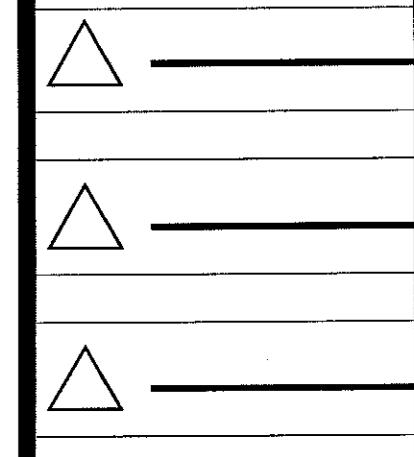


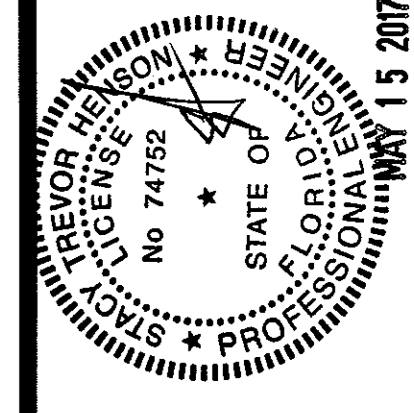
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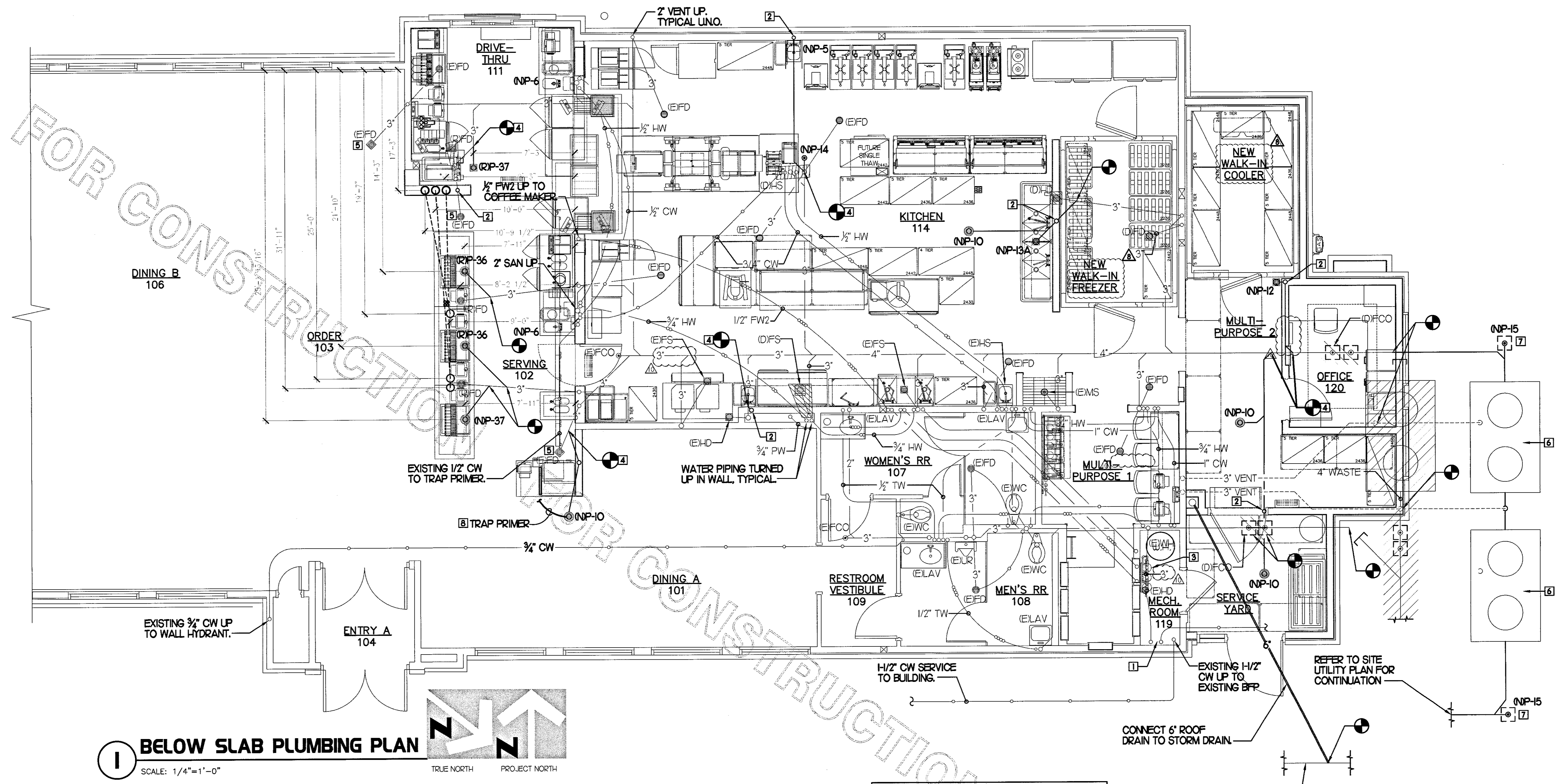
SHEET TITLE
BELOW SLAB
PLUMBING PLAN

VERSION: V7.025
ISSUE DATE: 01.2017

Job No. : 16.0439
Store : 01918
Date : 02.02.16
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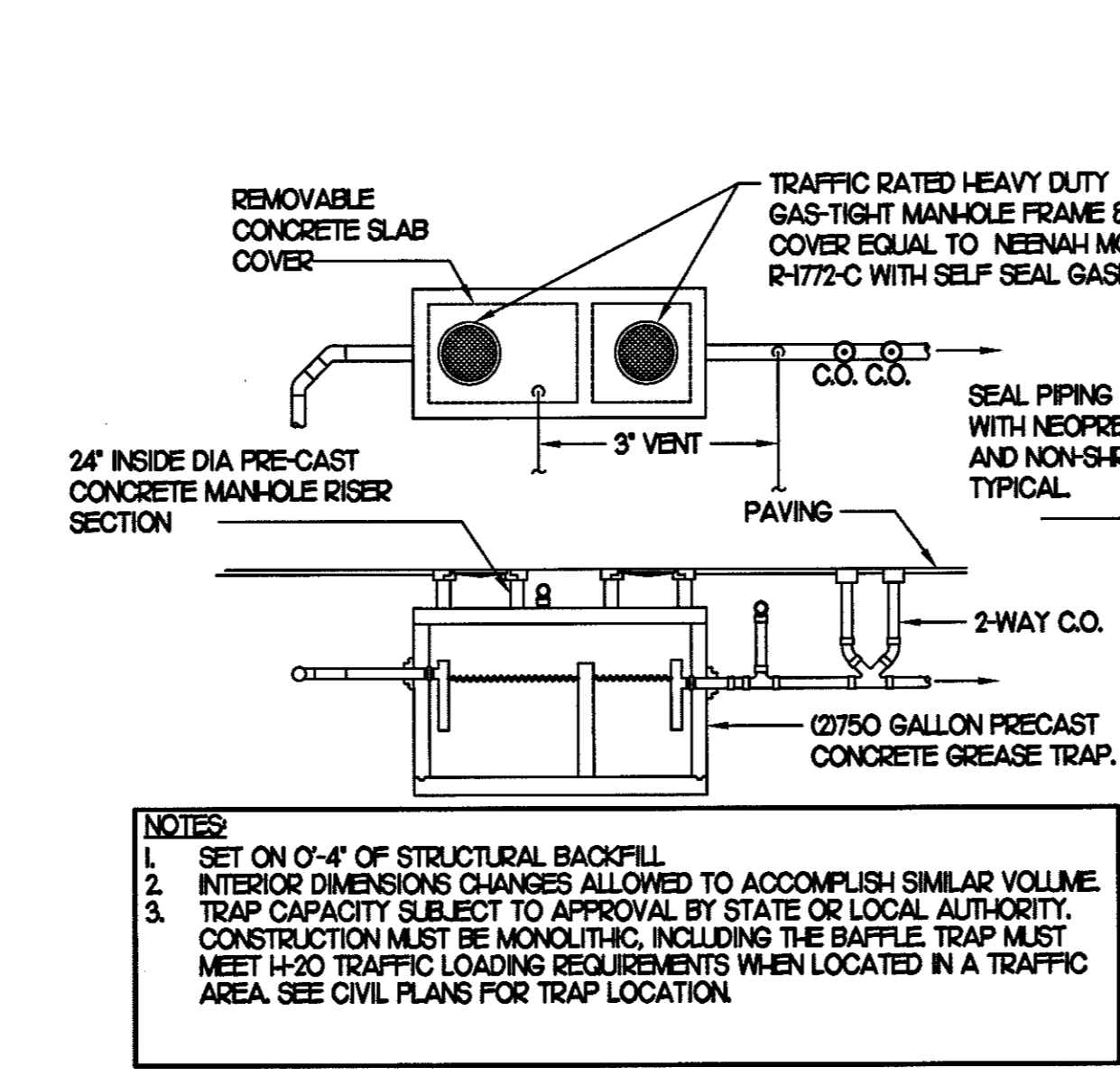
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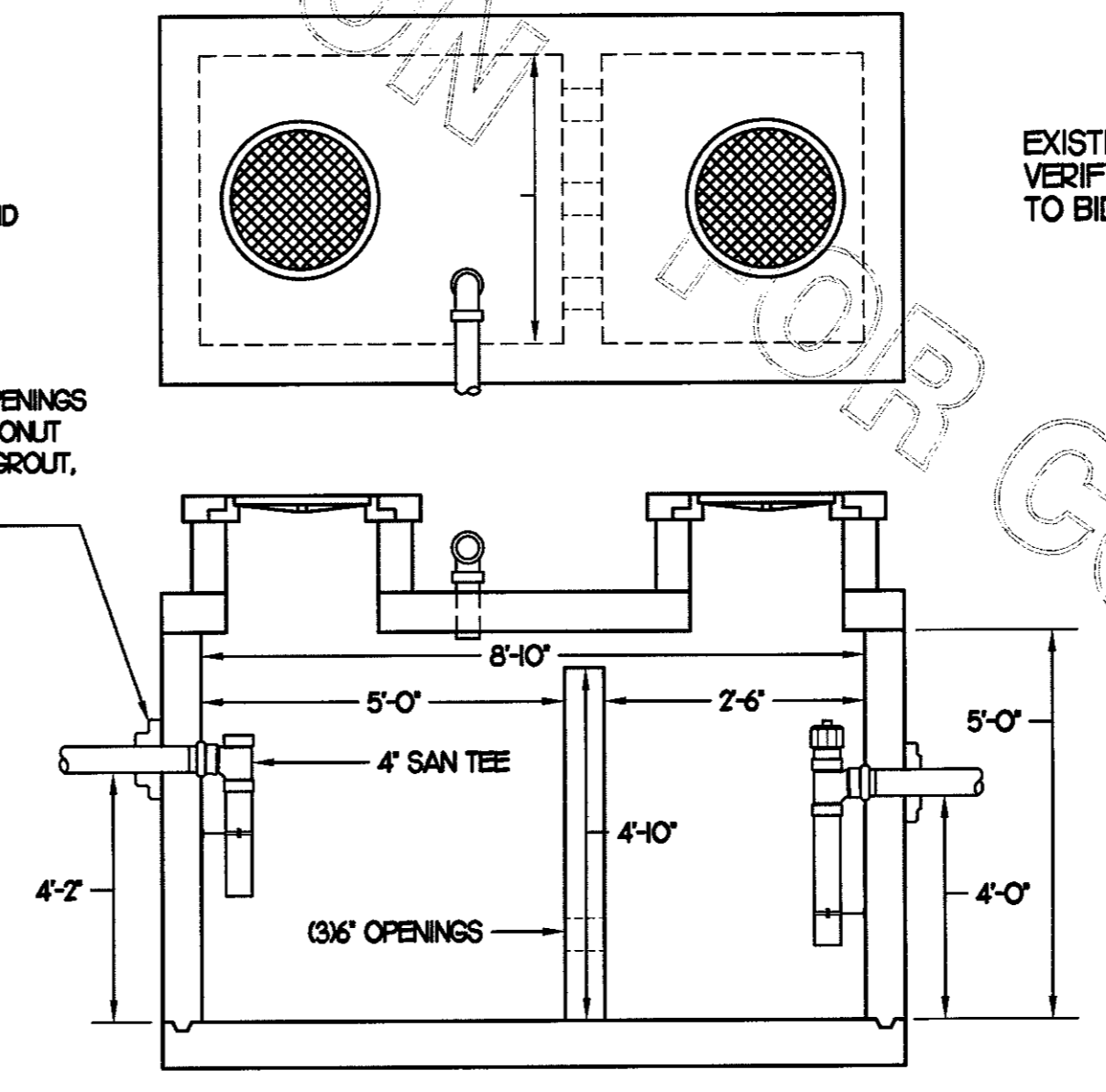
1 BELOW SLAB PLUMBING PLAN
SCALE: 1/4"=1'-0"
TRUE NORTH PROJECT NORTH

PLUMBING KEY NOTES

- 1 WATER HEATER IN MECHANICAL ROOM TO REMAIN.
- 2 PROVIDE NEW 2" VENT IN WALL.
- 3 PROVIDE NEW T-1 WATER FILTER. SEE DETAIL ON P21.
- 4 CONNECT TO EXIST. WASTE LINE AS INDICATED, VERIFY FALL, FLOW DIRECTION AND CONNECTING INVERTS.
- 5 GENERAL CONTRACTOR TO CHECK EXISTING FLOOR DRAIN FOR PROPER CONNECTION TO AND FUNCTION OF EXISTING TRAP PRIMER AND TRAP PRIMER CONNECTING VALVE. IF PROPER WORKING CONDITIONS ARE NOT MET, OWNER TO PROVIDE NEW SNAKE DRAIN TO REMOVE ANY EXISTING BLOCKAGES RESPONSIBLE FOR BACKUP/ODOR ISSUES.
- 6 NEW 0750 GALLON GREASE TRAPS. REFER TO SITE UTILITY PLAN SHEET FOR EXACT SIZE AND LOCATION.
- 7 4" CO, P-15. SEE DETAIL 2/P11.
- 8 NEW 1/2" CW UP TO EXISTING TRAP PRIMER. SEE ISOMETRIC ON DWG P51. LOCATE PRIMER AND DISTRIBUTION UNIT AT BACK WALL OF CABINET.

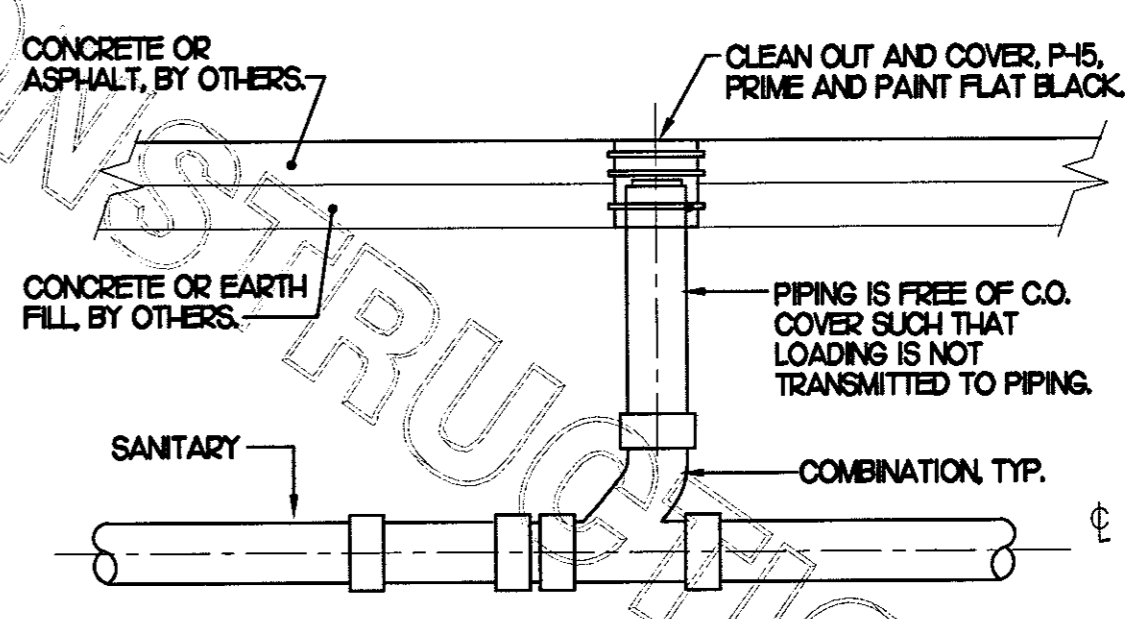


3 GREASE INTERCEPTOR
SCALE: NONE



2 SAN. C.O. OUTSIDE BUILDING
SCALE: NONE

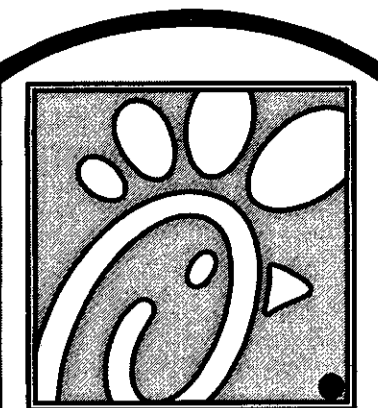
EXISTING STORM DRAIN. FIELD VERIFY EXACT LOCATION PRIOR TO BID AND CONSTRUCTION.



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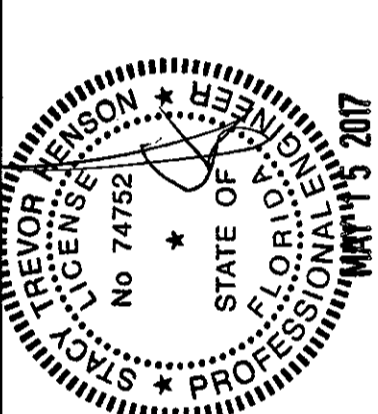
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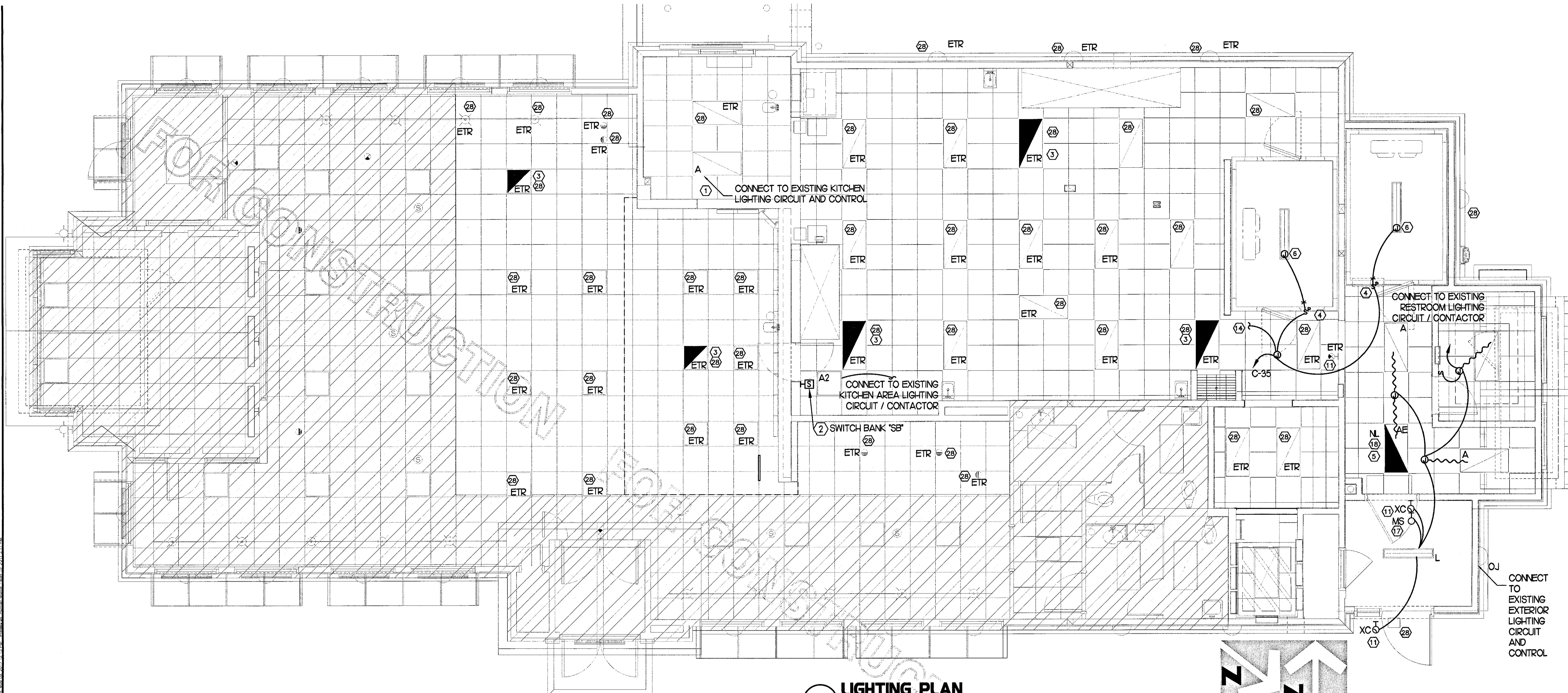
SHEET TITLE
LIGHTING
PLAN

VERSION: V7.025
ISSUE DATE: 01.2017

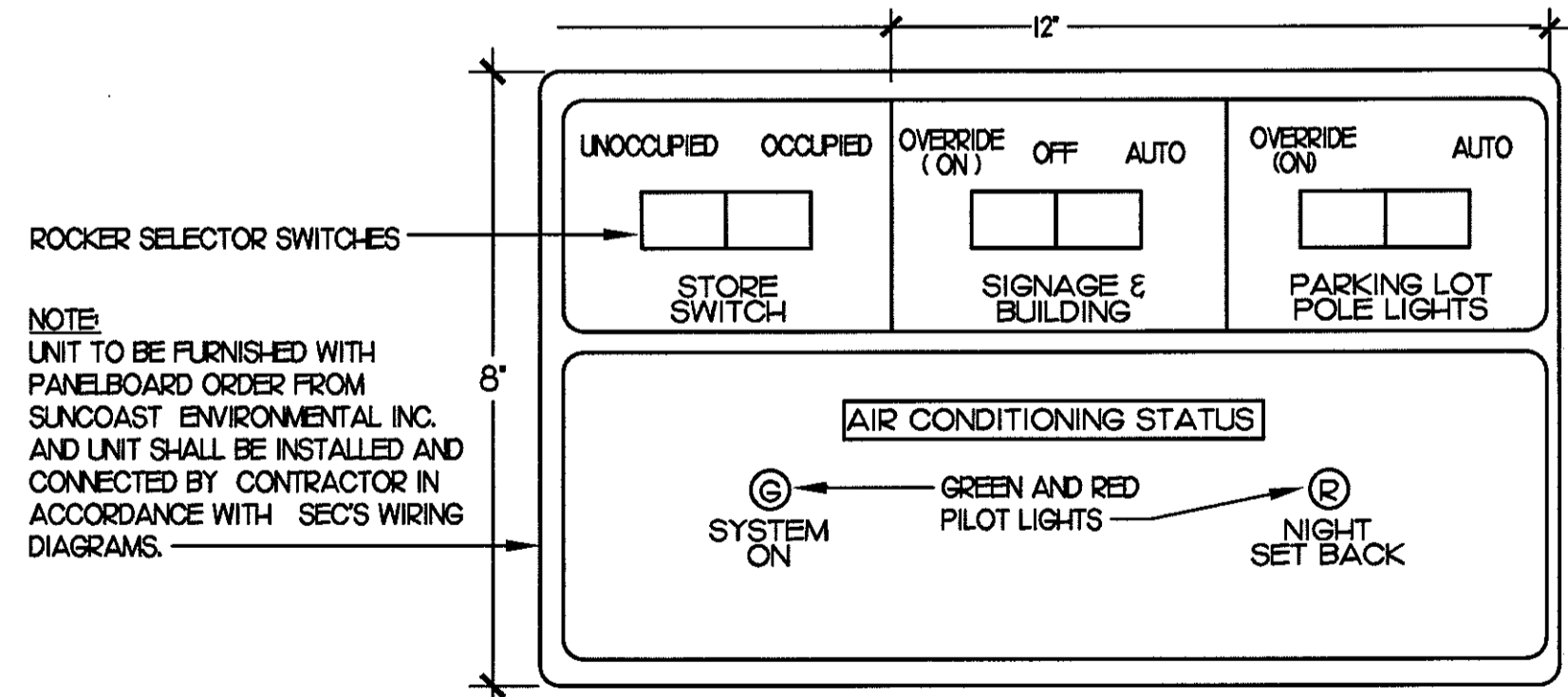
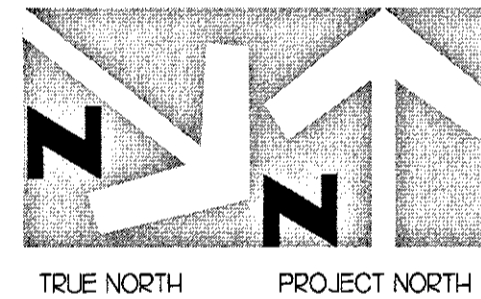
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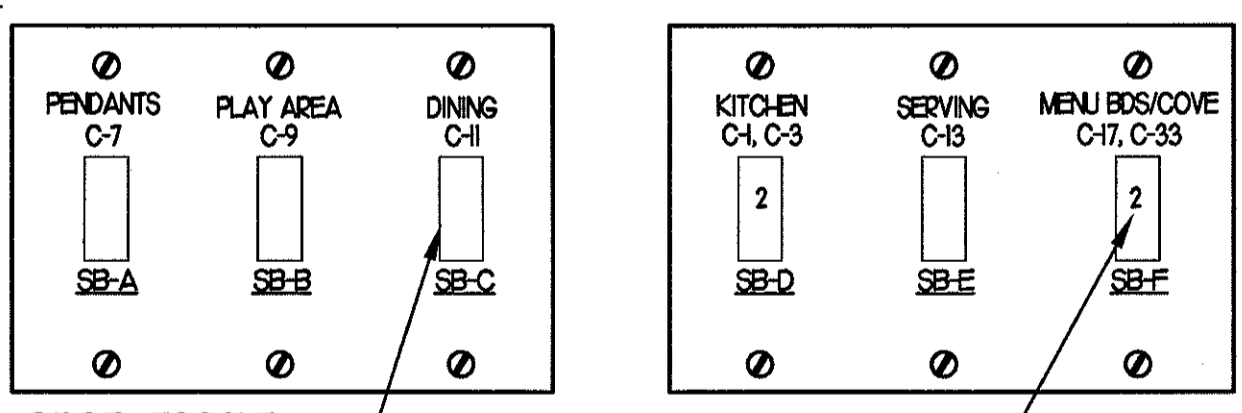
E2.I



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



3 STORE OPEN-CLOSE CONTROL SWITCH UNIT
NO SCALE

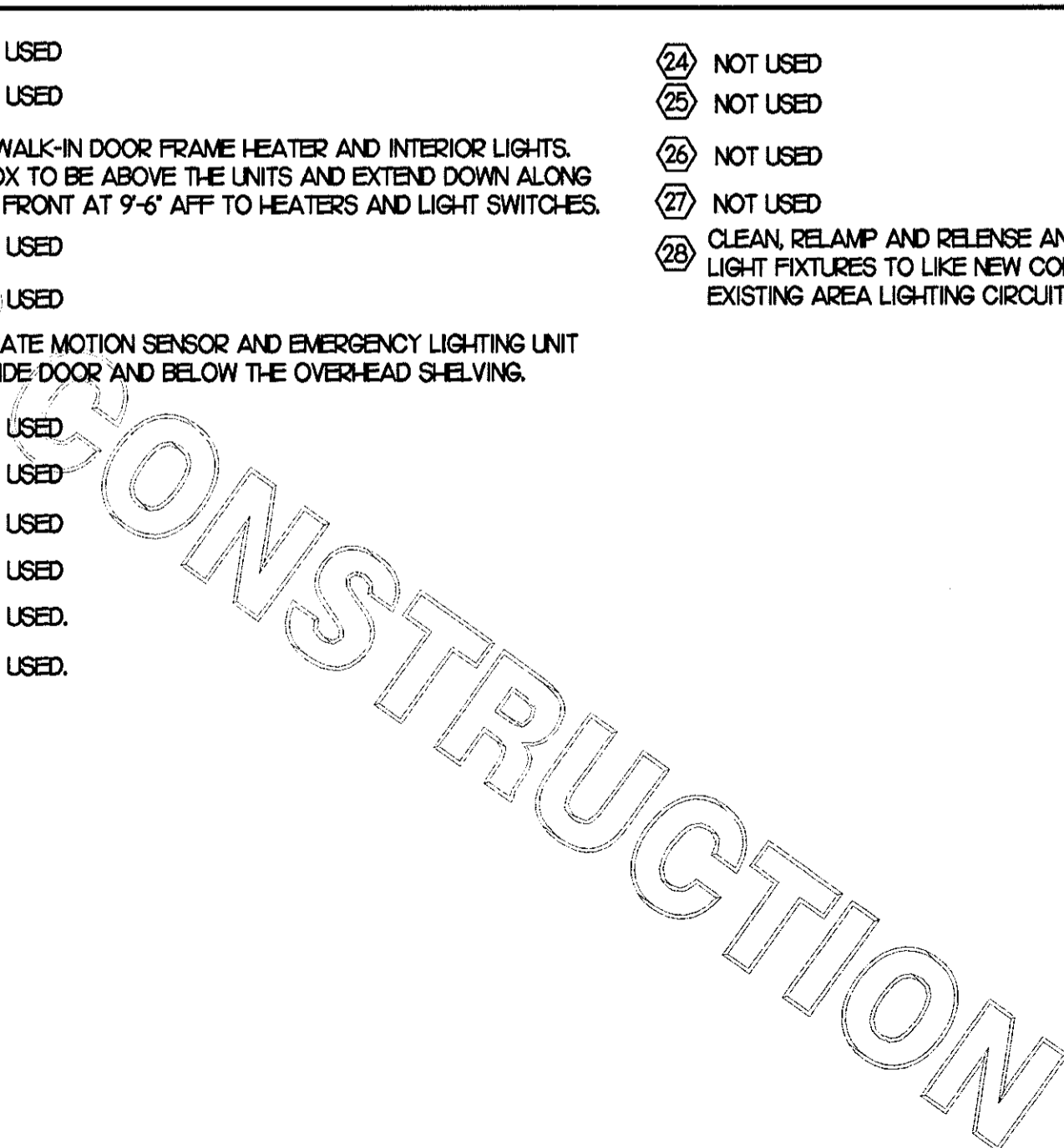


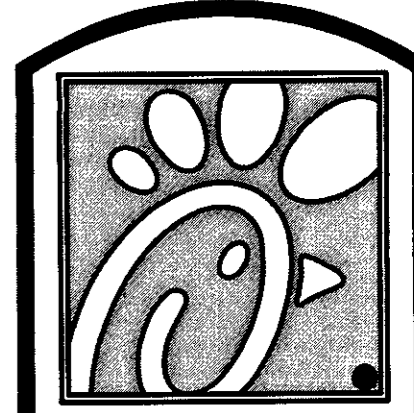
NOTE: LOCATE JUNCTION BOXES IN CEILING SPACE ABOVE THE LOCATION OF THE SWITCHBANK FOR SPLICING OF LINE, LOAD, AND SWITCHED CONDUCTORS. PROVIDE GANGED BACKBOX FOR SWITCHES AS REQUIRED AND LABEL ALL CONDUCTORS SO AS TO INDICATE THEIR USE (LINE, LOAD, SWITCH), THE LOAD SERVED, AND THE CIRCUIT NUMBER.

4 SWITCH BANK "SB" DETAIL
NO SCALE

5 KEYNOTES (APPLY TO THIS SHEET ONLY)

- (1) ROUTE THROUGH CONTROL PANEL T-500' CONTROLLED BY STORE OCCUPIED SWITCH.
- (2) APPROXIMATE LOCATION OF SWITCH BANK 'SB'. SEE DETAIL #4 THIS SHEET FOR MORE INFORMATION.
- (3) ASSUMED LOCATION OF EXISTING BATTERY BACKUP FIXTURE E.C. SHALL FIELD VERIFY IF FIXTURE EXISTING AND REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO BID AND PROVIDE NEW AS NEEDED.
- (4) FOR CONTROL OF LIGHTING FIXTURE IN WALK-IN COOLER/FREEZER, FURNISHED WITH EQUIPMENT, INSTALLED BY ELECTRICAL CONTRACTOR.
- (5) NOT USED.
- (6) FOR CONNECTION TO LIGHTING FIXTURES IN THE WALK-IN COOLER AND WALK-IN FREEZER WHICH ARE FURNISHED WITH EQUIPMENT. CONTRACTOR SHALL ROUGH-IN AND CONNECT ALL FIXTURES AS REQUIRED BY THE EQUIPMENT MANUFACTURER. PROVIDE FLUORESCENT LAMPS TYPE AS REQUIRED BY EQUIPMENT MANUFACTURER.
- (7) NOT USED.
- (8) NOT USED.
- (9) NOT USED.
- (10) NOT USED.
- (11) CONNECT FIXTURE TO CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS. THIS FIXTURE SHALL NOT BE SWITCHED.
- (12) NOT USED.
- (13) NOT USED.
- (14) TO WALK-IN DOOR FRAME HEATER AND INTERIOR LIGHTS. J-BOX TO BE ABOVE THE UNITS AND EXTEND DOWN ALONG THE FRONT AT 9'-6" AFF TO HEATERS AND LIGHT SWITCHES.
- (15) NOT USED.
- (16) NOT USED.
- (17) LOCATE MOTION SENSOR AND EMERGENCY LIGHTING UNIT BESIDE DOOR AND BELOW THE OVER-HEAD SHELVING.
- (18) NOT USED.
- (19) NOT USED.
- (20) NOT USED.
- (21) NOT USED.
- (22) NOT USED.
- (23) NOT USED.
- (24) NOT USED.
- (25) NOT USED.
- (26) NOT USED.
- (27) NOT USED.
- (28) CLEAN, RELAMP AND RELEASE ANY RELOCATED / EXISTING LIGHT FIXTURES TO LIKE NEW CONDITION, RECONNECT TO EXISTING AREA LIGHTING CIRCUIT AND CONTROL.





