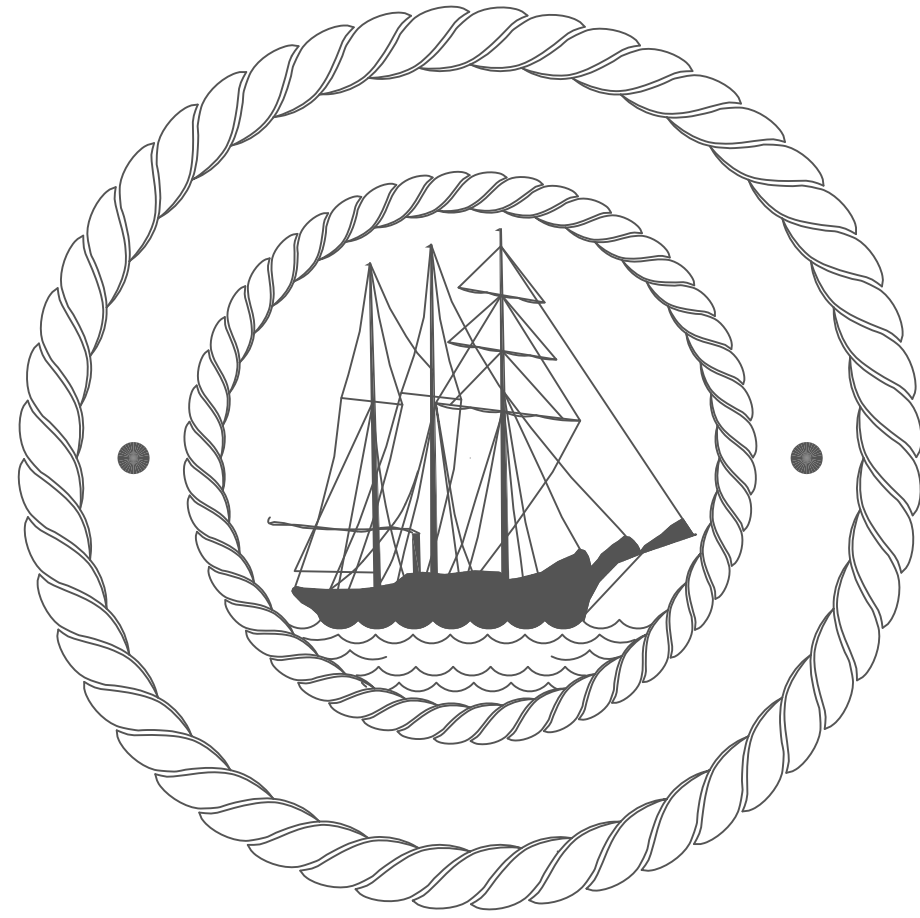


The Enclosed Document Is Provided For Your Convenience.

Please Email ALL Questions:
[MailTo:ContractAdministration@TampaGov.net](mailto:ContractAdministration@TampaGov.net)

Please Let Us Know If You Plan To Bid

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456



DOWNTOWN GATEWAY LIGHTING IMPROVEMENTS AT
NORTH FRANKLIN STREET AND
JEFFERSON/ORANGE STREET AT I-275
CONTRACT No: 14-C-00003
SEPTEMBER 2013

CONSULTANT (ELECTRICAL)

ANSTON - GREEN LEES, INC
1315 WEST FLETCHER AVENUE, SUITE #A
TAMPA, FLORIDA 33612
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INDEX (VOLUME 1)

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E-4 ENLARGED LIGHTING AND POWER PLANS
E-5 ENLARGED LIGHTING AND POWER PLANS
E-6 LIGHTING CALCULATIONS
E-7 ELECTRICAL DETAILS

CONSULTANT (ELECTRICAL)

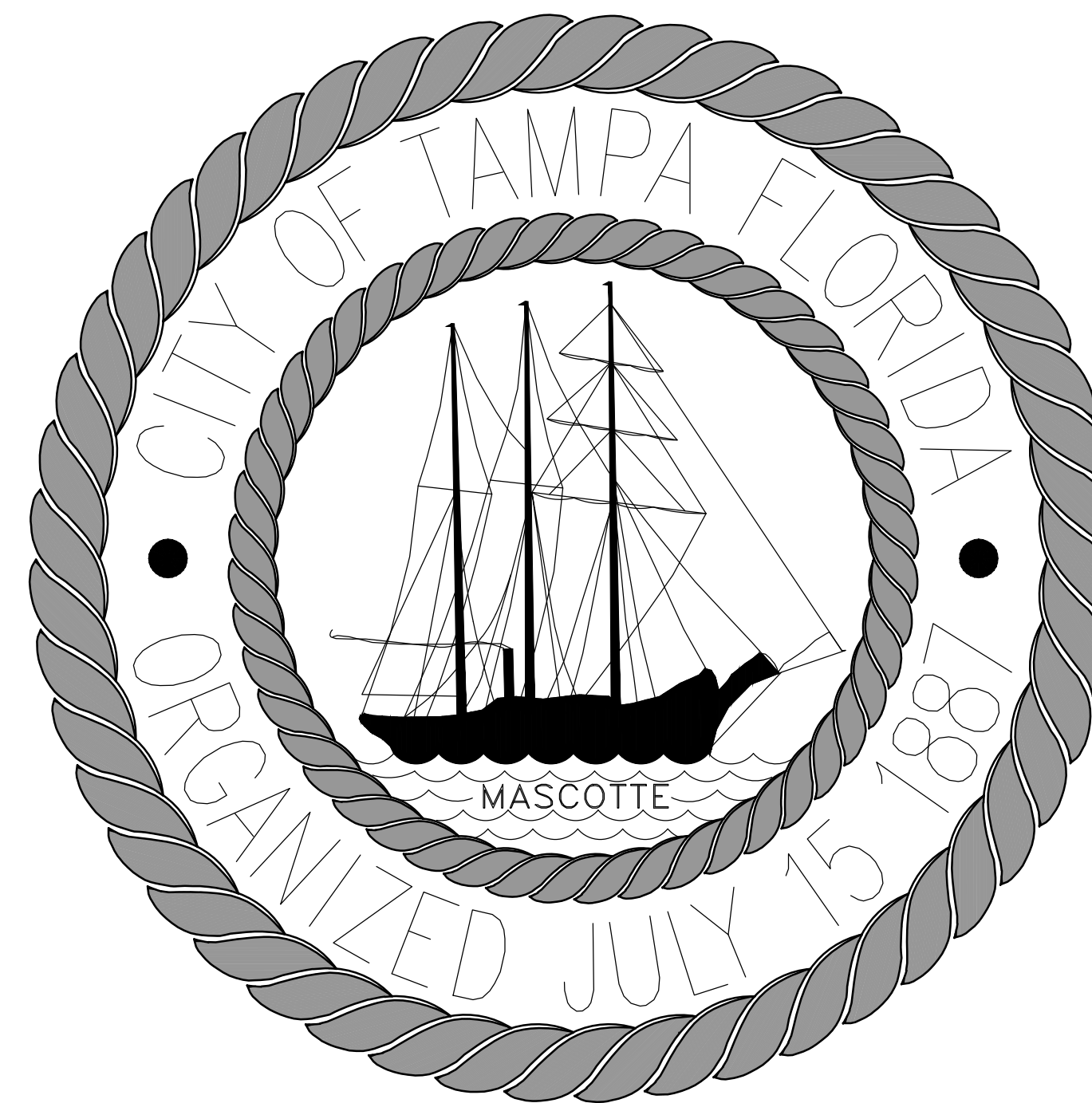
DEREK GIL, P.E.
ELEMENT ENGINEERING GROUP
1713 EAST 9TH AVENUE
TAMPA, FL 33605
PH.: (813) 386-2101
FAX.: (813) 386-2106

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North Franklin Street Improvements

E. Cass Street to E. Fortune Street



CITY OF TAMPA PARKS AND RECREATION DEPARTMENT

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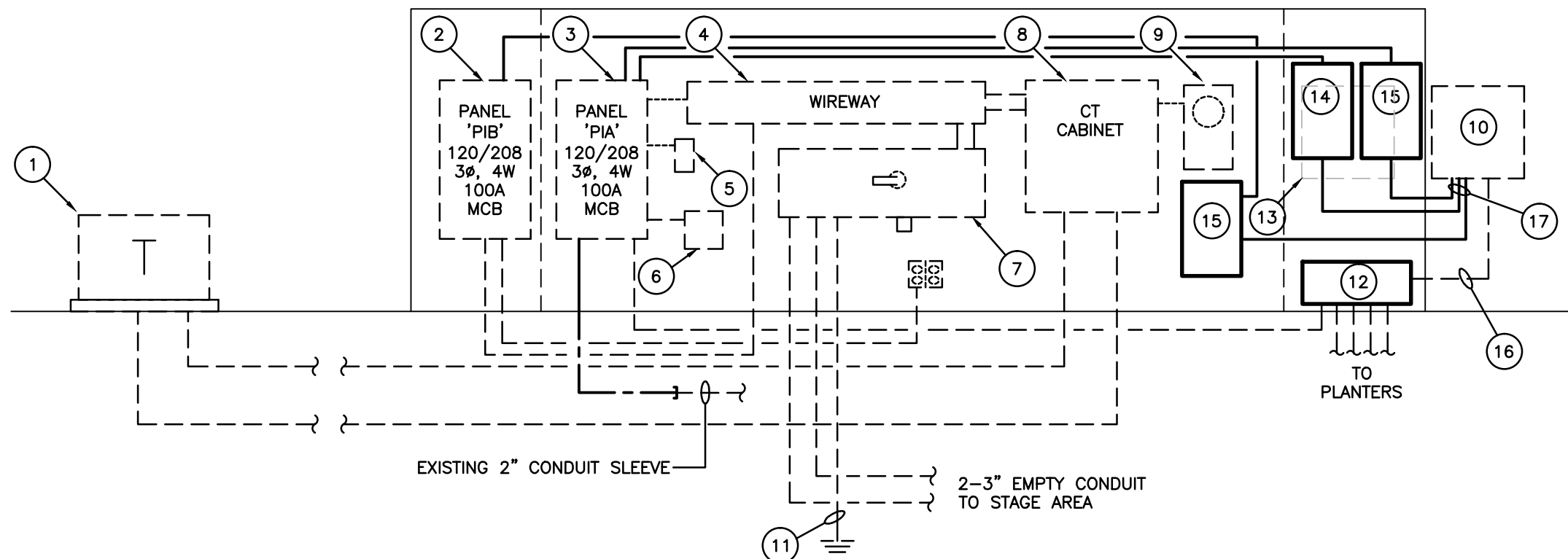
EXISTING PANEL 'P1A'														
PANEL: P1A			3PH,4W						MLO: 0 AMPS					
AIC RATING: EXIST									MCB: 100 AMPS					
SERVICE: 120/208 V.														
DESCRIPTION			KVA	BKR	CKT	A	B	C	CKT	BKR	KVA	DESCRIPTION		
E	LTG; STREET	1.2	2P	1					2	20	0.8	LTG; BOLLARD		
E	LTG; STREET	1.2	20	3					4	20	0.8	LTG; BOLLARD		
E	LTG; BOLLARD	0.8	20	5					6	20	1	LTG; TREE		
E	LTG; TREE	1	20	7					8	20	0.9	REC; LT. POLE		
E	LTG; TREE	1	20	9					10	20	0.9	REC; LT. POLE		
E	REC; LT. POLE	0.9	20	11					12	20	0.9	REC; LT. POLE		
E	REC; LT. POLE	0.9	20	13					14	20	0.9	REC; LT. POLE		
E	REC; LT. POLE	0.9	20	15					16	20	0.9	REC; LT. POLE		
E	REC; LT. POLE	0.9	20	17					18	20	0.1	EQ; TIME CLOCK		
E	REC; LT. POLE	0.9	20	19					20	20	0.1	EQ; IRRIGATION		
E	REC; LT. POLE	0.9	20	21					22	2P	3	REC; HARRISON ST		
N	LTG; TREE	0.3	2P	23					24	50	3	REC; HARRISON ST		
N	LTG; TREE	0.3	20	25					26	20	1	REC; HARRISON ST		
N	LTG; TREE	0.3	2P	27					28	-	0	SPACE		
N	LTG; TREE	0.3	20	29					30	-	0	SPACE		
			A PH = 8.00			B PH = 9.90			C PH = 8.20					
SERVES			CONN		LOAD	FACTOR		FEED		DIVERSITY		KVAD		
LIGHTING			9.00		x	1.25		= 11.25		x		=		
RECEPT			16.00		x	+		= 13.45		x		=		
MISC EQUIP			0.20		x	1.00		= 0.20		x		=		
A/C			0.00		x	1.00		= 0.00		x		=		
HEATING			0.00		x	1.00		= 0.00		x		=		
LARGEST MOTOR			0.00		x	1.25		= 0.00		x		=		
OTHER MOTORS			0.00		x	1.00		= 0.00		x		=		
OTHER			0.00		x	1.00		= 0.00		x		=		
SPARE								11.08						
TOTALS			26.10		KVA				35.98		KVA			

* PER N.E.C. TABLE 220.44

EXISTING PANEL 'P1B'													
S E R V I C E	P1B AIC RATING: EXIST SERVICE: 120/208 V.						3PH,4W			MLO: 0 AMPS MCB: 100 AMPS			S E R V I C E
	DESCRIPTION	KVA	BKR	CKT	A	B	C	CKT	BKR	KVA	DESCRIPTION		
E	REC; BOLLARD	1.4	20	31				32	20	1.4	REC; BOLLARD	E	
E	REC; BOLLARD	1.4	20	33				34	20	1.4	REC; BOLLARD	E	
E	REC; BOLLARD	1.4	20	35				36	20	1.4	REC; LTS. POLE	E	
E	REC; LTS. POLE	1.4	20	37				38	20	1.4	REC; LTS. POLE	E	
E	REC; LTS. POLE	1.4	20	39				40	20	1.4	REC; LTS. POLE	E	
E	SPACE	0	-	41				42	20	1.4	REC; LTS. POLE	E	
E	REC; EP AREA	1.4	20	43				44	20	1.4	REC; EP AREA	E	
E	REC; EP AREA	1.4	20	45				46	20	1.4	REC; STAGE	E	
E	REC; STAGE	1.4	20	47				48	20	1.4	REC; STAGE	E	
E	REC; STAGE	1.4	20	49				50	20	0.8	REC; TYLER ST	N	
E	REC; STAGE	1.4	20	51				52	20	0.8	REC; TYLER ST	N	
N	REC; CASS ST	2	2P	53				54	2P	2	REC; TYLER ST	N	
N	REC; CASS ST	2	30	55				56	30	2	REC; TYLER ST	N	
N	REC; CASS ST	0.8	20	57				58	2P	2	REC; TYLER ST	N	
N	SPACE	0	-	59				60	30	2	REC; TYLER ST	N	
A PH = 14.60 B PH = 13.40 C PH = 13.00													
SERVES		CONN		LOAD	FACTOR		FEED		DIVERSITY		KVAD	PANEL KVAD	
LIGHTING		0.00		x	1.25		=	0.00		x	=		
RECEIPT		41.00		x	+		=	25.50		x	=		
MISC EQUIP		0.00		x	1.00		=	0.00		x	=		
A/C		0.00		x	1.00		=	0.00		x	=		
HEATING		0.00		x	1.00		=	0.00		x	=		
LARGEST MOTOR		0.00		x	1.25		=	0.00		x	=		
OTHER MOTORS		0.00		x	1.00		=	0.00		x	=		
OTHER		0.00		x	1.00		=	0.00		x	=		
SPARE								10.48					
TOTALS		41.00		KVA				35.98		KVA			

* PER N.E.C. TABLE 220.44

ABBREVIATIONS:
E = EXISTING CIRCUIT TO REMAIN.
N = NEW BREAKER AND CIRCUIT.



