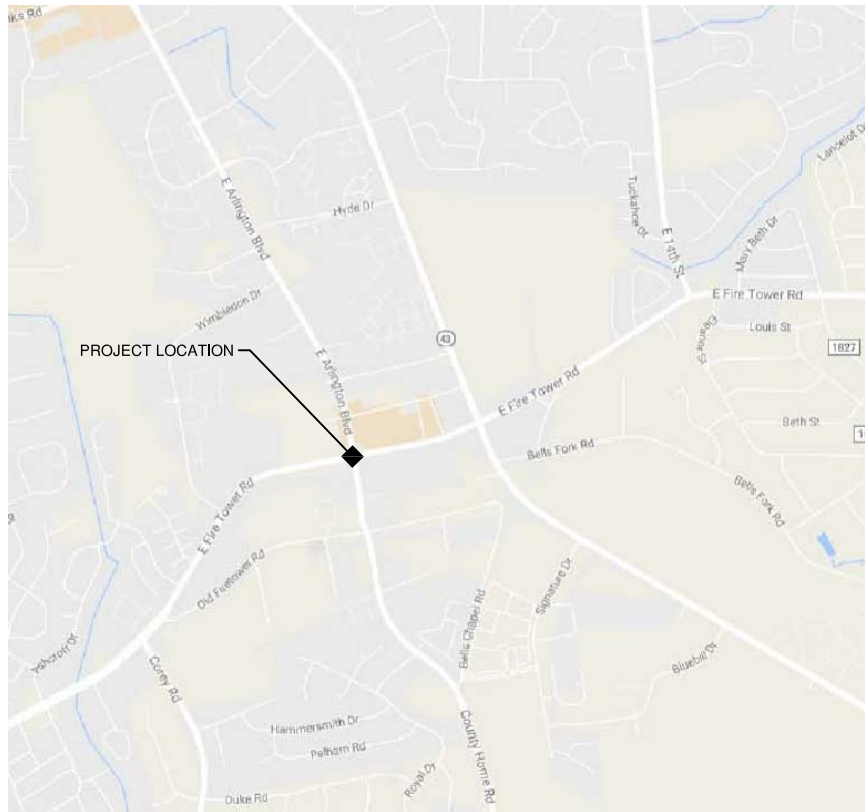


GOVERNING SPECIFICATIONS:
THE MOST CURRENT EDITION OF NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION "STANDARD SPECIFICATIONS" AND
"SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL
PROVISIONS" HEREIN SHALL GOVERN. WHERE APPLICABLE.

CITY OF GREENVILLE, NORTH CAROLINA

PROJECT PLANS FOR THE CONSTRUCTION OF
RED TRAFFIC LIGHT MONITORING FACILITIES
AT THE INTERSECTION OF
CR 1725 / E. FIRE TOWER RD AT SR 1795 /
E. ARLINGTON BLVD / COUNTRY HOME RD

VICINITY MAP

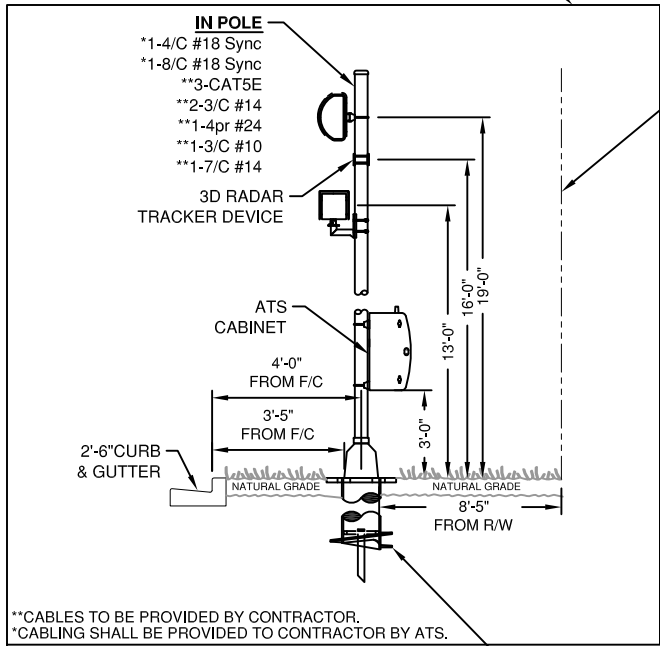


SHEET INDEX

SHEET NO.	SITE ID	DESCRIPTION
1		COVER SHEET
2	GE009, GE010	INTERSECTION PLAN
3		ATS STANDARD DETAILS
4		UNDERGROUND POWER SERVICE
5		REAR POLE DETAILS
6		DRILLED ANCHOR FOUNDATION
7		REINFORCED CONCRETE FOUNDATION
8-10		SPREAD FOOTING DETAILS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

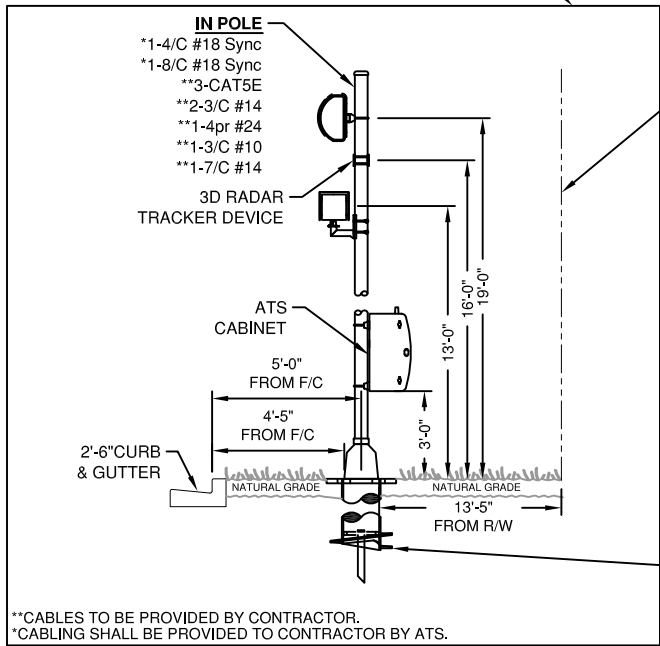
CONTROLLER CABINET (ON RIGHT), REAR SCENE CAMERA ASSEMBLY (ON LEFT), 300 WATT-SECOND STROBE (ON LEFT), MOUNTED ON 20 FT ATS POLE WITH FRANGIBLE BASE. CONTAINS EVDO MODEM.



SECTION A-A

NEW ATS DRILLED ANCHOR FOUNDATION. SEE DETAIL "A" ON SHEET 6. OPTIONAL SPREAD FOOTING FOUNDATION ON SHEETS 8-10 OR REINFORCED CONCRETE FOOTING ON SHEET 7 IF DRILLED ANCHOR CANNOT BE INSTALLED.

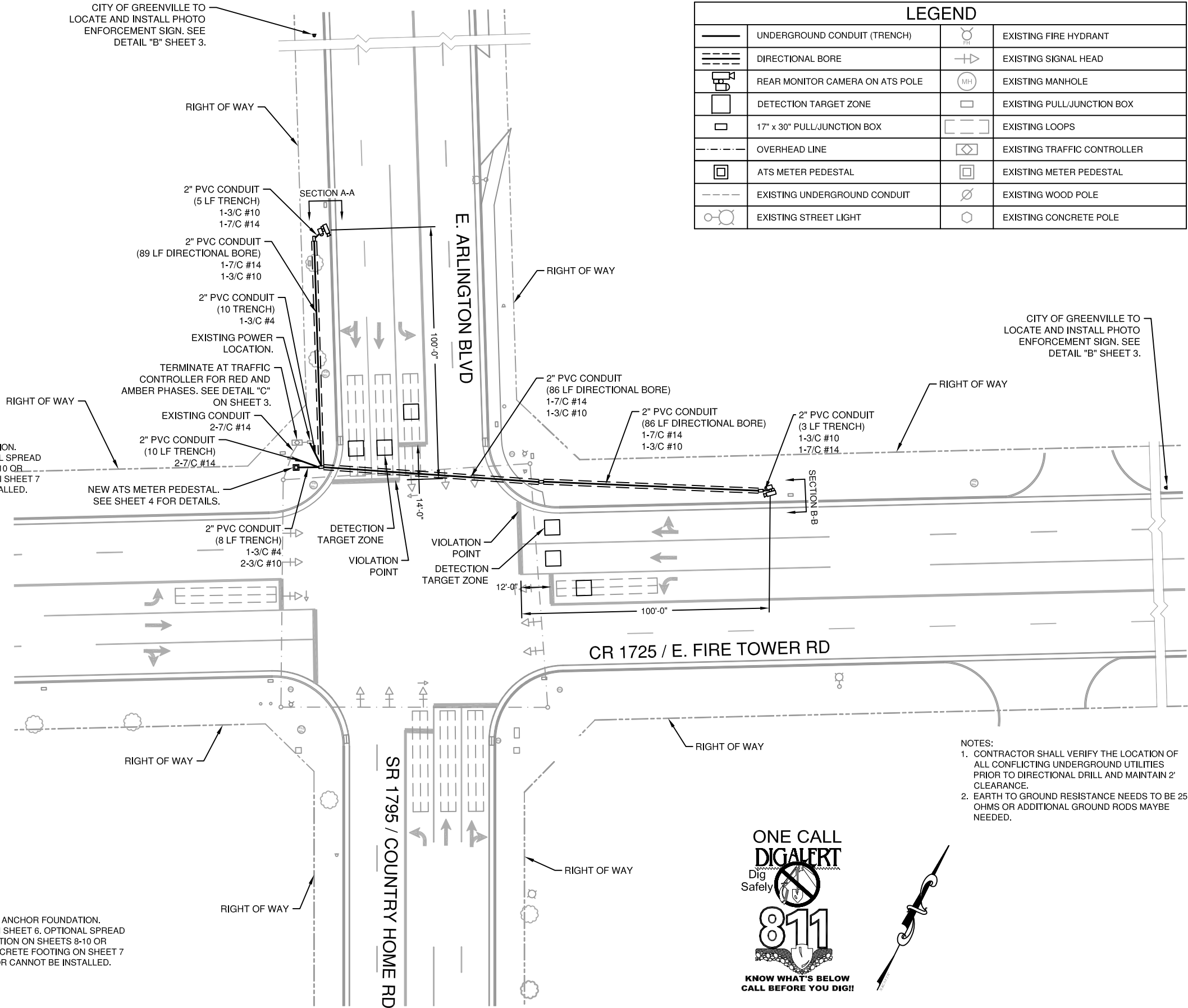
CONTROLLER CABINET (ON RIGHT), REAR SCENE CAMERA ASSEMBLY (ON LEFT), 300 WATT-SECOND STROBE (ON LEFT), MOUNTED ON 20 FT ATS POLE WITH FRANGIBLE BASE. CONTAINS EVDO MODEM.



