



- (1) MULTI-DIRECTIONAL SLIP BASE BREAKAWAY STRUCTURAL PIPE SIGN SUPPORT STANDARD SHALL BE APPROVED FOR ALL STRUCTURAL PIPE SIGN POSTS LOCATED WITHIN THE CLEAR ZONE AND NOT PROTECTED BY AN APPROVED BARRIER SYSTEM.
- (J) POST STUB HEIGHT SHALL BE 4 INCHES OR LESS ABOVE FINISHED GROUND SURFACE.
- (K) ALL FINISHED COMPONENTS OF THE SLIP BASE SYSTEM SHALL BE PERMANENTLY MARKED TO INDICATE THE MANUFACTURER. METHOD, DESIGN, AND LOCATION OF MARKING SHALL BE AS APPROVED BY THE ENGINEER.
- (L) ANCHORS MAY BE EXPANSION TYPE AS SHOWN OR ADHESIVE TYPE LISTED ON THE OPL MEETING THE STRENGTH REQUIREMENTS. EXPANSION ANCHORS SHALL CONSIST OF 5/8 INCH DIAMETER STUD BOLT WITH UNC-SERIES BOLT THREADS ON THE UPPER END WITH HEAVY HEX NUT PER ASTM A563, AND HARDENED WASHER PER ASTM F436. THE STUD BOLT SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI AND ULTIMATE TENSILE STRENGTH OF 75 KSI.
- (M) INSTALL MULTI-DIRECTIONAL SLIP BASE STRUCTURAL SIGN SUPPORT SYSTEM AS SHOWN OR APPROVED EQUAL. ONLY THOSE SYSTEMS APPROVED BY FHWA ACCEPTANCE LETTER AND FOUND ON THE TDOT OPL SHALL BE USED.
- (N) SCHEDULE 80 PIPE SPECIFICATIONS (SIGN POST):
  - 2.875" OUTSIDE DIAMETER
  - 0.276" NOMINAL WALL THICKNESS
  - STEEL TUBING PER ASTM A500 GRADE C
  - OTHER SEAMLESS OR ELECTRIC-RESISTANCE WELDED STEEL TUBING OR PIPE WITH EQUIV. OUTSIDE DIA. AND WALL THICKNESS MAY BE USED IF THEY MEET THE FOLLOWING:
    - 46,000 PSI MINIMUM YIELD STRENGTH, 62,000 PSI MINIMUM TENSILE STRENGTH
    - WALL THICKNESS (UNCOATED) SHALL BE WITHIN THE RANGE OF 0.248" TO 0.304"
    - OUTSIDE DIAMETER (UNCOATED) SHALL BE WITHIN THE RANGE OF 2.855" TO 2.895"
    - GALVANIZATION PER ASTM A123