

NOTE: ALL HYDRANTS SHALL STAND PLUMB AND SHALL HAVE THE PUMPER NOZZLE FACING THE CURB.

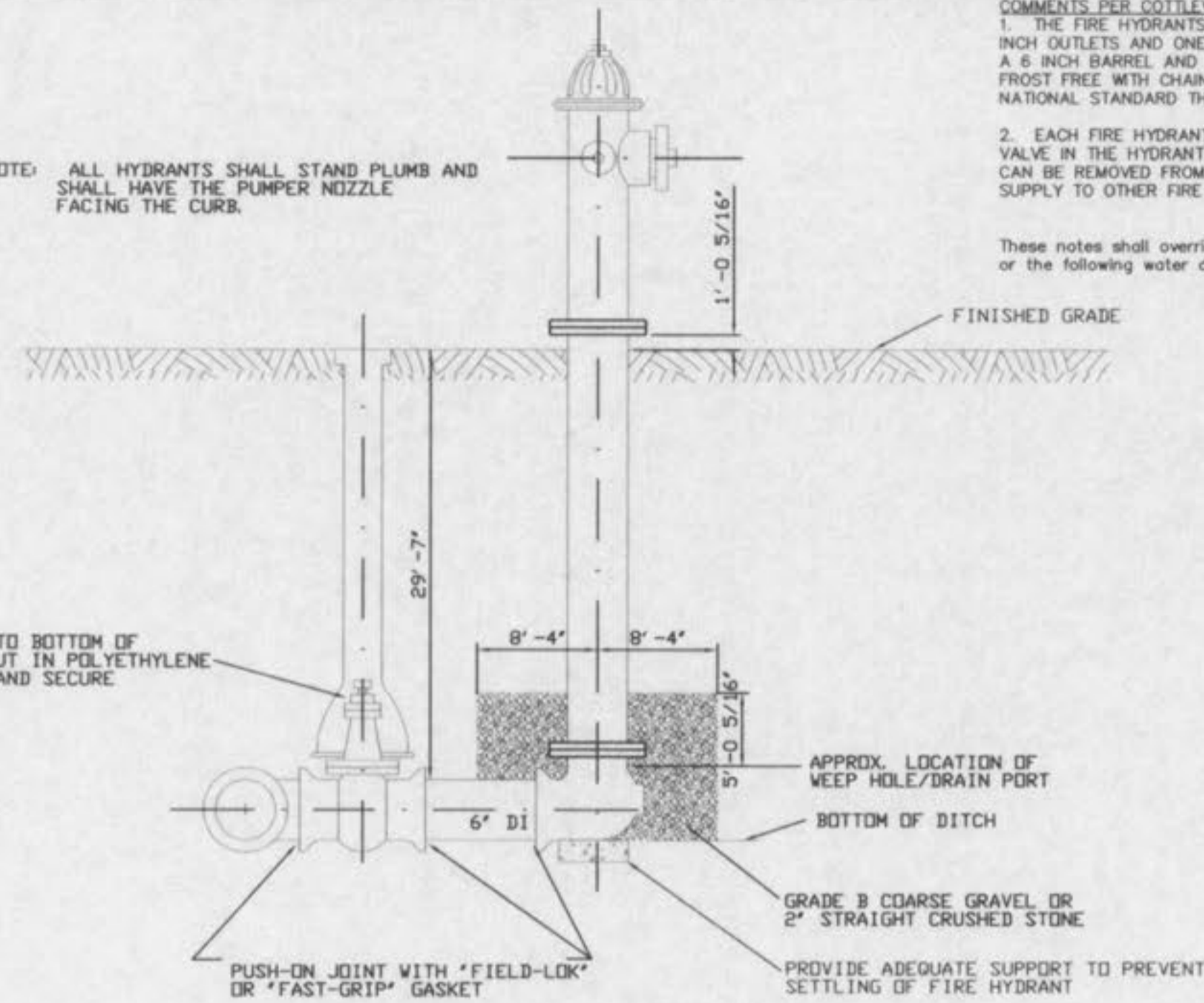
COMMENTS PER COTTLEVILLE FIRE DEPT.  
 1. THE FIRE HYDRANTS SHALL HAVE NOT LESS THAN TWO 2.50 INCH OUTLETS AND ONE 4.50 INCH OUTLET, A 5.25 INCH VALVE, A 6 INCH BARREL AND SHALL BE OF THE BREAKAWAY DESIGN, FROST FREE WITH CHAIN, LEFT HAND OPEN DESIGN AND HAVE NATIONAL STANDARD THREADS.  
 2. EACH FIRE HYDRANT SHALL BE PROVIDED WITH A CONTROL VALVE IN THE HYDRANT CONNECTION SUCH THAT THE HYDRANT CAN BE REMOVED FROM SERVICE WITHOUT SHUTTING OFF WATER SUPPLY TO OTHER FIRE HYDRANTS.

