

SCOPE OF WORK AND SPECIFICATIONS

1. GENERAL SCOPE OF WORK SUMMARY

- 1.1. Lee County Board of County Commissioners seeks to contract with a qualified Contractor to provide Services involving the installation of a new water main for Fort Myers Shores Phase 1D, covering approximately 5,470 linear feet of pipeline. The work includes installing approximately 2,200 linear feet of 12-inch High-Density Polyethylene (HDPE) DR11 water main along Upcohall Avenue and approximately 3,270 linear feet of 8-inch HDPE DR11 water main along First Street, Second Street, Third Street, Fourth Street, and Fifth Street, utilizing directional drilling and/or direct burial methods as specified in the project drawings. The scope also encompasses all necessary ancillary items and connections, as outlined in the Drawings. The Work Includes:

- 1.1.1. Furnishing of all labor, material, superintendence, plant, power, light, heat, fuel, water, tools, appliances, equipment, supplies, services and other means of construction necessary or proper for performing and completing the Work.
- 1.1.2. Sole responsibility for all materials, equipment & labor for the project.
- 1.1.3. Maintaining the work area and site in a clean and acceptable manner.
- 1.1.4. Locate, support, and maintain existing facilities and utilities in service at all times except where specifically provided for otherwise herein.
- 1.1.5. Protection of finished and unfinished Work.
- 1.1.6. Repair and restoration of Work damaged during construction.
- 1.1.7. Furnishing as necessary proper equipment and machinery, of a sufficient capacity, to facilitate the work and to handle all emergencies normally encountered in work of this nature.
- 1.1.8. Coordination with LCU on pressure tests, bacteriological tests, clear the new water main for use (LDOH Bacteriological clearance), and place it into service prior to removing or grouting the existing main.

2. STANDARD PLAN NOTES

- 2.1. General- The standard notes shown below shall be included on all water and sewer plans submitted for approval to Lee County Utilities (LCU).

2.1.1. All work shall confirm to latest revision of Lee County Utilities design manual which is on file at the Division of Lee County Utilities office (1500 Monroe Street, P.O. Box 398, Fort Myers, Florida 33902).

2.1.2. Locations, elevations, and dimensions of existing utilities, structures, and other features are shown according to the best information available at the of preparation of these plans, but do not purport to be absolutely correct. Extreme caution is to be used when excavating, as the number and location of existing utilities has not been verified. It is the contractor's responsibility to field locate and verify any and all existing Utilities shown and not shown. The contractor shall contact LCDOT, utility companies and sunshine state one call no fewer than 72 hours prior to excavation for field location of utilities. All coordination and required utility company temporary protection shall be at Contractors expense. Individual water services and associated meter boxes are not shown on the plans.

2.1.3. All quantities shown on plans are not verified by LCU. Quantities to be verified by the contractor. If any discrepancies are found, the Contractor shall notify LCU immediately.

2.1.4. At the site keep and maintain one record copy of all contract documents, reference documents and all technical documents submitted in good order. As the work progresses the contractor or his designated representative shall record on one set of reproducible drawings all changes and deviations from the original plans. He shall record the exact location of all changes in vertical and horizontal alignment by offsets and ties at each; sewer, water, electric, gas, communication and other services by off-set distance to permanent improvements such as building and curbs. These record Drawings must be certified by Florida Registered Professional Engineer, who prepared the plans and signs and seals these plans. The record drawings shall include vertical and horizontal alignment of all water, sewer, and effluent reuse lines, valves, tees, bend, reducers, hydrants, Pump stations, service connections, meter boxes and/ or pads, and other pertinent structures. Pipeline run excess of 152.4m, (500'), without fittings shall include vertical alignment information at 152.4m, (500') intervals. Said alignment shall be tied to permanent improvements, such as roadway and/or railroad centerlines and right-of-way, building and property corners, and shall be certified by a professional land surveyor, Licensed in the State of Florida. The professional land surveyor can coordinate with the contractor to install the necessary appurtenances on buried utilities to facilitate the survey after construction is complete. In addition, property strap numbers and street names shall be shown on the plan. On a case by case basis, Lee County Utilities may waive the requirement for certification by a Professional Land Surveyor, licensed in The State of Florida. However, prior consent must first be obtained from Lee County Utilities. The County shall withhold final acceptance of the project until the requirement for record drawings and related records has been met. Record drawings without detailed field Verified horizontal and vertical locations of all facilities shown will be rejected.

