

ADDENDUM NO. 2

TO: Sandy Scott, Contracts Department

DATE: December 31, 2009

SUBJECT: Bid No. 0910-127 Project A Production Well 4 Remodel and Piping Modifications and Project B-Production Well 24 Phase II Upgrades

Please make the following additions/changes to the above referenced project.

Make the following changes to the Bid Documents;

1. Special Conditions, Time of Performance of the Well #4 Project:

- A. Work at the Well #4 site will not commence until 45 days after the NTP has been issued, or unless approved by the Construction Manager. Submittals shall still be reviewed and approved during this period. Well #4 shall now be ready for operation by June 30 and the project totally complete by August 15, 2010. (You may need to adjust the wording here to meet your criteria, but I think you know what we are trying to do)

Make the following changes to the Plans;

2. Carson City Well #4 Remodel and Piping Modifications;

- A. **Sheet C1/17.** Do not cut, cap and slurry fill the existing 6" water line as indicated on sheet C1/17, as a portion of it is to be re-used as a storm drain line as shown on sheet C2/17.
- B. **Sheet C4/17, Material List.** Change item #21 from a hose bib with vacuum breaker to a ½" MIP x plain Spout Brass Sampling Tap (see attached photo for example of approved unit).
- C. **Sheet C7/17, Detail B/C7.** Delete 20 Mesh screen on end of discharge pipe and replace with Tideflex "duck bill" style flapper/check. Increase length of 8" galvanized riser in order to provide the required 16" air gap once the "duck bill" flapper has been installed.
- D. **Sheet C7/17, Material List.** Add the following text to Item D. "The contractor shall verify that the new pit-less adaptor meets all criteria of NAC 445A.6692 prior to ordering".
- E. **Sheet C8/17. Details and Construction Notes;** The attached detail C-3.1.2 and the "NDEP Bureau of State Drinking Water Vertical Crossing Conflicts Summary" are all now a part of sheet C8/17 and shall be utilized for the construction as required.
- F. **Sheet C11/17. Roof Framing Plan and Details;**
 - A. The stamped Engineered Drawings and calculations for the new trusses shall include details for attic access as per '06 IBC 1209.2 and calculations for attic ventilation. (3 stamped copies are required). Note: A reduction in ground snow load (Pg) to a roof snow load (Ps) shall comply with the methodology outlined in ASCE 7-2005 and

require design calculations from the Engineer. ('06 IBC 1608.1 & ASCE 7-05 Section 7.4)

- B. Construction Notes 1-3 on this sheet will be revised to reflect compliance with the 2006 International Building Code ('06 IBC), in lieu of the UBC as indicated. Snow loads shall be in compliance with the 2007 Northern Nevada Amendments ('06 IBC 1608.2 & Table 1608.2.1, as amended by the 2007 Northern Nevada Amendments).

3. Carson City Well #24 Phase II Upgrades;

- A. **Sheet C3/C22, Material List.** Change item #21 from a hose bib with vacuum breaker to a ½" MIP x plain Spout Sampling Tap (see attached photo for example of approved unit).
- B. **Sheet C6/22, Pump Base Section Detail A/C6.** This detail will now include a 1" threaded steel pipe that will be welded to the side of the well casing, extend through the concrete pedestal, then angle upward to a point 12" above the top of the pedestal. A threaded vent cap with a screen shall be attached to the top of this pipe.
- C. **Sheet C4/22, Detail B/C4.** Delete Flange and 20 Mesh screen on end of discharge pipe and replace with Tideflex "duck bill" style flapper/check. Attach as per manufacturer.
- D. **Sheet C4/22, Detail A/C4 & C/C4.** Increase length of item #21 in order to provide the required 16" air gap once the "duck bill" flapper has been installed as per Item C above.
- E. **Sheet C7/22. Additional Details and Construction Notes;** The attached details C-3.1.2, the "NDEP Bureau of State Drinking Water Vertical Crossing Conflicts Summary" and the Air Release Detail are all now a part of sheet C7/22 and shall be utilized as required. The "FloodSafe" device shall be equipped with a 22 to 24 mesh per inch screen.
- F. **Sheet C10/22. Roof Framing Plan and Details;**
 - A. The stamped Engineered Drawings and calculations for the new trusses shall include details for attic access as per '06 IBC 1209.2 and calculations for attic ventilation. (3 stamped copies are required). Note: A reduction in ground snow load (Pg) to a roof snow load (Ps) shall comply with the methodology outlined in ASCE 7-2005 and require design calculations from the Engineer. ('06 IBC 1608.1 & ASCE 7-05 Section 7.4).
 - B. Construction Notes 1-3 on this sheet will be revised to reflect compliance with the 2006 International Building Code ('06 IBC), in lieu of the UBC as indicated. Snow loads shall be in compliance with the 2007 Northern Nevada Amendments ('06 IBC 1608.2 & Table 1608.2.1, as amended by the 2007 Northern Nevada Amendments).

