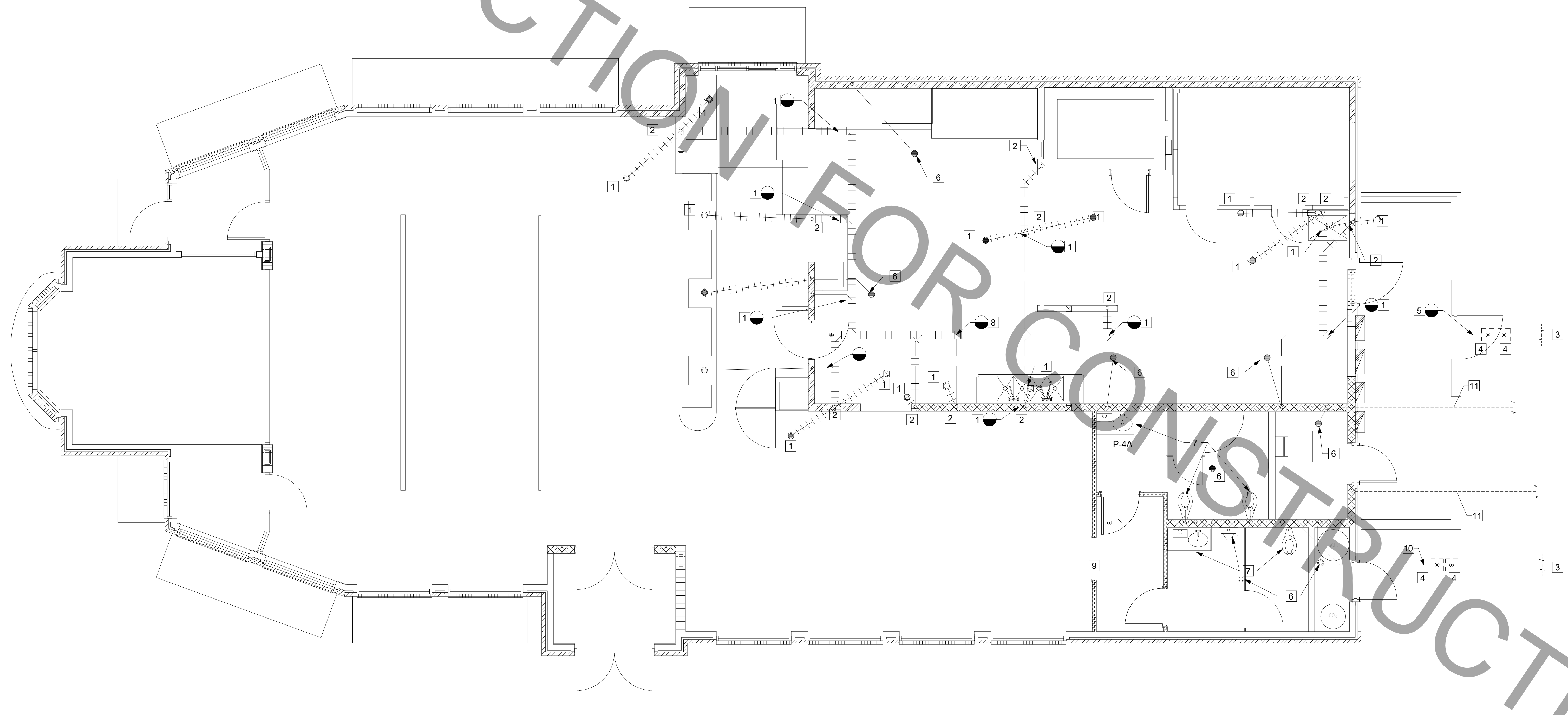


**DEMOLITION KEY NOTES**

- 1 DEMO EXISTING FIXTURE AND ASSOCIATED GREASE WASTE & VENT PIPING BACK TO GREASE WASTE AND VENT MAIN. NO DEAD END PIPING TO REMAIN AFTER DEMOLITION.
- 2 DEMO EXISTING VENT PIPING BACK TO GREASE/SANITARY WASTE AND VENT MAIN. NO DEAD END PIPING TO REMAIN AFTER DEMOLITION.
- 3 REFER TO CIVIL PLAN FOR CONTINUATION.
- 4 DEMO EXISTING EXTERIOR CLEANOUTS.
- 5 REMOVE EXISTING 4" GREASE LINE AT THIS LOCATION. SEE P101 SHEET FOR NEW DESIGN. REFER TO CIVIL PLAN FOR FURTHER INFORMATION.
- 6 EXISTING FLOOR DRAINS TO REMAIN. INSPECT FOR DAMAGES AND REPLACE AS NEEDED.
- 7 DEMO EXISTING PLUMBING FIXTURE AND PREPARE FOR NEW SANITARY LINE CONNECTION.
- 8 DISCONNECT AND REMOVE EXISTING 4" GREASE WASTE MAIN BELOW SLAB AND PREPARE FOR NEW CONNECTION. CONTRACTOR TO FIELD VERIFY DIRECTION, FLOW & INVERTS PRIOR TO COMMENCEMENT OF WORK.
- 9 REMOVE ALL WATER PIPING CONNECTION ASSOCIATED WITH PLUMBING FIXTURES IN THE RESTROOM AREAS AND PREPARE FOR NEW FIXTURE CONNECTION.
- 10 LOCATE AND CUT EXISTING SANITARY LINE AT LOCATION SHOWN AND PREPARE FOR NEW CONNECTION.
- 11 LOCATE AND CUT EXISTING VENT LINE AT LOCATION SHOWN AND PREPARE FOR NEW CONNECTION.

**DEMOLITION PIPE LEGEND**

- +++++ EXISTING PIPE TO BE REMOVED
- EXISTING PIPE TO REMAIN
- POINT OF DISCONNECTION



1 BELOW SLAB PLUMBING PLAN  
1/4" = 1'-0"

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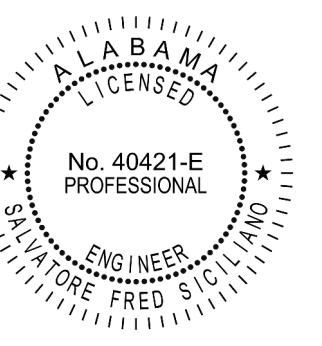
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 Engineer No. 2750-E  
 Surveyor No. CA-909-LS  
 Landscape No. N/A



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
 385 Fieldstown Rd  
 GARDENDALE, ALABAMA 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04-152  
 RELEASE: N/A

REVISION SCHEDULE		
NO.	DATE	DESCRIPTION

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**SHEET**  
 BELOW SLAB PLUMBING  
 DEMOLITION PLAN

SHEET NUMBER

**PERMIT**

**P-100**

**RENOVATION KEY NOTES**

- EXISTING INCOMING 2" CW TO REMAIN. 3/4" CW TO REFUSE TO REMAIN UNLESS NOTIFIED OTHERWISE.
- NEW VENT PIPING ROUTED TO ABOVE CEILING. ROUTE AND CONNECT NEW VENT PIPING TO EXISTING VENT SYSTEM. REFER TO RISER DIAGRAM FOR ROUTING INFORMATION.
- CONNECT NEW 2" GREASE WASTE PIPING TO EXISTING GREASE WASTE MAIN BELOW SLAB. CONTRACTOR TO FIELD VERIFY DIRECTION, FLOW & INVERTS PRIOR TO COMMENCEMENT OF WORK.
- CONNECT NEW 3" GREASE WASTE PIPING TO EXISTING GREASE WASTE MAIN BELOW SLAB. CONTRACTOR TO FIELD VERIFY DIRECTION, FLOW & INVERTS PRIOR TO COMMENCEMENT OF WORK.
- CONNECT NEW 4" GREASE WASTE PIPING TO EXISTING GREASE WASTE MAIN BELOW SLAB. CONTRACTOR TO FIELD VERIFY DIRECTION, FLOW & INVERTS PRIOR TO COMMENCEMENT OF WORK.
- GENERAL CONTRACTOR TO CHECK EXISTING FLOOR DRAIN/SINK FOR PROPER CONNECTION AND FUNCTION. IF APPLICABLE INSPECT EXISTING TRAP PRIMER AND TRAP PRIMER CONNECTING VALVE. IF PROPER WORKING CONDITIONS ARE NOT MET, OWNER TO PROVIDE REPLACEMENTS. VERIFY CONDITION OF ASSOCIATED GREASE WASTE PIPING CLEANS & REPAIR AS REQUIRED.
- NEW GREASE TRAP. REFER TO CIVIL SITE UTILITY PLAN SHEET FOR EXACT SIZE, CALCULATION, & LOCATION ON SITE.
- INSTALL NEW TWO WAY EXTERIOR CLEANOUT IN LOCATION SHOWN.
- 3" VENT PIPING FROM NEW GREASE TRAP TO BE ROUTED TO EXISTING VENT SYSTEM. REFER TO RISER FOR ROUTING INFORMATION.
- INSTALL NEW PLUMBING FIXTURE IN LOCATION SHOWN. CONNECT NEW LAVATORY TO EXISTING SANITARY & VENT PIPING REMAINING FROM DEMOLITION.
- PROVIDE TRAP SEAL PROTECTOR P-26A.
- INSTALL P-35 FLOOR DRAIN WITH TOP OF DRAIN 0'-7" BFF. COORDINATE WITH GENERAL CONTRACTOR. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- EXISTING CO2 SYSTEM REMAIN AS SHOWN ON PLAN. REFER TO SHEETS P-201 AND P-211 FOR FURTHER INFORMATION.
- CONNECT NEW 4" SANITARY SEWER PIPING TO EXISTING SANITARY SEWER PIPING BELOW GRADE.
- EXISTING 3/4" CW FOR POST HYDRANT IN REFUSE RE-ROUTED. SEE CIVIL FOR FURTHER INFORMATION.
- THE EXISTING WATER HEATER TO REMAIN.

**5. SHEET NOTES**

- COORDINATE INSTALLATION OF SANITARY PIPING WITH FOOTINGS IN THE FIELD. SLEEVE PENETRATIONS IN FOOTINGS WITH PVC.
- COMBINATION WASTE AND VENT SYSTEM SHOWN HERE. WHERE REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION, PROVIDE SAFE-WASTE SYSTEM OR DEDICATED VENT SYSTEM AS OUTLINED IN STATE AND LOCAL CODE AMENDMENTS.
- ALL WATER PIPING INSTALLED WITHIN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE INSULATION.
- ALL VENT PIPING TO BE 2" DIAMETER MIN UNLESS NOTED OTHERWISE. SEE 1/P-301 FOR VENT LAYOUT.

**PER 2015 INTERNATIONAL PLUMBING CODE :**

THE REQUIRED CAPACITY OF GRAVITY INTERCEPTORS AND GRAVITY GREASE INTERCEPTORS WITH FATS, OILS, AND GREASE DISPOSAL SYSTEMS SHALL BE DETERMINED BY MULTIPLYING THE PEAK DRAIN FLOW INTO THE INTERCEPTOR IN GALLONS PER MINUTE BY A RETENTION TIME OF 30 MINUTES.

THE VALUE OF RESTAURANT PEAK FLOW RATE IS 40 GPM.

40 GPM X 30 MINUTE RETENTION TIMEFRAME WOULD CALCULATE OUT AS A 1,200 GALLON GREASE INTERCEPTOR CAPACITY.

TWO (2) 1000-GALLON GI IN SERIES ARE PROVIDED TO SATISFY THIS REQUIREMENT.

- GREASE INTERCEPTOR CALCULATIONS NOT TO SCALE

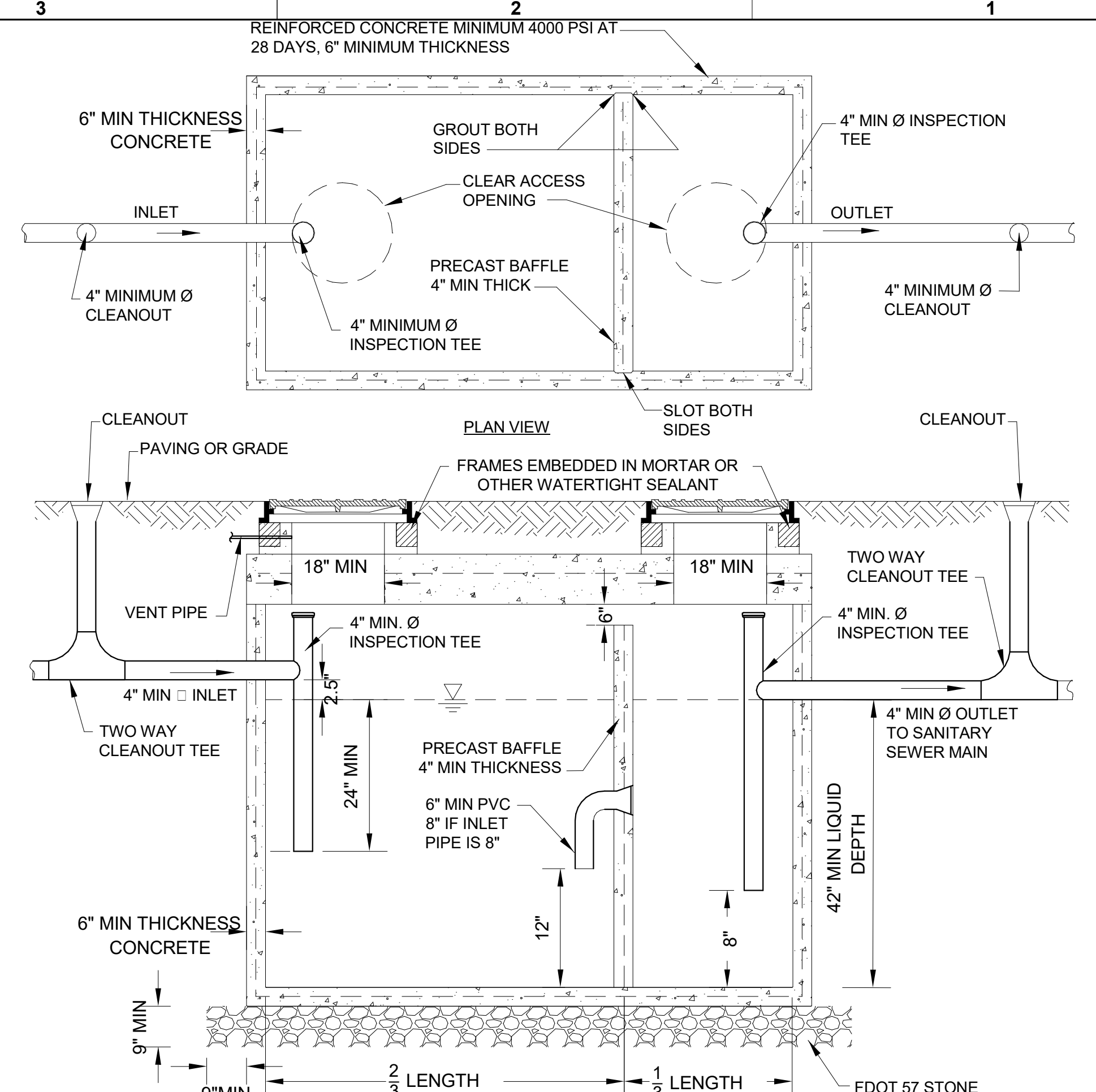
4" DIA SCHED 40 PVC SLEEVE. EXTEND THROUGH FOOTING. TERMINATE 1'-0" AFF. FILL WITH PEA GRAVEL. SECURE TO CMU WALL WITH SPLIT RING HANGER 0'-10" AFF.

3" DRAIN LINE. SEE CIVIL DRAWINGS FOR CONTINUATION.

3/4" NON-FREEZE POST HYDRANT, P-31, WITHIN PVC SLEEVES. SECURE BARREL TO WALL WITH SPLIT-RING HANGER AND THREADED ROD 2'-0" AFF. SET BASE OF HYDRANT BARREL IN ONE CUBIC FOOT OF PEA GRAVEL. WRAP BASE OF HYDRANT WITH SILT FENCE FABRIC TO PREVENT DRAIN HOLE FROM BEING OBSTRUCTED.

**METHOD OF DRAINAGE AT REFUSE PAD**  
WHEN AREA DRAIN IS SHOWN ON CIVIL PLANS, SEE FIXTURE P-32 SPECIFICATION ON DRAWING P-901 FOR MAKE AND MODEL OF DRAIN, DRAIN AND PIPING PROVIDED AND INSTALLED BY CHICK-FIL-A SITE CONTRACTOR. WHEN AREA DRAIN IS NOT SHOWN, REFER TO ARCHITECTURAL DRAWINGS FOR DESIGN OPTION SHOWING DRAINAGE THROUGH BACK OF DUMPSTER ENCLOSURE.

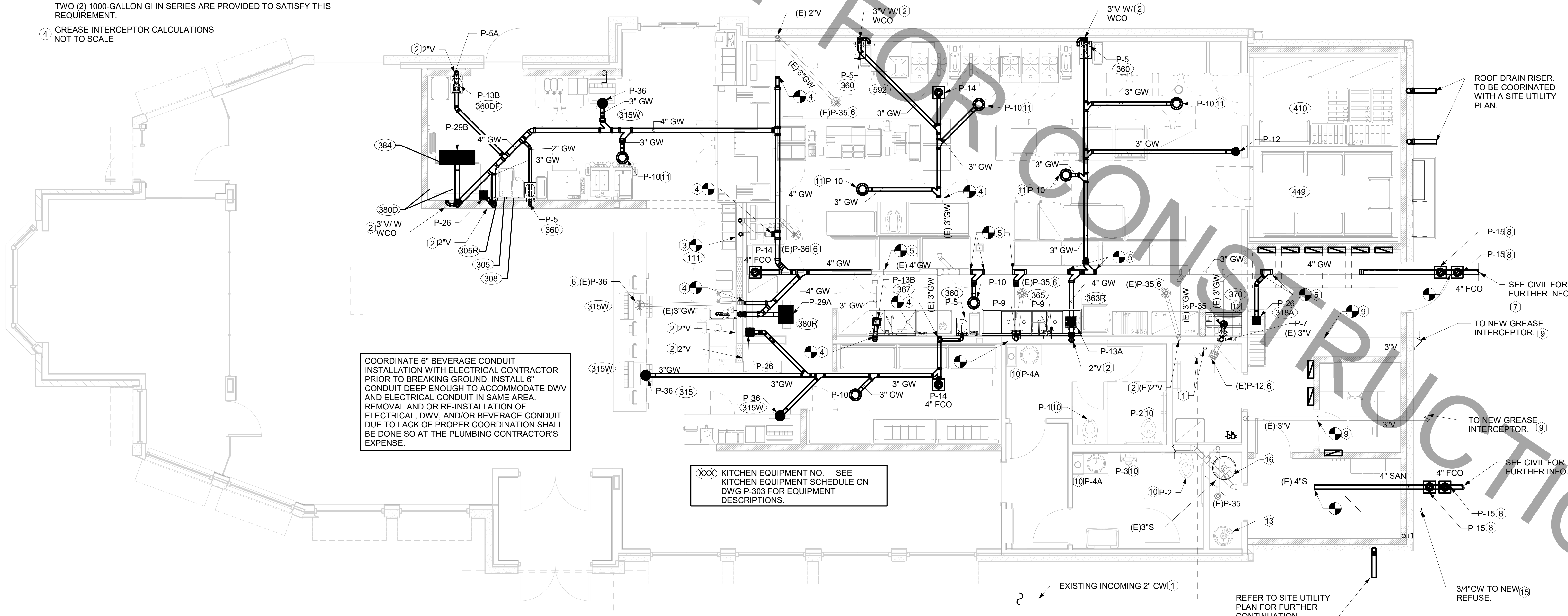
2 REFUSE PAD PLUMBING PLAN  
1/4" = 1'-0"



- NOTES:**
- SPECIFIC DESIGN DETAILS MUST IN ALL ASPECTS MEET APPLICABLE ALABAMA PLUMBING AND ADMINISTRATIVE CODE.
  - SIZE GREASE INTERCEPTOR PER UTILITY PLAN, SHEET PS-1.0.
  - INTERCEPTORS SHALL BE WATER AND GAS TIGHT.
  - ALL FIXTURES LOCATED IN FOOD AND BEVERAGE PREPARATION AREAS SHALL BE ROUTED THROUGH GREASE INTERCEPTOR. RESTROOM WASTE SHALL NOT BE ROUTED THROUGH INTERCEPTOR.
  - BAFFLE REQUIRED; ALTERNATIVE DESIGNS ARE ACCEPTABLE. DESIGN MUST MEET ALABAMA PLUMBING AND ADMINISTRATIVE CODE.
  - LOADS: H-20 TRUCK WHEELS WITH 30% IMPACT PER AASHTO. TRAFFIC BEARING FRAME AND COVER TO MEET ALDOT STANDARDS IF APPLICABLE.
- 3 GREASE INTERCEPTOR DETAIL NOT TO SCALE

COORDINATE 6" BEVERAGE CONDUIT INSTALLATION WITH ELECTRICAL CONTRACTOR PRIOR TO BREAKING GROUND. INSTALL 6" CONDUIT DEEP ENOUGH TO ACCOMMODATE DWV AND ELECTRICAL CONDUIT IN SAME AREA. REMOVAL AND OR RE-INSTALLATION OF ELECTRICAL, DWV, AND/OR BEVERAGE CONDUIT DUE TO LACK OF PROPER COORDINATION SHALL BE DONE SO AT THE PLUMBING CONTRACTOR'S EXPENSE.

XXX KITCHEN EQUIPMENT NO. SEE KITCHEN EQUIPMENT SCHEDULE ON DWG P-303 FOR EQUIPMENT DESCRIPTIONS.



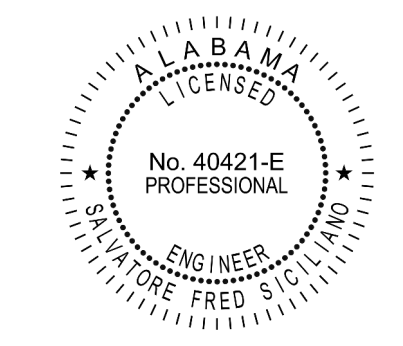
1 BELOW SLAB PLUMBING PLAN  
1/4" = 1'-0"



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30349-2998



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Landscape No. N/A



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
GARDENDALE, ALABAMA 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04-152  
RELEASE: N/A

REVISION SCHEDULE		
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SHEET: BELOW SLAB PLUMBING PLAN  
SHEET NUMBER: P-101

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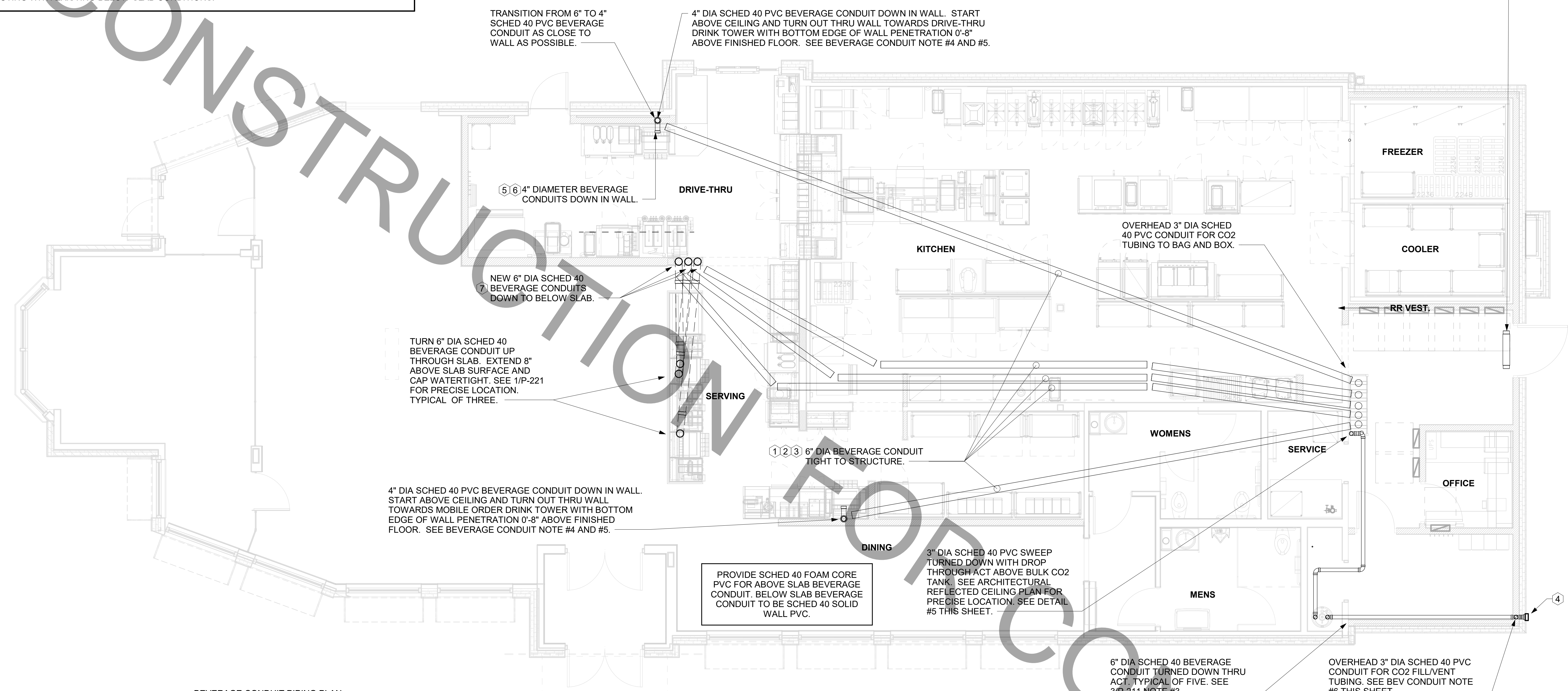


**BEVERAGE CONDUIT NOTES**

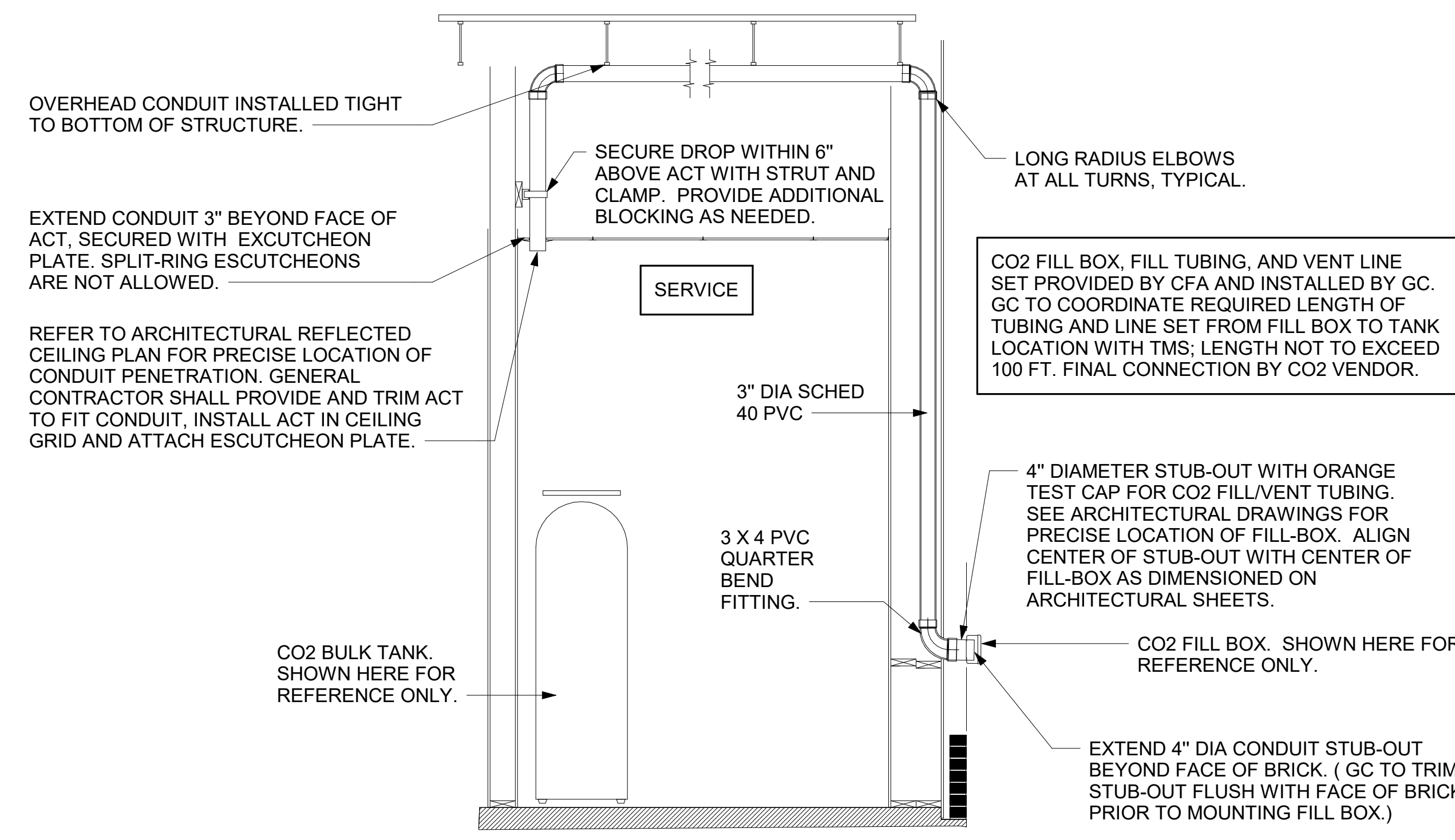
- 1 ROUTE BEVERAGE SYSTEM PIPING OVERHEAD FROM THE BEVERAGE RACK TO DRINK TOWERS IN FIVE (5)-6" DIA SCH 40 PVC DWV CONDUITS. ALL CONDUIT SHALL BE HELD TIGHT TO STRUCTURE AND SUPPORTED WITH THREADED ROD AND CLEVIS HANGERS AT INTERVALS SHOWN IN SPECIFICATIONS FOR HORIZONTAL OVERHEAD PIPING. COORDINATE ROUTING WITH THE GENERAL CONTRACTOR TO AVOID MECHANICAL AND ELECTRICAL SYSTEMS.
- 2 COORDINATE ROUTING OF ALL CONDUITS WITH HVAC DUCT IN KITCHEN. SEE SHEET M-201 FOR LOCATION OF AC UNITS AND DUCT ROUTING.
- 3 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.
- 4 COORDINATE ROUTING OF REMOTE FILL LINE AND LOCATION OF EXTERIOR WALL MOUNTED FILL-BOX WITH COMPRESSED GAS VENDOR DURING CONSTRUCTION.
- 5 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.
- 6 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.
- 7 ROUTE NEW BEVERAGE CONDUIT DOWN WITHIN WALL TO BELOW SLAB. COORDINATE SAW CUT AND ROUTING WITH EXISTING BELOW SLAB CONDITIONS.

**NOTE:**  
ALL BEVERAGE CONDUIT 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 TO REVIEW ALL NEW & EXISTING EQUIPMENTS. EACH TRADE CONTRACTOR SHALL VERIFY WITH THE GENERAL CONTRACTOR THAT HAS THOROUGHLY REVIEWED AND COORDINATED ALL LOCATIONS AND ROUTINGS WITH ALL OTHER TRADES PRIOR TO INSTALLATION & FABRICATION OF CONDUITS, DUCTS, OR PIPING. RUN BEVERAGE CONDUITS AS STRAIGHT AS POSSIBLE AVOIDING EXISTING STRUCTURE, PIPING, DUCTS, & ALL EQUIPMENTS. ANY INSTALLATION OR CONSTRUCTION CONFLICTS WHICH OCCUR IN THE FIELD SHALL BE RESOLVED BY THE TRADE CONTRACTOR TO THE SATISFACTION OF THE OWNER AND ARCHITECT AND AT NO EXPENSE TO THE OWNER, ARCHITECT AND/OR GENERAL CONTRACTOR.

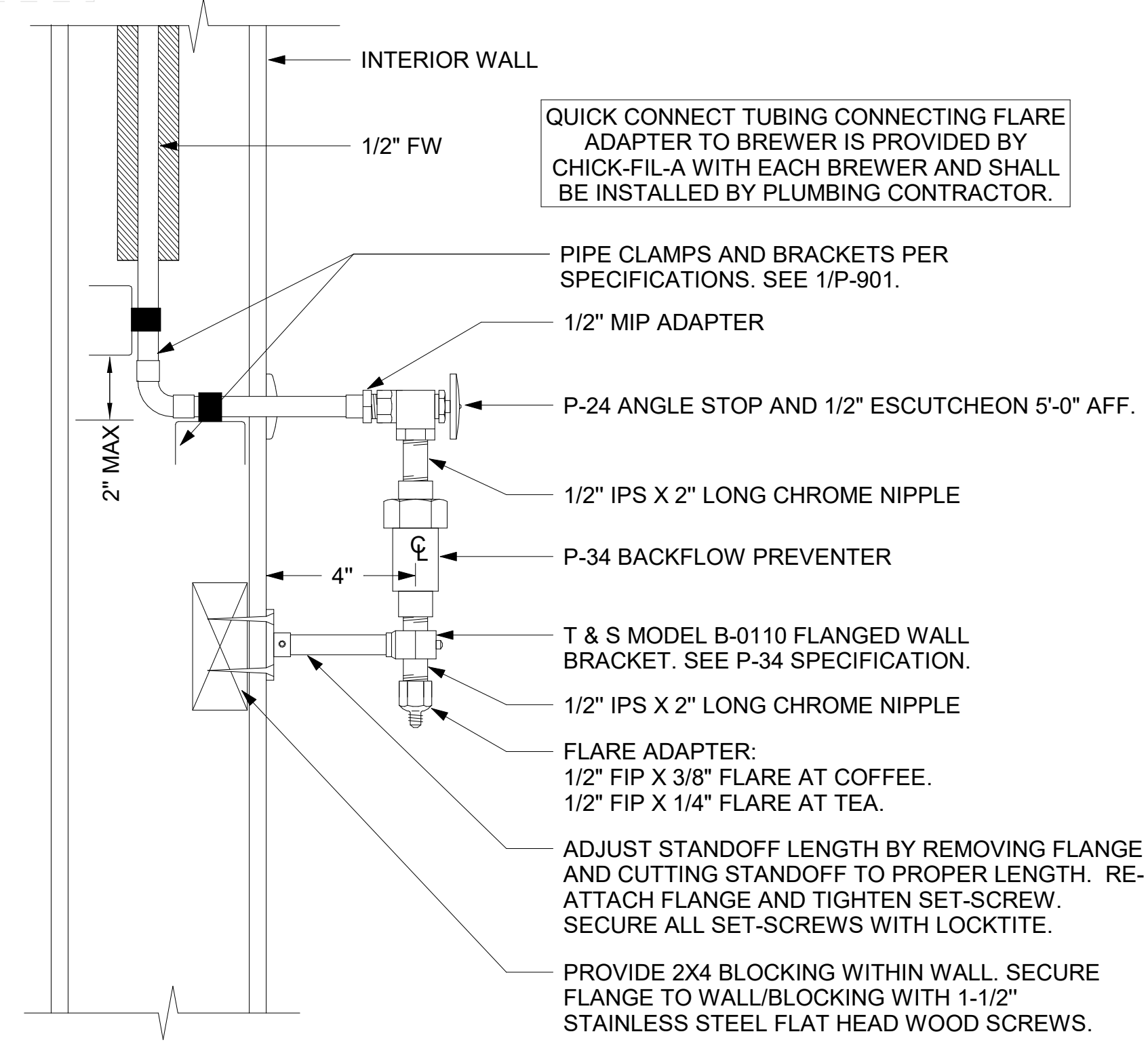
6" PVC PLAN STORAGE TUBE ABOVE DOOR. MOUNT 6" DIA X 30" LONG SCHED 40 PVC WITH CLEANOUT PLUGS AT EACH END. SECURE TO WALL 3" ABOVE AIR DOOR WITH STRUT AND CLAMP.



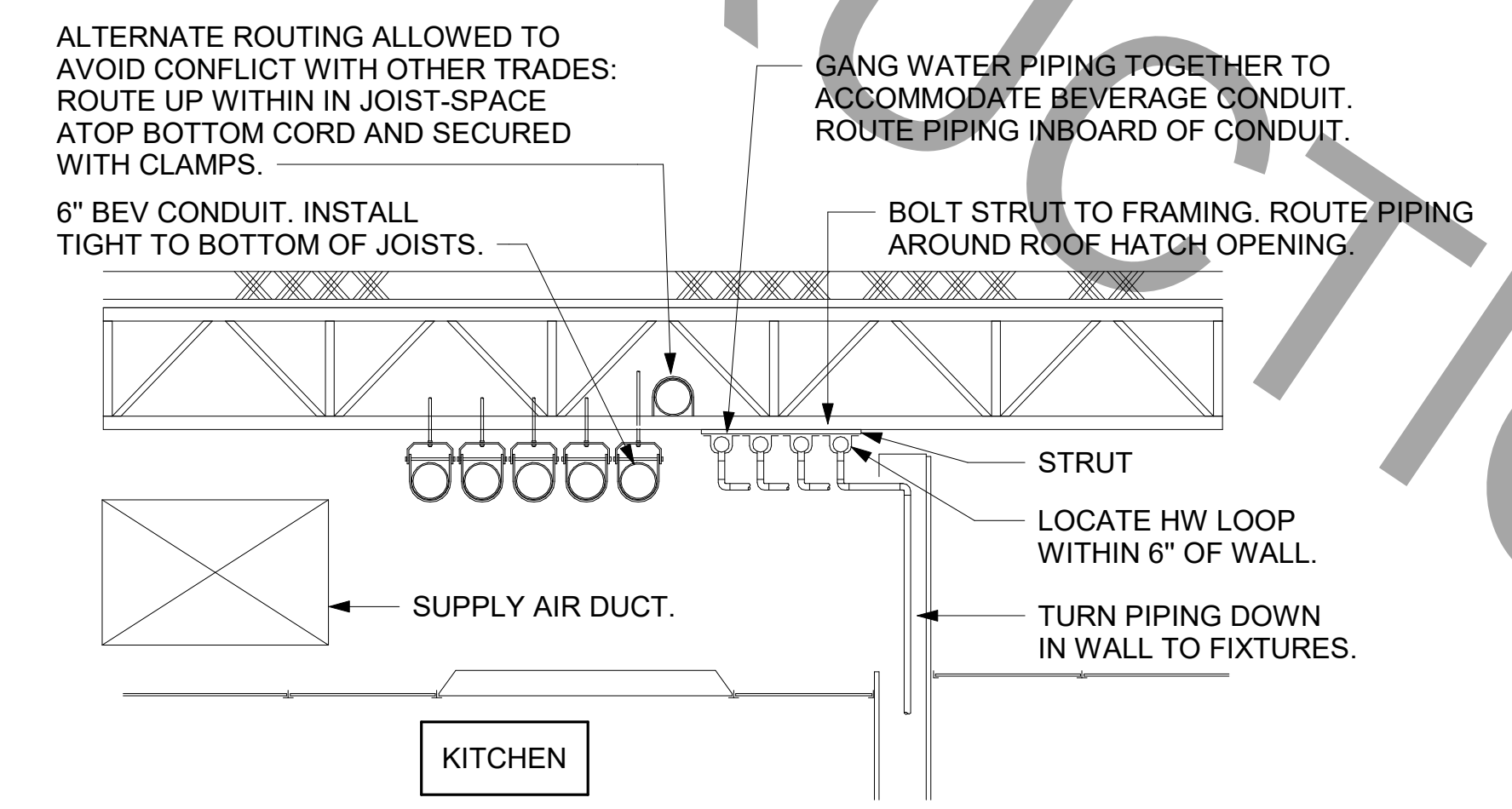
1 BEVERAGE CONDUIT PIPING PLAN  
1/4" = 1'-0"



5 CO2 FILL/VENT CONDUIT AND FILL-BOX INSTALLATION  
NOT TO SCALE



4 COFFEE & TEA BREWER STOP & BFP  
1/4" = 1'-0"



3 SECTION AT WET WALL  
NOT TO SCALE



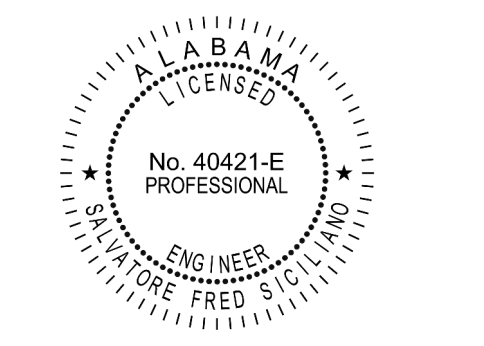
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GARDENDALE (AL)  
385 Fieldstown Rd  
GARDENDALE, ALABAMA 35071

FSR#01687

BUILDING TYPE / SIZE: S04-152 ALL  
RELEASE: N/A

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SHEET	BEVERAGE CONDUIT PLAN
SHEET NUMBER	P-211

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40-01687-P-211-BEVERAGE CONDUIT PLAN

# NOTE OF SPECIAL IMPORTANCE:

BELOW-SLAB BEVERAGE CONDUIT SHALL BE 6" DIAMETER SCHED 40 DWV SOLID WALL, NO FOAM CORE ALLOWED. USE LONG RADIUS ELBOWS (A.K.A. SWEEPS) ON ALL BEVERAGE CONDUIT. PLEASE NOTE BEVERAGE CONDUIT ROUGH-IN LOCATIONS ARE MEASURED TO THE FRACTION OF AN INCH. CARE MUST BE TAKEN WHEN INSTALLING 6" DIAMETER CONDUIT LOCATED WITHIN A 2X8 WALL. THE MARGIN FOR ERROR IS ONLY 1/16TH INCH.

## IMPORTANT NOTE TO INSTALLER

EXERCISE CAUTION WHEN LOCATING ROUGH-INS AT:  
 - DRIVE THRU AREA  
 - CUSTOMER WAIT AREA  
 DO NOT PULL TAPE FROM THE SLAB EDGE AT THESE AREAS WITHOUT COMPENSATING FOR DIFFERENCE IN OFFSETS. NOTE OFFSET AT BACK CORNER OF BUILDING.

## MOP SINK NOTE

IMPORTANT: INSTALL FLOOR DRAIN WITH TOP OF DRAIN 0'-7" BFF. COORDINATE WITH GENERAL CONTRACTOR. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS.

## COORDINATE LEGEND

TYPE	EXAMPLE	PIPE COORDINATES
#1	CW X=43'8" Y=14'7"	APPLIES TO WATER PIPING ROUGH-IN PENETRATION ONLY. SEE P-101 FOR CONTINUATION.
#2	VENT X=43'8" Y=14'7"	APPLIES TO DWV PENETRATION ONLY.
#3	6" BEV COND X=43'8" Y=27'3"	APPLIES TO 6" BEVERAGE CONDUIT PENETRATION ONLY.

## NOTES ABOUT (0,0) BENCHMARK ORIGIN

- THE (X=0, Y=0) BENCHMARK ORIGIN IS LOCATED AT THE OUTSIDE FACE OF FRAMING FOR THE EXTERIOR WALL AT THE CORNER WHERE SHOWN ON THE ADJACENT PLAN.
- IT IS EXTREMELY IMPORTANT FOR THE PLUMBING INSTALLER TO BECOME COMPLETELY FAMILIAR WITH THE FACE-OF-FRAMING POSITION AND ITS RELATION TO THE FLOOR SLAB CONSTRUCTION PRIOR TO BEGINNING THE UNDERSLAB PLUMBING ROUGH-IN.
- PLUMBING CONTRACTOR SHALL REVIEW STRUCTURAL DETAIL "TYPICAL SECTION @ EXTERIOR WALL" FOR PRECISE LOCATION OF FACE-OF-FRAMING WITH RESPECT TO THE SLAB INSTALLATION PRIOR TO LOCATING SLAB ROUGH-INS.