2.1.5. A Pre-construction meeting is required before work may begin. Lee County Utilities shall be notified 48 hours prior to project mobilization.

2.1.6. All work and materials, which do not conform to LCU specifications, are subject to removal and replacement at the contractor's expense.

2.1.7. The contractor shall provide access to the site at all times for inspection by LCU, their designee, and regulatory agencies to observe project Construction.

2.1.8. The contractor shall provide sufficient personnel and equipment on the job at all times during construction to satisfy the specifications and to complete work.

2.1.9. LCU inspector to be notified 24 hours in advance to observe any work including but not limited to tie-in's, testing and flushing. Any work performed without the knowledge of LCU is subject to re-excavation, removal and replacement of same to be done at the contractor's expense.

2.1.10. The contractor is to uncover all existing lines being tied into and verify grades before beginning construction.

2.1.11. It is the Contractor's responsibility to locate and take all possible precautions to avoid any damage to all underground pipelines, telephone, Cable tv, electric lines/conduits and structures in

advance of any construction. LCU will not guarantee any locations as shown on these plans or those omitted from these plans. The contractor shall be fully responsible for any and all damages which may occur by his failure to exactly locate and protect existing utilities and structures.

2.1.12. Contractor shall verify all quantities shown on the plans. If any discrepancies in quantities are found, the Contractor shall notify the project Engineer and LCU.

2.1.13. All regulatory and permitting agencies' requirements shall be complied with at all times during the progress of the project.

2.1.14. Appropriate turbidity control devices (e.g. silt fences, hay bails) shall be utilized during all phases of installation and grading. Contractor is responsible for submitting the notice of intent and notice of termination to the EPA in compliance with Lee County's NPDES permit. Contractor is responsible for developing and maintaining an effective Storm Water Pollution Prevention Plan.

2.1.15. In the event that hard limestone formation is encountered, making it impossible to excavate to the depth required under this contract, the Contractor may be allowed to reduce the pipe cover not less than two (2) feet while maintaining the LCU required thickness of bedding under the Pipe. Such deviation from the plans must first be approved by LCU and the Engineer prior to the pipe laying. If two feet of cover or more can Not be attained, the Contractor shall provide other method of construction or pipe protection which shall first be approved by LCU and the Engineer, at no additional cost to the County.

2.1.16. Prior to construction, the Contractor shall verify and be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all existing utilities, structures, and other features affecting his work. Anything not shown on these Drawings should be brought to the attention of the engineer and shall not constitute an extra, unless approved by LCU.

2.1.17. The Contractor shall contact the Engineer and LCU immediately concerning any conflicts with LCU utilities/ structures arising during construction of any facilities shown on these drawings.

2.1.18. Traffic must be maintained at all times as per Lee County Department of Transportation (LCDOT) and per Florida department of Transportation (FDOT) standard specifications for road and bridge construction, latest edition.

2.1.19. The Contractor shall verify all utilities and provide at least 48 hours notice to the individual utility companies and FDOT and LCDOT prior to construction.

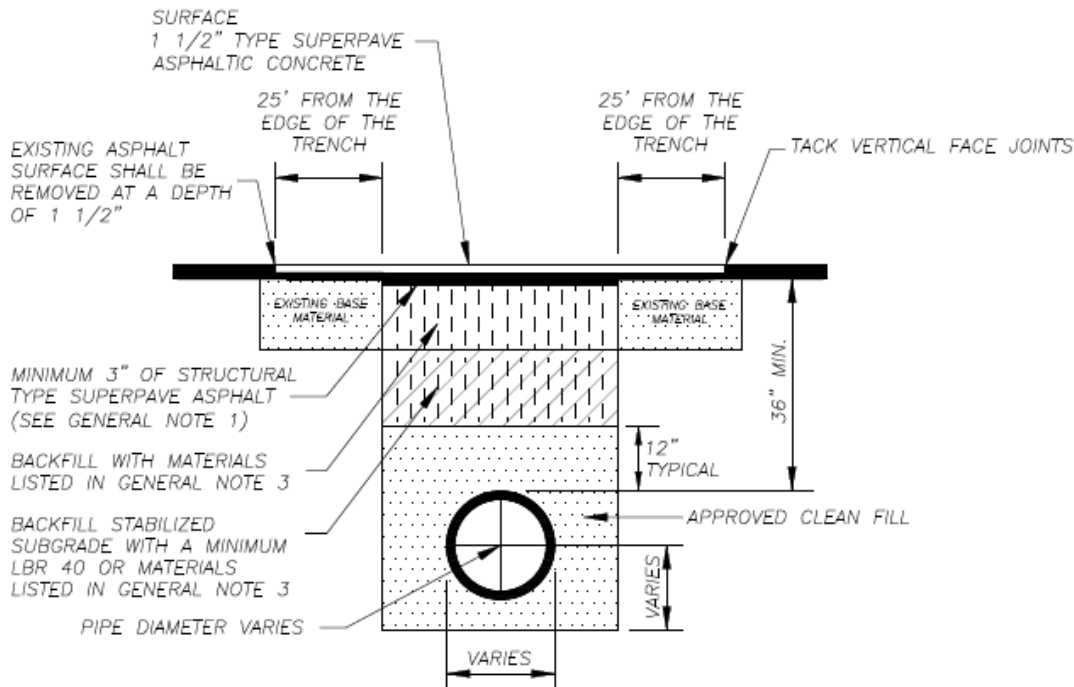
2.1.20. The Contractor shall replace all pavements, curbs, driveways, sidewalks, fences, etc., with the same type of material that was removed during Construction or as directed by the Engineer. The contract shall restore all areas affected by the construction to its original condition, or better.

