

HYDRANT NOTES

NOTE A:
FIRE HYDRANTS SHALL BE AWWA BREAKABLE TYPE WITH 5-1/4" COMPRESSION TYPE MAIN VALVE, 2" 2-1/2" HOSE NOZZLES, 1" 4-1/2" STREAMER NOZZLE, 6" MECHANICAL JOINT INLET AND NATIONAL STANDARD 1-1/2" PENTAGON OPERATING NUT FOR INSTALLATION IN A 48" DEEP TRENCH. HYDRANT NOZZLE THREADING SHALL CONFORM TO SPECIFICATION B16-1.25 OF ASA FOR THE NATIONAL STANDARD FIRE HOSE THREAD. HYDRANT SHALL OPEN TO LEFT AND SHALL BE RATED FOR 150 LBS. WORKING PRESSURE, FIG. 8-11 DRY TOP, AS MANUFACTURED BY KENNEDY VALVE MANUFACTURING COMPANY, INC., ELMIRA, NEW YORK OR A-24015 AS MANUFACTURED BY MUELLER CO., DECATUR, ILL. OR F-2640 AS MANUFACTURED BY EDDY-IOWA DIVISION, JAMES B. CLOW & SONS, INC., CHICAGO, ILL. OR AN ENGINEER APPROVED ALTERNATE.

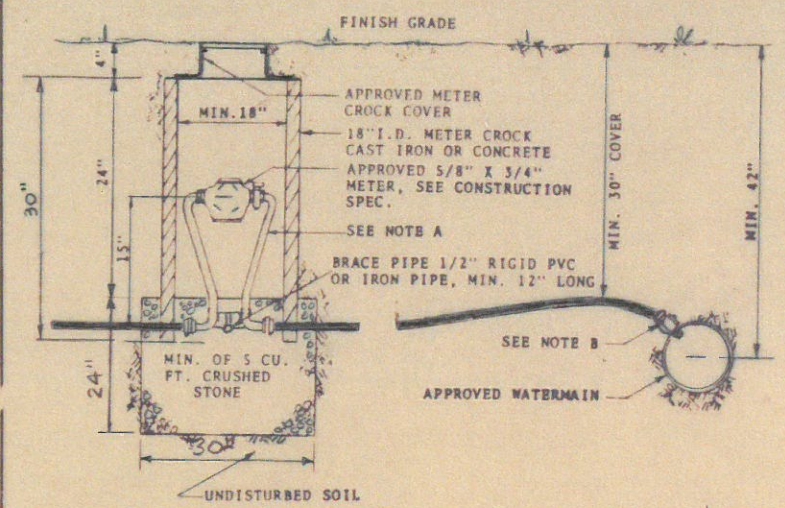
NOTE B:
FLUSHING HYDRANTS SHALL BE POST TYPE FOR 150 PSI WORKING PRESSURE WITH 2-1/8" MAIN VALVE, ONE (1) 2" DISCHARGE HOSE NOZZLE AND 2" MECHANICAL JOINT INLET CONNECTION MODEL A-24058 AS MANUFACTURED BY MUELLER CO., DECATUR, ILL. OR AN ENGINEER APPROVED ALTERNATE.

NOTE C:
TRANSITION GLAND FITTING FOR MECHANICAL JOINT END TO I.P. SIZE PVC PIPE WITH "O" RING SEAL AND TRANSITION GLAND GASKET (RADIAL COMPRESSION TYPE) AS MANUFACTURED BY MUELLER CO., DECATUR, ILL.

