CATALOG NUMBER	TYPE II SERIES POLE DATA: LENGTH "A"	SHAFT DIMENSIONS TOP O.D. X BASE O.D.	MATERIAL BREAKDOWN .120" THK.	.179" THK.	.239" THK.	.3125" THK.	.375" THK.	BASE SQ. "SQ."	BOLT CIRCLE "B.C."	BASE THK. "THK."	ANCHOR BOLT SIZE	MAST ARM LENGTH RANGE "F"
TYPE IIA-90-XX-W3724	22'-0" [6.7]	10 1/2" X 13 1/2" [267 X 343]	–	–	–	22'-0" [6.7]	–	18" [457]	18" [457]	1 1/2" [38]	1 1/2" X 60" [38 X 1524]	20'-0" THRU 45'-0" [6.1] [13.7]
TYPE IIB-90-XX-W3724	22'-0" [6.7]	13 1/4" X 16 1/4" [336 X 413]	–	–	–	22'-0" [6.7]	–	22" [559]	22" [559]	2" [51]	2" X 60" [51 X 1524]	50'-0" THRU 55'-0" [15.2] [16.8]
TYPE IIC-90-XX-W3724	22'-0" [6.7]	13 1/4" X 16 1/4" [336 X 413]	–	–	–	–	22'-0" [6.7]	22" [559]	22" [559]	2" [51]	2" X 60" [51 X 1524]	60'-0" THRU 65'-0" [18.3] [19.8]

CATALOG NUMBER	TYPE III SERIES POLE DATA: LENGTH "A"	SHAFT DIMENSIONS TOP O.D. X BASE O.D.	MATERIAL BREAKDOWN .120" THK.	.179" THK.	.239" THK.	.3125" THK.	.375" THK.	BASE SQ. "SQ."	BOLT CIRCLE "B.C."	BASE THK. "THK."	ANCHOR BOLT SIZE	LUMIN. ARM LENGTH "C"	MAST ARM LENGTH RANGE "F"	LUMIN MOUNTING HEIGHT "A2" (MAX.)	(MIN.)
TYPE IIIA-90-XX-XXXXX-W3724	22'-0" [6.7]	10 1/2" X 13 1/2" [267 X 343]	③	–	–	22'-0" [6.7]	–	18" [457]	18" [457]	1 1/2" [38]	1 1/2" X 60" [38 X 1524]	16'-0" MAX [4.9] MAX	20'-0" THRU 45'-0" [6.1] [13.7]	50'-0" [15.2]	27'-6" [8.69]
TYPE IIIB-90-XX-XXXXX-W3724	22'-0" [6.7]	13 1/4" X 16 1/4" [336 X 413]	③	–	–	22'-0" [6.7]	–	22" [559]	22" [559]	2" [51]	2" X 60" [51 X 1524]	16'-0" MAX [4.9] MAX	50'-0" THRU 55'-0" [15.2] [16.8]	50'-0" [15.2]	27'-6" [8.69]
TYPE IIIC-90-XX-XXXXX-W3724	22'-0" [6.7]	13 1/4" X 16 1/4" [343 X 413]	③	–	–	–	22'-0" [6.7]	22" [559]	22" [559]	2" [51]	2" X 60" [51 X 1524]	16'-0" MAX [4.9] MAX	60'-0" THRU 65'-0" [18.3] [19.8]	50'-0" [15.2]	27'-6" [8.69]

NOTES:

1.) SEE SHEET 1 OF 2 FOR DETAILS & NOTES (W3724-1)

2.) DIMENSIONS IN [ ] ARE METRIC. INCHES CONVERTED TO MILLIMETERS AND FEET TO METERS.

3.) LUMINAIRE POLE EXTENSION VARIES DEPENDING ON LUMINAIRE MOUNTING HEIGHT. THICKNESS IS .120" [3] THK. AND A TAPER OF .1375" PER FT [11.5 mm/m].

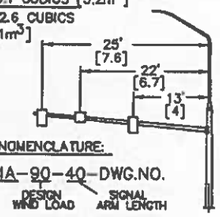
4.) 60'-0" & 65'-0" MAST ARMS ARE TO BE FABRICATED IN (2) SECTIONS. INBOARD SECTION IS TO BE 40 FT. LONG. 55' MAST ARMS TO BE SUPPLIED IN (2) SECTIONS WHEN PAINTED.

5.) POLE SHAFT LENGTH VARIES BASED ON PROJECT REQUIREMENTS.

6.) CALCULATE CUBICS BASED UPON EXAMPLE BELOW AND COMPARE RESULTS WITH THOSE LISTED IN SIGNAL ARM DATA TABLE.