2.1.21. Within the FDOT and LCDOT right-of-way, all disturbed areas shall receive grassing (seeding) or sodding materials in accordance with FDOT specifications. Those areas that are classified as drainage ditches shall receive full solid sod.

2.1.22. The information provided in these plans is solely to assist the contractor in assessing the nature and extent of conditions which may be Encountered during the course of work. All contractors are directed, prior to bidding, to conduct whatever investigations they may deem Necessary to arrive at their own conclusion regarding the actual conditions that will be encountered, and upon which their bids will be based.

2.1.23. All frames, cover valve boxes, meter boxes and manholes shall be adjusted to finished grade upon completion of paving or related construction. All valve pads shall be poured in place. No pre-formed valve pads allowed.

2.1.24. All valves shall be treated as dead ends & restrained during construction. Restrained length shown in restrained length detail 6.12 shall be used to provide pipe restrained length.



3. TRENCH/PAVEMENT RESTORATION DETAIL FOR LEE COUNTY ROADS

- 3.1. All work shall be performed according to the current FDOT Standard Specification.
- 3.2. The limits of asphalt replacement shall be determined by Lee County DOT.
- 3.3. Optional Base Group 9 per Table 285-1 of the current FDOT Standard Specifications for the exception of Bank Run Shell.
- 3.4. Fill and Base Material shall be placed in a compacted lifts no greater than 6" with testing every 12".
- 3.5. Existing Material removed during Construction shall be permitted to be used as backfill below the subgrade if it has not been contaminated with deleterious material and if it is at the least equal to minimum County Standards.
- 3.6. Pavement joints shall be mechanically sawed and tacked before patching.
- 3.7. Replacement pavement surface course shall be mechanically sawed and tacked before patching. No Feather Joints are permitted.
- 3.8. The Top of underground cable or pipe must be a minimum of 36" below the existing pavement, or the existing pavement, or the existing ground elevation where crossing ditches or swales unless otherwise approved by the director of DOT.
- 3.9. "AS-BUILT" Drawings will not be required if the work is completed by passes inspections per the permit issued.
- 3.9. Lee County must be notified at least 24 hours before beginning work and within 24 hours after work is completed. This notification requirement is in addition to any scheduled inspections.

4. DENSITY REQUIREMENTS

4.1. Backfill for Stages 1&2 and Base Materials must be placed in layers not to exceed 6" compacted Thickness. Compaction shall be 100% of AASHTO T-99 (Standard Proctor) for fill materials and 98% of AASHTO T-180 (Modified Proctor) for Base and Subgrade Materials.

4.1.1. State 1: Provide compacted fill beneath and around the pipe or duct to spring line elevation (Midpoint of Pipe or Duct) using an appropriate tamping method suitable to the work and accepted by the director of DOT. If required by Soil Conditions the Stage 1 Bedding may be placed on a layer of coarse aggregate at least 6" Thick. Place the Aggregate such that it will stable and firm. Fully wrap the aggregate layer of Type -D Fabric. Do not place coarse aggregate within 4' of the ends or the trench or ditch. Use normally accepted backfill material at the ends.

4.1.2. State 2: Backfill shall continue in lifts to the top of the subgrade. Each Lift shall be mechanically tamped to ensure adequate compaction.

End of Scope of Work and Specifications Section