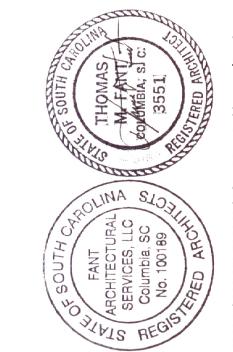
## FOODSERVICE RENOVATIONS FOR SWEARINGEN ENGINEERING CENTER UNIVERSITY OF SOUTH CAROLINA Columbia, S. C.

3/30/2018





## TABLE OF CONTENTS

COVER / TABLE OF CONTENTS DEMOLITION PLAN DEMOLITION REFLECTED CEILING PLAN FLOOR PLAN REFLECTED CEILING PLAN

**MILLWORK** 

**MILLWORK** 

WINDOW TYPES / DOOR SCHEDULE / DOOR TYPES / WALL TYPES MILLWORK / ROOM FINISH SCHEDULE

**DETAILS / INTERIOR ELEVATIONS** KITCHEN EQUIPMENT PLAN

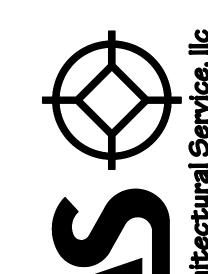
KITCHEN EQUIPMENT SCHEDULE / NOTES KITCHEN EQUIPMENT PLUMBING PLAN KITCHEN EQUIPMENT ELECTRICAL PLAN

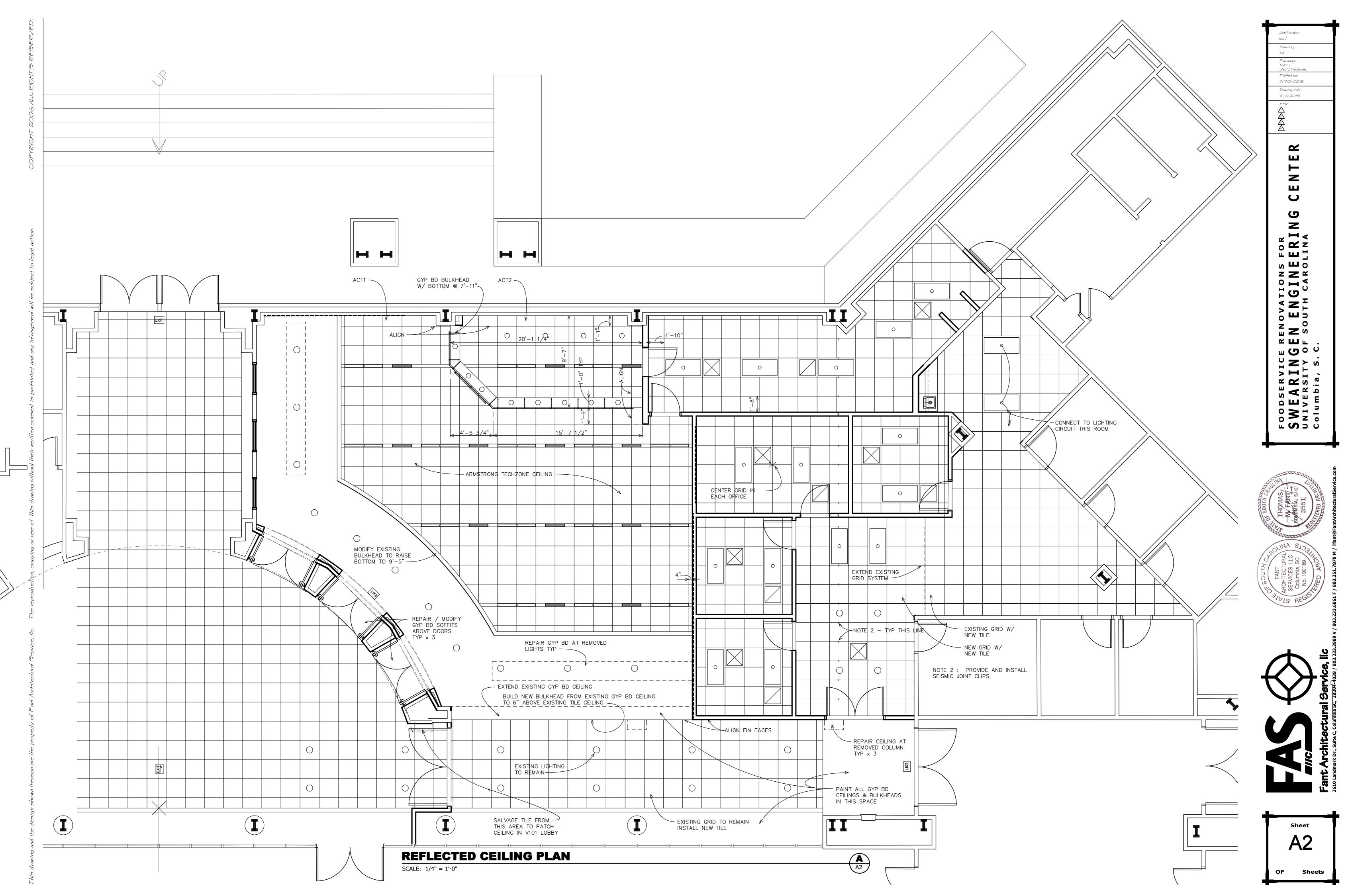
PLUMBING SPECIFICATION PLUMBING PLANS MECHANICAL DEMOLITION PLAN

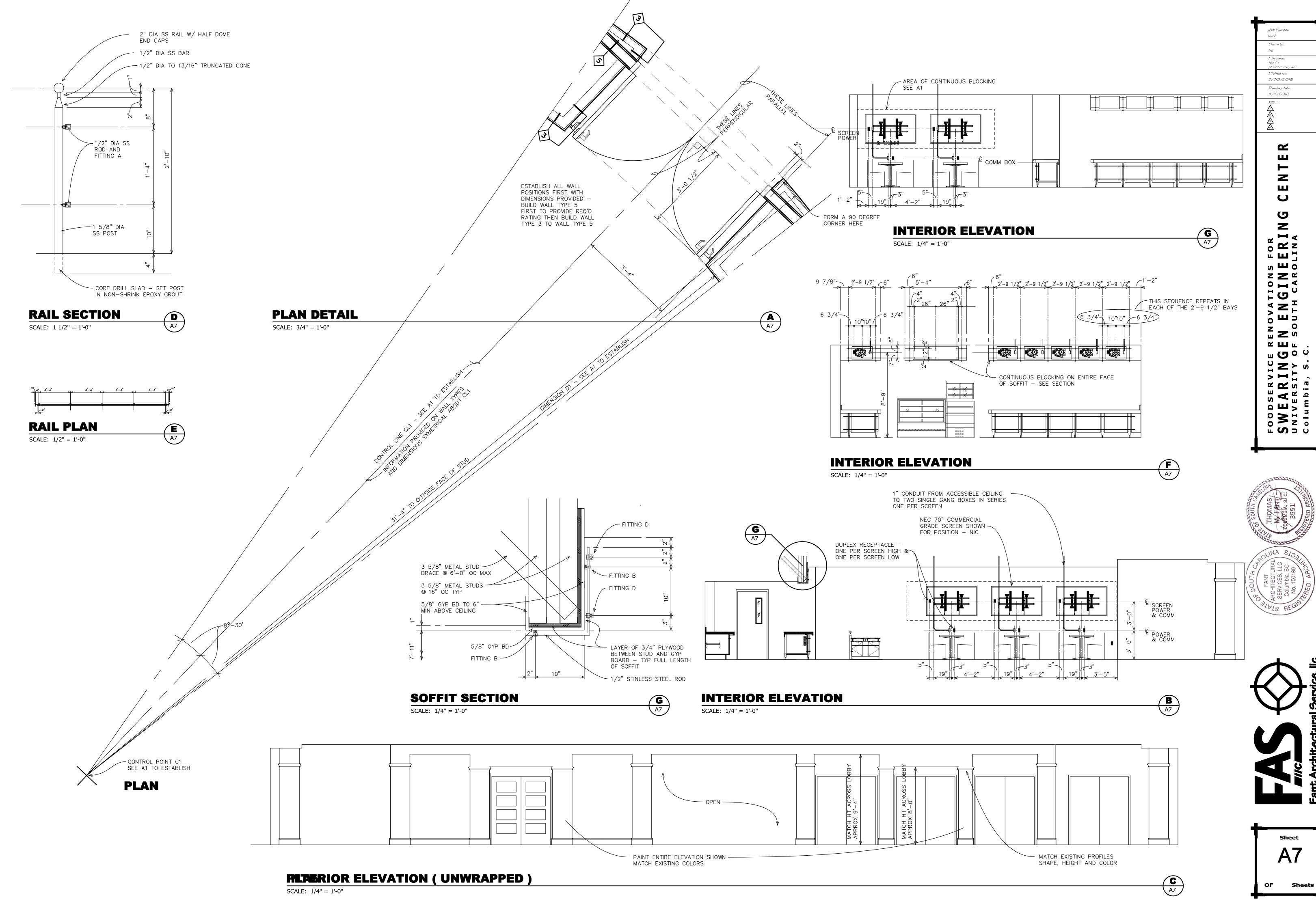
MECHANICAL PLAN MECHANICAL SYMBOLS SCHEDULES AND NOTES MECHANICAL SPECIFICATIONS

