

M2-LED PACKAGE



NATIONAL ACCOUNTS PROGRAM CRESCENT ELECTRIC
SUPPLY CO., EMAIL - CULVERS@CESCO.COM FOR
EXTERIOR/INTERIOR LIGHTING.

LIGHTING ALLOWANCE CALCULATION

COMPLIES BY	363.5
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KEYED NOTES

- DRAWING NOTES
-

GENERAL NOTES

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ELECTRICAL LIGHTING PLAN
SCALE: 3/16" = 1'-0"

Michael P
Spychala
2022.04.15
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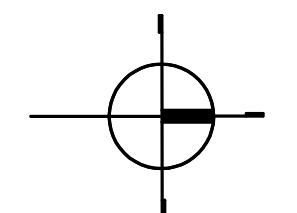
REVISIONS	BY

OLIVERI ARCHITECTS

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Michael P.
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Fla PE# 31533
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Calver's
POULTRY
PROCESSING

US Hwy 90
Lake City, Florida
Columbia County

Date:	04.13.22
Scale:	AS NOTED
Project Mgr:	MPS
Drawn:	TD
Job:	21-244
Sheet	

E1

ELECTRICAL SCHEDULE					
					COMMENTS
ITEM	DESCRIPTION	VOLT	PH.	AMP	CONN. TYPE NEMA NUMBER
65	WORKTABLE	115	1	16.0	DIR.
66	ICE MACHINE AND BIN	208	1	12.0	DIR.
66A	ICE MAKER	115	1	1.0	DIR.
66B	ICE MAKER REMOTE COND.	208	1	1.6	DIR.
69	ASTRO BLENDERS	115	1	3@2.1	CORDS
65	WORKTABLE	115	1	16.0	DIR.
66	ICE MACHINE AND BIN	208	1	12.0	DIR.
66A	ICE MAKER	115	1	1.0	DIR.
66B	ICE M&R REMOTE COND.	208	1	1.6	DIR.
69	ASTRO BLENDERS	115	1	3@2.1	CORDS
70	MILKSHAKE MACHINE	208	3	16.0	CORD
71	WORKTABLE	115	1	16.0	DIR.
74	2 SPEED DISPENSERS	115	1	2@3.3	CORD
74A	FRIG WORKCOUNTER	115	1	10.0	CORD
75	CUSTARD DISPENSING CABINET	115	1	10.0	CORD
80	FRIG 55 B3 COUNTER	115	1	1.0	DIR.
81	AJL COLD PANFRIG	115	1	1.0	DIR.
B.)	SOUP WELL	208	1	8.7	DIR.
C.)	CONVEN. OUTLETS	115	1	16.0	DIR.
81	HEATED PAST THRU	115/208	1	15.5	CORD
83	REACH IN REFRIGERATOR	115/208	1	6.0	CORD
84	COFFEE MAKER	115/208	1	8.3	CORD
85	PRESSURE WASHER	208	1	16.0	CORD
86	MENU BOARD	115	1	16.0	DIR.
89	FOOD LABEL MAKER	115	1	1.0	DIR.
91	CASH REGISTERS	115	1	5@8.5	CORDS
93	DRIVE UP COUNTER	115	1	16.0	DIR.
94	EXP. LV. COUNTER	115	1	16.0	DIR.
96	ICE AND SODA DISPENSER	115	1	1.5	CORD
97	CARBONATOR	115	1	1.5	CORD
98	ICE TEA BREWER	115	1	4.5	CORD
100	ICE DISPENSER	115	1	1.0	DIR.
103	ICE AND SODA DISPENSER	115	1	5.2	CORD
104	CARBONATOR	115	1	10.0	CORD
106	ICE DISPENSER	115	1	10.5	CORD
113	BEVERAGE COUNTER	115	1	16.0	DIR.
114	BEVERAGE COUNTER	115	1	16.0	DIR.
121	CUSTOMER DROP IN PAN	115	1	4.0	CORD
505	FRIG SYSTEMS				

CORDS TO BE AS CLOSE TO END OF WALL AS POSSIBLE

FINISHED CEILING

ITEM G3 CORDS TO MACHINE WITH 90 DEGREE CONNECTORS AT WALL

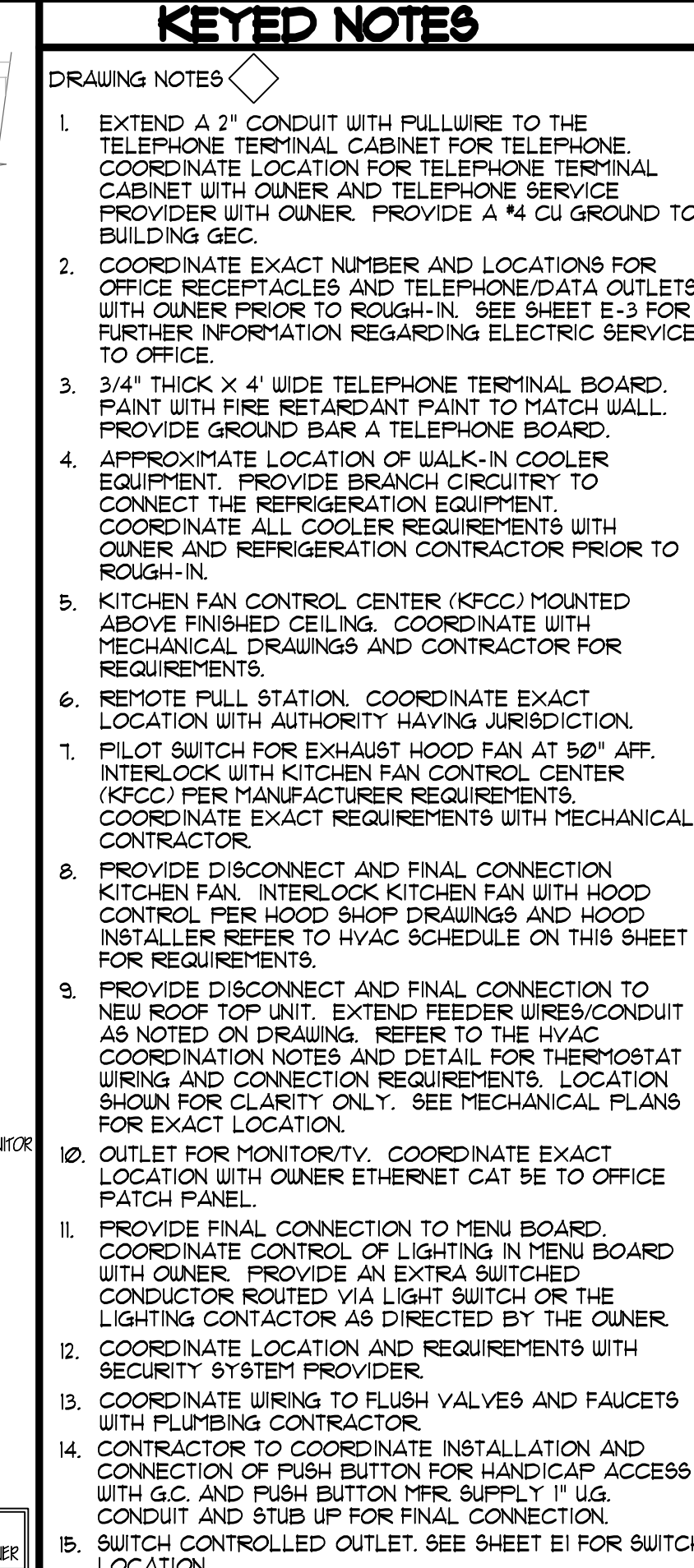


Diagram illustrating the Custard Machine Outlet Details. The diagram shows a side elevation of a wall with a finished floor. The wall features a series of horizontal lines representing the custard machine's structure. Key components and labels include:

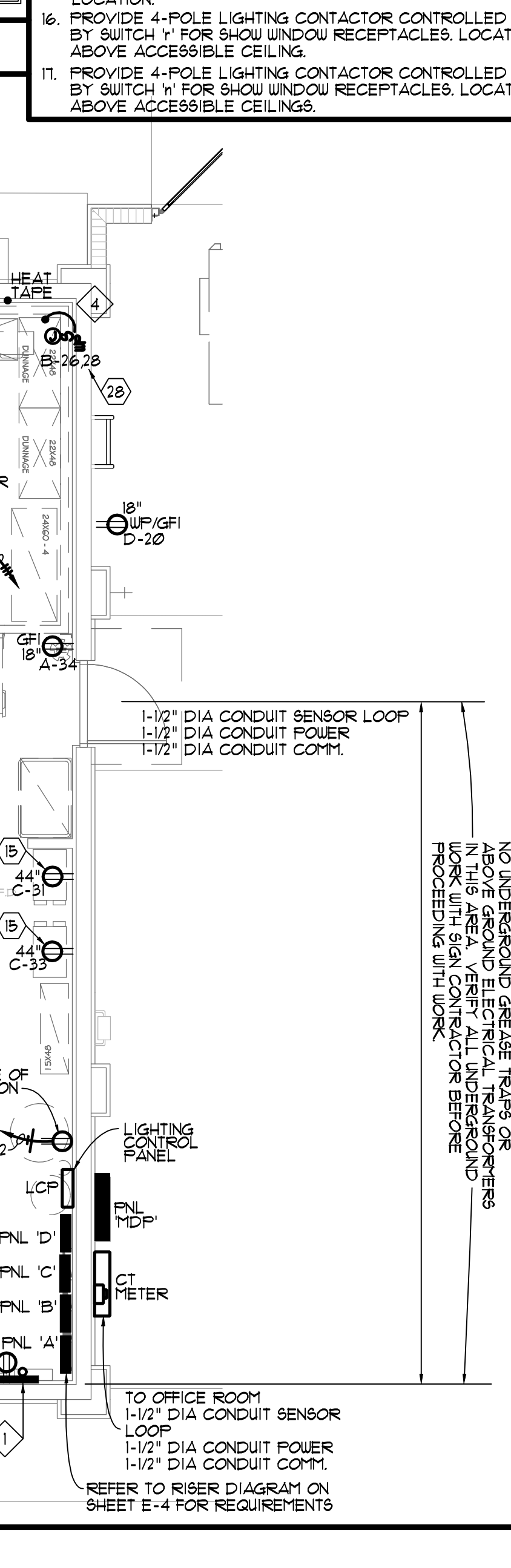
- FINISHED FLOOR**: Indicated by a horizontal line at the bottom left.
- 6" 3/4"**: Dimension indicating the height of the machine base from the floor.
- 3" 3/4"**: Dimension indicating the height of the machine body.
- OUTLINE OF CUSTARD MACHINE**: Points to the main structure of the machine.
- MOTOR CONTROL SWITCHES WITH WEATHERPROOF LOCKING COVERS**: Points to the switches on the wall.
- MOTOR CONTROL SWITCHES WITH WEATHERPROOF LOCKING COVERS**: Points to the switches on the right side of the machine.
- KEEP CORDS OFF OF FLOOR**: A note with an arrow pointing to the bottom right corner.

CUSTARD MACHINE OUTLET DETAILS

NO SCALE

ELECTRICAL NOTE:

EC TO FURNISH AND INSTALL FOUR HUBBELL NHC 1307 CONNECTORS AT WALL. CORDS FROM THE CONNECTORS TO THE MACHINE CONNECTION POINT. THREE HUBBELL HB7810 SWITCHES FOR MOTOR CONTROL AND ONE HUBBELL #1221W SWITCH FOR EMERGENCY STOP CONTROL. MOUNT SWITCHES IN END OF WALL. INSTALL IN END OF WALL.



2 NOT TO SCALE

REMOTE COMPRESSOR
(*63.1) ON ROOF FIELD
VERIFY EXACT LOCATIONS.

HOOD FANS ON ROOF
LOCATIONS PROVIDED
NON FUSED DISCONNECT
AT EACH MOTOR

TO FLUSH VALVES AND FAUCETS
POWER SUPPLY
ABOVE CEILING

CEILING MOUNTED
WIRELESS ROUTER
CAT 5e OR 6 WIRE TO
OFFICE PATCH PANEL

DEDICATED CREDIT
CARD PHONE LINE
(UNDER CABINET)

ELECTRICAL IN
THIS SPACE
REFRIGERATION
CHARGE NO

SEE SHEET E-3 FOR CASH
REGISTER REQUIREMENTS

1 ELECTRICAL POWER PLAN

12. WHERE POSSIBLE THE ROUGH-INS ARE TO BE CONCEALED IN WALL OR FLOOR AND STUBBED OUT AT THE HEIGHTS INDICATED.
16. CONTRACTOR TO PROVIDE ALL RECEPTACLES, CONDUIT, CONTRACTOR CONTROLLERS, SWITCHES, DISCONNECTS, STARTERS, ETC. UNLESS SO INDICATED IN THE ELECTRICAL SCHEDULE AS FURNISHED BY THE PEC FOR INSTALLATION BY THE ELECTRICAL CONTRACTOR.
17. INSTALL DEVICES FURNISHED BY PEC AND INDICATED ON THE ELECTRICAL/MECHANICAL SCHEDULE.
18. COORDINATE WITH BEVERAGE MACHINE PURVEYOR FOR ELECTRICAL REQUIREMENTS ON ALL PURVEYOR FURNISHED EQUIPMENT.
19. REFRIGERATION LINES ARE TO BE RUN IN WALL PRIOR TO ELECTRICAL RUNS.
20. PROVIDE CONDUIT, WIRE AND TERMINATIONS FOR CABLE TV, ETHERNET AND HDMI DEVICES. VERIFY LOCATIONS WITH OWNER.
21. PULL WIRES FROM OFFICE FOR OWNER PROVIDED SECURITY SYSTEM. VERIFY LOCATIONS WITH OWNER.
22. PULL WIRES FOR OWNERS SOUND SYSTEM. VERIFY LOCATIONS WITH OWNER.
23. PROVIDE CONDUIT AND POWER TO BUILDING SIGNAGE. SEE BUILDING ELEVATIONS FOR LOCATIONS. VERIFY WITH OWNER.
24. PROVIDE CONDUIT AND POWER TO ALL SITE SIGNAGE. SEE BUILDING ELEVATIONS FOR LOCATIONS. VERIFY WITH OWNER.
25. COORDINATE CONTROL SEQUENCE FOR EMERGENCY SHUT-DOWN OF RTU'S WITH HOOD PROVIDER AND FIRE SUPPRESSION SYSTEM PROVIDER.
26. SIGN VENDOR TO COORDINATE LOCATION AND ELECTRICAL REQUIREMENTS OF SIGN BASES AND SPEAKER POST BASE WITH ELECTRICAL CONTRACTOR.
27. SIGN VENDOR IS RESPONSIBLE FOR ALL SIGN BASE CONSTRUCTION.
28. MENU BOARD REQUIRES POWER 24/7.
29. 1-110 VOLT OUTLET TO BE INSTALLED ON WALL UNDER EVERY BOTTLE TABLE. LOCATED 12" FROM CENTER OF TABLE AND 24" O.C. AFF. VERIFY ALL LOCATIONS OF ALL DINING ROOM USE OUTLETS WITH OWNER AND EQUIPMENT SUPPLIER.
30. REFER TO DRAWING E-3 FOR CASH REGISTER AND ORDERING SYSTEM POWER AND COMMUNICATION REQUIREMENTS.
31. ALL EXTERIOR RECEPTACLES SHALL HAVE BOTH WATERPROOF COVERS AND WEATHER RESISTANT DEVICES.
32. SEE MECHANICAL SHEET M4 FOR HOOD CONTROL PANEL DETAILS.

SEE SHEET F59 FOR ALL KITCHEN EQUIPMENT ROUGH-IN LOCATIONS, SIZES AND PLACEMENT.

ALL READILY ACCESSIBLE RECEPTACLES IN THE KITCHEN AND FOOD SERVICE AREAS TO BE GFI HUBBELL #GFS362UTR WITH STAINLESS STEEL COVERS.

CONTRACTOR SHALL REFER TO FOOD SERVICE DRAWINGS FOR EXACT DEVICE LOCATIONS AND REQUIREMENTS.

GENERAL NOTES:

ALL DRAWINGS F5-1 THROUGH F5-9 SHOULD BE INCLUDED IN ALL ARCHITECTURAL SETS.