SECTION B-B

NEW ATS DRILLED ANCHOR FOUNDATION. SEE DETAIL "A" ON SHEET 6. OPTIONAL SPREAD FOOTING FOUNDATION ON SHEETS 8-10 OR REINFORCED CONCRETE FOOTING ON SHEET 7 IF DRILLED ANCHOR CANNOT BE INSTALLED.

CITY OF GREENVILLE TO LOCATE AND INSTALL PHOTO ENFORCEMENT SIGN. SEE DETAIL "B" SHEET 3.



LEGEND

	UNDERGROUND CONDUIT (TRENCH)		EXISTING FIRE HYDRANT
	DIRECTIONAL BORE		EXISTING SIGNAL HEAD
	REAR MONITOR CAMERA ON ATS POLE		EXISTING MANHOLE
	DETECTION TARGET ZONE		EXISTING PULL/JUNCTION BOX
	17" x 30" PULL/JUNCTION BOX		EXISTING LOOPS
	OVERHEAD LINE		EXISTING TRAFFIC CONTROLLER
	ATS METER PEDESTAL		EXISTING METER PEDESTAL
	EXISTING UNDERGROUND CONDUIT		EXISTING WOOD POLE
	EXISTING STREET LIGHT		EXISTING CONCRETE POLE

CITY OF GREENVILLE TO LOCATE AND INSTALL PHOTO ENFORCEMENT SIGN. SEE DETAIL "B" SHEET 3.

- NOTES:
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL CONFLICTING UNDERGROUND UTILITIES PRIOR TO DIRECTIONAL DRILL AND MAINTAIN 2' CLEARANCE.
 - EARTH TO GROUND RESISTANCE NEEDS TO BE 25 OHMS OR ADDITIONAL GROUND RODS MAYBE NEEDED.



GENERAL & CONSTRUCTION NOTES

1.

SEPARATE RIGHT-OF-WAY PERMITS ARE REQUIRED FOR WORK WITHIN PUBLIC AGENCY RIGHT-OF-WAY. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPLICATION PERMITS & FEE'S, AND COMPLY WITH ALL PUBLIC REQUIREMENTS.
2.

UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE BASED ON AVAILABLE INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT DESIGNATED AGENCY TO LOCATE ALL UNDERGROUND UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3.

CONTRACTOR SHALL BE RESPONSIBLE TO APPLY AND OBTAIN AN APPROVED TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MUTCD AND LOCAL STANDARDS AS REQUIRED.
4.

CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL DISTURBED AREAS TO ORIGINAL CONDITION TO AGENCY SATISFACTION AT NO ADDITIONAL COMPENSATION.
5.

CONTRACTOR SHALL TERMINATE ALL POWER CIRCUITS INTO ATS CABINETS.
6.

INSTALL INLINE 30 AMP FUSE INSIDE HAND HOLE ON ATS CAMERA POLE.
7.

INSTALL FOUNDATION POLE AND GROUNDING WIRE FOR ATS EQUIPMENT. SEE LOCATIONS IN DRAWINGS AND POLE FOUNDATION DETAIL.
8.

INSTALL PULL/JUNCTION BOX OF THE REQUIRED SIZE AND TYPE PER LOCAL AGENCY STANDARDS.
9.

SCHEDULE 80 PVC CONDUIT TO BE BORED UNDER ROADWAY - 36" COVER MINIMUM. SEE SIZES AND LOCATION IN DRAWINGS.
10.

CONTRACTOR SHALL CALL NCDOT AND CITY TRAFFIC SIGNAL SUPERVISOR AT LEAST 72 HOURS IN ADVANCE TO COORDINATE THE POWER DROP INTO THE AGENCIES METER PEDESTAL.
11.

THE CONTRACTOR SHALL HAVE A LEVEL II IMSA CERTIFIED TECHNICIAN / ELECTRICIAN ON-SITE AT ALL TIMES DURING CONSTRUCTION. CONDUCTOR SPLICES AND TERMINATIONS SHALL BE MADE BY A QUALIFIED JOURNEYMAN ELECTRICIAN, WHO HAS SUCCESSFULLY COMPLETED A RECOGNIZED FOUR (4) YEAR APPRENTICESHIP PROGRAM UNDER THE DIRECT SUPERVISION OF A JOURNEYMAN ELECTRICIAN.
12.

TERMINATE RED & AMBER PHASE WIRES TO AGENCIES RED & AMBER PHASE CONDUCTORS IN THE NEAREST TRAFFIC CONTROL CABINET SEE CONDUCTOR RED & AMBER PHASE CONNECTION DETAIL. CONTRACTOR SHALL CONTACT NCDOT AND THE CITY TRAFFIC SIGNAL SUPERVISOR AND CITY POLICE DEPARTMENT FOR ON-SITE ASSISTANCE WITH RED & AMBER PHASE ISOLATION CONNECTION. ALLOW 24 HOURS ADVANCE NOTICE BEFORE CONNECTION.
13.

ALL WORK SHALL CONFORM TO ALL APPLICABLE ELECTRICAL CODES EXCEPT WHEN NCDOT OR CITY STANDARDS SUPERSEDE.
14.

CONTRACTOR SHALL TRIM EXISTING TREES TO IMPROVE LINE OF SIGHT NEEDED. CONTRACTOR SHALL NOTIFY CITY ARBORIST KEVIN HEIFFERON AT 252-378-5214, KHEIFFERSON@GREENVILLE.GOV, PRIOR TO TRIMMING.
15.

AT LOCATIONS WHERE EXISTING ENFORCEMENT EQUIPMENT MAY EXIST, CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ATS PROJECT MANAGER FOR REMOVAL & SALVAGE.
16.

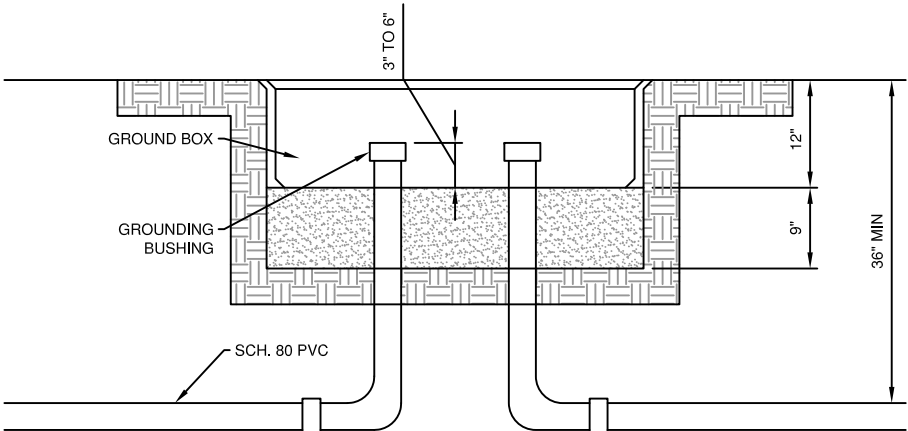
CONTRACTOR SHALL COORDINATE WITH NCDOT AND CITY TRAFFIC SIGNAL SUPERVISOR AND LAW ENFORCEMENT TO HAVE AN OFFICER PRESENT WHEN TRAFFIC SIGNAL POWER IS TURNED OFF FOR CONNECTION TO POWER PEDESTAL.
17.

CONNECT POLE TO SOLID BARE BOND GROUND & GROUNDING ROD (OR COIL 25' OF NO. 6 BARE COPPER) IN POLE FOUNDATION & TO SYSTEM GROUND BONDED BACK TO ATS CABINET(S).
18.

