SECTION 221323 - SANITARY WASTE INTERCEPTORS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

This Section uses the term "Architect." Change this term to match that used to identify the design professional as defined in the General and Supplementary Conditions.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
	* + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			1. SUMMARY
				1. Section Includes:

Grease interceptors.

Grease-removal devices.

Oil interceptors.

Sand interceptors.

Solids interceptors.

Precast-concrete manhole risers.

* + - 1. DEFINITIONS

Retain terms that remain after this Section has been edited for a project.

* + - * 1. FRP: Fiberglass-reinforced plastic.
				2. PP: Polypropylene.
			1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are submitted and tabbed (for combined submittals).
				4. Product Data: For each type of [**metal**] [**and**] [**FRP**] interceptor. Include materials of fabrication, dimensions, rated capacities, retention capacities, operating characteristics, size and location of each pipe connection, furnished specialties, and accessories.
				5. Shop Drawings: For each type and size of interceptor indicated.

Include materials of construction, dimensions, rated capacities, retention capacities, location and size of each pipe connection, furnished specialties, and accessories.

Retain "Coordination Drawings" paragraph below to require coordination of other trades involved in the installation of products listed below.

* + - * 1. Coordination Drawings: Interceptors, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

Piping connections. Include size, location, and elevation of each.

Interface with underground structures and utility services.

Grease Interceptors

* + - 1. CLOSEOUT SUBMITTALS
				1. Operation and Maintenance Data: For sanitary waste interceptors to include in emergency, operation, and maintenance manuals.
			2. FIELD CONDITIONS

Retain this article if interruption of existing sanitary or storm sewer service is required.

* + - * 1. Interruption of Existing Sewer Services: Do not interrupt services to facilities occupied by Director’s Representative or others unless permitted under the following conditions and then only after arranging to provide temporary sewer services according to requirements indicated:

Notify **[Architect] [Construction Manager] [Director’s Representative**] no fewer than **[seven] <Insert number**> days in advance of proposed interruption of service.

Do not proceed with interruption of sewer services without [**Architect's**] [**Construction Manager's**] [**Director’s Representative's**] written permission.

1. PRODUCTS

Manufacturers and products listed in SpecAgent and MasterWorks Paragraph Builder are neither recommended nor endorsed by the AIA or Deltek. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications.

* + - 1. GREASE INTERCEPTORS

Indicate on Drawings the number, size, and arrangement of compartments and baffles in grease interceptors. In "Precast-Concrete Grease Interceptors" paragraph below, delete option and insert name(s) of authorities having jurisdiction for interceptors that must comply with requirements of authorities having jurisdiction.

* + - * 1. Precast-Concrete Grease Interceptors: Comply with [**ASTM C913**] <**Insert authorities having jurisdiction**>.

Delete first subparagraph below if interceptors must comply with requirements of authorities having jurisdiction.

Include rubber-gasketed joints, [**vent connections,**]manholes, compartments or baffles, and piping or openings to retain grease and to permit wastewater flow.

Structural Design Loads:

Light-Traffic Load: Comply with ASTM C890, A-8.

Medium-Traffic Load: Comply with ASTM C890, A-12.

Heavy-Traffic Load: Comply with ASTM C890, A-16.

Walkway Load: Comply with ASTM C890, A-03.

"Resilient Pipe Connectors" subparagraph below is an optional feature.

Resilient Pipe Connectors: ASTM C923, cast or fitted into interceptor walls, for each pipe connection.

Steps: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A615, deformed, **1/2-inch** steel reinforcing rods encased in ASTM D4101, PP] [ASTM A615, deformed, **1/2-inch** steel reinforcing rods encased in ASTM D4101, PP] <Insert material>, 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. Omit steps if total depth from floor of interceptor to finished grade is less than [**60 inches**] <Insert dimension>.

"Grade Rings" subparagraph below is an optional feature.

Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.

"Manhole Frames and Covers" subparagraph below is an optional feature. Underground structures with risers to grade only require manhole frames and covers at top of riser.

Accessway Frames and Covers: Ferrous; 24-inch ID by 7- to 9-inch riser with 4-inch- minimum-width flange and 26-inch- diameter cover.

Ductile Iron: ASTM A536, Grade 60-40-18, unless otherwise indicated.

