



## PLUMBING BUILDING SCOPE OF WORK

1. The Contractor shall furnish all supervision, materials, labor, equipment, tools, supplies, incidental items, including construction cleanup, etc for accomplishing the Building Plumbing Scope of Work covered by this Request for Proposal and any subsequent Contract, except the materials and services specifically named herein to be provided by the Owner (Sheetz).
2. The Contractor shall furnish, deliver, unload, store, fabricate, erect, clean, inspect and test all piping systems.
3. The Contractor shall supply all required sizes and types of pipe, pipe fabrications, associated fittings, valves, piping specialties, flanges, nuts, bolts, washers, gaskets, hangers, supports, vents, drains, heat tracing, plumbing fixtures, insulation, jacketing, etc as shown or noted on the drawings and covered by the Building Plumbing Scope of Work.
4. **Sheetz will supply the Building Water Heater, Drain Pan, Circulation Pump, Balancing Valves, Thermometer and ASME Expansion Tank for installation by the Contractor.**
5. **The Plumbing Contractor shall do all excavation, backfill and spoils for their work**

### Building Plumbing Scope of Work

The Contractor is responsible for the following items covered by the Building Plumbing Scope of Work and shall fill out the Bid Schedule according to the line items listed below.

**1705 - Mobilization**

The contractor will be paid for one mobilization any additional mobilizations will be done at the contractor's expense.

**2394 - Plumbing Excavation, Stone Backfill and Spoil**

The Plumbing Contractor shall be responsible for the excavation, stone backfill and spoil removal for their work.

**11450 - Fryer Grease Line (Electric/Gas Fryer Disposal)**

Supply and install 1" Black Iron piping from the fryer to the fry oil disposal tank and from the disposal tank to the exterior wall outlet box.

**15140 - Main Water Service into Building**

The Contractor shall supply and install the main water service. The Contractor's take over point for the domestic water shall five feet (5') outside the building wall line.

The scope shall include the piping tie in inside the building and shall include all shutoff and combination valves, meters, backflow preventer, strainers, etc up to the branch connections for the HW, CW, FW, FP inside of the building.

All exposed piping shall be insulated with 1" closed cell foam insulation with white PVC jacketing & fittings as noted on P-1 note 19.

**15140 – Distribution Water Pipe**

**In Slab Plumbing** – Unless noted otherwise, the Contractor's take over points for all In Slab Plumbing included in this scope of work shall be five feet (5') from the outside building wall foundation.

The continuation of the In Slab Plumbing systems that extend beyond the five feet (5') limit outside the building shall be priced in the On & Off Site Scope of Work. The Scope of Work for the In Slab Plumbing shall include the following piping systems:

**Cold Water, Hot Water, Filtered Water** – The Contractor shall install the In Slab cold water (CW), hot water (HW), and filtered water (FW) systems piping including all piping, fittings, etc to the lines and grades as shown on the drawings. The underground portions shall be type PE tubing (no joints) in accordance with the sizes shown on the drawings and shall be wrapped with insulation.

The In Slab portions of these systems that continue above the slab shall be stubbed up to a manifold type connection with individual labeled valves below ceiling by the water filter location.

All exposed piping shall be insulated with 1" closed cell foam insulation with white PVC jacketing & fittings as noted on P-1 note 19.

The In Slab portions of these systems that continue above the slab shall be stubbed up in the locations shown on the drawings.

The capped portions of the filtered water not stubbed up shall be located under the floor slab in the proper locations.

All necessary excavation and backfill required for the above mention services is part of this scope of work.

All piping shall be supported and anchored sufficiently so as not to be displaced from plan locations during back filling.

**Above Slab Plumbing** - The scope work for the Above Slab Plumbing shall include the following piping systems:

**Hot Water (HW) & Cold Water (CW)** - The Contractor shall install the HW and CW plumbing systems above the slab as shown on the drawings. Provide all necessary piping, fixtures, hangers, etc as required.