These notes shall override any conflicting details shown on this or the following water detail sheets.

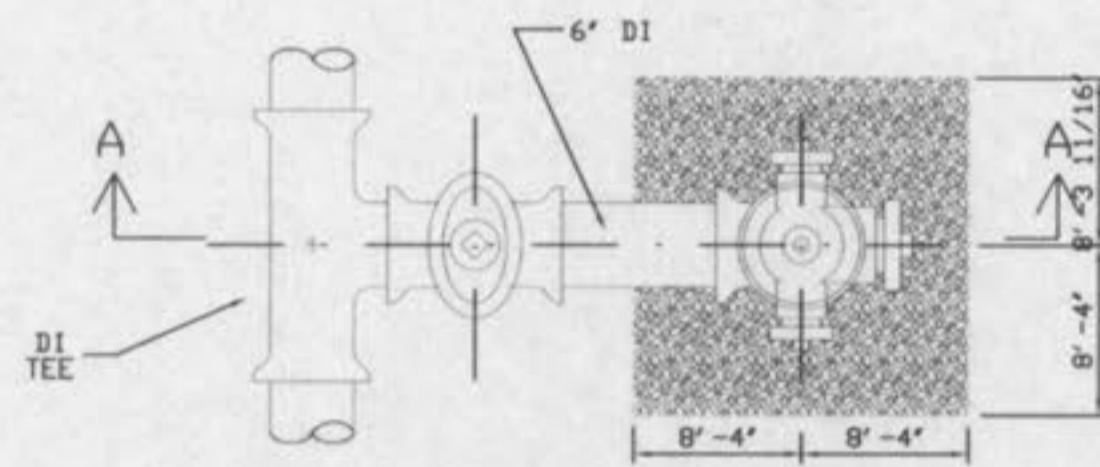
NOTE: ALL HYDRANTS SHALL STAND PLUMB AND SHALL HAVE THE PUMPER NOZZLE FACING THE CURB.

\* NOTE: POLYETHYLENE ENCASING ON ALL D. I. PIPE

WRAP VALVE TO BOTTOM OF OPERATING NUT IN POLYETHYLENE ENCASUREMENT AND SECURE.

