**APPENDIX A - TECHNICAL SPECIFICATIONS**

**005-18 Main St to Pulaski Road Transmission Force Main**

**Scope of Work**

JEA is soliciting Bids from construction contractors (hereinafter referred to as “Company”) for Construction of the Main St to Pulaski Rd Transmission Force Main

The Scope of work specified herein includes installation of approximately 9,600 LF of 20” PVC force main and 80 LF of 16" PVC force main, along with valves, fittings and associated appurtenances. The new force main will connect to the existing twin 10” force mains at the Main Street and Ponce Boulevard Intersection. From there, the installation route will follow Ponce Boulevard to the east, then Gillespie Avenue south to a JEA east-west utilty easement. Following the easement to the east, the force main will turn south and enter the JEA owned transmission line parcel near Camden Road. Following the transmission line corridor in a southerly direction, the route will branch at Fields Road. One force main branch will run east to Pulaski Road, the other will continue south to the JEA east-west T-Line, and both branches will connect to existing force mains.

All Work shall be done in accordance with the January 2017 Edition of JEA Water & Wastewater Standards Manual. The following is a link to the JEA Water and Sewer Standards: <https://www.jea.com/Working_With_JEA/Engineering_and_Construction/Reference_Materials/Water_and_Sewer_Standards.aspx>

The following scope of work will be defined as the base bid for this contract and shall include, but is not necessarily limited to, the following:

* Install 9,600 linear feet of 20-inch (pipe and fittings), PVC – DR-25 force main, 80 LF of 16" DR-25 PVC force main, and associated appurtenances via open cut methods within COJ ROW, FDOT ROW, CSX ROW, JEA Utility Easement, and JEA Electric Transmission Line easement
* Mobilization/demobilization, general requirements, and insurance
* 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 and their proximity to electric transmission poles and conductors
* Installation of Maintenance of Traffic (MOT) plans, devices, and measures to construct the project
* Set up erosion & sediment control devices (E&SC) & stormwater pollution prevention plan (SWPPP)
* Site work
* Clearing, grading, seeding, and sodding
* Removal and disposal of concrete, pavement, and appurtenances as shown on the drawings
* Restoration of landscaping, grassing, asphalt roads, driveways, and sidewalks.
* Installation of isolation valves and air release valves along with associated appurtenances as per the contract drawings
* Installation of connections to existing force mains
* Perform all testing and swabbing required during construction
* Perform all permits necessary to complete the work, including but not limited to, the FDEP NOI to Use NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP)
* Perform all site restoration to preconstruction (or better) condition

**Permits and Regulations**

The Company’s responsibility includes compliance with federal, state and local regulations which in any way affect the work or implementation of the Project.

JEA will provide the following permits for the Project:

* COJ Plan Approval; CDN 4161.225, issued August 4, 2017
* FDEP Permit to Construct a Domestic Wastewater Collection/Transmission System; Permit No. 0010239-354-DWC, issued June 16, 2017
* FDEP Environmental Resource Permit; Permit No. 55-0354063-001 EG, issues June 6, 2017
* FDOT Utility Permit # 2017-H-294-211, issued July 14, 2017
* USACE Permit No. SAJ-2017-01123, issued June 16, 2017
* CSX Railroad Agreement Number CSX825061-Tracking ID 1008334 (Contact – John Howard, OSPRE’ Consruction Manager John.Howard.ospre@gmail.com (386) 623-7278)

Prior to commencing Work the Company is responsible for obtaining the following permits, including but not limited to:

* City of Jacksonville Right of Way Permit
* City of Jacksonville (COJ) Site Work – Tree Removal Permit
* FDEP NOI to Use NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP) – Form 62-621.300(4)(b).
* SJRWMD Notice to District of Dewatering Activity – Form 40C-2-900-12.
* SJRWMD Individual Consumptive Use Permit if unable to qualify for general permit under Rule 40C-2.042(9).

All costs associated with obtaining such permits shall not be paid for separately but shall be included in the unit price of the associated item of work in the Bid Form Workbook. The Company shall comply with all conditions of permits issued for the Work, either directly or indirectly, issued by federal, state, or local governmental agencies.

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.

The Company shall comply with all requirements and instructions of the latest edition of FDOT’s Standard Specifications for Road and Bridge Construction and FDOT Utility Permit including, but not limited to, the following:

* Dewatering Plan signed and sealed by a Florida licensed professional engineer prior to commencing dewatering.
* Shoring Plan signed and sealed by a Florida licensed professional engineer prior to commencing shoring work.