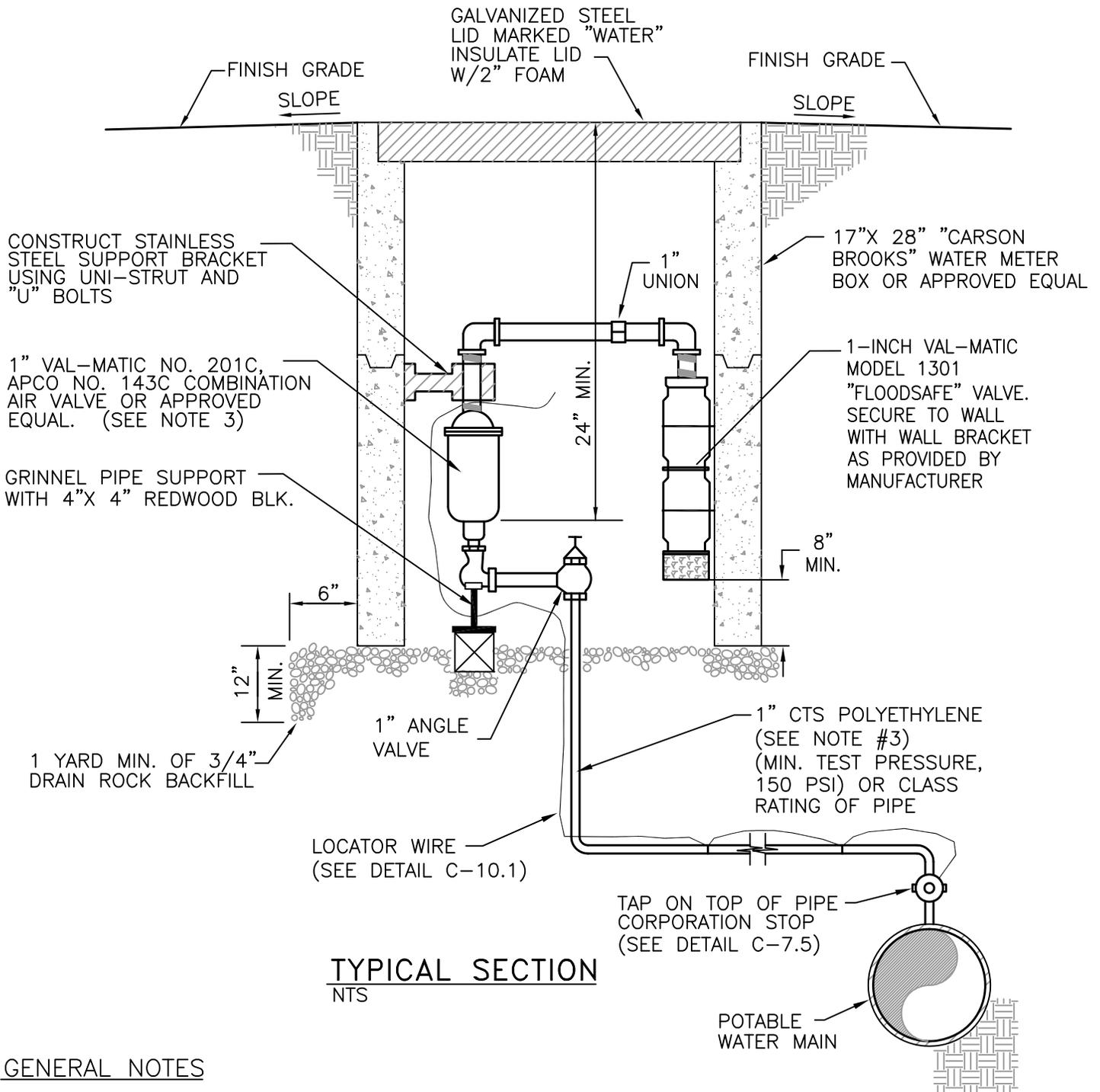
4. Clarifications;