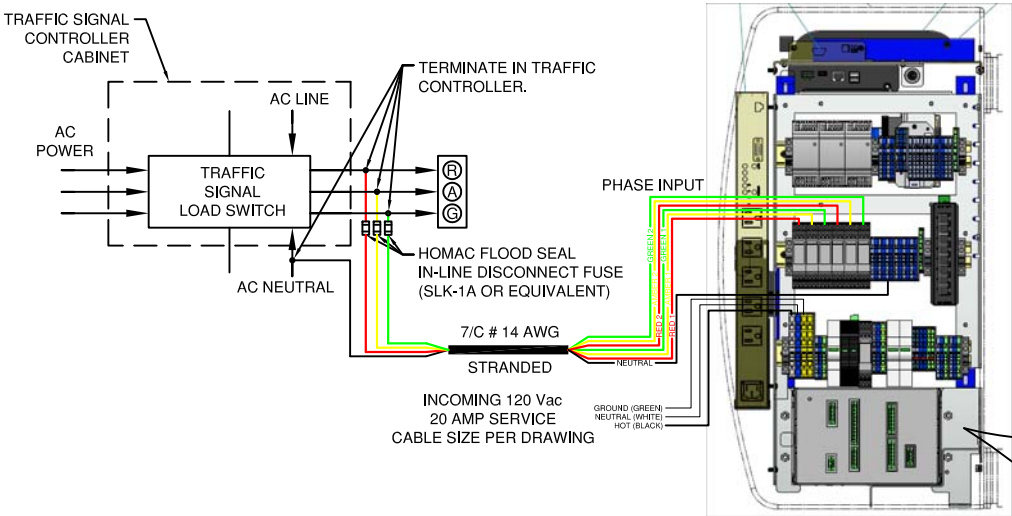
CONTRACTOR SHALL PLACE THE POLES / FOUNDATIONS IN A LOCATION TO MAINTAIN A 5' CLEAR SPACE FROM THE OVERHEAD POWER LINES. EARTH TO GROUND RESISTANCE NEEDS TO BE 25 OHMS OR ADDITIONAL GROUND RODS MAYBE NEEDED.
19.

CONTRACTOR TO LABEL EACH END OF ALL CABLE RUNS.
20.

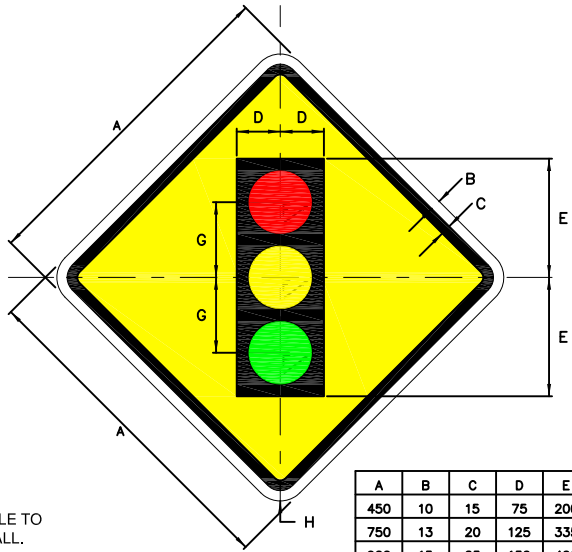
CONTRACTOR TO INSTALL AND LEAVE IN PLACE NYLON DRAW STRING IN ALL CONDUIT RUNS.



DETAIL "A"
TYPICAL JUNCTION BOX DETAIL



DETAIL "C"
RED AND AMBER PHASE CONNECTION DETAIL

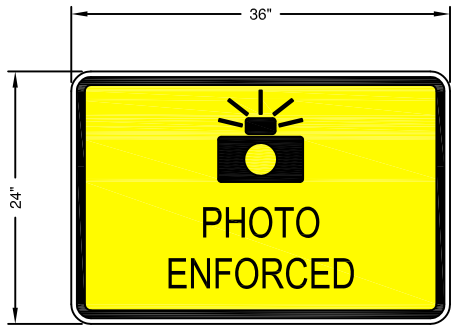


A	B	C	D	E	F	G	H
450	10	15	75	200	56	125	40
750	13	20	125	335	94	219	50
900	15	25	150	400	112	250	60
1200	20	30	200	535	150	325	70

W3-3
SIGNAL AHEAD

NOTES:

1. CITY OF GREENVILLE TO LOCATE AND INSTALL.
2. FLAT SHEET ALUMINUM HIGH INTENSITY 0.080.
3. SIGN TO BE INSTALLED ON MONITORED APPROACHES.



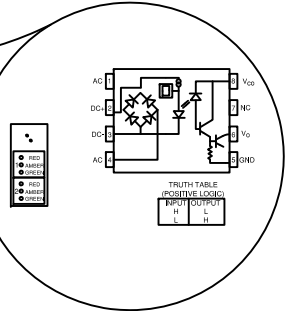
R10-18
RED LIGHT PHOTO ENFORCED

SIGN COLORS:

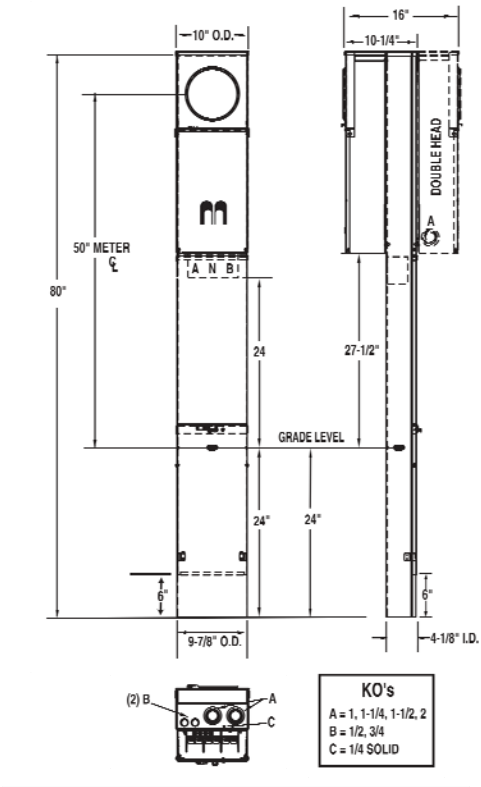
- LEGEND
- BACKGROUND
- BLACK
- YELLOW (RETROREFLECTIVE)

DETAIL "B"
PHOTO ENFORCEMENT SIGN DETAIL

OPTO COUPLER



NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION



SPECIFICATIONS

- UL listed – conforms to EUSFRC drawing number 307
- 200 amp maximum, 120/240 volt, single phase, three wire meter socket
- Ring type meter socket with stainless steel screw-type sealing ring
- Short circuit withstand rating 22K AIC.
- Type 3R construction for durable outdoor use, one piece post – lockable and sealable
- Milbank grey polyester powder coat finish
- Wire terminations accept copper or aluminum conductors
- Line & Neutral: (2) #6-350 kcmil per phase
- Line Ground: (4) #14-1/0
- Load (CB): 2/0 to 300 kcmil per pole
- Load Neutral: (1) #6-350 kcmil
- Load Ground: (2) #14-1/0, (4) #14/6
- Milbank plug-in main circuit breaker. Available in 100, 125, 150 & 200 amp. Type UQFPH-M.
- Four-circuit plated copper interior accepts (2) 2-pole or (4) 1-pole standard plug-in type circuit breakers up to a total of 125 amps maximum. Acceptable manufacturers: Cutler-Hammer, GE or Siemens
- Factory or field installable receptacle bridge and receptacle / circuit breaker kits available. See Accessories.

DETAIL "A"
METER PEDESTAL

USE MILBANK PEDESTAL (U5240-0-100S) OR APPROVED EQUAL

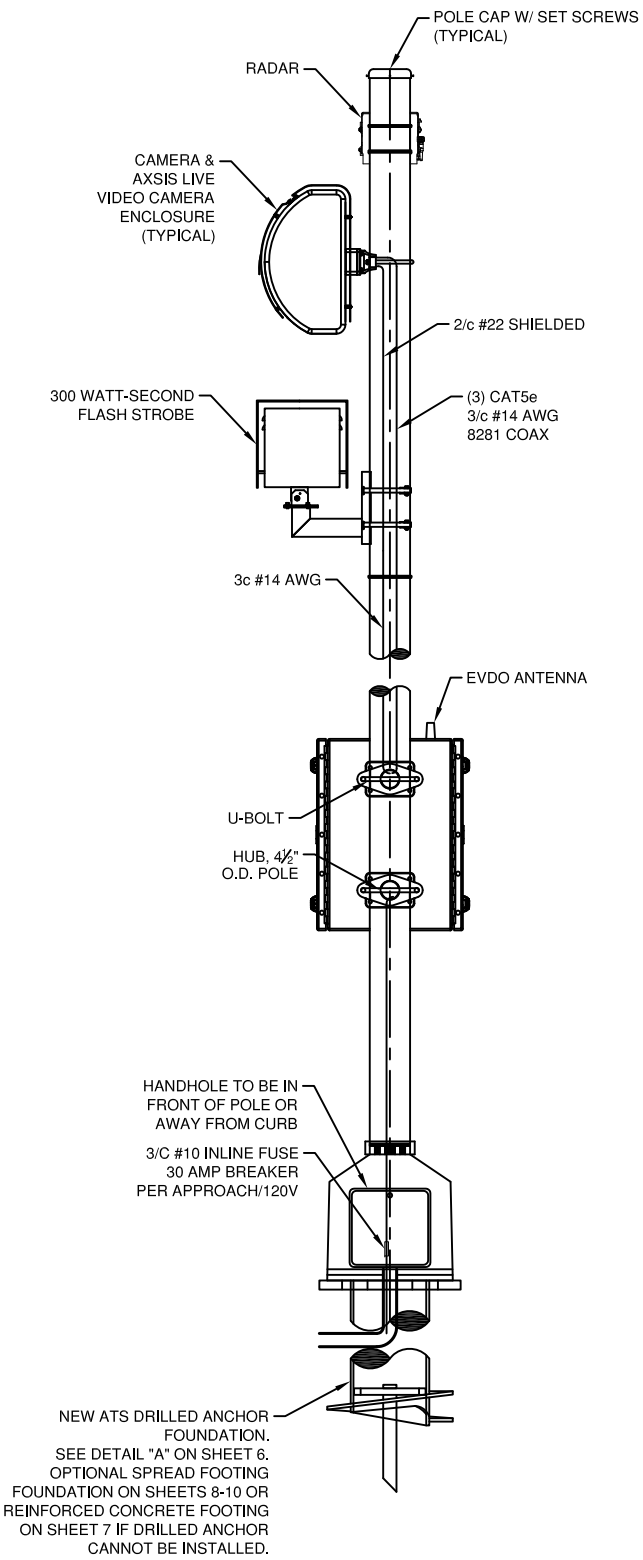
MANUFACTURE - SQUARE D OR EQUAL						12/24 CIRCUIT, 125 AMP RATING						SINGLE PHASE, 120/240 V					
22 KAIC						70A MAIN BREAKER						LOCATION - METER PEDESTAL					
LOAD	CONDUIT	WIRE	TRIP	1P/2P	VOLTS	DESCRIPTION	CKT	CKT	DESCRIPTION	VOLTS	1P/2P	TRIP	WIRE	CONDUIT	LOAD		
			30A	2P		SURGE ARRESTOR	1	2	RLC (ATS)	120	1P	30A	#10	2"	2135		
							3	4	SPACE								
						SPACE	5	6	RLC (ATS)	120	1P	30A	#10	2"	2135		
						SPACE	7	8	SPACE								
						SPACE	9	10	SPACE								
						SPACE	11	12	SPACE								
TOTAL LOAD: 2135 WATTS (PER RLC)										TOTAL AMPS: 30AMPS (PER RLC)							

