.C. Page 3 of 3

# Florida Department of Transportation

Dec 14, 2016

**UTILITY PERMIT** 

PERMIT NO: 2018-H-294-173

### **CERTIFICATION**

I, the undersigned UAO and/or Utility Builder, hereby CERTIFY that the utilities were constructed and inspected in compliance with the UAM all incorporated documents, and special instructions. Pursuant to UAM Section 2.11, all changes have been approved by the FDOT's Approving Engineer and incorporated into this permit along with all other material certifications, test results, bore logs, approved plans changes, as-built plans or other required documentation.

I also CERTIFY that work began on MM/DD/YYYY and was completed on MM/DD/YYYY and that the area was left in as good or better condition than when the work began.

Utility Agency/Owner

Utility Builder (when applicable)

Signature: N/A

Name (printed): N/A

Title: N/A

Title: N/A

### FINAL INSPECTION OF WORK

	The work was inspected and found to be in non-compliance as noted below	w:
	None	
	1 0 1	ance and/or FDOT has no outstanding issues that need to be addressed by the se the UAO and/or Utility Builder of their continuing responsibilities pursuant tructions.
FDO	T Inspector: N/A	Date: N/A
	Name: N/A	
	Title: N/A	

**APPROVED** 

2018-H-294-173 Julian McKinley 6/12/2018

# CONSTRUCTION DRAWINGS FOR

# WEST GRID LENOX TO TIMUQUANA FORCE MAIN IMPROVEMENTS WILSON TO TIMUQUANA SEGMENT PREPARED FOR:

# CITY OF JACKSONVILLE NOTES

# **GENERAL**

All construction shall be performed in accordance with the approved plans and comply with all standard city policies and practices. City approval is contingent upon any required state or federal permit approvals such as those from the Department of Environmental Protection or the St. Johns River Water Management District (SJRWMD).

## **UTILITY WORK**

Plan approval through Development Services does not include utilities. Proposed water, sewer or electric construction must be approved separately through the respective utility company. In most cases, this will be:

JEA JEA Tower - 4th Floor 21 W. Church Street

Jacksonville, FL 32202 http://www.jea.com/business/services/devandbuild/developer

# WORK WITHIN THE RIGHT-OF-WAY

CITY: Except for new subdivision infrastructure construction, all work performed within a City of Jacksonville right-of-way or easement requires a Right-of-way Permit. The contractor performing the proposed work must have a current Right-of-way Bond on file with Development Services. Right-of-way Permit applications are processed at:

Development Services Customer Service Counter Edward Ball Building, 2nd Floor

214 N. Hogan St. Jacksonville, FL 32202

(904) 255-8572

STATE: All work performed within a state right-of-way requires a permit from the Florida Department of Transportation (FDOT). It is the developer's responsibility to obtain required FDOT permits or maintenance-of-traffic approvals for work within FDOT right-of-ways. The FDOT regional office can be contacted at (904) 825-5036 Any changes to the approved plans needed for FDOT approval must be submitted to Development Services as revisions.

Adjacent State Roads:

RAILROAD: Railroad companies may require special approvals or permits to work within their right-of-ways. It is the developer's responsibility to obtain permission from any railroad right-of-way owner before performing any work within their right-of-way.

# STORMWATER

Annual reports in compliance with the SJRWMD stormwater permits are required from the maintenance entity of all stormwater management facilities. Send copies of the reports to:

Engineering and Construction Managem Edward Ball Building, 10th Floor

214 N. Hogan St. Jacksonville, FL 32202

http://www.coj.net/Departments/Public+Works/Engineering+and+Construction+Management/

The owner of any project one (1) acre or larger is required to provide a Notice of Intent (NOI) in accordance with criteria set forth in the city's NPDES

permit within 48 hours of beginning construction. Send NOI and NOI fee to:

Florida Department of Environmental Protection NPDES Stormwater Notices Center, Mail Station #25 2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(866) 336-6312 http://www.dep.state.fl.us/water/stormwater/npdes

The contractor shall contact the Environmental Quality Division, Erosion and Sedimentation Control Section (ESC) to provide verification that applicable

stormwater permits have been obtained and to schedule a pre-construction ESC site inspection:

No lane closures allowed from 7 a.m. till 9 a.m. and from 4 p.m. till 6 p.m.

407 North Laura Street, Third Floor Jacksonville, FL, 32202 (904) 255-7222

# FIRE MARSHALL

Plan review and approval does not relieve the contractor of complying with all applicable State Fire Codes.

Underground mains and hydrants shall be installed, completed, and in service prior to construction work.

Underground contractor shall submit to the Fire Marshall for approval complete specs for all underground pipe and fittings relating to fire protection PRIOR to installation and inspection. Contractor shall include manufacturer's name and pipe ID along with contractor's state license number.

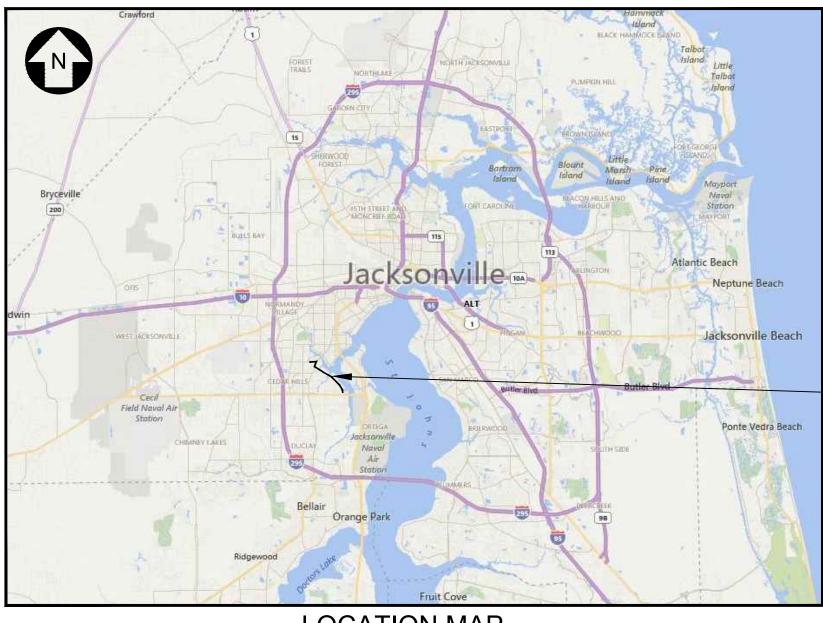
# LANDSCAPE

A Site Work Permit is required for this project.			
Tree Fund payment is due:	inches at \$	= \$	
Article 25 funds are due:	inches at \$	= \$	1 · · · · · · · · · · · · · · · · · · ·

Article 25 funds a	are due: inches at \$ = \$
TRAFFIC ENGI	NEERING
TRAFFIC SIGN	S
Metro Name (each)	
Standard (each)	
Stop/Yield (each)	
Design (per plat)	1 per plat
Installation (per hour)	1 per 2 signs (rounded up)
Streetlights Req	
	s change from time to time. Consult Attachment 8 of the Land Development Procedures Manual (http://ldpm.jaxdev.com/) for the ring for any sign installations.

Building Community®

JEA PROJECT NO.: 8003534
MM PROJECT NO.: 376869
PERMIT SUBMITTAL
APRIL 2018



LOCATION MAP SCALE: NTS

M

MOTT MACDONAL

MACDONALD

Mott MacDonald Florida, LLC

Architects Engineers Surveyors

AA - C0000035 EB - 0000155 LB - 0006783

10245 Centurion Pkwy. N., Suite 320

Jacksonville, Florida 32256

Telephone: (904) 203-1090

PROJECT LOCATION

IFB BID NO.:
BID DUE DATE:
TIME OF RECEIPT:
TIME OF OPENING:
BID PLACE:

PLAN APPROVAL

Date

Development Services Division (Chief)

Plan approval is valid for five years after the initial approval date. Revisions made after the initial approval date do not extend this five-year time frame.

PLAN APPROVAL IS SUBJECT TO THE FOLLOWING NOTES AND CONDITIONS:


# GENERAL PROJECT INFORMATION

-		
	GENERAL City Development Number	4161.234
	Concurrency Application Number	N/A
	Property Appraiser Number (RE #)	* (BELOW)
	Zoning Designation	RLD-60, PBF-2, RMD-B, CRO,
		CN, CCG-1, RLD-90, RMD-D
	Zoning Application(s) (if any)	N/A
	PUD Ordinance Number	N/A
	FIRM – Community – Panel	12031CO342H, 12031C0363H ,
		12031C0364H & 12031C0527H
	Flood Zones (Show in Plans)	X
	Base Flood Elev. (Show in Plans)	BFE: 4 & 21
	Vertical Datum Used for Project	NAVD 88
	JEA Availability Number	JEA PROJ. 8003534
	CLIDDIV/ICION	
	SUBDIVISION PSD Number	NI/A
		N/A
	City or Private Inspection	N/A
	Public or Private Roads	N/A
	Subdivision ("911") Disk Provided?	N/A
	NON-SUBDIVISION	
	North American Industry	23711
	Classification System (NAICS)	
	Impervious Area (Sq. Ft.)	NO CHANGE
ı	. , , ,	

WILSON BLVD, SUDBURY AVE, CEDAR HILLS BLVD, BLANDING BLVD, CONFEDERATE POINT RD AND ORTEGA FARMS RD RIGHT-OF-WAY.

