

SECTION 15156 - SANITARY WASTE INTERCEPTORS

Project Number 14-5006-39

Project title Kansas City Area Transportation Authority
Service Line Reversal (FOR INFORMATION ONLY)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Oil interceptors.

1.3 DEFINITIONS

- A. FRP: Fiberglass-reinforced plastic.
- B. PP: Polypropylene plastic.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of plastic interceptor indicated. Include materials of fabrication, dimensions, rated capacities, retention capacities, operating characteristics, size and location of each pipe connection, furnished specialties, and accessories.
- B. Shop Drawings: For each type and size of precast-concrete interceptor indicated.
 - 1. Include materials of construction, dimensions, rated capacities, retention capacities, location and size of each pipe connection, furnished specialties, and accessories.

1.5 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Interceptors, drawn to scale, on which the following items are shown and coordinated with each other, based on input from Installers of the items involved:

1. Interceptors.
2. Piping connections. Include size, location, and elevation of each.
3. Interface with underground structures and utility services.

1.6 PROJECT CONDITIONS

- A. Interruption of Existing Sewer Services: Do not interrupt services to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary sewer services according to requirements indicated:
1. Notify Architect, Construction Manager, and Owner no fewer than seven days in advance of proposed interruption of service.
 2. Do not proceed with interruption of sewer services without Architect's, Construction Manager's, and Owner's written permission.

PART 2 - PRODUCTS

2.1 OIL INTERCEPTORS

- A. Oil Interceptors: Plastic body; with removable sediment bucket or strainer, baffles, vents, and flow-control fitting on inlet.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. [Green Turtle \(USA\).](#)
 - b. [Parkson Corporation.](#)
 - c. [Schier Products Company.](#)
 - d. [Town & Country Plastics, Inc.](#)
 2. Inlet, Outlet, Vent, and Waste-Oil Outlet Piping Connections: Hub, hubless, or threaded, unless otherwise indicated.
 3. Extension: Plastic shroud, full size of interceptor, extending from top of interceptor to grade.
 4. Cover: Plastic with steel reinforcement to provide ASTM C 890 load.
 5. Waste-oil storage tank and piping are specified in Section 231113 "Facility Fuel-Oil Piping."
- B. Capacities and Characteristics:
1. Refer to drawings.
 2. Trapped Outlet Required: No.
 3. Installation Position: Top flush with grade or Underground with extension to grade based on incoming and outgoing waste piping elevations.

2.2 PRECAST-CONCRETE MANHOLE RISERS

- A. Precast-Concrete Manhole Risers: ASTM C 478, with rubber-gasket joints.

1. Structural Design Loads:
 - a. Light-Traffic Load: Comply with ASTM C 890, A-8 (ASSHTO HS10-44).
 - b. Medium-Traffic Load: Comply with ASTM C 890, A-12 (ASSHTO HS15-44).
 - c. Heavy-Traffic Load: Comply with ASTM C 890, A-16 (ASSHTO HS20-44).
 - d. Walkway Load: Comply with ASTM C 890, A-03.
 2. Length: From top of underground concrete structure to grade.
 3. Riser Sections: 3-inch minimum thickness and 36-inch diameter.
 4. Top Section: Eccentric cone, unless otherwise indicated. Include top of cone to match grade ring size.
 5. Gaskets: ASTM C 443, rubber.
 6. Steps: ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals.
- B. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, diameter matching manhole frame and cover, and height as required to adjust the manhole frame and cover to indicated elevation and slope.
- C. Manhole Frames and Covers: Ferrous; 24-inch ID by 7- to 9-inch riser with 4-inch-minimum width flange and 26-inch- diameter cover.
1. Ductile Iron: ASTM A 536, Grade 60-40-18, unless otherwise indicated.
 2. Gray Iron: ASTM A 48, Class 35, unless otherwise indicated.
 3. Include indented top design with lettering cast into cover, using wording equivalent to the following:
 - a. Oil Interceptors in Sanitary Sewerage System: "OIL INTERCEPTOR."

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Section 312000 "Earth Moving."

3.2 INSTALLATION

- A. Install precast-concrete interceptors according to ASTM C 891. Set level and plumb.
- B. Install manhole risers from top of underground concrete interceptors to manholes and gratings at finished grade.
- C. Set tops of manhole frames and covers flush with finished surface in pavements. Set tops 3 inches above finish surface elsewhere, unless otherwise indicated.
- D. Set tops of grating frames and grates flush with finished surface.

- E. Set plastic interceptors level and plumb.
- F. Set tops of metal interceptor covers flush with finished surface in pavements. Set tops 3 inches above finish surface elsewhere, unless otherwise indicated.
- G. Install piping and oil storage tanks according to Section 15192 "Facility Fuel-Oil Piping."

3.3 CONNECTIONS

- A. Piping installation requirements are specified in Section 15150 "Sanitary Waste and Vent Piping." Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Make piping connections between interceptors and piping systems.

3.4 IDENTIFICATION

- A. Identification materials and installation are specified in Section 31200 "Earth Moving." Arrange for installation of green warning tapes directly over piping and at outside edges of underground interceptors.
 - 1. Use warning tapes or detectable warning tape over ferrous piping.
 - 2. Use detectable warning tape over nonferrous piping and over edges of underground structures.

END OF SECTION 15156