DETAIL "B"
ATS PANEL SCHEDULE

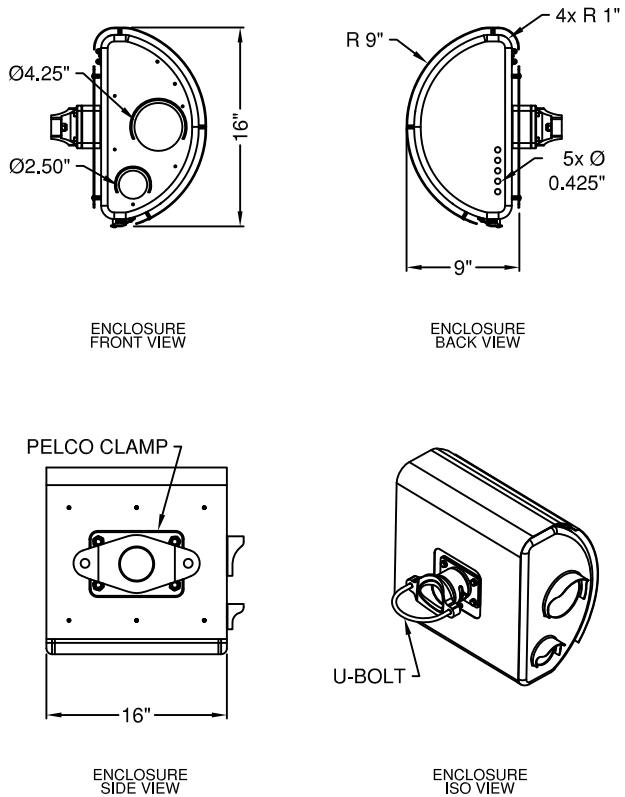
NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

REAR CAMERA POLE

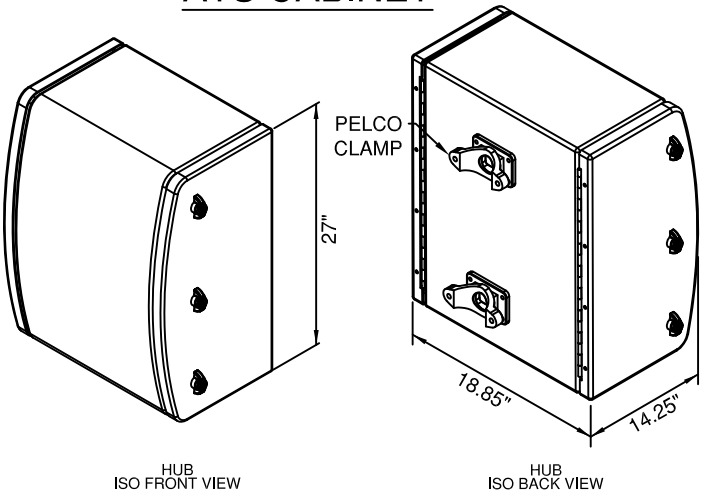
20' - 4.5" O.D. SCHEDULE 80
(6061 T6 ALUMINUM)



CAMERA & VIDEO CAMERA ENCLOSURE



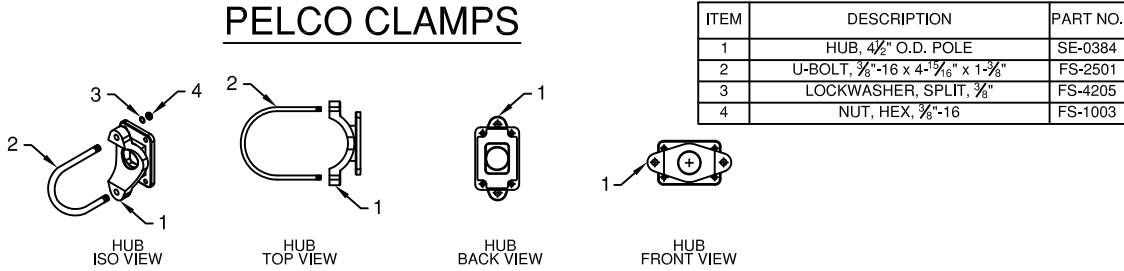
ATS CABINET



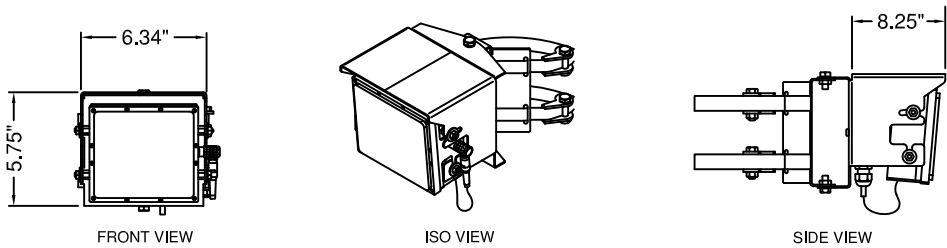
NOTES:

1. CABINET TO BE ROTATED PERPENDICULAR TO CURB.
2. ORIENT (AIM) RADAR TOWARDS THE MIDDLE OF THE TOTAL NUMBER OF LANES ON THE FRONT SIDE OF THE FRONT POLE.
3. LOCATE POLE PER PLAN.