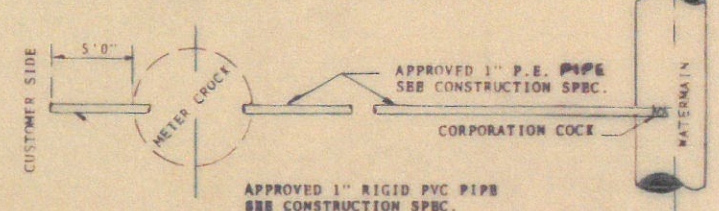
NOTE D:
PVC TEE AS REQUIRED BY MAIN SIZE WITH 2" BRANCH OUTLET FOR FLUSHING HYDRANT INSTALLATION OR 6" BRANCH OUTLET FOR FIRE HYDRANT INSTALLATION. BRANCH OUTLET SHALL BE FOR PVC WITH GASKETED PUMP ON FITTINGS, UNLESS OTHERWISE NOTED OR DETAILED ON THE PLANS OR IN THE SPECIFICATIONS.

NOTE E:
SUPPLY PIPE SHALL BE 2" PVC PRESSURE RATED PIPE FOR FLUSHING HYDRANT INSTALLATION OR 6" PVC PRESSURE RATED PIPE FOR FIRE HYDRANT INSTALLATION AND OF THE SAME CLASS AS MAIN: CLASS 160 (SDR 26) OR CLASS 200 (SDR 21), UNLESS OTHERWISE NOTED OR DETAILED ON THE PLANS OR IN THE SPECIFICATIONS.

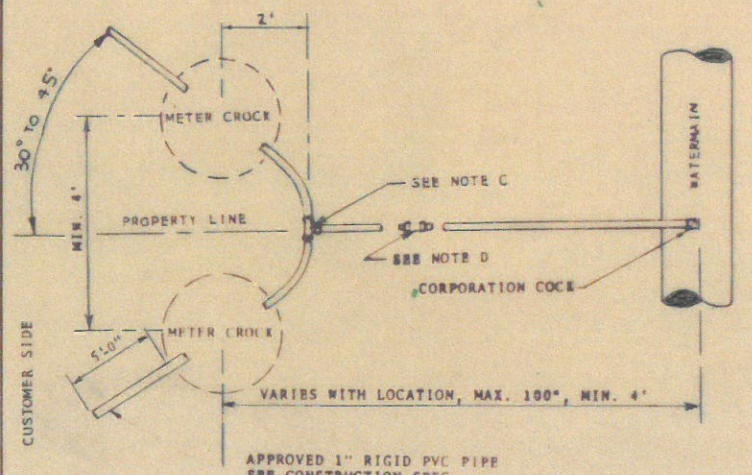
WATER DISTRIBUTION SYSTEM
WATER WORKS STANDARDS - DETAILS



TYPICAL METERED SERVICE INSTALLATION SECTION DETAIL



TYPICAL SINGLE METERED SERVICE INSTALLATION PLAN



TYPICAL DOUBLE METERED SERVICE INSTALLATION PLAN

METERED SERVICE INSTALLATION NOTES

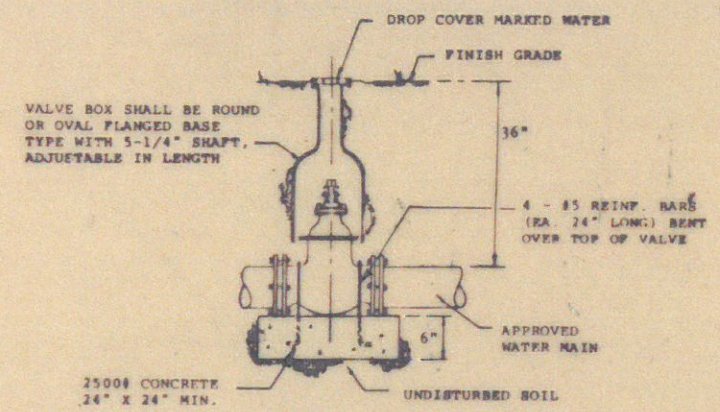
NOTE A:
METER SETTER SHALL BE COPPER TYPE FOR 5/8"x3/4" METER WITH BRASS 90° SELF-STABILIZING TYPE METER VALVE WITH "O" RING STEM SEAL AND SMOOTH CONTOUR UNOBSTRUCTED WATER WAY. INTEGRAL INLET PACK JOINT FOR 1" P.E. PIPE. INTEGRAL OUTLET PACK JOINT FOR 1" I.P. SIZE PVC. BRACING EYE FOR 1/2" RIGID PVC OR IRON PIPE, CATALOG NO. V172-15 AS MANUFACTURED BY THE FORD METER BOX CO., INC., WABASH, IND. OR AN ENGINEER APPROVED ALTERNATE.