- A. Prior to the demolition of the existing interior walls at Well #24, an inspection of these walls shall be performed by an accredited AHERA asbestos abatement firm to determine if they contain asbestos. The Contractor shall provide a copy of the inspection report to the Project Manager and the Building Department prior to any demolition work. The method of roof removal chosen by Contractor will dictate the reporting requirements as required by

the Building Department. Contractor shall verify and coordinate all requirements with the Building Department.

- Pump
- B. All PVC water main pipe manufactured by JM Eagle shall NOT be utilized for this project.
 - C. The casing diameter of the new well #4 is 16 inch. See drawing included with this addendum. Contractor shall verify exact O.D. of casing prior to ordering new pit-less adaptor. New and motor will be set at 500' below ground surface.
 - D. The new pit-less adaptor at well #4 shall have 2 electrical junction boxes with 2" NPT couplings, a 2" vent with 22 to 24 stainless steel mesh screen, 1-1/2" stainless steel MxM sealed wire connector for wires or probe and a lift out bail.
 - E. The following construction codes apply to both well projects; 2007 Northern Nevada Amendments, 2006 International Building Code, 2006 International Fire Code, 2006 Uniform Mechanical Code, 2006 Uniform Plumbing Code and 2005 National Electrical Code.

End of Addendum No. 1

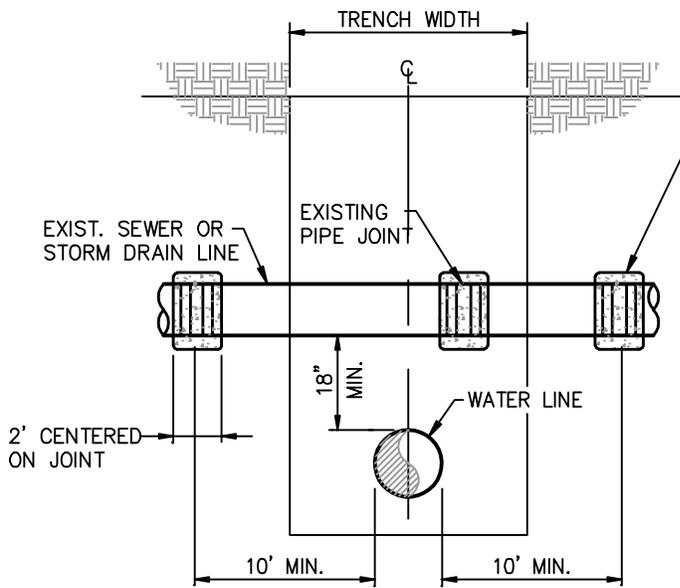


GENERAL NOTES

1. AIR RELEASE VALVES SHALL BE INSTALLED OUTSIDE PAVEMENT SECTION. SLOPE GROUND AWAY FROM VALVE BOX OR CONSTRUCT CURBING TO PROTECT FROM FLOODING BY SURFACE WATERS.
2. ALL PIPES SHALL HAVE POSITIVE SLOPE FROM MAIN LINE TO AIR RELEASE VALVE.
3. RCW TRANSMISSION MAINS REQUIRE SPECIAL DESIGN. (SEE DETAIL C-10.6)

***BELOW GRADE POTABLE WATER
COMBINATION AIR VALVE DETAIL***

I:\PROJECTS\4.0810 East Fifth St Transmission Main\dwg\40810-drls.dwg, 12/17/2009 9:15:30 AM, drossenkoetter



