BREVARD ROUNDABOUTS - ELECTRICAL

CITY OF BREVARD DOT PROJECT # R-5799

SHEET INDEX

COV	COVER SHEET
E01	DEAVOR RD ELECTRICAL PLAN
E02	DEAVOR RD ELECTRICAL CONTINUED
E03	DISCALL DD ELECTRICAL

SCHEDULE OF VALUES

E04 PISGAH RD ELECTRICAL PLAN

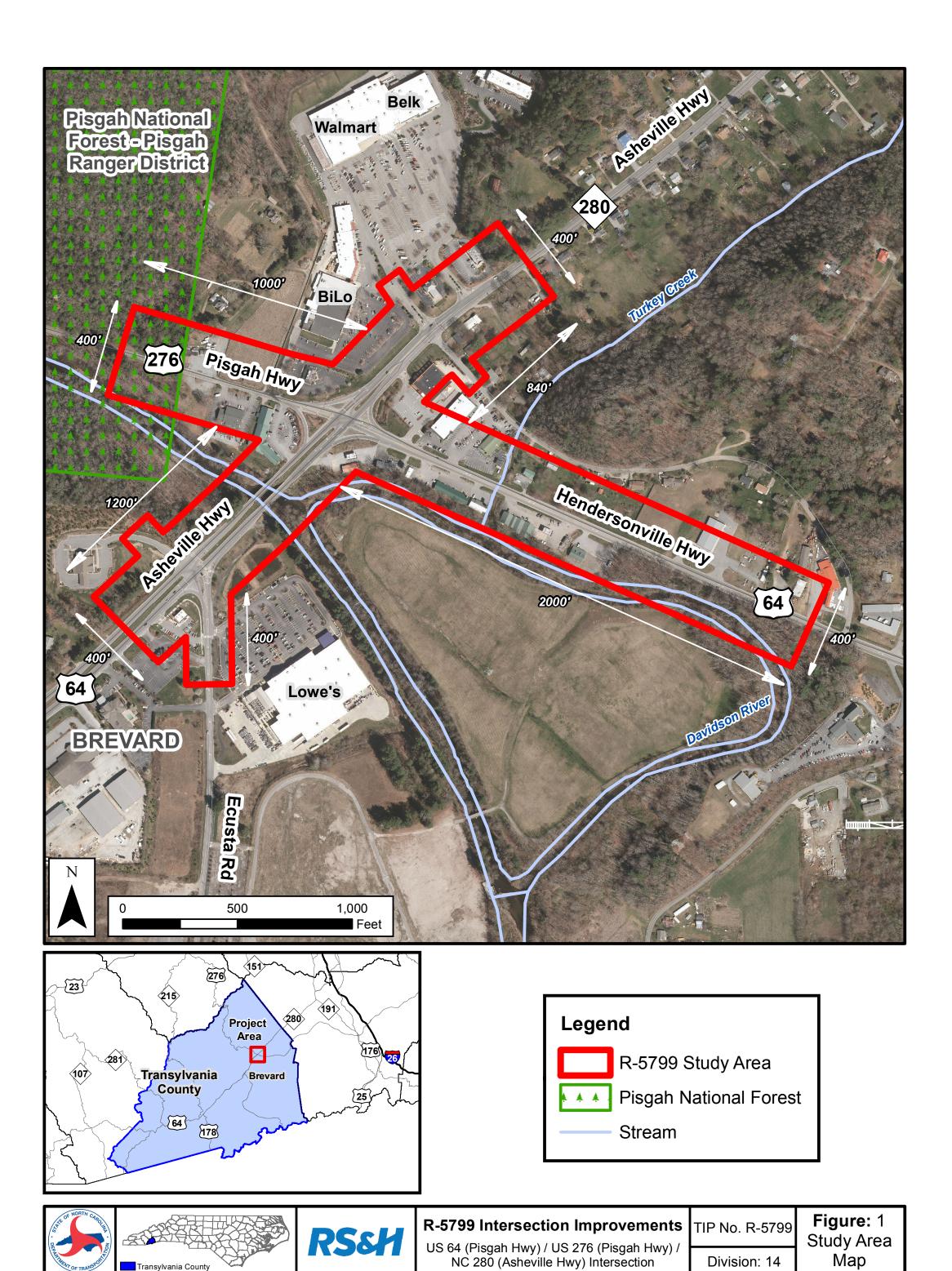
ELEVATION:		0 AMSL
DESIGN WIND SPEED:		115 MPF
SEISMIC DESIGN CATEGORY:		В
DESIGN FROST DEPTH:		24"
GROUND SNOW LOAD:		30 PSF
PRIMARY USE FLOOR LOAD:	LIVE LOAD: DEAD LOAD:	
ROOF LOAD:	LIVE LOAD: DEAD LOAD:	

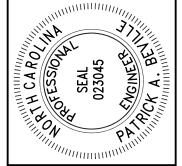
SCOPE OF WORK

PER CONTRACT BETWEEN TERESA BUCKWALTER AND IONCON: Provide the electrical sheets for the landscape level lighting in the 2 roundabouts. Mosaic Civic will provide proposed fixture lists and layout for the roundabouts and IONCON will be responsible for the conductor and conduit sizing from the user side of the meter to the individual fixtures.