**Work Description and Sequence**

Perform work in a sequence to ensure completion of the work in the contract time. Completion dates of the various stages shall be in accordance with the approved construction schedule submitted by the Company.

The Company shall submit a written schedule to the JEA Engineer for approval prior to commencing work. Completion dates of the various stages shall be in accordance with the approved construction schedule submitted by the Company.

**901. General Conditions**

The General Conditions Lump Sum price shown on the Bid Form Workbook shall be compensation to complete the Work as required in this contract (except for items listed separately on the bid form workbook), 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). Payment of the General Conditions Lump Sum Price shall be based upon the percentage of Work completed: however, if the Company executed bond(s) accompany the first pay request then the amount paid will be deducted from the associated subtotal. Also, the Company shall include the cost for performing survey of the existing roadway horizontal alignment (prior to initiating any construction) in their initial General Conditions payment. In the event that changes to the work are required that are covered under the Supplemental Work Authorization account, the General Conditions Lump Sum Price will not be increased unless the total value of the SWA exceeds the original SWA account provided in the original contract bid.

**902. Quality Control and Quality Assurance**

The Company shall provide Quality Control to ensure the Work is performed in accordance with the Contract. Quality Control shall be appropriate for the nature of the Work, and shall be conducted in a manner consistent with sound quality management and industrial engineering principles. The Company shall have only personnel trained in Quality Control techniques and experienced with the nature of the Work perform the Quality Control function.

JEA may perform Quality Assurance activities. Such activities whether performed or not, do not in any way limit or reduce the Company's requirements. JEA may become aware of quality related problems during its performance of Quality Assurance, but has no obligation to notify the Company of its findings. The Company shall provide access to all areas of Work, including the Company's facilities, for JEA Quality Assurance personnel and JEA Representatives. JEA will conduct Quality Assurance activities so as not to excessively interfere with the Work, however, where JEA Quality Assurance personnel request specific actions of the Company, the Company shall comply with the request and agrees that such compliance is included as part of its Contract Price.

**903. Maintenance of Traffic**

Payment for maintenance of traffic shall be included in the General Conditions lump sum price set forth in the Bid Form Workbook and shall include, but not be limited to, mobilization, excavation, embankment, pavement overbuild, sod, pavement marking removal, pavement marking removable tape, thermoplastic pavement marking, thermoplastic preformed pavement marking, permanent tape for concrete bridges, permanent tape for concrete surfaces, temporary reflective pavement markers, permanent reflective pavement markers, work zone signs, temporary barrier wall, temporary crash cushion, channelizing devices, milling existing asphalt pavement, superpave asphaltic concrete, grounding rumble strips and portable changeable message sign, removal of all MOT components, restoration of the FDOT Right-of-Way to existing conditions, cleaning up the site; furnishing all material, labor, tools, and equipment and all incidental and related work required to complete the work of the item. Maintenance of traffic shall be in accordance with the approved maintenance of traffic drawings and plan and the FDOT Utility Permit. Payment shall be made for the MOT mobilization and installation as two-thirds of the lump sum price. Payment shall be made for the MOT demobilization and removal as one-third of the lump sum price.

**904. 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 limerock 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 limerock 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.

**905. 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 Company shall replace damaged/removed striping due to construction activities with like striping and/or reflectors.

* Any required temporary markings must be in place before opening lanes of traffic.
* The removal of existing pavement markings will be considered an incidental item with no additional compensation provided.
* All permanent pavement markings shall be extruded thermoplastic and meet current City of Jacksonville specifications and FDOT standard specifications, latest edition.
* Thermoplastic pavement markings are to be placed no sooner than 30 calendar days after the completion of the final pavement layer.
* A bituminous reflective pavement marker (RPM) adhesive meeting current City of Jacksonville and/or FDOT specifications shall be used on asphalt roadways.
* The Company shall use 4” x4” CLASS –B reflective pavement markers (RPMs) installed to meet current City of Jacksonville specifications and/or FDOT standard specifications. Acceptable examples are: Ennis Paint co., Model 911; Ray-O-Lite, Model AA-ARCII-FH; Apex, 921AR.
* 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.
* The Company SHALL contact the Pavement Marking Inspector (904-387-8861) 48 hours PRIOR.