POLYETHYLENE WRAP AND CONCRETE ENCASE ALL SEWER AND STORM DRAIN PIPE JOINTS WITHIN 10' EACH SIDE OF WATER MAIN

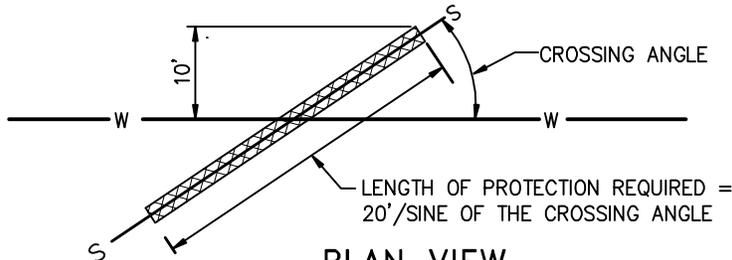
FOR NEW WATER LINE CONSTRUCTION

CENTER WATER PIPE 10 FEET EACH SIDE OF CROSSING. WHEN EXISTING SEWER OR STORM DRAIN LINE IS ABOVE THE WATER MAIN BEING INSTALLED, INSTALL MECHANICALLY RESTRAINED JOINTS ON THE WATER PIPE AT ALL JOINTS WITHIN 10 FEET EACH SIDE OF THE SEWER OR STORM DRAIN LINE, AND POLYETHYLENE WRAP AND CONCRETE ENCASE ALL EXISTING SEWER OR STORM DRAIN PIPE JOINTS WITHIN 10' EACH SIDE OF WATER MAIN

SEWER CROSSING WATER

NTS

"WATER" INCLUDES WATER MAINS AND SERVICE LATERALS
 "SEWER" INCLUDES SANITARY SEWER, STORM DRAIN AND RECLAIMED WATER MAINS AND LATERALS.



PLAN VIEW

NTS

NOTES:

1. IF WATER LINE IS 18 INCHES OR GREATER ABOVE THE SEWER LINE OR STORM DRAIN LINE, NO SPECIAL CONSTRUCTION IS REQUIRED.
2. PROVIDE 18 INCHES MINIMUM OF VERTICAL SEPARATION BETWEEN WATER, SEWER AND STORM DRAIN LINES. WHEN SEPARATION CANNOT BE OBTAINED, AND IN CASES WHERE WATER LINES MUST BE ROUTED UNDER EXISTING SEWER OR STORM DRAIN LINES, LOWER WATER MAIN PER STANDARD DETAIL NO. C-3.1.8 OR C-3.1.9 IF TRENCH WIDTH EXCEEDS 36 INCHES, THEN PROVIDE CONCRETE SUPPORT PER STANDARD DETAIL DRAWING NO. 2-17.
3. ALL PROVISIONS ABOVE SHALL APPLY FOR CROSSINGS TO THE POINT AT WHICH THE 10 FOOT SEPARATION BETWEEN THE WATER AND SEWER OR STORM DRAIN LINE IS ACHIEVED (10 FEET/SINE OF CROSSING ANGLE).
4. FOR PURPOSES OF SEPARATIONS AND PROTECTION OF THE WATER SUPPLY, A RECLAIMED WATER LINE SHALL BE CONSIDERED A SEWER LINE. NO CONCRETE SHALL BE PLACED ON RECLAIMED WATER PIPE JOINTS.
5. ENCASEMENT SLURRY BACKFILL SHALL BE TYPE B (NON-EXCAVATABLE) WITH A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 (PSI) AND MEET THE REQUIREMENTS OF TABLE 337.08.01-1.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
			NEW WATER CROSSING EXISTING GRAVITY SANITARY SEWER OR STORM DRAIN	CARSON CITY
				DRAWING NO. C-3.1.2
				DATE 4/2009
APPROVED BY: _____				

