ADDENDUM 4 **FEBRUARY 20, 2024**

REEFER SERVICE AREA, PORT OF WILMINGTON
SCO#: 22-25839-01

LOCATION: **Reefer Service Area**
Port of Wilmington
2202 Burnett Boulevard
Wilmington, NC 28401

OWNER: **North Carolina State Ports Authority**
2202 Burnett Boulevard
Wilmington, NC 28401

DESIGNER: **Mott MacDonald**
930 Main Campus Drive, Suite 200
Raleigh NC, 27606

BIDS DUE: **Thursday, February 28, 2024 @ 3:00 PM**
North Carolina State Ports Authority
Room 100A, North Carolina Maritime Building
2202 Burnett Boulevard, Wilmington, NC 28401

Questions received:

Electrical (Answer underlined in bold font)

1. I can not find where there are associated conduit and wire sizing for the riser.
    a. **Drawings will be revised.**
2. Why is there a meter drawn when the port owns the power that is feeding this structure. DUKE Energy will not be setting a meter for this application. If they are just wanting to monitor the electricity used, could they use some kind of alternate meter instead?
    a. **If the port owns this utility pole, a meter is not required. Drawings will be revised.**
3. Most all the equipment installed outside at the port is Nema 4X SS and the panels on the drawings are noted to be Nema Type 3R … Should they be 4X?
    a. **Panels, like all other outdoor equipment, should be 4X. This is also stated in the contract specifications. Drawings will be revised.**
4. What size junction box is recommended for the Square "J" symbol on the drawing?
    a. **Canopy mounted boxes shall be 16"x16" minimum. Receptacle junction boxes are just device back boxes.**
5. What is the purpose of a Junction box at each device?
    a. **Junction boxes for receptacles are for wire pulling and device mounting. Junction boxes mounted to the canopy for the fans and lights are for wire pulling.**

