



#### Design Basis:

- 1) North Carolina State Building Code 2024, Risk Category II
- 2) Ultimate Design Wind Speed: 110 MPH, Exposure C
- 3) Sign Dead Load: 5 PSF Surface Area (Assumed)
- 4) Design shown is for base pole & concrete foundation only
- 5) No cabinet engineering provided

#### Soils and Foundations Data (Assumed w/o soil report):

- 1) Allowable vertical bearing pressure: 2,000 PSF
- 2) Allowable lateral bearing pressure: 150 PSF/Ft.
- 3) These listed values correspond to sand, silty sand, clayey sand, silty gravel, or clayey gravel (Class 4). Contractor shall verify these values prior to casting any footings.

#### Material Specifications:

- 1) Aluminum Design Manual (AA ADM 2020):
  - a) Aluminum Pipe: 6061-T6
  - b) All exposed materials shall be properly protected from weathering and/or corrosion
- 2) American Concrete Institute Building Code (ACI 318-19):
  - a) All concrete shall have minimum compressive strength of 2,500 psi @ 28 days
  - b) All concrete shall be placed in direct contact with undisturbed soil. No backfilled soil adjacent to the foundation without Engineer's approval
- 3) Larger size and/or stronger material may be substituted

#### Construction Notes:

- 1) Contractor to verify all field conditions prior to erection. Notify Engineer of any discrepancies.
- 2) All field work shall comply with applicable OSHA regulations
- 3) Exercise care during excavation of the foundation to minimize disturbance to the surrounding soils
- 4) Do not locate sign structure on the side or top of a slope in excess of 3:1
- 5) Place 6" concrete in bottom of hole prior to main pour
- 6) Do not allow water to pond in the excavation prior to concrete placement. Slope top of concrete to shed water

**Byron L. Martin, P.E.**  
**Sign Structure Engineering**

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**PYLON/FOUNDATION DESIGN FOR:**  
**CAROLINA SIGN & SERVICE**

**EAGLES NEST**  
**10303 McDOUGALD RD.**  
**BROADWAY, NC 27505**

Project No:

Drawn by: DAN

Approved: BLM

Date: 10-29-25

Not To Scale