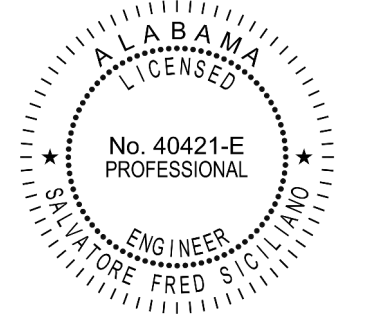
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**GARDENDALE (AL)**  
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 GARDENDALE, ALABAMA 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04-152 ALL  
 RELEASE: N/A

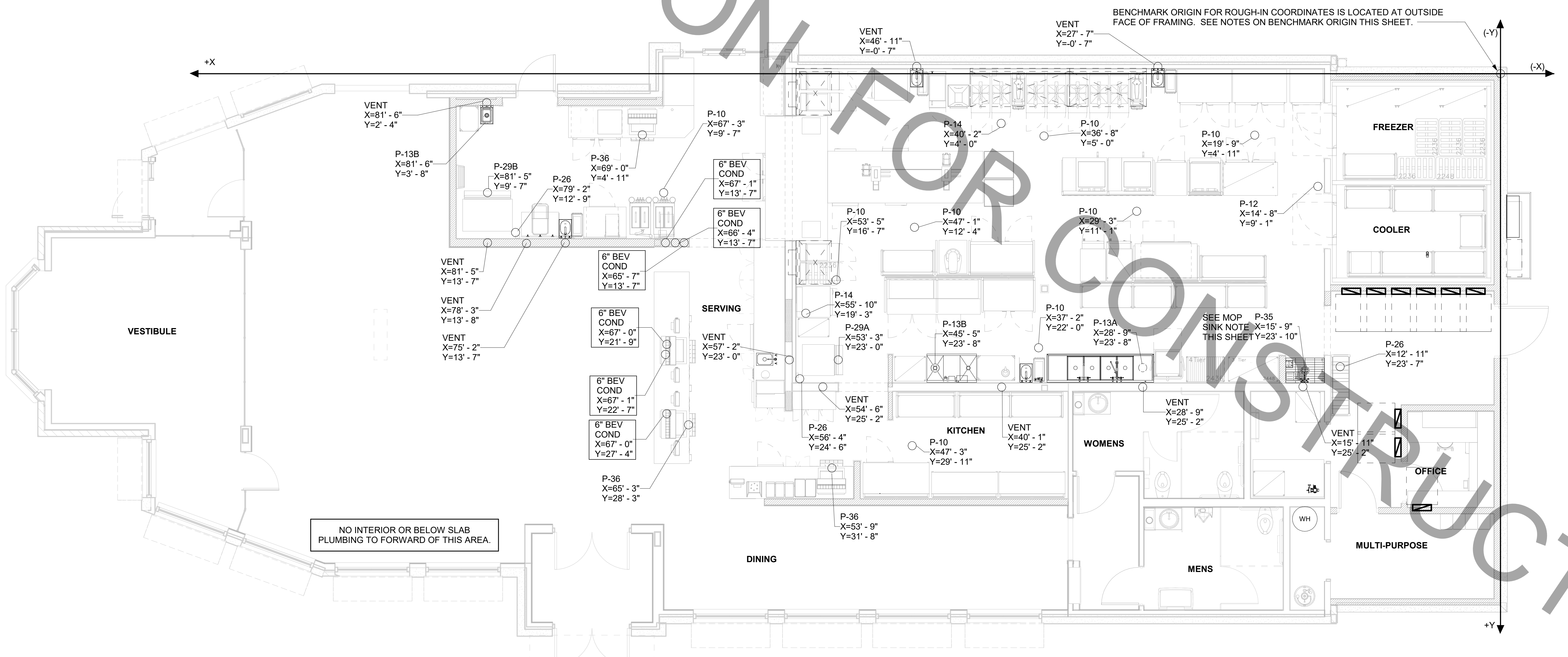
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 SHEET  
 SLAB ROUGH-IN PLAN

SHEET NUMBER

**P-221**

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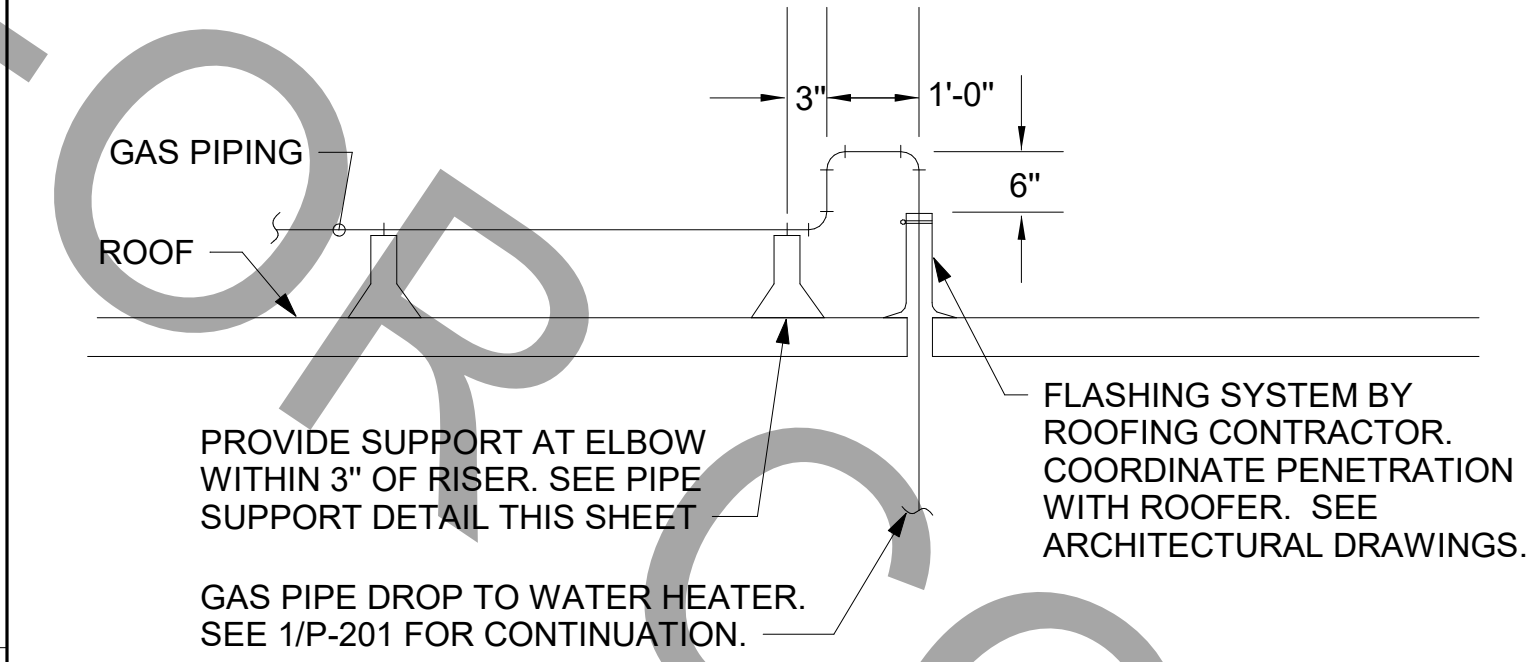
NO INTERIOR OR BELOW SLAB PLUMBING TO FORWARD OF THIS AREA.

BENCHMARK ORIGIN FOR ROUGH-IN COORDINATES IS LOCATED AT OUTSIDE FACE OF FRAMING. SEE NOTES ON BENCHMARK ORIGIN THIS SHEET.

SEE MOP SINK NOTE THIS SHEET Y=23'-10"

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 40-01687-P-221-SLAB ROUGH-IN PLAN

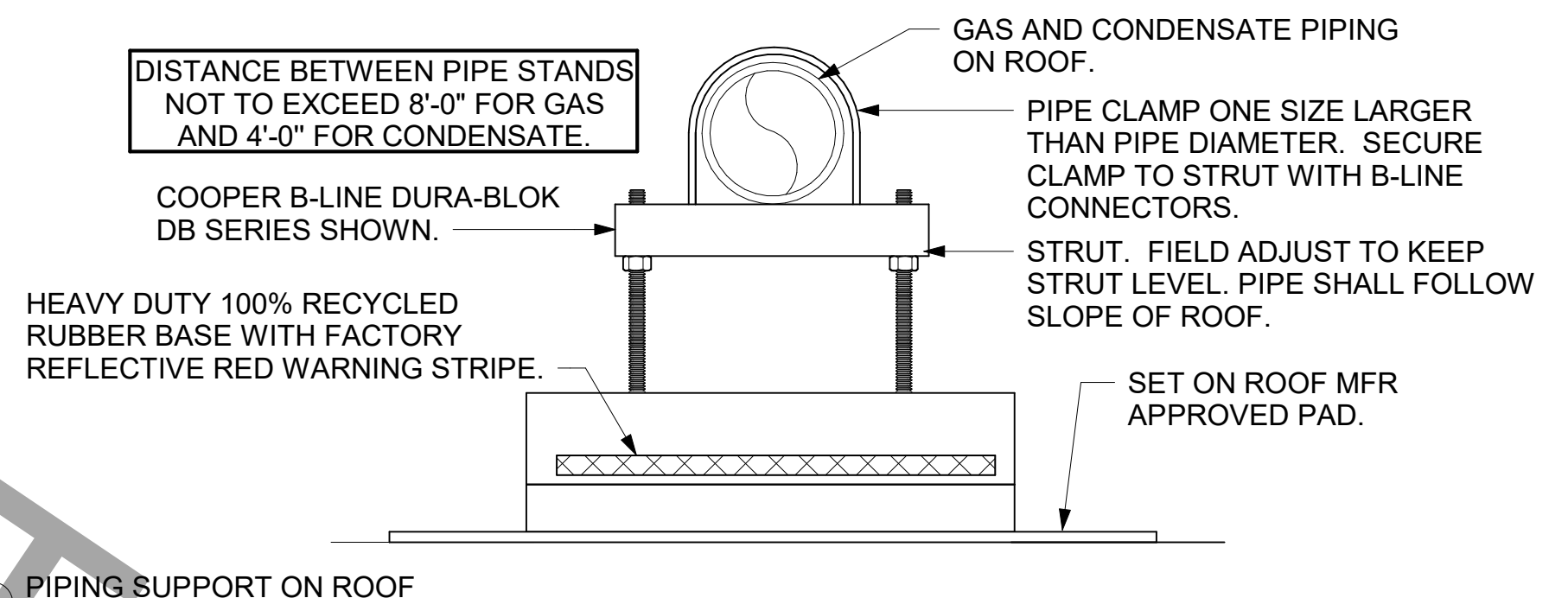
OFFSET PIPING A MINIMUM OF 6" ABOVE TOP EDGE OF FLASHING.



7 GAS PIPE DROP TO WATER HEATER NOT TO SCALE

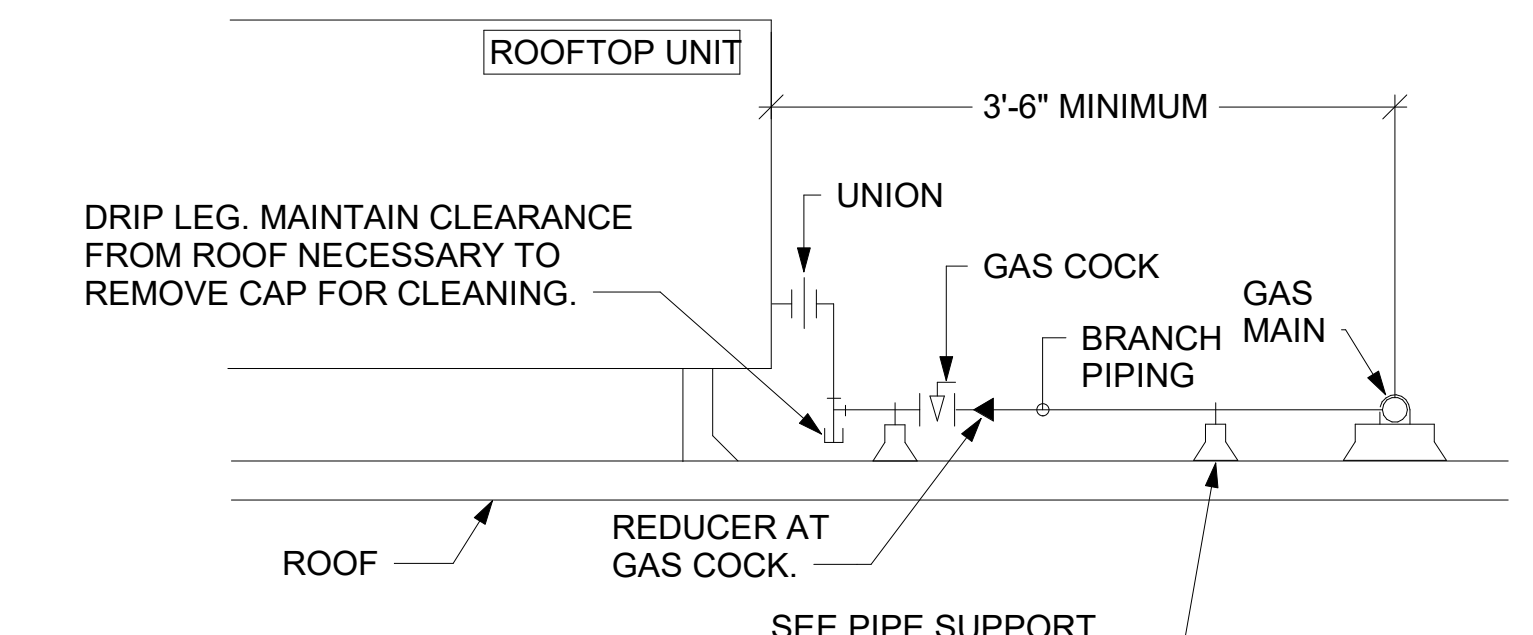
**NOTES:**  
 1. PROVIDE MODEL APS-MDA-1, APS-MDA-2 OR USPP-MDA AS NEEDED FOR ELEVATING CONDENSATE PIPING TO MAINTAIN PROPER SLOPE.  
 2. INSTALL AS REQUIRED IN ACCORDANCE WITH MIAMI-DADE NOA No. 19-0313.09.  
 3. ENSURE CONDENSATE PIPING DOES NOT OBSTRUCT ROOFTOP EQUIPMENT ACCESS OPENINGS. RE-PIPING OF SYSTEMS DUE TO CONFLICTS WITH EQUIPMENT ACCESS OPENINGS SHALL BE DONE AT PLUMBING CONTRACTOR'S EXPENSE.

**NOTES:**  
 1. NON ADJUSTABLE MODEL DB610 PIPE STAND TO BE USED FOR NON-ELEVATED PIPING INSTALLED FLAT ON ROOF DECK.  
 2. PROVIDE MODEL DBE 10-8 OR DBE 10-12 OR DBE 10-16 AS NEEDED FOR ELEVATING CONDENSATE PIPING TO MAINTAIN PROPER SLOPE AND FOR GAS PIPING CROSSING OVER CONDENSATE PIPING.  
 3. 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.



9 PIPING SUPPORT ON ROOF NOT TO SCALE

**NOTES:**  
 1. INSTALL GAS PIPING SUCH THAT HVAC EQUIPMENT ACCESS PANELS AND/OR DOORS ARE IN NO WAY OBSTRUCTED BY PIPING, VALVES, OR SUPPORTS.  
 2. TO AVOID CONFLICT WITH AC UNIT ACCESS DORRS, INSTALL GAS PIPING NO CLOSER THAN 3'-6" FROM AC UNIT. (EXCEPT FOR BRANCH LINE CONNECTED TO AC UNIT.)  
 3. 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.

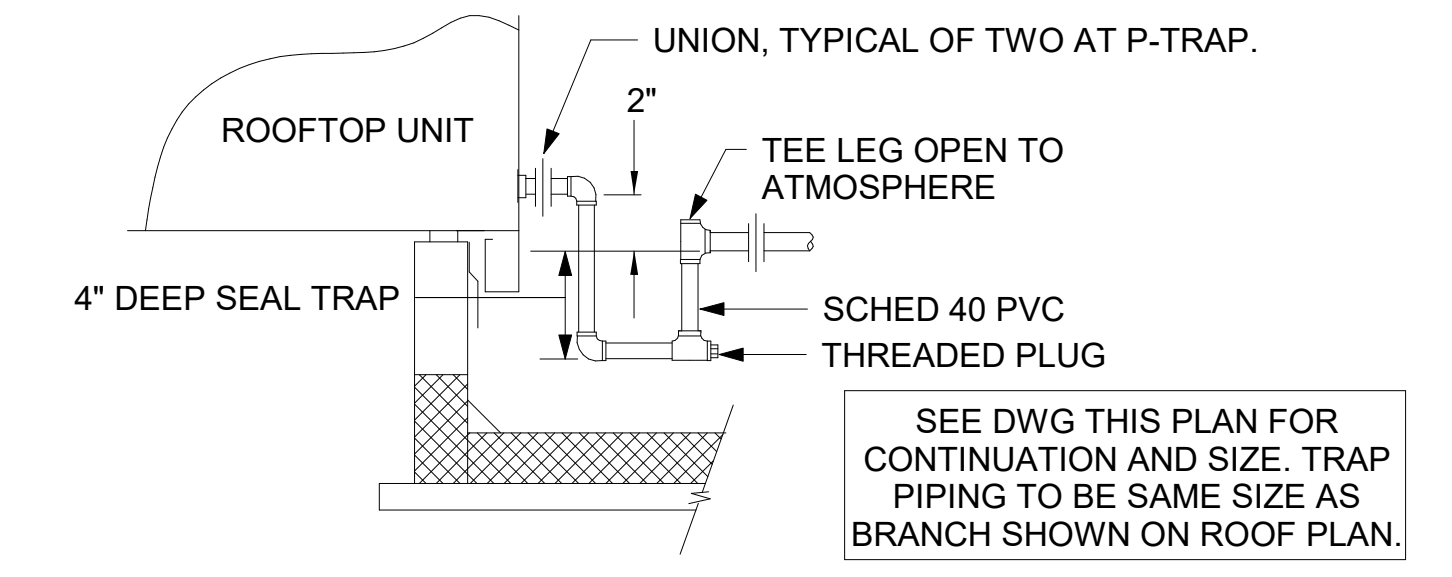


5 GAS PIPING AT RTU 1/4" = 1'-0"

5. GAS CONNECTION SCHEDULE	
EQUIPMENT	GAS LOAD
NEW AC#1	480,000 BTUS
EXISTING AC#2	235,000 BTUS
EXISTING AC#3	235,000 BTUS
EXISTING AC#4	235,000 BTUS
EXISTING AC#5	125,000 BTUS
NEW AC#6	100,000 BTUS
GH (4 @ 50,000 BTU EA.)	200,000 BTUS
EXISTING WATER HEATER	75,000 BTUS
<b>TOTAL CONNECTED LOAD</b>	<b>1,685,000 BTUS</b>

REMARKS:  
 1) EQUIVALENT TO 1,685.0 CFH  
 2) 7" W.C. DELIVERY PRESSURE  
 3) DEVELOPED LENGTH: 175 FT (METER TO GH)

4 GAS CONNECTION SCHEDULE - LS LARGE/MEDIUM NOT TO SCALE



2 CONDENSATE DRAIN PIPING 1/4" = 1'-0"

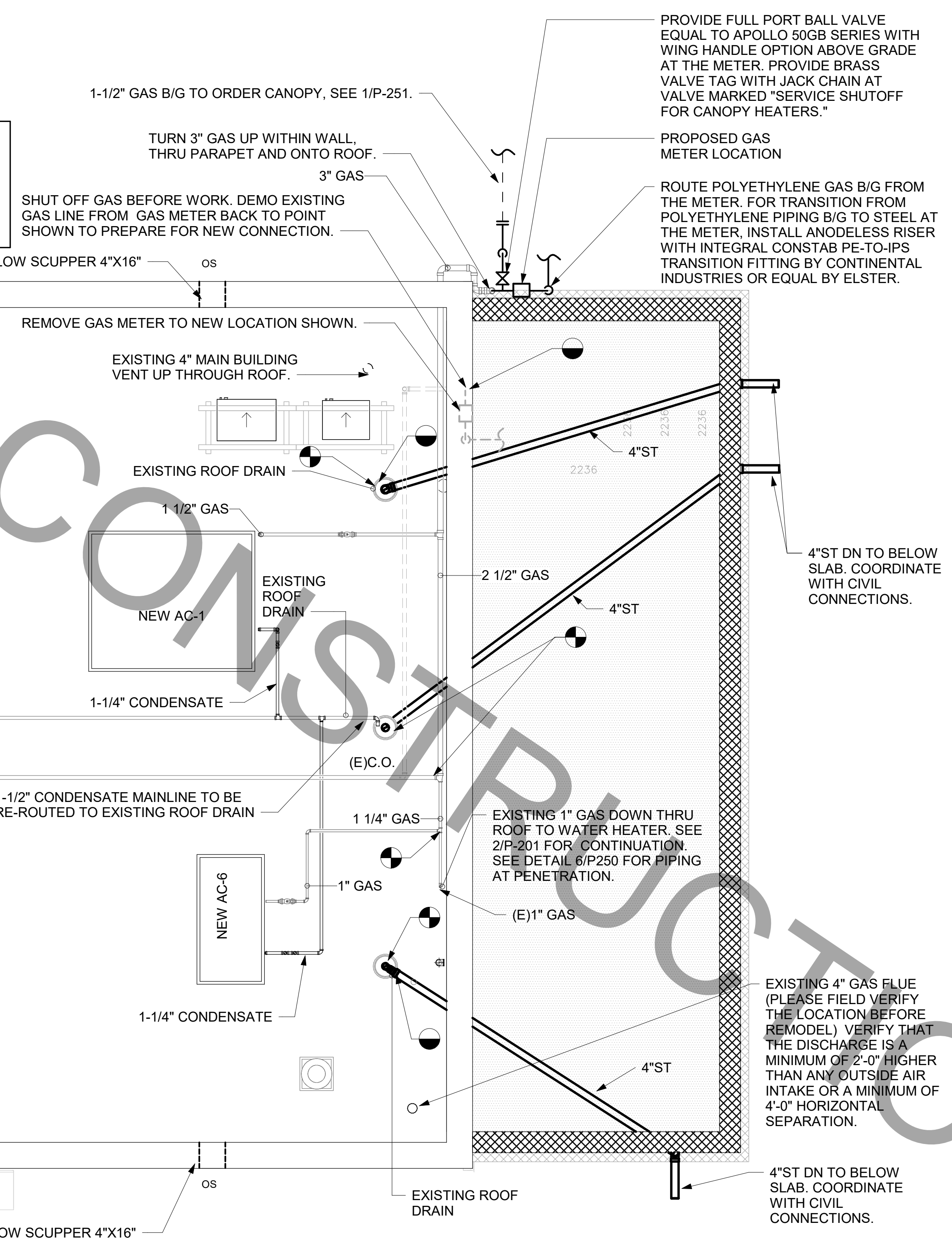
STORM WATER CALCULATIONS			
RAINFALL RATE	4.5 IN/HR		4.5 IN/HR
ROOF AREA	5,000 SQFT		5,000 SQFT
VERTICAL AREA	1,485 SQFT		1,485 SQFT
HALF VERTICAL AREA	743 SQFT		743 SQFT
<b>TOTAL ROOF GPM</b>	<b>268.5 GPM</b>		<b>268.5 GPM</b>
TOP DRAIN	89.5 GPM	PLAN NORTH OVERFLOW SCUPPER	135 GPM
PIPE SIZE AT 1/8 SLOPE	4"	PIPE SIZE AT 1/4 SLOPE	4"
PIPE SIZE AT VERTICAL	4"	PIPE SIZE AT VERTICAL	4"
MIDDLE DRAIN	89.5 GPM	PLAN SOUTH OVERFLOW SCUPPER	135 GPM
PIPE SIZE AT 1/8 SLOPE	4"	PIPE SIZE AT 1/4 SLOPE	4"
PIPE SIZE AT VERTICAL	4"	PIPE SIZE AT VERTICAL	4"
BOTTOM DRAIN	89.5 GPM	4" NOMINAL PIPE SIZE x 3.14 = 12.56" CIRCUMFERENCE @ 1/4" PER FT = 163 GPM	
PIPE SIZE AT 1/8 SLOPE	4"	SIZE OF SCUPPER = 4" HIGH X 16" WIDE = 64 SQ. IN. WHICH IS GREATER THAN NOMINAL 4" PIPE CIRCUMFERENCE.	
PIPE SIZE AT VERTICAL	4"		

6 ROOF DRAINAGE CALCULATIONS (INCLUDES NEW ADDITION AREA) 1/4" = 1'-0"

LEGEND			
B/G	BELOW GRADE	EC	ELECTRICAL CONTRACTOR
---	NEW GAS PIPING ABOVE GRADE	MC	MECHANICAL CONTRACTOR
----	NEW GAS PIPING BELOW GRADE	==	PIPING TO BE DEMO'D
---	EXISTING GAS PIPING ABOVE GRADE	---	EXISTING MECHANICAL EQUIPMENT
---	EXISTING GAS PIPING BELOW GRADE	---	

8 CANOPY LEGEND 1/4" = 1'-0"

PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT FOR ICE MAKER, AND WALK-IN FREEZER AND COOLER REFRIGERANT TUBING THROUGH ROOF. SEE ARCHITECTURAL DRAWINGS FOR ROOFTOP REFRIGERANT CONDUIT INSTALLATIONS AND LOCATION OF ICE MAKER, FREEZER AND COOLER CONDENSING UNITS.



CONDENSATE PIPING ON ROOF SHALL BE SCHEDULE 40 PVC. SEE SPECIFICATIONS ON DRAWING P-901.

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

SEE ARCHITECTURAL DETAILS FOR ROOFTOP PIPE PENETRATIONS.

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



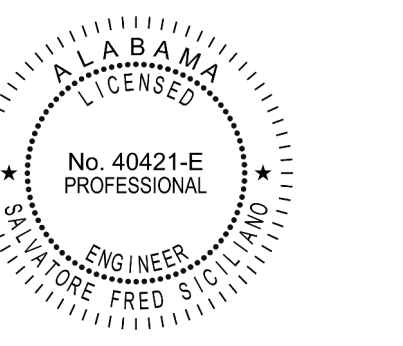
Chick-fil-A

Chick-fil-A  
 5200 Buffington Road  
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 30349-2998



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 Plans Prepared By:  
 CPH Design, Inc.  
 State of Alabama License:  
 Engineer No. 2750-E  
 Surveyor No. CA-909-LS  
 Landscape No. N/A



CHICK-FIL-A  
 GARDENDALE (AL)  
 385 Fieldstown Rd  
 GARDENDALE, ALABAMA 35071

FSR#01687

BUILDING TYPE / SIZE: S04-152 ALL  
 RELEASE: N/A

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT #	C29153
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SHEET	ROOF PLAN AND DETAILS
SHEET NUMBER	P-250

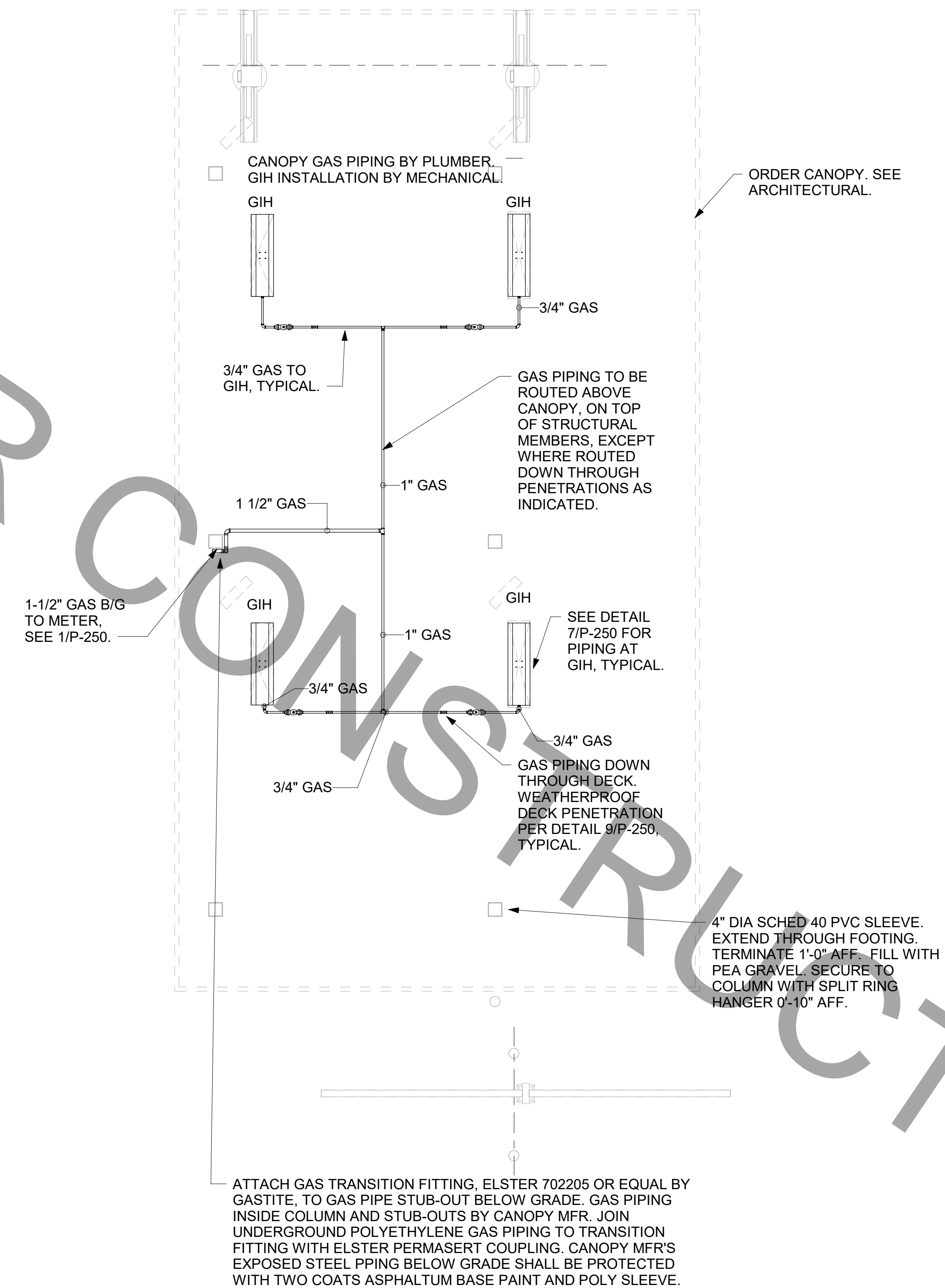
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 40-01687-P-250-ROOF PLAN AND DETAILS

FOR CONSTRUCTION

LEGEND			
[GIH#1]	GAS INFRARED HEATER #1 (TYP.)	B/G	BELOW GRADE
[Solid Line]	NEW GAS PIPING ABOVE GRADE	EC	ELECTRICAL CONTRACTOR
[Dashed Line]	NEW GAS PIPING BELOW GRADE	MC	MECHANICAL CONTRACTOR

**CANOPY GENERAL NOTES**

- COORDINATE NEW WORK WITH EXISTING CONDUIT, STRUCTURE, AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK.
- COORDINATE LOCATION AND RESPONSIBILITIES FOR UNDERGROUND PIPING AND ASSOCIATED TRENCHING WITH GENERAL CONTRACTOR PRIOR TO START OF WORK.
- EXPOSED GAS PIPING SHALL BE PAINTED BY GENERAL CONTRACTOR.
- ACTUAL NUMBER OF GAS INFRARED HEATERS WILL BE DETERMINED BY SITE-SPECIFIC CANOPY LAYOUT AND EQUIPMENT LOCATIONS, AS INDICATED ON ARCHITECTURAL PLANS.



1 ORDER CANOPY PIPING PLAN  
1/4" = 1'-0"

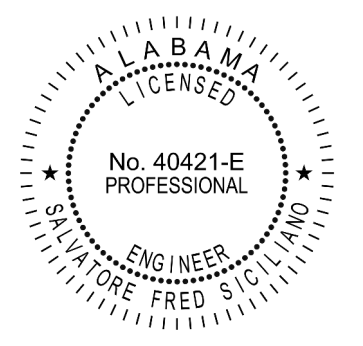


**Chick-fil-A**  
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**CPH Design, Inc.**  
State of Alabama License:  
Engineer No. 2750-E  
Surveyor No. CA-909-LS  
Landscape No. N/A



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
GARDENDALE, ALABAMA 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04-152 LRG  
RELEASE: N/A

REVISION SCHEDULE		
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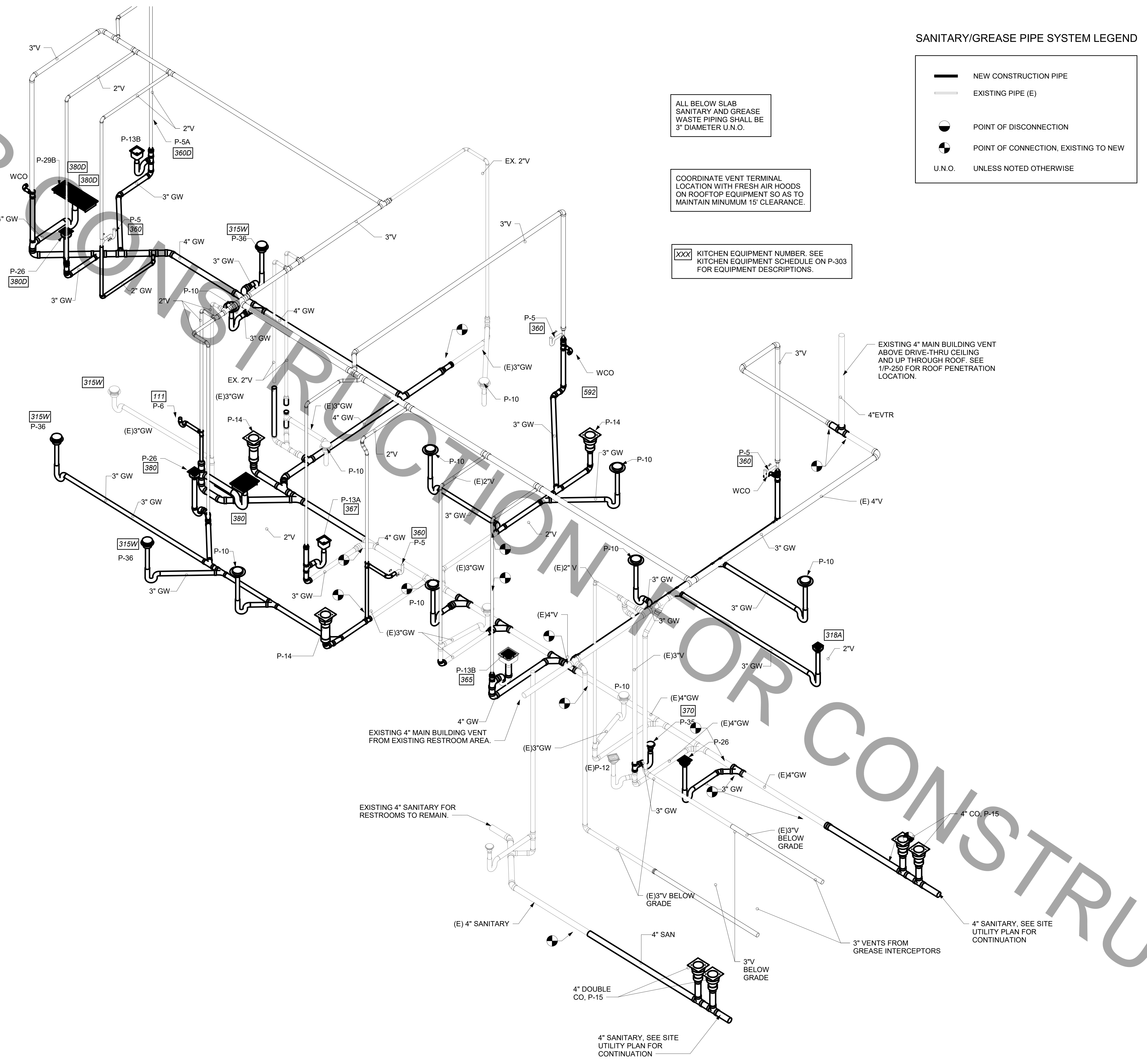
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SHEET  
**CANOPY PLAN AND  
DETAILS**

SHEET NUMBER  
**P-251**

8 7 6 5 4 3 2 1

FOR CONSTRUCTION



SANITARY/GREASE PIPE SYSTEM LEGEND

- NEW CONSTRUCTION PIPE
- EXISTING PIPE (E)
- POINT OF DISCONNECTION
- POINT OF CONNECTION, EXISTING TO NEW
- U.N.O. UNLESS NOTED OTHERWISE

ALL BELOW SLAB SANITARY AND GREASE WASTE PIPING SHALL BE 3" DIAMETER U.N.O.

COORDINATE VENT TERMINAL LOCATION WITH FRESH AIR HOODS ON ROOFTOP EQUIPMENT SO AS TO MAINTAIN MINIMUM 15' CLEARANCE.

XXX KITCHEN EQUIPMENT NUMBER. SEE KITCHEN EQUIPMENT SCHEDULE ON P-303 FOR EQUIPMENT DESCRIPTIONS.

EXISTING 4" MAIN BUILDING VENT ABOVE DRIVE-THRU CEILING AND UP THROUGH ROOF. SEE 1/P-250 FOR ROOF PENETRATION LOCATION.

EXISTING 4" MAIN BUILDING VENT FROM EXISTING RESTROOM AREA.

EXISTING 4" SANITARY FOR RESTROOMS TO REMAIN.

4" VENTS FROM GREASE INTERCEPTORS

4" SANITARY. SEE SITE UTILITY PLAN FOR CONTINUATION

4" SANITARY. SEE SITE UTILITY PLAN FOR CONTINUATION

1 WASTE RISER DIAGRAM

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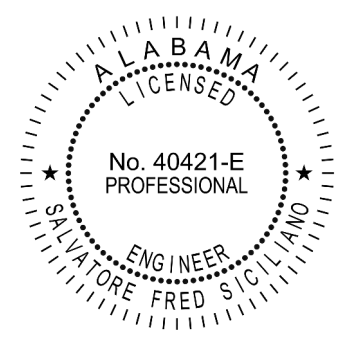


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Landscape No. N/A



07-20-2021

CHICK-FIL-A  
GARDENDALE (AL)  
385 Fieldstown Rd  
GARDENDALE, ALABAMA 35071

FSR#01687

BUILDING TYPE / SIZE: S04-152 ALL  
RELEASE: N/A

REVISION SCHEDULE

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SHEET DWV RISER DIAGRAM

SHEET NUMBER

P-301

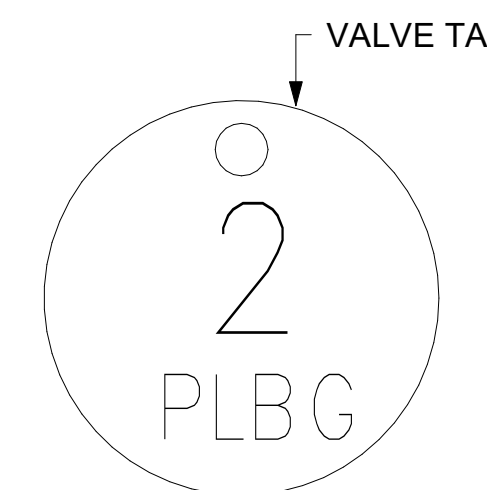
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VALVE TAG LEGEND	
VALVE	VALVE POSITION
1 MAIN WATER SHUT-OFF	NORMALLY OPEN
2 MAIN DRAIN	NORMALLY CLOSED
3 ACCESSORY SHUT-OFF	NORMALLY OPEN
4 WATER FILTER INLET	NORMALLY OPEN
5 RECIRC PUMP ISOLATION VALVE	NORMALLY OPEN
6 WATER HEATER INLET	NORMALLY OPEN
7 RESTROOM & KITCHEN COLD WATER	NORMALLY OPEN
8 POST HYDRANT COLD WATER	NORMALLY OPEN
9 GAS TO WATER HEATER	NORMALLY OPEN
10 WATER HEATER OUTLET	NORMALLY OPEN

NOTE: HANDLE IN-LINE WITH PIPING = VALVE OPEN

LAMINATE VALVE TAG LEGEND AND MOUNT PERMANENTLY WHERE SHOWN ON WATER HEATER DETAIL IN AN ALUMINUM FRAME EQUAL TO SETON #68624.



2 VALVE TAG SYMBOL AS SHOWN ON DETAIL 6/P-303. PROVIDE 1-1/2" ROUND BRASS VALVE TAG WITH 1/2" HIGH BLACK FILLED LETTERING. EACH TAG SHALL INDICATE VALVE NUMBER AND WILL ALSO HAVE "PLBG" STAMPED ON THE TAG IN 1/4" HIGH BLACK FILLED LETTERING EQUAL TO SETON #M4506. HANG WITH BRASS JACK CHAIN ON VALVE HANDLE.