APPROV

# SURVEY AND LOCATE DATA:

- □ ☑ 1. ALL ELEVATIONS ARE BASED ON NAVD 88 DATUM AND SHOWN IN FEET.
- 🔲 🔯 2. LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS, OR INCLUDED WITH BID SPECS.
- □ ☑ 3. EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES OR SUPPLEMENTED WITH AS-BUILT PLANS.
- ☑ 4. UNDERGROUND UTILITIES WERE LOCATED UTILIZING GROUND PENETRATING RADAR (GPR) AND A DIGITAL LOCATOR CONTRACTOR SHALL BE AWARE THAT IN SOME CASES UTILITIES HAVE BEEN LOCATED, AND SURVEY HAS BEEN COMPLETED ONLY ON ONE SIDE OF THE ROAD.
- 🔲 🛮 5. ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS ETC. OR ALONG THE CENTER LINE OF FORCE MAINS AND WATER MAINS.
- □ 6. INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE NORTH RIM OF MANHOLES, UNLESS OTHERWISE INDICATED.
- □ ☑ 7. THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED ON THESE PLANS. THE LOCATION OF NEW SERVICES SHALL BE VERIFIED IN THE FIELD.
- □ № 8. BENCHMARK DATA: NAVD 88 SEE SURVEYORS NOTES

# PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

- □ 図 1. CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS.
- □ № 2. CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA UNLESS SPECIFICALLY SHOWN ON PLANS
- 🔲 🛮 3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT SHOULD DEWATERING ACTIVITIES BE REQUIRED.
- ☐ ☑ 4. THE DEPARTMENT OF TRANSPORTATION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, RAILROAD COMPANIES AND C.O.J. ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS.
- ☐ ☑ 5. ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, REV. JANUARY 2018 AND CITY OF JACKSONVILLE STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE STATE AND
- ☐ 6. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.
- □ ☑ 7. THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
- □ 🛮 8. TREE PROTECTION SHALL BE IN ACCORDANCE WITH JACKSONVILLE ORDINANCE CODE 656 AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY.
- ☐ ☑ 9. THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE CITY OF JACKSONVILLE STORMWATER POLLUTION PREVENTION PLAN.
- 10. CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.

# **EXISTING UTILITY PROTECTION:**

- 1. IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE CITY OF JACKSONVILLE RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS. SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR (GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S/JEA'S INFRASTRUCTURE AND THE EXISTING FACILITIES OF OTHER UTILITY COMPANIES.
- 3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

# **RESTORATION NOTES:**

- THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION, KNOWN CORNER LOCATIONS ARE AVAILABLE FROM THE CITY OF JACKSONVILLE ENGINEERING DIVISION.
- 2. THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.
- 3. TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH CITY OF JACKSONVILLE/FDOT STANDARD SPECIFICATIONS.
- 4. SIDEWALKS, DRIVEWAYS AND CURBING DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED INACCORDANCE WITH CITY OF JACKSONVILLE OR FDOT STANDARD SPECIFICATIONS AS REQUIRED. SIDEWALKS REMOVED AND REPLACED IN CURB AND GUTTER AREAS AT INTERSECTIONS SHALL HAVE HANDICAP RAMPS INSTALLED. DRIVEWAYS AND SIDEWALKS SHALL BE SAWCUT ALONG THE RIGHT-OF-WAY LINE OR NEAREST JOINT AND REMOVED AND REPLACED TO THE EDGE OF STREET.
- 5. GRASS SOD SHALL BE FURNISHED AND PLACED IN THE AREAS DISTURBED OR DAMAGED BY THE CONSTRUCTION OPERATION.
- 6. ALL PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH THE CITY OF JACKSONVILLE/FDOT STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
- 7. UNLESS OTHERWISE NOTED, REMOVE AND REPLACE EXISTING PAVEMENT AS PER C.O.J. CASE X (10) PAVEMENT
- 8. CONTRACTOR MUST MAINTAIN AND PRESERVE NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED.

# **UTILITY CONTACTS:**

A. AT&T ~ GENERAL NUMBER — — — — — — — — — — — — — — — — — — —	
B. AT&T ~ ADAM DUGAN ~ NORTH DISTRICT — — — — — — — — — — — — — — — — — — —	
C. AT&T ~ BILL LAKE ~ SOUTH DISTRICT — — — — — — — — — — — — — — — — — — —	- — — — — — — — 904-303-8754
D. CITY OF JACKSONVILLE ~ PUBLIC WORKS DEPT. — — — — — — — — — — — — — — — — — —	
E. CITY OF JACKSONVILLE ~ TRAFFIC OPERATIONS — — — — — — — — — — — — — — — — — — —	
F. FLORIDA DEPT. OF TRANSPORTATION ————————————————————————————————————	<b></b>
G. JEA ~ WATER COLLECTION & DISTRIBUTION ~ RANDY ELLIS	- — — — — — — — 904-665-7133
H. JEA ~ SEWER COLLECTION & DISTRIBUTION ~ NATHANIAL ROUSE ——————————	— — — — — — 904-665-8183
I. JEA ~ GENERAL INFORMATION — — — — — — — — — — — — — — — — — — —	· — — — — — — 904-665-6000
J. JEA ~ PROJECT OUTREACH — — — — — — — — — — — — — — — — — — —	———————904-665-7500
K. JEA ~ POWER OUTAGES — — — — — — — — — — — — — — — — — — —	
L. JEA ~ SEWER PROBLEMS	- — — — — — — — 904-665-4802
M. JEA ~ WATER PROBLEMS — — — — — — — — — — — — — — — — — — —	— — — — — — 904-665-4801
N. JEA ~ WATER & SEWER LOCATES — — — — — — — — — — — — — — — — — — —	- — — — — — — — 904-665-8410
O. COMCAST ~ EMERGENCY HOTLINE	904-380-6274
P. JACKSONVILLE TRANSIT AUTHORITY (JTA) ~ IVAN MITCHELL	
Q. TECO/PEOPLES GAS ~ BEN MOBLEY	904-545-8958
R. SUNSHINE ONE CALL	
S. FDOT - ITS - FOC ~ JOSH REICHERT ————————————————————————————————————	
T. JEA ENVIRONMENTAL GROUP ————————————————————————————————————	
U. COJ TRAFFIC MOT ~ RONNIE THIGPEN — — — — — — — — — — — — — — — — — — —	
W. FLORIDA GAS TRANSMISSION ~ JACOB WALLACE ————————————————————————————————————	
W. FLORIDA GAS TRANSIVIISSION ~ JACOB WALLACE ——————————————————————	

# **INSTALLATION NOTES:**

- 1. CONTRACTOR TO REHABILITATE ALL MANHOLES ON PIPE BURST SEWERS VIA COATING/LINING PER JEA SPECIFICATION 446-2, UNLESS OTHERWISE NOTED ON THE PLANS.
- □ 2. CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE.
  - 3. CONTRACTOR TO INSTALL SEWER SERVICE PIPING A MINIMUM OF 60 INCHES BELOW GRADE. WHERE NEW SANITARY SEWER MAIN IS LESS THAN 5 FEET DEEP, THE SEWER SERVICE PIPE SHALL BE INSTALLED AS DEEP AS POSSIBLE.
- □ ⊠ 4. WHEN THE DISTANCE BETWEEN A POWER POLE AND THE TRENCH IS LESS THAN THE TRENCH DEPTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH JEA ELECTRICAL PERSONNEL TO SECURE POWER POLES. THE CONTACTS FOR JEA ARE AS FOLLOWS:
  - NORTHSIDE~EAST of US-1 MIKE CORBITT @ 665-7991 (mobile 662-0635)
  - NORTHSIDE~WEST of US-1 ANDY YEAGER @ 665-7998 (mobile 662-0622) NORTHSIDE~BACKUP ALAN AINSLEY @ 665-7303 (mobile 662-6557)
  - SOUTHSIDE~SOUTH of BEACH BLVD. TOM KERNS @ 665-6847 (mobile 860-1687) SOUTHSIDE~NORTH of BEACH BLVD. DERYL BASFORD @ 665-6855 (mobile 662-0616)
  - SOUTHSIDE~BACKUP EDDIE GALES @ 665-6855 (mobile 662-0616)
  - A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED FOR AN OUTSIDE MEETING WITH JEA ELECTRICAL TO DISCUSS THE REQUIRED WORK. ADDITIONAL TIME WILL BE REQUIRED BY JEA ELECTRICAL FOR ANY REQUIRED WORK TO BE ACCOMPLISHED.
- □ □ 5. ALL NEW STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.

SERVICE SHALL BE LEFT INTERRUPTED AT THE END OF THE WORK DAY.

PRIOR TO THE EXISTING MAINS BEING ABANDONED.

