

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and Divisions 00 and 01, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following types of interceptors outside the building:
 - 1. Grease interceptors.
 - 2. Oil interceptors.
 - 3. Sand interceptors.
 - 4. Sediment interceptors.

1.3 DEFINITIONS

- A. FRP: Fiberglass-reinforced plastic.
- B. HDPE: High-density polyethylene plastic.
- C. PE: Polyethylene plastic.
- D. PP: Polypropylene plastic.

1.4 CODES AND STANDARDS

- A. Codes and Standards shall be the current version adopted by the Authority Having Jurisdiction.

1.5 SUBMITTALS

- A. Product Data: For each type of [metal] [metal and plastic] [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 cast-in-place-concrete interceptor indicated.
 - 1. Include materials of construction, dimensions, rated capacities, retention capacities, location and size of each pipe connection, furnished specialties, and accessories.
 - 2. Include reports and calculations for design mixes of concrete.
- C. 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.
- D. 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] [Owner] no fewer than [seven] <Insert number> days in advance of proposed interruption of service.
 2. Do not proceed with interruption of sewer services without [Architect's] [Construction Manager's] [Owner's] written permission.

PART 2 – PRODUCTS

2.1 GREASE INTERCEPTORS

- A. Grease Interceptors: Cast-in-place-concrete or precast concrete structure complying with requirements of <Insert authority title>.
- B. Grease Interceptors: Construct bottom, sidewalls, and top of reinforced, cast-in-place concrete. Include [vent connections,] manholes, compartments or baffles, and piping or openings to retain grease and to permit wastewater flow.
1. Concrete: Comply with ACI 318/318R, ACI 350R.
 - a. Design Mix: 4000 psig minimum, with 0.45 maximum water-to-cementitious materials ratio.
 - b. Portland Cement: ASTM C 150, Type II.
 - c. Fine Aggregate: ASTM C 33, sand.
 - d. Coarse Aggregate: ASTM C 33, crushed gravel.
 - e. Water: Potable.
 - f. Reinforcing Fabric: ASTM A 185, steel, welded wire fabric, plain.
 - g. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed steel.
- C. Grease Interceptors: Precast concrete complying with ASTM C 913. Include rubber-gasketed joints, [vent connections,] manholes, compartments or baffles, and piping or openings to retain grease and to permit wastewater flow.
1. Protective Coating: Plant-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all [exterior] [exterior and interior] [interior] concrete surfaces.
 2. 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.
 3. Resilient Pipe Connectors: ASTM C 923, cast or fitted into interceptor walls, for each pipe connection.

4. Steps: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] [ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] <Insert other>, wide enough to allow worker to place both feet on 1 step and designed to prevent lateral slippage off of step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of interceptor to finished grade is less than [60 inches] <Insert other>.
5. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.
6. 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.
 - a. Ductile Iron: ASTM A 536, Grade 60-40-18, unless otherwise indicated.
 - b. Gray Iron: ASTM A 48, Class 35, unless otherwise indicated.
 - c. Include indented top design with lettering cast into cover, using wording equivalent to "[INTERCEPTOR] [GREASE INTERCEPTOR] [SANITARY SEWER] <Insert other>."
 - d. Protective Coating: Foundry-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces.

D. Grease Interceptor Capacity and Characteristics:

1. Length by Width by Depth: <Insert values.>
2. Number of Compartments: [One] [Two] <Insert other>.
3. Retention Capacity: <Insert value.>
4. [Inlet and] Outlet Pipe Size: <Insert value.>
 - a. Centerline of Inlet to Floor: <Insert value.>
 - b. Centerline of Outlet to Floor: <Insert value.>
5. Trapped Outlet Required: [Integral] [No] [Yes].
6. Vent Pipe Size: [Not required] <Insert value>.
7. Installation Position: [Top flush with grade] [Underground with manhole riser to grade] <Insert other>.