ELECTRICAL RISER DIAGRAM
NOT TO SCALE

ELECTRICAL LEGEND		
SYMBOL	DESCRIPTION	MOUNTING
	BRANCH CIRCUIT CONDUIT AND WIRE CONCEALED ABOVE CEILING OR BEHIND FINISHED WALL	N/A
	BRANCH CIRCUIT CONDUIT AND WIRE CONCEALED BELOW FINISHED FLOOR OR UNDERGROUND	N/A
	HOMERUN TO PANELBOARD - LETTER INDICATES PANEL, NUMBER INDICATES CIRCUIT, MINIMUM 3/4" CONDUIT. NOTE: ANY HOMERUN WITHOUT FURTHER DESIGNATION INDICATES TWO #12 AWG AND #12 AWG EQUIPMENT GROUND. PC OUTLET REQUIRES SEPARATE NEUTRAL, MIN. #10 AWG. DEDICATED CIRCUIT REQUIRES SEPARATE NEUTRAL	N/A
	LED, INCANDESCENT, OR HIGH INTENSITY DISCHARGE LIGHTING FIXTURE, LETTER INDICATES TYPE	POST MOUNTED - SEE FIXTURE SCHEDULE
	POWER PEDESTAL, TWO-GANG WITH IN-USE COVER; (1) DUPLEX RECEPTACLE - 120 VOLT (1) 30 AMP RECEPTACLE - 208 VOLT, 4 WIRE GROUNDING TYPE, NEMA 18-30R (VERIFY RECEPTACLE CONFIGURATION PRIOR TO ORDERING)	ABOVE GRADE - AS NOTED SEE DETAIL, SHEET E-7
	POWER PEDESTAL, TWO-GANG WITH IN-USE COVER; (1) DUPLEX RECEPTACLE - 120 VOLT (1) 50 AMP RECEPTACLE - 208 VOLT, 4 WIRE GROUNDING TYPE, NEMA 18-50R (VERIFY RECEPTACLE CONFIGURATION PRIOR TO ORDERING)	ABOVE GRADE - AS NOTED SEE DETAIL, SHEET E-7

LIGHTING FIXTURE SCHEDULE				
TYPE	DESCRIPTION	VOLTS	LAMPS	MOUNTING
A	ARCHITECTURAL FLOODLIGHTING LUMINAIRE, ONE-PIECE DIE-CAST ALUMINUM HOUSING AND DOOR, HINGED REMOVABLE DOOR AND BACK BOX, SEALED AND GASKETED OPTICAL COMPARTMENT, AIMING TAPER-LOCK KNUCKLE MOUNT, WITH VISOR AND IMPACT SHIELD, COOPER LIGHTING LUMARK CAT.# XTOR3A-N-WITH XTORFLD-KNC-OR APPROVED EQUAL.	208	30W LED NEUTRAL WARM WHITE 3000K	ON POST 12" ABOVE GRADE MINIMUM

ELECTRICAL GENERAL NOTES:

(THESE NOTES APPLY TO ALL SHEETS)

- ALL WORK SHALL COMPLY WITH THE LATEST ACCEPTED VERSIONS OF THE FOLLOWING:
 - 2008 NATIONAL ELECTRICAL CODE (NEC)
 - 2010 FLORIDA BUILDING CODE (FBC), EFFECTIVE MARCH 15, 2012
 - 2010 FLORIDA FIRE PREVENTION CODE (FFPC): (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.); (EFFECTIVE DECEMBER 31, 2011)
 - ALL OTHER LOCAL CODES AND ORDINANCES
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY THE EXISTING CONDITIONS TO GAIN KNOWLEDGE OF THE SCOPE OF WORK INVOLVED.
- "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- IN GENERAL, THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHOULD NOT BE SCALED. IT SHALL NOT BE THE INTENT OF THESE PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. PROVIDE ALL ITEMS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
- ELECTRICAL INSTALLATION SHALL BE CLOSELY COORDINATED WITH ALL OTHER TRADES. REVIEW THE ENTIRE SET OF DOCUMENTS FOR COORDINATION. NO COST SHALL BE ASSOCIATED WITH ILL-TIMED INSTALLATION INCLUDING ANY REPAIRS OR REPLACEMENTS.
- ALL CONDUITS AND BOXES SHALL BE CONCEALED UNLESS OTHERWISE NOTED. ALL CONDUIT RUNS ARE SCHEMATIC IN NATURE. EXACT ROUTING TO BE DETERMINED IN THE FIELD UNLESS OTHERWISE NOTED.
- PROVIDE ALL REQUIRED PULL BOXES, JUNCTION BOXES, ETC. FOR A COMPLETE INSTALLATION.
- PATCH, REPAIR AND REPAINT ALL WALLS THAT HAVE BEEN DAMAGED DUE TO ELECTRICAL ROUGH-IN. REMOVE ANY UNUSED CONDUIT AND WIRE.
- ALL CONDUCTORS SHALL BE STRANDED COPPER, THHN/THWN, MINIMUM #12 AWG. ALL CONDUCTORS SHALL BE IN CONDUIT. FLEXIBLE CONDUIT SHALL BE LIMITED TO A MAXIMUM OF 6'-0" IN LENGTH.
- MC CABLE OR OTHER PREMANUFACTURED CABLING SHALL NOT BE USED UNLESS APPROVED BY THE OWNER AND ENGINEER.
- ALL CIRCUITS SHALL CONTAIN A SEPARATE, GREEN, COPPER GROUNDING CONDUCTOR.
- ALL RECEPTACLES SHALL HAVE A GROUND TERMINAL.
- WHEN REUSING OR EXTENDING EXISTING CIRCUITS, VERIFY ALL CIRCUIT NUMBERS AND VERIFY ANY EXISTING LOAD. CIRCUITS MAY BE PICKED UP AT AN EXISTING JUNCTION BOX IF AVAILABLE RATHER THAN PROVIDING A SEPARATE HOMERUN TO A PANEL.
- PANELBOARDS SHALL BE ACCURATELY LABELED TO IDENTIFY FINAL CIRCUIT NUMBERS UTILIZED, THEIR LOAD AND LOCATION.
- COORDINATE WITH PARKS AND RECREATION DEPARTMENT FOR REMOVAL OF PLANT MATERIAL AS NEEDED FOR INSTALLATION OF LIGHT FIXTURES AND POWER PEDESTALS. CONTRACTOR SHALL REMOVAL ALL DEBRIS AND RESTORE SITE TO ORIGINAL CONDITION UPON COMPLETION OF WORK.
- ALL CONDUCTORS IN UNDERGROUND CONDUIT SHALL BE WET LOCATION TYPE "XHHW".
- SEE SPECIFICATION FOR MORE REQUIREMENTS.

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
E	EXISTING
ETR	EXISTING TO REMAIN
EG	EQUIPMENT GROUND
GFI	GROUND FAULT PROTECTION
G, GND	GROUND
MTG	MOUNTING
MTD	MOUNTED
M.H.	MOUNTING HEIGHT
N/A	NOT APPLICABLE
U.O.N.	UNLESS OTHERWISE NOTED
R	REMOVE
RL	RELOCATED
WP	WEATHER PROOF

ELECTRICAL DRAWING INDEX

E-1	GENERAL NOTES, LEGEND, DETAILS AND RISER DIAGRAM
E-2	PARTIAL LIGHTING AND POWER PLAN
E-3	PARTIAL LIGHTING AND POWER PLAN
E-4	ENLARGED LIGHTING AND POWER PLANS
E-5	ENLARGED LIGHTING AND POWER PLANS
E-6	LIGHTING CALCULATIONS
E-7	ELECTRICAL DETAILS

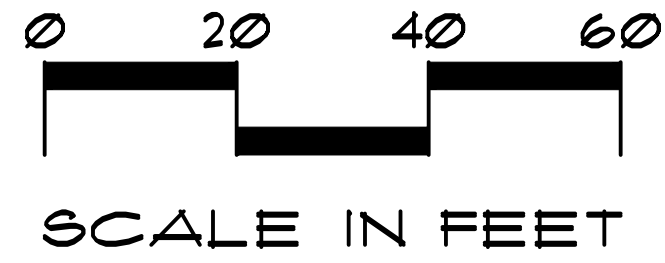
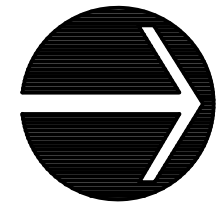
Revisions	Date

CITY OF TAMPA PARKS AND
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Planning and Design
3402 W. Columbus Drive
Tampa, FL 33607
274-5132

AGI
Astons-Greenlee, Inc.
Electrical & Mechanical Contractors
1333 West Hillsborough Avenue, Suite 100
Tampa, FL 33607
813-288-1111
Fax: 813-288-1112

NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET
GENERAL NOTES, LEGEND, RISER DIAGRAM AND
PANEL SCHEDULES

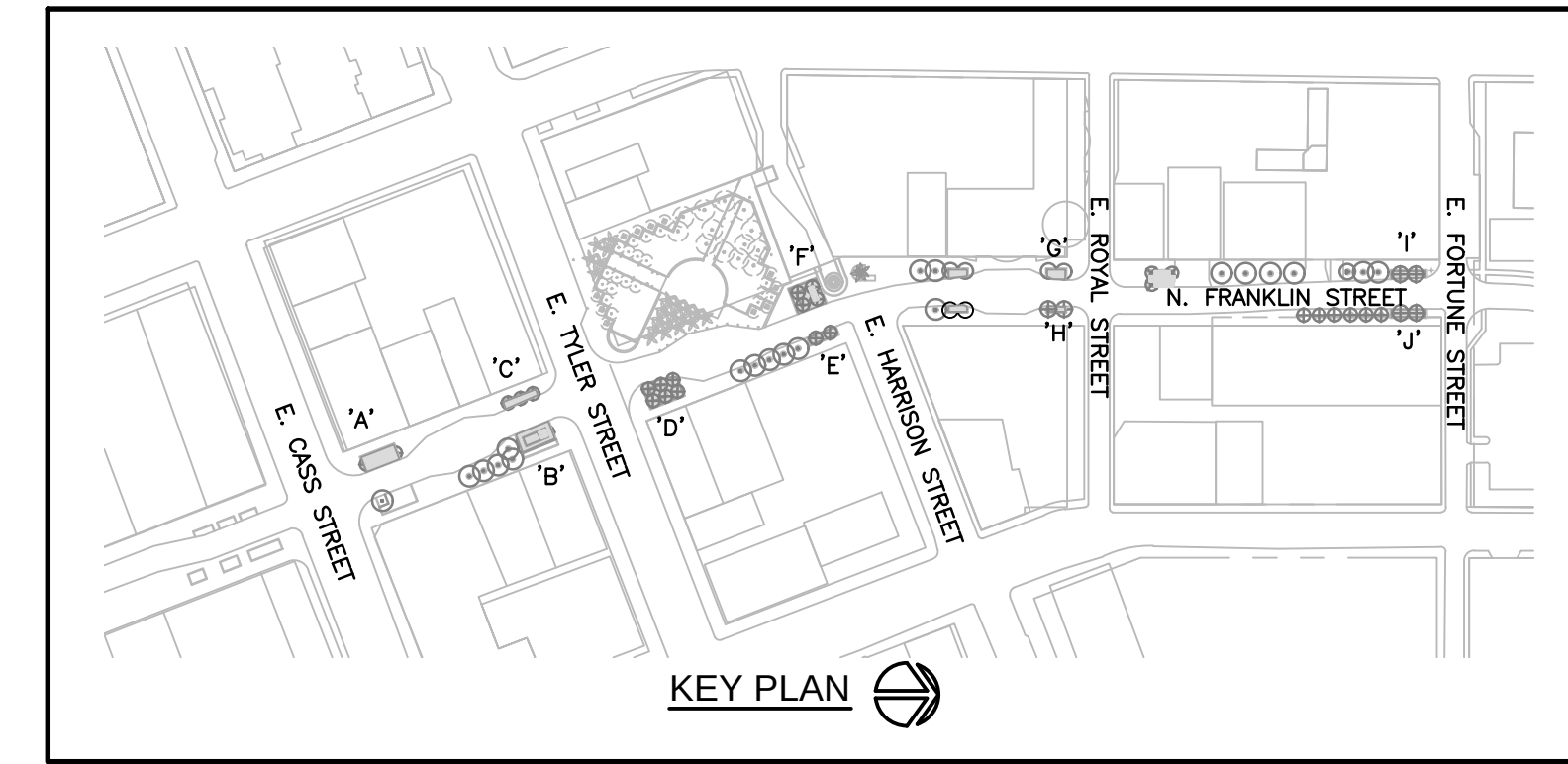
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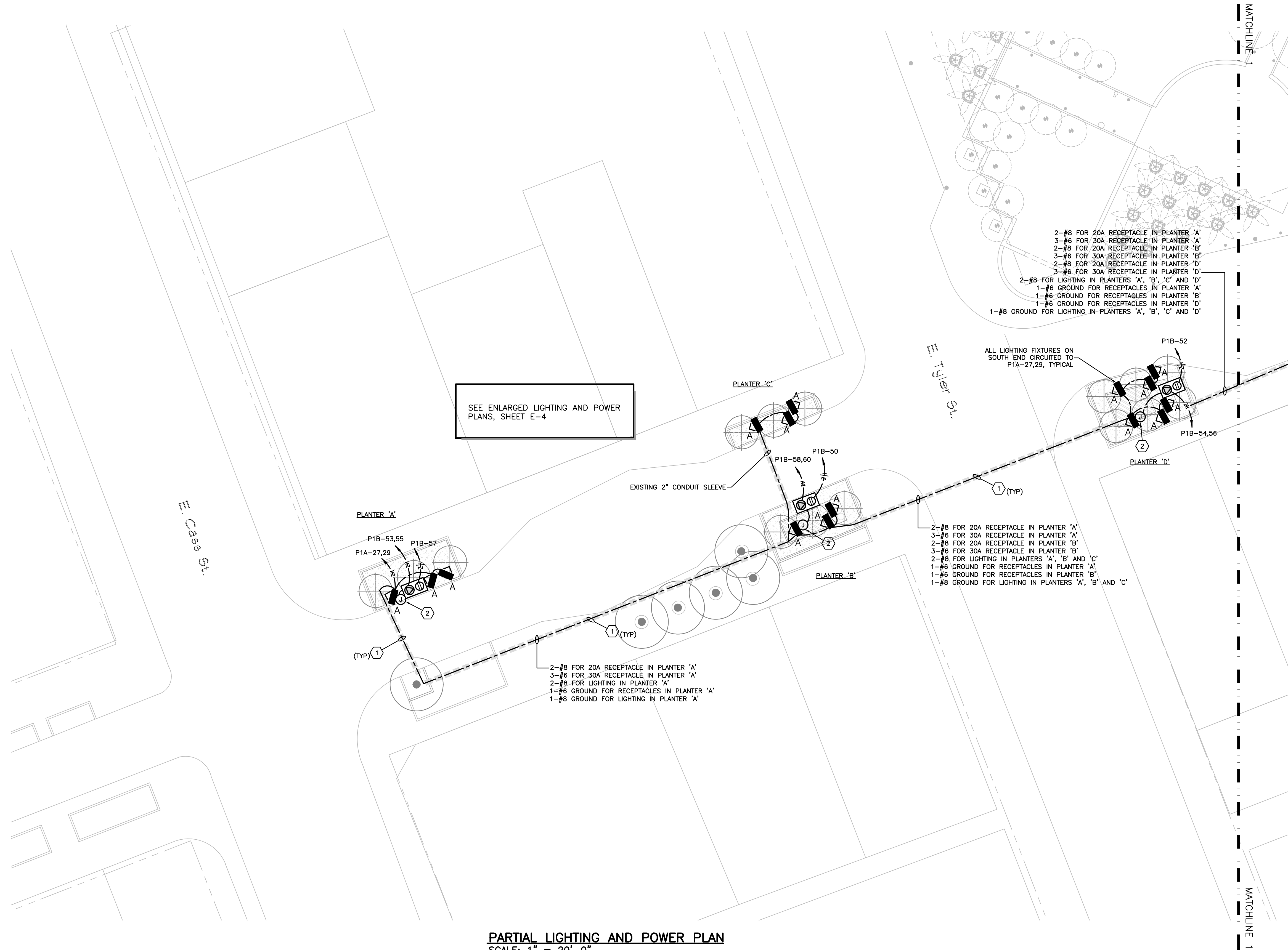
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DRAWING NOTES:

1. INSTALL WIRE FOR NEW LANDSCAPE LIGHTING AND NEW EXTERIOR RECEPTACLES IN EXISTING 2" CONDUIT SLEEVES.
2. MOUNT WEATHERPROOF JUNCTION BOX ON PEDESTAL. EXTEND RECEPTACLE CIRCUITS IN PLANTER. PROVIDE #10 WIRE TO 30A RECEPTACLE, #10 WIRE TO 20A RECEPTACLE. SEE TYPICAL POWER OUTLET BOX DETAIL, SHEET E-7.