**ELECTRICAL SCHEDULES, NOTES AND SPECIFICATIONS** LIGHTING PLAN

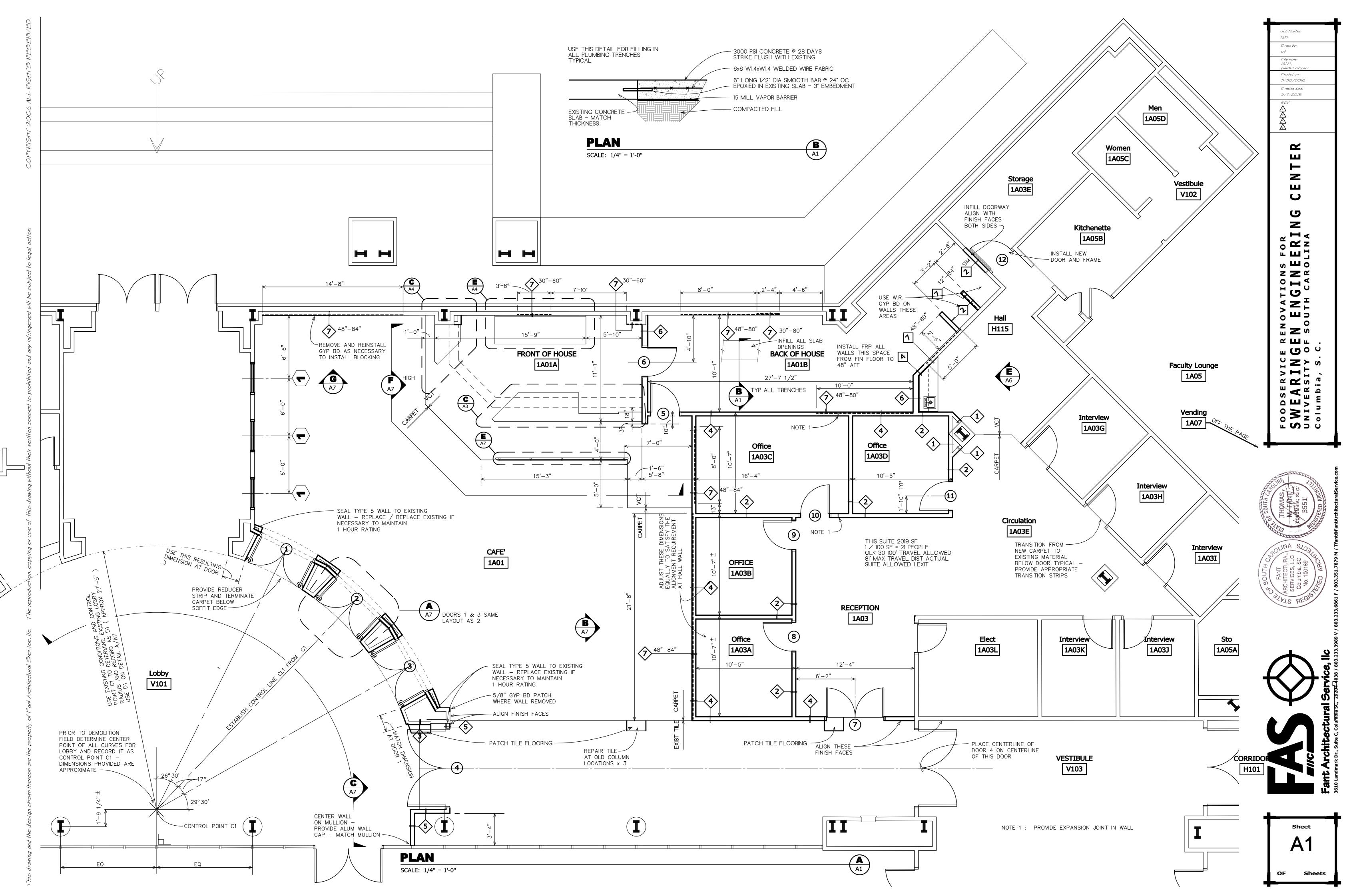
POWER AND COMMUNICATIONS PLAN KITCHEN EQUIPMENT POWER PLAN

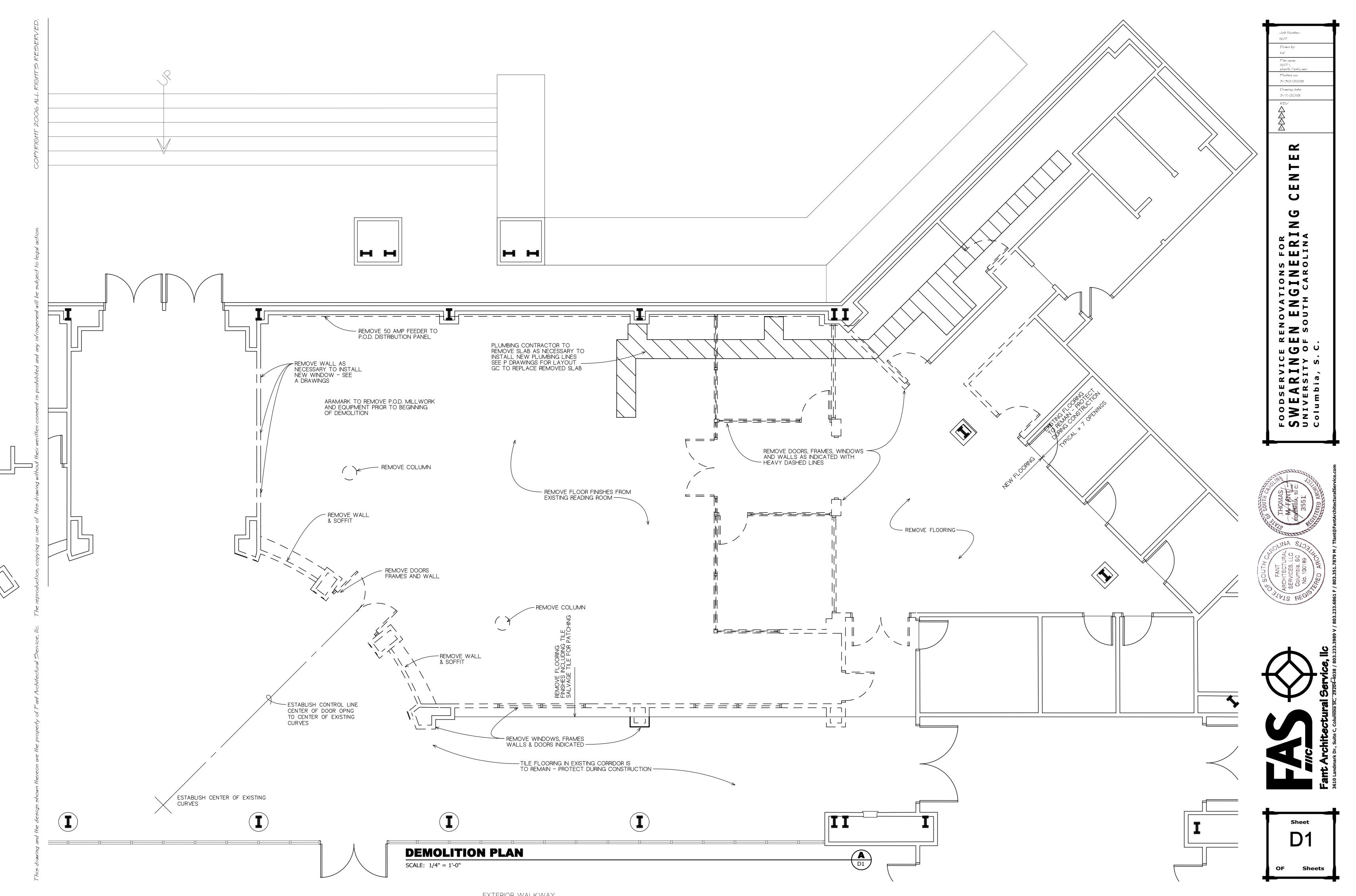


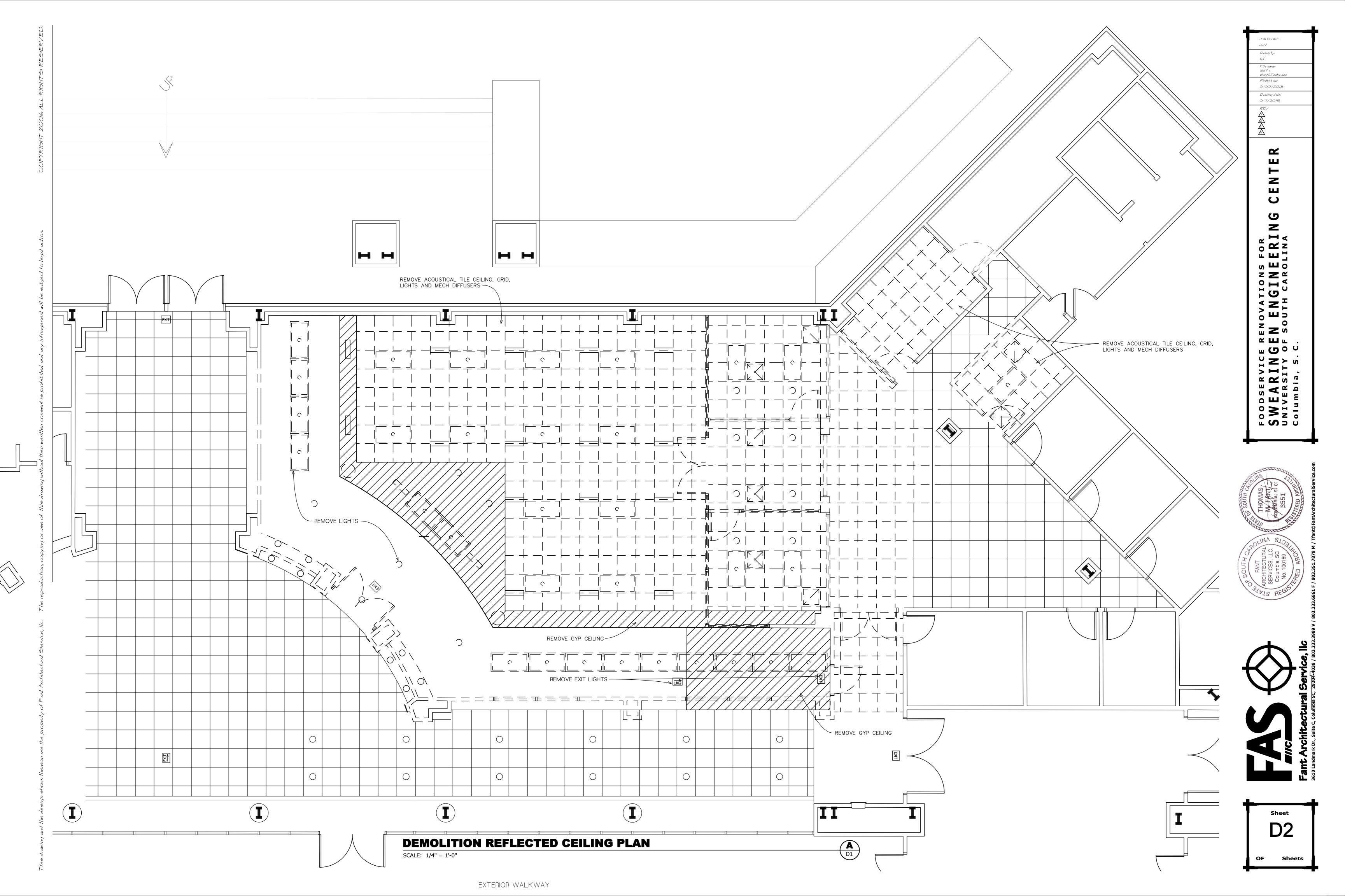


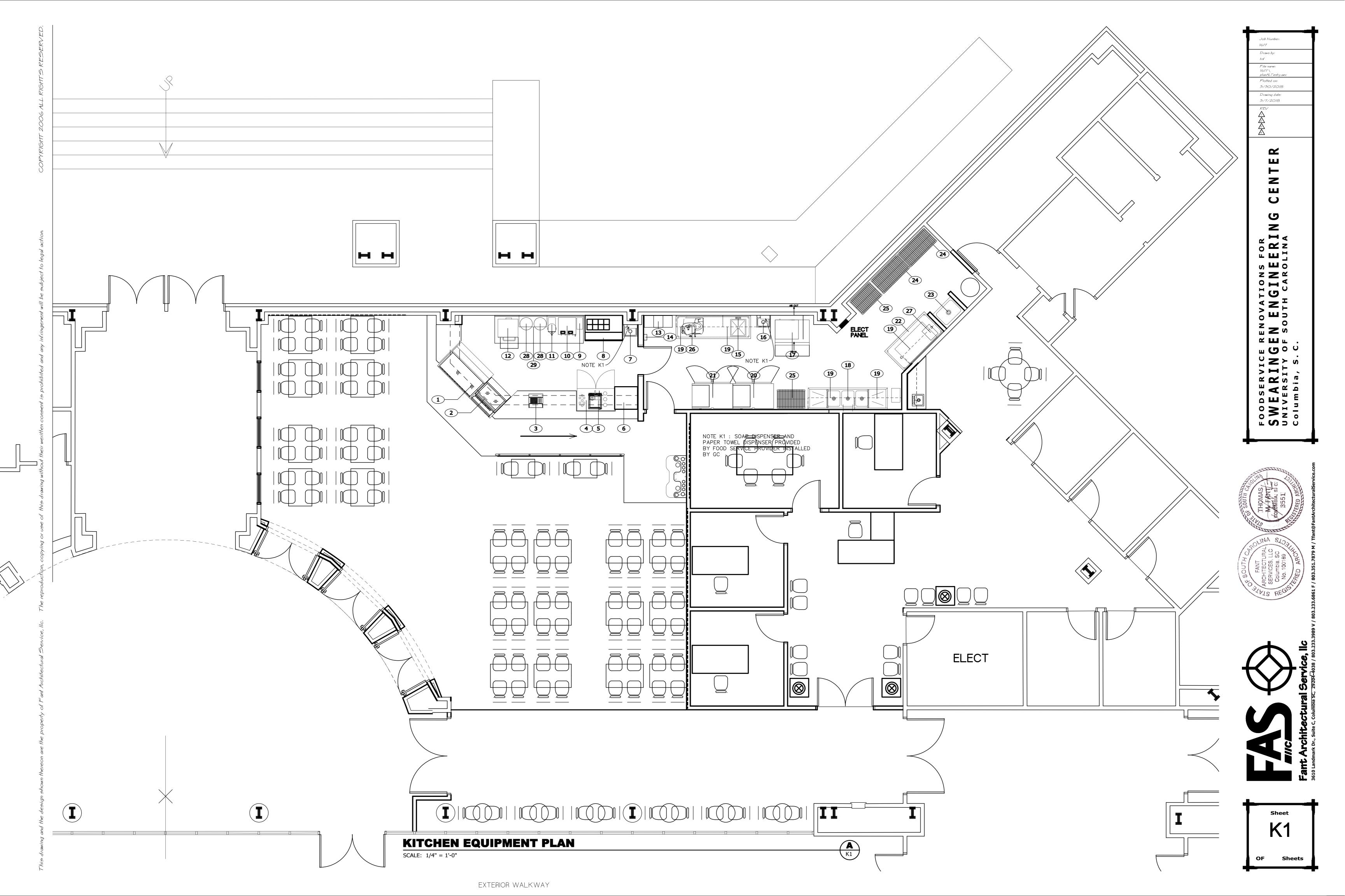


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## **EQUIPMENT SCHEDULE**

ITEM QTY	. DESCRIPTION	MANUF.	MODEL	REMARKS	ELECTR	ICAL			G	AS			COLD WA	TER	HOT WAT	ΓER	DIRECT	DRAIN	INDIRECT	PLUMBING REMARKS
No.					AMPS	HP VOLTS	PHASE	HEIGHT SHUNT	ELECTRIC REMARKS S	ZE	HEIGHT	BTU	SIZE	HEIGHT	SIZE	HEIGHT	SIZE	HEIGHT	DRAIN	
1 1	Curved Glass Refrigerated Deli Case	Federal	CGR5948CD		12	1/2 120	1	18′′	NEMA 5-15 P											
2 1	Hybrid Merchandiser	Federal	CH3628 / RSS3SC		9	120	1	28"	NEMA 5-15 P											
					15	1/3   120	1	28"	NEMA 5-20 P											
3 1	Point of Sale	By Ops	By Ops		10	120	1	28"	DEDICATED CIRCUIT - COMM	1UNICATI	IONS DROF	P								
4 1	2 Door Worktop Refrigerator	Delfield	UC4O48P		4	120	1	20"	NEMA 5-15 P											
5 1	Espresso Machine	Schaerer	Verismo 701		25	208	1	26"	NEMA L6-30 P				3/8" FIP	12''					BY INSTALLER	R FILTRATION REQD
6 1	Nitro Injector	Cornelius	Nitropro	Include water filter	3	110	1	20"	NEMA 5-15 P				1/4" BARB	3 10"					1/2" PVC	FILTRATION REQD
7 1	Hand Sink	Eagle	HSA-10-FAW										1/2"	20′′	1/2"	20′′	11/2"	18′′		12" TALL SPLASH LEFT SIDE REQD - SEE DETAIL
8 1	Sandwich Prep Table	Delfield	4448N-8		8	110	1	18′′	NEMA 5-15 P											
9 1	Coffee Grinder	Bunn	G3		9	110	1	48′′	NEMA 5-15 P											
10 1	Coffee Maker	Bunn	CWTF		26	110 / 208	1	48′′	PROVIDE CORD & NEMA 14-5	O P & R	2		3/8″	48′′						MACHINE HAS 3/8" MALE FLARE - FILTRATION REQUIRED
11 1	Tea Brewer	Bunn	TB3Q x (2) TDO-4		15	110	1	48′′	NEMA 5-15 P				1/4"	48′′						MACHINE HAS 1/4" OD MALE FLARE - FILTRATION REQUIRED
12 1	Speed Oven	Merychef	Eikon E4		30	208	1	48′′	PROVIDE CORD & NEMA 6-50	DP&R										
13 1	Lockers	By Ops	By Ops																	
14 1	Time Clock	By Ops	By Ops		5	110	1	48′′	COMMUNICATIONS DROP											
15 1	Prep Table w/ Sink	Eagle	T3O96SEM-BS-E23										1/2"	20′′	1/2"	20′′			11/2"	
