CALCULATED BY D.L. DATE 1-24-78
CHECKED BY D.D. DATE 5-29-79

GENERAL NOTES (WATER WORK)

ITEM 814-WATER MAINS AND SERVICE BRANCHES-GENERAL:

The Contractor shall obtain the permission from the City of Zanesville before shutting off any waterline service during the construction of this project. All the correspondence shall be handled through the Engineer. All water work in this project shall be in accordance with Supplemental Specification 814 Water Mains and Service Branches, except as amended herein. In all cases of conflict with the Supplemental Specifications, the following notes shall govern: Water Service shall not be interrupted for more than four hours for any service stop and box being relocated.

ITEM 814- POLYETHYLENE WATER SERVICE TUBING:

GENERAL:

Supplemental Specification 814 Water Mains and Service Branches is hereby amended to include the furnishing and installing, polyethylene water service tubing Class 160 P.S.I. (minimum) to be used with standard brass flared fittings. This tubing can also be used with compression fittings.

MATERIAL:

The polyethylene water service tubing shall be manufactured from ultra-high molecular weight polyethylene in accordance with ASTM D-1248 PE Type III Class 160 and ASTM D-2737 or the latest revision thereof. Tubing shall be marked with size, manufacturers name, working pressure, national sanitation approval, ASTM specification and production code.

TESTING:

Tubing shall be capable of maintaining a pressure of 300 P.S.I. at 73.4° F for 1,000 hrs.

WORKING PRESSURE:

Tubing shall have a maximum working pressure of 160 P.S.I. at 73.4° F.

INSTALLATION:

All new water tubing shall have a minimum 4' cover from finish grade to the top of the pipe. All service lines that are to be extended shall be connected to the existing water service lines at the right-of-way line. Any service line found to be lead shall be replaced from the water main to the right-of-way line.

TRENCH PREPARATION:

The excavation shall be performed in accordance with 814.05. However, the trench must be wide enough to permit "snaking" to allow for expansion or contraction of the tubing. Sharp rocks and large clods of dirt shall be removed.

JOINTS:

The cold flaring of the tubing to fit the standard brass fittings shall be done in accordance with the manufacturer's recommendations. The use of compression fittings with the tubing shall be in accordance with the manufacturer's recommendations.

BACKFILLING:

Allow a minimum clearing of 1" between the trench bottom and tubing and backfill with sand to provide a cover of 6" over tubing and tamp the backfill. In rocky soils place a 4" layer of sand on the trench bottom before adding the first 6" layer of sand. The remainder of the backfilling shall be done in accordance with 814.08.

PRESSURE TESTING:

The pressure testing can be accomplished after total backfilling or after first 6" layer of backfilling. If the latter method is used, the backfill shall be shaded leaving the joints exposed for observation during the pressure testing. The testing shall be made in accordance with 814.07, Alternate A.

STERILIZING:

The sterilizing shall be done in accordance with 814.09. CAUTION: Granular calcium hypochlorite shall not be used until it has been completely dissolved in water.

METHOD OF PAYMENT:

Payment for all polyethylene tubing used either with brass flared fittings or compression fittings complete in place will be made at the contract unit price bid per linear foot for Item 814 New Service Branches.

ITEM 814-NEW SERVICE BRANCHES:

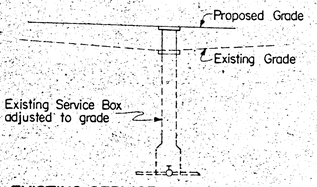
This work consists of furnishing and laying new water tubing service branches in resonably close conformity to the lines and grades shown on the plans or as directed by the Engineer. It includes making connections to the existing water lines or existing corporation stops at the existing main with suitable connections and furnishing and installing new service stops and service boxes in accordance with Supplemental Specification 814.15. All the existing service boxes which are in good condition on the existing service branches replaced with new service branches shall be removed and stored at a location mutually agreed upon between the City of Zanesville and the Contractor for disposal by the City of Zanesville.

Payment will be made at the unit price bid for linear foot "Item 814-New Service Branches" which price and payment shall constitute full compensation for excavating, furnishing and installing all pipe and fittings, corporation stops, service stops, service boxes, and include testing, backfilling and sterilizing and furnishing all labor, tools and equipment required to complete this item work in place.