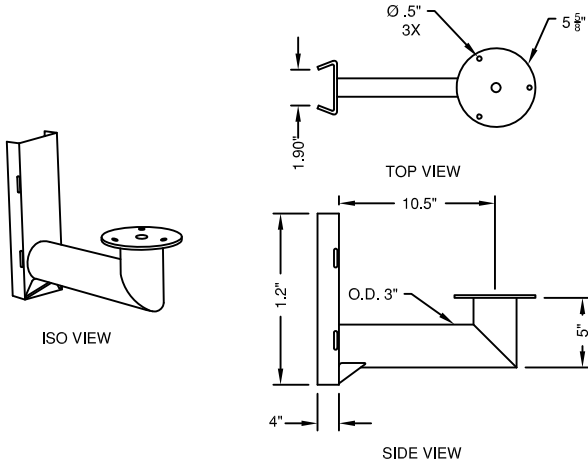
PELCO CLAMPS



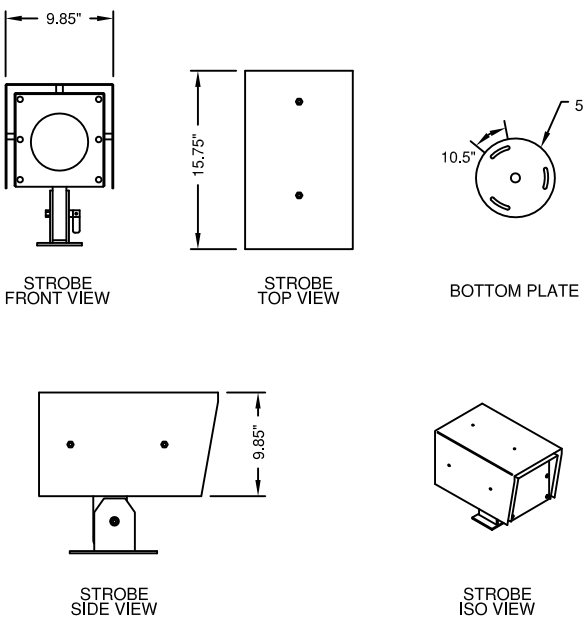
RADAR



STROBE MOUNT



FLASH STROBE



REAR POLE DETAILS

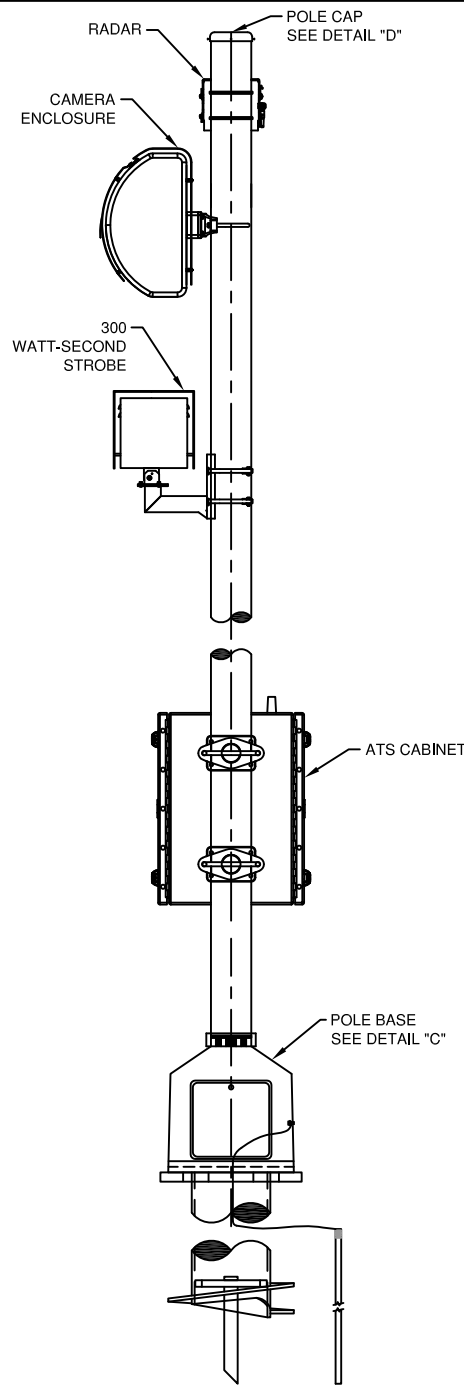
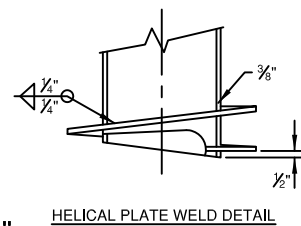
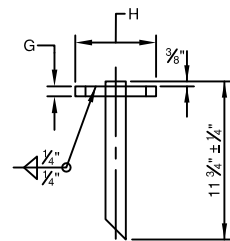
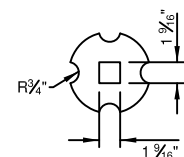
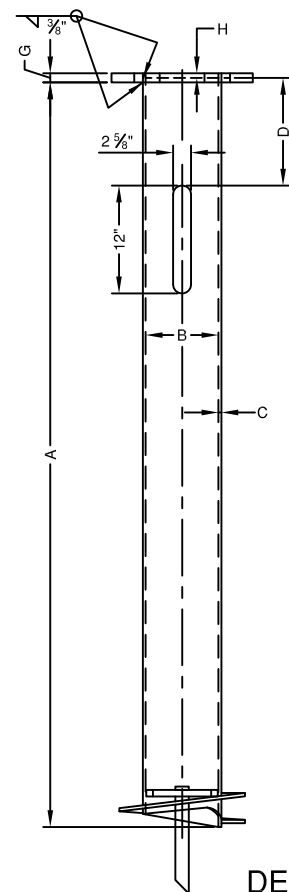
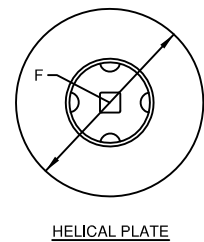
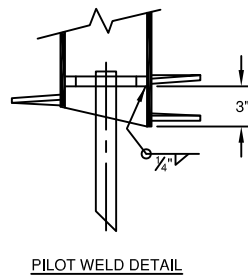
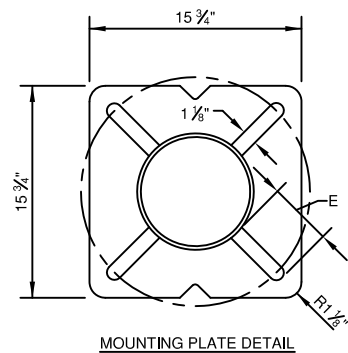
CR 1725 / E. FIRE TOWER RD AT SR 1795 /
E. ARLINGTON BLVD / COUNTRY HOME RD
GREENVILLE, NC

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

1ST SUBMITTAL
DESIGNED BY: ATS
DATE: 10-28-16
APPROVED BY:
APPROVAL DATE:

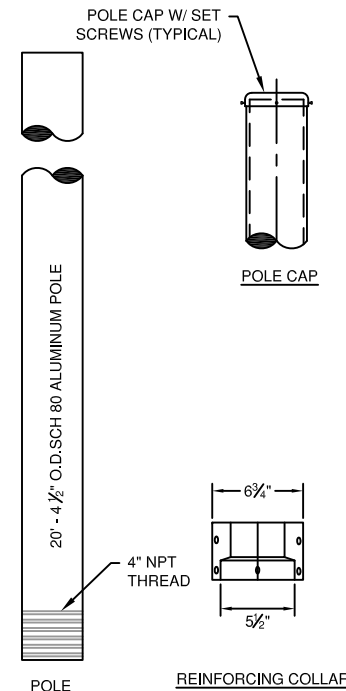
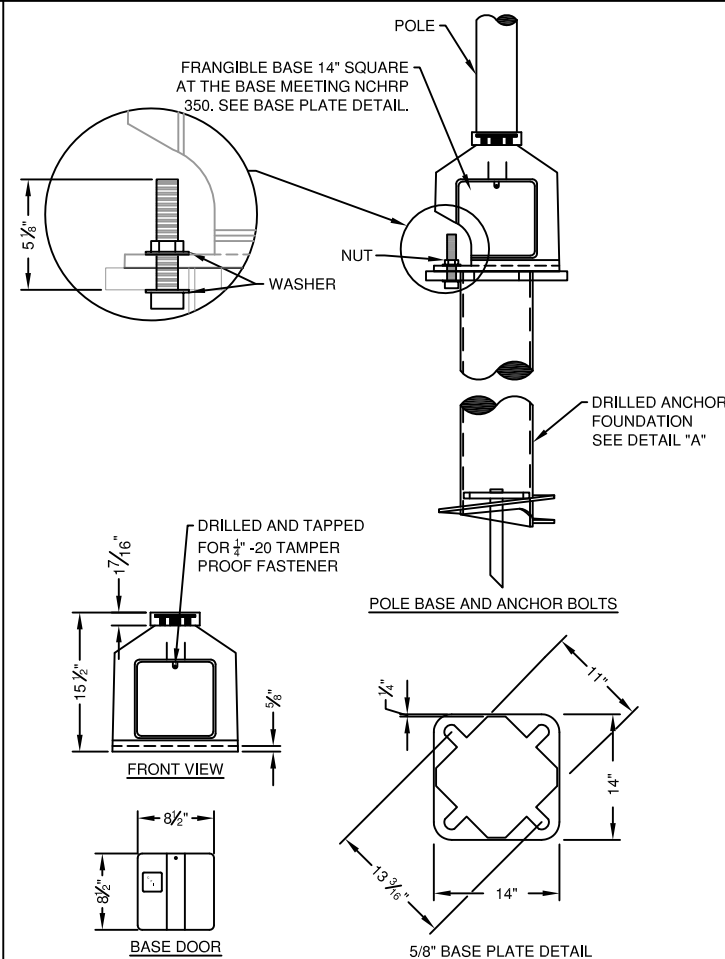
JOB NUMBER
1487
SITE ID(S)
GE009, GE010

SHEET
NUMBER
5
OF 10 SHEETS



DETAIL "B"
TYPICAL ALUMINUM POLE DETAIL
DRILLED ANCHOR FOUNDATION DATA

POLE HEIGHT	ANCHOR SHAFT			HAND HOLE	BASE PLATE	HELICAL PLATE	PILOT DETAIL	
	A	B	C	D	E	F	G	H
20'	84"	6 5/8"	1/4"	18"	5 1/2"	14"	1"	5 15/16"



- GENERAL NOTES:
- DESIGN SHALL BE IN ACCORDANCE WITH 2009 (5TH) EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS AND INTERIMS.
 - POLE MATERIAL SHALL BE SCHEDULE 80 ALUMINUM POLE FABRICATED USING 6061-T6 ALUMINUM ALLOY, THREADED ONE END NPT CUT TO LENGTH.
 - ALL NUTS, BOLTS, WASHERS AND THREADED BARS/STUDS SHALL BE GALVANIZED PER F2329-05.
 - UNLESS OTHERWISE NOTED ON THE PLANS, LOCATE HANDHOLE 180 DEGREES FROM CURB & GUTTER (FACING SIDEWALK).
 - PROVIDE NUT AND WASHER WITH EACH BOLT.
 - THREADS OF BOLTS SHALL BE COATED WITH PIPE JOINT COMPOUND PRIOR TO INSTALLATION OF UPPER NUTS WHEN ERECTING POLE. AFTER POLE IS PLUMBED AND IN PERMANENT ALIGNMENT. THE EXPOSED THREADS OF PAINTED BOLTS SHALL BE CLEANED AND AN ADDITIONAL COATING OF ZINC-RICH PAINT APPLIED TO SEAL THE BOLT THREAD-NUT JOINT.
 - HELICAL PLATE SHALL BE HOT DIP GALVANIZED PER ASTM A123 GRADE 100 KSI.
 - SQUARE BAR PILOT SHALL BE PER ASTM A576.