16 1	Hand Sink	Eagle	HSA-10-FAW										1/2"	20′′	1/2"	20′′	11/2"	18′′		12" TALL SPLASH LEFT SIDE REQD - SEE DETAIL
17 1	Ice Maker / Bin	Hoskizaki	KDM-850-MAH-B-700-SF	Water filter by Plumber	10	208	1	48′′	20 AMP BREAKER / CONNEC	CT THRC	DUGH DISC	ONNECT	1/2" FPT	60′′					(2) 1/2" FPT	(I) 5/8" OD PIPE
18 1	3 Compartment Sink	Eagle	314-16-3-24 / B-O231										1/2"	20′′	1/2"	20′′	11/2"			MANIFOLD WASTE AND ROUTE TO GREASE TRAP
19 5	Overshelf	Eagle	SWS1560-14/304-VMAR																	
20 1	2 Door Freezer	Delfield	GBSF2P-S		10	110	1	84"	NEMA 5-15 P											
21 1	2 Door Refrigerator	Delfield	GBSR2P-S		6	110	1	84"	NEMA 5-15 P											
22 1	Work Table	Eagle	T3672SEM-BS x CASTERS	SET UNDERSHELF & 12" AFF																
23 1	Mop Sink	Eagle	F282O										1/2"	30′′	1/2"	30′′	2"			
24 2	Wire Shelving 2448	Eagle	S5-74-2448-E w/ CASTERS 2	LOCKING & CASTER POSTS																
25 1	Wire Shelving 2436	Eagle	S5-74-2436-E w/ CASTERS 2	LOCKING & CASTER POSTS																
26 1	Slicer	Hobart	EDGE 13		4	110	1	48"	NEMA 5-15 P											
27 1	Induction Range	Vollrath	6950020		15	110	1	48"	NEMA 5-15 P											
28 2	Classic Kettle Warmer	APWyott	WK-1		5	110	1	48"	NEMA 5-15 P											
29 1	Wall Shelf - Solid	Eagle	WCS-36																	

## **GENERAL NOTES:**

- 1. ALL COOKING EQUIPMENT UNDER EXHAUST HOODS MUST BE ON CASTERS WITH FLEXIBLE UTILITY QUICK DISCONNECTS
- 2. ICE MACHINES TO BE HELD OFF WALL 8". PLUMBING CONTRACTOR MUST FURNIGH AND INSTALL VACUUM BREAKER IN SUPPLY LINE
- 3. HOT FOOD WELLS AND STEAM TABLES ARE FILLED WITH WATER BY NEARBY COUNTERTOP FAUCETS OR ADJACENT SINK FAUCETS
- 4. DISHWASHERS WHERE APPLICABLE WILL BE DESIGNED AS HIGH TEMPERATURE FINAL RINSE OF 180 DEGREES F AND WASH CYCLE TEMPERATURES OF 140 DEGREES F PROPERLY SIZED BOOSTER HEATERS WILL BE USED TO BOOST 140 DEGREE HOT WATER TO 180 DEGREES FOR FINAL RINSE OF DISHWASHERS.
- 5. ALL REFRIGERATION EQUIPMENT SHALL HAVE THERMOMETERS WHICH ARE EASILY READABLE, IN PROPER WORKING CONDITION AND ACCURATE WITHIN A RANGE OF PLUS OR MINUS TWO DEGREES AND MUST BE NSF CERTIFIED
- 6. COUNTER TOP EQUIPMENT NOT READILY MOVABLE, WEIGHING OVER 80 POUNDS SHALL BE PROVIDED WITH LEGS OR FEET AT LEAST FOUR (4")