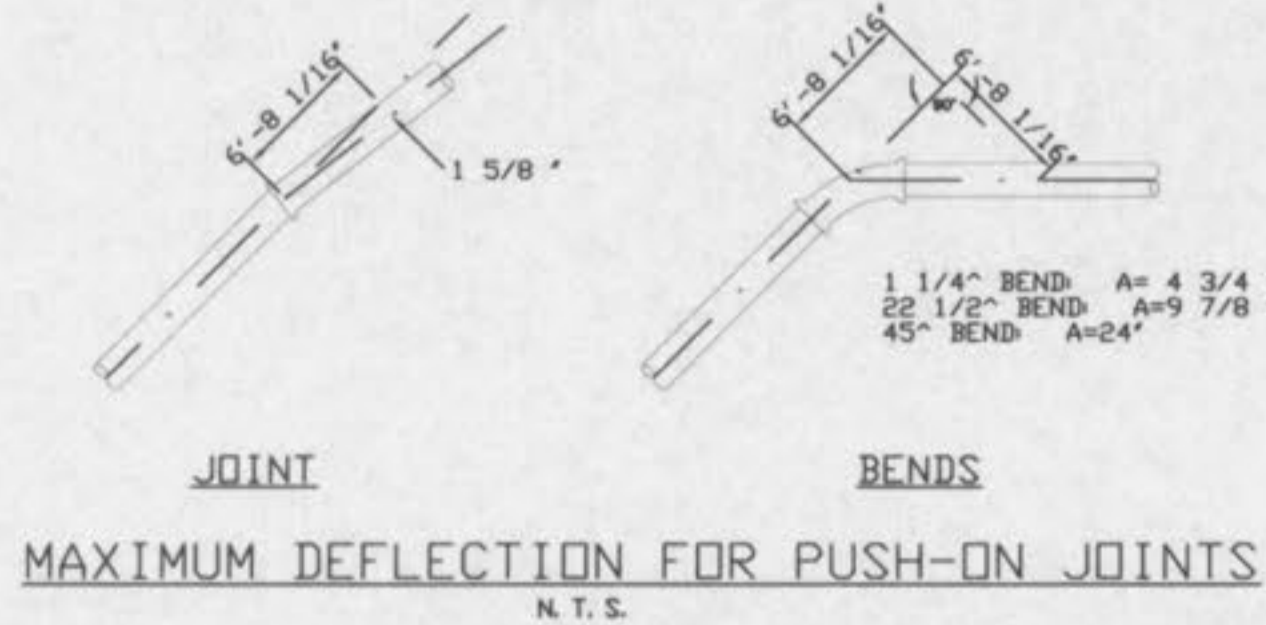


SECTION A-A



PLAN

FIRE HYDRANT DETAIL-STANDARD  
N.T.S.