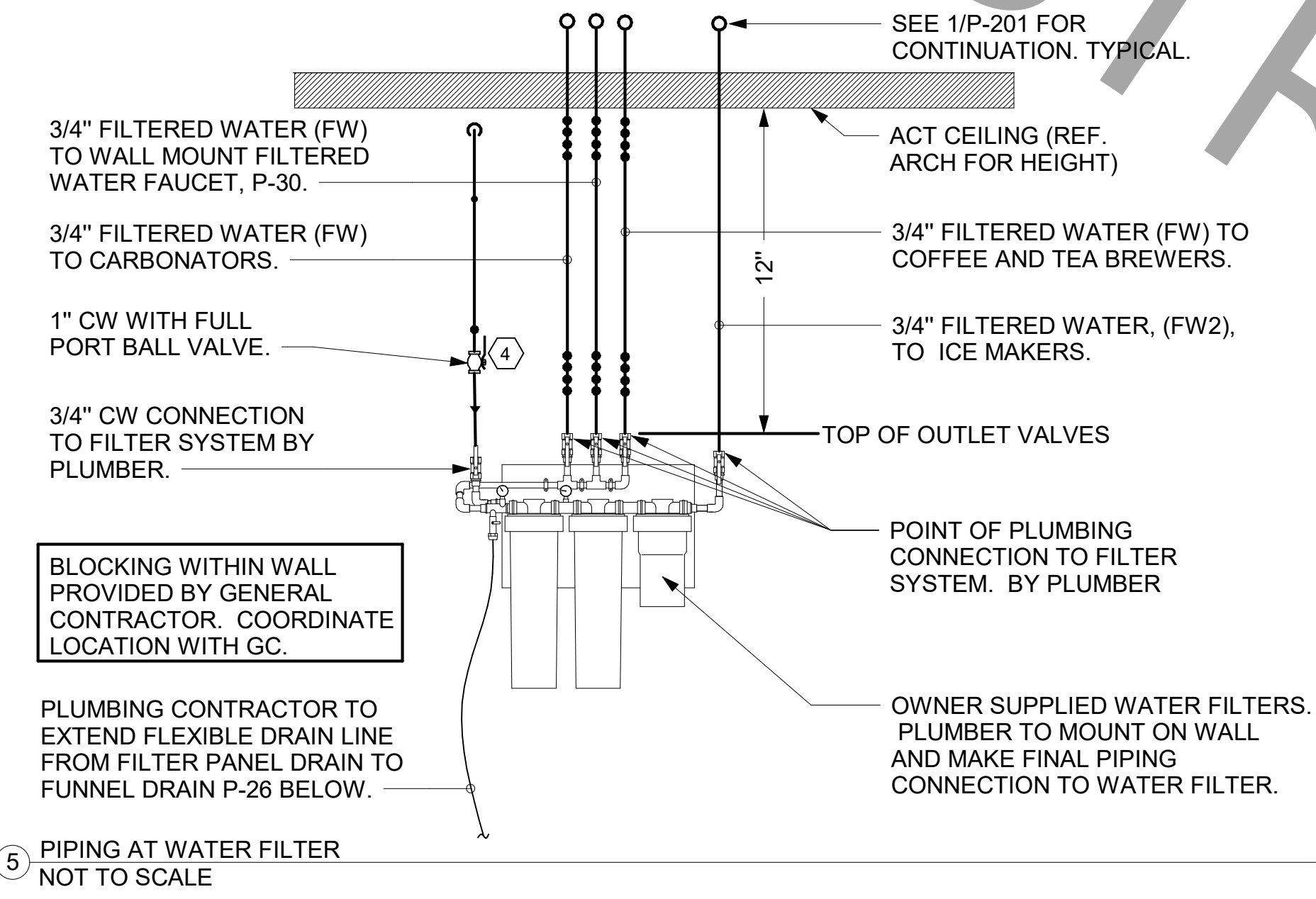
3 VALVE TAGS AND LEGEND NOT TO SCALE

2. KITCHEN EQUIPMENT SCHEDULE									
TAG	DESCRIPTION	FW	FW2	CW	HW	WASTE	ROUGH-IN		
305	TEA BREWER	1/2"	X	X	X	X	P-24, SEE K-611 & 6/P-211		
305R	TEA BREWER	1/2"	X	X	X	X	P-24, SEE K-611 & 6/P-211		
308	COFFEE MAKER	1/2"	X	X	X	X	P-24, SEE K-611 & 6/P-211		
315W	10 HEAD BEVERAGE DISP.	1/2"	X	X	X	INDIRECT	P-36		
318A	CARBONATOR BFP PANEL	3/4"	X	X	X	X	P-28, SEE K-611		
350	WATER FILTER PANEL	(3) 3/4"	3/4"	3/4"	X	X	SEE DET 5/P-303		
360	HAND SINK	X	X	1/2"	1/2"	X	SEE K-611 & P-201		
360D	DUMP SINK	X	X	1/2"	1/2"	X	SEE K-611 & P-201		
360E	EMERGENCY EYEWASH STATION	X	X	1/2"	1/2"	X	*1/2" TEPIID WATER FROM P-42, SEE K-611 & 1/P-201		
363R	DISHWASHER	X	X	3/4"	X	INDIRECT TO P13A	P-41C, SEE K-611 & 1/P-201		
365	POT SINK	X	X	(2) 1/2"	(2) 1/2"	INDIRECT	TWO #365F FAUCETS, P-9 SEE K-611		
367	VEGETABLE PREP SINK	X	X	1/2"	1/2"	INDIRECT	#367F FAUCET, P-8 SEE K-611		
367FW	FILTERED WATER FAUCET	(2) 1/2"	X	X	X	X	P-30 48" AFF.		
368FW	FILTERED WATER FAUCET	(2) 1/2"	X	X	X	X	P-30 48" AFF.		
370	MOP SINK	X	X	1/2"	1/2"	3" P-35	P-7 SEE K-611		
380R	ICE MAKER	X	(3) 1/2"	X	X	INDIRECT	P-23 SEE K-611 & 3/P-201		
381	ICE BIN (1 HEAD)	X	X	X	X	INDIRECT	SEE DET 3/P-201		
384	ICE BIN (2 HEAD)	X	X	X	X	INDIRECT	SEE DET 3/P-201		
410B	FREEZER EVAPORATOR	X	X	X	3/4"	INDIRECT	SEE P-201		
449B	COOLER EVAPORATOR	X	X	X	3/4"	INDIRECT	SEE P-201		
592	RETHEMALIZER	X	X	1/2"	X	INDIRECT	SEE DET 3/P-302		

2 KITCHEN EQUIPMENT SCHEDULE NOT TO SCALE

1. FIXTURE CONNECTION SCHEDULE									
MARK	FIXTURE	FW	FW2	CW	HW	WASTE			
	DUMPSTER DRAIN	X	X	X	X	X			3"
P-1	WATER CLOSET - FLOOR MOUNT (1.28 GPF)	X	X	1"	X	X			3"
P-2	WATER CLOSET - ADA FLOOR MOUNT (1.28 GPF)	X	X	1"	X	X			3"
P-3	URINAL - ADA WALL HUNG (0.125 GPF)	X	X	3/4"	X	X			2"
P-4A	LAVATORY - ADA COUNTERTOP (0.50 GPM)	X	X	1/2"	1/2"	1-1/4"			1-1/4"
P-4B	LAVATORY - ADA WALL-MOUNTED (0.50 GPM)	X	X	1/2"	1/2"	1-1/4"			1-1/4"
P-5	KITCHEN HAND SINK - WALL HUNG (1.0 GPM)	X	X	1/2"	1/2"	1-1/2"			1-1/2"
P-5A	DUMP SINK - WALL HUNG (1.0 GPM)	X	X	1/2"	1/2"	1-1/2"			1-1/2"
P-6	SINGLE COMP SINK - COUNTERTOP (1.0 GPM)	X	X	1/2"	1/2"	1-1/2"			1-1/2"
P-7	MOP SINK	X	X	1/2"	1/2"	3"			3"
P-8	VEGETABLE PREP SINK (0.65 GPM SPRAYER)	X	X	1/2"	1/2"	(2) 1-1/2"			(2) 1-1/2"
P-9	POT SINK (0.65 GPM SPRAYER)	X	X	(2) 1/2"	(2) 1/2"	(4) 1-1/2"			(4) 1-1/2"
P-10	FLOOR DRAIN (ROUND TOP)	X	X	X	X	X			3"
P-11	WALL HYDRANT (NON FREEZE)	X	X	3/4"	X	X			X
P-12	FUNNEL DRAIN (3")	X	X	X	X	X			3"
P-13A	FLOOR SINK (4") 12" TOP	X	X	X	X	X			4"
P-13B	FLOOR SINK (3") 8" TOP	X	X	X	X	X			3"
P-14	CLEANOUT INSIDE BUILDING	X	X	X	X	X			SEE PLAN
P-15	CLEANOUT OUTSIDE BUILDING	X	X	X	X	X			SEE PLAN
P-16	3-WAY VALVE/VACUUM BREAKER	X	X	3/4"	3/4"	X			X
P-17	VACUUM RELIEF VALVE	X	X	3/4"	X	X			X
P-18	EXISTING EXPANSION TANK	X	X	3/4"	X	X			X
P-19	EXISTING GAS WATER HEATER	X	X	1"	1"	X			X
P-20	THERMOMETER	X	X	X	1/2"	X			X
P-21	EXISTING BACKFLOW PREVENTER	X	X	1-1/2"	X	X			X
P-22	MOP SINK CHECK VALVES	X	X	1/2"	1/2"	X			X
P-23	UTILITY CONNECTION (ICE MAKER)	X	1/2"	X	X	X			X
P-24	UTILITY CONNECTION (COFFEE & TEA)	1/2"	X	X	X	X			X
P-25	SHOCK ABSORBER	1/2"	1/2" & 3/4"	1/2"	1/2"	X			X
P-26	FUNNEL DRAIN	X	X	X	X	X			3"
P-26A	TRAP SEAL PROTECTOR	X	X	X	X	X			3"
P-27	WATER PRESSURE GAUGE	X	X	1/4"	X	X			X
P-28	BALL VALVE-CARBONATOR STOP/BFP PANEL	3/4"	X	X	X	X			X
P-29A	ICE MACHINE TRENCH DRAIN	X	X	X	X	X			4"
P-29B	ICE MACHINE TRENCH DRAIN	X	X	X	X	X			4"
P-30	FILTERED WATER FAUCET	(2) 1/2"	X	X	X	X			X
P-31	DUMPSTER POST HYDRANT	X	X	3/4"	X	X			X
P-34	DISPENSER BACKFLOW PREVENTER	1/2"	X	X	X	X			X
P-35	FLOOR DRAIN	X	X	X	X	X			3"
P-36	BEVERAGE TOWER INDIRECT RECEIVER	X	X	X	X	X			3"
P-38	EXISTING HOT WATER CIRCULATING PUMP	X	X	X	1/2"	X			X
P-39	EXISTING PRESSURE REDUCING VALVE	X	X	2"	X	X			X
P-40	EXISTING WYE STRAINER	X	X	2"	X	X			X
P-41C	DISHWASHER SUPPLY VALVES - CHAMPION	X	X	3/4"	X	X			X
P-42	EMERGENCY EYEWASH MIXING VALVE	X	X	1/2"	1/2"	X			X
P-43	RETHEMALIZER SUPPLY VALVE	X	X	3/4"	X	X			X

NOTES: 1 REFER TO FOOD SERVICE DRAWINGS FOR KITCHEN EQUIPMENT INSTALLATION AND HOOK-UP RESPONSIBILITIES.  
2 DO NOT MANIFOLD POT OR PREP SINK DRAINS TOGETHER UNLESS ALLOWED BY LOCAL AUTHORITY.



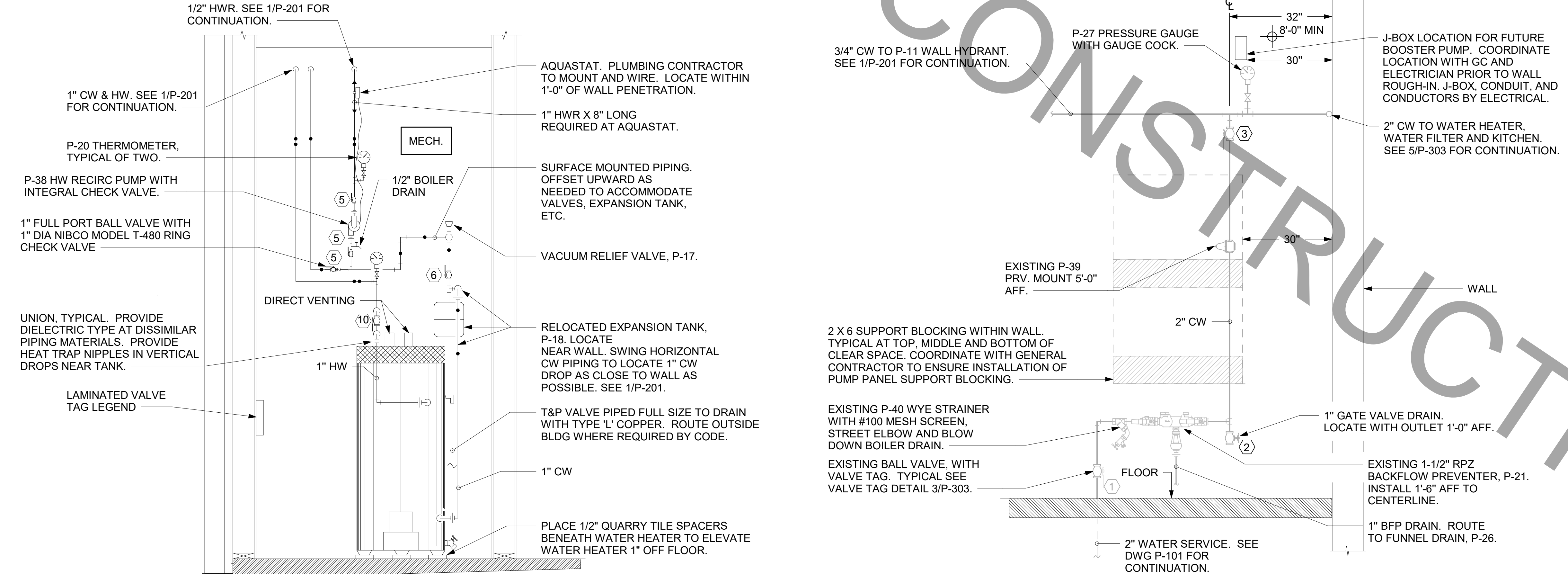
5 PIPING AT WATER FILTER NOT TO SCALE

**NOTES TO WATER HEATER INSTALLER:**

- POSITION VALVES AND TRIM IN MECH ROOM SUCH THAT VALVES AND TRIM ARE UNOBSTRUCTED TO VIEW AND SO THAT ACCESS FOR OPERATION OR REPAIR IS POSSIBLE WITHOUT USE OF STEP LADDERS OR NEED TO DISASSEMBLE ANY COMPONENTS.
- VENT HEATER UP THRU MECH ROOM ROOF AND PROVIDE FRESH AIR PIPING PER MANUFACTURER'S RECOMMENDATIONS.

**NOTE OF SPECIAL IMPORTANCE:**

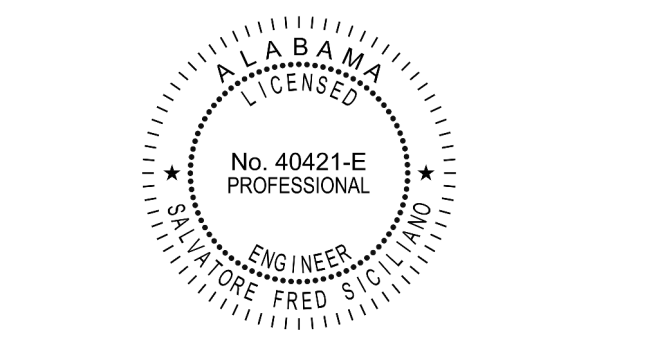
- LOCATIONS OF 2" CW RISER AND CLEAR SPACE ARE DIMENSIONED BECAUSE THEY ARE CRITICAL FOR THE FUTURE PUMP PANEL INSTALLATION.
- GENERAL CONTRACTOR SHALL ENSURE OTHER TRADES SHALL NOT INSTALL ANY OTHER BUILDING COMPONENT WITHIN CLEAR SPACE OR WITHIN 10" OF EDGES.



6 PIPING AT WATER HEATER NOT TO SCALE

4 PIPING AT WATER SERVICE ENTRANCE IN MECHANICAL ROOM NOT TO SCALE

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40-01687-P-303-DETAILS AND SCHEDULES



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
GARDENDALE, ALABAMA 35071

**FSR#01687**  
BUILDING TYPE / SIZE: S04-152 ALL  
RELEASE: N/A

REVISION SCHEDULE		
NO.	DATE	DESCRIPTION

CONSULTANT PROJECT #	C29153
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SHEET DETAILS AND SCHEDULES

SHEET NUMBER

1. SECTION C15100 - 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 STRINGENT 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 VENT DRINK CARBONATORS SHALL BE PROVIDED AND INSTALLED BY LOCAL SOFT DRINK VENDOR.

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, HILDORITE 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. SHOCK ABSORBERS SERVICING FIXTURES WITH FLUSH VALVES SHALL BE SECURELY ANCHORED IN THEIR VERTICAL POSITION. CONFORM TO ASSE 1010.

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 1/4" PER FT (2%) UNLESS NOTED OTHERWISE ON PLANS.

G. SUPPORT HORIZONTAL PIPING ACCORDING TO LOCAL PLUMBING CODE. HANGER RODS 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.

2.03 TESTING (C15100)

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

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

PART III - MANUFACTURERS

3.01 PRODUCTS - PIPING SYSTEMS, ETC (C15100)

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

B. ALTERNATES TO ZURN (ZRN) FIXTURES: ONLY AS SHOWN ON PLANS. APPROVED JAY R. SMITH (JRS), WATTS (WTS), 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.

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. PLUMBING FIXTURES

RESTROOM FIXTURES (C15405) AND PLUMBING (15100)

P-13A DUMPSTER PAD DRAIN: J.R. SMITH FIGURE NO. 2280C03 3" FLOOR DRAIN WITH 7-1/2" HINGED CAST IRON SLOTTED GRATE AND SEDIMENT BUCKET (PROVIDED BY HJC.) INSTALLED BY SITE CONTRACTOR. ALT: (ZRN) Z415C-3NL-Y.

P-1 WATER CLOSET: TOTO MODEL CT705UN#01 BOWL WITH 1.28 GPF TET1A32#CP ECO-POWER FLUSH VALVE AND SC534 SEAT (ALL PROVIDED BY HJC). 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 ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.

P-13B FLOOR SINK (VEGETABLE SINK): ZURN MODEL Z1910-KC-3NL-1-23 CAST IRON INDIRECT WASTE RECEIVER WITH FLASHING CLAMP, 8" SQ. BODY, ALUMINUM SEDIMENT BUCKET, AND NO GRATE (PROVIDED BY HJC). NO SUBSTITUTIONS. CLEANOUTS INSIDE BUILDING: ZURN ZN1400-XNL-T-8P CLEANOUT WITH 6" SQUARE NICKEL BRONZE TOP AND TAPER THREAD BRONZE PLUG. SEE PLAN FOR SIZE. (X=PIPE DIA) (PROVIDED BY HJC). ALT: (WTS) CO-20XP-S; (JRS) 4053L.

P-14 CLEANOUTS OUTSIDE BUILDING: ZURN Z1474-NX EXTRA HEAVY DUTY CAST IRON CLEANOUT, "C.O." CAST IN COVER, ABS PLUG, NEO-LOOK OUTLET. (X=PIPE DIA) (PROVIDED BY HJC) ALT: (WTS) CO-X00-MF + CO-38X; (ZRN) Z1474-X-N (JRS) 42R.

P-15 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 G20-103 OR EQUAL). PROVIDE WITH ONE ASSE 1011 APPROVED CHROME PLATED VACUUM BREAKER (WOODFORD MODEL 34H-CH OR EQUAL) (ALL PROVIDED BY HJC). FOR INSTALLATION AT MOP SINK. SEE 4/P-201. PROVIDE ALSO TWO 3/4" GLOBE CHROME PLATED BRASS NIPPLE AND 3/4" POLISHED CHROME 90 DEGREE ELBOW.

P-16 VACUUM RELIEF VALVE: WATTS MODEL #LFN36M1, 3/4" CONNECTION. (PROVIDED BY HJC.)

P-17 EXISTING EXPANSION TANK

P-18 GAS WATER HEATER: EXISTING

P-19 THERMOMETER: PROVIDE TEREICE MODEL B83404 - 04 3" DIAL TYPE THERMOMETER WITH BOTTOM 1/2" N.P.T. CONNECTION, 4" STEM AND 0 DEG F TO 200 DEG F RANGE. LEAD FREE. (PROVIDED BY HJC.)

P-20 EXISTING BACKFLOW PREVENTERS:

P-21 MOP SINK CHECK VALVES: T&S BRASS 1/2" MODEL B-CVV1-2 BALL CHECK. (PROVIDED BY HJC.)

P-22 UTILITY CONNECTION (ICEMAKER): PROVIDE A MCGUIRE MODEL LFH5T06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET (PROVIDED BY HJC). PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFP P-34. SEE DETAIL 3/P-201 FOR PIPING AT ICE MAKERS.

P-23 UTILITY CONNECTION (COFFEE & TEA BREWERS): PROVIDE A MCGUIRE MODEL LFH5T06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET (PROVIDED BY HJC). PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFP P-34.

P-24 SHOCK ABSORBER: ZURN Z1700-100 THRU Z1700-300 AS NEEDED, SIZE AS RECOMMENDED BY MANUFACTURER (PROVIDED BY HJC). ALT: (WTS) SSA + SSB; (JRS) 5005 THROUGH 5050)

P-25 FUNNEL DRAIN (3"): ZURN ZN415-3NL-8S-OF FLOOR DRAIN W/FUNNEL. INDIRECT WASTE RECEIVER WITH NICKEL BRONZE STRAINER AND FUNNEL. PROVIDE 8" ROUND STRAINER WITH 3.25" X 8.25" OBLONG FUNNEL (DRAIN AND STRAINER PROVIDED BY HJC). ALT: (WTS) FD-103P-A8-G-1; (JRS) SMITH 3510L03.

P-26 TRAP SEAL PROTECTOR: PROVENT TRAP GUARD MODEL TG3H 3" TRAP SEAL INSERT FOR INTERIOR INSTALLATION AND REPLACEMENT ACCESS THROUGH STRAINER (PROVIDED BY HJC). PROVIDE AT P-35 FLOOR DRAINS IN RESTROOMS. P-37 FLOOR DRAINS DINING ROOM, AND P-26 FUNNEL DRAINS IN MECH ROOM. PROVIDE PROSET MODEL TG33-ZURN WHEN USING ZURN FLOOR FIXTURES (PROVIDED BY HJC).

P-27 WATER PRESSURE GAUGE: TEREICE MODEL 800B, 2-1/2" ROUND, BOTTOM OUTLET WITH 1/4" N.P.T. CONNECTION AND 0 TO 100 PSI RANGE. (PROVIDED BY HJC.)

P-28 ISOLATION BALL VALVE (8-STOP WATER MANIFOLD PANEL): NIBCO MODEL 4660-T, 3/4", WITH IPS INLET AND OUTLET. (PROVIDED BY HJC.)

P-29A ICE MACHINE TRENCH DRAIN: ZURN/STAINLESS DRAINS TR12-CFA-18 STAINLESS STEEL TRENCH DRAIN, 14.5" X 18", STAINLESS STEEL SEDIMENT CUP AND STAINLESS STEEL SERRATED LADDER GRATE (DRAIN WIDTH=18") (PROVIDED BY HJC). NO SUBSTITUTIONS.

P-29B ICE MACHINE TRENCH DRAIN: ZURN/STAINLESS DRAINS TR12-CFA-36 STAINLESS STEEL TRENCH DRAIN, 14.5" X 36", STAINLESS STEEL SEDIMENT CUP AND STAINLESS STEEL SERRATED LADDER GRATE (DRAIN WIDTH=36") (PROVIDED BY HJC). NO SUBSTITUTIONS.

P-30 FILTERED WATER FAUCET: (FAUCET PROVIDED BY TMS) 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 DISPENSER BACKFLOW PREVENTER: WATTS MODEL #LF7R2-2 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. (ALL PROVIDED BY HJC.)

P-32 FLOOR DRAIN (3"): ZURN EZ1-PV3-R6 PVC BODY, BRONZE SPUD WITH 6" DIAMETER NICKEL BRONZE STRAINER (PROVIDED BY HJC). ALT: JONES STEPHENS CORP D50-064.

P-33 BEVERAGE TOWER INDIRECT RECEIVER (3"): ZURN EZ1-PV3-R8 PVC BODY, BRONZE SPUD WITH 8" DIAMETER NICKEL BRONZE STRAINER (PROVIDED BY HJC). ALT: JONES STEPHENS CORP D53-144.

P-34 EXISTING HOT WATER CIRCULATING PUMP

P-35 EXISTING 2" PRESSURE REDUCING VALVE:

P-36 EXISTING WYE STRAINER

P-37 DISHWASHER SUPPLY LINES (CHAMPION): FULL-PORT LEAD-FREE STAINLESS STEEL BALL VALVES (PROVIDED BY HJC) WITH SPLIT-RING BRACKET. CHROME FITTINGS, PIPE NIPPLES AND ESCUTCHEON AS DETAILED ON 2/P-302.

P-38 EMERGENCY THERMOSTATIC MIXING VALVE (EMERGENCY EYEWASH): BRADLEY MODEL S19-2000 EF38 THERMOSTATIC TEMPERING VALVE (PROVIDED BY HJC). ANSI Z358.1 CERTIFIED FOR EMERGENCY FIXTURES, ASSE 1071 COMPLIANT, WITH DIAL THERMOMETER, INLET CHECK STOPS, ADJUSTABLE SETPOINT, ACCURATE WITHIN +/- 3 DEG F. INCLUDES INTEGRAL COLD WATER BYPASS WITH POSITIVE HOT WATER SHUT-OFF WHEN COLD WATER SUPPLY IS LOST. FACTORY SETPOINT OF 85 DEG F. MOUNTING BRACKET INCLUDED. FACTORY ASSEMBLED AND TESTED. ROUGH BRASS FINISH. NO SUBSTITUTIONS. CONTACT CHICK-FIL-A NATIONAL ACCOUNTS AT HAYNES, JONES & CADBURY FOR PRICING AND DELIVERY.

P-39 SUPPLY VALVE (RETHERMALIZER): FULL-PORT LEAD-FREE STAINLESS STEEL BALL VALVE (PROVIDED BY HJC) WITH SPLIT-RING BRACKET. CHROME FITTINGS, PIPE NIPPLES AND ESCUTCHEON AS DETAILED ON 3/P-302.

NATIONAL ACCOUNTS	
1.	TOTO VALVES AND FIXTURES (NO SUBSTITUTIONS). HAINES, JONES & CADBURY LLC. (HJC DISTRIBUTORS). PLEASE CONTACT HJC-CFA CUSTOMER SERVICE REPRESENTATIVE AT (800) 459-7099 OR VIA E-MAIL AT: <b>CF@HJCCINC.COM</b> FOR NATIONAL ACCOUNT PRICING AND DELIVERY FOR ALL ITEMS ON PLUMBING FIXTURE SCHEDULE.

NOTE TO INSTALLER:

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. EACH TRADE CONTRACTOR SHALL VERIFY WITH THE GENERAL CONTRACTOR THAT HE HAS THOROUGHLY REVIEWED AND COORDINATED ALL LOCATIONS AND ROUTINGS WITH ALL OTHER TRADES PRIOR TO FABRICATION OF CONDUITS, DUCTS, OR PIPING, AND START OF INSTALLATION OF SAME (INCLUDING SPRINKLER PIPING WHEN PRESENT ON JOB). ANY INSTALLATION OR WORKING CONFLICTS WHICH OCCUR IN THE FIELD SHALL BE RESOLVED BY THE TRADE CONTRACTOR TO THE SATISFACTION OF THE OWNER AND ARCHITECT AND AT NO EXPENSE TO THE OWNER, ARCHITECT AND/OR GENERAL CONTRACTOR.

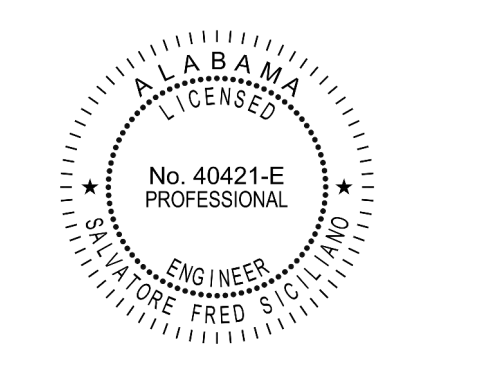
THE CONTRACTOR SHALL CONTACT THE ARCHITECT, ENGINEER OR OWNER PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN HIS BID ALL COSTS TO MEET THE DESIGN INTENT. CLARIFICATIONS MADE BY THE ARCHITECT, ENGINEER OR OWNER AFTER BIDDING WILL BE FINAL AND SHALL BE IMPLEMENTED AT CONTRACTORS COST. BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COSTS FOR ALL WORKING CONFLICTS ACCORDING WITH GOVERNING CODES. THE PLANS AND SPECIFICATIONS NOT WITHSTANDING, THE CONTRACTOR SHALL ALERT ARCHITECT, ENGINEER OR OWNER OF ANY APPARENT DISCREPANCIES BETWEEN GOVERNING CODES AND DESIGN INTENT. MAINTAIN 30 INCHES CLEAR IN FRONT OF WATER HEATER CONTROL SECTION.



**Chick-fil-A**  
5200 Buffington Road  
Atlanta, Georgia  
30349-2998



**www.cphcorp.com**  
**A Full Service A & E Firm**  
Plans Prepared By:  
**CPH Design, Inc.**  
State of Alabama License:  
Engineer No. 2750-E  
Surveyor No. CA-909-LIS  
Landscape No. N/A



07-20-2021

**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
GARDENDALE, ALABAMA 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04-152 ALL RELEASE: N/A

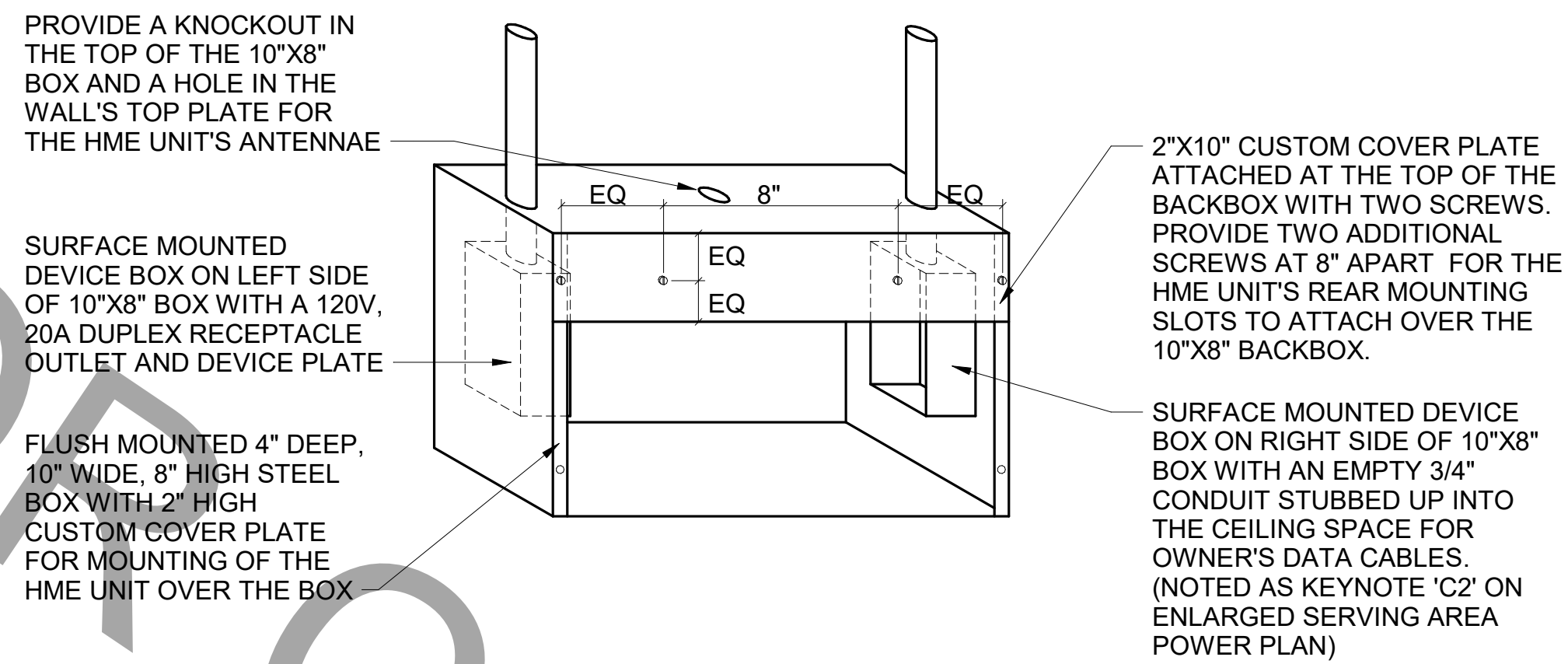
REVISION SCHEDULE

NO.	DATE	DESCRIPTION

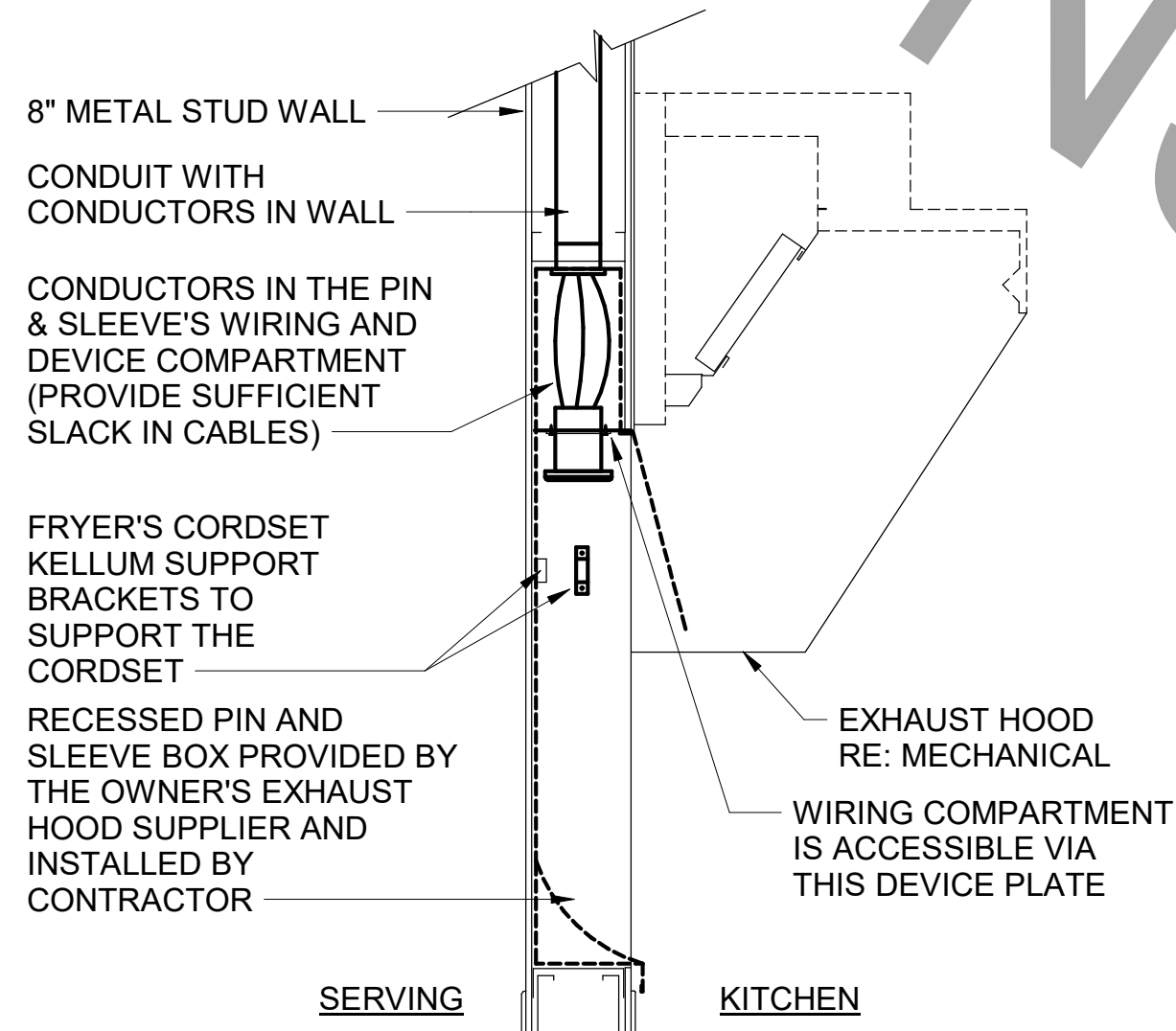
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DATE 04/06/2022  
DRAWN BY JPM  
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**PLUMBING SPECIFICATIONS**  
SHEET NUMBER

**P-901**

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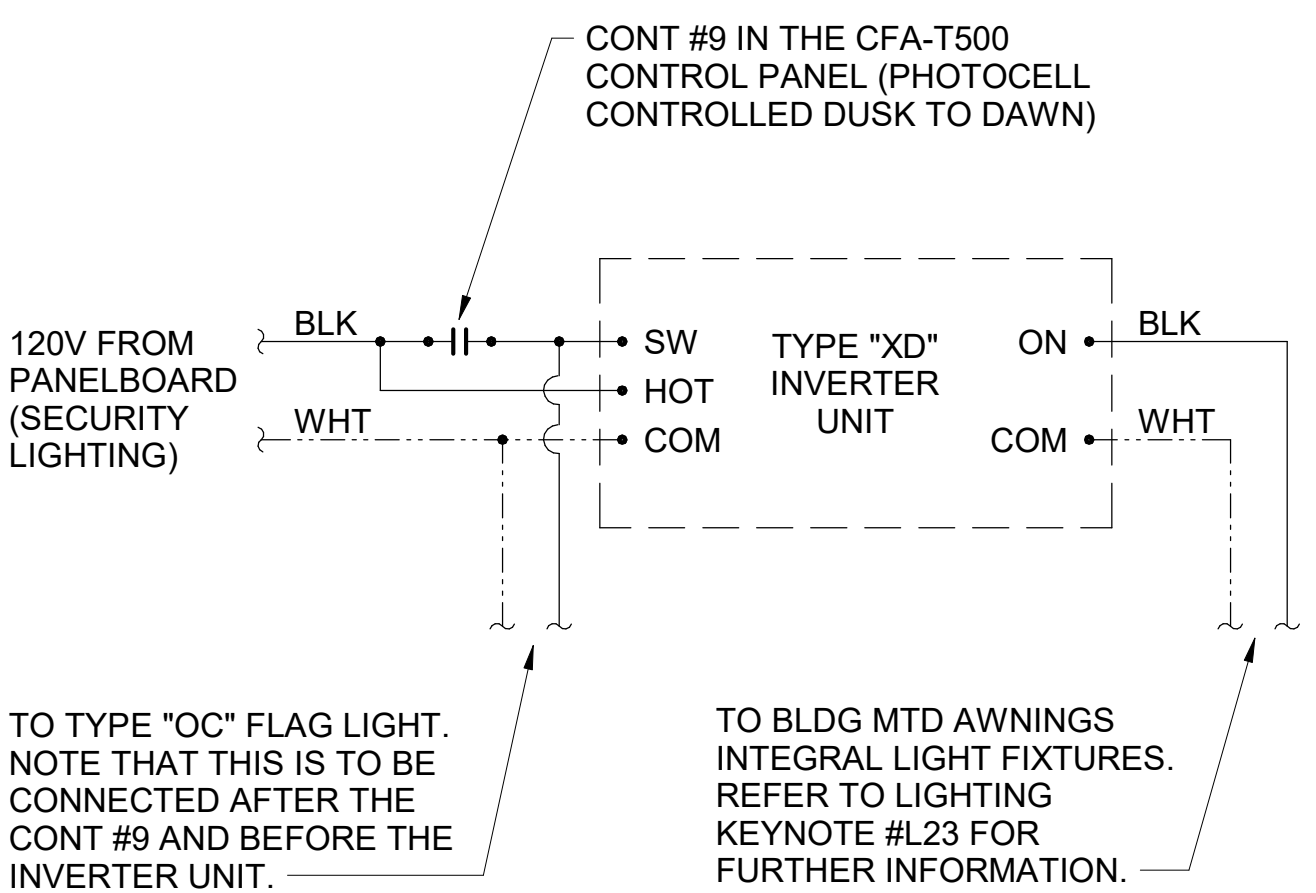


**E3 HME UNIT POWER & DATA BOX DETAIL**  
NO SCALE

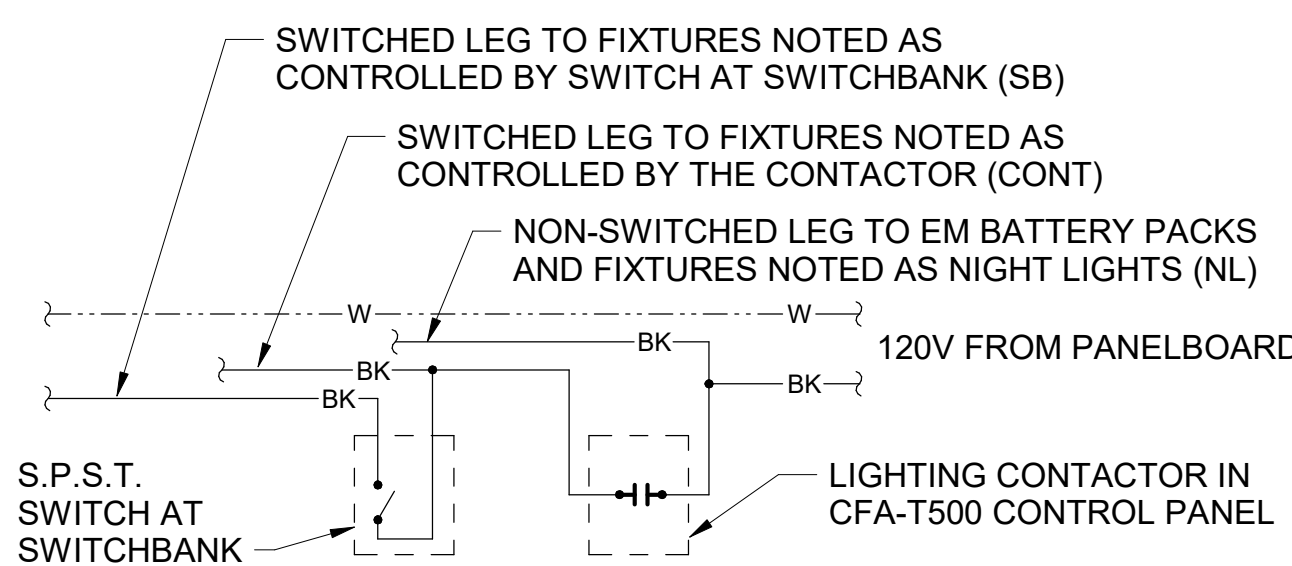


**D4 PIN & SLEEVE BOX DETAIL**  
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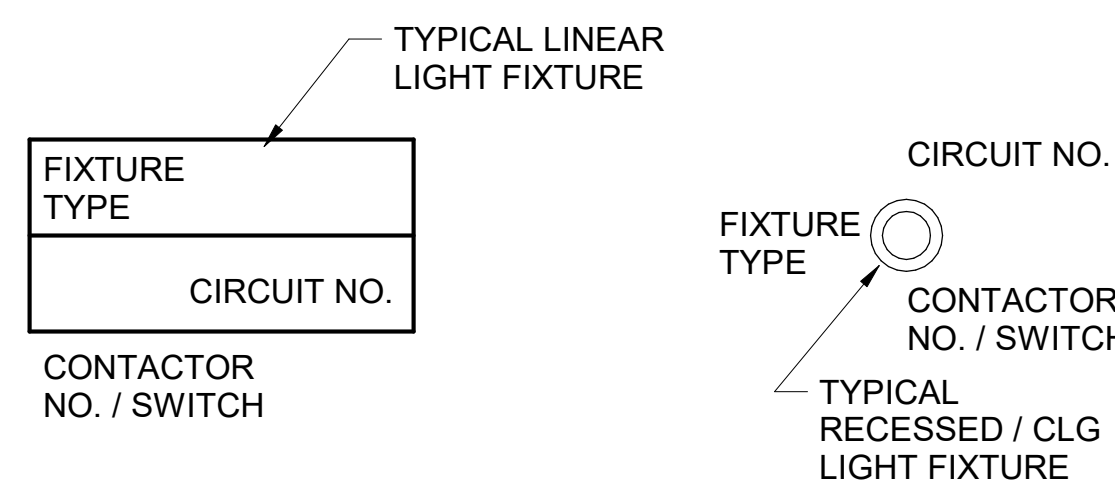
**D3 OPEN-CLOSED CONTROL SWITCH**  
NO SCALE