2.2 OIL INTERCEPTORS

- A. Oil Interceptors: Cast-in-place-concrete or precast concrete structure complying with requirements of <Insert authority title>.
- B. Oil Interceptors: Construct bottom, sidewalls, and top of reinforced, cast- in-place concrete. Include waste oil and vent connections, manholes, compartments or baffles, and piping or openings to draw off oil and to permit wastewater flow.
 1. Concrete: Comply with ACI 318/318R, ACI 350R.
 - a. Design Mix: 4000 psig minimum, with 0.45 maximum water-to-cementitious materials ratio.
 - b. Portland Cement: ASTM C 150, Type II.
 - c. Fine Aggregate: ASTM C 33, sand.
 - d. Coarse Aggregate: ASTM C 33, crushed gravel.
 - e. Water: Potable.

- f. Reinforcing Fabric: ASTM A 185, steel, welded wire fabric, plain.
 - g. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed steel.
- C. Oil Interceptors: Precast concrete comply with ASTM C 913. Include rubber-gasketed joints, vent connections, manholes, compartments or baffles, and piping or openings to retain grease and to permit wastewater flow.
1. Protective Coating: Plant-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all [exterior] [exterior and interior] [interior] concrete surfaces.
 2. 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.
 3. Resilient Pipe Connectors: ASTM C 923, cast or fitted into interceptor walls, for each pipe connection.
 4. Steps: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] [ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] <Insert other>, wide enough to allow worker to place both feet on 1 step and designed to prevent lateral slippage off of step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of interceptor to finished grade is less than [60 inches] <Insert other>.
 5. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.
 6. 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.
 - a. Ductile Iron: ASTM A 536, Grade 60-40-18, unless otherwise indicated.
 - b. Gray Iron: ASTM A 48, Class 35, unless otherwise indicated.
 - c. Include indented top design with lettering cast into cover, using wording equivalent to "[INTERCEPTOR] [OIL INTERCEPTOR] [SANITARY SEWER] <Insert other>."
 - d. Protective Coating: Foundry-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces.
 7. Waste-oil storage tank and piping are specified in Division 23 Section "Facility Fuel-Oil Piping."
- D. Oil Interceptors: Factory-fabricated, cast-iron or steel body; with removable sediment bucket or strainer, baffles, vents, and flow-control fitting on inlet.
1. [Available] Manufacturers:
 - a. Enpoco Div.; Watts Industries, Inc.
 - b. Josam Company.
 - c. MIFAB Manufacturing Inc.
 - d. Rockford Sanitary Systems, Inc.
 - e. Schier Products Company.

- f. Smith, Jay R. Mfg. Co.
 - g. Wade Div.; Tyler Pipe.
 - h. Waterlink, Inc.
 - i. Watts Industries, Inc.
 - j. Zurn Specification Drainage Products; Zurn Plumbing Products Group.
 - k. Or Approved Equal.
2. Inlet, Outlet, Vent, and Waste-Oil Outlet Piping Connections: Hub, hubless, or threaded, unless otherwise indicated.
 3. Extension: Cast-iron or steel shroud, full size of interceptor, extending from top of interceptor to grade.
 4. Cover: Cast iron or steel, with steel reinforcement to provide ASTM C 890, [A-03, walkway] <Insert other> load.
 5. Protective Coating: Factory-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces, except bucket or strainer, unless otherwise indicated.
 6. Waste-oil storage tank and piping are specified in Division 23.
- E. Oil Interceptors: Plastic body; with removable sediment bucket or strainer, baffles, vents, and flow-control fitting on inlet.
1. [Available] Manufacturers for FRP Units:
 - a. Proceptor Div.; Green Turtle Technologies, Ltd.
 - b. Waterlink, Inc.
 - c. Or Approved Equal.
 2. [Available] Manufacturers for PE or HDPE Units:
 - a. Schier Products Company.
 - b. Town & Country Plastics, Inc.
 - c. Or Approved Equal.
 3. Inlet, Outlet, Vent, and Waste-Oil Outlet Piping Connections: Hub, hubless, or threaded, unless otherwise indicated.
 4. Extension: Plastic shroud, full size of interceptor, extending from top of interceptor to grade.
 5. Cover: Plastic [with steel reinforcement to provide ASTM C 890,] [A-03, walkway] <Insert other> load.
 6. Protective Coating: Factory-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces, except bucket or strainer, unless otherwise indicated.
 7. Waste-oil storage tank and piping are specified in Division 23.
- F. Oil Interceptor Capacity and Characteristics:
1. Capacity: [Not applicable] <Insert value.>
 2. Overall Dimensions: <Insert values.>
 3. Inlet and Outlet Pipe Size: <Insert value.>
 - a. Centerline of Inlet to Floor: <Insert value.>
 - b. Centerline of Outlet to Floor: <Insert value.>

