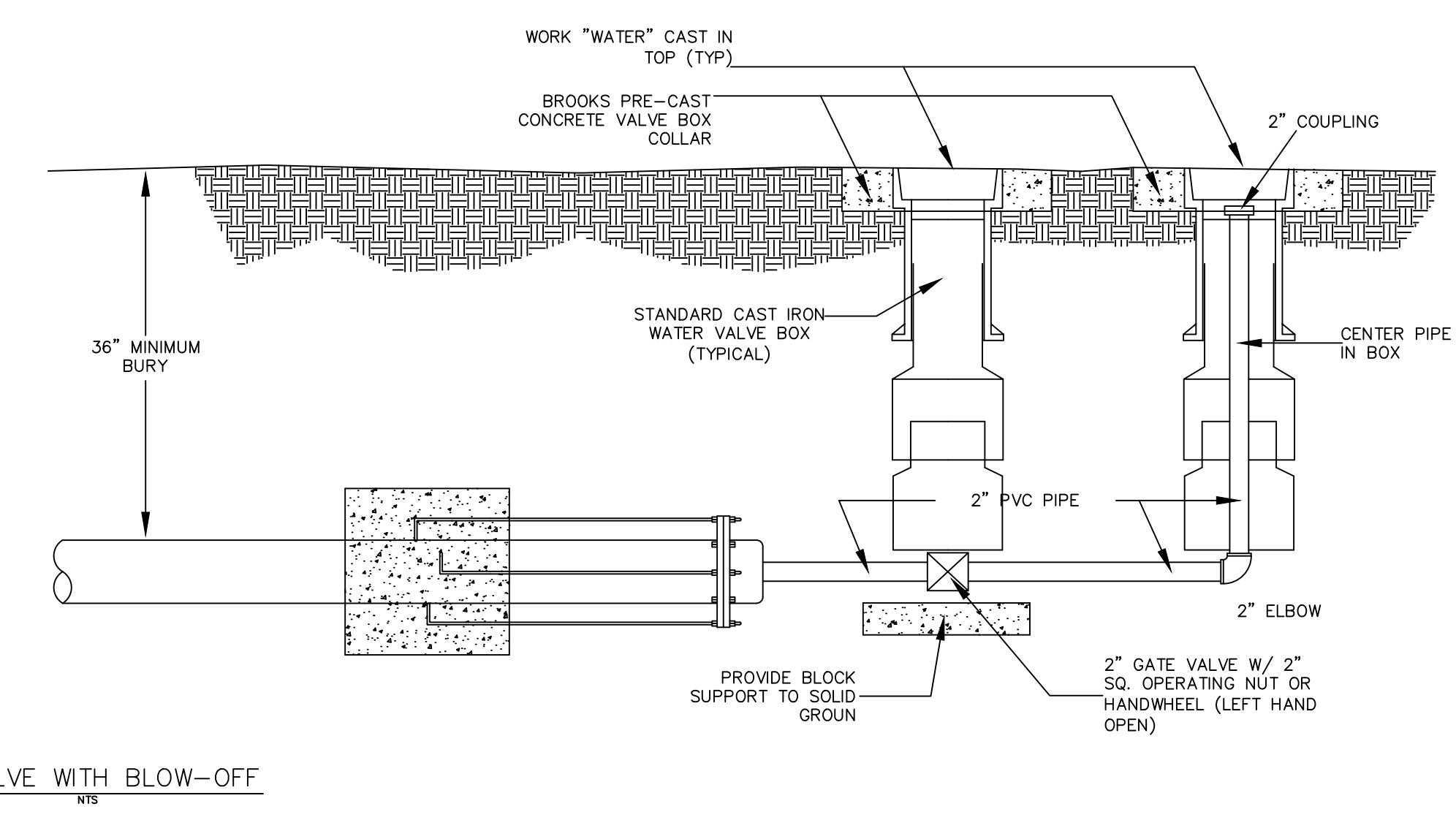
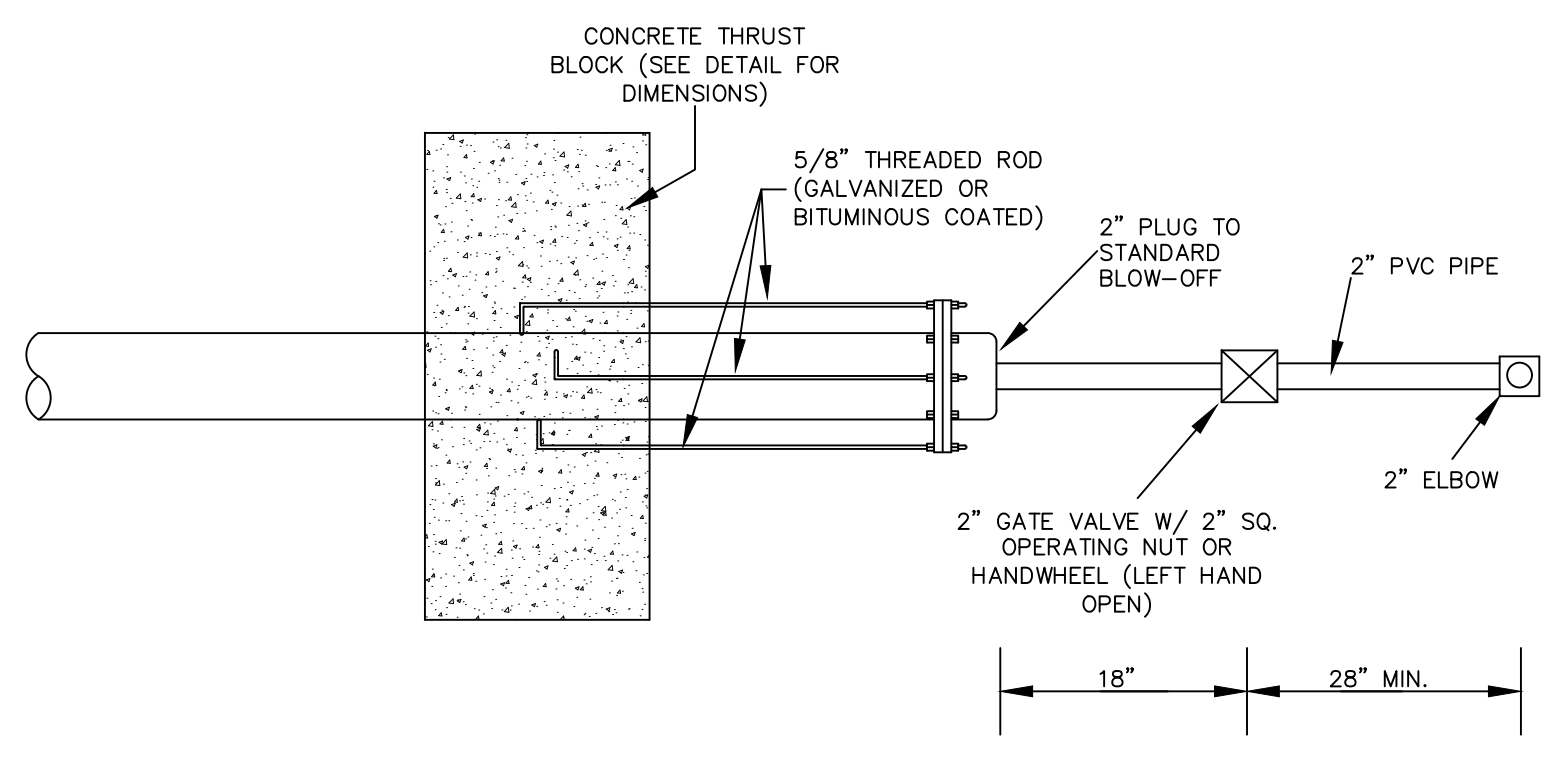
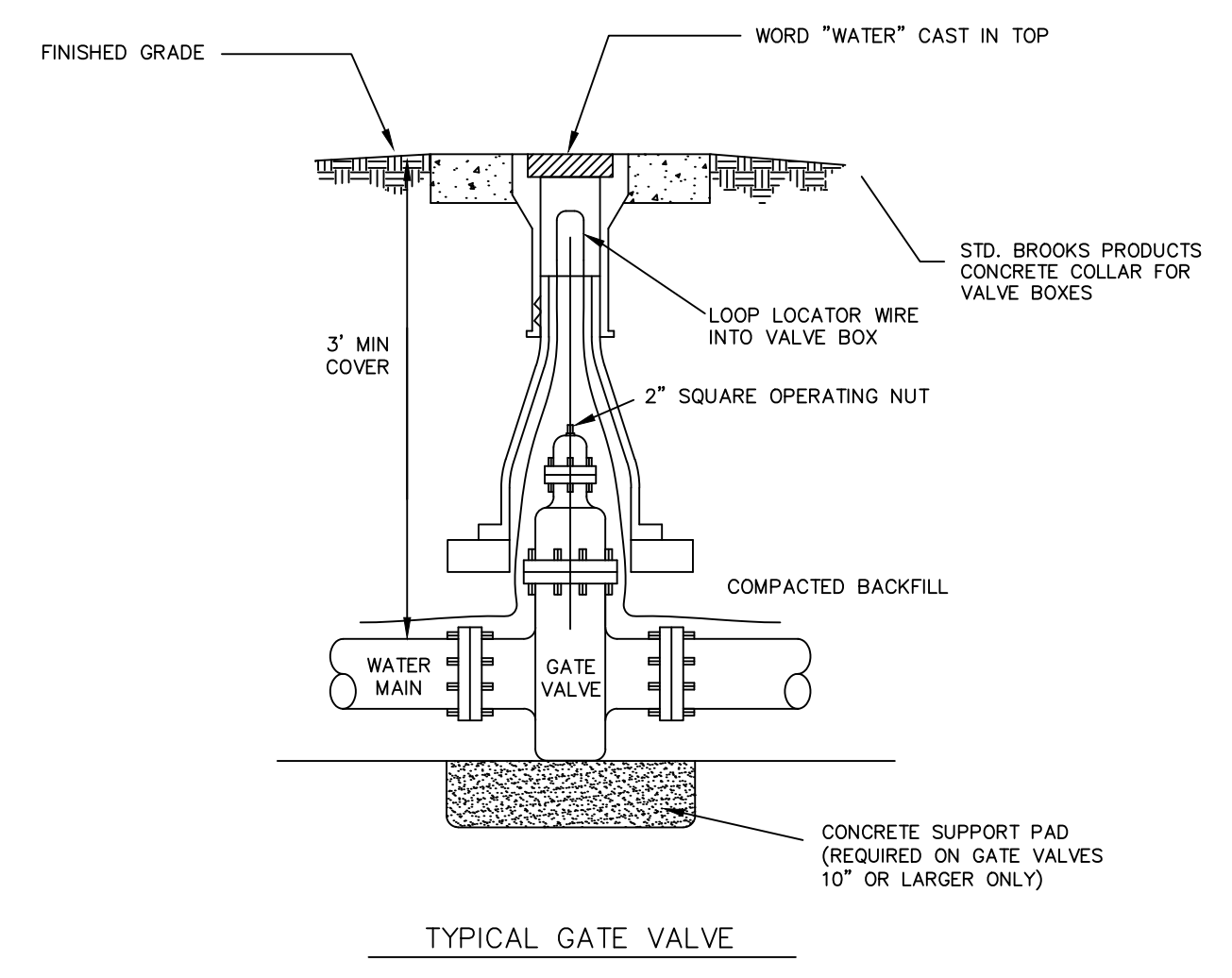
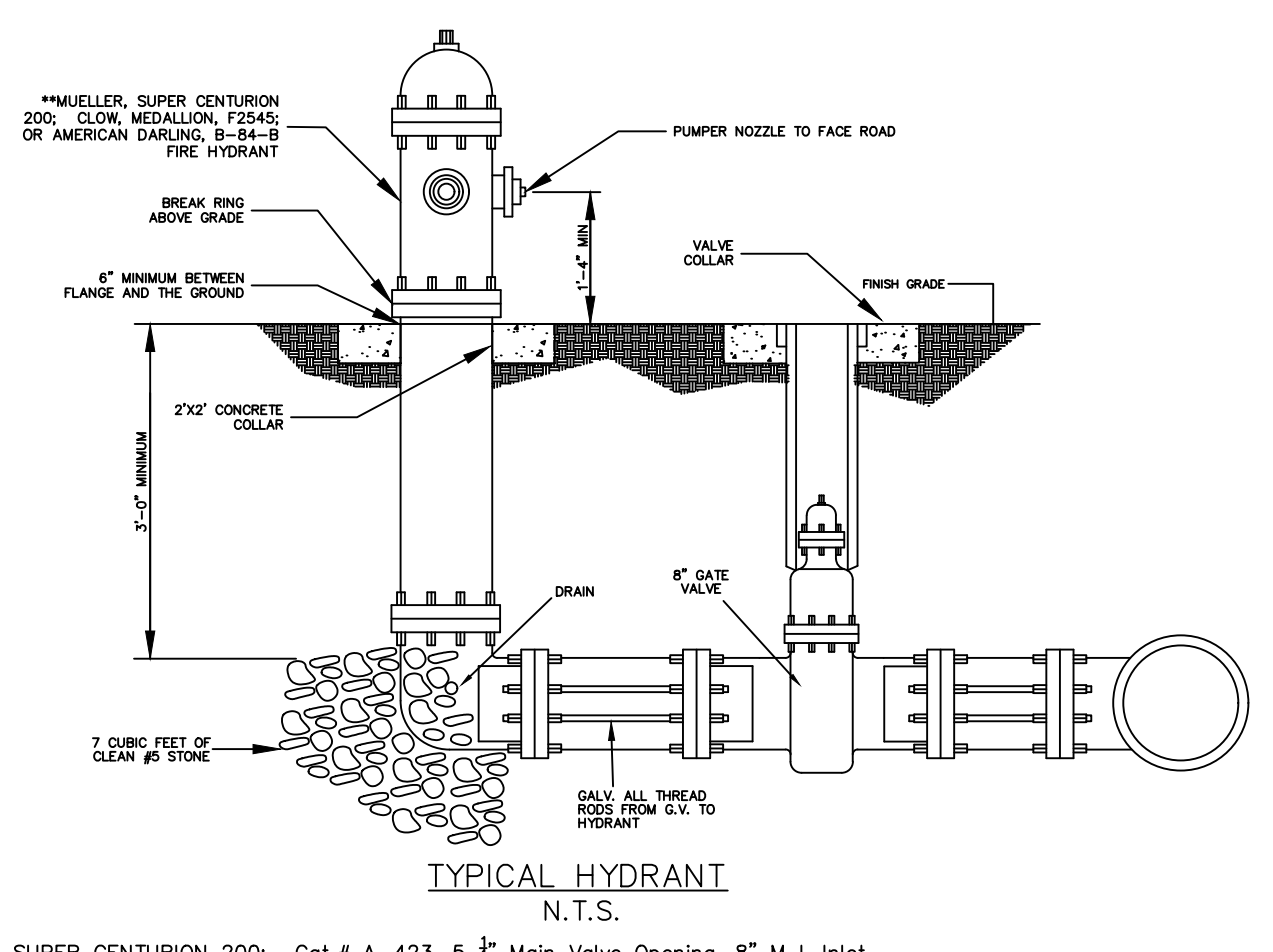


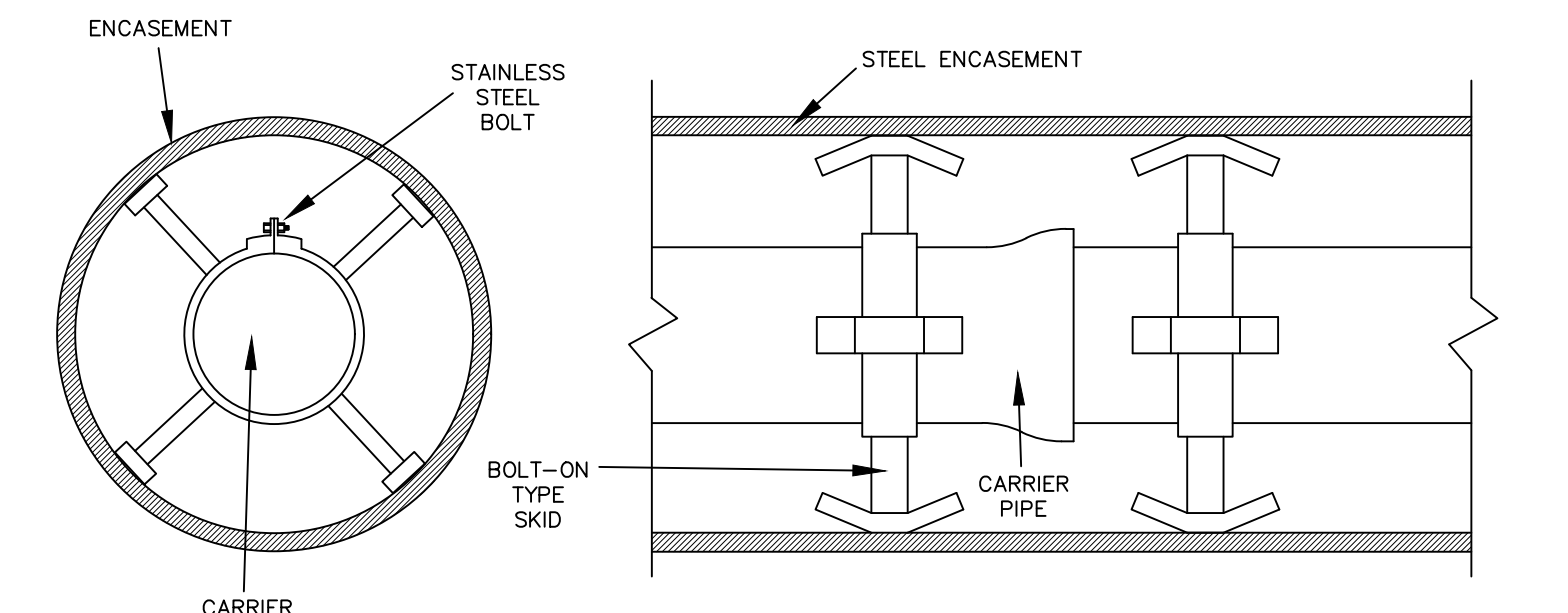
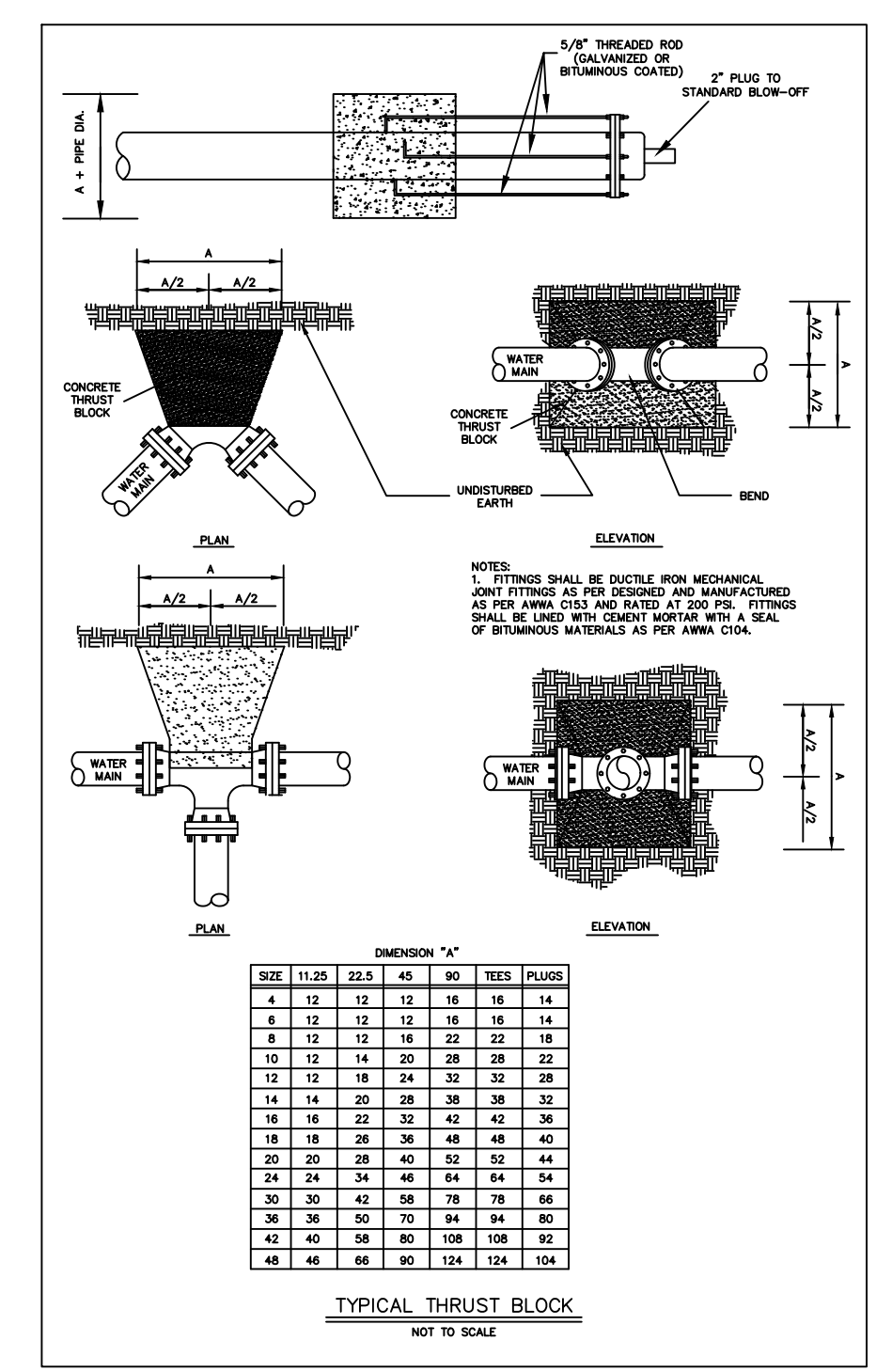
UTILITY CONSTRUCTION



2" VALVE WITH BLOW-OFF
