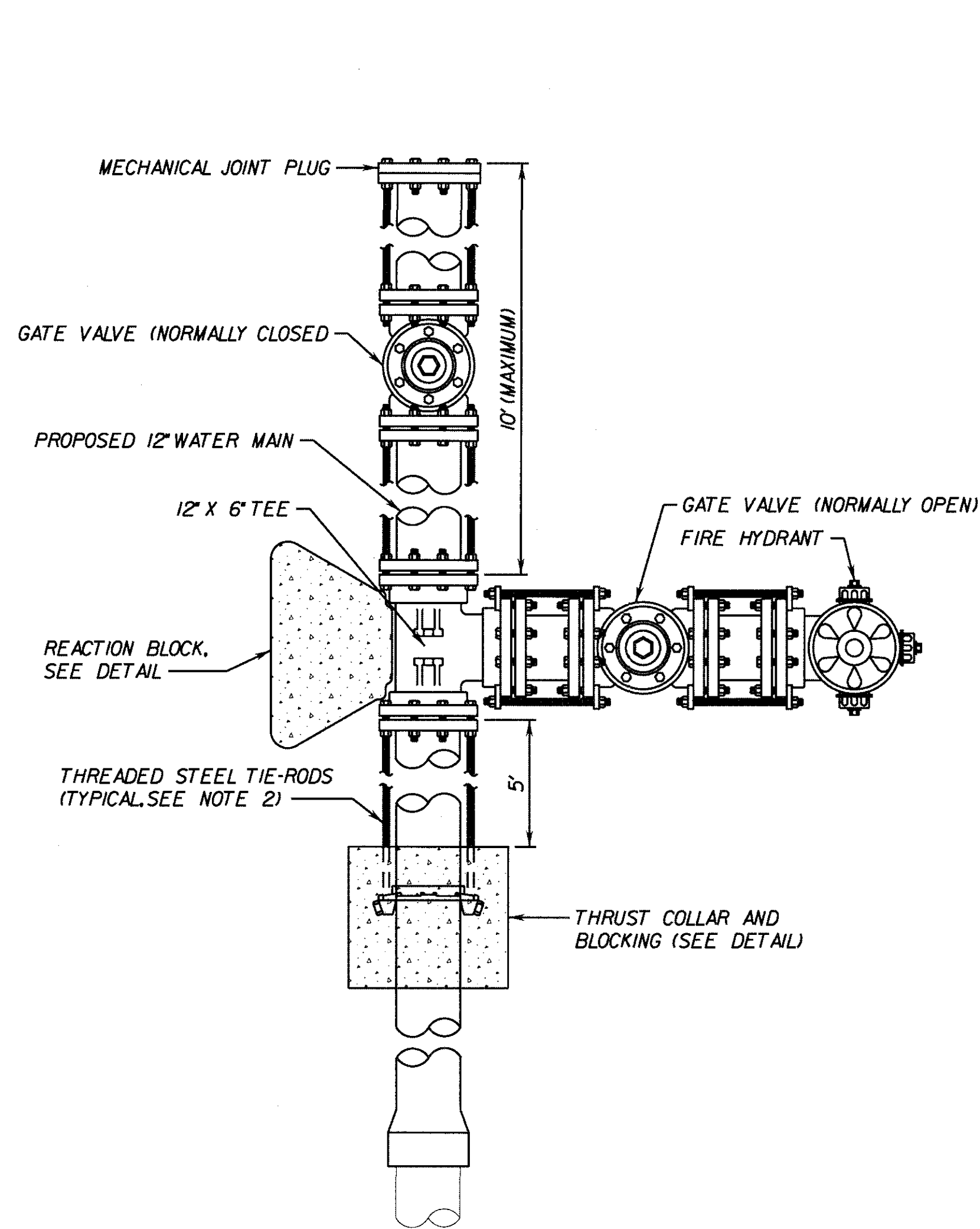


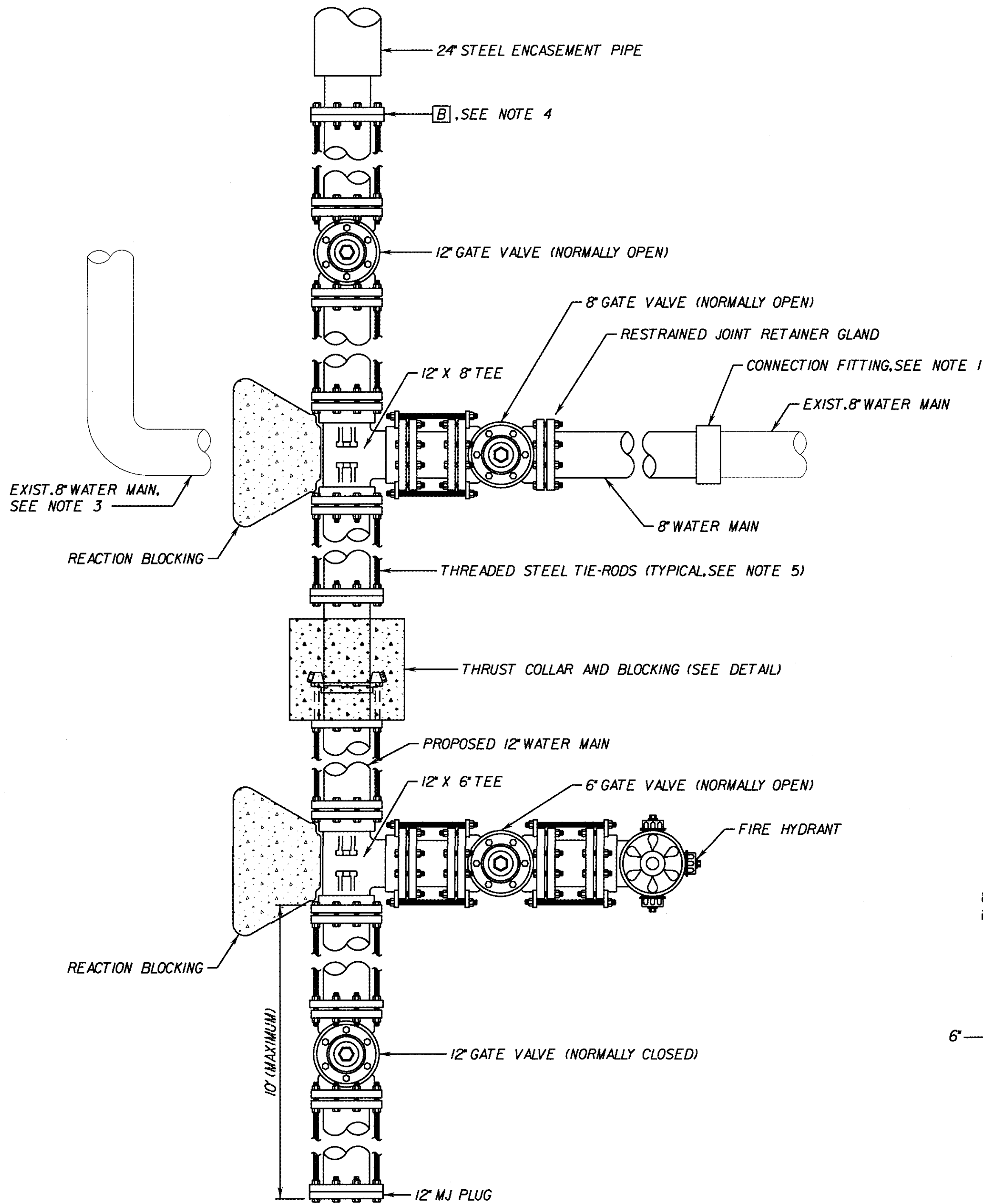
PROJECT MANAGER: Mohammad, Zaid, PE (540) 387-5374 (Salem)  
SURVEYED BY: Richard, Ziem, LS (703) 631-5325 (Burgess & Niple)  
DESIGN SUPERVISED BY: J. Scott, Hodge, PE (540) 857-3322 (AECOM)  
DESIGNED BY: Craig, Biddle, PE (540) 857-3369 (AECOM)

## UTILITY DETAILS



- NOTES:
- CONTRACTOR SHALL REPAIR PAVEMENT AND CURBING REMOVED TO INSTALL DETAILED TERMINAL END TO WATER MAIN TO EXISTING CONDITION.
  - ALL JOINTS RESTRAINED. TIE-RODS SHALL BE ASTM A307 CADMIUM COATED TIE-RODS. PROVIDE SIX (6) - 3/4 INCH DIAMETER RODS.

DETAIL A  
NO SCALE



- NOTES:
- CONNECTION FITTING PER WATER/SANITARY SEWER UTILITY NOTES.