**C4 INVERTER XD WIRING DIAGRAM**  
NO SCALE



**B4 LIGHTING CONTROL DIAGRAM**  
NO SCALE



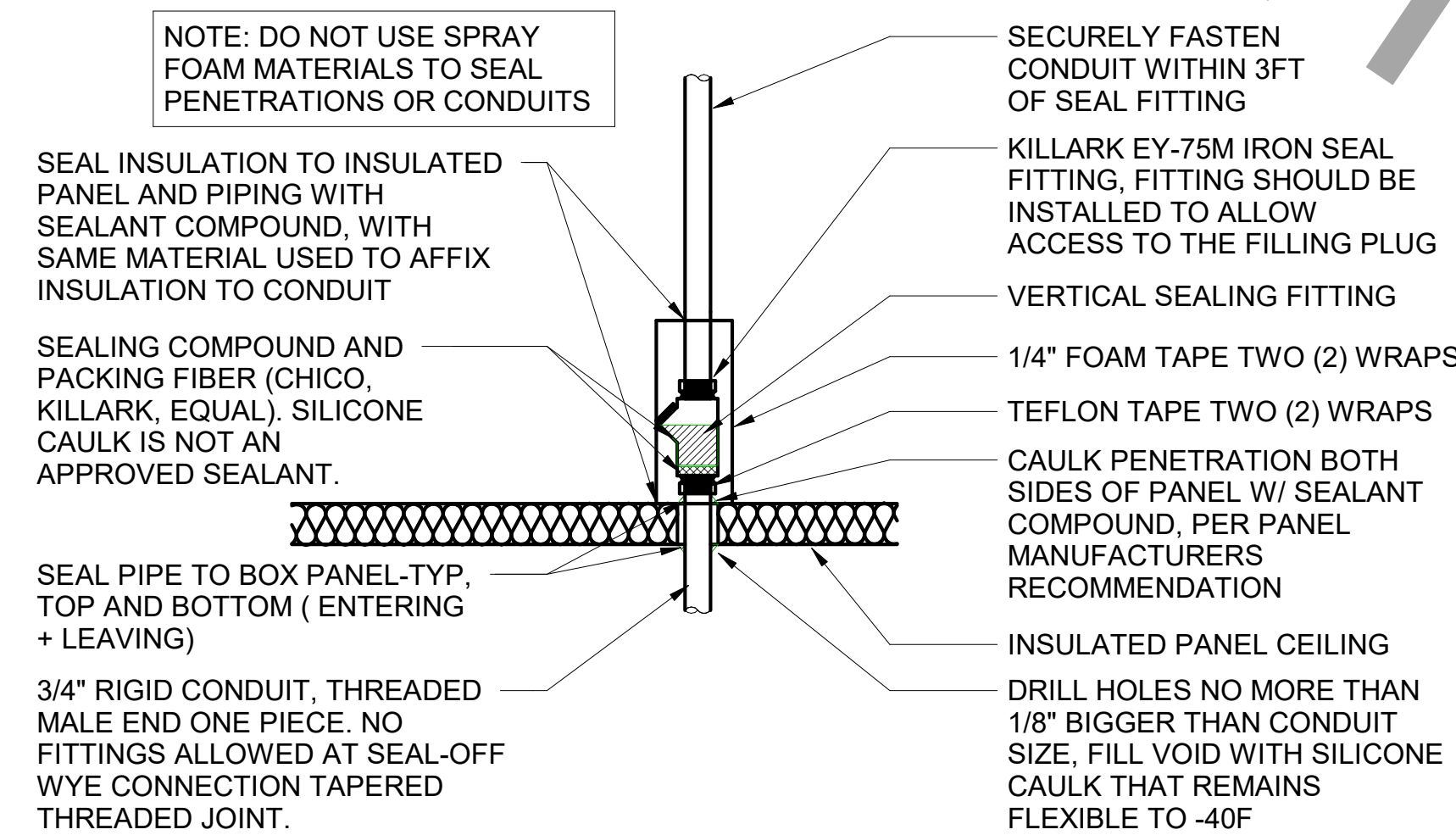
**A4 LIGHT FIXTURE NOMECLATURE**  
NO SCALE

CIR C-1	CONTACTOR-1	30A 4-POLE	KITCHEN LTG
CIR C-3	120 VOLT COIL	(STORE SWITCH ON AND OFF)	KITCHEN LTG
CIR C-5			RESTROOM LTG / EF-3
CIR C-11			DINING LTG
CIR C-7	CONTACTOR-2	30A 4-POLE	DINING LTG
CIR C-9	120 VOLT COIL	(STORE SWITCH ON AND OFF)	SERV AREA LTG
CIR C-15			WATER RECIRC PUMP
SPARE			SPARE
CIR C-2	CONTACTOR-3	30A 4-POLE	BLDG. SIGNAGE
CIR C-4	120 VOLT COIL	(P'CELL ON AND SWITCH OFF)	BLDG. SIGNAGE
SPARE			SPARE
SPARE			SPARE
CIR C-19	CONTACTOR-4	30A 4-POLE	DIRECTIONAL SIGNS
CIR C-37	120 VOLT COIL	(P'CELL ON AND SWITCH OFF)	MAIN ID SIGN
CIR C-39			MAIN ID SIGN
CIR C-41			MAIN ID SIGN
CIR C-30	CONTACTOR-5	30A 4-POLE	BLDG LIGHTING
CIR C-32	120 VOLT COIL	(P'CELL ON AND SWITCH OFF)	BLDG LIGHTING
SPARE			SPARE
SPARE			SPARE
SPARE	CONTACTOR-6	30A 4-POLE	SPARE
SPARE	120 VOLT COIL	(P'CELL ON AND SWITCH OFF)	SPARE
SPARE			SPARE
SPARE			SPARE
CIR C-21	CONTACTOR-7	30A 4-POLE	PARKING LOT LTG
CIR C-23	120 VOLT COIL	(P'CELL ON AND SWITCH OFF)	PARKING LOT LTG
CIR C-25			PARKING LOT LTG
CIR C-27			SPARE/PARKING LOT LTG
SPARE	CONTACTOR-8	30A 4-POLE	SPARE
SPARE	120 VOLT COIL	(STORE SWITCH ON AND OFF)	SPARE
SPARE			SPARE
SPARE			SPARE
CIR C-29	CONTACTOR-9	30A 4-POLE	SECURITY/FLAG LTG
SPARE	120 VOLT COIL	(PHOTOCELL ON AND OFF)	SPARE
SPARE			SPARE
SPARE			SPARE
CIR A-41	CONTACTOR-10	30A 4-POLE	EXHAUST FAN EF-1
CIR C-42	120 VOLT COIL	(SWITCH ON & OFF, ANSUL ON)	EXHAUST FAN EF-2
SPARE			SPARE
SPARE			SPARE
SPARE	CONTACTOR-11	30A 4-POLE	HOOD CJ FAN/LIGHTS
SPARE	120 VOLT COIL	(SWITCH ON & OFF, ANSUL ON)	SPARE
SPARE			SPARE
SPARE			SPARE

**NOTES:**  
1) VERIFY WITH SUNCOAST ENVIRONMENTAL CONTROLS' SHOP DRAWINGS.  
2) ONLY THE 'HOT' CONDUCTOR OF EACH CIRCUIT SHALL BE RUN THRU THE CONTACTOR.  
3) ANY TAPS OR WIRING CONNECTIONS OTHER THAN TO THE TERMINALS SHALL BE DONE IN A JUNCTION BOX OUTSIDE OF THIS CABINET.  
4) VERIFY WITH THE LOCAL CODE IF CONTACTORS #10 AND #11 WILL BE ON OR OFF WHEN THE ANSUL SYSTEM IS INITIATED.  
5) CIRCUITS C-49, C-25, AND C-27 WILL BE SPARES IF NOT NEEDED.

**C2 CFA-T500 CONTROL PANEL DIAGRAM**  
NO SCALE

C1 ELECTRICAL LEGEND					
SYMBOL	DESCRIPTION	MTG HT AFF TO CL	SYMBOL	DESCRIPTION	MTG HT AFF TO CL
LIGHTING FIXTURES			MISCELLANEOUS SYMBOLS		
☐	SURFACE MOUNTED LIGHTING FIXTURE		⊕	GROUND	
☐	RECESSED LED TROFFER LIGHTING FIXTURE		(M)	MOTOR	
○	SURFACE MOUNTED LED LIGHTING FIXTURE		(EF)	EXHAUST FAN MOTOR	
☐	RECESSED LED LIGHTING FIXTURE		(J)	JUNCTION BOX	
☐	WALL MOUNTED LIGHTING FIXTURE, SEE LIGHTING FIXTURE SCHEDULE	AS NOTED	(1)	CONDUIT AND WIRE 'MARK' NUMBER, REFER TO CONDUCTORS AND CONDUIT SCHEDULE FOR SIZE	
☐	WALL MOUNTED EXIT SIGN, SHADE INDICATES FACES, PROVIDE CHEVRON DIRECTIONALS WHEN NEEDED	6" FROM CEILING TO TOP	(101)	KITCHEN EQUIPMENT 'MARK' NUMBER, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR REQUIREMENTS	
☐	CEILING MTD EXIT SIGN, SHADING INDICATES FACES, PROVIDE W/ CHEVRON DIRECTIONALS WHEN NEEDED		(1)	NOTE NUMBER	
☐	COMBO EXIT WITH TWO LAMPHEADS		(A)	HOOD EXTINGUISHING ANSUL PULL STATION	
☐	WALL MTD EMERGENCY BATTERY PACK LIGHTING FIXTURE	AS NOTED	(D)	SMOKE DETECTORS REMOTE STATUS INDICATOR W/ 1/2" CUB-UP	
☐	CEILING MTD EMERGENCY BATTERY PACK LIGHTING FIXTURE		(B)	PUSHBUTTON	
☐	FLUORESCENT STRIP LIGHTING FIXTURE		(B)	BELL, TYPE AS NOTED ON PLANS	
☐	WALLWASHER TYPE RECESSED DOWNLIGHT, AIM LIGHT TOWARD WALL		(PE)	PHOTO-ELECTRIC CELL	
☐	RECESSED LIGHTING FIXTURE W/ EMERGENCY BATTERY PACK	AS NOTED	(T)	TRANSFORMER / DRIVER	
☐	PENDANT LIGHTING FIXTURE		(S)	LOCKABLE SINGLE POLE SWITCH	
☐	LIGHTING TRACK WITH TRACK HEADS		ABBREVIATIONS		
WIRING DEVICES			AFF	ABOVE FINISHED FLOOR	
☐	120 VOLT DUPLEX RECEPTACLE, 20 AMPS U.O.N.	14" UON	AFG	ABOVE FINISHED GRADE	
☐	120 VOLT DUPLEX AT SPECIAL MTD HEIGHT, 20 AMPS U.O.N.	44" UON	AHU	AIR HANDLING UNIT	
☐	120 VOLT QUADRUPLEX RECEPTACLE, 20 AMPS U.O.N.	14" UON	C	CONDUIT	
☐	120 VOLT QUAD. AT SPECIAL MTD HEIGHT, 20 AMPS U.O.N.	44"	CL	CENTER-LINE	
☐	120 VOLT SIMPLEX RECEPTACLE, 20 AMPS U.O.N.	14" UON	CT	CONTACTOR	
☐	SINGLE SPECIAL PURPOSE RECEPT W/ VOLTS, AMPS, & PHASE AS NOTED, NEMA CONFIGURATION AS REQUIRED BY EQUIP.	14" UON	EF	EXHAUST FAN	
☐	RECEPTACLE MOUNTED ON DROP CORD, 120 VOLT, 20 AMP, UON, OUTLET BOX FLUSH WITH CEILING		FLA	FULL LOAD AMPS	
☐	SINGLE POLE TOGGLE SWITCH	48"	GF/GFI	GROUND FAULT CIRCUIT INTERRUPTER	
☐	DOUBLE POLE TOGGLE SWITCH	48"	GND/GRD	GROUND	
☐	THREE WAY TOGGLE SWITCH	48"	HT	HEIGHT	
☐	MANUAL MOTOR STARTER SWITCH (WP=NEMA 3R)	48"	IG	ISOLATED GRD, PROVIDE ORANGE DEVICE WHEN ADJACENT TO WIRING DEVICE	
☐	SWITCH WITH PILOT LIGHT (ON WHEN SWITCH IS ON)	48"	MOC/P	MAXIMUM OVER-CURRENT PROTECTION	
☐	KEY OPERATED SWITCH	48"	MUA	MAKE UP AIR UNIT	
CONDUIT/RACEWAYS			NEC	LOCALLY ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70)	
☐	CONDUIT CONCEALED ABOVE CEILING OR IN WALL		NL	NIGHT LIGHT (ON 24 HOURS)	
☐	CIRCUIT HOMERUN TO PANELBOARD W/ MIN 2#12, 1#12G, 3/4"C		OC	ON CENTER	
☐	CONDUIT TURNING UP		POS	POINT OF SALE EQUIPMENT	
☐	CONDUIT TURNING DOWN		RTU	ROOF TOP UNIT	
☐	CONDUIT CONCEALED IN OR BELOW SLAB (OR UNDERGROUND)		TB	TERMINAL BLOCK	
☐	FLEXIBLE LIGHT FIXTURE WHIP; SIX FOOT MAXIMUM LENGTH		TL	TWIST-LOCK TYPE DEVICE	
☐	METAL CLAD CABLE ASSEMBLY - ONLY WHERE INDICATED ON DWGS OR SPECS		TR	TAMPER-RESISTANT	
DISTRIBUTION EQUIPMENT			UON	UNLESS OTHERWISE NOTED	
☐	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" *	WP	WEATHERPROOF (NEMA 3R)	
☐	FUSIBLE SAFETY SWITCH, SIZE & TYPE AS NOTED ON PLANS (AMP/POLES/ENCLOSURE) OR ON SCHEDULE. NEMA 1 ENCLOSURE UNLESS NOTED WP FOR NEMA 3R.	6'-6" *	TELEPHONE		
☐	FLUSH MOUNTED LIGHTING PANELBOARD	6'-6" *	☐	TELEPHONE OUTLET	18" UON
☐	SURFACE MOUNTED LIGHTING PANELBOARD	6'-6" *	☐	TELEPHONE OUTLET AT SPECIAL MOUNTING HEIGHT	60" UON
NOTES: DISTANCE IS TO TOP-MOST DISCONNECTING DEVICE OR HIGHEST POSITION OF OPERATING HANDLE OF DISCONNECTING DEVICE			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			CCTV / SECURITY SYSTEM		
			(K)	SECURITY ALARM KEYPAD	
			(S)	SECURITY SYSTEM KEY NOTE	



**A2 WIC/WIF SEAL-OFF DETAIL**  
NO SCALE

**SIGNAGE 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.



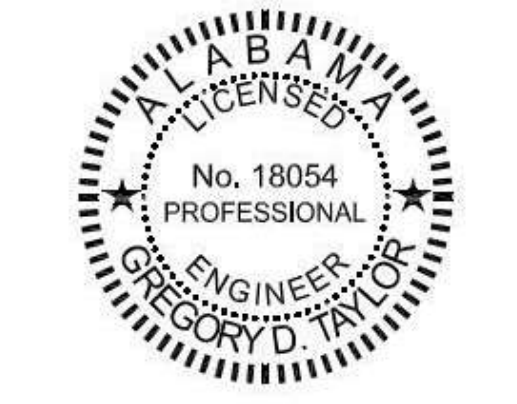
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Surveyor No. CA-909-LS  
Landscape No. N/A



CHICK-FIL-A  
GARDENDALE (AL)

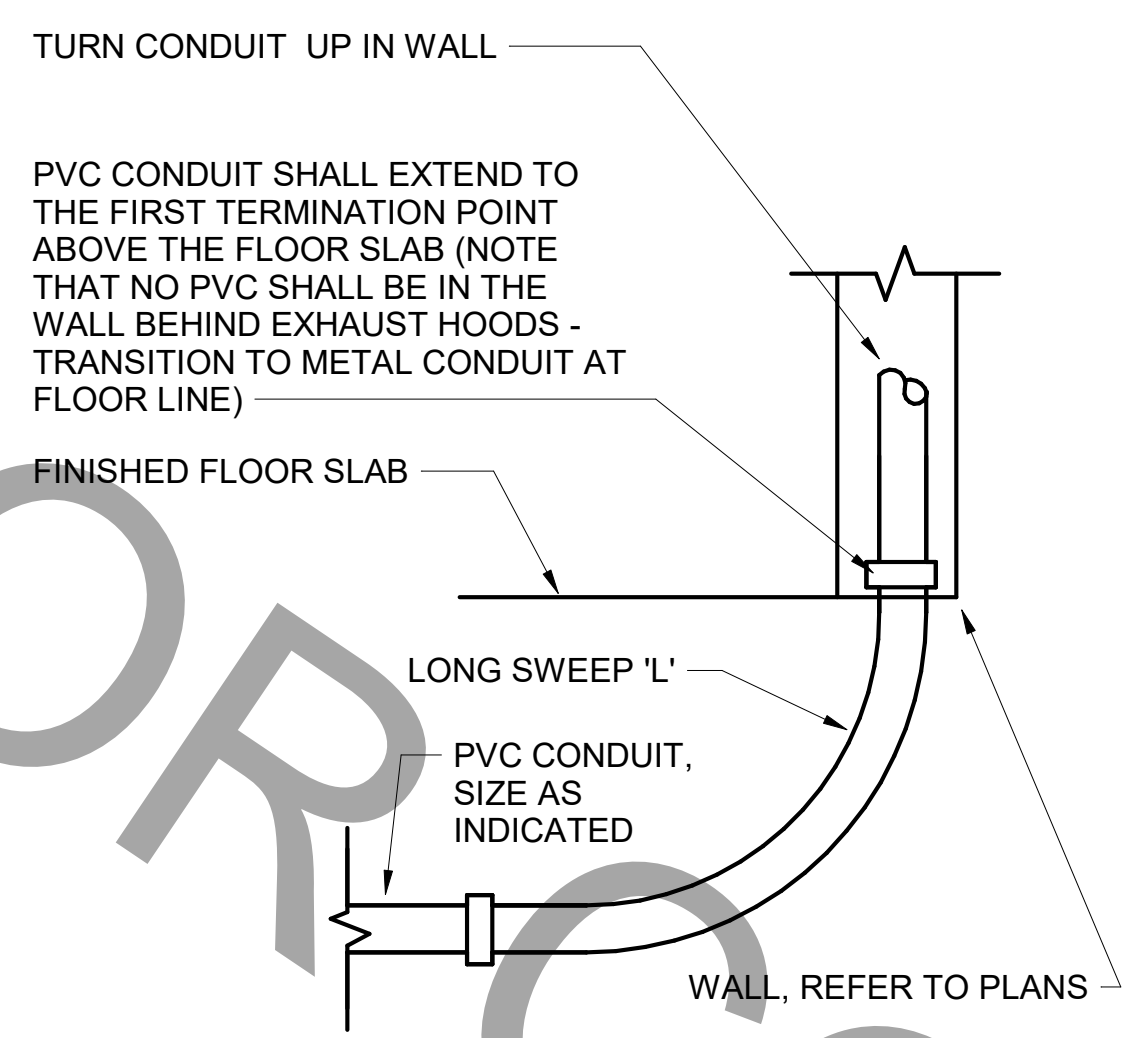
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FSR#01687

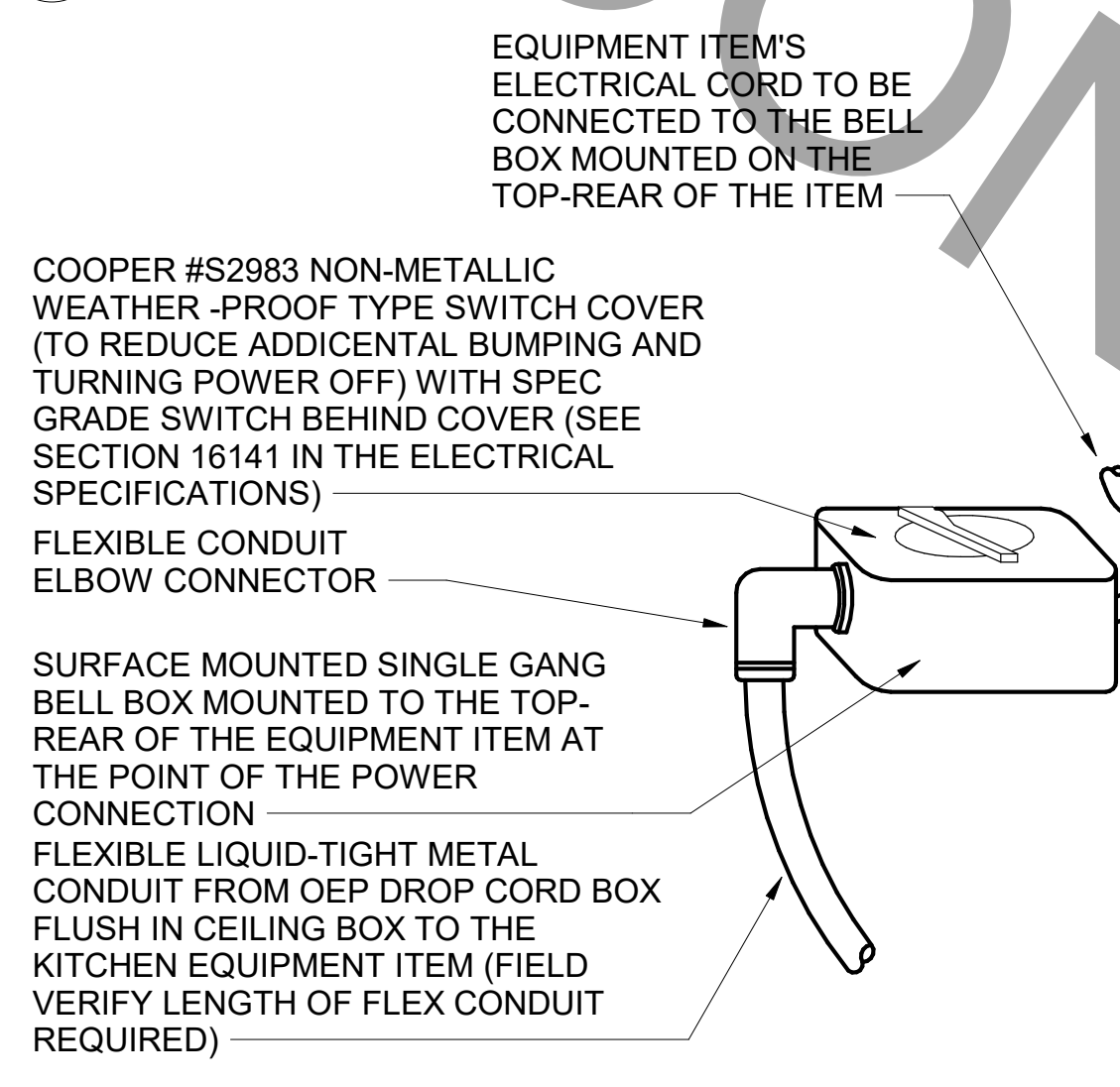
BUILDING TYPE / SIZE: S04  
RELEASE: 2111

REVISION SCHEDULE  
NO. DATE DESCRIPTION

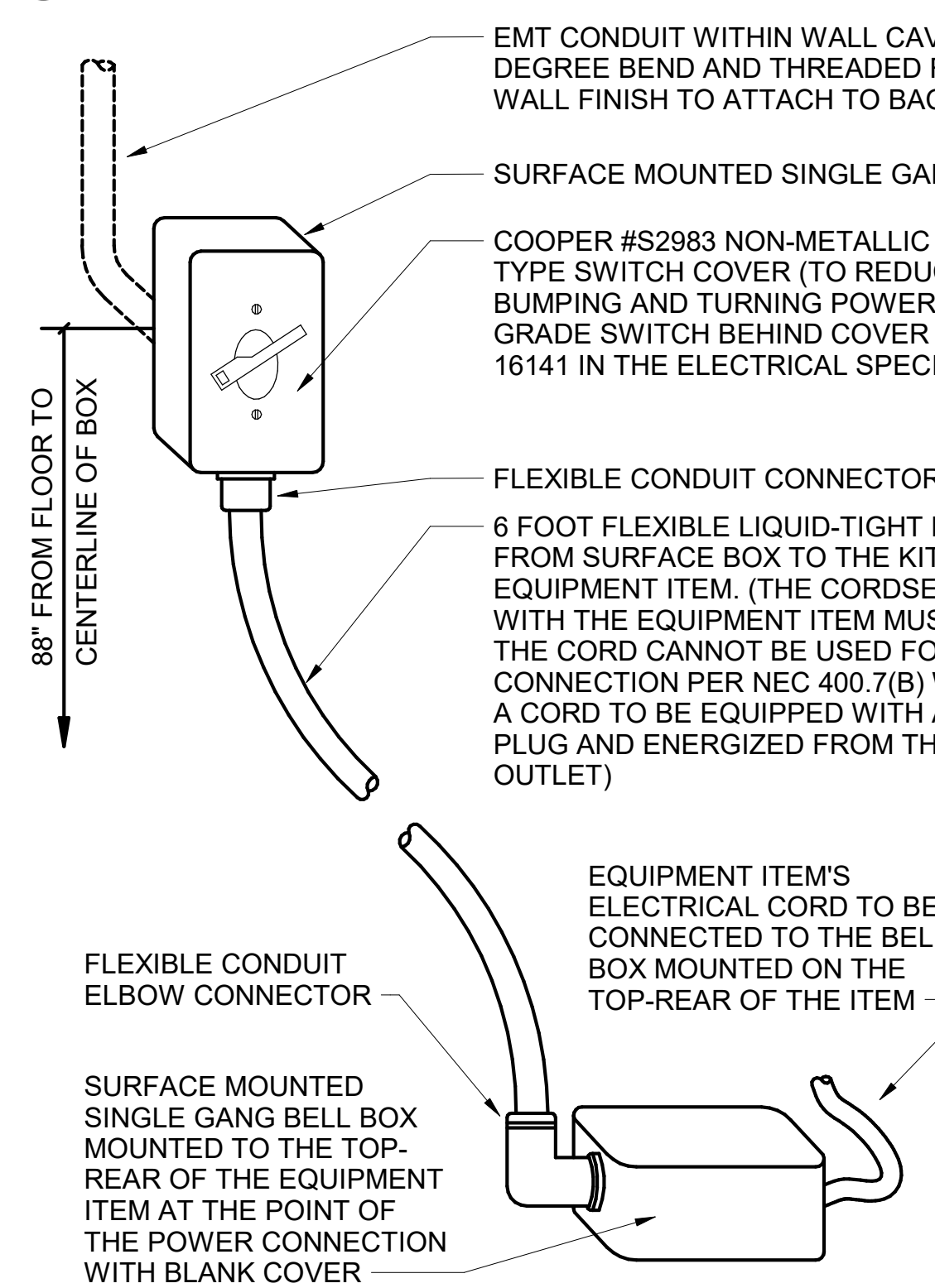
CONSULTANT PROJECT # C29153  
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DRAWN BY KCL  
SHEET ELECTRICAL SCHEDULES AND DETAILS  
SHEET NUMBER E-001



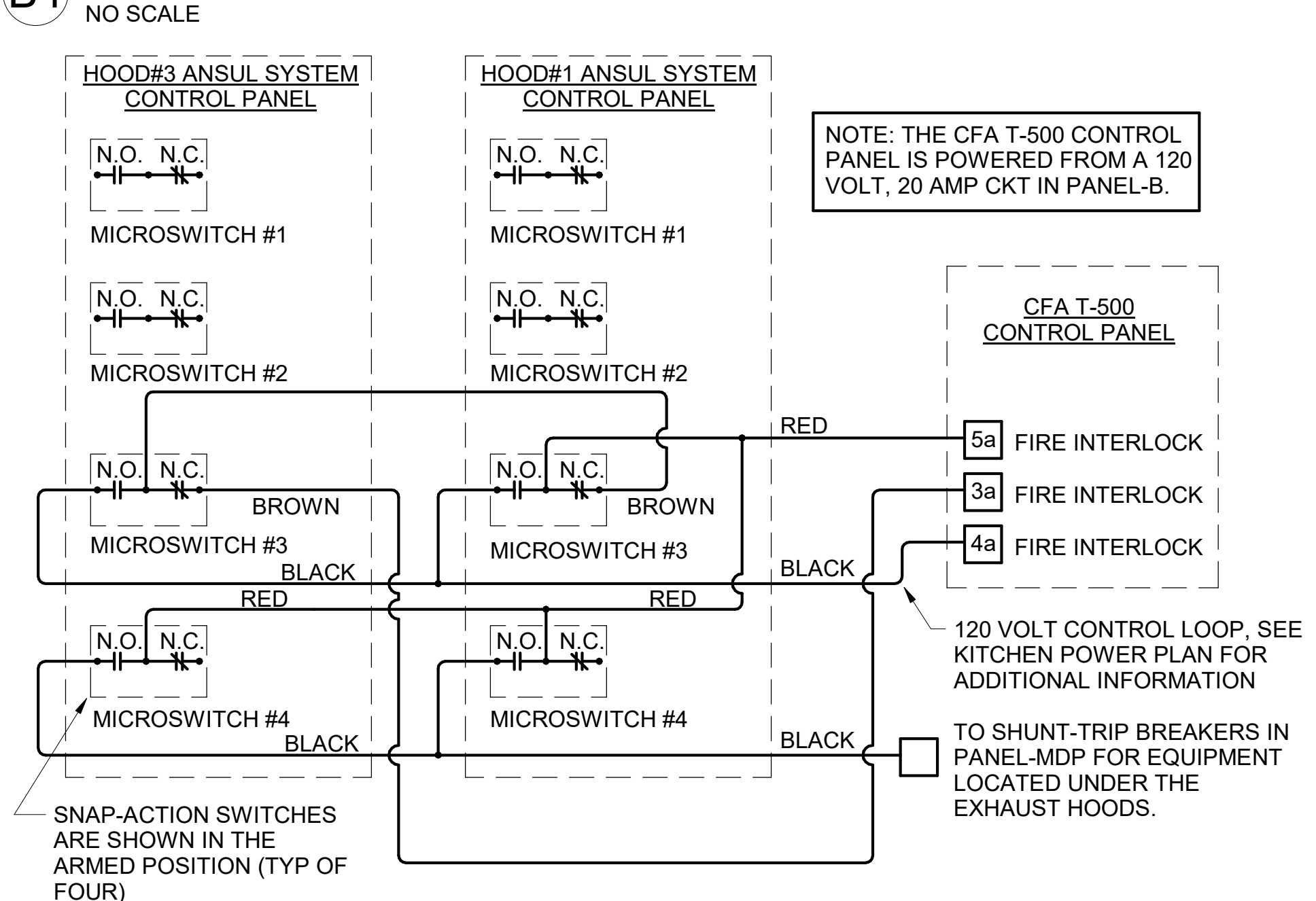
**D4** INTERIOR PVC CONDUIT DETAIL  
NO SCALE



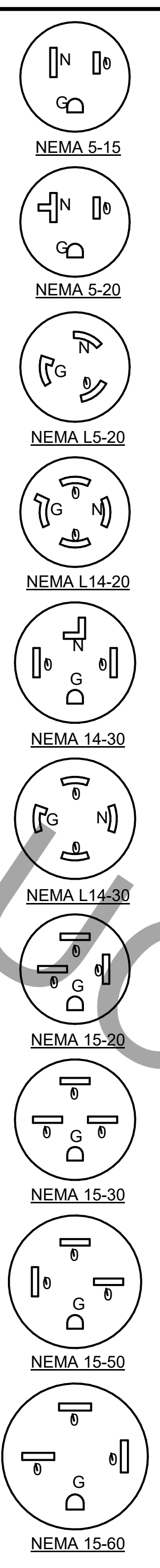
**C4** DIRECT CONNECTION - ISLAND LOCATION  
NO SCALE



**B4** DIRECT CONNECTION - WALL LOCATION  
NO SCALE



**A3** ANSUL SYSTEM PANEL WIRING DIAGRAM  
NO SCALE



KITCHEN EQUIPMENT SCHEDULE NOTES

1. ALL SO CORD LENGTHS SHALL BE MEASURED FROM THE REAR OF THE EQUIPMENT TO THE END OF THE CORD.
2. CONTRACTOR SHALL PROVIDE GROUND-FAULT PROTECTION FOR ALL 120 VOLT 15 AMP AND 20 AMP RECEPTACLES IN THE KITCHEN / FOOD PREPARATION AREAS. GROUND-FAULT PROTECTION SHALL BE PROVIDED AT THE RECEPTACLE AS A GFCI TYPE RECEPTACLE UNLESS NOTED OTHERWISE ON THE PLANS WHERE A GFCI TYPE BREAKER IS INDICATED.
3. PROVIDE GFCI TYPE BRANCH BREAKER FOR KITCHEN / FOOD PREPARATION AREA RECEPTACLES THAT ARE TWIST-LOCK, CLOCK STYLE, OR IG (ISOLATED GROUND) TYPE.

ITEM NO.	DESCRIPTION OF EQUIPMENT	VOLTS	PH	KW	AMPS	NEMA-RATING	COMMENTS AND REMARKS
180	ORDER REGISTER	120	1		0.7	5-20P	
180R	ORDER REGISTER	120	1			5-20P	
182L	LABEL PRINTER	other	1		1.70	5-20P	PROVIDED BY CFA IT WITH 120V/24V POWER SUPPLY ADAPTER FOR USE WITH 120V IG OUTLET
182LR	LABEL PRINTER	other	1		1.70	5-20P	
182R	RECEIPT PRINTER	other	1		1.80	5-20P	
183	ORDER MONITOR	120	1		0.125	5-20P	
183R	ORDER MONITOR	120	1		0.125	5-20P	
184R	IPAD	120	1	0.120	1.00	5-20P	
184T	ITIMER	120	1	0.120	1.00	5-20P	PROVIDED BY CLARK
190R	DRIVE-THRU VIDEO MONITOR	120	1		0.8	5-20P	PROVIDED BY CFA IT
211B	FLY SYSTEM	120	1			5-15P	CLOCK STYLE RECEPTACLE REQUIRED
269	ANSUL FIRE SUPPRESSION SYSTEM	120	1		VERIFY	DIRECT CONNECTION	REMOTE CABINET - REFER TO SHOP DRAWINGS - FED FROM CFA-T500 PANEL
270	ANSUL FIRE SUPPRESSION SYSTEM	120	1		VERIFY	DIRECT CONNECTION	LOCATED ABOVE HOOD - BEHIND CLOSURE PANEL - REFER TO SHOP DRAWINGS - FED FROM CFA-T500 PANEL
300aR	MILKSHAKE BASE DISPENSER	120	1		4.0	5-20P	MOUNTED ON ITEM #300b
300X	DOUBLE BARREL ICE CREAM MACHINE	208	3	19.00/15.00		15-30P/15-20P	PROVIDED WITH HUBBELL HBL8432C & HBL8421C ANGLE PLUGS
305	TEA BREWER	120	1	1.650	13.80		PROVIDE QUICK DISCONNECT HOSES
308	SINGLE COFFEE MAKER	208	1	4.000	19.20	L14-30P	PROVIDE QUICK DISCONNECT HOSES
310	DOUBLE LEMONADE BUBBLER	120	1		8.50	5-15P	ORDER (1) #3CRA018 BOWL KIT AND (1) #3CRA018 BASE PER BUBBLER AND ORDER TOTAL OF (1) #3CRA021 SET OF (2) 2.4 GAL BOWLS
310R	DOUBLE LEMONADE BUBBLER	120	1		8.50	5-15P	ORDER (1) #3CRA018 BOWL KIT AND (1) #3CRA018 BASE PER BUBBLER AND ORDER TOTAL OF (1) #3CRA021 SET OF (2) 2.4 GAL BOWLS
315W	10-HEAD BEVERAGE DISPENSER WITH ICE BIN	115	1		10.00	5-15P/5-15P	PROVIDED WITH (2) CORDS AND PLUGS PER TOWER
320	TURBO CARBONATOR	115	1		6.2	5-20P	ORDER (8) #44231, (3) #44233, (8) DR. PEPPER PUMPS, & (3) #T5274SN-01
363R	HIGH-TEMP UPRIGHT DISHWASHER	208	3		46.00	DIRECT CONNECTION	GC TO VERIFY EXISTING ELECTRICAL
380	ICE MACHINE	115	1		5	5-15P	INSTALLED ON TOP OF ICE BIN - PROVIDED WITH 6 FT CORD AND 35 FT LINE SETS
380a	ICE BIN SANITATION SYSTEM	120	1	0.0096		5-15P	INSTALLED ON WALL ABOVE ICE BIN - SHARES DUPLEX WITH (1) ICE MACHINE
380C	ICE MACHINE REMOTE CONDENSING UNIT	208	3	3.1	14.2	DIRECT CONNECTION	AIR COOLED UNIT - GC SHALL PLACE AND INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS
380CD	ICE MACHINE REMOTE CONDENSING UNIT	208	3	3.600	15.70	DIRECT CONNECTION	AIR COOLED UNIT - GC SHALL PLACE AND INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS
380D	ICE MACHINE	115	1	0.368	5.00	5-15P	INSTALLED ON TOP OF ICE BIN - PROVIDED WITH 6 FT CORD AND 35 FT LINE SETS
400L	SINGLE UPRIGHT FREEZER (30" WIDE)	115	1	1.100	9.40	5-15P	HINGE LEFT - PROVIDE FINISHED BACK - ORDER ON 4 5/8 IN CASTERS
400LR	SINGLE UPRIGHT FREEZER (30" WIDE)	115	1	1.100	9.40	5-15P	HINGE LEFT - PROVIDE FINISHED BACK - ORDER ON 4 5/8 IN CASTERS
410	WALK-IN FREEZER	120	1		3.3	DIRECT CONNECTION	ORDER WITHOUT FLOOR - REFER TO LIGHTING PLAN
410a	WALK-IN FREEZER CONDENSER	208	3		16.30	DIRECT CONNECTION	GC SHALL INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS
410b	WALK-IN FREEZER EVAPORATOR	208	1		1.50	DIRECT CONNECTION	POWER FED FROM CONDENSER
420A	SINGLE UNDERCOUNTER REFRIGERATOR	115	1	0.564	4.70	5-20P	HINGE RIGHT - ORDER ON 2 IN CASTERS
420L	SINGLE UNDERCOUNTER REFRIGERATOR	115	1	0.564	4.70	5-20P	HINGE LEFT - ORDER ON 4 IN CASTERS
420LR	SINGLE UNDERCOUNTER REFRIGERATOR	115	1	0.564	4.70	5-20P	HINGE LEFT - ORDER ON 4 IN CASTERS
420R	SINGLE UNDERCOUNTER REFRIGERATOR	115	1	0.564	4.70	5-20P	HINGE RIGHT - ORDER ON 4" CASTERS
421R	DOUBLE UNDERCOUNTER REFRIGERATOR	115	1	0.756	6.30	5-15P	ORDER ON 4 IN CASTERS
422T	REFRIGERATED EQUIPMENT STAND (48")	115	1	0.80	6.70	L5-15P	EC TO CHANGE PLUG TO TWIST LOCK - PROVIDED W/8" CORD - ORDER ON 4" CASTERS
431T	DOUBLE REFRIGERATED WORK TABLE	115	1	0.756	6.30	L5-15P (BY EC)	EC TO CHANGE PLUG TO TWIST LOCK - ORDER ON 6 IN CASTERS WITH BACKSPASH TOP
432TR	DOUBLE REFRIGERATED WORK TABLE	115	1	0.756	6.30	L5-20P (BY EC)	EC TO CHANGE PLUG TO TWIST LOCK - ORDER ON 6 IN CASTERS WITH BACKSPASH TOP
439L	40" COLD RAIL	115	1	0.800	7.10	5-15P	COMPRESSOR ON LEFT - SUPPLIED WITH 9 FT CORD AND PLUG
440CT	ICE BATH BREADING TABLE	120	1		1.00	L5-15P (BY EC)	EC TO CHANGE PLUG TO TWIST LOCK - 10 FT CORD AND PLUG - LEAF INCLUDED WITH TABLE - INSTALL IF SHOWN ON PLANS
441	SALAD PREP TABLE	115	1		9.0	L5-15P	PROVIDE WITH TWIST LOCK PLUG; ORDER ON 4" CASTERS WITH PAN PKG.; SESC TO PROVIDE PAN PKG.
442WCL	SINGLE UPRIGHT REFRIGERATOR (30" WIDE)	115	1		7	L5-15P (BY EC)	HINGE LEFT - PROVIDE FINISHED BACK - ORDER ON 6 IN CASTERS - EC TO CHANGE PLUG TO TWIST LOCK
444D	DOUBLE THAWING CABINET (52" WIDE)	115	1		16.0	DIRECT CONNECTION	HINGE STANDARD - GC TO INSTALL LIQUID TIGHT FLEX CONDUIT - ORDER ON 6 IN CASTERS
444S	SINGLE THAWING CABINET (32" WIDE)	115	1		16.0	DIRECT CONNECTION	HINGE RIGHT - GC TO INSTALL LIQUID TIGHT FLEX CONDUIT - ORDER ON 6 IN CASTERS
449	WALK-IN COOLER	120	1		2.4	DIRECT CONNECTION	ORDER WITHOUT FLOOR - REFER TO LIGHTING PLAN
449a	WALK-IN COOLER CONDENSER	208	3		9.50	DIRECT CONNECTION	GC SHALL INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS
449b	WALK-IN COOLER EVAPORATOR	208	1	0.110	1.00	DIRECT CONNECTION	POWER FED FROM CONDENSER
500A	VERTICAL CONTACT TOASTER	120	1	1.80	15.00	5-15P	
500AR	VERTICAL CONTACT TOASTER	120	1	1.80	15.00	5-15P	
500BR	RADIANT TOASTER	208	1	5.50	24.00	L6-30P	
503T	EGG STATION	208	1	2.5	12.5	L6-20P	PROVIDED W/TWIST LOCK PLUG
505VLT	VECTOR OVEN	208	3	7.90	22.00	L15-30P (BY EC)	HINGE LEFT - EC TO CHANGE PLUG TO TWIST LOCK
522	SINGLE OPEN FRYER	208	3	22.000	62.00	PIN & SLEEVE	PIN & SLEEVE PROVIDED WITH EQUIPMENT AND RECEPTACLE BOX PROVIDED WITH HALTON ITEMS - (1) POWER CONNECTION PER WELL
522R	SINGLE OPEN FRYER	208	3	22.000	62.00	PIN & SLEEVE	
523	PRESSURE FRYER	208	3	13.500	38.00	15-50P	PROVIDED WITH 6 FT CORD AND PLUG
523R	PRESSURE FRYER	208	3	13.500	38.00	15-50P	
524R	DUAL SIDE CLAMSHELL GRILL	208	3	3.3	24.1/28.2/23.1	15-50P	
560	FRY HOLDING STATION	120	1	1.90	15.0	5-20P	
562A	HIGH DENSITY HOT HOLDING TOWER	120	1	1.80	16.00	5-20P	PROVIDED WITH 8 FT CORD AND PLUG
563D	DOUBLE TIER SANDWICH SLIDE	120	1	1.09	9.13	5-15P	CORD EXITS RIGHT - 6' CORD AND PLUG
563SL	SINGLE TIER SANDWICH SLIDE	120	1	0.548	4.56	5-15P	CORD EXITS LEFT - 6' CORD AND PLUG
564AR	VISUAL HOT HOLDING CABINET (2x2)	120	1	0.660	5.50	5-15P	ORDER WITH LIDS/TRAY SEALS, AMBER PANS, AND FALSE BOTTOMS
564BR	VISUAL HOT HOLDING CABINET (2x2 LANDSCAPE)	120	1	0.660	5.50	5-15P	ORDER WITH LIDS/TRAY SEALS, AMBER PANS, AND FALSE BOTTOMS
565C	FOOD COOKER/WARMER	120	1	1.500	12.50	5-15P	ORDER WITH (1) 3VOL042, (2) 3VOL043, (8) 3VOL051, AND (8) 3VOL061
580HR	VISUAL HOT HOLDING CABINET (5x2)	120	1	1.920	16.00	5-20P	ORDER WITH LIDS/TRAY SEALS
592	RETHEMALIZER	208	3	8.000	22.00	15-30P	PROVIDED WITH 6' CORD AND ANGLE PLUG - WATER SUPPLY TO BE S/S BRAIDED HOSE WITH MALE QUICK CONNECT ADAPTER
600R	MIXER	120	1		8.0	L5-20P	
607	COUNTER TOP LEMON JUICER	115	1			5-15P	LOCATED ON ITEM #606
669	OFFICE SAFE	120	1			5-20P	INSTALL SAFE PER MANUFACTURER'S WRITTEN INSTRUCTIONS
671	LED INTERIOR MENU BOARD	other	1	0.060		5-20P	PROVIDED WITH 5 FT CORD AND ANGLE PLUG FOR USE WITH 120V OUTLET - ORDER WITH (1) #3AMD010 END CAP SET