- 7. ALL CHEMICAL SANITIZER KITS FOR THREE COMPARTMENT SINKS WILL BE FURNISHED BY THE CHEMICAL SUPPLIER.
- 8. ALL CHEMICAL INJECTION SYSTEMS MUST BE INSTALLED DOWNSTREAM FROM A VACUUM BREAKER TO PREVENT POSSIBLE BACK SIPHONAGE OF THE CHEMICALS INTO THE WATER LINE SYSTEM
- 9. ALL CUTTING BOARDS AND WORK SURFACES SHALL BE OF NON-WOOD CONSTRUCTION
- 10. ALL FOOD SERVICE AND RELATED EQUIPMENT SHALL BE INSTALLED IN CONFORMITY WITH THE N.S.F. STANDARDS AND SHALL BE NATIONAL SANITATION FOUNDATION (N.S.F.) APPROVED.
- 11. AN AISLE SPACE OF THIRTY (30") INCHES MINIMUM OR MORE SHALL BE PROVIDED WITHIN ALL WORK AND STORAGE AREAS
- 12. BACKSPLASHES OF EQUIPMENT SHALL BE SEALED TO WALLS OR NSTALLED A MINIMUM OF THREE INCHES FROM WALLS
- 13. NO OVERSHELVES TO BE PROVIDED OVER COOKING EQUIPMENT.
- 14. HANDWASHING FACILITIES ARE REQUIRED FOR FOOD PREPARATION. SERVING AND UTENSIL WASHING AREAS AND WILL BE SHOWN ON THE FLOOR PLAN. EACH HANDWASHING FACILITY WILL BE SUPPLIED WITH SOAP DISPENSERS AND PAPER TOWEL DISPENSERS. DISPENSERS PROVIDED BY VENDOR SUPPLYING MATERIALS & INSTALLED BY THIS CONTRACT
- 15. SNEEZE-GUARD PROTECTION WHERE APPLICABLE WILL BE PROVIDED FOR EXPOSED UNWRAPPED FOOD AT SUCH AREAS AS SALAD BARS, BUFFETS AND CAFETERIAS
- 16. G.C. TO PROVIDE BACKING IN WALL FROM 66" TO 78" FOR WALL SHELVES ATTACHMENT
- 17. G.C. TO PROVIDE BACKING IN WALL FROM 24" TO 48" FOR ATTACHMENT OF BACKSPLASHES, HANDSINKS AND HANDSINK ACCESSORIES
- 18. SHELVING WILL BE LIMITED TO THAT SHOWN IN THE EQUIPMENT SPECIFICATIONS. IT DOES NOT INCLUDE ANY WOODEN SHELVING. THIS CONTRACT MUST ERECT SHELVING SUCH THAT THE BOTTOM SHELF IS A MINIMUM OF 6" AFF.
- 19. EXPOSED UTILITY SERVICE LINES AND PIPES SHALL BE INSTALLED IN A WAY THAT DOES NOT OBSTRUCT OR PREVENT CLEANING OF THE FLOOR, WALLS, AND CEILINGS.
- 20. INSTALLATION OF EXPOSED HORIZONTAL UTILITY LINES AND PIPES ON THE FLOOR IS PROHIBITED
- 21. UTILITY SERVICE LINES AND PIPES SHALL NOT BE UNNECESSARILY EXPOSED ON WALLS OR CEILINGS IN WALK-IN REFRIGERATION UNITS, FOOD PREPARATION AREAS, EQUIPMENT WASHING AND UTENSIL WASHING AREAS, TOILET ROOMS AND VESTIBULES