NDEP BUREAU OF SAFE DRINKING WATER
VERTICAL CROSSING CONFLICTS SUMMARY
Revised 4/10/07

- "Water" includes water mains and laterals.
- "Sewer" includes sanitary sewer main and laterals, storm drains and reclaimed wastewater mains and laterals.
- Use of a "Sleeve" is an acceptable alternative to centering the water and sewer at the point of crossing. "Sleeve" means encasing the water or sewer with a 20' length of AWWA C900 Class 100 or greater water quality pipe, centered at the point of water/sewer crossing. To avoid being grouted in place, the water main inside the sleeve must have a diameter equal to or greater than 2/3 the diameter of the sleeve.
- "Restrained" means using mechanical couplings to restrict joint movement or separation of pipe joints within 10' each side of the point of crossing.
- "Special Construction" identifies acceptable mitigation or protection that addresses physically constrained environments where requirements of NAC 445A.6715 through 445A.6717 inclusive cannot be met.
- Areas of "Special Construction" are to be identified on the Plans in plan view using cross-hatching and in profile view using cross-hatching and by referencing a Standard Detail.
- Vertical separation in all cases shall not be less than 6".
- "Concrete Encasement" of the water as mitigation or protection is discouraged.
- At the discretion of NDEP, public water system improvement projects with excessive use of "special construction" may be required to sewer with C900 water quality pipe, green striped, manhole to manhole.
- **EVERY EFFORT IS TO BE MADE TO KEEP WATER MAIN OR WATER LATERAL 18" ABOVE SEWER MAIN AND WATER MAIN 12" ABOVE SEWER LATERAL. OTHERWISE, THE FOLLOWING SPECIAL CONSTRUCTION METHODS APPLY:**

SEWER MAIN ABOVE WATER MAIN, OR SEWER MAIN BELOW WATER MAIN BY LESS THAN 18":

- SLEEVE OR CENTER SEWER MAIN and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

SEWER MAIN ABOVE EXISTING WATER MAIN, OR SEWER MAIN BELOW EXISTING WATER MAIN BY LESS THAN 18":

- USE AWWA C900 WATER QUALITY PIPE, GREEN STRIPED, FOR SEWER MAIN MANHOLE TO MANHOLE AND CENTER SEWER MAIN AT CROSSING and RESTRAIN ANY EXPOSED WATER MAIN JOINTS

EXISTING SEWER MAIN ABOVE WATER MAIN, OR EXISTING SEWER MAIN BELOW WATER MAIN BY LESS THAN 18":

- POLYETHYLENE WRAP AND CONCRETE ENCASE SEWER MAIN JOINTS WITHIN 10' EACH SIDE OF THE POINT OF CROSSING and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

EXISTING SEWER FORCE MAIN ABOVE WATER MAIN, OR EXISTING SEWER FORCE MAIN BELOW WATER MAIN BY LESS THAN 18":

- POLYETHYLENE WRAP AND CONCRETE ENCASE SEWER FORCE MAIN JOINTS WITHIN 10' EACH SIDE OF THE POINT OF CROSSING (UNLESS WELDED HDPE THEN NOT NECESSARY) and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

LESS THAN 24" DIAMETER RCP STORM DRAIN ABOVE WATER MAIN, OR LESS THAN 24" DIAMETER RCP STORM DRAIN BELOW WATER MAIN BY LESS THAN 18":

- POLYETHYLENE WRAP AND CONCRETE ENCASE RCP STORM DRAIN JOINTS WITHIN 10' EACH SIDE OF THE POINT OF CROSSING and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN
- USE EXTERNAL JOINT SEALANTS FOR RCP STORM DRAIN DIAMETERS FROM 16"-21" and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

GREATER THAN OR EQUAL TO 24" DIAMETER RCP/RCB STORM DRAIN ABOVE WATER MAIN, OR GREATER THAN OR EQUAL TO 24" DIAMETER RCP/RCB STORM DRAIN BELOW WATER MAIN BY LESS THAN 18":