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Landscape No. N/A



CHICK-FIL-A  
GARDENDALE (AL)  
385 Fieldstown Rd  
Gardendale, AL 35071

FSR#01687

BUILDING TYPE / SIZE: S04

RELEASE: 2111

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT # C29153  
PRINTED FOR PERMIT  
DATE 04-11-22  
DRAWN BY KCL  
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SHEET ELECTRICAL SCHEDULES AND DETAILS  
SHEET NUMBER

E-002

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### ELECTRICAL SITE PLAN KEYNOTES

(APPLIES TO THE ELECTRICAL SITE PLAN ONLY)

- PROPOSED LOCATION OF SECONDARY UNDERGROUND ELECTRICAL UTILITY LINES.
- PROPOSED LOCATION OF PAD MOUNTED TRANSFORMER FURNISHED BY THE ELECTRICAL UTILITY COMPANY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE:
  - PROVIDE THREE 4" SCH. 40 PVC CONDUIT TO UTILITY SOURCE, AT MINIMUM 30" BELOW FINISHED GRADE AND IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. COORDINATE ALL REQUIREMENTS WITH THE UTILITY COMPANY PRIOR TO BID.
  - SECONDARY SERVICE LATERAL FROM UTILITY TRANSFORMER TO PANEL "MDP" VIA THE CURRENT TRANSFORMER CABINET. SEE SHEET E-502, "SINGLE-LINE DIAGRAM", REFER TO "ELECTRICAL SERVICE LATERAL CONDUIT DETAIL", SHEET E-101, FOR ADDITIONAL INFORMATION.
  - CONCRETE PAD FOR UTILITY TRANSFORMER IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
  - METERING CONDUIT. SEE NOTE-14.
- LOCATION OF TERMINATION OF SECONDARY SERVICE LATERAL AT PANEL "MDP". REFER TO "SINGLE-LINE
- PROVIDE TWO 2" SCH. 40 PVC CONDUIT (ONE IS A SPARE), MINIMUM 24" BELOW FINISHED GRADE, FOR TELEPHONE SERVICE FROM TELEPHONE UTILITY SOURCE TO JUNCTION BOX INSIDE THE BUILDING. REFER TO SHEET E-221 FOR LOCATION OF JUNCTION BOX IN SERVICE AREA. REFER TO "TELEPHONE SERVICE CONDUIT DETAIL", SHEET E-101, FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION OF UTILITY SOURCE WITH TELEPHONE UTILITY. TERMINATE CONDUITS AT UTILITY SOURCE AS REQUIRED BY THE UTILITY COMPANY.
  - PROVIDE ONE 3" SCH. 40 PVC CONDUIT, MINIMUM 24" BELOW FINISHED GRADE, FOR ISP SERVICE FROM UTILITY SOURCE TO JUNCTION BOX INSIDE THE BUILDING. REFER TO SHEET E-221 FOR LOCATION OF JUNCTION BOX IN BUILDING. REFER TO "TELEPHONE SERVICE CONDUIT DETAIL", SHEET E-101, FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION OF UTILITY SOURCE WITH SERVICE SUPPLY COMPANY. TERMINATE CONDUITS AT AS REQUIRED BY THE UTILITY COMPANY.
- LOCATION OF DUMPSTER. REFER TO "REFUSE ENCLOSURE PLAN - ELECTRICAL", SHEET E-303 FOR ELECTRICAL REQUIREMENTS IN THIS AREA.
- REFER TO SHEET E-303 FOR ELECTRICAL REQUIREMENTS AT MENU BOARD, DRIVE-THRU CANOPY, AND PRESELL MENU BOARD.
- REFER TO SHEETS E-901, & E-902 FOR ELECTRICAL SPECIFICATIONS PERTAINING TO ELECTRICAL WORK DESCRIBED ON THIS SHEET.
- REFER TO SHEET E-211 FOR LIGHTING FIXTURE SCHEDULE.
- PROVIDE UNDERGROUND CONDUIT TO JUNCTION BOX IN OFFICE FOR POLE MOUNTED SECURITY CAMERA. REFER TO SHEET E-302 FOR LOCATION OF JUNCTION BOX IN OFFICE AND REQUIRED SIZE OF CONDUIT. COORDINATE EXACT CAMERA LOCATION WITH CHICK-FIL-A SECURITY SYSTEM REPRESENTATIVE PRIOR TO ROUGH-IN.
- CONNECT SITE LIGHTING CIRCUITS TO TERMINAL BLOCKS LOCATED IN THE "CFA-T500" CONTROL PANEL (TYPICAL). SEE PANEL SCHEDULES ON SHEET E-501.
- CONNECT SITE SIGNAGE CIRCUITS TO TERMINAL BLOCKS LOCATED IN THE "CFA-T500" CONTROL PANEL (TYPICAL). SEE PANEL SCHEDULES ON SHEET E-501. COORDINATE LOCATIONS OF ALL SIGNS WITH CHICK-FIL-A REPRESENTATIVE PRIOR TO BID AND PRIOR TO CONDUIT INSTALLATION.
- PROVIDE GFCI TYPE WEATHERPROOF RECEPTACLE MOUNTED ON MAIN SIGN SUPPORT +14" AFG. THIS RECEPTACLE SHALL NOT BE SWITCHED. (BYPASS THE CONTACTOR AND SIGN'S DISCONNECT SWITCH.)
- PROVIDE WEATHERPROOF 20A SPST TOGGLE SWITCH 18" AFG AND CONNECTION TO MAINTENANCE DISCONNECT SWITCH FOR MAIN I.D. SIGN.
- PROPOSED LOCATION OF BUILDING MOUNTED ELECTRICAL UTILITY METER. METER BASE WILL BE FURNISHED BY THE UTILITY COMPANY AND INSTALLED BY THE CONTRACTOR. THE CURRENT TRANSFORMER CABINET SHALL BE FURNISHED AND INSTALLED ON THE BUILDING BY THE CONTRACTOR. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL A 1-1/4" RIGID GALVANIZED CONDUIT BETWEEN METER BASE AND CURRENT TRANSFORMER CABINET. COORDINATE LOCATIONS AND REQUIREMENTS WITH ELECTRIC UTILITY COMPANY PRIOR TO BID.
- PROVIDE A 12' POLE FOR MOUNTING OF SECURITY CAMERA. POLE TO MATCH SITE LIGHTING POLES IN STYLE AND COLOR.

### GENERAL ELECTRICAL SITE PLAN NOTES

(APPLIES TO THE ELECTRICAL SITE PLAN ONLY)

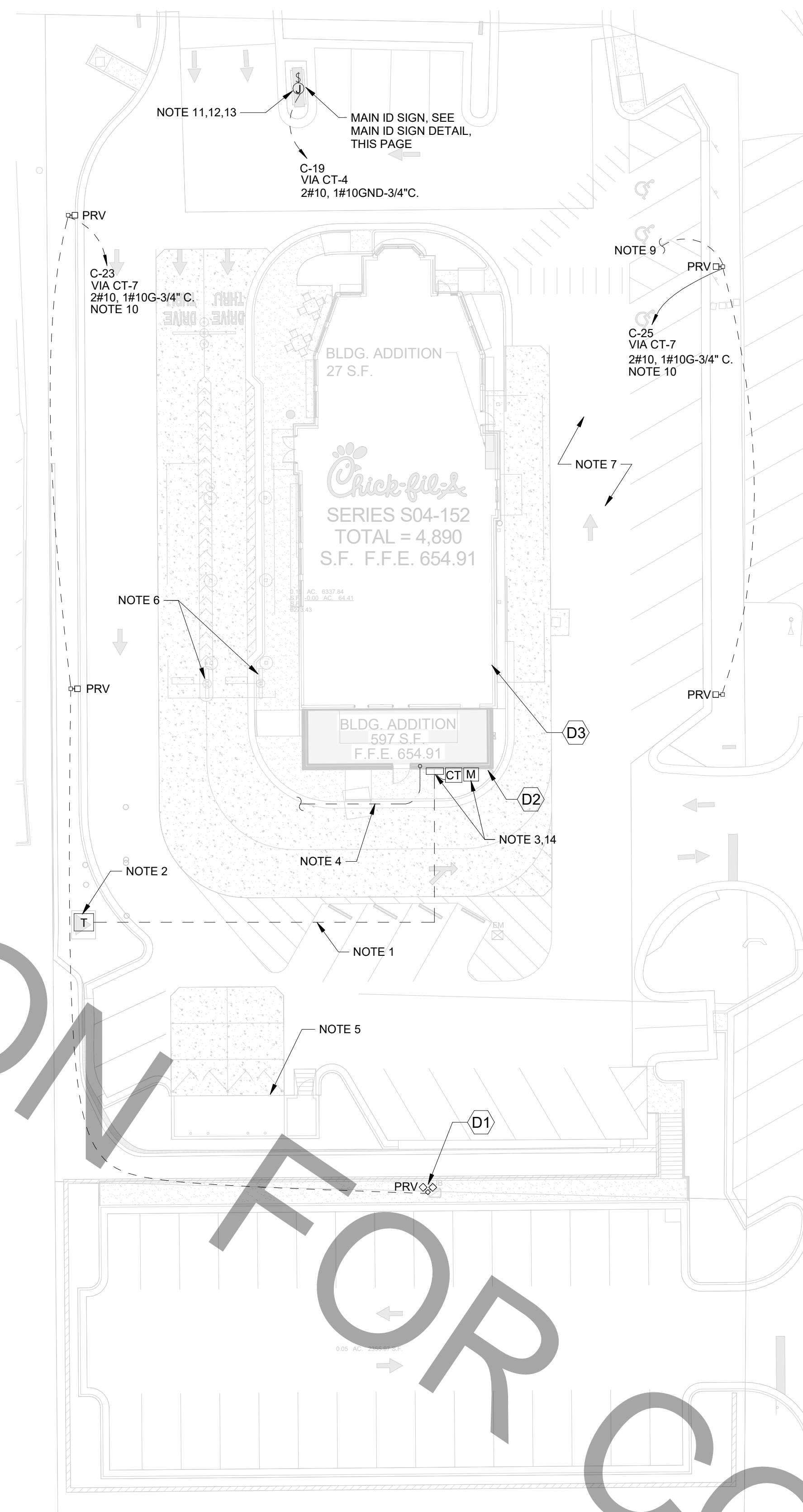
- VERIFY WITH LOCAL AUTHORITIES AND UTILITIES THAT OWNER'S SIGNS, POLES, AND THEIR APPURTENANCES ARE NOT LOCATED ON OR OVER ANY EASEMENT OR MUNICIPAL RIGHT OF WAY.
- SITE WORK, UTILITY, AND ROADWAY INFORMATION ARE TAKEN FROM BOUNDARY AND TOPO SURVEY SITE PLANS. REFER TO C-DRAWINGS.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" C. MINIMUM CONDUCTOR SIZE SHALL BE #10AWG COPPER UNLESS OTHERWISE NOTED.
- REFER TO BUILDING ELECTRICAL DRAWINGS FOR EXTERIOR LIGHTING CONTROL.
- FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ONLY NEW AND U.L. LABELED ELECTRICAL EQUIPMENT, UNLESS INDICATED OTHERWISE BY THE CONTRACT DOCUMENTS.
- FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL CONTACT ALL UTILITIES FOR VERIFICATION AND IDENTIFICATION OF ALL UNDERGROUND RUNS, PRIOR TO SITE TRENCHING ("CALL BEFORE YOU DIG").
- FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (NFPA 70), AND THE LIFE SAFETY CODE (NFPA 101), AS ADOPTED AND/ OR AMENDED BY STATE AND LOCAL AUTHORITIES HAVING JURISDICTION.
- FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL COORDINATE AND FIELD VERIFY LOCATIONS OF ALL UTILITY SERVICE RUNS, ORIGINATIONS, TERMINATIONS AND ANY INSTALLATION REQUIREMENTS (i.e. ELECTRICAL, TELEPHONE, WATER, GAS, SEWAGE, ETC.), AS RELATED TO THIS JOB, OR THEREBY EFFECTED.

#### POWER/TELEPHONE UTILITIES:

COORDINATE AND COMPLY WITH ALL TELEPHONE AND ELECTRICAL UTILITY REQUIREMENTS. THE FOLLOWING PERSONS SHALL BE CONTACTED FOR SPECIFIC UTILITY COMPANY REQUIREMENTS:

ELECTRICAL UTILITY: ALABAMA POWER COMPANY  
2613 RHODY DR.  
GARDENDALE, AL 35071  
(205) 226-1653

TELEPHONE UTILITY: AT&T  
521 FIELDSTOWN RD, SUITE 101  
GARDENDALE, AL 35071  
(205) 608-0548



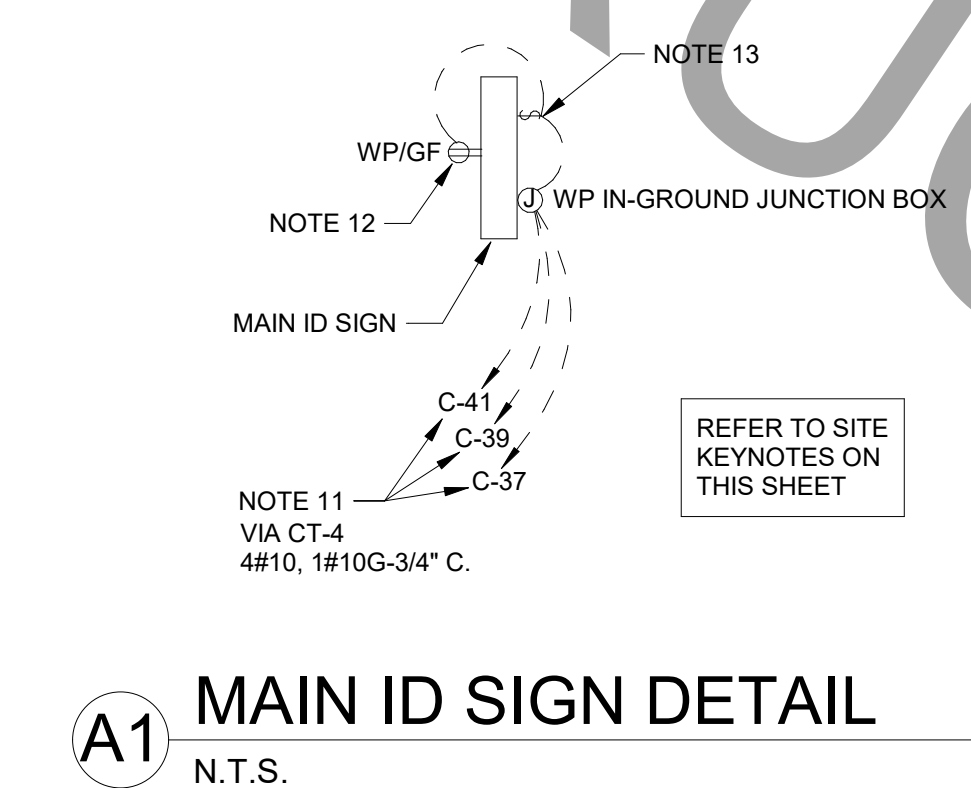
C1 ELECTRICAL SITE PLAN  
1" = 20'-0"

#### ELECTRICAL SITE PLAN SYMBOLS

SYMBOL	DESCRIPTION (UNLESS OTHERWISE NOTED ON PLANS)
	UTILITY COMPANY TRANSFORMER, (208 VOLT, 3 PHASE, 4 WIRE SECONDARY)
	S.P.S.T. LIGHT SWITCH (600V AC QUIET TYPE)
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE
	CONDUIT HOMERUN TO PANEL
	JUNCTION BOX (SINGLE GANG STEEL WHERE WALL MOUNTED, 4" SQ. STEEL WHERE CEILING MOUNTED, UNLESS NOTED OTHERWISE)
	CONDUIT BURIED BELOW GRADE
	POLE MOUNTED SITE LIGHTING FIXTURE.

#### DT CASH STATION - KEYNOTES

- LOCATION OF A 360 DEGREE BUILDING MOUNTED EXTERIOR CAMERA (BY OTHERS). PROVIDE A 3/4" CONDUIT AT 9'-4" AFF TO AN EXTERIOR WALL MOUNTED WP JUNCTION BOX WITH THE CONDUIT ABOVE THE INTERIOR CEILING AND EXTENDED TO AN ACCESSIBLE CEILING AREA FOR CAMERA CABLES BY OTHERS.
- PROVIDE AN EXTERIOR DUPLEX 120V, 20A RECEPTACLE AT 18" AFF WITH "IN-USE" STYLE LOCKABLE WP COVER AND CONNECT TO A GENERAL PURPOSE 120V RECEPTACLE CIRCUIT.
- PROVIDE A JUNCTION BOX ON THE INSIDE PARAPET WALL ABOVE THE ROOF WITH A 3/4" CONDUIT STUBBED DOWN INTO AN ACCESSIBLE CEILING SPACE AREA BELOW FOR THE OWNER PROVIDED WI-FI EXTERIOR ANTENNAE.



A1 MAIN ID SIGN DETAIL  
N.T.S.



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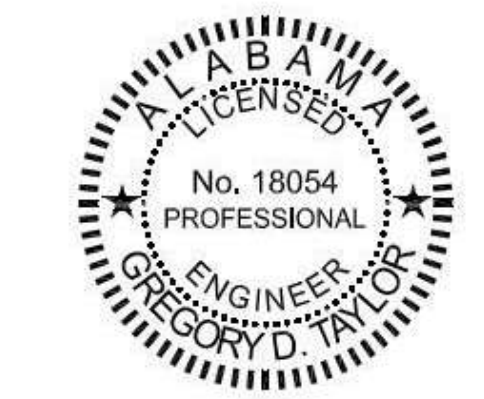
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Engineer No. 2750-E  
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Landscape No. N/A



CHICK-FIL-A  
GARDENDALE (AL)  
385 Fieldstown Rd  
Gardendale, AL 35071

FSR#01687

BUILDING TYPE / SIZE: S04  
RELEASE: 2111

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

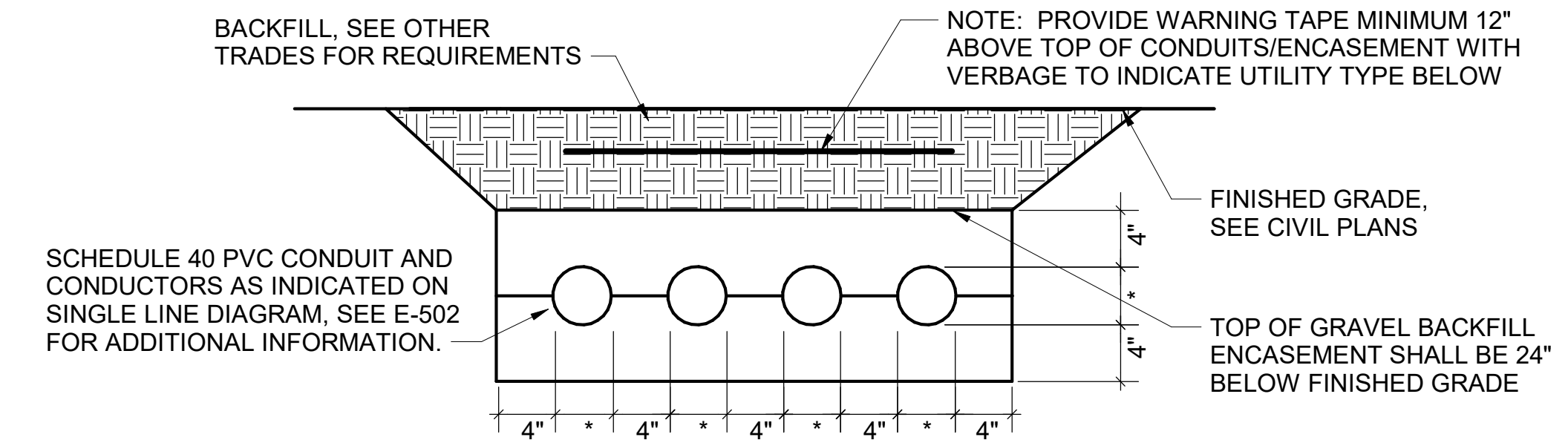
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DATE	04-11-22
DRAWN BY	KCL
SHEET	ELECTRICAL SITE PLAN

SHEET NUMBER

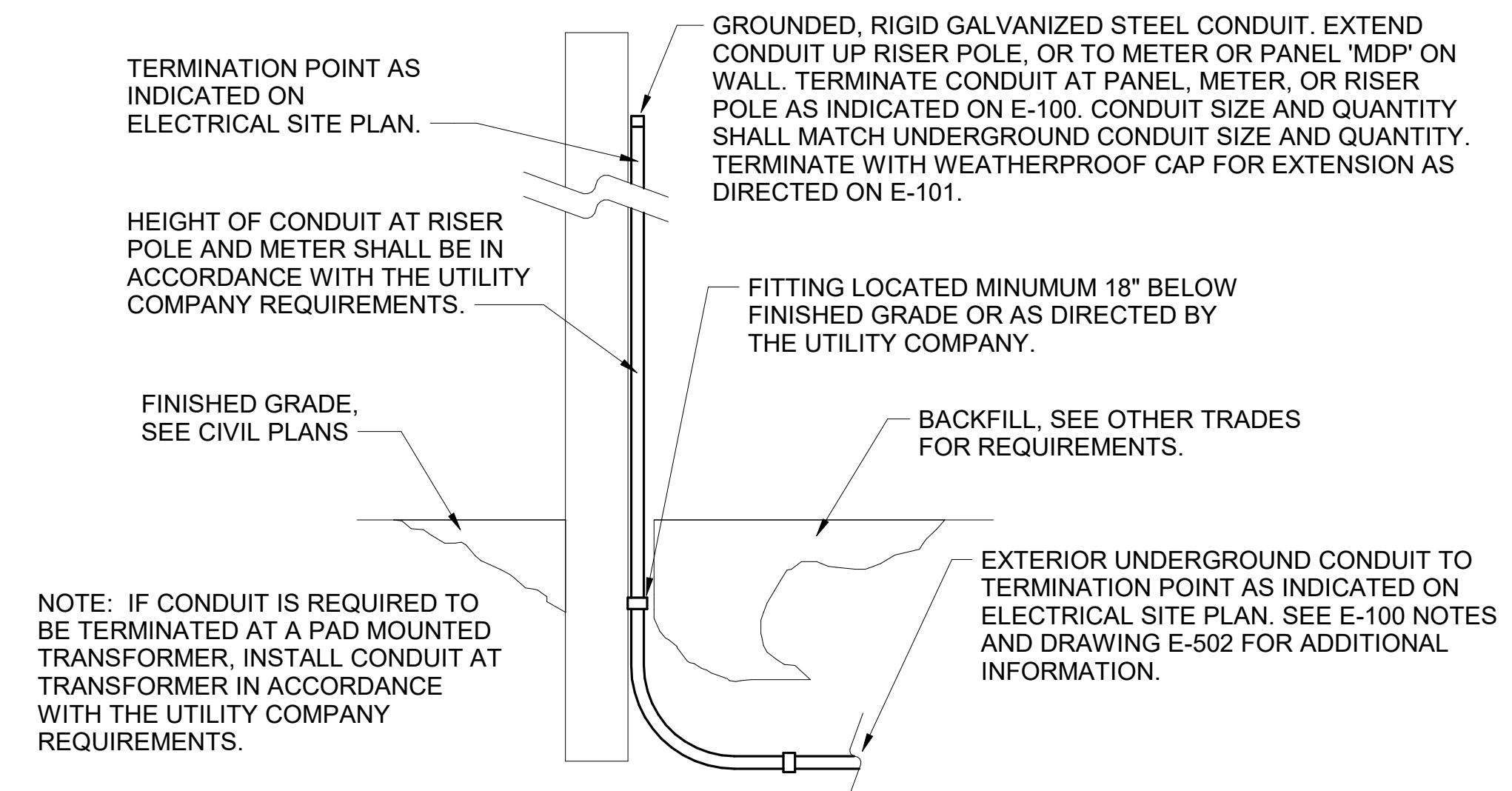
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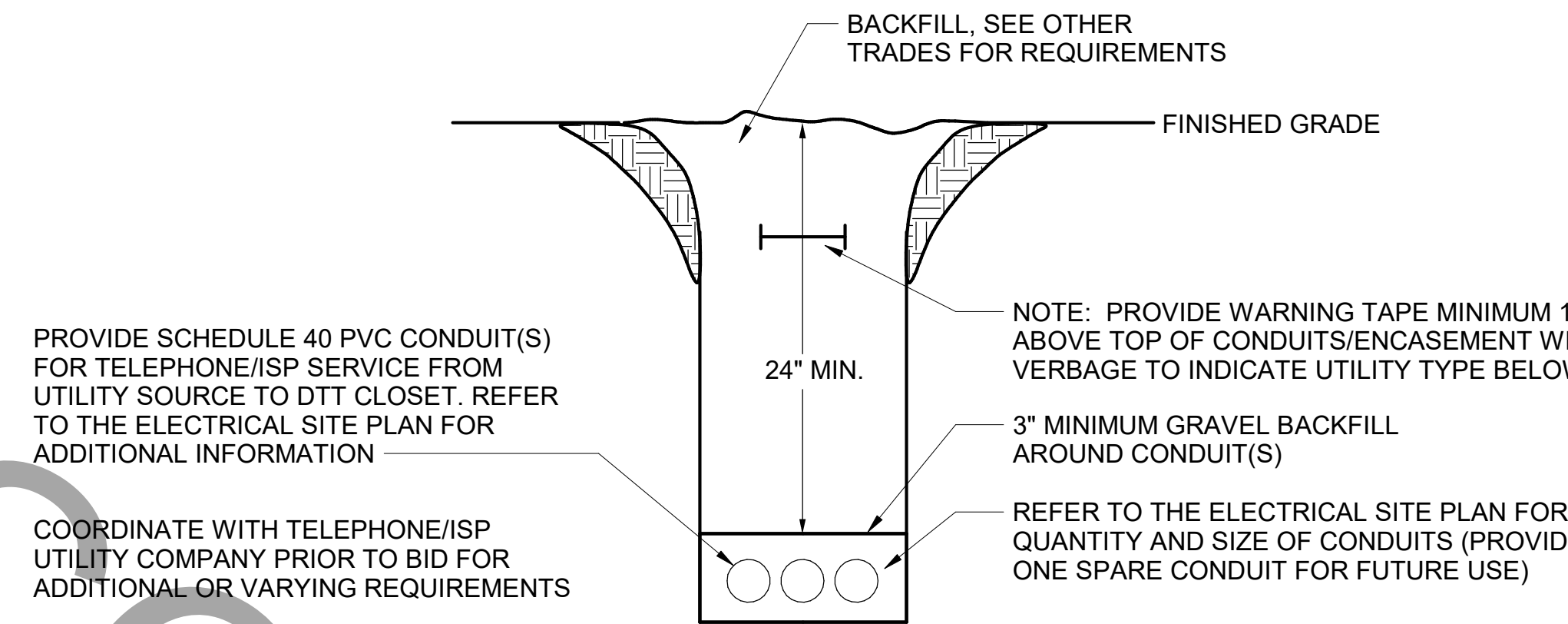
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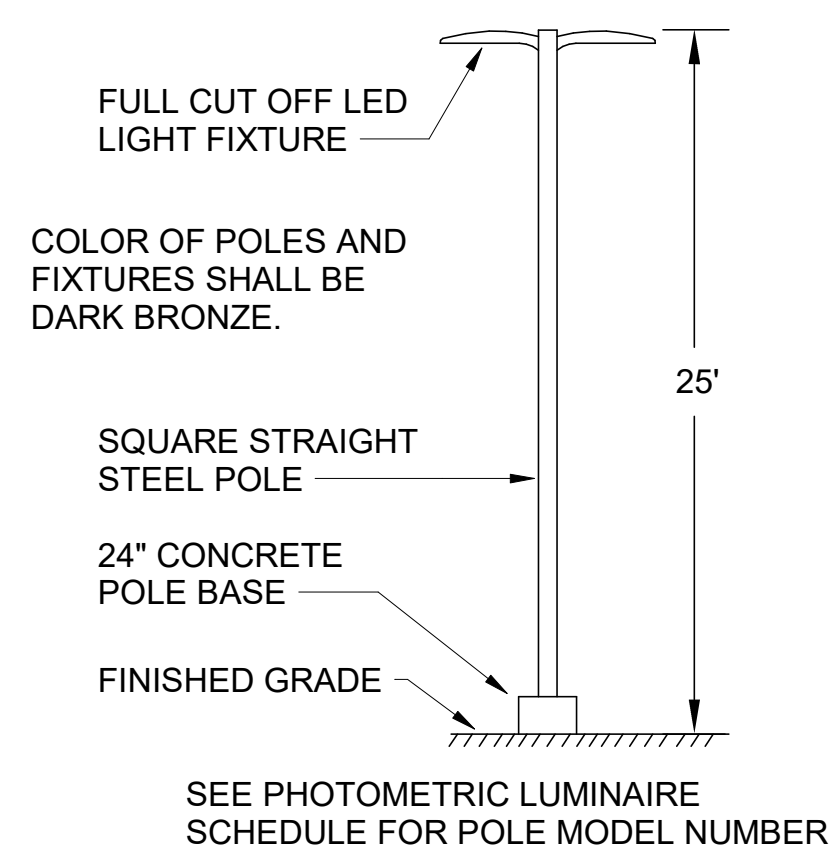
**E1** ELECTRICAL SERVICE LATERAL CONDUIT DETAIL  
1/4" = 1'-0"



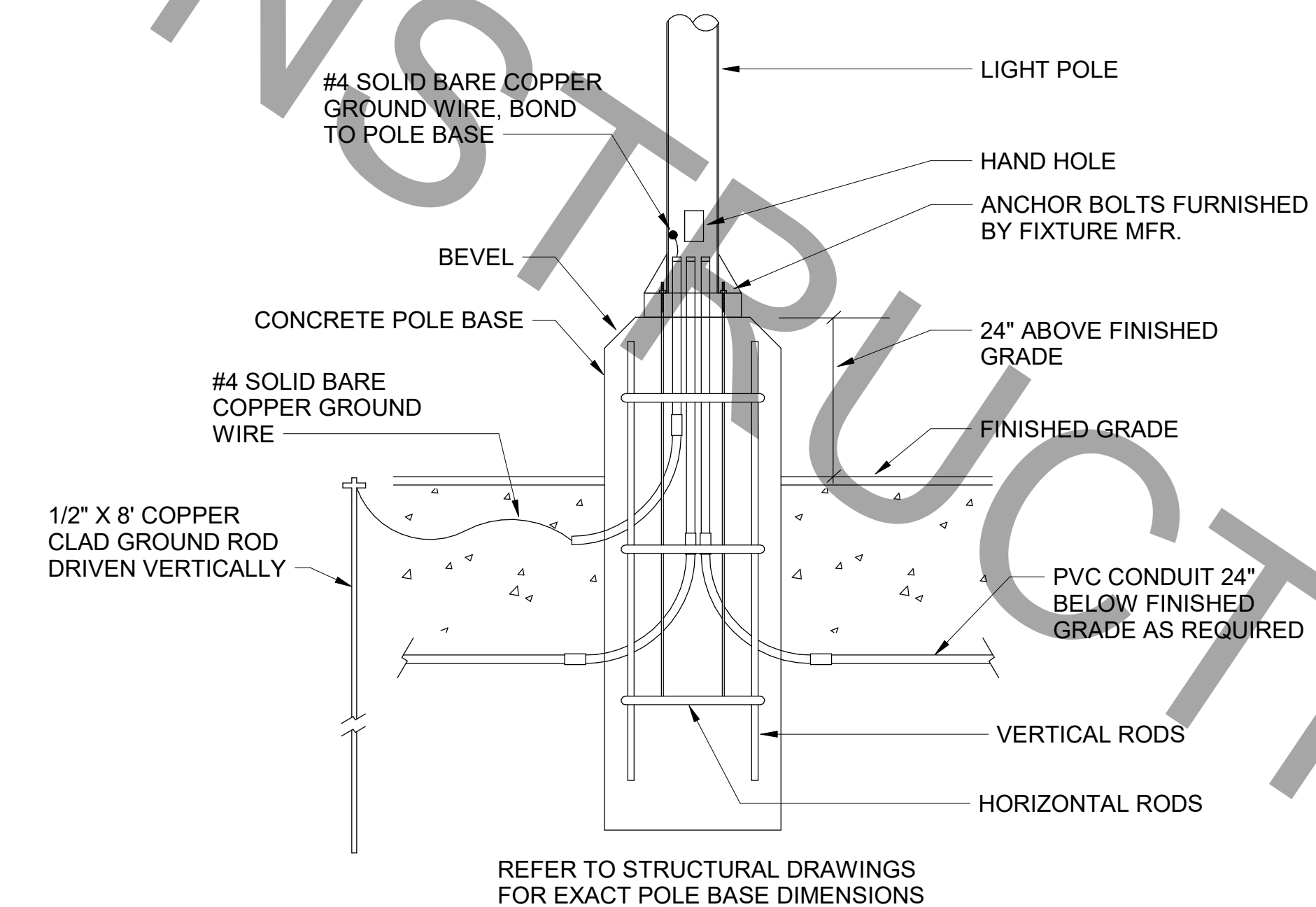
**C1** EXTERIOR CONDUIT TURN UP DETAIL  
N.T.S.



**B1** TELEPHONE SERVICE CONDUIT DETAIL  
N.T.S.



**A3** SITE LIGHTING POLE DETAIL  
N.T.S.



**A1** TYPICAL LIGHT POLE BASE DETAIL  
N.T.S.



Chick-fil-A

**Chick-fil-A**  
5200 Buffington Road  
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Lndscp. Lic. No. LC0000298



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
Gardendale, AL 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04  
RELEASE: 21.11

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SHEET	ELECTRICAL SITE DETAILS
SHEET NUMBER	E-101

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FOR CONSTRUCTION

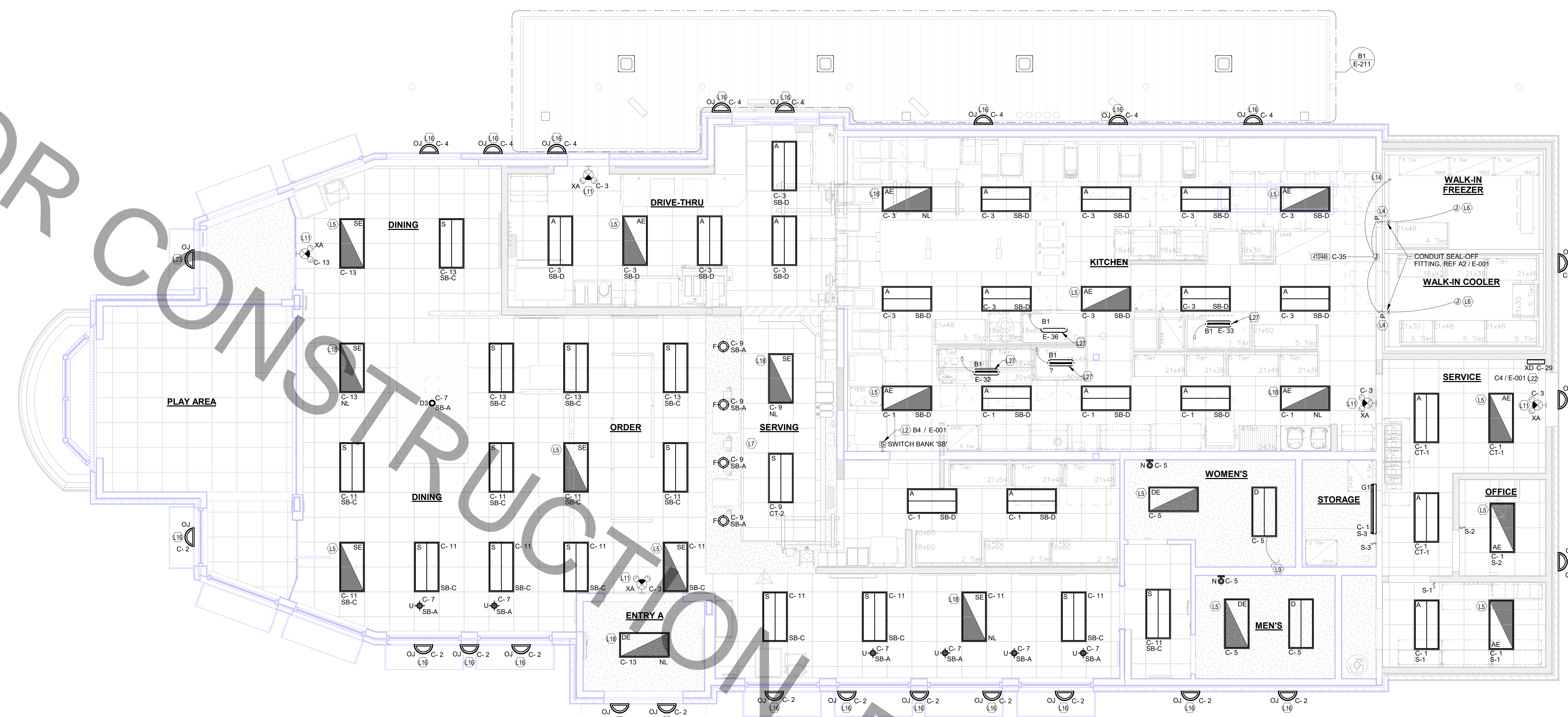
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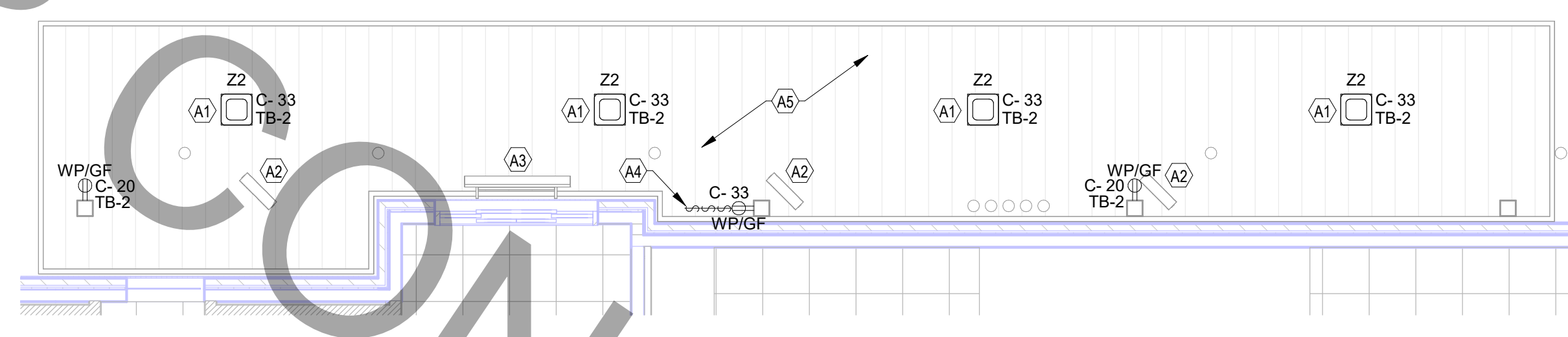
C1 Lighting Plan  
1/4" = 1'-0"

LIGHTING PLAN KEYNOTES

- (L2) APPROXIMATE LOCATION OF SWITCH BANK 'SB'. SEE DETAIL ON THE LIGHTING PLAN FOR MORE INFORMATION.
(L4) FOR CONTROL OF LIGHTING FIXTURE IN WALK-IN COOLER AND FREEZER...
(L5) CONNECT FIXTURE SO THAT BATTERY PACK IS NOT SWITCHED WITH LIGHTS...
(L6) FOR CONNECTION TO LIGHTING FIXTURE IN THE WALK-IN COOLER...
(L7) THE LIGHT FIXTURES IN THE SERVING AREA ARE PROVIDED WITH LAMP SHIELDING VIA A LENS.
(L9) TO THE TOILET EXHAUST FAN ON ROOF...
(L11) THIS FIXTURE SHALL NOT BE SWITCHED...
(L13) SEE THE ROOF ELECTRICAL PLAN FOR LOCATION OF TYPE 'OC' ROOF MOUNTED FLAG POLE LIGHT...
(L14) TO WALK-IN FREEZER DOOR FRAME HEATER AND AIR RELIEF ASSEMBLY...
(L15) SEE THE SITE ELECTRICAL PLAN FOR LOCATION OF TYPE 'OC' GROUND MOUNTED FLAG POLE LIGHT...
(L16) ROUTE THROUGH CONTROL PANEL CFA-T500 AND CONTROLLED BY OCCUPIED SWITCH AND PHOTOCCELL.
(L18) CONNECT LIGHTING FIXTURE SO THAT LAMP BALLAST OR DRIVER AND EMERGENCY BATTERY PACK ARE NOT SWITCHED...
(L22) TYPE 'XD' INVERTER CABINET TO BE WALL MOUNTED AT THE CEILING AND CONNECTED TO CIRCUIT C-29...

OMD CANOPY KEYNOTES:

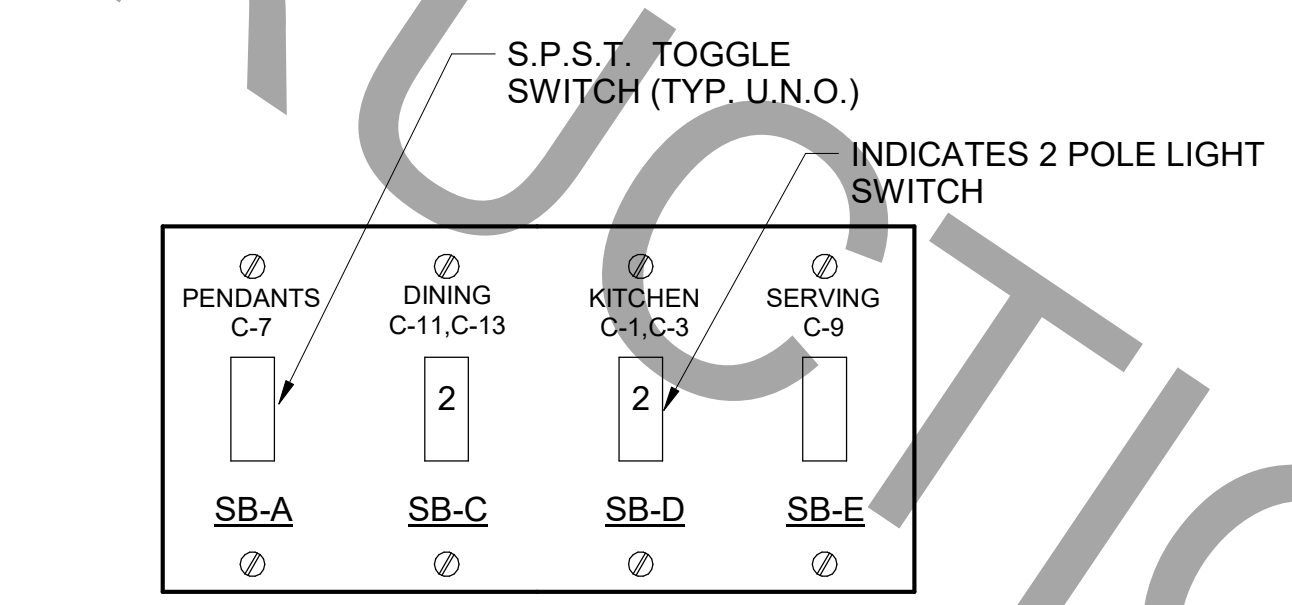
- (A1) CEILING LIGHT FIXTURE PROVIDED BY THE CANOPY SUPPLIER AND INSTALLED BY ELECTRICAL CONTRACTOR.
(A2) AIR CIRCULATING FAN (WITH INTEGRAL ON-OFF SWITCH) PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR...
(A3) ELECTRICAL HEATER PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
(A4) PROVIDE ONE DUPLEX GFCI (WITH IN-USE WP COVER PLATE) AND TWO 120V SINGLE-POLE SWITCHES...
(A5) ALL CONDUIT AND BOXES SHALL BE CONCEALED FROM NORMAL VIEW...