EQUIPMENT KEY

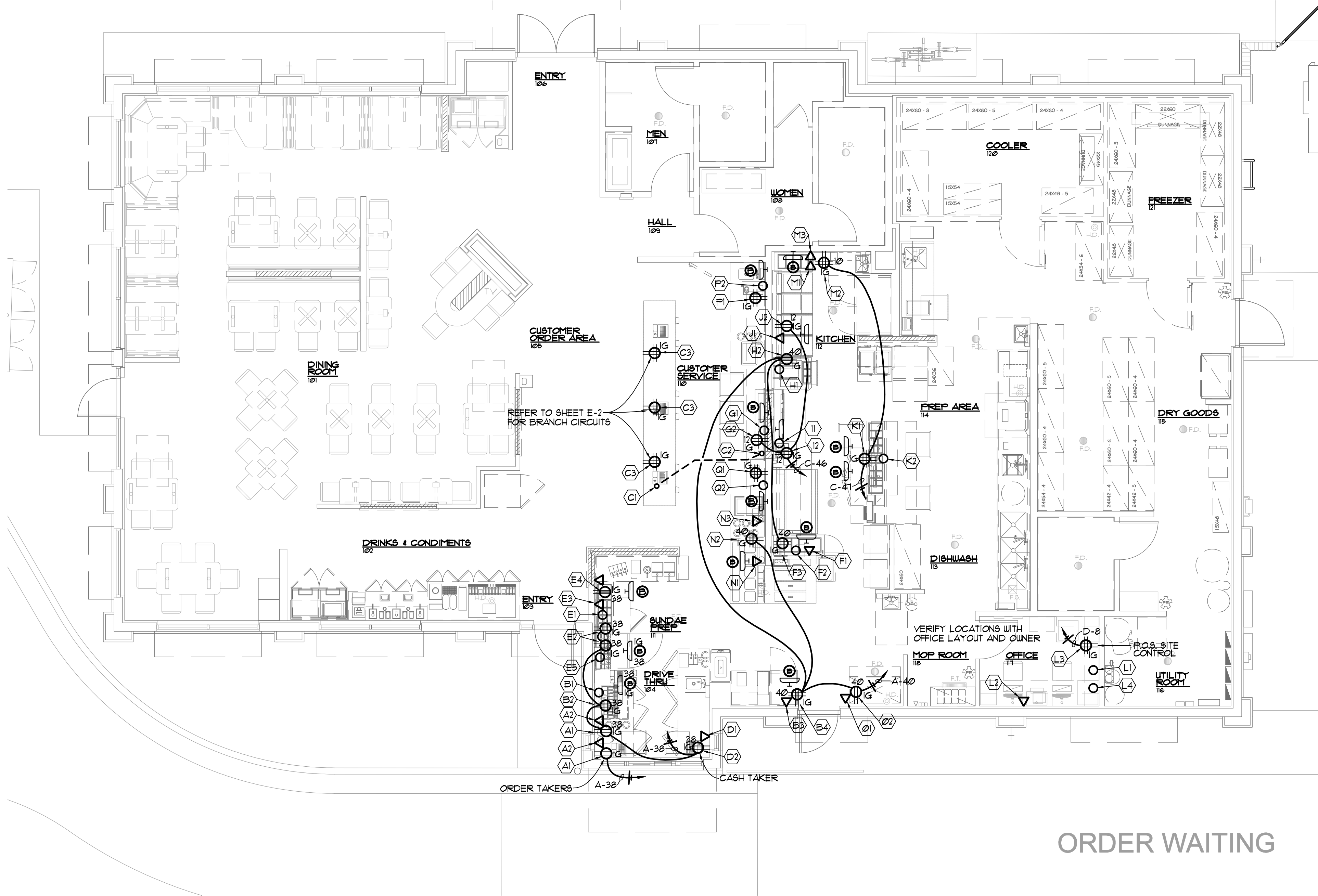
ALL ITEMS ARE OWNER FURNISHED EQUIPMENT CONSOLIDATOR INSTALLED EXCEPT AS FOLLOWS.

OFCI--OWNER FURNISHED CONTRACTOR INSTALLED
OFCO--OWNER FURNISHED OWNER INSTALLED
OFCI--CONTRACTOR FURNISHED CONTRACTOR INSTALLED

ALL ROUGH INS AND FINAL CONNECTIONS OF ALL EQUIPMENT BY OTHERS

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Text	Text
July 16	July 16
2100.	2100.

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ALL RECEPTACLES TO BE GFI HUBBELL 4FR5362UTR, READILY ACCESSIBLE AND WITH STAINLESS STEEL COVERS

ORDER WAITING

Item	P.O.S. SYSTEM ROUGH-IN SCHEDULE
A1	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - 20" A.F.F. - MOUNTED NO LESS THAN 3" AND NO MORE THAN 18" OFF THE INSIDE CORNER OF DRIVE THRU WINDOW
A2	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 20" A.F.F. - MOUNTED NO LESS THAN 3" AND NO MORE THAN 18" OFF INSIDE CORNER. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
B1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 85" A.F.F. MOUNTED WITHIN 5' OF THE INSIDE CORNER OF THE DRIVE-THRU WINDOW. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
B2	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 85" A.F.F. MOUNTED WITHIN 5' OF THE INSIDE CORNER OF THE DRIVE-THRU WINDOW.
B3	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 85" A.F.F. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
B4	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 85" A.F.F.
C1	1 1/2" CONDUIT STUB UP 10" A.F.F.- CONNECT TO BOX C2
C2	1 1/2" CONDUIT STUB UP A MINIMUM OF 12" A.F.C.- CONNECT TO BOX C1
C3	(3) LOCATIONS - SINGLE DUPLEX OUTLET MOUNTED IN A 4 SQUARE BOX. TO BE LOCATED ON THE LOWEST SHELF NEAR THE REAR RIGHT OF THE OPENING.
D1	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 20" A.F.F. MOUNTED WITHIN 18" OF INSIDE CORNER. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
D2	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - 20" A.F.F. - MOUNTED NO LESS THAN 3" AND NO MORE THAN 18" OF INSIDE CORNER OF DRIVE THRU WINDOW.
E1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 85" A.F.F. PROVIDE (1) 2" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
E2	(2) DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 85" A.F.F.
E3	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 54" A.F.F. PROVIDE (1) 3/4" CONDUIT STUBBED UP 12" AFC
E4	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - 54" A.F.F. MOUNTED NEXT TO LOCATION OF E3
E5	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 85" A.F.F. PROVIDE (1) 2" CONDUIT STUB-UP A MINIMUM OF 12" AFC
F1	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 70" A.F.F. PROVIDE (1) 3/4" CONDUIT RUN TO LOCATION F2
F2	SINGLE GANG RING MOUNTED VERTICALLY (NO BOX NEEDED) - 85" A.F.F. - DIRECTLY ABOVE JBOX F1. PROVIDE (1) 2" CONDUIT STUB-UP, A MINIMUM OF 12" A.F.C., TOWARDS THE FRYER HOOD.
F3	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 85" A.F.F. - MOUNTED NEXT TO LOCATION F2
G1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 66" A.F.F.- MOUNTED WITHIN 16" OF THE SIDE OF THE PASS-THRU WINDOW PROVIDE (1) 2" CONDUIT STUB-UP INTO KITCHEN AREA A MINIMUM OF 12" A.F.C.
G2	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 66" A.F.F. - MOUNTED A MINIMUM OF 3" AND NOT TO EXCEED 16" FROM THE SIDE OF THE PASS-THRU WINDOW
H1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - MOUNT 6" ABOVE ROUGH OPENING OF PASS-THRU - PROVIDE (1) 2" CONDUIT STUB-UP, A MINIMUM OF 12" A.F.C., TOWARDS KITCHEN AREA
H2	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - MOUNT 6" ABOVE ROUGH OPENING OF PASS-THRU
I1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - MOUNT 6" ABOVE ROUGH OPENING OF PASS-THRU - PROVIDE (1) 2" CONDUIT STUB-UP, A MINIMUM OF 12" A.F.C., TOWARDS KITCHEN AREA
I2	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - MOUNT 6" ABOVE ROUGH OPENING OF PASS-THRU - LOCATE NEXT TO I1
J1	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 20" A.F.F. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
J2	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - 26" A.F.F. - MOUNTED DIRECTLY ABOVE LOCATION J1
K1	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - MOUNTED IN FINISHED CEILING
K2	NO ACTUAL ROUGH IN NEEDED IN CEILING. REFERENCE ONLY FOR LOCATION. LEAVE 10" SERVICE LOOP ON COMMUNICATION CABLES TO ALLOW FOR DROP THROUGH MONITOR MOUNTING BRACKETS TO END TERMINATION POINT.
L1	SINGLE GANG MUD RING MOUNTED HORIZONTALLY (NO BOX NEEDED) - 8" BELOW FINISHED CEILING, NOT TO EXCEED 108" A.F.F. - PROVIDE (1) 2" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
L2	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 18" A.F.F. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
L3	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 8" BELOW FINISHED CEILING, NOT TO EXCEED 108" A.F.F.- LOCATE A MINIMUM OF 12" TO THE RIGHT OF LOCATION L1
L4	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 8" BELOW FINISHED CEILING, NOT TO EXCEED 108" A.F.F. - LOCATE A MINIMUM 12" TO THE LEFT OF L1
M1	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 85" A.F.F.- PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C. -PROVIDE (1) 3/4" CONDUIT TO M3 LOCATION
M2	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - 85" A.F.F.
M3	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 70" A.F.F.
N1	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 85" A.F.F. MOUNT WITHIN 16" OF EDGE OF WALL. PROVIDE (1) 2" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C. TOWARDS REAR OF KITCHEN.
N2	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 85" A.F.F. - MOUNTED WITHIN 16" OF EDGE OF WALL.
N3	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 54" A.F.F. MOUNTED WITHIN 16" OF EDGE OF WALL. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C. TOWARDS REAR OF KITCHEN.
O1	4" SQUARE BOX WITH SINGLE GANG MUD RING MOUNTED VERTICALLY - 48" A.F.F. PROVIDE (1) 3/4" CONDUIT STUB-UP A MINIMUM OF 12" A.F.C.
O2	SINGLE DUPLEX OUTLET WITH ISOLATED GROUND - 48" A.F.F.
P1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 66" A.F.F. MOUNTED WITHIN 16" OF THE SIDE OF THE PASS-THRU WINDOW. PROVIDE (1) 2" CONDUIT STUB-UP INTO KITCHEN AREA A MINIMUM OF 12" A.F.C.
P2	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 66" A.F.F. - MOUNTED A MINIMUM OF 3" AND NOT TO EXCEED 16" FROM THE SIDE OF THE PASS-THRU WINDOW
Q1	SINGLE GANG MUD RING MOUNTED VERTICALLY (NO BOX NEEDED) - 66" A.F.F. - MOUNTED WITHIN 36" OF THE SIDE OF THE PASS-THRU WINDOW PROVIDE (1) 2" CONDUIT STUB-UP INTO KITCHEN AREA A MINIMUM OF 12" A.F.C.
Q2	DOUBLE DUPLEX OUTLET WITH ISOLATED GROUND - 66" A.F.F. - MOUNTED A MINIMUM OF 36" FROM THE SIDE OF THE PASS-THRU WINDOW.

GENERAL NOTES	
1.	FOUR 120V - 1PH - 20 AMP CIRCUITS ARE REQUIRED FOR THE ENTIRE P.O.S. SYSTEM. 1 FOR THE OFFICE AND 3 FOR THE OTHER LOCATIONS. EACH CIRCUIT IS TO BE DEDICATED WITH ISOLATED GROUNDS.
2.	3/4" AND 1" CONDUITS ARE LISTED. 1" IS ACCEPTABLE TO USE IN PLACE OF THE 3/4" LISTED. ALL 2" CONDUIT LISTED MUST REMAIN AT 2".
3.	RDS / P.O.S. SYSTEM SUPPLIERS TO PROVIDE ALL CABLES TO E.C.
4.	E.C. TO PULL ALL CABLES AS REQUIRED BY THE P.O.S. SYSTEM AND WIRELESS ORDERING SYSTEM SUPPLIERS. THESE WIRES ARE TO BE KEPT SEPARATE FROM ALL OTHER LOW VOLTAGE CABLES
5.	RDS TO FURNISH AND INSTALL ALL COVER PLATES AS REQUIRED BY THE P.O.S. DRAWINGS.
6.	SEE DRAWING E4.1 FOR ELEVATIONS OF P.O.S. ROUGH INS.
7.	SEE DRAWINGS F5 3, E2 AND E5 FOR OTHER POWER, PHONE AND COMMUNICATION REQUIREMENTS.
8.	ALL DIMENSIONS LISTED ARE TO THE CENTER OF THE BOX.
9.	ALL PIPES SHOULD STUB UP BACK TO MAIN P.O.S. PANEL.
PRIOR TO ROUGH IN OF THE P.O.S. SYSTEM VERIFY ALL LOCATIONS WITH RETAIL DATA SYSTEMS (P.O.S. SUPPLIER) AT 1-262-896-2600	

LEGEND

LEGEND

- TELEPHONE
- MONITOR
- BUMP BAR
- PRINTER
- POINT OF SALE REGISTER (POS)
- 4" SQ. DEEP BOX W/2 GANG PLASTER RING, 20 AMP DEADFRONT GFI 4 NEMA 5, 20 AMP SINGLE RECEPTACLE
- DEDICATED CIRCUIT FOR DOUBLE DUPLEX OUTLETS W/ISOLATED GROUND
- DEDICATED CIRCUIT FOR SINGLE DUPLEX OUTLETS W/ ISOLATED GROUND
- COMMUNICATION JUNCTION BOX
- SINGLE GANG MUD RING

REVISIONS

BY

DATE

DESCRIPTION

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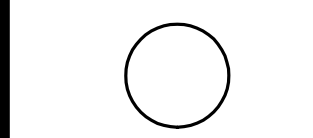
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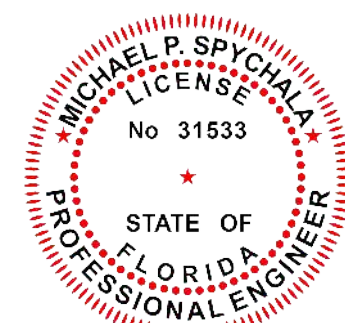
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Michael P. Spychala P.E.
 Fla PE# 31533
 Fla COA# 3967

New Free Standing
Culver's
 US Hwy 90
 Lake City, Florida
 Columbia County



This item has been electronically signed and sealed by Michael P. Spychala, PE on the date shown using a Digital Signature.

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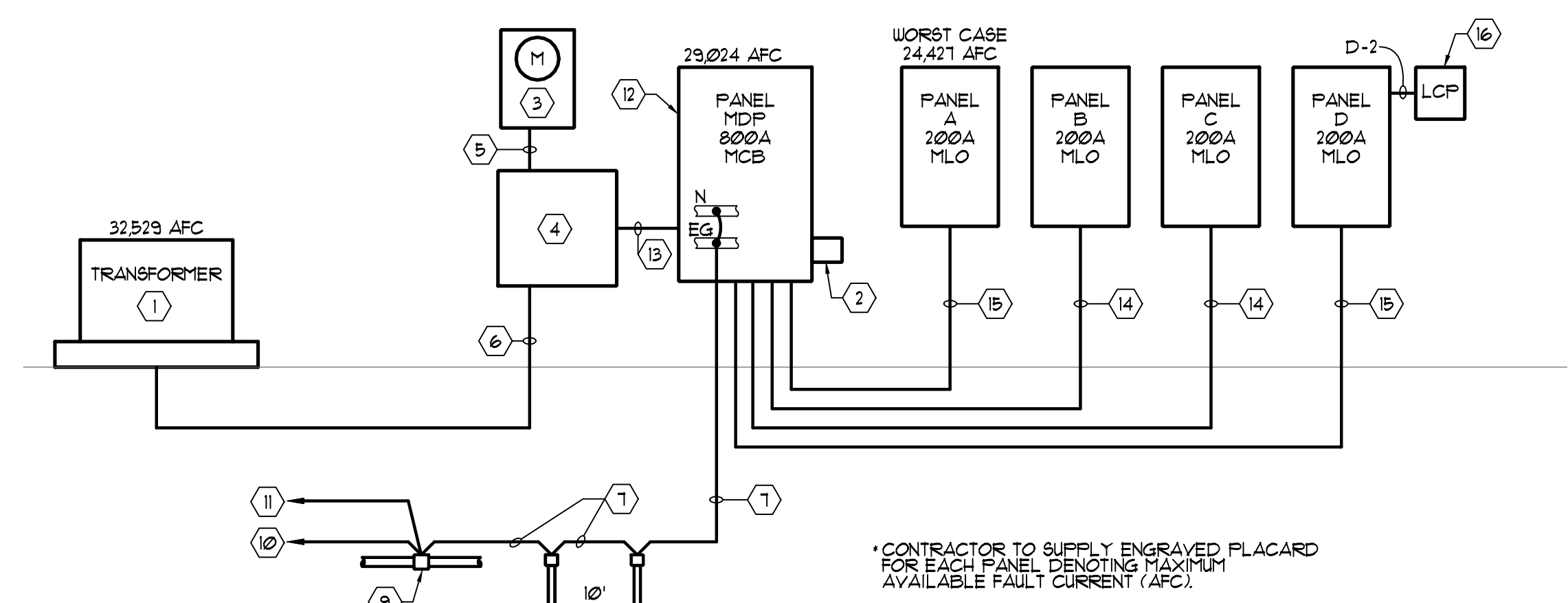
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 Spychala
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Date: 04.13.22
 Scale: AS NOTED
 Project Mgr: MPS
 Drawn: TD
 Job: 21-244
 Sheet

E4

DRAWING NOTES

- PAD MOUNTED TRANSFORMER SHALL BE FURNISHED AND INSTALLED BY UTILITY COMPANY. SECONDARY SERVICE VOLTAGE SHALL BE 120/208V, 3 PHASE, 4 WIRE.
- CLASS C 9PD TVSS. LEA FV600 SERIES OR APPROVED EQUIVALENT. PROVIDE WITH INTEGRAL MAIN FUSED DISCONNECT. EXTEND 8'4" TO BUS IN 1/2" C AS STRAIGHT AS POSSIBLE. 9PD SHALL BE RATED FOR 100KAIC.
- 3 PHASE CT METER BASE TO UTILITY COMPANY SPECIFICATION.
- NEMA 3R CT CABINET TO UTILITY COMPANY SPECIFICATION.
- 1-1/2" GRC WITH FULL LINE FOR UTILITY COMPANY CT WIRING.
- 2 SETS OF 4 #600 KCMIL IN 4" C EACH.
- 3/8" CU GROUND ELECTRODE CLAD GROUND ROD. CONNECT WITH EXOTHERMIC WELD.
- 3/4" x 10' LONG COPPER CLAD GROUND ROD. CONNECT WITH EXOTHERMIC WELD.
- BOND THE METALLIC COLD WATER PIPE TO THE GROUND ELECTRODE SYSTEM.
- EXTEND THE GROUND ELECTRODE SYSTEM TO BUILDING FOUNDATION AND BUILDING STEEL.
- EXTEND A #4 GROUND ELECTRODE CONDUCTOR TO THE BUILDING TELEPHONE TERMINAL CABINET. PROVIDE A GROUND BAR AT THE TELEPHONE CABINET.
- PROVIDE AN 800 AMP, 3 PHASE, NEMA 3R, SERVICE ENTRANCE RATED DISTRIBUTION PANEL, SEE SCHEDULE.
- 2 SETS OF 4 #600 KCMIL AND 1 #3/8" BOND IN 4" C EACH.
- 4 #3/8" AND 1 #6 EG IN 2" C.
- 4 #3/8" 1 #6 IG AND 1 #6 EG IN 2" C.
- ELECTRONIC ASTRONOMICAL TIME CLOCK LIGHTING CONTROL PANEL WITH 16 ZONES. LIGHTING CONTROL AND DESIGN BLUE BOX.



