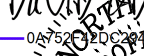
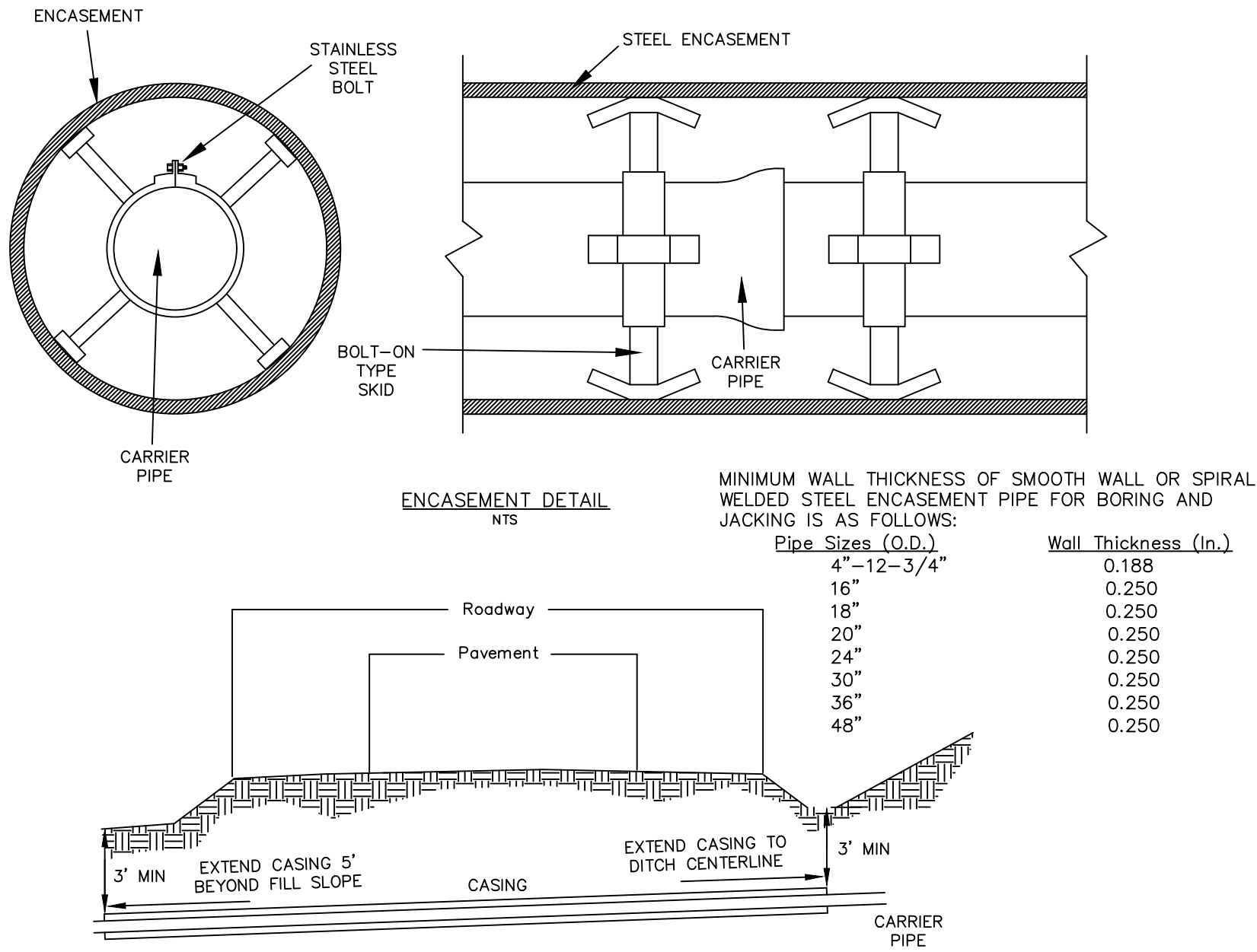
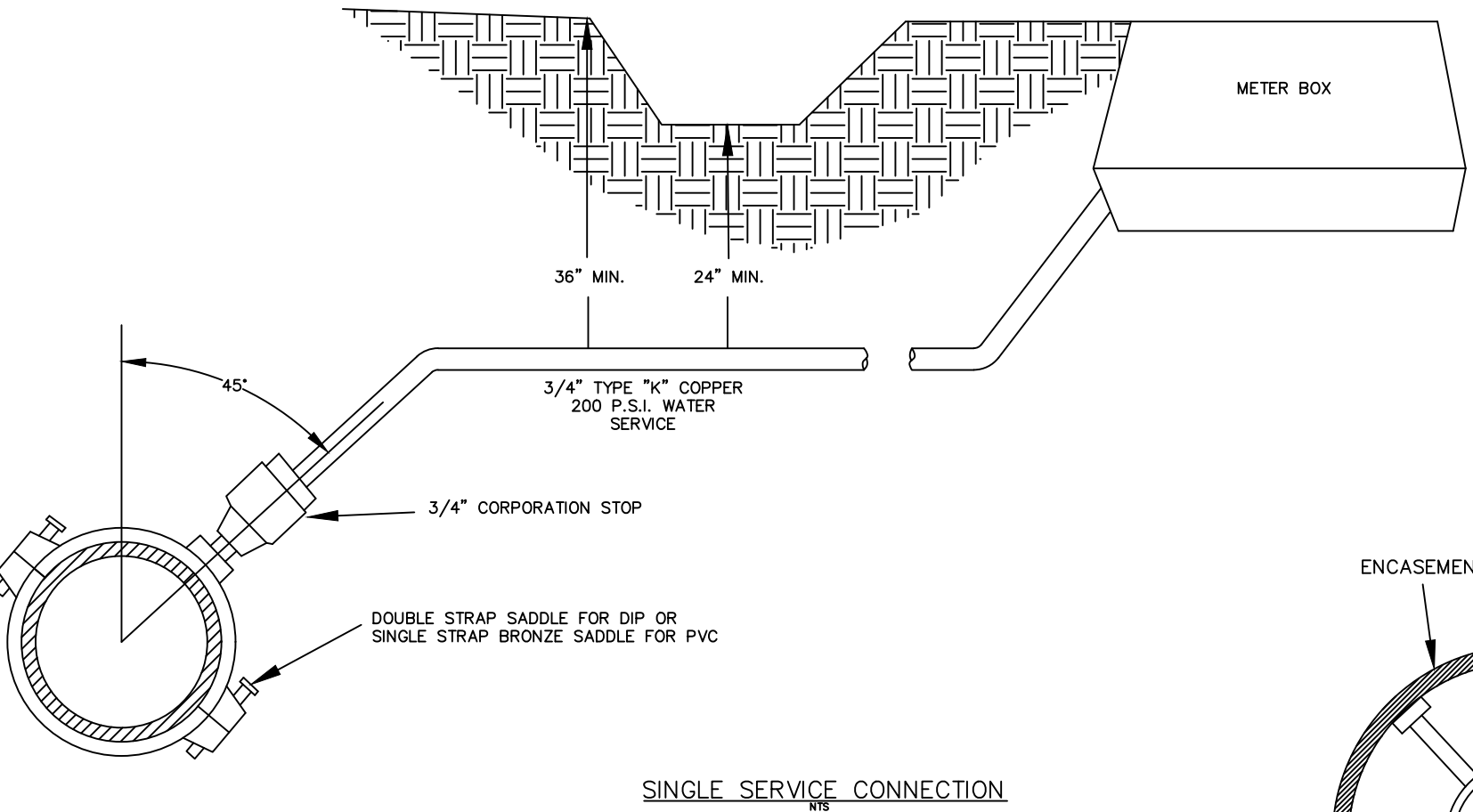
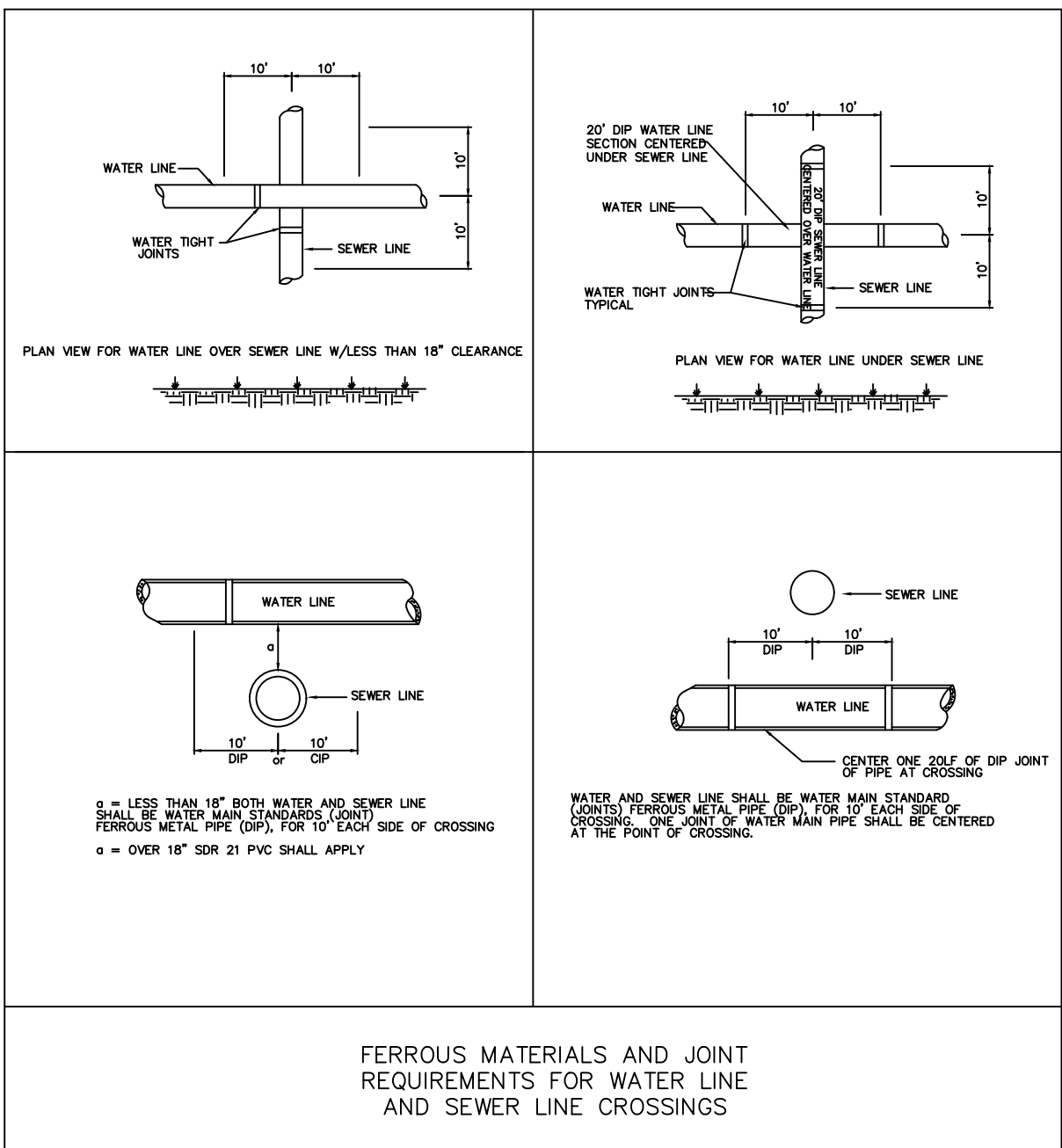
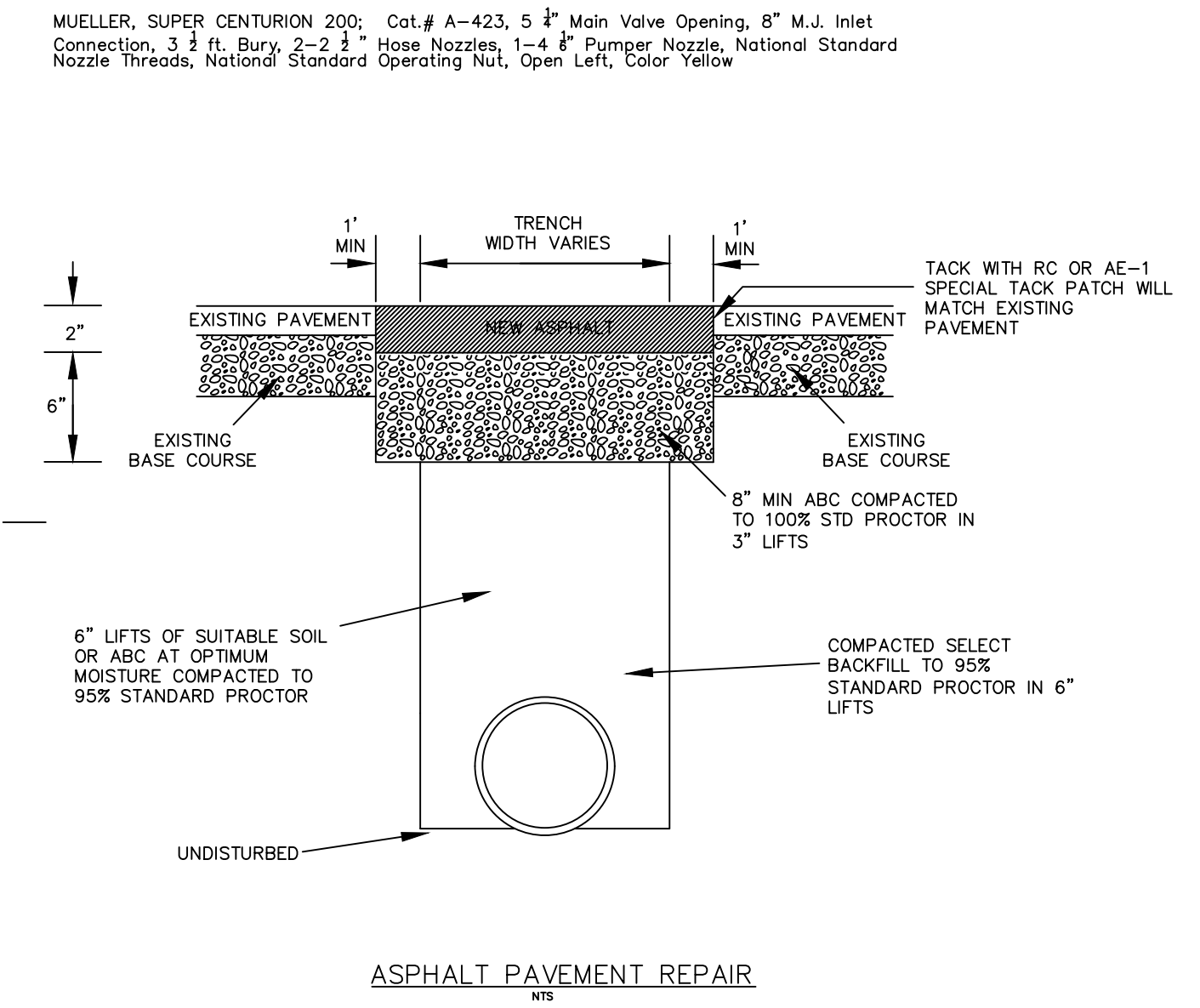
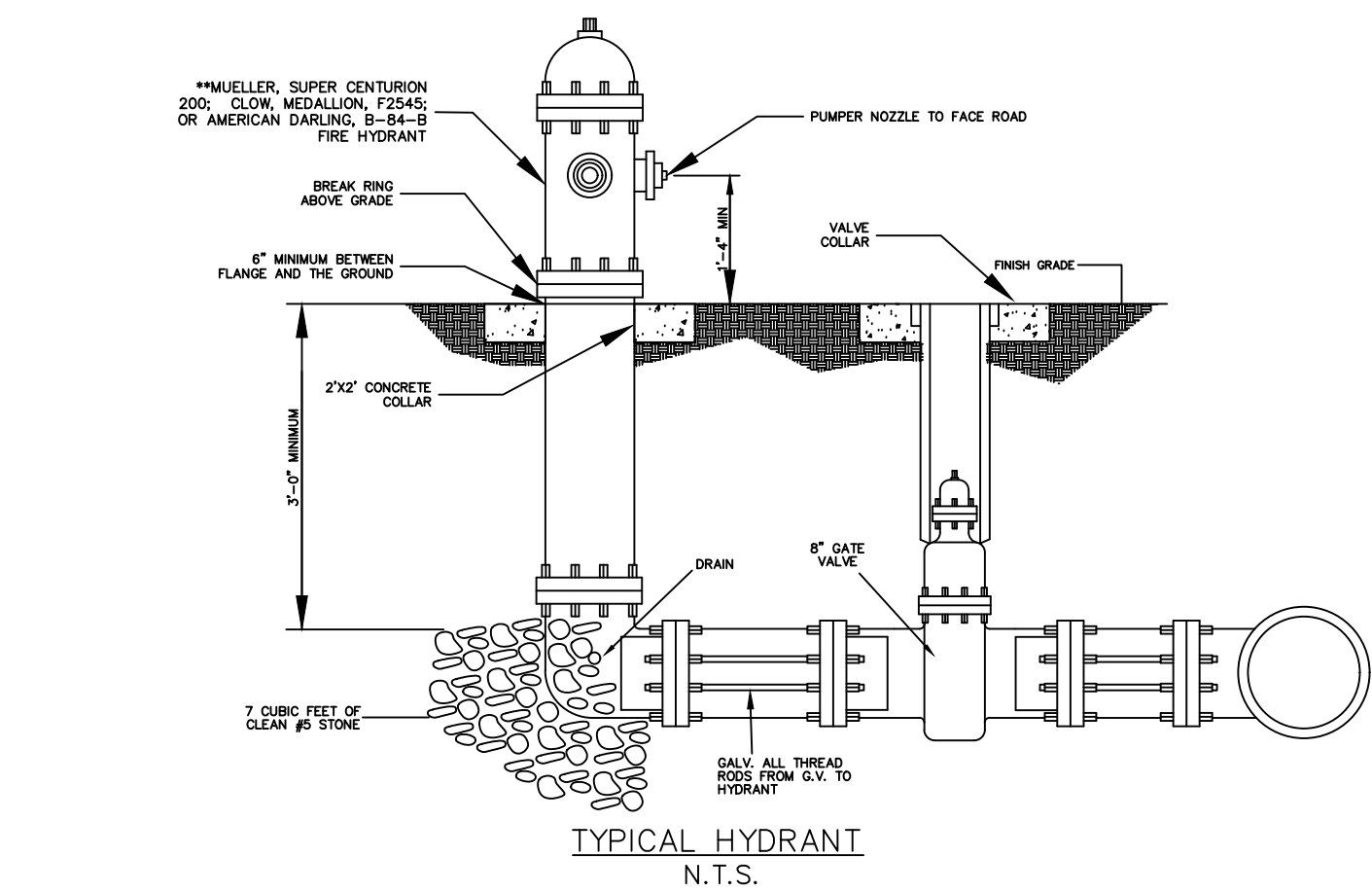