EXAMPLE:

8.7 SQ.FT. X 25' = 217.5 CUBICS [6.2m³]
6.0 SQ.FT. X 22' = 132.0 CUBICS [3.7m³]
8.7 SQ.FT. X 13' = 113.1 CUBICS [3.2m³]
TOTAL = 462.6 CUBICS [13.1m³]



POLE NOMENCLATURE:

TYPE IIA-90-40-DWG.NO.
POLE STYLE / DESIGN WIND LOAD / SIGNAL ARM LENGTH

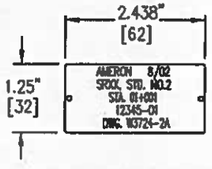
TYPE IIIA-90-40-3510J-DWG.NO.
POLE STYLE / DESIGN WIND LOAD / SIGNAL ARM LENGTH / LUMINAIRE ARM LENGTH / LUMINAIRE MTNG. HEIGHT / LUMINAIRE ARM STYLE

— — MAST ARM DATA — — MAST ARM LENGTH "F"	MAST ARM DIMENSIONS END O.D. X BASE O.D.	MATERIAL BREAKDOWN .120" THK.	.179" THK.	.239" THK.	.3125" THK.	CONN. LOC. "A1"	FLANGE THK "D"	FLANGE THK "I"	BOLT CIRCLE "J"	HHCS SIZE DIAMETER X LENGTH "K"	FLANGE SQ. "L"	PLATE THK "M"	"CUBIC" (ft³)
20'-0" [6.1]	5 1/4" X 8" [133 X 203]	—	20'-0" [6.1]	—	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	15 3/4" [400]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	15" [381]	5/16" [8]	470
25'-0" [7.6]	4 9/16" X 8" [116 X 203]	—	25'-0" [7.62]	—	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	15 3/4" [400]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	15" [381]	5/16" [8]	680
30'-0" [9.1]	5 1/4" X 9 3/8" [133 X 238]	—	30'-0" [9.14]	—	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	15 3/4" [400]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	15" [381]	5/16" [8]	892
35'-0" [10.7]	4 9/16" X 9 3/8" [116 X 238]	—	35'-0" [10.67]	—	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	15 3/4" [400]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	15" [381]	5/16" [8]	1105
40'-0" [12.2]	5 1/4" X 10 3/4" [113 X 273]	—	40'-0" [12.19]	—	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	15 3/4" [400]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	15" [381]	5/16" [8]	1320
45'-0" [13.7]	4 13/16" X 11" [116 X 279]	—	45'-0" [13.72]	—	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	15 3/4" [400]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	15" [381]	5/16" [8]	1531
50'-0" [15.2]	5 1/4" X 12 1/8" [113 X 308]	—	—	50'-0" [15.24]	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	19 1/2" [495]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	18 1/2" [470]	3/8" [10]	1744
55'-0" [16.8]	4 9/16" X 12 1/8" [116 X 308]	—	15'-0" [4.57]	40'-0" [12.19]	—	20'-6" [6.2]	1 3/4" [44]	1 3/4" [44]	19 1/2" [495]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	18 1/2" [470]	3/8" [10]	1957
* 60'-0" [18.3]	5 1/4" X 13 1/2" [168 X 376]	—	20'-0" [6.1]	40'-0" [12.19]	—	20'-0" [6.1]	1 3/4" [44]	1 3/4" [44]	20" [508]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	20" [508]	3/8" [10]	2666
* 65'-0" [19.8]	4 9/16" X 13 1/2" [151 X 378]	—	25'-0" [7.62]	40'-0" [12.19]	—	20'-0" [6.1]	1 3/4" [44]	1 3/4" [44]	20" [508]	1 1/2"-6NC X 4" [1 1/2"-6NC X 102]	20" [508]	3/8" [10]	2950

* SEE NOTE 4

TYPE "T" LUMINAIRE ARM DATA: ARM LENGTH "C"	"T" LUM DIMENSIONS END O.D. X BASE O.D. X THK.	RADIUS "R1"	RADIUS "R2"	RISE
6'-0" [1.8]	2 3/8" X 4" X .120" [60 X 102 X 3]	7'-5" [2.3]	1'-0" [0.3]	3'-0" [0.9]
8'-0" [2.4]	2 3/8" X 4" X .120" [60 X 102 X 3]	7'-5" [2.3]	1'-0" [0.3]	4'-0" [1.2]
10'-0" [3.0]	2 3/8" X 4" X .120" [60 X 102 X 3]	7'-5" [2.3]	1'-0" [0.3]	5'-0" [1.5]
12'-0" [3.7]	2 3/8" X 4 1/2" X .120" [60 X 114 X 3]	7'-5" [2.3]	1'-0" [0.3]	6'-6" [2.0]
14'-0" [4.3]	2 3/8" X 4 1/2" X .120" [60 X 114 X 3]	7'-5" [2.3]	1'-0" [0.3]	7'-6" [2.3]
16'-0" [4.9]	2 3/8" X 4 1/2" X .120" [60 X 114 X 3]	7'-5" [2.3]	1'-0" [0.3]	8'-9" [2.7]

NOTES:
1.) TAG MOUNTED W/ (2) BRINE SCREWS.
2.) MOUNT BOTTOM OF TAG 0'-6" ABOVE TOP OF HAND HOLE. MOUNT (1 ea.) 6" FROM FLANGE PLATE ON ARM & 6" PAST CONNECTION IN DETS. "I" OR "J".
3.) MANUFACTURER MONTH/YEAR = AMERON MM/YY
STATE RT., POLE NO.= XX.XXX
STATION NO. = STA. XX+XXX
PART NO. = XXXXX-XX
DRAWING NO. = DWG. W3724-2X