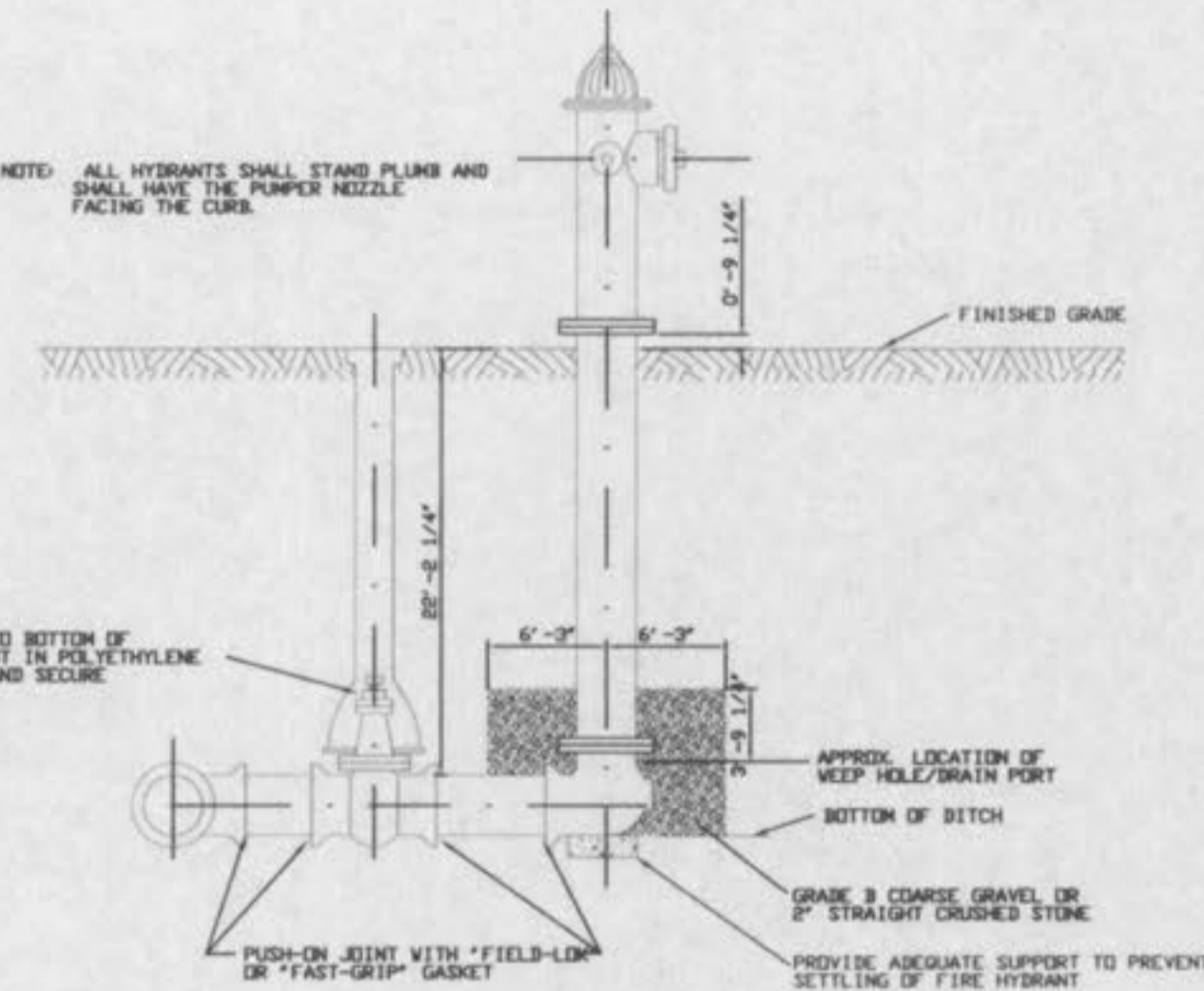


JOINT

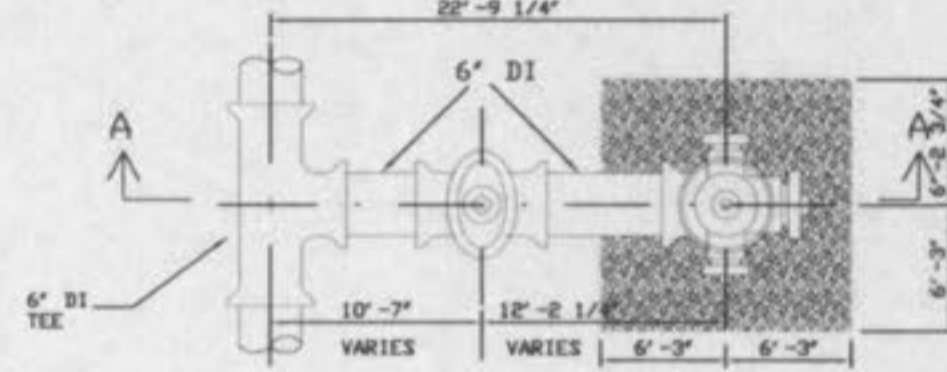
BENDS

MAXIMUM DEFLECTION FOR PUSH-ON JOINTS  
N.T.S.

WRAP VALVE TO BOTTOM OF OPERATING NUT IN POLYETHYLENE ENCASUREMENT AND SECURE.