POLE DATA

POLE TUBE			POLE BASE			ANCHOR BOLT		
POLE O.D.	LENGTH	WALL THK	SQUARE	BOLT CIRCLE	THK	DIA	LENGTH	THREAD LENGTH
4 1/2"	20'	43/128"	14"	13 3/16"	5/8"	1"	5 1/8"	5 1/8"



1. DESIGN SHALL BE IN ACCORDANCE WITH 2009 (5TH) EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS AND INTERIMS.
2. POLE MATERIAL SHALL BE SCHEDULE 80 ALUMINUM POLE FABRICATED USING 6061-T6 ALUMINUM ALLOY, THREADED ONE END NPT CUT TO LENGTH.
3. ANCHOR BOLTS SHALL BE PER ASTM F1554 GRADE 55 KSI.
4. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 KSI.
5. ALL NUTS, BOLTS, WASHERS AND THREADED BARS/STUDS SHALL BE GALVANIZED PER F2329-05.
6. UNLESS OTHERWISE NOTED ON THE PLANS, LOCATE HANDHOLE 180 DEGREES FROM CURB & GUTTER (FACING SIDEWALK).
7. PROVIDE NUT AND WASHER WITH EACH ANCHOR BOLT.
8. ANCHOR BOLT THREADS SHALL BE TAPED PRIOR TO POURING CONCRETE. THREADS OF ANCHOR BOLTS SHALL BE COATED WITH PIPE JOINT COMPOUND PRIOR TO INSTALLATION OF UPPER NUTS WHEN ERECTING POLE. AFTER POLE IS PLUMBED AND IN PERMANENT ALIGNMENT. THE EXPOSED THREADS OF PAINTED BOLTS SHALL BE CLEANED AND AN ADDITIONAL COATING OF ZINC-RICH PAINT APPLIED TO SEAL THE BOLT THREAD-NUT JOINT.
9. ALL EXPOSED FOUNDATION SHALL BE FINISHED SMOOTH AND SHALL BE FLUSH WITH ADJACENT SIDEWALKS WHEN APPLICABLE.



DETAIL "D"
POLE DETAIL

POLE DATA										
POLE TUBE			POLE BASE			ANCHOR BOLT			FOUNDATION	
POLE O.D. (IN)	LENGTH (FT)	WALL THK (IN)	SQUARE (IN)	BOLT CIRCLE (IN)	THK (IN)	DIA (IN)	LENGTH (IN)	THREAD LENGTH (IN)	WIDTH (IN)	DEPTH (IN)
4.50	20.00	0.337	14.00	13.18	0.63	1.00	42.00	3.5	24.00	60.00

GENERAL NOTES

1. SOIL SHOULD BE COMPACTED EVENLY AND FREE OF ORGANIC MATERIAL. EXERCISE CAUTION TO AVOID DAMAGE TO EXISTING UTILITIES.
2. PROTECT ADJACENT STRUCTURES AND FACILITIES. RESTORE ALL DAMAGED ITEMS (INCLUDING GRASSED AREAS) TO ORIGINAL CONDITION.
3. TOP OF FOUNDATION SHALL MATCH THE ADJACENT EXISTING SIDEWALK ELEVATION AND SHALL MATCH THE LONGITUDINAL GRADE & TRANSVERSE CROSS-SLOPE OF THE EXISTING SIDEWALK.
4. NEW SIDEWALKS SHALL MATCH EXISTING GRADE, CROSS-SLOPE, & ELEVATION OF EXISTING SIDEWALKS.
5. PROVIDE A BROOM FINISH ON TOP OF THE FOUNDATION AND NEW SIDEWALKS. ENSURE THAT SURFACE VARIATIONS DO NOT EXCEED 1/4" UNDER A 10 FOOT STRAIGHTEDGE OR 1/8" UNDER A 5 FOOT TRANSVERSE SECTION. FINISH EDGES WITH AN EDGING TOOL HAVING A 1/2 INCH RADIUS.
6. VERIFY UTILITIES (TYPE, LOCATION, & CONDITION) BEFORE STARTING CONSTRUCTION.

DESIGN CRITERIA

1. THE SPREAD FOUNDATIONS ARE DESIGNED TO SUPPORT ALUMINUM POLES WITH NEW GENERATION EQUIPMENT SHOWN.
2. DESIGN CONFORMS TO THE AASHTO *STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS* (CURRENT EDITION).
3. DESIGN WIND SPEED: 150 MPH
4. TO ALLOW FOR WIND FROM VARYING ANGLES, A TRANSVERSE COMPONENT OF 20% OF THE NORMAL WIND LOAD FORCES IS APPLIED SIMULTANEOUS WITH THE NORMAL WIND FORCES.
5. MAXIMUM ALLOWABLE DESIGN BEARING PRESSURE = 1000 PSF
6. FOUNDATIONS ARE DESIGNED TO LIMIT UPLIFT TO A MAXIMUM OF ONE CORNER AND TO LIMIT THE TENSION AREA TO LESS THAN 25% OF FOUNDATION AREA.

EQUIPMENT DATA

	WEIGHT (LBS)	EPA (SF) OR DIMENSION
300 WATT- SECOND STROBE:	34	1.00
WVD ANTENNA:	5	0.25
RED PHASE CAMERA (EACH):	40	0.60
CAMERA & AXIS LIVE VIDEO CAMERA ENCLOSURE:	100	2.50
ATS CABINET:	125	14.25" X 18.85" X 27"
		Cd=1.70

TRANSFORMER BASE: COMPONENT PRODUCTS, INC. CPI-BAS-1P

DESIGN LOADING

	CASE 1 TRANSVERSE UNIAXIAL	CASE 2 TRANSVERSE BIAXIAL	CASE 3 LONGITUDINAL UNIAXIAL	CASE 4 LONGITUDINAL BIAXIAL
POLE/EQUIPMENT AXIAL	480	480	480	480
POLE/EQUIPMENT MOMENT (MZ)	0	0	0	0
WIND SHEAR (VX)	1,190	1,190	0	240
WIND SHEAR (VZ)	0	240	1,190	1,190
WIND MOMENT (MX)	0	2,150	11,120	11,120
WIND MOMENT (MZ)	11,120	11,120	0	2,150

AXIAL AND SHEAR FORCES ARE IN LBS.
MOMENTS ARE IN FOOT*LBS

APPLICABILITY

THE DETAILS HEREIN ARE FOR SPREAD FOUNDATIONS FOR USE WITH THE AMERICAN TRAFFIC SOLUTIONS ALUMINUM REAR POLE WITH NEW GENERATION EQUIPMENT AS SHOWN.

THESE FOUNDATIONS ARE NOT APPLICABLE FOR USE WITH OTHER TYPES OF POLES AND/OR EQUIPMENT.

MATERIAL NOTES

1. CONCRETE: CLASS C
(28-DAY MINIMUM COMPRESSIVE STRENGTH = 3,600 PSI)
2. REINFORCING STEEL: ASTM A615, GRADE 60
3. ANCHOR RODS:

A. RODS: ASTM F1554, GRADE 55

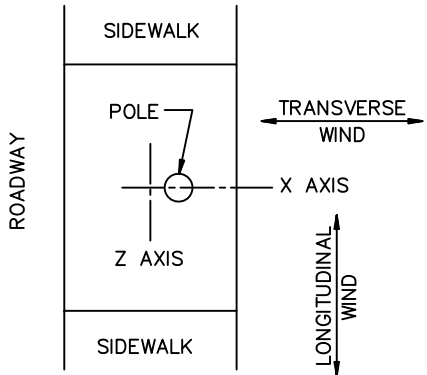
B. NUTS: ASTM A563, GRADE A HEAVY HEX

C. GALVANIZE RODS & NUTS IN ACCORDANCE WITH ASTM F2329.
4. CONCRETE COVER:

3" TOP

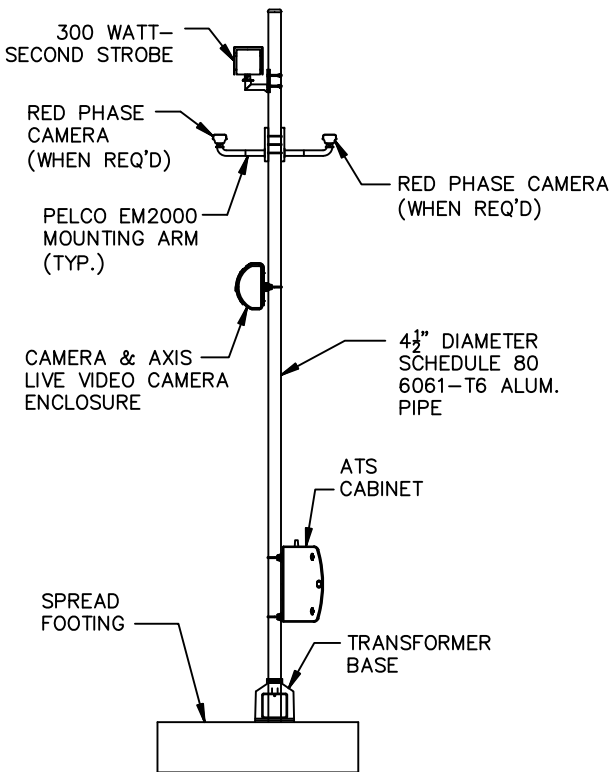
3" SIDES

3" BOTTOM

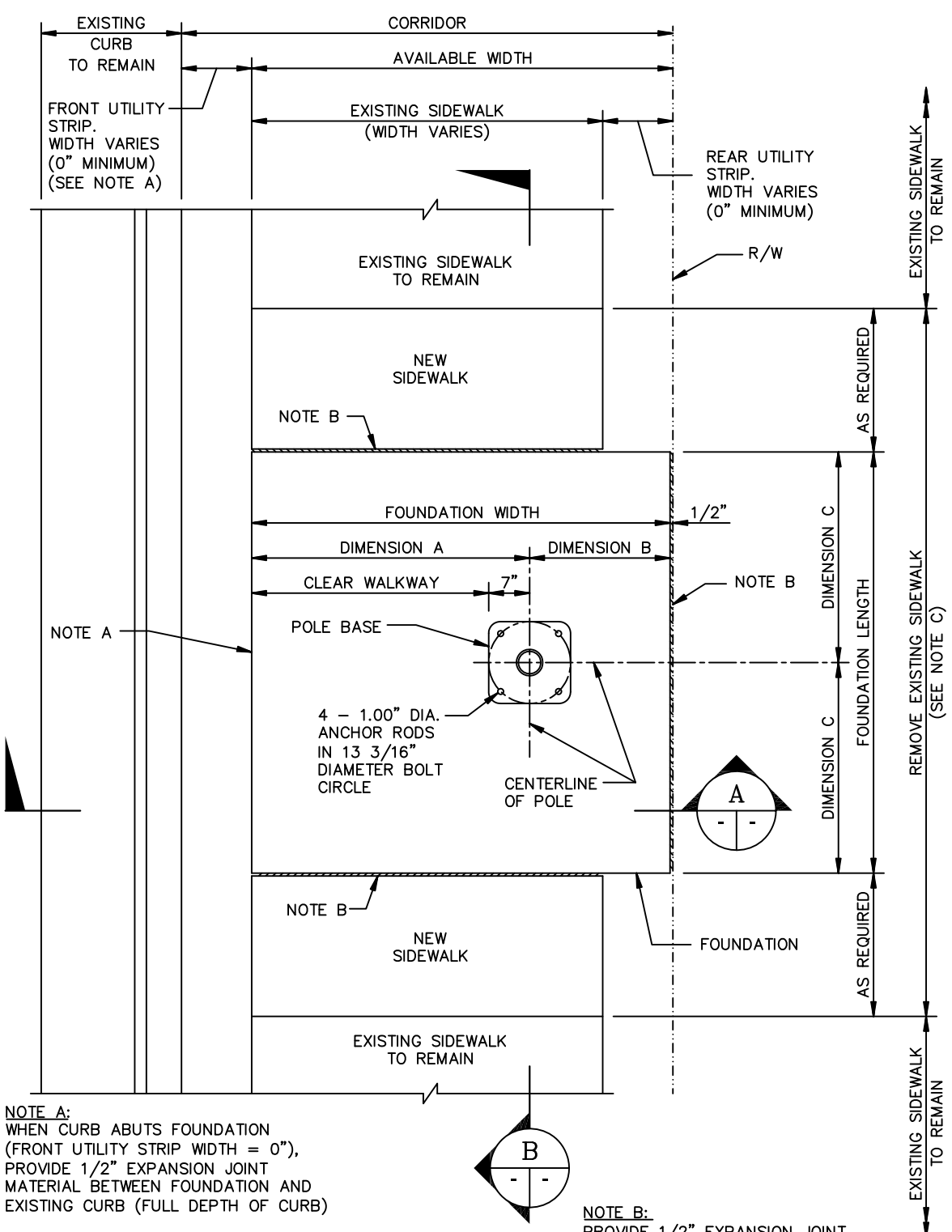


LOADING DIAGRAM

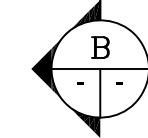
THESE SPREAD FOUNDATIONS SHALL NOT BE USED OVER:
1) GAS, PROPANE, LNG, OR OTHER FLAMMABLE UTILITIES;
2) CONCRETE ENCASED DUCTBANK;
3) CONDUITS OTHER THAN PVC CONDUITS
OR
4) MULTIPLE UTILITIES
WITHOUT THE PRIOR REVIEW AND SIGNED & SEALED WRITTEN APPROVAL OF A REGISTERED PROFESSIONAL ENGINEER.



ALUMINUM REAR POLE
WITH NEW GENERATION EQUIPMENT



NOTE A:
WHEN CURB ABUTS FOUNDATION
(FRONT UTILITY STRIP WIDTH = 0"),
PROVIDE 1/2" EXPANSION JOINT
MATERIAL BETWEEN FOUNDATION AND
EXISTING CURB (FULL DEPTH OF CURB)