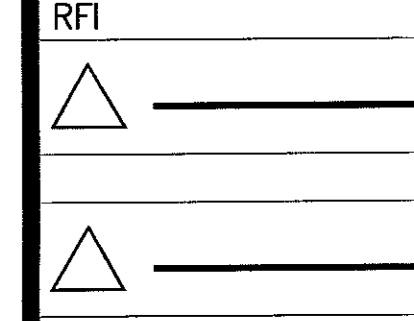
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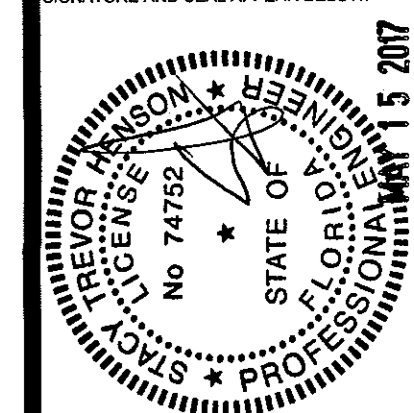
Revisions:

Mark	Date	By
6	04/14/17	MI
BID CLARIFICATION		
9	05/15/17	MI
ELECTRICAL		
RFI		

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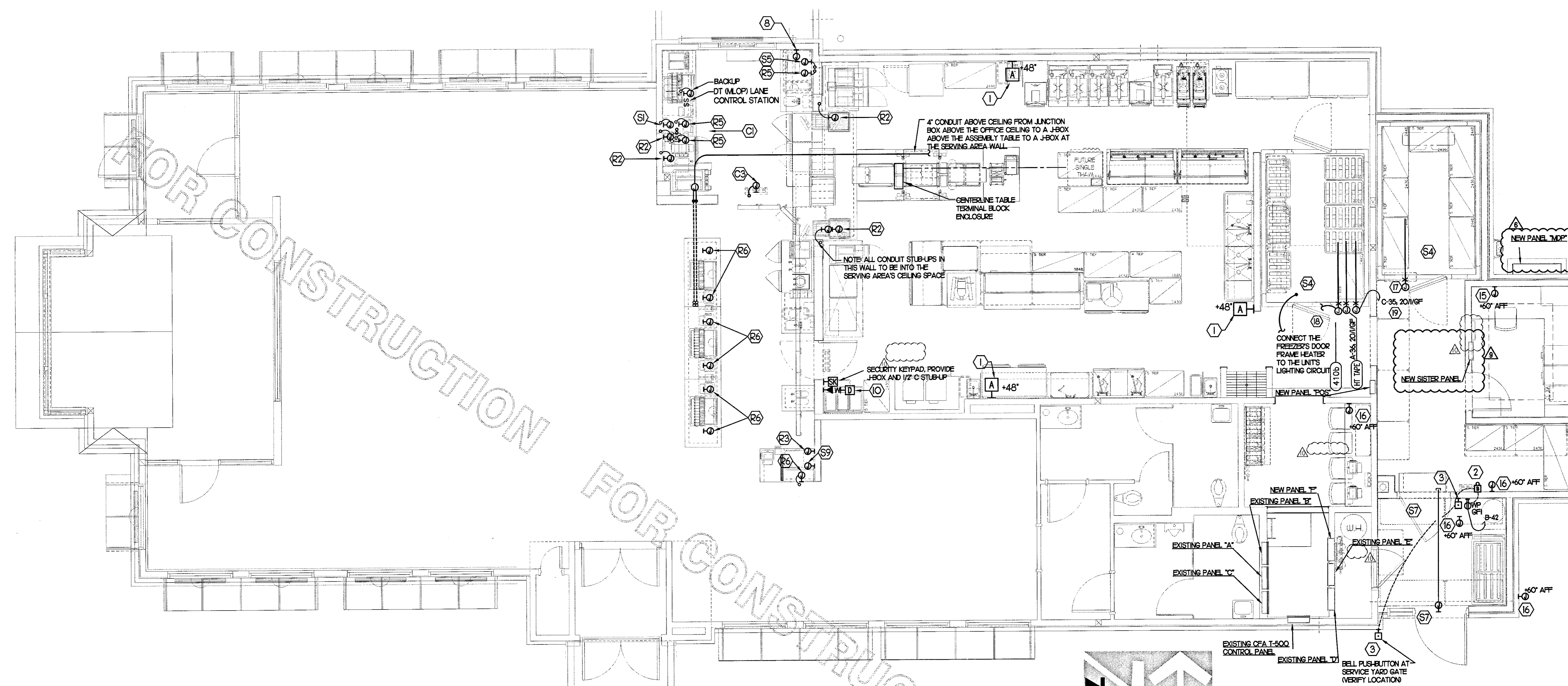
SHEET TITLE
POWER & SYSTEMS
PLAN & NOTES

VERSION: V7.025
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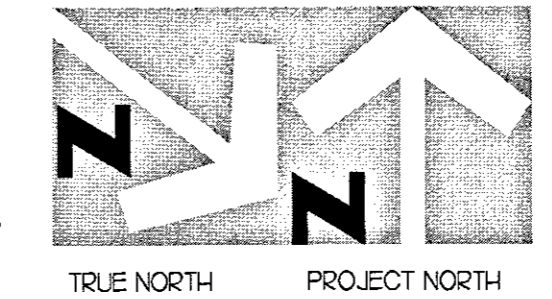
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E2.2



1 POWER & SYSTEM PLAN

SCALE: 1/4" = 1'-0"



2 KEY NOTES - POWER:

- 1 PROVIDE 2 GANG DEEP BOX (2" MIN) FOR ANSUL PULL STATION. EXTEND 1/2" CONDUIT FROM BOX, STUBBED ABOVE CEILING.
- 2 PROVIDE EDWARDS #340-4N5 VIBRATING 4" DIAMETER BELL. BELL SHALL BE RATED AT 120 VOLTS.
- 3 PROVIDE 120 VOLT WEATHERPROOF DOORBELL. PUSH-BUTTON AT DOOR. PUSH-BUTTON SHALL BE FLUSH MOUNTED. PROVIDE DORTRONICS SYSTEMS #N5286-P25 CLEAR ANODIZED ALUMINUM PUSH-BUTTON WITH SINGLE GANG SWITCH-PLATE.
- 4 NOT USED
- 5 NOT USED
- 6 NOT USED
- 7 NOT USED
- 8 JUNCTION BOX WITH 3/4" CONDUIT STUB-UP INTO THE CEILING SPACE FOR OWNER'S AI-PHONE INTERCOM FOR THE MLOP ORDERING CONTROL STATION. PROVIDE BLANK PLATE IF BLDG IS SINGLE LANE DRIVE-THRU.
- 9 NOT USED
- 10 PROVIDE 2 GANG DEEP BOX (2" MIN) FOR EACH DUCT SMOKE DETECTOR INDICATED ON THE MECHANICAL DRAWINGS. FOR INSTALLATION OF DUCT DETECTOR REMOTE ANNUNCIATORS BY MECHANICAL. THE DUCT SMOKE REMOTE ANNUNCIATORS ARE PROVIDED TO THE ELECTRICIAN WITH THE SUNCOAST ELECTRONICS PACKAGE OF GEAR AND CONTROLS. EXTEND 1/2" CONDUIT FROM EACH BOX AND STUB ABOVE CEILING.
- 11 NOT USED
- 12 NOT USED
- 13 NOT USED
- 14 NOT USED
- 15 PROVIDE CO2 CENTRAL CONTROL UNIT MOUNTED AT 60" AFF. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE-GANG J-BOX WITH 1/2" CONDUIT EXTENDED TO ABOVE ACCESSIBLE CEILING SPACE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODE. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS PRIOR TO BID AND CONSTRUCTION.
- 16 PROVIDE CO2 ANNUNCIATOR MOUNTED AT 60" AFF. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE-GANG J-BOX WITH 1/2" CONDUIT EXTENDED TO ABOVE ACCESSIBLE CEILING SPACE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODE. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS PRIOR TO BID AND CONSTRUCTION.
- 17 CONNECT EVAPORATOR UNIT IN COOLER TO COOLER CONDENSING UNIT CONTROLS LOCATED ON ROOF. SEE SHEET E2.3.
- 18 CONNECT EVAPORATOR UNIT IN FREEZER TO FREEZER CONDENSING UNIT CONTROLS LOCATED ON ROOF. SEE SHEET E2.3.
- 19 FACTORY PROVIDED JUNCTION BOX FOR WALK-IN FREEZER PRESSURE RELIEF. ELECTRICAL CONTRACTOR TO PROVIDE FIELD WIRING FROM UNSWITCHED LEG OF LIGHTING CIRCUIT SERVING WALK-IN FREEZER FIXTURES TO JUNCTION BOX.

3 KEY NOTES - SECURITY:

- 51 PROVIDE SINGLE GANG JUNCTION BOX AND STAINLESS STEEL COVER PLATE WITH 7/8" HOLE IN CENTER. EXTEND 1" E.C. UP IN WALL TO ABOVE ACCESSIBLE CEILING.
- 52 PROVIDE 4"W X 4"H X 3"D FLUSH JUNCTION BOX WITHOUT COVERPLATE. EXTEND 2" RIGID CONDUIT UP TO ABOVE ACCESSIBLE OFFICE CEILING AREA. PROVIDE BUSHING ON CONDUIT. CONNECT NOTE JUNCTION BOX TO NOTE JUNCTION BOX VIA 1/2" RIGID CONDUIT.
- 53 PROVIDE 4"W X 4"H X 3"D JUNCTION BOX WITHOUT COVERPLATE. EXTEND 2" RIGID E.C. UP TO ABOVE ACCESSIBLE OFFICE CEILING AREA. PROVIDE SINGLE-GANG J-BOX ADJACENT WITH 2" RIGID E.C. DOWN THROUGH SLAB AND BELOW GRADE TO REMOTE CAMERA LOCATION. USE ONLY LONG SWEEPS, 3 FEET PER 90 DEGREES. SEE ELECTRICAL SITE PLAN FOR CONTINUATION.
- 54 PROVIDE TWO GANG WEATHERPROOF JUNCTION BOX AND STAINLESS STEEL PLATE WITH 7/8" HOLE IN CENTER FOR PANIC BUTTON. MOUNT AT APPROXIMATELY 48" AFF. EXTEND 1/2" RIGID CONDUIT OVER TO THE WALL AND THEN UP TO ABOVE ACCESSIBLE CEILING. SEAL PENETRATION AT WIC/WIF CEILING.
- 55 PROVIDE SINGLE GANG BOX WITHOUT COVER PLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING AND TURN TOWARD SERVING AREA SIDE OF WALL.
- 56 PROVIDE SINGLE GANG JUNCTION BOX ON INSIDE FACE OF PARAPET WALL. APPROX. 12" BELOW TOP OF PARAPET WALL. EXTEND 1/2" CONDUIT DOWN TO ABOVE ACCESSIBLE OFFICE CEILING.
- 57 EXTEND 1/2" RIGID CONDUIT FROM TOP OF STRIKE-SIDE DOOR FRAME CHANNEL TO ABOVE ACCESSIBLE CEILING.
- 58 EXTEND 1/2" RIGID CONDUIT FROM A POINT 3" WITHIN EITHER HINGE-SIDE DOOR VERTICAL FRAME MULLION TO ABOVE ACCESSIBLE CEILING.
- 59 PROVIDE SINGLE GANG JUNCTION BOX WITHOUT COVERPLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING AND TURN TOWARD SERVING AREA SIDE OF WALL.
- 60 PROVIDE SINGLE GANG, WEATHER-PROOF JUNCTION BOX WITH STAINLESS STEEL COVER PLATE MOUNTED 18" FROM THE CORNER OF THE SERVICE YARD AND JUST BELOW ROOF DECK MOUNTING BRACKETS. ROUTE 1" EMT CONDUIT FROM THE BOX. SURFACE MOUNTED JUST BELOW THE ROOF DECK MOUNTING BRACKETS AND TERMINATE THE CONDUIT AT
- 61 NOT USED
- 62 PROVIDE SINGLE GANG, WEATHER-PROOF JUNCTION BOX WITH STAINLESS STEEL COVER PLATE MOUNTED JUST ABOVE THE STRIKE SIDE OF OUTSIDE DOOR ON INSIDE OF SERVICE YARD. ROUTE 1" EMT CONDUIT SURFACE MOUNTED FROM BOX JUST BELOW THE ROOF DECK MOUNTING BRACKETS. TERMINATE CONDUIT IN THE ACCESSIBLE CEILING SPACE INSIDE THE BUILDING.
- 63 NOT USED
- 64 PROVIDE JUNCTION BOX ON THE LATCH SIDE OF THE ROOF ACCESS HATCH WITH 1/2" C ABOVE THE CLG TO THE OFFICE CEILING SPACE FOR A DOOR CONTACT.

4 GENERAL NOTES:

1. ALL SECURITY, POS, MUSIC, COMMUNICATIONS, AND POWER ROUGH-IN SHALL BE INSTALLED DURING THE FRAMING/ROUGH-IN PHASE OF CONSTRUCTION.
2. REFER TO KITCHEN EQUIPMENT SHEETS FOR EQUIPMENT ELECTRICAL ROUGH-IN ELEVATIONS ABOVE FINISHED FLOOR.
3. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING.
4. PROVIDE INSULATED BUSHINGS AT TERMINATION POINTS OF ALL CONDUITS FOR LOW VOLTAGE WIRING.
5. THE ELECTRICAL INSTALLER SHALL COORDINATE THE ROUTING OF ALL CONDUIT IN THE BUILDING WITH OTHER TRADES (SPECIFICALLY THE DUCTWORK INSTALLATION) TO AVOID CONFLICTS OF SPACE REQUIREMENTS IN WALLS AND CEILING SPACES.

5 KEY NOTES - COMMUNICATIONS:

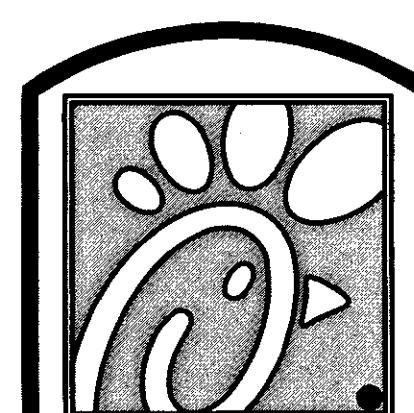
- 61 PROVIDE DOUBLE-GANG RING (CARLON #SC200RR) WITH STAINLESS STEEL COVER PLATE AND HOLE IN PLATE FOR AUDIO WITH 2" CONDUIT UNDERGROUND TO THE DT DUAL-LANE (MLOP) ORDERING AREA AND A 2" CONDUIT STUBBED UP INTO THE CEILING SPACE.
- 62 PROVIDE JUNCTION BOX, LESS COVER PLATE, AND EXTEND 3/4" E.C. UP IN WALL TO ABOVE CEILING FOR INSTALLATION OF WIRELESS COMMUNICATION CONTROL UNIT.
- 63 PROVIDE TWO DOUBLE-GANG RINGS (CARLON #SC200RR) WITH STAINLESS STEEL COVER PLATE AND HOLE IN PLATE FOR AUDIO WITH 2" CONDUIT STUBBED UP INTO THE CEILING SPACE. ONE RING SHALL BE ABOVE THE COUNTER AND ONE BELOW WITH A 2" CONDUIT BETWEEN THE RINGS.
- 64 NOT USED.

6 KEY NOTES - MUSIC:

- M1 PROVIDE JUNCTION BOX WITH STAINLESS STEEL COVER PLATE AND 3/4" HOLE IN PLATE WITH GROMMET ON HOLE IN PLATE. EXTEND 3/4" E.C. UP IN WALL TO ABOVE CEILING FOR MUSIC SYSTEM.
- M2 PROVIDE JUNCTION BOX WITH STAINLESS STEEL COVER PLATE AND 3/4" HOLE IN PLATE WITH GROMMET ON HOLE IN PLATE. EXTEND 3/4" E.C. UP IN WALL TO PARAPET WALL FOR THE SATELLITE DISH.
- M3 PROVIDE THREE SINGLE GANG EXTRA DEEP J-BOXES AT 74" AFF WITH 1/2" CONDUIT FROM EACH TO THE CENTER BOX AND A 1" CONDUIT STUBBED INTO THE CEILING SPACE FOR MUSIC SYSTEM VOLUME CONTROLS.
- M4 PROVIDE A SINGLE GANG EXTRA DEEP JUNCTION BOX AT 74" AFF WITH 1/2" CONDUIT STUBBED INTO THE CEILING SPACE FOR MUSIC SYSTEM VOLUME CONTROLS.

7 KEY NOTES - POS SYSTEM:

- R1 PROVIDE A RETROFIT DOUBLE-GANG RING (CARLON #SC200RR) FOR OWNER'S DEVICE PLATE WITH A 3" EMPTY CONDUIT AT THE OPENING IN THE WALL UP TO THE CEILING SPACE FOR OWNER'S DATA CABLES.
- R2 PROVIDE JUNCTION BOX FOR TERMINATION OF 1" CONDUIT. PROVIDE 1" CONDUIT EXTENDING FROM CEILING AND TERMINATED AT JUNCTION BOX ON THE SERVING AREA SIDE OF THE WALL. COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR.
- R3 PROVIDE A 2" CONDUIT FROM FACE OF WALL AND EXTEND CONDUIT TO JUNCTION BOX IN CEILING SPACE ABOVE SERVING AREA. CONDUIT SHALL TERMINATE FLUSH WITH FACE OF WALL BELOW COUNTER. CUSTOM STAINLESS STEEL COVER PLATE IN WALL WITH GROMMET ON 2" DIAMETER HOLE AT CONDUIT TERMINATION IN WALL.
- R4 PROVIDE A RETROFIT SINGLE GANG RING (CARLON #SC100RR) FOR OWNER'S DEVICE PLATE WITH A 2" EMPTY CONDUIT AT THE OPENING IN THE WALL UP TO THE CEILING SPACE FOR OWNER'S DATA CABLES.
- R5 PROVIDE JUNCTION BOX FOR TERMINATION OF 1" CONDUIT. PROVIDE 1" CONDUIT EXTENDING FROM CEILING AND TERMINATED AT JUNCTION BOX ON THE SERVING AREA SIDE OF THE WALL. POS SYSTEM SUPPLIER WILL PROVIDE COVER PLATE ON BOX.
- R6 PROVIDE SINGLE GANG EXTRA DEEP JUNCTION BOX MOUNTED ON THE MOUNTING PLATE WITHIN THE FRONT SERVING COUNTER CASEWORK. MOUNT BOX ADJACENT TO THE RECEPTACLE FOR EQUIPMENT 201. DO NOT MOUNT BOX BETWEEN EQUIPMENT 201 AND EQUIPMENT 204 RECEPTABLES.



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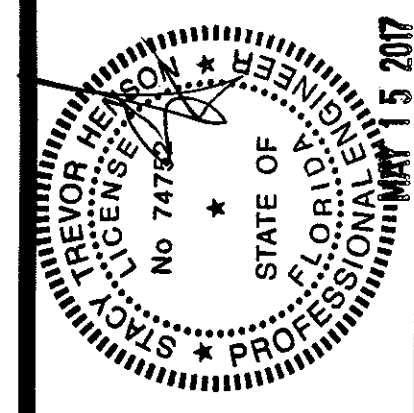
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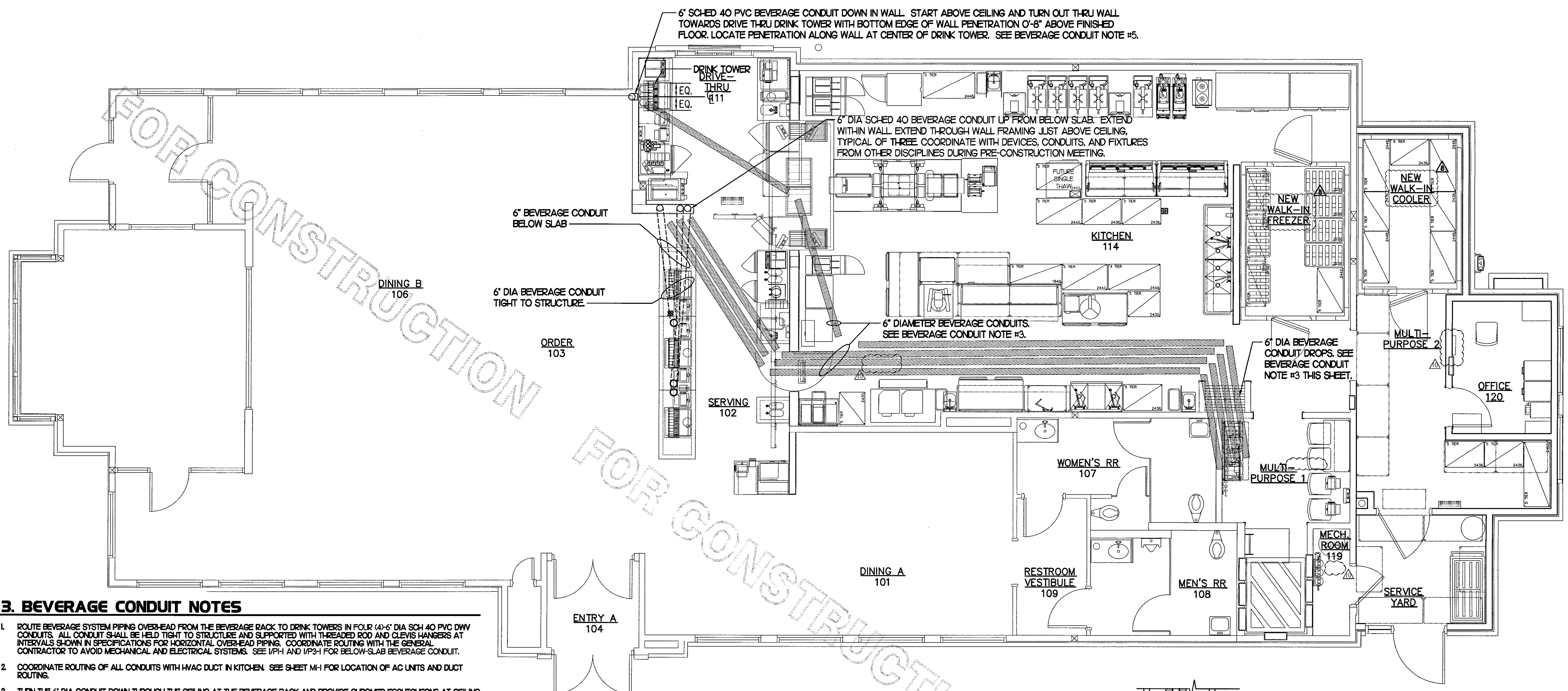
SHEET TITLE
PLUMBING DETAILS
& BEVERAGE
CONDUIT

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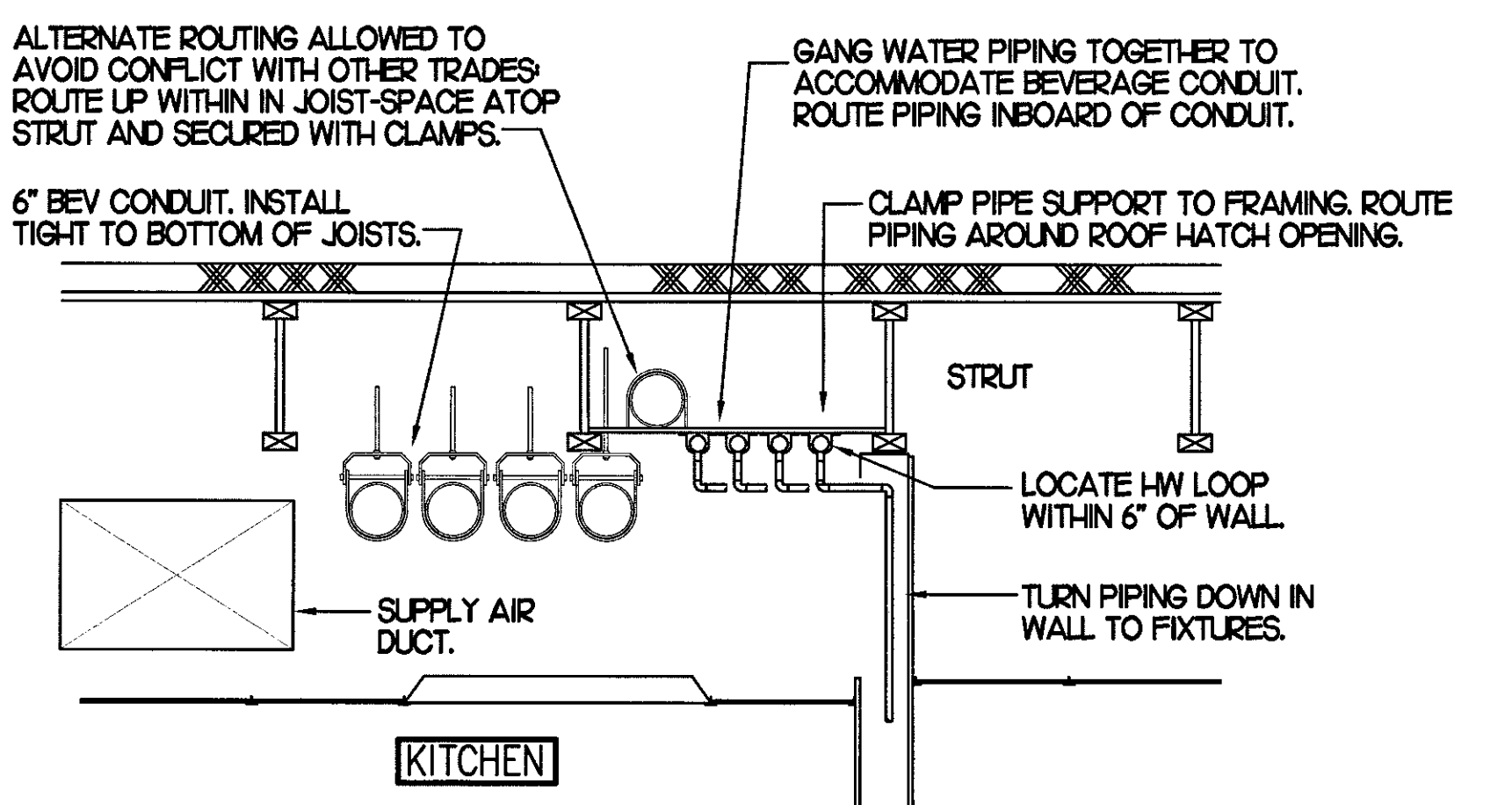
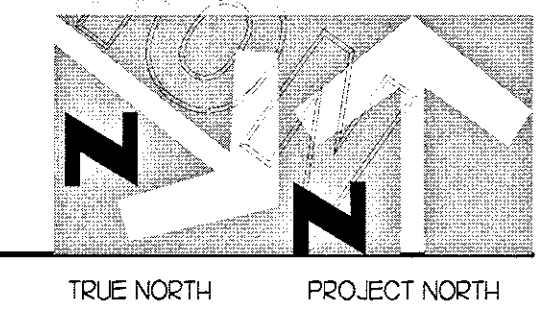


3. BEVERAGE CONDUIT NOTES

- ROUTE BEVERAGE SYSTEM PIPING OVER-HEAD FROM THE BEVERAGE RACK TO DRINK TOWERS IN FOUR (4)-6" DIA SCH 40 PVC DWV CONDUITS. ALL CONDUIT SHALL BE HELD TIGHT TO STRUCTURE AND SUPPORTED WITH THREADED ROD AND CLEVIS HANGERS AT INTERVALS SHOWN IN SPECIFICATIONS FOR HORIZONTAL OVER-HEAD PIPING. COORDINATE ROUTING WITH THE GENERAL CONTRACTOR TO AVOID MECHANICAL AND ELECTRICAL SYSTEMS. SEE 1/PH AND 1/P3-1 FOR BELOW-SLAB BEVERAGE CONDUIT.
- COORDINATE ROUTING OF ALL CONDUITS WITH HVAC DUCT IN KITCHEN. SEE SHEET M-1 FOR LOCATION OF AC UNITS AND DUCT ROUTING.
- TURN THE 6" DIA CONDUIT DOWN THROUGH THE CEILING AT THE BEVERAGE RACK AND PROVIDE CHROMED ESCUTCHEONS AT CEILING PENETRATIONS. TERMINATE OPPOSITE END ABOVE CEILING WHERE SHOWN ON PLANS.
- COORDINATE ROUTING OF REMOTE FILL LINE AND LOCATION OF EXTERIOR WALL MOUNTED FILL-BOX WITH COMPRESSED GAS VENDOR DURING CONSTRUCTION.
- AT 6" DIA CONDUIT DROP IN DRIVE-THRU PROVIDE 1/8TH BEND FITTING WITH SHORT PIPE STUB AT BASE OF DROP. CUT STUB AND FITTING FLUSH WITH FINISHED WALL.
- FOR BEVERAGE CONDUIT DROPS AT WALLS WITH SHEATHING EXTENDED ABOVE THE CEILING, PROVIDE APPROPRIATE FITTING TO AT UPPER END OF CONDUIT DROP TO EXTEND CONDUIT THROUGH SHEATHING.