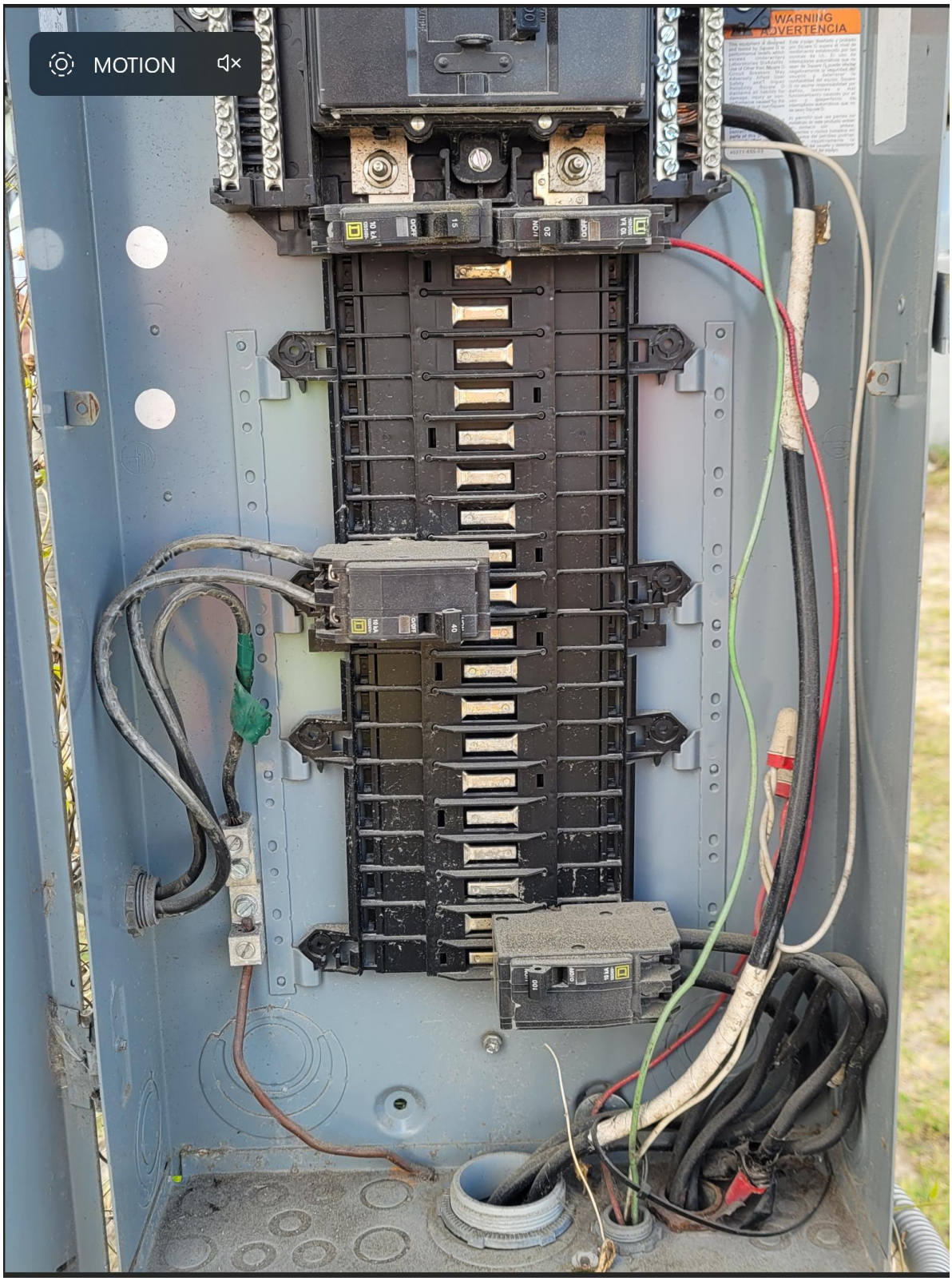
6. Are the conduits that feed the WP GFI receptacles and the 480V receptacle meant to be mounted on the column with the conduit coming up through the concrete poured around the column?
    a. **Yes**.
7. What is the purpose of the 5#12, 2#8 and 1#10 5KV medium voltage cable in the 4" conduit? The smallest 5KV wire we can get is a #6 which we should only need 3 strands to feed the 4160 transformer … correct?
    a. **These are two separate conduits. The 5kV MV cable will in one 4" conduit while the remaining wires in the second conduit shall be used to refeed the existing loads currently located on the utility pole existing panel (Picture attached).**
8. On the panel schedules …What is the "existing loads" in Panel PP-2 and what will need to be hooked up for them as far as conduit and wire sizes?
    a. **Refer to comment #7 response. These are existing loads in the existing panel (Picture attached).**
9. In the 2" conduit from the "Electrical Rack" that shows "(6) SETS 2#8, 1#8 in 2"C" does the engineer really want multiple voltages in the same conduit, or should you have one conduit for the fans that are 277-Volt and a separate conduit for the lights that are 240-Volt … or should the lights be changed to 277-volt?
    a. **While multiple voltages (power) are allowed in the same conduit provided the wiring insulation is rated for 600V and the wire colors follow the contract specifications, it will be a cleaner installation if the canopy lights are also fed from PP-1. Drawings will be revised.**
10. What, other than the breaker, is the means to turn the lights ON and/or OFF? Should there be a switch added on one of the columns or a photocell at the panel?
    a. **The lights will remain on at all times from our understanding and a switch on one of the columns would be a good addition. Drawings will be revised.**

Structure

1. Receive a question regarding the wash rack spread footing quantity. **Revised structure quantities are being provided**

Contract and Plan Set

1. **REVISION: Replace existing plan sheet E-101, E-103, and E-105 with attached revised plan sheet E-101, E-103, and E-105 with noted Revision 1, Addendum 4 dated 2/14/2024.**
2. **REVISION: Replace Page C-3 of revised Section C provided in Addendum 1 with revised Page C-3 attached.**