### PLUMBING NOTES:

- ALL NOTES THAT ARE APPLICABLE TO THIS PROJECT ARE THE RESPONSIBILITY OF THE PARTICIPATING ENGINEERS AND CONTRACTORS.
- 1. ALL FINAL CONNECTIONS SHOWN ON THIS DRAWING ARE ACTUAL REQUIREMENTS OF THE EQUIPMENT AND ARE SHOWN IN THEIR APPROXIMATE LOCATION
- 2. PLUMBING VENT SIZES AND LOCATIONS ARE TO BE DETERMINED BY THE PLUMBING ENGINEER
- 3. FLOOR DRAINS SHOWN ARE FOR EQUIPMENT USE AND GENERAL CLEANING PURPOSES, AND ARE TO BE OF THE TYPE INDICATED IN SYMBOLS UNLESS OTHERWISE REQUIRED BY LOCAL CODES
- 4. STOP VALVES SHALL BE PROVIDED IN ALL PIPING TO KITCHEN AND OTHER EQUIPMENT OR FIXTURE AHEAD OF OPERATING LEVER HANDLES OR FAUCETS.
- 5. WHERE INDIRECT WASTE ARE NOTED, THE PLUMBING ENGINEER IS TO INDICATE SUCH FOR NEAREST EXTENSION TO FLOOR SINK INDIRECT WASTE LINES TO BE RUN IN ACCORDANCE WITH ALL
- 6. ALL GAS ROUGH-INS SHOWN ARE EQUIPMENT CONNECTION POINTS ONLY. THE PLUMBING ENGINEER SHALL DETERMINE MAIN GAS LINE DROPS, SIZES AND ROUTING TO CONNECTION POINTS
- 7. ALL GAS FIRED EQUIPMENT MUST BE EQUIPPED WITH INDIVIDUAL MANUAL SHUT-OFF VALVES BY PLUMBING CONTRACTOR
- 8. ALL KITCHEN WASTE WATER TO BE SPILLED TO GREASE TRAP GREASE TRAP IS EXISTING TO REMAIN
- 9. PLUMBING CONTRACTOR TO INTERCONNECT KITCHEN EQUIPMENT WITH WATER FILTERS
- 10. THE INTENT OF THE SPECIFICATIONS AND DRAWINGS REGARDING MECHANICAL, ELECTRICAL, PLUMBING, AND FACTORY PREWIRING AND PREPIPING IS TO HAVE THE FABRICATOR EXTEND TO AND TERMINATE ALL CONNECTIONS FOR ALL EQUIPMENT IN THE LOCATIONS SHOWN IN THE SCHEDULE OF EQUIPMENT AND FLOOR PLAN
- 11. ALL WORK IS TO BE COMPLETED IN EVERY RESPECT SO THAT THE ITEMS CONCERNED WILL BE FULLY OPERABLE AS SOON AS THE FINAL CONNECTIONS ARE MADE AT THE JOBSITE BY THE APPROPRIATE CONTRACTOR.
- 12. FS DENOTES FLOOR SINK 12" x 12" NOMINAL PLAN DIMENSIONS WITH 1/2 GRATE TYPICAL. FLOOR SINKS ARE SPECIFIED BY THE PLUMBING ENGINEER AND PURCHASED AND INSTALLED BY THE PLUMBING CONTRACTOR
- 13. FD DENOTES FLOOR DRAIN. FLOOR DRAINS ARE SPECIFIED BY THE PLUMBING ENGINEER AND PURCHASED AND INSTALLED BY THE PLUMBING CONTRACTOR
- 14. ALL PLUMBING MUST BE INSTALLED TO BE IN COMPLIANCE WITH THE INTERNATIONAL PLUMBING CODE - 2012 EDITION
- 15. BACK-SIPHONAGE PROTECTION SHALL BE SPECIFIED BY PLUMBING ENGINEER AND INSTALLED BY PLUMBING CONTRACTOR AT THE FOLLOWING LOCATIONS:
  - EQUIPMENT WITH SUBMERGED WATER INLETS SUCH AS DISPOSALS, WAREWASHERS, SCRAPPING TROUGHS ETC.
  - AT ALL HOSE CONNECTIONS AT ALL POTENTIAL CROSS CONNECTIONS AT ALL CHEMICAL DISPENSING SYSTEMS
- USE EXPOSED IN-LINE CONTINUOUS PRESSURE DOUBLE CHECK BACKFLOW PREVENTERS ON WATER SUPPLY LINES TO HOSE REELS, POWER CLEAN-UP EQUIPMENT AND HOSE CONNECTIONS WHERE HOSE NOZZLES OR OTHER CUT-OFF VALVES ARE LOCATED DOWNSTREAM OF THE DEVICE.
- 16. MANUAL SANITIZATION OF UTENSILS AND EQUIPMENT WILL USE APPROVED CHEMICALS IN LIEU OF 170 DEGREE HOT WATER
- 17. HAND SINKS WILL BE PROVIDED WITH LEVER HANDLED MIXING VALVES. THESE ARE NOT SELF-CLOSING, SLOW CLOSING OR METERED DEVICES. HOT WATER AT THESE SINKS MAY BE TEMPERED TO AVOID BURNING BUT MUST BE A MINIMUM OF 110 DEG F
- 18. SINKS IDENTIFIED AS HAND SINKS MUST HAVE 12" HIGH STAINLESS STEEL GUARDS ATTACHED TO OR ADJACENT TO SINK.

## ELECTRICAL NOTES:

- ALL NOTES THAT ARE APPLICABLE TO THIS PROJECT ARE THE RESPONSIBILITY OF THE ENGINEERS AND CONTRACTORS
- 1. ALL FINAL CONNECTIONS SHOWN ON THIS DRAWING ARE THE ACTUAL REQUIREMENTS OF THE EQUIPMENT AND ARE SHOWN IN THEIR APPROXIMATE LOCATION
- 2. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL SWITCHES, STARTERS, DISCONNECTS, ETC FOR ALL EQUIPMENT UNLESS NOTED OTHERWISE, ALL DISCONNECTS OR LOCK-OUT DEVICES STARTERS, ETC TO MEET NEC AND OSHA STANDARDS
- 3. ALL RECEPTACLES SHALL BE GROUNDED PER NEC AND OSHA AND TO HAVE GROUND FAULT CIRCUIT INTERRUPTOR.
- 4. ELECTRICAL REQUIREMENTS FOR FIRE PROTECTION: GAS SOLENOID AND/OR SHUNT TRIP BREAKERS AND/OR FLOW CONTROL ALARM SWITCHS (FOR WET WATER SYSTEMS) TO BE WIRED THRU LIFE SAFETY SYSTEM BY ELECTRICAL CONTRACTOR
- 5. WHERE CONNECTION IS SHOWN AS DC (DIRECT CONNECTION) ELECTRICAL CONTRACTOR SHALL CONNECT TO JUNCTION BOX FURNISHED WITH EQUIPMENT
- 6. EC TO PROVIDE WIRING FROM FAN TO REMOTE SWITCH AND/OR SWITCH ON EXHAUST HOOD
- 7. ALL CONDUIT FOR REGISTER SYSTEM, BEVERAGE SYSTEMS AND HOOD PULL STATIONS TO BE SPECIFIED BY THE ELECTRICAL ENGINEER AND PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR
- 8. THE INTENT OF THE SPECIFICATIONS AND DRAWINGS REGARDING MECNANICAL, ELECTRICAL, PLUMBING AND FACTORY PREWIRING AND PREPIPING IS TO HAVE THE FABRICATOR EXTEND TO AND TERMINATE ALL CONNECTIONS FOR ALL EQUIPMENT IN THE LOCATIONS SHOWN IN THE ROUGH-IN PLANS
- 9. ALL WORK IS TO BE COMPLETED IN EVERY RESPECT SO THAT THE ITEMS CONCERNED WILL BE FULLY OPERABLE AS SOON AS THE FINAL CONNECTIONS ARE MADE AT THE JOBSITE BY THE APPROPRITE CONTRACTOR.
- 10. LIGHTING LEVELS MUST ACHIEVE THE FOLLOWING MINIMUM LEVELS:

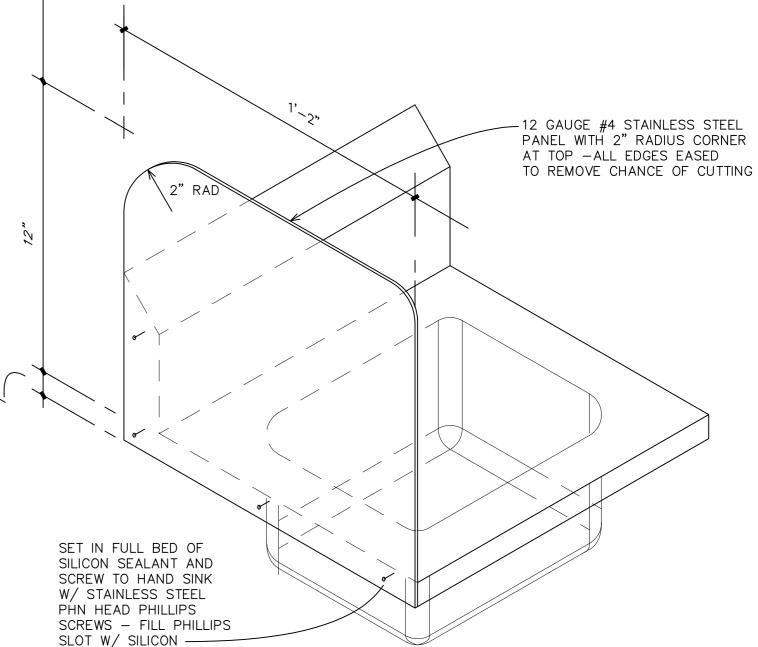
VALK-IN COOLER / FREEZER	
RY STORAGE	10 fc @ 30" AFF
T SURFACES WHERE FOOD IS PROVIDED. FOR SELF SERVICE.	20 fc
NSIDE EQUIPMENT	20 fc
HANDWASHING / WAREWASHING	20 fc @ 30" AFF
QUIPMENT AND UTENSIL STQRAGE	20 fc @ 30" AFF
N TOILET ROOMS	20 fc @ 30" AFF
AT SURFACES WHERE A FOOD EMPLOYEE, IS. WORKING WITH: .	
FOOD	50 FC
UTENSILS - KNIVES	
EQUIPMENT - SLICERS ./ GRINDERS /. SAWS	50 FC