**906. Roadway Restoration**

Company shall perform survey of existing roadway horizontal alignment and vertical grade of the existing structures, utilities, and appurtenances for the Work area prior to initiating any construction.  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, driveways, and sidewalk portions to existing alignment, width, and grade to match existing elevations after open cut construction is performed.

**907. 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 and FDOT requirements.

**908. Swale and Ditch Construction/Regrading**

The Company shall regrade all existing swales and ditches as necessary to restore the swales and ditches to their original (or better) condition. No separate payment shall be made for regrading or construction of new drainage ditches as required for restoration, but shall be included in the Bid Form Workbook payment for roadway paving replacement. Payment for sodding of swales and ditches will be separate.

**909. 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. Company shall coordinate activities with any other Company who will be performing work in the same general area.

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.

**910. 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.

**911. 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 horizonally).

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

**912. 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.

Stone aggregate (limerock) aggregate shall be used to provide a final driving surface for the restored portions. 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.

**913. Surveying**

In addition to the Surveying requirements set forth elsewhere in this solicitation, the Company shall be responsible for surveying and staking the project stationing, permanent easements, temporary construction easements, and/or right-of–way boundaries. The survey datum used for this project is NAVD 1988. Staking shall be maintained throughout construction, including resurveying and restaking if the stakes are damaged or removed. All surveying shall be performed by a Professional Surveyor and Mapper (PSM) licensed in the State of Florida.

**914. Existing Utilities**

Known surface and subsurface utilities are shown or noted on the drawings as accurately available information will permit. JEA does not guarantee the information shown or noted or that utilities other than those indicated (on the drawings) do not exist. It is the responsibility of the Company to notify each of the utilities at least (15) fifteen working days prior to construction and request that the location of their respective utility or material be located and staked in the field. Should the Company encounter unidentified utility, work in the immediate area shall promptly cease and the JEA representative shall be advised. JEA shall investigate the condition and propose remedial action. The Company is reminded of the laws of Florida requiring notification of Gas Company, at least four (4) working days in advanced of any digging operation. The Company shall call the Sunshine State One-Call of Florida (1-800-638-4097) to request location of all facilities owned by utilities that participate in the locate program.  Failure by the Company to contact Sunshine State One-Call of Florida prior to digging shall obligate the Company for damages to participating utility Company and associated repair cost.

In order to reduce the disruption and cost of utility damages occurring in the Duval County Right of Ways (R/W) and Easements, the Company shall prevent damages to existing utilities caused by its work through field verification of the location of existing utilities. In the case of open excavation, verification may be performed during the Company’s work.

Company 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 infrastructure and the existing facilities of other utility companies.

**915. Coordination of Construction with Existing Utilities**

The Company shall establish liaison with and coordinate work with (including; but, not limited to) JEA, BellSouth, AT&T, TECO/Peoples Gas, and Comcast to prevent interference with overhead and buried electrical, telephone, and television cables. BellSouth, AT&T, TECO/Peoples Gas, Comcast and others will need time to relocate their facilities.

The Company shall at all times conduct his operation so as to interfere as little as possible with the existing utilities. The Company shall develop a program in cooperation with 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 there from 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.

**916. 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.

**917. Tie-In Connections Sequencing Constraints**

The following tie-in connections sequencing constraints are to emphasize critical tasks related to connections to existing systems for the work in this Contract. It is not a complete list of all work to be completed.

* The Company shall give a minimum of 5 working days advance written notice to the JEA of each component proposed for shutdown, tie-in, or disruption, all of which shall be subject to JEA’s approval and limitations. The request shall include, but not be limited to, points of connection, fittings to be used, method of flushing, and estimated construction time for connection.
* All connections and ties to the existing system and transfer of services shall be performed by the Company under the JEA’s direction. The Company shall not operate any valves in the existing system.
* The JEA reserves the right to postpone connections to existing utilities due to operational and/or weather related concerns.
* Connection to the existing system may depend on the closure of certain valves. The existing valves may be not be operable or may not seal properly. The Company shall coordinate with the JEA in advance of connections to determine condition of existing valves.

**918. Utility Pole Holding / Suspending**

Holding or suspending of utility poles including power poles and telephone poles shall be performed 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. Company shall review the project and notify the JEA Engineer of all anticipated holds/suspends within ten (10) days following the notice to proceed. JEA will be responsible for the coordination and provision of utility pole holds/suspends. Notice, giving the exact date and time, for each hold/suspend, shall be provided by the Company in writing to the JEA Engineer at least two weeks in advance of each hold/suspend. No separate pay item will be made to the Company separately, but shall be included in the cost of the associated items in the Bid.