  - COORDINATE WITH BOTETOURT COUNTY PRIOR TO EXCAVATING TO CUT EXISTING PIPING AND INSTALL PROPOSED VALVES AND PIPING. MINIMIZE DISCONTINUITY IN SERVICE AS MUCH AS POSSIBLE. STAGE EQUIPMENT, PERSONNEL, PIPING, VALVES, FITTINGS, ETC. AND PRE-ASSEMBLE TO THE EXTENT POSSIBLE TO ENSURE MINIMAL DISRUPTION.
  - CUT AND REMOVE EXISTING 8" WATER MAIN TO BE ABANDONED AS REQUIRED TO INSTALL PROPOSED WATER VALVES AND PIPING. PLUG AND DEWATER 8" WATER MAIN TO BE ABANDONED THAT IS LEFT IN PLACE.
  - REMOVE TEMPORARY PLUG AT CONSTRUCTION POINT [B] AND INSTALL PROPOSED VALVES AND PIPING. REFER TO SEQUENCE OF CONSTRUCTION SHEET 18A.
  - ALL JOINTS RESTRAINED. TIE-RODS SHALL BE ASTM A307 CADMIUM COATED TIE-RODS. PROVIDE SIX (6) - 3/4 INCH DIAMETER RODS.
  - PROVIDE BOLLARDS FOR FIRE HYDRANT PER DETAIL THIS SHEET.