ELECTRICAL RISER DIAGRAM

SCALE: NOT TO SCALE

MANUFACTURER: SQUARE D				MLO OR MCB: MCB				PANEL: MDP							
TYPE: NO				FEED: BOTTOM				VOLTAGE: 120/208V, 3 PH, 4 WIRE							
MOUNTING: SURFACE				CU / AL WIRE: CU				MAIN AMPS: 800 AMP							
LOCATION: UTILITY ROOM				AIC RATING: 65000.00				FEEDER: 800 AMP							
BREAKER OPTIONS:				NOTES:				SPACES: 42							
								SEE RISER DIAGRAM FOR WIRE & CONDUIT SIZES							
CKT NO.	LOAD	OPT	CODE	KVA	WIRE	BRKR	PHASE	BRKR	WIRE	KVA	CODE	OPT	LOAD	CKT NO.	
1	PANEL A		S	15.80	RISER	3P	A	3P	RISER	14.50	S		PANEL C	2	
3			S	15.80	RISER	200	A	200	RISER	14.50	S			4	
5			S	15.80	RISER	200	A	200	RISER	14.50	S			6	
7			S	16.03	RISER	3P	A	3P	RISER	13.59	S			8	
9	PANEL B		S	16.03	RISER	200	A	200	RISER	13.59	S		PANEL D	10	
11			S	16.03	RISER	200	A	200	RISER	13.59	S			12	
13			E	5.20	4	2P	A	3P	I	SPACE				14	
15			E	5.20	4	70	B	I	SPACE					16	
17	SHED LIGHTING AND RECEPITS			R	0.85	12	20	C					I	SPACE	18
19	RTU-1 #70		H	7.38	4	3P	A	3P	4	7.10	H		RTU-2 #70	20	
21			H	7.38	4	80	A	80	4	7.10	H			22	
23			E	1.30	12	3P	A	3P	4	7.10	H			24	
25			E	1.30	12	3P	A	3P	4	7.10	H			26	
27	LIFT STATION			E	1.30	12		B	4	7.10	H		RTU-OA	28	
29	MICROWAVE #36		E	1.30	12	20	A	C	80	4	7.10	H		30	
31			K	1.50	12	2P	A				I	SPACE	32		
33			K	1.50	12	20	B	20			I	SPACE	34		
35			I				A	C	20		I	SPACE	36		
37	SPACE													38	
39	SPACE													40	
39	SPACE												SPD TVSS	42	
41	SPACE													42	
				DEMAND FACTOR		DEMAND KVA				BUS A: 69.58					
				0.00 X 1.25 =		0.00				BUS B: 69.58					
										BUS C: 63.53					
										TOTAL KVA: 262.69					

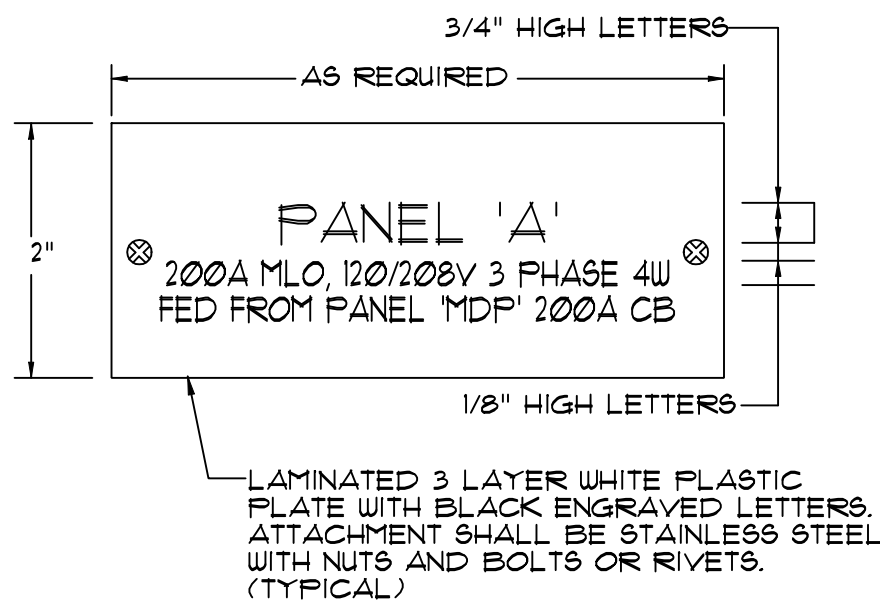
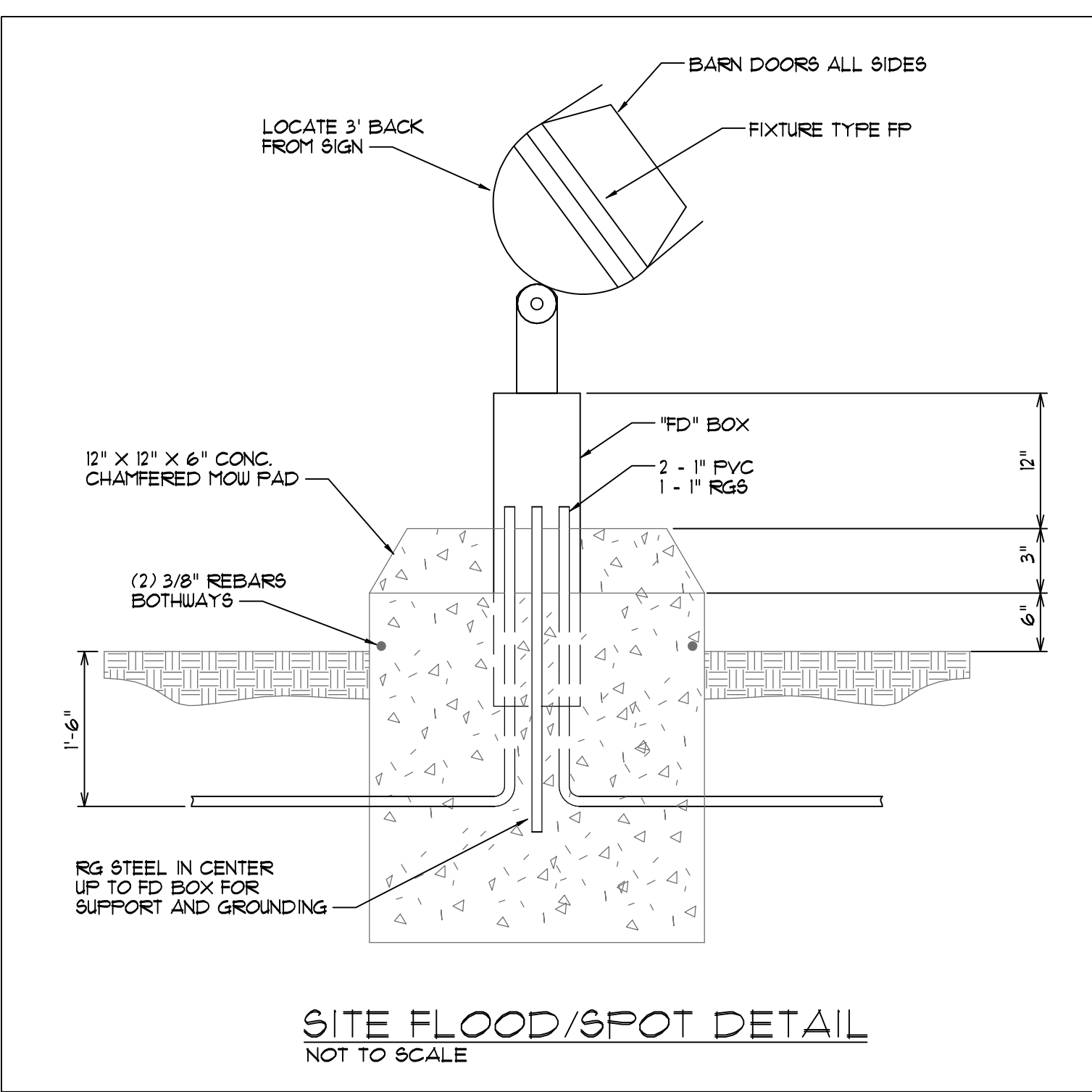
KVA PER PHASE=									
BUS A: 85.56									
BUS B: 80.58									
BUS C: 83.53									
TOTAL KVA: 262.69									
PANEL CALCULATIONS									
DEMAND KVA: 281.64									
TIMES 1000									
DIVIDED BY 208									
DIVIDED BY 1.732									
DEMAND AMPS: 726.26									
JOB NAME: CULVERS									
MPS #: 220057									
DATE LAST MODIFIED: 12/6/2021									

KVA									
FACTOR									
DEMAND KVA									
(L) LIGHTING: 0.00 X 1.25 = 0.00									
(R) RECEPTACLES: 0.85 X 1.00 = 0.85									
(H) HVAC: 64.68 X 1.00 = 64.68									
(E) EQUIPMENT: 14.80 X 1.00 = 14.80									
(K) KITCHEN EQUIP: 3.00 X 0.85 = 2.55									
(S) SUBFEED: 179.78 X 1.00 = 179.78									
LARGEST MOTOR: 0.00 X 0.25 = 0.00									
TOTAL DEMAND KVA: 281.64									

MANUFACTURER: SQUARE D				MLO OR MCB: MLO				PANEL: B							
TYPE: NO				FEED: BOTTOM				VOLTAGE: 120/208V, 3 PH, 4 WIRE							
MOUNTING: SURFACE				CU / AL WIRE: CU				MAIN AMPS: 200 AMP							
LOCATION: UTILITY ROOM				AIC RATING: 65000.00				FEEDER: 200 AMP							
BREAKER OPTIONS:				NOTES:				SEE RISER DIAGRAM FOR WIRE & CONDUIT SIZES							
SPACES: 42															
CKT NO.	LOAD	OPT	CODE	KVA	WIRE	BRKR	PHASE	BRKR	WIRE	KVA	CODE	OPT	LOAD	CKT NO.	
1			K	1.52	12	3P	A	3P	12	1.50	E			2	
3	CUSTARD MACHINE #83		K	1.52	12		B		12	1.50	E		CUSTARD COMPRESSOR #83.1	4	
5			K	1.52	12	20	C	20	12	1.50	E			6	
7			K	1.52	12	3P	A	3P	12	1.50	E			8	
9	CUSTARD MACHINE #83		K	1.52	12		B		12	1.50	E		CUSTARD COMPRESSOR #83.1	10	
11			K	1.52	12	20	C	20	12	1.50	E			12	
13			K	1.52	12	3P	A	3P	12	1.50	E			14	
15	CUSTARD MACHINE #83		K	1.52	12		B		12	1.50	E		CUSTARD COMPRESSOR #83.1	16	
17			K	1.52	12	20	C	20	12	1.50	E			18	
19			H	1.74	12	3P	A	3P	10	1.50	E			20	
21	COOLER CONDENSER #1.3		H	1.74	12		B		10	1.50	E		FREEZER CONDENSOR #2.3	22	
23			H	1.74	12	20	C	30	10	1.50	E			24	
25	COOLER COIL #1.2		E	0.43	12	20	A	2P	12	2.44	E			26	
27	COOLER BOX #1.1		E	0.36	12	20	B	20	12	2.44	E		FREEZER COIL #2.2	28	
29	FREEZER BOX #2.1		Z	0.80	20		C	20	12	0.94	E		HOPPER COMP #83.2	30	
31	COOLER FRZR RECEPT #1.4 & #2.4		E	1.92	12	20	A	20	12	0.61	E		R/R. FAN PRV-1 & EF-1	32	
33			E	0.37	12	3P	B	3P	12	0.73	E			34	
35	KITCHEN FAN #83.1 PRV-2		E	0.37	12		A		12	0.73	E		KITCHEN FAN #83.1 PRV-3	36	
37			E	0.37	12	15	A	15	12	0.73	E			38	
39	FLUSH VALVE & LAW. FAUCETS		N	1.00	12	20	C	20	12	0.36	E		RECEPTACLE RTU-1 & 2	40	
41	FIRE SPRINKLER ALARM		E	1.00	12	20	C	20	12	0.70	E		DISHWASHER HOOD #25.1 (PRV-4)	42	
										KVA PER PHASE		BUS A: 18.50			
												BUS B: 17.50			
												TOTAL KVA: 52.90			
(L) LIGHTING: 0.00 X 1.25 = 0.00															
(R) RECEPTACLES: 0.00 X 1.00 = 0.00															
(R) RECEPTACLES: 0.00 X 0.50 = 0.00															
(R) HVAC: 0.00 X 1.00 = 5.22															
(E) EQUIPMENT: 34.00 X 1.00 = 34.00															
(G) KITCHEN EQUIP: 13.88 X 0.65 = 8.89															
(S) SUBFED: 0.00 X 1.00 = 0.00															
LARGEST MOTOR: 0.00 X 0.25 = 0.00															
TOTAL DEMAND KVA: 48.11															