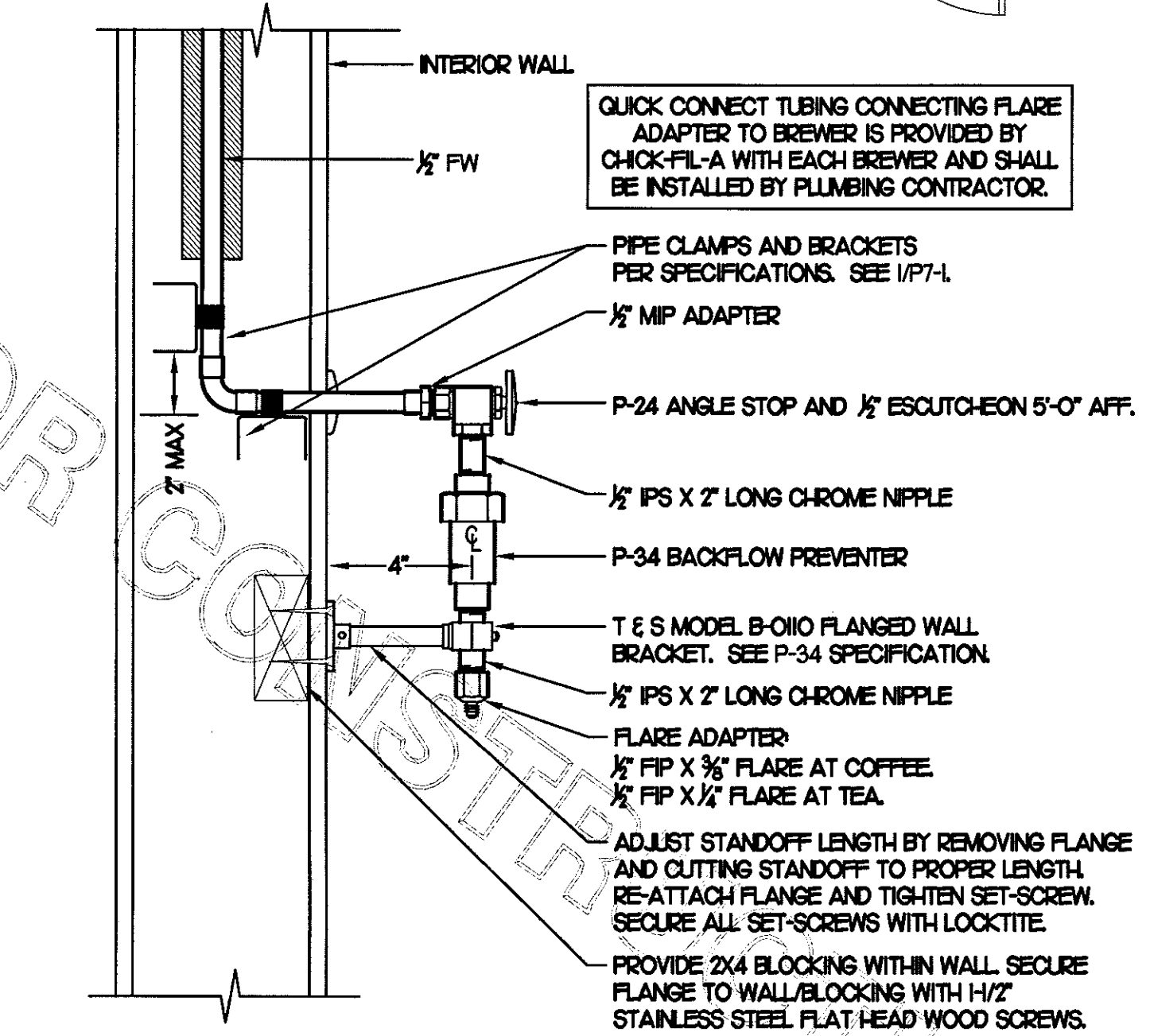
1 BEVERAGE CONDUIT PLAN

1/4"=1'-0"



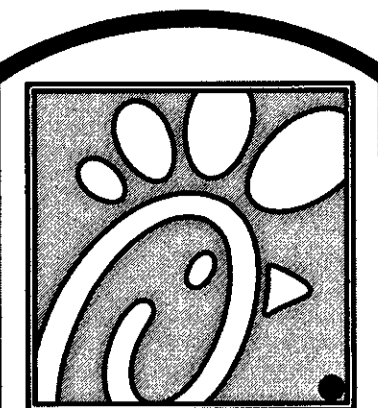
3 SECTION AT WET WALL

1/4"=1'-0"



2 COFFEE & TEA BREWER STOP & BFP

SCALE: NONE



Chick-fil-A

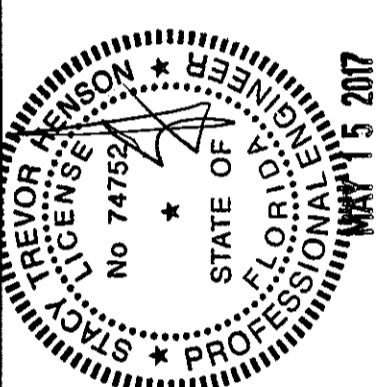
5200 Buffington Rd.
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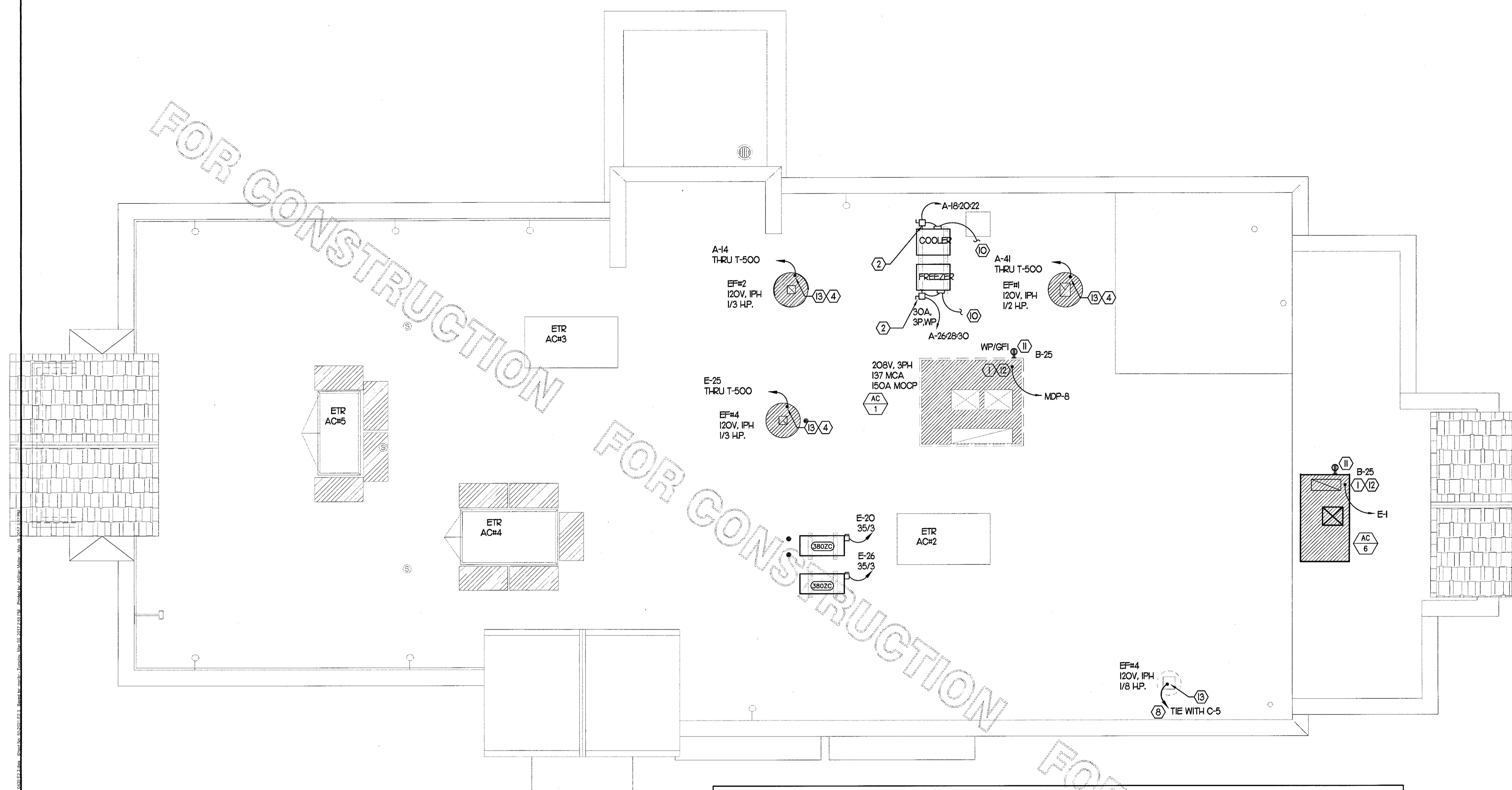
SHEET TITLE
ROOF ELECT.
PLAN

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Job No. : 16.0439
Store : 01918
Date : 02.02.16
Drawn By : MI
Checked By: SN

Sheet

E2.3



1 ROOF ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

3 KEY NOTES - ROOF ELECTRICAL PLAN:

- ① ROUTE ELECTRICAL CONDUITS TO UNIT CONNECTIONS THROUGH WEATHERPROOF RACEWAY FURNISHED WITH UNIT. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATIONS.
- ② MOUNT DISCONNECT SWITCHES FOR W/C AND W/F CONDENSERS ON UNISTRUT WITH CONDUIT DOWN INTO CEILING SPACE BELOW THRU ROOF PENETRATION DEVICE (NOT THRU ROOF). SEE SHEET A-17. PROVIDE FUSE SIZE PER MANUFACTURER REQUIREMENTS.
- ③ NOT USED.
- ④ COORDINATE EXACT LOCATION OF CONDUIT AND DISCONNECT AT EXHAUST FAN. CONDUIT SHALL BE INSTALLED THROUGH ROOF ON OUTSIDE OF FAN CURB. CONDUIT SHALL BE LOCATED AT FAN HINGE SUCH THAT THE FAN HOOD CAN BE FULLY HINGED OPEN AND NOT TOUCH THE CONDUIT. PROVIDE 1/4" DIAMETER LOOP IN THE FLEXIBLE CONDUIT BETWEEN THE ROOF AND THE FAN ELECTRICAL CONNECTION.
- ⑤ NOT USED.
- ⑥ NOT USED.
- ⑦ NOT USED.
- ⑧ COORDINATE EXACT LOCATION OF CONDUIT AND DISCONNECT AT EXHAUST FAN. CONDUIT SHALL BE ROUTED THROUGH DUCTWORK, WITHIN FAN ROOF CURB, AND TO THE FAN WIREWAY. PROVIDE SEALTIGHT FITTINGS AS THE CONDUIT ENTERS AND LEAVES THE DUCTWORK. INTERLOCK WITH LIGHTING CIRCUIT IN RESTROOM. REFER TO E21 FOR CONTINUATION.
- ⑨ NOT USED.
- ⑩ CONNECT POWER FROM EACH CONDENSING UNIT'S COMPRESSOR CONTACTOR TO THE EVAPORATOR COIL UNITS JUNCTION BOX BELOW. REFER TO E24 FOR LOCATION.
- ⑪ CONVENIENCE RECEPTACLE PROVIDED PRE-INSTALLED IN HVAC UNIT. CONNECT TO 120 VOLT CIRCUIT AS REQUIRED AND/OR AS INDICATED.
- ⑫ A/C UNIT DISCONNECT IS FURNISHED WITH A/C UNIT AND SHALL BE CONNECTED BY THE CONTRACTOR.
- ⑬ EXHAUST FAN IS FURNISHED WITH A PREWIRED DISCONNECT.

1 LIGHTING FIXTURE (LUMINAIRE) SCHEDULE - CHICK-FIL-A									
MARK	MANUFACTURER	CATALOG NUMBER	NO. LAMPS/TYPE	SYL LAMP NO.	WATTS	VOLTS	MOUNTING	REMARKS	
A	LITHONIA	2GT8-G-432-A12V-MVOLT-OS10ISH	4-F028/835/XP/SS/ECO	22178	99	120	RECESSED	2'x4' STATIC TROFFER. SMOOTH SIDE OF PRISMATIC LENS DOWN.	
AE	LITHONIA	2GT8-G-432-A12V-MVOLT-OS10ISH-EL14	4-F028/835/XP/SS/ECO	22178	99	120	RECESSED	SAME AS 'A' WITH EMERGENCY BATTERY PACK. SEE PLAN NOTES ABOUT LAMP SWITCHING.	
A2	LITHONIA	2RT8S-217-9-LD-MVOLT-GEB10IS	2-F017/835/XP/SS/ECO	22491	34	120	RECESSED	2'x2' STATIC TROFFER. SMOOTH SIDE OF PRISMATIC LENS DOWN.	
A3	LITHONIA	2PM3NGB-2-17-9-LD-MVOLT-GEB10IS-EL14	2-F017W TB (24")		34	120	RECESSED	2'x2' STATIC TROFFER. SMOOTH SIDE OF PRISMATIC LENS DOWN.	
A3E	LITHONIA	2PM3NGB-2-17-9-LD-MVOLT-GEB10IS-EL14	2-F017W TB (24")		34	120	RECESSED	SAME AS 'A3' WITH EMERGENCY BATTERY PACK. SEE PLAN NOTES ABOUT LAMP SWITCHING.	
B1	ILLUMITECH	CS1-24-4-LED-DW-6-35-U-WH-W	INTEGRAL WITH FIXTURE		75	120	SURFACE	MOUNT LIGHT TO BTM OF OVERHEAD WIRE SHELVING & PROVIDE CORD & PLUG	
B3	CON-TECH	UF228-P WITH PLUG & CORDSET	1-FP28/835/ECO	20901	31	120	SURFACE	REFER TO SHEET E2.4, KEYNOTE #11, FOR ADDITIONAL INFORMATION.	
D1	LITHONIA	REAL6C6/MW/1000L/30K/95SC-LP6LN	FURNISHED		14.2	120	RECESSED	LED DOWNLIGHT WITH WHITE TRIM	
D2	LITHONIA	REAL6C6/BZA/1000L/30K/95SC-LP6LN	FURNISHED		14.2	120	RECESSED	LED DOWNLIGHT WITH BRONZE TRIM - USED ONLY IN WOOD OR COLORED CLGS	
D3	LITHONIA	LDN6-30/20-L06AR-LSS-MVOLT	FURNISHED		22.6	120	RECESSED		
D3E	LITHONIA	LDN6-30/20-L06AR-LSS-MVOLT-EL	FURNISHED		22.6	120	RECESSED		
D	LITHONIA	2RT8S-232-MVOLT-OS10IS/DGA24	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	2'x4' VOLUMETRIC RECESSED LIGHTING SYSTEM WITH DRYWALL GRID ADAPTER TRIM	
DE	LITHONIA	2RT8S-232-MVOLT-OS10IS-EL14/DGA24	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	SAME AS 'D' WITH EMERGENCY BATTERY PACK. SEE PLAN NOTES ABOUT LAMP SWITCHING.	
F	MEYDA	30894-8 (144638)	1-CF13EL/GU24/827	28957	13	120	CEILING	EGG LIGHT ABOVE SERVING COUNTER	
G	LITHONIA	C-132-AL-MVOLT-OS10IS	1-F028/835/XP/SS/ECO	22178	25	120	SURFACE	STRIP FLUORESCENT WITH LOW TEMP BALLAST, MOUNT WITHIN AWNING ON FRAME	
G1	LITHONIA	C-232-AL-MVOLT-OS10IS-WGCUN	2-F028/835/XP/SS/ECO	22178	50	120	WALL	STRIP FLUORESCENT WITH LOW TEMP BALLAST AND WIREGUARD, MTD ABOVE DOOR FRAME	
J	LITHONIA	CA-132-MVOLT-OS10IS	1-F028/835/XP/SS/ECO	22178	25	120	WALL	MOUNT ABOVE DOOR FRAME	
J1	LITHONIA	Z-132-MVOLT-OS10IS	1-F028/835/XP/SS/ECO	22178	25	120	COVE	MOUNT IN MENUBOARD COVE AND PROVIDE TUBE GUARDS ON LAMPS	
J2	LITHONIA	AV-G232-MDR-ASY-MVOLT-OS10IS	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	1'x4' ASYMMETRIC WITH LIGHT DIRECTED TOWARDS THE CENTER OF THE ROOM	
K2	JUNO / INDY	MS302-WH/HB-28/T5621/MSS70BL	2-12PAR30S/END/F22/27K	PHILLIPS	24	120	RECESSED	WHITE HOUSING 2 LAMP MULT-SPOT WITH LED RETROFIT LAMPS, AIM AS DIRECTED	
K4	JUNO / INDY	MS302-BL/HB-28/T5621/MSS70BL	2-12PAR30S/END/F22/27K	PHILLIPS	24	120	RECESSED	SAME AS K2 WITH BLACK HOUSING - USED ONLY IN WOOD OR COLORED CLGS	
L	LITHONIA	VSL-232-MVOLT-DL-OS10IS	2-F028/835/XP/SS/ECO	22178	50	120	SURFACE	LOW PROFILE DAMP LOCATION FLUORESCENT.	
MS	LEVITON	PS110-10W	N/A		4	120	WALL	MOTION SENSOR ON FLUSH BACKBOX, PROVIDE COVERPLATE W/ CENTER THREADED KNOCKOUT	
M	LITHONIA	2GT8-G-232-A12V-MVOLT-OS10ISH	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	SAME AS 'A' EXCEPT WITH TWO LAMPS. SEE PLAN NOTES ABOUT LAMP SWITCHING.	
ME	LITHONIA	2GT8-G-232-A12V-MVOLT-OS10ISH-EL	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	SAME AS 'AE' EXCEPT WITH TWO LAMPS. SEE PLAN NOTES ABOUT LAMP SWITCHING.	
N	MINKA	4531-267B	1-CF19EL/mini-TWIST/2700	29396	19	120	WALL	"COW BELL" LAVATORY WALL SCONCE WITH SHADE POINTED DOWN	
P1	MEYDA	142776	2-CF19EL/mini-TWIST/2700	29396	38	120	PENDANT	PEACH BASKET PENDANT WITH BTM AT 6'-6" AFF ABV TABLE, 7'-6" OTHERWISE	
Q	TROY	KF14856-1	FURNISHED		43	120	PENDANT	CUSTOM 48"x12"x12" COCA-COLA BOTTLE PENDANT, BTM AT 6'-3" AFF	
R	LITHONIA	2RT8S-232-MVOLT-OS10IS	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	2'x4' VOLUMETRIC RECESSED LIGHTING	
RE	LITHONIA	2RT8S-232-MVOLT-OS10IS-EL14	2-F028/835/XP/SS/ECO	22178	50	120	RECESSED	SAME AS 'R' WITH EMERGENCY BATTERY PACK	
U	BESA LIGHTING	BES00298-060	FURNISHED		7.5	120	PENDANT	RED FRIT GLASS, BRONZE CABLE & CANOPY, 6'-6" AFF	
CON-TECH		LA-17A-P	N/A			120	TRACK	PENDANT ADAPTER FOR CON-TECH 'LT SERIES' LIGHTING TRACK	
U1	CON-TECH	LT-4 OR 8-P TRACK, LA9 END FEED, LA2 MINI-CONNECTORS AND LA-17A-P PENDANT ADAPTORS				120	CEILING	LIGHTING TRACK WITH ACCESSORIES AS REQ'D, LENGTH AS NOTED	
V	VISUAL COMFORT	SL2923BZ	1-LEDBA19/DIM/O/827	78935	8	120	WALL	BOSTON LIBRARY LIGHT WITH RETROFIT LED LAMP, MOUNT BACKBOX AT 86" AFF	
XA	LITHONIA	LHQM-S-W-1-R-120	INTEGRAL WITH FIXTURE		4	120	WALL	EXIT SIGN WITH BATTERY PACK AND TWO INTEGRAL ADJUSTABLE LAMPHEADS	
XB	CHLORIDE	CAX6	INTEGRAL WITH FIXTURE		3	120	CEILING	WHITE THERMOPLASTIC BATTERY PACK UNIT WITH TWO LAMPHEADS	
XC	LITHONIA	AFN-BN-EXT (TWO LAMP UNIT)	INTEGRAL WITH FIXTURE		21	120	WALL	EXTERIOR WALL MOUNTED EMERGENCY LIGHTING UNIT, LOCATE NEAR EGRESS DOOR	
OB	LUMUX	SL563SS-PL26-120	1-CFR26W/GX240/827	20767	31	120	SEMI-REC	7 INCH DIAMETER TEMPERED FROSTED LENS WITH STAINLESS STEEL GRID & POLYMER HOUSING	
OC	LITHONIA	TFR-400M-TA-TB-SCWA-IS-LPI	1-M400/PS/U	64321	456	120	PIPE	FLOODLIGHT MTD ON ROOF ON 2" PIPE SUPPORT (BY OTHERS) AND AIMED AT FLAG AFTER DARK	
OD	LITHONIA	DSXO-LED-400-1000-40K SERIES (DISTRIBUTION TYPES TO BE DETERMINED BY THE REGIONAL TEAM SPECIFIC TO THE SITE.)	FURNISHED		138	120	POLE	COORDINATE WITH THE SPECIFIC SITE CONDITIONS FOR DISTRIBUTION TYPE(S) AND POLE STYLE & HEIGHT. REFER TO THE ELECTRICAL SITE PLAN FOR FURTHER INFORMATION.	
* OG		REFER TO SHEET ES2.1 (PHOTOMETRIC PLAN) FOR THE SITE SPECIFIC LIGHTING FIXTURE USED IN LIEU OF TYPE OD WHEN REQUIRED.							
OH	LITHONIA	L3LED-T24/40PA-TRMW-30K-90CRI	FURNISHED		11.2	120	RECESSED	4" OPEN CLEAR DIFFUSER DOWNLIGHT WITH 3000K, 93 CRI, 600LUMEN	
OJ	SECURITY LTG	RWSC-50PMH-UD-DB-120 (DARK BRONZE)	FURNISHED		25	120	WALL	UP/DOWN DECORATIVE EXTERIOR WALL SCONCE, SEE ELEVATIONS FOR MOUNTING HEIGHT	
OK	LITHONIA	TWA-50M-120-LPI	FURNISHED		12.9	120	WALL	CENTERLINE OF FIXTURE AT 8'-0" ABV 0'-0" (FINISH FLOOR LINE)	

- NOTES:
- LUMINAIRES UTILIZING DOUBLE-ENDED LAMPS AND CONTAIN BALLASTS THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS EITHER INTERNAL OF EXTERNAL TO EACH LUMINAIRE PER NEC 410.130(G).
 - THE LIGHTING FIXTURE PACKAGE IS AVAILABLE THROUGH A NATIONAL ACCOUNT PROGRAM. REFER TO SHEET E4.2, SECTION 16500 FOR VENDOR INFORMATION.
 - THE FLUORESCENT BALLAST CATALOG NUMBER INDICATES OSRAM AND ALL LAMP DESIGNATIONS ARE FOR OSRAM/SYLVANIA PER A NATIONAL ACCOUNT AGREEMENT.
 - THE ASTERISK (*) BESIDE THE FIXTURE MARK IN THE ABOVE SCHEDULE INDICATES THE FIXTURE IS A NON-PROTOTYPICAL LIGHT FIXTURE PER THE CFA NATIONAL HERITAGE PROTOTYPE.

THE EXHAUST HOOD SYSTEM AND COOKING APPLIANCES MUST BE INTERCONNECTED SO THAT OPERATING ANY OF THE COOKING APPLIANCES AUTOMATICALLY ACTIVATES THE HOOD SYSTEM.

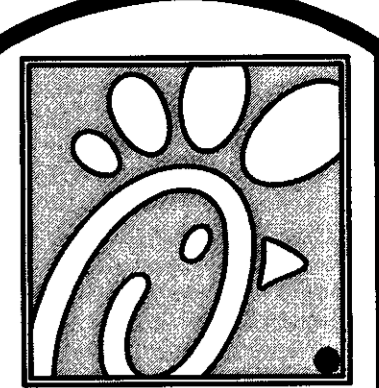
CONTRACTOR SHALL PROVIDE SUNCOAST DUCT HEAT SENSOR & CONTROL SYSTEM PACKAGE MODEL #TS2-OIO 120VAC DIGITAL TEMPERATURE SWITCH IN COMPLIANCE WITH THE 507.2.11. INTERLOCKED WITH THE EXISTING SUNCOAST CONTROL PANEL.

4 ELECTRICAL LEGEND			
SYMBOL	DESCRIPTION	MTG HT AFF TO CL	MTG HT AFF TO CL
LIGHTING FIXTURES		MISCELLANEOUS SYMBOLS	
□	SURFACE MTD FLUORESCENT LIGHTING FIXTURE	⊥	GROUND
⊞	RECESSED FLUORESCENT LIGHTING FIXTURE	Ⓜ	MOTOR
○	SURFACE MTD FLUORESCENT OR HID LIGHTING FIXTURE	Ⓢ	EXHAUST FAN MOTOR
⊙	RECESSED FLUORESCENT OR HID LIGHTING FIXTURE	Ⓝ	JUNCTION BOX
⊙	WALL MOUNTED LIGHTING FIXTURE. SEE LIGHTING FIXTURE SCHEDULE (FLUORESCENT OR HID FIXTURE)	AS NOTED	Ⓝ
⊙	WALL MOUNTED EXIT SIGN. SHADING INDICATES FACES. PROVIDE WITH CHEVRON DIRECTIONAL ARROWS WHERE INDICATED ON PLANS PROVIDED WITH BATTERY PACK	6' BELOW CEILING TO TOP	101
⊙	CEILING MOUNTED EXIT SIGN. SHADING INDICATES FACES. PROVIDE WITH CHEVRON DIRECTIONAL ARROWS WHERE INDICATED ON PLANS PROVIDED WITH BATTERY PACK		101
⊙	COMBO EXIT WITH TWO LAMP HEADS. SEE LIGHTING FIXTURE SCHEDULE		101
⊙	WALL MOUNTED EMERGENCY BATTERY PACK LIGHTING FIXTURE	AS NOTED	101
⊙	CEILING MOUNTED EMERGENCY BATTERY PACK LIGHTING FIXTURE		101
—	FLUORESCENT STRIP LIGHTING FIXTURE		Ⓢ
⊙	WALL WASHER STYLE RECESSED DOWNLIGHT, AIM LIGHT TOWARD WALL		Ⓢ
⊙	RECESSED LIGHTING FIXTURE WITH EMERGENCY BATTERY PACK		Ⓢ
⊙	PENDANT LIGHTING FIXTURE	AS NOTED	Ⓢ
—	LIGHTING TRACK WITH TRACK HEADS		Ⓢ
WIRING DEVICES		ABBREVIATIONS	
Ⓢ	120 VOLT DUPLEX RECEPTACLE, 20 AMPS UO.N	18"	CL
Ⓢ	120 VOLT DUPLEX AT SPECIAL MOUNTING HEIGHT, 20 AMPS UO.N	44" UO.N	CL
Ⓢ	120 VOLT QUADRUPLEX RECEPTACLE, 20 AMPS UO.N	18" UO.N	FLA
Ⓢ	120 VOLT QUADRUPLEX AT SPECIAL MOUNTING HEIGHT, 20 AMPS UO.N	44"	GF/GFI
Ⓢ	120 VOLT SIMPLEX RECEPTACLE, 20 AMPS UO.N	18" UO.N	GND/GRD
Ⓢ	SINGLE SPECIAL PURPOSE RECEPTACLE WITH VOLTS, AMPS, AND PHASE AS NOTED, NEMA CONFIGURATION AS REQUIRED BY EQUIPMENT	18" UO.N	HT
Ⓢ	RECEPTACLE MOUNTED ON CORD DROP, 120 VOLT, 20 AMP, UO.N, OUTLET BOX FLUSH WITH CEILING		IG
Ⓢ	SINGLE POLE TOGGLE SWITCH	48"	MOCP
Ⓢ	DOUBLE POLE TOGGLE SWITCH	48"	MJA
Ⓢ	THREE WAY TOGGLE SWITCH	48"	NEC
Ⓢ	MANUAL MOTOR STARTER SWITCH (WPNEMA 3R)	48"	NL
Ⓢ	SWITCH WITH PILOT LIGHT (ON WHEN SWITCH IS ON)	48"	OC
Ⓢ	KEY OPERATED SWITCH	48"	POS
Ⓢ	RECEPTACLES ON A DEDICATED CIRCUIT (THAT IS, NO OTHER LOAD CONNECTED TO THE BRANCH CIRCUIT) SHALL HAVE AMPACITY RATING NOT LESS THAN THE AMPERAGE OF THE CIRCUIT BREAKER SERVING THE DEVICE		RTU
CONDUIT/RACEWAYS			TL
—	CONDUIT CONCEALED ABOVE CEILING OR IN WALL		TR
—	CIRCUIT HOMERUN TO PANELBOARD WITH MINIMUM 2#12, 1#12G, 3/4" C		UO.N
—	CONDUIT TURNING UP		WP
—	CONDUIT TURNING DOWN		
—	CONDUIT CONCEALED IN OR BELOW SLAB (OUTSIDE - UNDERGROUND)		
—	FLEXIBLE LIGHT FIXTURE WHIP, SIX FOOT MAXIMUM LENGTH		
—	METAL CLAD CABLE ASSEMBLY - ONLY WHERE INDICATED ON DWGS OR SPECS		
TELEPHONE			
—	TELEPHONE OUTLET	18" UO.N	
—	TELEPHONE OUTLET AT SPECIAL MOUNTING HEIGHT	60" UO.N	
NOTE: EACH TELEPHONE OUTLET (FLOOR OR WALL MOUNTED) SHALL BE PROVIDED WITH A 3/4" EMPTY CONDUIT, WITH PULL WIRE, TO ACCESSIBLE CEILING SPACE.			
CCTV / SECURITY SYSTEM			
Ⓢ	CLOSED CIRCUIT TELEVISION CAMERA		
Ⓢ	SECURITY ALARM KEYPAD		
Ⓢ	SECURITY ALARM HOLD-UP BUTTON		
Ⓢ	SECURITY SYSTEM KEY NOTE		
NOTES:			
FOR ALL CONDUITS: REFER TO PLANS FOR OTHER CONDUITS, REFER TO VENDOR DRAWINGS FOR CONDUIT AND WIRING REQUIREMENTS FOR LOW VOLTAGE SYSTEMS AND CONTROL WIRING.			
MULTIPLE IFC CIRCUITS MAY OCCUPY THE SAME CONDUIT IN ACCORDANCE WITH THE NEC, MAXIMUM OF THREE AND OF DIFFERENT PHASES.			
LOW VOLTAGE AND CONTROL WIRING SHALL BE IN SEPARATE CONDUIT FROM POWER WIRING.			
DISTRIBUTION EQUIPMENT			
Ⓢ	NON-FUSIBLE SAFETY SWITCH, SIZE AND TYPE AS NOTED ON PLANS (AMP/POLES/ENCLOSURE OR ON SCHEDULE NEMA 1 ENCLOSURE UNLESS NOTED WP FOR NEMA 3R ENCLOSURE)	6'-6"	
Ⓢ	FUSIBLE SAFETY SWITCH, SIZE AND TYPE AS NOTED ON PLANS (AMP/POLES/FUSE AMPS/ENCLOSURE OR ON SCHEDULE NEMA 1 ENCLOSURE UNLESS NOTED WP FOR NEMA 3R)	6'-6"	
Ⓢ	FLUSH MOUNTED LIGHTING PANELBOARD	6'-6"	
Ⓢ	SURFACE MOUNTED LIGHTING PANELBOARD	6'-6"	
Ⓢ	TRANSFORMER, PROVIDE SECONDARY GROUNDING PER NEC	6'-6"	
Ⓢ	ENCLOSED CIRCUIT BREAKER, SIZE AND TYPE AS NOTED (AMPS/POLES/ENCLOSURE NEMA 1 ENCLOSURE IF NOT NOTED, WPNEMA 3R)	6'-6"	
* 6'-6" DISTANCE IS TO TOP-MOST DISCONNECTING DEVICE OR HIGHEST POSITION OF OPERATING HANDLE OF DISCONNECTING DEVICE			

5 SIGNAGE COORDINATION NOTE

THE ELECTRICAL SUBCONTRACTOR SHALL INCLUDE THE ELECTRICAL ROUGH-IN AND FINAL CONNECTIONS OF ALL SIGNAGE (BUILDING MOUNTED AND GROUND MOUNTED ON THE SITE) IN HIS SCOPE OF WORK AND UNDER HIS LOCAL CODE PERMITTING PROCESS.

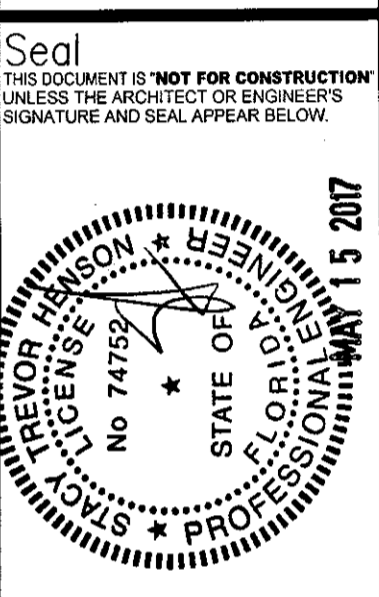
PROVIDE A COPY OF THE PERMIT (WHICH SPECIFICALLY INCLUDES THE SIGNAGE) TO THE SIGN VENDOR IN ORDER TO EXPEDITE THE SIGN VENDOR'S PERMIT PROCESS.



5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:
Mark Date By

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SHEET TITLE
SCHEDULES
AND DETAILS

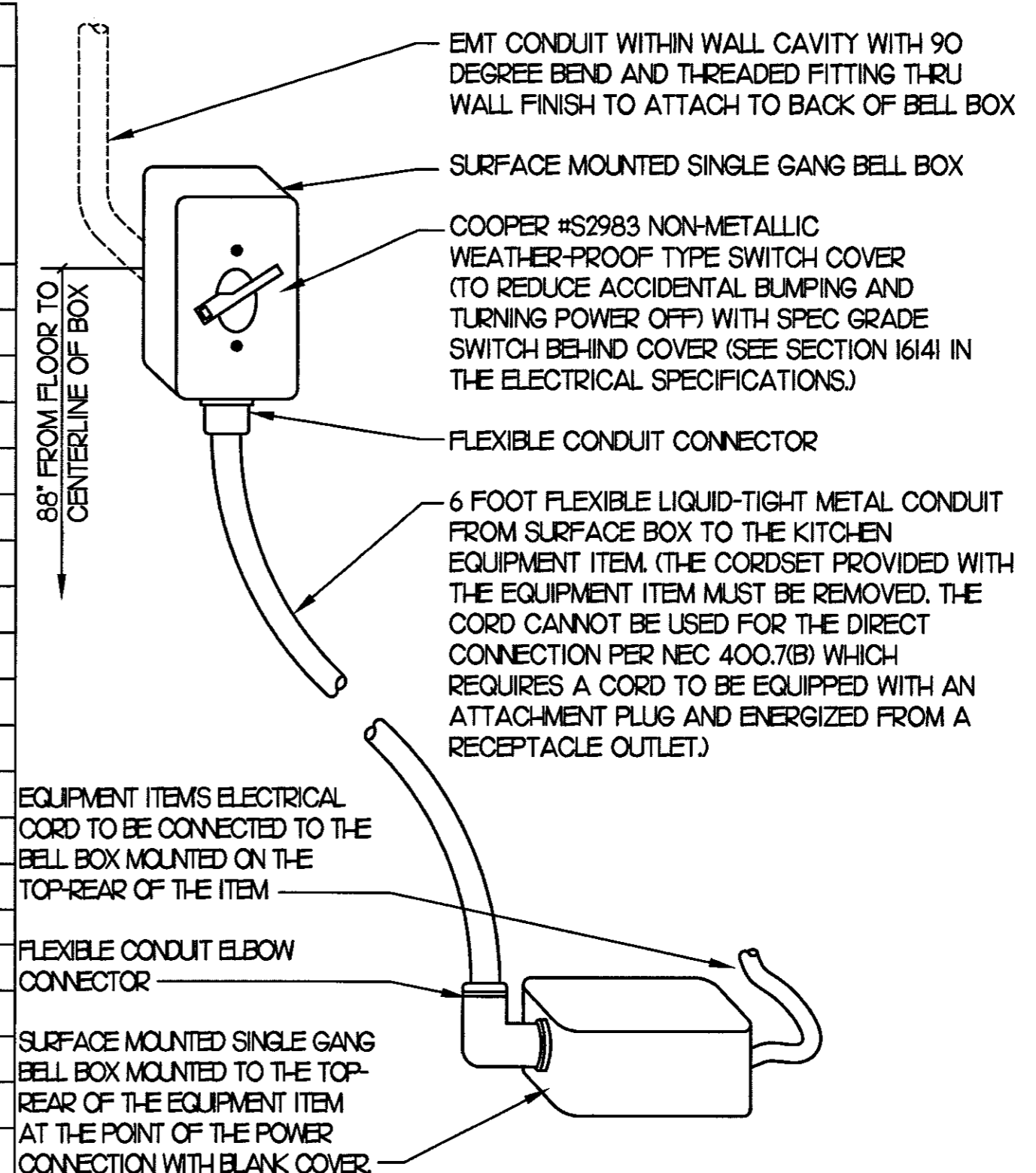
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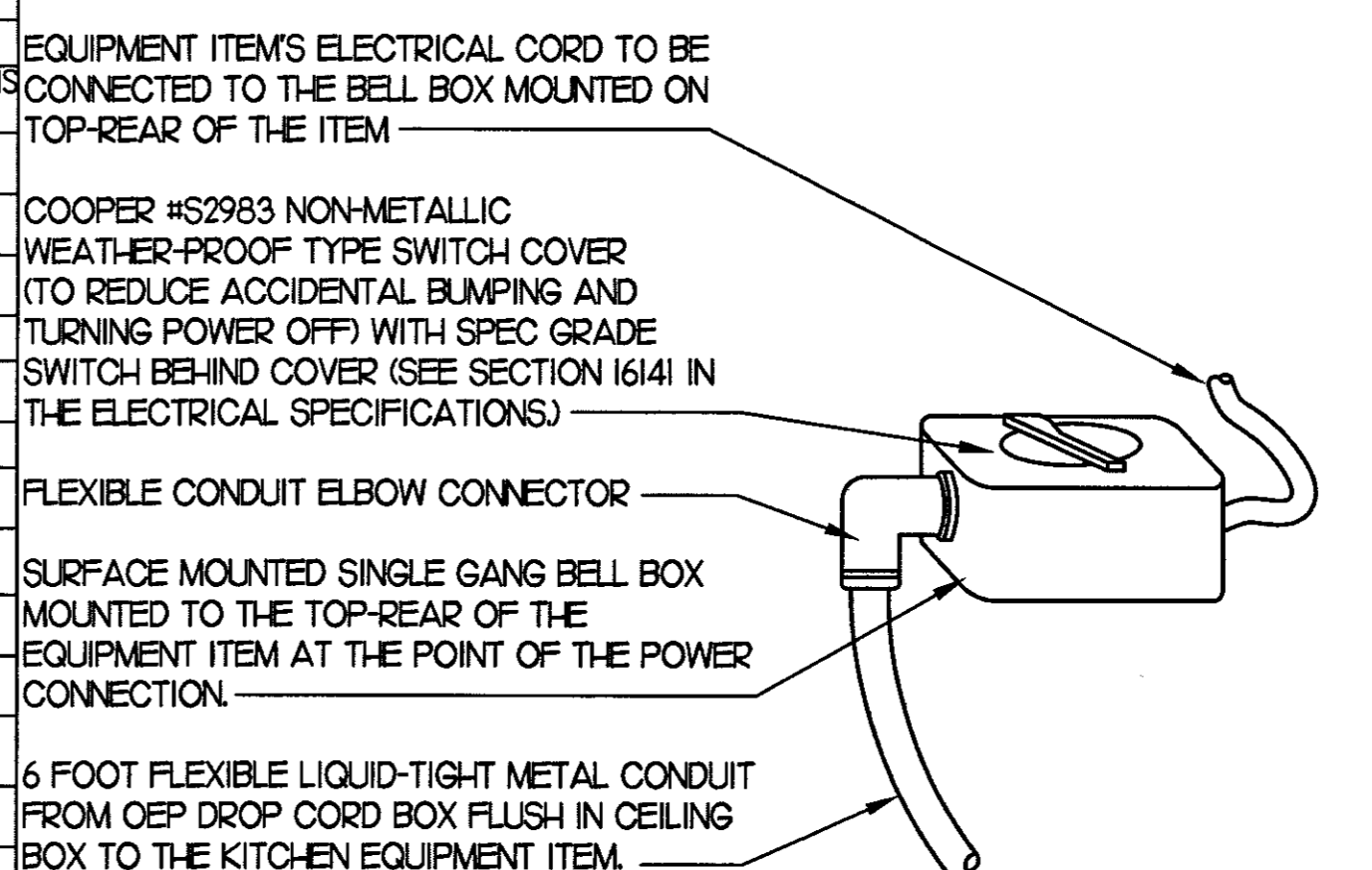
E.I.

