

ADDENDUM 3 APPENDIX A - TECHNICAL SPECIFICATIONS

026-19 Construction Services for Nassau Reclaimed Water Main - Radio Ave to Harts Rd

Table of Contents

1.	SCOPE OF WORK.....	3
2.	BID DRAWINGS	3
3.	GEOTECHNICAL REPORT	3
4.	026-19 APPENDIX C- SUE TEST HOLE FIELD REPORTS 2017	3
5.	RIGHT OF WAY (ROW) PERMIT	3
6.	NASSAU COUNTY’S ROAD CLOSURE POLICY	4
7.	BASIS OF AWARD	4
8.	BID PRICING (INCLUDED IN FRONT ENDS, BUT DOES NOT LIST EACH ITEM)	4
9.	PERMITS.....	4
10.	CONSTRUCTION SEQUENCE	4
11.	SURVEYING	5
12.	CLEAR AND GRUB.....	5
13.	EARTHWORK.....	5
14.	LANDSCAPING	5
15.	RESTORATION.....	5
16.	SOD RESTORATION.....	6
17.	COORDINATION OF CONSTRUCTION WITH EXISTING UTILITIES	6
18.	COMPANY’S USE OF PREMISES	6
19.	COMPANY’S STAGING, STORAGE AND STOCKPILE AREA	6
20.	ELECTRICAL TRANSMISSION LINE (T-LINE) REQUIREMENTS	6
21.	JEA ELECTRICAL TRANSMISSION LINE ACCESS DRIVE.....	7
22.	LOCATION AND PROTECTION OF EXISTING PROPERTY - ON NON-RIGHT OF WAY ISSUES	7
23.	PAVEMENT REPAIR (ONLY FOR OPEN CUT OPTION)	7
24.	TEMPORARY PAVEMENT REPAIR	8
25.	ROADWAY RECONSTRUCTION	8
26.	TEMPORARY ROADWAYS.....	8
27.	PAVEMENT REMOVAL (OPEN CUT ONLY)	8
28.	NASSAU COUNTY PAVEMENT MARKING REQUIREMENTS (OPEN CUT ONLY)	8
29.	SWALE AND DITCH CONSTRUCTION/REGRADE.....	9
30.	DUST CONTROL	9
31.	PERMIT COORDINATION MEETING	9
32.	JACK AND BORE, DEWATERING SHORING PLANS:	9
33.	VALVE AND LOCATE WIRE BOX IDENTIFICATION MARKERS	9
34.	CONNECTIONS TO EXISTING UTILITIES.....	9
35.	MAINTENANCE OF TRAFFIC.....	9
36.	UTILITY POLE HOLDING / SUSPENDING.....	10
37.	DEWATERING	10
38.	DRAINAGE ALONG RIGHT OF WAY AND UTILITY EASEMENT	10
39.	RESPONSIBLE BIDDERS LIST (RBL) GC-11 LOCATE LINE VERIFICATION.....	10
40.	TRAFFIC SIGNAGE.....	11
41.	US17-FDOT/NASSAU COUNTY PAVEMENT MARKING REQUIREMENTS.....	11
42.	TEMPORARY MAILBOX REMOVAL/RELOCATION	11
43.	SILT FENCE INSTALLATION AND GOPHER TORTOISES PERMIT COMPLIANCE.....	11

44.	PROTECTION OF ENDANGERED WILDLIFE.....	12
45.	MARKER UTILITY - RECLAIMED WATER VALVE MARKER	12
46.	CRITICAL PATH METHOD (CPM) SCHEDULING, RESOURCE AND COST LOADING ...	12
47.	SILT FENCE FOR GOPHER TORTOISE BARRIER	12
48.	FROM NASSAU COUNTY CODE OF ORDINANCES 99-17. APPENDIX D:	12
49.	SUBGRADE WHEN DIGGING CLOSE TO EDGE OF ROADWAY.....	15
50.	WORKING HOURS.....	15
51.	SHOP DRAWING REQUIREMENTS	16
52.	DRIVEWAY ACCESS TO BUSINESS.....	16
53.	PREVENTION, CONTROL AND ABATEMENT OF EROSION AND SILTATION.....	16
54.	GENERAL CONDITIONS/SPECIAL CONDITIONS	16
55.	PERMITS AND PLAN APPROVALS	17
56.	PROJECT OUTREACH MEETINGS.....	17
57.	CONTRACTOR EQUIPMENT IN RESIDENTIAL AREA	17
58.	NPDES PERMIT CONFORMANCE.....	17
59.	AS BUILTS	18
60.	JEA COMPANY / SUBCONTRACTOR SAFETY REQUIREMENTS	19
61.	UPDATED SCHEDULES	20
62.	COMPANY SAFETY MEETINGS	20
63.	FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) GOPHER TORTOISE TEMPORARY EXCLUSION PERMIT CONDITIONS:	20
64.	COMMUNICATIONS	22
65.	PROTECTION OF THE ENVIRONMENT.....	23
66.	STORM WATER POLLUTION PREVENTION AND STORM WATER AND GROUND WATER DISCHARGE FROM CONSTRUCTION SITES	24
67.	EDGE OF ROADWAY RESTORATION	25

1. SCOPE OF WORK

JEA is soliciting Bids from construction contractors (hereinafter referred to as “Company or Contractor”) for construction services for **Nassau Reclaimed Water Main - Radio Ave to Harts Rd** Project (the “Work” or “Services”).

- A. This request is to solicit bids for construction services to install 11,000LF of 16-inch PVC DR18 reclaimed water main by open cut method, 140 LF of 30-inch steel casing under US Hwy 17N and 230 LF of 30-inch steel casing by the bore and jack method under CSX railroad right of way in Nassau County. The new main will provide system reliability, reduce the reclaimed water discharge from the Nassau WRF to the Yulee wetlands and allow reuse water implementation for future developments in the area. The new main will connect to the Nassau WRF Outfall; continue along the FPL transmission easement, turn east on Radio Ave and go along south on US Hwy 1; turn east on Commercial Park Dr, cross the CSX ROW and continue north along Harts Rd up to the William Burgess Rd intersection.
- B. The Company shall strictly follow JEA’s Water and Wastewater Standards Manual, issued January, 2018 or latest version, during the construction of the improvements. Contractor shall use a Request for Information in the event of a discrepancy.
- C. The following is a link to the JEA Water and Wastewater Standards:
https://www.jea.com/Engineering_and_Construction/Water_and_Wastewater_Standards/
- D. The Company shall follow and comply with Nassau County Municipal Code Appendix D: Roadway and Drainage Standards Ordinance 99-017
- E. The duration of work from the notice to proceed will be two hundred and forty (240) days until substantial completion and two hundred and seventy (270) days until final completion.

2. BID DRAWINGS

TITLED “026-19 Appendix A - Nassau 16 in Reclaimed Water Main Radio Ave to Harts Rd Drawings” prepared by Jones Edmunds are attached.

3. GEOTECHNICAL REPORT

TITLED “026-19 Appendix C - 2010 Geotechnical Report Yulee FM and RWM” and “026-19 Appendix C - 2017 Geotech Report - Yulee RWM-Radio Ave to Harts Rd” by CSI Geo, Inc. is attached.

4. 026-19 APPENDIX C- SUE TEST HOLE FIELD REPORTS 2017

Prepared by FR Aleman and Associates are attached.

5. RIGHT OF WAY (ROW) PERMIT

The Company shall obtain a ROW permit from Nassau County and adhere to the attached Nassau County Engineering Services Department, and attend to pre-construction meeting once schedule by Nassau County “Guidelines for minimum test requirements for Nassau County Inspections” and “As-Built Requirement Checklist”.