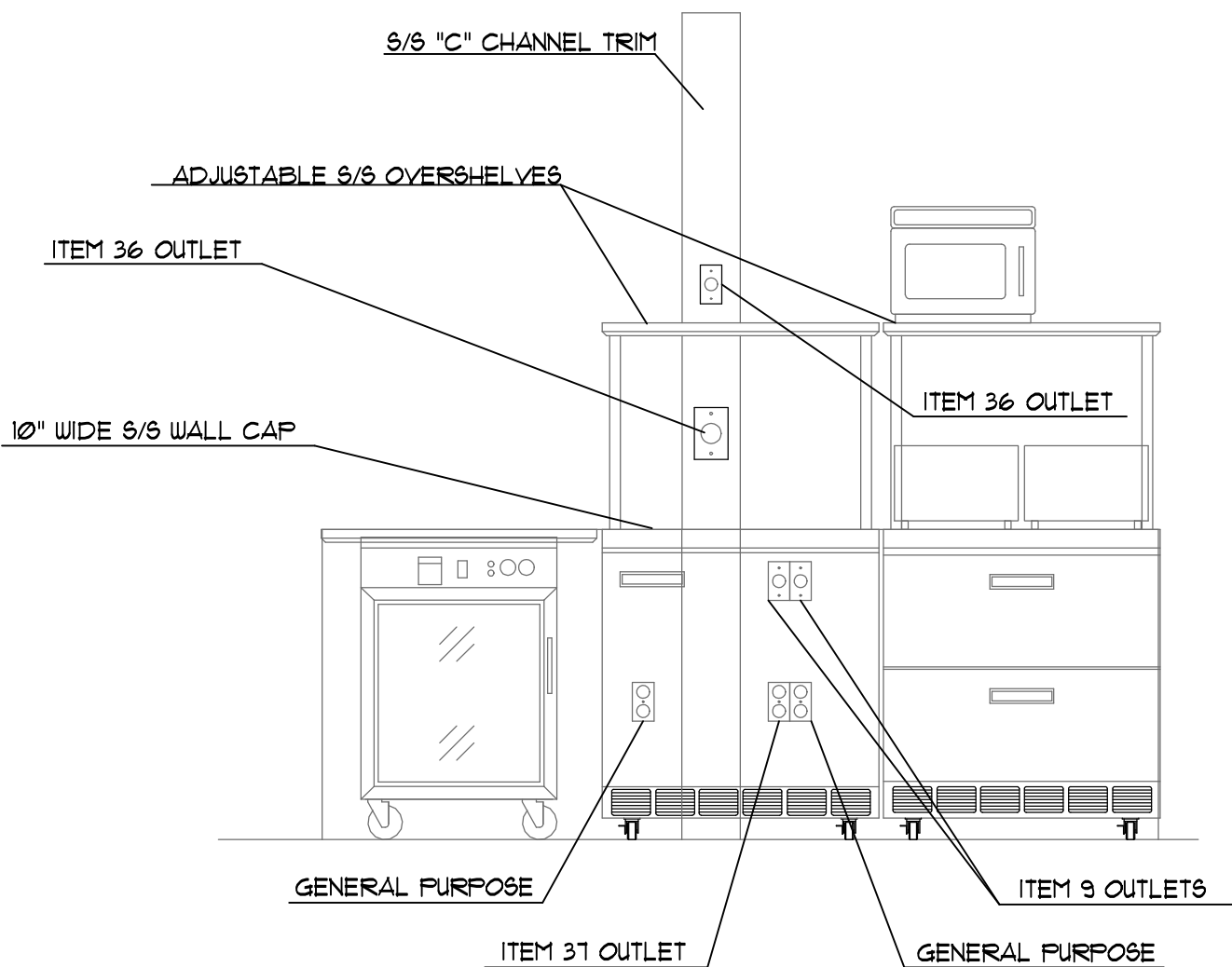
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ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE
1	WALK IN COOLER	25A	DISHWASHER EXHAUST HOOD--CFCI	51	GRILL AND GRILL STAND
2	WALK IN FREEZER	26	BOOSTER HEATER--OFCI	52	MOBILE S/S CART--OPTIONAL
3	COOLER SHELVEING	27	SLANTING RACK SHELF	53	SANDWICH WRAP STATION
4	COOLER DUNNAGE RACK	28	FIRE SUPPRESSION SYSTEMS--CFCI	54	ORDER BARS
4A	MOBILE CUSTARD MIX RACKS	29	CLEAN PAN SHELVEING	55	WRAP PAPER HOLDERS--OFOI
5	FREEZER SHELVEING	30	EYE WASH STATION--OFCI	56	HEATED BUN WARMER--OFOI
6	FREEZER DUNNAGE RACKS	31	JANITORS SHELVEING	57	S/S REFRIGERATION CHASE COVER
7	WORKTABLE/SINK	32	MOP SINK--CFCI	58	FRY STATION HEAT LAMP
8	WALL SHELF	33	CHEMICAL DISPENSING SYSTEM--OFOI	59	EXHAUST HOOD--CFCI
9	COOKER/WARMERS--OFOI	34	REACH-IN FREEZER	60	FRYERS
10	KETCHUP DISPENSER--OFCI	35	FUTURE ITEM	61	CUSTOM FISH REFRIGERATOR
11	LOCKERS--OPTIONAL	36	MICROWAVE OVEN--OFOI	62	OPEN NUMBER
12	WASTE OIL RECOVERY SYSTEM--OFOI	37	REFRIGERATED DRAWER BASE	63	TRIPLE CUSTARD MACHINE--OFOI
13	WASHER/DRYER--OFCI	38	OPEN NUMBER	64	WATER FILTER--OFCI
14	WALL CORNER GUARDS	39	OPEN NUMBER	65	WORKTABLE
15	BAG IN BOX SYSTEM--OFOI	40	BREAD SHELF	66	ICE MACHINE WITH BIN
16	STORAGE SHELVEING	41	REFRIGERATED WORKTABLE	66A	ICE MAKER--OPTIONAL
17	TRASH CANS/CART--OFOI	42	MOBILE WORKTABLE/OVERSHelf	67	OPEN NUMBER
18	BUN RACKS--OFOI	43	BUN TOASTER--OFOI	68	WALL SHELF
19	HAND SINKS--OFCI	44	GRILL SIDE WARMER CART	69	ASTRO BLENDERS--OFOI
20	DISHTABLES AND UTENSIL SINKS	45	S/S WALL CAP/ELECTRICAL CHASE COVER	70	SHAKE MACHINE--OFOI
21	WALL SHELF	46	MALT POWDER DISPENSER--OFOI	71	WORKTABLE
22	PRE-RINSE SPRAY ASSEMBLY--OFCI	47	FRONT PASS-THRU S/S TRIM	72	HEATED SYRUP DISPENSERS--OFOI
23	PRE-RINSE SPRAY ASSEMBLY--OFCI	48	REFRIGERATED MEAT CART	73	LIQUID TOPPING DISPENSER--OFOI
24	DISPOSER--OPTIONAL--OFCI	49	EXHAUST HOOD--CFCI	74	REFRIGERATED TOPPING TABLE
25	DISHWASHER--OFCI	50	MOBILE WORKTABLE	75	CUSTARD DIPPING CABINET

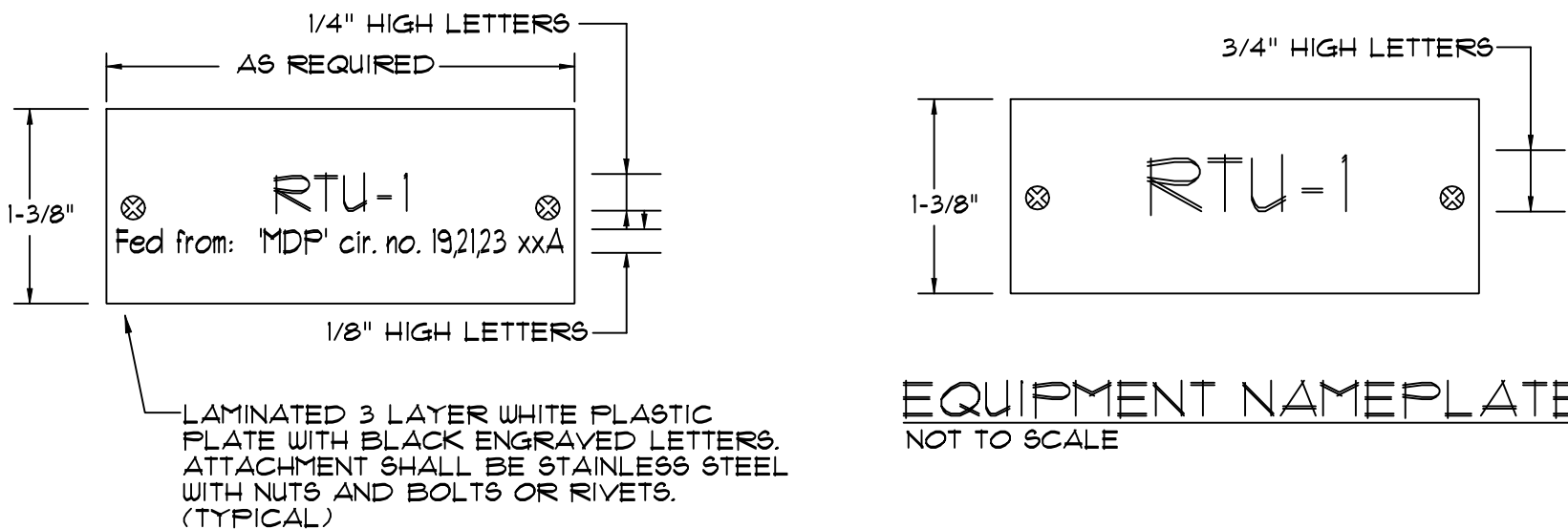


1. NEW NAMEPLATES MUST BE INSTALLED ON ALL ELECTRICAL PANELS. TEMPORARY NAMEPLATES ARE NOT ACCEPTABLE.
2. THE AMPERAGE RATING ENGRAVED ON THE NAMEPLATE SHALL BE THE RATING OF THE MAIN OVERCURRENT PROTECTION DEVICE, OR ITS TRIP DEVICE SETTING, OR DESIGN BUS CAPACITY IN THE ABSENCE OF A MAIN OVER CURRENT DEVICE, NOT THE SWITCHBOARD OR PANELBOARD BUS RATING.
3. REFER TO SPECIFICATIONS FOR NAMEPLATE REQUIREMENTS.

TYPICAL PANELBOARD NAMEPLATE DETAIL
NOT TO SCALE



WORK TABLE ELEVATION
NOT TO SCALE



EQUIPMENT NAMEPLATE DETAIL
NOT TO SCALE

EQUIPMENT DISCONNECT
NAMEPLATE DETAIL
NOT TO SCALE

LIGHTING CONTROL PANEL LCP1 SCHEDULE					
ZONE	FEED	CONTROL DEVICE	CONTROL SEQUENCE	NOTES	DIMMING
a	D-9	DIGITAL SWITCH	TIME CLOCK ON/OFF WITH SWITCH OVERRIDE	SWITCH IN CUSTOMER ORDER AREA	0-10
b	D-11	DIGITAL SWITCH	TIME CLOCK ON/OFF WITH SWITCH OVERRIDE	SWITCH IN CUSTOMER ORDER AREA	0-10
c	D-13	DIGITAL SWITCH	TIME CLOCK ON/OFF WITH SWITCH OVERRIDE	SWITCH IN CUSTOMER ORDER AREA	0-10
d	D-12	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
e	D-14	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
f	C-61	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
g	MDP-25	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
h	MDP-35	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
i	D-5	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
j	D-3	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
k	D-1	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
l	D-33	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
m	D-37	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
n	C-61	PHOTOCELL	TIME CLOCK ENABLE/ TIME CLOCK OFF	ON WITH PHOTOCELL OFF WITH TIME CLOCK	NONE
o	SPARE				
p	SPARE				
LIGHTING CONTROL PANEL NOTES					

ITEM	EQUIPMENT SCHEDULE	ITEM	EQUIPMENT SCHEDULE
76	CAKE CONE DISPENSER	102	TRAY / TRASH CABINET
77	SUNDAE TOPPING SYSTEM	103	ICE AND SODA DISPENSER--OFOI
78	CUP AND DISH DISPENSER	104	SODA MACHINE CARBONATOR--OFOI
79	WALL SHELVEIS	105	LID DISPENSER--OFOI
80	REFRIGERATED S/S BACKCOUNTER	106	REACH IN RETAIL FREEZER
81	HEATED PASS-THRU UNIT	107	CONDIMENT CUP DISPENSERS
82	TOOL SHELF	108	TABLES/CHAIRS/BOOTHIS
83	REACH IN REFRIGERATOR	109	CONDIMENT DISPENSERS
84	COFFEE MAKER--OFOI	110	NAPKIN DISPENSERS
85	POWER WASHER-OPITONAL--OFOI	111	STRAW DISPENSERS--OFOI
86	MENU BOARD--OFOI	112	CONDIMENT PANS--OFOI
87	WAFFLE CONE DISPENSER--OFOI	113	BEVERAGE COUNTER
88	OPEN NUMBER	114	CONDIMENT COUNTER
89	FOOD LABEL MAKER	115	OPEN NUMBER
90	FRONT SERVICE COUNTER	116	HAND TOWEL DISPENSERS--OFCI
91	CASH REGISTERS AND SYSTEM--OFOI	117	TOILET PAPER DISPENSERS--OFOI
92	CUP DISPENSERS	118	MONITOR BRACKETS--OFOI
93	S/S DRIVE-THRU COUNTER	119	OPEN NUMBER
94	S/S DRIVE-THRU COUNTER	120	HIGH TOP TABLES AND CHAIRS
95	CUP DISPENSERS	121	DROP IN CUSTARD COLD PAN--OPTIONAL
96	ICE AND SODA DISPENSER--OFOI	125	TRIM PACKAGE (NOT SHOWN)
97	SODA MACHINE CARBONATOR--OFOI	505	REFRIGERATION SYSTEMS (NOT SHOWN)
98	ICED TEA BREWER/DISPENSERS--OFOI		
99	LID DISPENSER--OFOI		
100	DISPLAY CABINET--OPTIONAL		
101	TRAY / TRASH / RECYCLE CABINET		

REVISIONS

BY

OLIVERI ARCHITECTS

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The firm has given electronic
signatures and sealed by Michael P.
Spychala, PE on the date shown
using a Digital Signature
Printed Copies of this document
are not considered signed and
sealed with the signature must be
verified on any electronic copies.

Michael P.
Spychala
2022.04.15
14:23:52 -04'00'

Michael P.
Spychala P.E.
Fla PE# 31533
Fla COA# 3967

New Free Standing

Calver's

US Hwy 90
Lake City, Florida
Columbia County

Date: 04.13.22

Scale: AS NOTED

Project Mgr: MPS

Drawn: TD

Job: 21-244

Sheet

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SECTION 16050 - GENERAL ELECTRICAL PROVISIONS

GENERAL

ALL WORKED LISTED HEREIN IS SUBJECT TO THE GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS, SPECIAL CONDITIONS PRECEDING SECTION 1 AND THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL BE RESPONSIBLE FOR AND GOVERNED BY ALL REQUIREMENTS THEREUNDER.

THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, PERMITS, CERTIFICATES OF INSPECTION AS REQUIRED FOR THE COMPLETE ELECTRICAL INSTALLATION AS SPECIFIED HEREINAFTER AND AS SHOWN ON THE DRAWINGS.

PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE ENGINEER/ARCHITECT TO ANY MATERIALS OR APPARATUS HE BELIEVES INADEQUATE AND TO ANY NECESSARY ITEMS OR WORK OMITTED.

IF AN ITEM IS EITHER SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, IT SHALL BE CONSIDERED SUFFICIENT FOR INCLUSION OF SAID ITEM IN THIS CONTRACT.

CODES, PERMITS AND FEES

ALL WORK AND MATERIALS ARE TO CONFORM IN EVERY DETAIL TO THE RULES AND REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS NATIONAL ELECTRICAL CODE, OSHA STATE AND LOCAL CODES AND THE LOCAL UTILITIES. THE CONTRACTOR SHALL OBTAIN ALL PERMITS NEEDED IN CONNECTION WITH THE WORK AND PAY ALL FEES INCIDENT THERETO INCLUDING NECESSARY COSTS TO BRING DISTRIBUTION TO SITE.

DRAWINGS

IT MUST BE UNDERSTOOD THAT THE ELECTRICAL DRAWINGS AND DETAILS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE INTENT OF THE SPECIFICATIONS. THE CONTRACTOR SHALL MAKE PER ALLOWANCE FOR PROVISIONS TO COVER SUCH CONTINGENCIES AS ACTUAL LENGTH AND ROUTING OF CONDUIT RUN, PROPER EQUIPMENT LOCATIONS AND CONNECTIONS, ETC. HE SHALL TAKE ALL NECESSARY PRECAUTIONS AND ACCEPT RESPONSIBILITY FOR THEIR ACCURACY. COORDINATE WITH THE GENERAL CONTRACTOR FOR EXACT LOCATION OF WALLS, BEAMS, SHAFTS, ETC. DO NOT SCALE DRAWINGS. COORDINATE WITH EQUIPMENT SUPPLIERS FOR CONNECTIONS MADE TO EQUIPMENT FURNISHED BY OTHERS.

MAKE ENGINEER/ARCHITECT AWARE OF ANY DISCREPANCIES BETWEEN DRAWINGS AND/OR EXISTING CONDITIONS. THE ENGINEER/ARCHITECT RESERVES THE RIGHT TO ELIMINATE DISCREPANCIES THROUGH MINOR CHANGES IN WORK AT NO CHANGE IN CONTRACT COST.

UPON COMPLETION OF THE JOB, THE ELECTRICAL CONTRACTOR SHALL TURN OVER TO THE OWNER A COMPLETE SET OF TRACINGS OF A DRAWING SHOWING SIZE, DESCRIPTION AND LOCATION OF ELECTRICAL MATERIALS AS ACTUALLY INSTALLED.

INTENT

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE NECESSARY MATERIALS, APPARATUS AND DEVICES TO COMPLETE THE EQUIPMENT HEREIN AS SPECIFIED, EXCEPT SUCH PARTS AS ARE SPECIFICALLY EXCEPTED.

IT IS THE INTENT OF THESE SPECIFICATIONS AND THE DRAWINGS ACCOMPANYING SAME TO CAUSE THIS EQUIPMENT TO BE FURNISHED COMPLETE IN EVERY RESPECT.

IF AN ITEM IS EITHER SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, IT SHALL BE CONSIDERED SUFFICIENT FOR INCLUSION OF SAID ITEM IN THIS CONTRACT.

MATERIAL AND LABOR SHALL BE FIRST CLASS AND WORKMANLIKE AND TO THE SATISFACTION OF THE ENGINEER/ARCHITECT, AND SUBJECT TO THE PASSING OF HIS INSPECTION TEST AND APPROVAL AT ALL TIMES FROM THE COMMENCEMENT UNTIL THE ACCEPTANCE OF THE COMPLETED WORK.

WHERE CERTAIN ITEMS ARE SPECIFIED BY MANUFACTURER OR TRADE NAMES, THE CONTRACTOR'S BID SHALL BE BASED ON THE USE OF THE NAMED ITEM, WHERE ONE MAKE IS DESCRIBED AND OTHERS LISTED, COMPARABLE MODELS OF THE OTHER NAMED EQUIPMENT MAY BE USED.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL LAY OUT HIS WORK AND SHALL BE RESPONSIBLE FOR ITS CORRECTNESS. HE IS TO TAKE SUCH MEASUREMENTS FROM EXISTING WORK AS MAY BE NECESSARY TO CORRECTLY LOCATE AND FIT THE WORK AND ALL OTHERS DEFENDING THEREON. CHECK EQUIPMENT PROVIDED BY OTHERS WHICH REQUIRED ELECTRICAL CONNECTIONS AND PROVIDE OUTLETS TO BE FITTED TO THE EQUIPMENT PROVIDED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CIRCUITRY REQUIRED FOR ALL EQUIPMENT. ITEMS NOT SPECIFICALLY MENTIONED IN SECTION 1620 (C)-EQUIPMENT CONNECTIONS, SHALL BE THE RESPONSIBILITY OF THE DESIGNATED SUBCONTRACTOR. COOPERATION BETWEEN THE VARIOUS CONTRACTORS TO ACCOMPLISH THIS MUST EXIST AT ALL TIMES.

