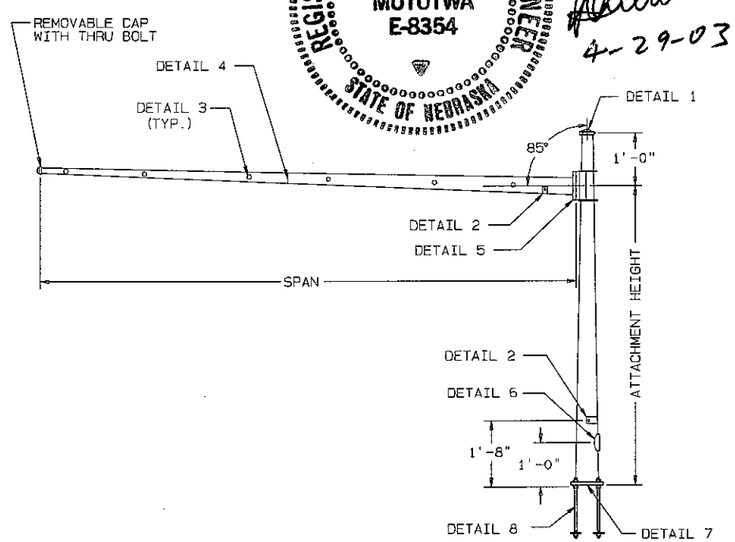
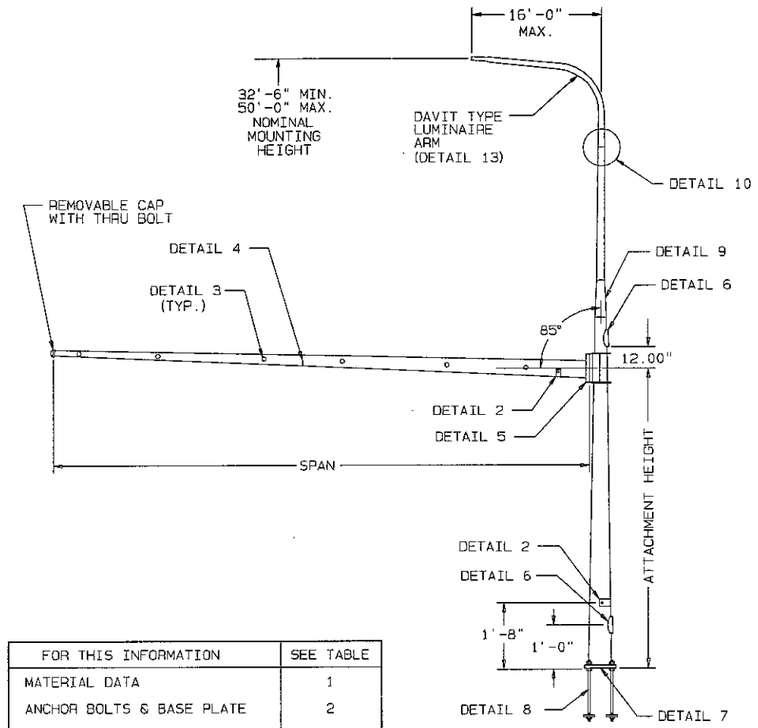
REGISTERED PROFESSIONAL ENGINEER
PETER M. MUTUTWA
E-8354
STATE OF NEBRASKA

4-29-03



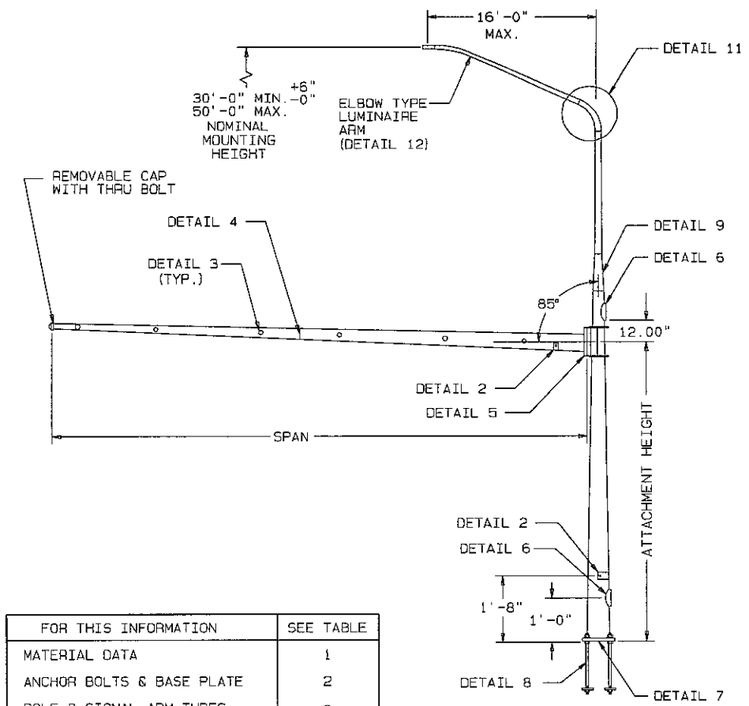
FOR THIS INFORMATION	SEE TABLE
MATERIAL DATA	1
ANCHOR BOLTS & BASE PLATE	2
POLE & SIGNAL ARM TUBES	2