6. NASSAU COUNTY'S ROAD CLOSURE POLICY

The Company must adhere to "Nassau County Engineering Services Department's, ROAD CLOSURE" policy.

7. BASIS OF AWARD

The basis of award will be the lowest, responsive, and responsible Bidder submitting the Base Price for open cut and Jack and Bore, as referenced on the Bid Form.

8. BID PRICING (INCLUDED IN FRONT ENDS, BUT DOES NOT LIST EACH ITEM)

Contract lump sum price shown for the general conditions on the bid form shall be compensation to complete the work as required in the general conditions that is not paid for separately including, but not limited to payment bond, performance bond, safety, quality control, preparation of daily reports, maintenance of traffic, attendance at meetings, scheduling, testing (if not included elsewhere), and all other items listed in the general condition specifications. Payment of the lump sum price shall only be made for the percentage of work completed.

Except as provided below for expenses related to Bonds and Surveying, JEA's payment for the General/Special Conditions line item shall be based upon the percentage of Work completed.

Bonds - Company will be permitted to invoice JEA, in its first payment application, for the costs associated with the execution and recording of the Payment and Performance Bonds. The amount paid by JEA for the Payment and Performance Bonds will be deducted from the General/Special Conditions line item total.

Surveying – Prior to construction, the Company will be permitted to invoice JEA for costs associated with the survey of the existing roadway horizontal alignment. The amount paid by JEA for these costs will be deducted from the General/Special Conditions line item total.

9. PERMITS

JEA has obtained the following permits for the project:

- CSX Permit – CSX057906025
- FDOT Utility Permit
- FDEP - ERP Permit
- USACE Permit
- NOI for NPDES – FDOT

10. CONSTRUCTION SEQUENCE

Company shall start any construction activities at Sta. 335+00 (Sheet C-22 in construction plans) and progressively advance towards the east end of the project (Sheet C-1 in Construction Plans) unless instructed otherwise by JEA.

Construction activities at the Gopher Tortoises designated areas in the plans Sheets C1, C2, C3, C4 shall be completed within 6 months of the first Gopher Tortoise relocation on the farthest western end on the project closest to the CSX crossing

In addition to constraints above the company shall not commence in work areas between Sta. 245+50 and Sta. 247+00 (Sheet C4 in construction plans), Sta. 272+80 and Sta. 276+50 (Sheets C10, C11) until authorized by JEA

11. SURVEYING

In addition to the Surveying requirements of this solicitation, the Contractor shall be responsible for staking the project stationing, easements and/or right-of-way boundaries. The survey datum used for this project is N.A.V.D 1988.

12. CLEAR AND GRUB

Payment for clearing and grubbing shall not be paid for separately, but shall be included in the cost of the associated item of work. Payment will be compensation in full for all clearing and grubbing required for the roadway right-of-way and for any other clearing and grubbing indicated or required for the construction of the entire project area including area of excavated trenches and where trenchless operations are required, including all necessary hauling, furnishing equipment, equipment operation, furnishing any areas required for disposal of debris, leveling of terrain and the landscaping work of trimming, etc. as required.

13. EARTHWORK

It shall be the sole responsibility of the Company to evaluate the geotechnical findings and recommendations along with the construction drawings to-determine the quantity of soil to be managed or removed/disposed and replaced in order to meet the requirements of the Contract Documents. No separate payment shall be made for stockpiling, managing, mixing, and/or removal, disposal, importation and placement of A-3 sand required for backfill and/or over-excavation (bedding) material for the pipeline(s) and structures, but all costs shall be merged with the associated item of work shown in the Bid Form. Excess and/or unsuitable material shall become the property of the Company and shall be disposed of outside of the right-of-way.

14. LANDSCAPING

The Company shall be responsible for protection and preservation of all trees, palms, shrubs, irrigation systems, landscaping, signs etc. along the route of the proposed work including hand digging, removal and storage of such and subsequent replacement to the fullest extent possible of the pre-existing condition. All costs associated with such shall not be paid for separately but shall be included in the cost of the associated item of work.

15. RESTORATION

The drawings show limits for all restoration items based on the existing design location of the proposed main and are provided for the Contractor's convenience. If the Contractor is forced to move the main into pavement or sidewalk due to a direct conflict with a utility or tree, the JEA Representative must be notified immediately and authorize such work.

Damage to asphalt, sidewalks, or curb and gutter (not indicated for removal and replacement) will be replaced at the Contractor's expense unless otherwise authorized by JEA.

16. SOD RESTORATION

JEA will pay for sod restoration only for disturbance of silt fence containment limits between C-1 through C-4, and C-10, limits between silt fence and EOP for C-5 through C-19 Sta. 317+27, a 2FT sod strip along the EOP from C-19 Sta. 317+27 through Sta. 334+50. Restoration of any of the areas outside of the limits described above shall be at contractor's expense.

17. COORDINATION OF CONSTRUCTION WITH EXISTING UTILITIES

The Company shall establish liaison with and coordinate work with JEA, BellSouth/AT&T, TECO/Peoples Gas, Florida Power & Light (FPL) and Comcast to prevent interference with overhead and buried electrical, telephone, and television cables. BellSouth, TECO/Peoples Gas, FPL and Comcast may need time to relocate their facilities.

The Company shall at all times conduct its operation so as to interfere as little as possible with the existing utilities. The Company shall develop a program in cooperation with the JEA and interested representatives of Utilities and City agencies, which shall provide for the construction of, and putting into service, the new work in the most orderly manner possible. This program shall be adhered to, except as deviations therefrom are expressly permitted. All work of connecting with, cutting into, and reconstructing existing pipes and structures shall be planned so as not to interfere with the operation of the existing utility.

18. COMPANY'S USE OF PREMISES

Company shall have complete use of the premises for the performance of the Work, subject to coordination with the JEA's Electrical Group, prior to mobilization on the Company's Work Plan addressing its staging, storage, pipe stringing, pipe installation, and limits of disturbance areas within the JEA's Electric Transmission Line easement.

All work shall take place within COJ ROW, FDOT ROW, CSX ROW, JEA Utility Easement, and the JEA Electric Transmission Line Easement. The Company is responsible for securing and obtaining any additional off site storage areas necessary.

Coordinate uses of premises with JEA and other contractors.

Company shall assume full responsibility for security of all its and its subcontractors' materials and equipment stored on the site.

If directed by the JEA Representative, move any stored items which interfere with operations of JEA or other contractors.

Obtain and pay for use of additional storage or work areas if needed to perform the work.

19. COMPANY'S STAGING, STORAGE AND STOCKPILE AREA

No additional staging, storage, and stockpile will be made available by the JEA along the project site. The Company is not allowed to store any equipment or materials outside the right-of-way and JEA's designated easement limits. The location will be agreed to upon and discussed at the pre-construction meeting.

20. ELECTRICAL TRANSMISSION LINE (T-LINE) REQUIREMENTS

Disturbance within the JEA T-Line easement shall be limited to the areas outlined by silt fence on the contract drawings. The Company shall submit a construction staging, storage, pipe stringing, and limits of disturbance plan to the JEA Electrical Utility Group and Environmental Group via the JEA Engineer for approval. The Company shall comply with the safety requirements and minimum clearances as set forth in OSHA Standard Number 1926.1408. All equipment and construction activities shall be kept outside a 20' minimum radius of all transmission lines (vertically and horizontally).

The Company shall coordinate with JEA Electrical Utility Group and/or JEA Security for the entry/exit protocol for the T-Line easements.