- □ 図 6. THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" METHOD OF CONSTRUCTION. IF USING ALTERNATIVE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD.
- □ □ 7. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AT SERVICE CONNECTIONS. THE MEANS AND METHODS SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS. NO EXISTING ACTIVE
- □ 図 8. CONTRACTOR SHALL PROVIDE ADDITIONAL CORPORATION STOPS FOR FILLING AND DRAINING PURPOSES DURING CONSTRUCTION AS NEEDED. CORPORATION STOPS ARE TO BE PLUGGED AND LEFT IN PLACE. INDICATE CORPORATION STOP LOCATIONS ON RECORD DRAWINGS (AS-BUILTS).
- 9. WATER AND SEWER SERVICES SHALL BE TRANSFERRED TO THE NEW MAIN UPON COMPLETION AND F.D.E.P./J.E.A. CERTIFICATION, AND
- □ ☑ 10. IF EXISTING VALVES ARE IN UNPAVED AREAS AND ARE TO BE TAKEN OUT OF SERVICE, THEY SHALL BE CLOSED AND THE VALVE BOX AND COVER SHALL BE REMOVED. IF THE VALVES ARE UNDER PAVED AREAS, THEY SHALL BE CLOSED, THE VALVE BOX GROUT FILLED AND THE COVER REMOVED.
- □ 11. CONTRACTOR SHALL REPLACE EXISTING WATER METER BOXES WHEN DEEMED NECESSARY BY THE JEA INSPECTOR.
- ☐ ☐ 12. CONTRACTOR TO PROVIDE ADDITIONAL DEPTH OF BURY VIA PIPE JOINT DEFLECTION TO ACCOMMODATE VALVE SELECTION PER JEA
- ☐ 13. WATER METERS MAY REQUIRE RELOCATION FOR CONSTRUCTION, CONTRACTOR SHALL CONTACT JEA METER DEPARTMENT AND RELOCATE WATER METERS AS NECESSARY.
- ☐ ☐ 14. PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL OBTAIN ALL GEOTECHNICAL AND TOPOGRAPHIC SURVEY DATA AND LOCATIONS OF ABOVE GROUND AND UNDERGROUND UTILITIES. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED.
- □ 15. SHEET PILING WILL BE REQUIRED ON ALL EXCAVATIONS DEEPER THAN 16 FEET.

		X OF DRAWINGS
SHEET NO.	DRAWING NO.	TITLE GENERAL
		COVER
1	G-1	INDEX
2	G-2	GENERAL NOTES AND LEGEND
3 4	G-3 G-4	KEY SHEET
		CIVIL
5	C-1	STA 0+00 to STA 4+00
6	C-2	STA 4+00 to STA 9+00
	C-3 C-4	STA 9+00 to STA 14+00 STA 14+00 to STA 17+50
9	C-5	STA 17+50 to STA 22+00
10	C-6	STA 22+00 to STA 27+00
11	C-7	STA 27+00 to STA 31+00
12 13	C-8 C-9	STA 31+00 to STA 33+75 STA 33+75 to STA 37+00
14	C-10	STA 37+00 to STA 42+00
15	C-11	STA 42+00 to STA 47+00
16	C-12	STA 47+00 to STA 52+00
17	C-13	STA 52+00 to STA 57+00
18 19	C-14 C-15	STA 57+00 to STA 62+00 STA 62+00 to STA 67+00
20	C-15	STA 67+00 to STA 72+00
21	C-17	STA 72+00 to STA 77+00
22	C-18	STA 77+00 to STA 82+00
23	C-19 C-20	STA 82+00 to STA 87+00 STA 87+00 to STA 92+00
25	C-20 C-21	STA 92+00 to STA 92+00 STA 92+00 to STA 97+00
26	C-22	STA 97+00 to STA 102+00
27	C-23	STA 102+00 to STA 107+00
28	C-24	STA 107+00 to STA 112+00
30	C-25 C-26	STA 112+00 to STA 117+00 STA 117+00 to STA 122+00
31	C-27	STA 122+00 to STA 127+00
32	C-28	STA 127+00 to STA 132+00
33	C-29	STA 132+00 to STA 136+00
34 35	CD-1	CIVIL DETAILS  CIVIL DETAILS
36	CD-2	CIVIL DETAILS
37	CD-4	CIVIL DETAILS
38	CD-5	CIVIL DETAILS
39	CD-6	CIVIL DETAILS CIVIL DETAILS
40	CD-7 CD-8	BUTCHERS PEN FM CROSSING DETAIL
	TEMPORA	RY TRAFFIC CONTROL
42	TTC-1	TEMPORARY TRAFFIC CONTROL PLAN
43	TTC-2	TEMPORARY TRAFFIC CONTROL PLAN
44 45	TTC-3	TEMPORARY TRAFFIC CONTROL PLAN  TEMPORARY TRAFFIC CONTROL PLAN
46	TTC-5	TEMPORARY TRAFFIC CONTROL PLAN
47	TTC-6	TEMPORARY TRAFFIC CONTROL PLAN
48	TTC-7	TEMPORARY TRAFFIC CONTROL PLAN
49	TTC-8	TEMPORARY TRAFFIC CONTROL PLAN
50 51	TTC-9	TEMPORARY TRAFFIC CONTROL PLAN  TEMPORARY TRAFFIC CONTROL PLAN
52	TTC-11	TEMPORARY TRAFFIC CONTROL PLAN
53	TTC-12	TEMPORARY TRAFFIC CONTROL PLAN
54	TTC-13	TEMPORARY TRAFFIC CONTROL PLAN
55 56	TTC-14	TEMPORARY TRAFFIC CONTROL PLAN  TEMPORARY TRAFFIC CONTROL PLAN
57	TTC-16	TEMPORARY TRAFFIC CONTROL PLAN
58	TTC-17	TEMPORARY TRAFFIC CONTROL PLAN
59	TTC-18	TEMPORARY TRAFFIC CONTROL PLAN
60	TTC-19	TEMPORARY TRAFFIC CONTROL PLAN
61	TTC-20	TEMPORARY TRAFFIC CONTROL PLAN  TEMPORARY TRAFFIC CONTROL PLAN
63	TTC-21	TEMPORARY TRAFFIC CONTROL PLAN
64	TTC-23	TEMPORARY TRAFFIC CONTROL PLAN
65	TTC-24	TEMPORARY TRAFFIC CONTROL PLAN
66	TTC-25	TEMPORARY TRAFFIC CONTROL NOTES
67 68	TTC-26 TTC-27	TTC - STANDARD DETAILS  TTC - STANDARD DETAILS
69	TTC-28	TTC - STANDARD DETAILS
70	TTC-29	TTC - STANDARD DETAILS
71	TTC-30	TTC - STANDARD DETAILS
72	TTC-31	TTC - STANDARD DETAILS

