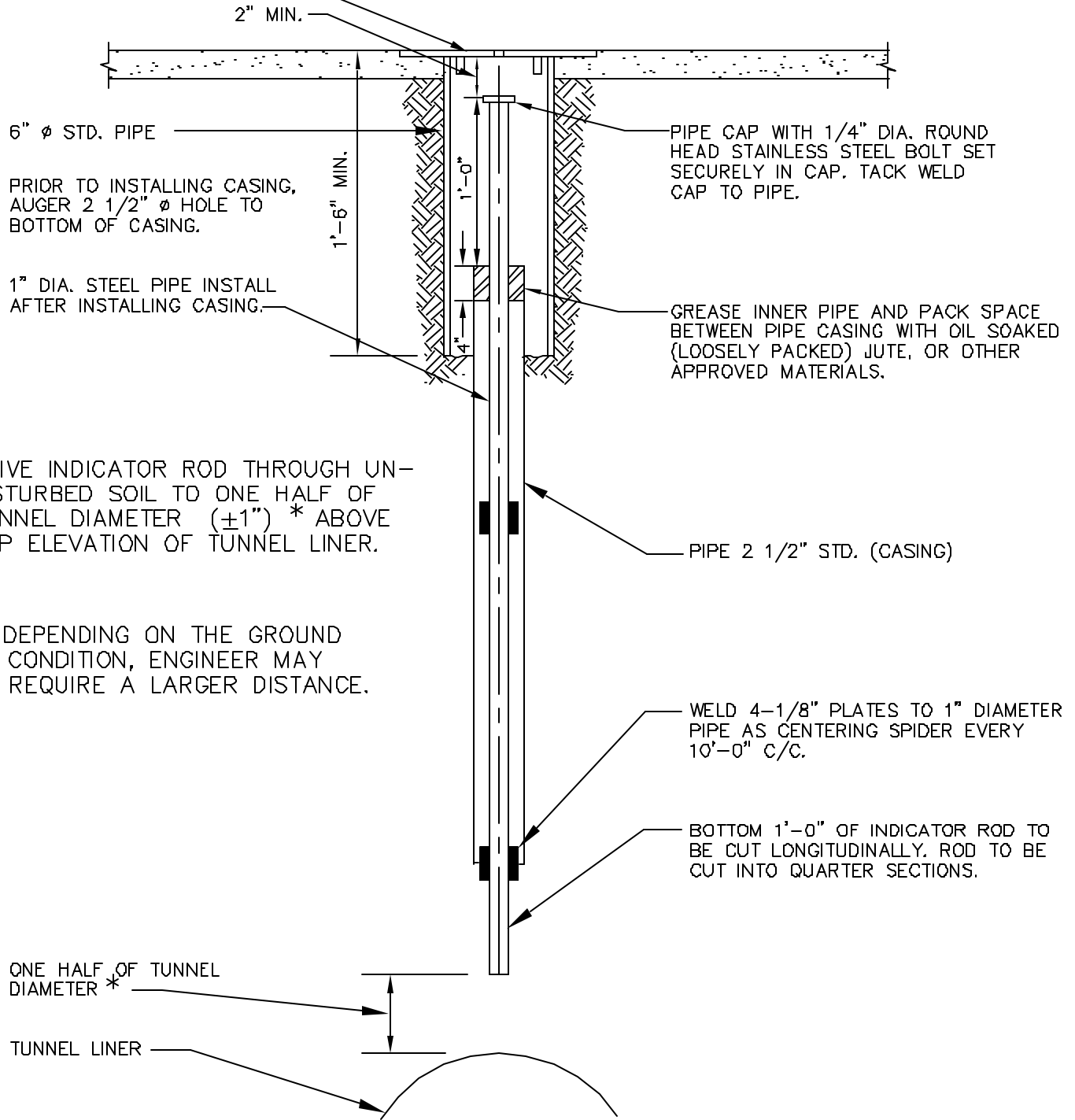


IF THE DEPTH OF COVER OVER TUNNEL LINER IS LESS THAN 6'-0" THE LOCATION AND DETAIL OF SETTLEMENT INDICATOR SHALL BE SHOWN ON THE DRAWINGS.

8" DIA. x 1/4" THICK STEEL PLATE WITH 3/4" DIA. HOLE IN CENTER. WELD 3-2"x1"x1/2" LUGS TO PLATE AS CENTERING DEVICE. SET COVER ASSEMBLY FLUSH WITH SURFACE.



6" ϕ STD. PIPE

PRIOR TO INSTALLING CASING, AUGER 2 1/2" ϕ HOLE TO BOTTOM OF CASING.

1" DIA. STEEL PIPE INSTALL AFTER INSTALLING CASING.

PIPE CAP WITH 1/4" DIA. ROUND HEAD STAINLESS STEEL BOLT SET SECURELY IN CAP. TACK WELD CAP TO PIPE.

GREASE INNER PIPE AND PACK SPACE BETWEEN PIPE CASING WITH OIL SOAKED (LOOSELY PACKED) JUTE, OR OTHER APPROVED MATERIALS.

DRIVE INDICATOR ROD THROUGH UN-DISTURBED SOIL TO ONE HALF OF TUNNEL DIAMETER ($\pm 1"$) * ABOVE TOP ELEVATION OF TUNNEL LINER.

PIPE 2 1/2" STD. (CASING)

* DEPENDING ON THE GROUND CONDITION, ENGINEER MAY REQUIRE A LARGER DISTANCE.

WELD 4-1/8" PLATES TO 1" DIAMETER PIPE AS CENTERING SPIDER EVERY 10'-0" C/C.

BOTTOM 1'-0" OF INDICATOR ROD TO BE CUT LONGITUDINALLY. ROD TO BE CUT INTO QUARTER SECTIONS.

ONE HALF OF TUNNEL DIAMETER *

TUNNEL LINER

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

APPROVED: SEP 12 2002

Paul P. [Signature]
Chief Engineer

STANDARD DETAIL

EARTH TUNNEL SUBSURFACE
SETTLEMENT INDICATOR

M
7.0