NOTES:

1. S-Hook is matched to the strain pole design number (see table). S-Hook and turnbuckle are required at one end of simple spans, all ends of complex spans. S-Hook shall be closed at pole end. If S-Hook begins to yield during installation, it shall be removed and replaced. The wire tension shall be adjusted to minimize movement of signal heads in high winds. Typical tension is 600 to 650 lbs.

2. Lock wire shall be stainless steel, 0.125" soft temper, wound to prevent turning of the turnbuckle body. Finished span shall have at least 2 ft of space for turnbuckle adjustment. Turnbuckle shall not be over-tightened. Use 8" hand tools, maximum.

3. If signal orientation is not perpendicular to span and tether wire, then use an anchor extension. Clamp assembly must be attached to the flat side of the extension bar.

4. Install safety tie at each turnbuckle. This wire shall be 1" x 0.125" stainless steel. Tie should be stock, but not so stock as to contact pole. Use 3 clips per end at 4-1/2" spacing.

5. Tether wire shall be ASTM A475 HS or EHS Grade 5/8". On all spans, install tether horizontally. Maintain clearance of 17' to 19' over roadway.

6. Span wire clamp as per Standard Construction Drawing TC-85.21 required for tether wire attachment or approved equal rated at 3650 lbs or higher. Alternate attachment method shall not be permitted.

7. Safety tie anchor height above tether is adjusted in the field before turnbuckle is installed. Dimension X (Safety Tie Height) shall be adjusted so that the minimum vertical clearance of the sagging tether wire above the pavement without the S-Hook installed is at least 14'. Minimum distance between the safety tie clamp and tether clamp shall be 1.5 and contain enough slack for head to sway in high winds. Safety tie anchor may be any galvanized or stainless steel pole clamp assembly rated at 3650 pounds or higher.

8. On spans with bullrings, a tie shall be provided at each turnbuckle. This wire shall be 1" x 0.125" stainless steel. Tie should be stock, but not so stock as to contact pole. Use 3 clips per end at 4-1/2" spacing.

9. All backplates shall have louvers and 2" fluorescent yellow reflective border. Border shall not be applied to backplates facing alternate directions by groups, as shown. Louvers open area shall be at least 8 percent of the total backplate area.

10. Do not tether signs on signal spans.

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**DETAIL A**

1. Washed and furnished in accordance with standard construction drawing TC-85.21.
2. Two or more sets of plans may be referenced for the completion of the design.
3. Tether Wire Clamp Assembly and Safety Tie Anchor Assembly shall be furnished in accordance with the standard construction drawing TC-85.21.
4. For all simple spans, all ends of complex spans. S-Hook and turnbuckle are required at one end.
5. Any galvanized or stainless steel pole clamp assembly rated at 3650 lbs or higher.
6. A minimum of 2" of space for head to sway in high winds. Safety tie anchor may be any galvanized or stainless steel pole clamp assembly rated at 3650 pounds or higher.
7. On spans with bullrings, a tie shall be provided at each turnbuckle.
8. This vertical tie shall be 1" x 0.125" stainless steel. Tie should be stock, but not so stock as to contact pole. Use 3 clips per end at 4-1/2" spacing.
9. Tether wire shall be ASTM A475 HS or EHS Grade 5/8".
10. Span wire clamp as per Standard Construction Drawing TC-85.21 required for tether wire attachment or approved equal rated at 3650 lbs or higher.

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**DETAIL B**

1. Washed and furnished in accordance with standard construction drawing TC-85.21.
2. Two or more sets of plans may be referenced for the completion of the design.
3. Tether Wire Clamp Assembly and Safety Tie Anchor Assembly shall be furnished in accordance with the standard construction drawing TC-85.21.
4. For all simple spans, all ends of complex spans. S-Hook and turnbuckle are required at one end.
5. Any galvanized or stainless steel pole clamp assembly rated at 3650 lbs or higher.
6. A minimum of 2" of space for head to sway in high winds. Safety tie anchor may be any galvanized or stainless steel pole clamp assembly rated at 3650 pounds or higher.
7. On spans with bullrings, a tie shall be provided at each turnbuckle.
8. This vertical tie shall be 1" x 0.125" stainless steel. Tie should be stock, but not so stock as to contact pole. Use 3 clips per end at 4-1/2" spacing.
9. Tether wire shall be ASTM A475 HS or EHS Grade 5/8".
10. Span wire clamp as per Standard Construction Drawing TC-85.21 required for tether wire attachment or approved equal rated at 3650 lbs or higher.

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**TABLE**

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<tr>
<td>I - 4</td>
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