			Mott MacDonald Florida, LLC 10245 Centurion Parkway Norti Suite 320 Jacksonile, Florida 32256 Telenhone (904) 203-1090	MOTT Architects AA - C0000035 Engineers EB - 0000155 Surveyors LB - 0006783	REVISIONS				FDOT PERMIT - BLANDING BLVD JACK AND BORE
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					DESIGN ENGINEER	BOR 3 G ISANE	CLOCIC O. OAIMICK, I. C., DOL		69/63
					B. NEU	B. LEE	APRIL 2018		
					DESIGNER:	DRAWN BY:	DATE:	DATE:	
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	NOTE: STANDARD DRAWIN PROJECTS, INCORF ARE AVAILABLE AT	PORATED BY REF			WEST GRID LENOX TO TIMUQUANA	SCE MAIN IMPROVEMENTS		XHCNI	
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- 3. THE CONTRACTOR IS RESPONSIBLE FOR PROCURING ALL MOBILIZATION, STORAGE, AND STAGING AREAS AS WELL AS ACCESS TO THE CONSTRUCTION SITES WITHIN THE TEMPORARY AND PERMANENT RIGHT OF WAYS. EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES SHALL BE INSTALLED AND MAINTAINED AT ALL WORK SITES AND STAGING AREAS. THE CONTRACTOR SHALL FOLLOW ALL LOCAL GUIDELINES AND REGULATIONS REGARDING THE WORK, INCLUDING KEEPING MUD AND DIRT OFF PUBLIC ROADS AND PRIVATE ENTRANCES.
- 4. SOIL EXPLORATION WORK WAS PERFORMED BY MESKEL AND ASSOCIATES ENGINEERING, PLLC OF JACKSONVILLE, FLORIDA (MAE PROJECT NO.0103-0010). SOILS EXPLORATION WORK IS SOLELY TO ASSIST BIDDERS IN ASSESSING THE NATURE AND EXTENT OF TESTING PROCEDURES REQUIRED TO MAKE THEIR OWN DETERMINATION OF ACTUAL SUBSURFACE CONDITIONS THAT WILL BE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION. NO REPRESENTATION IS MADE OR WILL BE GIVEN BY THE ENGINEER CONCERNING ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED. ALL BIDDERS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT ALL INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING SUCH CONDITIONS.
- 5. ALL OPEN ENDS OF PIPE SHALL BE SECURED WATER TIGHT TO PREVENT ENTRY AT THE END OF EACH WORK DAY.
- 6. ALL AREAS WITH OPEN EXCAVATIONS, OPEN VAULTS OR MANHOLES, OR EQUIPMENT SHALL BE FENCED WITH SECURE TEMPORARY FENCING AT LEAST FOUR FEET HIGH OR CLOSED AT THE END OF EACH WORK DAY.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WASTEWATER SPILLS THAT OCCUR DURING CONSTRUCTION AND FOR THE ASSOCIATED FINES BROUGHT FORTH FROM FEDERAL, STATE, OR LOCAL REGULATORY AGENCIES. THE CONTRACTOR IS REQUIRED TO HAVE PUMPS AVAILABLE AT ALL TIMES ALL TIMES IN CASE OF ACCIDENTAL SPILL OR EXISTING SEWER DAMAGE. THE CONTRACTOR SHALL NOTIFY JEA IMMEDIATELY IN THE CASE OF A SPILL
- 8. ANY PUBLIC LAND CORNER, PROPERTY MONUMENTATION, OR BENCH MARK WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A MONUMENT IS IN DANGER OF BEING DESTROYED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. ANY CORNER MONUMENT DISTURBED OR DESTROYED SHALL BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA AT NO ADDITIONAL COST TO THE OWNER.
- 9. THE CONTRACTOR SHALL CONTACT THE ENGINEER OR OWNER IMMEDIATELY SHOULD ANY ISSUE BETWEEN CONSTRUCTION AND THE DRAWINGS ARISE. THE CONTRACTOR SHALL ADHERE TO ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS THAT HAVE BEEN OBTAINED.
- 10. FOR ALL TIE-IN PIPING, CROSSINGS, OR VALVES THE CONTRACTOR SHALL VERIFY ALL EXISTING PIPELINE ELEVATIONS, LOCATIONS, DIAMETERS, AND MATERIALS PRIOR TO SHOP DRAWING SUBMITTALS, NOTIFYING THE ENGINEER OF ANY CONFLICTS.
- 11. ANY CONSTRUCTION IN COJ RIGHT OF WAY WILL REQUIRE A RIGHT OF WAY PERMIT. THE CONTRACTOR IS RESPONSIBLE FOR CALLING 904-255-8366 DAILY FROM 7:30 A.M. TO 8:30 A.M., WHEN WORKING IN THE COJ RIGHT OF WAY.
- 12. ALL DRIVEWAYS, DRAINAGE PIPES, AND HEADWALLS SHALL BE RESTORED TO EQUAL OR BETTER THAN EXISTING CONDITION. IN BOTH NEW AND EXISTING RIGHT OF WAYS AND WITHIN ANY TEMPORARY EASEMENT AREAS. ANY STRUCTURES OR DRIVEWAYS DISTURBED OUTSIDE OF THE RIGHT OF WAY SHALL BE FULLY RESTORED AT NO COST TO THE PROPERTY OWNER OR OWNERS.
- 13. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL WATER AND SEWER LATERALS SERVICING RESIDENTS AND BUSINESSES THROUGHOUT CONSTRUCTION.
- 14. WHEN EXCAVATED MATERIALS ARE PLACED ON ROADWAY SURFACES THE CONTRACTOR SHALL PLACE SAND OR STONE SCREENING UNDERNEATH THE EXCAVATED MATERIALS AND SHALL REMOVE SAID MATERIALS AND WASH ALL RESIDUES FROM THE SURFACES DAILY.
- 15. THE CONTRACTOR SHALL PROVIDE AN ACCESS CORRIDOR FOR EMERGENCY SERVICES AT ALL TIMES.
- 16. THE CONTRACTOR SHALL PROVIDE 24 HOURS' NOTICE TO FLORIDA GAS TRANSMISSION PRIOR TO WORK WHICH MAY IMPACT ITS GAS MAINS.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CLEAN AND EFFICIENT OPERATIONS OF ALL STORM WATER CONVEYANCE STRUCTURES IN THE AREA IMPACTED BY CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT THE CONVEYANCE CAPACITY OF THE STORM WATER INFRASTRUCTURE IS MAINTAINED TO AVOID FLOODING. THE CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCES AS DIRECTED BY THE ENGINEER AT LOCATIONS WHERE VEHICULAR TRAFFIC PASSES FROM DISTURBED AREAS TO UNDISTURBED AREAS. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL MEASURES DESIGNATED BY THE ENGINEER.
- 18. THE CONTRACTOR SHALL MINIMIZE TEMPORARY IMPACTS TO ANY AND ALL ENVIRONMENTALLY SENSITIVE AREAS. THE CONTRACTOR SHALL COMPLY WITH ALL DIRECTION AND PERMITTING THE FROM LOCAL, STATE, AND GOVERNMENT AGENCIES WHEN WORKING IN SUCH AREAS.
- 19. ANY IMPACTS TO WETLANDS AND WATERS OF THE U.S. SHALL BE PERMITTED BY APPROPRIATE LOCAL, STATE, AND FEDERAL AGENCIES.
- 20. ALL DRAINAGE DITCHES SHALL BE RESTORED TO THE EXISTING CROSS SECTION UPON COMPLETION OF CONSTRUCTION DISTURBANCE. EROSION CONTROL FOR DISTURBED DITCHES WILL BE REQUIRED UNTIL VEGETATION, EQUAL TO ADJACENT AREAS, HAS BEEN RESTORED. EROSION CONTROL METHODS WILL BE CONSISTENT WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL MANUAL, LATEST EDITION. THE CONTRACTOR SHALL USE ROLLED EROSION CONTROLLED PRODUCTS (RECP) TO TEMPORARILY AND PERMANENTLY STABILIZE DITCH BOTTOMS AT ALL DITCH CROSSINGS. SPECIFICALLY, AN EROSION CONTROL BLANKET OR TURF REINFORCEMENT MAT WILL BE REQUIRED. RICP'S SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS. CONTRACTOR IS REQUIRED TO MAINTAIN WET SEASON DRAINAGE CONVEYANCE WITHIN THE PROJECT AREA. CARE SHALL BE TAKEN TO MAINTAIN FLOW WITHIN THE EXISTING DITCH SYSTEMS DURING AND AFTER RAINFALL EVENTS.
- 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER RUNOFF CONTROL AND FILTRATION VIA USING BEST MANAGEMENT PRACTICES AS PROVIDED BY THE ENGINEER (SEE SHEET CD-5 AND NPDES PERMIT) .THE CONTRACTOR SHALL REFERENCE THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR ALL SUCH INSTANCES.
- 22. THE CONTRACTOR SHALL IMPLEMENT ONLY MAINTENANCE OF TRAFFIC SPECIFIED BY THE ENGINEER AND APPROVED BY THE CITY OF JACKSONVILLE AND FDOT.
- 23. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ITS TWO WEEK FORWARD PROJECT SCHEDULE AT LEAST ONE WEEK PRIOR TO IMPLEMENTATION. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ANY CHANGE/MODIFICATION TO THE PROJECT SCHEDULE WITHIN 24 HOURS.
- 24. LIMITS OF DISTURBANCE WITHIN THE UTILITY AND TEMPORARY CONSTRUCTION EASEMENTS SHALL BE LIMITED TO THE AREAS OUTLINED BY SILT FENCE ON THE
- 25. RESTORATION WORK WITHIN UTILITY AND TEMPORARY CONSTRUCTION EASEMENTS SHALL BE AS SHOWN ON THE DRAWINGS AS WELL AS SEEDING AS PER SHEET CD-5.
- 26. CONTRACTOR SHALL HAVE A LICENSED LAND SURVEYOR/MAPPER FIELD LAYOUT AND STAKE ALL PERMANENT AND TEMPORARY EASEMENTS PRIOR TO THE START OF CONSTRUCTION.
- 27. JEA WATER AND WASTEWATER STANDARDS SECTIONS 350 AND 429 III.3.1: THE MAXIMUM JOINT DEFLECTION SHALL BE LIMITED TO 80% OF THE PIPE MANUFACTURER'S RECOMMENDATIONS.

# CITY OF JACKSONVILLE (COJ) EROSION CONTROL NOTES

- 1. CAUTION: ALL UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE LOCATED PRIOR TO CONSTRUCTION.
- 2. VEGETATION CLEARING WILL BE KEPT TO THE ABSOLUTE MINIMUM NECESSARY FOR CONSTRUCTION.
- 3. MATERIAL RESULTING FROM EXCAVATION WILL NOT BE PLACED IN SUCH A MANNER THAT IT IS DISPERSED BY CURRENT OR OTHER FORCES. THE MATERIAL SHOULD BE COLLECTED AND CONTAINED AT ONE SITE AS APPROPRIATE.
- 4. HEAVY EQUIPMENT WORKING IN WETLANDS WILL BE PLACED ON MATS OR LOW GROUND PRESSURE EQUIPMENT USED DURING CONSTRUCTION TO LIMIT SOIL DISTURBANCE TO THE MINIMUM AREA REQUIRED TO INSTALL THE UTILITY.
- 5. NO STAGING AREAS OR TEMPORARY ACCESS ROADS WILL BE PLACED IN WETLANDS
- 6. APPROPRIATE SILTATION AND EROSION CONTROLS WILL BE USED AND MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION, AND ALL EXPOSED SOIL AND FILLS WILL BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICABLE DATE.
- 7. SEDIMENT CONTROL FENCE (SILT FENCE) SHOULD BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE CONSTRUCTION. SILT FENCE WILL BE INSTALLED ALONG AND WITHIN THE RIGHT-OF-WAY LINE (AT LEAST 12 FT. AWAY FROM THE EDGE OF THE RIGHT-OF-WAY), IF A BODY OF WATER OR POTENTIAL WETLAND IS LOCATED WITHIN 60 FT. FROM THE EDGE OF THE RIGHT-OF-WAY. ANY OTHER SITUATIONS WILL BE APPROVED BY ENGINEER.
- 8. WHEN CONSTRUCTING IN WETLANDS, THE TOP 6 TO 12 INCHES OF THE TRENCH WILL BE BACK FILLED WITH TOP SOIL FROM THE TRENCH.
- 9. EXCESS MATERIAL WILL BE REMOVED FROM THE WETLAND AND PLACE ON UPLAND AREAS IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- 10. EXPOSED SLOPES OF STREAM BANKS WILL BE RESTORED TO THEIR ORIGINAL CONTOURS AND STABILIZED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- 11. ANY TEMPORARY FILLS MUST BE REMOVED IN THEIR ENTIRETY AND THE AFFECTED AREAS RETURNED TO THEIR PRE-EXISTING ELEVATION.
- 12. ANY DISTURBED AREA WILL BE RESEEDED WITH NATIVE GRASS SEED, AND SEDIMENT CONTROL FENCE SHOULD BE REMOVED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- 13. WHEN CONSTRUCTING IN COJ LIMITS, ALL ROADWAY DRAINS, SUCH AS INLETS NEAR CURBS OR DROP INLETS ON ROADWAYS WHICH ARE LOCATED WITHIN THE RIGHT-OF-WAY, SHALL BE PROTECTED WITH TYPICAL INLET SEDIMENT FILTERS. THESE FILTERS WILL BE REMOVED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- 14. ALL CABLE MARKERS TO BE PLACED AS FAR BACK TO RIGHT-OF-WAY LINE AS POSSIBLE.
- 15. DRAWING DISCLAIMER: FACILITY LOCATIONS ARE GENERAL IN NATURE. ENGINEER WILL NOT BE HELD ACCOUNTABLE FOR THE ACCURACY OF THE INFORMATION PROVIDED ON THESE DRAWINGS. CONTRACTOR MUST LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.