KEY PLAN



SEE ENLARGED LIGHTING AND POWER PLANS, SHEET E-4

PARTIAL LIGHTING AND POWER PLAN
SCALE: 1" = 20'-0"

ROBERT C. ANSTON, P.E. 40858

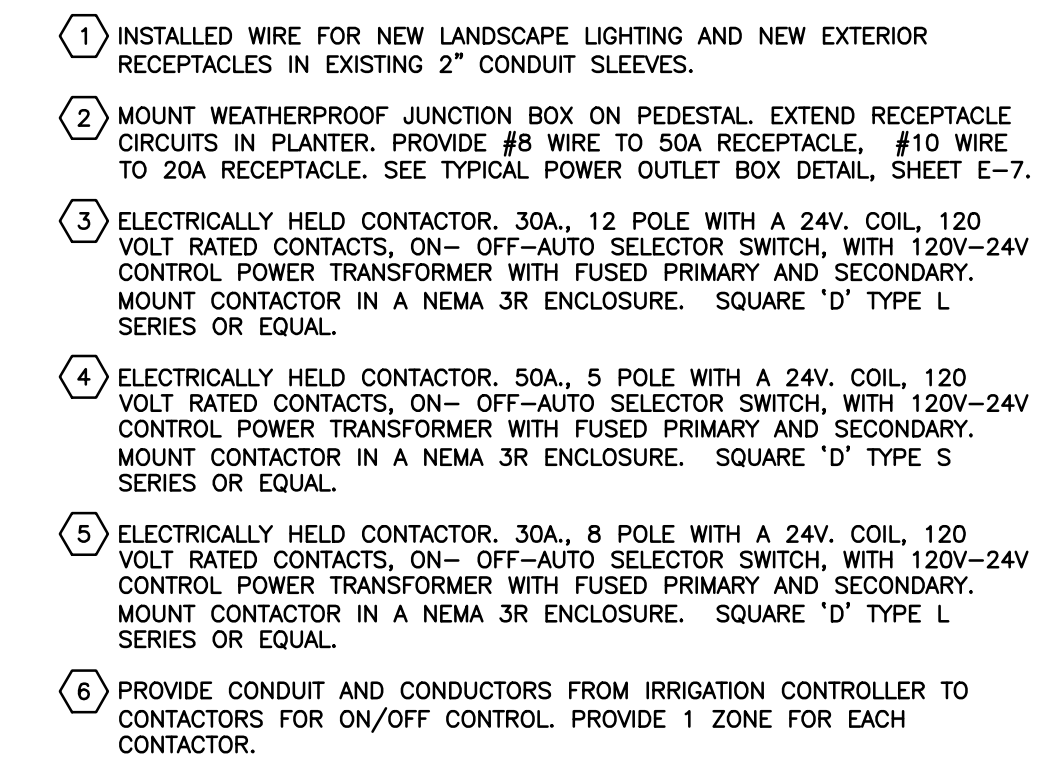
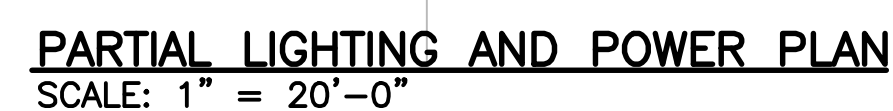
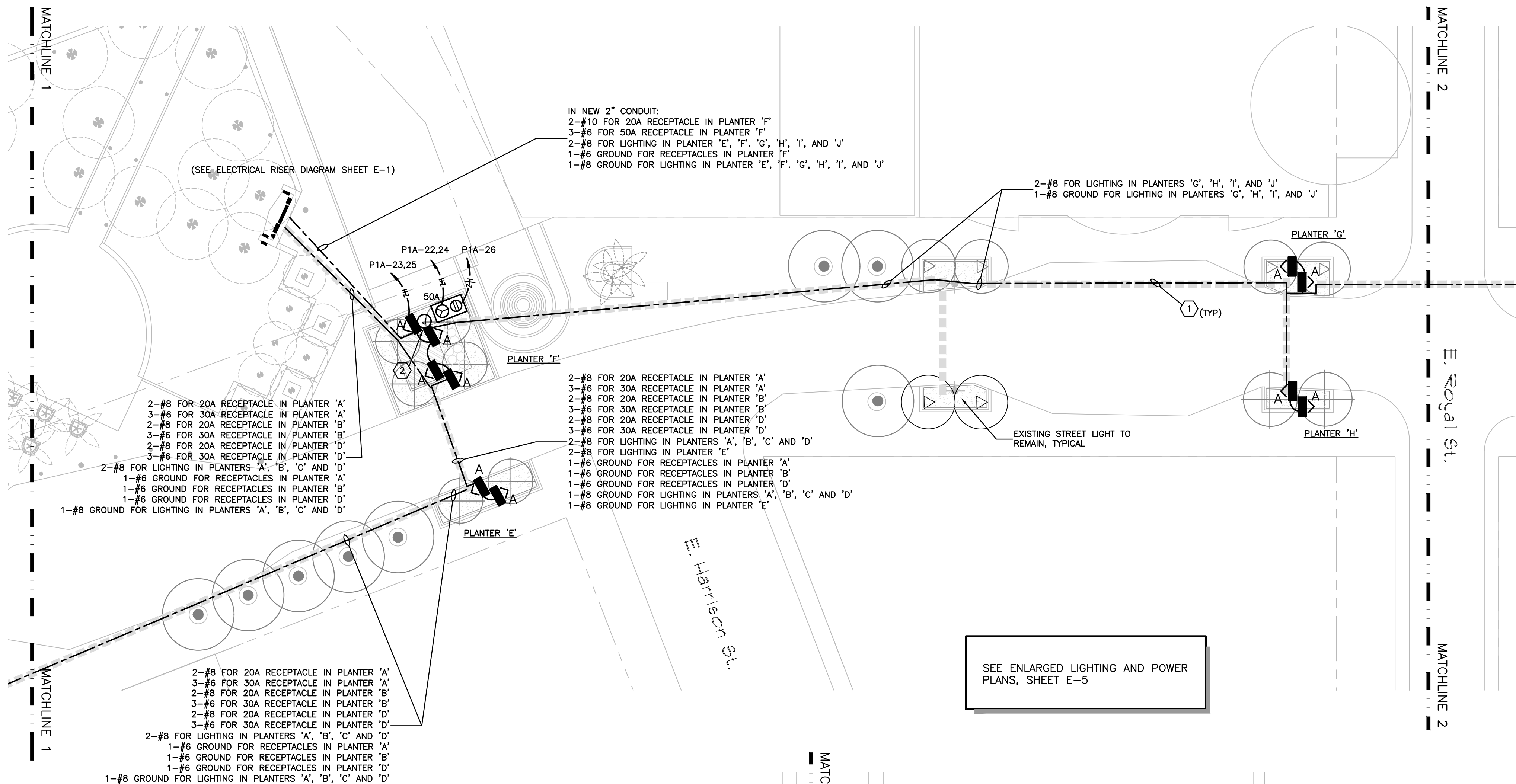
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Web: www.anston-greenlee.com

**NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET
PARTIAL LIGHTING AND POWER PLAN**

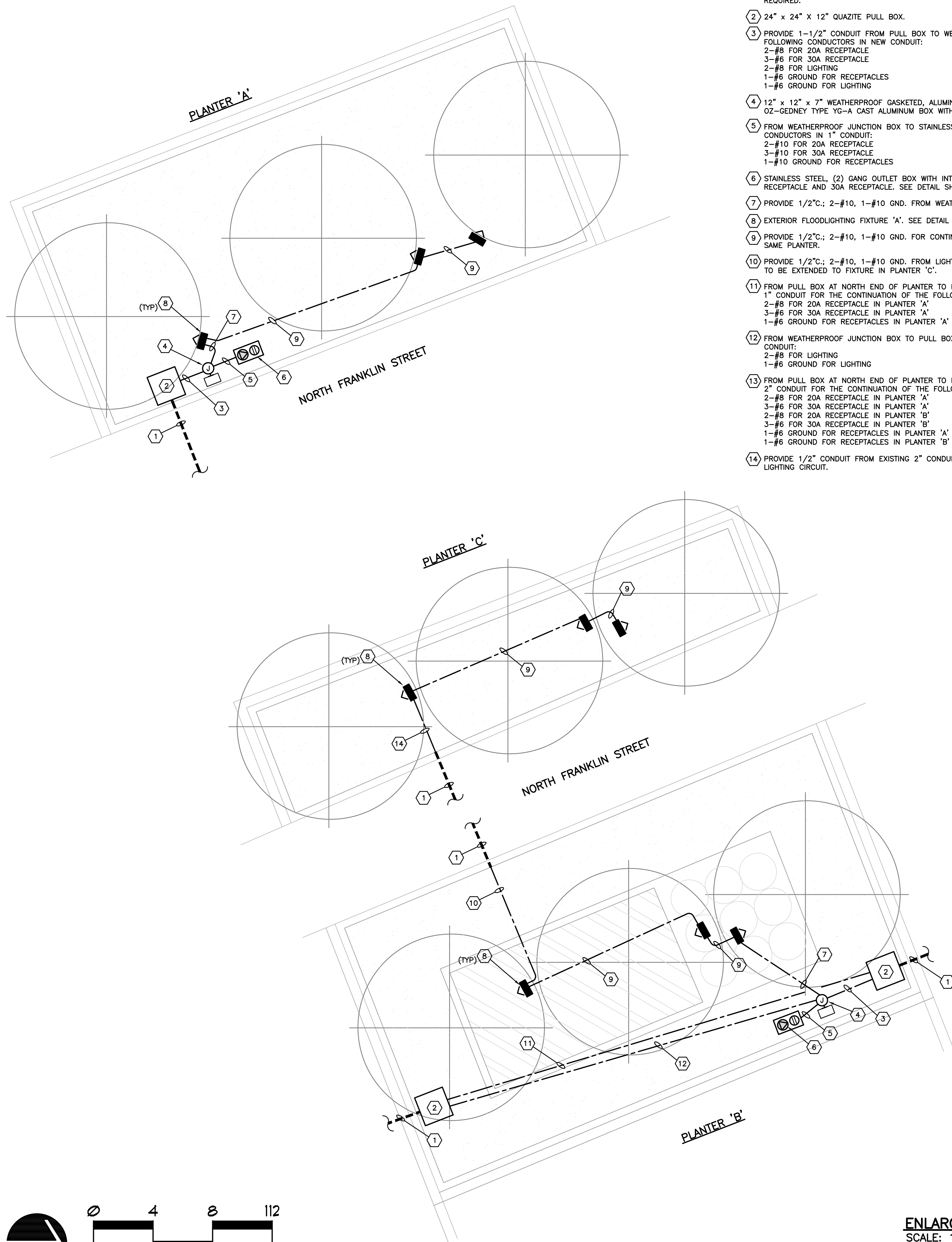
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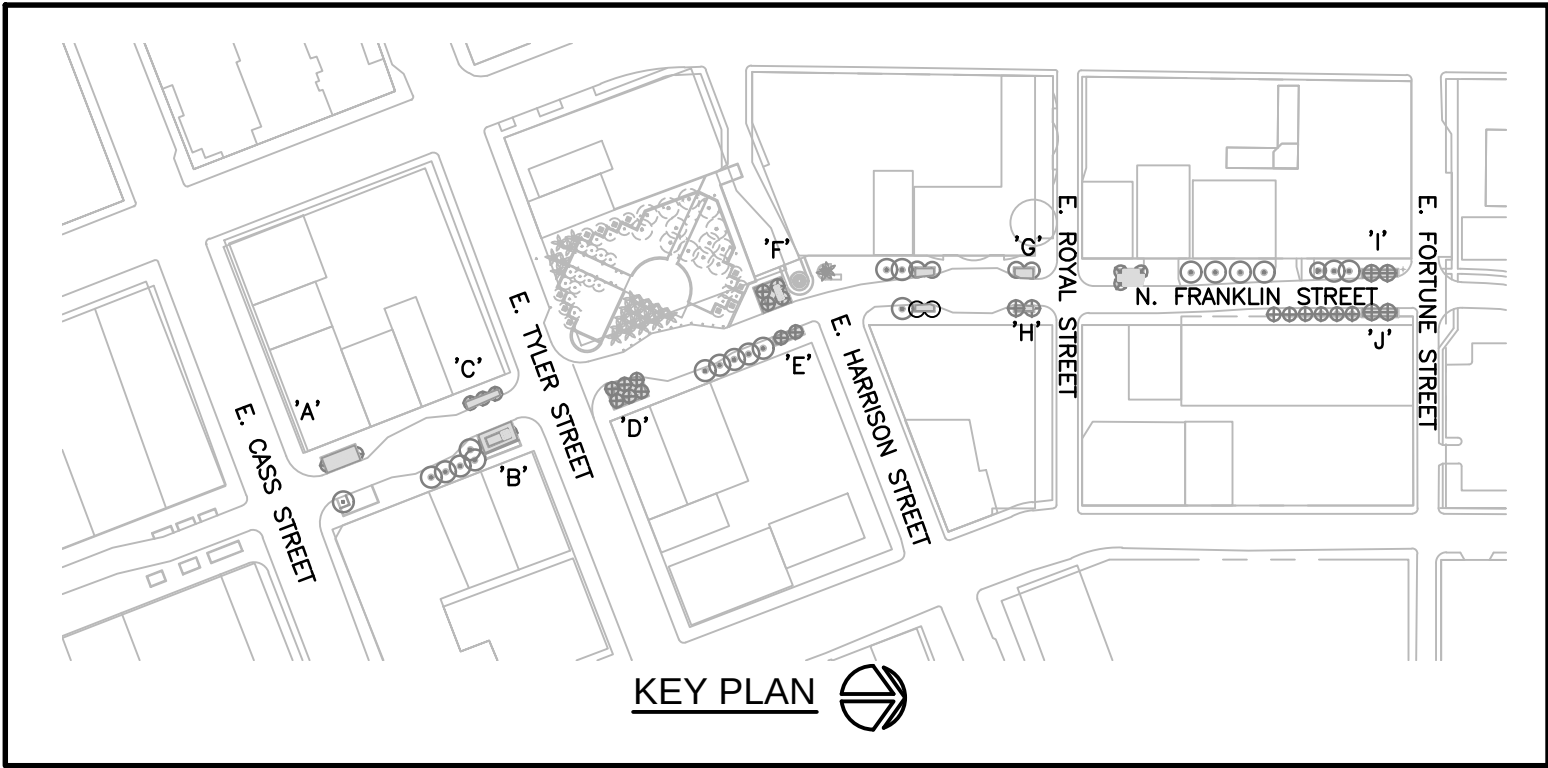
NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET
PARTIAL LIGHTING AND POWER PLAN

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DRAWING NOTES:

- 1 NEW POWER/LIGHTING CIRCUITS IN EXISTING 2" CONDUIT. SEE SHEETS E-3 FOR SIZE AND NUMBER OF CONDUCTORS. EXTEND EXISTING 2" CONDUIT INTO PULL BOX OR TO NEW CONDUIT EXTENSION AS REQUIRED.
- 2 24" x 24" x 12" QUAZITE PULL BOX.
- 3 PROVIDE 1-1/2" CONDUIT FROM PULL BOX TO WEATHERPROOF JUNCTION BOX. PROVIDE THE FOLLOWING CONDUCTORS IN NEW CONDUIT:
2-#8 FOR 20A RECEPTACLE
2-#8 FOR 30A RECEPTACLE
2-#8 FOR LIGHTING
1-#6 GROUND FOR RECEPTACLES
1-#6 GROUND FOR LIGHTING
- 4 12" x 12" x 7" WEATHERPROOF GASKETED, ALUMINUM JUNCTION BOX ON CONCRETE PEDESTAL. OZ-GEDNEY TYPE YG-A CAST ALUMINUM BOX WITH STAINLESS STEEL SCREWS, OR EQUAL.
- 5 FROM WEATHERPROOF JUNCTION BOX TO STAINLESS STEEL OUTLET BOX, PROVIDE THE FOLLOWING CONDUCTORS IN 1" CONDUIT:
2-#10 FOR 20A RECEPTACLE
3-#10 FOR 30A RECEPTACLE
1-#10 GROUND FOR RECEPTACLES
- 6 STAINLESS STEEL, (2) GANG OUTLET BOX WITH INTEGRAL BASE PROVIDED WITH 20A DUPLEX RECEPTACLE AND 30A RECEPTACLE. SEE DETAIL SHEET E-7.
- 7 PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FROM WEATHERPROOF JUNCTION BOX TO LIGHT FIXTURE 'A'.
- 8 EXTERIOR FLOODLIGHTING FIXTURE 'A'. SEE DETAIL SHEET E-7.
- 9 PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FOR CONTINUATION OF LIGHTING CIRCUIT TO NEXT FIXTURE IN SAME PLANTER.
- 10 PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FROM LIGHT FIXTURE 'A' TO EXISTING 2" CONDUIT. CIRCUIT TO BE EXTENDED TO FIXTURE IN PLANTER 'C'.
- 11 FROM PULL BOX AT NORTH END OF PLANTER TO PULL BOX AT SOUTH END OF PLANTER, PROVIDE 1" CONDUIT FOR THE CONTINUATION OF THE FOLLOWING CONDUCTORS:
2-#8 FOR 20A RECEPTACLE IN PLANTER 'A'
3-#8 FOR 30A RECEPTACLE IN PLANTER 'A'
1-#6 GROUND FOR RECEPTACLES IN PLANTER 'A'
- 12 FROM WEATHERPROOF JUNCTION BOX TO PULL BOX, PROVIDE THE FOLLOWING CONDUCTORS IN 1" CONDUIT:
2-#8 FOR LIGHTING
1-#6 GROUND FOR LIGHTING
- 13 FROM PULL BOX AT NORTH END OF PLANTER TO PULL BOX AT SOUTH END OF PLANTER, PROVIDE 2" CONDUIT FOR THE CONTINUATION OF THE FOLLOWING CONDUCTORS:
2-#8 FOR 20A RECEPTACLE IN PLANTER 'A'
3-#8 FOR 30A RECEPTACLE IN PLANTER 'A'
2-#8 FOR 20A RECEPTACLE IN PLANTER 'B'
3-#8 FOR 30A RECEPTACLE IN PLANTER 'B'
1-#6 GROUND FOR RECEPTACLES IN PLANTER 'A'
1-#6 GROUND FOR RECEPTACLES IN PLANTER 'B'
- 14 PROVIDE 1/2" CONDUIT FROM EXISTING 2" CONDUIT TO LIGHT FIXTURE 'A' FOR CONTINUATION OF LIGHTING CIRCUIT.