- POLYETHYLENE WRAP AND CONCRETE ENCASE RCP/RCB STORM DRAIN JOINTS WITHIN 10' EACH SIDE OF THE POINT OF CROSSING and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN
- USE INTERNAL JOINT SEALANTS OR JOINT GASKETS ON RCP/RCB STORM DRAIN and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN
- USE EXTERNAL JOINT SEALANTS FOR RCP/RCB STORM DRAIN DIAMETERS FROM 24"-168" and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

PVC STORM DRAIN ABOVE WATER MAIN, OR PVC STORM DRAIN BELOW WATER MAIN BY LESS THAN 18":

- SLEEVE OR CENTER PVC STORM DRAIN and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

SEWER LATERAL ABOVE WATER MAIN, OR SEWER LATERAL BELOW WATER MAIN BY LESS THAN 12":

- SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN and SLEEVE OR CENTER SEWER LATERAL

SEWER LATERAL ABOVE EXISTING WATER MAIN, OR SEWER LATERAL BELOW EXISTING WATER MAIN BY LESS THAN 12":

- SLEEVE OR CENTER SEWER LATERAL AT CROSSING and RESTRAIN ANY EXPOSED WATER MAIN JOINTS

SEWER MAIN ABOVE WATER LATERAL, OR SEWER MAIN BELOW WATER LATERAL BY LESS THAN 18":

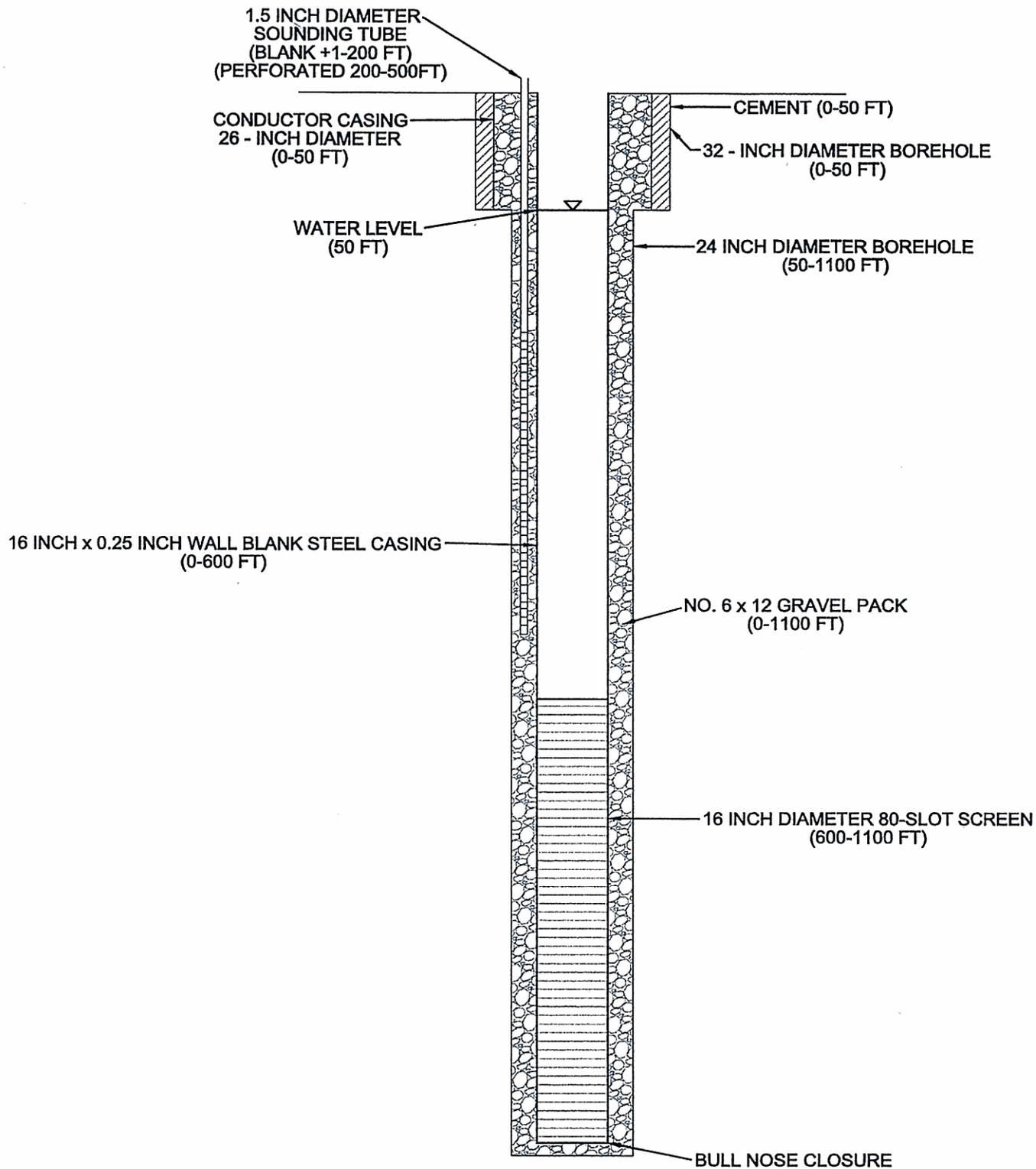
- USE PE TUBING CONFORMING TO AWWA STANDARD C901-02 AND ASTM D2737 FOR WATER LATERAL and SLEEVE OR CENTER SEWER MAIN