# **ABBREVIATIONS:**

ONC CONCRETE ONST CONSTRUCTION MP CORRUGATED METAL PIPE MPA CORRUGATED METAL PIPE ARCH PP CONCRETE POWER POLE ULV CULVERT &G CURB & GUTTER CUT OJ CITY OF JACKSONVILLE BI DITCH BOTTOM INVERT W OR DR DRIVEWAY I DUCTILE IRON OP EDGE OF PAVEMENT LEV ELEVATION RCP ELLIPTICAL REINFORCED CONC PIPE XP JT EXPANSION JOINT FILL H FIRE HYDRANT FLOW LINE M FORCE MAIN ALV/GLV GAS VALVE DPE HIGH DENSITY POLYETHYLENE PIPE W HEAD WALL	MH NTS OE OT POL PRM  PVC r R RCP RT R/W RD S/W SBT STA TCP TOP UGE UGT USC & GS  VC WM WV WLP WPP WTP	MANHOLE NOT TO SCALE OVERHEAD ELECTRIC OVERHEAD TELEPHONE POINT ON LINE PERMANENT REFERENCE MONUMENT POLYVINYL CHLORIDE RADIUS RATE REINFORCED CONCRETE PIPE RIGHT RIGHT OF WAY ROOF DRAIN SIDE WALK SOUTHERN BELL TELEPHONE STATION TERRA COTTA PIPE TOP OF PIPE UNDERGROUND ELECTRIC UNDERGROUND TELEPHONE UNITED STATES COASTAL & GEODETIC SURVEY VITRIFIED CLAY WATER METER WATER VALVE WOOD LIGHT POLE WOOD POWER POLE
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# GENERAL LEGEND

		LEGEND				
	<b>EXISTING</b>	PROPOSED				
RIGHT OF WAY LINE						
CENTER LINE						
LIMITS OF CONSTRUCTION		L.O.C.				
FENCE (HEIGHT & MAT'L. INDICATED)	x 6' CHAIN X LINK	—— x <u>6' CHAIN</u> LINK				
DITCH OR SWALE	~~~ ~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
DRAIN PIPE	DD					
CATCH BASIN						
STORM DRAIN GRATE		0.4" DOD				
STORM SEWER (SIZE & MAT'L. INDICATED)	24"_RCP	24" RCP				
STORM SEWER, REPLACEMENT (IN CASE 10 TRENCH) SIZE, MAT'L. INDICATED						
STORM SEWER (SIZE & MAT'L. INDICATED)	=======	<del></del>				
CULVERT W/ENDWALLS (SIZE & MAT'L. INDICATED)	Г <u> 18"_СМР</u> Л	18" CMP				
WATER MAIN SIZE, TYPE INDICATED	W6"WPVC					
WATER MAIN (IN CASE 10 TRENCH) SIZE, TYPE INDICATED						
GRAVITY SEWER SIZE, TYPE INDICATED	S8"S PVC					
SEWER FORCE MAIN SIZE, TYPE INDICATED	10" PVC					
LINE VALVE	X					
AIR RELEASE VALVE		ARV				
FIRE HYDRANT	IXI-O-					
VALVE (TYPE INDICATED)	$\bowtie$	M				
END CAP	7					
PLUG (AT END OF LINE)						
VALVE (TYPE INDICATED)						
REDUCER						
FIRE HYDRANT	7	•				
	<del>-</del>	4075				
HOUSE CONNECTION (SEWER)	HC	1275 NHC				
SPOT ELEVATION  MANHOLE TYPE (JE INDICATED.)	× OR ×					
MANHOLE - TYPE (IF INDICATED ) E - ELECTRIC S - SANITARY	× (100.00) ON × 100.00	MH1				
D - STORM T - TELEPHONE CLEAN OUT	• c.o.	1711 1 1				
SPRINKLER HEAD	⊚ SPR	<b>A</b>				
TEMPORARY SAMPLING/TEST TAP F (BACTERIOLOGICAL SAMPLING POIL	POINT NT)	SAMPLE TAP NO.				
SILT HAY BARRIER						
SIDEWALK						
SILT FENCE (SE/SC)		<del></del>				
CONSTRUCTION SAFETY FENCE		-00				
TEMPORARY CONSTRUCTION EASE	EMENT	TCE				

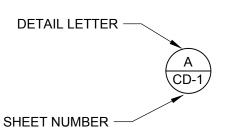
PERMANENT EASEMENT

# UTILITY SYMBOLS

ELECTRIC POLE OR S.B.T. POLE (WOOD)

WOOD POWER POLE

ELECTRIC POLE OR S.B.T. POLE (CONC.)	PP OR ☐ (WITH LIGH
CONCRETE POWER POLE GUY WIRE	□ CPP
TRAFFIC SIGNAL POLE	TS A
IRON PIPE	O I.P.
OVERHEAD ELECTRIC	OHE
UNDERGROUND ELECTRIC	— — UGE— — —
OVERHEAD TELEPHONE	ot
UNDERGROUND TELEPHONE	ugt
GAS MAIN (SIZE & MAT'L. INDICATED)	— — GAS— — —
CABLE TELEVISION	CATV
FIBER OPTIC LINE	FO
UNDERGROUND CABLE (TYPE UNDETERMINED)	— —UG— —UG—
WATER METER	<b>₩M</b>
WATER METER WITH TOUCHREAD	☐ WM(TR)
TELEPHONE BOX	□Т
CATV BOX	<b>□CATV</b>
CONCRETE MONUMENT	□СМ
GAS VALVE	•
SOIL BORING (NUMBER INDICATED)	B-XX
SOFT DIG (NUMBER INDICATED)	SD-XX
ASPHALT OR CONCRETE CORE SAMPLE (NUMBER INDICATED)	A-XX
GROUND MONITORING WELL	GW-XX
TREE, SIZE & TYPE INDICATED	• 12° O
MAIL BOX	<b>"</b> MB <b>Ç</b>
SIGN - TYPE INDICATED	OR ASIGN
BUSH, SHRUB OR HEDGE	SHRUB
FULL DEPTH ASPHALT PAVEMENT REPLACEMENT	
ASPHALT OR CONCRETE PAVEMENT REMOVAL AND OVERLAY (COJ)	
ASPHALT OR CONCRETE PAVEMENT REMOVAL AND OVERLAY (FDOT)	
CONFIRMED GOPHER TORTOISE BURROW	1
CONFIRMED GOPHER TORTOISE HABITAT ARE	EA
DELINEATED WELANDS	
TURBIDITY CURTAIN	<del></del> 0
SILT FENCE	
LIMITS OF WETLAND DISTURBANCE	



PERMIT SUBMITTAL

Attached= XCNSTPLN [..\d0252014\XCNSTPLN.dwg] TEPLN [..\d0252014\XCSTEPLN.dwg] \_SHT22x34\_BOR-WTS [..\d0252016\JEA\_SHT22x34\_BOR-WTS.dwg]

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15.23.004 F.A.C.

/refs Attached= JEA\_SHT22x34\_BOR-WTS [..\d0252016\JEA\_'
376869\_WTS-FM-DRef [..\d0339050\376869\_WTS-FM-DRef.
XCNSTPLN\_WTS [..\d0339050\XCNSTPLN\_WTS.dwg]
XCSTEPLN\_WTS [..\d0339050\XCSTEPLN\_WTS.dwg]

# HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

# PROPOSED UTILITY

	THOI GOLD GILLIT											
	PO	ΓABLE WA	TER	WASTEWATER GRAVITY AND FORCE MAIN			RECLAIMED WATER			VACUUM SEWERS		
CONFLICTING UTILITY	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*	HORIZ.	VERT.	JOINT SPACING*
POTABLE WATER	3' NOTE 1	12"	3' NOTE 2	6' to 10'	12" NOTE 5	6' NOTE 2	3'	12"	6' NOTE 2	3' to 10'	12"	3' NOTE 2
RECLAIMED WATER	3'	12"	6' NOTE 2	3' NOTE 1	3' NOTE 1	3' NOTE 2	3'	12"	6' NOTE 2	3' NOTE 1	12"	3' NOTE 2
WASTEWATER (GRAVITY AND FORCE MAIN)	6' to 10'	12"	6' NOTE 2	3' NOTE 1	3' NOTE 1	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
VACUUM SEWERS	3' to 10'	12"	3' NOTE 2	3' NOTE 1	3' NOTE 1	6"	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
RIGHT OF WAYS	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
PERMANENT STRUCTURES (SIGNS, TREES, POLES, ETC.)	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A	3' NOTE 1	N/A	N/A
STORM SEWERS	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2
ALL OTHER UTILITIES	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2	3' NOTE 1	12"	3' NOTE 2

# NOTES:

- / NTS

EXISTING 54"

UNDISTURBED SOIL MIN.

COATED WITH BITUMINOUS WATERPROOFING MATERIAL.

BITUMINOUS WATERPROOFING SHALL BE OMITTED ON INSIDE.

D \ 24" - 60" SEWERS

BEARING CAPACITY: —

THE CONE SECTION IS OPTIONAL.