KITCHEN EQUIPMENT SCHEDULE - CHICK-FIL-A 508-V8.2 EDITION

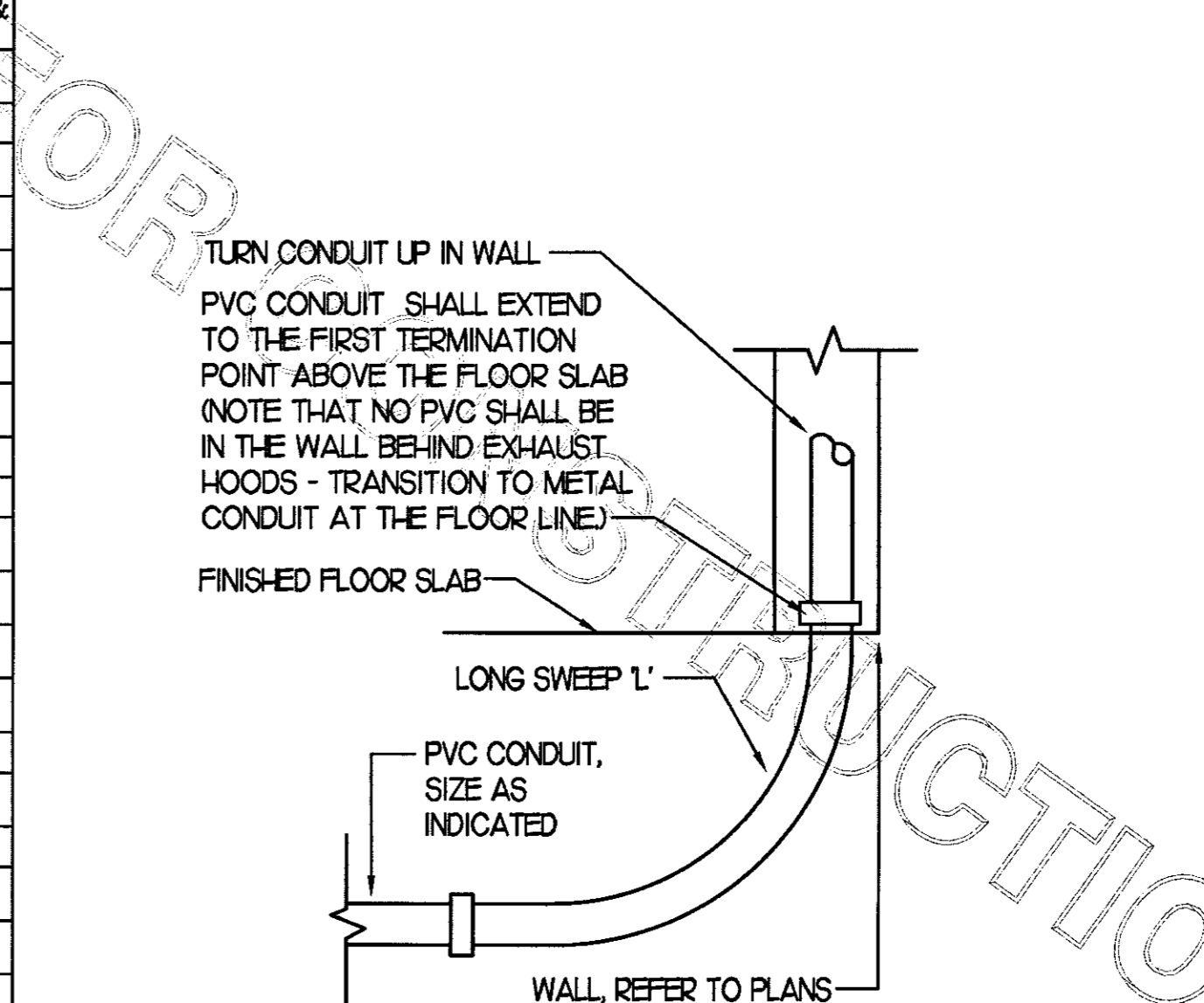
REQ UIR ES IG/ CF WIRI NG	ITEM NO.	EQUIPMENT	MANUFACTURER	ELECTRICAL					NEMA CONFIG	COOPER/ARROW HART (UON) RECEP CAT. NO.	Wire/Conduit MARK NO.	(ALL ITEMS BY CHICK-FIL-A UNLESS OTHERWISE NOTED)
				VO LT	PH	WI RE S	KW	AMP				
	120	HOT HOLDING CENTER LINE TABLE	FRANKE MODEL #18004629	208	1	3		9.1	DIRECT CONNECTION		VARIES	WITH TERMINAL BLOCK FOR CIRCUITS
	120a	COLD CENTER LINE TABLE	FRANKE MODEL #18005179	120	1	3		10.0	DIRECT CONNECTION		4	ORDER WITH ACCESSORY KIT #FS90046 - FRANKE TABLE CIRCUIT #1
	120b	SOUP CENTER LINE TABLE	FRANKE MODEL #18006252	120	1	3		4.4	DIRECT CONNECTION		4	FRANKE TABLE CIRCUIT #10
	180R	ORDER REGISTER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	182R	RECEIPT PRINTER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	183	ORDER MONITOR	RADIANT KITCHEN PRODUCTION SYSTEM	120	1	2		0.14	NEMA 5-20R IGS162RN (ORANGE)		1-IG	
	183R	ORDER MONITOR	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	184R	IPAD	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	190R	DRIVE-THRU VIDEO MONITOR	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	211B	FLY SYSTEM	GENUS COBRA MODEL #107000-00	120	1	2	0.078	0.65	NEMA 5-15R TR780W (DUPLX)		1	PROVIDED BY CFA WAREHOUSE - CLOCK STYLE RECEPTACLE REQUIRED
	269	ANSUL FIRE SUPPRESSION SYSTEM	HALTON HOODS	120	1	2			DIRECT CONNECTION			LOCATED ABOVE HOOD - BEHIND CLOSURE PANEL - REFER TO SHOP DRAWINGS - FED FROM CFA-1500 PANEL
	270	ANSUL FIRE SUPPRESSION SYSTEM	HALTON HOODS	120	1	2			DIRECT CONNECTION		1	LOCATED ABOVE HOOD - BEHIND CLOSURE PANEL - REFER TO SHOP DRAWINGS - FED FROM CFA-1500 PANEL
	300aR	MILKSHAKE BASE DISPENSER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			MOUNTED ON ITEM #300aR
	300XR	DOUBLE BARREL ICE CREAM MACHINE	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	305	TEA BREWER	WILBUR CURTIS MODEL #TCTT-10000	120	1	2	1.65	13.8	NEMA 5-20R VGF20		1	QUICK DISCONNECT HOSES PROVIDED BY OWNER
	305R	TEA BREWER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	308aR	DRY & DAIRY DISPENSER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	308R	SINGLE COFFEE MAKER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	309R	SINGLE JUICE DISPENSER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	310R	DOUBLE JUICE DISPENSER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	315W	10-HEAD DRINK TOWER/ICE BIN	LANCER #85-23710-111-07 MODEL 2300	120	1	2		10.0	NEMA 5-20R CR20		1	DUPLX RECEPTACLE REQUIRED FOR EACH BEVERAGE TOWER
	320	TURBO CARBONATOR	LANCER #85-1923-03	115	1	2		6.2	NEMA 5-20R CR20		1	ORDER (3) #44231, (2) #44233, (5) DR. PEPPER PUMPS, & (2) #15274SN-01
	380Z	ICE MACHINE	FOLLETT HORIZON CHEWBLET MODEL #HMF1650RBT	120	1	2		6	NEMA 5-15R CR15		1	INSTALLED ON ITEM #380 - PROVIDE WITH 35' LINE SETS
	380ZC	ICE MACHINE REMOTE CONDENSING UNIT	FOLLETT HORIZON CHEWBLET	208	3	4		21.2	DIRECT CONNECTION			AIR COOLED UNIT, G.C. SHALL PLACE AND INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWING
	400R	SGL SECTION REACH-IN FREEZER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	401	FREEZER/WORK TABLE	TRAULSEN MODEL #ULT48-ZCF-LR	120	1	2		7.3	NEMA L5-20R CWL520R		1	ORDER ON 4" CASTERS WITH WORK TOP AND BACKSPLASH; PROVIDE WITH TWIST LOCK
	410	WALK-IN FREEZER	THERMOKOOL	120	1	2		3.3	DIRECT CONNECTION		1	EXTERIOR BOX DIMENSIONS - 8'-0" W X 12'-3" D X 9'-6" H - CENTER LINE OF DOOR IS 48" FROM RIGHT EXTERIOR CORNER - HINGE LEFT
	410a	WALK-IN FREEZER CONDENSER	THERMOKOOL	208	3	3		18.8	DIRECT CONNECTION			G.C. SHALL INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWING
	410b	WALK-IN FREEZER EVAPORATOR	THERMOKOOL	208	1	2		8.8	DIRECT CONNECTION			POWER FED FROM CONDENSER
	420R	SGL UNDERCOUNTER REFRIGERATOR	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	421	DOUBLE UNDERCOUNTER REFRIGERATOR	TRAULSEN MODEL #UHT48-ZCF	120	1	2	.48	5.7	NEMA 5-20R 1877 (SIMPLEX)		1	ORDER ON 4" CASTERS
	432R	REFRIGERATED WORK TABLE	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			ELECTRICIAN TO CHANGE (1) PLUG TO TWIST LOCK
	440	BREADING TABLE	RANDELL MODEL #52365WPRM-CFA	120	1	2		12.0	NEMA L5-20R VGF20		1	ORDER ON 4" CASTERS - ELECTRICIAN TO CHANGE PLUG TO TWIST LOCK
	440R	BREADING TABLE	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			ELECTRICIAN TO CHANGE PLUG TO TWIST LOCK
	441	SALAD PREP TABLE	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			ELECTRICIAN TO CHANGE PLUG TO TWIST LOCK PLUG
	444R	THAWING CABINET - DOUBLE	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			CONVERT TO DIRECT CONNECTION IF NEEDED - G.C. TO INSTALL LIQUID TIGHT FLEX. CONDUIT
	444S	THAWING CABINET - SINGLE	TRAULSEN MODEL #RET132EWUT-FHS	120	1	2		6.0	DIRECT CONNECTION		1	HINGE LEFT - G.C. TO INSTALL LIQUID TIGHT FLEX. CONDUIT
	449	WALK-IN COOLER	THERMOKOOL	120	1	2		2.4	DIRECT CONNECTION		1	EXTERIOR BOX DIMENSIONS - 10'-2" W X 10'-0" D X 9'-6" H - CENTER LINE OF DOOR IS 50" FROM RIGHT EXTERIOR CORNER - HINGE RIGHT
	449a	WALK-IN COOLER CONDENSER	THERMOKOOL	208	3	3		5.8	DIRECT CONNECTION			G.C. SHALL INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWING
	449b	WALK-IN COOLER EVAPORATOR	THERMOKOOL	208	1	2		1.0	DIRECT CONNECTION			POWER FED FROM CONDENSER
	500AR	VERTICAL CONTACT TOASTER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			LOCATED ON ITEM #120c
	500BR	RADIANT TOASTER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			LOCATED ON ITEM #120c
	500R	BUN WARMER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			LOCATED ON ITEM #120c - FRANKE TABLE CIRCUIT #12 & #13
	505G	RANGE/CONVECTION OVEN	LANG MODEL #9P-R30CAPF208CF	208	3	3	19.8	57.6	NEMA 15-60R AH8460N		17	HINGE LEFT - FULL GRIDDLE TOP - OVEN MOUNTED ON 4" CASTERS - PROVIDE 6' CORD & ANGLE PLUG
	505R	OVEN - ON STAND	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	521	WARMING EYES WITH STAND	STAR-MAX MODEL #502FD	208	1	3	3.9	18.8	NEMA 5-30R 5700N		8	ORDER WITH CUSTOM EAGLE STAND AND BRACKET - PROVIDE WITH 6' CORD & PLUG
	522	OPEN FRYER	HENNY PENNY MODEL #CFE-410	208	3	3	22.0	61	PIN&SLEEVE			PIN&SLEEVE PROVIDED WITH EQUIPMENT AND RECEPTACLE BOX PROVIDED WITH HALTON ITEMS
	522R	OPEN FRYER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	523	PRESSURE FRYER	HENNY PENNY MODEL #PFE-500	208	3	3	13.5	38.0	NEMA 15-50R HUBBELL HBL8450A		14	SUPPLIED WITH 6' SO CORD AND PLUG
	523R	PRESSURE FRYER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	524	DUAL-SIDED XPRESS BROILER	GARLAND #CXBE12	208	3	3	16.04	47.0	NEMA 15-50R HUBBELL HBL8450A		14	REPLACE PLUG & CORD-SET IN FIELD - PART OF ROLLOUT
	524R	DUAL-SIDED XPRESS BROILER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	550	DOUBLE WARMING DRAWER	TOASTMASTER MODEL #3880A	120	1	2	1.00	8.3	NEMA 5-15R FURNISHED IN #120			LOCATED IN ITEM #120 - FRANKE TABLE CIRCUIT #2 & #3
	560	FRY HOLDING STATION	BKI MODEL #FW-15BB	120	1	2	1.84	15.4	NEMA 5-20R VGF20		1	ON ITEM #105
	560R	FRY HOLDING STATION	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			ON ITEM #105
	561	BUILT-IN HEAT LAMP	MARSHALL AIR #500792	208	1	2	1.12	5.4	DIRECT CONNECTION		1	PROVIDED BY FRANKE - FRANKE TABLE CIRCUIT #4 & #5
	563D	SANDWICH SLIDE	BKI MODEL #2TSM-2624L	120	1	2	1.09	9.13	NEMA 5-20R 1877 (SIMPLEX)		1	6' CORD & PLUG - PLACED ON ITEM #105
	563S	SANDWICH SLIDE	BKI MODEL #SM-2624R	120	1	2	.548	4.56	NEMA 5-20R 1877 (SIMPLEX)		1	6' CORD & PLUG - PLACED ON ITEM #105
	564	PRODUCT HOLDING CABINET	DUKE MODEL #FWM3-24CF6-120	120	1	2	1.6	13.3	NEMA 5-15R FURNISHED IN #120		1	LOCATED IN ITEM #120b - FRANKE TABLE CIRCUIT #7 & #14
	565	SINGLE FOOD WARMER WELL	WELLS MODEL #MOD-100TD	208	1	2	1.24	4.4	DIRECT CONNECTION			LOCATED IN ITEM #120b - PROVIDED BY FRANKE - FRANKE TABLE CIRCUIT #8 & #9
	580	MULTI-USE HOLDING CABINET	DUKE MODEL #MUHC-52-120	120	1	2	2.88	24	NEMA L5-30R CWL530R		7	PROVIDE WITH TWIST LOCK PLUG
	600R	FLOOR MIXER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	601R	FOOD CUTTER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			ELECTRICIAN TO CHANGE PLUG TO TWIST LOCK
	607R	LEMON JUICER	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	669R	OFFICE SAFE	EQUIPMENT TO BE REUSED/RELOCATED						VERIFY			
	671	FLAT-VU MENU BOX	C3 LIGHTING SOLUTIONS SIZE B	120	1	2	.054	.45	NEMA 5-20R CR20		1	VERIFY MENU BOARD LAYOUT



2 KITCHEN EQUIP DIRECT CONNECTION
NOT TO SCALE WALL MOUNT CONDITION



3 KITCHEN EQUIP DIRECT CONNECTION
NOT TO SCALE DROP CORD - ISLAND MOUNT CONDITION



4 INTERIOR PVC CONDUIT DETAIL
NOT TO SCALE

5200 Buffington Rd.
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Revisions:

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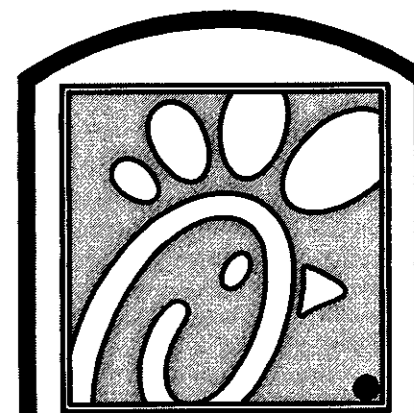
SHEET TITLE
EQUIP SCHEDULE
AND DETAILS

VERSION: V7.025
ISSUE DATE: 01.2017

Job No. : 16.0439
Store : 01918
Date : 02.02.16
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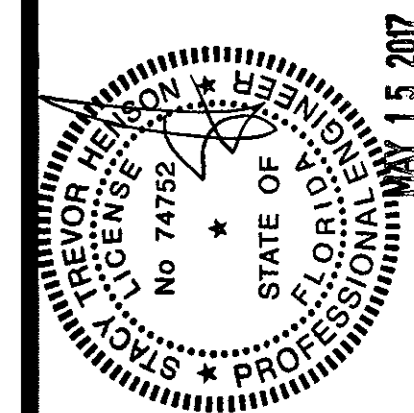
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SHEET TITLE
GAS PIPING
PLAN

VERSION: V7.025
ISSUE DATE: 01.2017

Job No. : 16.0439

Store : 01918

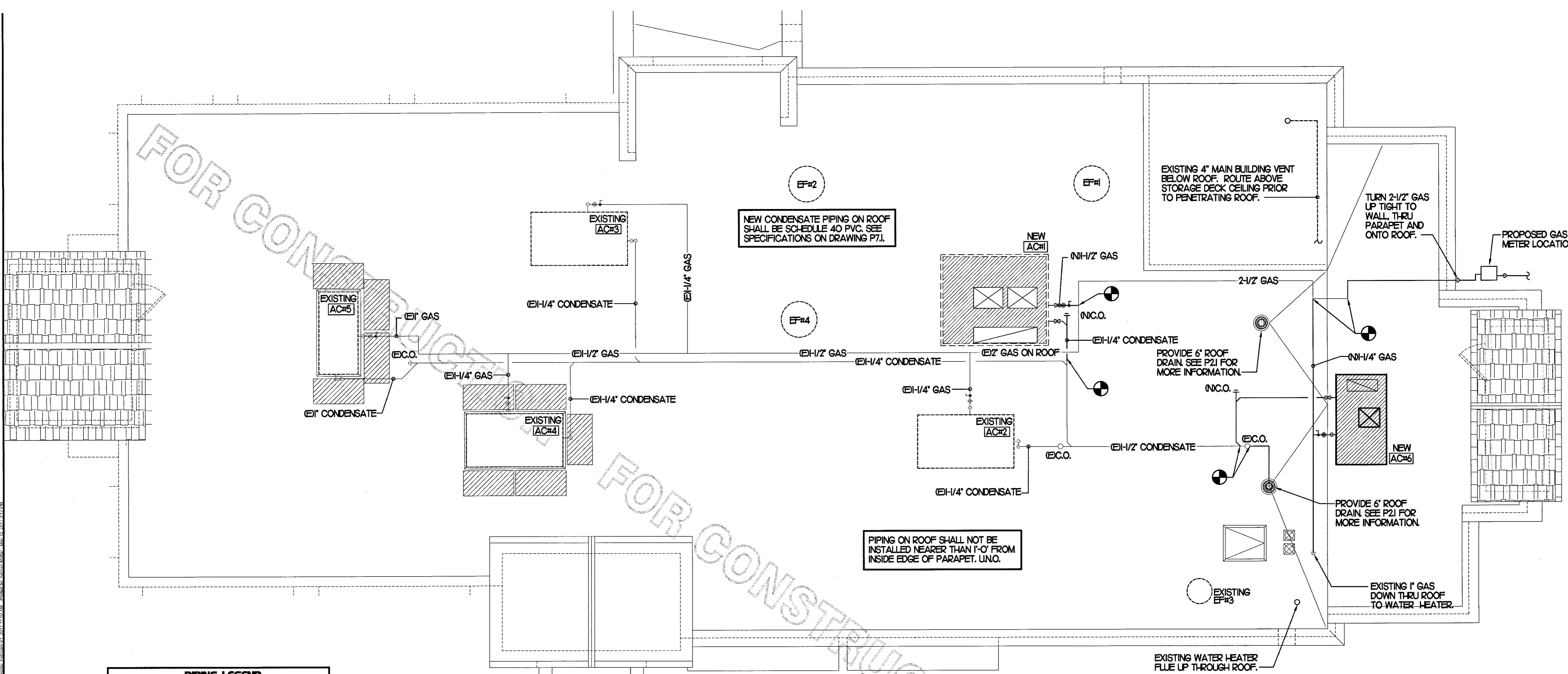
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PIPING LEGEND

⊖	EXISTING
⊕	NEW
—	NEW GAS PIPING
—	NEW CONDENSATE PIPING
—	EXISTING GAS AND CONDENSATE

SEE DETAIL 6/A-1.8 FOR ROOFTOP PIPE PENETRATIONS.

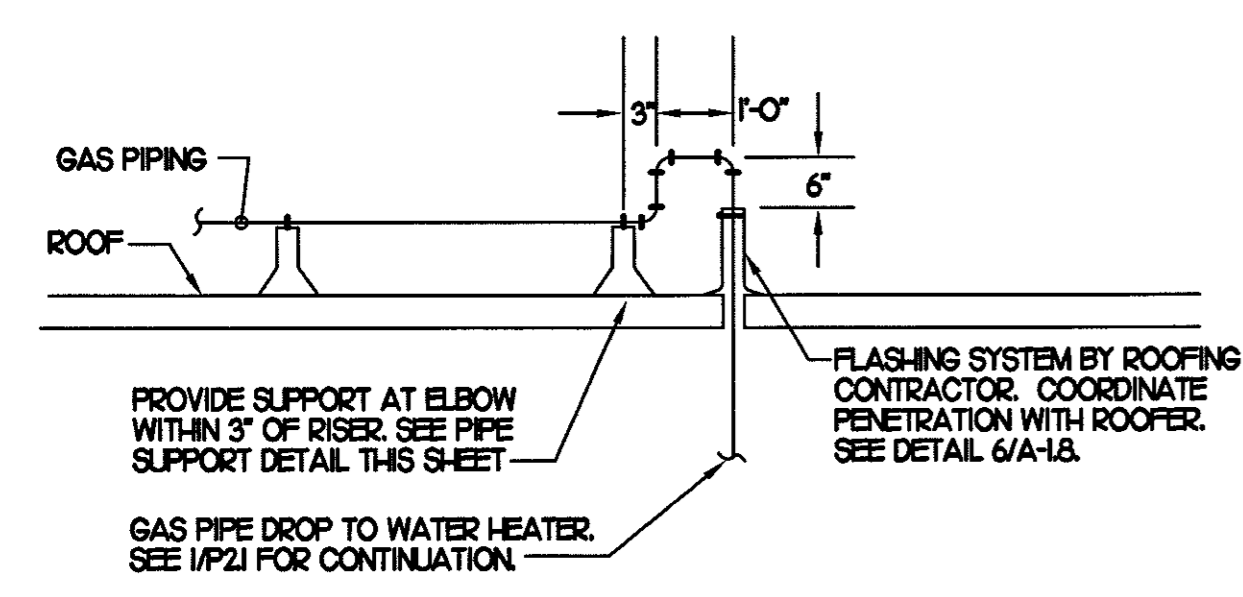
CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC.

PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT FOR ICE MAKER, AND WALK-IN FREEZER AND COOLER REFRIGERANT TUBING THROUGH ROOF. SEE DETAIL 5/A-1.8 FOR ROOFTOP REFRIGERANT CONDUIT INSTALLATIONS. SEE A-1.7 FOR LOCATION OF ICE MAKER, FREEZER AND COOLER CONDENSING UNITS.

PIPING ON ROOF SHALL NOT BE INSTALLED NEARER THAN 1'-0" FROM INSIDE EDGE OF PARAPET. UNO.

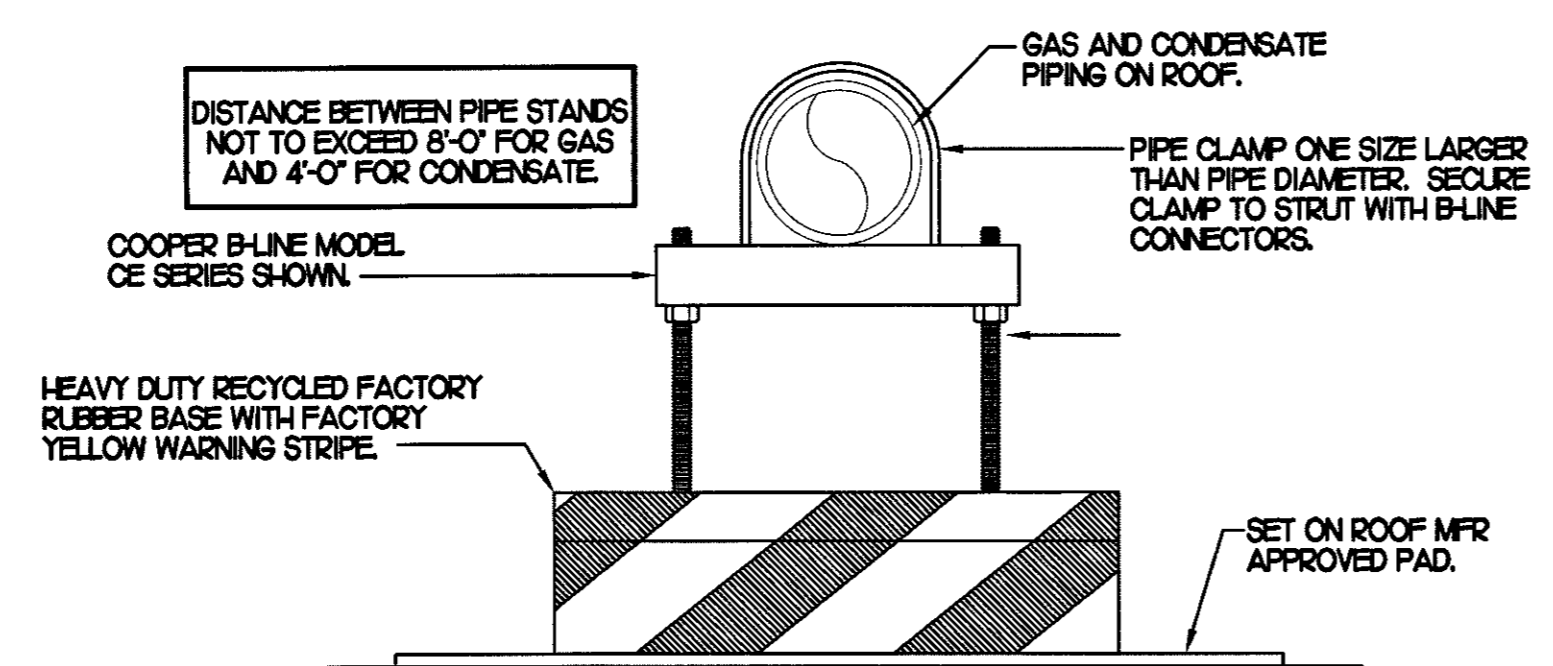
- NOTES**
- NON ADJUSTABLE MODEL C10 PIPE STAND TO BE USED FOR NON-ELEVATED PIPING INSTALLED FLAT ON ROOF DECK.
 - PROVIDE MODEL CE-8 OR CE-12 OR CE-16 AS NEEDED FOR ELEVATING CONDENSATE PIPING TO MAINTAIN PROPER SLOPE AND FOR GAS PIPING CROSSING OVER CONDENSATE PIPING.
 - ENSURE GAS AND CONDENSATE PIPING DO NOT OBSTRUCT ROOFTOP EQUIPMENT ACCESS OPENINGS. RE-PIPING OF SYSTEMS DUE TO CONFLICTS WITH EQUIPMENT ACCESS OPENINGS SHALL BE DONE AT PLUMBING CONTRACTOR'S EXPENSE.

OFFSET PIPING A MINIMUM OF 6" ABOVE TOP EDGE OF FLASHINGS.



GAS PIPE DROP TO WATER HEATER

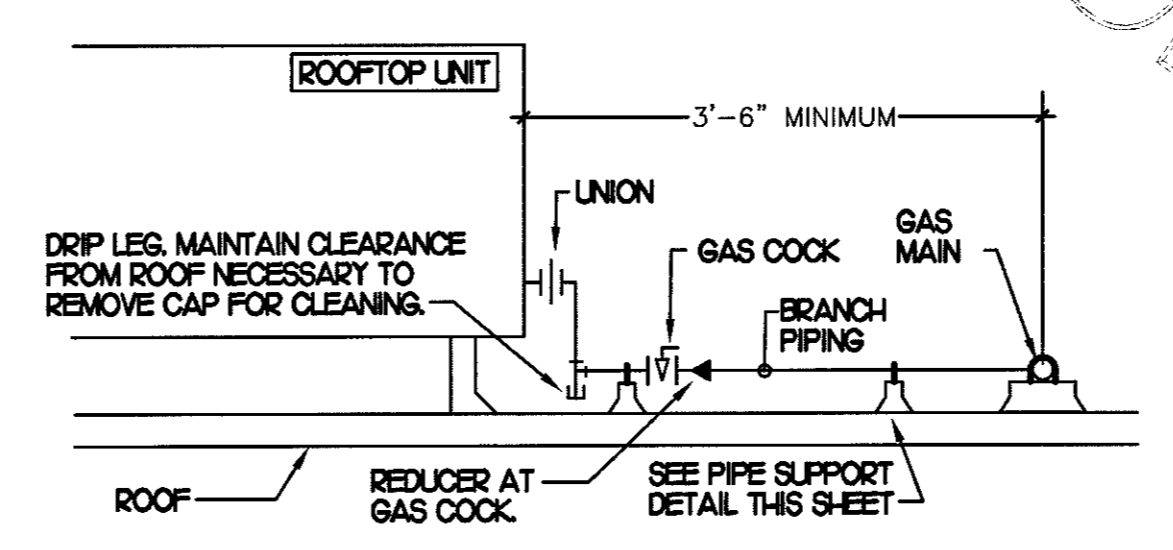
SCALE: NO SCALE



PIPING SUPPORT

SCALE: NO SCALE

1 ROOF PIPING PLAN
1/4" = 1'-0"



- NOTES**
- INSTALL GAS PIPING SUCH THAT HVAC EQUIPMENT ACCESS PANELS AND/OR DOORS ARE IN NO WAY OBSTRUCTED BY PIPING, VALVES, OR SUPPORTS.
 - TO AVOID CONFLICT WITH AC UNIT ACCESS DOORS, INSTALL GAS PIPING NO CLOSER THAN 3'-6" FROM AC UNIT. (EXCEPT FOR BRANCH LINE CONNECTED TO AC UNIT)
 - ROUTE BRANCH TAKE-OFF DIRECTLY FROM MAIN TO ROOFTOP UNIT AS SHOWN ON PLAN AND DETAILS WITHOUT LATERAL OFFSETS WHICH MAY OBSTRUCT UNIT ACCESS DOORS.