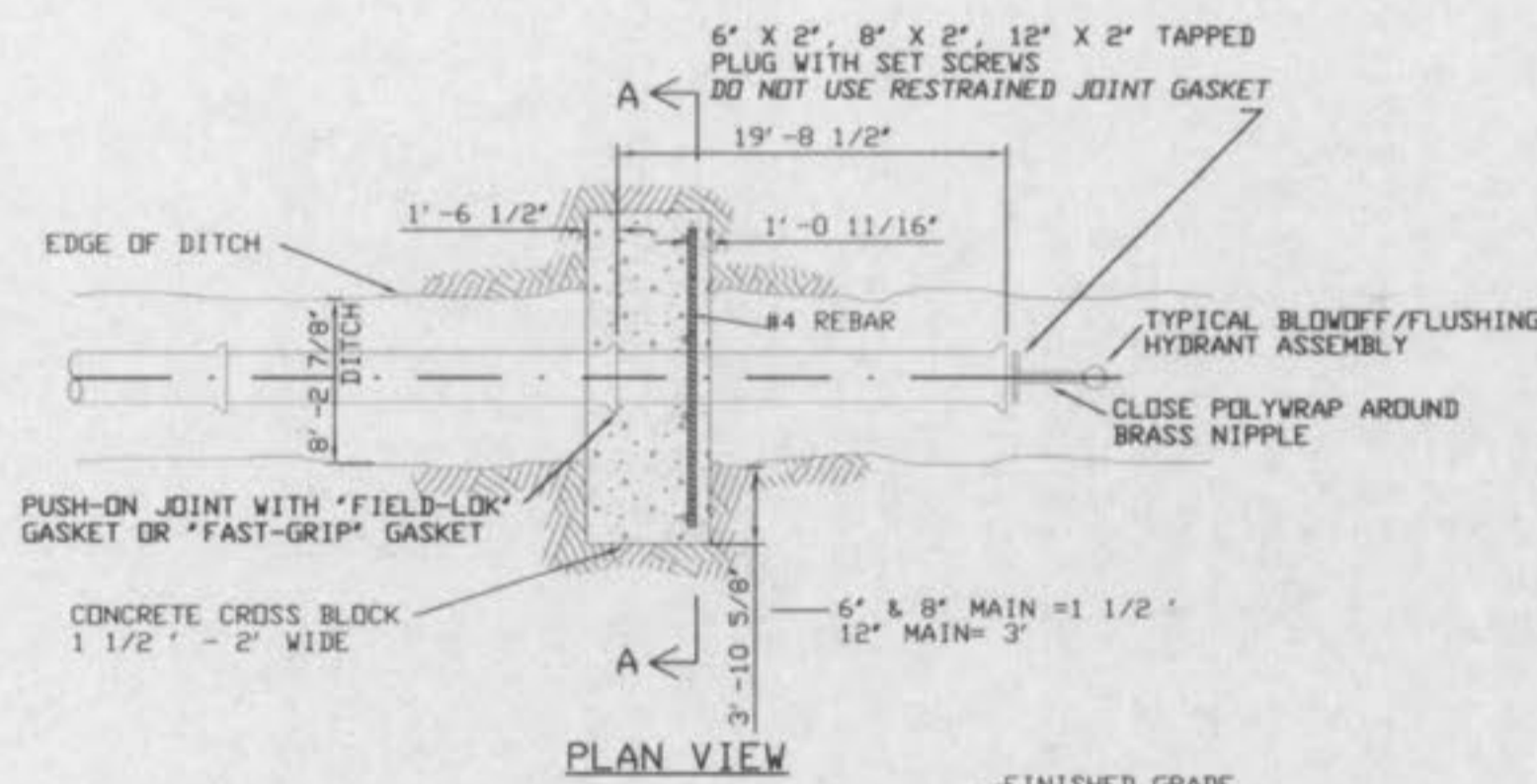


SECTION A-A

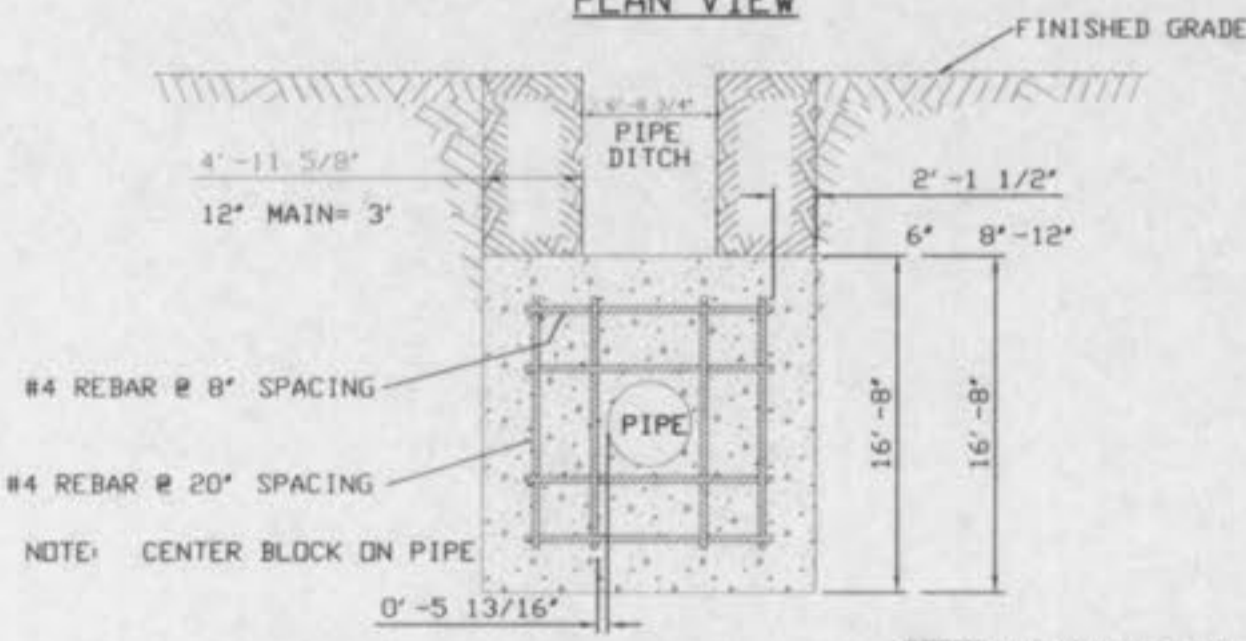


PLAN

FIRE HYDRANT DETAIL-OPTIONAL  
N.T.S.