11. LIGHT BULBS IN FOOD PREPARTAION AREAS, EQUIPMENT AND UTENSIL WASHING AREAS AND FOOD AND EQUIPMENT STORAGE AREAS (INCLUDING WALK-IN COOLERS / FREEZERS) SHALL BE SHEILDED OR SHATTER RESISTANT

WHERE EMPLOYEE SAFETY.IS.A FACTOR . . . . . . . . . 50 FC

- 12. ABOVE COUNTER CONVENIENCE OUTLETS NOT SPECIFICALLY ASSOCIATED WITH A PIECE OF KITCHEN EQUIPMENT ARE SHOWN ON ELECTRICAL DRAWINGS FOR INSTALLATION BY ELECTRICAL CONTRACTOR
- 13. DENOTES ELECTRICAL DISCONNECTS DESIGNED BY ELECTRICAL ENGINEER AND INSTALLED BY ELECTRICAL CONTRACTOR

GC SHALL PROVIDE ALL LABOR, MATERIALS ETC TO INSTALL FINISHES, UTILITIES, EQUIPMENT ETC TO STRICTLY COMPLY WITH SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL'S PUBLICATION ENTITLED "RETAIL FOOD ESTABLISHMENT'S REGULATION 61-25" DATED JULY 2014 THIS PUBLICATION CAN BE VIEWED AT THE FOLLOWING WEB SITE: http://www.scdhec.gov/FoodSafety/Docs/NewRegulation/Regulation%2061-25.pdf



SINK MOUNTED SPLASH GUARD

SCALE: 3'' = 1'-0''



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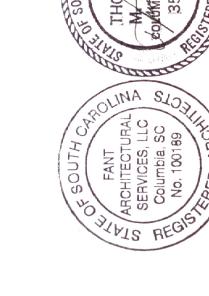
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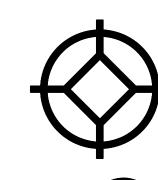
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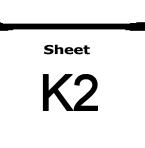
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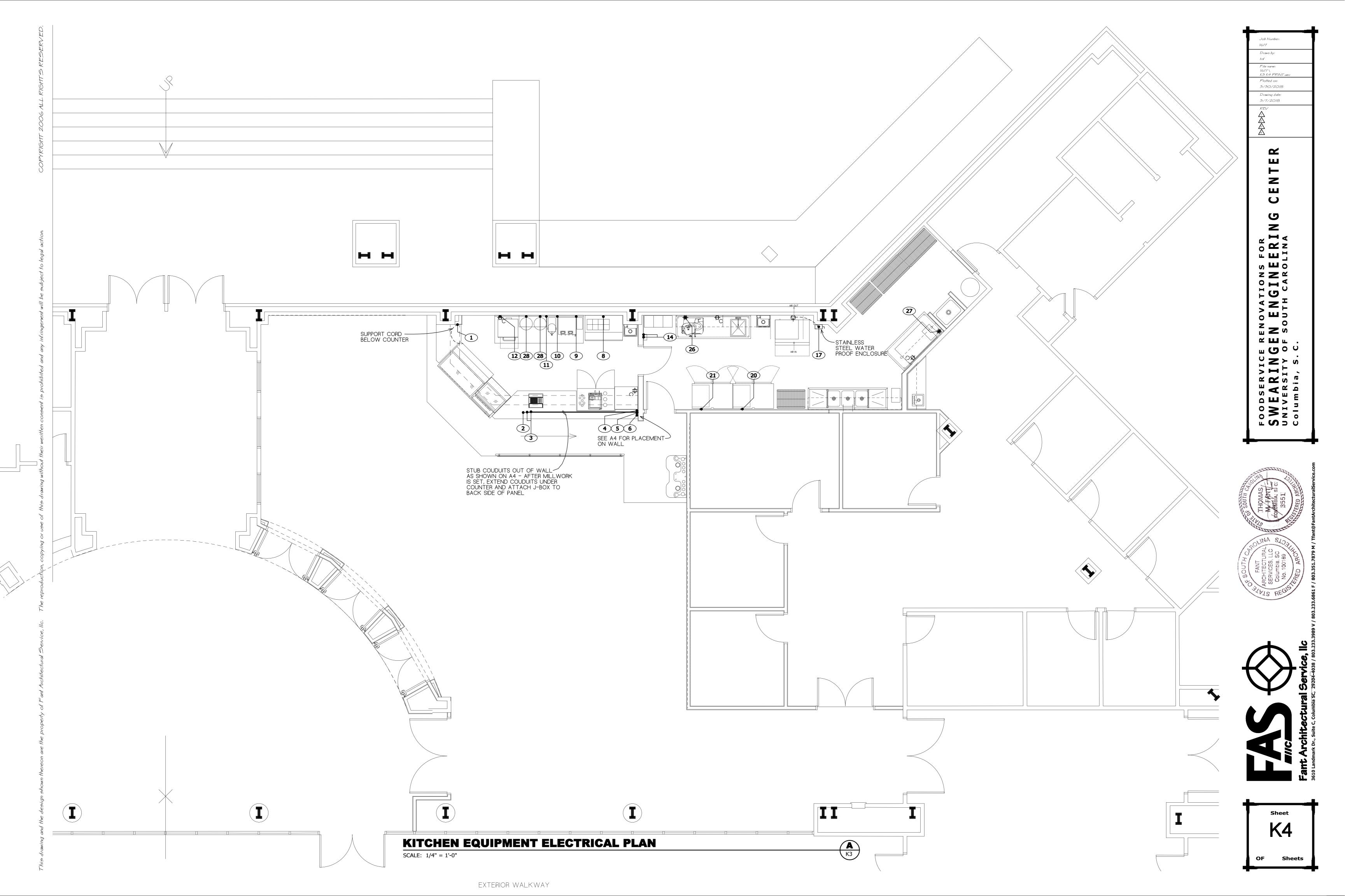












BRANCH CIRCUIT RACEWAY RUN IN WALL OR ABOVE CEILING. ARROWHEAD DENOTES RUN TO PANELBOARD. CROSSLINES DENOTE NUMBER OF #12 PHASE OR NEUTRAL CONDUCTORS. INSTALL CODE SIZE GROUNDING CONDUCTOR IN ADDITION TO CONDUCTORS SHOWN. SUBSCRIPT DENOTES CIRCUIT NUMBER.

SAME AS NEXT ABOVE - ADDITIONAL SUBSCRIPT DENOTES CONDUCTOR SIZE

SAME AS NEXT ABOVE - ADDITIONAL SUBSCRIPT DENOTES CONDUCTOR SIZE

YOICE/DATA OUTLET INSTALLED 18" UP WITH 3/4" CONDUIT TO ABOYE CEILING

PANELBOARD. CROSSLINES DENOTE NUMBER OF #12 PHASE OR NEUTRAL CONDUCTORS. INSTALL CODE SIZE GROUNDING CONDUCTOR IN ADDITION

TO CONDUCTORS SHOWN. SUBSCRIPT DENOTES CIRCUIT NUMBER.

BRANCH CIRCUIT RACEWAY RUN UNDERFLOOR. ARROWHEAD DENOTES RUN TO

	GENERAL NOTES
1.	DO NOT SCALE THESE DRAWINGS. ALL ROUGHING IN SHALL BE TAKEN FROM THE ARCHITECTURAL DRAWINGS AND DIMENSIONS.
2.	CONSULT THE MECHANICAL DRAWINGS IN DETAIL FOR THE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT BEFORE ROUGHING IN. ALL MECHANICAL EQUIPMENT SHALL BE ROUGHED IN AND WIRED ACCORDING TO THE SHOP DRAWINGS. IT IS THE INTENT OF THE WIRING SHOWN ON THESE PLANS TO GIVE A BASIS FOR BIDDING, AND ANY DEVIATIONS REQUIRED BY THE SHOP DRAWINGS SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
3.	THE DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY TO EACH OTHER AND WHAT IS CALLED FOR BY ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH.
4.	DRAWINGS INDICATE GENERALLY THE LOCATION OF EQUIPMENT AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. IF DUE TO JOB CONDITIONS IT IS FOUND NECESSARY TO CHANGE THE LOCATION OF SAME, SUCH CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER AND AS APPROVED BY THE ENGINEER.
5.	ANY WORK, ELECTRICAL OR ALLIED, INSTALLED WITHOUT REGARD TO THE WORK OF OTHER CRAFTS WHICH MUST, IN THE OPINION OF THE ENGINEER, BE MOVED IN ORDER TO PERMIT THE PROPER INSTALLATION OF OTHER WORK, SHALL BE MOVED AS A PART OF THIS SECTION WITHOUT EXTRA CHARGE.
6.	REMOVE ALL EXISTING ELECTRICAL WORK MADE OBSOLETE BY NEW WORK, RACEWAY EXPOSED SHALL BE REMOVED. RACEWAY ABOVE CEILING SHALL BE REMOVED. RACEWAY UNDERFLOOR OR CONCEALED IN WALLS SHALL HAVE CONDUCTORS AND OUTLET BOXES REMOVED, AND RACEWAY ABANDONED.
7.	ALL SALVAGE SHALL REMAIN PROPERTY OF THE OWNER.

