STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

METAL STRAIN POLE STANDARDS FOR
ZONE 4 – 90 mph (40 m/s)

ALL COUNTIES WITHIN DIVISIONS 5, 7, 8, 9, 10, AND 12.
ALEGHNAY, CALDWELL, SURRY, WILKES, AND YADKIN COUNTIES IN DIVISION 11.
BUNCOMBE, BURKE, MCDOUGAL, AND RUTHERFORD COUNTIES IN DIVISION 13.
CLAY, HENDERSON, JACKSON, MACON, POLK, RUTHERFORD, AND TRANSYLVANIA COUNTIES IN DIVISION 14.

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1. These notes provide information and requirements for the design, fabrication, and installation of the metal pole assemblies. This includes the selection, fabrication, and installation of metal pole assemblies. All materials used must conform to the specifications listed in Section 10.0 of the Standard Specifications. The design and installation of the metal pole assemblies must be in accordance with the requirements set forth in the standard specifications.

2. The following standard sections are based on light and heavy-duty cases. For variations, substitution or re-design of the specified poles and foundation, the designer must consult with the engineer to determine the most appropriate solution.

3. These metal pole standards make reference to the NCHRP "Standard Design" dated January 2000. The NCHRP "Standard Design" refers to the standard design for the metal pole assemblies. The standard design is based on the requirements set forth in the standard specifications.

4. This design is intended to be used as a template for the design and installation of metal pole assemblies. The design is based on the requirements set forth in the standard specifications.

5. The metal pole design shall conform to the "2000 AASHTO standard specifications for structural supports for concrete signs, luminaries and traffic signals" and latest approved specification. Design wind pressures and applications are in accordance with Section 8.0 of the AASHTO Standard Specifications.

6. The metal pole shall be fabricated in accordance with the requirements set forth in the standard specifications.

7. Base plate shall be fabricated in accordance with the requirements set forth in the standard specifications.

8. Anchor bolts, nuts, and washers shall be fabricated in accordance with the requirements set forth in the standard specifications.

9. All anchor bolts, nuts, and washers shall be galvanized in accordance with the requirements set forth in the standard specifications.

10. All other steel hardware material required but not specified above shall comply with section 1008-15 of the standard specifications.

11. Pole assembly shall be permanently tagged and engraved with the following: pole manufacturer name, pole model name, pole number, pole length, and pole type.

12. The design is based on the latest revision of the AASHTO standard specifications. The design is based on the requirements set forth in the standard specifications.

13. The metal pole shall be fabricated in accordance with the requirements set forth in the standard specifications.

14. The foundation size for poles in these metal pole standards is determined by conducting a subsurface soil investigation. For details of the foundation size, refer to the "Standard Design" dated January 2000. The "Standard Design" refers to the standard design for the metal pole assemblies. The standard design is based on the requirements set forth in the standard specifications.

15. The foundation size for poles in these metal pole standards is determined by conducting a subsurface soil investigation. For details of the foundation size, refer to the "Standard Design" dated January 2000. The "Standard Design" refers to the standard design for the metal pole assemblies. The standard design is based on the requirements set forth in the standard specifications.

16. This design is intended to be used as a template for the design and installation of metal pole assemblies. The design is based on the requirements set forth in the standard specifications.

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