COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC STANDARDS
SIGNING

11-13-70
### Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

**POST MOUNTED SIGNS, TYPE A BREAK-AWAY**
(EXTRUDED ALUMINUM CHANNEL SIGN)

<table>
<thead>
<tr>
<th>Model</th>
<th>Note</th>
<th>Size</th>
<th>Code</th>
<th>Color</th>
<th>Base Connection Data</th>
<th>Fuse Plate Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Foundation Data</td>
<td></td>
</tr>
</tbody>
</table>

**Foundation Data**
- Length: [Length] ft
- Width: [Width] ft
- Depth: [Depth] ft

**Base Connection Data**
- Section C-C
- Section A-A
- Section B-B

**Fuse Plate Data**
- Section 22

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**General Notes**
- For details of Extruded Aluminum Channel signs and Traffic Construction Standards, see [Link].
- See item 5.43 of T702A for base section required for post.

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**Assembly Instructions**
1. **Step 1:** Install base with bolts and nuts with flat washers on each channel bracket.
2. **Step 2:** Install base with nuts and bolts as required to align post.
3. **Step 3:** Verify bolt in channel tightly to the post, using a torque wrench.
4. **Step 4:** Install base with bolts and nuts with flat washers on each channel bracket.
5. **Step 5:** Tighten all bolts to specification.

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**Revised by:**
[Name]
[Date]
DESIGN CRITERIA

The design is based on 50 MPH wind speeds and adjustment standards.

Dimensions, elevations, slopes and situations shown are for illustrative purposes only and actual cases would depend on field conditions.

NOTE:
1. Top of footing is above reference line. It is indicated by a (+) value if below by a (-) value.
2. Lateral placement shall be determined in the field by the engineer prior to installation.
3. For locations where there is an immovable curb, the horizontal clearance to side of curb shall be at least 2'-0" beyond the face of the curb.
4. Location of sign shall be such as to avoid placing supports in drainage ditches.

Commonwealth of Pennsylvania
Department of Transportation
Bureau of Traffic Engineering

POST MOUNTED SIGNS - TYPE I
ERECTIO N DETAILS

N/A

NOTES
## POST SELECTION TABLE FOR BREAKAWAY SIGNS

### POST MOUNTED SIGNS-TYPE I

<table>
<thead>
<tr>
<th>Height (H)</th>
<th>Post Selection Example</th>
<th>Ground Line</th>
<th>Sign on Two Posts</th>
<th>Sign on Three Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
<td></td>
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<tr>
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<td><img src="image3" alt="Diagram" /></td>
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<td></td>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
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<tr>
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<td></td>
<td><img src="image7" alt="Diagram" /></td>
<td><img src="image8" alt="Diagram" /></td>
<td></td>
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</tbody>
</table>

### Table: Post Selection Table for Breakaway Signs

<table>
<thead>
<tr>
<th>Height (H)</th>
<th>Post Selection Example</th>
<th>Ground Line</th>
<th>Sign on Two Posts</th>
<th>Sign on Three Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
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<td><img src="image9" alt="Diagram" /></td>
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<tr>
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<td><img src="image11" alt="Diagram" /></td>
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<td><img src="image13" alt="Diagram" /></td>
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<td>12</td>
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<td><img src="image17" alt="Diagram" /></td>
<td><img src="image18" alt="Diagram" /></td>
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</tbody>
</table>

### GENERAL NOTES FOR SELECTION OF SIGN SUPPORT POSTS

1. Determine required values of H, V, \( \theta \), and \( W \) as described in paragraphs 2, 3, 4, and 5 below.
2. Height of sign support post to be selected from Table.
3. **Post Selection Example**
   - Determine post height by the formula:
     
     \[ H = \frac{V}{\cos \theta} \]

### Materials

- **Post**
  - Diameter: 3.5 inches
  - Length: 7 feet

- **Base**
  - Diameter: 3.5 inches
  - Length: 2 feet

**Commonwealth of Pennsylvania**

**DEPARTMENT OF TRANSPORTATION**

**BUREAU OF TRAFFIC ENGINEERING**

**POST SELECTION TABLES**

**Director, Bureau of Traffic Engineering**

**Insignia and Signature**

**TC 7702 A**

**Rev. 2**
**POST SELECTION TABLE FOR BREAKAWAY SIGNS**

<table>
<thead>
<tr>
<th>Height ( &quot; ) in Feet</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>9</th>
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**GENERAL NOTES FOR SELECTION OF SIGN SUPPORTS**

- **COLUMNS 1 THROUGH 16**
  - The "Post Selection Table for Breakaway Signs" presents the recommended post supports for breakaway signs based on height. Each row corresponds to a specific height, and the columns list the post selection options.

- **COLUMN 16**
  - "Recommended" values are provided for each column, indicating the preferred choice for that height.

- **RECOMMENDED POST SELECTION EXAMPLE**
  - For a height of 5 feet, the recommended post selection is "3.32."

- **POST MOUNTED SIGNS-TYPE II**
  - This table is designed for use with Commonwealth of Pennsylvania Department of Transportation Bureau of Traffic Engineering post mounted signs of Type II, where the selection of post supports is crucial for structural integrity and safety.
ELEVATION VIEW

AUGERED POST DETAIL

NOTE:
For locations where there is an unmountable curb, the horizontal clearance shall be 30" minimum beyond the face of the curb. The details and clearances shown are typical for all sign installations.

END VIEW

GROUND LINE

30"x36"

24"x24" or 32"x32"

4LB BAR

3 LB BAR

4 LB BAR

5 LB BAR

6 LB BAR

7 LB BAR

8 LB BAR

30"

1 1/2" DIAMETER

GROUNDED SINGLE OR DOUBLE REBAR

3 1/2" DIAMETER

3 1/2" DIAMETER

4LB BAR

ELEVATION AT NEAREST EDGE OF PAVEMENT

PLAN VIEW

3 LB BAR

S M 1-1/2-0-386 in 3
S M 1-1/2-0-866 in 3

4 LB BAR

S M 2-1/2-0-083 in 3
S M 2-1/2-0-386 in 3

ALUMINUM BOLT (SIGN TO POST)

NOTE:
- A hot washer shall be used on the face of all signs.
- All materials & workmanship shall be in accordance with the appropriate specification in PennDOT Form 408 or 409.
SECTION THRU BRIDGE
SINGLE RECTANGULAR SIGN

NOTE A
Date of final drawings on bridge is the date of submittal of project. If section or as indicated by the pavement edge markings.

SECTION B-B
PIPE BASE DETAIL

DOUBLE ROUTE MARKER WITH 36" SHIELD
(PARTS NOT SHOWN SIMILAR TO SINGLE RECTANGULAR SIGN)

MOUNTING BRACKET DETAILS

Anchor Detail

VIEW A-A

ANCHOR DETAIL

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEER-MS
ERECITION DETAILS
POST MOUNTED SIGNS
STRUCTURE CONNECTION