4. Waste-Oil-Outlet Pipe Size: <Insert value.>
 - a. Centerline of Outlet to Floor: <Insert value.>
5. Trapped Outlet Required: [Integral] [No] [Yes].
6. Vent Pipe Size: <Insert value.>
7. Installation Position: [Top flush with grade] [Underground with extension to grade] [Underground with manhole riser to grade] <Insert other>.
8. Waste-Oil Storage Tank: [Not required] <Insert value>.

2.3 SAND INTERCEPTORS

- A. Description: Factory-fabricated, cast-iron or steel body and inlet grate; with settlement chamber and removable basket or strainer.
 1. [Available] Manufacturers:
 - a. MIFAB Manufacturing Inc.
 - b. Rockford Sanitary Systems, Inc.
 - c. Smith, Jay R. Mfg. Co.
 - d. Wade Div.; Tyler Pipe.
 - e. Or Approved Equal.
- B. Outlet Piping Connection: Hub, hubless, or threaded, unless otherwise indicated.
- C. Grate: Cast iron or steel with reinforcement to provide ASTM C 890, [A-03, walkway] <Insert other> load.
- D. Protective Coating: Factory-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all [exterior] [exterior and interior] [interior] ferrous surfaces except basket or screens.
- E. Sand Interceptor Capacity and Characteristics:
 1. Capacity: [Not applicable] <Insert value.>
 2. Overall Dimensions: <Insert values.>
 3. Outlet Pipe Size: <Insert value.>
 4. Trapped Outlet Required: [Integral] [No] [Yes].
 5. Vent Pipe Size: [Not required] <Insert value>.
 6. Installation Position: [Top flush with grade] <Insert other>.

2.4 SEDIMENT INTERCEPTORS

- A. Sediment Interceptors: Cast-in-place-concrete or precast concrete structure complying with requirements of <Insert authority title>.
- B. Sediment Interceptors: Construct bottom, sidewalls, and top of reinforced, cast-in-place-concrete. Include manholes, compartments or baffles, and piping or openings to retain sediment and to permit wastewater flow.
 1. Concrete: Comply with ACI 318/318R, ACI 350R.