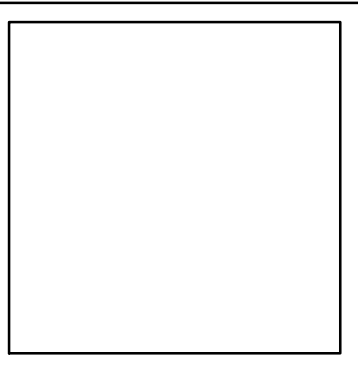
ENLARGED LIGHTING AND POWER PLAN
SCALE: 1/4" = 1'-0"

Revisions	Date

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**NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET
ENLARGED LIGHTING AND POWER PLANS**

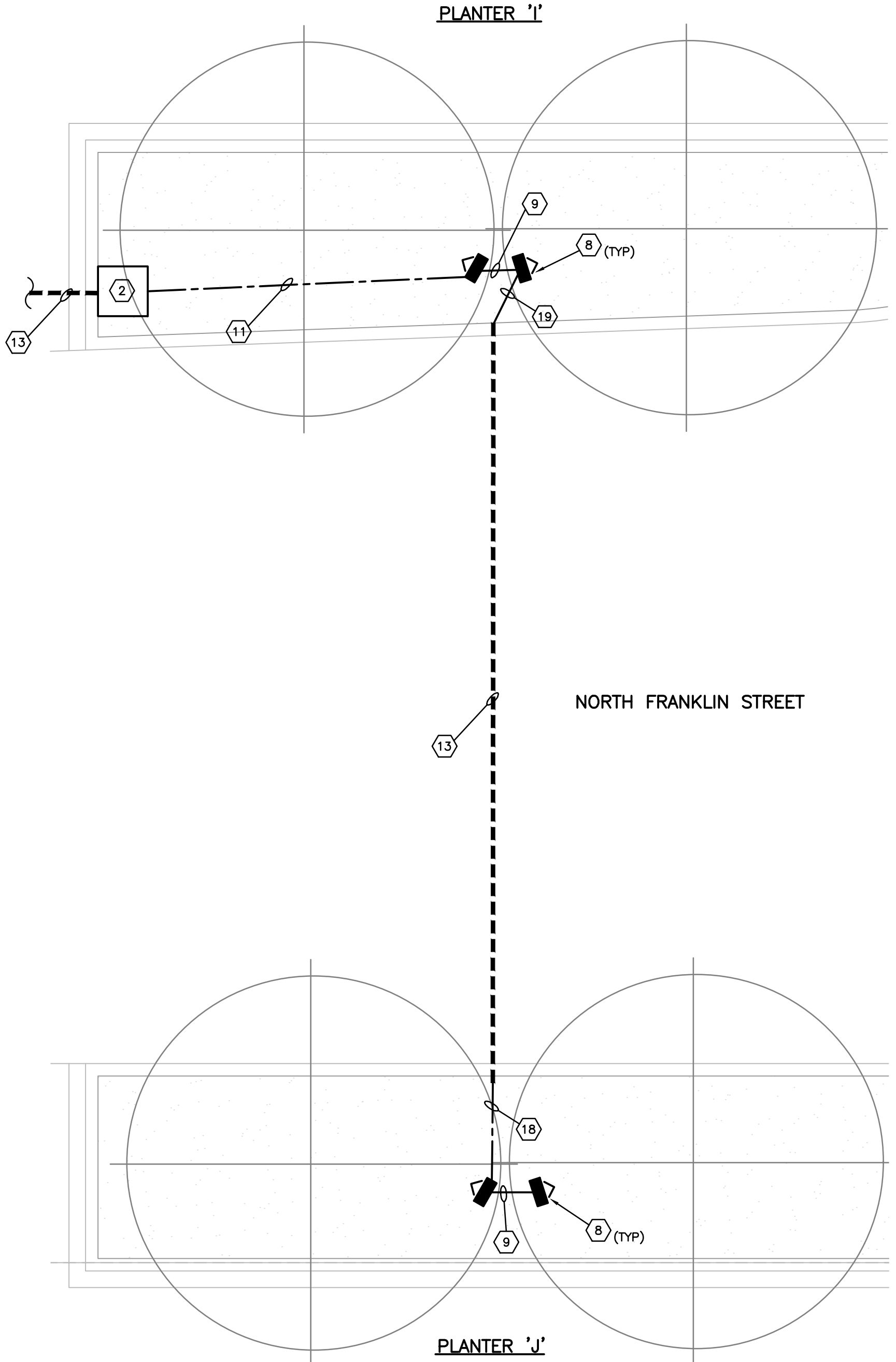
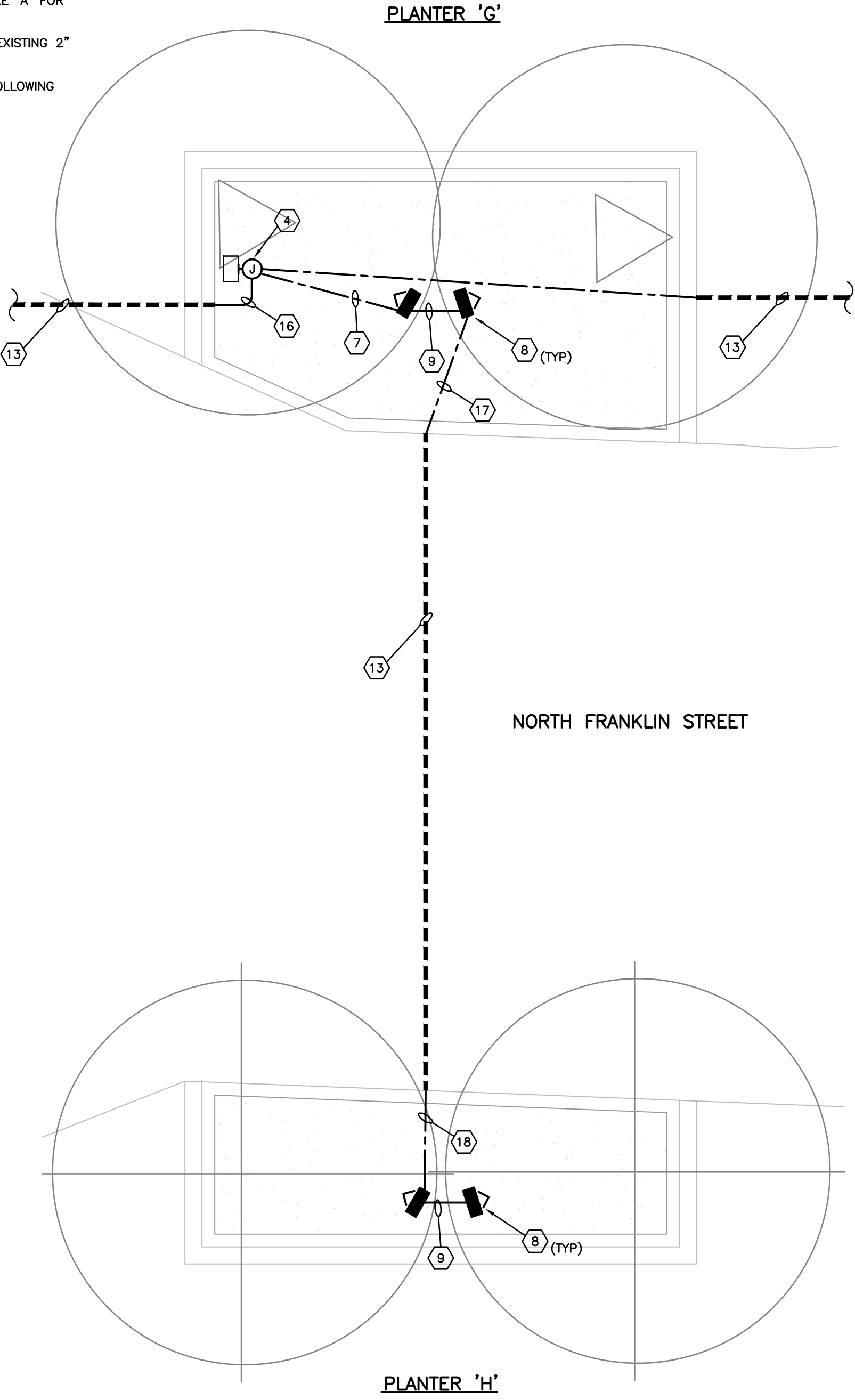
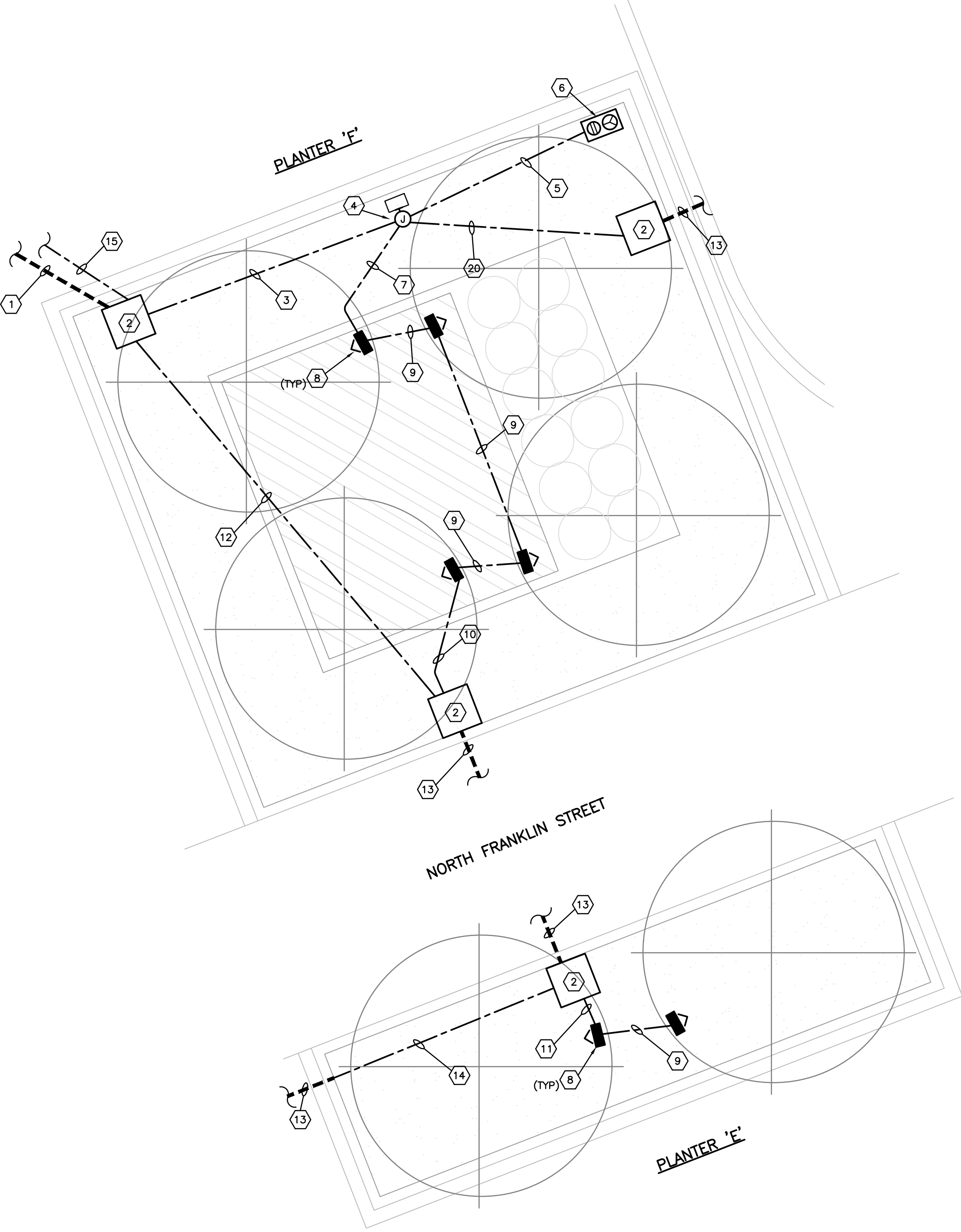
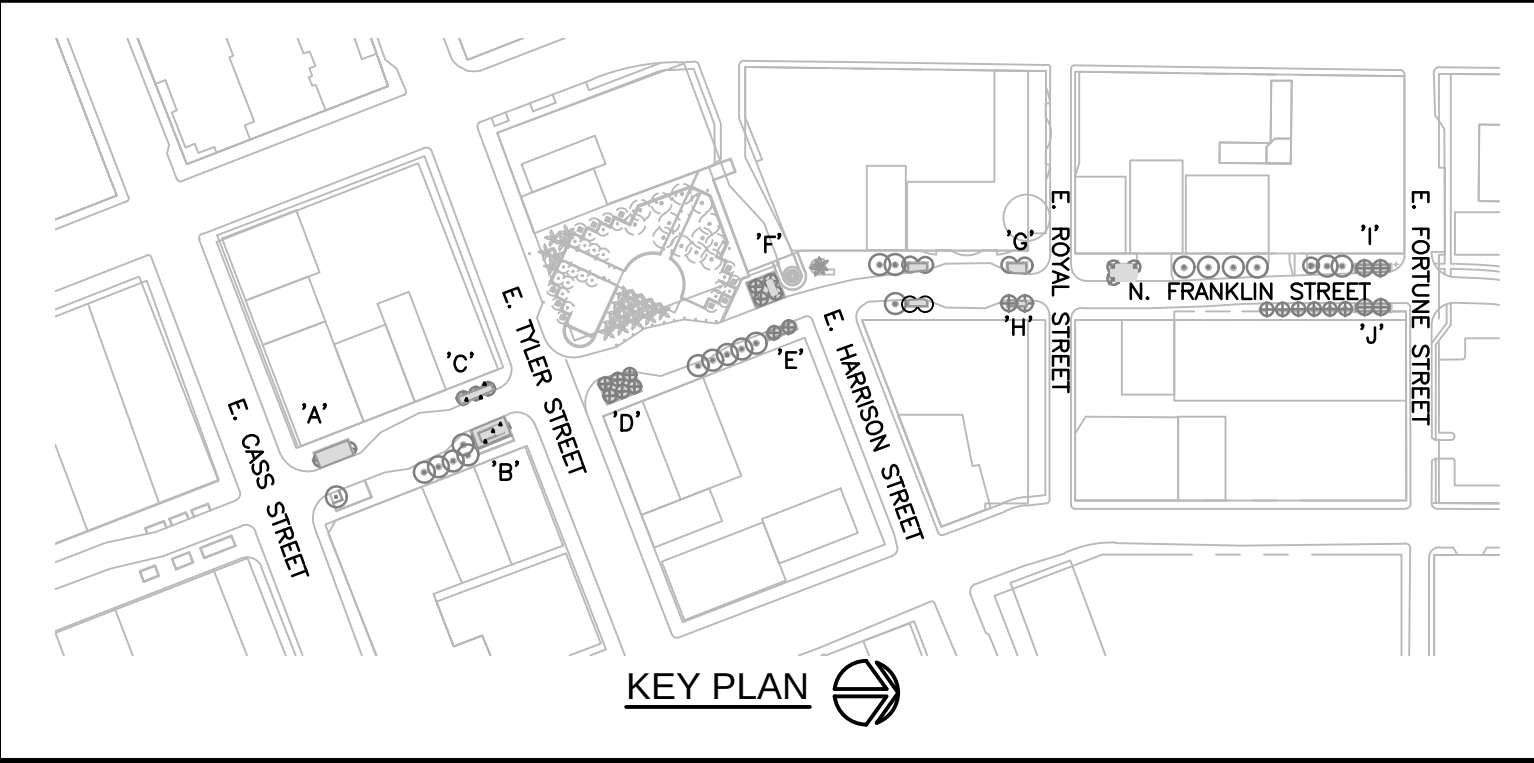


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DRAWING NOTES:

- 1) NEW POWER/LIGHTING CIRCUITS IN EXISTING 2" CONDUIT FROM EXISTING ELECTRICAL PANELS 'P1A' AND 'P1B'. SEE SHEETS E-3 AND E-4 FOR SIZE AND NUMBER OF CONDUCTORS. EXTEND EXISTING 2" CONDUIT INTO PULL BOX OR TO NEW CONDUIT EXTENSION AS REQUIRED.
- 2) 24" x 24" X 12" QUAZITE PULL BOX.
- 3) PROVIDE 1-1/2" CONDUIT FROM PULL BOX TO WEATHERPROOF JUNCTION BOX IN PLANTER 'F'. PROVIDE THE FOLLOWING CONDUCTORS IN NEW CONDUIT:
2-#10 FOR 20A RECEPTACLE
3-#8 FOR 50A RECEPTACLE
2-#8 FOR LIGHTING IN PLANTER
1-#6 GROUND FOR RECEPTACLES
1-#8 GROUND FOR LIGHTING
- 4) 12" x 12" x 7" WEATHERPROOF GASKETED, ALUMINUM JUNCTION BOX ON CONCRETE PEDESTAL. 02-GEDNEY TYPE YG-A CAST ALUMINUM BOX WITH STAINLESS STEEL SCREWS, OR EQUAL. SEE DETAIL, SHEET E-7.
- 5) FROM WEATHERPROOF JUNCTION BOX TO STAINLESS STEEL OUTLET BOX, PROVIDE THE FOLLOWING CONDUCTORS IN 1" CONDUIT:
2-#10 FOR 20A RECEPTACLE
2-#8 FOR 50A RECEPTACLE
1-#8 GROUND FOR RECEPTACLES
- 6) STAINLESS STEEL, (2) GANG OUTLET BOX WITH INTEGRAL BASE PROVIDED WITH 20A DUPLEX RECEPTACLE AND 50A RECEPTACLE. SEE DETAIL SHEET E-7.
- 7) PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FROM WEATHERPROOF JUNCTION BOX TO LIGHT FIXTURE 'A'.
- 8) EXTERIOR FLOODLIGHTING FIXTURE 'A'. SEE DETAIL SHEET E-7.
- 9) PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FOR CONTINUATION OF LIGHTING CIRCUIT TO NEXT FIXTURE IN SAME PLANTER.
- 10) PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FROM LIGHT FIXTURE 'A' TO PULL BOX. CIRCUIT TO BE EXTENDED TO FIXTURE IN PLANTER 'E'.
- 11) PROVIDE 1/2" CONDUIT FROM PULL BOX TO LIGHT FIXTURE 'A' FOR CONTINUATION OF LIGHTING CIRCUIT.