PLAN VIEW

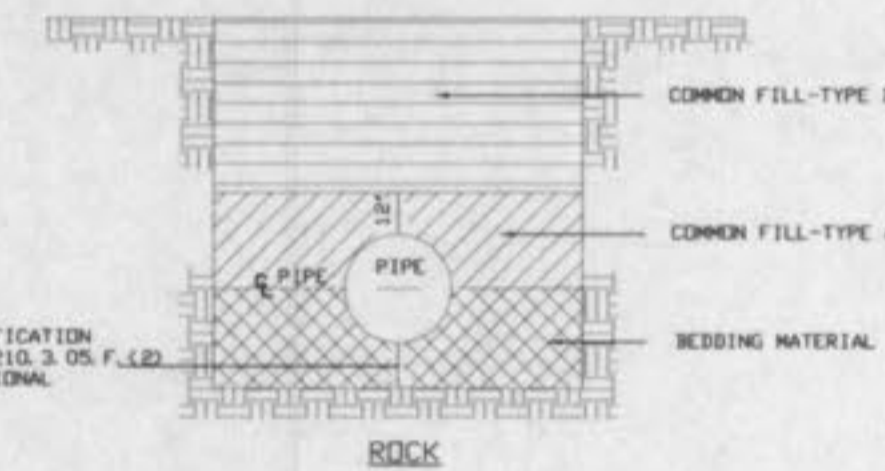


SECTION A-A

DEAD-END BLOCKING FOR 6", 8" & 12"  
PIPE USING RESTRAINED PUSH-ON  
JOINT WITH THRUST BLOCK  
N.T.S.

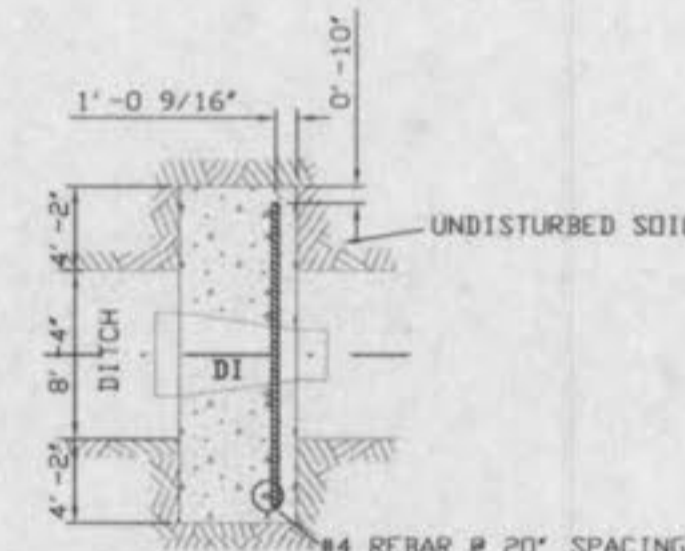


SOIL

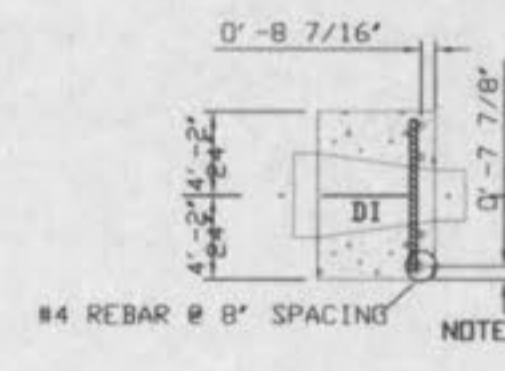


ROCK

NOTE: SEE SPECIFICATION SECTIONS 2210.2.02 AND 2210.2.03 FOR DESCRIPTION OF BACKFILL MATERIAL.



PLAN VIEW



ELEVATION VIEW

REDUCER THRUST BLOCK  
N.T.S.

NO.	DATE	DESCRIPTION OF REVISION	BY

Missouri-American Water Co.  
ST. LOUIS OPERATIONS  
WATER MAIN  
INSTALLATION DETAILS

SCALE: NOT TO SCALE	FILE NO.	DRAWING NO.
DRAWN: LJT	V.D. NO.: A 2298	1
CHECKED: RC	DATE: 10/2001	OF 2

CAD /DISTRIB/DETAILS/MDAWMAIN1.DGN

HIDDEN CREEK  
WATER DETAILS 1

ST. CHARLES ENGINEERING & SURVEYING, INC.  
801 S. FIFTH STREET, SUITE 202  
ST. CHARLES, MO 63301  
TEL: (636) 947-0607 FAX: (636) 947-2448

S E S



ORDER NO. 02-0162  
DATE 03/21/03  
D-8