2000 LB/SQ FT.

GRAVITY

SEWER

FINISHED GRADE -

- 1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTH, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
- 2. THE MINIMUM JOINT SPACING REQUIRED FROM CROSSING FROM OTHER UTILITIES WHILE STILL MAINTAINING MINIMUM VERTICAL SEPARATION.
- 3. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.

FRAME & COVER

SPECIALTY LINER -

8'-0" DIA. FOR (42-60" PIPE)

SECTION VIEW

THE EXTERIOR ONLY OF MANHOLE SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.

SANITARY SEWER TYPE 'G' MANHOLE

PRECAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITIONS OF A.S.T.M. C-478 WITH

SPECIALTY LINER IS TO BE INSTALLED ON INSIDE SURFACE OF MANHOLE IN ACCORDANCE WITH AS-602, THEREFORE, THE

ALL M/H JOINTS BELOW THE TOP CONE SECTION SHALL INCLUDE A 6" WIDE (MIN) EXTERIOR JOINT TAPE (W/PRIMER). TAPE ON

IN SILTS, CLAY OR HIGHLY ORGANIC SOILS (FINE-GRAINED SOILS INCLUDING SOIL GROUPS ML, CL, OL, MH, CH, OH AND PT) THE SOILS SHALL BE OVER-EXCAVATED AN ADDITIONAL 24" (AT A MIN.) AND BACKFILLED WITH AASHTO CLASS A-3 SOIL (COMPACTED

TO 98%, ASTM D1557) OR OVER-EXCAVATE AN ADDITIONAL 12" (AT A MIN.) AND BACKFILL WITH GRANULAR BACKFILL (57 STONE).

JANUARY 2018

PLATE S-11

4000 LB. CONC., TYPE II CEMENT. ALL LIFTING HOLES AND OUTSIDE INSERTS SHALL BE FILLED WITH NON-SHRINK GROUT AND

SLOPE 1/2" —

PER FT. (TYP)

- 4. NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURES.
- 5. WATER MAIN SHOULD CROSS ABOVE OTHER PIPES WHENEVER POSSIBLE. WHEN WATER MAIN MUST BE BELOW OTHER UTILITY PIPING, THE MINIMUM SEPARATION SHALL BE 12 INCHES.

A SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS

-12" NOMINAL, 18" MAX.

 GROUTED IN PLACE CONCRETE ADJUSTMENT RINGS OR BRICKS WITH SPECIALTY LINER (TYP)

-6" (MIN) EXTERIOR JOINT TAPE APPLIED OVER PRIMER

— PREMOLDED PLASTIC JOINT SEALER

SOLID CLASS "C" CONCRETE W/

ALLOWED AS FILLER NO RUBBLE.

LEVELING COURSE, 12" (MIN) THICKNESS OF GRANULAR BACKFILL (57 STONE)

OVER-EXCAVATION IS REQUIRED

- IN UNSUITABLE SOILS,

(SEE NOTE #5)

SOLID FILLER BRICKS ONLY

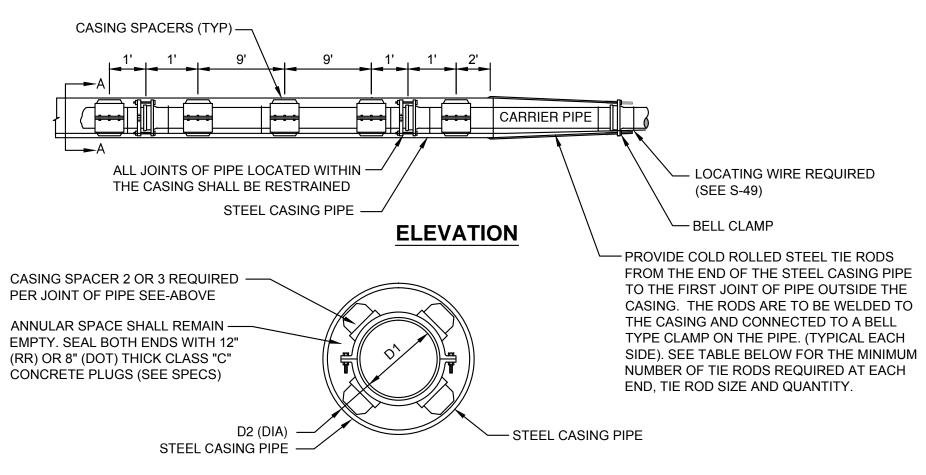
- 9" MIN. FOR 48"-60" PIPE.

(SEE NOTE #4)

### WATER MAIN AND NON-WATER MAIN SEPARATION REQUIREMENTS - NOTES

- 1. IT IS REQUIRED THAT "WATER MAINS" BE INSTALLED, CLEANED, DISINFECTED AND HAVE A SATISFACTORY BACTERIOLOGICAL SURVEY PERFORMED IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS, CHAPTER 62-555, F.A.C. AND LATEST JEA WATER AND SEWER STANDARDS. FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT HAVE AN INSIDE DIAMETER OF THREE (3) INCHES OR GREATER. IN ADDITION, THE PHRASE "RECLAIMED WATER" REFERS TO THE WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- 2. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE (3) FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS MAY BE REDUCED TO THREE (3) FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX (6) INCHES ABOVE THE TOP OF THE SEWER (SPECIAL CASE).
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX (6) INCHES, AND PREFERABLE TWELVE (12) INCHES, ABOVE OR AT LEAST TWELVE (12) INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS A LEAST TWELVE (12) INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- AT THE UTILITY CROSSINGS DESCRIBED IN NOTES 4 AND 5 ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE (3) FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER, AND AT LEAST SIX (6) FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINE CONVEYING RECLAIMED WATER.
- NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SO THAT THE HYDRANTS ARE AT LEAST THREE (3) FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER; AT LEAST THREE (3) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX (6) FEET, AND PREFERABLY TEN (10) FEET, FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER OR WASTEWATER FORCE MAIN.
- WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE, THE CONTRACTOR SHALL CONSULT THE DESIGN ENGINEER TO OBTAIN APPROVAL OF ANY ALTERNATIVE





# **SECTION "A-A"**

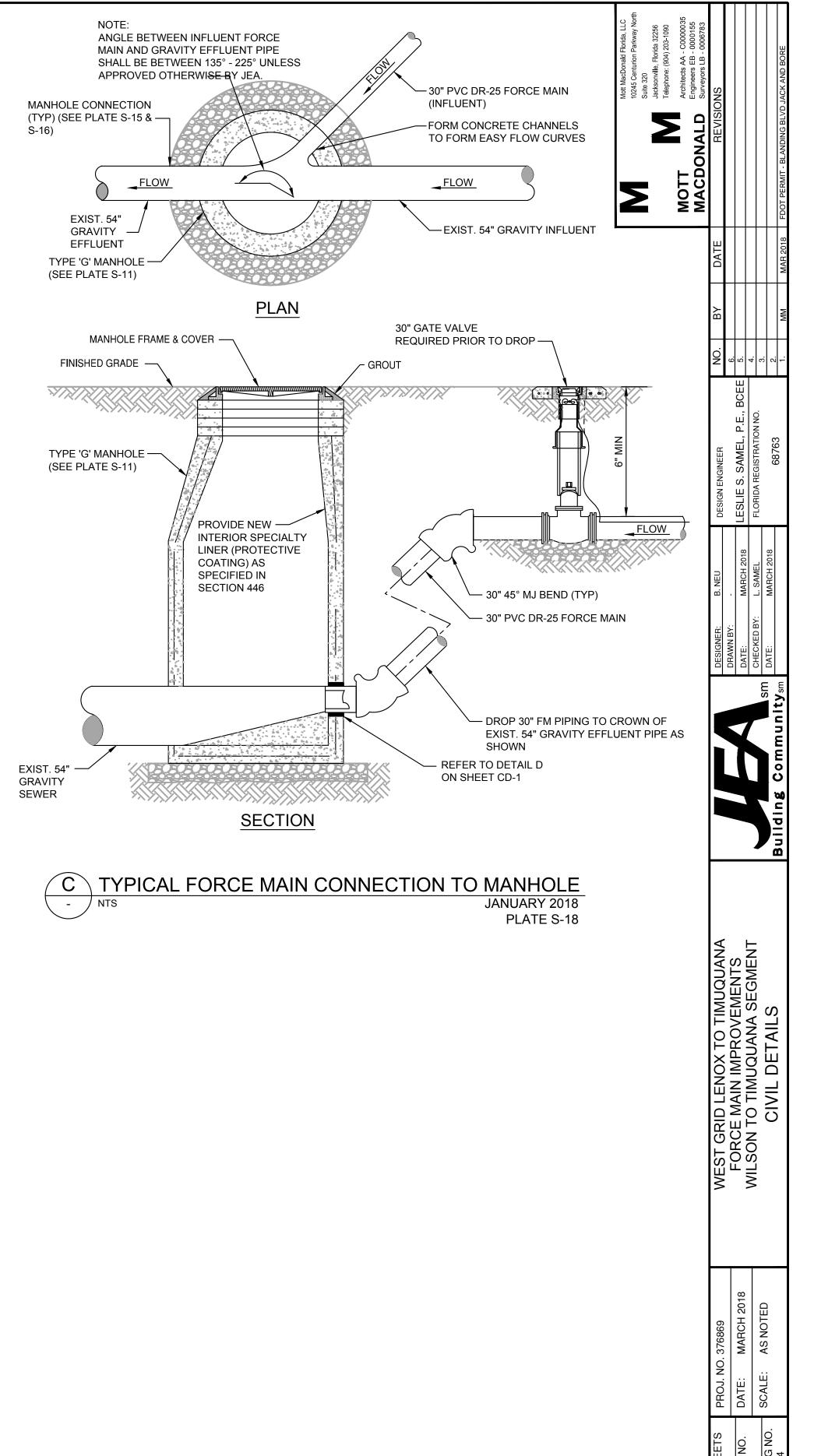
# NOTES:

