

WATERWORK NOTES

FED. RD. DIVISION	STATE	PROJECT
5	OHIO	

5B
111

LAKE COUNTY
LAK. 90-3.56

SCOPE OF WORK

The work contemplated under this contract comprises the furnishing and installing, complete with valves and other appurtenances, the following water main and performing other incidental work necessary for a 4" and 6" Water Main along I-90 from Rest Areas, vicinity Sta. 232+55 Right side of I-90 and Sta. 257+50 Left side of I-90, to Auburn Rd., vicinity Sta. 381+25 Left side of I-90.

The Contractor shall do all the work and furnish all the labor and material necessary for the final completion of this contract in the manner of and under the conditions of State of Ohio, Dept. of Transportation Supplemental Specification 814-Water Mains and Service Branches.

UTILITIES

City of Painesville Water Department, 7 Richmond Street, Painesville, Ohio 44077.

CONCRETE PIERS (THRUST BLOCKS)

Concrete Piers shall be paid for at contract unit price bid per linear foot of Item 814-New Water Main.

FIRE HYDRANTS, SELF CLOSING HYDRANTS AND BUBBLE FONTS IN THE REST AREA

The fire hydrants, self closing hydrants and bubble founts shall be located as directed.

The fire hydrants shall be 4" size furnished with two (2) 2 1/2" Hose nozzles and one (1) 4 1/2" Pumper Nozzle. Fire Hydrant branches shall have normal cover of six (6) feet. Fire Hydrants shall conform to AWWA C502 and State of Ohio Department of Transportation Supplemental Specification 814 Valves and Hydrants.

RESTORATION OF DISTURBED AREAS ASSOCIATED WITH WATER WORK

The Contractor shall restore all seeded and sodded areas, and all other disturbed surfaces to a condition at least equal to that existing before this work was started. All replacement shall be done in accordance with Item 659 and as directed by the Engineer. Payment for all restoration work including materials, equipment, labor, incidentals and disposal of all surplus materials shall be included in unit price bid per linear foot of "Item 814-New Water Main."

MAINTENANCE OF TRAFFIC IN HERMITAGE RD. AND AUBURN RD.

One lane of traffic shall be maintained at all times during water work in Hermitage Rd. and Auburn Rd. Proper precautions shall be taken to insure traffic safety. The work shall be completed in such time as to not cause undue inconvenience. The pavement shall be restored to condition of start of work.

No specific or separate payment will be made for these items, but the cost shall be included in the unit price bid per linear foot of new water main.

CONNECTION TO EXISTING WATER MAIN

The connection to the existing 8" water main in Auburn Rd. shall be made by the Contractor under the supervision of the City of Painesville Water Department Personnel consisting of furnishing all labor, materials, small tools and equipment necessary to install the tapping sleeve, valve and box at the location shown on the plans or as directed.

The tapping sleeve and valve shall be as manufactured by the A.P. Smith Mfg. Co. or the Clow Corporation or approved equal.

The work included in this item shall be paid for at contract unit price bid for each "Item 814-8" x 4" Tapping Sleeve, 4" Tapping Valve and Box Complete", which price and payment shall constitute full compensation for furnishing, installing, excavating, backfilling, and surface restoration, if required and for furnishing all labor, material, equipment, small tools and incidentals necessary to complete the work as specified or as shown.

CONNECTION TO EXISTING WATERMAIN; NEW 3" WATER METER, FITTINGS, VALVES AND APPURTENANCES; AND 3" METER VAULT

Connection to Existing 8" Water Main in Auburn Rd, furnishing and installing new 3" water meter, fittings, valves and appurtenances and constructing 3" meter vault shall meet the requirements and be under the supervision of the City of Painesville Water Department. Any fees for inspection or supervision charged by the Painesville Water Department shall be paid by the Contractor as a part of each item.

1" AIR RELEASE VALVE COMPLETE

The Contractor shall furnish and install at locations shown on the plans 1" Air Release Valves and Valve Boxes including labor, materials, small tools and equipment.

The air release valves shall be as manufactured by the American-Darling Valve Co., Clow, Inc. or approved equal.

Payment will be made at contract unit price bid per each "Item 814 1" Air Release Valve and Box Complete" which price and payment shall constitute full compensation for the furnishing of all labor, materials, small tools and equipment required to complete this item of work.

ANTI-FREEZING OUTDOOR BUBBLE - FONTS COMPLETE

Furnish and install where shown on the plans a total of two (2) Anti-Freezing Outdoor Bubble Founts and provide all appurtenances, labor, materials, small tools and equipment required and or shown to make a complete operable system of each fountain. This shall include excavation, backfill, three-inch (3") taps and one-inch (1") Type "K" hard copper tubing and fittings (thirty 30'-0") per each fountain.

Fountains shall be Model No. M-34 as manufactured by The Murdock Manufacturing and supply Co., Model No. 4880 as manufactured by Halsey-Taylor Co. or approved equal. Fountains shall have provisions for a three and one-half foot (3'-6") depth bury.

Two (2) separate three-inch (3") taps will be required in the four-inch (4") Water Mains, one per each Rest Area. From each of these taps provide a one-inch (1") tee handled corporation stop and screw type service box, Clow Fig. No. F-4600, Box No. 92D with Clow Fig. No. 4675 rod and clamp valve six feet (6'-0") long and Clow Fig. No. F-4677 cover bolt wrench. Covers shall have the word "WATER" cast on it.

Assemblies equal to the above shall be as manufactured by Grinnell, Anniston Foundry Co., Mueller Co. or approved equal.