Gray Iron: ASTM A48, Class 35, unless otherwise indicated.

Lettering in first subparagraph below, such as "INTERCEPTOR" and "SANITARY SEWER," should be simple and must be short enough to fit on cover. Custom lettering costs more than standard lettering.

Include indented top design with lettering cast into cover, using wording equivalent to "[**INTERCEPTOR**] [**GREASE INTERCEPTOR**] [**SANITARY SEWER**] <**Insert lettering**>."

If more than one grease interceptor is required, delete "Capacities and Characteristics" subparagraph below and schedule grease interceptors on Drawings.

Capacities and Characteristics:

Length by Width by Depth: <**Insert inches**>.

Number of Compartments: [**One**] [**Two**] <**Insert number**>.

Rate in first subparagraph below is limited to 100 gpm (6.3 L/s).

Flow Rate: <Insert interceptor design rate>.

Capacity in first subparagraph below is limited to 200 lb (90.7 kg).

Retention Capacity: <**Insert lb**>.

Inlet and Outlet Pipe Size: <**Insert** >.

Centerline of Inlet to Floor: <Insert inches>.

Centerline of Outlet to Floor: <**Insert inches**>.

End Connections: [**Flanged**] [**Hub**] [**Threaded**].

Cleanout: Integral[ or field installed on outlet].

Trapped Outlet Required: [**Integral**] [**No**] [**Yes**].

Vent Pipe Size: [Not required] <Insert >.

Mounting: [Above floor] [Recessed in acid-resistant, coated steel frame and cradle] [Recessed, flush with floor] <Insert mounting>.

Flow-Control Fitting: [**Not required**] [**Required**].

Operation: [Automatic recovery] [Manual cleaning] [Semiautomatic, manual drawoff] <Insert operation>.

Copy first paragraph below and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Cast-Iron or Steel Grease Interceptors <Insert drawing designation if any>:

[Manufacturers:](http://www.specagent.com/Lookup?ulid=7395) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Josam Company](http://www.specagent.com/Lookup?uid=123457152027).

[WATTS](http://www.specagent.com/Lookup?uid=123457152033).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457152034).

Or equal.

Not all manufacturers offer compliance with the first option in "Standard" subparagraph below. Consult manufacturers.

Standard: PDI G101[**and ASME A112.14.3**], for intercepting and retaining FOG from food[**-preparation**] [**or**] [**-processing**] wastewater.

PDI certification is currently limited to 50-gpm (3.15-L/s) flow rate and 100-lb (45.4-kg) grease retention by PDI G101. Larger uncertified units are available.

PDI Seal: [Not required] [Required].

Body Material: Cast iron or steel.

Interior Lining: [Corrosion-resistant enamel] [Not required] <Insert lining>.

Exterior Coating: [Corrosion-resistant enamel] [Not required] <Insert coating>.

Body Dimensions: <**Insert dimensions**>.

Body Extension: [**Not required**] [**Required**].

If more than one grease interceptor is required, delete "Capacities and Characteristics" subparagraph below and schedule grease interceptors on Drawings.

Capacities and Characteristics:

Length by Width by Depth: <**Insert inches**>.

Number of Compartments: [**One**] [**Two**] <**Insert number**>.

Rate in "Flow Rate" subparagraph below is limited to 100 gpm (6.3 L/s).

Flow Rate: <Insert interceptor design rate>.

Capacity in "Retention Capacity" subparagraph below is limited to 200 lb (90.7 kg).

Retention Capacity: <**Insert lb**>.

Inlet and Outlet Pipe Size: <**Insert** >.

Centerline of Inlet to Floor: <**Insert inches**>.

Centerline of Outlet to Floor: <**Insert inches**>.

End Connections: [**Flanged**] [**Hub**] [**Threaded**].

Cleanout: Integral[ or field installed on outlet].

Trapped Outlet Required: [**Integral**] [**No**] [**Yes**].

Vent Pipe Size: [Not required] <Insert>.

Mounting: [Above floor] [Recessed in acid-resistant, coated steel frame and cradle] [Recessed, flush with floor] <Insert mounting>.

Flow-Control Fitting: [**Not required**] [**Required**].