End of Addendum 1

	STRUCTURAL SITEWORK					
23	METAL BUILDING STRUCTURE	1.00	LS			
24	METAL BUILDING ERECTION	1.00	LS			
25	CANOPY SPREAD FOOTINGS AND PIERS	82.00	CY			
26	36" DIAMENTER CONCRETE COLUMN COVER	19.00	CY			
27	EXISTING ASPHALT PATCHING AND DEMO	228.00	SY			
28	WASHRACK HP BOLLARD W/ FOUNDATION	94.00	LF			
29	BOLLARDS (8" DIAMETER POLE) W/ FOUNDATION	12.00	EA			
30	WASH RACK STRUCTURE WITH HANDRAILS	5.00	TONS			
31	WASH RACK SPREAD FOOTINGS	3.00	CY			
	STRUCTURAL SITEWORK TOTAL				**$**	-
	ELECTRICAL SITEWORK					
32	TRENCHING AND BACKFILL	550.00	LF			
33	CONCRETE DUCTBANK	1.00	EA			
34	UTILITY METER	1.00	EA			
35	PANEL BOARD	2.00	EA			
36	TRANSFORMER	2.00	EA			
37	CONDUIT	1500.00	LF			
38	WIRING	40.00	CLF			
39	JUNCTION BOX	15.00	EA			
40	RECEPTACLE,WP	5.00	EA			
41	RECEPTACLE, 480V	1.00	EA			
42	LIGHTING FIXTURE	36.00	EA			
43	HVLS FAN	5.00	EA			
44	LIGHTNING PROTECTION	1.00	LS			
45	TESTING	1.00	LS			
	ELECTRICAL SITEWORK TOTAL					-

TOTAL GENERAL CONSTRUCTION CONTRACT BASE BID (Items 1 – 45):

_____ (words)

_____ (figures)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRIC SAFETY CODE, N.F.P.A., O.S.H.A. REGULATIONS AND ALL OTHER EXISTING CODES AND REGULATIONS OF AUTHORITIES WHICH HAVE JURISDICTION.

2. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND NOT EVERY DETAIL OR CONDUIT IS SHOWN. EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE COMMENCING ANY FABRICATION, ORDERING ANY MATERIAL, OR PERFORMING ANY WORK. ANY DEPARTURE FROM CONCEPT SHOWN ON THE CONTRACT DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. ALL ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND/OR REQUIRED FOR THE FULL INTEGRITY OF THE CONTRACT SHALL BE FURNISHED, INSTALLED AND CONNECTED, EXCEPT WHERE EQUIPMENT SHOWN IS IDENTIFIED AS "EXISTING" OR OTHERWISE NOTED ON THE DRAWINGS.

3. UNLESS OTHERWISE NOTED, EQUIPMENT AND MATERIALS TO BE PROVIDED SHALL BEAR LISTING AND LABELING BY A NATIONALLY RECOGNIZED TESTING AGENCY WHERE SUCH STANDARD HAD BEEN ESTABLISHED FOR THAT TYPE OF EQUIPMENT/MATERIAL. TESTING AGENCY MUST BE ACCREDITED BY THE NC BUILDING CODE COUNCIL TO LABEL ELECTRICAL EQUIPMENT.

4. SUBMIT DETAILED EQUIPMENT LAYOUT PLANS, SECTIONS, AND MOUNTING DETAILS SHOWING PROPOSED LOCATION OF ALL EQUIPMENT AND REQUIRED WORKING/SERVICE CLEARANCES PRIOR TO INSTALLATION.

5. VISIT THE PROJECT SITE AND EXAMINE AND CONFIRM EXISTING CONDITIONS. ALL CHANGES SHALL BE PRESENTED DURING SHOP DRAWING SUBMITTALS FOR ENGINEER'S APPROVAL.

6. CONDUITS SHALL CONTAIN AN INSULATED GROUND WIRE BONDED TO ENCLOSURES AND SIZED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEC, IF SIZE IS NOT SHOWN ON THE CONTRACT DRAWINGS.

7. PROVIDE CONDUIT FITTINGS, CONNECTORS, CLAMPS, HARDWARE, HANGERS, AND SUPPORTS AS NECESSARY FOR A COMPLETE INSTALLATION.

8. PROVIDE TAGS FOR EQUIPMENT, CONDUITS, AND CABLES THAT ARE INSTALLED UNDER THIS CONTRACT. TAG IDENTIFICATIONS SHALL BE IN ACCORDANCE WITH CONTRACT DRAWINGS. TAGS FOR CONDUITS SHALL BE AS DESCRIBED IN SPECIFICATIONS.

9. UNUSED OPENINGS IN CONDUITS, BOXES, DISCONNECT SWITCHES, CABINETS, AND PANEL BOARDS SHALL BE CAPPED OR PLUGGED.

10. UPDATE EXISTING PANELBOARD DIRECTORIES TO REFLECT THE CIRCUITING IN EXISTING PANELBOARDS AFFECTED BY THIS ALTERATION.