NOTE B:
CORPORATION STOP SHALL BE CAST BRONZE WITH 1" AWWA CORPORATION STOP INLET THREAD AND 1" PACK JOINT FOR P.E. PIPE, MODEL F1004 AS MANUFACTURED BY FORD METER BOX CO., INC., WABASH, IND. MODEL H-15009 AS MANUFACTURED BY MUELLER CO., DECATUR, ILL. OR AN ENGINEER APPROVED ALTERNATE.

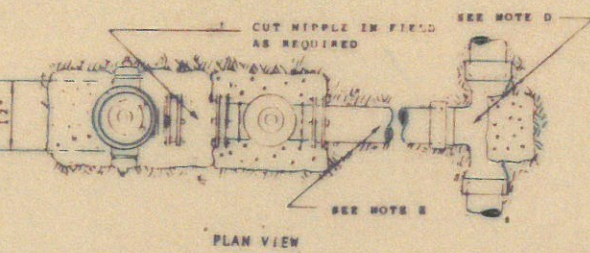
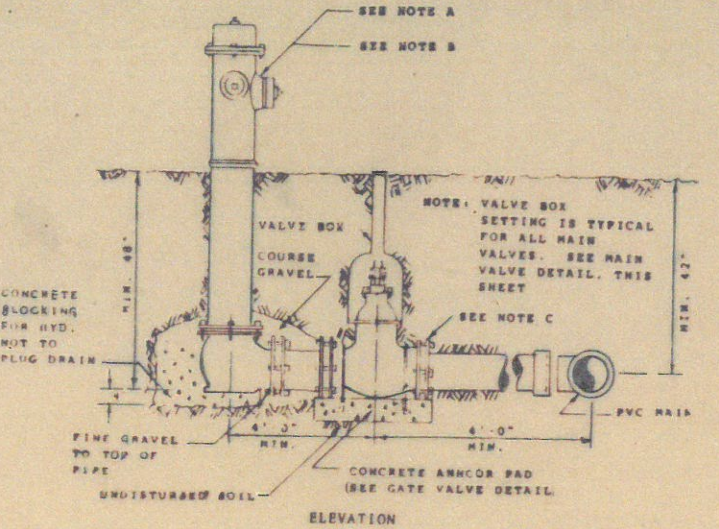
NOTE C:
TEE SHALL BE 1"x1"x1" ALL BRASS WITH INTEGRAL PACK JOINTS FOR P.E. PIPE. CATALOG NO. T-444 AS MANUFACTURED BY FORD METER BOX CO., INC., WABASH, IND. OR AN ENGINEER APPROVED ALTERNATE.

NOTE D:
IF SPLICE IS NECESSARY IT SHALL BE ALL BRASS WITH INTEGRAL PACK JOINTS FOR 1" P.E. PIPE, CATALOG NO. C-66-44 AS MANUFACTURED BY FORD METER BOX CO., INC., WABASH, IND. MODEL NO. H-15404 AS MANUFACTURED BY MUELLER CO., DECATUR, ILL. OR AN ENGINEER APPROVED ALTERNATE. NO MORE THAN ONE (1) SPLICE SHALL BE MADE ON EACH INSTALLATION.