Operation: [Automatic recovery] [Manual cleaning] [Semiautomatic, manual drawoff] <Insert operation>.

* + - * 1. Fiberglass Reinforced Plastic Grease Interceptors:

[Manufacturers](http://www.specagent.com/LookUp/?ulid=8019&mf=04&src=wd): Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

Fiberglass reinforced plastic.

[Green Turtle Zurn](http://www.specagent.com/Lookup?uid=123457151993).

[MIFAB, Inc](http://www.specagent.com/Lookup?uid=123457152045).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457151995).

Or equal.

Not all manufacturers offer compliance with the first option in "Standard" subparagraph below. Consult manufacturers.

Standard: PDI G101[**and ASME A112.14.3**], for intercepting and retaining FOG from food[**-preparation**] [**or**] [**-processing**] wastewater.

PDI certification is currently limited to 50-gpm (3.15-L/s) flow rate and 100-lb (45.4-kg) grease retention by PDI G101. Larger uncertified units are available.

PDI Seal: [Not required] [Required].

Body Material: Plastic.

Body Dimensions: <**Insert dimensions**>.

Body Extension: [**Not required**] [**Required**].

If more than one grease interceptor is required, delete "Capacities and Characteristics" subparagraph below and schedule grease interceptors on Drawings.

Capacities and Characteristics:

Length by Width by Depth: <**Insert inches**>.

Number of Compartments: [**One**] [**Two**] <**Insert number**>.

Rate in "Flow Rate" subparagraph below is limited to 100 gpm (6.3 L/s).

Flow Rate: <Insert interceptor design rate>.

Capacity in "Retention Capacity" subparagraph below is limited to 200 lb (90.7 kg).

Retention Capacity: <**Insert lb**>.

Inlet and Outlet Pipe Size: <**Insert**>.

Centerline of Inlet to Floor: <**Insert inches**>.

Centerline of Outlet to Floor: <**Insert inches**>.

End Connections: [**Flanged**] [**Hub**] [**Threaded**].

Cleanout: Integral[ or field installed on outlet].

Trapped Outlet Required: [**Integral**] [**No**] [**Yes**].

Vent Pipe Size: [Not required] <Insert>.

Mounting: [Above floor] [Recessed in acid-resistant, coated steel frame and cradle] [Recessed, flush with floor] <Insert mounting>.

Flow-Control Fitting: [**Not required**] [**Required**].

Operation: [Automatic recovery] [Manual cleaning] [Semiautomatic, manual drawoff] <Insert operation>.

* + - 1. GREASE-REMOVAL DEVICES

Copy paragraph below and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Grease-Removal Devices <Insert drawing designation if any>:

[Manufacturers](http://www.specagent.com/LookUp/?ulid=8019&mf=04&src=wd): Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Grease Guardian](http://www.specagent.com/Lookup?uid=123457195146).

[Josam Company](http://www.specagent.com/Lookup?uid=123457152038).

[Thermaco, Inc](http://www.specagent.com/Lookup?uid=123457152040).

Or equal.

PDI certification is currently limited to 50-gpm (3.15-L/s) flow rate and 100-lb (45.4-kg) grease retention by PDI G101. Larger uncertified units are available.

Standard: PDI G101[**and ASME A112.14.4**], for automatic intercepting and removal of FOG from food[**-preparation**] [**or**] [**-processing**] <**Insert application**> wastewater.

Body Material: [Stainless steel] [Steel] <Insert material>.

Interior Separation Device: [**Baffles**] [**Screens**] <**Insert device**>.

Heater: [Not required] [Required].

Interior Lining: [Not required] <Insert description if required>.

Exterior Coating: [Not required] <Insert description if required>.

Unit Dimensions: <**Insert dimensions**>.

Flow Rate: <Insert recovery unit design rate>.

Basket Material: [Stainless steel] <Insert material>.

Inlet and Outlet Size: <**Insert size**>.

End Connections: [**Flanged**] [**Hub**] [**Threaded**].

Cleanout: Integral[ or field installed on outlet].

Mounting: [Above floor] <Insert mounting>.

Flow-Control Fitting: [**Not required**] [**Required**].

Operation: [Automatic recovery] <Insert operation>.

Power Requirement: [**120-V ac**] <**Insert power**>.

Full-Load Amperes: <**Insert number**> A.