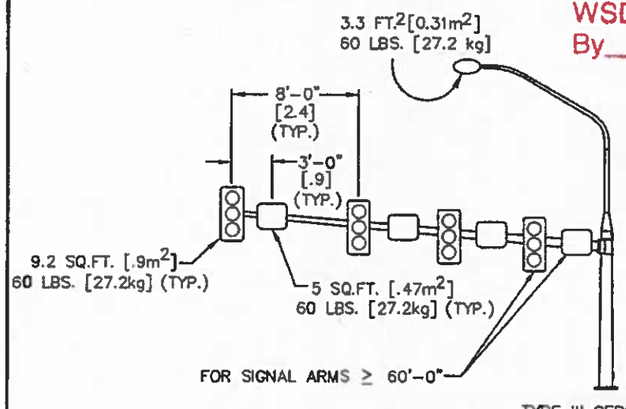
DETAIL "J" I.D. TAG DETAIL

LOADS PER AASHTO 2009:

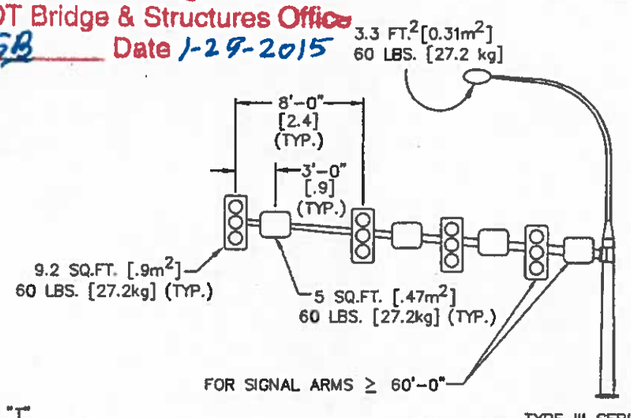
1.) LOCATION: WASHINGTON STATE
2.) BASIC WIND SPEED: 90 MPH.
3.) DESIGN LIFE: 50 YEARS RECURRENCE INTERVAL
4.) FATIGUE CATEGORY II
5.) GALLOPING LOADS: YES (I_F = 0.30)
6.) TRUCK LOADS: YES (I_F = 0.70)
7.) NATURAL WIND GUSTS: YES (I_F = 0.55)
8.) CAFL AT CRITICAL CONNECTIONS:
POLE TO BASE PLATE CONNECTION:
A. SOCKET DETAIL W/FILLET WELD = E'
B. FULL PENETRATION WELD = D
ARM TO SIMPLEX PLATE CONNECTION:
A. SOCKET DETAIL W/FILLET WELD = E'
B. FULL PENETRATION WELD = D
SIMPLEX GUSSETS = E'
POLE WALL AT SIMPLEX GUSSET = E
POLE SHAFT = B'
SHAFT FULL PENETRATION WELD = D

STEVEN EUGENE TAYLOR
STATE OF WASHINGTON
50244
REGISTERED
PROFESSIONAL ENGINEER
1/28/2015

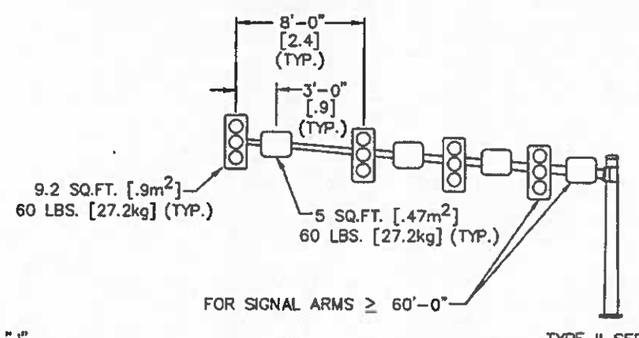
APPROVED
Manufacturer's Pole Plan
Approved For Listing As A
Pre-Approved Drawing
WSDOT Bridge & Structures Office
By GB Date 1-29-2015



TYPE III SERIES "T"



TYPE III SERIES "J"



TYPE II SERIES

DESIGN LOAD CASE FOR AASHTO 2001 90 M.P.H. WIND LOADING

REV	DATE	DESCRIPTION	BY	APPR
H	12/14	PER WA. D.O.T. REQUEST	ST	GM
G	12/11	ADDED TYPE IIC POLE & REV. DESIGN CRITERIA	GM	JB
F	3/08	REV. LOAD NOTES, "J" DIM. & 65FT SMA CUBICS	BB	GM

Ameron POLE PRODUCTS DIVISION

STATE OF WASHINGTON
TYPE II AND III SERIES

DRAWN :MHM	DATE :6/02	SCALE N.T.S.	DWG.NO.	REV.
APPR :JB	DATE :6/02	SHT 2 OF 2	W3724-2	H