21. JEA ELECTRICAL TRANSMISSION LINE ACCESS DRIVE

The Company shall provide all necessary labor, materials and equipment to restore any disturbed portions of the 15' wide JEA Electrical Transmission Line Access Drive to match preconstruction conditions. The manner in which this is accomplished shall be left to the discretion of the Company, subject to the requirements of the Contract and approval of the JEA Project Manager. The JEA Engineer approval in no way relieves the Company of any liabilities resulting from the restoration method chosen.

No separate payment shall be made for the restoration, but shall be included in the unit prices of associated bid items on the Bid Form Workbook.

22. LOCATION AND PROTECTION OF EXISTING PROPERTY - ON NON-RIGHT OF WAY ISSUES

When working in areas outside the normal City, County and/or State right-of-ways, the Company shall be responsible for location and protection of all property shown or not shown on the drawings, including maintenance and repair of any damaged utility service. Utility locates shall be provided in accordance with local and state requirements. If the drawings indicate abandonment or removal of property or utility service by the Company, the Company shall proceed after it has determined that all services have been de-energized and/or decommissioned. The Company shall coordinate with the owner of the property (Owner) and the appropriate utility company to determine status of the existing utility service prior to starting work in the area. All property and utility services that are to remain shall be appropriately protected and maintenance during the construction activity. Should there be additional cost to the Company for protection or maintenance of property or utility services not shown on the drawings, the Company shall justify and document this cost in writing to the JEA Contract Administrator. A Supplemental Work Authorization (SWA) will be negotiated and approved prior to starting work. Should property or utility services be damaged by the Company, the Company shall notify the JEA Inspector, the Owner and the utility company immediately. Should the damage interrupt service, the Company shall be responsible for restoring service as soon as possible. However, the Company shall not make repairs without approval of the Owner or the utility company and should the Owner or a particular licensed Company be required to make the repairs the Company shall be responsible for coordinating this effort as well as any cost associated with the repair. JEA reserves the right to deduct any unsettled claim amount from monthly progress payments until such time as the claim is satisfactorily resolved. This paragraph is intended to stress the importance of customer relations and the maintenance of all services to the customer.

23. PAVEMENT REPAIR (ONLY FOR OPEN CUT OPTION)

Any Nassau County standard pavement repair shall be completed within 10 calendar days or when 500LF of roadway is disturbed after completion of the utility installation. All mobilization/demobilization required for

rework/regrading of lime rock base, dust control, including asphalt paving shall not be paid for separately but shall be included in the cost of the associated items in the Bid Form.

24. TEMPORARY PAVEMENT REPAIR

Contractor may use crush-crete in lieu of lime rock for temporary repairs; however, additional LBR and gradation testing, every 500' and 1000' is required by Nassau Co

Any open cuts shall be temporary repaired by the end of the day per Nassau County recommendations

25. ROADWAY RECONSTRUCTION

The Company shall perform survey of existing roadway horizontal alignment and vertical grade of the existing limits of construction prior starting the work. No separate payment shall be made, but all costs shall be included in the lump sum cost of the General Conditions line items. Intent is to remove and replace impacted roadway, curb & gutter, and sidewalk portions to existing alignment, width, and grade to match existing elevations after open cut construction is performed.

26. TEMPORARY ROADWAYS

If the Company's operations render any street or private way potentially unsafe, the Company shall make such repairs or provide such temporary ways and guards necessary for the protection and safety of persons on the Work Site and the public, and for the orderly maintenance of traffic.

The Company shall always provide and maintain a hard-surfaced roadway for traffic. Where temporary detours of lanes are required, they shall be asphalt-paved by the Company. The Company may construct paving section(s) appropriate to support traffic, provided the surface is smooth and the profile reasonable, and as a minimum, consists of 1 inch of bituminous structural course over a 6-inch lime rock base that was inspected and approved by the JEA Engineer. Should any temporary pavement fail, the Company shall be responsible for repairing it, at its own cost, before close of Work on the day notification is given. Should the Company be unable to make such repair by close of Work, the Company shall notify the JEA Engineer and provide an estimated time when repairs can be made. No repair timeframes shall exceed 48 hours. Any damages, either direct or indirect, resulting from such temporary pavement failures shall be the sole liability of the Company.

All lime rock base material used for temporary pavement and constructed in proposed grassed areas shall be completely removed and disposed of by the Company prior to final restorative grassing operations. The area shall be backfilled with material stockpiled on the Work Location that is conducive to growth of the plant material. All costs associated with this work shall be included in the associated line item in the Bid Form Workbook.

27. PAVEMENT REMOVAL (OPEN CUT ONLY)

Saw cuts must be used on all asphalt removal.

28. NASSAU COUNTY PAVEMENT MARKING REQUIREMENTS (OPEN CUT ONLY)

The Company shall comply with Nassau County pavement marking requirements as indicated in Nassau County Municipal Code Ordinance No.99-17, Appendix D: Roadway and Drainage Standards.

29. SWALE AND DITCH CONSTRUCTION/REGRADING

The Company shall re-grade all existing swales and ditches. No separate payment shall be made for re-grading or construction of new drainage ditches as shown on the drawings, but shall be included in the Bid Document for roadway paving replacement. Payment for ditch invert will be the same as made for storm pipe invert. Payment for sodding of ditches will be separate.

30. DUST CONTROL

The Company shall utilize a water spray truck to mitigate dusty conditions when roadways are unpaved and construction areas are not sodded.

31. PERMIT COORDINATION MEETING

Company shall be responsible for being thoroughly familiar with all permit requirements prior to mobilizing and starting work associated with a particular permit. If a permit requires a notification or meeting with the issuing agency prior to starting work, Company shall be responsible for arranging said meeting and informing the JEA Representative. The following shall be attended by, but not limited to, the Company's Project Manager, Company's Site Superintendent, Permitting Agency Representative, JEA Project Engineer and JEA Inspector.

32. JACK AND BORE, DEWATERING SHORING PLANS:

Contractor to provide Jack and Bore, Dewatering, and Shoring Plans signed and sealed by a Florida Professional Engineer and submit to FDOT for approval before performing work on the FDOT ROW, per FDOT Permit No: 2018-H-294-79 FDOT Special Instructions

33. VALVE AND LOCATE WIRE BOX IDENTIFICATION MARKERS

The Company shall furnish and install fiberglass identification markers at all gate valve and locate wire box locations as directed by the JEA Representative. All costs associated with this work shall be included in the associated line item in the Bid Document.

34. CONNECTIONS TO EXISTING UTILITIES

Contractor shall verify size and type of pipe at each connection prior to ordering materials for connections. Price for connections shall be a lump sum price to include the installation of restraints/sleeves as shown in the plans or as approved by JEA.

35. MAINTENANCE OF TRAFFIC

The Company shall adhere to the maintenance of traffic plans, including construction zone signing, pavement marking, barricades, barriers, etc. as shown on the project drawings. The Company shall provide written approval from Nassau County of any proposed alternate MOT plan to JEA prior to starting work in area of alternate MOT plan.

Temporary closure of business entrances must be approved and coordinated with JEA. The affected business shall be given at least forty-eight (48) hours' notice prior to the closure. Any deviation from the contract documents or the requirements of the FDOT Roadway and Traffic Design Standards, such as construction zone signing, barricades, warning devices, temporary striping, flagmen, etc., must be approved

by the JEA. The JEA shall be notified and approval shall be obtained forty-eight (48) hours in advance of such deviation.