JANUARY 2018

PLATE S-26

- MIN. COVER TO TOP OF CASING; a) FDOT-3.0' b)RAILROAD-5.5' TO BASE OF RAIL, 4.5' FOR SECONDARY OR INDUSTRIAL TRACKS. EXCEPT FOR F..E.C. (SEE NOTE 3)
- THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE A MINIMUM OF 4 INCHES GREATER THAN THE OUTSIDE DIAMETER OF THE CARRIER PIPE BELL OR COUPLING. HOWEVER, A MINIMUM OF 6 INCHES IS REQUIRED FOR FLORIDA EAST COAST R.R. CROSSINGS.
- THE MINIMUM COVER FOR CASING UNDER FLORIDA EAST COAST RAILROAD SHALL BE 5.0 FEET BELOW THE BOTTOM OF TIES FOR ALL TRACKS.
- ALL JOINTS WITHIN CARRIES PIPE SHALL BE MECHANICAL RESTRAINED JOINTS.
- FOR STREET USES WHICH ARE NOT DOT OR RAILROAD, USE DOT CASING THICKNESS UNLESS OTHERWISE INDICATED BY ENGINEER.
- CASING PIPE SHALL BE FURNISHED IN NOMINAL 8 FOOT LENGTHS (MIN.) UNLESS OTHERWISE INDICATED ON THE DRAWING OR APPROVED BY JEA
- PIPE TO BE USED AS A CASING SHALL CONFORM TO EITHER ASTM STANDARD A139 FOR "ELECTRIC FUSION (ARC) WELDED STEEL PIPE". WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI OR "API SPECIFICATION API-5LX, GRADE X-42 WELDED STEEL PIPE".

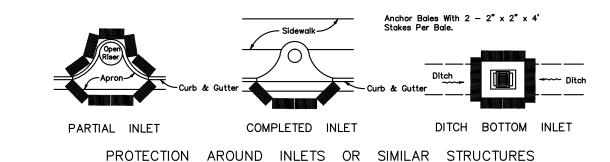
# TYPICAL CASING DETAIL JANUARY 2018 PLATE S-25



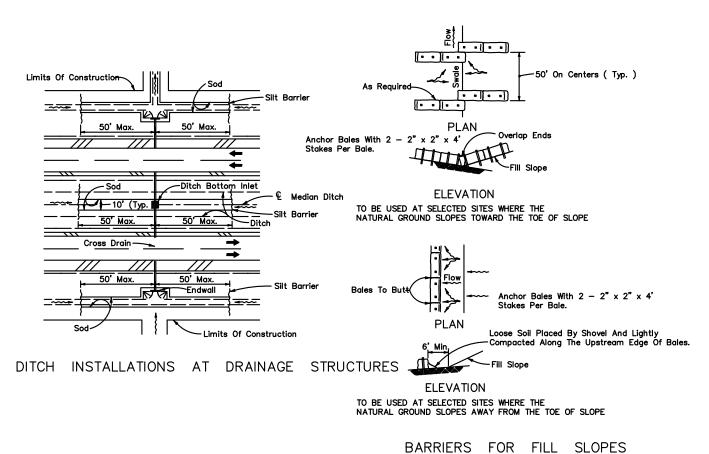
6/12/2018

PERMIT SUBMITTAI

- ALL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS
- 4. ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, SECTIONS 104, 570, 575 AND 980 TO
- UNFILTERED DEWATERING IS NOT PERMITTED. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER.
- 6. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATION COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
- 7. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHTS-OF-WAY WILL BE REMOVED IMMEDIATELY.
- ANY AREAS USED FOR THE CONTRACTOR'S STAGING, INCLUDING BUT NOT LIMITED TO, TEMPORARY STORAGE OF STOCKPILED MATERIALS (E.G. CRUSHED STONE, QUARRY PROCESS STONE, SELECT FILL, EXCAVATED MATERIALS, ETC.), SHALL BE ENTIRELY PROTECTED BY A SILT FENCE ALONG THE LOW ELEVATION SIDE TO CONTROL SEDIMENT RUNOFF.
- 9. ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED, DURING ANY PHASE OF DEVELOPMENT, AT THE DISCRETION OF THE JEA APPOINTED CONSTRUCTION INSPECTOR.
- 10. THE CONTRACTOR SHALL ENSURE THAT A FOREMAN OR SUPERVISOR WHO HAS BEEN CERTIFIED UNDER THE FLORIDA STORMWATER, EROSION, AND SEDIMENT CONTROL INSPECTOR TRAINING PROGRAM IS AVAILABLE IN PERSON OR BY PHONE AT ALL TIMES DURING THE CONSTRUCTION ACTIVITIES. THIS INDIVIDUAL MUST BE DESIGNATED AT THE PRE-CONSTRUCTION MEETING AND MUST BE PRESENT AT THE MEETING.
- 11. THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE PLANS ARE THE MINIMUM REQUIRED. ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED, DURING ANY PHASE OF DEVELOPMENT, AT THE DISCRETION OF THE JEA APPOINTED CONSTRUCTION INSPECTOR.
- 12. EROSION CONTROL MEASURES DEPICTED IN THE PLANS ARE LIMITED TO INLET PROTECTION AND SILT FENCES. THE INLET PROTECTION SHALL BE LIMITED TO INLETS WITHIN THE ACTIVE CONSTRUCTION LIMITS AND A MINIMUM OF TWO INLETS DOWNSTREAM OF THE ACTIVE CONSTRUCTION LIMITS. THE CONTRACTOR SHALL MONITOR THE EFFECTIVENESS OF SUCH INLET PROTECTION AND PROVIDE ADDITIONAL PROTECTION IF WARRANTED. NO SEDIMENTS ARE INTENDED TO ENTER THE CURB INLETS. THE CONTRACTOR SHALL CONDUCT AND MAINTAIN THE WORK IN SUCH CONDITION TO PROVIDE ADEQUATE DRAINAGE AT ALL TIMES AND SHALL MONITOR THE PERFORMANCE OF THE STORM WATER INLETS WHILE IMPEDED BY THE INLET PROTECTION. STREET FLOODING IS NOT TO BE INTRODUCED AS A RESULT OF THE INLET PROTECTION. SAFETY OF THE TRAVELING PUBLIC, AS RELATED TO THE ADEQUACY OF THE DRIVING SURFACE AS A RESULT OF STANDING STORMWATER RUNOFF CREATED BY THE INTRODUCTION OF INLET PROTECTION, IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A CLEAN WORK ZONE TO LIMIT THE RELEASE OF SEDIMENTS INTO STORMWATER COLLECTION SYSTEMS AND TO LIMIT THE TRACKING OF MATERIALS BEYOND THE ACTIVE WORK LIMITS. THE CONTRACTOR IS REQUIRED TO MECHANICALLY SWEEP THE ACTIVE CONSTRUCTION LIMITS A MINIMUM OF ONCE WEEKLY. SUCH SWEEPING SHALL BE COMPLETED TO REMOVE SEDIMENTS AND LIKE MATERIALS FROM THE CORRIDOR. MANUAL SWEEPING IS REQUIRED AT THE END OF EACH WORKDAY. ADDITIONAL OR MORE FREQUENT SWEEPING MAY BE REQUIRED BY THE IEA APPOINTED CONSTRUCTION INSPECTOR.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL TREES AND LANDSCAPING ON ADIACENT PROPERTIES. AND WILL BE SOLELY LIABLE FOR DAMAGE TO VEGETATION ON PROPERTIES ADJACENT TO CONSTRUCTION WORK ZONES. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS TO BE REMOVED. ALL TRESS OUTSIDE THE CONSTRUCTION WORK ZONE ARE TO BE PROTECTED TO THE MAXIMUM EXTENT PRACTICABLE. TREE BARRICADES WILL BE INSTALLED AND MAINTAINED AROUND ALL TREES TO BE PROTECTED OR AS DIRECTED BY THE ENGINEER/JEA APPOINTED CONSTRUCTION INSPECTOR. THE CONTRACTOR SHALL EMPLOY A CERTIFIED ARBORIST TO MITIGATE IMPACTS TO TREES AS A RESULT OF CONSTRUCTION ACTIVITIES AND SHALL COORDINATE THESE TREE-RELATED ISSUES WITH THE JEA APPOINTED CONSTRUCTION INSPECTOR. NO TRENCHING OR EXCAVATION SHALL BE ALLOWED WITHIN THE CRITICAL PROTECTION ZONE OF ANY PROTECTED TREE, EXCEPT WHERE DEBITS HAVE BEEN NOTED ON THE PLANS OR MITIGATION HAS BEEN PERFORMED. ANY TREE-RELATED DAMAGE DUE TO CONSTRUCTION SHALL BE PAID BY THE CONTRACTOR.
- 15. ALL DISTURBED AREAS, EXCEPT FOR AREAS THAT ARE LANDSCAPED, PAVED, OR OTHERWISE DESIGNATED, ARE TO BE SODDED. EXISTING GRASSED AREAS THAT ARE DISTURBED WILL BE SODDED WITH THE SAME GRASS TYPE AS EXISTING, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CENTIPEDE SOD WILL BE USED FOR ALL DISTURBED AREAS NOT CURRENTLY GRASSED. WHERE SOD IS PLACED ON SLOPES OF 2:1 OR STEEPER, AN EROSION MAT WILL BE INSTALLED BENEATH THE SOD, AND THE SOD WILL BE STAKED. AREAS THAT ARE SODDED SHALL BE FERTILIZED AT AN APPLICATION RATE OF 450 LBS. /AC AND WILL BE WATERED AT A RATE OF 5,000 GAL/AC. NO SEPARATE PAYMENT WILL BE MADE AND ALL COSTS FOR FERTILIZING, WATERING, STAKING, AND FURNISHING AND INSTALLING EROSION MAT SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS IN THE CONTRACT.
- 16. A DEWATERING PLAN IS REQUIRED AND SHALL DETAIL THE MEASURES TO BE EMPLOYED TO LOWER THE GROUNDWATER TABLE AND/OR TO DIVERT SURFACE WATER DURING EXCAVATION AND CONSTRUCTION INCLUDING THE INSTALLATION AND MAINTENANCE OF ALL DEVICES TO BE USED DURING EACH PHASE OF CONSTRUCTION TO CONTROL EROSION AND THE TRANSPORTATION OF ERODED MATERIALS OFF SITE. TRENCH SHEETING AND BRACING SHALL BE ADEQUATE TO PREVENT CAVE-IN OF TRENCH WALLS, SUBSIDENCE OF AREAS ADJACENT TO THE TRENCH, DAMAGE TO WASTEWATER COLLECTION PIPELINES AND OTHER UTILITIES, AND SLOUGHING OF THE BASE OF THE EXCAVATION DUE TO WATER SEEPAGE. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL DEWATERING ACTIVITIES ADHERE TO ALL LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS IT IS THE CONTRACTORS RESPONSIBILITY FOR THE ADEQUACY OF ANY SHEETING AND BRACING. THE COST OF DEWATERING, SHEETING AND BRACING IS CONSIDERED INCIDENTAL TO THE PAY ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- 17. PAYMENT FOR PREPARING AND SUBMITTING THE DEWATERING PLAN IS CONSIDERED INCIDENTAL TO THE PAY ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- 18. ALL DISTURBED AREAS TO BE LEFT IDLE LONGER THAN 14 DAYS MUST BE STABILIZED WITH QUICK GROW GRASS SEED AND MULCH.