11. PROVIDE THE NECESSARY MATERIALS, LABOR AND ATTENDANCE FOR THE OPERATION OF TEMPORARY LIGHT AND CONSTRUCTION POWER AS REQUIRED DURING WORKING HOURS FOR THE ENTIRE CONSTRUCTION PERIOD.

12. MAINTAIN CONTINUITY OF ANY EXISTING CIRCUITS AFFECTED BY THIS ALTERATION. RECONNECT ALL ALTERED OR REROUTED WORK TO ITS FULLY FUNCTIONAL STATE PRIOR TO ALTERATION.

13. PROVIDE ALL NECESSARY TEMPORARY WIRING TO MAINTAIN EXISTING INSTALLATIONS WHICH MUST REMAIN IN SERVICE DURING CONSTRUCTION PERIOD.

14. ALL BRANCH CIRCUITS 20A OR LESS OVER 75 FEET IN LENGTH SHALL BE RUN WITH #10 CONDUCTOR, UNLESS OTHERWISE NOTED.

15. SCHEDULE ALL DISCONNECTION AND INTERRUPTIONS OF ELECTRICAL SERVICE, COMMUNICATIONS AND SUPERVISORY SYSTEMS WITH THE OWNER AND ENGINEER.

16. FOLLOW ALL OWNER SITE SAFETY WORK PROCESSES PROCEDURES, FOR EXAMPLE, WORK PERMITS, SAFETY TASK ANALYSES, LOCKOUT TAGOUT (LOTO), LOCK, TAG AND TRY, AND RED TAG, ETC.

17. COORDINATE ALL WORK ACTIVITIES WITH OPERATIONS AND MAINTENANCE.

18. EQUIPMENT ARRANGEMENT AND CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY AND MAY DIFFER IN ACCORDANCE WITH ACTUAL FIELD CONDITIONS.

19. THE NUMBER, SIZE AND TYPE OF CONDUCTORS AND CONDUITS SHOWN IN THESE DRAWINGS ARE BASED ON DESIGN CRITERIA. MAKE ADJUSTMENTS WHERE NECESSARY TO REFLECT THE REQUIREMENTS OF THE ACTUAL EQUIPMENT TO BE INSTALLED PER APPROVED SHOP DRAWINGS.

20. POWER OR CONTROL CONDUCTORS SHALL NOT BE IN THE SAME CONDUIT AS INSTRUMENTATION WIRES. POWER AND INSTRUMENTATION CONDUITS SHALL BE PLACED A MINIMUM DISTANCE OF 12 INCHES APART.

21. SYSTEM CIRCUITS, ELECTRICAL AND MECHANICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC.

22. EXPOSED CONDUIT AND SURFACE MOUNTED EQUIPMENT NOT OTHERWISE SHOWN OR DETAILED SHALL BE SUPPORTED FROM WALLS AND/OR CEILINGS BY APPROVED STAINLESS STEEL HANGERS OF ANGLE OR CHANNEL CONSTRUCTION.

23. EXPANSION FITTINGS SHALL BE FURNISHED AND INSTALLED WHERE CONDUITS PASS STRUCTURAL JOINTS. FITTINGS SHALL BE OZ/GEDNEY TYPE "DXX" OR EQUAL.

24. EXACT CONDUIT STUB-UP LOCATIONS ARE TO BE DETERMINED BASED ON THE CERTIFIED MANUFACTURER'S DRAWINGS OF THE RESPECTIVE EQUIPMENT. CONDUITS SHALL BE INSTALLED TO AGREE WITH THE EQUIPMENT FURNISHED.

25. ALL CONDUITS SHALL BE PROVIDED WITH AN EQUIPMENT GROUNDING CONDUCTOR SIZED PER THE NATIONAL ELECTRICAL CODE. THE GROUNDING CONDUCTOR SHALL BE BONDED TO METALLIC CONDUIT AND EQUIPMENT GROUNDING LUGS AT EACH END PER SPECIFICATIONS.

26. CONDUIT NOT OTHERWISE INDICATED SHALL BE 3/4" RGS WITH 2#12 AND 1#12 GND CONDUCTORS, MINIMUM.

27. ALL CONDUITS PASSING THROUGH CONCRETE FLOORS OR WALLS BELOW GRADE SHALL BE INSTALLED WITH AN APPROVED INSULATED AND WATERTIGHT CONDUIT SEAL.

