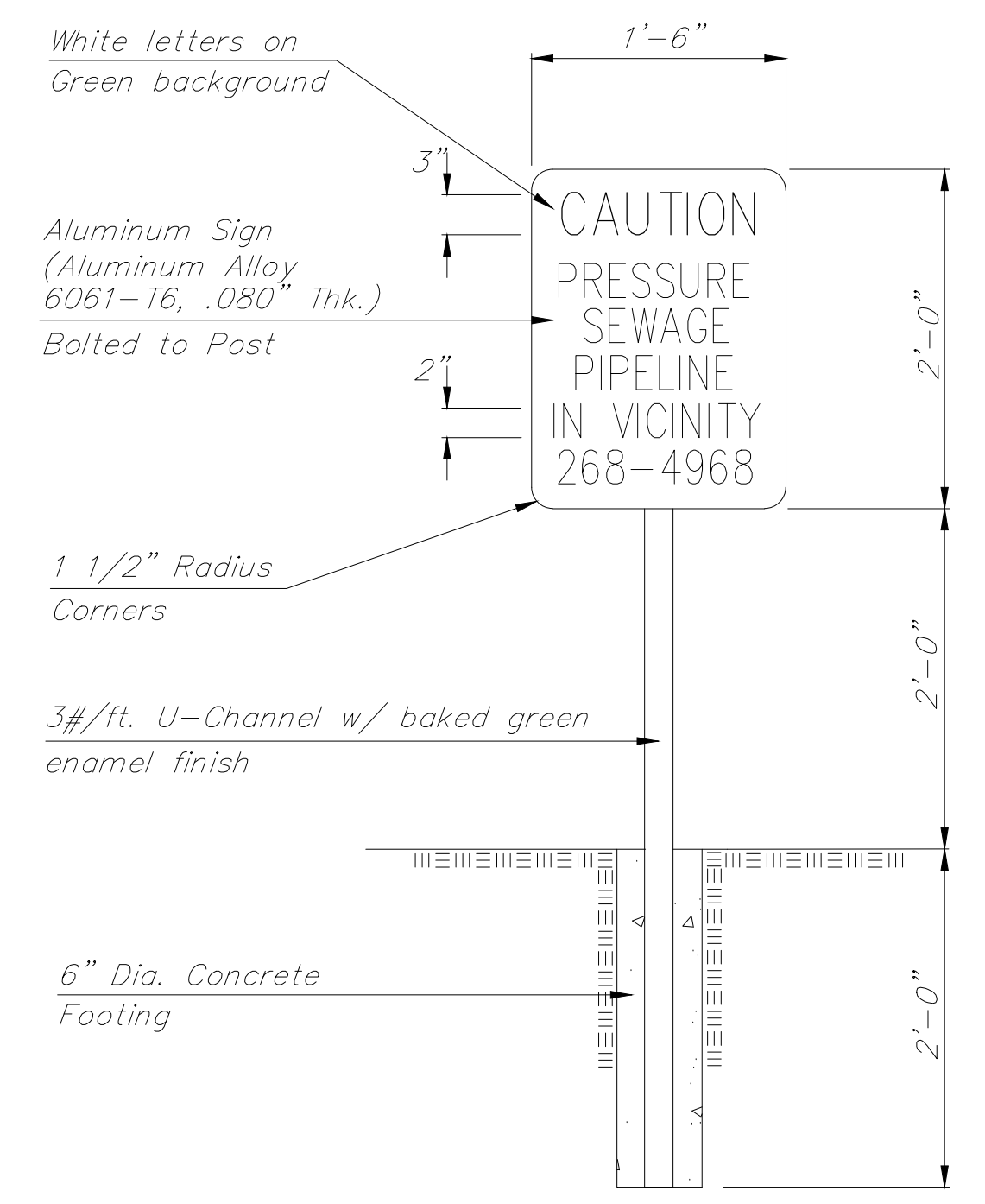


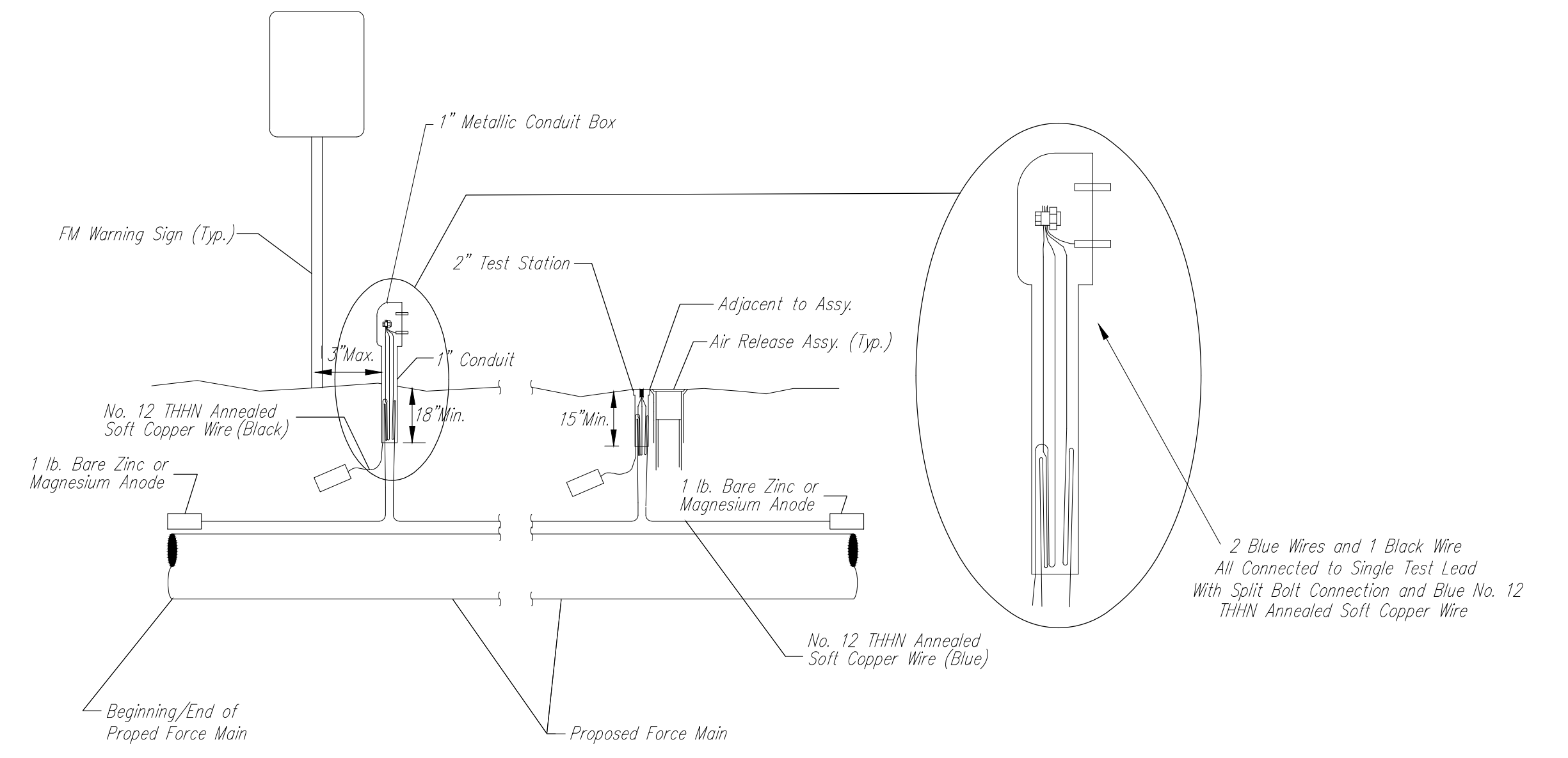
BOLLARD DETAIL

Note: Cost of Bollards shall be Included in L.S. Bid Item "Lift Station Module."



FORCE MAIN WARNING SIGN DETAIL

Note: Install Metal Warning Signs near Sta. 0+50, Sta. 5+00, Sta. 9+50 and Sta. 14+00. Exact Locations of Warning Signs shall be Approved by the Engineer. Cost of Signs shall be Included in L.S. Bid Item "Lift Station Module."



TRACER WIRE

Conductive type pipe locator/tracer wire shall be installed to locate all waterline pipe regardless of pipe material. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. Split-bolt connectors shall be used at splice locations. Electrical tape shall cover all splices so no bare wire is exposed. Test stations shall be installed adjacent to all fire hydrants along the waterline and at blowoffs or valves near the ends of the waterlines. Any exceptions to the location of test stations shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 1 lb. Zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.

WIRE

The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. The insulation sheathing shall be removed such that 1" bare copper wire is exposed at all points of connection. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.