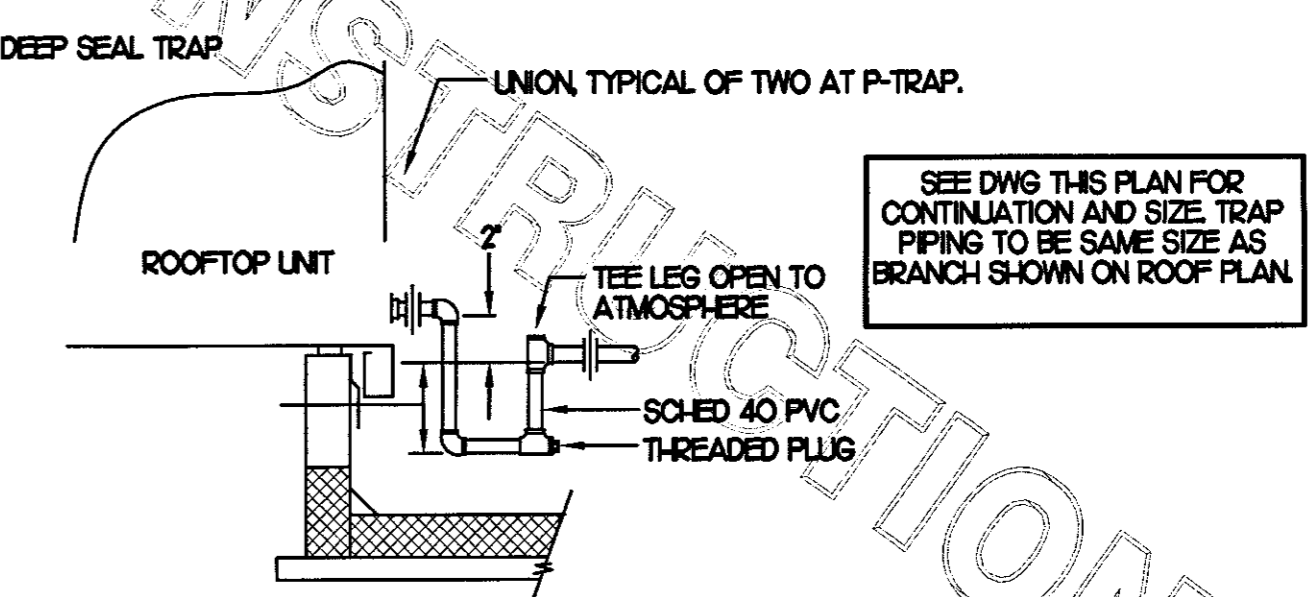
GAS PIPING AT RTU

NO SCALE

6. GAS CONNECTION SCHEDULE

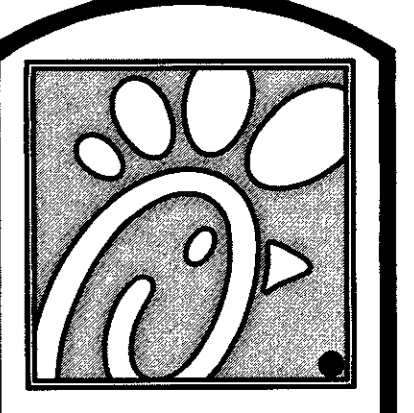
EQUIPMENT	GAS LOAD
NEW ACH1	480,000 BTUS
EXISTING ACH2	240,000 BTUS
EXISTING ACH3	240,000 BTUS
EXISTING ACH4	240,000 BTUS
EXISTING ACH5	125,000 BTUS
NEW ACH6	65,000 BTUS
EXISTING WATER HEATER	100,000 BTUS
TOTAL CONNECTED LOAD	1,490,000 BTUS

REMARKS:
1 EQUIVALENT TO 125' CPH
2 7" W.C. DELIVERY PRESSURE



CONDENSATE DRAIN PIPING

SCALE: NO SCALE

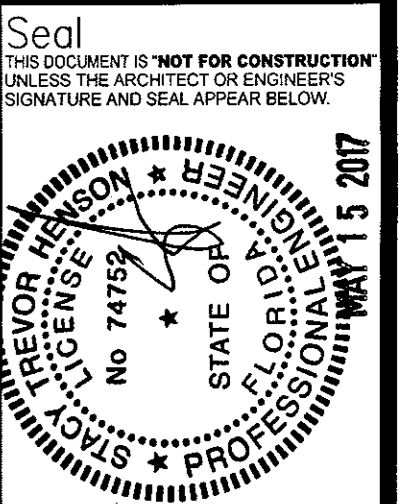


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Revisions:
Mark Date By
A 05/05/17 LE
WALK-IN COORD.

Table with 3 columns: Mark, Date, By. Row 1: A, 05/05/17, LE. Row 2: WALK-IN COORD.



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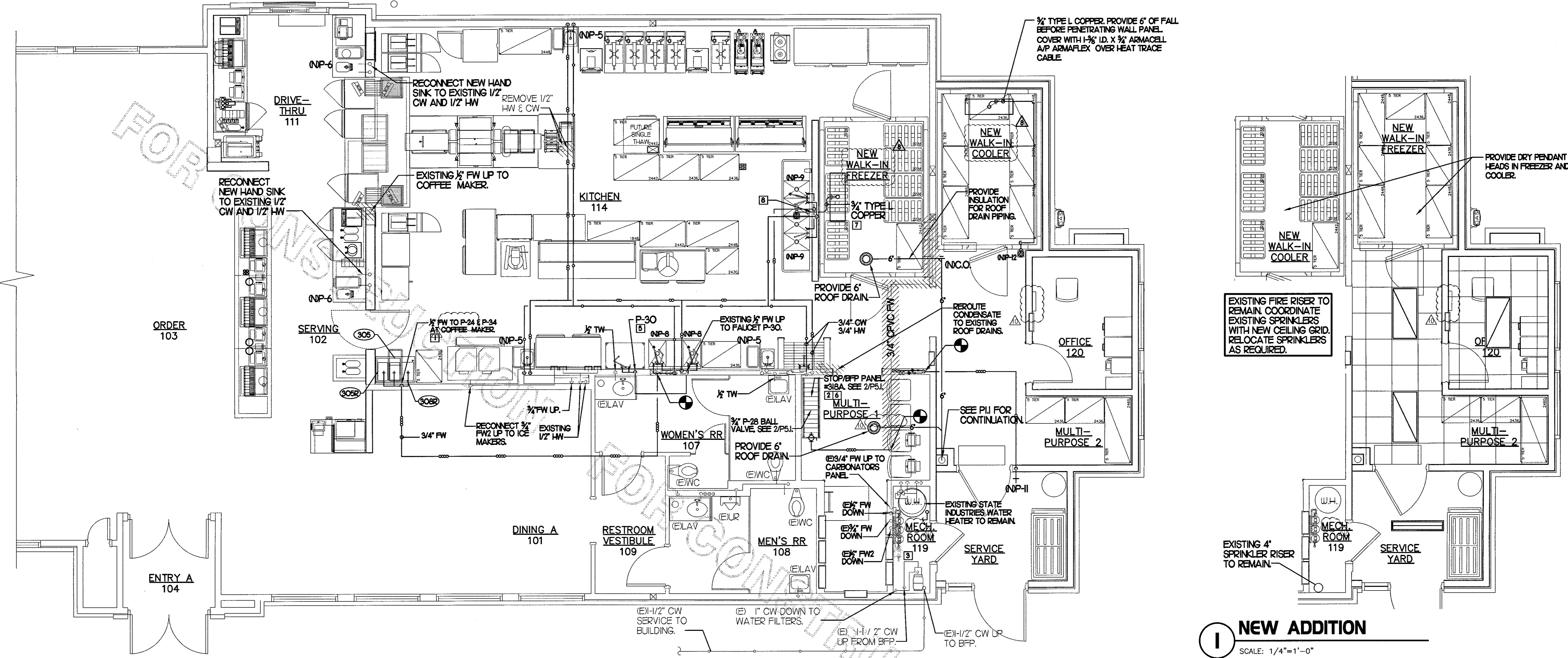
SHEET TITLE
**WATER PIPING
PLANS & DETAILS**

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Checked By : PD

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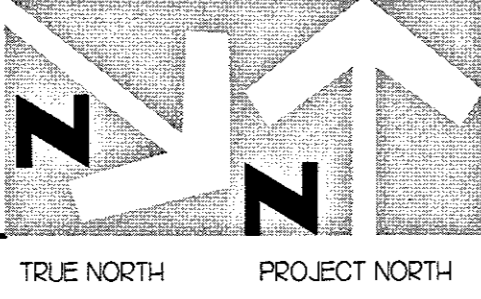


FOR CONSTRUCTION

ORDER 103

ENTRY A 104

1 WATER PIPING PLAN
SCALE: 1/4"=1'-0"



PIPING LEGEND

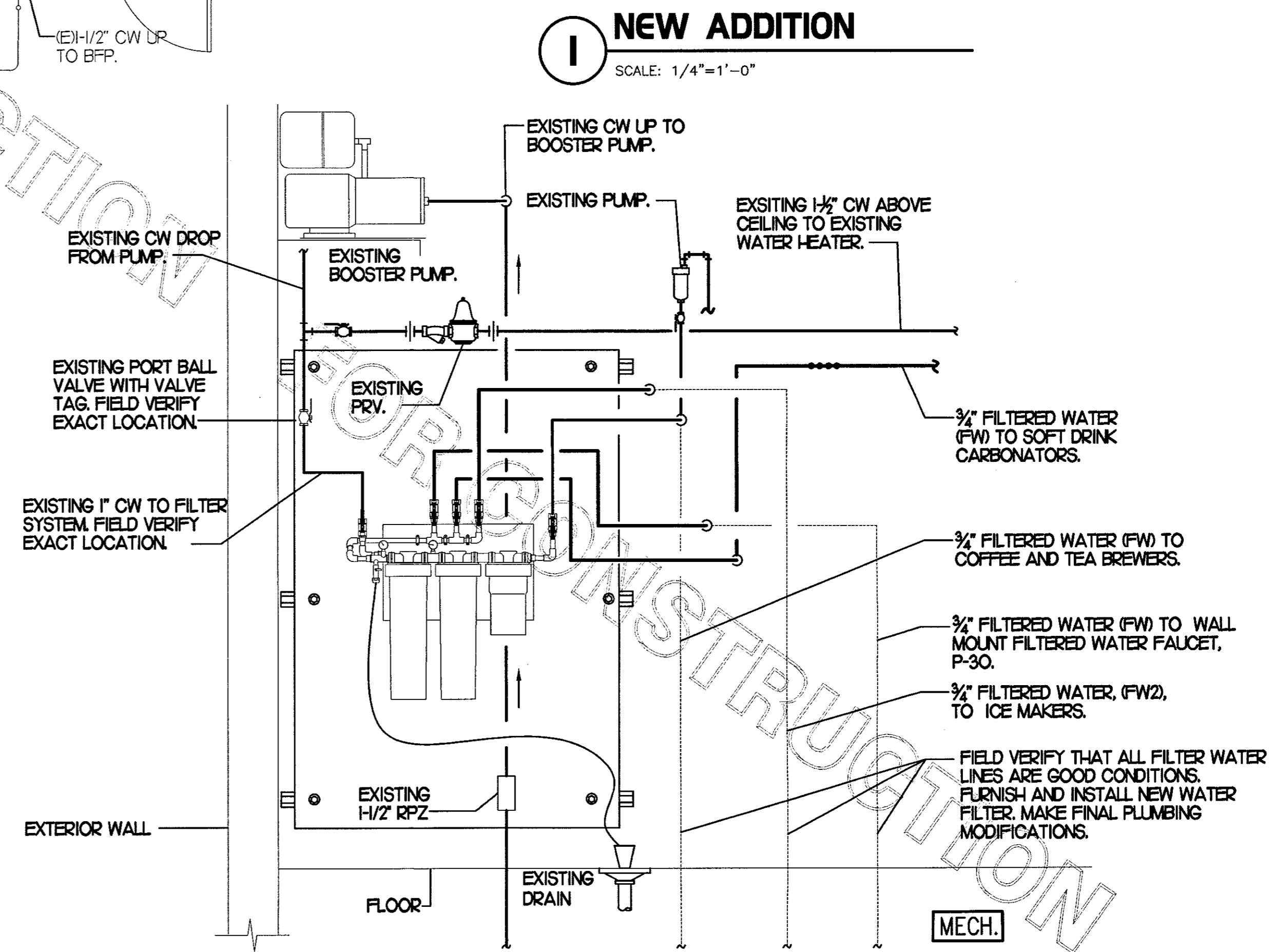
(E)	EXISTING
(D)	DEMOLISH
(R)	RELOCATE
(N)	NEW
—	NEW CW - COLD WATER
—	NEW HW - HOT WATER
—	NEW TW - TEMPERED WATER
—	EXISTING THW - TEMPERED WATER RETURN
—	EXISTING FW - FILTERED WATER
—	EXISTING PIPING

KEY NOTES

- 1) 1/2" FW TO P-24 & P-24 AT TWO TEA BREWERS AND P-24 AT COFFEE BREWER.
- 2) OWNER PROVIDED. PLUMBER INSTALLED STOP/BFP PANEL. SEE K-SHEET ELEVATIONS FOR EXACT LOCATION. PROVIDE EXPOSED 3/4" BALL VALVE AT CONNECTION TO PANEL. ROUTE 1" DIA SCHED 40 PVC BFP DRAIN TIGHT TO WALL TO 12" AFF.
- 3) PROVIDE NEW WATER FILTERS TO REPLACE EXISTING. VERIFY EXACT LOCATION AND CONNECTIONS PRIOR TO BID & CONSTRUCTION.
- 4) EXISTING FW AND FW2 FROM WATER FILTERS.
- 5) 3/4" FW DROP TO TWO-HANDLE FAUCET, P-30. MOUNT FAUCET ON WALL. SEE K-SHEETS FOR EXACT LOCATION. PIPE 1/2" FW TO EACH FAUCET INLET WITH 6" SPREAD. PROVIDE BALL VALVE ABOVE CEILING.
- 6) 1" DIAMETER PVC DRAIN FROM BACKFLOW PREVENTER PANEL. CONNECT 1" PVC TO FACTORY PROVIDED COUPLING MOUNTED ON BACK PANEL. ROUTE DRAIN TO 12" AFF. BELOW. MOUNT PIPING TIGHT TO WALL WITH STRUT.
- 7) APPLY RAYCHEM XL-TRACE, MODEL 5XL-1, SELF REGULATING HEATING CABLE. USE END SEAL KIT FROM MFR.
- 8) TURN 3/4" CONDENSATE PIPING OUT OF COOLER AND EXTEND OUTLET TO FLOOR SINK. SECURE PIPING TO COOLER WALL WITH RUBBER INSULATED PIPE CLAMPS TO PREVENT GALVANIC CORROSION. SEAL ALL PENETRATIONS IN WALLS WITH PERMAGUM CORO. TERMINATE ABOVE FUNNEL WITH ELBOW AND AIR GAP.

3. SHEET NOTES

- 1. COORDINATE VENT TERMINAL LOCATIONS WITH FRESH AIR HOODS ON ROOFTOP EQUIPMENT SO AS TO MAINTAIN MINIMUM 15'-0" CLEARANCE.
- 2. HOLD ALL PIPING ABOVE THE CEILING TIGHT TO STRUCTURE. DUCT LOCATIONS TAKE PRIORITY. SEE DRAWING M1 FOR DUCT LAYOUT. COORDINATE CONFLICTS WITH GC.
- 3. SEE K-SHEET ELEVATIONS FOR KITCHEN EQUIPMENT LOCATIONS.
- 4. SEE SHEET P-22 FOR BEVERAGE CONDUIT PIPING.
- 5. SEE RISER DIAGRAM (P/PS) FOR VENT PIPING. SEE ROOF PLAN (P/PA) FOR VENT THRU ROOF (VTR) LOCATION.
- 6. COORDINATE ABOVE-CEILING PIPING LOCATIONS AND ROUTING WITH HVAC CONTRACTOR AND M-SHEETS PRIOR TO INSTALLATION. ALL MAIN DUCT TRUNK LOCATIONS SHALL TAKE PRIORITY. PIPING MAY REQUIRE REMOVAL AND REINSTALLATION AT PLUMBING CONTRACTOR'S EXPENSE IF PIPING OBSTRUCTS THE M-SHEET DUCT LAYOUT AS SHOWN OR PREVENTS ACCESS TO GREASE DUCT CLEANOUT OPENINGS.



2 RELOCATE EXISTING PIPING WATER FILTER SYSTEM AS REQUIRED
NO SCALE

EXISTING FIRE RISER TO REMAIN. COORDINATE EXISTING SPRINKLERS WITH NEW CEILING GRID. RELOCATE SPRINKLERS AS REQUIRED.

EXISTING 4" SPRINKLER RISER TO REMAIN.

1 NEW ADDITION
SCALE: 1/4"=1'-0"

3/4" TYPE L COPPER. PROVIDE 6" OF FALL BEFORE PENETRATING WALL PANEL. COVER WITH 1-3/8" I.D. X 3/4" ARMCEL A/P ARMAFLEX OVER HEAT TRACE CABLE.

EXISTING CW DROP FROM PUMP.

EXISTING PORT BALL VALVE WITH VALVE TAG. FIELD VERIFY EXACT LOCATION.

EXISTING 1" CW TO FILTER SYSTEM. FIELD VERIFY EXACT LOCATION.

EXISTING CW UP TO BOOSTER PUMP.

EXISTING PUMP.

EXISTING BOOSTER PUMP.

EXISTING PRV.

EXISTING H/2 RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" RPZ.

EXISTING 1/2" CW ABOVE CEILING TO EXISTING WATER HEATER.

3/4" FILTERED WATER (FW) TO SOFT DRINK CARBONATORS.

3/4" FILTERED WATER (FW) TO COFFEE AND TEA BREWERS.

3/4" FILTERED WATER (FW) TO WALL MOUNT FILTERED WATER FAUCET, P-30.

3/4" FILTERED WATER (FW2), TO ICE MAKERS.

FIELD VERIFY THAT ALL FILTER WATER LINES ARE GOOD CONDITIONS. FURNISH AND INSTALL NEW WATER FILTER. MAKE FINAL PLUMBING MODIFICATIONS.

MECH.

I. SECTION C1500 - PLUMBING SPECIFICATIONS

PART I - PRODUCTS (C15100)

1.01 GENERAL REQUIREMENTS

A. THE FOLLOWING SPECIFICATIONS ARE THE MINIMUM REQUIREMENT. WHERE FEDERAL, STATE OR LOCAL REQUIREMENTS DIFFER FROM THIS SPECIFICATION, THE MORE RESTRICTIVE OF THE TWO SHALL BE FOLLOWED.

1.02 SCOPE

A. HOT AND COLD POTABLE WATER PIPING ABOVE SLAB SHALL BE TYPE 'L' HARD DRAWN COPPER OR FLOWGUARD GOLD CPVC AS MANUFACTURED BY NIBCO OR CHARLOTTE PIPE & FOUNDRY AND MEETING ASTM D-2846. FILTERED WATER PIPING SHALL BE FLOWGUARD GOLD CPVC. HOT AND COLD PIPING WITHIN WALLS BEHIND KITCHEN HOODS SHALL BE COPPER.

B. POTABLE WATER PIPING BELOW SLAB AND OUTSIDE BELOW GRADE SHALL BE TYPE 'K' SOFT ANNEALED SEAMLESS. NO JOINTS SHALL BE ALLOWED BELOW SLAB. POTABLE WATER PIPING BELOW GRADE SHALL BE SLEEVED FOR ITS ENTIRE LENGTH WITH POLY SLEEVE AS MADE BY IPS WATER-TITE. ALL SLAB PENETRATIONS SHALL BE SLEEVED WITH POLY SLEEVE TO PROTECT PIPING FROM CORROSION BY CONCRETE.

C. COPPER PIPE FITTINGS SHALL BE WROUGHT COPPER SWEEP PATTERN FITTINGS SOLDERED USING 95-5 LEAD-FREE SOLDER MEETING ASTM B-32 OR BRAZED WITH SIL-FOS. SOLDER FLUXES SHALL MEET ASTM B-813 AND SHALL BE LEAD FREE. BRAZING FLUXES SHALL MEET AWS FB3-A OR FB3-C.

D. WATER PIPING DOWNSTREAM OF SOFT DRINK CARBONATORS SHALL BE PROVIDED AND INSTALLED BY LOCAL SOFT DRINK VENDOR.

E. CPVC FITTINGS FOR PIPING SHALL BE SOLVENT WELD TYPE MEETING ASTM D-2846 WITH CEMENTS MEETING ASTM F-493 AND PRIMER MEETING ASTM F-656. CURE TIME MUST COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. FOR CPVC PIPING INSTALLATION, WALL STUBS AT FIXTURES AND EQUIPMENT SHALL BE COPPER AND SHALL BE SETTING 630-C. CPVC TO COPPER STUB OUT ELBOWS BY SIOUX CHIEF.

F. NIPPLES, ELBOWS, AND OTHER ACCESSORY FITTINGS REQUIRED TO COMPLETE ANY WATER PIPING CONNECTION SHALL BE BRASS OR OF SIMILAR TYPE METAL AS THE FITTING TO WHICH IT IS CONNECTED. GALVANIZED FITTINGS ARE PROHIBITED. (EXCEPTION: GALVANIZED HEAT TRAP WATER HEATER NIPPLES IF INTERNALLY PROTECTED WITH TEFLON OR POLYMER CORROSION-RESISTANT COATING.)

G. ALL HVAC CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC DWV AS MANUFACTURED BY CHARLOTTE PIPE AND MEETING ASTM D-1784, D-1785 AND D-2665.

H. U.N.O., ALL SANITARY WASTE, VENT, STORM DRAINAGE PIPING AND FITTINGS INSIDE THE BUILDING, ABOVE AND BELOW GRADE, AND FOR ROOFTOP CONDENSATE, SHALL BE SOLID WALL SCHEDULE 40 PVC DWV AS MANUFACTURED BY CHARLOTTE PIPE AND MEETING ASTM D-2665 AND D-2949. FOAM CORE AND/OR CELLULAR CORE PVC PIPING SHALL NOT BE ALLOWED. PVC PIPING OUTSIDE THE BUILDING, BELOW GRADE, SHALL BE TYPE SDR-35 MEETING ASTM D-3034, U.N.O.

I. DWV PIPE AND FITTINGS WITHIN WALLS BEHIND KITCHEN HOODS SHALL BE SERVICE WEIGHT HUBLESS CAST IRON WITH SLEEVE, SHIELD, AND DRAWBAND JOINTS MEETING ASTM A-888 AND ASTM C-564.

J. PVC-DWV FITTINGS FOR PIPING SHALL BE SOLVENT WELD TYPE INSIDE AND UNDERSLAB MEETING ASTM D-2665, D-3311 AND F-186. CEMENTS SHALL MEET ASTM D-2564 AND PRIMER MEETING ASTM F-656. CURE TIME MUST COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. EXTERIOR PIPING JOINTS SHALL BE NEOPRENE PUSH-ON TYPE.

K. PROVIDE 1" THICK PIPE INSULATION FOR ALL ABOVE SLAB HOT AND TEMPERED WATER PIPING. PROVIDE 1/2" THICK INSULATION FOR ALL ABOVE SLAB COLD WATER, FILTERED WATER, CONDENSATE PIPING, AND HORIZONTAL RAIN WATER CONDUCTORS INSIDE THE BUILDING. PIPING INSULATION SHALL BE KNAUF 1000F 25/50 FIBERGLASS PIPE COVERING, WHITE KRAFT PAPER VAPOR BARRIER (.02 PERMS) BONDED TO ALUMINUM FOIL AND REINFORCED WITH GLASS FIBERS. MAXIMUM THERMAL CONDUCTIVITY OF 0.23 AT 75F. LONGITUDINAL LAP SHALL BE SELF SEALING. INSULATION FOR WALK-IN COOLER/FREEZER CONDENSATE PIPING SHALL BE ARMACELL AP ARMAFLEX WITH MINIMUM 1/2" WALL THICKNESS.

L. PIPE INSULATION AND COVERINGS SHALL HAVE A RATING OF NOT GREATER THAN 25 FLAME SPREAD, NO HIGHER THAN 50 SMOKE DEVELOPED, AND NO MORE THAN 50 FUEL CONTRIBUTED. THE ONLY EXCEPTION SHALL BE ARMAFLEX AP, WHEN SPECIFIED, WHICH SHALL NOT EXCEED 100 SMOKE DEVELOPED.

M. A PVC 25/50 PRE-FORMED COVER SHALL BE PROVIDED AT ALL INSULATED PIPING FITTINGS EQUAL TO PROTO PVC CORP LOSMOKE, 800-875-7768.

N. ALL NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL MEETING ASTM A53 WITH SCREWED OR WELDED FITTINGS AND GASKET TYPE UNIONS AND FLANGES. FOR SCREWED PIPING, PIPING SHALL BE JOINED WITH BLACK 150 POUND MALLEABLE IRON SCREWED FITTINGS AS ALLOWED BY LOCAL AUTHORITY. CONTRACTOR SHALL VERIFY THE NEED FOR WELDED PIPING AS REQUIRED BY THE LOCAL GAS CODE AND/OR APPLICABLE LOCAL ORDINANCES AND AMENDMENTS.

O. EXPOSED SUPPORTS AND ATTACHMENTS SHALL BE STAINLESS STEEL, CHROME OR CHROME PLATED. GALVANIZED ATTACHMENTS WILL NOT BE ACCEPTED.

P. USE MATERIALS SPECIFIED ON THESE PLANS. SUBSTITUTIONS ARE ALLOWED ONLY IF SPECIFIED MATERIALS ARE UNAVAILABLE. PRODUCT SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT PRIOR APPROVAL. ALL WATER PIPING, FITTINGS, FIXTURES AND ACCESSORIES SHALL BE CERTIFIED LEAD FREE AS DEFINED IN, AND PER THE INTENT OF, THE "REDUCTION IN LEAD IN DRINKING WATER ACT".

PART II - EXECUTION (C15100)

2.01 TRENCHING (C15100)

A. EXCAVATION, BACKFILLING, AND TRENCH WORK SHALL BE DONE IN ACCORDANCE WITH LATEST O.S.H.A. AND APPLICABLE SAFETY STANDARDS.

B. PROVIDE NECESSARY SHORING AND CLEANING TO KEEP TRENCHES IN GOOD WORKING CONDITION, INCLUDING PUMPING OUT WATER.

C. IN MOSTLY ROCK MATERIAL, TRENCHES SHALL BE EXCAVATED TO 6" BELOW THE ELEVATION OF THE BOTTOM OF THE PIPES. AFTER EXCAVATION, TRENCH SHALL THEN BE FILLED TO THE PROPER ELEVATION WITH CRUSHED LIMESTONE. GRAVEL SHALL BE REMOVED FROM UNDER PIPE BELLS SO THE PIPE RESTS FIRMLY ON THE TRENCH BOTTOM.

D. IN MOSTLY EARTH OR SAND MATERIAL, TRENCHES SHALL BE EXCAVATED TO 6" BELOW THE ELEVATION OF THE BOTTOM OF THE PIPES. AFTER EXCAVATION, TRENCH SHALL THEN BE FILLED TO THE PROPER ELEVATION WITH FINE SAND OR GRAVEL. TRENCH BOTTOM SHALL BE REMOVED AT PIPE BELLS SO THE PIPE RESTS FIRMLY ON THE TRENCH BOTTOM.

E. BACKFILLING AND TAMPING SHALL BE CAREFULLY DONE BY HAND SIMULTANEOUSLY ALONG BOTH SIDES OF THE PIPE USING ROCK FREE EARTH, CRUSHED STONE OR SAND UNTIL THE PIPE IS COVERED TO A DEPTH OF AT LEAST 12". BACKFILL SHALL BE ACCOMPLISHED IN SUCCESSIVE 6" LAYERS. THE REST OF THE

FILL-UP TO THE TOPSOIL LAYER MAY BE GRAVEL OR ROCK FREE EARTH.

F. ACCEPTABLE SOIL MATERIALS FOR BACKFILL AND FILL SHALL BE FREE OF CLAY, ROCK OR GRAVEL LARGER THAN 2" IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS AND OTHER DELETERIOUS MATTER HAVING A PLASTICITY INDEX LESS THAN 30. BACKFILL SHALL BE ACCOMPLISHED IN LAYERS OF NOT MORE THAN 6" AND EACH LAYER SHALL BE COMPACTED. THE LAST 12" OF BACKFILL SHALL BE ROCK FREE TOPSOIL.

G. SURFACE SHALL BE RESTORED TO ITS ORIGINAL CONDITION.

2.02 INSTALLATION (C15100)

A. WATER PIPING IN EXTERIOR WALL SHALL BE INSTALLED ON THE HEATED SIDE OF WALL INSULATION.

B. EXPOSED HOT AND COLD WATER TRIM FITTINGS AND ACCESSORIES IN FINISHED AREAS SHALL BE CHROME FINISHED.

C. ACCEPTABLE METHODS OF PIPE SUPPORT WITHIN WALLS SHALL BE THE SUMNER SYSTEM, POSIFIX, STAKFIX, PIPEFIX, HOLDRITE OR CHANNEL.

D. PROVIDE J.R. SMITH OR APPROVED EQUAL SHOCK ABSORBERS #5005 THRU 5050 SIZE AS RECOMMENDED BY MANUFACTURER INSTALLED ON HOT AND COLD WATER BRANCH LINES CONTAINING SINGLE LEVER FAUCETS, FLUSH VALVES OR EQUIPMENT WITH QUICK CLOSING VALVES BETWEEN THE LAST TWO FIXTURES AS SHOWN ON THE CONTRACT DRAWINGS. SHOCK ABSORBERS SERVICING FIXTURES WITH FLUSH VALVES SHALL BE SECURELY ANCHORED IN THEIR VERTICAL POSITION.

E. SANITARY WASTE LINES SHALL BE UNIFORMLY GRADED TO ELEVATIONS SHOWN. IF NO ELEVATIONS ARE GIVEN, SEWERS SHALL BE PITCHED NOT LESS THAN 1/4" PER FOOT FOR ALL PIPING 2-1/2" IN DIAMETER AND SMALLER AND 1/8" PER FOOT FOR ALL PIPING 3" IN DIAMETER AND LARGER.

F. STORM PIPING SHALL BE SLOPED AT 1/2" PER FT (2%) UNLESS NOTED OTHERWISE ON PLANS.

G. SUPPORT HORIZONTAL PIPING ACCORDING TO LOCAL PLUMBING CODE. HANGER ROOFS SHALL BE SIZED AS FOLLOWS:

NOMINAL PIPE SIZE (IN)	MINIMUM HANGER DIAMETER (IN)
1/2	3/8
3/4 TO 1-1/2	3/8
2 TO 2-1/2	3/8
3 TO 6	1/2

H. HANGERS FOR PIPING GREATER THAN 1" SHALL PASS OVER THE INSULATION. PROVIDE SADDLES FOR INSULATED PIPING.

I. INSULATION SHALL BE APPLIED WITH JOINTS TIGHTLY BUTTED. OPEN CRACKS, VOIDS AND DEPRESSIONS SHALL BE FILLED WITH HYDRAULIC SETTING CEMENT. LAPPING MATCHING THE FINISH SHALL BE PASTED NEATLY OVER JOINTS. FITTINGS AND VALVES SHALL BE INSULATED WITH THE SAME TYPE.

J. PROVIDE AND INSTALL A CUT-OFF VALVE, UNION AND FULL SIZE DIRT LEG AT CONNECTION TO EACH GAS-FIRED PIECE OF EQUIPMENT. INSTALL PIPING AT AND AROUND EQUIPMENT SO AS TO NO WAY OBSTRUCT EQUIPMENT ACCESS PANELS AND/OR ACCESS DOORS.

K. COORDINATE ABOVE-CEILING PIPING LOCATIONS AND ROUTING WITH HVAC CONTRACTOR AND M-SHEETS PRIOR TO INSTALLATION. ALL MAIN DUCT TRUNK LOCATIONS SHALL TAKE PRIORITY. PIPING MAY REQUIRE REMOVAL AND REINSTALLATION AT PLUMBING CONTRACTOR'S EXPENSE IF PIPING OBSTRUCTS THE M-SHEET DUCT LAYOUT AS SHOWN OR PREVENTS ACCESS TO GREASE DUCT CLEANOUT OPENINGS.

L. ALL GAS PIPING ABOVE ROOF SHALL BE CLEANED FREE OF RUST AND PAINTED WITH COAT OF ZINC RUST PRIMER AND ONE COAT OF ALUMINUM BASE PAINT. METER AND GAS RISER SHALL BE PRIMED AND PAINTED TO MATCH BUILDING. APPLY TWO COATS OF ASPHALTUM BASE PAINT TO PIPING BURIED UNDERGROUND.

2.03 TESTING (C15100)

A. POTABLE WATER PIPING SHALL BE PRESSURE TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.

B. THE POTABLE WATER SYSTEM SHALL BE FLUSHED OUT PROGRESSIVELY BY OPENING OUTLETS AND FLOWING WATER UNTIL IT RUNS CLEAR. AFTER PIPE CLEANING IS COMPLETED, THE STRAINERS SHALL BE REMOVED, CLEANED, AND REPLACED. THEN THE ENTIRE POTABLE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.