APPROVAL OF MATERIALS AND SUBSTITUTIONS

IT IS THE INTENT THAT THE ELECTRICAL CONTRACTOR SHALL BASE HIS PROPOSAL UPON FURNISHING AND INSTALLING MATERIALS AS SPECIFIED. IN CASE THE SUCCESSFUL BIDDER DESIRES TO SUBSTITUTED ON MATERIALS AND/OR EQUIPMENT, NO NUMBER, SUCH SUBSTITUTIONS SHALL BE REVIEWED AND DISCUSSED WITH THE ENGINEER/ARCHITECT. NO SUBSTITUTIONS SHALL BE CONSIDERED UNLESS THE SUBSTITUTIONS BENEFIT THE OWNER IN PERFORMANCE, OPERATION, EFFICIENCY AND COST. FURTHER SUBSTITUTIONS SHALL BE MADE IN ACCORDANCE WITH THE GENERAL CONDITIONS AND SPECIAL CONDITIONS.

CODES AND STANDARDS

ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING: 2008 ED. NATIONAL ELECTRICAL CODE, STATE AND LOCAL ELECTRICAL CODES, STATE AND LOCAL FIRE CODES, REGULATIONS OF THE ELECTRICAL UTILITY SERVING THE PROJECT, AND OSHA REGULATIONS, CURRENT EDITION.

THE FOLLOWING STANDARDS APPLY AS MINIMUM REQUIREMENTS: UL, STANDARDS, NFPA REQUIREMENTS AND NEMA STANDARDS.

INSPECTIONS

ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL REQUIRED PERIODIC REGULATORY INSPECTIONS.

TEMPORARY LIGHT AND POWER

A LIGHTING

PROVIDE AND MAINTAIN INCANDESCENT LIGHTING FOR CONSTRUCTION OPERATIONS TO ACHIEVE A MINIMUM LIGHTING LEVEL OF 2 WATTS/SQ. FT.

PROVIDE AND MAINTAIN 5 WATTS/SQ. FT. LIGHTING TO EXTERIOR STAGING AND STORAGE AREAS AFTER DARK FOR SECURITY PURPOSES.

PROVIDE BRANCH WIRING FROM POWER SOURCE TO DISTRIBUTION BOXES WITH LIGHTING CONDUCTORS, DIGITALS, AND LAMPS AS REQUIRED.

MAINTAIN LIGHTING AND PROVIDE ROUTINE REPAIRS. PERMANENT BUILDING LIGHTING MAY BE UTILIZED DURING CONSTRUCTION.

PROVIDE TEMPORARY ELECTRICAL SERVICE WITH DISTRIBUTION EQUIPMENT WITHIN 10 FEET OF THE BACK OF THE BUILDING WITHIN TWO WEEKS OF START OF PROJECT.

POWER SERVICE CHARACTERISTICS: 240 VOLT, 200 AMPERE, SINGLE PHASE.

PROVIDE POWER OUTLETS FOR CONSTRUCTION OPERATIONS, WITH BRANCH WIRING AND DISTRIBUTION BOXES LOCATED AS REQUIRED.

PROVIDE FEEDER SWITCH AT SOURCE DISTRIBUTION EQUIPMENT.

PERMANENT CONVENIENCE RECEPTACLES MAY BE UTILIZED DURING CONSTRUCTION.

1

ELECTRICAL SPECIFICATIONS

SCALE: NOT TO SCALE

SERVICE, UTILITIES

COORDINATE THE EXTENSIONS OF ELECTRICAL, TELEPHONE AND TV CABLE SERVICES TO HAVE SERVICES AVAILABLE FOR ORDERLY PROGRESS OF WORK. PAY ALL PERMANENT CONNECTION CHARGES.

CONTRACTOR SHALL INCLUDE ALL CHARGES FOR SERVICE INSTALLATIONS IN HIS BID.

VERIFY SERVICE ENTRANCE LOCATIONS WITH POWER, CABLE AND TELEPHONE COMPANIES. VERIFY NUMBER AND SIZE OF CONDUIT REQUIRED FOR CONDUCTORS PRIOR TO BID.

SHOP DRAWINGS

PROVIDE (4) COPIES OF ALL SUBMITTALS.

SUBMITTALS MUST INCLUDE ALL DETAILS NOTED IN THE CONTRACT DOCUMENTS PLUS AMPLACITY, RATED VOLTAGE, CYCLES, PHASE, NUMBER OF POLES, MAXIMUM FAULT CURRENT AND WIRING DIAGRAMS.

ALL SUBMITTAL SHEETS MUST BE MARKED TO INDICATE THE EXACT EQUIPMENT AND CONNECTIONS REQUIRED. GENERAL SUBMITTAL SHEETS, DRAWINGS AND WIRING DIAGRAMS NOT PROPERLY MARKED WILL BE REJECTED.

FOR ALL EQUIPMENT REQUIRING INSTALLATION OR CONNECTION BY ANOTHER CONTRACTOR, FURNISH ONE (1) ADDITIONAL SET OF SHOP DRAWINGS FOR EACH CONTRACTOR MAKING CONNECTIONS TO THE EQUIPMENT INVOLVED.

THE FOLLOWING SUBMITTALS WILL BE REQUIRED:

SERVICE EQUIPMENT: METER CENTERS, COT CABINET IF REQUIRED, PANELBOARDS, ASSOCIATED EQUIPMENT AS REQUIRED, LIGHTING FIXTURES AND STANDARDS, EMERGENCY LIGHTING, SPECIALTY ITEMS.

CONCLUSION

THE CONTRACTOR SHALL FURNISH THE OWNER WITH TWO COMPLETE SETS OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL ITEMS FURNISHED UNDER THE CONTRACT. PROVIDE IN BOUND SETS WITH COMPLETE INDEX TABS. INFORMATION MUST INCLUDE PARTS LIST, EQUIPMENT WARRANTIES AND WIRING DIAGRAMS.

THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A SET OF DRAWINGS SHOWING THE ROUTE AND DEPTH OF THE UNDERGROUND SERVICE, CONDUIT ROUTING AND FULL BOXES SHALL BE INDICATED.

GUARANTEE

THIS CONTRACTOR ACKNOWLEDGES HIS ACQUAINTANCES WITH THESE SPECIFICATIONS AND ALL RESPECTIVE REQUIREMENTS. HE GUARANTEES THAT THE ELECTRICAL SYSTEM HAS BEEN INSTALLED STRICTLY IN ACCORDANCE WITH THE ELECTRICAL CODES AND SPECIFICATIONS AND THAT ALL MATERIALS AND DEVICES ARE SPECIFICALLY INSTALLED IN A SUBSTANTIAL MANNER BY EXPERIENCED LABOR.

THE CONTRACTOR, BY ACCEPTANCE OF THIS CONTRACT GUARANTEES ALL LABOR AND MATERIALS PROVIDED HEREUNDER AND SHALL AT HIS EXPENSE REPAIR, REMODEL, REPLACE AND/OR REPLACE AND/OR REQUIRE AND FURTHER MAKE GOOD AND ACCEPTABLE ALL LABOR AND MATERIALS, EXCEPT LAMPS FOUND DEFECTIVE WITHIN ONE YEAR FROM DATE OF FINAL ACCEPTANCE.

SECTION 16100 - GENERAL MATERIALS, METHODS AND SERVICE

GENERAL

THE PREFERRED WHOLESALER FOR THIS PROJECT IS CRESCENT ELECTRIC SUPPLY COMPANY - CONTACT KRIS KRUEGER AT (800)262-3395 (E-MAIL KRIS@CESCO.COM) CULVER'S FURNISHING SYSTEMS HAS WORKED OUT PACKAGE PRICING FOR ELECTRICAL EQUIPMENT.

SECTION 16200 AND ALL REFERENCES THEREIN FORM A PART OF THIS SECTION.

COORDINATE WITH LOCAL UTILITY TO PROVIDE SERVICE ENTRANCE BY UTILITY.

PRIMARY ELECTRIC SERVICE-800 AMP, 3 PHASE. VERIFY WITH UTILITY.

POWER TRANSFORMER. VERIFY WITH UTILITY.

SECONDARY SERVICE CONDUCTORS, CONTRACTOR TO VERIFY, INCLUDE IN BID IF REQUIRED.

CONDUCTOR TERMINATION FITTINGS AND SECONDARY SERVICE CONDUCTOR TERMINATIONS IN CUSTOMER'S SERVICE EQUIPMENT, WHERE APPLICABLE, CONTRACTOR TO VERIFY, INCLUDE IN BID IF REQUIRED.

BY ELECTRICAL CONTRACTOR:

PROVIDE CONDUIT(S) AND WIRING FROM BUILDING ELECTRIC SERVICE TO SUBSTITUTION UNDERGROUND TO THE OUTSIDE OF THE BUILDING WHERE INDICATED ON THE DRAWINGS AS PER UTILITY REQUIREMENTS.

TRENCHING FROM TRANSFORMER PAD TO BUILDING. SECONDARY SERVICE GROUND AT BUILDING.

PROVIDE EMPTY CONDUIT(S) FOR SECONDARY SERVICE CONDUCTORS UNDER WALKS, DRIVES, PARKING LOTS, ETC. AS REQUIRED BY THE UTILITY FOR LIGHTING SIGNAGE.

VERIFY SERVICE ENTRANCE LOCATIONS WITH UTILITY. VERIFY NUMBER AND SIZE CONDUITS REQUIRED FOR SECONDARY SERVICE CONDUCTORS.

MATERIALS

SERVICE EQUIPMENT

METER SOCKETS, CURRENT TRANSFORMER CABINETS AND SERVICE TERMINAL BOXES SHALL MEET REQUIREMENTS OF THE POWER COMPANY.

CIRCUIT BREAKER DISCONNECTS SHALL BE SQUARE D.

BALANCING LOADS

WHEN CONNECTING SINGLE PHASE CIRCUITS TO A THREE PHASE SYSTEM, DISTRIBUTE THE LOADS AMONG PHASE TO ACHIEVE A BALANCED LOAD ON ALL THREE PHASES OF THE SYSTEM.

POWER AND LIGHTING PANELS

ALL PANEL BOARDS SHALL BE SQUARE D, SHALL HAVE DOORS AND SHALL BE SECURELY MOUNTED AT THE LOCATIONS INDICATED ON THE DRAWINGS. ALL OTHER PANELS SHALL HAVE STENCILLED IDENTIFYING LETTER NUMBERS ON THE OUTSIDE OF THE PANEL DOORS AND IN ACCORDANCE WITH THE DRAWINGS.

CIRCUIT BREAKERS SHALL BE COMMON-TRIP FOR MULTI-POLE BOLT ON.

PROVIDE CIRCUIT-DIRECTORY CARD, TYPED OR NEATLY BLACK-INK LETTERED, IN EACH PANEL BOARD AND UNDER CLEAR PLASTIC SHIELD, UNDERGROUND ALL CIRCUITS.

WIRING DEVICES

ALL CONDUCTORS SHALL BE COPPER EXCEPT IN SIZES #3 AWG AND LARGER, EQUAL AMPLACITY ALUMINUM CONDUCTORS MAY BE USED.

MINIMUM WIRE SIZE SHALL BE #2 AWG, UNLESS OTHERWISE NOTED.

WIRE #6 AWG AND SMALLER SHALL BE SOLID WITH TW INSULATION.

WIRE #6 AWG AND LARGER SHALL BE STRANDED WITH THW INSULATION.

ALL WIRING ABOVE THE FLOOR WILL BE INSTALLED IN THIN-WALLED METAL CONDUIT.

COORDINATE THE EXTENSIONS OF ELECTRICAL, TELEPHONE AND TV CABLE SERVICES TO HAVE SERVICES AVAILABLE FOR ORDERLY PROGRESS OF WORK. PAY ALL PERMANENT CONNECTION CHARGES.

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VERIFY SERVICE ENTRANCE LOCATIONS WITH UTILITY. VERIFY NUMBER AND SIZE CONDUITS REQUIRED FOR SECONDARY SERVICE CONDUCTORS.

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CIRCUIT BREAKER DISCONNECTS SHALL BE SQUARE D.

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WIRE #6 AWG AND SMALLER SHALL BE SOLID WITH TW INSULATION.

WIRE #6 AWG AND LARGER SHALL BE STRANDED WITH THW INSULATION.

ALL WIRING ABOVE THE FLOOR WILL BE INSTALLED IN THIN-WALLED METAL CONDUIT.

FIXTURE DROPS TO BE METAL CLAD FLEXIBLE CONDUIT WITH GREEN GROUND CONDUCTOR - MAXIMUM LENGTH 6'-0".

ALL WIRING INSTALLED UNDERGROUND OR IN THE FLOOR SLAB SHALL BE INSTALLED IN RIGID HEAVY WALL, GALVANIZED STEEL CONDUIT OR RIGID HEAVY WALL PVC.

ALL WIRING INSTALLED EXPOSED TO THE ELEMENTS SHALL BE IN RIGID HEAVY WALL GALVANIZED STEEL CONDUIT.

INSTALL ALL EMERGENCY LIGHTS, EXIT LIGHTS AND FIRE ALARM WIRING IN CONDUIT OR RACEWAYS. #10 WIRE MINIMUM WIRE SIZE FOR EXIT AND EMERGENCY LIGHT CIRCUITS.

SINGLE CONDUCTORS INSTALLED IN CONDUIT MAY BE USED THROUGHOUT.

LOW VOLTAGE WIRING TO BE SUPPORTED AT 5'-0" O.C. MAXIMUM.

EXECUTION

INSTALL SERVICE AND SERVICE EQUIPMENT AS SHOWN ON THE DRAWINGS AND RISER DIAGRAMS.

MAIN SERVICE EQUIPMENT LOCATED ON THE INNER FACE OF WALLS SHALL BE MOUNTED ON 3/4" WEATHERPROOF FLYWOOD PAINTED WITH ONE COAT PRIMER AND ONE COAT GREY ENAMEL BEFORE INSTALLATION OF EQUIPMENT.

PROVIDE SYSTEM GROUND FOR NEW SERVICE AS REQUIRED BY CODE.

GROUND ALL EQUIPMENT, INCLUDING SWITCHES, TRANSFORMERS, CONDUIT SYSTEMS, MOTORS AND ALL OTHER APPARATUS BY CONDUIT TO COLD WATER MAIN AND TO INDEPENDENT ELECTRODE USING BURNED OR T & B GROUND CLAMPS. USE ADDITIONAL GROUND RODS IF WATER SERVICE IS NOT METALLIC OR IF ISOLATION COUPLINGS HAVE BEEN USED.

LOCATE GROUND RODS IN PLANTERS OR SIMILAR AREAS WHICH WILL RECEIVE WATER REGULARLY. DRIVE TO DEPTH OF AT LEAST 8 FEET.

PERFORM GROUND TESTS TO ASSURE NOT MORE THEN 5 OHMS RESISTANCE. ADD RODS AS REQUIRED.

PROVIDE GROUND CONDUCTOR TO ALL MOTOR AND EQUIPMENT CONNECTIONS. CONDUIT GROUNDING ALONE IS NOT ACCEPTABLE.

TRANSFORMERS, METERS, AND PRIMARY ELECTRIC SERVICE TO PROPERTY LIMITS BY LOCAL UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WORK WITH POWER COMPANY. PAY ANY CHARGES FOR SERVICE COMPANY REQUIRED FOR INSTALLATION OF SERVICE INCLUDING COSTS NECESSARY TO BRING SERVICE TO PROPERTY.

CONNECTIONS AT ALL SWITCHES AND RECEPTACLES SHALL BE BY SCREW TERMINAL CONNECTIONS - NOT THRU "PLUG-IN" TYPE CONNECTIONS PROVIDED ON THE REAR OF THE DEVICES.

GENERAL

SECTIONS 16010 AND 16050 AND ALL REFERENCES THEREIN FORM A PART OF THIS SECTION.

THERE SHALL BE FURNISHED:

A COMPLETE CONDUIT AND WIRE SYSTEM FOR POWER AND LIGHTING INCLUDING UNDERGROUND, ELECTRIC SERVICE, METERING FACILITIES, PANELBOARDS, FEEDER SYSTEM FOR POWER AND LIGHTING AS INDICATED ON THE DRAWINGS AND SPECIFIED IN DIVISION 16.

BRANCH CIRCUIT WIRING IN CONDUIT, FOR LIGHTING RECEPTACLES, JUNCTION BOXES AND MOTORS.

WIRING AND CONNECTIONS FOR EQUIPMENT.

A COMPLETE INSTALLATION OF FIXTURES AND LAMPS, INCLUDING INTERIOR LIGHTING, EXIT LIGHTING, EXTERIOR LIGHTING AND BUILDING LIGHTING.

EMERGENCY LIGHTING AS SHOWN ON THE DRAWINGS.

TELEPHONE SERVICE CONDUIT AND TERMINAL BACK BOARDS, INTERCOM AND VOICE/DATA CONDUIT SYSTEM.

TELEVISION WIRING AND CONDUIT SYSTEM AND TERMINAL BACK BOARD.

IN-DUCT SMOKE DETECTOR WITH REMOTE VISIBLE AND AUDIBLE SIGNAL.

WIRING SYSTEM IN CONDUIT FOR EQUIPMENT AND CONTROLS, MOTORS AND CONTROLS TO BE PROVIDED BY PLUMBING AND HVAC CONTRACTORS WHICH REQUIRE MOTOR STARTERS AND LINE VOLTAGE CONTROLS.

ALL OTHER ITEMS NECESSARY TO COMPLETE ALL SYSTEMS.

EQUIPMENT CONNECTIONS

PROVIDE ALL BRANCH WIRING, DISCONNECTIONS, TRENCHING, CONDUIT ETC. AS REQUIRED FOR ALL EQUIPMENT ASSOCIATED WITH THE BUILDING, INCLUDING BUT NOT LIMITED TO:

ALL FOOD PREPARATION HANDLING, SERVING AND SANITIZING EQUIPMENT. PROVIDE CORD FOR SHAKE MACHINE.