BALES BACKED BY FENCE



SEEDING MIXTURES. RATES AND DATES

40-60 lbs l

40-60 lbs

8-12 lbs

20-30 lbs

8 lbs

8 lbs

8 lbs

20 lbs

5 lbs l

5 lbs |

8-12 lbs

8-12 lbs |

RATES AND DATES SEEDING MIXTURES,

Acre

Seeding Rate

1000 Ft <sup>2</sup>

4 oz

.5 lb

3 lbs | 1.2 oz | 9/1–1/1

12 lbs | 4.5 oz | 9/1-1/1

4 lbs | 1.5 oz | 2/15-7/15

12 lbs | 4.5 oz | 2/15-7/15

3 lbs | 1.2 oz | 2/15-8/15

30-40 lbs | 12 oz | 2/15-8/15

4 oz

a.40-50 lbs | 1.2 lbs | 1/1-7/15

b. 75 lbs | 1.7 lbs | 7/15-1/1

3 oz | 9/1–1/1

3 oz | 9/1–1/1

3 oz | 2/15–7/15

7 oz | 2/15-8/15

8 oz | 10/1–11/15

2 oz | 2/15-8/15

2 oz | 2/15-8/15

4 oz | 2/15-8/15

2/15-8/15

| Seeding Dates | Comments

Use 50% scarified seed.

Innoculate legumes.

For scarified seed.

For unhulled seed.

Use seeding rate specified above.

Best adapted to N. Florida

Gives quick summer cover.

Use seeding rate and dates

specified above.

Use 50% scarified Bahia seed.

Use 50% scarified Bahia seed.

N. Fla.

1 lb | 2/15-8/31

1 lb | 2/15-8/15

HAY BALE LOCATION

Seeding Mixtures

Bahiagrass

2. Bahiagrass

Bermudagrass (hulled)

Southern White Clover

Crimson Clover

Arrowleaf Clover

Alyce Clover

Hairy Indigo

Bahiagrass

Tall Fescue

Weeping Lovegrass

Weeping Lovegrass

c. Hairy panicum

d. Serica lespedeza

Aschynamene

. Sericea lespedeza

Annual White Sweetclover

Bahiagrass with one of the followina:

. Serica lespedeza with one of the following:

Weeping Lovegrass with one of the following:

a. Bahiagrass (50% scarified seed)

b. Bermudagrass (Hulled)

Conditions

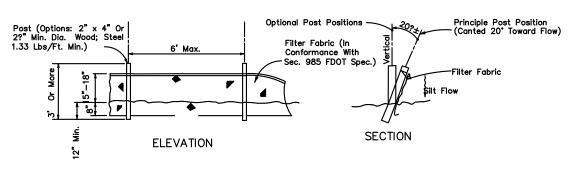
Maintenance

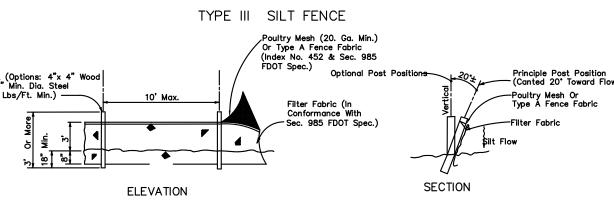
Lawns

General

Slopes

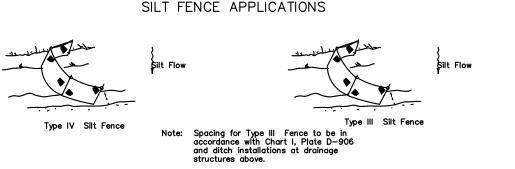
Droughty





Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF). TYPE IV SILT FENCE

Do not deploy in a manner that silt fences will act as a dam across permanent flowing



SILT FENCE TYPE III & IV PURSUANT TO A.A.N. STANDARDS CALIPER MEASUREMENTS SHALL BE MADE 6 INCHES ABOVE GROUND LEVEL (ROOTBALL) UP TO AND INCLUDING 4 INCH CALIPER; 12 INCHES ABOVE GROUND LEVEL FOR LARGER SIZES.

("DUCKBILL" GUYING SYSTEM IS AN ACCEPTABLE ALTERNATIVE TO BELOW) PLANT SO THAT TOP OF ROOT

BALL IS EVEN WITH THE FINISHED GRADE FLAG GUYING WIRES WITH SAFETY ORANGE COLORED SURVEYOR'S FLAGGING TAPE

**MAINTAIN GUYING &** SAFETY FLAGS FOR ONE YEAR; THEN REMOVE RUBBER HOSE 1" DIA. (8" MIN.)

TO PROTECT BARK FROM WIRE 3) GUYING WIRES 2 STRAND TWIST 12 GAUGE WIRE W/ TURNBUCKLE 3) 2"X4"X24" PRESSURE TREATED STAKES - TOP OF STAKE ABOVE GROUND PAINT W/SAFETY ORANGE HIGH GLOSS PAINT

SPECIFIED PLANTING MIX WATER & TAMP TO REMOVE AIR POCKETS REMOVE CONTAINER

(SINGLE/DOUBLE)

TREE TRUNK

DIAMETER

2 TO 3 INCH

4 TO 5 INCH

COMPACTED PLANTING MIX FILLS REQ'D PER 2 FILLS PER WEEK

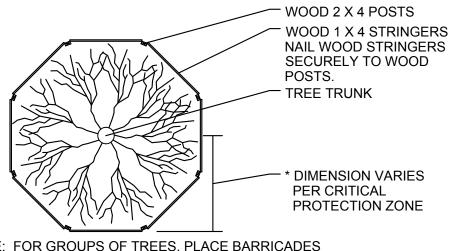
WEEK

SINGLE BAG 14.5 GALLONS DOUBLE BAG 23.5 GALLONS 1 FILL PER WEEK

WATER CAPACITY (PER

BAG)

# TREE PLANTING DETAIL



2. TREE PROTECTION BARRICADES SHALL BE LOCATED TO PROTECT A MINIMUM OF 75% OF THE CRITICAL PROTECTION ZONE.



NOTE: FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY. DIMENSION VARIES PER CRITICAL PROTECTION ZONE SECURELY AFFIX FENCE TO STRINGER WITH STAPLES OR 1 X 4 MINIMUM STRINGER SAFETY - ORANGE NYLON OR 2 X 4 MINIMUM POSTS 12' POLYPROPYLENE TYPE MAXIMUM SPACING FENCE — 4' MINIMUM HEIGHT 2' MINIMUM DEPTH EXISTING UNDISTURBED CRITICAL PROTECTION ZONE: THE AREA SURROUNDING A TREE WITHIN A CIRCLE DESCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE TRUNK DIAMETER AT 54" ABOVE FINISHED GRADE. FOR GROUPS OF TREES, PLACE BARRICADES BETWEEN TREES AND CONSTRUCTION ACTIVITY.

TREE PROTECTION

ID LENOX TO TII E MAIN IMPROVE TO TIMUQUANA CIVIL DETAILS

90% SUBMITTAL

6/12/2018

's Attached= JEA\_SHT22x34\_BOR-MOT [Z:\Projects\17006 JEA — West Grid Lenox to Timaquana\dwg\Wilson to Timuquana\JEA\_SHT22x34\_B :NSTPLN [Z:\Projects\17006 JEA — West Grid Lenox to Timaquana\dwg\XCNSTPLN.dwg] :STEPLN — MOT [Z:\Projects\17006 JEA — West Grid Lenox to Timaquana\dwg\XCSTEPLN — MOT.dwg]