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL MEET 2018 NORTH CAROLINA STATE BUILDING CODE:
- 2. ALL HARDWARE AND FASTENERS CONTACTING PRESSURE TREATED MATERIAL SHALL BE APPROVED FOR USE WITH CORRESPONDING WOOD TREATMENT.
- 3. ALL LUMBER CONTACTING CONCRETE SHALL BE PRESSURE TREATED. 4. ALL WOOD CONNECTORS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS
- UNLESS NOTED OTHERWISE. 5. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. DRAWINGS REPRESENT TYPICAL CONDITIONS. AS-BUILT CONDITIONS MAY EXIST.
- 6. ENGINEER NOT RESPONSIBLE FOR UN-COMPACTED FILL.
- 7. FLASHING, COUNTER-FLASHING AND WATERPROOFING BY OTHERS.
- 8. IONCON ENGINEERING IS ONLY RESPONSIBLE FOR THE STRUCTURAL ASPECTS AS REFERENCED HEREIN.







BY DATE ##/## ##/## ##/## ##/##

5/9/2023 AS NOTED MEB QD 215003

COV

ELECTRICAL NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND LOCAL CODES BY LICENSED ELECTRICAL CONTRACTOR.
- 2. ALL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE NEW AND LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY APPROVED BY THE STATE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO STARTING WORK. CONTACT ENGINEER, AS APPROPRIATE, IF CONFLICTING OR PROHIBITIVE CONDITIONS ARE ENCOUNTERED. UNDERGROUND UTILITIES EXIST AND MUST BE PROPERLY MARKED BY CONTRACTOR PRIOR TO EXCAVATION.
- 4. ELECTRICAL CONTRACTOR TO PROVIDE SEPARATE NEUTRAL CONDUCTOR FOR EACH 120V CIRCUIT, AND INSULATED GROUND CONDUCTOR IN ALL CONDUIT RUNS.
- 5. ELECTRICAL PLANS TO LOCATE EQUIPMENT AND FIXTURES ONLY. FINAL WIRE SIZING AND OVERCURRENT PROTECTION PER NEC REQUIREMENTS.
- 6. FINAL CIRCUITS TO BE CLEARLY LABELED ON DISTRIBUTION PANEL BY CONTRACTOR. ALL RECEPTACLE OUTLETS IN WET AREAS TO BE PROTECTED BY GFCI CIRCUITS.
- 8. ALL EXTERIOR 120V WIRING SHALL BE COPPER SINGLE WIRE CONDUCTORS IN CONDUIT, MINIMUM WIRE SIZING #12AWG. CONTRACTOR TO COORDINATE CONDUIT PLACEMENT AND RUNS WITH CONTRACTOR.
- 9. COORDINATE ELECTRICAL SERVICE AND METER PANEL LOCATIONS WITH LOCAL UTILITY.
- 10. ALL GFCI/WP RECEPTACLES TO HAVE IN-USE COVERS.
- 11. ALL EXTERIOR 24V SHALL BE #8-2 DBR LOW VOLTAGE CABLE RATED FOR DIRECT BURIAL.

NC ENERGY CODE: APPENDIX B ELECTRICAL SUMMARY 2018 NC ENERGY CONSERVATION CODE:

METHOD OF COMPLIANCE: PRESCRIPTIVE X ENERGY COST BUDGET

LIGHTING SCHEDULE: LAMP TYPE REQUIRED

NUMBER OF LAMPS IN FIXTURE SEE ELECTRICAL SCHEDULE BALLAST TYPE

NUMBER OF BALLAST TOTAL WATTAGE PER FIXTURE

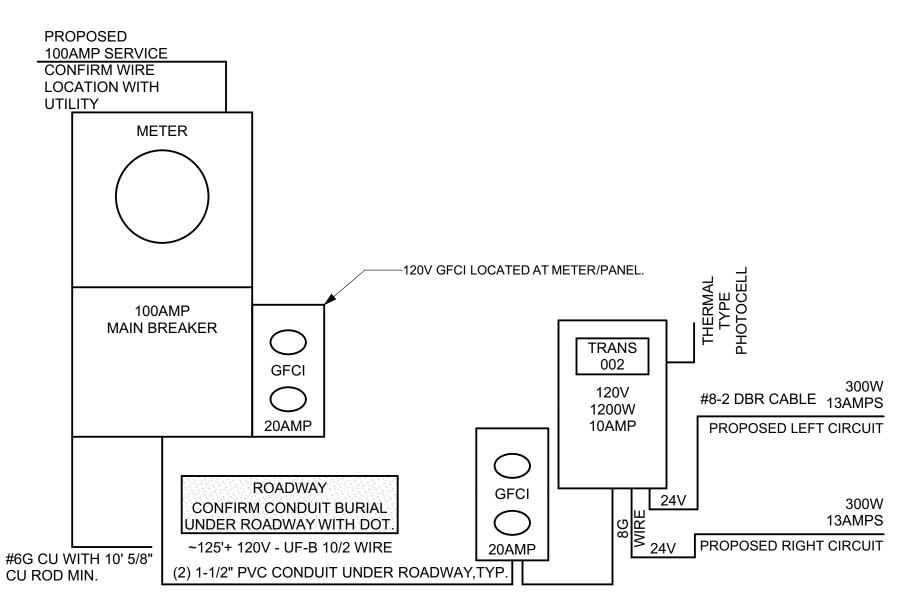
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED: N/A

EXTERIOR LUMENS SPECIFIED VS ALLOWED:

NOTE:LIGHTING USED FOR HIGHLIGHTING PUBLIC MONUMENTS IS EXEMPT FROM THE REQUIREMENTS BELOW

ELECTRICAL SCOPE:

1. INSTALL AND CONNECT CIRCUITS FOR LOW VOLTAGE LANDSCAPE LIGHTING TO NEW METER.



- ELECTRICIAN AND CONTRACTOR TO CONFIRM FINAL CIRCUIT OCP AND CONNECTIONS TO MAIN PANELS WITH ENGINEER PRIOR TO BEGINNING WORK.
- FINAL WIRE AND CONDUIT SIZING DETERMINED BY SITE CONDITIONS. CONTRACTOR TO COORDINATE WIRE RUNS AND SIZING PER NC 2017 NEC WITH ENGINEER PRIOR TO INSTALLATION.
- 24V LANDSCAPE LIGHTING TO USE #8-2 DBR CABLE OR EQUAL IN 1/2" NM LIQUID TIGHT CONDUIT.MAX 50FT PER
- CIRCUIT FOR 100FT TOTAL. CABLE GLANDS REQUIRED WHERE WIRE LEAVES CONDUIT TO FIXTURE. (2) 1-1/2" PVC CONDUIT UNDER ROADWAY- CONFIRM BURIAL DEPTH WITH DOT. APPROX 125FT LENGTH. (2) 20AMP 120V CIRCUITS PULLED TO GFCI OUTLETS WITH WET-RATED IN-USE COVERS. ATTACH TO 4X4 PT 3'-0" MIN EMBED DEPTH, MAX HEIGHT 3' ABOVE GRADE, PAINT SHERWIN WILLIAMS SUPERDECK STAIN, SEMI TRANSPARENT, COLOR: SW 3

UTILITY & MAIN SERVICE PANEL

REDWOOD . LOW VOLTAGE TRANSFORMER TO ATTACH TO OPPOSITE SIDE OF 4X4.

	PANEL SCHEDULE: M 1-PROPOSED										
	MAIN PANEL: EATON MODEL #MBT48B200BTS MAIN										
			120/240 VO	LTS 1-PHASE 3-W	IRE 200-AMP MAIN	I 10,000AIC					
				BUS A	BUS B						
CKT	BRK	WIRE	DESC	LOAD 1 (VA)	LOAD 2 (VA)	DESC	WIRE	BRK	СКТ		
1	20	10	GFCI RECEPT TRANS	1200	180	GFCI RECEPT	12	20	2		
3			SPARE	000	000	SPARE			4		

. NEW PANEL TO UTILIZE 100AMP MAIN BREAKER IN METER PANEL. MAIN OCP SIZING AND CIRCUIT WIRE SIZING TO BE AS PER NEC AND CONFIRMED WITH ENGINEER PRIOR TO INSTALLATION. . FINAL SIZING OF MAIN PANEL OCP TO BE CONFIRMED PER NEC ON SITE.

-ELECTRICAL CONTRACTOR TO CONFIRM EQUIP WIRE RUNS, SIZING, AND OVERCURRENT PROTECTION PER NEC WITH ENGINEER.