RECLAIMED WASTEWATER MAIN ABOVE WATER LATERAL, OR RECLAIMED WASTEWATER MAIN BELOW WATER LATERAL BY LESS THAN 12":

- USE PE TUBING CONFORMING TO AWWA STANDARD C901-02 AND ASTM D2737 FOR WATER LATERAL and SLEEVE OR CENTER RECLAIMED WASTEWATER MAIN

RECLAIMED WASTEWATER MAIN ABOVE WATER LATERAL, OR RECLAIMED WASTEWATER MAIN BELOW WATER LATERAL BY LESS THAN 12":

- USE PE TUBING CONFORMING TO AWWA STANDARD C901-02 AND ASTM D2737 FOR RECLAIMED WASTEWATER LATERAL and SLEEVE WATER MAIN OR CENTER & RESTRAIN WATER MAIN

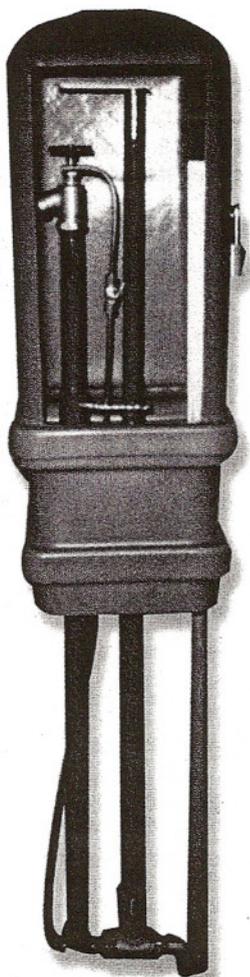


Model EH101 Above-Grade Sampling Stations

• Simple and durable

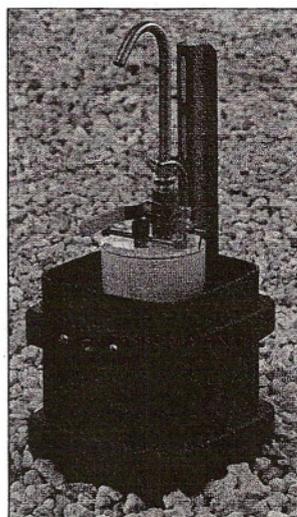
Use the EH101 for convenient sampling in your distribution system. The EH101's durable plastic housing is non-corroding, lockable, and has a steel anchor post to hold it in place. Because the entire cover is removable, you have complete access to the valve handle and tap.

The main shutoff is a 3/4" bronze ball valve with chrome-plated ball. Only non-corrosive materials are exposed to water. The station can be evacuated using the optional Jabsco hand pump for freeze protection in colder climates.

