1. Vertical and horizontal clearance requirements shall be as shown on the contract plans.

2. No post splices permitted in lower third of height, nor closer than 3' - 0" to bottom chord, except as otherwise noted. No chord shop splices permitted in first two-thirds of the span, except as otherwise noted. A maximum of two splices are permitted in the post. For post or chord shop splice details, see Standard Plan G-70.10.

3. The back-up plates or rings for all full penetration welds shall be welded continuously to the joined pieces. This can be done by either a continuous fillet weld on the back side of the piece, or by a continuous weld in the root of the full penetration weld.

4. All bolt holes shall be drilled, and the diameter shall be 1/16" larger than the nominal bolt diameter, except as noted.

5. The design and analysis of the structures has been done in accordance with AASHTO Standard Specification for Structural Supports for Highway Signs, Luminaires and Traffic Signals Dated 2001, using 90 MPH wind velocity and fatigue category - I.

6. Adjust post alignment in plane normal to roadway centerline by means of leveling nuts located below base plate to maintain upward slope in cantilever arm(s). Tighten anchor nuts above base plate in accordance with Standard Specification 6-03.3(33).

7. Variable Message Signs (VMS) exceeding 700 lbs. and/or 200 sq. ft. shall not be installed on cantilever structure.

8. For electrical requirements, see Standard Plan J-75.45.

NOTES

SUM OF SIGN FOR DOUBLE CANTILEVER

TOTAL SIGN AREA (FT²)

0 OR LESS

50 OR LESS

50+ TO 100

100+ TO 150

150+ TO 200

200+ TO 250

250+ TO 300

300+ TO 350

350+ TO 400

400+ TO 500

END

ALL TRUSS DIAGONALS AND STRUTS SHALL BE 1/2" PIPE (0.145" WALL)

MATERIAL SPECIFICATIONS

PIECE (CHORDS, DIAGONALS, STRUTS AND POSTS)

ASTM A 36

OR ASTM A 53

GRADE B

TYPE E OR 8, OR A 500 GRADE B

PLATES

ASTM A 36

SHAPES

ASTM A 36

ASTM A 992

BOLTS, NUTS & WASHERS

STD. SPEC.

9-05.03

PIPE, PLATE & SHAPE GALVANIZING

AASHTO M 111

FASTENER

GALVANIZING

AASHTO M 232

CHORD SELECTION

SIGN AREA (FT²)

50 OR LESS

50+ TO 100

100+ TO 150

150+ TO 200

CHORD SIZE

2" 0.154" 2 0.218" 2 1/2" 0.203" 3" 0.218"
VERTICAL STRUTS AT SPAN END ONLY

VERTICAL "FAR" TRUSS DIAGONAL (TYP.)

CAMBER EACH TRUSS 0.002 FT/FT FOR DOUBLE CANTILEVER (TYP.)

VERTICAL "FAR" TRUSS DIAGONAL (TYP.)

0 MIN. TO 1' - 0" MAX.

PANEL LENGTH (4' - 3" MAX.) TO BE CONSTANT THROUGHOUT SPAN

VERTICAL CLEARANCE - 1' - 6" MIN.

TRUSS & SIGN

\[ X/2 \]

SCREEN - SEE DETAIL, SHEET 4

BOTTOM OF LUMINAIRE BRACKET, WHEN SIGN LIGHTING IS SHOWN IN THE CONTRACT

1 3/4" CAPPED NIPPLE

HAND HOLE ON SIDE AWAY FROM TRAFFIC

H

\[ L = 21' - 0" \text{ MAX.} \]

\[ X/2 \]

\[ L = 21' - 0" \text{ MAX.} \]

SIGN CENTERLINE MAY VARY FROM TRUSS CENTERLINE TO PROVIDE MINIMUM VERTICAL CLEARANCE.

ELEVATION

DOUBLE CANTILEVER SIGN STRUCTURE

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
HEMISPHERICAL POST FINIAL, 1/8" MIN. THICKNESS. INSTALL AFTER GALVANIZING

3/8" ALLEN HOLLOW SET SCREW WITH DOG POINT (TYP.) (CORROSION RESISTANT METAL OR COATING) AT 90" INTERVALS

CUT HOLE IN POST FOR WIDE FLANGE, 1/8" MAX. CLEARANCE ALL AROUND

ELEVATION

SECTION THROUGH FINIAL AND POST

FINIAL BRACKET

DIAGONAL CONNECTION DETAIL TYPICAL OF ALL DIAGONALS

BASE - SIDE

3/4" MAX

3/4" MAX

3/4" DIA. HOLE IN CHORD AT EACH END OF ALL DIAGONAL CHORDS AND STRUTS

SPAN END - SIDE

SPAN END - END

OPPOSITE HAND SHOWN FOR CLARITY

8" DIAM. BOLT CIRCLE

ENDS OF DIAGONALS SHALL BE CUT TO FIT NEATLY AGAINST CHORDS

CANTILEVER SIGN STRUCTURE (TRUSS-TYPE)

STANDARD PLAN G-60.10-02

STATE DESIGN ENGINEER DATE

Pasco Bakotich III 6/10/13

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

APPROVED FOR PUBLICATION SHEET 3 OF 4 SHEETS

CANTILEVER SIGN STRUCTURE (TRUSS-TYPE) STANDARD PLAN G-60.10-02 SHEET 3 OF 4 SHEETS APPROVED FOR PUBLICATION Pasco Bakotich III 6/10/13 STATE DESIGN ENGINEER DATE Washington State Department of Transportation
REMovable Rain Tight
Hand Hole Cover With Gasket
   - Fasten With Two Stainless Steel
(ASTM F 593) Screws

Hand Hole Frame

2" - 6" DiaM.
Bolt Circle

Hole in Post Base
(Hole DiaM. = Post I.D. - 2"

2" DiaM. Holes
For Anchor Bolts
(TYP.)

1/2" DiaM. Steel Bolt,
1 1/2" Long, With Washer
And Nut For Ground

Inside Edges Shall Be
Round and Smooth
All Around

24" O.D. Pipe (t = 0.969) Splice With
24" O.D. Upper Post (See Post Selection Table)
18" O.D. Pipe (t = 0.750) Splice With
18" O.D. Upper Post (See Post Selection Table)

200% UT
See Weld Detail "G"

1/4" Back-Up Bar

Seal Weld

Base Weld Detail

POST BASE DETAILS

100% UT

PIpe WALL

Back-Up Ring

Pipe O.D.

DETAIL "G"

Screen Detail

Drill and Tap for 1/4" Diameter Cap
Screw - Spacing Approx. 9" O.C.
ASTM F 993, W/ S.S. Washer
Liberally Coat The Threads
With Anti-Seize Compound
(TYP.)

Welded Galv. Cloth
1/16" x 7/16" Sq. Wrap
Around Base Plate
With 3" Min. Lap

Post Anchor Bolt (TYP.)

Top of Foundation

Top of Post

Anchor Bolt (TYP.)

Top of Foundation

Section B

View C

Post Base Details

Standard Plan G-60.10-02

Cantilever
Sign Structure
(Truss-Type)

Pasco Bakotich III
State Design Engineer

Washington State Department of Transportation

DATE

APPROVED FOR PUBLICATION

State Design Engineer

SheET 4 OF 4 SHEETS

Approved For Publication 6/10/13