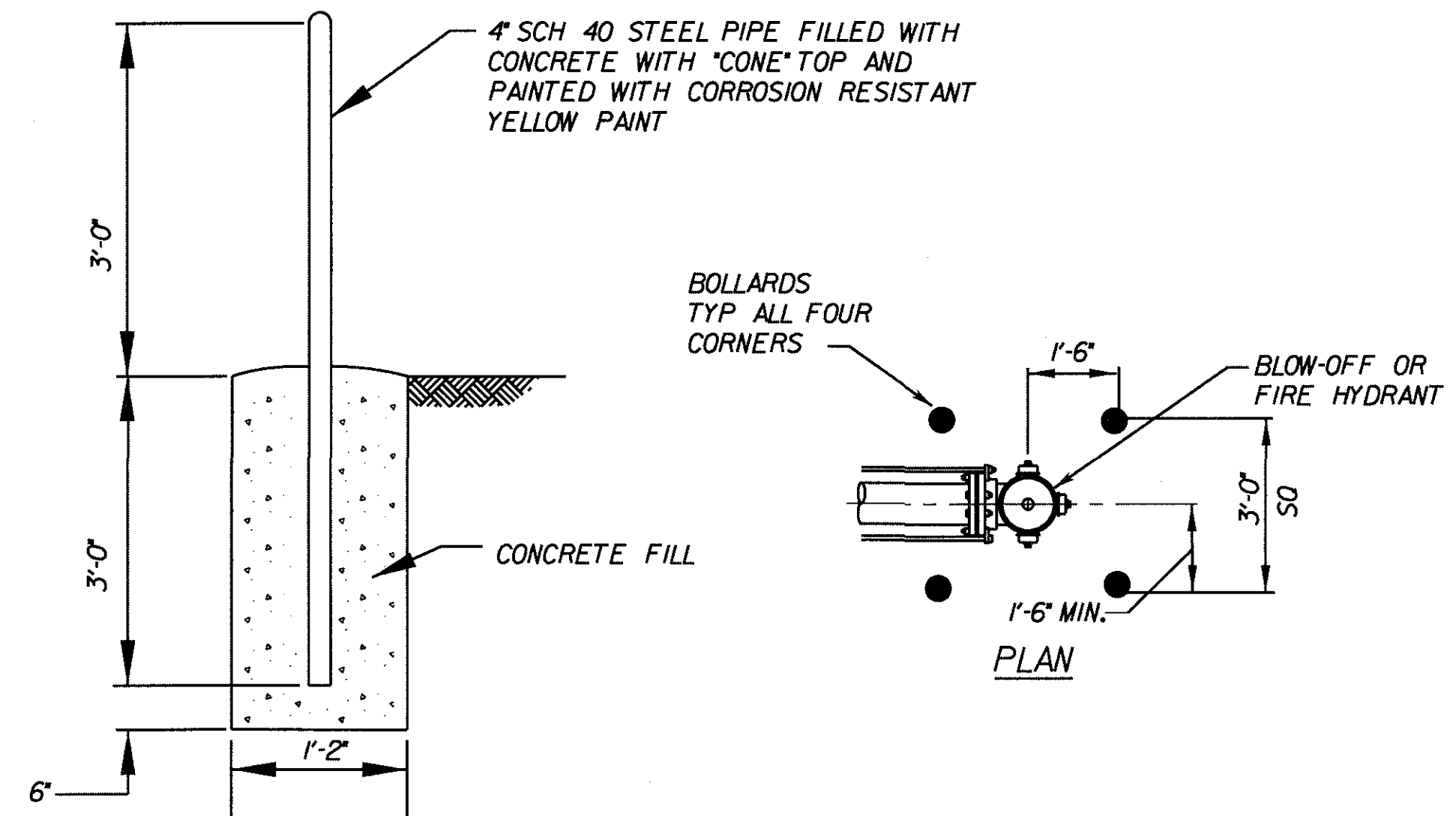
DETAIL B  
NO SCALE

REVISED	STATE	ROUTE	STATE	SHEET NO.
			PROJECT	
	VA.	11	0081-011-120, PE-102 RW-202, C-502	18C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

AECOM TECH. SERV., INC.  
ROANOKE, VIRGINIA  
UTILITY ENGINEER

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION.



- NOTES:
- CONCRETE SHALL BE VDOT CLASS A3.

BOLLARD AND BOLLARD SPACING PLAN  
NO SCALE