-LOADS ADJUSTED:- LIGHTS 125%, PUMP MOTOR- 125%, OTHER 100%

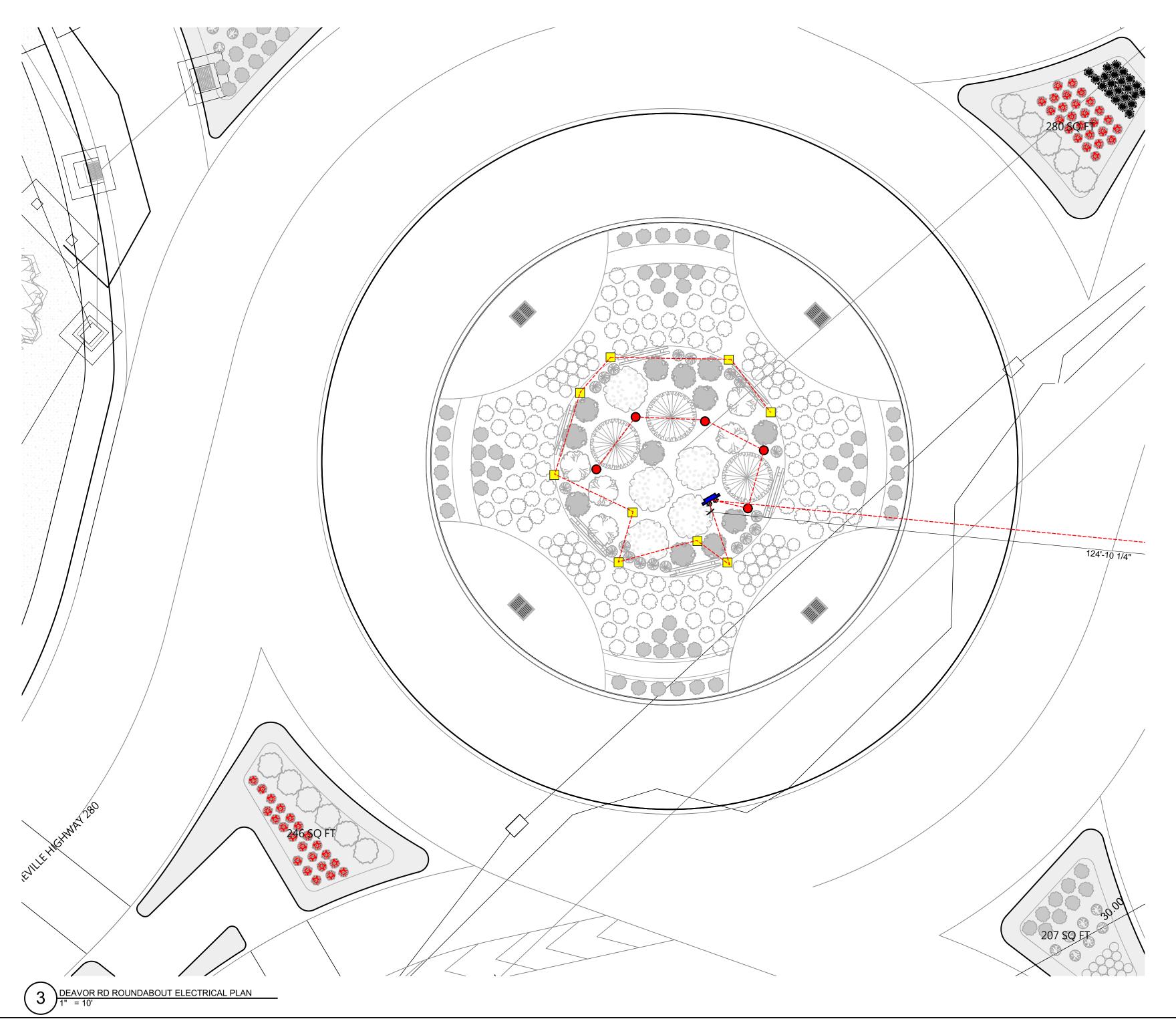
TTL CONNECTED KVA: 1.4 TTL DEMAND KVA: 1.2 TTL DEMAND AMPS: 5

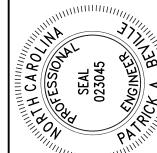
			ELECTRICAL SCHEDULE				
KEY	ITEM DESC	QUANTITY	MODEL#	SPECIFICATION	WATTAGE		VOLTAGE
	ELECTRICAL	0	CIWL6	WASH LIGHTS 20 LIGHT LEVELS W/ DIMMER		24V	
#	GFCI	2	COOPER TRAFGF15 OR EQUAL WITH #1991 HORIZONTAL OR #4966 VERTICAL WEATHERPROOF HOUSING	20 AMP		120V	
	LIGHT 01	5	CAST (CCGL25036B)	36° BEAM ANGLE	35 WATT HALOGEN EQUI.	24V	
\bigcirc	LIGHT 02	0	CAST (CCSL18336B)	36° BEAM ANGLE		24V	
	LIGHT 03	9	CAST LED MINI WASH (CWL6LED1)	120° BEAM ANGLE		24V	
	METER	1	EATON MODEL #MBT48B400BTS MAIN	200AMP 1PH		120V/240V	
	TRANS	1	CAST PERIMETER 600W X 1200W DC LIGHTING TRANSFORMERS	36° BEAM ANGLE		24V	
	PHOTOCELL	1	INTERMATIC ELEC-EK4236S	6IN LEAD LENGTH	UP TO 1,650W	120/208/240/277 V	

ELECTRICAL SCHEDULE DEVOUR ROAD SCALE: 1:1.35

NOTE: EXACT CONDUIT LENGHTS TO BE CONFIRMED WITH DOT GRADING PLAN AND UTILITY METER LOCATION. 1. APPROXOMATELY (2) 125' 1-1/2" PVC CONDUIT UNDER ROADWAY. ONE CONDUIT EMPTY AND CAPPED FOR REPAIR/ADDITIONAL FUTURE CIRCUITS.