- a. Design Mix: 4000 psig minimum, with 0.45 maximum water-to-cementitious materials ratio.
 - b. Portland Cement: ASTM C 150, Type II.
 - c. Fine Aggregate: ASTM C 33, sand.
 - d. Coarse Aggregate: ASTM C 33, crushed gravel.
 - e. Water: Potable.
 - f. Reinforcing Fabric: ASTM A 185, steel, welded wire fabric, plain.
 - g. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed steel.
- C. Sediment Interceptors: Precast concrete comply with ASTM C 913. Include rubber-gasketed joints, vent connections, manholes, compartments or baffles, and piping or openings to retain grease and to permit wastewater flow.
1. Protective Coating: Plant-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all [exterior] [exterior and interior] [interior] concrete surfaces.
 2. 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.
 3. Resilient Pipe Connectors: ASTM C 923, cast or fitted into interceptor sidewalls, for each pipe connection.
 4. Steps: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] [ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] <Insert other>, wide enough to allow worker to place both feet on 1 step and designed to prevent lateral slippage off of step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals. Omit steps if total depth from floor of interceptor to finished grade is less than [60 inches] <Insert other>.
 5. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.
 6. 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.
 - a. Ductile Iron: ASTM A 536, Grade 60-40-18, unless otherwise indicated.
 - b. Gray Iron: ASTM A 48, Class 35, unless otherwise indicated.
 - c. Include indented top design with lettering cast into cover, using wording equivalent to the following:
 - 1) Sediment Interceptors in Sanitary Sewerage System: "[INTERCEPTOR] [SEDIMENT INTERCEPTOR] [SANITARY SEWER]<Insert other>."
 - 2) Sediment Interceptors in Storm Drainage System: "[INTERCEPTOR] [SEDIMENT INTERCEPTOR] [STORM SEWER] <Insert other>."
 - d. Protective Coating: Foundry-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces.
 7. Cast Ferrous Gratings: Frame and [flat grate with small-square or short slotted drainage openings] <Insert other>.

- a. Ductile Iron: ASTM A 536, Grade 60-40-18, unless otherwise indicated.
 - b. Gray Iron: ASTM A 48, Class 35, unless otherwise indicated.
 - c. Minimum Size: [24 by 24 inches] <Insert other>, unless otherwise indicated.
 - d. Free Area: Approximately [50] <Insert other> percent, unless otherwise indicated.
 - e. Protective Coating: Foundry-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces.
8. Steel Gratings: Steel frame and welded heavy-duty steel grating with galvanized finish. Refer to Division 05.
- D. Sediment Interceptors: Factory-fabricated, cast-iron or steel body and cover; with settlement chambers; baffles; and removable basket, strainer, or screens.
1. [Available] Manufacturers:
 - a. Enpoco Div.; Watts Industries, Inc.
 - b. Josam Company.
 - c. MIFAB Manufacturing Inc.
 - d. Rockford Sanitary Systems, Inc.
 - e. Schier Products Company.
 - f. Smith, Jay R. Mfg. Co.
 - g. Wade Div.; Tyler Pipe.
 - h. Watts Industries, Inc.
 - i. Zurn Specification Drainage Products; Zurn Plumbing Products Group.
 - j. Or Approved Equal.
 2. Inlet and Outlet Piping Connections: Hub, hubless, or threaded, unless otherwise indicated.
 3. Extension: Cast-iron or steel shroud, full size of interceptor, extending from top of interceptor to grade.
 4. Cover: Cast iron or steel, with steel reinforcement to provide ASTM C 890, [A-03, walkway] <Insert other> load.
 5. Protective Coating: Factory-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces except basket or strainer.
- E. Sediment Interceptor Capacity and Characteristics:
1. Length by Width by Depth: <Insert values.>
 2. Number of Compartments: [One] [Two] <Insert other>.
 3. Retention Capacity: <Insert value.>
 4. [Inlet and] Outlet Pipe Size: <Insert value.>
 - a. Centerline of Inlet to Floor: [Not required] <Insert value.>
 - b. Centerline of Outlet to Floor: <Insert value.>
 - c. Trapped Outlet Required: [Integral] [No] [Yes].
 5. Vent Pipe Size: [Not required] <Insert value.>
 6. Installation Position: [Top flush with grade] [Underground with extension to grade] [Underground with manhole riser to grade] <Insert other>.