CUSTARD MACHINE AND ASSOCIATED COMPRESSORS.

ALL INTERCOM AND VOICE/DATA EQUIPMENT.

ALL REFRIGERATION EQUIPMENT.

ALL HVAC EQUIPMENT INCLUDING EXHAUST FANS, KITCHEN FAN CONTROLS, MOTORIZED INTAKE DAMPERS, ECONOMIZER CONTROLS, IN-DUCT SMOKE DETECTOR AND ASSOCIATED EQUIPMENT.

ALL MOTORS AND STARTERS.

ALL PLUMBING EQUIPMENT INCLUDING WATER HEATER CONTROLS, CIRCULATING PUMP, WATER SOFTENER, AUTOMATIC WATER CONTROL VALVES.

EXTERIOR LIGHTING INCLUDING BUILDING, REMOTE DIRECTIONAL SIGNS, FLOOD LIGHTING, SCENT LIGHTING, UTILITY BUILDING LIGHTING, MAIN SIGN, MARQUEE SIGN, FAHO BOLLARDS.

TIME CLOCK CONTROLS.

EMERGENCY LIGHTING.

LAUNDRY UNITS.

TELEPHONE SYSTEM.

FIRE SUPPRESSION SYSTEM.

TELEVISION DISTRIBUTION SYSTEM.

CASH REGISTERS AND ASSOCIATED EQUIPMENT.

MENU BOARD.

SPEAKER POST.

PHOTO CELL.

SHAKE MACHINE.

SMOKE DETECTOR AND REMOTE ALARM.

LINE VOLTAGE CONTROL WIRING.

AQUA AIRE.

SPEAKERS.

PANIC ALARM.

DISPLAY CASES.

CONDUIT ONLY: PROVIDE TRENCHING, CONDUIT, ETC. AS REQUIRED FOR ALL EQUIPMENT ASSOCIATED WITH THE BUILDING INCLUDING BUT NOT LIMITED TO:

FUTURE READER BOARD ON MAIN SIGN.

ORDER, VERIFYING AND IDENTIFYING BOARD.

SENSOR LOOP.

200' FOR CABLE TV - COORDINATE LOCATION WITH GENERAL CONTRACTOR.

MATERIALS

TELEPHONE

PROVIDE COMPLETE WIRING SYSTEM IN CONDUIT AS REQUIRED BY TELEPHONE COMPANY WITH OUTLETS AS SHOWN ON DRAWING. ALL WIRING SHALL BE IN CONDUIT.

TELEPHONE JACKS SHALL BE FLUSH, SINGLE GANG BOXES IN IVORY PLASTIC COVER PLATES TO MATCH ELECTRICAL COVER PLATES.

WALL MOUNT TELEPHONE JACK TO HANGING TELEPHONE: SETTYOUR WHITE41.

SINGLE GANG, TWO MODULAR JACK WITH WALL PLATE: PASS 4 SETTYOUR WHITE 21.

FIXTURES AND LAMPS

ALL FIXTURES AS SHOWN ON THE DRAWINGS AND SHALL BE INSTALLED COMPLETE WITH LAMP, STARTERS AND ALL OTHER EQUIPMENT NECESSARY FOR OPERATION.

ALL FIXTURE WIRING SHALL BE CONCEALED UNLESS FIXTURE DESIGN PREVENTS CONCEALMENT. ALL FIXTURES MUST BE FIRMLY SUPPORTED FROM CEILING SUSPENSION OF STRUCTURAL SYSTEM, NOT FROM CEILING MATERIAL.

ALL FIXTURES AND LAMPS SHALL BE IN PERFECT CONDITION WHEN JOB IS TURNED OVER TO THE OWNER, AND SHALL FUNCTION PROPERLY TO THE SATISFACTION OF THE OWNER AND THE ENGINEER/ARCHITECT BEFORE APPROVAL IS GIVEN.

LAMPS IN FLUORESCENT FIXTURES SHALL BE ENERGY SAVING COOL WHITE GE, WESTINGHOUSE OR SYLVANIA ARE CONSIDERED EQUAL. ALL FLUORESCENT LAMPS SHALL BE GUARANTEED BY THE ELECTRICAL CONTRACTOR FOR ONE YEAR.

ALL OTHER LAMPS SHALL BE 120 VOLT, INCANDESCENT LAMPS SHALL BE GE, INSIDE-FROSTED UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.

LIGHT STANDARDS

PROVIDE TRENCHING, CONDUIT AND WIRING AND INSTALL EXTERIOR LIGHTS AND LIGHT STANDARDS AS SHOWN ON THE DRAWINGS IN ACCORDANCE WITH LIGHTING REQUIREMENTS. PROVIDE ALL REQUIRED CONCRETE FOUNDATION WORK AND ANCHOR BOLTS IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SITE SIGNAGE

PROVIDE TRENCHING, CONDUIT AND WIRING FOR SITE SIGNAGE. SIGNS, BASES AND INSTALLATION BY OTHERS.

TESTS AND DEMONSTRATIONS

BEFORE PLACING ELECTRICAL SYSTEM IN OPERATION, TEST ALL WIRING AND CONNECTIONS FOR CONTINUITY AND GROUNDS.

DEMONSTRATE PROPER PERFORMANCE OF ALL CONNECTED ELECTRICAL EQUIPMENT AND SYSTEMS.

GENERAL PROJECT NOTES:

A. ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE CODES AND AUTHORITIES HAVING JURISDICTION.

B. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE ALL REQUIRED INSPECTIONS.

C. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS AND TRADES.

D. THESE DRAWINGS, AS PREPARED, ARE DIAGRAMMATIC BUT SHALL BE FOLLOWED AS CLOSELY AS CONSTRUCTION OF THE WORK AND THE WORK OF THE TRADES WILL PERMIT. EQUIPMENT LOCATIONS INDICATED ARE APPROXIMATE. COORDINATE EXACT LOCATION AND REQUIRED CLEARANCES WITH EQUIPMENT SUPPLIER AND ALL TRADES PRIOR TO INSTALLATION.

E. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE EQUIPMENT INDICATED WITHIN THESE DRAWINGS UNLESS OTHERWISE NOTED. VERIFY LOCATION AND DIMENSIONS IN THE FIELD PRIOR TO FABRICATION AND/OR INSTALLATION.

F. ALL ROOF PENETRATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE. COORDINATE WITH OWNER'S ROOFING CONTRACTOR SO AS NOT TO VOID ANY EXISTING ROOF WARRANTIES.

G. THE ENTIRE INSTALLATION SHALL BE GUARANTEED FREE OF DEFECTS AND CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO COST TO THE OWNER FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY ARCHITECT OR ENGINEER.

H. ALL WORK SHALL BE SUBJECT TO THE ACCEPTANCE AND APPROVAL OF THE ENGINEER/ARCHITECT. THE ARCHITECT SHALL BE NOTIFIED OF ANY AND ALL DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THE PORTION OF THE WORK FAILURE OF PROPER NOTIFICATION DOES NOT RELIEVE THE CONTRACTOR. THE CONTRACTOR SHALL CORRECT ANY AND ALL WORK ARISING FROM SUCH FAILURE TO COORDINATE DISCREPANCIES TO THE SATISFACTION OF THE ARCHITECT WITHOUT ADDITIONAL COST TO THE OWNER.

I. COORDINATE ALL EQUIPMENT UTILITY INFORMATION SHOWN ON THIS SHEET WITH THE DUNKIN' BRANDS EQUIPMENT SCHEDULE AND EQUIPMENT SCHEDULES AND EQUIPMENT MANUFACTURER'S CUT SHEETS.

J. ALL EXTERIOR LIGHTS TO BE TIMECLOCK CONTROLLED.

K. ALL 15 AND 20 AMP, 120 VOLT RECEPTACLES IN KITCHEN AND PREP AREAS SHALL BE GFI TYPE.

L. ALL JUNCTION BOXES SHOWN ON PLAN ARE TO BE INSTALLED ABOVE THE FINISHED CEILING.

M. ALL EMERGENCY AND EXIT FIXTURES SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. PROVIDE ADDITIONAL FIXTURES AS NEEDED TO MEET THE CODE REQUIREMENTS PER LOCAL REQUIREMENTS.

N. PROVIDE WOOD BLOCKING BEHIND ALL EXTERIOR LIGHTING FIXTURES COORDINATE WITH GENERAL CONTRACTOR.

O. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE LATEST KITCHEN PLANS AND EQUIPMENT CUT SHEETS FOR PROPER EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS PRIOR TO STARTING WORK.

P. PROVIDE ALL FLUORESCENT FIXTURES WITH BALLAST DISCONNECTING MEANS PER NEC.

Q. "N." DESIGNATION INDICATES FIXTURE TO BE NIGHT LIGHT, CIRCUITED HOT FOR CONTINUOUS OPERATION.

R. CONTRACTOR SHALL PROVIDE OPERATING AND MAINTENANCE MANUALS TO THE OWNER AS REQUIRED PER SECTION 505.142 OF FBCEC.

ABBREVIATIONS:

AFC - AVAILABLE FAULT CURRENT

AFB - ABOVE FINISHED FLOOR

AHU - AIR HANDLING UNIT

BFG - BELOW FINISHED GRADE

CONDUIT

CU - COOL WHITE

DACP - DOOR ALARM CONTROL PANEL

DN - DOWN

EF - EXHAUST FAN

ENCL - EQUIPMENT GROUND

EUC - ELECTRIC COIL UNIT

EUC - ELECTRIC WATER COOLER

EWH - ELECTRIC WATER HEATER

WU - EXPLOSION PROOF

FCU - FRACTIONAL HORSE POWER

FHP - FULL LOAD AMPERES

FLA - FLOOR

GFI - GROUND FAULT INTERRUPTER

HIGH - HIGH INTENSITY DISCHARGE

HORIZ - HORIZONTAL

IG - ISOLATED GROUND

LI - LIGHT WHITE

LP - HORSEPOWER, HEAT PUMP

HVAC - HEATING, VENTILATING, AIR CONDITIONING

JB - JUNCTION BOX

LRA - LOCKED ROTOR AMPERES

MCB - MAIN CIRCUIT BREAKER

NLO - MAIN LUGS ONLY

N - NEUTRAL

NL - NIGHT LIGHT

OUT - OUTLET BOX

PB - FULL BOX PUSHBUTTON

PS - PAY STATION

RECEPT - RECEPTACLE

SF - SUPPLY FAN

SPEC - SPECIFICATIONS

SUBEGS - SMOKE WARNING EMERGENCY CALL SYSTEM

TL - TIMECLOCK

TTB - TELEPHONE TERMINAL BOARD

VTB - TELEVISION TERMINAL BOARD

VERT - VERTICAL

WM - WATT METER

UP - WEATHERPROOF

WU - WATER

XTFR - TRANSFORMER

APC - AVAILABLE FAULT CURRENT

AFB - ABOVE FINISHED FLOOR

AHU - AIR HANDLING UNIT

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TTB - TELEPHONE TERMINAL BOARD

VTB - TELEVISION TERMINAL BOARD

VERT - VERTICAL

WM - WATT METER

UP - WEATHERPROOF

WU - WATER

XTFR - TRANSFORMER

FIXTURES AND LAMPS

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ALL FIXTURE WIRING SHALL BE CONCEALED UNLESS FIXTURE DESIGN PREVENTS CONCEALMENT. ALL FIXTURES MUST BE FIRMLY SUPPORTED FROM CEILING SUSPENSION OF STRUCTURAL SYSTEM, NOT FROM CEILING MATERIAL.

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ALL OTHER LAMPS SHALL BE 120 VOLT, INCANDESCENT LAMPS SHALL BE GE, INSIDE-FROSTED UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS.

LIGHT STANDARDS

PROVIDE TRENCHING, CONDUIT AND WIRING AND INSTALL EXTERIOR LIGHTS AND LIGHT STANDARDS AS SHOWN ON THE DRAWINGS IN ACCORDANCE WITH LIGHTING REQUIREMENTS. PROVIDE ALL REQUIRED CONCRETE FOUNDATION WORK AND ANCHOR BOLTS IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SITE SIGNAGE

PROVIDE TRENCHING, CONDUIT AND WIRING FOR SITE SIGNAGE. SIGNS, BASES AND INSTALLATION BY OTHERS.

TESTS AND DEMONSTRATIONS

BEFORE PLACING ELECTRICAL SYSTEM IN OPERATION, TEST ALL WIRING AND CONNECTIONS FOR CONTINUITY AND GROUNDS.

DEMONSTRATE PROPER PERFORMANCE OF ALL CONNECTED ELECTRICAL EQUIPMENT AND SYSTEMS.

GENERAL PROJECT NOTES:

A. ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE CODES AND AUTHORITIES HAVING JURISDICTION.

B. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE ALL REQUIRED INSPECTIONS.

C. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS AND TRADES.

D. THESE DRAWINGS, AS PREPARED, ARE DIAGRAMMATIC BUT SHALL BE FOLLOWED AS CLOSELY AS CONSTRUCTION OF THE WORK AND THE WORK OF THE TRADES WILL PERMIT. EQUIPMENT LOCATIONS INDICATED ARE APPROXIMATE. COORDINATE EXACT LOCATION AND REQUIRED CLEARANCES WITH EQUIPMENT SUPPLIER AND ALL TRADES PRIOR TO INSTALLATION.

E. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE EQUIPMENT INDICATED WITHIN THESE DRAWINGS UNLESS OTHERWISE NOTED. VERIFY LOCATION AND DIMENSIONS IN THE FIELD PRIOR TO FABRICATION AND/OR INSTALLATION.

F. ALL ROOF PENETRATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE. COORDINATE WITH OWNER'S ROOFING CONTRACTOR SO AS NOT TO VOID ANY EXISTING ROOF WARRANTIES.

G. THE ENTIRE INSTALLATION SHALL BE GUARANTEED FREE OF DEFECTS AND CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO COST TO THE OWNER FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY ARCHITECT OR ENGINEER.

H. ALL WORK SHALL BE SUBJECT TO THE ACCEPTANCE AND APPROVAL OF THE ENGINEER/ARCHITECT. THE ARCHITECT SHALL BE NOTIFIED OF ANY AND ALL DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THE PORTION OF THE WORK FAILURE OF PROPER NOTIFICATION DOES NOT RELIEVE THE CONTRACTOR. THE CONTRACTOR SHALL CORRECT ANY AND ALL WORK ARISING FROM SUCH FAILURE TO COORDINATE DISCREPANCIES TO THE SATISFACTION OF THE ARCHITECT WITHOUT ADDITIONAL COST TO THE OWNER.

I. COORDINATE ALL EQUIPMENT UTILITY INFORMATION SHOWN ON THIS SHEET WITH THE DUNKIN' BRANDS EQUIPMENT SCHEDULE AND EQUIPMENT SCHEDULES AND EQUIPMENT MANUFACTURER'S CUT SHEETS.

J. ALL EXTERIOR LIGHTS TO BE TIMECLOCK CONTROLLED.

K. ALL 15 AND 20 AMP, 120 VOLT RECEPTACLES IN KITCHEN AND PREP AREAS SHALL BE GFI TYPE.

L. ALL JUNCTION BOXES SHOWN ON PLAN ARE TO BE INSTALLED ABOVE THE FINISHED CEILING.

M. ALL EMERGENCY AND EXIT FIXTURES SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. PROVIDE ADDITIONAL FIXTURES AS NEEDED TO MEET THE CODE REQUIREMENTS PER LOCAL REQUIREMENTS.

N. PROVIDE WOOD BLOCKING BEHIND ALL EXTERIOR LIGHTING FIXTURES COORDINATE WITH GENERAL CONTRACTOR.

O. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE LATEST KITCHEN PLANS AND EQUIPMENT CUT SHEETS FOR PROPER EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS PRIOR TO STARTING WORK.

