

**SECTION 801  
EXCAVATION, BACKFILLING, AND COMPACTION  
FOR SANITARY SEWERS AND RELATED STRUCTURES**

**801-1 DESCRIPTION:** This Work shall include, but not necessarily be limited to, excavation and trenching operations to install pipe, manholes, pump stations, and other structures and all related work such as shoring, bracing, water handling, and miscellaneous clearing and grubbing; filling and grading under and around sanitary sewer structures; and all backfilling, compaction, grading, import of backfill material, disposal of surplus and unsuitable materials.

**801-2 GENERAL:**

- a. All work shall be performed in compliance with L.R.S. 40:1749.11-22, "Louisiana Underground Utilities and Facilities Damage Prevention Law", OSHA regulations and applicable codes, ordinances, and standards of governing authorities having jurisdiction.
- b. Open excavations, including incomplete manholes and pump stations, shall be barricaded and posted with operating warning lights in accordance with Federal, State and local requirements.
- c. Public and private structures, utilities, driveways, sidewalks, pavements, and other facilities shall be protected from damage caused by settlement, lateral movement, undermining washout, construction activities, and other hazards created by these operations. All settlement or other damage caused by the Contractor's operations shall be repaired within 7 days, or the facilities shall be replaced, at the Contractor's sole expense and at the discretion and direction of the Engineer. This includes the warranty period as well.

**801-3 MATERIALS:**

a. **Definitions:**

1. **Sanitary Sewer Bedding/Backfill Materials:** Bedding and initial backfill material shall be a sand-aggregate mixture. The aggregate shall be free of angular stones that could score, crack, or puncture the pipe. The sand-aggregate mixture shall meet the following gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
1-1/2 inch	95-100
No. 4	30-50
No. 10	20-45
No. 200	0-10

2. **Usable Excavated Soils:** Usable excavated soils shall have a maximum PI of 25 and a maximum organic content of 5 percent. Soils with a silt content of 50 percent or greater and also a PI of 10 or less will not be allowed. Soil shall be tested at Owner's option by the Owner's testing lab. Usable excavated material may be neatly stockpiled at the site where designated by the Engineer provided there is an area available that will not interfere with the Owner's access nor inconvenience traffic or adjoining property owners.
3. **#610 Stone Backfill:** The 610 Stone shall be one hundred percent quarried material. The stone shall pass the ASTM soundness test and abrasion test. Soundness loss shall not exceed fifteen percent when subjected to five cycles of