This work includes continuation of the Main Water Service from the first SOV, including the pressure reducing valve (PRV), water meter, combination check valve and back-flow preventer, etc up to and including all connections to the Contractor and Sheetz supplied fixtures and all the isolation valves for food service connections as noted on the drawings.

The Contractor shall insulate all lines located above the suspended ceiling.

Each individual run will have its own valve in an accessible location & be clearly marked as to what it controls.

All exposed piping shall be insulated with 1" closed cell foam insulation with white PVC jacketing & fittings as noted on P-1 note 16.

**Ice Maker Feed Water (IMF) (Distribution Water Piping)**

The Contractor shall install the IMF plumbing as shown on the drawings.

The Contractor shall provide all necessary piping, fixtures, hangers, etc as required.

The scope of work includes all piping, valves, etc up to and including the isolation and check valves for food service connections as noted on the drawings.

Each individual run will have its own valve in an accessible location (as shown on drawings) & be clearly marked as to what it controls.

**15150 - Sanitary Sewer / Grease Line (Sanitary Waste and Vent Piping)**

The Contractor shall supply and install the sanitary sewer piping and all associated risers, clean outs (CO), floor drains (FD), floor sinks (FS), funnel floor drains (FFD), shear gates, swing check combination valves, vents, traps, fittings, etc to the lines and grades as noted or shown on the drawings. The Contractor to ensure all piping is supported and anchored sufficiently so as not to be displaced from plan locations during backfilling.

**Sewers & Vents:**

The Contractor shall continue the installation of the under slab sanitary sewers above the slab as necessary to install all above slab plumbing fixtures and piping.

Install all required vents in the sizes and locations as shown on the drawings and details.

Provide all necessary piping, fittings, fixtures, hangers, etc as required.

All necessary roof penetrations are the responsibility of the Contractor.

The scope includes the installation of the grease trap piping to five feet (5') outside of the building including all excavation, backfill, risers, drains, vents, traps, fittings, etc to the correct lines and grades as noted or shown on the drawings.

The continuation of the grease trap piping and grease trap five feet (5') beyond the outside of the building is by the Site Contractor.

The Contractor to ensure all piping is supported and anchored sufficiently so as not to be displaced from plan locations during backfilling.

#### **15410 - Plumbing Fixtures**

The Contractor shall supply and install all items listed as supplied by the Contractor on the Plumbing Fixtures Schedule. The Contractor shall also install all the items listed as supplied by Sheetz. Installation shall include all material necessary for a complete installation.

The Contractor shall install the lavatories in the integral counter tops.

Sheetz will supply the lavatories, countertops and countertop fixtures.

The Contractor shall install the fixtures in the integral counter tops and fixture piping in each bathroom.

Sheetz will supply the fixtures and the automatic towel dispensers.

#### **15470 – Water Filtered Equipment**

The Contractor shall install the water filter system that will be supplied by Sheetz. The Contractor shall install the necessary piping and isolation valves for the water conditioner.

The water-conditioner will be supplied and installed by others.

Each individual run will have its own valve in an accessible location & be clearly marked as to what it controls.

#### **15480 - Water Heater Installation**

Install Sheetz supplied Water Heater, ASME Expansion Tank, Thermometer, Circulation Pump, Balancing Valves and Drain Pan as per plans and notes.

#### **15540 - Building Gas line (Building Services Piping)**

The Contractor shall provide and install the gas line meter structure & supply and install the gas piping from the building side of meter and make the final connections on the roof & interior of building as shown or implied on drawings.

Installation shall include all equipment, materials, labor and required testing necessary for a complete installation.