Payment for all work required for maintenance of traffic, not provided for as a specific pay item, including, but not limited to, Temporary Pavement, Flagmen, off-duty police officers, lighting, etc., shall NOT be paid for separately but included in the associated line item.

36. UTILITY POLE HOLDING / SUSPENDING

Holding or suspending of utility poles including power poles and telephone poles as needed, and when trenching or excavating is within a horizontal distance from the pole that is less than the depth of the trenching or excavation. Work shall include, but not limited to, furnishing of all material, labor, supervision, tools, and equipment as required to hold/suspend utility poles. The Company must coordinate any utility pole holding/suspending with JEA. The Company shall schedule a meeting with the FPL Electrical representative in the field to discuss the anticipated work. A minimum of two (2) days' notice for the field meeting is required. The actual pole hold work will be scheduled at the field meeting.

No separate pay item will be made for this work and all costs shall be included to the associated work item unit cost as indicated in the Bid Form.

37. DEWATERING

If the Company encounters groundwater, the Company shall be responsible for utilizing a dewatering system(s) to remove water from the excavations. Prior to beginning any dewatering activities, the Company shall comply with all requirements listed in Florida Department of Environmental Protection (FDEP) Dewatering Regulations.

Additionally, prior to any dewatering, the Company shall apply for a St. Johns River Water Management District (SJRWMD) Generic Permit for Short Term Dewatering, and comply with all SJRWMD requirements.

If the above requirements are not followed, the Company shall be held liable for any fines and/or violations incurred by JEA.

No additional payment shall be made for dewatering unless approved by a Supplemental Work Authorization.

38. DRAINAGE ALONG RIGHT OF WAY AND UTILITY EASEMENT

The Company shall so conduct its operations and maintain the Work in such condition that adequate drainage shall be in effect at all times. The Company shall not obstruct existing gutters, ditches and other runoff facilities.

39. RESPONSIBLE BIDDERS LIST (RBL) GC-11 LOCATE LINE VERIFICATION

Upon request by JEA, Company shall identify which subcontractor on JEA's RBL GC-11 Locate Line Verification listing will be utilized for the installation of locate wire on PVC piping. The Company may obtain a list of prequalified persons and/or companies by contacting the JEA Procurement Bid Office, 21 W. Church Street, Customer Center 1st Floor – Room 002, Jacksonville, FL 32202, (904) 665-6740, or by fax (904) 665-7294, or online at JEA.com.

40. TRAFFIC SIGNAGE

Costs incurred by the Company to provide new signage and pavement markers, or remove and replace existing signage as necessary to accomplish the work shall not be paid for separately but shall be merged with the cost of the associated item of work. Damaged signage shall be replaced with new signage. All signage and pavement markers shall be in accordance with the drawings, FDOT requirements and City Traffic Engineer's requirements.

41. US17-FDOT/NASSAU COUNTY PAVEMENT MARKING REQUIREMENTS

Pavement markings should be placed as shown on the plans and detail sheets. If no specific striping comments are noted on the drawings, the Contractor shall replace damaged/removed striping due to construction activities with like striping and/or reflectors.

- a. Any required temporary markings must be in place before opening lanes of traffic. Pay items for temporary pavement markings are to be included in the tabulation of quantities.
- b. The removal of existing pavement markings will be considered an incidental item with no additional compensation provided.
- c. All permanent pavement markings shall be extruded thermoplastic and meet current FDOT standard specifications and Nassau County Code of Ordinance, latest edition.
- d. Thermoplastic pavement markings are to be placed no sooner than thirty (30) calendar days after the completion of the final pavement layer.
- e. A bituminous reflective pavement marker (RPM) adhesive meeting current Nassau County and/or FDOT specifications shall be used on asphalt roadways.
- f. The contractor shall use 4" x 4" CLASS -B reflective pavement markers (RPMs) installed to meet current FDOT standard specifications and Nassau County Code of Ordinance. Acceptable examples are: Ennis Paint co., Model 911; Ray-O-Lite, Model AA-ARCII-FH; Apex, 921AR.
- g. Reflective pavement markers that do not conflict with permanent (thermoplastic) markings shall be placed on all final asphaltic concrete surfaces immediately after the temporary permanent striping is in place.
- h. The contractor SHALL contact the FDOT Inspector forty-eight (48) hours PRIOR to installing any pavement markings on any FDOT roadway or street or Nassau County Engineering Services Department (904) 530-6225.

42. TEMPORARY MAILBOX REMOVAL/RELOCATION

Contractor shall remove and temporarily relocate any mailboxes that are in conflict with construction for that working day. All mailboxes removed/relocated shall be reinstalled by the end of that workday. It is the contractor's responsibility to protect all mailboxes from damage during construction. Damage to any mailboxes during construction will be replaced at the Contractor's expense. All costs associated with temporary relocating mailboxes shall not be paid for separately but shall be incorporated in the associated line item work.

43. SILT FENCE INSTALLATION AND GOPHER TORTOISES PERMIT COMPLIANCE

Contractor shall install silt fence for JEA's Gopher Tortoise relocation prior to any pipeline installation activities at STA 226+00 to STA 248+00

Contractor to start pipe installation at Sta. 335+00 (C-22) and continuously to progress towards Sta. 226+00 (C-1) in order to minimize working construction days at Gopher Tortoises area.

Once first Gopher Tortoise is relocated to containment area, construction and restoration work shall be completed within 6 months to meet FWC permit requirements

44. PROTECTION OF ENDANGERED WILDLIFE

The contractor is responsible for ensuring their operations and activities are in compliance of the Florida Wildlife Commission permit for protection/relocation of Gopher Tortoises. Contractor SHALL attend endangered wildlife compliance training provided free by JEA prior to the start of any construction activities.

The Contractor shall coordinate with JEA's Environmental Compliance Specialist the installation of silt fence with JEA's relocation of Gopher tortoises.

The contractor is responsible for adhering to the attached Supplemental Endangered Wildlife Specification. Costs for compliance will not be paid for separately but shall be included as a cost of the associated work. Contractor shall be responsible for any/all fines imposed on JEA for non-compliance during construction

45. MARKER UTILITY - RECLAIMED WATER VALVE MARKER

5' 2" H X 3-3/4" W. FIBERGLASS MARKER, PANTONE PURPLE 522C COLOR W\VINYL WATER DECAL, "CAUTION RECLAIM WATER VALVE", BEFORE DIGGING OR IN CASE OF EMERGENCY CALL 665-4802

46. CRITICAL PATH METHOD (CPM) SCHEDULING, RESOURCE AND COST LOADING

Please see section 2.13.2 of the solicitation for CPM requirements.

47. SILT FENCE FOR GOPHER TORTOISE BARRIER

Unit costs shall be included in the furnishing and installation of the silt fence for gopher tortoise barrier only. Silt fence used for erosion control purposes shall be included in the cost of the pipe.

48. FROM NASSAU COUNTY CODE OF ORDINANCES 99-17. APPENDIX D:

- Section 11.5. - Pavement design.**

11.5.1. Stabilized subgrade:

11.5.1.1. All roadway and driveway subgrades shall have a minimum width of forty-eight (48) inches greater than the finished surface course (See roadway typical sections, in the standard details). Minimum depth and bearing values shall be as follows:

Roadway Classification	Stabilized Depth (inches)	Lime rock Bearing Ratio (L.B.R.)
Local Roads	12	40
Minor Collectors	12	40

Major Collectors	12	40
------------------	----	----

11.5.1.2. Where the existing soils to be used in the roadway subgrade have the required bearing value, no additional stabilizing material will be required. The stabilizing material, if required, shall be high-bearing value soil, sand-clay, lime rock, shell or other materials which meet the standards established in the F.D.O.T. Specifications.