WASHINGTON POLE TYPE II



FOR THIS INFORMATION	SEE TABLE
MATERIAL DATA	1
ANCHOR BOLTS & BASE PLATE	2
POLE & SIGNAL ARM TUBES	2
DAVIT LUM. ARM DATA	3

WASHINGTON POLE TYPE III-J



FOR THIS INFORMATION	SEE TABLE
MATERIAL DATA	1
ANCHOR BOLTS & BASE PLATE	2
POLE & SIGNAL ARM TUBES	2
ELBOW LUM. ARM DATA	4

WASHINGTON POLE TYPE III-T

DESIGN CRITERIA

2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.
-25 YEAR DESIGN LIFE/RECURRENCE INTERVAL
-FATIGUE CATEGORY III
-GALLOPING & TRUCK-INDUCED FATIGUE INCLUDED

WIND VELOCITY

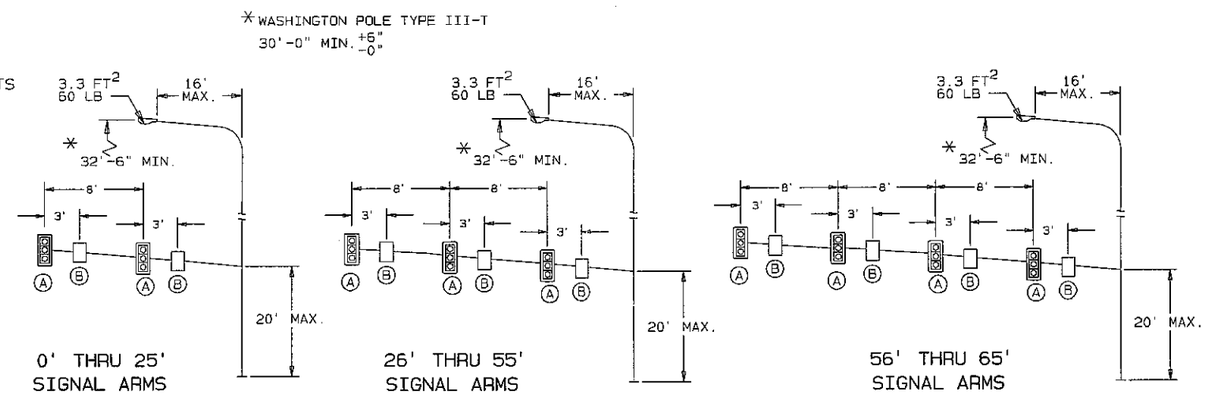
90 MPH ISOTACH

MAXIMUM TRUCK-INDUCED FATIGUE

65 MPH

CAFL AT CRITICAL CONNECTIONS

-POLE TO BASE PLATE CONNECTION = D
-ARM TO SIMPLEX PLATE CONNECTION = D
-SIMPLEX GUSSETS = ET
-POLE WALL AT SIMPLEX GUSSET = E
-POLE SHAFT = B'



DEVICE	DESCRIPTION	PROJ. AREA (FT^2)	WEIGHT (LBS)
Ⓐ	12"-3 SEC. SIGNAL WITH BACKPLATES	9.20	60
Ⓑ	30" X 24" DIRECTIONAL SIGN	5.00	60

XYZ VALUES LISTED ON SHEET 2 OF 3 INCLUDE SIGNS AND SIGNALS, AND ONE LUMINAIRE WITH A 16 FT. ARM ON THE TYPE III POLES.

LOADING INFORMATION

TABLE 1: MATERIAL DATA

COMPONENT	DESIGNATION	MIN. YIELD (KSI)
POLE/ARM TUBE - 0.250" & 0.313"	A572 GR. 65	65
ARM TUBE - 7 GA. & 3 GA.	A595 GR. A	55
BASE PLATE	A36	36
SIGNAL ARM ATTACHMENT	A36	36
SIGNAL ARM CONN. BOLTS	A325	--
ANCHOR BOLTS - 1.50" DIA.	A449	81
ANCHOR BOLTS - 2.00" DIA.	A449	58
NUTS	ASTM A563 GR. C, D, OR DH	-- --
WASHERS	ASTM F463	
GALVANIZING	A123 & A153	--

REV.	DATE	REVISION
A	08/13/02	ADDED 56'-65' ARM SPANS & REVISED IDENTIFICATION TAG -JKC
B	08/19/02	CAFL @ ARM TO SIMPLEX CONNECTION WAS "A" -JKC
C	09/20/02	CAFL @ ARM TO SIMPLEX PLATE & POLE TO BASE PLATE CONNECTIONS CHANGED FROM "C" TO "D" -JKC
D	04/29/03	GUSSET THICKNESS CHANGES DETAIL 5 SIGNAL ARM BASE DIA. 10" WERE 9.5" JEM

VALMONT.
VALMONT INDUSTRIES, INC.
VALLEY, NEBRASKA 68064
(402) 359-2201

DATE: 05/08/02 | DRAWN: JKC | JKC 05/10/02
ORDER NO. | SHEET OF | SHEET 1 OF 3 | REV.
TITLE: STATE OF WASHINGTON TRAFFIC SIGNAL STRUCTURES
DRAWING NO. DB00625 | D