PREVENT BRACKET ROTATION & CABLE SHEARING.

WARNING: TIGHTEN BRACKET CLAMPS SECURELY TO

3 1/2 X 6 1/2" SECTION (TYP.)

4" 2 3/4" O.D.

5 16

6

TAPERED ALUM. TUBE (5" O.D.)
125" WALL ALLOY 6063-T6
BLANK LENGTH. UPPER 25'-0"
BLANK LENGTH. LOWER 23'-9"

2 3/4" O.D.

2 1/4" TAPERED

18 1/2"

21"-8" TAPERED

23'-2"

(4) 3/8" 1/8" DIA WEEP HOLE

VARIES

SLIPFITTER TO BE HORIZONTAL

2" SCH. 40 PIPE X 8"
6" HORIZONTAL EXTENSION W/ REMOVABLE END CAP

FLUSH WELDED END CAP

(SEE NOTE 11)

CAST ALUM. POLE BANDS FITTED TO POLE OD WITH STAINLESS STEEL HARDWARE

WARNING: TIGHTEN BRACKET CLAMPS SECURELY TO PREVENT BRACKET ROTATION & CABLE SHEARING.

TOP CLAMP LOCATION IS ONE (1) FOOT BELOW TOP OF POLE. CLAMP ID SHALL BE DESIGNED TO FIT THE "OD" OF THE SIGNAL POLE. VERIFICATION OF POLE "OD" MUST BE MADE BEFORE THE CLAMPS ARE MANUFACTURED.

Radar or Video Detector (Banded or Clamp Mounted)

Drill a 5/8" hole in the bottom arm end cap just large enough to place the detector cable through it. See note f of conduit ell specifications on sheet 3 of 3.

Verify upper & lower id dimensions. Clamp shall be sized to accommodate pole id.

Horizontal Slipfitter

Provide threaded end cap when horizontal slipfitter is not used. Cap shall be coated to match arm and pole.

25'-0" BRACKET ARM

DETECTOR UNIT / TRAFFIC FLOW MONITOR BRACKET ARM

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

CITY ENGINEER

STD DWG
4110

10/01/2018
SHT 2 OF 3

25'-0" BRACKET ARM

INSTALL TRAFFIC FLOW MONITOR CABLE IN TOP ARM BRACKET

TAPERED ALUM. TUBE (5" O.D.)
125" WALL ALLOY 6063-T6
BLANK LENGTH. UPPER 25'-0"
BLANK LENGTH. LOWER 23'-9"

2" STRUT (TYP)

1 1/10"

1 3/8"

1 1/16"

2 1/8" STIFFENERS

ALUMINUM VERTICAL STRUTS (TYP)

(4) 3/8" REMOVABLE END CAP

W/GROMMET CABLE HOLES

FIELD DRILL HOLES IN POLE (TYPICAL)

HEX HD BOLTS WITH HEX NUTS & LOCKWASHERS W/ DIMENSIONS PER MANUFACTURER (STAINLESS STEEL)

1 1/2" CABLE ENTRY HOLE THROUGH CLAMP

HEX HD BOLTS WITH HEX NUTS & LOCKWASHERS W/ DIMENSIONS PER MANUFACTURER (STAINLESS STEEL)

CLAMP GAP

(2)-5/8" GALVANIZED ANTI-ROTATION BOLTS, EACH FIELD DRILLED INTO POLE (ONE FOR EACH BRACKET CLAMP)
ANTI-ROTATION BOLT SHALL NOT PROTRUDE MORE THAN 1/2" INTO SIGNAL SUPPORT.

2" SCH. 40 PIPE ALLOY 6063-T6

2" X 6" PIPE X 8"

1.2" OF NPT THREADS ON THE OUTSIDE OF THE EXTENSION

SPIN I.D. TO ACCEPT 2" PIPE

EFFECTIVE PROJECTED AREA

TRAFFIC FLOW CAMERA - 1 SQ FT
VIDEO DETECTOR - 0.75 SQ FT
RADAR DETECTOR - 1 SQ FT

WEIGHT IN POUNDS

TRAFFIC FLOW CAMERA - 20
VIDEO DETECTOR - 8
RADAR DETECTOR - 7

SAFETY FACTOR > 1.6

LOADING FACTORS

HORIZONTAL SLIPFITTER

PROVIDE THREADED END CAP WHEN HORIZONTAL SLIPFITTER IS NOT USED. CAP SHALL BE COATED TO MATCH ARM AND POLE.
NOTES:

1. BRACKET ARMS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE ROAD CENTERLINE AS PER PLAN.

2. ALL CABLES SHALL BE RUN INSIDE A BRACKET TUBE. ENTRY HOLES INTO THE SIGNAL POLE SHALL BE FIELD DRILLED.

3. BRACKET ARM, VIDEO DETECTOR AND/OR TRAFFIC FLOW MONITOR DOME SHALL BE COLOR COATED AS PER PLAN.

4. HEAT TREAT AFTER WELDING.

5. BRACKET ARMS SHALL BE COATED IN ACCORDANCE WITH THE PLANS TO MATCH THE SIGNAL SUPPORT OR STRAIN POLE STRUCTURE.

6. A TRUSS-STYLE DESIGN SHALL BE USED AND SHALL BE CAPABLE OF SUPPORTING A LUMINAIRE WEIGHING 75 POUNDS AND HAVING AN EFFECTIVE PROJECTED AREA OF 1.6 SQUARE FEET AND OR TRAFFIC DETECTOR AND/OR TRAFFIC FLOW MONITOR.

7. BRACKET ARMS SHALL BE DESIGNED FOR A 90 MPH WIND LOADING WITH APPROPRIATE GUST FACTOR.

8. THE CLAMP MOUNTED ARM SHALL COME WITH BOTH CLAMPS AND MOUNTING HARDWARE.

9. BRACKET ARMS SHALL BE DESIGNED TO FIT A MASTARM POLE SHAFT THAT HAS A NOMINAL TAPER OF 0.14 INCH PER FOOT AND A BOTTOM-OF-POLE OUTSIDE DIAMETER AS PER PLAN.

10. DETAILS AND DIMENSIONS ILLUSTRATED ON THESE DRAWINGS ILLUSTRATE AN ALUMINUM TRUSS ONLY. ALL STRUCTURAL COMPONENTS REMAIN THE RESPONSIBILITY OF THE MANUFACTURER.

11. FOR MECHANICAL DAMPENING DEVICE SEE STANDARD DRAWING 4122.

LL/LR CONDUIT ELL SPECS

A) THREADED BODY (NPT) WITH NON-CORROSIVE HARDWARE
B) 48 CU. IN. INTERIOR AREA
C) FLAT COVER WITH SOLID NEOPRENE GASKET
D) COVER OPENING - 6" X 2.4"
E) LIGHT WEIGHT ALUMINUM BODY
F) PROVIDE #10 RUBBER STOPPER WITH A HOLE AND SLOT FOR OUTGOING CABLE; ENLARGESTOPPER HOLE AS NEEDED JUST ENOUGH TO FIT CABLE DIAMETER