Minimum Circuit Ampacity: <**Insert number**> A.

Maximum Overcurrent Protection: <**Insert number**> A.

Waste Grease Receptacle: [Furnished by Director’s Representative] <Insert description>.

* + - 1. OIL INTERCEPTORS

Indicate on Drawings the number, size, and arrangement of compartments and baffles in oil interceptors in. In "Precast-Concrete Oil Interceptors" paragraph below, delete option and insert name(s) of authorities having jurisdiction for interceptors complying with requirements of authorities having jurisdiction.

* + - * 1. Precast Concrete Oil Interceptors: Comply with [**ASTM C913**] <**Insert authorities having jurisdiction**>.

Delete first subparagraph below if interceptors must comply with requirements of authorities having jurisdiction.

Include rubber-gasketed joints, vent connections, manholes, compartments or baffles, and piping or openings to retain grease and to permit wastewater flow.

Structural Design Loads:

Light-Traffic Load: Comply with ASTM C890, A-8.

Medium-Traffic Load: Comply with ASTM C890, A-12.

Heavy-Traffic Load: Comply with ASTM C890, A-16.

Walkway Load: Comply with ASTM C890, A-03.

"Resilient Pipe Connectors" subparagraph below is an optional feature.

Resilient Pipe Connectors: ASTM C923, cast or fitted into interceptor walls, for each pipe connection.

Steps: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A615, deformed, 1/2-inch steel reinforcing rods encased in ASTM D4101, PP] [ASTM A615, deformed, 1/2-inch steel reinforcing rods encased in ASTM D4101, PP] <Insert material>, 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. Omit steps if total depth from floor of interceptor to finished grade is less than [60 inches] <Insert dimension>.

"Grade Rings" subparagraph below is an optional feature.

Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover.

"Manhole Frames and Covers" subparagraph below is an optional feature. Underground structures with risers to grade only require manhole frames and covers at top of riser.

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.

Ductile Iron: ASTM A536, Grade 60-40-18, unless otherwise indicated.

Gray Iron: ASTM A48, Class 35, unless otherwise indicated.

Lettering in first subparagraph below, such as "INTERCEPTOR" and "SANITARY SEWER," should be simple and must be short enough to fit on cover. Custom lettering costs more than standard lettering.

Include indented top design with lettering cast into cover, using wording equivalent to "[**INTERCEPTOR**] [**OIL INTERCEPTOR**] [**SANITARY SEWER**] <**Insert lettering**>."

Waste-oil storage tank and piping are specified in Section 231113 "Facility Fuel-Oil Piping."

If more than one oil interceptor is required, delete "Capacities and Characteristics" subparagraph below and schedule oil interceptors on Drawings.

Capacities and Characteristics:

Capacity: [Not applicable] <Insert **gal.**>.

Overall Dimensions: <**Insert inches**>.

Flow Rate: <Insert interceptor design rate>.

Inlet and Outlet Pipe Size: <**Insert**>.

Centerline of Inlet to Floor: <**Insert inches**>.

Centerline of Outlet to Floor: <**Insert inches**>.

End Connections: [**Flanged**] [**Hub**] [**Threaded**].

Waste-Oil-Outlet Pipe Size: <**Insert**>.

Centerline of Outlet to Floor: <**Insert inches**>.

Trapped Outlet Required: [**Integral**] [**No**] [**Yes**].

Cleanout: Integral[ or field installed on outlet].

Vent Pipe Size: <Insert>.

Mounting: [Above floor] [Recessed in acid-resistant, coated steel frame and cradle] [Recessed, flush with floor] <Insert mounting>.

Flow-Control Fitting: [**Not required**] [**Required**].

Coordinate "Cast-Iron or Steel Oil Interceptors" and "Plastic Oil Interceptors" paragraphs below with Section 231113 "Facility Fuel-Oil Piping" for waste-oil storage tanks and oil and vent piping.

* + - * 1. Cast-Iron or Steel Oil Interceptors: Factory fabricated; with removable sediment bucket or strainer, baffles, vents, and flow-control fitting on inlet.

[Manufacturers](http://www.specagent.com/LookUp/?ulid=8019&mf=04&src=wd): Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Josam Company](http://www.specagent.com/Lookup?uid=123457151998).