- 12) FROM PULL BOX AT WEST SIDE OF PLANTER 'F' TO PULL BOX AT EAST SIDE OF PLANTER 'F', PROVIDE THE FOLLOWING CONDUCTORS IN 2" CONDUIT:
2-#8 FOR 20A RECEPTACLE IN PLANTER 'A'
3-#8 FOR 30A RECEPTACLE IN PLANTER 'A'
2-#8 FOR 20A RECEPTACLE IN PLANTER 'B'
3-#8 FOR 30A RECEPTACLE IN PLANTER 'B'
2-#8 FOR 20A RECEPTACLE IN PLANTER 'D'
3-#8 FOR 30A RECEPTACLE IN PLANTER 'D'
2-#8 FOR LIGHTING IN PLANTERS 'A', 'B', 'C' AND 'D'
1-#6 GROUND FOR RECEPTACLES IN PLANTER 'A'
1-#6 GROUND FOR RECEPTACLES IN PLANTER 'B'
1-#6 GROUND FOR RECEPTACLES IN PLANTER 'D'
1-#8 GROUND FOR LIGHTING IN PLANTERS 'A', 'B', 'C' AND 'D'
- 13) NEW POWER/LIGHTING CIRCUITS IN EXISTING 2" CONDUIT. SEE SHEETS E-3 AND E-4 FOR SIZE AND NUMBER OF CONDUCTORS. EXTEND EXISTING 2" CONDUIT INTO PULL BOX OR TO NEW CONDUIT EXTENSION AS REQUIRED.
- 14) PROVIDE 2" CONDUIT FOR CONTINUATION OF LIGHTING/POWER CIRCUITS TO NEXT PLANTER FROM PULL BOX TO EXISTING 2" CONDUIT. SEE SHEET E-4 FOR SIZE AND NUMBER OF CONDUCTORS.
- 15) PROVIDE NEW 2" CONDUIT FROM ELECTRICAL PANEL YARD TO PLANTER 'F'. JACK AND BORE UNDER EXISTING CONCRETE SURFACE. SEE SHEET E-4 FOR SIZE AND NUMBER OF CONDUCTORS.
- 16) PROVIDE 1" CONDUIT FROM WEATHERPROOF JUNCTION BOX TO EXISTING 2" CONDUIT FOR CONTINUATION OF LIGHTING CIRCUIT. SEE SHEET E-4 FOR SIZE AND NUMBER OF CONDUCTORS.
- 17) PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FROM LIGHT FIXTURE 'A' TO EXISTING 2" CONDUIT. CIRCUIT TO BE EXTENDED TO FIXTURE IN PLANTER 'H'.
- 18) PROVIDE 1/2" CONDUIT FROM EXISTING 2" CONDUIT TO LIGHT FIXTURE 'A' FOR CONTINUATION OF LIGHTING CIRCUIT.
- 19) PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FROM LIGHT FIXTURE 'A' TO EXISTING 2" CONDUIT. CIRCUIT TO BE EXTENDED TO FIXTURE IN PLANTER 'J'.
- 20) FROM WEATHERPROOF JUNCTION BOX TO PULL BOX, PROVIDE THE FOLLOWING CONDUCTORS IN 1" CONDUIT:
2-#8 FOR LIGHTING
1-#8 GROUND FOR LIGHTING



ENLARGED LIGHTING AND POWER PLAN
SCALE: 1/4" = 1'-0"

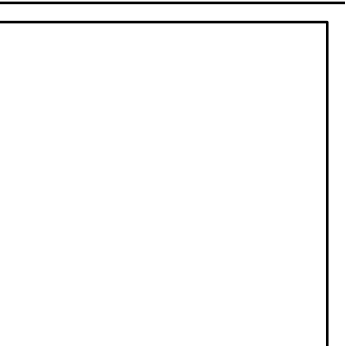


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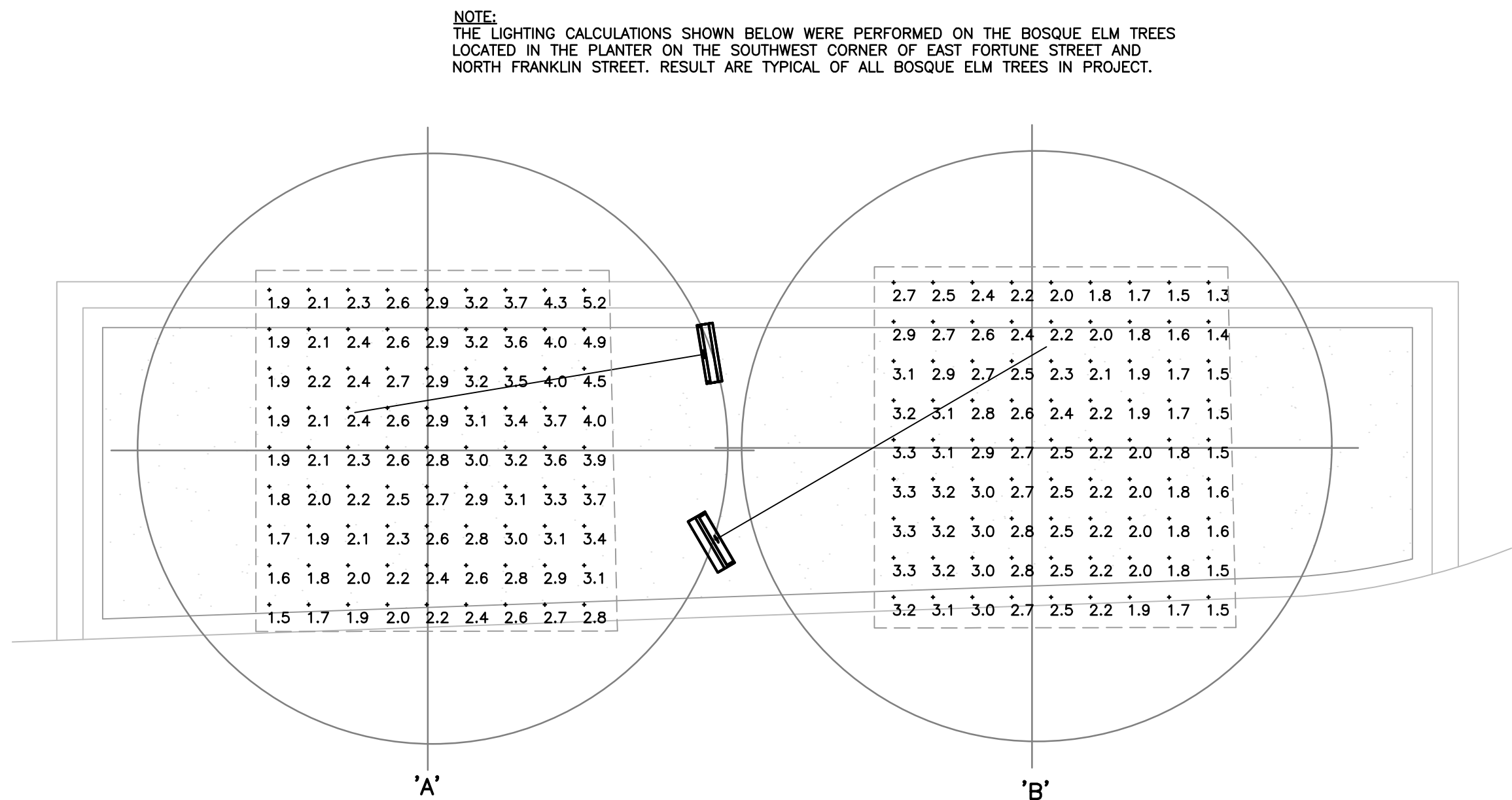
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Fax: 813-288-1112
Email: info@anston-greene.com
Website: www.anston-greene.com

NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET
ENLARGED LIGHTING AND POWER PLANS

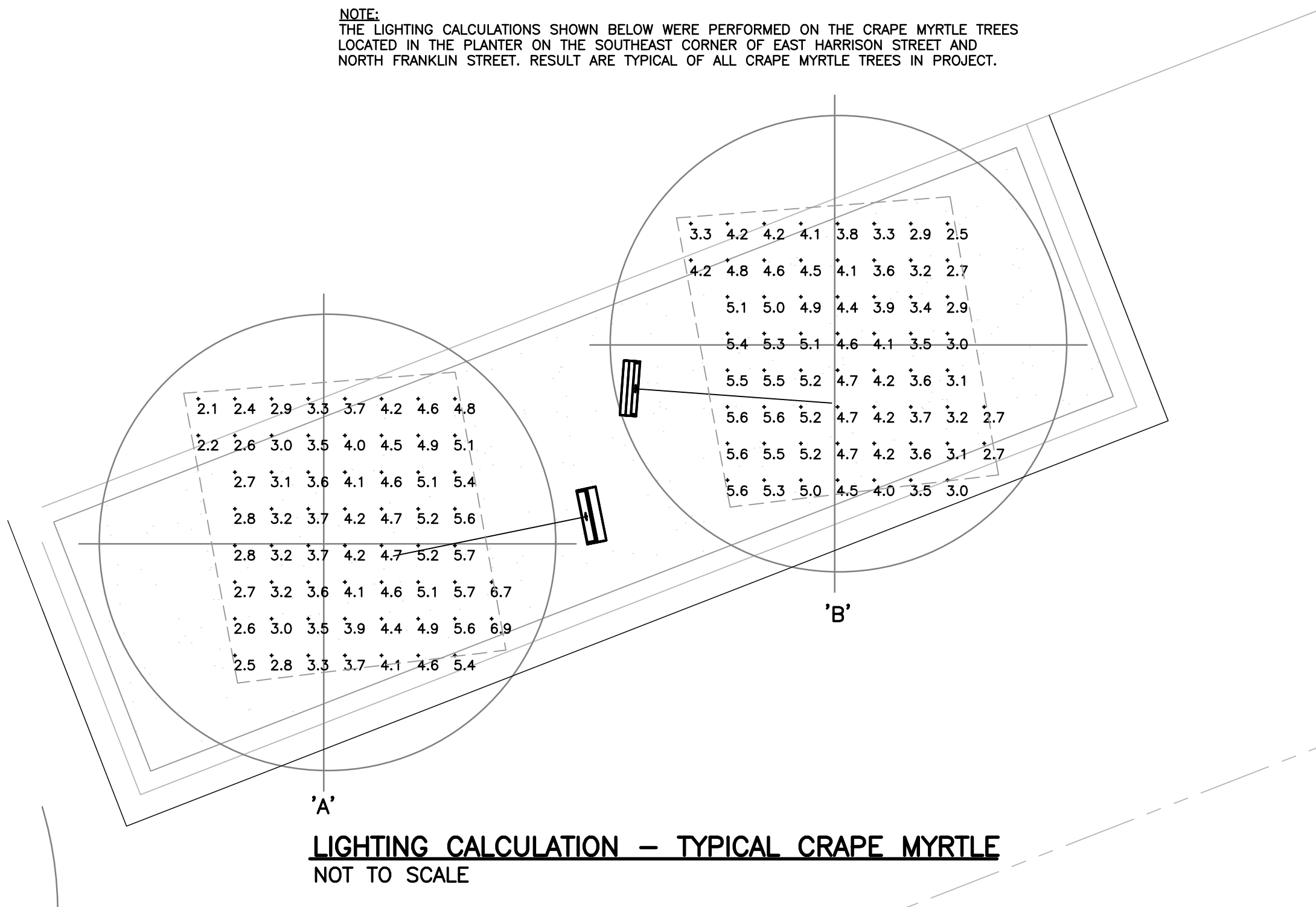


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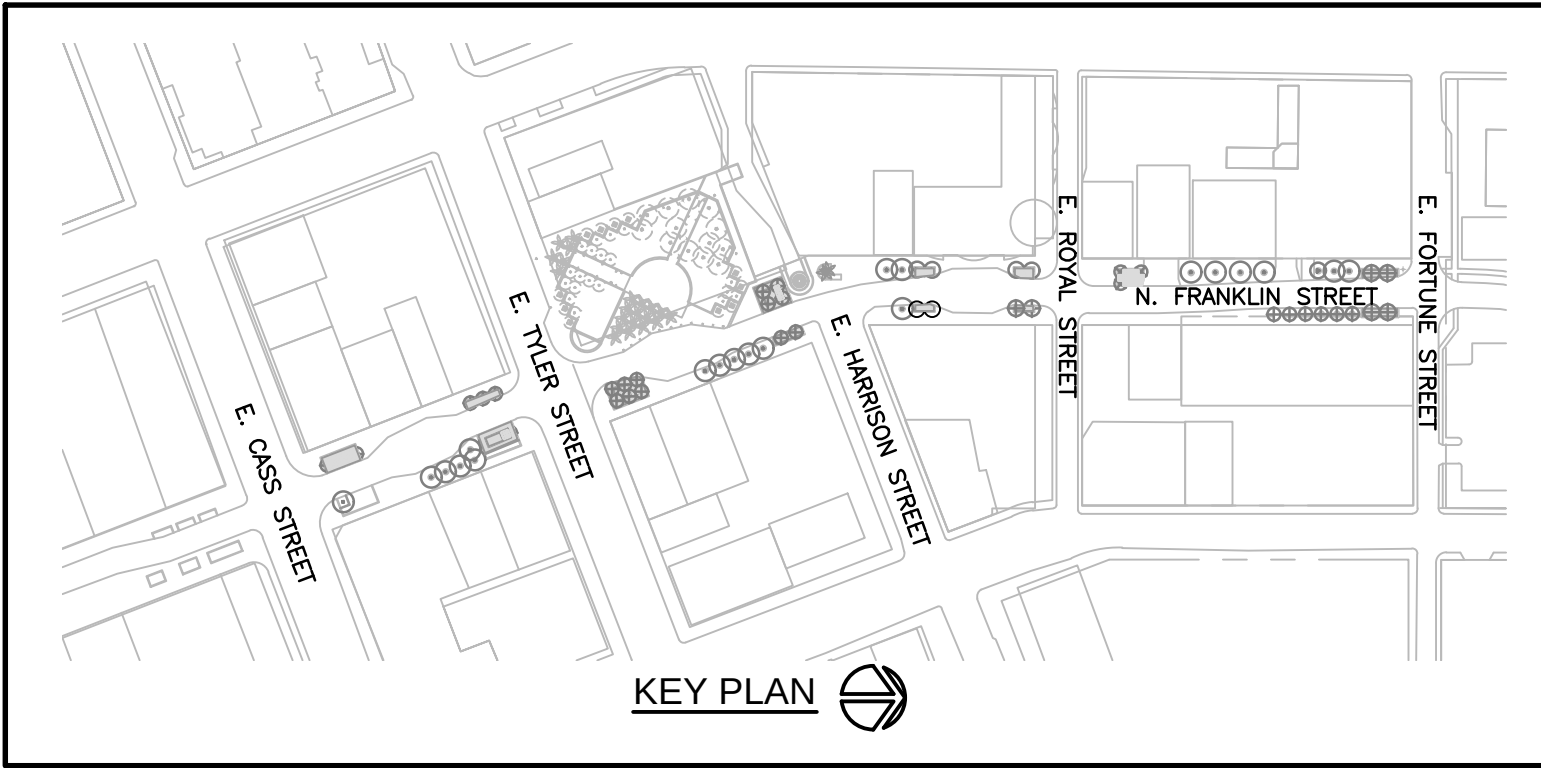


LIGHTING CALCULATION – TYPICAL BOSQUE ELM
NOT TO SCALE

LIGHTING CALCULATION SUMMARY – TREE CANOPY						
TREE TYPE	AVERAGE FC	MAX. FC	MIN. FC	AVG./MIN	MAX./MIN	COMMENTS
BOSQUE ELM – 'A'	2.75	5.2	1.5	1.83	3.47	6'–7' SPD., FULL CANOPY
BOSQUE ELM – 'B'	2.35	3.3	1.3	1.81	2.54	6'–7' SPD., FULL CANOPY
CRAPE MYRTLE – 'A'	4.04	6.9	2.1	1.92	3.29	7'–9' SPD., FULL CANOPY
CRAPE MYRTLE – 'B'	4.21	5.6	2.5	1.68	2.24	7'–9' SPD., FULL CANOPY



LIGHTING CALCULATION – TYPICAL CRAPE MYRTLE
NOT TO SCALE



DESCRIPTION

The patent pending Lumark Crosstour™ LED Wall Pack Series of luminaires provides an architectural style with super bright, energy efficient LEDs. The low-profile, rugged die-cast aluminum construction, universal back box, stainless steel hardware along with a sealed and gasketed optical compartment make the Crosstour impervious to contaminants. The Crosstour wall luminaire is ideal for wall/surface, inverted mount for façade/canopy illumination, post/bollard, site lighting, floodlight and low level pathway illumination including stairs. Typical applications include building entrances, multi-use facilities, apartment buildings, institutions, schools, stairways and loading docks.

