# **Incinerator Sand Transport System Replacement**

# **Project No. 2024036**

# **SCOPE OF WORK**

### Overall

- The Contractor will be responsible for obtaining and maintaining insurance as required under MSD General Conditions, Article 5 as shown in attachment.
- A preliminary construction meeting will be held prior to the start of the project. This meeting will be held to establish a schedule and timeline for the project.
- The contractor will be responsible for providing all labor, materials, tools and/or equipment to safely and correctly demo existing and install the new equipment described within the attached documents.
- > MSD staff will empty the storage silo prior to the project start date.
- Project duration will be 1 month
- > All installations shall be in accordance with all federal, state, and local regulations.

#### Removal

- MSD currently has a 600 cubic foot storage silo with an attached ladder, dust collector, and other accessories. Directly underneath the storage silo is a pneumatic transporter and on the inside wall of the incinerator building is a control panel. This old equipment needs to be removed and disposed of.
- The existing storage silo, transporter, control panel and associated attachments are located at the incinerator building at the Metropolitan Sewerage District's French Broad River Water Reclamation Facility, shown on the attached plans.
- The Contractor shall disconnect all pneumatic lines and the sand conveyance line from the existing storage silo and transporter prior to demolition and take precautions to not damage these lines.
- > The Contractor will be responsible for all lock out/tag out of energy sources.
- The contractor is responsible for disposal of the existing equipment after removal. All debris, trash, etc. shall be cleaned from the site prior to final payment.

#### Installation

- MSD has a new 900 cubic foot storage silo with a new ladder, dust collector, and other accessories that need to be assembled. In addition, MSD also has a new transporter, control panel, and 3" conveyance piping with fittings.
- Installation shall be to install the new equipment per plans, referenced drawings, and/or manuals.

- The location of the new storage silo with accessories and new transporter shall be replacing the existing in the same location using the same foundation. The new control panel shall replace the existing in the same location on the inside wall of the incinerator building.
- > The existing pneumatic piping shall be reused to operate the new equipment.
- The existing 2" sand conveyance line shall be reused and connect to the new transporter with a 3" to 2" carbon steel reducer fitting.
- A section of 3" conveyance line shall be installed for future use. This section is located from near the incinerator, a northwest direction, to the existing 2" conveyance line, shown on the attached plans. This new 3" conveyance line will be a more direct route and eliminate bends. Support hangers (supplied by the contractor) for the new 3" conveyance line shall be installed from the overhead ceiling.
- Two new stainless steel 4" knife gate valves (model CF37 heavy duty manufactured by Fabri-Valve, or a pre-approved equal) shall be installed at the end of the new 3" conveyance line similar to the existing knife gate valves on the existing 2" conveyance line. 4" to 3" carbon steel reducer fittings shall be installed on either side of the 4" knife gates.
- A new CAT5 or CAT6 communications cable shall be installed from the new control panel to MSD's existing operator control room located on the east side of the 2<sup>nd</sup> floor in the incinerator building (approximately 150 LF). The communication cable shall be installed inside ¾" rigid conduit fastened to the wall until reaching the overhead raceway and then shall be laid within the overhead raceway leading to the operator control room. A minimum of 10' extra communication cable shall be coiled up in the operator control room.
- The Contractor will be responsible for energizing the system after installation and to ensure the system is operable to standard procedures.