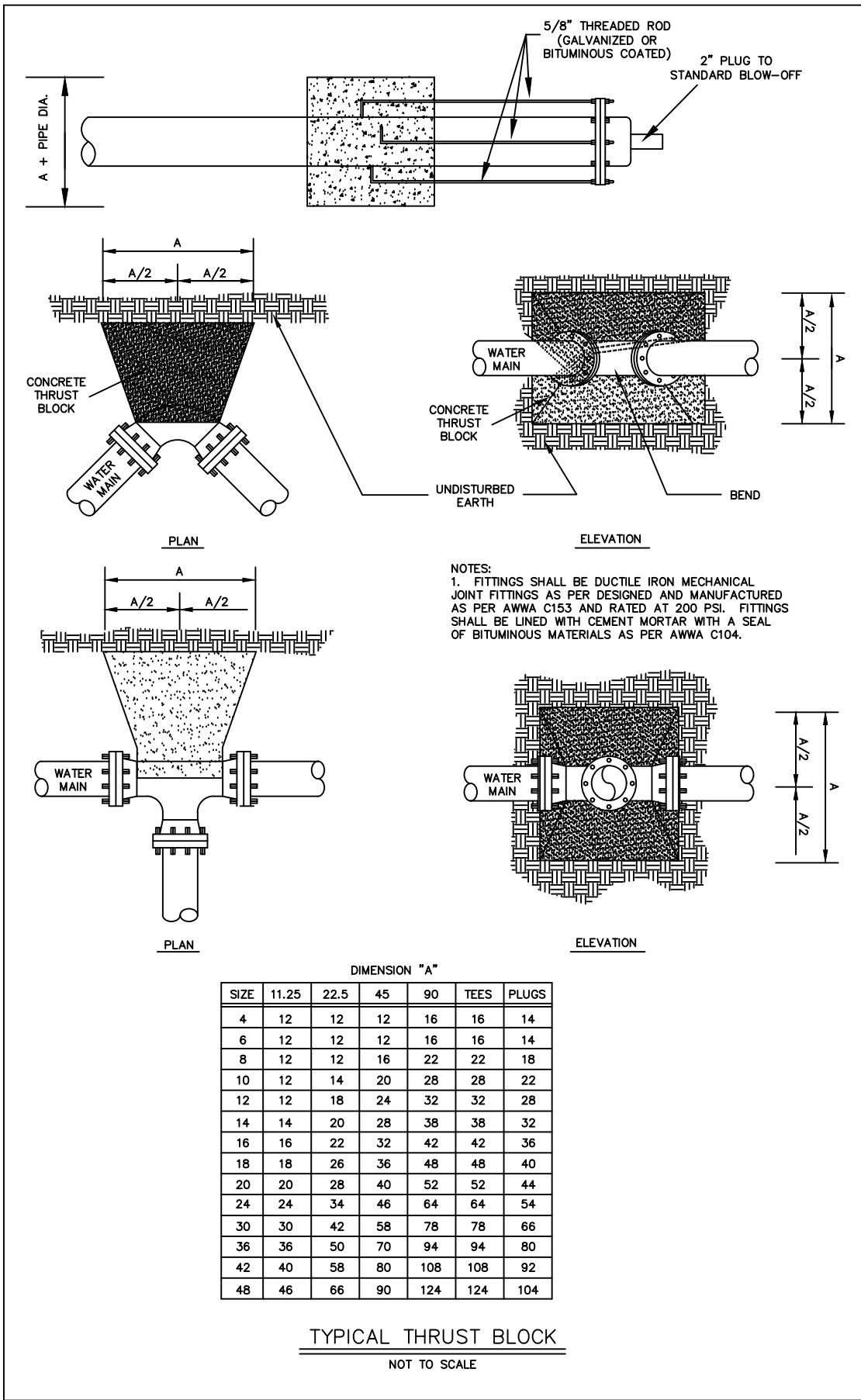
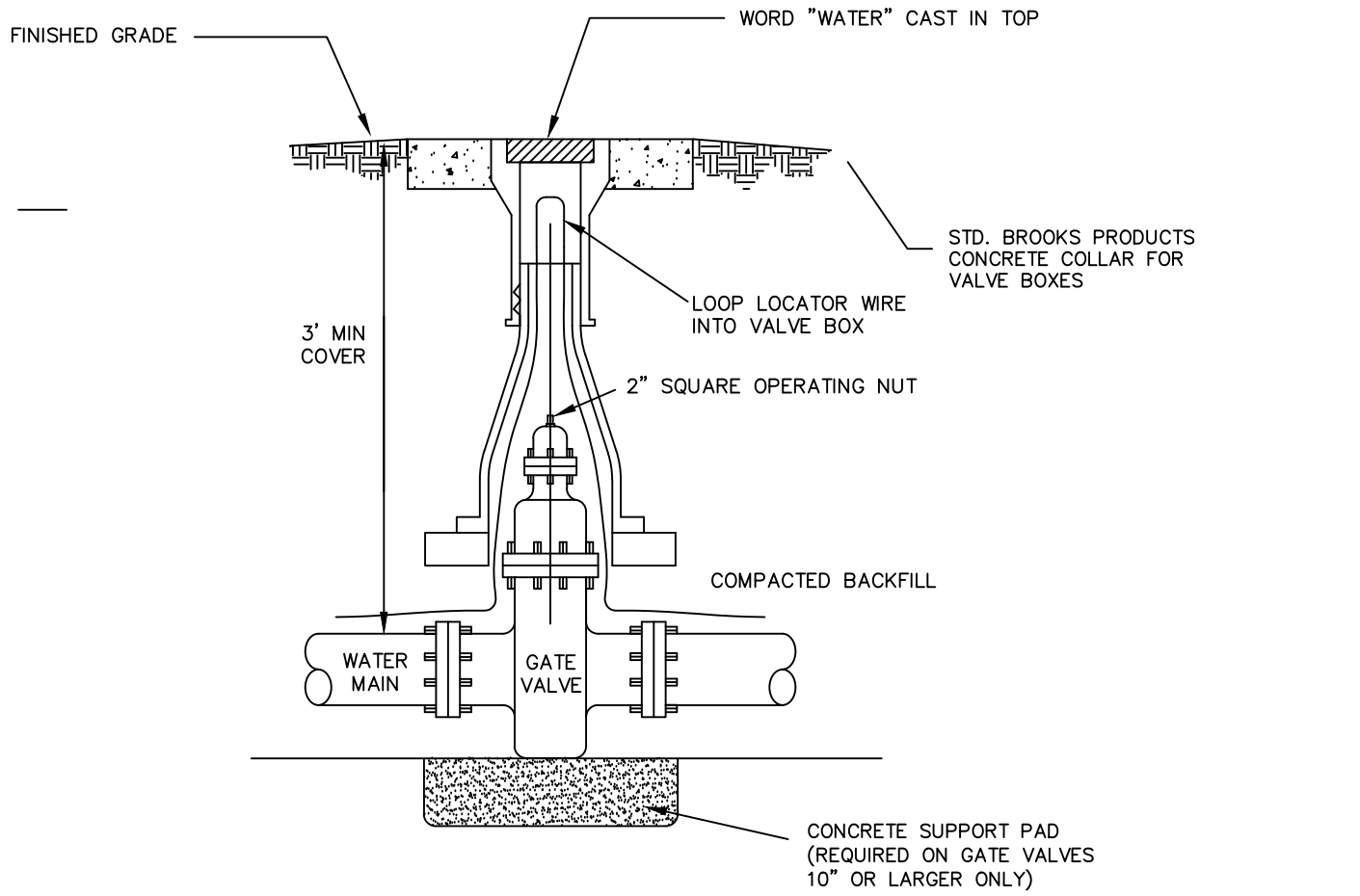


PROJECT REFERENCE NO.		SHEET NO.
HL-0065		UC-4
DESIGNED BY: DWO	Signed by:  NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 21130 DAVID ODOM	5/15/2026
DRAWN BY: LCT		