11.5.1.3. The construction of the stabilized roadbed shall meet the criteria as set forth in the F.D.O.T. Specifications. Minimum density shall be ninety-eight (98) percent (Modified Proctor Method).

11.5.1.4. Tests for the subgrade bearing capacity shall be located no more than five hundred (500) feet apart or every soil change, and tests for compaction shall be located no more than three hundred (300) feet apart. Tests shall be staggered to the left, right, and on the centerline of the roadway with no less than two (2) tests conducted per roadway section. When conditions warrant, in the judgment of the public works department, additional tests may be required to assure compliance with F.D.O.T. Specifications. The contractor/project engineer will be advised in writing that additional tests will be required and the extent of such additional tests.

11.5.2. Base course:

11.5.2.1. Base course materials shall be lime rock or material with an equivalent structural value. The minimum thickness and density for lime rock shall be as follows:

Roadway Classifications	Stabilized Depth (inches)	Lime rock Bearing Ratio (L.B.R.)
Local Roads	6	100
Minor Collectors	8	100
Major Collectors	8	100

11.5.2.2. Base course. The base course width shall be a minimum of twelve (12) inches greater than the finished surface course (see roadway typical sections in the standard details). Lime rock shall conform to F.D.O.T. Specifications for base course material and construction methods. Under special conditions where base material may be subjected to greater than normal moisture, soil cement or asphaltic base may be used after approval by the public works department. In such instances, the applicant shall submit the justification, test data to be used to determine mix, the contractor's experience record, and quality control procedure. The engineer of record shall state whether a fabric or other method will be used in the system to minimize surface cracking.

11.5.2.3. All bases shall be primed in accordance with the specifications. A tack coat will not be required on primed bases except on areas which have become excessively dirty and cannot be cleaned, or in areas where the prime has cured and lost all bonding effect. Tack coat material and construction methods shall conform to F.D.O.T. Specifications.

11.5.2.4. The construction of the base shall meet the criteria as set forth in the F.D.O.T. Specifications. Minimum density shall be ninety-eight (98) percent (Modified Proctor Method).

11.5.2.5. Testing for the base thickness and compaction shall be located no more than three hundred (300) feet apart and staggered to the left, right, and on the centerline of the roadway with no less than two (2) tests conducted per roadway section. When conditions warrant, in the judgment of the public works department, additional testing may be required to assure compliance with F.D.O.T. Specifications, the contractor/engineer will be advised in writing that additional tests will be required and the extent of such additional tests.

11.5.3. Asphaltic concrete surface course:

11.5.3.1. Surface courses for flexible pavements shall meet the following minimum thickness requirements:

Roadway Classification	Structural Course		Surface Course	
	Thickness	Type	Thickness	Type
Local Roads	N/A	N/A	1¼ inches	SP-9.5*
Minor Collectors	N/A	N/A	1½ inches	SP-9.5*
Major Collectors	1½ inches	SP-12.5	¾ inches	SP-9.5

* SP-12.5 with an equivalent structural value and minimum thickness of one and one-half (1½) inches shall be permitted.

11.5.3.2. Asphaltic concrete types or equivalent structural courses shall conform to the F.D.O.T. Standards and Specifications for design, materials, and method of construction.

11.5.3.3. Asphalt cores for thickness shall be located no more than two hundred (200) feet apart and staggered to the left, right, and on the centerline of the roadway with no less than two (2) cores taken per roadway section.

11.5.4. Portland cement concrete pavement:

11.5.4.1. Stabilized subgrade requirements for Portland cement concrete pavements shall be the same as those for flexible pavements.

11.5.4.2. Minimum pavement thickness requirements shall be as follows:

Roadway Classifications	Minimum Thickness (inches)
Local Roads	8
Minor Collectors	8
Major Collectors	10

11.5.4.3. Portland cement concrete pavement, including joints, shall conform to F.D.O.T. specifications for materials and method of construction.

49. SUBGRADE WHEN DIGGING CLOSE TO EDGE OF ROADWAY

According to Details #2 and County Ordinance 99-17, section 11.5.1.1 the subgrade shall extend a minimum of 24" past each edge of the surface course. According to County Ordinance 99-17, section 11.5.2.2 the base course shall extend a minimum of 6" past each edge of the surface course. Contractor shall meet this requirement when digging close to the edge of the roadway.

The Contractor shall maintain a 12' wide stabilized travel lane for traffic during construction, and shall install additional stabilized road base material to provide a 12' wide travel lane, if the existing asphalt roadway is not wide enough to provide 12 ft. wide travel lane along the work area. All stabilized road base material required to maintain a 12' wide travel lane shall not be paid for separately but included in the cost of the work.

50. WORKING HOURS

Contractor shall perform construction activities ONLY between 7:00 am and 6:00 pm

Contractor to restrict work hours from 9 am to 3:30 pm along Harts Rd and Radio Ave

Contractor to work on road crossings at night ONLY

51. SHOP DRAWING REQUIREMENTS

Contractor to provide bore logs and shop drawings for all the R&R at roadway crossings to JEA and Nassau County after work is completed

52. DRIVEWAY ACCESS TO BUSINESS

Contractor to maintain at least one driveway access to business at all times

53. PREVENTION, CONTROL AND ABATEMENT OF EROSION AND SILTATION

The Company shall take steps and make suitable provisions to minimize siltation and erosion of waterways that may result from its operation during the course of construction.

The Company shall make suitable arrangements, which may require the temporary construction of flumes, boxes, or some other device(s), at the Work Location for the drainage and disposal of water. The Company shall be responsible for protecting adjacent property to the Work Location from damage by water resulting from its operations. The Work Location shall be returned to its original condition to the satisfaction of JEA.

The Company is cautioned that execution or maintenance that creates turbidity and that directly or indirectly affects the water quality of any waterway into which storm water is discharged in such a manner as to exceed the limitations prescribed in the Florida Administrative Code, is a violation of the water quality standards of the State of Florida.

Turbidity shall not exceed 29 NTU's, above background level within 100' of the construction activity. Costs incurred by the Company for compliance to the restrictions outlined above shall be included in the cost of the items for which the turbidity control is required, unless a separate line item is included in the Bid Document for turbidity control. Silt barriers shall be used at all waterway crossings or at any time during construction that siltation or erosion may occur. The Company shall submit to the JEA Engineer, for written approval prior to construction, the method to be used to control the turbidity. The JEA Engineer's approval of the method to be used in no way relieves the Company of the liability in case of a citation against JEA.

54. GENERAL CONDITIONS/SPECIAL CONDITIONS

The line item shown on the Bid Form titled "General/Special Conditions Lump Sum Price" shall be used for general and special expenses which do not appear as separate line items on the Bid Form, including, but not limited to, costs and expenses related to the following:

- The execution and recording of the Payment and Performance Bonds
- Safety requirements
- Quality Control
- Preparation of daily reports
- Maintenance of traffic
- Attendance of meetings, project scheduling
- Testing (if not included elsewhere)

Except as provided below for expenses related to Bonds and Surveying, JEA's payment for the General/Special Conditions line item shall be based upon the percentage of Work completed.

Bonds - Company will be permitted to invoice JEA, in its first payment application, for the costs associated with the execution and recording of the Payment and Performance Bonds. The amount paid by JEA for the Payment and Performance Bonds will be deducted from the General/Special Conditions line item total.