28. SOME CONDUIT AND FEEDERS MAY NOT BE SHOWN ON THE PLANS FOR CLARITY.

29. ALL EQUIPMENT DEVICES CONDUIT AND WIRING ARE NEW UNLESS OTHERWISE INDICATED.

ABBREVIATIONS

A, AMP	AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AHB	AMP - HORIZONTAL BUS
AIC	AMPS OF INTERRUPTING CURRENT
AMP	AMPERE
APPROX	APPROXIMATELY
AT	AMPERE TRIP
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
BLDG	BUILDING
C, CDT	CONDUIT
CB	CIRCUIT BREAKER
CKT(S)	CIRCUIT(S)
CU	COPPER
DISC	DISCONNECT
DWG	DRAWING
DWG(S)	DRAWING(S)
E, ELEC	ELECTRIC, ELECTRICAL
EG	EQUIPMENT GROUNDING CONDUCTOR
EQUIP	EQUIPMENT
ETC	(ET CETERA) AND OTHER THINGS
EXIST	EXISTING
G, GND	GROUND
GEC	GROUNDING ELECTRODE CONDUCTOR
GFI	GROUND FAULT CIRCUIT INTERRUPT
HH	HANDHOLE
HZ	HERTZ
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
J.BOX,	JB,JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERE
KW	KILOWATT
MCB	MAIN CIRCUIT BREAKER
MFG	MANUFACTURER
MH	MANHOLE
MLO	MAIN LUGS ONLY
N, NEUT	NEUTRAL
N.T.S.	NOT TO SCALE
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
No.	NUMBER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P	POLE(S)
PH, Ø	PHASE
PNL	PANEL
PVC	POLY VINYL CHLORIDE CONDUIT
PVC/RGS	PVC COATED RGS CONDUIT
PWR	POWER
RECPT	RECEPTACLE
REF	REFERENCE
RGS	RIGID GALVANIZED STEEL CONDUIT
SPEC	SPECIFICATION
SS	STAINLESS STEEL
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT-AMPS
VAC	VOLTS ALTERNATING CURRENT
W	WATT
W	WIRE(S)
WP	WEATHER PROOF

SYMBOLS LEGEND

- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- UNDERGROUND CONDUIT
- GND — GROUND
- RPB/2,4,6 — HOMERUN, AS DESIGNATED ON PLANS; 'RPB' PANEL DESIGNATION; '2,4,6' CIRCUIT NUMBERS
- J OR J — JUNCTION BOX
- PB — PULL BOX
- GFI — DUPLEX RECEPTACLE, 20A,125V, 'WP' INDICATES WEATHER PROOF, 'GFI' INDICATES GROUND FAULT TYPE - NEMA 5-20R
- 480V RECEPTACLE, NEMA L16-30
- PANEL BOARD
- A — LIGHTING FIXTURE; 'A' INDICATES LIGHT FIXTURE MARK AS FOUND IN THE LIGHTING FIXTURE SCHEDULE
- EF-1 — IDENTIFICATION OF EQUIPMENT
- UNFUSED DISCONNECT SWITCH
- GROUND ROD
- GROUND WELL ONLY
- GROUNDING
- EXOTHERMIC CADWELD
- AIR TERMINAL
- TRANSFORMER
- M — UTILITY METER
- X:Y, Z — CURRENT TRANSFORMER
  - 'X:Y' INDICATES RATIO
  - 'Z' INDICATES QUANTITY (1 PER PHASE UNLESS OTHERWISE INDICATED)
- XXA/Y, Y — DISTRIBUTION SWITCH
- 200A, 3P — CIRCUIT BREAKER
- X $ — SINGLE POLE TOGGLE SWITCH FOR LIGHTS, 20A, 42" AFF, UON (1)

VICINITY MAP

REV	DESCRIPTION	DATE	APP BY
1	ADDENDUM 4	2/14/2024	GB

MOTT MACDONALD
1101 Haynes Street
Raleigh, NC 27604
License No. F-0860
www.mottmac.com

