FOUNDATION REINFORCEMENT AND BACKFILL DETAIL

CAMERA POLE FOUNDATION DETAILS

STANDARD PLAN J-39.10-00

SHEET 1 OF 1 SHEET

Washington State Department of Transportation

APPROVED FOR PUBLICATION

Praha Bashook III 06-27-11

NOTE:
1. These Foundations are designed for a minimum of 1,600 PSF allowable lateral bearing pressure for the soil. A Special Foundation shall be required for soil with allowable lateral bearing pressures lower than 1,600 PSF.
2. These Foundations are designed for installation on level ground, or on sloping ground, not to exceed 2:1 slopes. Slopes steeper than 2:1 require a special design.
3. Foundations constructed within ecology embankments shall be increased in depth, by the depth of the ecology embankment.
4. Foundations not within the parameters of this standard require Special Design. Contact the WSDOT Bridge and Structures Office through the Engineer for Special Foundation Design.
5. The top 2'-0" of the Foundation shall use a smooth finish (such as paper or cardboard). After the concrete has cured, this entire form shall be removed.
6. Galvanized Welded Wire mesh shall be 3 mesh per linear inch, 0.062" diam. wire, with 0.167" overlap. Contractor to form fit and install.

EXCAVATION SOIL (TYP.)

LOAD CASE # 1
Camera (1) - EPA = 4.00 sq. ft. at 2'-0" above pole top, and:
Dish (1) - 1'-0" diameter at pole top level.

LOAD CASE # 2
Camera (1) - EPA = 4.00 sq. ft. at 2'-0" above pole top, and:
Camera (2) - EPA = 0.54 sq. ft. each at 1'-0" and 2'-0" from pole top, and
NEMA Cabinet (2) - EPA = 1.33 sq. ft. each at 3'-0" from pole top, install both NEMA cabinets back to back, and:
Radio Equipment (2) - EPA = 3.25 sq. ft. each at 2'-0" and 6'-0" from pole top.
EPA = Effective Projected Area

ALTERNATE # 2 - CONSTRUCTION METHOD

1. Shoring or Excavation as Required. Excavated area shall be backfilled with Controlled-Density Fill or with soil in accordance with Standard Specification 0-60.3(3).

DESIGN CRITERIA:
This structure has been designed according to the Fifth Edition 2006 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signs. Basic wind velocity is 80 MPH. Design Life/Recurrence Interval 50 years and Fatigue Category III.