CHECKED BY: SBR		
APPROVED BY: DWO		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC.		
PHONE: (919) 707-6690 FAX: (919) 250-4151		



- NOTE:
- SMOOTH WALL STEEL PIPE SHALL BE JACKED THROUGH DRY BORE SLIGHTLY LARGER THAN PIPE AS SPOIL IS MUCKED BY THE AUGER BACK THROUGH THE PIPE. AS THE DRY BORING OPERATION PROGRESSES, EACH NEW SECTION OF THE ENCASMENT PIPE SHALL BE BUTT-WELDED TO THE SECTION PREVIOUSLY JACKED INTO PLACE. ENCASMENT SHALL EXTEND FROM DITCH LINE TO DITCH LINE IN CUT SECTIONS, 5' BEYOND THE TOE OF THE SLOPES IN FILL SECTIONS.
 - IF VOIDS ARE ENCOUNTERED OR OCCUR OUTSIDE THE ENCASMENT PIPE, GROUT HOLES SHALL BE INSTALLED IN THE TOP SECTION OF THE ENCASMENT PIPE AT 10' CENTERS AND THE VOIDS FILLED WITH 1:3 PORTLAND CEMENT GROUT AT SUFFICIENT PRESSURE TO PREVENT SETTLEMENT IN THE ROADWAY.
 - IN THE EVENT AN OBSTRUCTION IS ENCOUNTERED DURING THE BORING AND JACKING OPERATION, THE AUGER IS TO BE WITHDRAWN AND THE EXCESS PIPE IS TO BE CUT OFF, CAPPED, AND FILLED WITH 1:3 PORTLAND CEMENT GROUT AT SUFFICIENT PRESSURE TO FILL ALL VOIDS BEFORE MOVING TO ANOTHER BORING SITE.
 - CASING PIPE SHALL BE SEALED AT THE ENDS TO PREVENT FLOWING WATER AND DEBRIS FROM ENTERING THE ANNULAR SPACE BETWEEN THE CASING AND THE CARRIER.

TYPICAL HIGHWAY CROSSING
NTS