

## SECTION 02609

### GREASE AND SAND INTERCEPTOR

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Modular precast concrete grease interceptor sections with joint covers, access holes, anchorage, cast iron ring, grate, and accessories.
- B. Modular precast concrete sand interceptor sections with joint covers, access holes anchorage, cast iron ring, grate, and accessories.

##### 1.02 RELATED SECTIONS

##### 1.03 REFERENCES

- A. AASHTO M-105: Gray Iron Castings.
- B. AASHTO M-199: Precast Reinforced Concrete.
- C. ASTM C-923: Resilient Connectors between Reinforced Concrete Structures and Pipes.

##### 1.04 SUBMITTALS FOR REVIEW

- A. Product Data: Provide ring & covers, component construction, features, configuration, and dimensions.

##### 1.05 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

##### 1.06 GENERAL REQUIREMENTS

- A. When determined by the City Engineer that grease control is required, per Chapter 10 of the International Plumbing Code, the following control shall be used.
  - 1. Grease Interceptors (outdoor, gravity):
    - a. Grease interceptors are required on all new non-residential building construction or retrofits which include food preparation and serving areas.
    - b. A sampling manhole shall be located below the downstream outlet.
- B. The Contractor shall furnish and install watertight cast-in-place or precast concrete grease interceptors and sand interceptors as required by the City Engineer or City Officials.
- C. Grease interceptors and sand interceptors shall be furnished complete with cast iron rings and covers.

- D. Design of grease/sand interceptors and grease traps need to be approved by City Engineer.
- E. Flow Channels
  - 1. The flow channel through Grease interceptors shall conform with the slope of the sewer.
  - 2. Adjacent floor area should drain to the channel with the minimum slope of 1 inch per foot.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Manufacturers:
  - 1. Amcor.
  - 2. Geneva Pipe.
  - 3. Dura-crete.
- B. Grease interceptor Sections and sand interceptor: Reinforced precast concrete in accordance with AASHTO M-199 with gaskets in accordance with ASTM C923.
- C. Mortar and Grout: Type S.

### 2.02 COMPONENTS

- A. Grease Interceptors
  - 1. Outdoor gravity grease interceptors shall have a minimum of two compartments.
  - 2. The minimum size for grease interceptors shall be 750 gallons, unless otherwise approved
  - 3. Wall Sections to be designed to meet ASTM C913 [RF1] with AASHTO HS-20 loading:
    - a. Interceptors shall be constructed of 6" thick precast reinforced concrete. Box size to be 3-foot by 3-foot and the height as shown on plans. Provide grade rings as needed.
    - b. Grease interceptor shall be designed to meet ASTM C-857 "minimum structural design loading for underground precast concrete utility structures. Provide grade rings as needed.
    - c. All joint surfaces of precast sections and the face of the walls, base, and grade rings shall be thoroughly cleaned and wet prior to setting precast sections.
    - d. All joints including grade rings shall be set in mortar consisting of 1 part cement and 1 ½ parts sand with sufficient water added to bring the mixture to workable consistency, or the joints shall be sealed with butyl rubber gasket that is permanently flexible and non-shrinking, similar to Brandt No. 95 Cold Weather Vault Sealant.
  - 4. Lid and Frame:

- a. All iron castings shall conform to the requirements of H-20 loading for grey iron castings.
- b. Rings and grates shall have machined bearing surfaces and a minimum cover weight of 150 pounds and minimum ring weight of 233 pounds.
- c. The foundry name, year of manufacture, and "SEWER" shall be marked on the cover.
- d. All Grease interceptor and clean-out box rings shall be carefully set to the grade as shown on the approved drawings or as directed by the Engineer.
- e. Grate covers shall be so installed to be within 1/4" below the finished surface.
- f. A concrete ring 12" wide and 8" thick will be poured around lid in accordance with Section 03304.

## 2.03 CONFIGURATION

- A. Shape: rectangular.
- B. Design Size: design criteria to be submitted to the City Engineer for review.
- C. Clear Grate and Lid Opening: 24 inches diameter.
- D. Pipe Inlet and Outlet: Pipe inlet and outlet to be grouted to eliminate infiltration and leakage.

## PART 3 EXECUTION

### 3.01 PLACING CONCRETE SECTIONS

- A. Place base pad, trowel top surface level.
- B. Place Grease interceptor or sand interceptor plumb and level, trim to correct elevations, anchor to base pad.
- C. Cut and fit for pipe as required.
- D. Grout base of shaft sections to achieve slope to exit piping.
- E. Provide grade rings and Trowel smooth. Contour as required.
- F. Set cover frames and covers level without tipping, and to correct elevations.

### 3.02 SCHEDULES

- A. Grease interceptors and sand interceptors: Precast concrete sections, copolymer polypropylene plastic steps, to depth indicated, with tamper proof lid.

END OF SECTION