C. THE SANITARY WASTE SYSTEM SHALL BE FLUSHED OUT PROGRESSIVELY WITH FLOWING WATER UNTIL IT RUNS CLEAR.

D. THE ENTIRE SANITARY WASTE SYSTEM AND STORM DRAINAGE SYSTEM SHALL BE PRESSURE TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.

E. NATURAL GAS PIPING SHALL BE LEAK TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS.

PART III - MANUFACTURERS

3.01 PRODUCTS - PIPING SYSTEMS, ETC (C15100)

A. HYDRANTS, CARRIERS, DRAINS, AND SHOCK ABSORBERS: JAY R. SMITH, JONES STEPHENS CORP, WATTS ZURN, OR JOSAM.

B. ALTERNATE FIXTURES: ONLY AS SHOWN ON PLANS. APPROVED JAY R. SMITH (JRS), WATTS (WTS), AND ZURN (ZRN) MODEL NUMBERS LISTED ON FIXTURE SCHEDULE, THIS SHEET.

3.02 PRODUCTS - RESTROOM FIXTURES PORCELAIN & VALVES (C15405)

A. PREFERRED FIXTURES: TOTO, NO EXCEPTION.

B. ALTERNATE FIXTURES: ONLY AS SHOWN ON PLANS.

C. FITTINGS: AS SPECIFIED ON THE PLANS. NO SUBSTITUTIONS ALLOWED.

D. FLUSH VALVES AND LAVATORY FAUCETS: TOTO MANUFACTURING. NO SUBSTITUTIONS ALLOWED.

E. PREFERRED TOILET SEATS: TOTO. ALTERNATE TOILET SEATS: CHURCH, BEMIS, AND BENEKE.

F. FLOOR SINKS: ZURN WITH ALUMINUM SEDIMENT BUCKETS. NO SUBSTITUTIONS ALLOWED.

NATIONAL ACCOUNTS

I. TOTO VALVES AND FIXTURES (NO SUBSTITUTIONS). PLEASE CONTACT TRINA LINDSEY WITH HJC DISTRIBUTORS AT (800) 459-7099 OR VIA E-MAIL AT: cfo@hjcinc.com FOR NATIONAL ACCOUNT PRICING AND DELIVERY FOR ALL ITEMS ON PLUMBING FIXTURE SCHEDULE.

2. PLUMBING FIXTURES

RESTROOM FIXTURES (C15405)

P-1 WATER CLOSET: TOTO MODEL CT705EN BOWL WITH 1.28 GPF TET-1-LNC #32CP ECO-POWER FLUSH VALVE AND SC534 SEAT. NO SUBSTITUTIONS. WHITE, FLOOR MOUNTED, FLUSH VALVE TYPE, VITREOUS CHINA, 1-1/2" TOP SPUD, ELONGATED BOWL, ELECTRONIC SENSOR OPERATED HANDS-FREE FLUSH VALVE, WHITE OPEN FRONT SEAT WITH CHECK HINGE. CHICK-FIL-A HAS NATIONAL ACCOUNTS WITH TOTO. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.

P-2 WATER CLOSET (ADA): TOTO MODEL CT705ELN BOWL WITH 1.28 GPF TET-1-LNC #32CP ECO-POWER FLUSH VALVE AND SC534 SEAT. NO SUBSTITUTIONS. I.C. ACCESSIBLE, WHITE, FLOOR MOUNTED, 17-1/2" HIGH FLUSH VALVE TYPE, VITREOUS CHINA, 1-1/2" TOP SPUD, ELONGATED BOWL, ELECTRONIC SENSOR OPERATED HANDS-FREE FLUSH VALVE, WHITE OPEN FRONT SEAT WITH CHECK HINGE. CHICK-FIL-A HAS NATIONAL ACCOUNTS WITH TOTO. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.

P-3 URINAL: TOTO MODEL UT445U URINAL WITH TEJ 1 UN 12#CP Q125 GPF SELF SUSTAINED HYDROPOWER SELF-GENERATING ELECTRONIC SENSOR-OPERATED FLUSH VALVE. NO SUBSTITUTIONS. VITREOUS CHINA, 3/4" TOP SPUD, SENSOR OPERATED WITH MANUAL OVERRIDE BUTTON, INTERNAL VALVE FILTER PROTECTION, PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO PRODUCTS.

P-4 LAVATORY FAUCET (BUILT-IN COUNTERTOP LAVATORY PROVIDED BY OWNER) TOTO MODEL TET 105-D10ET # CP ECO-POWER SENSOR HOT/COLD FAUCET WITH THERMOSTATICALLY CONTROLLED ASSE 1070 MIXING VALVE FAUCET, 0.09 GALLONS PER CYCLE, NO SUBSTITUTIONS. PROVIDE MCGUIRE LF175 SUPPLY WITH STOP, MCGUIRE 155-WC GRID DRAIN WITH OFFSET TAILPIECE MCGUIRE 8872 POLISHED CHROME P-TRAP. P-TRAP SHALL BE PARALLEL WITH BACK WALL. PROVIDE A TRUEBRO INC. HANDI LAV-GUARD INSULATION KITS MODELS IOIE-Z AND IOIE-Z. CHICK-FIL-A HAS NATIONAL ACCOUNTS WITH TOTO. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.

PLUMBING (C15100)

P-5 KITCHEN HAND SINK ROUGH IN (SINK AND FAUCET WITH 0.50 GPM AERATOR FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL WALL HUNG, STAINLESS STEEL SINK AND FAUCET SET AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE LF175 SUPPLIES WITH STOPS AND A MCGUIRE 8912 POLISHED CHROME P-TRAP.

P-6 SERVING COUNTER DROP IN SINK ROUGH IN (SINK AND FAUCET WITH 0.50 GPM AERATOR FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL SINK AND FAUCET SET AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE 8912 POLISHED CHROME P-TRAP AND MCGUIRE LF175 STOPS WITH 20" CHROME PLATED 3/8" COPPER RISERS.

P-7 MOP SINK FAUCET (MOP SINK BASIN BUILT BY GENERAL CONTRACTOR) PROVIDE T&S BRASS MODEL B-2345 FAUCET WITH CERAMA SPRING CHECK VALVE CARTRIDGES, HOSE THREAD SPOUT OUTLET, TOP BRACE, ADJUSTABLE INLET SPREAD FROM 3" TOP 8". INCLUDE T&S BRASS MODEL 43-072 HOSE THREAD X 3/4" FEMALE NPT CHROME ADAPTOR. NO SUBSTITUTIONS. SEE ALSO P-16.

P-8 VEGETABLE PREP SINK ROUGH IN (SINK AND FAUCET WITH 0.65 GPM SPRAY HEAD FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL SINK AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE LFST08 STOPS AND BRASSRAFT 36" CHROME PLATED 1/2" OD COPPER RISERS MODEL 3-36AC, ASSEMBLE AND MOUNT TWO HANDLE FAUCET WITH PRE-RINSE SPRAY ARM. INSTALL ADD-ON FAUCET WITH 1/2" SPOUT AT BASE OF PRE-RINSE RISER. SEE K-SHEET ELEVATIONS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) INDIRECT WASTE MANIFOLD FROM SINK BASIN TO FLOOR SINK P-13B, NO P-TRAP REQUIRED. INSTALL CLEANOUT AT TURN.

P-9 FOUR COMPARTMENT POT SINK ROUGH IN (SINK AND FAUCETS WITH 0.65 GPM SPRAY HEAD FURNISHED BY OWNER) CONTRACTOR SHALL INSTALL SINK, ASSEMBLE & MOUNT TWO FAUCETS, AND MAKE FINAL CONNECTIONS. PROVIDE MCGUIRE LFST08 STOPS AND BRASSRAFT 36" CHROME PLATED 1/2" OD COPPER RISERS MODEL 3-36AC, ASSEMBLE AND MOUNT ONE TWO-HANDLE FAUCET WITH PRE-RINSE SPRAY. INSTALL ADD-ON FAUCET WITH 1/2" SPOUT AT BASE OF PRE-RINSE RISER. ASSEMBLE AND MOUNT ONE TWO-HANDLE FAUCET WITH DOUBLE JOINT SPOUT ON OPPOSITE SIDE. SEE K-SHEET ELEVATIONS FOR FAUCET LOCATIONS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) INDIRECT WASTE MANIFOLD FROM EACH SINK BASIN TO FLOOR SINK P-13A, NO P-TRAPS REQUIRED. PROVIDE CLEANOUT AT EACH END.

P-10 FLOOR DRAIN (3") JONES STEPHENS CORP D53-144 PVC BODY, BRONZE SPUD WITH 8" DIAMETER NICKEL BRONZE STRAINER. ALT: (JRS) 2110-HP-NB, (WTS) FDI03-A6-60, (ZRN) FRO8NIP35-C.

P-11 WALL HYDRANT (NON-FREEZE) WOODFORD MODEL 67-C AUTOMATIC DRAINING WALL HYDRANT WITH DUAL CHECK BFP, ASSE 1052 APPROVED, WALL CLAMP, POLISHED BRASS FINISH. "C" STYLE INLET, SEE WALL HYDRANT NOTES ON 1/2"-1" FOR WALL THICKNESS AT WALL HYDRANTS. ALT: (WTS) HY-42.

P-12 FUNNEL DRAIN (3") JR. SMITH 3510LO3 FUNNEL-CEPTOR 3" INDIRECT WASTE RECEIVER WITH NICKEL BRONZE STRAINER AND FUNNEL. PROVIDE 6" SQUARE F12 STRAINER WITH 4" ROUND FUNNEL AT ICE MACHINE & WALK-IN COOLER. ALT: (WTS) FDI03P-M6-F4-I, (ZRN) ZN415-3N-65-4.

P-13A FLOOR SINK (POT SINK) ZURN MODEL Z1901-KC-1-3N-1-23 CAST IRON INDIRECT WASTE RECEIVER WITH 12" SQUARE BODY, FLASHING CLAMP, 8" DEEP, ALUMINUM SEDIMENT BUCKET, AND NO GRATE. NO SUBSTITUTIONS.

P-13B FLOOR SINK (VEGETABLE SINK) ZURN MODEL Z1910-KC-3N-1-23 CAST IRON INDIRECT WASTE RECEIVER WITH FLASHING CLAMP, 8" SQ. BODY, ALUMINUM SEDIMENT BUCKET, AND NO GRATE. NO SUBSTITUTIONS.

P-14 CLEANOUTS INSIDE BUILDING: JR. SMITH 4053L CLEANOUT WITH 6-1/2" SQUARE NICKEL BRONZE TOP AND TAPER THREAD BRONZE PLUG. SEE PLAN FOR SIZE. ALT (X-PIPE DIA) (WTS) CO-20XP-S, (ZRN) ZN1400-XN-1-8P.

P-15 CLEANOUTS OUTSIDE BUILDING: JR. SMITH 426L SERIES EXTRA HEAVY DUTY CAST IRON CLEANOUT, "C.O." CAST IN COVER, ABS PLUG, SPEEDI SET OUTLET. ALT (X-PIPE DIA) (WTS) CO-XOO-MF + CO-38X, (ZRN) Z1474-X-N.

P-16 3-WAY DIVERTER VALVE ASSEMBLY: WATTS MODEL LFB 6780 ROUGH BRASS LEAD-FREE DIVERTER BALL VALVE WITH 3/4" FIP INLET AND OUTLETS AND QUARTER TURN LEVER HANDLE PROVIDE WITH TWO (2) FORGED BRASS 3/4" MIP X 3/4" MALE GARDEN HOSE THREAD ADAPTERS (PLUMBEST MODEL 620-003 OR EQUAL). PROVIDE WITH ONE ASSE 101 APPROVED CHROME PLATED VACUUM BREAKER (WOODFORD MODEL 34H-CH OR EQUAL). FOR INSTALLATION AT MOP SINK, SEE 2/P-1. PROVIDE ALSO TWO 3/4" CLOSE CHROME PLATED BRASS NIPPLE AND 3/4" POLISHED CHROME 90 DEGREE ELBOW.

P-17 VACUUM RELIEF VALVE: WATTS MODEL #LFN36MI, 3/4" CONNECTION.

P-18 EXPANSION TANK: STATE INDUSTRIES MODEL ETC-5X, ACCEPTANCE 3.05 GALLONS AT 40 PSI PRECHARGE, 3/4" CONNECTION. ALTERNATE MODELS SIZED PER WATER HEATER MANUFACTURER RECOMMENDATIONS ARE ACCEPTABLE.

P-19 WATER HEATER: STATE INDUSTRIES MODEL G56-75-YRVHTL, 75 GALLON GAS FIRED WATER HEATER, 76,000 BTUH INPUT, 79 GPH MINIMUM RECOVERY AT 100 DEGREE RISE, 3" PVC OR ABS VENT OUTLET, WITH ONE YEAR MANUFACTURER WARRANTY. CONTRACTOR TO PROVIDE HEAT TRAPS AT INLET AND OUTLET. ACCEPTABLE SUBSTITUTES: A.O SMITH GPVX75L, BRADFORD WHITE RG2-PV754-KN, RHEEM GPV75-75FV-2.

P-20 THERMOMETER: PROVIDE TRERICE MODEL 8834-04-04 3" DIAL TYPE THERMOMETER WITH BOTTOM 1/2" NPT. CONNECTION, 4" STEM AND 0 DEG F TO 200 DEG F RANGE. LEAD FREE.

P-21 BACKFLOW PREVENTERS: COORDINATE LOCATION WITH CIVIL SITE UTILITY PLAN. BACKFLOW PREVENTER TYPE AND MODEL IS DETERMINED BY CIVIL ENGINEER IF LOCATED OUTSIDE THE BUILDING.

DOUBLE CHECK TYPE
WATTS NO. LF1007MIQT 1-1/2" DUAL CHECK MODULAR TYPE BACKFLOW PREVENTER MEETING ASSE 1015 AND AWWA C510-92. WHERE REQUIRED BY LOCAL AUTHORITY, USE THE RPZ TYPE BFP SHOWN BELOW. ALT: (ZRN) 112-350XL.

REDUCED PRESSURE ZONE (RPZ) TYPE
WATTS NO. LF1009M2 1-1/2" MODULAR TYPE WITH TEST PORTS AND INTERMEDIATE RELIEF VALVE MEETING ASSE 1018 AND AWWA C511-89. PROVIDE WATTS NO. 909-AG-C AIR GAP DEVICE. ALT: (ZRN) 112-975XL2L.

P-22 MOP SINK CHECK VALVES: T&S BRASS 1/2" MODEL B-CVVI-2 BALL CHECK.

P-23 UTILITY CONNECTION (ICE MAKER): PROVIDE A MCGUIRE MODEL LF-1ST06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET. PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFP P-34. SEE DETAIL 3/P-1 FOR PIPING AT ICE MAKERS.

P-24 UTILITY CONNECTION (COFFEE & TEA BREWERS): PROVIDE A MCGUIRE MODEL LF-1ST06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET. PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFP P-34.

P-25 SHOCK ABSORBER: JR. SMITH FIGURE 5005 THROUGH 5050, SIZE AS RECOMMENDED BY MANUFACTURER. ALT: (WTS) SSA + SSB, (ZRN) Z1700-100 + Z1700-300.

P-26 FUNNEL DRAIN (3") JR. SMITH 3510LO3 FUNNEL-CEPTOR 3" INDIRECT WASTE RECEIVER WITH NICKEL BRONZE STRAINER AND FUNNEL. PROVIDE 8" ROUND F22 STRAINER WITH 3.25" X 8.25" OBLONG FUNNEL. ALT: (WTS) FD-103P-A8-G-I, (ZRN) ZN415-3N-85-OF.

P-26A TRAP SEAL PROTECTOR: PROVENT TRAP GUARD MODEL TG3H 3" TRAP SEAL INSERT FOR INTERIOR INSTALLATION AND REPLACEMENT ACCESS THROUGH STRAINER. PROVIDE AT P-35 FLOOR DRAINS IN RESTROOMS, P-37 FLOOR DRAINS DINING ROOM, AND P-26 FUNNEL DRAINS IN MECH ROOM. TRAP GUARDS TO BE USED ALONG WITH MECHANICAL TRAP PRIMERS. PROVIDE PROSET MODEL TG33-ZURN WHEN USING ZURN FLOOR FIXTURES.

P-27 WATER PRESSURE GAUGE: TRERICE MODEL 800B, 2-1/2" ROUND, BOTTOM OUTLET WITH 1/4" NPT. CONNECTION AND 0 TO 100 PSI RANGE.

P-28 BALL VALVE: NIBCO MODEL 4660-T, 3/4", WITH IPS INLET AND OUTLET.

P-29 ICE MACHINE FLOOR SINK: ZURN Z1910-KC-3N-1-23 CAST IRON INDIRECT WASTE RECEIVER WITH FLASHING CLAMP, 8" SQ. BODY, ALUMINUM SEDIMENT BUCKET AND NO GRATE. NO SUBSTITUTIONS.

P-30 FILTERED WATER FAUCET: (FAUCET PROVIDED BY OWNER) TWO-HANDLE WALL MOUNT FAUCET WITH SWING SPOUT. MOUNT ON WALL AS SHOWN ON K-SHEETS. PIPE FILTERED WATER TO BOTH SIDES OF FAUCET. CONNECT TO SUPPLY PIPING WITH BRASS OR CHROME NIPPLES, GALVANIZED NOT ALLOWED.

P-31 DUMPSTER POST HYDRANT (NON-FREEZE) WOODFORD MODEL Y2 LEVER TYPE POST HYDRANT, 3/4" HOSE CONNECTION, LOCKABLE LEVER HANDLE, BRASS CASING, BRASS OPERATING ROD, ASSE 1052 APPROVED AND 24" DEPTH OF BURY.

P-32 DUMPSTER PAD DRAIN JR. SMITH FIGURE NO. 2280C03 3" FLOOR DRAIN WITH 7-1/2" HINGED CAST IRON SLOTTED GRATE AND SEDIMENT BUCKET. PROVIDED AND INSTALLED BY SITE CONTRACTOR. ALT: (ZRN) Z560-3N-L-Y.

P-33 TRAP PRIMER (MECHANICAL TYPE) PRECISION PRODUCTS PR-500. PROVIDE DISTRIBUTION UNIT WHERE SERVING MULTIPLE DRAINS. PROVIDE SCREWDRIWER STOP AT PRIMER INLET. ALT: (WTS) TP-300A-DR.

P-34 DISPENSER BACKFLOW PREVENTER: WATTS MODEL #WLF7RU22D ASSE 1024 RATED WITH 1/2" FIP INLET AND OUTLET, DUAL CHECK TYPE. PROVIDE 1/2" DIA X 2" LONG CHROME NIPPLE AT BFP INLET AND OUTLET. PROVIDE T&S BRASS MODEL B-0110 CHROME WALL BRACKET.

P-35 FLOOR DRAIN (3") JONES STEPHENS CORP D50-064 PVC BODY, BRONZE SPUD WITH 6" DIAMETER NICKEL BRONZE STRAINER. SEE DWG PH-F FOR DRAINS IN RESTROOMS REQUIRING 1/2" TRAP PRIMER CONNECTION. ALT: (WTS) FDI03-A6-60, (ZRN) FRO6NIP35-C.

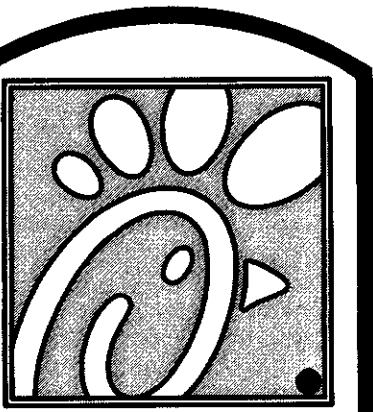
P-36 BEVERAGE TOWER INDIRECT RECEIVER (3") JONES STEPHENS CORP D53-144 PVC BODY, BRONZE SPUD WITH 8" DIAMETER NICKEL BRONZE STRAINER. ALT: (JRS) 2110-HP-NB, (WTS) FDI03-A8-60, (ZRN) FRO8NIP35-C.

P-37 FLOOR DRAIN (3") JONES STEPHENS CORP D50-076 PVC BODY, BRONZE SPUD WITH 6" SQUARE NICKEL BRONZE STRAINER. PROVIDE 1/2" TRAP PRIMER CONNECTION FOR DINING ROOM DRAINS. ALT: (WTS) FDI03-M6-7-60, (ZRN) FSO6NIP35-C.

P-38 HOT WATER CIRCULATING PUMP: TACO MODEL 006-SC7-1FC, 1/2" UNION CONNECTIONS, INTEGRAL FLOW CHECK, 110 VAC, ELECTRICIAN TO PROVIDE AND WIRE PLUG AND CORD, 1/2" HP, 3 GPM AT 7 FT TOTAL DYNAMIC HEAD, PROVIDE CONTROL WIRING AND HONEYWELL MODEL L6006C 110 VAC AQUA-STAT, WITH ADJUSTABLE SETPOINT, MOUNTED DIRECTLY ON PIPE. SET SHUT-OFF TEMPERATURE AT 130 DEG F.

P-39 2" PRESSURE REDUCING VALVE: WATTS NO. #LF223-SB WITH BUILT-IN BYPASS FEATURE. SET NO FLOW CONDITION AT 70 PSI. ALT: (ZRN) SERIES 500XLYSBR.

P-40 WYE STRAINER WITH #100 SCREEN: 2" WATTS LF777SM3, BRONZE WYE STRAINER WITH THREADED CONNECTION AND TAPPED RETAINER CAP. PROVIDE #100 MESH SCREEN. PROVIDE WATTS 1/2" BD-1C BRASS BOILER DRAIN WITH BRASS STREET 90 DEGREE ELBOW, MALE END SIZED FOR CONNECTION TO WYE STRAINER RETAINER CAP OUTLET TAP.



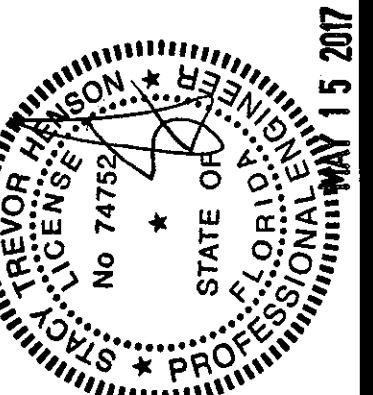
Chick-fil-A

5200 Buffington Rd.
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30349-2998

Revisions:

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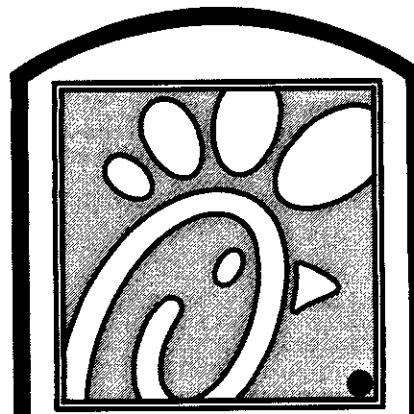
3166 Daniels Rd
Winter Garden, FL
34787-7017

SHEET TITLE PLUMBING SPECIFICATIONS

VERSION: V7.025
ISSUE DATE: 01.2017

Job No. : 16.0439
Store : 01918
Date : 02.02.16
Drawn By : LP
Checked By : PD

Sheet

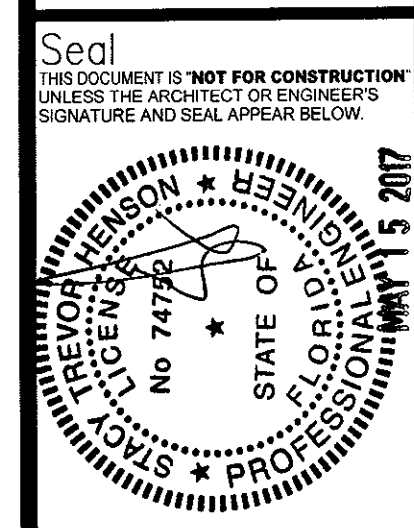


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5200 Buffington Rd. Atlanta Georgia, 30349-2998

Revisions: Mark Date By

Table with 3 columns: Mark, Date, By. Contains revision entries with triangle symbols.



STACY HENSON, P.E.

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SHEET TITLE SINGLE LINE RISER DIAGRAM

VERSION: V7.025 ISSUE DATE: 01.2017

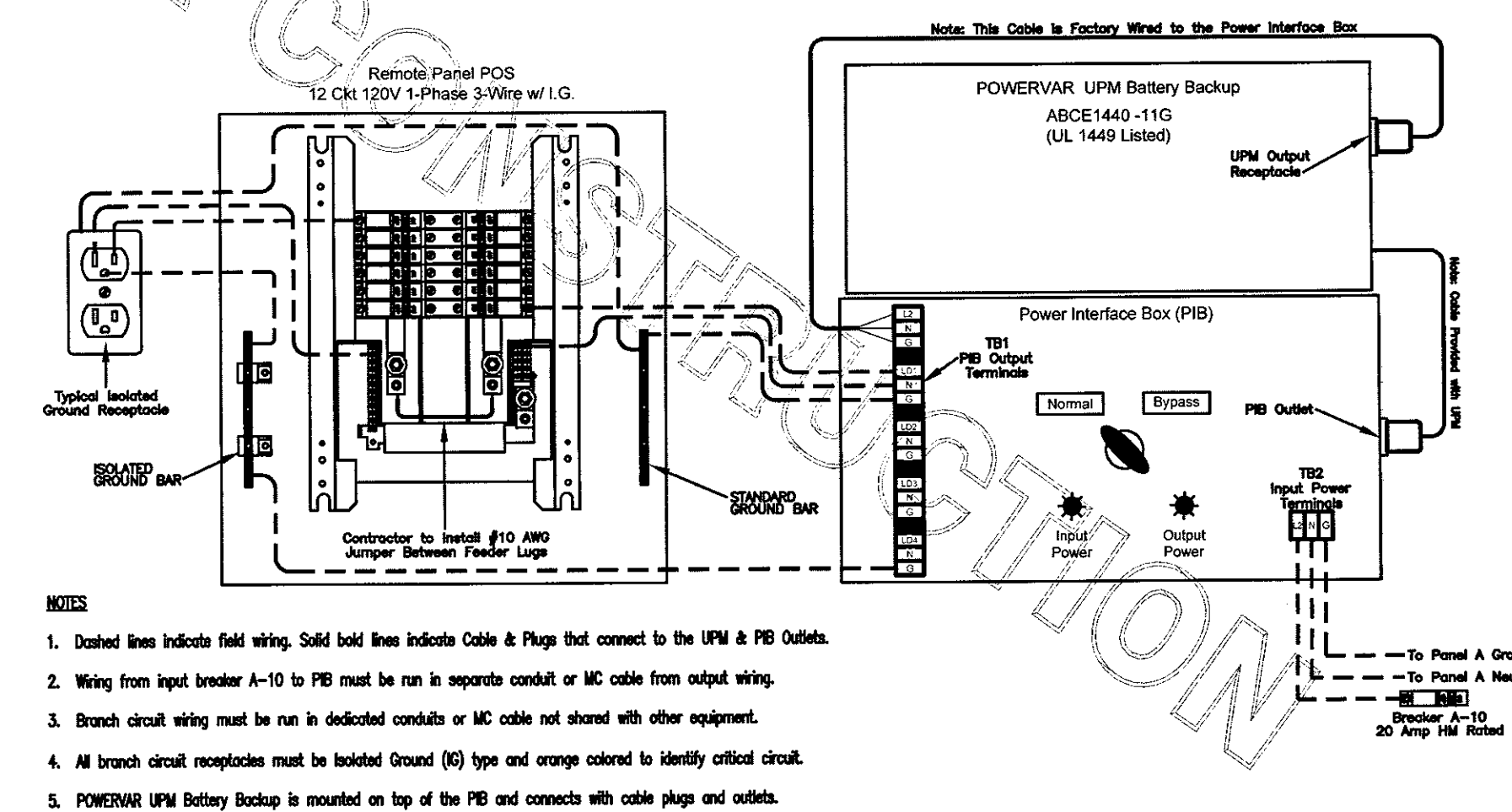
Job No.: 16.0439 Store: 01918 Date: 02.02.16 Drawn By: MI Checked By: SN

Sheet E3.2

2 CONDUIT AND CONDUCTORS SCHEDULE (Based on 2005, 2008, and 2011 NEC)

Table with columns: Mark No., OCP Device (Amp), Conductors Total Ampacity (60d C, 75d C), Phase & Neutral Qty, Size, Type, Min Eq, Grd, No. Sets, Raceway Size (nominal inches) with sub-columns for EMT, IMC, RIGID, PVC, and With Isolated Ground.

Notes: Conductors are rated at 600 volt or below and are to be copper. NEC Table 310.16 (310.15(B)(16) in 2011) is used for the basis of the conductor ampacity... All Branch Feeders and Branch Circuits shall include a green Equipment Grounding Conductor.



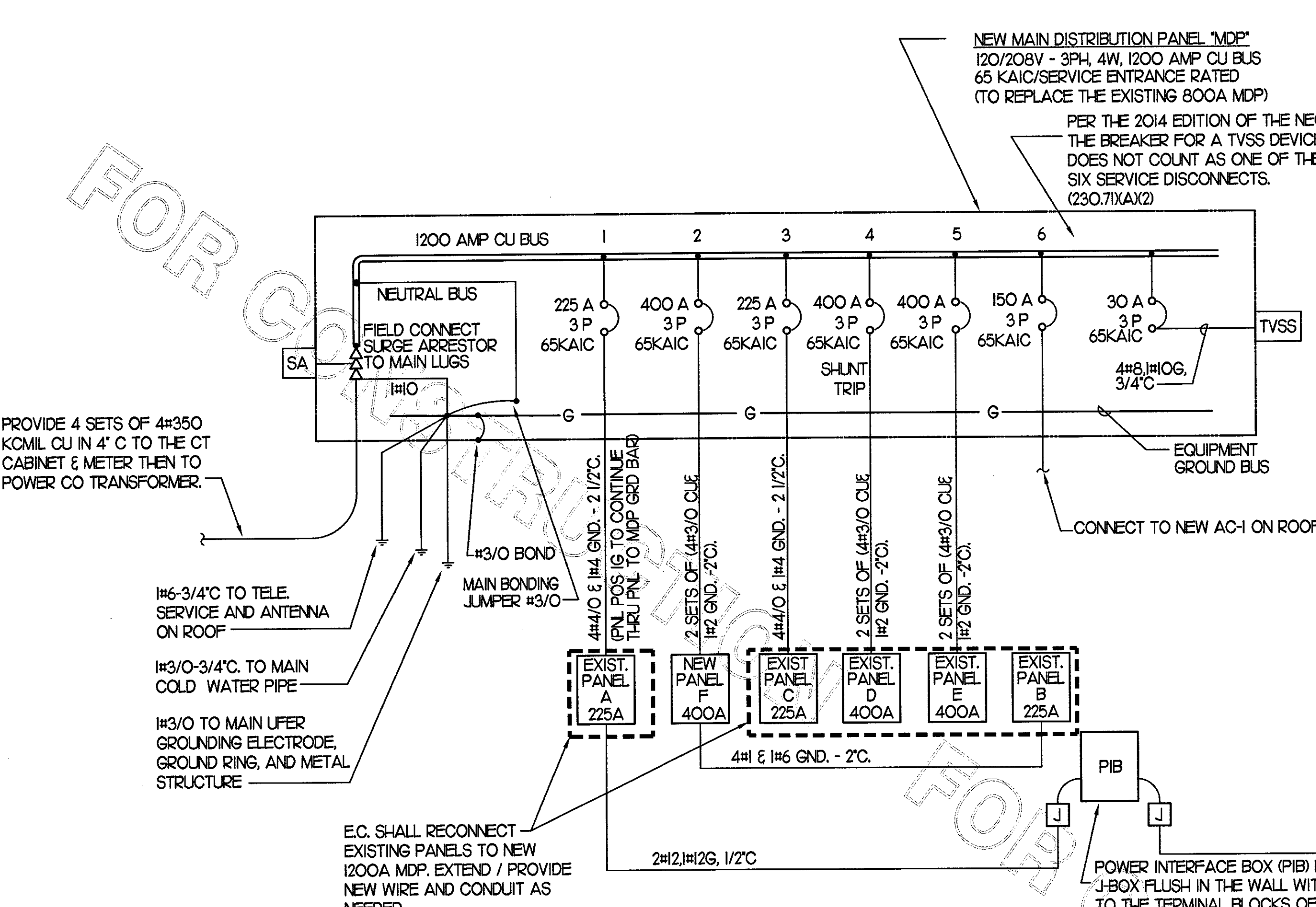
POWERVAR LAPC with POWER INTERFACE BOX (PIB) and Panel POS Wiring Diagram

NOTE: BRANCH CIRCUIT ASSIGNMENTS ARE BASED ON EXISTING DATA MARKED ON PANEL SCHEDULE AND ARE SUBJECT TO FIELD VERIFICATION. THIS CONTRACTOR SHALL PROVIDE NEW ACCURATE TYPEWRITTEN SCHEDULES FOR PANELS. SHADED CIRCUITS DENOTE EXISTING TO REMAIN. NOTE! AS NOTED IN THE SPECIFICATIONS, ALL WIRING LAYOUTS, PIPING LAYOUTS AND DUCT LAYOUTS ARE SCHEMATIC. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONSTRUCTION AND STRUCTURE OF THE BUILDING AND SHALL BE VERIFIED AND COORDINATED IN THE FIELD.

THE CONTRACTOR SHALL CONTACT THE ARCHITECT, ENGINEER OR OWNER PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN HIS BID ALL COSTS TO MEET THE DESIGN INTENT.

BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORK INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, THE PLANS AND SPECIFICATIONS NOT WITHSTANDING.