[WATTS](http://www.specagent.com/Lookup?uid=123457152004).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457152005).

Inlet, Outlet, Vent, and Waste-Oil-Outlet Piping Connections: Hub, hubless, or threaded unless otherwise indicated .

"Extension" subparagraph below is an optional feature. Retain only if required. Verify availability.

Extension: Cast-iron or steel shroud, full size of interceptor, extending from top of interceptor to grade.

Cover: Cast iron or steel, with steel reinforcement to provide ASTM C890, [**A-03, walkway**] <**Insert loading type**> load.

Comply with requirements in Section 231113 "Facility Fuel-Oil Piping" for waste-oil storage tank and piping.

If more than one oil interceptor is required, delete "Capacities and Characteristics" subparagraph below and schedule oil interceptors on Drawings.

Capacities and Characteristics:

Capacity: [Not applicable] <Insert **gal.**>.

Overall Dimensions: <**Insert inches**>.

Flow Rate: <Insert interceptor design rate>.

Inlet and Outlet Pipe Size: <**Insert**>.

Centerline of Inlet to Floor: <**Insert inches**>.

Centerline of Outlet to Floor: <**Insert inches**>.

End Connections: [Flanged] [Hub] [Threaded].

Waste-Oil-Outlet Pipe Size: <Insert>.

Centerline of Outlet to Floor: <Insert inches>.

Trapped Outlet Required: [Integral] [No] [Yes].

Cleanout: Integral[ or field installed on outlet].

Vent Pipe Size: <Insert>.

Mounting: [Above floor] [Recessed in acid-resistant, coated steel frame and cradle] [Recessed, flush with floor] <Insert mounting>.

Flow-Control Fitting: [**Not required**] [**Required**].

* + - * 1. Plastic Oil Interceptors: Removable sediment bucket or strainer, baffles, vents, and flow-control fitting on inlet.

[Manufacturers](http://www.specagent.com/LookUp/?ulid=8019&mf=04&src=wd): Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Green Turtle Zurn](http://www.specagent.com/Lookup?uid=123457152008).

[MIFAB, Inc](http://www.specagent.com/Lookup?uid=123457152048).

[Town & Country Plastics, Inc](http://www.specagent.com/Lookup?uid=123457152010).

Or. equal.

Inlet, Outlet, Vent, and Waste-Oil Outlet Piping Connections: Hub, hubless, or threaded, unless otherwise indicated.

"Extension" subparagraph below is an optional feature. Verify availability.

Extension: Plastic shroud, full size of interceptor, extending from top of interceptor to grade.

Cover: Plastic[ with steel reinforcement to provide ASTM C890,] [A-03, walkway] <Insert loading type> load.

Waste-oil storage tank and piping are specified in Section 231113 "Facility Fuel-Oil Piping."

If more than one oil interceptor is required, delete "Capacities and Characteristics" subparagraph below and schedule oil interceptors on Drawings.

Capacities and Characteristics:

Capacity: [Not applicable] <Insert **gal.**>.

Overall Dimensions: <**Insert inches**>.

Flow Rate: <Insert interceptor design rate>.

Inlet and Outlet Pipe Size: <**Insert**>.

Centerline of Inlet to Floor: <**Insert inches**>.

Centerline of Outlet to Floor: <**Insert inches**>.

End Connections: [Flanged] [Hub] [Threaded].

Waste-Oil-Outlet Pipe Size: <Insert>.

Centerline of Outlet to Floor: <**Insert inches**>.

Trapped Outlet Required: [Integral] [No] [Yes].

Cleanout: Integral[ or field installed on outlet].

Vent Pipe Size: <Insert>.

Mounting: [Above floor] [Recessed in acid-resistant, coated steel frame and cradle] [Recessed, flush with floor] <Insert mounting>.

Flow-Control Fitting: [Not required] [Required].

* + - 1. SAND INTERCEPTORS

Sand interceptors in "Description" paragraph below are small and intended for shallow installation in locations, such as outdoor showers.

* + - * 1. Description: Factory-fabricated, cast-iron or steel body and inlet grate; with settlement chamber and removable basket or strainer.
				2. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Josam Company](http://www.specagent.com/Lookup?uid=123457152018).