2. APPROXOMATELY 100' 1" PVC CONDUIT FOR LOW VOLTAGE LIGHTING WIRE PROTECTION WITHIN LANDSCAPING AREA.



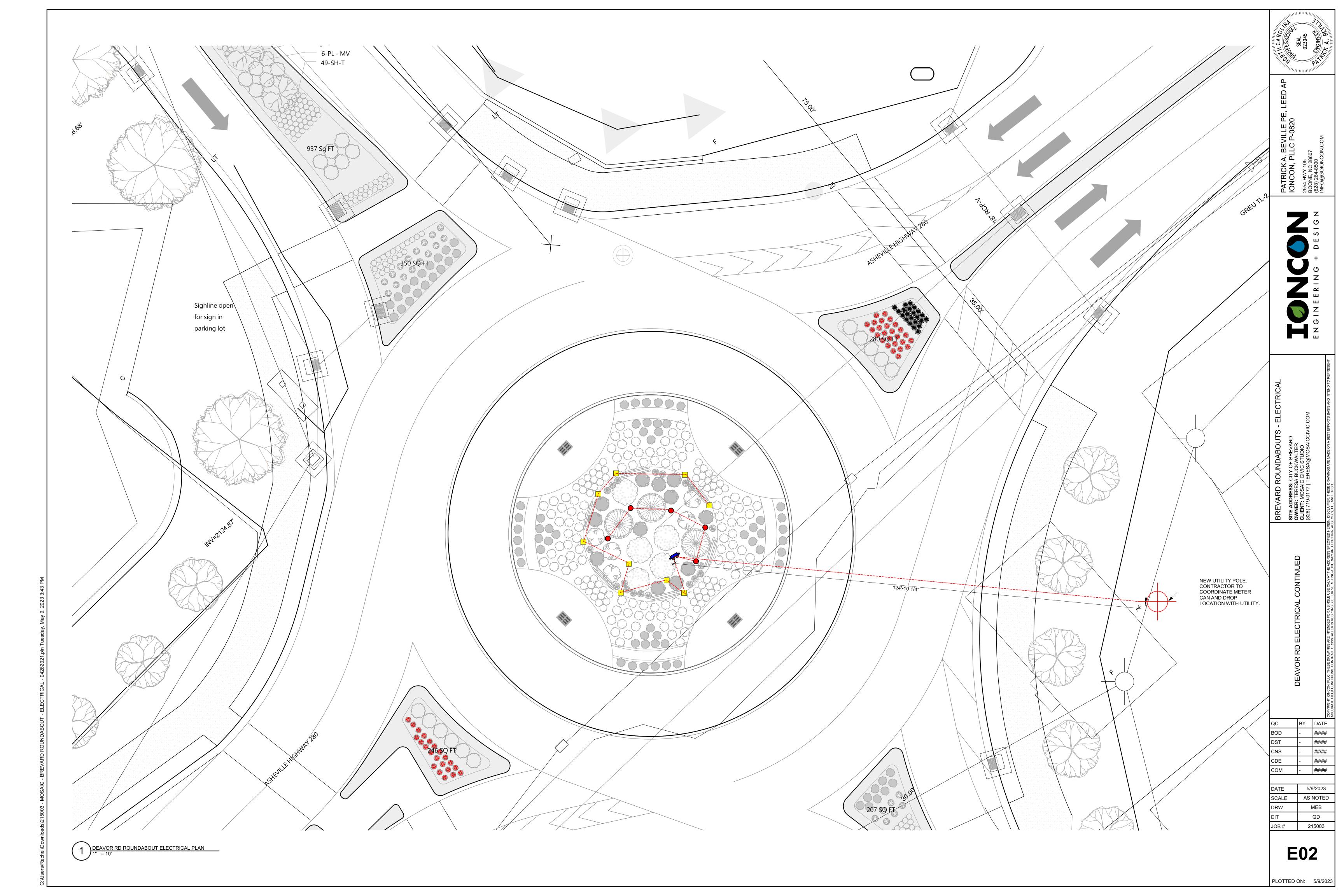


PATRICK A. BEVILLE P IONCON, PLLC P-0820

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E01



ELECTRICAL NOTES:

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METHOD OF COMPLIANCE: PRESCRIPTIVE X PERFORMANCE ENERGY COST BUDGET

LIGHTING SCHEDULE: LAMP TYPE REQUIRED

NUMBER OF LAMPS IN FIXTURE

SEE ELECTRICAL SCHEDULE

BALLAST TYPE

NUMBER OF BALLAST TOTAL WATTAGE PER FIXTURE

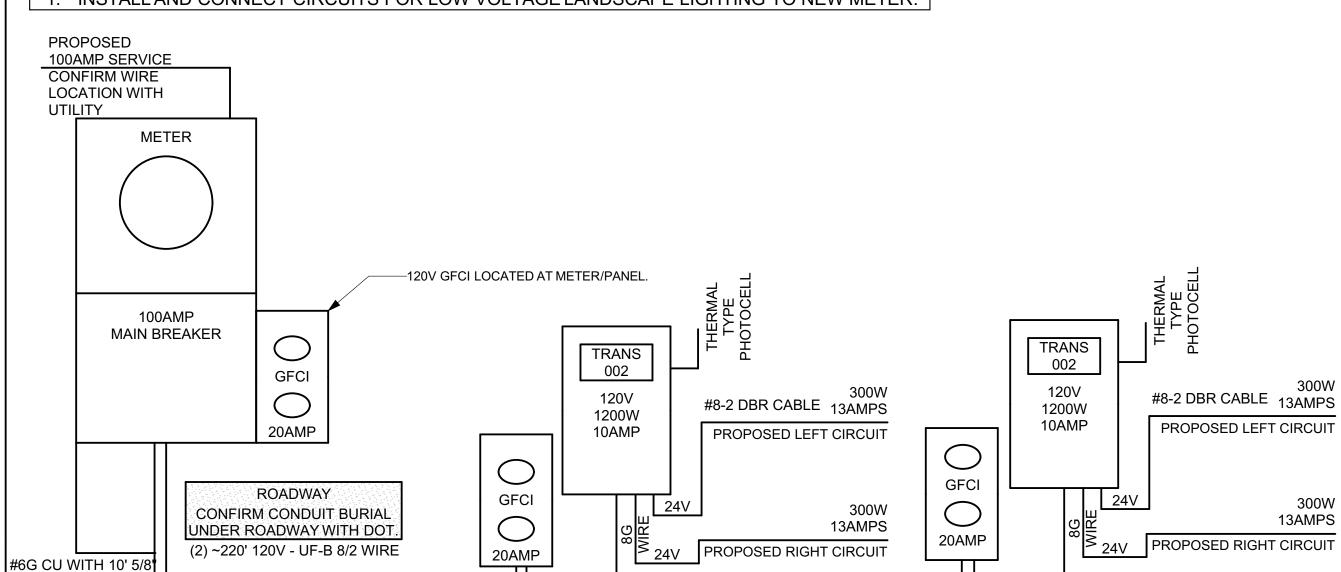
TOTAL INTERIOR WATTAGESPECIFIED VS ALLOWED: N/A

EXTERIOR LUMENS SPECIFIED VS ALLOWED:

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- GLANDS REQUIRED WHERE WIRE LEAVES CONDUIT TO FIXTURE 4. (2) 1-1/2" PVC CONDUIT UNDER ROADWAY- CONFIRM BURIAL DEPTH WITH DOT. APPROX 125FT LENGTH. (2) 20AMP 120V CIRCUITS PULLED TO GFCI
- OUTLETS WITH WET-RATED IN-USE COVERS. ATTACH TO 4X4 PT 3'-0" MIN EMBED DEPTH, MAX HEIGHT 3' ABOVE GRADE, PAINT SHERWIN WILLIAMS SUPERDECK STAIN, SEMI TRANSPARENT, COLOR: SW 3501 REDWOOD . LOW VOLTAGE TRANSFORMER TO ATTACH TO OPPOSITE SIDE OF 4X4 PT POST.

UTILITY + MAIN SERVICE PANEL NOTES PISGAH ROAD ELECTRICAL

(2) 1-1/2" PVC CONDUIT UNDER ROADWAY, TYP.

	PANEL SCHEDULE: M 1-PROPOSED										
	MAIN PANEL: EATON MODEL #MBT48B200BTS MAIN										
			120/240 VO	LTS 1-PHASE 3-W	IRE 200-AMP MAIN	I 10,000AIC					
				BUS A	BUS B						
CKT	BRK	WIRE	DESC	LOAD 1 (VA)	LOAD 2 (VA)	DESC	WIRE	BRK	СКТ		
1	20	8	GFCI RECEPT TRANS	1200	180	GFCI RECEPT	12	20	2		
3	20	8	GFCI RECEPT TRANS	1200	000	SPARE			4		
N 0 7											