TEST STATIONS

The test station for fire hydrant applications shall be a 1 inch galvanized conduit style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS3B as manufactured by HANDLEY Industries or approved equal. The conduit style shall be attached to a 1 inch rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "Force Main" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be installed to allow 10 inches of wire within the test station. In concrete environments such as sidewalks or in the downtown area the contractor shall use the flush style test station. The location of all test stations shall be approved by the engineer, recorded, and shown in the as-built drawings.

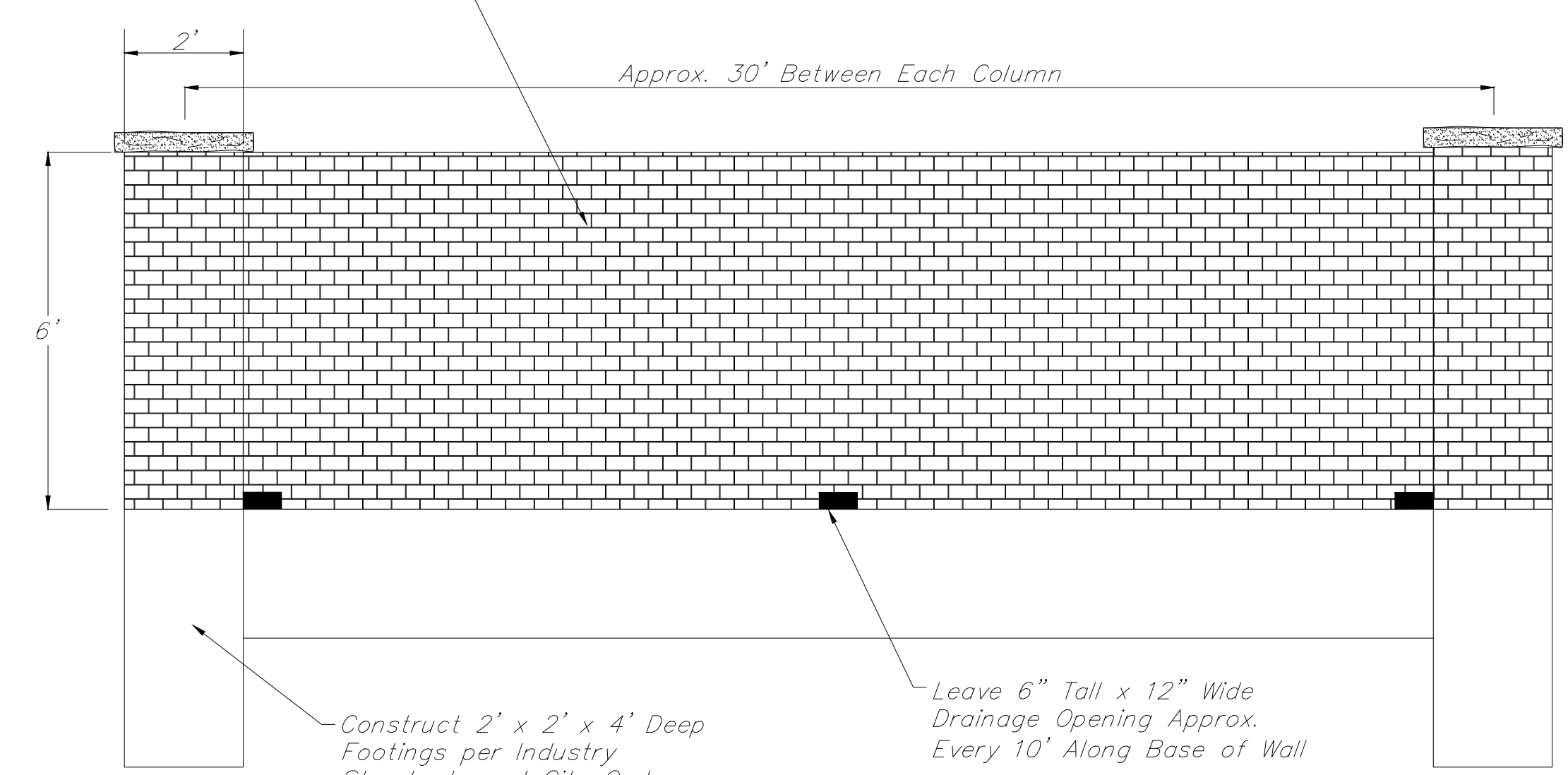
ANODES

The anodes shall be 1 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL

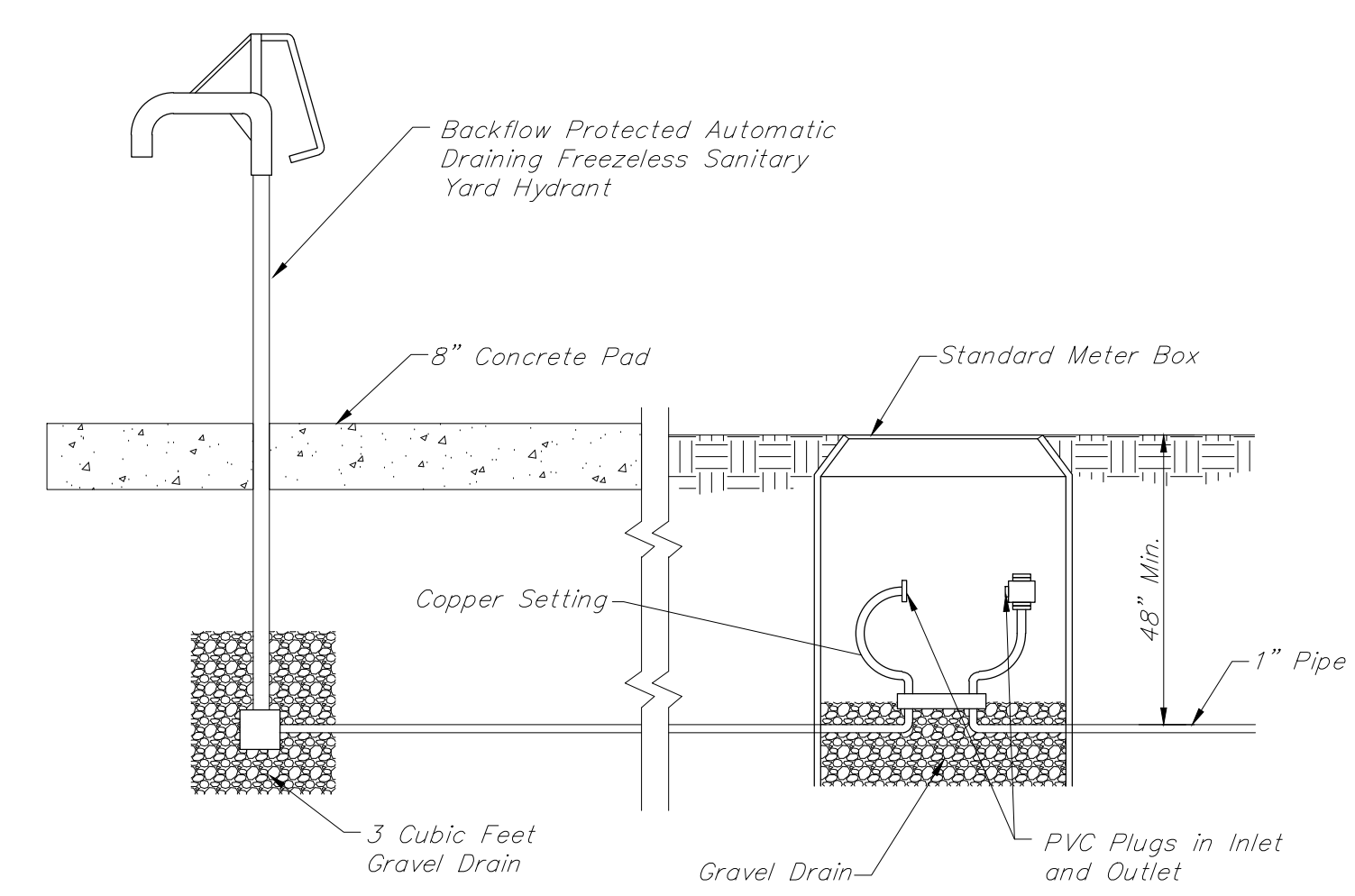
COST IS SUBSIDIARY TO PIPE INSTALLATION

Construct 6' Tall Concrete Slump Block Wall per Industry Standards and City Standards. Wall shall be Left Unpainted. Contractor shall Obtain Approval from Developer for Texture and Finish Style of Wall.