 NTS

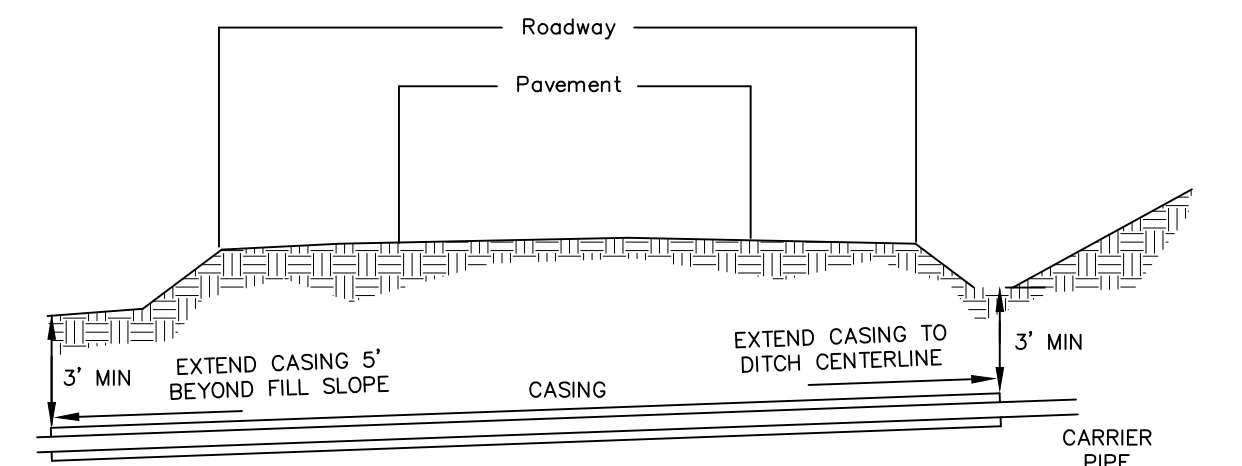


MUELLER, SUPER CENTURION 200; Cat. # A-423, 5 1/2" Main Valve Opening, 8" M.J. Inlet Connection, 3 1/2 ft. Bury, 2-2 1/2" Hose Nozzles, 1-4 8" Pumper Nozzle, National Standard Nozzle Threads, National Standard Operating Nut, Open Left, Color Yellow

