%" Dia. bolts with washer and lock washer

Ground line

Anchor unit -

Section C-C

Max projection of the stub post is 4" above a 60" chord aligned radially to the center line of the highway and connecting any point,

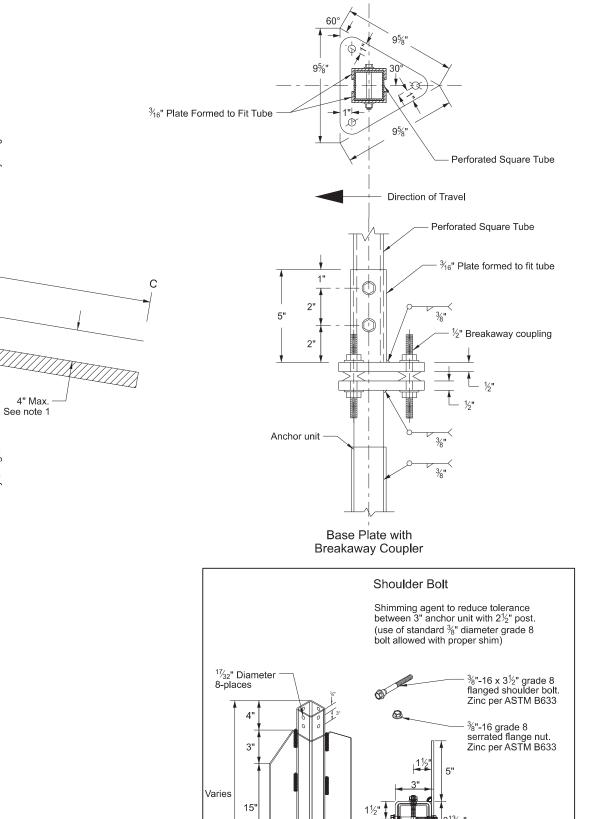
within the length of the chord, on the ground surface on one side of the support to a point in the ground surface on the other side.

60"

25"

15"

Breakaway Coupler System for Perforated Tubes



3" Anchor Unit

Notes:

- 4" Vertical clearance of anchor or breakaway base. The 4" x 60" measurement is above and below post location and also back and ahead of post.
- 2. Use anchor unit of the same size and specification as the post.
- 3. Provide a minimum 8' distance between the first and fourth post on four post signs.
- Use the breakaway base system on standard D-754-24 or the breakaway coupling system manufactured from material meeting the requirements of ASTM A325 fasteners with the special requirements specified by DENT BREAKAWAY IND., INC. which meets the test requirements of NCHRP Report 350.

| | | | | . 5 | | | | |
|-----------------------|-----------------------------|---------------------------------|-----------------------|---------------------------------|--------------|--|-----------------------------------|--|
| Number of Posts | Telescoping Perforated Tube | | | | | | | |
| | Post Size In. | Wall Thick- ness Gauge | Sleeve Size In. | Wall Thick- ness Gauge | Slip Base | Anchor Size Without Slip Base In. | Anchor Wall Thickness Guage | |
| 1 | 2 | 12 | | | No | 21/4 | 12 | |
| 1 | 21/4 | 12 | | | No | 2½ | 12 | |
| 1 | 2½ | 12 | | | (B) | 3(C) | 7 | |
| 1 | 2½ | 10 | | | Yes | | 7 | |
| 1 | 21/4 | 12 | 2 | 12 | Yes | | 7 | |
| 1 | 2½ | 12 | 21/4 | 12 | Yes | | 7 | |
| 2 | 2½ | 10 | | | Yes | | 7 | |
| 2 | 21/4 | 12 | 2 | 12 | Yes | | 7 | |
| 2 | 2½ | 12 | 21/4 | 12 | Yes | | 7 | |
| 3 & 4 | 2½ | 12 | | | Yes | | 7 | |
| 3 & 4 | 2½ | 10 | | | Yes | | 7 | |
| 3 & 4 | 2½ | 12 | 21/4 | 12 | Yes | | 7 | |
| 3 & 4 | 21/4 | 12 | 2 | 12 | Yes | | 7 | |
| 3 & 4 | 2½ | 10 | 2¾ ₁₆ | 10 | Yes | | 7 | |

- (B) $2\frac{1}{2}$ " 12 gauge posts do not need breakaway bases unless support is placed in boggy, wet, or loose soil areas.
- (C) 3" anchor unit

Direction of Traffic

| DEPARTI | NORTH DAKOTA MENT OF TRANSPORTATION | | | |
|----------------------|---|--|--|--|
| | 10-3-2013 | | | |
| REVISIONS | | | | |
| DATE | CHANGE | | | |
| 08-30-19 08-05-24 | Updated notes to active voice New Design Engr PE Stamp, Electronic Stamp/Signature. Corrected "typo" in C-C note | | | |