P. PROVIDE ALL FLUORESCENT FIXTURES WITH BALLAST DISCONNECTING MEANS PER NEC.

Q. "N." DESIGNATION INDICATES FIXTURE TO BE NIGHT LIGHT, CIRCUITED HOT FOR CONTINUOUS OPERATION.

R. CONTRACTOR SHALL PROVIDE OPERATING AND MAINTENANCE MANUALS TO THE OWNER AS REQUIRED PER SECTION 505.142 OF FBCEC.

ABBREVIATIONS:

AFC - AVAILABLE FAULT CURRENT

AFB - ABOVE FINISHED FLOOR

AHU - AIR HANDLING UNIT

BFG - BELOW FINISHED GRADE

CONDUIT

CU - COOL WHITE

DACP - DOOR ALARM CONTROL PANEL

DN - DOWN

EF - EXHAUST FAN

ENCL - EQUIPMENT GROUND

EUC - ELECTRIC COIL UNIT

EUC - ELECTRIC WATER COOLER

EWH - ELECTRIC WATER HEATER

WU - EXPLOSION PROOF

FCU - FRACTIONAL HORSE POWER

FHP - FULL LOAD AMPERES

FLA - FLOOR

GFI - GROUND FAULT INTERRUPTER

HIGH - HIGH INTENSITY DISCHARGE

HORIZ - HORIZONTAL

IG - ISOLATED GROUND

LI - LIGHT WHITE

LP - HORSEPOWER, HEAT PUMP

HVAC - HEATING, VENTILATING, AIR CONDITIONING

JB - JUNCTION BOX

LRA - LOCKED ROTOR AMPERES

MCB - MAIN CIRCUIT BREAKER

NLO - MAIN LUGS ONLY

N - NEUTRAL

NL - NIGHT LIGHT

OUT - OUTLET BOX

PB - FULL BOX PUSHBUTTON

PS - PAY STATION

RECEPT - RECEPTACLE

SF - SUPPLY FAN

SPEC - SPECIFICATIONS

SUBEGS - SMOKE WARNING EMERGENCY CALL SYSTEM

TL - TIMECLOCK

TTB - TELEPHONE TERMINAL BOARD

VTB - TELEVISION TERMINAL BOARD

VERT - VERTICAL

WM - WATT METER

UP - WEATHERPROOF

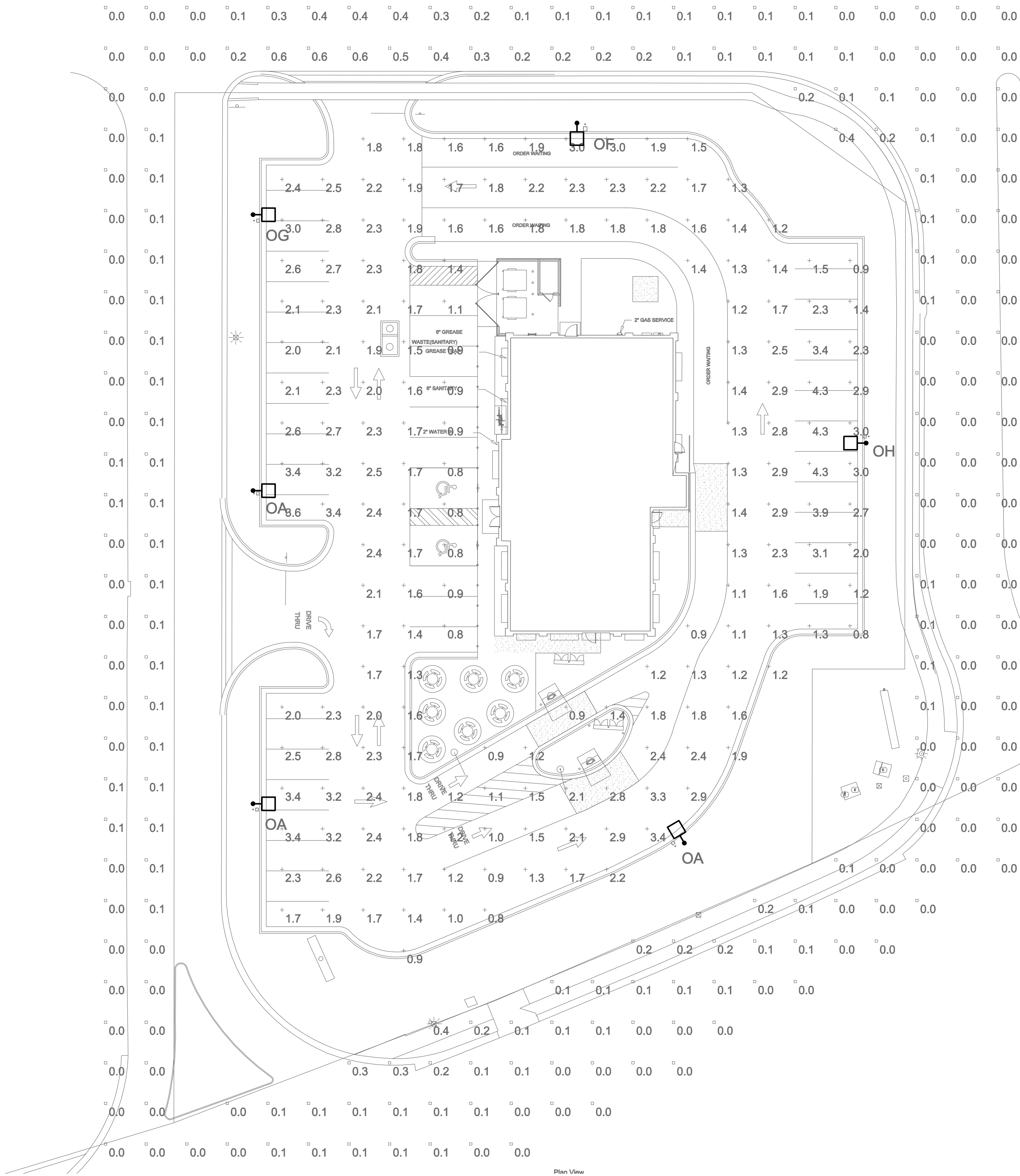
WU - WATER

XTFR - TRANSFORMER

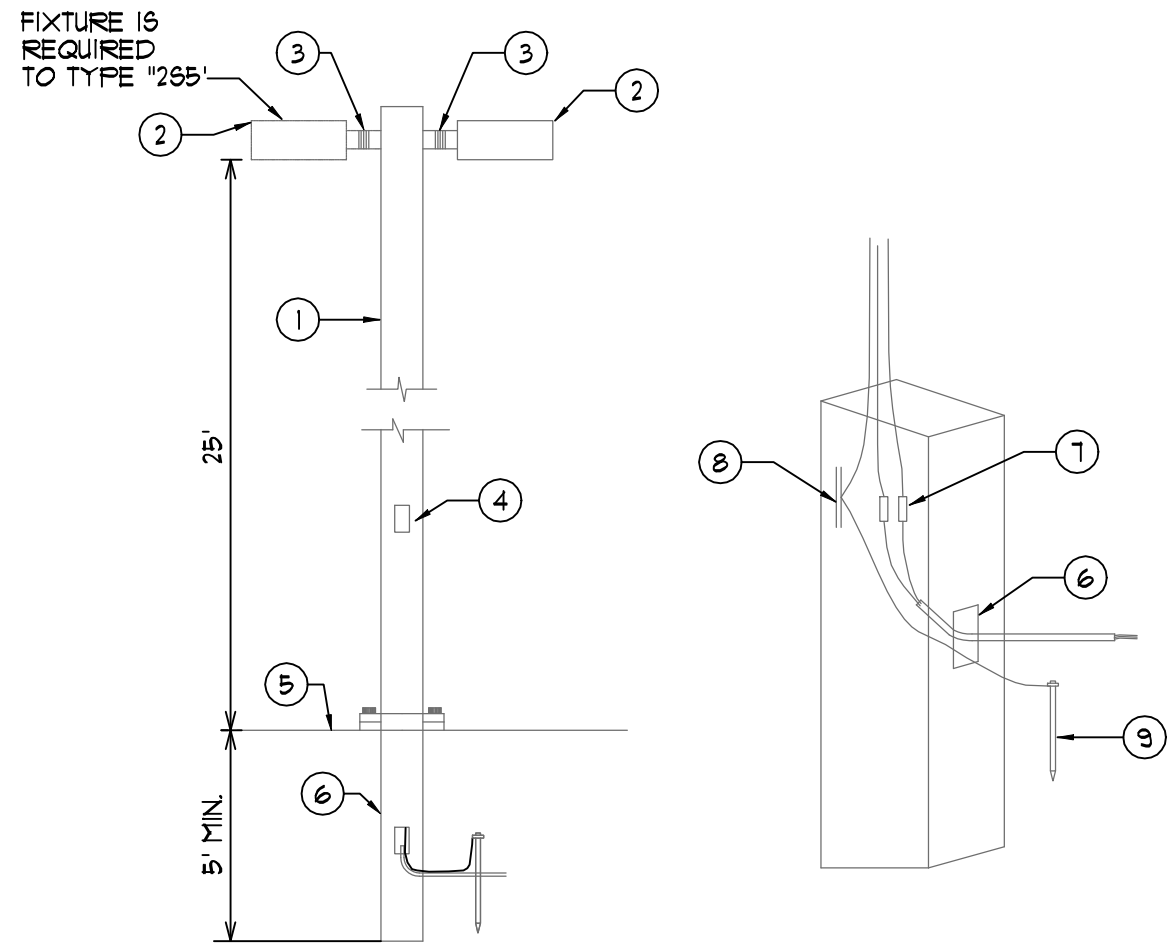
SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING
	1'x4' FLOURESCENT FIXTURE	CEILING
	2'x4' FLOURESCENT FIXTURE	CEILING
	SHADED FIXTURES CONTAIN BATTERY PACK	CEILING
	FLUORESCENT STRIP FIXTURE	CEILING
	LIGHT FIXTURE, WALL BRACKET LETTER INDICATES TYPE	AS SPECIFIED
	LIGHT FIXTURE, CEILING TYPE LETTER INDICATES TYPE	CEILING OR WALL
	EXIT FIXTURE, SHADING INDICATES SINGLE OR DOUBLE FACE	CEILING OR WALL
	EXIT LIGHT WITH EMERGENCY LIGHTS	8'-0" AFF
	EMERGENCY BATTERY UNIT	8'-0" AFF
	SWITCH, SINGLE POLE-LETTER INDICATES LIGHTS CONTROLLED	48" AFF TO CL OR AS NOTED
	SWITCH, THREE WAY	48" AFF TO CL OR AS NOTED
	DIGITAL SWITCH OR AS NOTED	*48" AFF OR AS NOTED
	WALL-MOUNTED OCCUPANCY SENSOR	*48" AFF OR AS NOTED
	CEILING MOUNTED OCCUPANCY SENSOR	SURFACE MOUNT TO CEILING
	LIGHTING RELAY	INSTALL CONCEALED IN AN ACCESSIBLE AREA ABOVE CEILING
	POWER PACK	INSTALL CONCEALED IN AN ACCESSIBLE AREA ABOVE CEILING
	PHOTOCELL	SURFACE MOUNT TO CEILING
	DUPLEX RECEPTACLE, 125V, 20A WITH ISOLATED GROUND	18" AFF TO CL OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A	48" AFF OR 6" ABOVE COUNTER
	DUPLEX RECEPTACLE, 125V, 15A GROUND FAULT	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A	48" AFF OR 6" ABOVE COUNTER
	DUPLEX RECEPTACLE, 125V, 15A	FLUSH IN FLOOR
	QUADRAPLEX RECEPTACLE, 125V, 15A	18" AFF OR AS NOTED
	QUADRAPLEX RECEPTACLE, 125V, 15A	48" AFF OR 6" ABOVE COUNTER
	SPECIAL PURPOSE OUTLET, NEMA CONFIGURATION AS SHOWN	18" AFF OR AS NOTED
	TELEPHONE/DATA OUTLET. SEE PLANS FOR WIRING CONFIGURATION	18" AFF OR AS NOTED
	PANELBOARD 120/208V OR 120/240V	SEE PANEL SCHEDULE
	MOTOR STARTER SWITCH WITH OVERLOAD RELAYS AS REQUIRED	AS NOTED
	MOTOR	AS NOTED
	DISCONNECT SWITCH SIZE/ FUSE/ # OF POLES	TOP 60" AFF OR AS NOTED
	SPECIAL CABINET OR EQUIPMENT AS NOTES, RECESSED MOUNTED	
	DRY TYPE TRANSFORMER (NUMBER INDICATES KVA RATING).	
	JUNCTION BOX	AS NOTED
	TIME CLOCK	54" AFF
	SH	

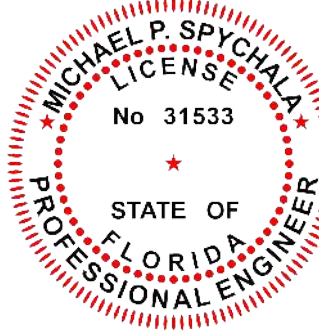
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CRESCENT ELECTRIC SUPPLY COMPANY
GARY MANDERS AT 1-800-236-9008
EMAIL: CULVERS@CESCO.COM
VERIFY THAT THE ATTACHED LAYOUT
MEETS LOCAL CODE REQUIREMENTS



Schedule				
Symbol	Label	Quantity	Description	Wattage
	OA	3	DSX1 LED P6 40K T4M MVOLT HS - FIXTURE 25' ABOVE GRADE	163
	OF	1	DSX1 LED P4 40K T3M MVOLT HS - FIXTURE 25' ABOVE GRADE	125
	OG	1	DSX1 LED P4 40K T4M MVOLT HS - FIXTURE 25' ABOVE GRADE	125
	OH	1	DSX1 LED P6 40K BLC MVOLT - FIXTURE 25' ABOVE GRADE	163



This item has been electronically signed and sealed by Michael P. Spychala, PE on the date shown using a Digital Signature.
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Michael P
Spychala
2022.04.15
14:24:53 -04'00"

REVISIONS

BY

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Michael P.
Spychala P.E.
Fla PE# 31533
Fla COA# 3967

New Free Standing

US Hwy 90
Lake City, Florida
Columbia County

Date: 04.13.22

Scale: AS NOTED

Project Mgr: MPS

Drawn: TD

Job: 21-244

Sheet

EP1

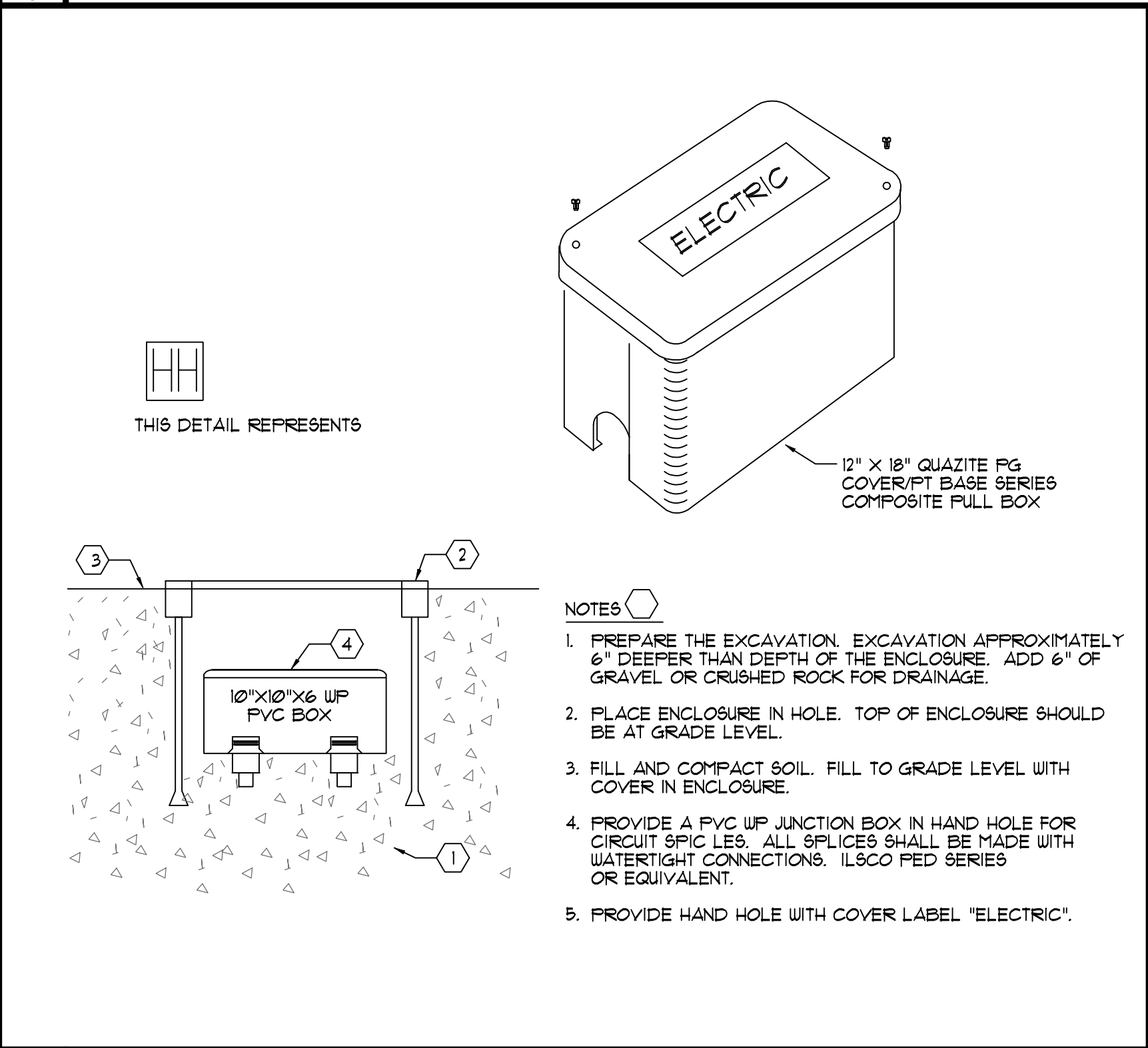
EQUIPMENT SCHEDULE						SITE SIGNAGE/MENU BOARD SCHEDULE					
ITEM ○	DESCRIPTION	QUAN	NEW (N) EXIST (E) FUTURE (F)	VOLT	PHASE	AMP	CONN.	TYPE	COMMENTS	ITEM ○	DESCRIPTION
A	MAIN BUILDING SIGN	1	NEW	115	1	1.8	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	I	SECONDARY FREESTANDING SIGN	1
B	MAIN BUILDING SIGN	1	NEW	115	1	1.8	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	1)	SIGN CONTROL	1
C	MAIN BUILDING SIGN	1	NEW	115	1	1.8	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	J	ELECTRONIC MESSAGE CENTER (EMC)	1
D	MAIN BUILDING SIGN	1	NEW	115	1	1.8	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	1)	EMC CONTROL	1
E	EXTERIOR LED STRIP LIGHTING	LOT	-NEW					EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	K	FREE SELL MENU BOARD	1
F	MAIN FREESTANDING SIGN	1	NEW	115	1	16.0	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	1)	SIGN CONTROL	1
G	ELECTRONIC MESSAGE CENTER (EMC)	1	NEW	115	1	28 16.0	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	L	ORDER CONFIRMATION BOARD (OCB)	1
H	SITE DIRECTIONAL SIGNS	LOT	NEW	115	1	1.0	DIR.	EC TO FURNISH AN 18" LONG WIRE WHIP (SEALTITE) EXTENDING FROM THE FACE OF THE BUILDING AT LOCATION AS VERIFIED WITH SIGN CONTRACTOR. VERIFY ALL SIGN REQUIREMENTS WITH SIGN CONTRACTOR BEFORE ROUGH IN.	M	MAIN MENU BOARD	1