The cost/price the gas line installation from the main to the inlet side of the meter is in the on & off Site Scope of Work

## Car Wash Plumbing

### 15140 - Carwash Plumbing (Distribution Water Piping)

- 1 The Contractor shall extend and make final connections to the 1½” water line inside the Mechanical Room of the carwash. Water line needs to have a minimum of 40 psi. & 40 gallons per min. If more than 80 psi the plumbing contractor needs to install a pressure reducing valve (The 1½” water line will be brought to within five feet outside the carwash building as part of the On Site Scope of Work).
- 2 Tie in floor drain from equipment room to pre-installed stub for sewer.
- 3 Mud joint between the building and grit separator with hydraulic cement to ensure a watertight seal.
- 4 The Plumbing contractor is responsible to install heating tubing / piping in the concrete at the entrance and exit aprons of the car wash. Also making sure that it loops around the strip drain.  
The Plumbing contractor is responsible for air pressure test (20lb psi until final connections with no decay) of heating tubing before concrete is poured. Sheetz/Car Wash manufacture will supply the radiant heat tubing & Glycol. The final connections to boiler manifold (including, the tubing that is already installed in the carwash building & utility room) will be the responsibility of the carwash supplier.  
The Plumbing Contractor is responsible for filling the boiler & tubing with Glycol and commissioning the system per manufacturer’s specifications. Please coordinate heat piping / tubing installation with concrete contractor (Please see carwash layout drawing # 1 for tubing details. This drawing (layout # 1) is just a typical drawing. Please refer to dimensions & details on drawings & notes in this scope)
- 5 The Plumber is to run 2-2” PVC schedule 80 from utility room to the last compartment in second reclaim tank.  
These are to be stubbed out so that they are accessible from the man hole. These are to have flapper type foot valves on the end and need to be installed 18” off of the bottom of the tank.  
These are also to have unions at the top so they can be removed and cleaned without getting into the tank.
- 6 The Plumber is also to run 1-1” pvc sch 40 from utility room to second compartment in the first reclaim tank for the ozone water

- 7 The Plumbing contractor is responsible for installing & making the final connections of the natural gas or propane radiant heater in the car wash bay & the radiant heater in the utility room.  
Ensure that both heaters are connected and in working order before turning over. (Note: The heater in the car wash bay is electronic ignition. The heater in the utility room needs a pilot light & also needs a thermostat installed on the opposite end of the utility room)
- 8 Complete a combustion test (The boiler must be hooked up to a combustion analyzer) on the boiler to ensure that it is burning efficiently. If you are not able to do this work you are required to hire a certified person to do so. Huron Valley Sales will also help you with this and help you out with anything you need.
- 9 Plumber to mount the install the following sensors.  
A: The slab stat- During the installation of the heat tubing in the exterior slabs. Install a 1” conduit (this conduit to be installed from the back of the utility to the center of the heated pad) to use as a sleeve to install the slab stat.  
B: Boiler air temp stat- This is to be attached to the brick up tight to the overhang, on a standoff bracket.

#### **15540 - Carwash Gas Line (Building Services Piping)**

The Contractor shall provide and install the gas line from the meter outside the carwash and make the final connections inside the Mechanical room.

Installation shall include all equipment, materials, labor and required testing necessary for a complete installation.

Price the gas line installation from the main to the inlet side of the meter in the On & Off site Scope of Work (If natural gas is not available substitute Propane)

- A. **Inspections and Testing** - The Contractor is responsible to ensure all plumbing system and fixture installations comply with the drawings and all local, state and federal codes. The most stringent requirement shall apply.  
The Contractor is responsible for performing all required testing for each system and for scheduling and obtaining all required inspections.
- B. **Work by Others** – The Food Service Equipment Contractor will connect from the above ground plumbing systems isolation valves (by the Plumbing Contractor) to the food service equipment.  
The carbon dioxide (CO<sub>2</sub>) piping system and the fire suppression system for the fryer will be installed by others.  
Sheetz will supply the water filter that is to be installed by the Plumbing Contractor.

- E. Permits and Inspection Fees** – The Contractor is responsible for obtaining the plumbing permit, any applicable licenses, and scheduling all tests and inspections with the appropriate governing agencies.  
All permit and inspection fees are by the Contractor.  
Sheetz will pay the water and sewer tap fee(s).
- F. Gas Canopy** – The Building Contractor is responsible for tying the canopy roof drains into the storm drains.