2.5 PRECAST CONCRETE MANHOLE RISERS

- A. Precast Concrete Manhole Risers: ASTM C 478, with rubber-gasket joints.
- B. Precast Concrete Manhole Risers: ASTM C 913, [36-inch] <Insert other> ID. Include rubber-gasketed 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] <Insert other> 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: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] [ASTM A 615/A 615M, deformed, 1/2-inch steel reinforcing rods encased in ASTM D 4101, PP] <Insert other>, wide enough to allow worker to place both feet on 1 step and designed to prevent lateral slippage off of step. Cast or anchor steps into sidewalls at 12- to 16-inch intervals.
- C. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.
- D. Protective Coating: Plant-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all [exterior] [exterior and interior] [interior] concrete surfaces.
- E. 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. Grease Interceptors in Sanitary Sewerage System: "[INTERCEPTOR] [GREASE INTERCEPTOR] [SANITARY SEWER] <Insert other>."
 - b. Oil Interceptors in Sanitary Sewerage System: "[INTERCEPTOR] [OIL INTERCEPTOR] [SANITARY SEWER] <Insert other>."
 - c. Sediment Interceptors in Sanitary Sewerage System: "[INTERCEPTOR] [SEDIMENT INTERCEPTOR] [SANITARY SEWER] <Insert other>."
 - d. Sediment Interceptors in Storm Drainage System: "[INTERCEPTOR] [SEDIMENT INTERCEPTOR] [STORM SEWER] <Insert other>."
 - 4. Protective Coating: Foundry-applied, [SSPC-Paint 16, coal-tar, epoxy-polyamide paint] <Insert other>; [10-mil] [15-mil] <Insert other> minimum thickness applied to all ferrous surfaces.

2.6 MISCELLANEOUS MATERIALS

- A. Concrete Paint: [SSPC-Paint 16, coal-tar, epoxy polyamide] <Insert other>.
- B. Metal Paint: [SSPC-Paint 16, coal-tar, epoxy polyamide] <Insert other>.
- C. PE Film: ASTM D 4397, 0.10-inch thickness sheet.

PART 3 – EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Division 31.

3.2 INSTALLATION

- A. Install interceptor inlets and outlets at elevations indicated.
- B. Place concrete for cast-in-place interceptors according to ACI 318/318R and ACI 350R.
 - 1. Refer to Division 03 for formwork, reinforcement, and concrete.
- C. Install precast concrete interceptors according to ASTM C 891. Set level and plumb.
- D. Install manhole risers from top of underground concrete interceptors to manholes and gratings at finished grade.
- E. Set tops of manhole frames and covers flush with finished surface in pavements. Set tops [3 inches] <Insert other> above finish surface elsewhere, unless otherwise indicated.
- F. Set tops of grating frames and grates flush with finished surface.
- G. Clean and prepare concrete surfaces to be field painted. Remove loose efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen surface as required to remove glaze. Paint the following concrete surfaces as recommended by paint manufacturer:
 - 1. Cast-in-Place-Concrete Interceptors: All [exterior, except bottom] [exterior, except bottom and all interior] [interior].
 - 2. Precast Concrete Interceptors: All [exterior] [exterior and interior] [interior].
- H. Install sheet PE film on earth where cast-in-place-concrete interceptors are to be built.
- I. Clean and prepare metal surfaces to be field painted according to SSPC- PA 1. Paint the following metal surfaces according to SSPC-PA 1 and SSPC-Paint 16:
 - 1. Metal Interceptors: All surfaces except baskets, screens, and strainers.
 - 2. Plastic Interceptors: All metal surfaces except baskets, screens, and strainers.
 - 3. Metal Manhole Frames and Covers [(Including Grates)]: All surfaces.
 - 4. Do not paint metal surfaces with factory-applied, corrosion-resistant coating.
- J. Set [metal] [metal and plastic] [plastic] interceptors level and plumb.

- K. Set tops of metal interceptor covers flush with finished surface in pavements. Set tops [3 inches] <Insert other> above finish surface elsewhere, unless otherwise indicated.
- L. Prepare and paint metal components, to be field painted, according to SSPC-Paint 16.
- M. Install piping and oil storage tanks according to Division 23.
- N. Repair and restore protective coatings to original condition.

3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Division 22 Sections. 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 Division 31. 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