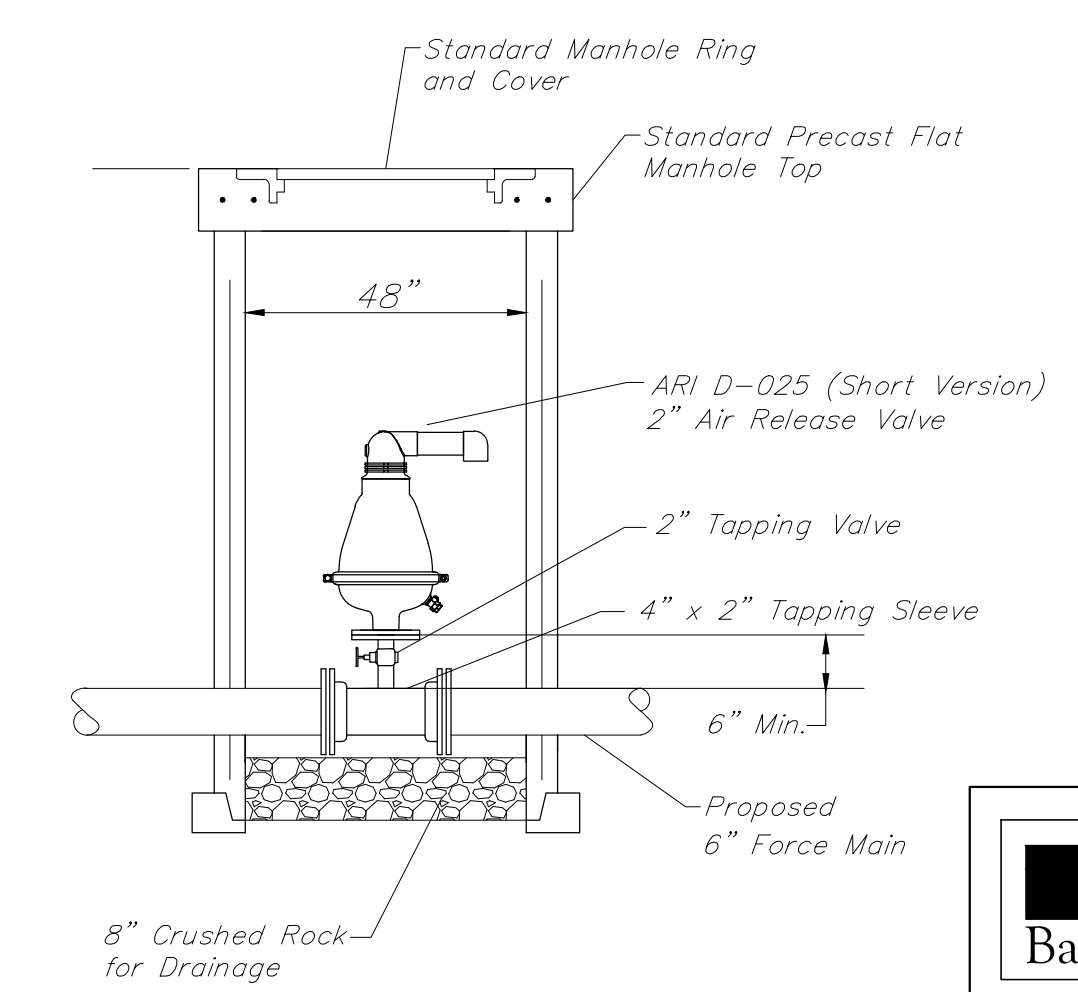
SCREEN WALL DETAIL

Note: Cost of 6' Concrete Slump Block Screening Wall shall be Included in L.S. Bid Item "Lift Station Module."



YARD HYDRANT DETAIL

Note: All Costs Associated with the Yard Hydrant shall be Included in L.S. Bid Item "Lift Station Module."



AIR RELEASE VALVE and VAULT DETAIL

Note: Install Air Release Valve and Vault at Locations as Shown on the Plans. All Costs Associated with Air Release Valves shall be Included in 6" Force Main Bid Item.



Baughman		Rocky Ford Addition MISC DETAILS Sanitary Sewer Force Main	
Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316262-7271 F 316262-0149 ENGINEERING SURVEYING PLANNING LANDSCAPE ARCHITECTURE			
PROJECT NUMBER 468-84465	DESIGN DMV	DRAWN DJI	DATE 7/17
REVISIONS:	SCALE Noted		
			SHEET 13 OF 26