NOTE:
GATE VALVES 2" AND LARGER SHALL BE AWWA CLASS C, DOUBLE DISC, PARALLEL SLAT, NON-RISE TYPE, WITH IRON BODY FULL BRONZE MOUNTED, 2" SQUARE OPERATING NUT, OPEN LEFT, "O" RING PRESSURE SEAL, MIN. 150 LBS. WORKING PRESSURE, STANDARD MECHANICAL JOINT, FIG. 571X AS MANUFACTURED BY KENNEDY VALVE MFG. CO., INC., ELMIRA, NEW YORK, A-2380-23 AS MANUFACTURED BY CLOW CORPORATION, EDDY-IOWA DIVISION, OSKALOOSA, IOWA, OR PUSH-ON ENDS FOR PVC PIPE, FIG. 597X AS MANUFACTURED BY KENNEDY VALVE MFG. CO., INC., ELMIRA, NEW YORK, A-2380-32 AS MANUFACTURED BY MUELLER CO., DECATUR, ILL. EDDY-IOWA AWWA GATE VALVES WITH PUSH-ON JOINT FOR PVC PIPE AS MANUFACTURED BY CLOW CORPORATION, EDDY-IOWA DIVISION, OSKALOOSA, IOWA, OR AN ENGINEER APPROVED ALTERNATE. WHEN VALVE WITH MECHANICAL JOINT IS USED, TRANSITION, GLAND FITTINGS FOR MECHANICAL JOINT END TO I.P. SIZE PVC PIPE WITH "O" RING SEAL AND TRANSITION GLAND GASKET (RADIAL COMPRESSION TYPE) AS MANUFACTURED BY MUELLER CO., DECATUR, ILL. SHALL ALSO BE USED.

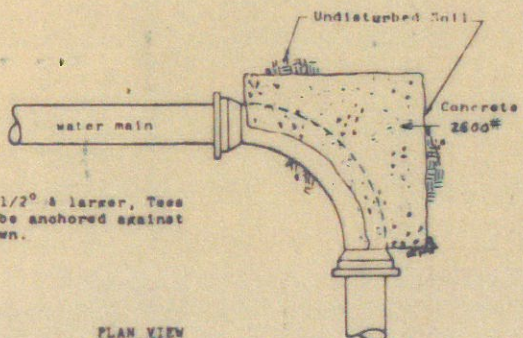


DETAIL OF TYPICAL GATE VALVE AND BOX INSTALLATION



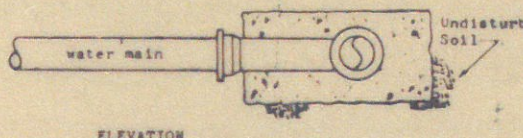
TYPICAL FIRE HYDRANT AND FLUSHING HYDRANT DETAIL

WATER WORKS STANDARDS



NOTE:

All bends 22-1/2" & larger, Tee incl., shall be anchored against thrust as shown.



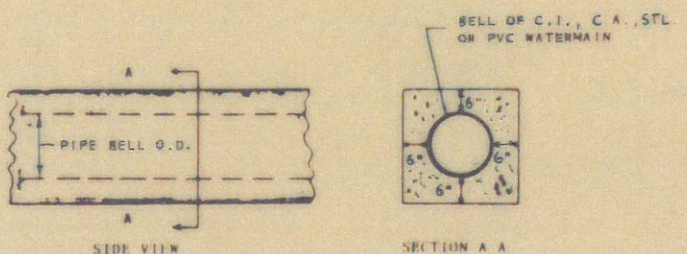
BEARING AREA REQUIRED FOR CONCRETE PIPE ANCHORS

Main Size	Dead Ends	90° Bends	45° Bends	22-1/2° Bends
4"	2-sq. ft.	3-sq. ft.	2-sq. ft.	1-sq. ft.
6"	4-sq. ft.	6-sq. ft.	3-sq. ft.	2-sq. ft.
8"	7-sq. ft.	10-sq. ft.	5-sq. ft.	3-sq. ft.
10"	11-sq. ft.	16-sq. ft.	9-sq. ft.	4-sq. ft.
12"	14-sq. ft.	23-sq. ft.	12-sq. ft.	6-sq. ft.