DESIGNED BY: E. CONTICCHIO
DRAWN BY: E. CONTICCHIO
CHECKED BY: I. BONDAR
PROJ. MANAGER: GREG BURNS, PE

NORTH CAROLINA PROFESSIONAL SEAL 049082 ENGINEER IGOR BONDAR

NORTH CAROLINA STATE PORTS AUTHORITY
REEFER SERVICE AREA IMPROVEMENTS
PORT OF WILMINGTON - 2202 BURNETT BLVD.
WILMINGTON, NC 28401
MARK A. BLAKE, P.E., VICE PRESIDENT, ENGINEERING & MAINTENANCE

ELECTRICAL LEAD SHEET, SCHEDULES, AND DETAILS

NTS

SCO PROJECT NO. 22-25839-01A
NCSPA CONTRACT NO. C-1749
AUGUST 17, 2023

E-101

NORTH (NAD 83)

100% SUBMISSION

ELECTRICAL ENLARGED CANOPY SITE PLAN

SCALE: 1/8" = 1'-0"

VICINITY MAP

REV	DESCRIPTION	DATE	APP BY
1	ADDENDUM 4	2/14/2024	GB

MOTT MACDONALD

1101 Haynes Street
Raleigh, NC 27604
License No. F-0369
www.mottmac.com

DESIGNED BY: E. CONTICCHIO

DRAWN BY: E. CONTICCHIO

CHECKED BY: I. BONDAR

PROJ. MANAGER: GREG BURNS, PE

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049082 IGOR BONDAR

NORTH CAROLINA STATE PORTS AUTHORITY

REEFER SERVICE AREA IMPROVEMENTS

PORT OF WILMINGTON - 2202 BURNETT BLVD.

WILMINGTON, NC 28401

MARK A. BLAKE, P.E., VICE PRESIDENT, ENGINEERING & MAINTENANCE

ELECTRICAL ENLARGED SITE PLAN

0 4 8 16

SCALE: 1/8" = 1'-0"

NORTH (NAD 83)

1/8" = 1'-0"

SCO PROJECT NO. 22-25839-01A
NCSPA CONTRACT NO. C-1749
AUGUST 17, 2023

100% SUBMISSION

E-103

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS-NUMBER/TYPE	VOLTAGE	LOAD	LUMENS	TEMPERATURE	CRI	MOUNTING	REMARKS
A	PHILLIPS-SIGNIFY	FSX460L840-UNV	CANOPY LED, QTY = 36	MVOLT	52W	6000 LM	4000 K	80	HANGING, 22' A.F.F.	FURNISH AND INSTALL DACH48 ADJUSTABLE CABLE HANGER KIT, (2) PER FIXTURE

VICINITY MAP

PANEL: PP-1 — LOCATION: REEFER CANOPY

CKT#	BKR.	POLE	DESCRIPTION	VA	PHASE A	PHASE B	PHASE C	VA	DESCRIPTION	POLE	BKR.	CKT#
1	100A	2	TRANSFORMER "XFMR-2"	16560	19560			3000	480V RECEPTACLE	3	30	2
3				15360		18360		3000				4
5	15	1	CANOPY FAN	2216			5216	3000				6
7			SPACE		-				SPACE			8
9			SPACE			-			SPACE			10
11	15	1	CANOPY FAN	2216			4432	2216	CANOPY FAN	1	15	12
13			SPACE		-				SPACE			14
15			SPACE			-			SPACE			16
17	15	1	CANOPY FAN	2216			4432	2216	CANOPY FAN	1	15	18
19			SPACE		-				SPACE			20
21			SPACE		1	1250		1250	CANOPY LIGHTING	2	20	22
23			SPACE				1250	1250				24
25			SPACE		-				SPACE			26
27			SPACE			-			SPACE			28
29			SPACE				-		SPACE			30
			TOTAL CONNECTED LOAD (VA) PER PHASE:		19560	19610	15330					
			CONNECTED LOAD (AMPS) PER PHASE		71	71	55					
			TOTAL CONNECTED LOAD (VA):		54500							
			TOTAL CONNECTED LOAD (AMPS):		66							

OPTIONS

VOLTS L-L:	480	MAIN OVERCURRENT:	125A	BUS MATERIAL:	Cu	MOUNTING:	SURFACE
VOLTS L-N:	277	MAIN BUS RATING:	225A	NEUTRAL SIZE:	100%	ENCLOSURE TYPE:	TYPE 4X
PHASE:	3	MINIMUM A.I.C.:	22kA	DEMAND FACTOR	1.00	GROUND:	EQUIPMENT
WIRE:	4						