HANGAR WIRE  TYPICAL LAY-IN FILLIOPES CENT TROPPED
EATON B-LINE *BA-SFC OR EQUAL EARTHQUAKE CLIP (SCREW TYPE) - ONE ON EACH CORNER FOR A TOTAL OF FOUR
TYPICAL LAY-IN FIXTURE INSTALLATION DETAIL

	4 *3/0 1 *6 GND. 2" C.		3 *6 _ 1 *10 GND. 1" C.
INSTALL DOUBLE LUGS ON SECONDARY SIDE OF EXISTING TRANSFORMER    EXISTING	#3/0 #6 GND.	PANEL "K"	60 AMP 120/240Y IPH PANEL PURNISHED WITH MODULAR UNIT
T5KVA DRY-TYPE TRANSFORMER			

MOL	JNTING	FLUSH MOUNTED	>		120 / 208 VOLT				
BUS	S SIZE	225 AMPS			THR	EE PHA	ASE / FOUR WIRE V	/IRING	
Т	YPE	NQOD				٦	1AIN LUGS ONLY	MAINS	
CKT		DESCRIPTION	AMPS	POLE	POLE	AMPS	DESCRIPTION	СКТ	
1	RE	FRIG DELI (1)	20	1	1	2Ø	HYBRID MERC (2)	2	
3		P06 (3)	20	1	1	20	HYBRID MERC (2)	4	
5	;	REFRIG (4)	20	1	1	20	NITRO INJECT (6)	6	
7	SA	20	1	1	20	COFFEE GRIND (9)	8		
9	T	20	1	1	20	TIMECLOCK (14)			
11	F	REEZER (20	20	1	1	20	REFRIG (21)		
13	RECEPTACLES		20	1	1	20	RECEPTACLES		
15	RECEPTACLES		20	1	1	20	RECEPTACLES		
17	RECEPTACLES		20	1	1	20	RECEPTACLES		
19	RECEPTACLES		20	1	1	20	RECEPTACLES		
21	RE	ECEPTACLES	20	1	1	20	RECEPTACLES		
23	RE	ECEPTACLES	20	1	1	20	<b>∨</b> A <b>∨</b> 2		
25		VAVI	20	1	1	2Ø	VAV3	26	
27		VAV5	20	1	1	20	VAV6	28	
29	VAV4		20	1	1	20	RANGE	30	
31	KETTLE		20	1	2	60	WATER HEATER	32	
33		20	1			(TEMPORARY PANEL	34		
35	ICE MAKER (IT)		20	2	2	40	SPEED OVEN (12)	36	
37	_							38	
39	COFF	EE MAKER (10)	40	2	2	30	EXPRESSO MACHINE (	<b>5</b> ) 40	
41								42	

**SPECIFICATIONS** 

4 - THE CONTRACTOR SHALL VISIT THE JOB SITE BEFORE SUBMITTING A BID

I - INSTALLATION SHALL MEET THE REQUIREMENTS OF THE NATIONAL

ELECTRICAL CODE NFPA 70-2014 \$ IBC 2015.

3 - ALL MATERIALS SHALL BE NEW WITH THE UL LABEL..

7 - ALL BOXES SHALL BE ONE PIECE METAL.

10 - PANELS SHALL BE BOLT-IN BREAKER TYPE.

ELECTRICAL SYSTEM SHALL BE GROUNDED.

FOR ONE YEAR FROM DATE OF ACCEPTANCE.

AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.

9 - DEVICE PLATES SHALL BE OVERSIZED STAINLESS STEEL.

5 - ALL WIRING SHALL BE COPPER, THW, THWN OR XHHW IN RACEWAY.

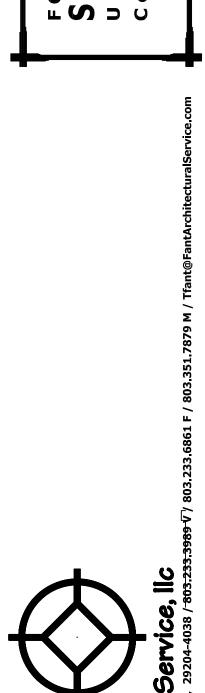
6 - RACEWAY FOR FEEDERS SHALL BE RIGID METAL IMC CONDUIT OVERHEAD BRANCH CIRCUIT RACEWAY SHALL BE EMT.

8 - WIRING DEVICES SHALL BE SPECIFICATION GRADE WITH GRAY FINISH.

11 - ALL EXPOSED NON-CURRENT CARRYING METALLIC PARTS OF THE

12 - THE CONTRACTOR SHALL GUARANTEE ALL MATERIAL AND WORKMANSHIP

2 - APPLY AND PAY FOR ALL PERMITS.