SPECIFICATION FEATURES

Construction
Slim, low profile LED design with rugged one-piece, die-cast aluminum hinged removable door and back box. Matching housing styles incorporate both a small and large design. The small housing is available in 10W and 20W. The large housing is available in the 30W model. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes three (3) half-inch, NPT threaded conduit entry points. The universal back box supports both the small and large forms and mounts to standard 3-1/2" to 4" round and octagonal, 4" square, single gang and masonry junction boxes. Key hole gasket allows for adaptation to junction box or wall. External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Minimum 5" wide pole for site lighting application. Not recommended for car wash applications.

Optical
Silicone sealed optical LED chamber incorporates a custom engineered mirrored anodized reflector providing high-efficiency illumination. Optical assembly includes impact-resistant tempered glass and meets IESNA requirements for full cutoff compliance. Solid state LED Crosstour luminaires are thermally optimized with five (5) lumen packages in cool 5000K or neutral warm 3500K LED color temperature (CCT).

Electrical
LED driver is mounted to the die-cast housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 10W models operate in -40°C to 40°C (-40°F to 104°F). 20W and 30W models operate in -30°C to 40°C (-22°F to 104°F). Crosstour luminaires maintain greater than 70% of initial light output after 50,000 hours of operation. Three (3) half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 10W, 120V 50/60 Hz, 20W and 30W, 120-277V or 347V 50/60Hz models.

Finish
Crosstour is protected with a Super durable TGIC carbon bronze or summit white polyester powder coat paint. Super durable TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty
Five-year limited warranty.

LUMARK® energy solutions

Catalog #		Type	A
Project		Date	
Comments			
Prepared by			

XTOR CROSSTOUR LED

APPLICATIONS:
WALL / SURFACE
POST / BOLLARD
LOW LEVEL
FLOODLIGHT
INVERTED
SITE LIGHTING

DESIGNLIGHTS CONORTIUM

CERTIFICATION DATA
ULCUL Wet Location Listed
IP68 Ingress Protection Rated
ADA Compliant
LM79 / LM80 Compliant
RoHS Compliant
AURA Compliant
DLC Qualified Models
Lighting Factsheet Approved
Title 24 Compliant
NOM Compliant Models

TECHNICAL DATA
40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum

EPA
Effective Projected Area:
(sq. ft.)
XTORIA/XTOR2A=0.34
XTOR3A = 0.46

SHIPPING DATA:
Approximate Net Weight:
37–5.29 lbs. (1.7–2.4 kgs.)

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COOPER Lighting
www.cooperlighting.com

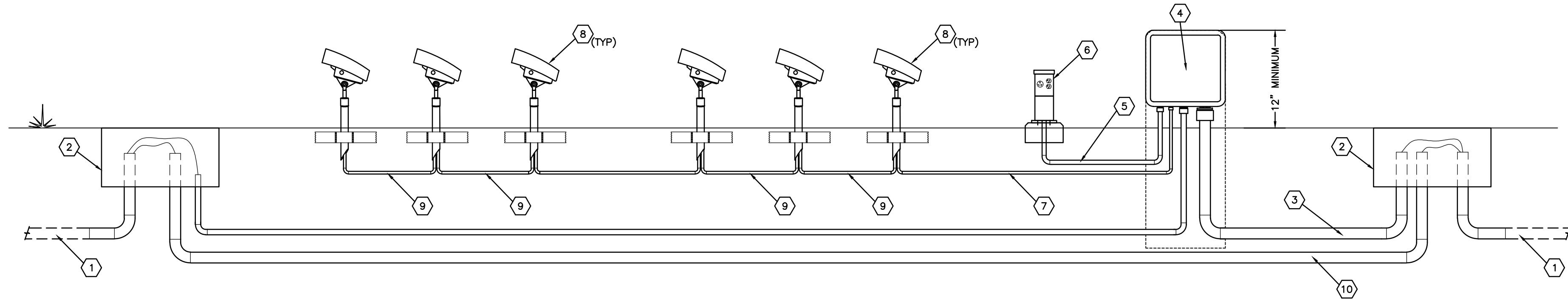
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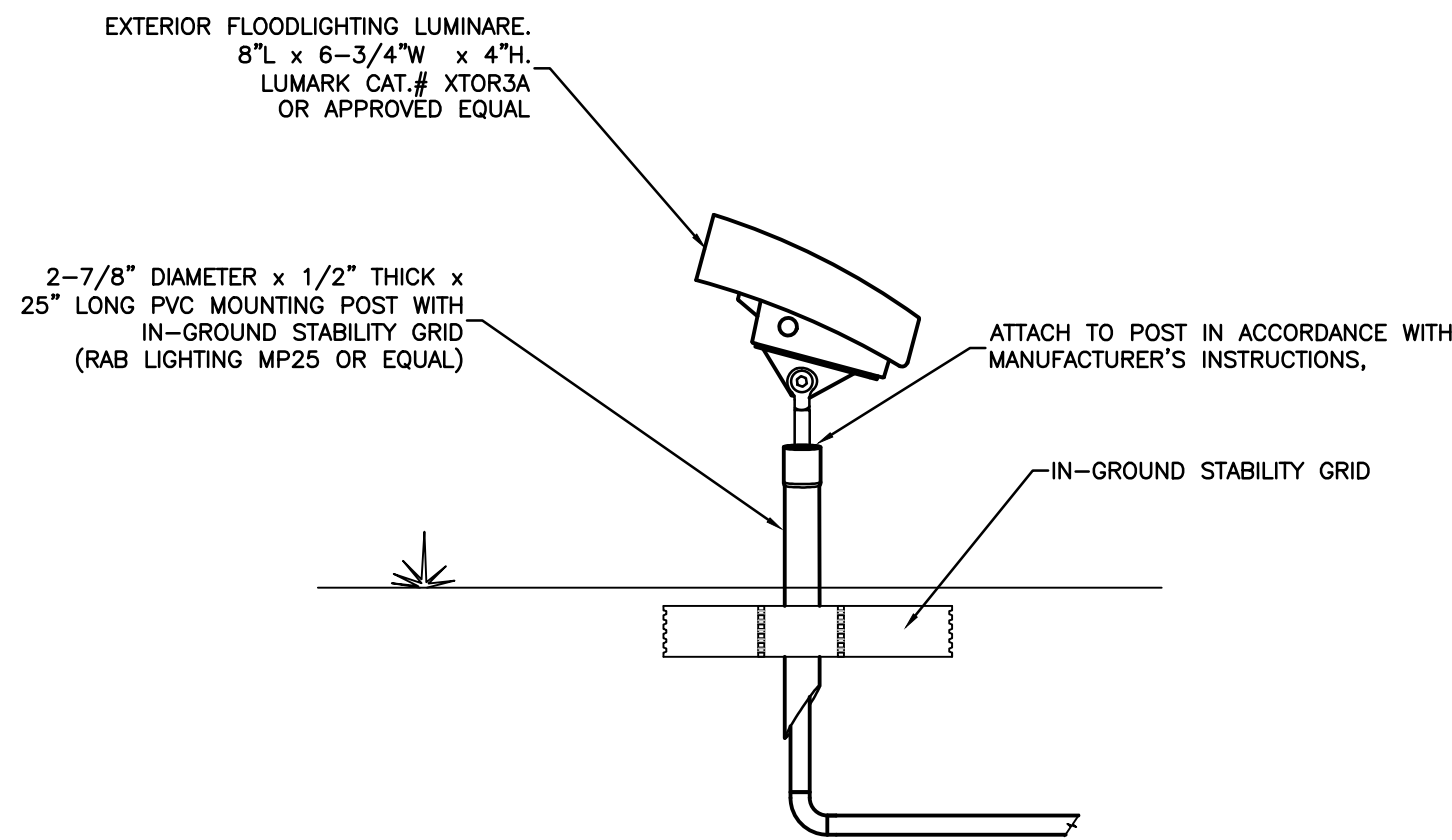
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Aston-Greenlee, Inc.
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1145 West Hillsborough Avenue, Suite 200
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NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET
LIGHTING CALCULATIONS

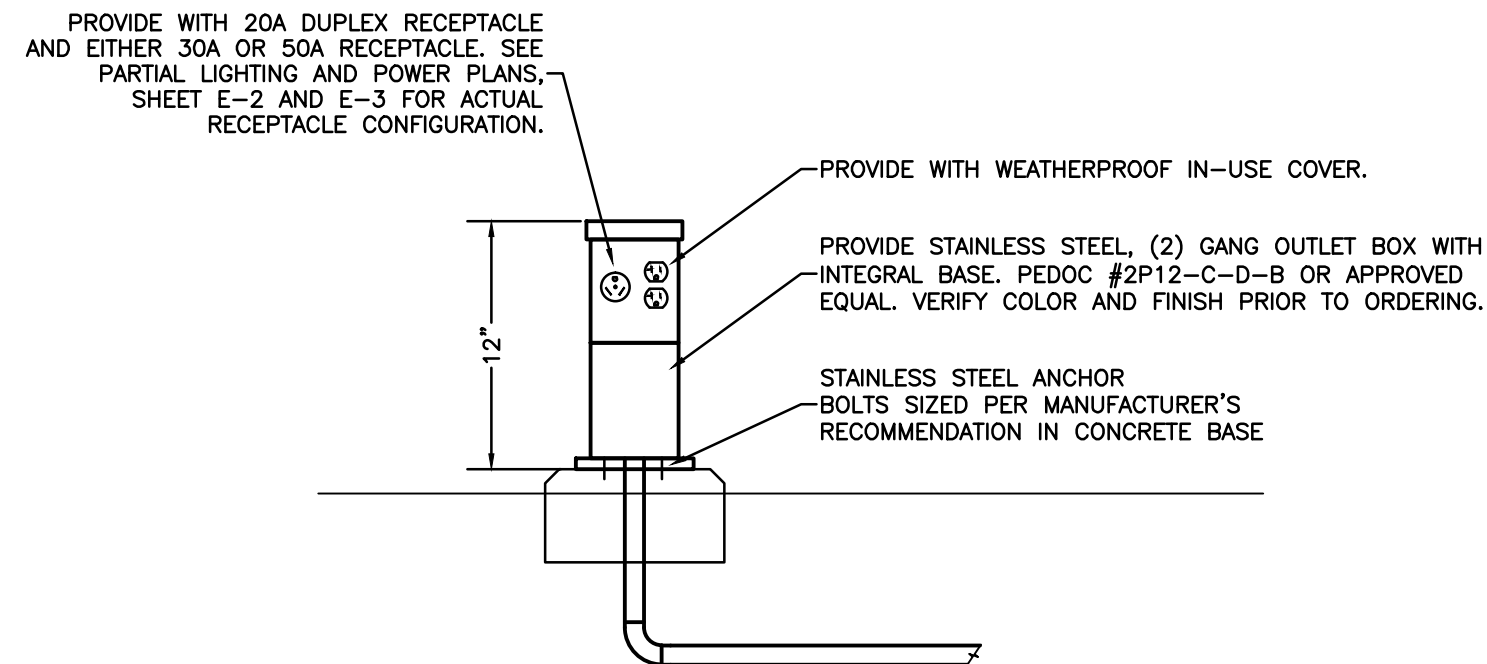
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TYPICAL LIGHTING AND POWER OUTLET BOX PLANTER DETAIL
NOT TO SCALE



TYPICAL LIGHTING FIXTURE DETAIL
NOT TO SCALE



TYPICAL POWER OUTLET BOX DETAIL
NOT TO SCALE

DETAIL NOTES:

1. NEW POWER/LIGHTING CIRCUITS IN EXISTING 2" CONDUIT. PROVIDE EXTENSION OF EXISTING 2" CONDUIT INTO PULL BOX AS REQUIRED.
2. 24" x 24" x 12" QUAZITE PULL BOX.
3. PROVIDE 1-1/2" CONDUIT FROM PULL BOX TO JUNCTION BOX FOR POWER/LIGHTING CIRCUITS.
4. 12" x 12" x 7" WEATHERPROOF GASKETED, ALUMINUM JUNCTION BOX ON 12" X 4" CONCRETE PEDESTAL. LABEL ALL CONDUCTORS INSIDE BOX WITH CIRCUIT NUMBERS AND PANEL. QZ-GEDNEY TYPE YG-A CAST ALUMINUM BOX WITH STAINLESS STEEL SCREWS, OR EQUAL.
5. PROVIDE 1" CONDUIT FROM WEATHERPROOF JUNCTION BOX TO STAINLESS STEEL OUTLET BOX FOR REQUIRED CONDUCTORS TO 20A RECEPTACLE AND 30A OR 50A RECEPTACLE. SEE ENLARGED LIGHTING AND POWER PLAN FOR SIZE AND NUMBER OF CONDUCTORS.
6. STAINLESS STEEL, (2) GANG OUTLET BOX WITH INTEGRAL BASE PROVIDED WITH 20A DUPLEX RECEPTACLE AND 30A OR 50A RECEPTACLE. SEE DETAIL THIS SHEET.
7. PROVIDE 1/2"C. 2-#10, 1-#10 GND. FROM JUNCTION BOX FOR LIGHTING FIXTURE 'A'.
8. EXTERIOR FLOODLIGHTING FIXTURE 'A'.
9. PROVIDE 1/2"C.; 2-#10, 1-#10 GND. FOR CONTINUATION OF LIGHTING CIRCUIT TO NEXT FIXTURE.
10. IF REQUIRED, PROVIDE CONDUIT FROM PULL BOX AT ONE END OF PLANTER TO PULL BOX AT OTHER END OF PLANTER FOR THE CONTINUATION OF THE CONDUCTORS FOR THE RECEPTABLES IN THE NEXT PLANTER. SEE ENLARGED LIGHTING AND POWER PLAN FOR SIZE OF THE CONDUIT AND THE SIZE AND NUMBER OF CONDUCTORS.



With Integral Base

To be anchored on a flat, solid surface. Base is welded to the bottom of the PEDOC.
Note: Material is stainless steel.
If powder coated, please substitute * with color code below.

Height	Powder coated		Polished	
	Horizontal	Vertical	Horizontal	Vertical
6"	1P6-C-HZ-*	1P6-C-V-*	1P6-SS-HZ	1P6-SS-V
12"	1P12-C-HZ-*	1P12-C-V-*	1P12-SS-HZ	1P12-SS-V
18"	1P18-C-HZ-*	1P18-C-V-*	1P18-SS-HZ	1P18-SS-V
24"	1P24-C-HZ-*	1P24-C-V-*	1P24-SS-HZ	1P24-SS-V
30"	1P30-C-HZ-*	1P30-C-V-*	1P30-SS-HZ	1P30-SS-V
36"	1P36-C-HZ-*	1P36-C-V-*	1P36-SS-HZ	1P36-SS-V
42"	1P42-C-HZ-*	1P42-C-V-*	1P42-SS-HZ	1P42-SS-V
48"	1P48-C-HZ-*	1P48-C-V-*	1P48-SS-HZ	1P48-SS-V

2 GANG

Height	Powder coated	Polished
6"	2P6-C-*	2P6-SS
12"	2P12-C-*	2P12-SS
18"	2P18-C-*	2P18-SS
24"	2P24-C-*	2P24-SS
30"	2P30-C-*	2P30-SS
36"	2P36-C-*	2P36-SS
42"	2P42-C-*	2P42-SS
48"	2P48-C-*	2P48-SS

2 GANG DIVIDED

Height	Powder coated	Polished
6"	2P6-C-D-*	2P6-SS-D
12"	2P12-C-D-*	2P12-SS-D
18"	2P18-C-D-*	2P18-SS-D
24"	2P24-C-D-*	2P24-SS-D
30"	2P30-C-D-*	2P30-SS-D
36"	2P36-C-D-*	2P36-SS-D
42"	2P42-C-D-*	2P42-SS-D
48"	2P48-C-D-*	2P48-SS-D



Sample 2P30-C-B

* Colors: G = gray B = black BR = brown GN = green

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Revisions	Date

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**NORTH FRANKLIN STREET
E. FORTUNE STREET TO E. CASS STREET**
ELECTRICAL DETAILS

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of 7 Sheets	



Derek M. Gil, P.E.
P.E. NO.: 54798

TABULATION OF QUANTITIES

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PAYITEM FOOT NOTES

1. ITEM 555-1-1: INCLUDES LABOR AND MATERIALS FOR DIRECTIONAL BORE. CONDUIT IS INCLUDED AND SHALL BE 2-2½ INCH HDPE AS SHOWN IN THE PLANS.

2. ITEMS 715-1-XX: INCLUDES CONDUCTORS AS INDICATED IN THE PLANS. PAYMENT SHALL BE MADE ON LINEAR FEET OF SINGLE CONDUCTOR.