B1 CANOPY PLAN  
3/16" = 1'-0"

Table with columns: MARK, MANUFACTURER, CATALOG NUMBER, NO. LAMPS/TYPE, WATTS, VOLTS, MOUNTING, REMARKS. Includes entries for CooperMetalux, Hubbell, and other lighting fixtures.

NOTES: 1. LUMINAIRES UTILIZING DOUBLE-ENDED LAMPS AND CONTAIN BALLASTS THAT CAN BE SERVICED IN PLACE... 2. THE LIGHTING FIXTURE PACKAGE IS AVAILABLE THROUGH A NATIONAL ACCOUNT PROGRAM... 3. THE ASTERISK (\*) BESIDE THE FIXTURE MARK IN THE ABOVE SCHEDULE INDICATES THE FIXTURE IS A NON-PROTOTYPICAL LIGHT FIXTURE... 4. IF TYPE OC IS GROUND MOUNTED IN LIEU OF ROOF MOUNTED, PROVIDE EITHER THE FLL-VISOR-DB (VISOR) OR THE FLL-LOUVER-BL (LOUVER) FOR GLARE CONTROL.



A1 SWITCH BANK "SB" DETAIL  
NO SCALE

CHICK-FIL-A  
GARDENDALE (AL)  
385 Fieldstown Rd  
Gardendale, AL 35071

FSR#01687

BUILDING TYPE / SIZE: S04  
RELEASE: 2111

REVISION SCHEDULE

Table with columns: NO., DATE, DESCRIPTION. Shows revision history for the project.

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SHEET LIGHTING PLAN

SHEET NUMBER



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**CHICK-FIL-A  
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Gardendale, AL 35071

**FSR#01687**

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RELEASE: 2111

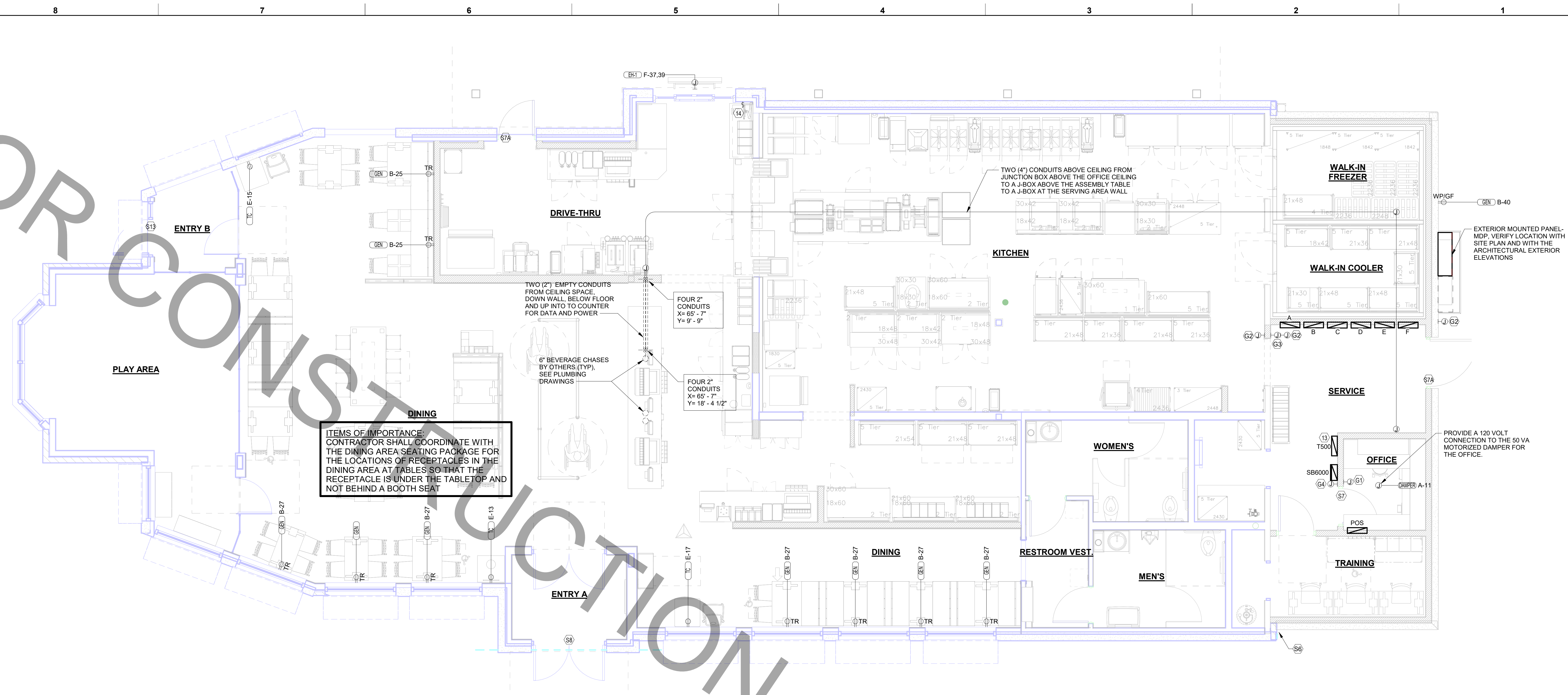
REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT #	C29153
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SHEET	POWER AND SYSTEMS PLAN
SHEET NUMBER	E-221

PERMIT

**E-221**



**C1 POWER AND SYSTEMS PLAN**  
1/4" = 1'-0"

**POWER PLAN KEYNOTES**

- ⑥ PROVIDE DUPLEX RECEPTACLE (SEE ELEVATIONS FOR MTG HT) IN AN ARLINGTON #DFR2W DOUBLE-GANG RECESSED BOX FOR THE FLYLIGHT SYSTEM ITEMS. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT AND TUCK INTO THE BACKBOX.
- ⑦ TAMPER RESISTANT (TR) DUPLEX RECEPTACLE (IN DINING AREAS) WITH USB CHARGER SHALL BE COOPER/ARROW HART #TR7756-B (BROWN) WITH MATCHING COLOR 'DECOR' STYLE PLATE. VERIFY COLOR WITH OWNER.
- ⑫ PROVIDE JUNCTION BOX AT 8'-0" AFF WITH CONDUIT AND CONDUCTORS TO PANELBOARD FOR FUTURE CONNECTION TO BOOSTER PUMP. REFER TO THE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- ⑬ THE STORE OPEN-CLOSE UNIT SWITCH IS FURNISHED WITH THE CFA-T500 CONTROL PANEL AND FACTORY INSTALLED IN THE DOOR OF THE CFA-T500 CABINET.
- ⑭ TIMER SWITCH TO CONTROL CONTACTOR MOUNTED INSIDE, ABOVE ACCESSIBLE CEILING IN DRIVE-THRU AREA.

**SECURITY KEYNOTES**

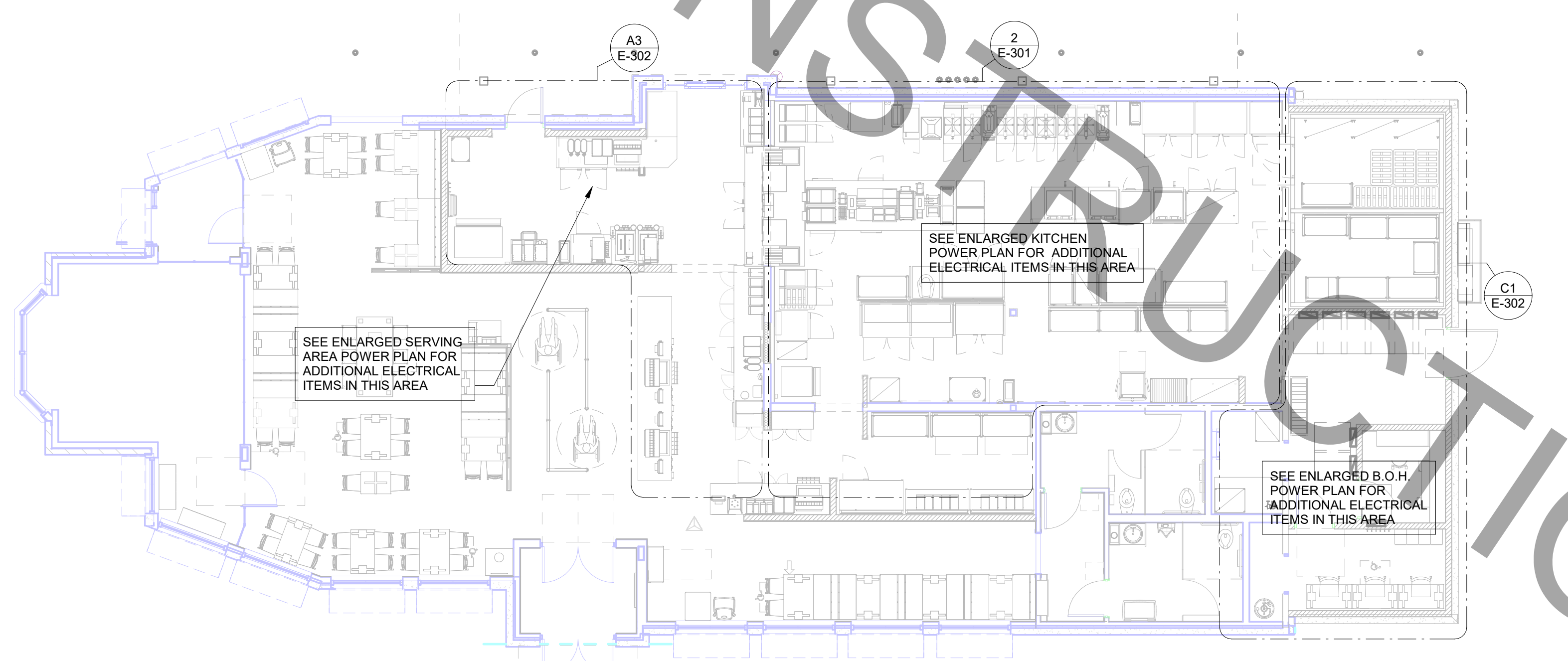
- ⑯ PROVIDE A 1/2" CONDUIT THRU THE EXTERIOR WALL AND STUBBED INTO THE ACCESSIBLE CEILING SPACE FOR THE EXTERIOR WALL MOUNTED AUDIO-VISUAL ALARM NOTIFICATION DEVICE. VERIFY LOCATION WITH THE EXTERIOR ELEVATIONS AND WITH THE SECURITY INSTALLER - TYPICALLY TO BE LOCATED NEAR THE FIRE PROTECTION SYSTEM'S EXTERIOR ALARM UNIT AND VISIBLE FROM THE STREET.
- ⑰ EXTEND 1/2" RIGID CONDUIT FROM TOP OF STRIKE-SIDE DOOR FRAME CHANNEL TO ABOVE ACCESSIBLE CEILING.
- ⑱ EXTEND 3/4" RIGID CONDUIT FROM TOP OF STRIKE-SIDE DOOR FRAME CHANNEL TO ABOVE ACCESSIBLE CEILING.
- ⑳ EXTEND 1/2" CONDUIT FROM A POINT 3" WITHIN EITHER HINGE-SIDE DOOR VERTICAL FRAME MULLION TO ABOVE ACCESSIBLE CEILING.
- ㉑ EXTEND 1/2" CONDUIT FROM A POINT 3" INSIDE THE STRIKE-SIDE DOOR FRAME MULLION TO ABOVE ACCESSIBLE CEILING.
- ㉒ PROVIDE JUNCTION BOX ON THE LATCH SIDE OF THE ROOF ACCESS HATCH WITH 1/2" CONDUIT ABOVE THE CEILING TO AN ACCESSIBLE CEILING SPACE FOR A DOOR CONTACT.

**CO2 DETECTOR NOTES**

- ① CO2 CENTRAL CONTROL UNIT - PROVIDE SINGLE-GANG BACKBOX AT 60" AFF WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE
- ② CO2 ANNUNCIATOR UNIT - PROVIDE SINGLE-GANG BACKBOX AT 60" AFF WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE
- ③ CO2 SENSOR UNIT - PROVIDE SINGLE-GANG BACKBOX AT 12" AFF WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE
- ④ CO2 POWER SUPPLY - PROVIDE SINGLE-GANG BACKBOX AT 18" BELOW CEILING WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE. PROVIDE DUPLEX OUTLET, AND CONNECT TO A LOCAL GENERAL OUTLET CIRCUIT. FIELD VERIFY EXACT LOCATION WITH STRONG SYSTEMS 800-500-5566

**POWER PLAN 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 BUSHING 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.



**A1 ELECTRICAL KEY PLAN**  
1/8" = 1'-0"

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4/5/2022 4:05:50 PM  
50-S04-01687-E-221-POWER AND SYSTEMS PLAN





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Landscape No. N/A



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
Gardendale, AL 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04  
RELEASE: 2111

REVISION SCHEDULE

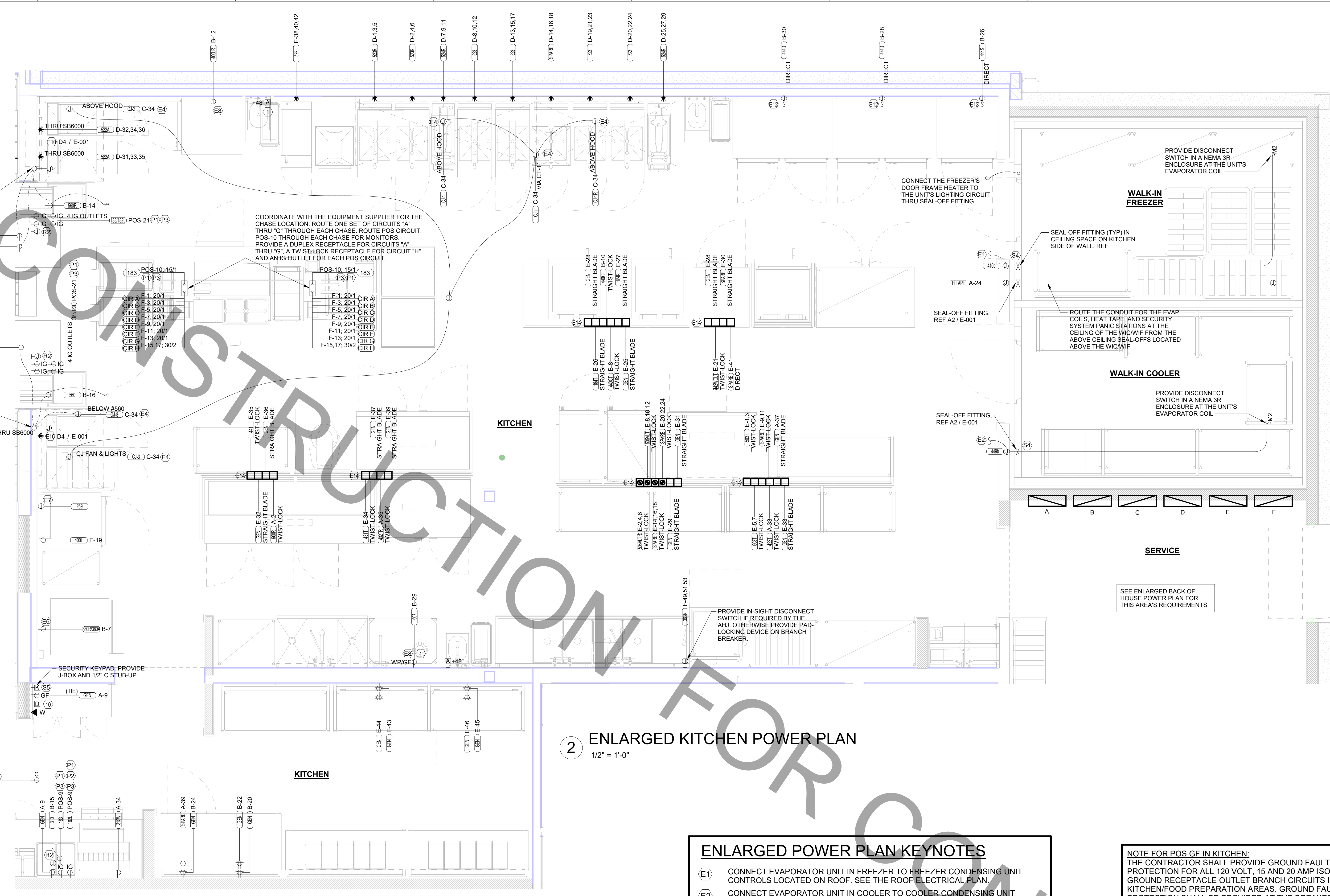
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SHEET ENLARGED KITCHEN POWER PLAN	
SHEET NUMBER	

E-301

## 2 ENLARGED KITCHEN POWER PLAN

1/2" = 1'-0"



### ENLARGED POWER PLAN KEYNOTES

- (E1) CONNECT EVAPORATOR UNIT IN FREEZER TO FREEZER CONDENSING UNIT CONTROLS LOCATED ON ROOF. SEE THE ROOF ELECTRICAL PLAN.
- (E2) CONNECT EVAPORATOR UNIT IN COOLER TO COOLER CONDENSING UNIT CONTROLS LOCATED ON ROOF. SEE THE ROOF ELECTRICAL PLAN.
- (E4) CONNECT AS REQUIRED TO HOOD. CONNECT HOMERUN VIA A RELAY IN THE CFA-T500 CONTROL SECTION.
- (E6) SEE THE ROOF ELECTRICAL PLAN FOR THE LOCATION OF THE ICE MAKER CONDENSERS AND ANY ADDITIONAL REQUIREMENTS.
- (E7) PROVIDE #12 IN 1/2" CONDUIT BETWEEN THE CFA-T500 CONTROL PANEL AND THE ANSUL SYSTEM PANEL(S). SEE ANSUL SYSTEM WIRING DIAGRAM DETAIL ON SHEET E-002 FOR ADDITIONAL INFORMATION.
- (E8) PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLE IN COMPLIANCE WITH THE NEC REQUIREMENT FOR KITCHEN/FOOD PREP AREAS. IF THE RECEPTACLE OUTLET IS NOT NOTED AS GFCI, THEN THE BREAKER IS TO BE GFCI TYPE.
- (E10) THE RECESSED PIN AND SLEEVE BOX WITH THE 'SLEEVE' RECEPTACLE FOR THE OPEN FRYERS (ITEMS #522 AND 522A) ARE FURNISHED BY THE EXHAUST HOOD SUPPLIER AND INSTALLED BY THE CONTRACTOR. THE OPEN FRYER SUPPLIER PROVIDES PREWIRED CORDSET WITH A PIN DEVICE INTERGRAL WITH THE OPEN FRYER TO PLUG INTO THE SLEEVE RECEPTACLE.
- (E12) SINGLE POLE SWITCH SHALL SERVE AS THE LOCAL "IN-SIGHT" MEANS OF DISCONNECT FOR EQUIPMENT ITEM AS NOTED. SEE DIRECT CONNECTION DETAILS ON SHEET E-002 FOR FURTHER INFORMATION.
- (E14) OVERHEAD EQUIPMENT POWER (OEP) DROP CORD RECEPTACLES FROM A FLUSH MOUNTED CEILING OEP BOX (MAXIMUM OF SIX PER ASSEMBLY.) PROVIDE A-C-S OEP ASSEMBLY #12360-1000. ASSEMBLY WILL CONSIST OF A FLUSH CEILING OUTLET BOX, TWIST-LOCK PENDANT RECEPTACLES, STRAIGHT BLADE PENDANT RECEPTACLES, CORDS, STRAIN RELIEF, AND TWIST-LOCK PLUGS AS NOTED ON PLAN. CONTACT BRIGID DEFAMKESH@GMAIL.COM (800-639-7584) 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 SHELVEING ABOVE AS NEEDED. PASS & SEYMOUR MODEL #FS075-U-GH5 OR EQUIVALENT.
- (E15) PROVIDE A DOUBLE-GANG BOX FLUSH MOUNTED IN THE CEILING WITH A BLANK PLATE WITH HOLE FOR A DROP CORD. PROVIDE THE #12 DROP CORD (WITH STRAIN RELIEF AT THE BOX AND AT THE OUTLET BACKBOX) AND CONNECT THE CORD TO AN OUTLET BOX CONTAINING TWO 15 AMP IG (ORANGE) DUPLEX OUTLETS. OUTLET BOX TO BE MOUNTED TO THE OVERHEAD SHELVEING AT THE PRINTER AND MONITOR MOUNTING BRACKET.

**NOTE FOR POS GF IN KITCHEN:**  
THE CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL 120 VOLT, 15 AND 20 AMP ISOLATED GROUND RECEPTACLE OUTLET BRANCH CIRCUITS IN THE KITCHEN/FOOD PREPARATION AREAS. GROUND FAULT PROTECTION SHALL BE PROVIDED AT THE BREAKER VIA A GROUND FAULT TYPE BRANCH BREAKER. (GFCI TYPE ISOLATED GROUND RECEPTACLES ARE NOT AVAILABLE.)

### POWER PLAN KEYNOTES

- 1) PROVIDE TWO-GANG DEEP BOX (2" MIN.) FOR ANSUL PULL STATION. EXTEND 1/2" CONDUIT FROM BOX, STUBBED ABOVE CEILING.
- 6) PROVIDE DUPLEX RECEPTACLE (SEE ELEVATIONS FOR MTG HT) IN AN ARLINGTON #0VFRW DOUBLE-GANG RECESSED BOX FOR THE FLY SYSTEM ITEMS. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT AND TUCK INTO THE BACKBOX.
- 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.

### POWER PLAN 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 EMVTS CONDUITS SHALL BE PROVIDED WITH PULL STRING.
4. PROVIDE INSULATED BUSHING 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.

### SECURITY KEYNOTES

- (S4) PROVIDE TWO GANG WEATHERPROOF JUNCTION BOX AND STAINLESS STEEL PLATE WITH 7/8" HOLE IN CENTER FOR PANIC BUTTON. LOCATE AT 48" AFF AND EXTEND 1/2" CONDUIT UP TO ABOVE ACCESSIBLE CEILING WITH CONDUIT SEAL FITTING. SEAL CONDUIT PENETRATION AT WICWIF CEILING.
- (S5) PROVIDE SINGLE GANG BOX WITHOUT COVER PLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.
- (S9) PROVIDE SINGLE GANG JUNCTION BOX WITHOUT COVERPLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.

### POS DATA KEYNOTES

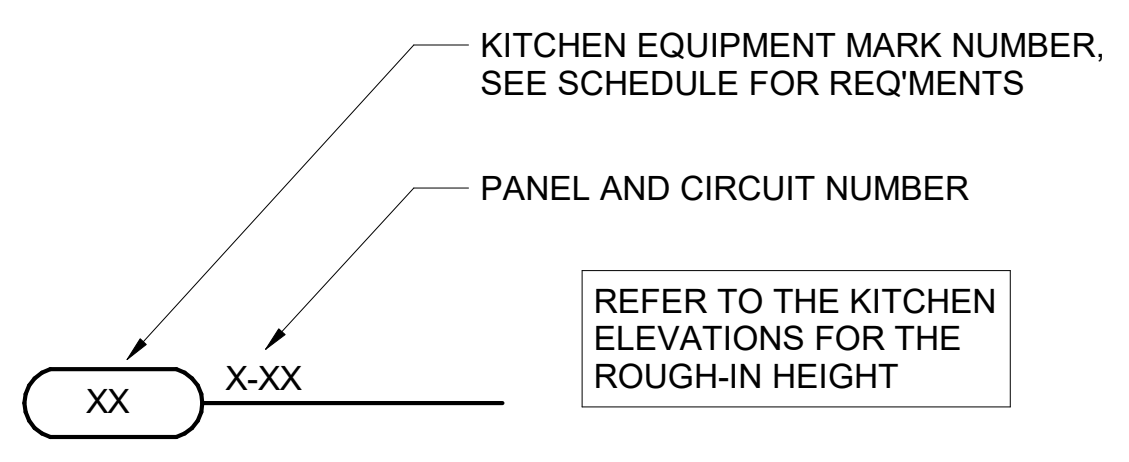
- (R2) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS MONITOR(S). COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR.
- (R7) PROVIDE A SINGLE GANG BOX FLUSH MOUNTED IN THE CEILING FOR THE POS DATA PLATE (BY OTHERS) FOR THE SALAD PREP AREA POS MONITOR AND PRINTER.

### POS POWER KEYNOTES

- (P1) PROVIDE ORANGE ISOLATED GROUND (IG) DUPLEX RECEPTACLE.
- (P3) USE TYPE MC CABLE FOR THE ISOLATED GROUND CIRCUIT: #12 HOT, NEUTRAL, GREEN GROUND, STRIPED ISOLATED GROUND. EACH 15 AMP HOMERUN SHALL BE DEDICATED TO A CIRCUIT BREAKER VIA DEDICATED CONDUCTORS WITHIN A CABLE ASSEMBLY. ALL MC CABLES SHALL BE RUN OVERHEAD ABOVE THE CEILING AND RACKED TOGETHER ON J-HOOKS. NO SPLICES IN ANY HOMERUN CABLES FROM FIRST RECEPTACLE TO BREAKER.

**NOTE:**  
RECEPTACLES FOR THE POS EQUIPMENT SHALL BE THE ONLY ITEMS THAT CONNECT TO PANEL-POS. THERE SHALL BE NO OTHER LOADS CONNECTED TO THIS ISOLATED GROUND PANEL AND, IF SO, SHALL BE REMOVED AND RECONNECTED TO ANOTHER PANELBOARD AT THE EXPENSE OF THE CONTRACTOR.

**NOTE FOR GF TYPE RECEPTACLES IN KITCHEN/FOOD PREP AREAS:**  
THE CONTRACTOR SHALL PROVIDE GROUND FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL FOR ALL 125V - 250V RECEPTACLES SUPPLIED BY 120V SINGLE-PHASE BRANCH CIRCUITS 50 AMPS OR LESS, 208V SINGLE-PHASE BRANCH CIRCUITS 50 AMPS OR LESS, AND 208Y THREE-PHASE BRANCH CIRCUITS 100 AMPS OR LESS. SEE FLOOR PLANS FOR ADDITIONAL INFORMATION.



### A1 KITCHEN EQUIP NOMENCLATURE

NO SCALE

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50-504-01687-E-301-ENLARGED KITCHEN POWER PLAN



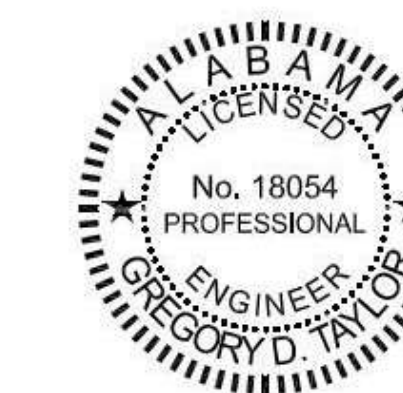
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Landscape No. N/A



CHICK-FIL-A  
GARDENDALE (AL)

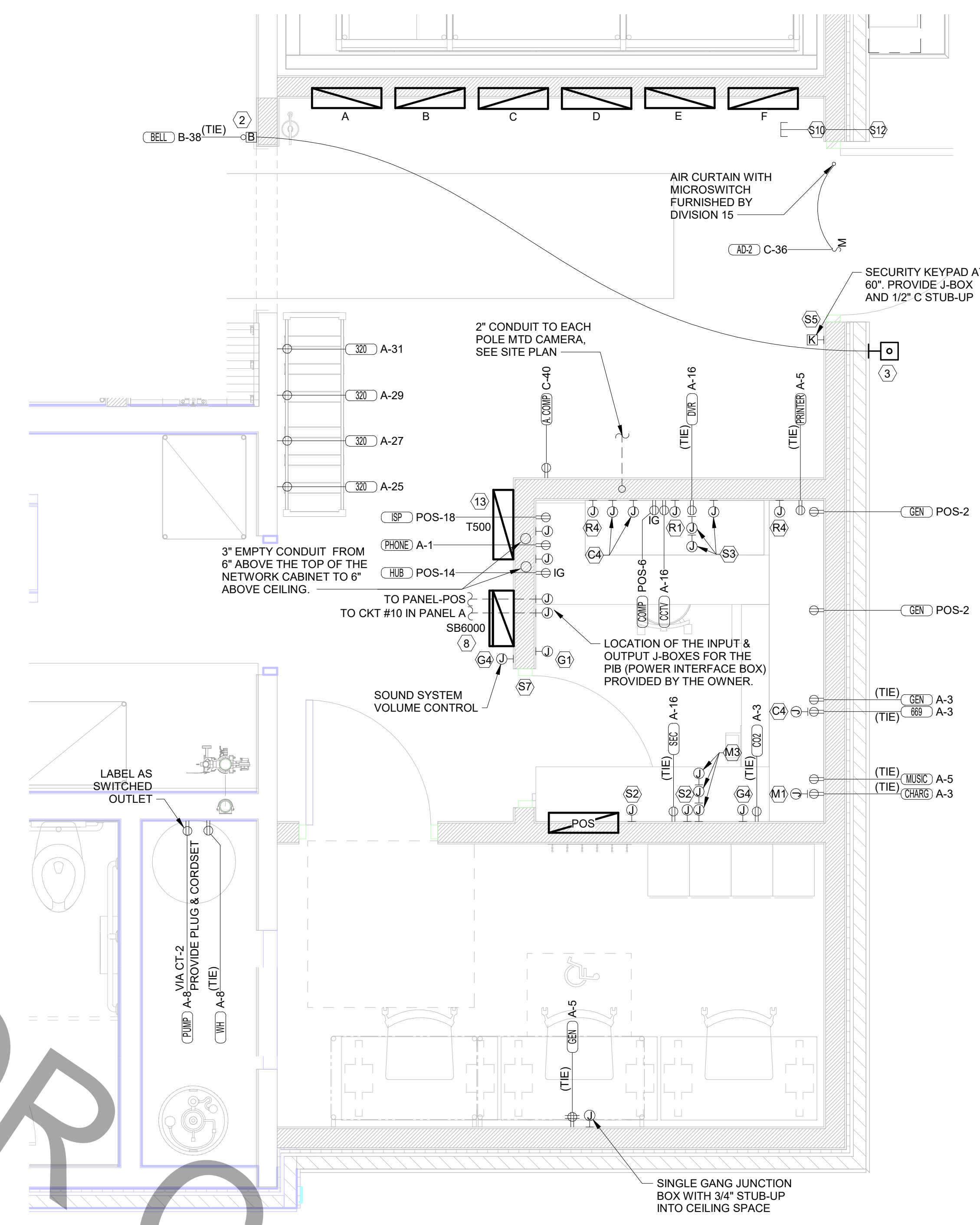
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Gardendale, AL 35071

FSR#01687

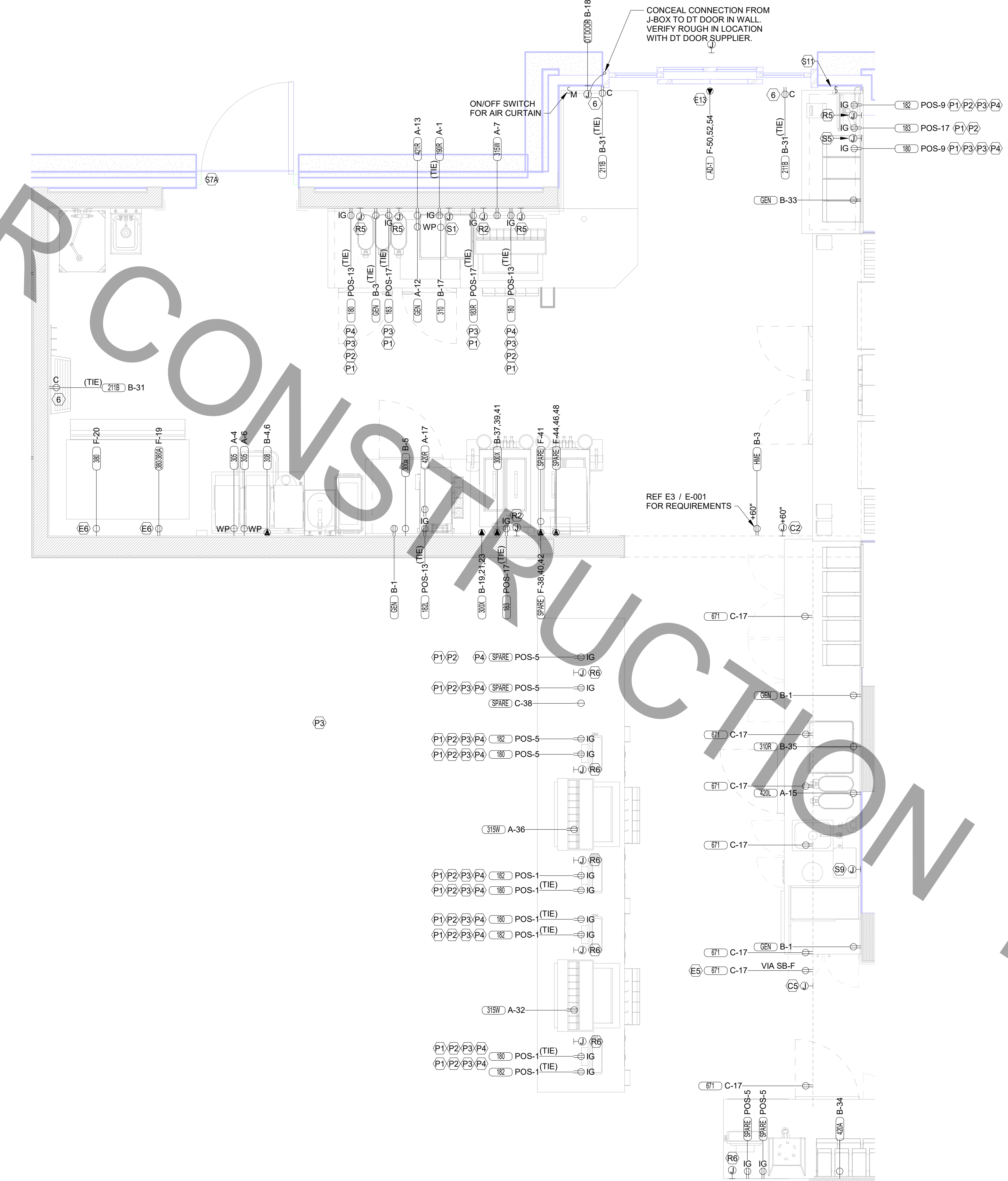
BUILDING TYPE / SIZE: S04  
RELEASE: 2111  
REVISION SCHEDULE  
NO. DATE DESCRIPTION

CONSULTANT PROJECT # C29153  
PRINTED FOR PERMIT  
DATE 04-11-22  
DRAWN BY KCL  
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SHEET ENLARGED SERVING AND BOH POWER PLAN  
SHEET NUMBER

E-302



C1 ENLARGED BOH POWER PLAN  
1/2" = 1'-0"

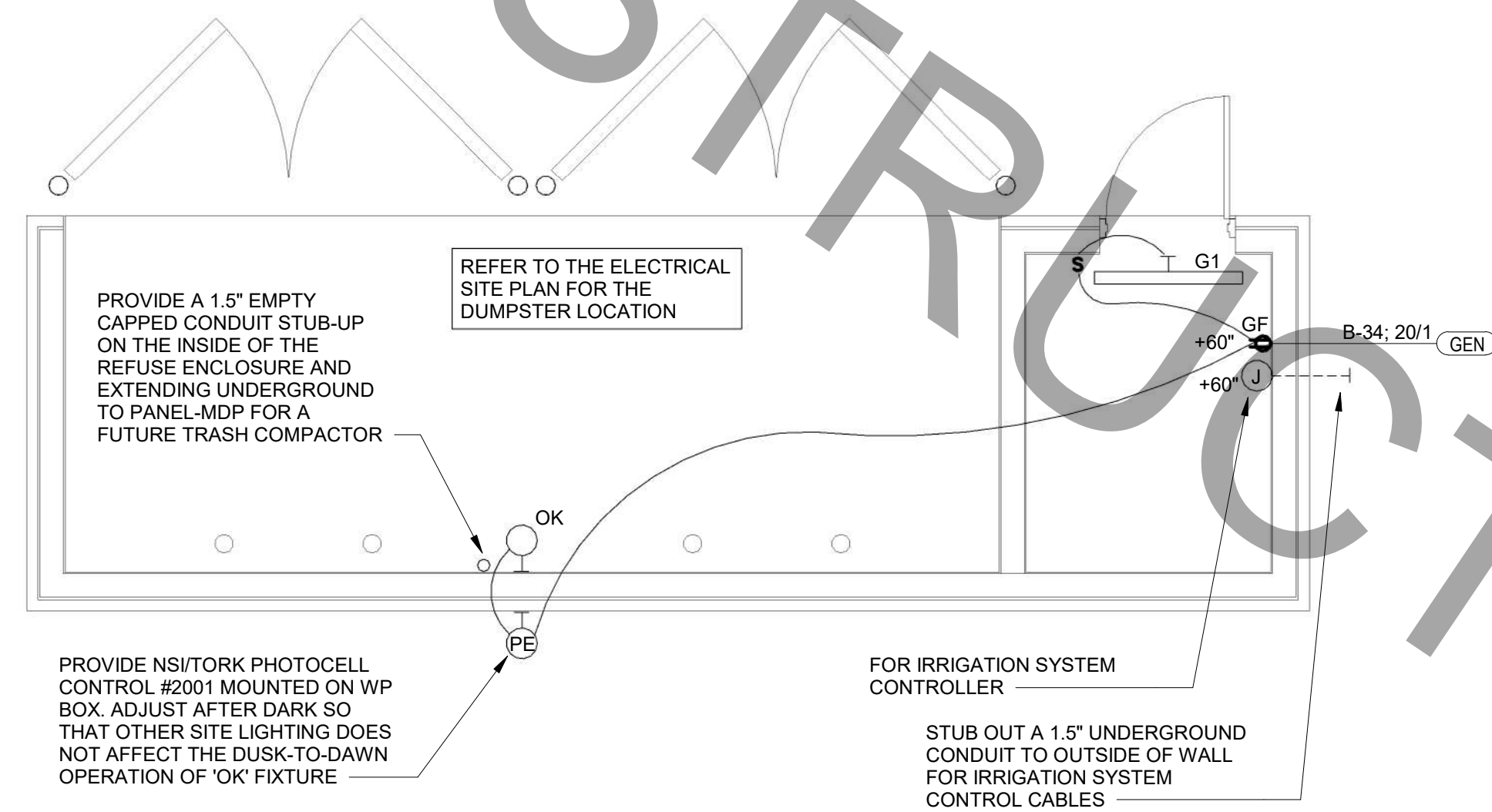


A3 ENLARGED SERVING AREA POWER PLAN  
1/2" = 1'-0"