Surveying – Prior to construction, the Company will be permitted to invoice JEA for costs associated with the survey of the existing roadway horizontal alignment. The amount paid by JEA for these costs will be deducted from the General/Special Conditions line item total.

SWA - In the event that JEA authorizes changes to the Work under a Supplemental Work Authorization (SWA), the amount of the Bid Form line item for SWA Allowance will not be increased unless the total value of all SWA Work exceeds the original SWA Allowance provided on the Bid Form.

55. PERMITS AND PLAN APPROVALS

The Contractor must obtain a Notice of Intent to Use Noticed General Permit for Short Term Construction Dewatering (Form 40C-22-0590-1) prior to the commencement of any dewatering. As part of the permit, a Notice to District of Dewatering Activity (Form RDS-50) must be submitted to the SJRWMD ten days before commencement of dewatering.

Contractor shall comply with all requirements and conditions of the JEA Permit for Construction of Reclaimed Water Main.

Contractor is responsible for obtaining COJ Right-of-Way (ROW) Permit prior to construction at the Nassau County Pre-Construction meeting.

56. PROJECT OUTREACH MEETINGS

The Company's project manager, superintendent and customer satisfaction representative for this Work shall be required to attend JEA project outreach meetings including potential “Town Meetings” scheduled through JEA Project Outreach or Nassau County.

57. CONTRACTOR EQUIPMENT IN RESIDENTIAL AREA

It is the design intent to place the proposed reclaimed water main out of the pavement in the grassed area between edge of pavement and right-of-way line. The Contractor is responsible for protecting sidewalks, curb, gutter, and asphalt by placing plywood or other applicable procedures for the machinery to operate.

All heavy equipment (excavator, front-end loaders, directional drilling rigs, etc.) shall be sized for a residential setting. Excavators shall be rubber tired unless approved by JEA representative. The bucket on the excavator shall be no greater than 30 inches wide to minimize the risk of disturbing surrounding utilities, sidewalks, curb and gutters, etc...

58. NPDES PERMIT CONFORMANCE

The Company shall comply with the State of Florida Department of Environmental Protection (FDEP) Document No. 62-621-300(4) (a). A copy may be downloaded via internet at http://www.dep.state.fl.us/water/stormwater/npdes/permits_forms.htm and is attached to this section.

The NPDES permit program requires that if the construction activities disturb an acre or greater of land, then the Company must submit the Notice of Intent (NOI) to use the Generic Permit for Storm water Discharge

from Large and Small Construction Activities, FDEP Form No. 62-621.300(4)(b). By applying for the Generic Permit, the Company is certifying that it will develop and implement a Storm Water Pollution Prevention Plan (SWPPP) specifically designed for each construction site. Also involved are certain certifications, notifications, inspections and record keeping activities. The SWPPP and the weekly inspection reports are required to be kept at the project site and available for review upon request.

The SWPPP must be prepared and certified by the Company prior to commencement of construction. The NOI will be initiated by the Company (DEP Document No. 62-621.300(4)(b)) and forwarded to the FDEP and related fee with courtesy copy to JEA (attention: Environmental Services, 21 W. Church Street, Tower 8).

The Company shall also comply with the City of Jacksonville Ordinance 98-994-E. A SWPPP plan that meets the minimum erosion and sedimentation control measures required by the City of Jacksonville may be included in the Construction Drawings. However, the Company is responsible for providing a SWPPP that will adhere to the requirements delineated in DEP Document No. 62-621.300(4)(a). This may require amendment or provision of additional information and controls to the SWPPP included in the Drawings. No separate payment shall be made for a SWPPP and its implementation, but all associated costs shall be included in the associated item of work in the Bid Form.

The Company shall obtain all other applicable local, state, and federal permits. It is unlawful to have any discharges that are not composed entirely of Storm water (except discharges pursuant to a NPDES permit) to the Municipal Separate Storm water System (MS4). Only non-contaminated water/non-turbid water shall be transported through the MS4. Groundwater discharge (approved by the Florida Department of Environmental Protection pursuant to 62-621.300(2)) from dewatering activities may be routed into the Storm water system, drainage ditch, creek, river or wetland providing that erosion, and transportation of suspended solids to the system is prevented. If unanticipated contaminated soil or contaminated groundwater is encountered, the dewatering activity shall cease immediately, and the Company shall contact the JEA Engineer and FDEP at (904) 807-3300 and.

The Company must complete Notice of Termination (NOT) (DEP Doc. No. 62-621.300(6), F.A.C.) within one (1) week of final site stabilization with courtesy copy to JEA (attention: Environmental Services, 21 W. Church Street, Tower 8). The Company shall also provide copies of NOT to JEA Engineer with final payment and construction closeout documents.

JEA will reject any and all invoices and Application for Payments unless JEA receives a copy of the Company's NOI and NOT that were forwarded to the FDEP. In addition, if the above requirements are not followed, the Company shall be held liable for any fines and/or violations incurred by JEA.

59. AS BUILTS

Upon submission of each payment application, Company shall furnish to the JEA Engineer a photocopy "redline" set of drawings identifying those field changes made to the Work to date, along with a photocopy set of the associated field notes. Revisions and recording of information on the photocopy set of drawings shall be done in scale in red ink clearly and accurately identifying those changes in the Work by a competent drafter. All "As-Built" information shall be recorded and kept current during the progress of the Work. The JEA Engineer may review and comment on the drawings which shall be incorporated into the next month's As-Built submittal. Failure to incorporate changes the following month may result in denial of pay application request. These requirements only supplement the requirements of the General Conditions.

When the payment of application submitted includes associated items of final restoration for a project, or a portion of the project thereof, then the associated final as-builts shall be submitted as a “redline” marked photocopy set of drawings for that pay period. The Project Engineer may review and comment on the drawings with the view toward final As-Built submittal. The subsequent month submittal made with the payment application shall incorporate a photocopy set of CADD drawing final as-builts. The JEA Engineer shall review and comment on the photocopy set of CADD drawings which shall be incorporated into the final As-Built submittal. These requirements only supplement the requirements of the General Conditions.

As-Builts shall be provided to Nassau County and JEA once construction substantially completed. Completion of the project will only be accepted once As-Builts have been accepted by Nassau County requirements and JEA GIS requirements.

Limits of flowable fill should be indicated in final as-builts

60. JEA COMPANY / SUBCONTRACTOR SAFETY REQUIREMENTS

Bidder shall be approved as JEA Safety Qualified within ten (10) business days of receiving written notice from the JEA Bid Office that it is the lowest responsive and responsible Bidder. If the Bidder fails to obtain JEA approval as a JEA Safety Qualified company by 4:00 PM Eastern Time on the 10th business day, JEA will reject the company's Bid, and proceed to Award to the next lowest responsive and responsible Bidder.

JEA Safety Qualification information is available online at jea.com. Please note that it may take up to five (5) business days for a company to be approved as JEA Safety Qualified. It is the Bidder's responsibility to ensure it is JEA Safety Qualified. A list of the JEA's Safety Qualified vendors can be found on jea.com.

For additional information, contact Jerry Fulop, JEA, T-3 21 W. Church Street, Jacksonville, FL 32202, (904) 665-5810, e-mail: fuloje@jea.com

Company agrees to abide by all JEA's Safety Rules and Regulations in accordance with JEA Company Safety Requirement. In addition, ALL Company employees will be required to attend and successfully complete Company's orientation and supervisor's training at Company's expense prior to the start of any work activities. This is a condition of employment for Company and Subcontractors who perform work for JEA. There will be at least two (2) categories of training mandated. 1) Orientation and 2) Supervisor.