PROVIDE A JUMPER ON THE LUGS OF PANEL-POS SO THAT BOTH PHASE BARS ARE TIED TO THE ONE 120V PHASE CONDUCTOR FROM THE PIB. POWER INTERFACE BOX (PIB) LOCATED UNDER THE OFFICE COUNTER. PROVIDE INCOMING J-BOX AND OUTGOING J-BOX FLUSH IN THE WALL WITH FLEX CONDUIT CONNECTION TO THE PIB.



PER THE 2014 EDITION OF THE NEC THE BREAKER FOR A TVSS DEVICE DOES NOT COUNT AS ONE OF THE SIX SERVICE DISCONNECTS. (230.71(K)(2)). PROVIDE 4 SETS OF #3/4\"/>

1 SINGLE LINE DIAGRAM

3 SINGLE LINE DIAGRAM NOTES

- 1. VERIFY SERVICE LOCATIONS AND CONFORM TO THE REQUIREMENTS OF THE POWER COMPANY AND/OR DEVELOPER. POWER COMPANY AND/OR DEVELOPER SHALL BE CONTACTED PRIOR TO BEGINNING CONSTRUCTION TO ARRANGE AND VERIFY FOR THE INSTALLATION OF THE POWER COMPANY SERVICE, METER AND OTHER ITEMS. 2. GROUND ALL EQUIPMENT AND SERVICES IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, LOCAL APPLICABLE CODES, AND ALSO AS INDICATED ON DRAWINGS.

4 SWITCHGEAR AND CONTROL EQUIPMENT NOTES:

- 1. PURCHASE PANELBOARDS, WIREWAYS, SURGE ARRESTOR, AND TVSS FROM GRAY BAR. NO SUBSTITUTIONS ALLOWED. 2. PURCHASE CONTROL PANEL "CFA-T500" OR ANY ADDITION SUB PANELS FROM SUNCOAST ENVIRONMENTAL, INC. (NO SUBSTITUTIONS ALLOWED) ALL EQUIPMENT IN THE CONTROL PANEL SHALL BE INSTALLED, WIRED AND CONNECTED AT THE FACTORY, INCLUDING AUTOMATIC LIGHTING CONTROL SYSTEM, LIGHTING RELAYS, HVAC STARTERS, POWER SUPPLIES, MISCELLANEOUS RELAYS AND CONTROLS, AND THERMOSTATS.

LOAD SUMMARY (NOT ALL ELECTRIC RESTAURANT) THE FOLLOWING IS BASED ON NEC 2005-220.88 / 2008-220.88 / 2011-220.88. Table lists loads for Lighting, Receptacles, Space Heating, Air Conditioning, Water Heater, Kitchen Equipment, and Continuous Loads, totaling 507.8 KVA and 958.9 AMPS.

FOR CONSTRUCTION

FOR CONSTRUCTION

FOR CONSTRUCTION

SECTION C16124
SUPPORTING DEVICES AND HANGERS

PART 1 - PRODUCTS

- 1.01 ACCEPTABLE MANUFACTURERS
A. Supporting devices and hangers shall be manufactured by RACO Fasteners, or approved equivalent.

PART 2 - EXECUTION

- 2.01 INSTALLATION
A. Secure conduits to within 3' of each outlet box, junction box, cabinet, fitting, etc., and at intervals not to exceed ten feet (10') and in accordance with the National Electric Code.
B. Install clamps secured to structure for feeder and other conduits routed against the structure.
C. Provide and install suitable angle iron, channel iron or steel metal framing with accessories to support or brace electrical equipment including safety switches, fixtures, panelboards, etc.
D. Use of chains, perforated iron, baling wire, or tie wire for supporting conduit runs is not permitted.
E. For support of low voltage wiring not required to be in conduit, bundle cables together in a neat manner using approved nylon tie wraps.
F. Provide a system of supporting devices and hangers to insure secure support or bracing for conduit, electrical equipment, including safety switches, fixtures, panelboards, outlet boxes, junction boxes, cabinets, etc.

SECTION C16140
WIRING DEVICES AND PLATES

PART 1 - PRODUCTS

- 1.01 WALL SWITCHES
a. Shall be purchased from the National Accounts Vendor indicated on the plans.
B. Ratings: 20 amps, 120/277 volts a.c. or as identified on drawings.
C. Devices: (Cooper/Arrow Hart catalog numbers are listed unless noted otherwise):
1. Single pole toggle switches:
20 AMP device - #AH1221-GY (Kitchen) or #AH1221-B (Dining)
20 AMP Pilot lights illuminated with load on - #AH1221-PL
2. Double pole toggle switches:
20 AMP device - #AH1222-GY (Kitchen) or #AH1222-B (Dining)
1.02 RECEPTACLES
A. Shall be purchased from the National Accounts Vendor indicated on the plans.
B. Devices: (Cooper/Arrow Hart catalog numbers are listed unless otherwise noted):
1. Specification grade devices (grey device color in Kitchen, brown device color in Dining, and orange for IG type) to be 20 amp, 125 volts, a.c. receptacles:
Single (simplex) device: #1877-GY (Kitchen) or #1877-B (Dining)
Duplex device: #CR20-GY (Kitchen) or #CR20-B (Dining)
Tampor resistant duplex device: #TR8200-B (Dining)
GF (ground-fault circuit interrupter) duplex device: #VGF20-GY (Kitchen) or #VGF20-B (Dining)
IG (isolated ground) duplex device: #IG5362-RN (orange face)

- 1.03 SPECIAL DEVICES
A. Manual motor starter switch: SQ, D Class 2510, Type F, for use on motors up to 3/4 horsepower. Provide NEMA 1 enclosure in dry locations; provide NEMA 3R enclosure in wet or exterior locations.
1.04 WALL PLATES
A. Provide Cooper/Arrow Hart, or approved equal, smooth satin stainless steel 302-SS series for switches and receptacles in the Kitchen areas. All other areas shall be brown Nylon plastic.
B. Provide blank plates on all outlet boxes for future outlets, or outlets without devices. Plate style shall match device plates.
C. Provide non-metallic weatherproof covers for duplex GF receptacles located outside or in wet locations that feature 'while-in-use' cover equivalent to Arrow Hart #WU-1.
D. Where devices installed in exposed boxes or conduit fittings; provide properly designed plates and covers equal to Arrow Hart RS-Series exposed work covers.
E. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted boxes.

PART 2 - EXECUTION

- 2.01 INSTALLATION

- A. Mounting
1. Mount switches and receptacles at height above finished floor as indicated on plans, and legend.
2. Mount switches on strike side of door maximum 8" from door frame. Outlet box for switch shall be located clear of door frame. Coordinate with architectural plans prior to rough-in.
3. Install switches with off position down.
4. Do not use the feed thru feature for the GF Type receptacle, unless required by the plans.
5. Use jumbo sized plates for outlets installed in masonry walls.
6. Each receptacle shall be provided with a #12 green grounding jumper between the ground terminal of the receptacle and the outlet box.
7. The grounding conductor to each receptacle shall be installed such that the removal of the device will not interfere with the continuity of the ground.
B. Testing
1. Test each switch and verify proper operation with energized circuit.
2. Test each receptacle for proper polarity on energized circuit.
3. Test each GF receptacle with a GF receptacle tester and verify circuit is opened by GF device at milli-ampere ranges established by the manufacturer.

SECTION C16440
PANELBOARDS

PART 1 - PRODUCTS

- 1.01 MANUFACTURER
A. Suncoast Environmental Controls (SEC) thru a National Accounts Program.
1.02 PANELBOARD FEATURES
A. Panelboards shall have a minimum symmetrical interrupting rating to meet or exceed the available symmetrical interrupting fault current at the device intended to interrupt current.
B. Bus bars shall be copper or tin plated aluminum.
C. Provide factory-installed copper ground bus in each panelboard with lugs or connectors on bar.
D. Provide electrically isolated, factory installed, neutral bus in each 3 phase, 4 wire or 1 phase 3 wire panelboard.
E. In addition to the ground bus required by paragraph 1.02D (above), provide factory installed, electrically isolated, copper ground bus in each panelboard serving isolated ground receptacles.
F. Main lugs and main circuit breaker lugs shall be UL Listed for use with both aluminum and copper conductors.
G. Provide panelboard doors with chrome-plated locks and catches. All locks shall be keyed alike. Provide two keys for each lock.
H. Provide thermal-magnetic circuit breakers which are rated for 40 degrees C ambient temperature. Breakers shall be quick-make, quick-break type trip with trip indication shown by handle position other than on or off. Multi-pole breakers shall have a common trip handle. Tandem type circuit breakers shall not be permitted.
I. Provide typed directory card with clear holder for each panelboard.

PART 2 - EXECUTION

- 2.01 INSTALLATION
A. Panelboards shall be mounted at height above finished floor such that the height of the top-most breaker in the panel is not more than 6-1/2 feet above finished floor in its highest position per the NEC.
B. Where multiple panelboards are installed on walls in common areas of buildings, the panelboards shall be installed with the top of all panelboards at the same height.
C. Provide blank filler plates over all unused spaces in panelboards.
D. A typed directory card shall indicate devices being served and the space name where the device is located.
E. Provide minimum of one (1) 3/4" empty spare conduit for every 3 poles of spare breaker or space in the panelboard. Stub conduit to nearest accessible ceiling space. Label conduit as spare at panelboard and termination point.
F. Non-isolated ground bars shall be grounded to panelboard can and main service entrance ground bus with a code sized grounding conductor installed in the same conduit as the phase and neutral conductors.
G. Circuits using a common neutral shall be installed in accordance with the National Electrical Code.
H. Inspect each panelboard for proper installation, physical damage, tightness and installation of overcurrent devices. Verify proper color coding of conductors. Correct or repair all items found in inspection.
I. Neutral wires, ground wires, and isolated ground wires shall be connected to the appropriate panel bus bar. Do not mix bus wire connections.

SECTION C16441
ENCLOSED SWITCHES

PART 1 - PRODUCTS

- 1.01 MANUFACTURERS
A. Square D.
B. General Electric.
C. Siemens

1.02 ENCLOSED SWITCHES

- A. Nonfusible switch assemblies: NEMA KS 1, General Duty Type for 208 volt load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in on position. Handle lockable in off position. Provide equipment ground lug in each switch.
B. Enclosures: NEMA KS 1.
1. Interior dry locations: Type 1.
2. Exterior locations: Type 3R.

SECTION C16442
UTILITY SERVICE ENTRANCE AND DISTRIBUTION SYSTEM

PART 1 - GENERAL

- 1.01 SYSTEM DESCRIPTION
A. The underground electrical system service characteristics shall be 208Y/120 volts, Three Phase, Four Wire service and shall extend from utility company transformer secondary.
B. Metering of electrical usage shall be located as required by local electrical utility company. Coordinate requirements with local utility company.
C. Distribution system originates at secondary of utility transformer and includes service entrance conduit and conductors, distribution equipment, lighting panelboards, utilization equipment, overcurrent devices, disconnecting means, controls, branch and feeder circuits, etc.

PART 2 - PRODUCTS

- 2.01 MATERIALS
A. Furnish service entrance conduit, cable, and miscellaneous hardware as required by plans and specifications for electrical service entrance and system grounding at main electrical service.

PART 3 - EXECUTION

- 3.01 EXAMINATION AND PREPARATION
A. Coordinate exact locations of electrical service utility transformer, metering equipment, service lateral, etc. prior to commencement of installation. Contact engineer with conflicts prior to bid.
B. Ensure pad mounted transformer is not located within roadway or sidewalk.
C. Coordinate with local electrical utility for all utility company requirements and provide for the following items and any others required by the utility:
1. Concrete pad for utility transformer with required dimensions and details.
2. Primary underground conduit, excavation, and backfill requirements.
3. Pay for all fees associated with establishment of electrical service.
4. Furnish list of loads to the electrical utility company serving the facility.
5. Verify that utility company clearances are provided on all sides of utility equipment.
D. Ensure proper access to utility equipment is maintained.
E. Provide pull rope, excavation in accordance with electrical utility company requirements, backfill and concrete envelope for primary in accordance with electrical utility company requirements. Turn conduits up riser pole as required. cap spare conduits 12 inches above grade with plumbers pipe cap.
F. Provide secondary lugs on utility transformer and perform drilling and installation of lugs in accordance with utility requirements. Type of lugs shall be in accordance with electrical utility company requirements. Connect service conductor to transformer secondary lugs as directed by electrical utility.

SECTION C16500
LIGHTING FIXTURES (LUMINAIRES)

PART 1 - GENERAL

- 1.01 ACCEPTABLE MANUFACTURERS AND VENDORS
A. Lighting fixtures indicated on lighting fixture schedule are to be purchased from the National Account Vendor for the region of the project (verify region designation with Owner's Representative):
1. Accu-Serv Lighting - North region and Southeast region. Contact at Accu-Serv: Bob Harpring at 877-707-7378, fax - 502-961-0357, email - bharpring@accu-serv.com
2. Villa Lighting - Central region, Southwest region, and West region. Contact at Villa Lighting: Dave Christianell at 800-325-0963, fax- 314-531-8720, email - davecc@villalighting.com

- B. Ballasts to be electronic ballast provided with lighting fixture by the manufacturer.
C. Lamps to be Osram-Sylvania and will typically be provided with the luminaire by the lighting manufacturer.
1.02 FIXTURE REQUIREMENTS
A. Provide regulating, HPF ballasts in all HID lighting fixtures. HID lamp types shall be as indicated on the drawings.
B. Recessed fluorescent lighting fixture ballasts shall be provided with integral thermal protection.
C. Provide energy-saving Instant or Rapid Start lamps for all fluorescent fixtures.

- D. All lamps and ballasts shall meet or exceed the requirements of the National Energy Policy Act of 1992 and any other applicable Codes or Criteria.
E. All components of recessed fixtures shall be accessible without disturbing fixture in or on ceiling.
F. Energy saving ballasts and energy saving lamps provided shall be compatible for operation together.
G. Exterior fixtures and poles shall be suitable for exterior use, shall be UL Listed, and shall be a standard design for exterior application.

- H. Exterior poles for fixtures with luminaires installed shall be designed for maximum constant velocity wind load with luminaires installed, applicable to the geographic area.

1.03 CONTROLS

- A. Lighting contactors shall be Square-D, General Electric, Cutler-Hammer or Siemens of types and quantity shown on drawings, except those furnished with the switchgear as part of the National Account Program by Suncoast Environmental Controls (SEC).
1.04 EMERGENCY LIGHTING UNITS
A. Batteries shall supply emergency power for lighting with minimum operating time of 1-1/2 hours.
B. Emergency lighting shall be automatically operational upon normal utility power failure.

PART 3 - EXECUTION

- 3.01 INSTALLATION
A. Lighting fixtures shall be structurally supported. Fluorescent fixtures mounted in suspended ceilings shall be supported by and attached to ceiling system as required by NEC Article 410. In addition, fluorescent troffers shall be supported at two opposite corners to building structure.
B. Recessed fixtures in dropped ceiling areas shall be connected to power source using flexible conduit. Flexible conduit shall contain a separate insulated green No. 12 copper ground wire. Flexible conduit shall be connected to junction box and fixture. Green ground wire shall provide ground continuity between conduit system and fixture. Grounding conductors shall be permanently and mechanically connected between fixture and conduit system so as to be electrically continuous.
C. Fixtures surface mounted on exposed tee bar ceilings shall use grip clamps on tee bars to support fixtures.
D. Wire shall be continuous from splice in outlet box of building wiring system to lamp socket or ballast terminals.
E. Maintain the integrity of enclosures on enclosed and gasketed fixtures. Minimize the number of enclosure penetrations and make such penetrations water and dust tight with appropriate gaskets and fittings.
F. Concrete bases shall be provided for all exterior ground mounted or pole mounted fixtures.
G. Install accessories furnished with each fixture.
H. Wiring from pole bases to pole mounted luminaire shall be No. 12 with fuse protection provided by a 30 amp, 600 volt waterproof fuseholder with Bussman 'Limitron' fuse of ampere rating 3 times the load current.
I. Surface and recessed fixtures on or in plastered or drywall ceilings shall be supported by support channels. Support channels shall span across main support channels and shall not depend upon ceilings for support.
3.02 FIELD QUALITY CONTROL
A. Relamp fixtures that have failed lamps at substantial completion.

SECTION C16598
SPECIAL SYSTEMS

PART 1 - GENERAL

- 1.01 WORK INCLUDED
A. Furnish and install raceway system for music/communications security, CCTV, POS, and other owner-furnished systems, consisting of empty conduits, junction boxes, outlet boxes, and device plates, etc., as specified and shown on owner selected vendor wiring schematics. Cable, equipment, and installation of the interior system will be provided by the owner's system vendor.
B. Interior system equipment will be furnished by Owner's Vendor.
C. Install special backboxes furnished by Owner's Vendor. Coordinate with the Vendor for the installation. Coordinate with the Vendor if backboxes are to be contractor provided in order to provide and install the appropriate item for the Vendor.

PART 2 - PRODUCTS

- 2.01 MATERIALS
A. Provide 4-11/16" square boxes, with plaster rings. Provide device plates for system outlets as specified in Section 16141. Provide separate conduit to nearest accessible ceiling space from each outlet.
B. Cable shall be in conduit where installed in walls or inaccessible ceilings.
C. Minimum conduit size shall be 3/4".

PART 3 - EXECUTION

- 3.01 INSTALLATION
A. Furnish and install conduits, junction boxes, outlet boxes, and plates.
B. Provide one #10 equivalent nylon pull wire in each system empty conduit.
C. Provide a complete raceway system in accordance with interior system vendor requirements. Interior system vendor shall review the drawings. Contractor shall provide for any additional or varying requirements.
D. Final connections and testing of systems will be provided by the system vendor. Contractor shall contact the owner's vendor and schedule the work so as to complete system installation and testing prior to occupancy of the facility.
E. Terminate each conduit stub-up or termination with nylon insulated bushing.

SECTION C16597
TELEPHONE SERVICE

PART 1 - GENERAL

- 1.01 WORK INCLUDED
A. Furnish and install telephone system consisting of empty conduits, junction boxes, outlet boxes, device plates, etc., as specified and shown on owner selected vendor wiring schematics. Cable, equipment, and installation of the interior system will be provided by the owner's system vendor.
B. Provide underground PVC, Schedule 40, service conduit as required by plans.
C. Telephone Utility Company will provide service entrance cable.
D. Interior telephone system will be furnished by owner's vendor.
E. Special backboxes (unless otherwise noted) and faceplates will be furnished by the owner's vendor.

PART 2 - PRODUCTS

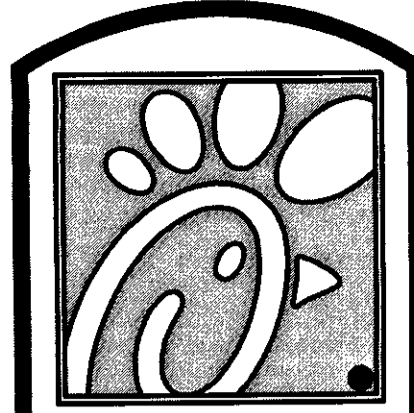
- 2.01 MATERIALS
A. Provide 4-11/16" square boxes, with plaster rings. Provide device plates for telephone outlets to match those specified in wiring device section. Provide separate conduit to nearest accessible ceiling space from each outlet.
B. Minimum conduit size shall be 3/4".
C. Provide lightning arrester for telephone service entrance at main telephone backboard in accordance with UL98A paragraph 11.2 and NFPA 780.
D. Cable shall be in conduit where installed in walls or above inaccessible ceiling spaces.

PART 3 - EXECUTION

- 3.01 INSTALLATION
A. Provide one #10 equivalent nylon pull wire in each empty telephone conduit.
B. Provide trenching, backfilling, etc., for installation of service entrance conduit in accordance with other divisions, plans, and telephone utility requirements. Provide pull wire in empty conduit.
C. Coordinate with the local utility for point of service and type of service required. Pay for any utility company charges and fees for establishment of service.
D. Provide a complete raceway system in accordance with telephone utility company and interior system vendor/utility requirements. Telephone utility company and interior system vendor shall review the drawings. Contractor shall provide for any additional or varying requirements.
E. Terminate each conduit stub-up or termination with nylon insulated bushings.
F. Final connections and testing of system will be provided by the system vendor. Contractor shall contact the owner and vendor and schedule the work.

CLOSE OUT DOCUMENT REQUIREMENTS

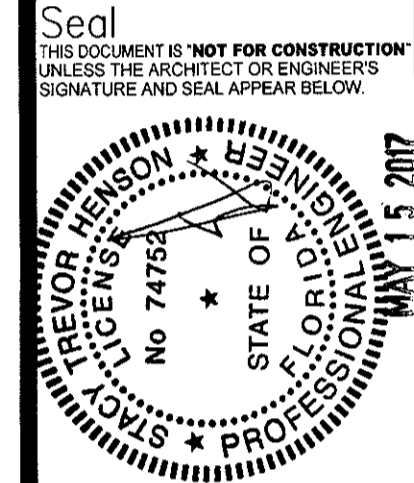
- Provide the following to the building owner upon completion of construction:
1. Submittal data stating equipment rating and selected options for each piece of equipment requiring maintenance.
2. Operation manuals and maintenance manuals for each piece of equipment requiring maintenance. Required routine maintenance actions shall be clearly identified.
3. Names and addresses of at least one qualified service agency.
4. A complete narrative of how each system is intended to operate.



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Winter Garden, FL
34787-7017

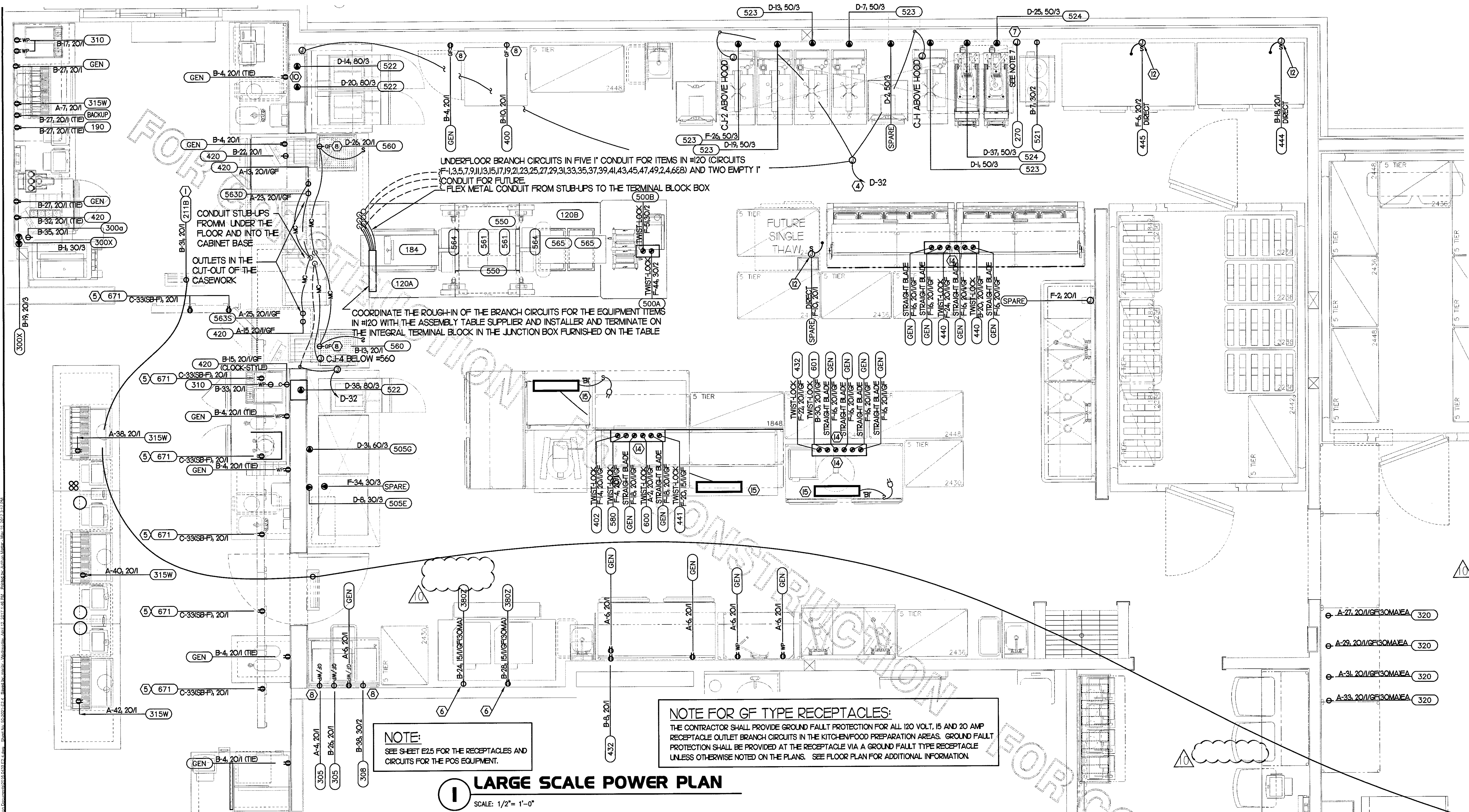
STORE
S06C
WINTER GARDEN
FSU#1918

SHEET TITLE
ELECTRICAL
SPECIFICATIONS

VERSION: V7.025
ISSUE DATE: 01.2017

Job No. : 16.0439
Store : 01918
Date : 02.02.16
Drawn By : MI
Checked By : SN

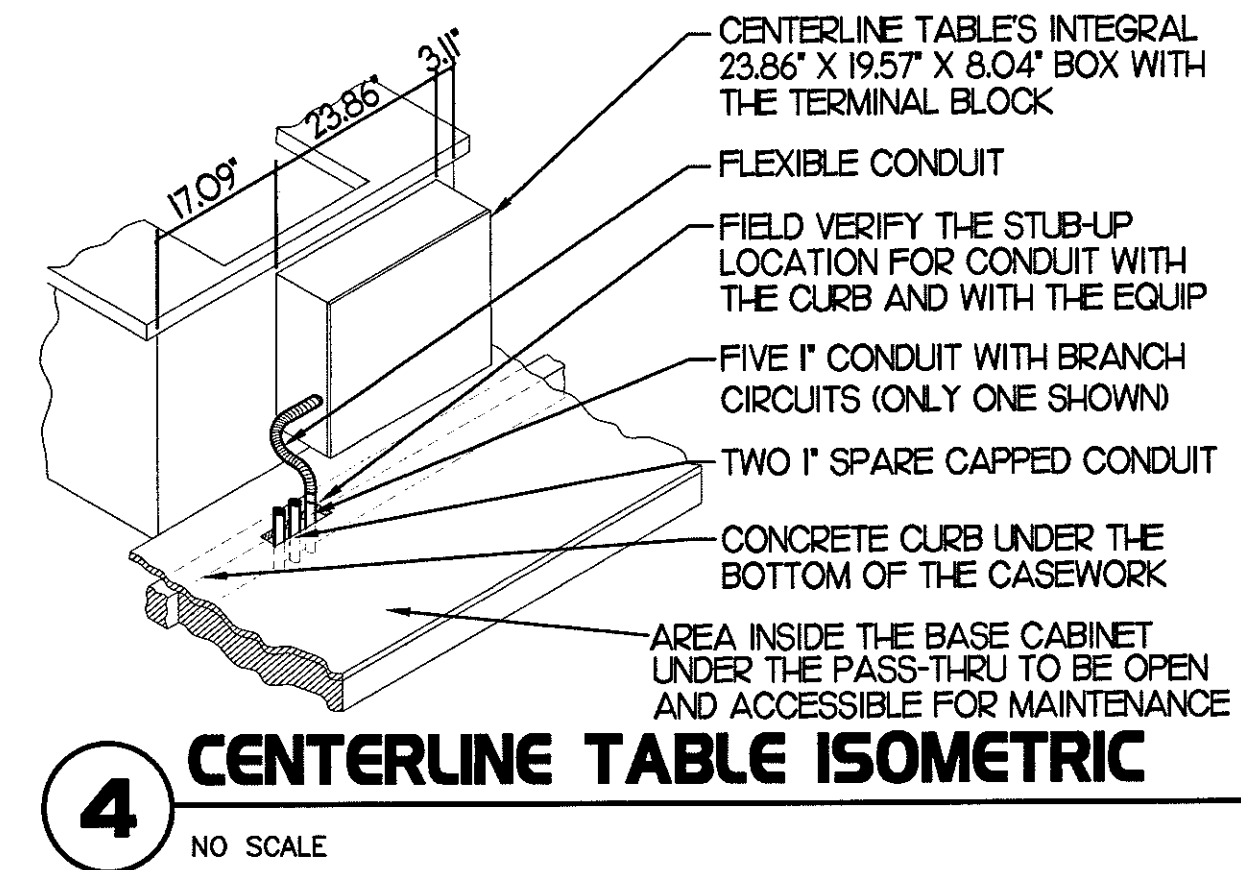
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1 LARGE SCALE POWER PLAN
SCALE: 1/2" = 1'-0"

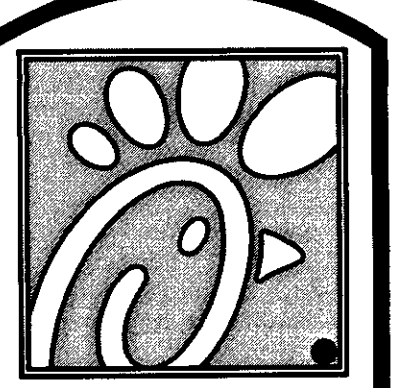
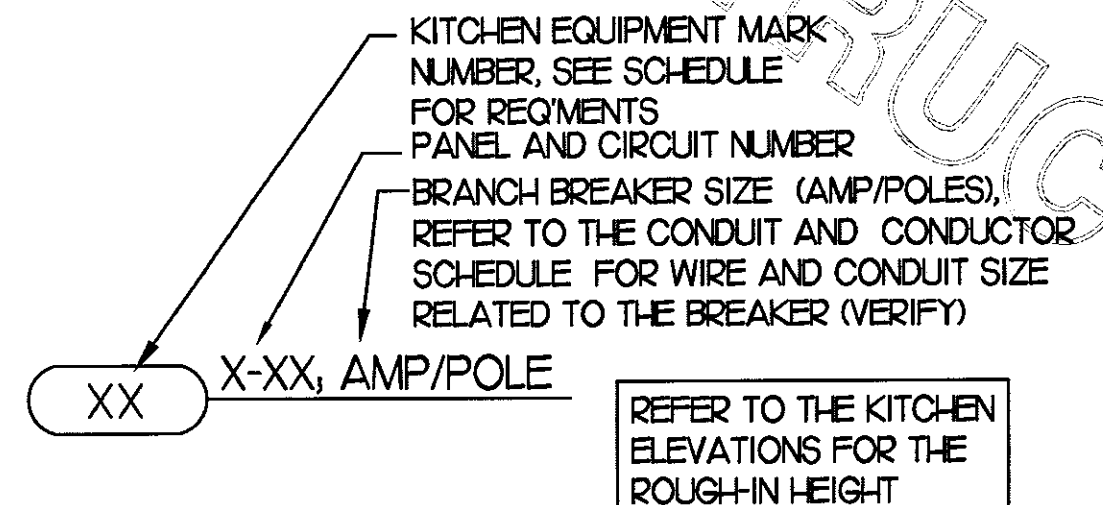
3 KEY NOTES - POWER:

- ① PROVIDE DUPLEX NEMA 5-15R CLOCK RECEPTACLE (SEE ELEVATIONS FOR MFG HT) FOR CONNECTION TO FLY SYSTEM EQUIPMENT #21B. VERIFY HEIGHT FOR #21. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT PER MANUFACTURER'S DIRECTIONS. RECEPTACLE BOX SHALL BE ARLINGTON # DVF2W
- ② NOT USED
- ③ NOT USED
- ④ CONNECT AS REQUIRED TO C-J FAN VIA SPEED CONTROLLER. CONNECT HOMERUN VIA RELAY IN T-500 CONTROL SECTION.
- ⑤ ROUTE THROUGH LIGHTING CONTROL SWITCH-BANK "SB". CONTROLLED BY SWITCHED "F". REFER TO SHEET E-21
- ⑥ SEE SHEET E23, ROOF ELECTRICAL PLAN, FOR THE LOCATION OF THE ICE MACHINE'S CONDENSER AND ADDITIONAL REQUIREMENTS.
- ⑦ PROVIDE 3#12 IN 1/2" CONDUIT BETWEEN THE T-500 CONTROL PANEL AND THE ANSLU SYSTEM PANEL. SEE ANSLU SYSTEM WIRING DIAGRAM, DETAIL 3 ON SHEET E11 FOR ADDITIONAL INFORMATION.
- ⑧ PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLE IN COMPLIANCE WITH THE NEC REQUIREMENT FOR KITCHENS. IF NOT NOTED AS GFCI, THEN THE BREAKER IS TO BE GFCI TYPE.
- ⑨ NOT USED.
- ⑩ THE OUTLETS FOR THE OPEN FRYERS (ITEM #522) ARE FURNISHED BY THE EXHAUST HOOD SUPPLIER AND INSTALLED BY THE CONTRACTOR.
- ⑪ NOT USED
- ⑫ LOCKABLE SINGLE POLE SWITCH SHALL SERVE AS THE LOCAL "IN-SIGHT" MEANS OF DISCONNECT FOR EQUIPMENT ITEM AS NOTED. THE SWITCH SHALL BE COOPER #S2963 AND INSTALLED PER THE DETAILS ON SHEET E12
- ⑬ NOT USED
- ⑭ OVER-HEAD EQUIPMENT POWER (OEP) DROP CORD RECEPTACLES FROM A FLUSH MOUNTED CEILING OEP BOX. PROVIDE A-C-S OEP ASSEMBLY #1260-1000. ASSEMBLY WILL CONSIST OF A FLUSH CEILING OUTLET BOX, TWIST-LOCK PENDANT RECEPTACLES, STRAIGHT BLADE PENDANT RECEPTACLES, CORDS, STRAIN RELIEF, AND TWIST-LOCK PLUGS. CONTACT MR. JIM JACOBSON AT A-C-S AT 800-689-7584 TO PURCHASE OEP BOX AND DROP CORD RECEPTACLES. PROVIDE LIQUID-TIGHT CONDUIT WITH CONDUCTORS FOR DIRECT CONNECTED EQUIPMENT. CONDUIT SHALL NOT TOUCH THE FLOOR WHEN EQUIPMENT IS IN PLACE. USE SUPPORT GRIPS W/ SUPPORT HOOK ATTACHED TO SHELVING ABOVE AS NEEDED. PASS & SEYMOUR MODEL #FS075-UJ-G5 OR EQUIVALENT.
- ⑮ PROVIDE A TYPE B1 LIGHT FIXTURE. MOUNT LIGHT TO THE UNDERSIDE OF THE WIRE SHELVING. PROVIDE A CORD FROM THE FIXTURE(S) TO A SWITCH IN AN FS BOX MOUNTED TO THE SHELF. FROM FS BOX PROVIDE AN SO CORD WITH PLUG AND CONNECT TO THE GEN RECEPTACLE (WALL OR DROP CORD). SEE SHEET E24 FOR FURTHER INFORMATION.