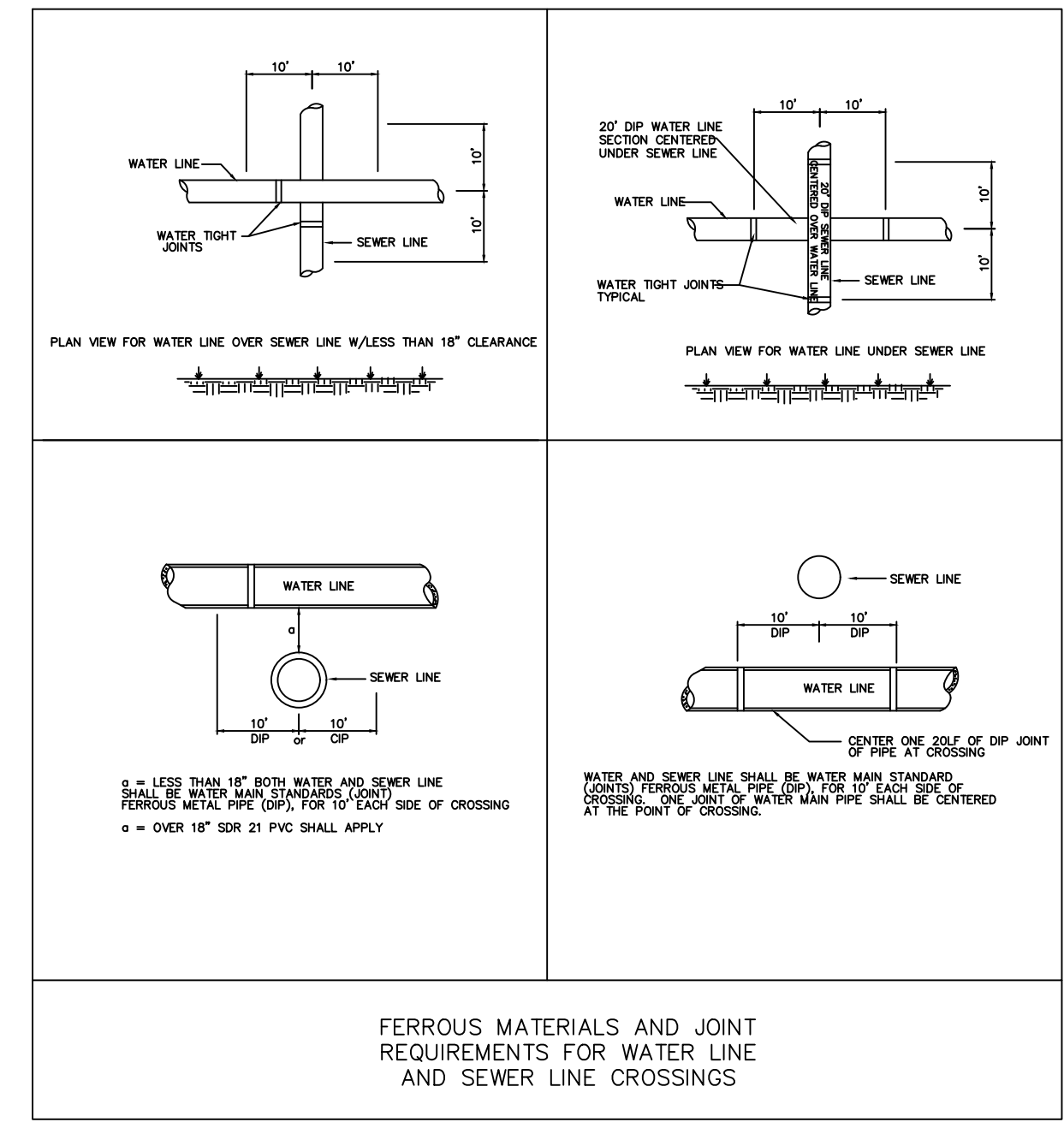
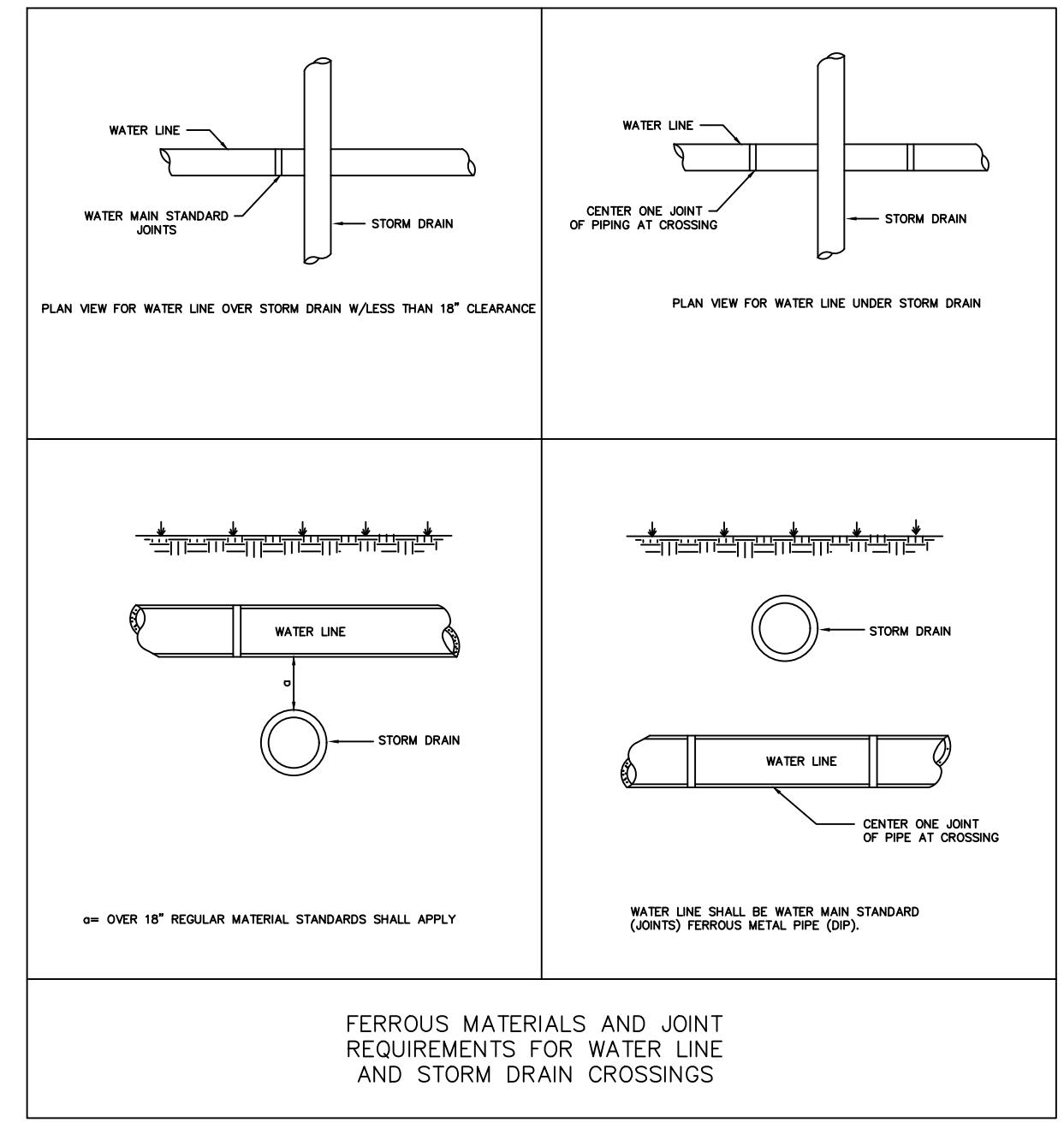
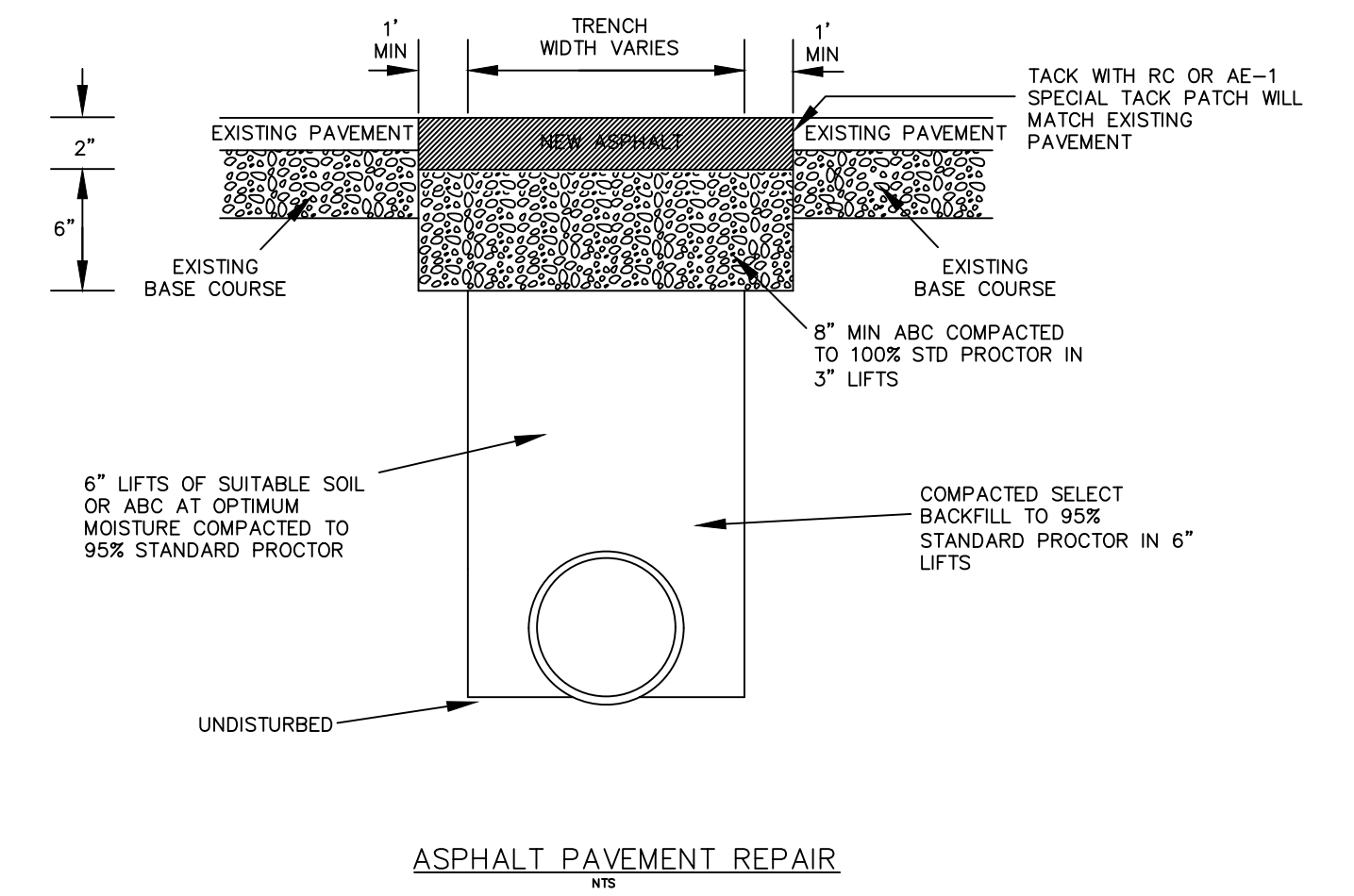


MINIMUM WALL THICKNESS OF SMOOTH WALL OR SPIRAL WELDED STEEL ENCASEMENT PIPE FOR BORING AND JACKING IS AS FOLLOWS:

Pipe Sizes (O.D.)	Wall Thickness (In.)