**919. NPDES Permit Conformance**

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 also 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 Stormwater 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 Stormwater 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 Contract 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 Workbook.

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 stormwater (except discharges pursuant to a NPDES permit) to the Municipal Separate Stormwater 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 stormwater 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 also FDEP at (904) 807-3300 and.

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). Company shall also provide copies of NOT to the JEA Engineer with final payment and construction close-out 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.

**920. Landscaping**

Except for trees designated for removal and/or replacement and areas within the designated limits of clearing on the contract drawings, the Company shall be responsible for protection and preservation of all trees, palms, shrubs, irrigation systems, landscaping, signs, and 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, except for Item No. 36 shown on the Bid Form Workbook, and shall be included in the unit prices of the associated items listed on the Bid Form Workbook.

**921. Tree Mitigation Work**

Company shall remove one jurisdictional Live Oak tree and replace with four Live Oak trees per City of Jacksonville Mitigation Requirements and as designated on Drawing No. C-11 and CD-1 of the Contract Drawings. Prior to the performing the work, the Company shall obtain a Site Work – Tree Removal Permit from the City of Jacksonville. The removal and replacement planting shall comply with all requirements of the Site Work – Tree Removal Permit and the Contract Drawings. Payment for the minimum 12’ high and minimum 4” caliper Live Oak Trees Mitigation work shall be via Item No. 36 on the Bid Form Workbook and shall include all labor, equipment, and materials needed to permit and to perform the removal and planting of the Live Oak trees.

**922. Clearing and Grubbing**

Payment for clearing and grubbing in the JEA Utiltiy Easement on the Oceanway Assembly of God property shall be via line Item No. 35 shown on the Bid Form Workbook. The lump sum payment will be compensation in full for all clearing and grubbing required for the construction in the JEA Utility Easement, 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. No separate payment shall be paid for any other clearing and grubbing needed to perform the work; but, shall be included in the unit prices of the associated items listed on the Bid Form Workbook.

**923. Grassing/Sodding**

Disturbed areas within the FDOT and COJ right of ways must be restored to original or better conditions using sod which complies with the applicable FDOT or COJ requirements and specifications. All disturbed areas shall be restored by resodding (if grass was established pre-construction) or seeding and mulching in accordance with Section 441 of the JEA Water and Wastewater Standards Manual, titled, Grassing.

**924. Dust Control**

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

**925. Earthwork**

It shall be the sole responsibility of the Company to evaluate the geotechnical findings and recommendations along with the contract 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 Workbook. Excess and/or unsuitable material shall become the property of the Company and shall be disposed of outside of the right-of-way.

**926. Force Main Profile Elevations**

The force main profile shown on the contract drawings indicate the station and elevation for the air release valves (ARV). The ARV must be located at a high point. To insure this requirement is met, the Company shall take station and elevation readings of the top of the force main at 100 foot intervals. The data collected shall be taken during the progression of the pipeline installation. Once the stations and elevations are collected, submit to the JEA Representative prior to installing the ARV. The JEA Engineer will review the elevations to determine if the station (location) for the ARV needs to be adjusted from that shown on the force main (FM) profile. If the Company installs the pipeline such that additional high points are created on the pipeline profile beyond that shown on the contract drawings, the Company shall be solely responsible for furnishing and installing additional ARV/manholes at each of these high points. Elevations should be referenced to the survey benchmark.

**927. Updated 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.

**928. Reporting**

The Company shall provide the reports as defined in the Contract Documents.

Where the reporting frequency is daily, reports shall be submitted by noon of the following workday. Where the reporting frequency is weekly, reports are due by Monday at noon, covering the prior workweek. Where Monday is a Holiday, the reports are due at noon on the next workday. Where reports are due monthly, reports are due by noon on the first business day of each month. Sample forms for reports may be included in the Contract Documents. Where they are included they are to be used. Where they are not included, the Company shall provide a sample of its proposed report format for each report to the Contract Administrator at least one-week prior to its initial due date. The JEA Engineer will review and either approve or reject use of the report. Where proposed report is rejected, Company shall resubmit revised report formats, until JEA Engineer approves format. Reporting cycle shall begin upon PO date, or, if used, date of Notice to Proceed.

**929. Responsible Bidders List (RBL) GC-11 Locate Line Verification**

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. 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.

**930. 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 p.m. 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 Subcontrcators 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 NCCER (National Center for Construction Education and Research) 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.