ORIENTATION - Required one-day training class for ALL personnel working at JEA's sites. Acceptable training will be EITHER attendance at an OSHA 10 hour class or the National Center for Construction Education and Research (NCCER) 8 hour Orientation. Cards must be provided for proof. Company personnel utilizing the OSHA 10 Hour class must also attend the JEA 2-Hour Operation specific training. This training must be completed prior to starting work on a JEA job site.

SUPERVISOR - Orientation and the JEA Safety Leadership Development (SLD) Class. This requirement is for ALL employees paid as a foreman, general foreman, superintendent or any employee that will direct or may be expected to direct work.

NOTE: OSHA ten (10) hour classes are available from the following: Trained and Certified OSHA Instructors, Consultants, Safety Councils, etc. Other training mandated by JEA has been developed and approved by the NCCER. This training will be available from Certified Master Instructors, JEA, Northeast Florida Safety Council or other approved sources and will be tracked in the form of an individual transcript for each employee by NCCER.

Company may request exemption for specialty work based on task to be performed, hazard involved, and duration of work.

61. UPDATED SCHEDULES

Schedules shall be provided to JEA every two weeks

62. COMPANY SAFETY MEETINGS

Copy of weekly companies' safety meeting record to be provided to JEA every week

63. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) GOPHER TORTOISE TEMPORARY EXCLUSION PERMIT CONDITIONS:

The designated protected gopher tortoise silt fence enclosure is shown on the construction drawings. Absolutely no construction activity or material storage shall occur within the limits of this silt fence. Installation of the fence enclosure and relocation of gopher tortoises shall be completed prior to installation of the silt fence surrounding the limits of construction disturbance. The Company shall provide 30 days' notice to JEA prior to commencing work between STA 226+00 and STA 247+00 so that relocations can be made.

The Company's limits of disturbance shall not encroach within 25' of an identified active gopher tortoise burrow. If the limits of disturbance, including silt fence installation, must encroach within the 25' radius, the gopher tortoise shall be relocated by a JEA environmental representative certified to perform such work (Brett Anderson at (904) 470-2200 and Andrew Sears at (904) 665-7719). The Company shall remain vigilant of any other gopher tortoises other than those noted on the construction drawings. Should the Company encounter any gopher tortoises or burrows, the Company shall notify the JEA Engineer and JEA environmental representative (Brett Anderson at (904) 470-2200 and Andrew Sears at (904) 665-7719) immediately.

Only individuals who are in possession of a valid permit or authorization issued by the United States Fish and Wildlife Service to capture or possess an eastern indigo snake (*Drymarchon corais couperi*) are permitted to physically handle these snakes. If individuals without this permit or authorization encounter an eastern indigo snake during attempts to capture gopher tortoises or during subsequent land alteration or development activities within the property, all movement of heavy equipment and land alteration or development activities within the vicinity of the snake shall cease to allow the snake to vacate the area. No movement of heavy equipment, or land alteration or development activities within the vicinity of the snake shall resume until the snake has vacated the work area.

Before attempting to capture any gopher tortoises for relocation the Permittee shall either install filter fabric or other comparable fencing, ***buried at least eight inches into the ground***, along the boundary separating the donor site utility construction corridor ("utility corridor") from the recipient site(s), or utilize other methods approved by the FWC to keep gopher tortoises out of the utility corridor. If fencing is installed, it shall be removed immediately following completion of the utility installation and restoration of the gopher tortoise habitat within the utility corridor. Habitat restoration shall include restoring the pre-construction ground elevations and either seeding or sodding the utility corridor to provide suitable forage for gopher tortoises.

Either this original permit, or a complete copy, must be clearly posted at the affected site at all times while engaged in the permitted tortoises relocation activities.

Other Items to provide within Construction Information:

Gopher Tortoise Information

Silt fence is defined by FWC as: temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. There are two types: 1) the silt fence is a temporary linear filter barrier constructed of synthetic filter fabric, posts, and, depending upon the strength of the fabric used, wire fence for support; 2) the filter barrier is constructed of stakes and burlap or synthetic filter fabric. These types of silt fencing are useful for temporary exclusion, but are generally not durable enough for six month-enclosures on recipient sites. FWC recommends a type of silt fencing produced by Belton Industries (#935). This is a durable type of silt fencing (36 in x 75 ft., pre-assembled, double-stapled, with oak stakes) that has been field-tested as an enclosure material for gopher tortoises. The manufacturer is Belton Industries, PO Box 127, Belton, SC; 800-845-8743; www.beltonindustries.com/silt.html. Distributors include Pallen Enterprises, Conyers, GA (770-922-1812) and Certified Slings, Ft. Myers, FL (239-334-1343).

All site crew will be required to attend an education presentation discussing the material below.

Signs summarizing the information and what to do if you encounter a gopher tortoise will be provided.

Description of the Gopher Tortoise and its Burrow

The adult gopher tortoise is a large land turtle that burrows underground. Juvenile gopher tortoises can be as small as a silver dollar.

Their top shells and skin are brown in color, with the bottom of their shells being more yellow in color. Younger tortoises can have larger areas of yellow on their top shell and have lighter colored skin.

Tortoises dig burrows up to nine feet deep and 20 to 30 feet long with a large chamber at the bottom.

Burrows are characterized by half-moon shaped openings with a large sandy apron located at the mouth of the burrow.

Gopher tortoises are herbivores that feed primarily on wiregrass, broadleaf grasses, legumes and non-legume forbs. They are considered opportunistic feeders and will usually eat what is available to them. Active during the day, they spend time foraging, basking and traveling to other tortoise burrows. The remainder of the time is spent at the mouth of the burrow or in the burrow, depending upon daytime temperatures.

Federal and State Protection Status and Penalties

Federal

Listed as “Threatened” and therefore covered by the Endangered Species Act.

Definition of a “take” – a take is defined as “harassing, harming, pursuing, hunting, shooting wounding, killing, trapping, capturing or collecting, or attempting to engage in any such conduct, or possessing, selling, delivering, carrying, transporting or shipping.”

Penalties for a “take” – violations of the Endangered Species Act can result in civil and criminal penalties of up to a \$13,000 fine and a year in jail.

State – Florida Fish and Wildlife Conservation Commission (FWC)

Rule 68A-27.004 (F.A.C.) - The gopher tortoise is declared to be "Threatened."

No person shall take, attempt to take, pursue, hunt, harass, capture, possess, sell or transport any gopher tortoise or parts thereof or their eggs, or molest, damage, or destroy gopher tortoise burrows, except as authorized by FWC permit or when complying with FWC approved guidelines for specific actions which may impact gopher tortoises and their burrows.

Only those authorized by FWC as an Authorized Agent and holding the appropriate permit specific to the project are authorized to handle any observed gopher tortoises.

WHAT TO DO IF YOU ENCOUNTER A GOPHER TORTOISE OR ITS BURROW DURING CONSTRUCTION ACTIVITIES

If you encounter a gopher tortoise burrow within the footprint of construction delineated by the silt fencing:

STOP all work in the vicinity. Call JEA Engineer and environmental representative (Andrew Sears at (904) 665-7719 and Brett Anderson at (904) 470-2200) immediately. If neither can be reached, contact ESI Environmental Solutions, Inc. ((904) 470-2200) and provide the following information to the receptionist: Your name, telephone number at which you can be reached, the name and the location of the project site, and an appropriate contact will get back to you ASAP.