From the corporation stops install one-inch (1") Type "K" hard copper tubing (20'-0" lengths) to the outdoor drinking fountains and make connections to same as required. Only 95-5 solder will be approved for use on the copper water lines. Water lines to the drinking fountains shall have a minimum of three and one-half foot (3'-6") earth cover.

The bubble founts will be located in the existing pump shelters.

The existing pump is to be removed and casing plugged with concrete. The existing 6" concrete slab is to be removed and disposed of, the existing cast iron drain removed, and the existing drain pipe removed within work area.

Furnish and install as required two (2) Class C Concrete pads one (1) each for the two (2) bubble founts, with 12" dia. flat grate for bell of 12" Tile Pipe and 2 LF of 12" V.C.P.

Excavate as required. Provide six inches (6") deep aggregate bases beneath the six foot six inch by seven foot four inch square (6'-6" x 7'-4") by six inch (6") thick concrete pads. The pads shall conform to Item 511 and shall have a finish conforming to 511.17. Pads shall be sloped toward the cast iron drains.

All required excavation and backfill shall conform to Supplemental Specification 814.

Basis of Payment: Payment will be made at the contract unit price bid per Each "Item 814 - Anti-Freezing Outdoor Bubble Founts, complete as per plan" which price and payment shall constitute full compensation for the furnishing of all appurtenances, labor materials, small tools and equipment required to complete this item of work.

ANTI - FREEZING SELF- CLOSING HYDRANTS COMPLETE

Furnish and install where shown on the plans a total of two (2) Anti-Freezing Self-Closing Hydrants and provide all appurtenances, labor, materials, small tools and equipment required and or shown to make a complete operable system of each self-closing hydrant. This shall include excavation, backfill, one-inch (1") branch take-offs from the one-inch (1") copper lines supplying the outdoor bubble founts and one-inch (1") Type "K" hard copper tubing and fittings (three feet 3'-0") per each self-closing hydrant.

The Anti-Freezing Self-Closing Hydrants shall be Model No. M-175-3/4-inch as manufactured by The Murdock Manufacturing and Supply Co., or like kind and quality as manufactured by American Foundry and Manufacturing Co., Muller Co., Tyler Pipe Industries or approved equal. Self-Closing Hydrants shall have provisions for a three and one-half foot (3'-6") depth bury.

Two (2) separate one-inch (1") branch take-off connections will be required in the one-inch (1") copper tubing supplying the bubble founts, one per each Rest Area. From each of these branch take-offs provide a one-inch (1") tee handled corporation stop and screw type service box, Clow Fig. No. F-4600, Box No. 92 D with Clow Fig. No. 4675 rod and clamp valve wrench six feet (6'-0") long and Clow Fig. No. F-4677 cover bolt wrench will be required. Covers shall have the word "WATER" cast on it.

Assemblies equal to the above shall be as manufactured by Grinnell, Anniston Foundry Co., Muller Co. or approved equal.

From the corporation stops install one-inch (1") Type "K" hard copper tubing (20'-0" lengths) to the self-closing hydrants and make connections to same as required. Only 95-5 solder will be approved for use on the copper water lines. Water lines to the self-closing hydrants shall have a minimum of three and one-half foot (3'-6") earth cover.

Furnish and install as required two (2) Class "C" concrete pads, one (1) each for the two (2) self-closing hydrants. Excavated as required. Provide six-inches (6") deep aggregate bases beneath the six-foot (6'-0") square by six-inches (6") thick concrete pads. Pads shall conform to Item 511 and shall have a finish conforming to 511.17. Pads shall be sloped to drain away from the self-closing hydrants.

All required excavation and backfill shall conform to Supplemental Specification 814.

Basis of Payment: Payment will be made at the contract unit price bid per each "Item 814 - 3/4 - Inch Anti-Freezing Self-Closing Hydrants, complete as per plan" which price and payment shall constitute full compensation for the furnishing of all appurtenances labor, materials, small tools and equipment to complete this item of work.

WATER MAIN ENCASEMENT

The Contractor shall furnish and install where shown on the plans steel casing pipe and provide all labor materials, equipment, small tools and incidentals required to complete this item including oak blocking, steel strapping, masonry bulkheads and sand fill and including trenching, backfilling and sheeting and shoring, if required.

Notes:

- No trench excavation or equipment shall be closer than ten (10) feet from the edge of pavement. Trenches shall be adequately supported.
- Traffic shall be maintained as provided under Maintenance of Traffic in the General Notes (Sheet 2).
- Median Construction Equipment Crossing of the General Notes (Sheet 2) shall apply to this work.
- The above items shall be paid for under unit price bid per linear foot of "Item 603 - Conduit Steel Casing Pipe, Jacked and Bored, as per plan".

The steel pipe sections shall be joined by butt welding in accordance with 513.17. The steel casing pipe shall be clean and have one (1) prime coat of AWWA 6-203.

Water mains being encased will be paid for under unit price bid per linear foot of "Item 814 - New Water Mains" classified as to size and type.

Payment for water main encasement will be under unit price bid per linear foot of "Item 603 - Conduit Steel Casing Pipe, Jacked and Bored, as per plan", classified as to size and type, which price and payment shall include the furnishing of all labor, materials, small tools, and equipment required to complete this item of work.

See Sheets 110 and 111 for Water Work Details and additional notes.

SCALE: _____ HOWARD, NEEDLES, TAMMEN & BERGENDOFF
MADE BY ERH DATE 2-26-73 CONSULTING ENGINEERS
TRC'D BY J.M.C. DATE 2-27-73
CK'D BY ERH DATE 6-21-73 KANSAS CITY CLEVELAND NEW YORK