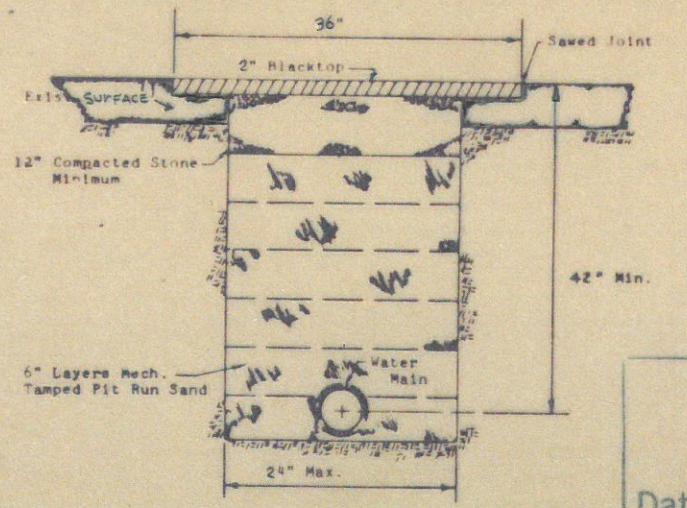
MINIMUM THEORETICAL VOLUME OF CONCRETE FOR PIPE ANCHORS

Main Size	Dead Ends	90° Bends	45° Bends	22-1/2° Bends
4"	2-cu. ft.	2-cu. ft.	1-cu. ft.	1-cu. ft.
6"	4-cu. ft.	4-cu. ft.	2-cu. ft.	1.5-cu. ft.
8"	7-cu. ft.	7-cu. ft.	3.5-cu. ft.	2-cu. ft.
10"	11-cu. ft.	12-cu. ft.	6.9-cu. ft.	3-cu. ft.
12"	16-cu. ft.	17-cu. ft.	9-cu. ft.	6-cu. ft.

TYPICAL PIPE ANCHOR STANDARD DETAIL



TYPICAL CONCRETE ENCASMENT DETAIL FOR C.I., C.A., STL. OR PVC WATERMAIN



STANDARD DETAIL FOR CROSSING A STREET OR DRIVE OF BITUMINOUS SURFACE PAVEMENT

NOTE:

HIGH PRESSURE METERED SERVICE LINES W/IPRV'S SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE TYPICAL SINGLE AND DOUBLE METERED SERVICE PLANS AND DETAILS SHOWN ON THIS SHEET, EXCEPT THAT METER SETTER INLETS, TEES AND CORPORATION STOPS SHALL BE PROVIDED WITH 1" PACK JOINT FOR P.V.C. PIPE (STANDARD IRON PIPE O.D.). HIGH PRESSURE METERED SERVICE INSTALLATIONS ARE INCLUDED IN QUANTITIES INDICATED FOR SERVICE TAP TO MAIN, SERVICE LINE AND INDIVIDUAL PRESSURE REDUCING STATIONS ALL OF WHICH ARE ITEMS OF THE BASE BID SCHEDULE FOR DIVISION "A". THE DIVISION A CONTRACTOR SHALL INCLUDE COSTS OF SAID HIGH-PRESSURE SERVICES INSTALLATIONS IN HIS UNIT PRICE FOR SAID ITEMS AND NO ADDITIONAL COMPENSATION SHALL BE MADE.

AS BUILT

Date 6-16-83 By M. Sewers

ELROD WATER COMPANY, INC.
SYSTEM IMPROVEMENTS
DISTRIBUTION SYSTEM
DIVISION A
1979

SIECO, Inc.	architects
	engineers
COLUMBUS IN	
MADISON IN	
DELAWARE OH	
JOB NO.	61140
DATE	STD. DWG.
DRAWN	R. D. S.
CHECKED	James F. Murphy
CERTIFIED	James F. Murphy
SCALE	NONE
SHEET	89 OF 89