If a live gopher tortoise is encountered during construction:

STOP all work in the vicinity. Call JEA environmental representative Call JEA Engineer and environmental representative (Andrew Sears at (904) 665-7719 and Brett Anderson at (904) 470-2200) immediately. If neither can be reached, contact ESI Environmental Solutions, Inc. ((904) 470-2200) and provide the following information to the receptionist: Your name, telephone number at which you can be reached, the name and the location of the project site, and an appropriate contact will get back to you ASAP.

If a dead gopher tortoise encountered:

STOP all work in the vicinity. Call JEA environmental representative Call JEA Engineer and environmental representative (Andrew Sears at (904) 665-7719 and Brett Anderson at (904) 470-2200) immediately. If neither can be reached, contact ESI Environmental Solutions, Inc. ((904) 470-2200) and provide the following information to the receptionist: Your name, telephone number at which you can be reached, the name and the location of the project site, and an appropriate contact will get back to you ASAP.

Appendices to provide within Construction Information:

Gopher Tortoise Temporary Exclusion Permit Application #42123 (Must be posted on-site)

Gopher Tortoise Temporary Exclusion for Major Linear Utility Corridors Permit # GTU-18-00028 (Must be posted on-site)

Construction drawings showing the designated protected gopher tortoise silt fence enclosure.

64. COMMUNICATIONS

Company should be working in cooperation with JEA inspector and any JEA representative

JEA's representative should be able to ask questions about the work being performed to any Companies' representative on site

65. PROTECTION OF THE ENVIRONMENT

The Company and its Subcontractors shall comply with all applicable laws, rules and regulations including, but not limited to, all Environmental Regulations.

A. Asbestos, Lead, or Toxic Mold Notification:

Asbestos, Lead, or Toxic Mold may be present at the Work Location. The Company shall notify the Contract Administrator immediately upon discovery of asbestos, lead, toxic mold. The Company shall not disturb or remove known or discovered asbestos, lead, or toxic mold unless directed by the JEA Representative.

B. Hazardous Materials:

The Company shall bear full responsibility including, but not limited to, payment and liability for the transportation, use, recycling, and disposal of any Hazardous Materials under the Company's control during the performance of the Work. Disposal or recycling of Hazardous Materials shall only be performed at JEA approved facilities. The Company shall provide JEA with appropriate documentation showing proper disposal or recycling of its Hazardous Materials.

The Company shall notify the Contract Administrator in writing of the type, quantity and disposal or recycling method of any hazardous material used during the performance of the Work. The Company shall be solely responsible for the use and disposal or recycling of any such materials. The Company shall submit cleanup procedures to the JEA Representative for review and written approval prior to the use of the hazardous material. In the event that a hazardous material escapes into the environment, the Company shall immediately notify the Contract Administrator in writing of the occurrence and the actions taken. In the event that the Company encounters hazardous materials in the course of construction, the Company shall immediately notify the Contract Administrator verbally, with a written notification to follow. The Contract Administrator shall arrange for disposal by JEA.

JEA has identified and labeled equipment known to contain PCBs. JEA will remove and transport any equipment so identified. The Company shall not remove or transport any equipment containing PCBs. The Company shall immediately notify the JEA Representative of any questionable or unmarked equipment, and the JEA Representative will arrange for testing and identification.

C. Waste Management:

The Company will be solely responsible for the proper management of all waste material, including but not limited to, paints, lubricants, fuels, solvents, drilling mud and materials, construction and demolition debris, used oil and oily waste, land clearing debris, universal waste (mercury containing lamps and devices, batteries, etc.) and other chemicals and hazardous materials used in connection with or generated during the Work, except as specified above. The Company will provide proper containers for waste materials and comply with all applicable laws, rules and regulations in their disposal or recycling. The Company will dispose of or recycle all empty containers off-site as soon as possible.

D. Wetlands:

The Company understands and agrees that the Work Location may include wetlands or other environmentally sensitive areas. The Company shall not enter these areas during the performance of its Work, unless specifically authorized by the Contract Administrator and appropriate state and federal permits have been obtained.

E. Wildlife:

The Company and/or Subcontractor's employees shall not endanger, harass, or interfere with any wildlife species or domestic animals of any kind.

F. Violation of Environmental Laws and Permits:

The Company shall immediately cease any activity that causes or results in a violation of JEA's or Company's environmental permits or federal, state and local laws and regulations. Such violation shall immediately be reported to the Contract Administrator verbally, with written notification to follow. All additional costs due to the Company's noncompliance with the applicable environmental permits or Environmental Regulations shall be paid by the Company.

66. STORM WATER POLLUTION PREVENTION AND STORM WATER AND GROUND WATER DISCHARGE FROM CONSTRUCTION SITES

The Company shall develop a Storm water Pollution Prevention Plan (SWPPP) compliant with local, state, and federal rules, laws, and ordinances. Company shall be responsible for implementing the SWPPP, installing and maintaining in a functional manner performance based structural and nonstructural best management practices (BMPs) as described therein, evaluating the effectiveness of the best management practices, and employing additional performance based best management practices as may be deemed necessary by JEA. The Company, at its own expense, shall revise, or include as addendum to the SWPPP measures as maybe required by a local, state, or federal authority to remain compliant with local, state, and federal rules, laws, and ordinances.

No additional payments shall be made to Company for revisions or addendums to the SWPPP, or for the actual implementation of those revisions on the Work site, including those made so as to achieve functional performance based best management practices.

The Company shall obtain all other applicable local, state, and federal permits subsequent to notification of JEA of the need for such authorization(s). It is unlawful to have any discharges that are not composed entirely of Storm water (except discharges pursuant to a NPDES permit) to the Municipal Separate Storm water System (MS4). Only non-contaminated water/non-turbid water shall be transported through the MS4. Groundwater discharge (approved by the FDEP pursuant to 62-621.300(2)) from dewatering activities may be routed into the Storm water system, drainage ditch, creek, river or wetland providing that erosion, and transportation of suspended solids to the system is prevented. If contaminated soil or contaminated groundwater is encountered, the dewatering activity shall cease immediately, and the Company shall contact JEA's Environmental Coordinator, Andrew Sears, at (904) 665-7719.

All contractors conducting land disturbing activities shall have at least one corporate representative that is certified for the Florida Department of Environmental Protection Erosion and Sediment Control Inspector Training Manual.

For projects with greater than one acre of disturbed land, a person certified pursuant to the Florida Department of Environmental Protection's Erosion and Sediment Control Inspector Training Manual or trained by a certified person, shall make the routine inspections of work site BMPs at least once every 7

days or within 24 hours after every 0.5 inch rainfall. Written inspection reports shall be made, kept on the construction site, and made available for inspection during land-disturbing activities. If the inspector is trained by a certified person but not certified themselves, accurate training records must be kept and evidence of annual refresher training shall be maintained.

Any required erosion and sediment control plans submitted to the City of Jacksonville must conform to the requirements in the Florida Department of Environmental Protection's Erosion and Sediment Control Inspector Training Manual and the provisions contained in the City of Jacksonville Land Development Procedures Manual. Upon approval to proceed to do so by the Owner, the Company shall complete a *Notice of Termination (NOT)* (DEP Doc. No. 62-621.300(6), F.A.C.), to terminate the CGP coverage within one (1) week of final site stabilization.

67. EDGE OF ROADWAY RESTORATION

Item No. 19 in the workbook includes all the materials, equipment and labor needed to perform work directed on notes on the construction drawings calling out edge of roadway restoration, Note 5. and 6. from the Restoration Notes on Drawing G2 Sheet No. 2, and Nassau County Detail No. 2 referenced in Drawing No. DET-1 Sheet No. 32.

The Company shall be held liable for any fines and/or violations incurred by JEA.