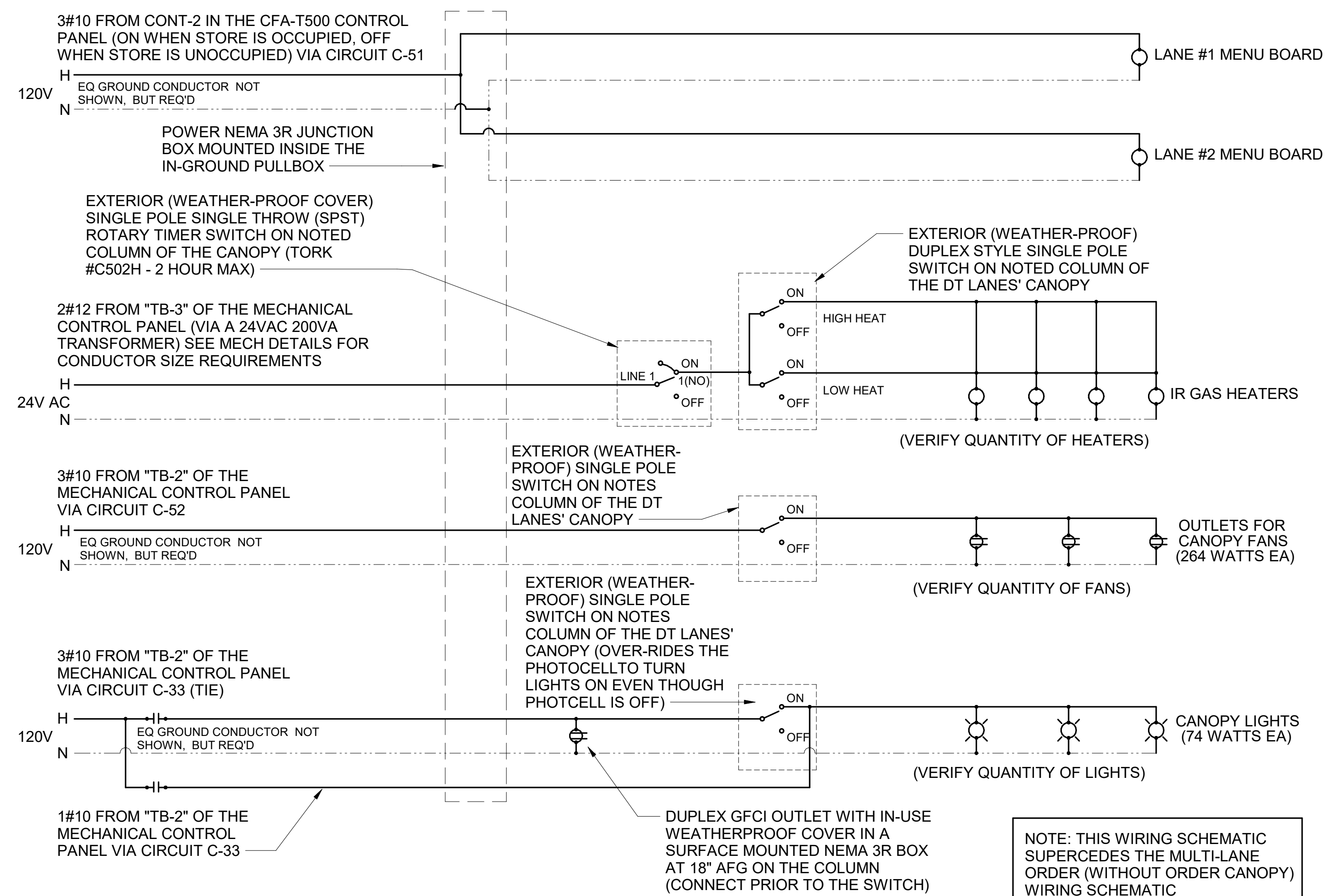
<p><b>MUSIC KEYNOTES</b></p> <p>M1) PROVIDE JUNCTION BOX WITH STAINLESS STEEL COVER PLATE AND 3/4" HOLE IN PLATE WITH GROMMET ON HOLE IN PLATE. EXTEND 3/4" CONDUIT UP IN WALL TO ABOVE CEILING FOR MUSIC SYSTEM.</p> <p>M3) THREE SINGLE GANG EXTRA DEEP J-BOXES STACKED WITH A 1/2" CONDUIT FROM EACH TO THE TOP J-BOX AND A 1" CONDUIT STUBBED INTO THE CEILING SPACE FOR MUSIC SYSTEM VOLUME CONTROLS PROVIDED BY OWNER'S VENDOR.</p> <p>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.</p>	<p><b>POS DATA KEYNOTES</b></p> <p>R1) PROVIDE A 'RETROFIT' SINGLE GANG RING (CARLON #SC100RR) FOR OWNER'S DEVICE PLATE WITH A 1" EMPTY CONDUIT AT THE OPENING STUBBED UP INTO THE CEILING SPACE FOR OWNER'S DATA CABLES.</p> <p>R2) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS MONITOR(S). COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR.</p> <p>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.</p> <p>R4) PROVIDE A 'RETROFIT' SINGLE GANG RING (CARLON #SC100RR) FOR OWNER'S DEVICE PLATE WITH A 1" EMPTY CONDUIT AT THE OPENING STUBBED UP INTO THE CEILING SPACE FOR OWNER'S DATA CABLES.</p> <p>R5) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS TERMINAL. POS SYSTEM SUPPLIER WILL PROVIDE COVER PLATE ON BOX.</p> <p>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 180. DO NOT MOUNT BOX BETWEEN EQUIPMENT 180 AND EQUIPMENT 182 RECEPTACLES.</p>	<p><b>POWER PLAN KEYNOTES</b></p> <p>2) PROVIDE EDWARDS #340-4N5 VIBRATING 4" DIAMETER BELL. THE BELL SHALL BE RATED AT 120 VOLTS.</p> <p>3) PROVIDE A 120 VOLT WEATHERPROOF DOORBELL PUSHBUTTON AT DOOR. PUSHBUTTON SHALL BE FLUSH MOUNTED. PROVIDE DORTRONICS SYSTEMS #W5286-P25 CLEAR ANODIZED ALUMINUM PUSHBUTTON WITH SINGLE GANG SWITCHPLATE.</p> <p>4) TWO 2" TELEPHONE SERVICE ENTRANCE CONDUIT(S). EXTEND WITH PULL STRING FROM TELEPHONE SERVICE J-BOX TO THE UTILITY SOURCE. REFER TO THE ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION.</p> <p>6) PROVIDE DUPLEX RECEPTACLE (SEE ELEVATIONS FOR MTG HT) IN AN ARLINGTON #DVF2W DOUBLE-GANG RECESSED BOX FOR THE FLY SYSTEM ITEMS. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT AND TUCK INTO THE BACKBOX.</p> <p>8) SB6000 PANEL ENCLOSURE WITH 3 LITTELFUSE SHOCK BLOCK GFCI PROTECTION DEVICES AND SB6100 PANEL ENCLOSURE SHOCK BLOCK GFCI PROTECTION DEVICE. ENSURE CONDUITS ARE INSTALLED FOR LINE AND LOAD WIRES TO BE INSTALLED WITH PROPER WIRE BENDING SPACE. LABEL EACH SHOCK BLOCK WITH PANEL AND CIRCUIT NUMBER IT CONTROLS.</p> <p>9) ONE 3" ISP SERVICE CONDUIT. EXTEND WITH PULL STRING FROM J-BOX TO SUPPLIER'S SOURCE. REFER TO ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION.</p> <p>11) PROVIDE TWO 6"H X 6"W X 4"D J-BOXES (ONE FOR TELEPHONE AND ONE FOR ISP) AT 6'-6" AFF AND EXTEND A 2" CONDUIT WITH PULL STRING IN THE WALL FROM EACH J-BOX INTO THE ACCESSIBLE CEILING SPACE. PROVIDE A 36" X 36" X 3/4" PLYWOOD BACKBOARD ON THE WALL ABOVE THE J-BOXES (AT THE CEILING) FOR USE BY THE ISP. PROVIDE A COPPER GROUND BAR (EQUAL TO ERCO TGBZAL14P) AT THE BOTTOM OF THE BACKBOARD WITH A #6 AWG INSULATED CU GROUNDING CONDUCTOR IN A 3/4" C FROM THE GROUND BAR TO THE INTER SYSTEM BONDING TERMINATION NEXT TO THE SERVICE ENTRANCE. THE GROUND BAR SHALL HAVE TAPS FOR USE BY THE TELEPHONE AND ISP UTILITY COMPANIES AND FOR THE #6 COMMUNICATIONS GROUNDING CONDUCTOR TO THE GES. PROVIDE A 15 AMP ISOLATED GROUND (IG) ORANGE-FACED DUPLEX RECEPTACLE IN THE WALL BESIDE THE BACKBOARD AND LABEL THE RECEPTACLE "FOR FIBER TO CABLE MODEM USE ONLY". BOND NETWORK RACKS TO GROUND BAR.</p>	<p><b>SECURITY KEYNOTES</b></p> <p>S1) PROVIDE SINGLE GANG JUNCTION BOX AND STAINLESS STEEL COVER PLATE WITH 7/8" HOLE IN CENTER. EXTEND 1" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.</p> <p>S2) PROVIDE 4"W X 4"H X 3"D FLUSH JUNCTION BOX WITHOUT A COVERPLATE. EXTEND 2" CONDUIT UP TO ABOVE ACCESSIBLE OFFICE CEILING AREA AND PROVIDE BUSHING ON CONDUIT.</p> <p>S3) PROVIDE A SINGLE-GANG JUNCTION BOX WITH A 1.5" CONDUIT STUBBED UP INTO ACCESSIBLE CEILING SPACE WITH A BUSHING ON THE CONDUIT END FOR THE CCTV MONITOR AND DVR LOCATION.</p> <p>S5) PROVIDE SINGLE GANG BOX WITHOUT COVER PLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.</p> <p>S10) PROVIDE SINGLE GANG JUNCTION BOX WITH STAINLESS STEEL COVER PLATE MOUNTED ABOVE THE CEILING SPACE AND ABOVE ON THE INTERIOR SIDE OF THE REAR DOOR. ROUTE 1" CONDUIT FROM THE BOX TO THE "S12" BOX NOTED BELOW.</p> <p>S11) EXTEND 1/2" CONDUIT FROM WINDOW'S FRAME MULLION (RIGHT SIDE) TO ABOVE ACCESSIBLE CEILING.</p> <p>S12) PROVIDE SINGLE GANG, WEATHER-PROOF JUNCTION BOX WITH STAINLESS STEEL COVER PLATE MOUNTED ABOVE THE REAR DOOR ON THE EXTERIOR WALL. ROUTE 1" CONDUIT FROM THE BOX AND INTO THE BUILDING AND TERMINATE CONDUIT IN THE BOX NOTED IN "S10" ABOVE.</p>
<p><b>COMMUNICATIONS KEYNOTES</b></p> <p>C2) PROVIDE JUNCTION BOX, LESS COVER PLATE, AND EXTEND 1-1/2" CONDUIT UP IN WALL TO ABOVE CEILING FOR INSTALLATION OF WIRELESS COMMUNICATION CONTROL UNIT.</p> <p>C4) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" EMPTY CONDUIT STUBBED UP INTO THE ACCESSIBLE CEILING SPACE FOR OWNER'S VOIP PHONE JACK AND CABLES.</p> <p>C5) PROVIDE SINGLE-GANG JUNCTION BOX WITH A 3/4" EMPTY CONDUIT STUBBED UP INTO THE ACCESSIBLE CEILING SPACE FOR FUTURE MENU BOARD CABLES.</p>	<p><b>POS POWER KEYNOTES</b></p> <p>P1) PROVIDE ORANGE ISOLATED GROUND (IG) DUPLEX RECEPTACLE.</p> <p>P2) PROVIDE GROUND FAULT PROTECTION FOR THESE DEVICES VIA A GROUND FAULT CIRCUIT BREAKER IF LOCAL CODE DEFINES THIS A FOOD PREPARATION AREA.</p> <p>P3) USE TYPE MC CABLE FOR THE ISOLATED GROUND CIRCUIT: #12 HOT, NEUTRAL, GREEN GROUND, STRIPDED SOLATED GROUND. EACH 15 AMP HOMERUN SHALL BE DEDICATED TO A CIRCUIT BREAKER VIA DEDICATED CONDUCTORS WITHIN A CABLE ASSEMBLY. ALL MC CABLES SHALL BE RUN OVERHEAD ABOVE THE CEILING AND RACKED TOGETHER ON J-HOOKS. NO SPLICES IN ANY HOMERUN CABLES FROM FIRST RECEPTACLE TO BREAKER.</p> <p>P4) THE RECEPTACLE BACKBOX AND SYSTEM CABLE JUNCTION BOX FOR ITEMS 180 AND 182 SHALL BE TURNED HORIZONTAL. REFER TO THE KITCHEN EQUIPMENT ROUGH-IN ELEVATIONS FOR ADDITIONAL INFORMATION.</p>	<p><b>ENLARGED POWER PLAN KEYNOTES</b></p> <p>E6) SEE THE ROOF ELECTRICAL PLAN FOR THE LOCATION OF THE ICE MAKER CONDENSERS AND ANY ADDITIONAL REQUIREMENTS.</p> <p>E13) JUNCTION BOX ABOVE CEILING FOR AD-1 AT THE DRIVE-THRU WINDOW.</p>	
<p><b>POWER PLAN GENERAL NOTES</b></p> <ol style="list-style-type: none"> <li>ALL SECURITY, POS, MUSIC, COMMUNICATIONS, AND POWER ROUGH-IN SHALL BE INSTALLED DURING THE FRAMING/ROUGH-IN PHASE OF CONSTRUCTION.</li> <li>REFER TO KITCHEN EQUIPMENT SHEETS FOR EQUIPMENT ELECTRICAL ROUGH-IN ELEVATIONS ABOVE FINISHED FLOOR.</li> <li>ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING.</li> <li>PROVIDE INSULATED BUSHING AT TERMINATION POINTS OF ALL CONDUITS FOR LOW VOLTAGE WIRING.</li> <li>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.</li> </ol>			

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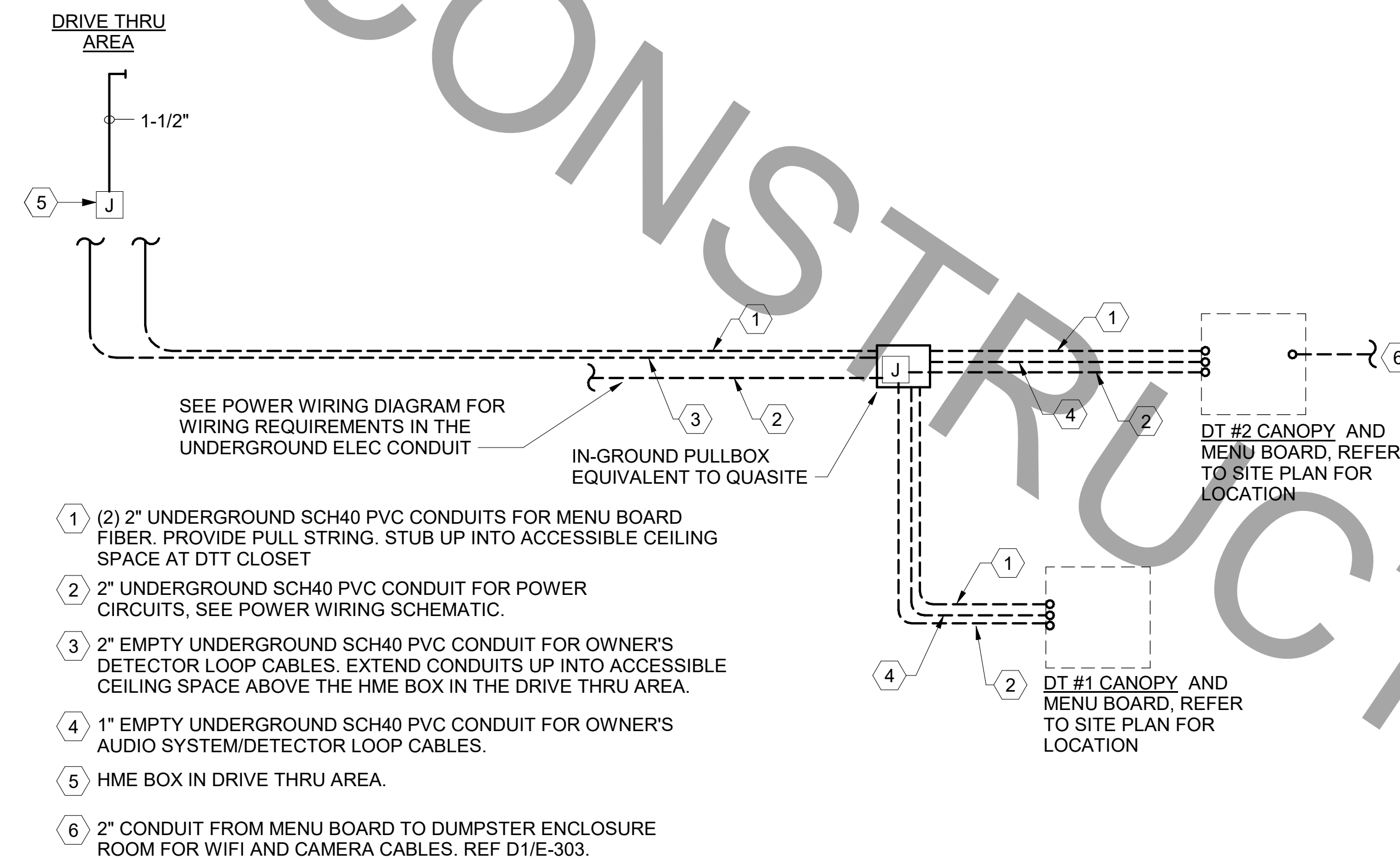
FOR CONSTRUCTION



**D1** REFUSE ENCLOSURE ELECTRICAL PLAN  
1/4" = 1'-0"



**B3** MULTI-LANE ORDER CANOPY POWER WIRING SCHEMATIC  
N.T.S.



**A3** MLOP DT REQUIREMENTS - WITH ORDER AREA F2F CANOPY  
NO SCALE

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*Chick-fil-A*

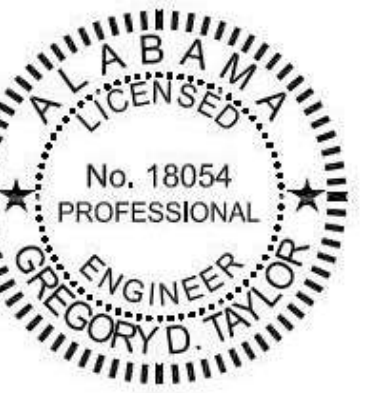
**Chick-fil-A**  
5200 Buffington Road  
Atlanta, Georgia  
30349-2998



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Surveyor No. CA-909-LS  
Landscape No. N/A



**CHICK-FIL-A**  
**GARDENDALE (AL)**

385 Fieldstown Rd  
Gardendale, AL 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04  
RELEASE: 2111

REVISION SCHEDULE  
NO. DATE DESCRIPTION

CONSULTANT PROJECT # C29153  
PRINTED FOR PERMIT  
DATE 04-11-22  
DRAWN BY KCL  
SHEET DT ORDERING AREA  
DETAILS & REFUSE  
ENCLOSURE PLAN  
SHEET NUMBER

**E-303**

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. Ratings: 20 amps, 120/277 volts a.c. or as identified on drawings.
B. 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)
2. Double pole toggle switches: 20 AMP device - #AH1222-GY (Kitchen) or #AH1222-B (Dining)
3. Three-way toggle switches: 20 AMP device - #AH1223-GY (Kitchen) or #AH1223-B (Dining)

1.02 RECEPTACLES

- A. Devices: (Cooper/Arrow Hart catalog numbers are listed unless otherwise noted):
1. Specification grade devices to be 20 amp, 125 volts, a.c. receptacles:
a. Single (simplex) device: #1877-GY (Kit) or #1877-B (Dining)
b. Duplex device: #CR20-GY (Kitchen) or #CR20-B (Dining)
c. Tamper resistant duplex device: #TRCR20-B or #TR7756-B (with USB charging)
d. GF (ground-fault circuit interrupter) duplex device: #VGF20-GY (Kitchen) or #VGF20-B (Dining)
e. IG (isolated ground) duplex device: #G5362-RN (orange face)
B. Color:
1. Devices mounted in the FRP or tile shall be gray.
2. Devices mounted in wood finish shall be brown.
3. Isolated ground receptacles shall be orange.

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 blank plates on all outlet boxes for future outlets, or outlets without devices. Plate style shall match device plates.
B. 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 #WU1-1.
C. Where devices installed in exposed boxes or conduit fittings; provide properly designed plates and covers equal to Arrow Hart RS-Series exposed work covers.
D. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted boxes.
E. Color:
1. Wall plates mounted in FRP or tile shall be smooth satin stainless steel 302-ss series.
2. Wall plates mounted in wood finish shall be brown nylon plastic.
3. Isolated ground wall plates shall be orange nylon plastic with a circuit number printed in 3/16 inch black lettering on clear adhesive label adhered to plate.

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 (via Chick-fil-A National Accounts Program)
A. Square-D (for all regions); from Villa Lighting, Dave Christianell (800)325-0963
1.02 PANELBOARD FEATURES
A. Panelboards shall have a minimum symmetrical interrupting rating to meet or exceed the available symmetrical interrupting current at the device intended to interrupt current.
B. Bus bars shall be copper.
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. MDP main breaker, 1200 Amps or higher, shall be equipped with Arc Flash Maintenance Setting switch for use as a temporary arc-flash incident energy reduction device during maintenance activities.
J. 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. GE / ABB
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 on 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. Villa Lighting - all regions. Contact at Villa Lighting; Dave Christianell at 800-325-0963, fax- 314-531-8720, email- davec@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, GE / ABB, 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 C16596  
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 UL96A 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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5200 Buffington Road
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30349-2998



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State of Alabama Licenses: Engineer No. 2750-E, Surveyor No. CA-909-LS, Landscape No. N/A



CHICK-FIL-A
GARDENDALE (AL)
385 Fieldstown Rd
Gardendale, AL 35071

FSR#01687

BUILDING TYPE / SIZE: S04

REVISION SCHEDULE

Table with 3 columns: NO., DATE, DESCRIPTION

Table with 2 columns: CONSULTANT PROJECT #, PERMIT

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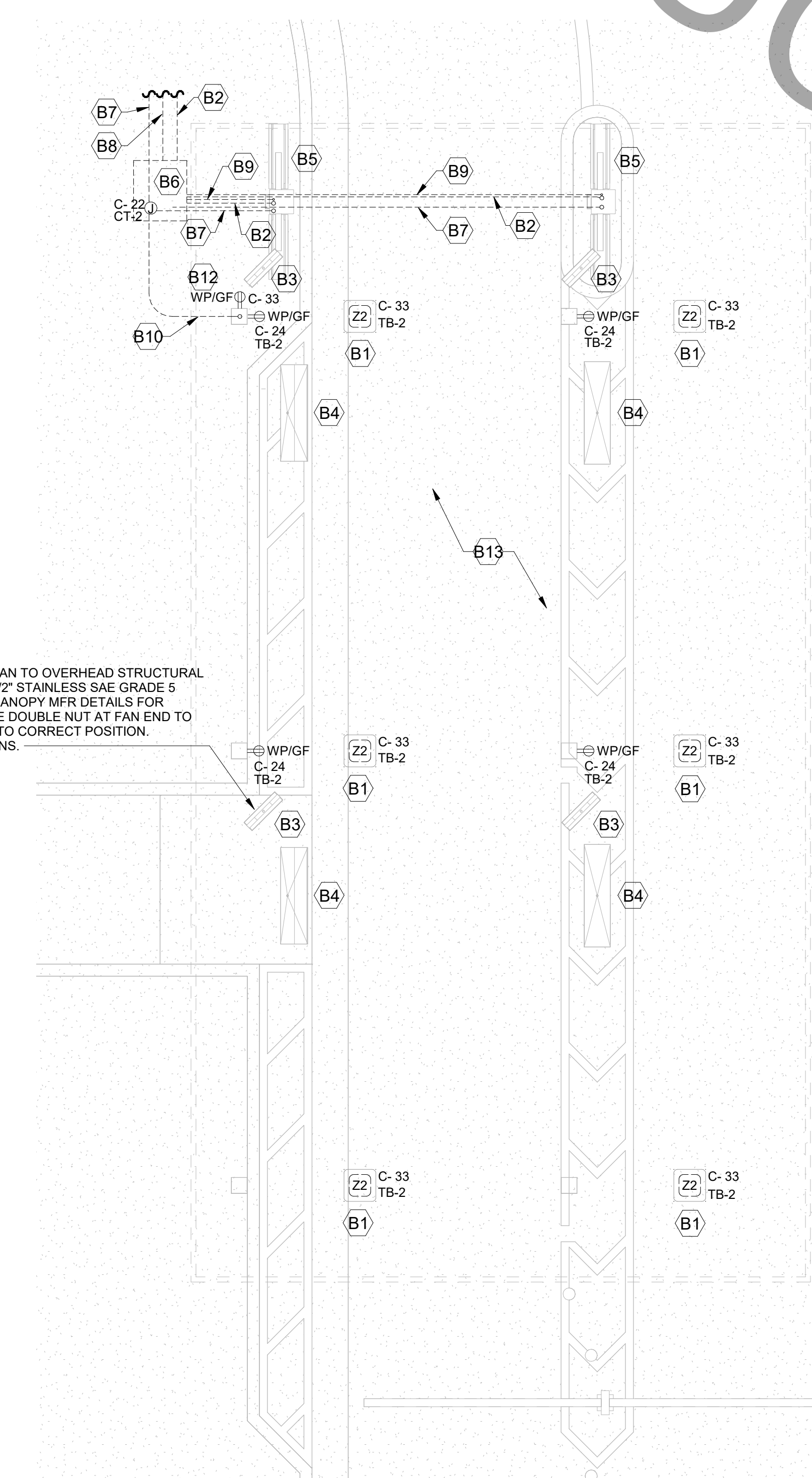
SHEET ELECTRICAL SPECIFICATIONS

SHEET NUMBER E-902

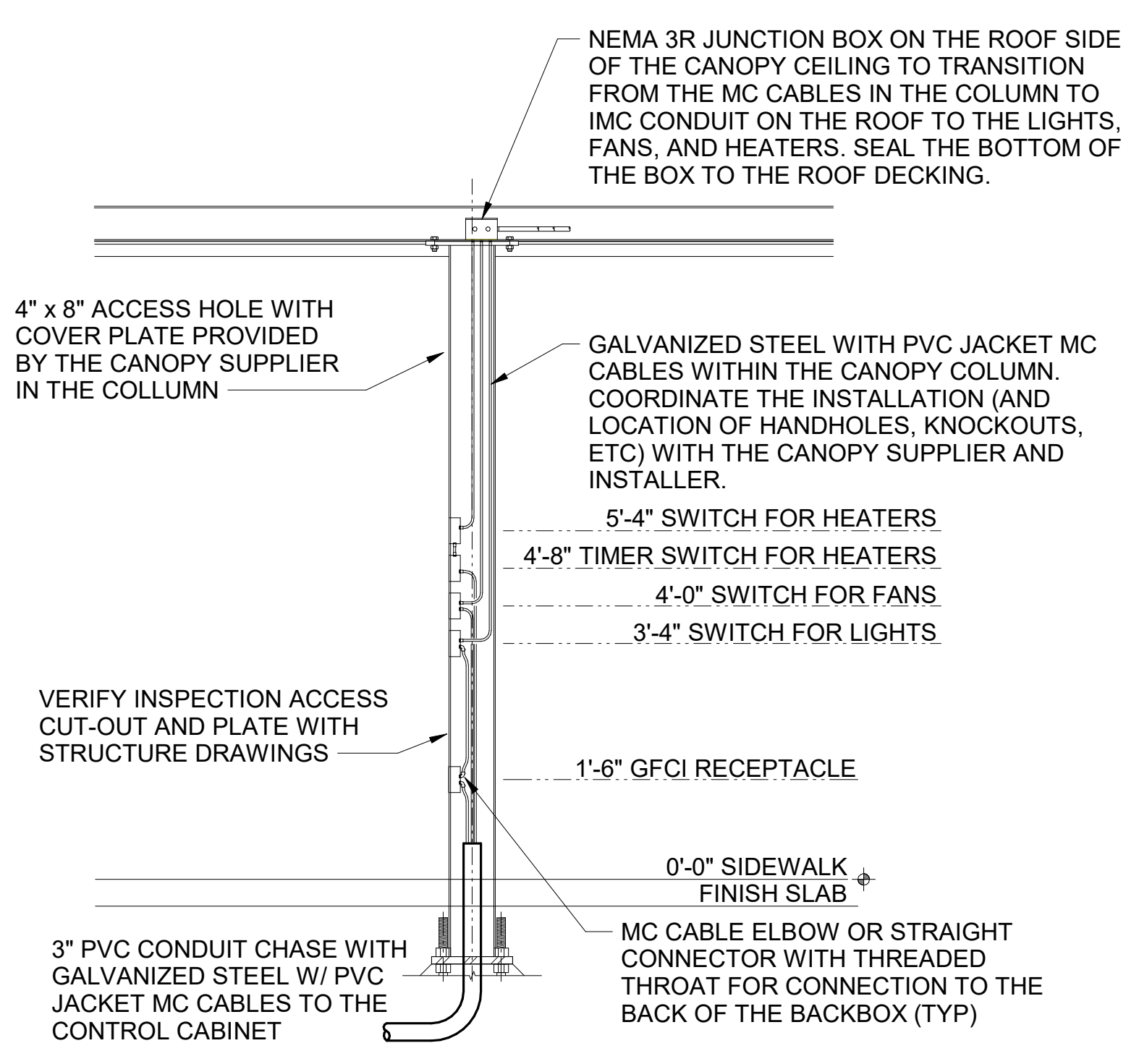
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4/5/2022 4:06:49 PM
50-S04-01687-E-902-ELECTRICAL SPECIFICATIONS

**ORDER CANOPY ELECTRICAL KEYNOTES:**

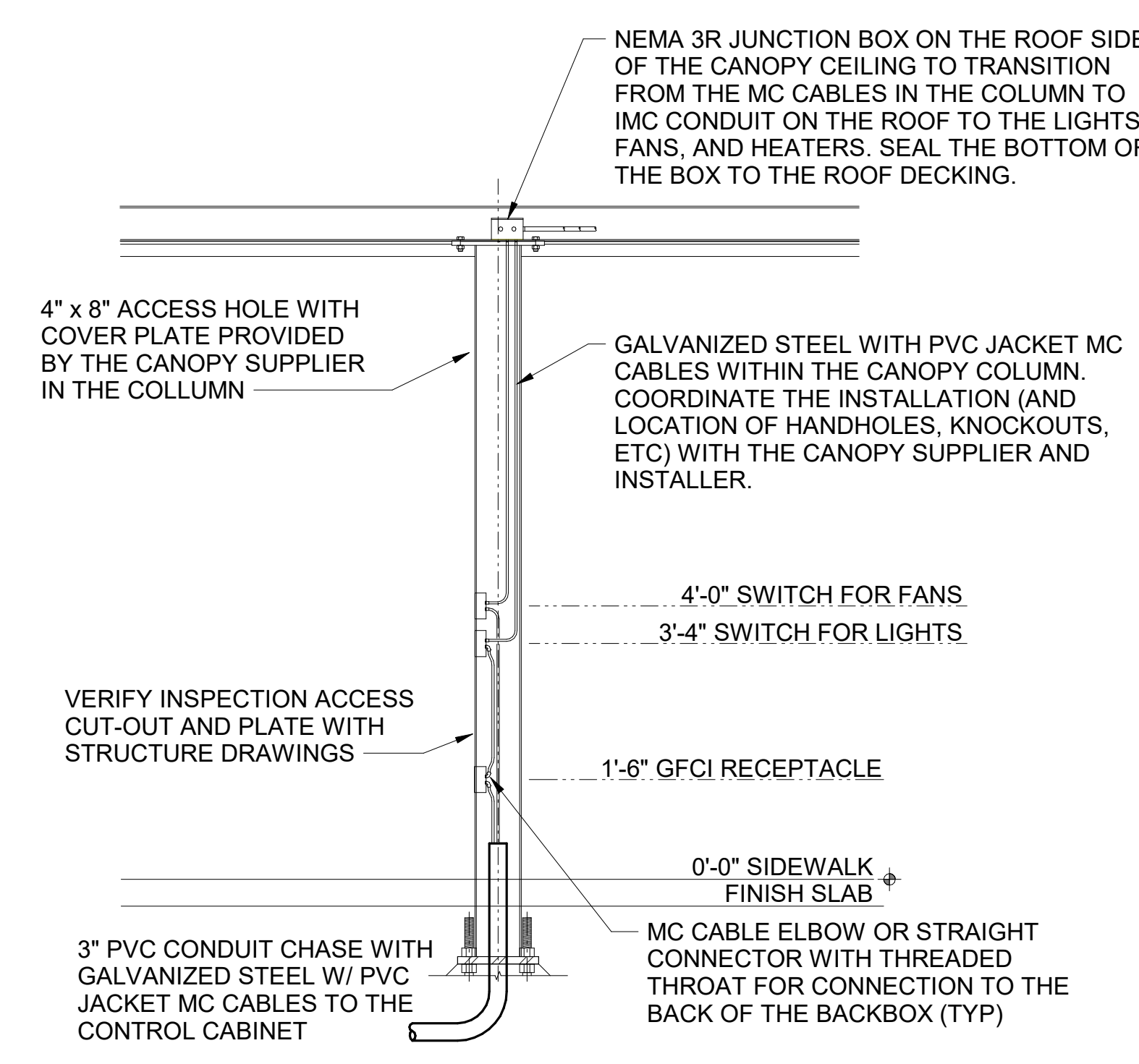
- B1 CEILING LIGHT PROVIDED BY CANOPY SUPPLIER AND INSTALLED BY E.C.
- B2 (2) 2" UNDERGROUND SCH40 PVC CONDUIT FOR MENU BOARD FIBER. PROVIDE PULL STRING. STUB UP INTO ACCESSIBLE CEILING SPACE AT DTT CLOSET OR OFFICE IF NO DTT CLOSET.
- B3 AIR CIRCULATING FAN (WITH INTEGRAL ON-OFF SWITCH) PROVIDED BY OTHERS. PROVIDE A DUPLEX OUTLET (WITH IN-USE COVER PLATE) FLUSH MOUNTED IN CUT-OUT AT TOP OF COLUMN FOR FAN'S PULG AND CORD. OUTLET TO BE ON DOWNSTREAM SIDE OF COLUMN AND AWAY FROM ONCOMING VEHICLES' VIEW.
- B4 INFRARED GAS HEATER WITH INTEGRAL ON-OFF SWITCH PROVIDED BY OTHERS.
- B5 MENUBOARD PROVIDED BY OTHERS.
- B6 PROVIDE IN-GROUND QUAZITE PULLBOX FOR MLOP DATA CABLES WITH POWER NEMA 3R JUNCTION BOX MOUNTED INSIDE THE PULLBOX.
- B7 2" UNDERGROUND SCH40 PVC CONDUIT WITH POWER CIRCUITS. SEE WIRING SCHEMATIC.
- B8 2" EMPTY UNDERGROUND SCH40 PVC CONDUIT FOR OWNER'S DETECTOR LOOP CABLES. EXTEND CONDUITS UP INTO ACCESSIBLE CEILING SPACE ABOVE THE HME BOX IN THE DRIVE THRU AREA.
- B9 1" EMPTY UNDERGROUND SCH40 PVC CONDUIT FOR OWNER'S AUDIO SYSTEM/DETECTOR LOOP CABLES.
- B10 INSTALL UNDERGROUND 3" SCH40 PVC CONDUIT UP INTO THE CANOPY COLUMN WITH TYPE MC CABLE (GALVANIZED STEEL WITH PVC JACKET) RUN WITHIN FOR THE 120V POWER FOR LIGHTS, 120 VOLT POWER FOR FANS, AND 24 VOLT POWER FOR THE INFRARED GAS HEATERS.
- B11 2" CONDUIT FROM DRIVE-THRU MENU BOARD TO DUMPSTER ENCLOSURE ROOM FOR WIFI AND CAMERA CABLES.
- B12 PROVIDE ONE DUPLEX GFCI (WITH IN-USE WP COVER PLATE), TWO 120V SINGLE-POLE SWITCHES (EACH WITH HUBBELL #RW51550 WP COVER PLATE), AND ONE DUPLEX SINGLE-POLE SWITCH (WITH HUBBELL #RW51470 WP COVER PLATE) MOUNTED ON THE COLUMN IN FLUSH MOUNTED METAL SINGLE GANG BOXES FOR LOCAL ON-OFF CONTROL OF THE FAN, TWO-STAGE HEATERS, AND CANOPY LIGHTS. SEE WIRING SCHEMATIC AND CANOPY COLUMN DETAILS FOR FURTHER INFORMATION. ALL SURFACE MOUNTED ITEMS AND COVER PLATES TO BE FIELD PAINTED MATTE BLACK.
- B13 ALL CONDUIT AND BOXES SHALL BE CONCEALED FROM NORMAL VIEW. UNDERGROUND, IN COLUMNS, OR ABOVE THE CANOPY (ON THE ROOF). MC CABLE (GALVANIZED STEEL WITH PVC JACKET) TO BE USED INSIDE THE COLUMNS, BUT MUST CONVERT BACK TO IMC ABOVE THE ROOF. REFER TO THE MECHANICAL DRAWINGS FOR LOCATIONS OF GAS PIPING ABOVE THE ROOF AND INSTALL CONDUIT ALONG THE SAME LOCATIONS USING THE SAME PIPE STAND FOR PIPING AND CONDUIT. ALL EXPOSED ELECTRICAL BOXES TO BE NEMA 3R CAST-METAL.



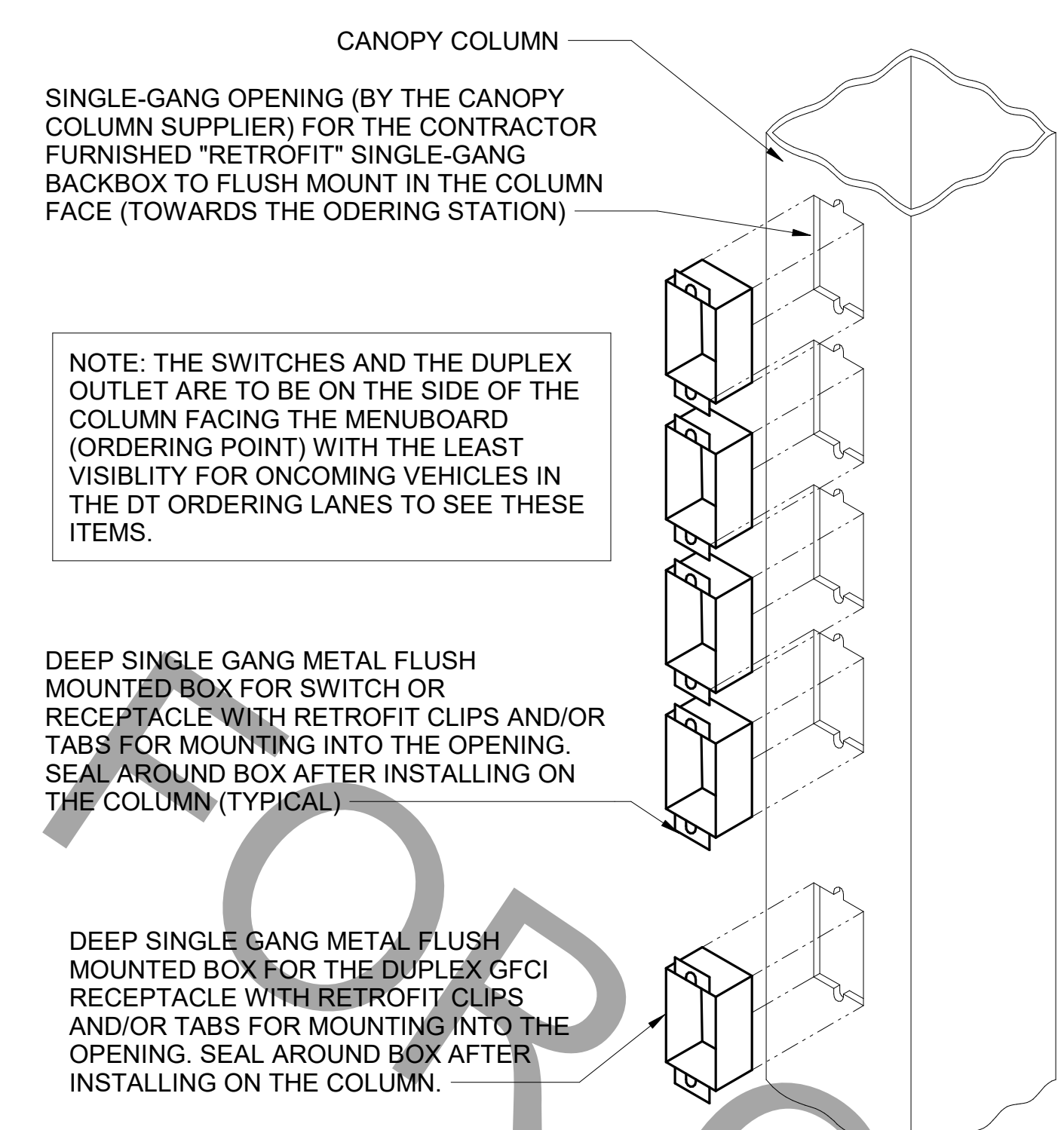
**B4 MLOP ORDER CANOPY POWER PLAN**  
1/4" = 1'-0"



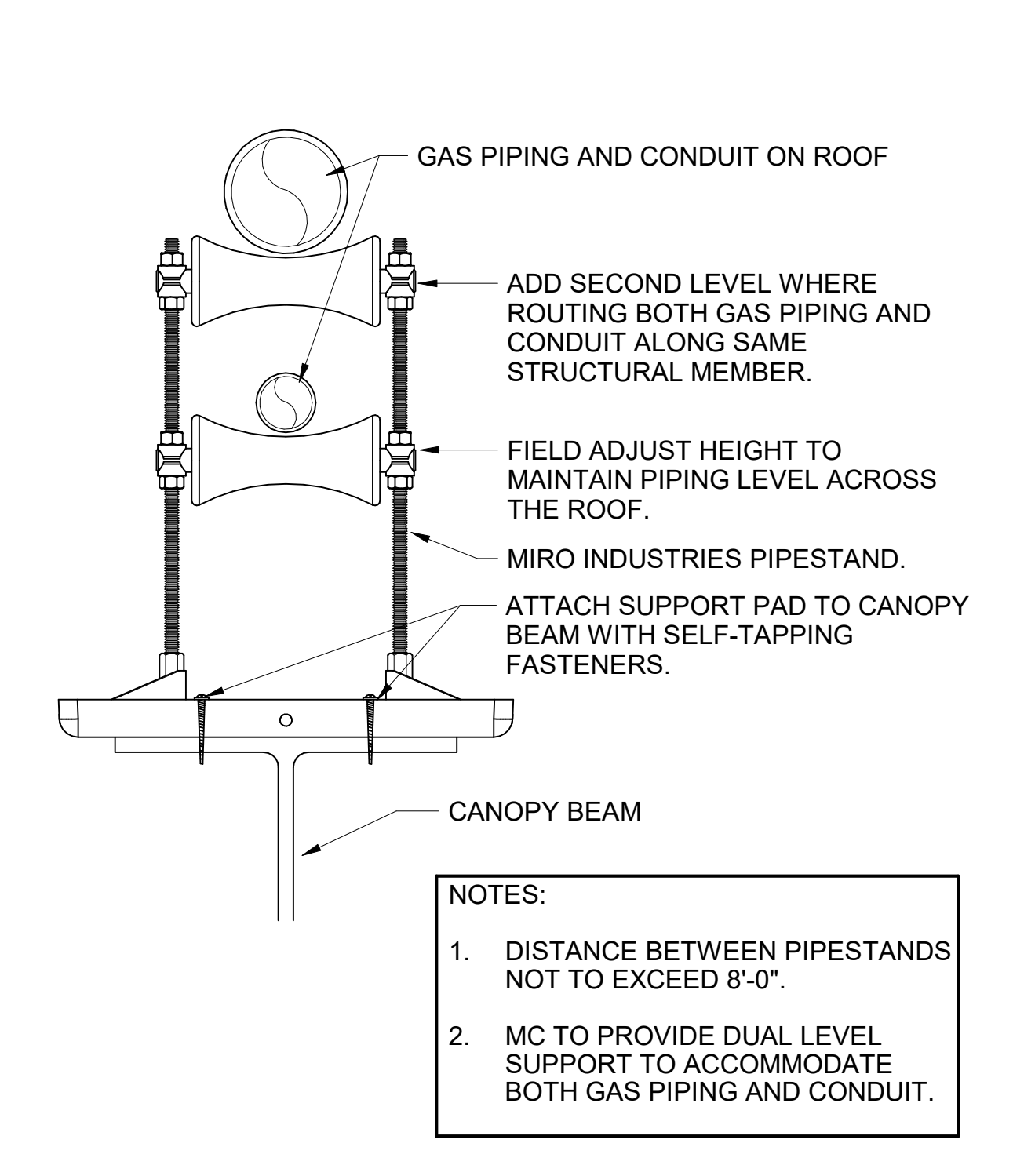
**D2 MLOP ORDER CANOPY COLUMN SECTION**  
N.T.S.



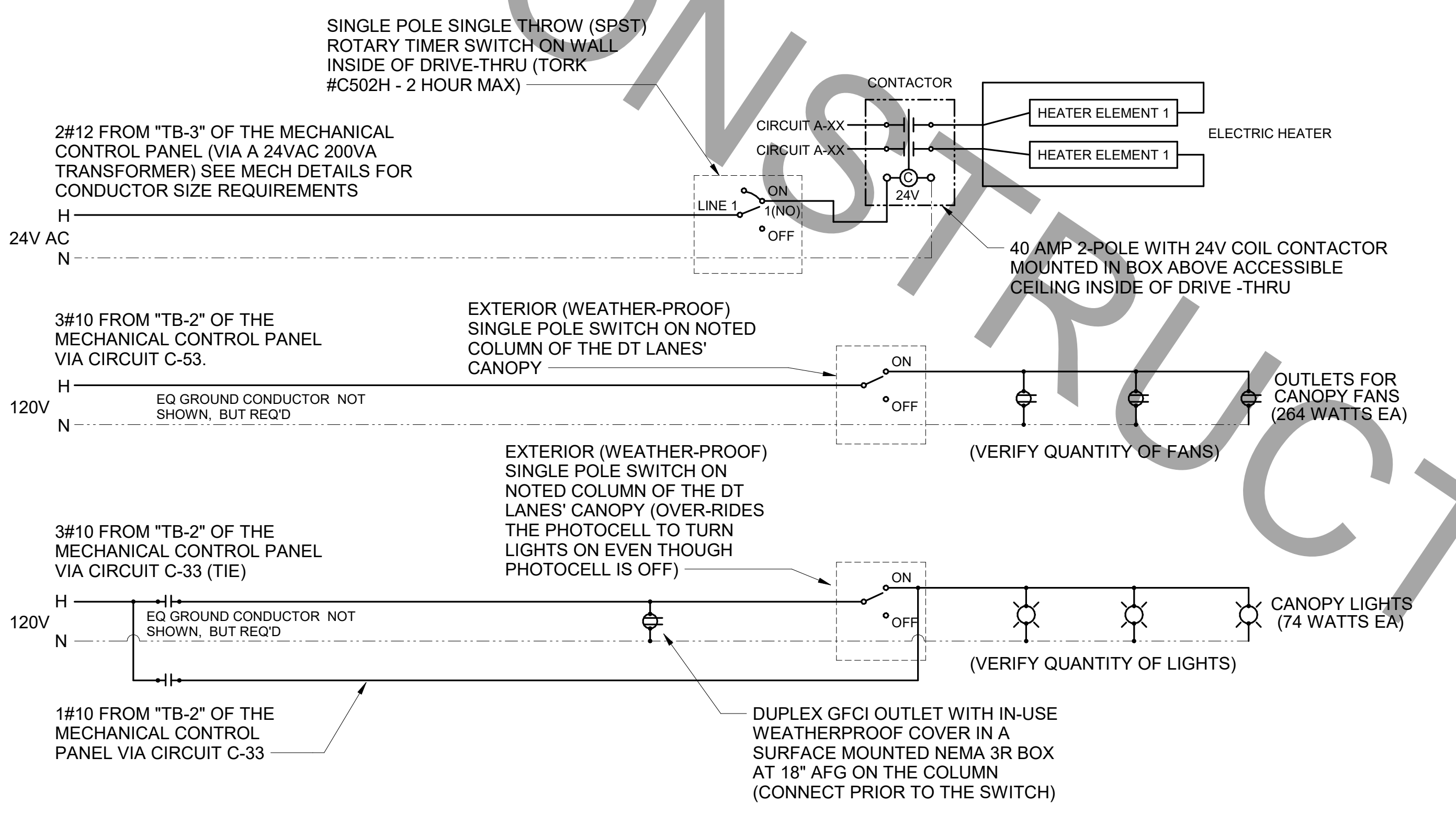
**D1 MEAL DELIVERY CANOPY COLUMN SECTION**  
N.T.S.