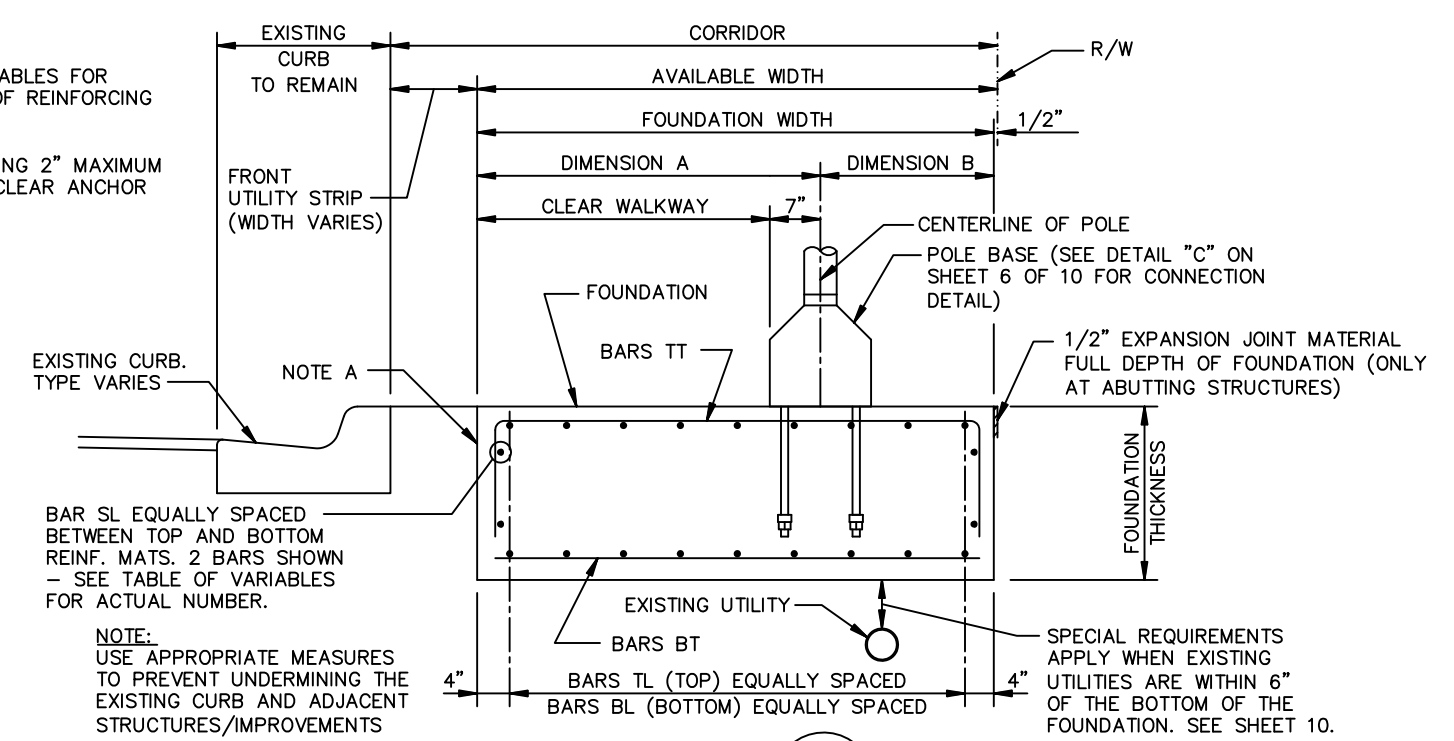


PLAN
NOT TO SCALE

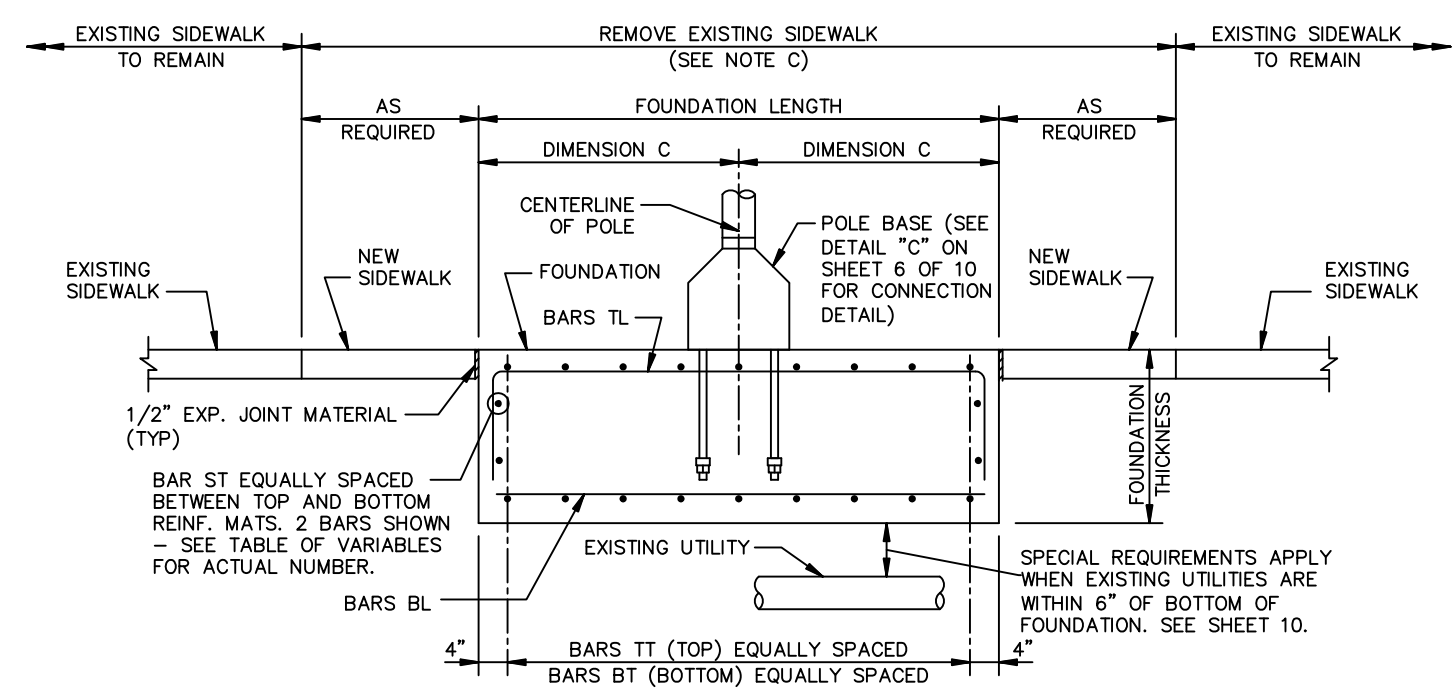
NOTE B:
PROVIDE 1/2" EXPANSION JOINT
MATERIAL BETWEEN FOUNDATION AND
1) NEW SIDEWALK
2) ADJACENT STRUCTURES AS APPLICABLE

- REINFORCING NOTES:**
1. SEE TABLE OF VARIABLES FOR NUMBER AND SIZE OF REINFORCING BARS.
 2. SHIFT TOP REINFORCING 2" MAXIMUM WHERE NEEDED TO CLEAR ANCHOR RODS.

NOTE C:
LIMIT SIDEWALK REMOVAL TO
THAT NECESSARY TO
CONSTRUCT THE FOUNDATION



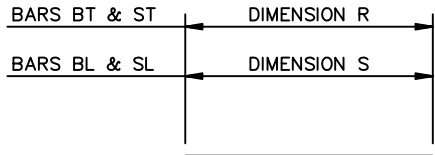
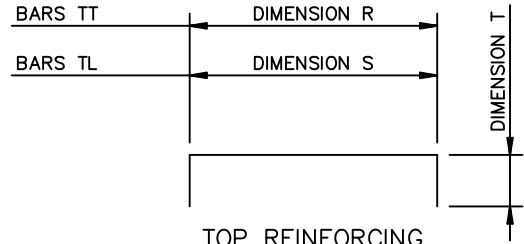
SECTION A
NOT TO SCALE



SECTION B
NOT TO SCALE

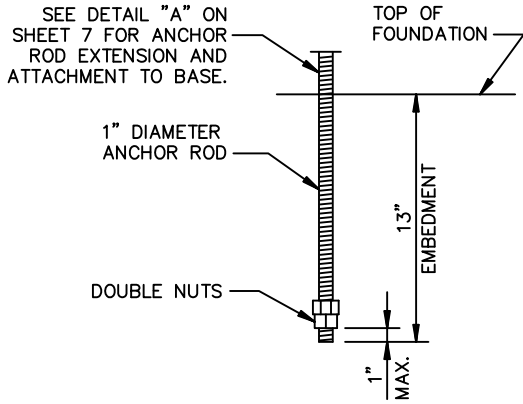
TABLE OF VARIABLES						
	AVAILABLE WIDTH					
	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
FOUNDATION WIDTH ①	4'-11 ½"	5'-5 ½"	5'-11 ½"	6'-5 ½"	6'-11 ½"	7'-5 ½"
FOUNDATION LENGTH	8'-6"	8'-6"	9'-0"	8'-6"	7'-6"	7'-0"
FOUNDATION THICKNESS	34"	27"	20"	18"	18"	18"
REINFORCING BARS TT	13 - #4	10 - #4	11 - #4	11 - #4	9 - #4	9 - #4
REINFORCING BARS TL	8 - #4	7 - #4	7 - #4	8 - #4	9 - #4	10 - #4
REINFORCING BARS ST	3 - #5	2 - #5	1 - #5	1 - #5	1 - #5	1 - #5
REINFORCING BARS SL	3 - #5	2 - #5	1 - #5	1 - #5	1 - #5	1 - #5
REINFORCING BARS BT	13 - #5	10 - #5	11 - #5	11 - #5	9 - #5	9 - #5
REINFORCING BARS BL	8 - #5	7 - #5	7 - #5	8 - #5	9 - #5	10 - #5
CLEAR WALKWAY ①	2'-8 ½"	2'-8 ½"	3'-0 ½"	3'-6 ½"	3'-6 ½"	3'-6 ½"
DIMENSION A ①	3'-3 ½"	3'-3 ½"	3'-7 ½"	4'-1 ½"	4'-1 ½"	4'-1 ½"
DIMENSION B	1'-8"	2'-2"	2'-4"	2'-4"	2'-10"	3'-4"
DIMENSION C	4'-3"	4'-3"	4'-6"	4'-3"	3'-9"	3'-6"
DIMENSION R	4'-5"	4'-11"	5'-5"	5'-11"	6'-5"	6'-11"
DIMENSION S	8'-0"	8'-0"	8'-6"	8'-0"	7'-0"	6'-6"
DIMENSION T	2'-1"	1'-6"	0'-11"	0'-9"	0'-9"	0'-9"

① DECREASE DIMENSION BY ½" IF CURB ABUTS FRONT FACE OF SIDEWALK

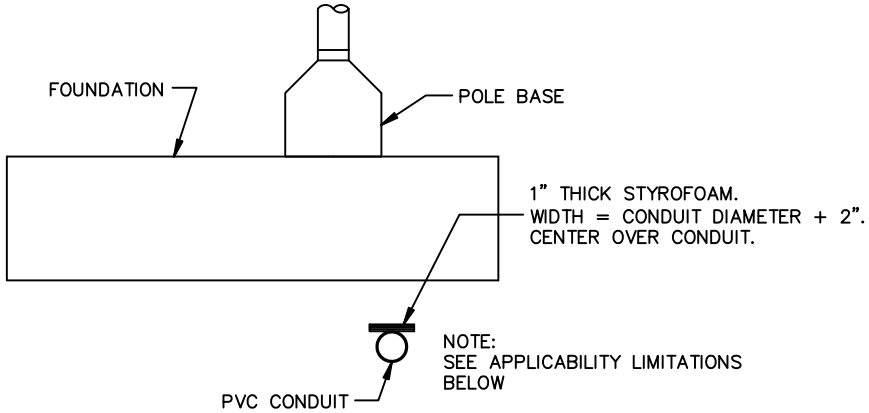


BOTTOM & SIDE REINFORCING

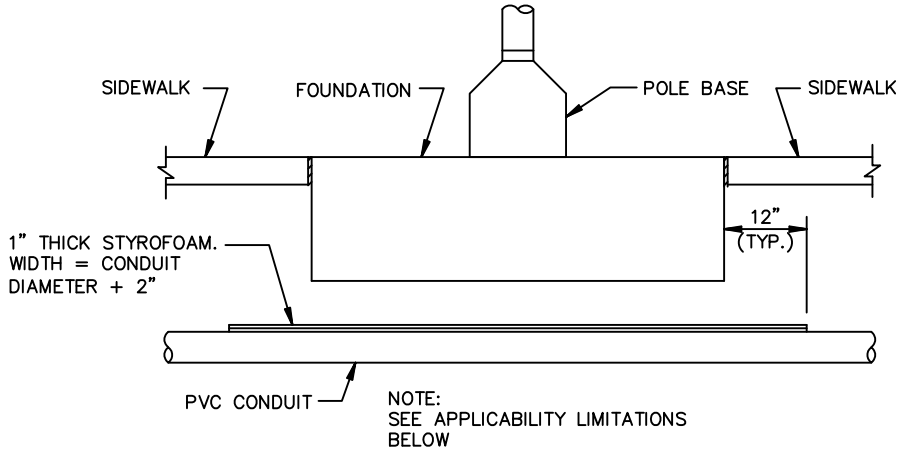
REINFORCING BARS



ANCHOR RODS
NOT TO SCALE



TRANSVERSE SECTION



LONGITUDINAL SECTION

SPECIAL REQUIREMENTS AT UTILITIES

NOT TO SCALE

APPLICABILITY LIMITATIONS:

- DETAILS SHOWN ARE APPLICABLE ONLY FOR A SINGLE PVC CONDUIT WITH A MINIMUM OF 1" CLEAR DISTANCE FROM THE TOP OF THE CONDUIT TO THE UNDERSIDE OF THE FOUNDATION.
- NO MODIFICATIONS ARE NEEDED FOR A SINGLE PVC CONDUIT WITH MORE THAN 6" CLEAR DISTANCE FROM THE TOP OF THE CONDUIT TO THE UNDERSIDE OF THE FOUNDATION.
- ALL OTHER CONDITIONS (DIFFERENT TYPE OF CONDUIT, MULTIPLE CONDUITS, ETC.) REQUIRE THE REVIEW AND APPROVAL OF A PROFESSIONAL ENGINEER.