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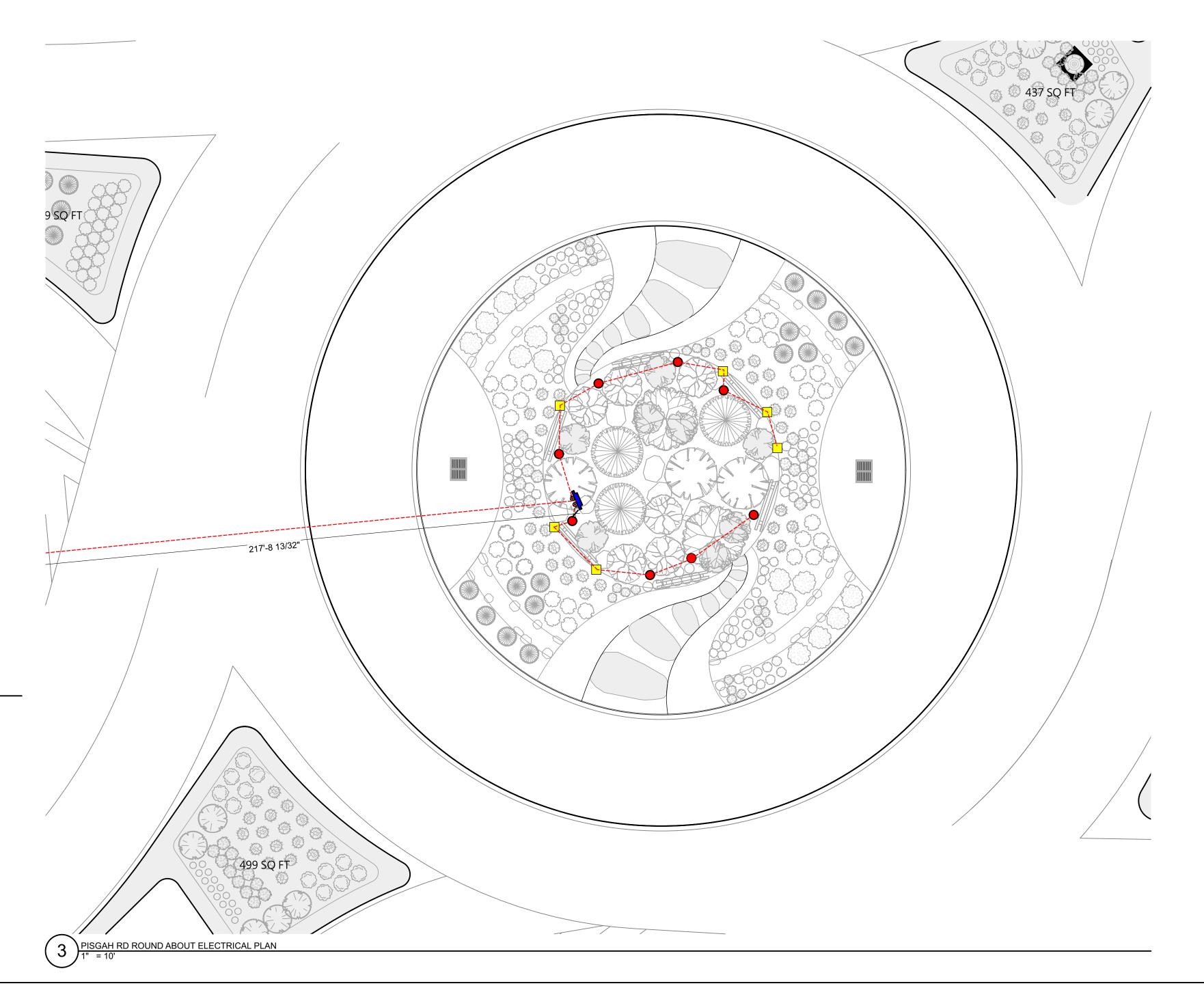
TTL CONNECTED KVA: 1.4 TTL DEMAND KVA: 2.4 TTL DEMAND AMPS: 5

ELECTRICAL SCHEDULE									
KEY	ITEM DESC	QUANTITY	MODEL#	SPECIFICATION	WATTAGE	VOLTAGE			
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	LIGHT 1	8	CAST (CCGL25036B)	36° BEAM ANGLE	35 WATT HALOGEN	24V			
	LIGHT 2	3	CAST (CCSL18336B)	36° BEAM ANGLE		24V			
	LIGHT 3	12	CAST LED MINI WASH (CWL6LED1)	120° BEAM ANGLE		24V			
	METER	1	EATON MODEL #MBT48B400BTS MAIN	200AMP 1PH		120V/240V/			
	TRANS	2	CAST PERIMETER 600W X 1200W DC LIGHTING TRANSFORMERS	36° BEAM ANGLE		24V			
	PHOTOCELL	1	INTERMATIC ELEC-EK4236S	6IN LEAD LENGTH	UP TO 1,650W	120/208/240/277 V			