**C3 CANOPY COLUMN ISOMETRIC**  
N.T.S.



**C1 PIPING SUPPORT ON CANOPY**  
1/4" = 1'-0"



**A1 MEAL DELIVERY CANOPY POWER WIRING SCHEMATIC**  
N.T.S.



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30349-2998



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**A Full Service A & E Firm**  
Plans Prepared By:  
**CPH Design, Inc.**  
State of Alabama License:  
Engineer No. 2750-E  
Surveyor No. CA-909-LS  
Landscape No. N/A



**CHICK-FIL-A**  
**GARDENDALE (AL)**  
385 Fieldstown Rd  
Gardendale, AL 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04  
RELEASE: 2111

**REVISION SCHEDULE**

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT # C29153  
PRINTED FOR PERMIT  
DATE 04-11-22  
DRAWN BY KCL  
SHEET ORDER CANOPY PLAN AND DETAILS  
SHEET NUMBER

FOR CONSTRUCTION



*Chick-fil-A*

**Chick-fil-A**  
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A & E Firm**

Plans Prepared By:  
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State of Alabama License:  
Engineer No. 2750-E  
Surveyor No. CA-909-LS  
Landscape No. N/A



SEQUENCE OF OPERATION	
<b>STORE SWITCH IN "STORE OPEN" POSITION</b>	<b>STORE SWITCH IN "STORE CLOSED" POSITION</b>
A. INFRARED HEATERS ARE ENABLED.	A. INFRARED HEATERS ARE DISABLED.
B. COOLING FANS ARE ENABLED.	B. COOLING FANS ARE DISABLED.
C. LIGHTS ARE ENABLED.	C. LIGHTS ARE DISABLED.
D. MASTER AUTO/OFF SWITCH FOR IR HEATERS AND COOLING FANS. PROVIDE SINGLE POINT ON/OFF CONTROL.	

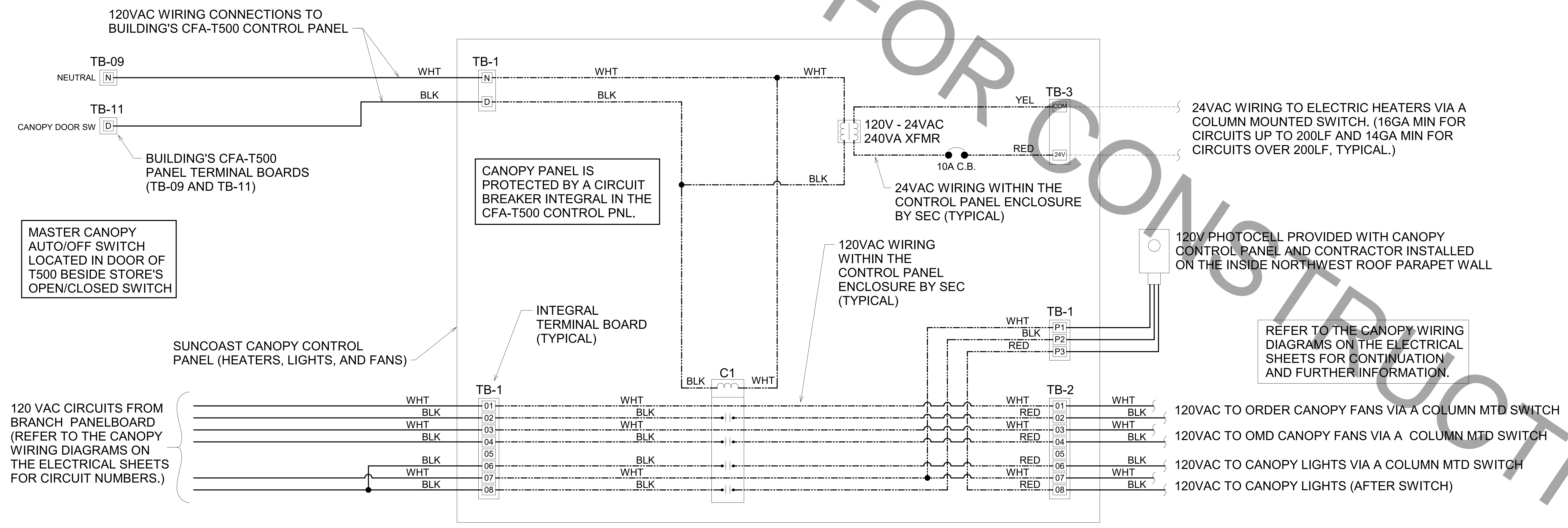
  

NOTES	
1.	CONTRACTOR SHALL PURCHASE CONTROL PANEL DIRECT FROM SUNCOAST ENVIRONMENTAL CONTROLS (727-544-6679).
2.	COORDINATE WITH GC TO ESTABLISH LOCATION TO MOUNT PANEL IN A CONDITIONED SPACE INSIDE THE BUILDING. SUGGESTED LOCATION IS SURFACE MOUNTED DIRECTLY ABOVE THE LOCATION OF THE CFA-T500 CONTROL PANEL.
3.	THE SUNCOAST ENVIRONMENTAL CONTROLS (SEC) IS TO BE SURFACE MOUNTED, UNLESS OTHERWISE REQUESTED TO SUNCOAST.
4.	PROVIDE LAMINATED LEGEND SHOWING NAMED LOCATIONS OF FANS AND IR HEATERS. MOUNT LEGEND AT PANEL.

LEGEND	
SEC	SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF CONTROL PANELS)
---	LOW VOLTAGE BY CONTRACTOR
---	LOW VOLTAGE WIRING BY SUNCOAST
—	120 VOLT BY CONTRACTOR
—	120 VOLT BY SUNCOAST

CIRCULATING FAN SCHEDULE					
MARK	CFM	RPM	HP	MODEL	MANUFACTURER
CF	5,750	1,625	1/8	U18TE-HD	TPI
REMARKS	1. ALUMINUM PADDLE WITH STEEL HUB/SPIDER PROPELLER. 2. 360° ROTATING HEAD HORIZONTALLY AND VERTICALLY. 3. OSHA COMPLIANT DOUBLE LOCKING, COATED STEEL WIRE GUARD. 4. 3-SPEED, TOTALLY ENCLOSED, PERMANENTLY LUBRICATED BALL BEARING MOTOR. 5. FACTORY PRE-WIRED POWER CORD. 6. PROVIDE FACTORY WALL MOUNTING BRACKET. SEE FAN MOUNTING DETAIL ON CANOPY SHOP DRAWINGS FOR TYPICAL INSTALLATION INSTRUCTIONS. 7. PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. MOUNT TO UNDERSIDE OF CANOPY OR EXISTING OVERHANG, FACING DOWNWARD, 12" LATERALLY FROM THE FAN LOCATION. 8. REMOVE PULL CHAIN EXTENSION AT ON/OFF SWITCH IN THE FIELD. 9. FACTORY CERTIFIED FOR OUTDOOR INSTALLATION.				
TPI FAN PACKAGE - THE CONTRACTOR IS REQUIRED TO PURCHASE THE FAN PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. FANS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.					

SUNCOAST RELAYS CONTACTORS SHOWN IN DE-ENERGIZED "STORE UNOCCUPIED" CONDITION. RELAYS AND CONTACTORS FACTORY INSTALLED BY SEC IN CONTROL PANEL. RELAYS AND CONTACTORS ENERGIZED VIA "STORE OPEN/CLOSED" SWITCH.



**A1** SUNCOAST CANOPY CONTROL PANEL WIRING DIAGRAM  
NO SCALE

**CHICK-FIL-A**  
GARDENDALE (AL)  
385 Fieldstown Rd  
Gardendale, AL 35071

**FSR#01687**

BUILDING TYPE / SIZE: S04  
RELEASE: 21.11

REVISION SCHEDULE		
NO.	DATE	DESCRIPTION

CONSULTANT PROJECT #	C29153
PRINTED FOR	PERMIT
DATE	04-11-22
DRAWN BY	KCL
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SHEET	CANOPY CONTROL PANEL WIRING DIAGRAM
SHEET NUMBER	E-305

BIM 360/AL\_01687\_Gardendale FSU\_2021.03\_REI01687\_Gardendale\_Remodel\_ELE.rvt  
4/5/2022 4:05:39 PM  
50-504-01687-E-305-CANOPY CONTROL PANEL WIRING DIAGRAM

**Branch Panel: A - Relocated**

LOCATION: SUPPLY FROM: MDP  
MOUNTING: SURFACE  
ENCLOSURE: NEMA 3R

VOLTS: 120/208 Wye  
PHASES: 3  
WIRES: 4

A.I.C. SERIES RATING: 65K/10K  
MAINS TYPE: MLO  
MAINS RATING: 250 A  
MCB RATING:

NT	CKT	LOAD DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	LOAD DESCRIPTION	CKT	NT		
H	1	TELEPHONE DT VIDEO (150)	20 A	1	0.100	0.960		1	20 A	MIXER (600R)	2	H		
H	3	OFFICE GEN OUTLETS (CO2, 660)	20 A	1	0.720	1.650		1	20 A	TEA BREWER (305)	4	H		
H	5	OFF GEN OUTLETS, PRINTER, MUSIC	20 A	1			0.720	1.650	1	20 A	TEA BREWER (305)	6	H	
H	7	DRINK TOWER (635/W)	20 A	1	1.200	1.462			1	20 A	WATER HEATER/PUMP	8	H	
H	9	GENERAL OUTLETS	20 A	1		0.360	1.647		1	20 A	PANEL-POS THRU PIB	10	M	
H	11	GENERAL OUTLETS	20 A	1			0.050	1.180	1	20 A	GENERAL OUTLETS	12	H	
H	13	U.C. REFRIG (420L)	20 A	1	0.564	1.587			1	25 A	HOOD EXHAUST FAN (EF-2)	14	A	
H	15	U.C. REFRIG (420A)	20 A	1		0.564	0.360		1	20 A	SECURITY SYSTEM	16	L	
H	17	U.C. REFRIG (420)	20 A	1			0.564	1.244	3	15 A	COOLER CONDENSER/ EVAP COIL (449)	18	LO	
I	19	SINGLE SANDWICH SLIDE (563S)	20 A	1	0.548	1.244						20		
I	21	U.C. REFRIG (421)	20 A	1		0.756	1.140				22			
I	23	SANDWICH SLIDE (663D)	20 A	1			1.090	0.500	1	20 A	FREEZER HEAT TAPE	24	F	
I	25	CARBONATOR (320)	20 A	1	0.744	1.752				3	35 A	FREEZER CONDENSER/ EVAP COIL (410)	26	LO
I	27	CARBONATOR (320)	20 A	1		0.744	1.908				28			
I	29	CARBONATOR (320)	20 A	1			0.744	1.908			30			
I	31	CARBONATOR (320)	20 A	1	0.744	1.200			1	20 A	DRINK TOWER (315W)	32	H	
I	33	REFRIG EQUIPMENT STAND (422T)	20 A	1		0.804	1.200			1	20 A	DRINK TOWER (315W)	34	H
I	35	DOUBLE REFRIG WORK TABLE (432TR)	20 A	1			0.756	1.200	1	20 A	DRINK TOWER (315W)	36	H	
I	37	DOUBLE REFRIG WORK TABLE (432)	20 A	1	0.180	2.730				3	45 A	ROOFTOP UNIT (A/C-5)	38	H
I	39	SPARE	20 A	1		0.564	2.730				40			
A	41	HOOD EXHAUST FAN (EF-1)	25 A	1			1.587	2.730			42			
Total Load:					15.02 kVA	15.15 kVA	1.887 kVA				14.92 kVA			
Total Amps:					125.2 A	126.3 A	124.4 A				97.7 A			

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
HVAC	17386 VA	100.00%	17386 VA	
KITCHEN EQUIPMENT	13674 VA	65.00%	8885 VA	Total Conn. Load: 45.1 kVA
KITCHEN REFRIG EQUIPMENT	4272 VA	65.00%	2776 VA	Total Est. Demand: 39.1 kVA
MISCELLANEOUS	1421 VA	100.00%	1421 VA	Total Conn.: 125.1 A
Motor	4686 VA	108.47%	5083 VA	Total Est. Demand: 108.5 A
RECEPTACLES	3346 VA	100.00%	3346 VA	

**Branch Panel: C - Relocated**

LOCATION: SERVICE 12  
SUPPLY FROM: MDP  
MOUNTING: SURFACE  
ENCLOSURE: NEMA 3R

VOLTS: 120/208 Wye  
PHASES: 3  
WIRES: 4

A.I.C. SERIES RATING: 65K/10K  
MAINS TYPE: MLO  
MAINS RATING: 400 A  
MCB RATING:

NT	CKT	LOAD DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	LOAD DESCRIPTION	CKT	NT		
J	1	KITCHEN LTG	20 A	1	0.772	0.325		1	20 A	SCIENCE LIGHTING	2	C		
J	3	KITCHEN LTG	20 A	1		0.907	0.225		1	20 A	SCIENCE LIGHTING	4	C	
J	5	RESTROOM LIGHTING	20 A	1			0.197	1.500	1	20 A	BUILDING SIGNAGE	6	B	
J	7	PENDANT LIGHTING	20 A	1	0.045	5.550			3	70 A	ROOFTOP UNIT (A/C-3)	8		
J	9	SERVE AREA LTG	20 A	1		0.110	5.550				10			
J	11	DINING LIGHTING	20 A	1			0.689	5.550			12			
J	13	DINING LIGHTING	20 A	1	0.348	4.060			3	50 A	ROOFTOP UNIT (A/C-4)	14		
J	15	SPARE	20 A	1		0.000	4.060				16			
H	17	MENUBOARDS (671)	20 A	1			1.260	4.060			18			
B	19	DIRECTIONAL SIGNS	20 A	1	0.500	0.792			1	20 A	DMD CANOPY FANS	20	LJ	
E	21	SPARE	20 A	1		0.000	0.780			1	20 A	DRIVE THRU ORDERING	22	JLO
E	23	PARKING LOT LTG	20 A	1			0.489	1.056	1	20 A	MLOP CANOPY FANS	24	LJ	
E	25	PARKING LOT LTG	20 A	1	0.326	4.600			3	60 A	ROOFTOP UNIT 12.5 TON (A/C-2)	26		
I	27	SPARE	20 A	1		0.000	4.600				28			
D	29	SECURITY/BLD POLE LTG	20 A	1		0.422	4.600				30			
I	31	SPARE	20 A	1		0.000	1.587				32	A		
J	33	MLOP & DM CANOPY LTG	20 A	1		1.068	0.653		1	20 A	HOOD EXHAUST FAN (EF-4)	34	A	
LO	35	FRZ/COOLER LTG (410/449)	20 A	1			1.000	0.960	1	20 A	UNHATED AIR DOOR (AD-2)	36	LO	
B	37	MAIN ID SIGN	20 A	1	0.980	0.120			1	20 A	SPARE	38		
B	39	MAIN ID SIGN	20 A	1		0.800	2.185		1	20 A	OPTIONAL COMPRESSOR	40		
B	41	MAIN ID SIGN	20 A	1			0.800	0.000		--	(1 OF 2 LOCATIONS)	42		
Total Load:					19.95 kVA	20.89 kVA	22.54 kVA				189.0 A			
Total Amps:					166.3 A	175.3 A	189.0 A							

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
HVAC	42630 VA	100.00%	42630 VA	
KITCHEN EQUIPMENT	120 VA	65.00%	78 VA	Total Conn. Load: 63.4 kVA
LIGHTING	12800 VA	125.00%	16000 VA	Total Est. Demand: 67.5 kVA
Motor	5137 VA	107.72%	5534 VA	Total Conn.: 175.9 A
RECEPTACLES	540 VA	100.00%	540 VA	Total Est. Demand: 167.3 A
SINGLE PHASE MOTOR	2185 VA	125.00%	2731 VA	

**Branch Panel: E - New**

LOCATION: SERVICE 12  
SUPPLY FROM: MDP  
MOUNTING: SURFACE  
ENCLOSURE: NEMA 1

VOLTS: 120/208 Wye  
PHASES: 3  
WIRES: 4

A.I.C. SERIES RATING: 65K/10K  
MAINS TYPE: MLO  
MAINS RATING: 250 A  
MCB RATING:

NT	CKT	LOAD DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	LOAD DESCRIPTION	CKT	NT	
I	1	EGG STATION (603T)	20 A	2	1.300	2.642		3	30 A	VECTOR OVEN (505VLT)	2	I	
I	3	EGG STATION (603T)	20 A	2	1.300	2.642		3	30 A	VECTOR OVEN (505VLT)	4	I	
I	5	EGG STATION (603T)	20 A	2	1.300	2.642		3	30 A	VECTOR OVEN (505VLT)	6	I	
I	7	EGG STATION (603T)	20 A	2	1.300	2.642		3	30 A	VECTOR OVEN (505VLT)	8	I	
I	9	SPARE/FUTURE EGG STATION (503T)	20 A	2	1.300	2.642		3	30 A	VECTOR OVEN (505VLT)	10	I	
I	11	TRASH COMPACTOR (TC)	20 A	1	1.800	0.060			3	20 A	SPARE/FUTURE VECTOR OVEN	14	I
I	15	TRASH COMPACTOR (TC)	20 A	1	1.800	0.060			3	20 A	SPARE/FUTURE VECTOR OVEN	16	I
I	17	TRASH COMPACTOR (TC)	20 A	1	1.800	0.060			3	20 A	SPARE/FUTURE VECTOR OVEN	18	I
I	19	SINGLE REACH-IN FREEZER (400L)	20 A	1	0.564	0.060			3	20 A	SPARE/FUTURE VECTOR OVEN	20	I
I	21	SINGLE UPRIGHT REFRIG (442WCLTR)	20 A	1		0.840	0.060				22		
I	23	DROP CORD OUTLET	20 A	1			0.180	0.060			24		
I	25	DROP CORD OUTLET	20 A	1	0.180	0.180			1	20 A	DROP CORD OUTLET (184T)	26	I
I	27	DROP CORD OUTLET (184R)	20 A	1		0.180	0.180		1	20 A	DROP CORD OUTLET (SPARE)	28	I
I	29	DROP CORD OUTLET	20 A	1			0.180	0.180	1	20 A	DROP CORD OUTLET	30	I
I	31	DROP CORD OUTLET	20 A	1	0.180	0.212			1	20 A	DROP CORD OUTLET	32	I
I	33	DROP CORD OUTLET	20 A	1		0.212	0.756		1	20 A	DROP CORD OUTLET (431T)	34	I
I	35	DROP CORD OUTLET (441)	20 A	1		0.120	0.212	1	20 A	DROP CORD OUTLET	36	I	
I	37	DROP CORD OUTLET	20 A	1	0.180	2.640			3	30 A	REHEAT/MAKING (592)	38	I
I	39	DROP CORD OUTLET	20 A	1		0.180	2.640				40		
I	41	DROP CORD OUTLET (SPARE)	20 A	1			1.960	2.640			42		
H	43	GENERAL OUTLET	20 A	1	0.360	0.360			1	20 A	GENERAL OUTLET	44	H
H	45	GENERAL OUTLET	20 A	1		0.360	0.360		1	20 A	GENERAL OUTLET	46	H
I	47	SPACE	--	--			0.000	0.000	--	--	SPACE	48	
I	49	SPACE	--	--			0.000	0.000	--	--	SPACE	50	
I	51	SPACE	--	--			0.000	0.000	--	--	SPACE	52	
I	53	SPACE	--	--			0.000	0.000	--	--	SPACE	54	
Total Load:					14.66 kVA	15.51 kVA	15.28 kVA				128.1 A		
Total Amps:					122.2 A	130.1 A	128.1 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
KITCHEN EQUIPMENT	31572 VA	65.00%	20522 VA	Total Conn. Load: 45.4 kVA
KITCHEN REFRIG EQUIPMENT	4240 VA	65.00%	2756 VA	Total Est. Demand: 32.9 kVA
LIGHTING	66 VA	125.00%	120 VA	Total Conn.: 126.2 A
RECEPTACLES	9540 VA	100.00%	9540 VA	Total Est. Demand: 91.4 A

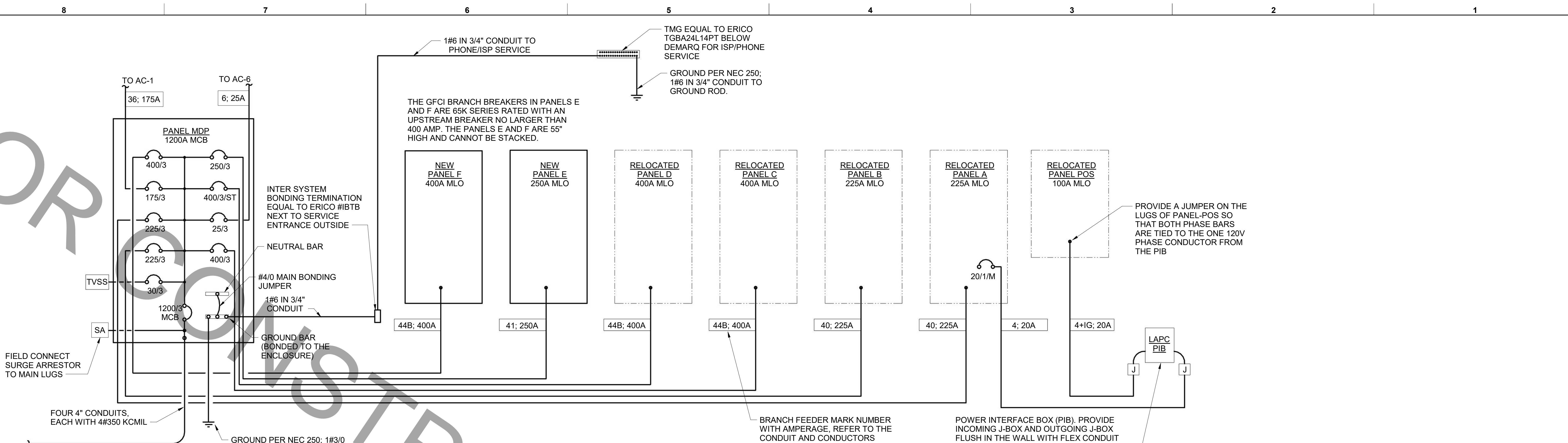
**Branch Panel: B - Relocated**

LOCATION: SERVICE 12  
SUPPLY FROM: MDP  
MOUNTING: SURFACE  
ENCLOSURE: NEMA 3R

VOLTS: 120/208 Wye  
PHASES: 3  
WIRES: 4

A.I.C. SERIES RATING: 65K/10K  
MAINS TYPE: MLO  
MAINS RATING: 250 A  
MCB RATING:

NT	CKT	LOAD DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	LOAD DESCRIPTION	CKT	NT	
H	1	GENERAL OUTLET	20 A	1	0.540	0.000			1	20 A	REFUSE ENCLOSURE	2	I
H	3	GENERAL OUTLET	20 A	1		0.360	2.000		2	25 A	COFFEE MAKER (308)	4	I
I	5	MILKSHAKE DISPENSER (300A)	20 A	1			0.480	2.000	--	--	6	I	
I	7	INTERIOR ICE MAKER (380,380A)	20 A	1	0.610	0.120			1	20 A	ICE BATH BREADING TABLE (440CTR)	8	I
I	9	ROOF MOUNTED ICE MAKER (380C)	25 A	3		1.704	0.120		1	20 A	ICE BATH BREADING TABLE (440CTR)	10	I
I	11	ROOF MOUNTED ICE MAKER (380C)	25 A	3		1.704	1.128		1	20 A	SINGLE REACH-IN FREEZER (400LR)	12	I
I	13	ROOF MOUNTED ICE MAKER (380C)	25 A	3									

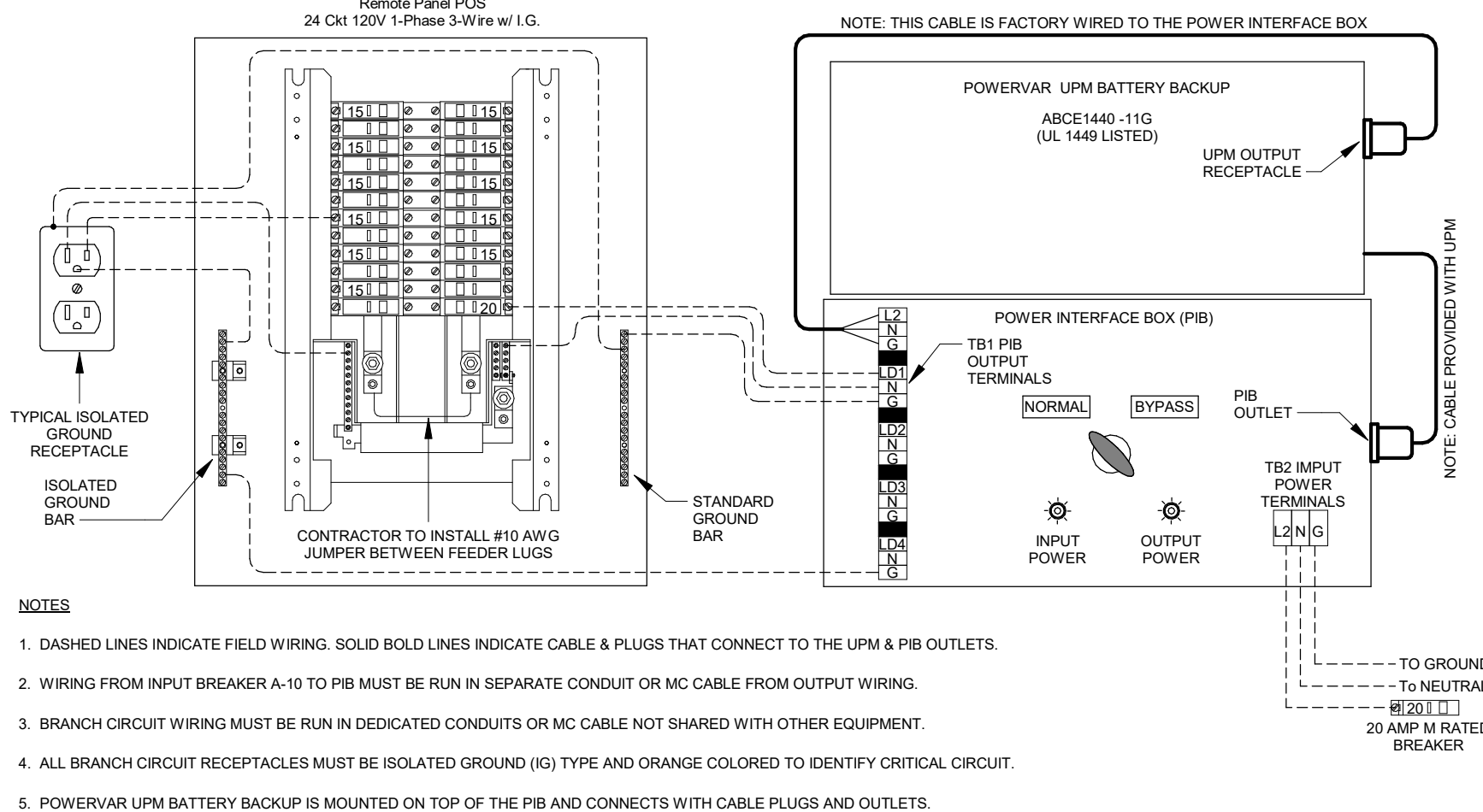


**SINGLE-LINE DIAGRAM NOTES**

- 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.
- GROUND ALL EQUIPMENT AND SERVICES IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, LOCAL APPLICABLE CODES, AND ALSO AS INDICATED ON DRAWINGS.
- MAKE NECESSARY INSPECTIONS OF EXISTING SITE AND SERVICE LOCATIONS AS REQUIRED FOR THIS WORK AND MAKE ALLOWANCE FOR EXISTING CONDITIONS BEFORE SUBMITTING BID. VERIFY WORK REQUIRED WITH POWER COMPANY AND TELEPHONE COMPANY.
- CUT AND PATCH THE CONSTRUCTION WORK AS REQUIRED FOR PROPER INSTALLATION OF THE ELECTRICAL WORK. ALL PATCHING SHALL MATCH THE SURROUNDING WORK TO THE SATISFACTION OF THE ARCHITECT. ALL CONDUIT SHALL BE INSTALLED CONCEALED UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. COORDINATE SAW CUTTING WITH LANDLORD'S OR OWNER'S REPRESENTATIVE.
- WIRE AND CABLE:
  - CONDUCTORS SHALL BE COPPER, #12 AWG, MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE.
  - CONDUCTOR #10 AWG AND SMALLER SHALL BE SOLID AND #8 AWG AND LARGER SHALL BE STRANDED. INSULATION SHALL BE 600 VOLT, THHN/THWN.
- PROVIDE ENGRAVED LAMINATED PHENOLIC BLOCK-ON-WHITE (UNLESS NOTED OTHERWISE) NAMEPLATES SECURED TO EQUIPMENT WITH ADHESIVE AND SCREWS FOR PANELBOARDS, RELAY CABINETS, TRANSFORMERS, DISTRIBUTION BOARDS, AND MAIN PANELBOARD - IDENTIFYING EQUIPMENT DESIGNATION (CORRESPONDING WITH DESIGNATION USED ON DRAWINGS) AND EQUIPMENT VOLTAGE. LETTERING SHALL BE 1/4" HIGH. PROVIDE LABELS FOR CIRCUIT BREAKERS, FUSIBLE SWITCHES AND STARTERS IN PANELBOARDS AND DISTRIBUTION BOARDS FOR EACH DEVICE IDENTIFYING EQUIPMENT CONTROLLED. LETTERING SHALL BE 1/8" HIGH.
- ALL DEVICES SHALL HAVE AN INTERRUPTING CAPACITY NOT LESS THAN THE POWER COMPANY AVAILABLE FAULT CURRENT, OR AS INDICATED ON THE DRAWINGS.
- 120/208 VOLT BRANCH CIRCUIT PANELBOARD BREAKERS SHALL HAVE A MINIMUM U.L. SERIES RATING OF 65 KAIC WITH UP-STREAM FEEDER BREAKERS AS NOTED.
- AVAILABLE SPACE FOR MAIN PANELBOARD IS LIMITED. PANELBOARD MUST FIT IN ALLOCATED SPACE. COORDINATE WITH CONSTRUCTION AS REQUIRED.
- ALL WIRING SHALL BE IN CONDUIT, E.M.T OR RIGID. FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTIONS AND WITH GREEN EQUIPMENT GROUNDING CONDUCTORS.
- MOUNT SINGLE CIRCUIT SURGE PROTECTION DEVICE (SQUARE D) SDSA1175T TO FACEPLATE MOUNTED ON JUNCTION BOX DIRECTLY ABOVE PANELBOARD SERVING LOAD. REF PANEL SCHEDULES FOR SURGE PROTECTION CIRCUITS.

**SWITCHGEAR AND CONTROL EQUIPMENT NOTES**

- PURCHASE PANELBOARDS, SURGE ARRESTOR, AND TVSS FROM ONE OF THE TWO NATIONAL ACCOUNTS VENDORS (SEE SHEET E-902 SECTION C16440, PANELBOARDS) PROVIDING SQUARE-D EQUIPMENT. NO SUBSTITUTIONS ALLOWED.
- PURCHASE CONTROL PANEL 'CFA-T500' 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.
- CONTRACTOR SHALL PROVIDE PANEL FEEDERS A, B, C, D, AND POS, BRANCH CIRCUIT CONDUIT AND WIRE, AND INSTALL ALL EQUIPMENT AS REQUIRED.
- ALL BREAKERS AND PANELS SHALL BE SQUARE-D.
- TVSS AND SURGE ARRESTOR UNITS SHALL BE MOUNTED DIRECTLY ADJACENT TO THE SIDE OF THE MAIN DISTRIBUTION PANEL IN NEMA 3R ENCLOSURES. CLOSE NIPLLE THE UNITS TO THE SIDE OF THE PANEL. PROVIDE CONNECTION OF TVSS UNIT TO BREAKER IN PANEL. CONNECT SURGE ARRESTOR TO MAIN INCOMING LUGS OF THE PANEL. CONNECT USING MINIMUM LENGTH OF WIRE WITHOUT SHARP BENDS IN THE WIRE AND SHALL NOT BE LENGTHENED FROM WIRE LENGTH PROVIDED WITH THE TVSS OR SURGE SUPPRESSOR DEVICE.
- PROVIDE ARC FLASH MITIGATION AND DOCUMENTATION FOR PANEL MDP PER NEC 240.87.
- CONTRACTOR SHALL APPLY FOR SERVICE FROM ELECTRIC UTILITY. CONTRACTOR SHALL OBTAIN THE AVAILABLE FAULT CURRENT FROM UTILITY AND CALCULATE THE 3-PHASE FAULT CURRENT AT EACH PANEL USING COOPER BUSSMAN BULLETIN EDP-1, "A SIMPLE APPROACH TO SHORT CIRCUIT CALCULATIONS" (2004) OR "SPD ELECTRICAL PROTECTION HANDBOOK" (2017), SECTION 4. PROVIDE PANELS WITH INTERRUPTING CAPACITIES AT LEAST 10% ABOVE CALCULATED VALUES.



**B1) CONDUIT AND CONDUCTORS SCHEDULE**

Mark No.	OCP Device (Amp/Poles)	Conductors Total Amps 60d C/75d C	Conductors		Raceway Size (Nominal Inches)		With IG								
			Phase & Neutral Qty	Min Eq Grd Qty/Set	EMT	IMC	RIGID	PVC	EMT	IMC	PVC				
1	20/1	20	2	12	THHN	1	12	One	0.75	0.75	0.75	0.75	0.75	0.75	
2	20/2	20	3	12	THHN	1	12	One	0.75	0.75	0.75	0.75	0.75	0.75	
3	20/3	20	4	12	THHN	1	12	One	0.75	0.75	0.75	0.75	0.75	0.75	
4	25/1	30	2	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
5	25/2	30	3	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
6	25/3	30	4	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
7	30/1	30	2	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
8	30/2	30	3	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
9	30/3	30	4	10	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
10	40/1	40	2	8	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
11	40/2	40	3	8	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
12	40/3	40	4	8	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	1.00	
13	45/3	55	4	6	THHN	1	10	One	1.00	1.00	1.00	1.00	1.00	1.00	
14	50/1	55	2	6	THHN	1	10	One	0.75	0.75	0.75	0.75	0.75	0.75	
15	50/2	55	3	6	THHN	1	10	One	0.75	0.75	0.75	0.75	1.00	1.00	
16	50/3	55	4	6	THHN	1	10	One	1.00	1.00	1.00	1.00	1.00	1.00	
17	60/1	70	2	4	THW	1	8	One	1.00	1.00	1.00	1.00	1.00	1.25	
18	60/2	70	3	4	THW	1	8	One	1.25	1.00	1.25	1.25	1.25	1.25	
19	60/3	70	4	4	THW	1	8	One	1.25	1.25	1.25	1.25	1.25	1.25	
20	70/1	70	2	4	THW	1	8	One	1.00	1.00	1.00	1.00	1.25	1.00	
21	70/2	70	3	4	THW	1	8	One	1.25	1.00	1.25	1.25	1.25	1.25	
22	70/3	70	4	4	THW	1	8	One	1.25	1.25	1.25	1.25	1.25	1.25	
23	80/2	85	3	3	THW	1	8	One	1.25	1.25	1.25	1.25	1.25	1.25	
24	80/3	85	4	3	THW	1	8	One	1.25	1.25	1.25	1.25	1.50	1.25	
25	90/2	95	3	2	THW	1	8	One	1.25	1.25	1.25	1.25	1.50	1.50	
26	90/3	95	4	2	THW	1	8	One	1.50	1.25	1.50	1.50	1.50	1.50	
27	100/2	110	3	1	THW	1	6	One	1.50	1.50	1.50	1.50	2.00	2.00	
28	100/3	110	4	1	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00	
29	110/2	-	150	3	1/0	THW	1	6	One	1.25	1.25	1.25	1.25	1.50	1.25
30	110/3	-	150	4	1/0	THW	1	6	One	1.50	1.25	1.50	1.50	1.50	1.50
31	125/2	-	150	3	1/0	THW	1	6	One	1.50	1.50	1.50	1.50	2.00	2.00
32	125/3	-	150	4	1/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00
33	150/2	-	150	3	1/0	THW	1	6	One	2.00	1.50	2.00	2.00	2.00	2.00
34	150/3	-	150	4	1/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00
35	175/2	-	175	3	2/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.00	2.00
36	175/3	-	175	4	2/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.50	2.50
37	200/2	-	200	3	3/0	THW	1	6	One	2.00	2.00	2.00	2.00	2.50	2.50
38	200/3	-	200	4	3/0	THW	1	6	One	2.50	2.50	2.50	2.50	2.50	2.50
39	225/2	-	230	3	4/0	THW	1	4	One	2.50	2.00	2.50	2.50	2.50	2.50
40	225/3	-	230	4	4/0	THW	1	4	One	2.50	2.50	2.50	2.50	3.00	3.00
41	250/3	-	255	4	250	THW	1	4	One	2.50	3.00	3.00	3.00	3.00	3.00
42A	300/3	-	285	4	300	THW	1	4	One	3.00	3.00	3.00	3.00	3.00	3.00
42B	300/3	-	310	4	350	THW	1	4	One	3.00	3.00	3.00	3.00	3.00	3.00
43A	350/3	-	335	4	400	THW	1	4	One	3.00	3.50	3.50	3.50	3.50	3.50
43B	350/3	-	380	4	500	THW	1	4	One	3.50	3.50	3.50	3.50	3.50	3.50
44A	400/3	-	380	4	500	THW	1	3	One	3.50	3.50	3.50	3.50	3.50	3.50
44B	400/3	-	400	4	3/0	THW	1	3	Two	2.50	2.50	2.50	2.50	2.50	2.50
45A	600/3	-	570	4	300	THW	1	1	Two	3.00	3.00	3.00	3.00	3.00	3.00
45B	600/3	-	620	4	350	THW	1	1	Two	3.00	3.00	3.00	3.00	3.00	3.50
46A	800/3	-	760	4	500	THW	1	1/0	Two	3.50	3.50	3.50	3.50	3.50	3.50
46B	800/3	-	820	4	600	THW	1	1/0	Two	4.00	4.00	4.00	4.00	4.00	4.00
47	1000/3	-	1005	4	400	THW	1	2/0	Three	3.50	3.50	3.50	3.50	3.50	3.50
48	1200/3	-	1240	4	350	THW	1	3/0	Four	3.50	3.50	3.50	3.50	3.50	4.00
49	1600/3	-	1675	4	400	THW	1	4/0	Five	4.00	4.00	4.00	4.00	4.00	4.00

Notes:  
Conductors are rated at 600 volt or below and are to be copper.

NEC Table 310.15(B)(16) - formerly Table 310.16 - is used for the basis of the conductor ampacities, which is not more than three current carrying conductors in a raceway at an ambient temperature of 30 deg C with 60 deg C rated conductors and connectors per 110.14-C-1 for up to 100 amp rated and up to #1 AWG conductors for equipment terminations and 75 deg C rated conductors and termination connectors for larger than 100 amp and above #1 AWG conductors.

NEC Tables 4, 5, and Appendix C is used for the basis of the conduit sizes. Table C1 for EMT, Table C4 for IMC, Table C8 for Rigid, and Table C10 for PVC (Sch 40).

All Branch Feeders and Branch Circuits shall include a green Equipment Grounding Conductor.

Omit Grounding conductor on Service Entrance Feeders.

Omit Neutral conductor on all Delta primary transformer feeders or single-phase 2 pole loads and 3 phase loads not requiring a neutral.

The above conductors are not calculated for Voltage Drop. Any circuits that exceed 100 feet shall be calculated by the Installer to have less than a three percent voltage drop on feeders and five percent on branch circuits per the NEC.

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50-S04-01687-E-502-SINGLE LINE DIAGRAM AND NOTES



Chick-fil-A  
Chick-fil-A  
5200 Buffington Road  
Atlanta, Georgia  
30349-2998



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CHICK-FIL-A  
GARDENDALE (AL)  
385 Fieldstown Rd  
Gardendale, AL 35071

FSR#01687  
BUILDING TYPE / SIZE: S04  
RELEASE: 2111

REVISION SCHEDULE  
NO. DATE DESCRIPTION

CONSULTANT PROJECT # C29153  
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SHEET NUMBER

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 be included 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.
- 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 an additional isolated ground (green + yellow stripe) conductor for isolated ground circuits (IGS system). Fittings used for connecting MC cable to boxes, cabinets, or other equipment shall be listed and identified for such use.
  - 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 or set-screw 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.
    4. Installed for panelboard feeders above slab.
- 1.03 INTERMEDIATE METAL CONDUIT (IMC)
  - A. Use Intermediate Metal Conduit (IMC) where drawings call for conduit to be:
    1. Installed for panelboard feeders ran below ground.
    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 shall be UL listed per standard 1569, color coded copper conductors (type THHN), the sheathing shall be constructed of interlocking galvanized steel, and shall conform to the requirements of Article 330 of the National Electrical Code.
  - B. MC Cable with an isolated grounding conductor shall be used, concealed above ceiling and in walls, for the connection of the Point Of Sales (POS) system equipment from the isolated ground receptacles to the panelboard serving the POS loads when allowed by local codes and Article 330 of the National Electrical Code.
  - C. MC Cable may be used when allowed by local codes and Article 330 of the National Electrical Code for branch circuits (except the main homerun to the panelboard which shall be conduit with conductors) for the following:
    1. Lighting
    2. Dining area receptacles
    3. Fly Lights
    4. Building mounted signage
    5. Office area receptacles
  - D. MC Cable shall not be used for branch circuits serving Kitchen Equipment Items and similar circuits in the Kitchen, the Drive-Thru area, and the Serving area's back counter.

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.
- 2.05 MC CABLE
  - A. MC Cable may be used for branch circuits as noted in Part 1 above and where the local code allows use of MC Cable. The installation shall conform to Article 330 of the National Electrical Code and shall be concealed in walls and above ceilings. (Exposed MC Cable will not be acceptable.)
  - B. MC Cables shall be secured and supported by the building structure per the National Electrical Code and any local code requirements. MC Cable shall not lay on ceilings.

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.
  - C. In-ground cast metal box: inside flanged, recessed cover box for flush mounting.
    1. Material: galvanized cast iron.
    2. Cover: furnish with ground flange, 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 inter system bonding termination 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.



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FSR#01687

BUILDING TYPE / SIZE: S04  
RELEASE: 2111

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SHEET NUMBER  
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