4"-12-3/4"	0.188
16"	0.250
18"	0.250
20"	0.250
24"	0.250
30"	0.250
36"	0.250
48"	0.250



- 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 ENCASEMENT PIPE SHALL BE BUTT-WELDED TO THE SECTION PREVIOUSLY JACKED INTO PLACE. ENCASEMENT 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 ENCASEMENT PIPE, GROUT HOLES SHALL BE INSTALLED IN THE TOP SECTION OF THE ENCASEMENT 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.



- GENERAL NOTES:
- ONLY DISTURB CLEAR OR GRADE AREAS NECESSARY FOR CONSTRUCTION. FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED. EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.
 - CLEAR AND GRUB AREAS TO BE FILLED TO REMOVE TREES, VEGETATION, MUCK, ROOTS, OR OTHER OBJECTIONABLE MATERIAL THAT WOULD AFFECT THE PLANTED STABILITY OF THE FILL. PLACE FILL IN LAYERS NOT TO EXCEED 6" IN THICKNESS AND COMPACT THE LAYERS AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, OR OTHER RELATED PROBLEMS.
 - KEEP DIVERSIONS AND CHANNELS AND OTHER WATER CONVEYANCE MEASURES FREE OF SEDIMENT AT ALL TIMES.
 - ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE INFILTRATION, AND FACILITATE VEGETATION ESTABLISHMENT.
 - PERMANENTLY STABILIZE ALL GRADED AREAS IMMEDIATELY AFTER FINAL GRADING IS COMPLETED ON EACH AREA. 2:1 OR STEEPER SLOPES MUST HAVE TEMPORARY GROUND COVER WITHIN 7 DAYS. 3:1 SLOPES OR FLATTER SLOPES MUST HAVE TEMPORARY GROUND COVER WITHIN 14 DAYS.