ELECTRICAL SCHEDULE PISGAH ROAD

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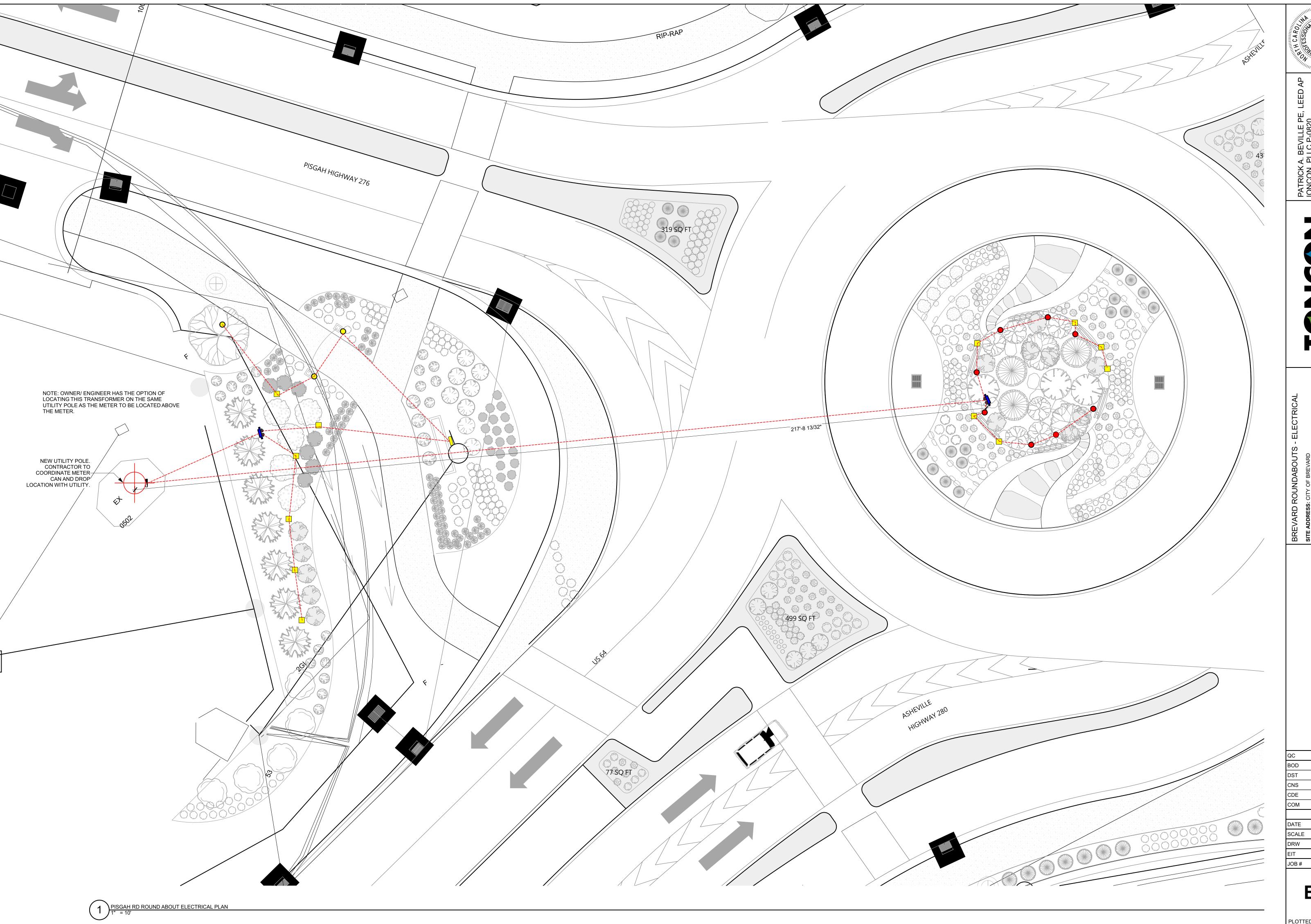


PATRICK A. BEVILLE PE IONCON, PLLC P-0820 2554 HWY 105 BOONE, NC 28607 (828) 264-8500 INFO@GOIONCON.COM

##/## ##/##

5/9/2023 SCALE AS NOTED MEB QD 215003

E03



SEAL 023045

PATRICK A. BEVILLE PE, LEED A IONCON, PLLC P-0820
2554 HWY 105
BOONE, NC 28607
(828) 264-8500
INFO@GOIONCON.COM

PATRI IONCC 2554 HW BOONE, (828) 264 INFO@G

SITE ADDRESS: CITY OF BREVARD
OWNER: TERESA BUCKWALTER
CLIENT: MOSAIC CIVIC STUDIO
(828) 719-0177 | TERESA@MOSAICCIVIC.COM

PISGAH RD ELECTRICAL PLAN

BY DATE
- ##/##
- ##/##
- ##/##
- ##/##
- ##/##

CDE - ##/##
COM - ##/##

DATE 5/9/2023
SCALE AS NOTED
DRW MEB
EIT QD
JOB # 215003

E04