ITEM 814-VALVE BOX ADJUSTED TO GRADE:

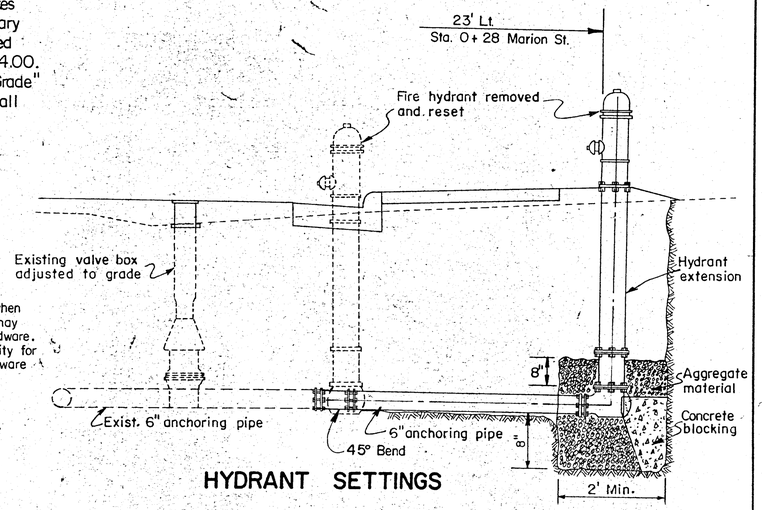
This work shall consist of adjusting existing valve boxes to the proposed surface grade at the locations shown on the plans. The Contractor shall carefully excavate around the existing valve boxes without damaging the boxes, valves or pipes and reset the base, telescope and hood. If the necessary adjustment is outside the design limits of the existing box, an extension shall be furnished and installed after the valve box has been adjusted to grade. The backfilling shall be performed as specified in 814.00.

Payment will be made at the contract unit price bid per each "Item 814-Valve Box Adjusted to Grade" which price and payment shall constitute full compensation for furnishing of all labor material, small tools and equipment required to complete this item of work in place.



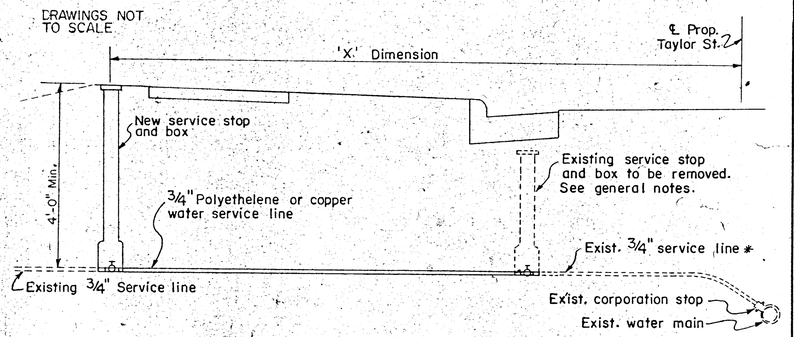
EXISTING SERVICE BOX ADJUSTED TO GRADE

NOTE:
The Contractor is hereby advised that when constructing the proposed waterline he may encounter different style of existing hardware. It shall be the Contractors responsibility for furnishing and installing any extra hardware needed to complete the Item of work.



HYDRANT SETTINGS

DRAWINGS NOT TO SCALE



TYPICAL SERVICE BRANCHES INSTALLATION

* If existing service branches are lead or galvanized iron it shall be replaced from the existing water main to the new service stop.

QUANTITIES-WATER WORKS

Mark	Side	STATION From	STATION To	814 Valve Boxes Adjusted to grade Each	814 Service Boxes Adjusted to grade Each	814 New Service Branches Lin. Ft.	814 Fire Hydrant Removed & Reset Each	'X' Dimension In Feet
1-W	RT.	25+03		1				
2-W	RT.	26+48			1			
3-W	RT.	26+76		1				
4-W	RT.	27+82.5		1				
5-W	RT.	28+94			1			
6-W	LT.	29+00			1			
7-W	RT.	29+76		1				
8-W	RT.	29+79.5		1				
9-W	LT.	29+83		1				
10-W	LT.	29+87.5	29+93				1	
11-W	RT.	32+18			1			
12-W	RT.	32+77.5		1				
13-W	RT.	32+79.5		1				
14-W	RT.	33+03.5		1				
15-W	RT.	33+54				11.0		24.5
16-W	LT.	33+88				3.0		17.0
17-W	RT.	34+33				9.5		24.5
18-W	RT.	38+82.5		1				
19-W	LT.	0+23 WILMER ST. RT.		1				
20-W	RT.	38+95		1				
21-W	LT.	0+30.5 WILMER ST. RT.		1				
22-W	RT.	39+17		1				
23-W	RT.	39+46				3.6		19.5
24-W	LT.	39+50				3.3		19.5
25-W	RT.	38+62				8.0		24.5
26-W	RT.	38+65				6.0		28.0
27-W	LT.	39+75				4.0		19.5
28-W	RT.	37+18		1				
29-W	RT.	40+35.5			1			
30-W	RT.	40+35.5			1			
31-W	RT.	41+40.5				3.5		19.5
TOTALS				15	6	51.9	1	

GENERAL SUMMARY - WATER WORK (Type code Y060)

Item No.	Carried From Table This Sheet	TOTALS	UNIT	DESCRIPTION
814	15	15	Each	Valve box adjusted to grade
814	6	6	Each	Service box adjusted to grade
814	52	52	Lin. Ft.	New service branches
814	1	1	Each	Fire hydrant removed and reset

GENERAL SUMMARY - GENERAL NOTES (WATER WORKS)