EQUIPMENT SCHEDULE						SITE SIGNAGE/MENU BOARD SCHEDULE					
ITEM ○	DESCRIPTION	QUAN	NEW (N) EXIST (E) FUTURE (F)	VOLT	PHASE	AMP	CONN.	TYPE	COMMENTS	ITEM ○	DESCRIPTION
I	SECONDARY FREESTANDING SIGN	1	OPTIONAL	115	1	16.0	DIR.	THIS IS OPTIONAL. SAME REQUIREMENTS AS SIGN "F" ABOVE. VERIFY WITH SIGN CONTRACTOR.	1)	SIGN CONTROL	1
J	ELECTRONIC MESSAGE CENTER (EMC)	1	OPTIONAL	115	1	28 16.0	DIR.	THIS IS OPTIONAL. SAME REQUIREMENTS AS SIGN "G" ABOVE. VERIFY WITH SIGN CONTRACTOR.	2)	COMMUNICATION CONDUIT	1
K	FREE SELL MENU BOARD	1	OPTIONAL	115	1	1.8	DIR.	THIS IS OPTIONAL. SAME REQUIREMENTS AS SIGN "G2" ABOVE. VERIFY WITH SIGN CONTRACTOR.			
L	ORDER CONFIRMATION BOARD (OCB)	1	NEW					PROVIDE AN EMPTY 1" CONDUIT, WITH PULL STRING, FROM MECHANICAL ROOM TO SIGN FOR POWER.	1)	COMMUNICATION CONDUIT	1
M	MAIN MENU BOARD	1	NEW	115	1	1.8	DIR.	PROVIDE AN EMPTY 1 1/2" CONDUIT, WITH PULL STRING, FROM OFFICE TO SIGN FOR COMMUNICATION LINES.	2)	DRIVE THRU SENSOR LOOP CONDUIT	1

- SIGN SCHEDULE NOTES:
- VERIFY EXACT LOCATIONS AND REQUIREMENTS WITH SIGN CONTRACTORS, G.C. AND OWNER.
 - CONTRACTOR TO PROVIDE ALL REQUIRED J BOXES, DISCONNECTS, CONDUITS, LIGHTING CONTRACTORS, AND BRANCH CIRCUITS TO PROVIDE COMPLETE INSTALLATIONS.
 - MENU BOARDS AND PARKING LOT LIGHTING TO BE CONTROLLED SEPARATELY FOR THE MAIN BUILDING SIGNAGES.

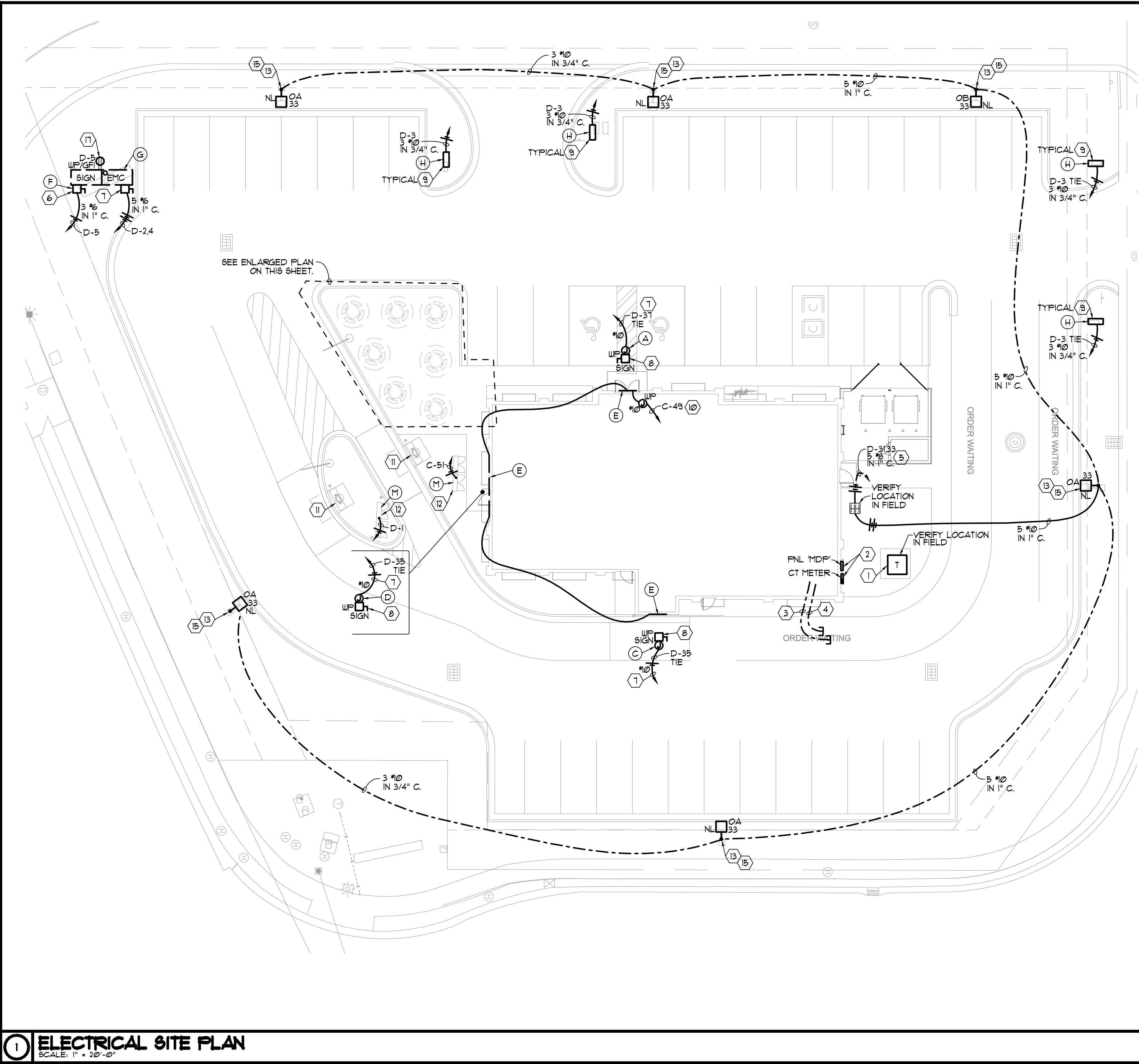
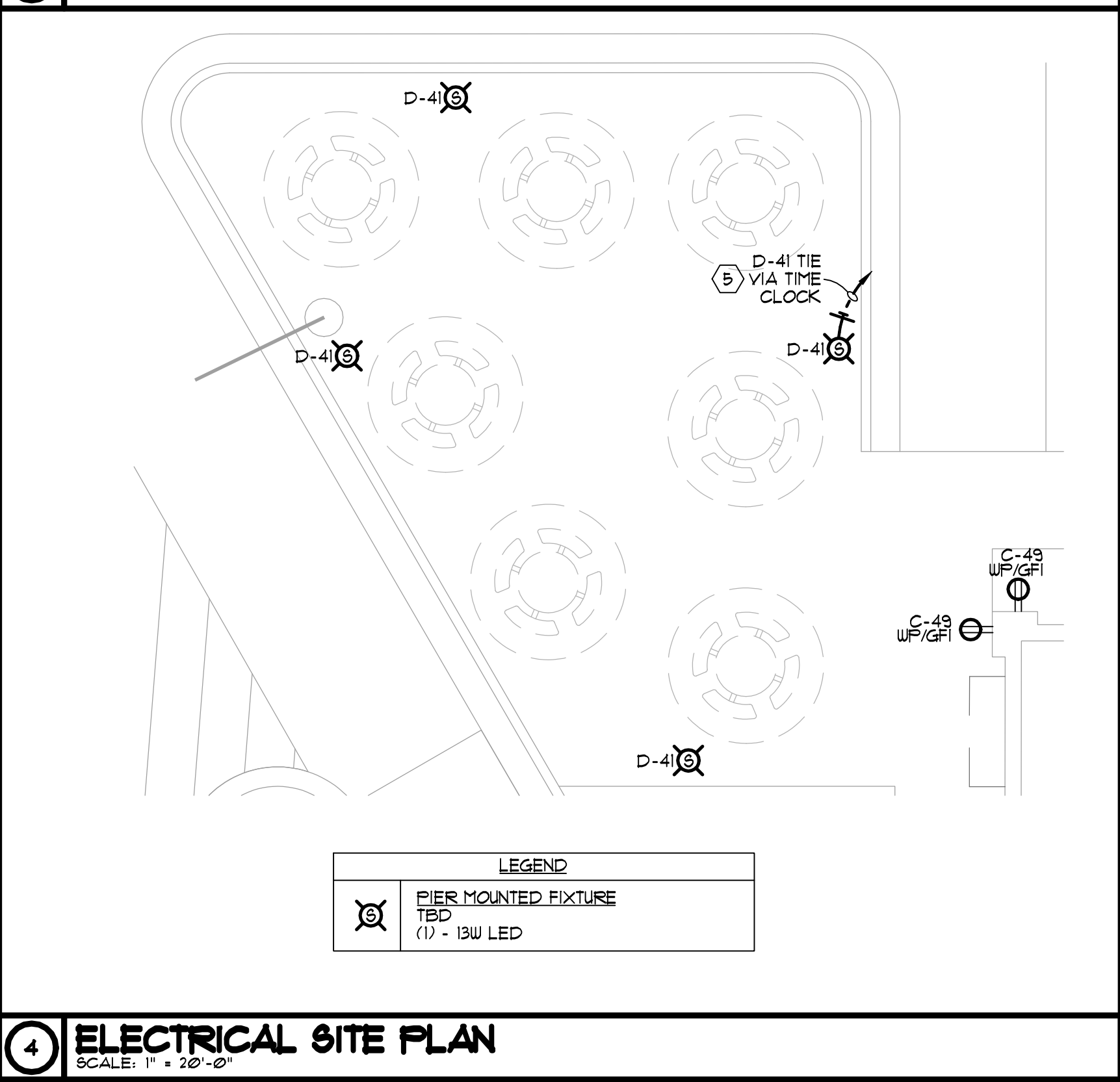
2 ELECTRICAL SIGNAGE/MENU BOARD SCHEDULE

SCALE: N.T.S.



3 ELECTRICAL DETAIL

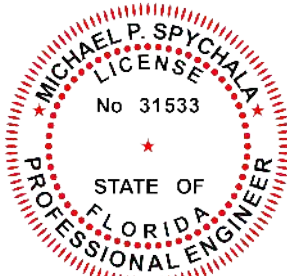
SCALE: N.T.S.



KEYED NOTES

DRAWING NOTES

- PAD MOUNTED UTILITY TRANSFORMER SHALL BE FURNISHED AND INSTALLED BY UTILITY COMPANY. SECONDARY SERVICE VOLTAGE SHALL BE 120/208 VOLT, 3 PHASE, 4 WIRE.
- PROPOSED LOCATION FOR BUILDING CT METER AND MAIN. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
- PROVIDE ONE (1) 3" SCHEDULE 40 PVC TELEPHONE CONDUITS WITH NYLON PULL CORDS FOR USE BY TELEPHONE SERVICE PROVIDER. BURY THE CONDUITS AT 30" BELOW FINISHED GRADE TO THE TOP OF CONDUITS. STUB-OUT THE TELEPHONE CONDUITS AT THE PROPERTY LINE AS DIRECTED BY TELEPHONE SERVICE PROVIDER.
- PROVIDE ONE (1) 3" SCHEDULE 40 PVC CATV CONDUITS WITH NYLON PULL CORDS FOR USE BY CATV SERVICE PROVIDER. BURY THE CONDUITS AT 30" BELOW FINISHED GRADE TO THE TOP OF CONDUITS. STUB-OUT THE TELEPHONE CONDUITS AT THE PROPERTY LINE AS DIRECTED BY CATV SERVICE PROVIDED.
- ROUTE EXTERIOR LIGHTING CIRCUIT HOME RUN VIA CONTRACTORS THAT ARE CONTROLLED BY THE LIGHTING CONTROL PANEL. CIRCUIT D-31 (NIGHT LIGHT) SHALL BE ON/OFF BY THE PHOTOCELL. CIRCUIT D-33 SHALL BE CONTROLLED BY TIMECLOCK WITH PHOTOCELL OVER-RIDE DURING COLVERS RESTAURANT OPERATING HOURS. CONFIRM EXACT SETTING REQUIREMENTS WITH OWNER.
- PROVIDE AND INSTALL JUNCTION BOX FOR MAIN FREESTANDING SIGN. PROVIDE UP DISCONNECT TO SIGNAGE PER ARTICLE 600-6 OF THE NEC. ROUTE HOME RUN VIA LIGHTING CONTROL PANEL. REFER TO SIGN SCHEDULE ON THIS SHEET FOR REQUIREMENTS. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR AND OWNER.
- PROVIDE FINAL CONNECTION TO MAIN BUILDING SIGN. COORDINATE WITH SIGN INSTALLER. SEE ARCHITECTURAL ELEVATIONS. REFER TO SIGN SCHEDULE ON THIS SHEET FOR REQUIREMENTS.
- PROVIDE FINAL CONNECTION TO DIRECTIONAL SIGNS. COORDINATE EXACT LOCATIONS AND QUANTITY WITH SIGN INSTALLER AND GENERAL CONTRACTOR. ROUTE HOME RUN VIA PHOTOCELL WITH OVERRIDE FUNCTION. REFER TO SIGN SCHEDULE ON THIS SHEET FOR REQUIREMENTS.
- PROVIDE FINAL CONNECTION TO EXTERIOR LED STRIP LIGHTING. COORDINATE EXACT LOCATIONS AND QUANTITY WITH GENERAL CONTRACTOR AND OWNER ROUTE HOME RUN VIA LIGHTING CONTROL PANEL. REFER TO SIGN SCHEDULE ON THIS SHEET FOR REQUIREMENTS.
- PROVIDE FINAL CONNECTION TO OCB. COORDINATE EXACT LOCATIONS WITH MENU BOARD INSTALLER. GENERAL CONTRACTOR AND OWNER REFER TO SIGN SCHEDULE ON THIS SHEET FOR REQUIREMENTS.
- PROVIDE FINAL CONNECTION TO MENU BOARD VIA PHOTOCELL WITH OVERRIDE FUNCTION. COORDINATE EXACT LOCATIONS WITH MENU BOARD INSTALLER. GENERAL CONTRACTOR AND OWNER REFER TO SIGN SCHEDULE ON THIS SHEET FOR REQUIREMENTS.
- PARKING LOT NIGHT LIGHTS SHALL BE WIRED AND CONTROLLED FOR DUSK TO DAWN OPERATION. PROVIDE PHOTOCELL FOR ON-OFF SWITCHING OF THESE LIGHTS. TYPICAL.
- ENTIRE BRANCH CIRCUIT TO BE #10.
- PROVIDE 30" CONCRETE DIRECT BURIAL POLE WITH FIXTURE MOUNTED 25" ABOVE FINISHED GRADE. BURY POLE 5'-0" IN GROUND. TYPICAL.
- PROVIDE UP DISCONNECT TO LIFT STATION PER NEC. ROUTE HOMERUN TO PANEL MDP. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR. SEE MANUFACTURERS SPECIFICATIONS FOR FURTHER INFORMATION.
- OUTLET TO BE MOUNTED TO SIGN POST 24" ABOVE GRADE



This item has been electronically signed and sealed by Michael P. Spychala, P.E. on the date shown using a Digital Signature.

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Michael P.
Spychala
2022.04.15

14:25:32 -04'00'

Estimated Voltage Drop Calculator			
Input			
Load Voltage	120v		
Conductor Size	#10		
Conductor Type	Cu	Al	
Number of Sets	1		
Longest Distance (one way)	290	Feet	
Load (A)	3	A	
Output			
Unity Power Factor			85% PF
Voltage Drop (V)	2.2	V	1.9
Voltage Drop (%)	1.8	%	1.6
Voltage at Load	117.8	V	118.1
Minimum Conductor Size for 3% VD	12		
Minimum Conductor Size for 5% VD	14		

4 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

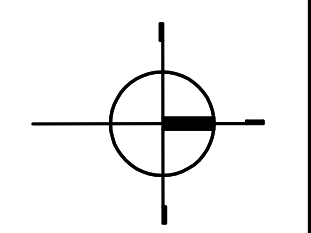
1 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

REVISIONS	BY
REV #1	4/26/21
REV #3	7/6/21

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Michael P.
Spychala P.E.
Fla PE# 31533
Fla COA# 3987

New Free Standing
Colours
US Hwy 90
Lake City, Florida
Columbia County

Date: 04.13.22
Scale: AS NOTED
Project Mgr: MPS
Drawn: TD
Job: 21-244

Sheet
ES1