PANEL: USDA MODULAR (E) — LOCATION: EXISTING BUILDING

	CKT#	BKR.	POLE	DESCRIPTION	VA	PHASE A	PHASE B	VA	DESCRIPTION	POLE	BKR.	CKT#	
(E)	1	20	1	TRUCK WASH RACK RECEPTACLE	180	180			SPACE			2	
	3			SPACE			-		SPACE			4	
	5			SPACE		-			SPACE			6	
	7			SPACE			-		SPACE			8	
	9			SPACE		-			SPACE			10	
	11			SPACE			-		SPACE			12	
	13			SPACE		-			SPACE			14	
	15			SPACE			-		SPACE			16	
	17			SPACE		-			SPACE			18	
	19			SPACE			-		SPACE			20	
	21			SPACE		-			SPACE			22	
	23			SPACE			-		SPACE			24	
	25			SPACE		-			SPACE			26	
(E)	27	100	2	EXISTING LOAD	6000		12000	6000	EXISTING LOAD	2	100	28	(E)
	29				6000	12000		6000				30	
				TOTAL CONNECTED LOAD (VA) PER PHASE:		12180	12000						
				CONNECTED LOAD (AMPS) PER PHASE		102	-						
				TOTAL CONNECTED LOAD (VA):		24180							
				TOTAL CONNECTED LOAD (AMPS):		101							

OPTIONS

VOLTS L-L:	240	MAIN OVERCURRENT:	MLO	BUS MATERIAL:	Cu	MOUNTING:	
VOLTS L-N:	120	MAIN BUS RATING:	200A	NEUTRAL SIZE:	100%	ENCLOSURE TYPE:	
PHASE:	1	MINIMUM A.I.C.:	10kA	DEMAND FACTOR	1.00	GROUND:	1
WIRE:	3						

NOTES:
1. (E) EXISTING LOADS ARE ESTIMATED
2. (N) FURNISH AND INSTALL CIRCUIT BREAKERS, TYPE TO MATCH EXISTING

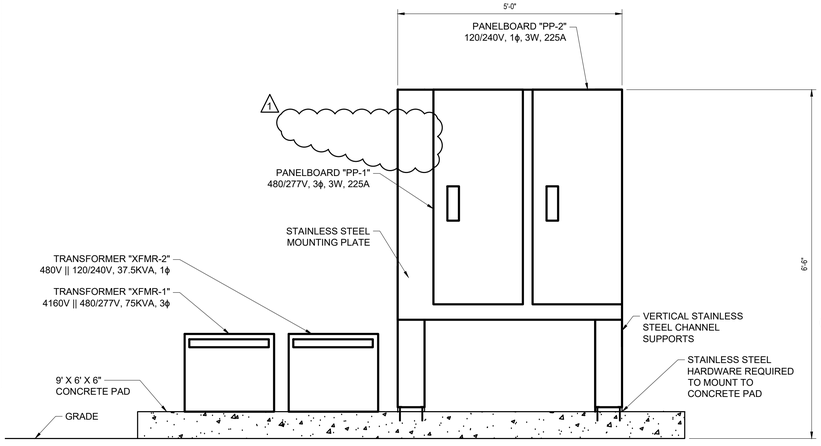
PANEL: PP-2 — LOCATION: REEFER CANOPY

	CKT#	BKR.	POLE	DESCRIPTION	VA	PHASE A	PHASE B	VA	DESCRIPTION	POLE	BKR.	CKT#	
(E)	1	100	2	FUTURE CONNECTION	9600	9600			SPACE			2	
	3				9600		9600		SPACE			4	
	5	20	1	CANOPY RECEPTACLES	720	1 2640		1920	EXISTING LOAD	1	20	6	(E)
(E)	7	45	2	EXISTING LOAD	4320		5760	1440	EXISTING LOAD	1	15	8	(E)
	9				4320	4320			SPACE			10	
	11			SPACE			-		SPACE			12	
	13			SPACE		-			SPACE			14	
	15			SPACE			-		SPACE			16	
	17			SPACE		-			SPACE			18	
	19			SPACE			-		SPACE			20	
	21			SPACE		-			SPACE			22	
	23			SPACE			-		SPACE			24	
	25			SPACE		-			SPACE			26	
	27			SPACE			-		SPACE			28	
	29			SPACE					SPACE			30	
				TOTAL CONNECTED LOAD (VA) PER PHASE:		16560	15360						
				CONNECTED LOAD (AMPS) PER PHASE		138	128						
				TOTAL CONNECTED LOAD (VA):		31920							
				TOTAL CONNECTED LOAD (AMPS):		133							

