

NOTES:

Design Poles (Concrete and Strain Poles) in accordance with the latest edition of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and Supplement thereto. For allowable unit stresses, meet the requirements of Section 6.

Place the prestressing symmetrically. Supply a sufficient amount of prestressing to provide a calculated compressive stress of 2.2 ksi for Type N-II and 3 ksi for Type N-III at the top of pole after all losses.

Concrete Strength shall be 6 ksi minimum at 28 days and 4 ksi minimum at transfer of the Prestressing force.

Reinforcing steel shall be A615 Grade 60. Provide a minimum area of non-prestressed reinforcement equal to 0.33% of the concrete area.

Prestressed Strands shall be A46 Grade 270 stress relieved or low relaxation.

One turn required for spiral apices and two turns required at the top and bottom of poles. Spiral shall be manufactured from cold-drawn steel wire meeting the requirements of ASTM A82.

Attach span wire assemblies (consisting of the catenary wire, the messenger wire, and the tetter wire) to the concrete poles in accordance with Section 6.34.

If a two point attachment is required by the plans, provide an eye bolt for the messenger wire, or field drills one of the locations indicated in the plans. Field drill the eyebolt hole for the tetter wire, when required, prior to installation.

Use cover plates made of non-corrosive materials and attached to the pole using lead anchors or threaded inserts embedded in the pole and round head chrome plated screws.

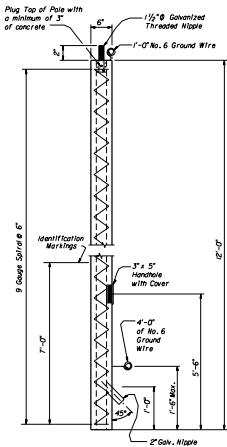
Attach ground wires to the reinforcing steel in the pole as necessary to prevent the ground wire from being displaced during concreting operations.

Identify concrete poles as to pole manufacturer, Department's pole type, length and Qualified Product List qualification number, by inset numerals 1" in height inscribed on the same face of the pole as the handhole and ground wire.

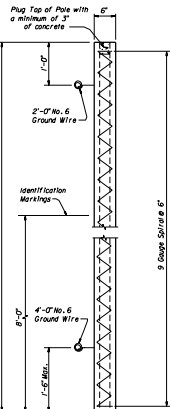
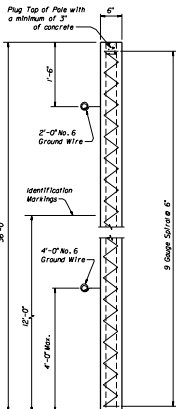
Provide a Class 3 Surface Finish as Specified in AASHTO-15.2.4.

Provide a minimum cover of 1".

Provide all poles with total taper of 0.52 IN/FT.

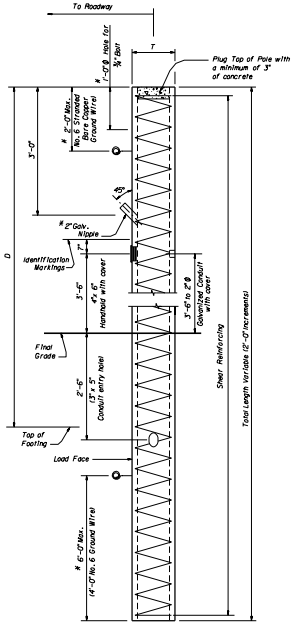


TYPE N-II POLE ON CONCRETE PEDESTAL



SERVICE POLES - TYPE N-III

(For installation, refer to Roadway and Traffic Design Standard, Index No. 07504)



POLE TYPES N-III THROUGH N-VII

Do not apply these items to Type N-III. Establish bolt hole locations, ground wire location and conduit location as shown in the plans.

MINIMUM REQUIRED MOMENT CAPACITY

D (feet)	TYPE OF POLE			
	N-III (4-11)	N-IV (4-11)	N-VI (4-11)	N-VII (4-11)
20	33	406	152	200
22	37	111	159	218
24	41	116	163	226
26	44	121	172	234
28	48	127	179	242
30	52	132	185	250
32	56	137	192	258
34	60	142	199	266
36	63	148	205	274
38	67	153	212	282
40	71	158	219	290
42	75	163	225	298
44	79	168	232	306
46	82	173	239	314
48	86	177	245	322
50	90	180	252	330

Service Conditions: Design poles to carry the "Minimum Required Moment Capacity." These moments are based on a dead load plus wind load combinations, therefore obtain the allowable stresses by multiplying these for normal exposure conditions given in Section 6 by the applicable factor from Section 2 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

The ultimate moment capacity of each pole shall be a minimum of 1.3 times the "Minimum Required Moment Capacity."

TYPE OF POLE	CONCRETE POLE	
	SIZE AT TOP (1)	SHEAR REINFORCING
Type II	6" x 6"	9 Gauge Spiral # 6"
Type III	6" x 6"	6 Gauge Spiral # 6"
Type IV	6" x 6"	5 Gauge Spiral # 6"
Type V	10" x 10"	5 Gauge Spiral # 6"
Type VI	12" x 12"	5 Gauge Spiral # 6"
Type VII	14" x 14"	5 Gauge Spiral # 6"

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD DESIGN

CONCRETE POLES

Designed By	Checked By	Date	Approved By
JP	00	10/29/77	W. J. [Signature]
Drawn By	Checked By	Date	Scale
JP	00	10/29/77	AS BUILT
Checked By: 00			1 of 1