[WATTS](http://www.specagent.com/Lookup?uid=123457152024).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457152025).

Or equal.

* + - * 1. Outlet Piping Connection: Hub, hubless, or threaded, unless otherwise indicated.
				2. Grate: Cast iron or steel with reinforcement to provide ASTM C890, [**A-03, walkway**] <**Insert loading type**> load.

If more than one sand interceptor is required, delete "Capacities and Characteristics" paragraph below and schedule sand interceptors on Drawings.

* + - * 1. Capacities and Characteristics:

Capacity: [Not applicable] <Insert **gal.**>.

Overall Dimensions: <**Insert inches**>.

Outlet Pipe Size: <**Insert**>.

Trapped Outlet Required: [**Integral**] [**No**] [**Yes**].

Vent Pipe Size: [Not required] <Insert>.

Installation Position: [Top flush with grade] <Insert position>.

* + - 1. SOLIDS INTERCEPTORS

Copy first paragraph below and re-edit for each product.

Insert drawing designation. Use these designations on Drawings to identify each product.

* + - * 1. Cast-Iron or Steel Solids Interceptors <**Insert drawing designation if any**>:

Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Josam Company](http://www.specagent.com/Lookup?uid=123457151981).

[WATTS](http://www.specagent.com/Lookup?uid=123457151987).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457151988).

Or equal.

Type: Factory-fabricated interceptor made for removing and retaining [**lint**] [**sediment**] <**Insert solid**> from wastewater.

Body Material: Cast iron or steel.

Interior Separation Device: [**Baffles**] [**Screens**] <**Insert device**>.

Interior Lining: [Corrosion-resistant enamel] [Not required] <Insert lining>.

Exterior Coating: [Corrosion-resistant enamel] [Not required] <Insert coating>.

Body Dimensions: <**Insert dimensions**>.

Flow Rate: [Not required] <Insert description if required>.

Inlet and Outlet Size: <**Insert size**>.

End Connections: [Threaded] <Insert connections>.

Mounting: [Above floor] [Inline] <Insert mounting>.

* + - * 1. Plastic Solids Interceptors:

[Manufacturers:](http://www.specagent.com/Lookup?ulid=7400) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Green Turtle Zurn](http://www.specagent.com/Lookup?uid=123457152013).

[Town & Country Plastics, Inc](http://www.specagent.com/Lookup?uid=123457152015).

[Zurn Industries, LLC](http://www.specagent.com/Lookup?uid=123457152016).

Or equal.

Type: Factory-fabricated interceptor made for removing and retaining [lint] [sediment] <Insert solid> from wastewater.

Body Material: Plastic.

Interior Separation Device: [Baffles] [Screens] <Insert device>.

Body Dimensions: <Insert dimensions>.

Flow Rate: [Not required] <Insert description if required>.

Inlet and Outlet Size: <Insert size>.

End Connections: [Threaded] <Insert connections>.

Mounting: [Above floor] [Inline] <Insert mounting>.

* + - 1. PRECAST-CONCRETE MANHOLE RISERS

Retain this article for manhole risers for underground concrete interceptors, to provide access from grade level to interior of interceptors.

* + - * 1. Precast Concrete Manhole Risers: [**ASTM C478**] [**ASTM C913**], with rubber-gasket joints.

Structural Design Loads:

Light-Traffic Load: Comply with ASTM C890, A-8.

Medium-Traffic Load: Comply with ASTM C890, A-12.

Heavy-Traffic Load: Comply with ASTM C890, A-16.

Walkway Load: Comply with ASTM C890, A-03.

Length: From top of underground concrete structure to grade.

Riser Sections: 3-inch minimum thickness and [**36-inch**] <**Insert dimension**> diameter.

Top Section: Eccentric cone unless otherwise indicated. Include top of cone to match grade ring size.

Gaskets: ASTM C443, rubber.

Steps: [Individual FRP steps or FRP ladder] [Individual FRP steps, FRP ladder, or ASTM A615, deformed, **1/2-inch** steel reinforcing rods encased in ASTM D4101, PP] [ASTM A615, deformed, **1/2-inch** steel reinforcing rods encased in ASTM D4101, PP] <Insert material>, 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.

* + - * 1. 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.