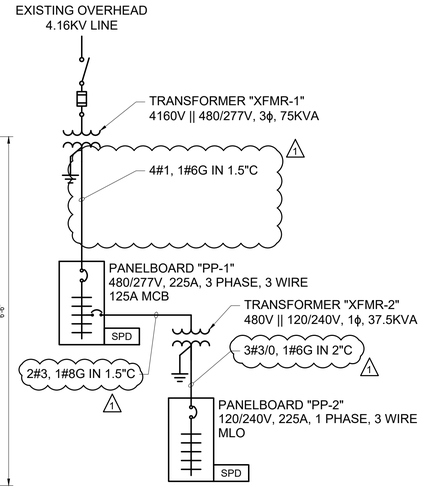
OPTIONS

VOLTS L-L:	240	MAIN OVERCURRENT:	MLO	BUS MATERIAL:	Cu	MOUNTING:	SURFACE
VOLTS L-N:	120	MAIN BUS RATING:	225A	NEUTRAL SIZE:	100%	ENCLOSURE TYPE:	NEMA 4X
PHASE:	1	MINIMUM A.I.C.:	22kA	DEMAND FACTOR	1.00	GROUND:	EQUIPMENT
WIRE:	3						

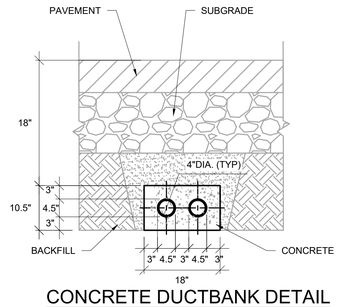
NOTES:
1. (E) EXISTING LOADS ARE ESTIMATED
2.



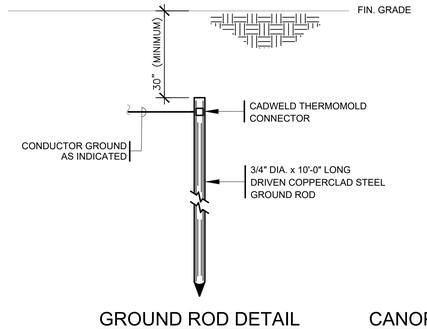
ELECTRICAL RACK "ER-1" DETAIL
NTS



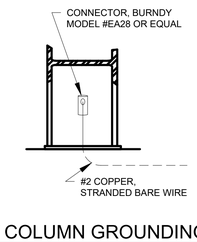
ONE-LINE DIAGRAM
NTS



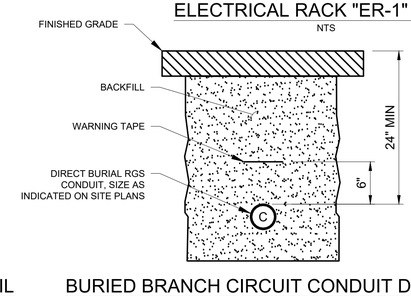
CONCRETE DUCTBANK DETAIL
NTS



GROUND ROD DETAIL
NTS



CANOPY COLUMN GROUNDING DETAIL
NTS



BURIED BRANCH CIRCUIT CONDUIT DETAIL
NTS

NORTH (NAD 83)

100% SUBMISSION

REV	DESCRIPTION	DATE	APP BY
1	ADDENDUM 4	2/14/2024	GB

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NORTH CAROLINA STATE PORTS AUTHORITY
REEFER SERVICE AREA IMPROVEMENTS
PORT OF WILMINGTON - 2202 BURNETT BLVD.
WILMINGTON, NC 28401
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ELECTRICAL SCHEDULES, DIAGRAMS, AND DETAILS

NTS

SCO PROJECT NO. 22-25839-01A
NCSPA CONTRACT NO. C-1749
AUGUST 17, 2023

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