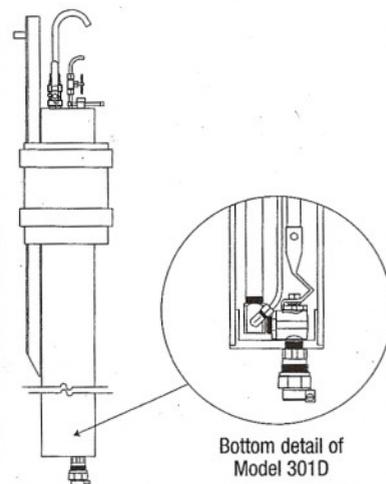


Easily accessible

BURY DEPTH	STOCK #	EACH
3"	MC-17580	\$ 245.00
3.5"	MC-17710	255.00
4"	MC-17711	258.00
4.5"	MC-17712	264.00
5"	MC-17713	270.00
5.5"	MC-17714	275.00
6"	MC-17715	280.00
Jabsco Hand Pump	MC-64779	44.12



For use in cold climate and freezing weather (stock # 17742 shown)



Bottom detail of Model 301D

Above Grade Sampling Stations

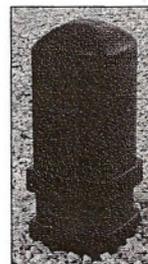
- Choose from wet or dry barrel designs
- Dual lock features for added station security

Make sampling easy with the Water Plus 301 sampling station. Available in both dry and wet barrel designs, they feature high-impact resistant polyethylene enclosures. Station security is accomplished with the standard pin Allen bolt or optional locking hasp. For additional protection, a padlock ready stainless steel latch lock handle is located on the throttling valve.

The 301D model features a dry barrel design perfect for colder climates. Barrel evacuation is achieved through a 1/4" copper bleed tube, using a hand pump or compressed air. Choose from bury depths of 36", 48" and 60". The 301W model features a wet barrel design for warmer climates, and is available in a standard 30" bury depth (longer versions available as special order).

Both stations feature an all brass and stainless steel waterway, brass throttling valve, stainless steel spigot for flaming, and 3/4" CTS compression inlet with a completely enclosed polyethylene housing.

Note: To evacuate the dry barrel model 301D, use hand pump (stock # 64779) listed below.

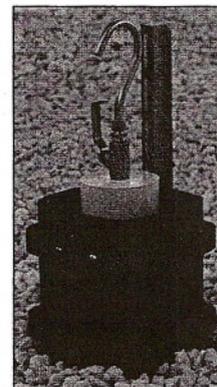
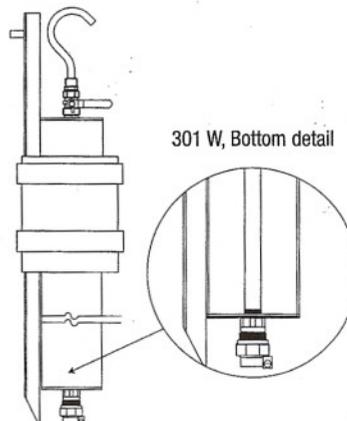


Closed and locked position

MFR #	DESCRIPTION	BURY DEPTH	STOCK #	EACH
DRY BARREL FOR COLD CLIMATES				
301D	Model 301D, Green Enclosure	36"	MC-17742	\$ 369.00
301D	Model 301D, Green Enclosure	48"	MC-17743	417.00
301D	Model 301D, Green Enclosure	60"	MC-17744	465.00

WET BARREL FOR WARM CLIMATES				
301W	Model 301W, Blue Enclosure	30"	MC-17746	\$ 289.00

ACCESSORIES				
—	Jabsco Hand Pump	—	MC-64779	\$ 44.12



Model 301W, For use in warm climates, 17746



Sampling Taps

• 1/2" MIP x plain spout

Taking samples out of standard threaded hose bibs can be a problem because of the buildup in the threads. These brass hose bibs have no exterior threads, which makes it much easier to clean and sterilize. The inner 3/8" of the discharge opening has been polished to remove casting burrs. Available in rough cast, polished brass or chrome finish.

DESCRIPTION	STOCK #	EACH
Rough Cast Sampling Tap	MC-45326	\$ 7.50
Polished Brass Sampling Tap	MC-45325	7.50
Chrome Tap	MC-45327	6.00