Retain "Manhole Frames and Covers" paragraph below only if required. Underground structures with risers to grade only require manhole frames and covers at top of riser.

* + - * 1. 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.

Ductile Iron: ASTM A536, Grade 60-40-18, unless otherwise indicated.

Gray Iron: ASTM A48, Class 35, unless otherwise indicated.

Include indented top design with lettering cast into cover, using wording equivalent to the following:

Lettering in two subparagraphs below, such as "INTERCEPTOR" and "SANITARY SEWER," should be simple and must be short enough to fit on cover. Custom lettering costs more than standard lettering.

Grease Interceptors in Sanitary Sewerage System: "[**INTERCEPTOR**] [**GREASE INTERCEPTOR**] [**SANITARY SEWER**] <**Insert lettering**>."

Oil Interceptors in Sanitary Sewerage System: "[**INTERCEPTOR**] [**OIL INTERCEPTOR**] [**SANITARY SEWER**] <**Insert lettering**>."

1. EXECUTION
	* + 1. INSTALLATION
				1. Equipment Mounting:

Retain first subparagraph below to require equipment to be installed on cast-in-place concrete equipment bases.

Install [**grease interceptors**] [**grease-removal devices**] [**and**] [**solids interceptors**] on cast-in-place concrete equipment base(s).

Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."

Install interceptors according to manufacturer’s installation instructions.

* + - * 1. Install precast concrete interceptors according to ASTM C891.
				2. Set interceptors level and plumb.
				3. Install manhole risers from top of underground concrete interceptors to manholes and gratings at finished grade.
				4. Set tops of manhole frames and covers flush with finished surface in pavements.

Set tops [**3 inches**] <**Insert dimension**> above finish surface elsewhere unless otherwise indicated.

* + - * 1. Set tops of grating frames and grates flush with finished surface.
				2. Set [**metal**] [**and**] [**plastic**] interceptors level and plumb.
				3. Set tops of metal interceptor covers flush with finished surface in pavements.

Set tops [**3 inches**] <**Insert dimension**> above finish surface elsewhere unless otherwise indicated.

* + - * 1. Install piping and oil storage tanks according to Section 231113 "Facility Fuel-Oil Piping."
				2. Install grease interceptors, including trapping, venting, and flow-control fitting, according to authorities having jurisdiction and with clear space for servicing.

Above-Floor Installation: Set unit with bottom resting on floor unless otherwise indicated.

Flush with Floor Installation: Set unit and extension, if required, with cover flush with finished floor.

Recessed Floor Installation: Set unit in receiver housing having bottom or cradle supports, with receiver housing cover flush with finished floor.

Install cleanout immediately downstream from interceptors not having integral cleanout on outlet.

* + - * 1. Install grease-removal devices on floor. Install trap, vent, and flow-control fitting according to authorities having jurisdiction.

Install control panel adjacent to unit unless otherwise indicated.

* + - * 1. Install oil interceptors, including trapping, venting, and flow-control fitting, according to authorities having jurisdiction and with clear space for servicing.

Coordinate oil-interceptor storage tank and gravity drain with Section 231113 "Facility Fuel-Oil Piping."

* + - * 1. Install solids interceptors with cleanout immediately downstream from interceptors that do not have integral cleanout on outlet.

Install trap on interceptors that do not have integral trap and are connected to sanitary drainage and vent systems.

* + - 1. PIPING CONNECTIONS

Coordinate piping installations and specialty arrangements with Drawings and with requirements specified in piping systems. If Drawings are explicit enough, these requirements may be reduced or omitted.

* + - * 1. Make piping connections between interceptors and piping systems.
			1. IDENTIFICATION
				1. Identification materials and installation are specified in Section 312000 "Earth Moving."

Arrange for installation of green warning tapes directly over piping and at outside edges of underground interceptors.

Use warning tapes or detectable warning tape over ferrous piping.

Use detectable warning tape over nonferrous piping and over edges of underground structures.

* + - * 1. Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplate or sign on or near each of the following:

Grease interceptors.

Grease-removal devices.

Oil interceptors.

Solids interceptors.

* + - 1. PROTECTION
				1. Protect sanitary waste interceptors from damage during construction period.
				2. Repair damage to adjacent materials caused by sanitary waste interceptor installation.

END OF SECTION 221323