3. ITEM 715-2-11: INCLUDES CONDUIT, ELBOWS, SWEEPS, CONNECTING HARDWARE, TRENCHING, ROOT PRUNING AND BACKFILL AS INDICATED IN THE PLANS AND THE FDOT DESIGN STANDARD INDEX 17721. THE LINEAR FOOT PRICE FOR CONDUIT SHALL ALSO INCLUDE THE COST OF RESTORING CUT PAVEMENT, SIDEWALKS, SOD, ETC., TO ITS ORIGINAL CONDITION. SOD SHALL BE REPLACED IN LIKE KIND OF THE ADJACENT SURROUNDINGS.

4. ITEM 715-7-11: INCLUDES NEMA 1 SURFACE MOUNTED LOAD CENTER, BREAKERS, LIGHTING CONTRACTOR, TIMER ASSEMBLY, CONDUIT & FEEDER CONDUCTORS FROM EXISTING PANEL NO. 1 TO LOAD CENTER, PULL BOX AND ALL MISCELLANEOUS HARDWARE FOR A COMPLETE INSTALLATION AS PER PLANS. (SEE SHEET L-9 FOR DETAILS).

5. ITEM 715-11-119 A&B: INCLUDES LANDSCAPE LED FLOOD LUMINAIRE LIGHTS, MOUNTING HARDWARE, VISORS, JUNCTION BOXES, GROUND RODS, FOUNDATIONS AND ALL MISCELLANEOUS HARDWARE FOR COMPLETE INSTALLATION AS PER THE PLANS.

6. ITEM 715-14-11: INCLUDES THE PULL BOX, COVER, CONCRETE APRON, BEDDING STONE AND GROUNDING ROD (AS REQUIRED) AS INDICATED IN THE PLANS AND FDOT DESIGN STANDARD INDEX 17700.

7. ITEM 580-1-1 (LANDSCAPE COMPLETE- SMALL PLANTS): INCLUDES COST OF PLACING THE SOIL AND MULCH BACK IN PLACE, REPLANTING OF EXISTING PLANTS (IF IN GOOD CONDITION) OR REPLACING WITH PLANT MATERIAL OF EQUIVALENT SPECIES AND SIZE TO THAT REMOVED AND REMOVAL OF EXCESS MATERIAL.

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NUMBER 256921
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TABULATION OF QUANTITIES

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Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
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of 9 Sheets

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GENERAL NOTES:

1. PRIOR TO ANY EQUIPMENT ORDER. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL EQUIPMENT SPECIFICATION OR DESIGN DATA FOR ALL MATERIALS PROPOSED FOR THE PROJECT. THESE MUST SPECIFICALLY INCLUDE:
- | | | |
|----------------------------|---------------|---------------|
| A) LUMINAIRE | C) CONDUITS | E) PULL BOXES |
| B) SERVICE POINT EQUIPMENT | D) CONDUCTORS | |

SEVEN (7) COPIES OF SHOP DRAWINGS AND DESIGN DATA FOR LANDSCAPE LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN ACCORDANCE WITH THE SPECIFICATIONS.

2. THE LOCATIONS OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNER(S) AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OWNER FOR LOCATION AND STAKING OF UNDERGROUND FACILITIES BEFORE EXCAVATING.

3. FLORIDA STATUTE 556 REQUIRES THAT BEFORE EXCAVATING, NOTICE BE GIVEN TO THE UTILITY OWNER NOT LESS THAN TWO (2) AND NO MORE THAN FIVE (5) FULL BUSINESS DAYS. NOT ALL UTILITY OWNERS ARE MEMBERS OF "SUNSHINE" 1-800-432-4770.

4. THE LOCATION OF THE LIGHTS, CONDUCTORS, CONDUITS, JUNCTION BOXES AND SERVICE POLES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS, LANDSCAPE LOCATION AND EXISTING UTILITY LOCATIONS.

5. ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE AND THE CITY OF TAMPA ORDINANCES. ALL COMPONENTS SHALL BE PROPERLY GROUNDED AND BONDED PER N.E.C. REQUIREMENTS.

6. IN ACCORDANCE WITH N.E.C., IDENTIFY ALL CIRCUITS AND EQUIPMENT WITH "LAMACO ID TAGS". INSTALL SIMILAR TAGS OF STAINLESS STEEL IDENTIFYING CIRCUIT FOR EACH LUMINAIRE AT JUNCTION BOX FOR EACH LIGHTING FIXTURE.

7. THE CONTRACTOR SHALL NOTIFY TECO AT LEAST 48 HOURS PRIOR TO ANY INSTALLATION THAT IS WITHIN 10' OF ENERGIZED ELECTRICAL CONDUCTORS (OVERHEAD OR UNDERGROUND). TECO, AT ITS OPTION, SHALL ASSIST THE CONTRACTOR, PROTECT ENERGIZED CONDUCTORS AT INSTALLATION SITE, OR TAKE OTHER SAFETY PRECAUTIONS AS NECESSARY. EXTREME CAUTION SHALL BE EXERCISED AT ALL TIMES IN PERFORMANCE OF WORK AROUND THE PRIMARY HIGH VOLTAGE COMPONENTS.

8. PULLING INSTRUCTIONS: CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BE N.E.C. OR N.E.S.C. FOR CABLE USED.

9. CONTRACTOR SHALL STAKE ALL LIGHT LOCATIONS AND REQUEST UTILITY COMPANIES TO LOCATE AND STAKE UNDERGROUND UTILITIES PRIOR TO EXCAVATING.

10. THE CONTRACTOR SHALL USE CONCRETE FOUNDATIONS AS SHOWN ON SHEET L-8.

11. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN 2' OF THE LIGHTING FOUNDATIONS OR CONDUIT RUN, THE CONTRACTOR SHALL HAND DIG THE FIRST 4' OF THE HOLE FOR THE POLE FOUNDATION AND THE CONDUIT RUN.

12. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PROVISIONS THAT REQUIRES THE PREPARATION AND APPROVAL OF AN EROSION CONTROL PLAN THAT ADDRESSES PREVENTION, CONTROL AND ABATEMENT OF WATER POLLUTION.

13. ALL CONDUIT TRENCHES SHALL BE BACK FILLED COMPLETELY TO PROVIDE SAFE CROSSING AT THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CANNOT BE BACK FILLED IN THE SAME DAY/NIGHT OPERATION.

14. ALL EXCESS DIRT AND DEBRIS EXCAVATED FROM LIGHT FOUNDATIONS SHALL BE REMOVED DAILY TO AREAS APPROVED BY THE ENGINEER. THE COST SHALL BE INCIDENTAL TO THE WORK.

15. THE CONTRACTOR IS RESPONSIBLE FOR LANDSCAPE RESTORATION IMMEDIATELY FOLLOWING COMPLETION OF THE ELECTRICAL WORK. RESTORATION INCLUDES PLACING THE SOIL AND MULCH BACK IN PLACE AND REPLANTING EXISTING PLANTS (IF IN GOOD CONDITION) OR REPLACING WITH PLANT MATERIAL OF EQUIVALENT SPECIES AND SIZE TO THAT REMOVED.

16. CONTRACTOR SHALL FIELD COORDINATE THE PROPOSED LOCATIONS OF ELECTRICAL LINES WITHIN TREE DRIP LINES WITH THE CITY OF TAMPA LANDSCAPE ARCHITECT PRIOR TO STARTING THE WORK. FIXTURE LOCATIONS SHALL ALSO BE FIELD LOCATED AND APPROVED BY THE CITY OF TAMPA LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

MAINTENANCE OF TRAFFIC NOTES:

1. CONTRACTOR SHALL COMPLY WITH FDOT STANDARD INDEX 600 SERIES FOR MAINTENANCE OF TRAFFIC.

2. FDOT REQUIRES CERTIFIED MOT CONTRACTOR INFORMATION WITH STAFF IDENTIFIED PRIOR TO START OF WORK.

3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND FOLLOWING ALL FDOT MOT REQUIREMENTS.

LEGEND

• — • — • —

ONE - ¾" SCHEDULE 40 PVC UNDERGROUND CONDUIT CONTAINING RHW-2 OR XHHW COPPER CONDUCTORS. AWG SIZES AND TOTAL CONDUCTORS CALLED OUT ON PLAN SHEETS. CALL OUT NUMBER INCLUDES ONE COPPER BOND CONDUCTOR (GREEN INSULATION) INSIDE CONDUIT WITH OTHER CONDUCTORS.

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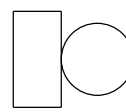
ONE - 2" SCHEDULE 40 PVC UNDERGROUND CONDUIT CONTAINING RHW-2 OR XHHW COPPER CONDUCTORS. AWG SIZES AND TOTAL CONDUCTORS CALLED OUT ON PLAN SHEETS. CALL OUT NUMBER INCLUDES ONE COPPER BOND CONDUCTOR (GREEN INSULATION) INSIDE CONDUIT WITH OTHER CONDUCTORS.

••• — ••• — ••• —

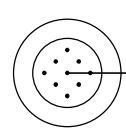
TWO - 2 1/2" DIRECTIONAL BORED, HDPE CONDUIT CONTAINING RHW-2 OR XHHW COPPER CONDUCTORS. AWG SIZES AND TOTAL CONDUCTORS CALLED OUT ON PLAN SHEETS. CALL OUT NUMBER INCLUDES ONE COPPER BOND CONDUCTOR (GREEN INSULATION) INSIDE CONDUIT WITH OTHER CONDUCTORS.



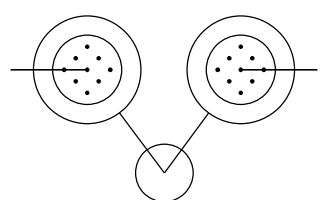
ISOLATED PULL BOX. FOR SPECIFICATIONS SEE SECTION 635 OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, INDEX 17503 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS AND SECTION 365 OF THE MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNAL DEVICES.



LOAD CENTER (SEE SHEET L-9)



67 WATT, 40 LED FLOOD LUMINAIRE, MEDIUM SYMMETRIC ROUND INTEGRAL ELECTRONIC BALLAST WIRED FOR 240 VOLT OPERATION. COOPER LIGHTING INVUE SERIES FIXTURE: VFS K A40-5 LED EI MSR BZ/SF-BZ/VFS-TV-BZ



DUAL MOUNTED 67 WATT, 40 LED FLOOD LUMINAIRE, MEDIUM SYMMETRIC ROUND INTEGRAL ELECTRONIC BALLAST WIRED FOR 240 VOLT OPERATION. COOPER LIGHTING INVUE SERIES FIXTURE: VFS K A40-5 LED EI MSR BZ/TMA-BZ/VFS-TV-BZ

Revisions	Date

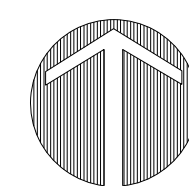
CITY OF TAMPA PARKS AND RECREATION DEPARTMENT
Planning and Design
3402 W. Columbus Drive
Tampa, FL 33609
(813) 274-3132

ELEMENT
LANDSCAPE GROUP
1713 E. 9TH AVENUE
SUITE 100
TAMPA, FL 33605
P: 813.356.7201
F: 813.356.7206
CERTIFICATE OF NUMBER 28921
FOR I BOREX M. OIL PE 54795

GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT
FROM CASS STREET TO I-275 / I-4 INTERCHANGE
GENERAL NOTES

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L-3
of 9 Sheets

NOTE: STANCHION HEIGHT ABOVE GROUND
IS 12" FOR THIS SHEET UNLESS NOTED
DIFFERENTLY.



0 20 40

SCALE IN FEET

[illegible]

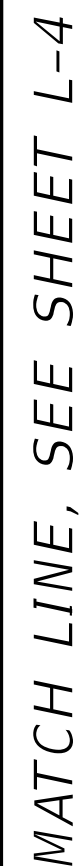
**CITY OF TAMPA PARKS AND
RECREATION DEPARTMENT**
Planning and Design
3402 W. Columbus Drive
Tampa, FL
(813) 274-5132

ELEMENT
ENGINEERING GROUP
1713 E. 9th AVENUE
TAMPA, FL 33605
P 813.386.2101
TF 888.603.1942
F 813.386.2106
CERTIFICATE OF AUTHORIZATION
NUMBER 26321
EOR | DEREK M. GIL, PE 54798

**GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT
FROM CASS STREET TO I-275 / I-4 INTERCHANGE**

PLAN SHEET (1 OF 4)

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L - 4
of 9 Sheets



E. HARRISON ST.

E. EMERY ST.

2 #8 (CKT-5)
2 #8 (CKT-6)

2 #10 (CKT-1)
2 #10 (CKT-2)
2 #10 (CKT-3)

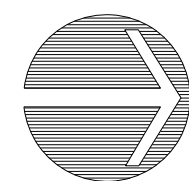
1.4' Metal Traffic-Signal Pole on
3.5' Concrete Base

1.4' Metal Traffic
Signal Pole on
3.5' Concrete Base

2 #10 (CKT-1)
2 #10 (CKT-2)
2 #10 (CKT-3)

2 #10 (CKT-4)
2 #8 (CKT-5)
2 #8 (CKT-6)

LOAD CENTER TO BE
LOCATED INSIDE OF
BUILDING.



0 20 40

SCALE IN FEET

[illegible]

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1713 E. 9th Avenue
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F 813.386.2106
CERTIFICATE OF AUTHORIZATION
NUMBER 26921
EOR | DEREK M. GIL, PE 54798

**GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT
FROM CASS STREET TO I-275 / I-4 INTERCHANGE**

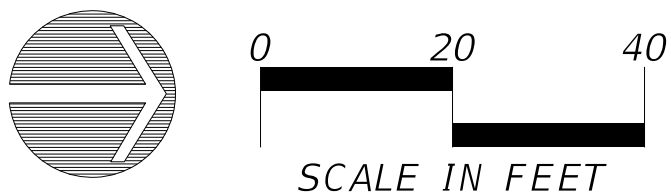
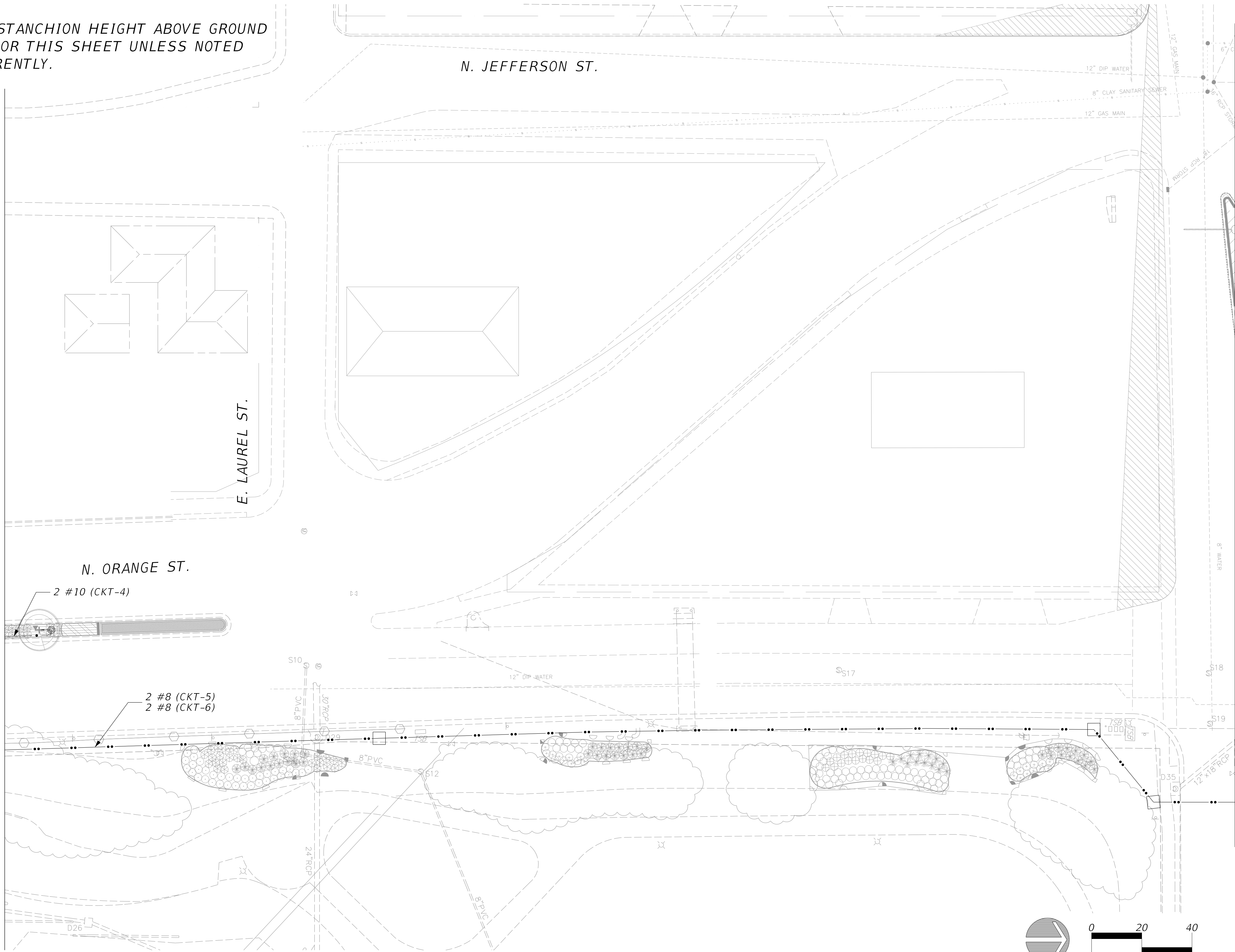
PLAN SHEET (2 OF 4)

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L-5
of 9 Sheets

5/9/2012 3:55:41 PM PLOTTED BY: mcanon
PLOT CONFIG: P:\COT1201\CAD-Gateway_Lighting\Naraa_COTPDF_mod.dwg
PLOT DATE: 5/9/2012 PLOT TIME: 3:55:41 PM PLOT USER: mcanon
MODEL NAME: Dwg1201\CAD-Gateway_Lighting\Naraa_COT_Gray\Existing.tbl
FILE NAME: P:\COT1201\CAD-Gateway_Lighting\Naraa_COT_Gray\Existing.tbl

NOTE: STANCHION HEIGHT ABOVE GROUND
IS 6" FOR THIS SHEET UNLESS NOTED
DIFFERENTLY.