4 CENTERLINE TABLE ISOMETRIC
NO SCALE

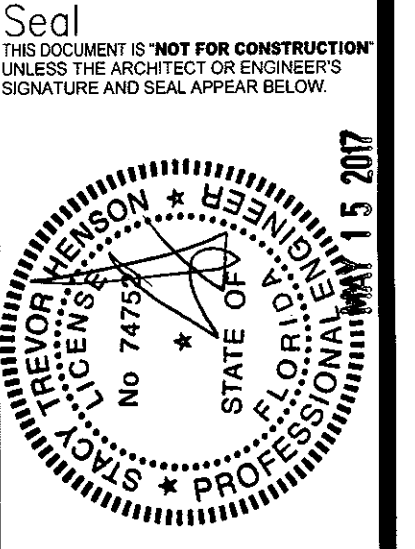
2 KITCHEN EQUIP NOMENCLATURE
NO SCALE



5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
△		
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FSU#1918

3166 Daniels Rd
Winter Garden, FL
34787-7017

SHEET TITLE
ENLARGED
POWER PLAN

VERSION: V7.025
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Checked By : SN

Sheet

E2.4

SECTION C16100
ELECTRICAL GENERAL PROVISIONS

PART 1- GENERAL

- 1.01 WORK INCLUDED
 - A. Provide all materials, labor and equipment required to furnish and install a complete electrical system as indicated on drawings and as specified herein.
- 1.02 REGULATORY REQUIREMENTS
 - A. Equipment furnished shall be UL listed where such label is available. Installation shall conform to UL standards where applicable.
 - B. Electrical work shall be installed in accordance with drawings and specifications, NEC and NFPA codes in effect at project location, state and local electrical and building codes and special codes having jurisdiction over specific portions within complete installation.
 - C. Obtain permits and certificates of approval from all authorities having jurisdiction over the installation and pay all fees required.
- 1.03 SUBMITTALS
 - A. Submit list of materials and equipment prior to manufacture, order or installation and within twenty days after award of contract for approval. Include each item of material and equipment whether or not shop drawings are also required. List shall include name of manufacturer, catalog number and other complete identification as well as dimensions and detailed data. Submittals shall include for the following:
 1. Lighting Fixtures
 2. Panelboards/Breakers
 3. Wiring Devices and Device Plates
 4. Enclosed Switches
 - B. Certified shop drawings and submittals shall bear stamp of approval of contractor as evidence that drawings have been checked. Drawings submitted without this stamp of approval will not be considered and will be returned for proper resubmission.
 - C. If submittals show variances or substitutions from requirements of contract, contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment. Otherwise contractor shall not be relieved of responsibility for executing work in accordance with contract even though such submittals have been approved.
- 1.04 SITE VISIT
 - A. Visit job site prior to bid date to determine actual conditions under which work shall be done, to familiarize oneself with project and to verify total scope of work required. Failure to do so shall not constitute a reason for an extra charge.

SECTION C16101
BASIC MATERIALS AND METHODS

PART 1 - GENERAL

- 1.01 COORDINATION
 - A. Obtain and review shop drawings, product data, and manufacturer's instructions for equipment furnished under other sections to determine connection locations and requirements.
 - B. Sequence rough-in of electrical connections to coordinate with installation and start-up of equipment furnished under other sections.

PART 2 - PRODUCTS

- 2.01 SUBSTITUTIONS
 - A. Where specifications list one or more manufacturers and do not include "or approved equal", furnish materials made by one of manufacturers listed. Where "or approved equal" is included, contractor may substitute equal products by another manufacturer subject to approval by engineer and owner.

PART 3 - EXECUTION

- 3.01 INSTALLATION
 - A. Make electrical connections to utilization equipment in accordance with equipment manufacturer's instructions.
 - B. Drawings are diagrammatic and shall not be scaled for exact sizes or locations, they are not intended to disclose absolute or unconditional knowledge of actual field conditions.
 - C. Protect work and materials from damage by weather, entrance of water and dirt. cap conduit during installation. Avoid damage to materials and equipment in place.
 - D. Satisfactorily repair or remove and replace damaged work with new materials. Deliver equipment and materials to job site in original, unopened, labeled containers. Store ferrous materials to prevent rusting. Store finished materials and equipment to prevent staining and discoloring.
 - E. Trenches shall be excavated 6" below elevation of bottom of conduit.
 - F. Failure to route conduit through building without interfering with other equipment and construction shall not constitute a reason for an extra charge. Equipment, conduit and fixtures shall fit into available spaces in building and shall not be introduced into building at such times and manner as to cause damage to structure. Equipment requiring service shall be readily accessible.

- 3.02 TESTING AND EQUIPMENT SERVICING
 - A. Make test to ensure that entire system is in proper operating condition, and that adjustments and apparatus setting of circuit breakers, fuses, control equipment and apparatus have been made. Correct defects discovered during tests.
- 3.03 REMOVAL OF DEBRIS
 - A. Remove surplus materials and debris caused by, or incidental to, electrical work. Remove such debris at frequent intervals. Keep job clean during construction.
- 3.04 IDENTIFICATION OF EQUIPMENT
 - A. Identify electrical distribution equipment, disconnects, and contactors with black laminated plastic name-plates, attached with two screws, engraved with 1/4" high, white letters.
- 3.05 TEMPORARY LIGHTING AND POWER IN AREAS OF CONSTRUCTION
 - A. Provide, maintain and remove after construction is completed, temporary lighting adequate for workman safety and temporary power for all trades including any 3 phase power required.
 - B. Provide and maintain barricade lighting where required to adequately protect owner against liability for damage to public or personnel. All lamps used in barricade shall be 60 watt red, installed in weatherproof socket with wire guard. All wiring shall be approved for weatherproof installation.
- 3.06 GUARANTEE-WARRANTY
 - A. Guarantee work to be free from defects of materials and workmanship for a period of one year from date of final acceptance of building. Repair and replace defective work and other work damaged thereby which becomes defective during term of guarantee-warranty. Furnish owner with three written copies of guarantee-warranty.

SECTION C16120
RACEWAYS AND CONDUIT SYSTEMS

PART 1 - PRODUCTS

- 1.01 ACCEPTABLE MANUFACTURERS
 - A. Rigid IMC, and EMT conduit shall be hot-dipped, galvanized, or electro-galvanized steel by Allied, Republic, Triangle, Wheatland, or approved equal.
 - B. PVC conduit shall be Carlon, schedule 40, 90 degrees C. rated, unless otherwise noted.
 - C. MC cable shall be manufactured by AFC Cable Systems or approved equal. Type "AC-90" is not allowed. All MC Cables shall have a green equipment ground conductor and isolated ground (green + yellow stripe) conductor. Cables for data systems power circuits shall be as specified on plans.
 - D. Associated couplings, connectors and fittings shall be steel as manufactured by Raco or equivalent. Catalog numbers used below are those of Raco.
 - E. Erickson Couplings, Series 1502, shall be used where neither length of conduit can be rotated.
 - F. Insulated bushings shall be series 1402.
 - G. EMT box connectors shall be compression fittings.
 - H. Conduit, connectors, couplings and fittings shall be UL listed and labeled.

- 1.02 ELECTRICAL METALLIC TUBING (EMT)
 - A. Use Electrical Metallic Tubing (EMT) where drawings call for conduit to be:
 1. Concealed in walls.
 2. Installed above suspended ceilings.
 3. Installed exposed, above 6 feet.

- 1.03 INTERMEDIATE METAL CONDUIT (IMC)
 - A. Use Intermediate Metal Conduit (IMC) where drawings call for conduit to be:
 1. Installed for panelboard feeders.
 2. Installed in wet locations (interior and exterior).
 3. Installed exposed below 6 feet.

- 1.04 POLYVINYL CHLORIDE (PVC) RACEWAY
 - A. Use PVC raceway for:
 1. Underground service entrance conduits for telephone and power.
 2. Exterior branch circuits installed underground.
 3. Interior branch circuit conduits installed in or under concrete slab on ground floor.

- 1.05 RIGID STEEL CONDUIT (RSC)
 - A. Use Rigid Steel Conduit for:
 1. Install underground for power Service Entrance elbows penetrating floor slab.
 2. Exposed to physical damage.

- 1.06 FLEXIBLE METAL CONDUIT
 - A. Provide flexible metal conduit for termination at equipment subject to motion and vibration.
 - B. Length shall not exceed 6 feet in accessible ceiling areas.
 - C. Shall not be concealed in walls.
 - D. Where exposed to continuous or intermittent moisture, conduit shall be UL Type EF liquidtight or type as indicated.
 - E. For connection to ceiling mounted lighting fixtures from outlet boxes.

- 1.07 MC (METAL-CLAD) CABLE
 - A. MC Cable may be used, concealed above ceiling and in walls, when allowed by local codes and article 330 of the national electrical code for the connection of the Point Of Sales (POS) system equipment only.

PART 2 - EXECUTION

- 2.01 INSTALLATION
 - A. Minimum size of conduits shall be 1/2 inch.
 - B. Run concealed conduits in direct line with long sweep bends or offsets. Run exposed conduits parallel to and at right angles to building lines. Group multiple conduit runs in banks.
 - C. Cap ends of conduits to prevent entrance of water and other foreign material during construction.
 - D. Provide No. 12 AWG copper pull wires or nylon cord in all empty conduits. Steel wire not acceptable as pull wire.
 - E. Where IMC enters a cabinet, junction box, or pull box conductors shall be protected by an insulated bushing. Locknuts shall be installed on conduit outside and inside enclosure.
 - F. In areas where enclosed and gasketed fixtures and weatherproof devices are specified, where Rigid Conduit enters a sheet metal enclosure, junction box and outlet box, and not terminated in a threaded hub, a steel, or malleable iron nylon insulated hub, complete with recessed sealing "O" ring or sealing locknut shall be used.
 - G. Provide seal-off fitting in all conduits entering a cold temperature area such as freezers and dry refrigerators.
 - H. In concrete slabs, block up conduit from forms and securely fasten in place. all conduits in slabs shall have a minimum of 4" inches concrete coverage above.
 - I. Failure to route conduit through building without interfering with other equipment, and construction shall not constitute a reason for an extra charge. Equipment, conduit, and fixtures shall fit into available spaces in building and shall not be introduced into building at such times and manner as to cause damage to structure or equipment. Equipment requiring servicing shall be readily accessible.
 - 2.02 EMT (ELECTRICAL METALLIC TUBING) RACEWAY
 - A. Do not use Electrical Metallic Tubing in cinder concrete or cinder fill or where conduit system is in contact with dissimilar metals or in wet locations.
 - 2.03 PVC RACEWAY
 - A. Use threaded fittings for all connectors and adapters.
 - B. Provide 1/4-inch nylon pull rope in all primary power and incoming telephone service entrance conduits.
 - C. PVC conduit shall convert to galvanized rigid metal per detail on drawings.
 - 2.04 FLEXIBLE METAL CONDUIT
 - A. Where fittings for liquid tight flexible conduit are brought into an enclosure with a knock-out, a gasket assembly, consisting of one piece "O" ring, with Buna-N sealing material, series 3400, shall be installed on outside of box. Fittings shall be made of either steel or malleable iron only, and shall have insulated throats or insulated bushings.
 - B. In dry locations, where final connections to motors and other equipment may be made with Flexible Metal Conduit, fittings shall be of steel or malleable iron only with insulated throats or insulated bushings, and shall be of wedge and screw type having an angular wedge fitting between convolutions of conduit.

SECTION C16121
CONDUCTORS

PART 1 - PRODUCTS

- 1.01 CONDUCTORS
 - A. Provide 98% conductivity copper conductors with 600-volt insulation. For conductors No. 12 AWG and No. 10 AWG, provide solid type. For all conductors No. 8 AWG and larger, provide stranded type. All conductors shall have THHN/THWN insulation unless noted otherwise.
 - B. Conductors shall be manufactured by Triangle, American, Rome, Southwire or approved equal.
 - C. Provide No. 14 AWG type THHN fixture conductors, for conductors entering lighting fixtures.
 - D. Branch circuit conductors shall be minimum #12 AWG, copper.

PART 2 - EXECUTION

- 2.01 INSTALLATION
 - A. Install pull boxes in circuits or feeders over 100 feet long.
 - B. Make all splices or connections only at outlet, pull or junction boxes.
 - C. All conductors and connections shall test free of grounds, shorts, and opens prior to energizing circuit.
 - D. Provide No. 10 wire in lieu of No. 12 wire for any branch circuit in excess of 100 feet linear length to prevent excessive voltage drop.
 - E. Use Ideal wing nuts, Scotchlok Type Y, R, G, or B, or approved equivalent connectors for fixture connections at outlet boxes.

- F. Make feeder taps and joints with OZ Type T, PT, PM or PTS, or approved equivalent clamp connectors as manufactured by Kupler, or with approved compression sleeves. Wrap connectors with No. 10 Electro-Seal or approved equivalent plastic filler and vinyl tape.
- G. Leave a minimum of 8" slack wire in every outlet box.
- H. Provide color coded wire and with a different color for each phase and neutral and ground as follows: Phase A, B, C: Black, Red and Blue respectively; Neutral: White; Isolated Ground: Green with Yellow Stripes. Approved color tape is acceptable for feeders using larger than #6 conductors.
- I. All conductors shall be continuous from origin to panel or equipment termination without splices where possible. Where splices and taps are necessary or are required, they shall be made in splice boxes with suitable connectors.
- J. Tighten all electrical connectors and terminals, including screws and bolts, in accordance with manufacturer's published torque tightening values. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL486A and UL486B.

SECTION C16122
OUTLET AND JUNCTION BOXES

PART 1 - GENERAL

- 1.01 PROJECT CONDITIONS
 - A. Verify field measurements are as shown on drawings.
 - B. Verify locations of floor boxes and outlets in work areas prior to rough-in.

PART 2 - PRODUCTS

- 2.01 OUTLET BOXES
 - A. Sheet metal outlet boxes: galvanized steel.
 - B. Cast boxes: type FS, cast fer alloy. Provide gasketed cover by box manufacturer.
 - C. Manufacturers: National, Appleton, General Electric, RACO, OR Steel City.
 - D. Provide boxes for fixtures with fixture studs in center.
 - E. Outlet boxes for lighting, switches and receptacles in interior areas with exposed conduit shall be pressed steel and in exterior areas with exposed conduit shall be cast metal with threaded hubs, "FS" type. Use galvanized steel for concealed boxes. Boxes shall be 1-1/2" deep minimum.
- 2.02 PULL AND JUNCTION BOXES
 - A. Sheet metal boxes: galvanized steel.
 - B. Surface-mounted cast metal box: type 4; flat-flanged, surface-mounted junction box.
 1. Material: galvanized cast iron.
 2. Cover: furnish with ground flange, neoprene gasket, and stainless steel cover screws.
 3. Cover legend: electric.
 - C. In-ground cast metal box: inside flanged, recessed cover box for flush mounting.
 1. Material: galvanized cast iron.
 2. Cover: nonskid cover with neoprene gasket and stainless steel cover screws.
 3. Cover legend: electric.
 - D. Manufacturers: National, Appleton, General Electric, RACO, Oz-Gedney or Steel City.

PART 3 - EXECUTION

- 3.01 INSTALLATION
 - A. Install electrical boxes as shown on drawings, and as required for splices, taps, wire pulling, equipment connections and compliance with regulatory requirements.
 - B. Install pull boxes and junction boxes above accessible ceilings.
 - C. Inaccessible ceiling areas: Install outlet and junction boxes no more than 6 inches from ceiling access panel or from removable recessed light fixture.
 - D. Use flush mounting outlet boxes in finished areas.
 - E. Use stamped steel bridges to fasten flush mounting outlet box between studs.
 - F. Install flush mounted box without damaging wall insulation or reducing its effectiveness.
 - G. Use adjustable steel channel fasteners for hung ceiling outlet box.
 - H. Do not fasten boxes to ceiling support wires.
 - I. Support boxes independently of conduit, except cast box that is connected to two Rigid Metal Conduits both supported within 12 inches of box.
 - J. Use gang box where more than one device is mounted together. Do not use sectional box.
 - K. Use gang box with plaster ring for single device outlets.

- L. Use cast outlet box in exterior locations and wet locations.

- 3.02 OUTLET BOXES
 - A. Select boxes according to intended use and type of outlet. Ceiling outlet boxes shall be 4" octagon and 1-1/2" deep. Use 2-1/8" deep octagon boxes or 4" square boxes required. All ceiling outlet boxes shall have a fixture stud of no bolt self-locking type installed if required to hang the fixture specified at the outlet.

- 3.03 JUNCTION BOXES
 - A. Junction boxes shall be sized according to number of conductors in box or type of service to be provided. Minimum junction box size 4-11/16" square and 2-1/8" deep. Provide screw covers for junction boxes.

- B. Use code gauge steel with screw covers for pull boxes with prime coat and provide with screw cover. Size pull boxes according to the NEC.

- C. Provide pull box every 100 feet of conduit run or where excessive number of bends necessitates a box for ease of wire installation.

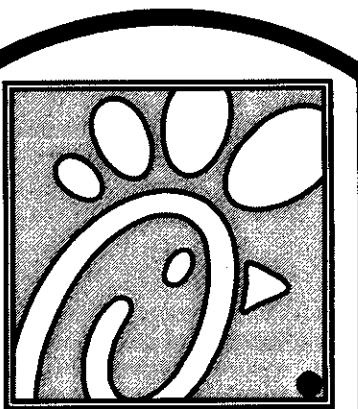
SECTION C16123
GROUNDING AND BONDING

PART 1 - PRODUCTS

- 1.01 ROD ELECTRODES
 - A. Material: copper-clad steel.
 - B. Diameter: 3/4 inch.
 - C. Length: 10 feet.
- 1.02 MECHANICAL CONNECTORS
 - A. Material: bronze.
- 1.03 GROUNDING CONDUCTOR (WIRE)
 - A. Material: stranded copper, sized to meet NFPA 70, Article 250 requirements.

PART 2 - EXECUTION

- 2.01 INSTALLATION
 - A. Install rod electrodes at locations indicated. Install additional rod electrodes as required to achieve resistance to ground of less than 25 ohms.
 - B. Provide grounding electrode conductor and connect to reinforcing steel in foundation footing.
 - C. Provide bonding to meet regulatory requirements.
 - D. Bond together each metallic raceway, pipe, duct and other metal objects.
 - E. Provide isolated grounding conductor for circuits supplying all isolated ground outlets. Insulation shall be green with yellow stripe. Size per NEC Table 250.66. This isolated grounding conductor shall run in addition to equipment grounding conductor and along with the branch circuit conductors.
 - 2.02 GROUNDING
 - A. Ground electrical system in accordance with NEC Article 250 and local authorities having jurisdiction.
 - B. Install a #3/0 bare copper wire bond across the water meter attached to ground clamps on water line on each side of meter. Arrangements shall be made to do this work at the time the water meter is installed.
 - C. From the point of entrance of the water main into the building and on the meter side of the main inside water valve and union install a stranded copper cable #3/0 in 1-1/4" conduit to the main distribution panel. Connect the cable to the equipment ground bus.
 - D. Install a green equipment grounding conductor in each raceway, sized per NEC Table 250-122. Terminate on equipment ground bus within panelboard serving load.
 - E. Install #6 awg copper grounding conductor from ground bar in main telephone box to grounded neutral bus in main distribution panel.
 - F. All separate grounding electrode conductors shall be bonded together to limit potential differences between them and between their associated wiring systems. This includes the power system, telephone system, etc.
 - 2.03 FIELD QUALITY CONTROL
 - A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.



Chick-fil-E

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions: _____

Mark Date By

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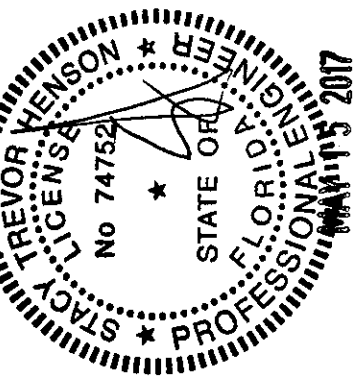
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Seal
THIS DOCUMENT IS NOT FOR CONSTRUCTION
UNLESS THE ARCHITECT OR ENGINEER'S
SIGNATURE AND SEAL APPEAR BELOW.



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STORE
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E4.I

UPDATED: 2/2/2017 12:29 pm
ISSUED FOR: APPROVAL

(EXISTING) PANEL A

LOCATION: KITCHEN
VOLTAGE: 120V/208V
TRIM: FLUSH

MAIN: 225A MLO
SYSTEM: 34, 4W
BUS RATING: 225A

CONN. LOAD: 39.0 KVA
FEED: TOP
GROUND BUS: YES

CKT	LOAD SERVED	COND	PHASE	NEUT	W	BKR	DMD	L1	L2	L3	DMD	BKR	COND	PHASE	NEUT	W	LOAD SERVED	CKT
1	TELEPHONE DT VIDEO	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	3/4"	#12	#12	#12	FLOOR MIXER	2
3	OFFICE GEN & MUSIC	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	TEA BREWER	4
5	OFFICE GEN/PRINTER	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	GENERAL OUTLETS	6
7	FOUR DRINK TOWERS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	WATER HEATER	8
9	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	UPS RECEPTACLE (POS)	10
11	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	PLAY AREA OUTLET	12
13	TWO U.C. REFRIG	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	(N) EPF#	14
15	TWO U.C. REFRIG	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	SECURITY SYSTEM	16
17	WALL HEATER (NORTH)	1/2"	#12	#12	#12	20/2	W	1050	1575		K	20/3	1/2"	#12	#12	#12	COOLER CONDENS	18
19	"	1/2"	#12	#12	#12	20/2	W	1050	1575		K	20/3	1/2"	#12	#12	#12	"	20
21	DT RADIANT HEAT PANEL	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	"	22
23	SANDWICH SLIDE	1/2"	#12	#12	#12	20/2	R	540	780		K	20/1	1/2"	#12	#12	#12	COOLER EVAP COIL	24
25	"	1/2"	#12	#12	#12	20/2	R	540	780		K	20/1	1/2"	#12	#12	#12	FREZZER CONDENSER	26
27	CARBONATOR	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	"	28
29	CARBONATOR	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	"	30
31	CARBONATOR	1/2"	#12	#12	#12	20/1	R	540	780		K	20/2	1/2"	#12	#12	#12	FREZZER EVAP COIL	32
33	CARBONATOR	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	"	34
35	BOOSTER PUMP	1/2"	#12	#12	#12	20/2	M	1450	2175		N	20/1	1/2"	#12	#12	#12	FREZZER HEAT TAPE	36
37	"	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	315W- DRINK STATION	38
39	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	315W- DRINK STATION	40
41	(N) EF-1	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	315W- DRINK STATION	42

INTERRUPT RATING: EXISTING (13790|14419|11734) FROM: (NEW) PANEL MDP

LOADS (IN VA)	CONNECTED	DEMAND FACTOR	MINIMUM FEEDER	LOADS	CONNECTED	DEMAND FACTOR	MINIMUM FEEDER	REMAINING CONTINUOUS LOADS	REMAINING NON-CONTINUOUS LOADS	MISC. DEMAND LOADS	TOTAL CONNECTED LOAD	TOTAL DEMAND LOAD	OVERALL DEMAND FACTOR
LIGHTING	0	1.25	0	NON-SEASONAL MOTORS	5520	1.0	5520	0	0	0	5520	5520	1.0
RECEPTS TO 10 KVA	6952	1.0	6952	LARGEST MOTOR	0	0.25	0	0	0	0	6952	6952	0.25
RECEPTS REMAINING	0	0.5	0	WATER HEATING	2250	1.0	2250	0	0	0	2250	2250	1.0
SPACE HEATING	0	0.0	0	KITCHEN EQUIP.	24727	0.65	16073	0	0	0	24727	16073	0.65
AIR CONDITIONING	0	1.0	0										

Note 1. Feeder size: SEE RISER DIAGRAM
Note 2. Provide GFCI rated breaker(s) for circuit(s) 27, 29, 31, 33

UPDATED: 1/30/2017 2:18 pm
ISSUED FOR: APPROVAL

(EXISTING) PANEL B

LOCATION: KITCHEN
VOLTAGE: 120V/208V
TRIM: FLUSH

MAIN: 225A MLO
SYSTEM: 34, 4W
BUS RATING: 225A

CONN. LOAD: 48 KVA
FEED: TOP
GROUND BUS: YES

CKT	LOAD SERVED	COND	PHASE	NEUT	W	BKR	DMD	L1	L2	L3	DMD	BKR	COND	PHASE	NEUT	W	LOAD SERVED	CKT
1	ICE DREAM MACHINE	1/2"	#10	#10	#10	30/3	K	2016	3024		N	20/1	1/2"	#12	#12	#12	REFUSE ENCLOSURE	2
3	"	1/2"	#10	#10	#10	30/3	K	2016	3024		N	20/1	1/2"	#12	#12	#12	GEN OUTLETS	4
5	"	1/2"	#10	#10	#10	30/3	K	2016	3024		N	20/1	1/2"	#12	#12	#12	FOOD WARMER	6
7	BUN WARMER (A1)	1/2"	#12	#12	#12	20/2	K	1660	2490		K	20/1	1/2"	#12	#12	#12	REF DISPLAY CASE	8
9	"	1/2"	#12	#12	#12	20/2	K	1660	2490		K	20/1	1/2"	#12	#12	#12	SOL R-1 FREEZER	10
11	SANDWICH TOASTER	1/2"	#12	#12	#12	20/1	K	720	1080		K	20/1	1/2"	#12	#12	#12	FRY HOLDING STAT	12
13	BSCUIT HOLD CAB.	1/2"	#10	#10	#10	30/3	K	2280	3420		N	20/1	1/2"	#12	#12	#12	WASHING DRAWER	14
15	REFRIG WORK TABLE	1/2"	#12	#12	#12	20/1	K	1044	1566		K	20/1	1/2"	#12	#12	#12	DT WARMER	16
17	SINGLE JUICE DISP	1/2"	#12	#12	#12	20/1	K	500	750		K	20/1	1/2"	#12	#12	#12	THAWING CABINET	18
19	ICE DREAM MACHINE	1/2"	#12	#12	#12	20/3	K	2940	4410		K	20/1	1/2"	#12	#12	#12	REF. BREAD TABLE	20
21	"	1/2"	#12	#12	#12	20/3	K	2940	4410		K	20/1	1/2"	#12	#12	#12	REFRIGERATOR	22
23	"	1/2"	#12	#12	#12	20/3	K	2940	4410		K	20/1	1/2"	#12	#12	#12	INTERIOR ICE MAKER	24
25	ROOF RECEPTACLES	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	TEA BREWER	26
27	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	INTERIOR ICE MAKER	28
29	BUN WARMER	1/2"	#12	#12	#12	20/1	R	1560	2340		K	20/1	1/2"	#12	#12	#12	FOOD CUTTER	30
31	FLY SYSTEM	1/2"	#12	#12	#12	20/1	N	320	480		N	20/1	1/2"	#12	#12	#12	REF WORK TABLE	32
33	DOUBLE JUICE DISPENSER	1/2"	#12	#12	#12	20/1	K	480	720		K	20/1	1/2"	#12	#12	#12	REF WORK TABLE	34
35	MILKSHAKE	1/2"	#12	#12	#12	20/1	K	500	750		K	20/1	1/2"	#12	#12	#12	T-500/ SHUNT TRIP	36
37	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	COFFEE MAKER	38
39	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	"	40
41	GENERAL OUTLETS	1/2"	#12	#12	#12	20/1	R	540	780		K	20/1	1/2"	#12	#12	#12	GEN OUTLET / DOORBELL	42

INTERRUPT RATING: EXISTING (17114|15800|15130) FROM: PANEL F

LOADS (IN VA)	CONNECTED	DEMAND FACTOR	MINIMUM FEEDER	LOADS	CONNECTED	DEMAND FACTOR	MINIMUM FEEDER	REMAINING CONTINUOUS LOADS	REMAINING NON-CONTINUOUS LOADS	MISC. DEMAND LOADS	TOTAL CONNECTED LOAD	TOTAL DEMAND LOAD	OVERALL DEMAND FACTOR
LIGHTING	0	1.25	0	NON-SEASONAL MOTORS	500	1.0	500	1700	1.0	1700	1700	1700	1.0
RECEPTS TO 10 KVA	4320	1.0	4320	LARGEST MOTOR	0	0.25	0	0	0	0	4320	4320	0.25
RECEPTS REMAINING	0	0.5	0	WATER HEATING	4000	1.0	4000	0	0	0	4000	4000	1.0
SPACE HEATING	0	0.0	0	KITCHEN EQUIP.	37524	0.65	24391	0	0	0	37524	24391	0.65
AIR CONDITIONING	0	1.0	0										

Note 1. Feeder size: SEE RISER DIAGRAM

THE CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL 120 VOLT, 15 AND 20 AMP RECEPTACLES IN THE KITCHEN/FOOD PREPARATION AREA. THE GROUND FAULT PROTECTION SHALL BE PROVIDED AT THE RECEPTACLE AS A GROUND FAULT TYPE RECEPTACLE UNLESS NOTED OTHERWISE. (NOTE THAT THE RECEPTACLES LOCATED IN THE OEP BOX, THE KITCHEN/SERVING AREA RECEPTACLES SERVING POS EQUIPMENT, AND THE CIRCUIT FOR THE FLY SYSTEM SHALL BE PROTECTED BY GROUND FAULT TYPE CIRCUIT BREAKERS RATHER THAN GROUND FAULT TYPE RECEPTACLES SINCE ISOLATED GROUNDING TYPE RECEPTACLES, DROP-CORD RECEPTACLES, AND CLOCK TYPE RECEPTACLES ARE NOT AVAILABLE AS GROUND-FAULT TYPE RECEPTACLES.) GFCI BREAKERS REQUIRE A DEDICATED NEUTRAL (NOT SHARED) TO OPERATE PROPERLY.

COMPARISON LOAD SUMMARY

TOTAL LOAD WITH ADDED EQUIPMENT	507.8
LOAD BASED ON EXISTING DRAWINGS RECEIVED	372
NEW TOTAL INCREASE / DECREASE (KVA)	135.8
NEW TOTAL INCREASE / DECREASE (AMPS)	208 X 1.73 = 377.4 A
EXISTING 800AMP SERVICE	

UPDATED: 1/27/2017 2:54 pm
ISSUED FOR: APPROVAL

(EXISTING) PANEL C

LOCATION: KITCHEN
VOLTAGE: 120V/208V
TRIM: FLUSH

MAIN: 225A MLO
SYSTEM: 34, 4W
BUS RATING: 225A

CONN. LOAD: 41.6 KVA
FEED: TOP
GROUND BUS: YES

CKT	LOAD SERVED	COND	PHASE	NEUT	W	BKR	DMD	L1	L2	L3	DMD	BKR	COND	PHASE	NEUT	W	LOAD SERVED	CKT
1	KITCHEN LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	BUILDING SIGNAGE	2
3	KITCHEN LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	BUILDING SIGNAGE	4
5	RESTROOM LIGHTING & EF-3	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SPARE	6
7	DINING AREA LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	AUDIO GREETER OUTLET	8
9	PLAY AREA LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SPARE	10
11	DINING AREA LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SECURITY/FLAGPOLE LIGHTING	12
13	DINING AREA LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SPARE	14
15	SERVING AREA LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	AWNING LTG	16
17	MENUBOARDS	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	AWNING LTG	18
19	DIRECTIONAL SIGNS	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	AWNING LTG	20
21	PARKING LOT LIGHTING	1/2"	#10	#10	#10	30/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	AWNING LTG	22
23	PARKING LOT LIGHTING	1/2"	#10	#10	#10	30/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SHOW WINDOW	24
25	PARKING LOT LIGHTING	1/2"	#10	#10	#10	30/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SHOW WINDOW	26
27	PARKING LOT LIGHTING	1/2"	#10	#10	#10	30/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SHOW WINDOW	28
29	PARKING LOT LIGHTING	1/2"	#10	#10	#10	30/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SHOW WINDOW	30
31	PARKING LOT LIGHTING	1/2"	#10	#10	#10	30/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SPARE	32
33	MENUBOARD COVE LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SPARE	34
35	FRZ/COOLER LIGHTING	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	SPARE	36
37	MAIN ID SIGN	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	DRIVE-THRU CANOPY	38
39	MAIN ID SIGN	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12	BUILDING SIGNAGE	40
41	MAIN ID SIGN	1/2"	#12	#12	#12	20/1	L	1820	2730		K	20/1	1/2"	#12	#12	#12</		