MATCH LINE, SEE SHEET L-5



MATCH LINE, SEE SHEET L-7

Revisions	Date

**CITY OF TAMPA PARKS AND
RECREATION DEPARTMENT**
Planning and Design
3402 W. Columbus Drive
Tampa, FL
(813) 274-5152

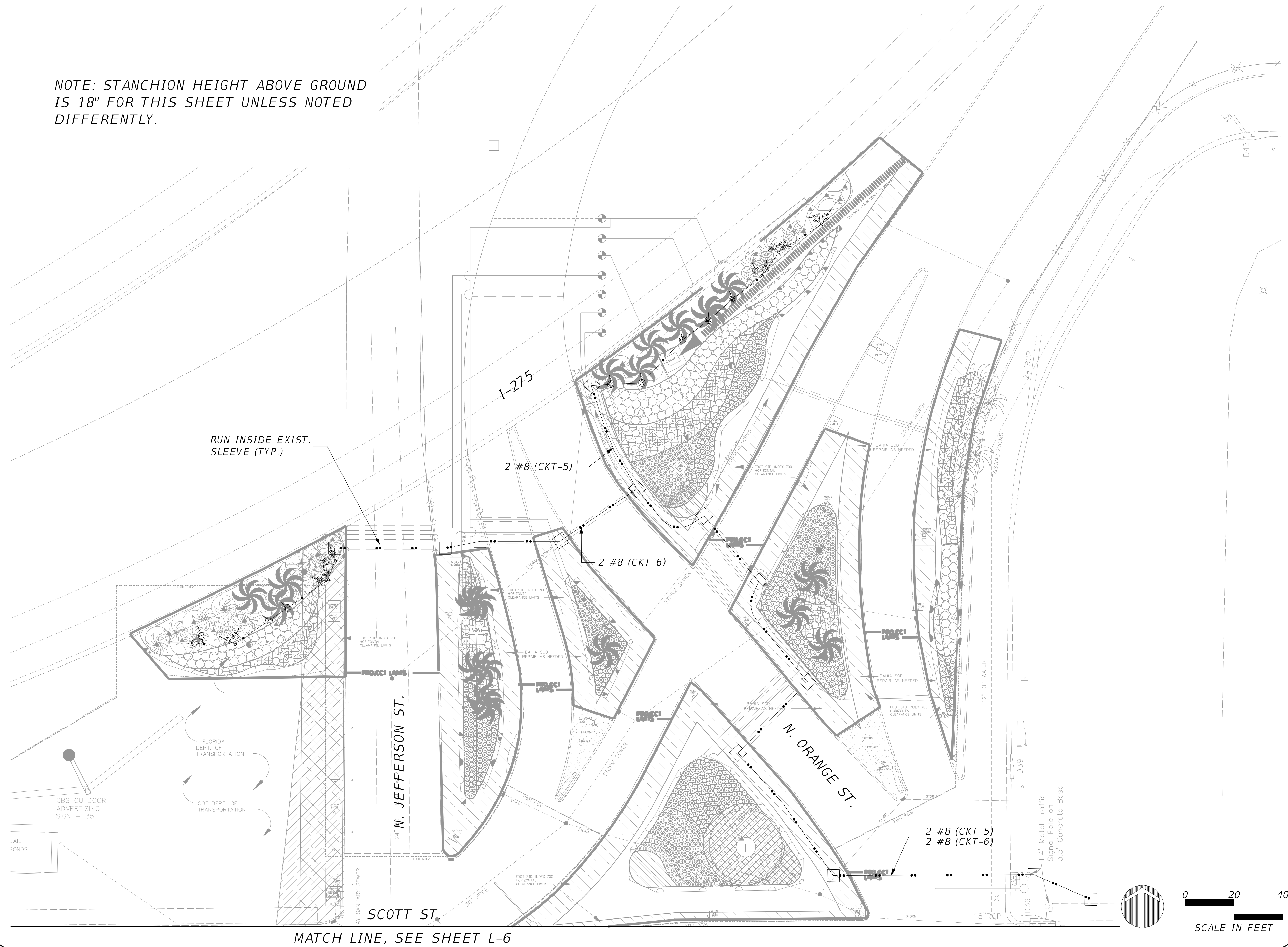
ELEMENT
1715 E. 9th Avenue
Tampa, FL 33605
P: 813.552.2100
F: 813.552.2106
CERTIFICATE OF
NUMBER 28201
FOR I BRECK M. GIL PE 54798

**GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT
FROM CASS STREET TO I-275 / I-4 INTERCHANGE**

PLAN SHEET (3 OF 4)

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L-6
of 9 Sheets

5/9/2012 3:56:06 PM PLOTTED BY: mcameron
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MODEL NAME: Default
FILE NAME: P:\COT1201\CAD-Gateway_Lighting\Lighting\element04.dgn



Revisions	Date

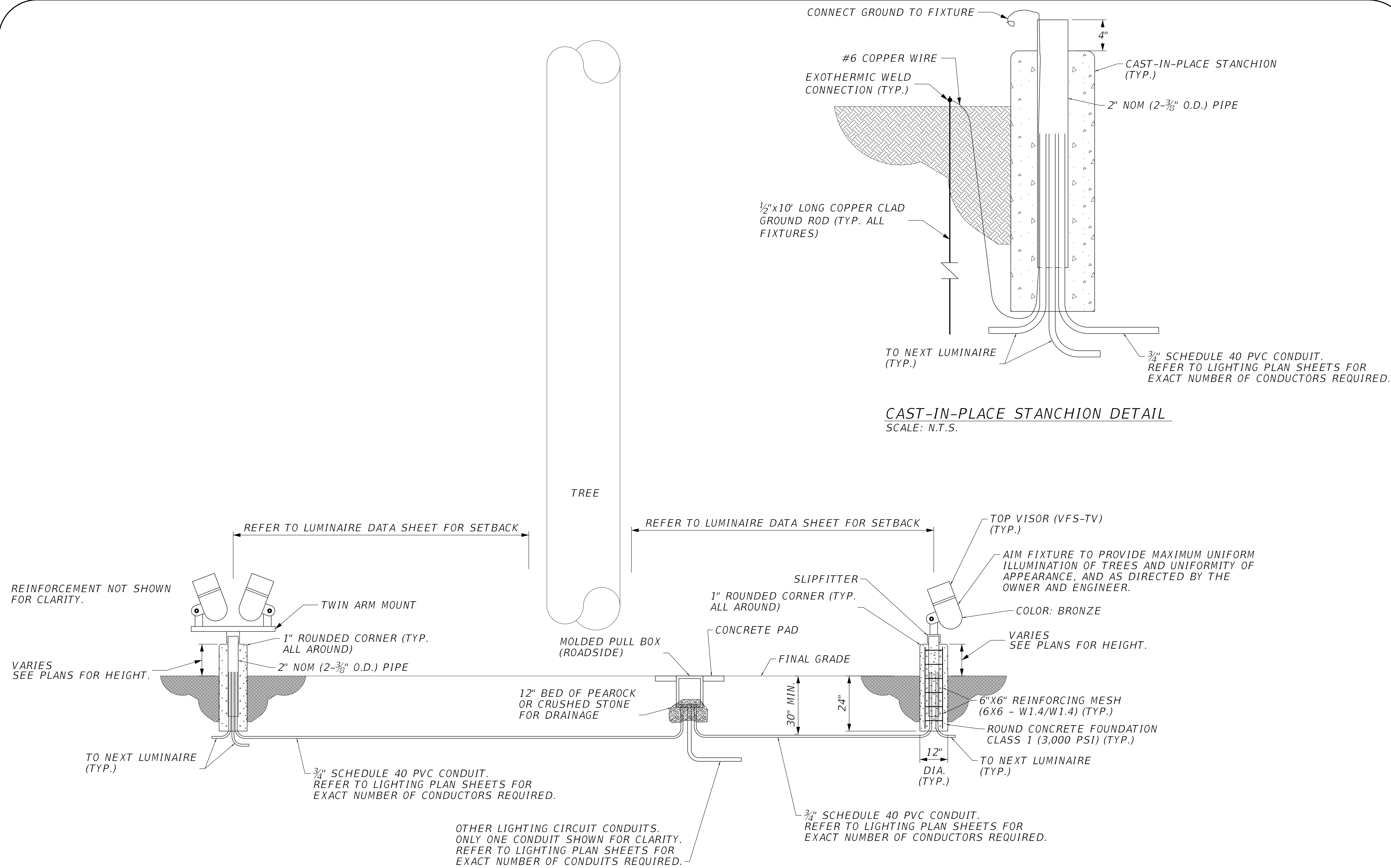
CITY OF TAMPA PARKS AND RECREATION DEPARTMENT
Planning and Design
3402 W. Columbus Drive
Tampa, FL 33609
(813) 274-3132

ELEMENT
LANDSCAPE GROUP
1713 E. 9TH AVENUE
TAMPA, FL 33605
P: 813.386.2101
F: 813.386.2106
CERTIFICATE OF NUMBER 28921
Exp: I BRECK M. GIL PE 54795

GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT
FROM CASS STREET TO I-275 / I-4 INTERCHANGE
PLAN SHEET (4 OF 4)

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L-7
of 9 Sheets

5/9/2012 3:56:08 PM PLOTTED BY: mcameron
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PLOT DATE: 5/9/2012 PLOT TIME: 3:56:08 PM
MODEL NAME: Default
FILE NAME: P:\COT1201\CAD-Gateway_Lighting\Lighting\spchd1.dwg



LANDSCAPE LIGHTING - GROUND MOUNTED LUMINAIRES
SCALE: N.T.S.

TYPICAL FOR EACH TREE UNLESS OTHERWISE NOTED.
NOTE THAT ACTUAL QUANTITY OF LUMINAIRES VARIES FROM TREE TO TREE.
REFER TO LANDSCAPED LIGHTING PLAN SHEETS FOR ACTUAL QUANTITY OF
AESTHETIC LUMINAIRES AT EACH TREE.

Revisions	Date

CITY OF TAMPA PARKS AND RECREATION DEPARTMENT
Planning and Design
3402 W. Columbus Drive
Tampa, FL 33609
(813) 274-3132

ELEMENT
LANDSCAPE GROUP
1713 E. 9TH AVENUE
SUITE 200
TAMPA, FL 33605-2001
P: 813.356.2101
F: 813.356.2106
CERTIFICATE OF NUMBER 28921
Exp: I BEREK M. GUL, PE 54795

GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT FROM CASS STREET TO I-275 / I-4 INTERCHANGE
SPECIAL DETAILS

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L-8
of 9 Sheets

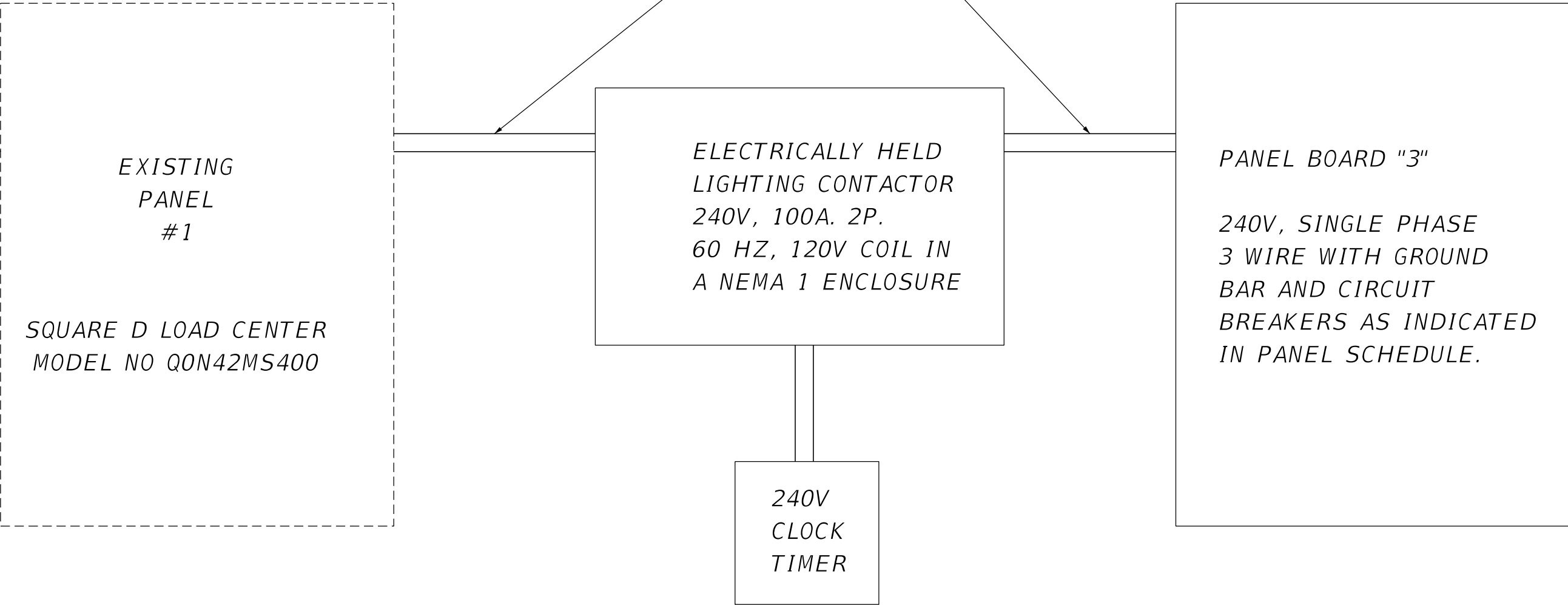
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PLOTTER: HP DesignJet T120
MODEL NAME: Default
FILE NAME: P:\COT1201\CAD-Gateway_Lighting\lighting\spst04.dgn

PANEL "3"

MAIN: 100A, 2P, MAIN BKR.
VOLTAGE: 240V, 1ø

DESCRIPTION	VOLTS (V)	CND. SIZE	WIRE SIZE	CKT. BKR.			VOLTS-AMPS		CKT. BKR.			WIRE SIZE	CND. SIZE	VOLTS (V)	DESCRIPTION
				AMPS	P	NO.	LOAD (VA)	LOAD (VA)	NO.	AMPS	P				
CKT-1	240	*	10	20	2	1 3	598	725	2 4	20	2	10	*	240	CKT-4
CKT-2	240	*	10	20	2	5 7	598	864	6 8	20	2	8	*	240	CKT-5
CKT-3	240	*	10	20	2	9 11	658	799	10 12	20	2	8	*	240	CKT-6
TIME CLOCK	120	1/2"	12	20	1	13	100		14	20	2				SPARE
SPACE	-	-	-	-	1	15	-	-	16	-	-	-	-	-	SPACE
LTG. CONTACTOR	120	1/2"	12	20	1	17	140		18	20	2				SPARE
					1	19			20						
NOTES & MODIFICATION:									TOTAL DEMAND: 4,242 VA						
* 1. SEE PLANS.									TOTAL DEMAND AMPS: 18 AMPS						
2. GROUND SIZE - #8, 1" CONDUIT.									NO. OF POLES 20						
3. FEEDER SIZE - 3 #2 AWG, 1 1/2" RGS.									ENCLOSURE NEMA 1						
4. SAFETY SWITCH 100 AMP F/A 100 AMP.									MOUNTING SURFACE						
5. MAIN BREAKER F/A 100 AMP/ 2P.									A/C RATING 22KA						
6. MAIN BREAKER SHALL HAVE MINIMUM AIC 22,00 AMPS SYMM.															

FURNISH AND INSTALL NEW 100A, 2P. BREAKER IN EXISTING PANEL #1 SPACE. NEW BREAKER SHALL MATCH PHYSICALLY AND ELECTRICALLY EXISTING PANEL MANUFACTURER.



SERVICE POINT SCHEMATIC DETAIL

Revisions	Date

CITY OF TAMPA PARKS AND RECREATION DEPARTMENT
Planning and Design
3402 W. Columbus Drive
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F: 813.386.2106
CERTIFICATE OF NUMBER 28921
Exp 1/28/2014
Exp 1/28/2014

GATEWAY IMPROVEMENTS, JEFFERSON ST. / ORANGE ST. LIGHTING IMPROVEMENT
FROM CASS STREET TO I-275 / I-4 INTERCHANGE
PANEL SCHEDULE AND DETAILS

Drawn: MLC
Checked: DMG
Approved: DMG
Date: 4/16/2012
Scale:
Sheet
L-9
of 9 Sheets