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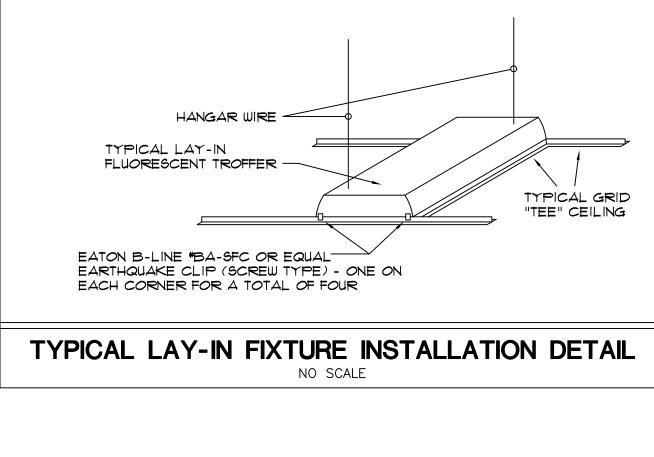
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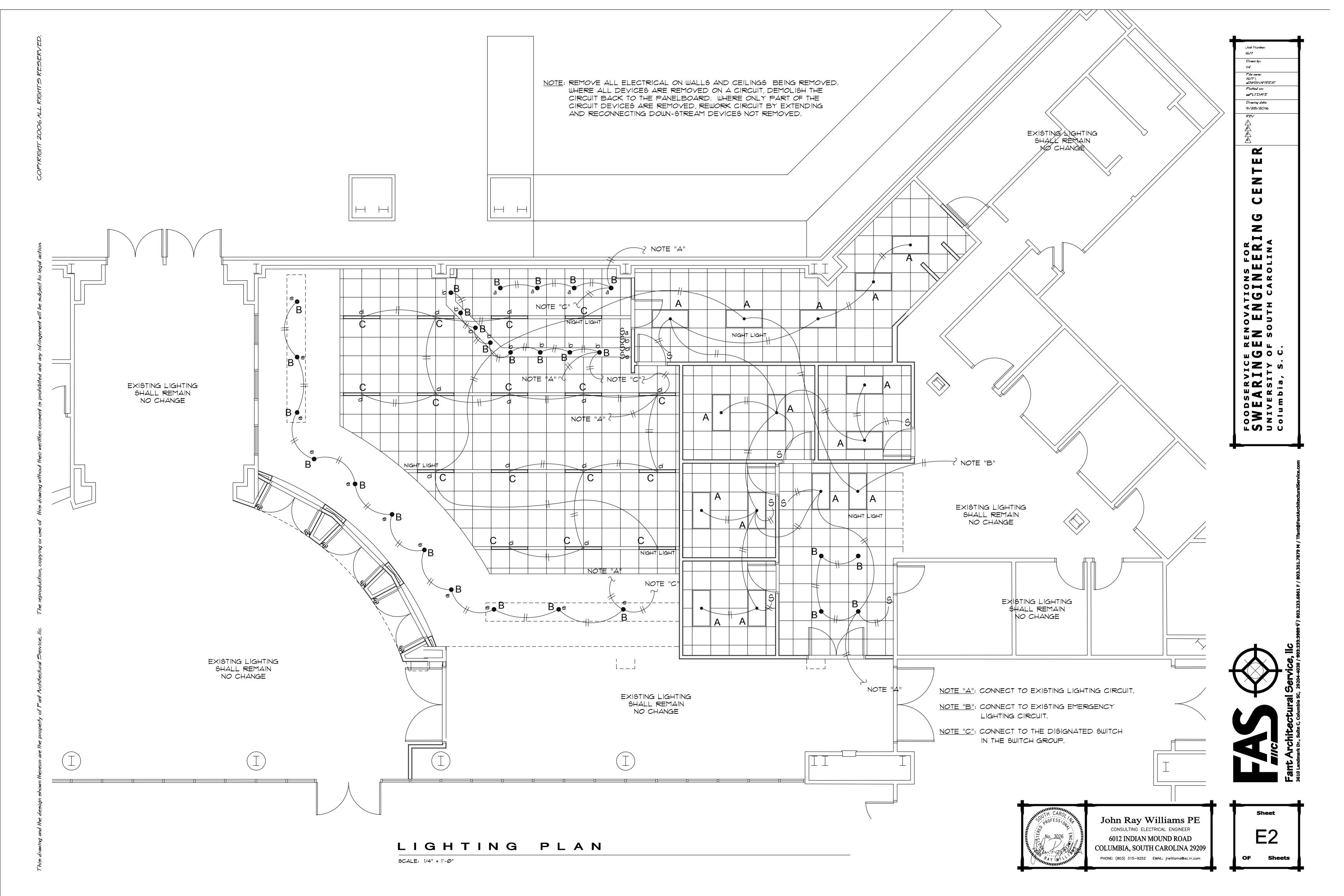
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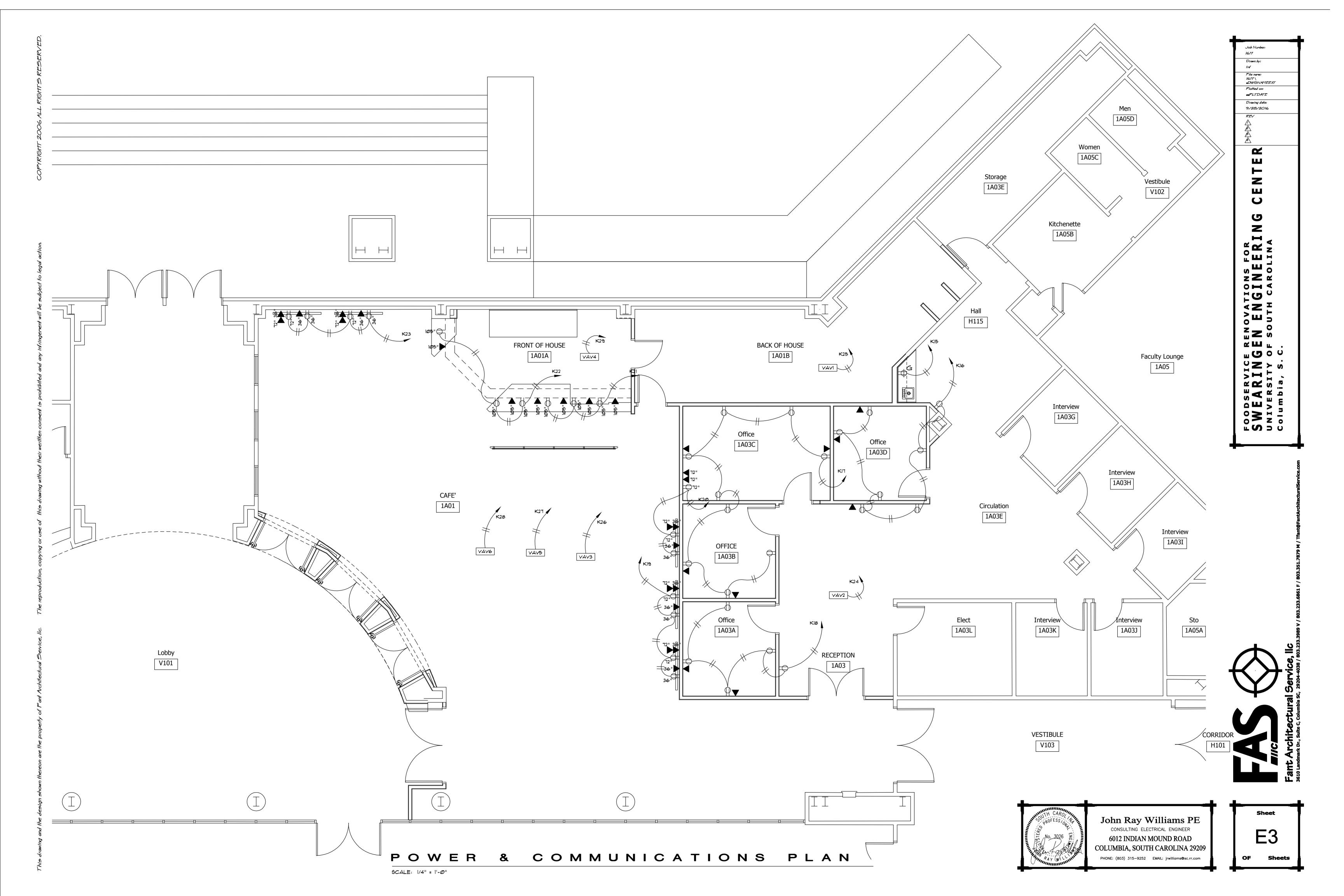
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FOODSERVICE RENOVATIONS FOR

SWEARINGEN ENGINEERING CENTER

UNIVERSITY OF SOUTH CAROLINA

Columbia, S.C.

ooPLTDATE

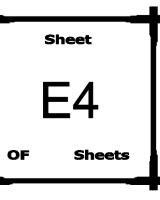
Drawing date:
9/28/2016

Fant Architectural Service,

EQUIPMENT POWER PLAN

SCALE: 1/2" = 1'-Ø"





#### DESCRIPTION

Metalux AP series GR recessed lensed LED troffers of er a high qualiluminaire designed with solid state lighting and electronic driver technology for optimal performance and energy efficiency. The GR is compatible with all of today's popular ceiling systems and is available with multiple lumen packages.

The GR series features efficiency, quality and performance. The series is an excellent choice for commercial office spaces, schools, hospitals or retail merchandising areas.

# Catalog # Type Project Comments Date Prepared by

#### SPECIFICATION FEATURES

#### Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length die-formed stiffeners and unibody endplate for added strength. Side flanges are hemmed. Innovative design provides superior lens brightness uniformity and visual comfort. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. Endplates have integral Grid-lock feature for safety and convenience.

#### Controls

The GR is equipped standard with a 0-10V continuous dimming driver that works with any standard control/dimmer to 10%. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels to maximize energy savings.

#### Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3500K and 4000K with a minimum of 80 CRI. Projected life at 70% lumen maintenance is nearly 200,000 hours with TM21 rating up to L90 >60,000 hours. Electronic drivers are cULus recognized and available for 120-277V. Standard dimming is 0-10V to 10%.

#### Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition.

#### Hinging/Latching

Positive spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

#### Frame/Optical Shielding

Die formed, flat steel door with .095 #12 pattern acrylic prismatic lens offering the balance of rigidity and light stability.

#### Compliance

Modules are UL recognized components and indoor luminaires are cULus listed for 25°C ambient environments, RoHS compliant, and LED modules comply with IESNA LM-79 and LM-80 standards. DesignLights Consortium™ Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.



Metalux AP

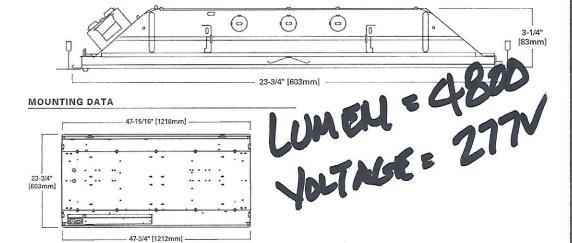
24GR LED

#### 2' X 4' LED TROFFER

General Recessed LED Troffer For Use in Insulated Ceilings







Catalog Number	Product Description
24GR4235D	2 x 4, Lensed LED Troffer, 4200 lumen, 3500K, 0 to 10V dimmable
24GR4240D	2 x 4, Lensed LEDTroffer, 4200 lumen, 4000K, 0 to 10V dimmable
24GR4835D	2 x 4, Lensed LEDTroffer, 4800 lumen, 3500K, 0 to 10V dimmable
24GR4840D	2 x 4, Lensed LEDTroffer, 4800 lumen, 4000K, 0 to 10V dimmable
24GR6435D	2 x 4, Lensed LEDTroffer, 6400 lumen, 3500K, 0 to 10V dimmable
24GR6440D	2 x 4, Lensed LEDTroffer, 6400 lumen, 4000K, 0 to 10V dimmable

#### ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips<sup>(1)</sup> DF-24-W=2' x 4' Drywall Frame Kit

NOTES: (1) An EQ Grid Clip is recommended for all 9/16" ceiling systems.

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information



#### WATTAGE

Lumen Package	Watts
4200	30W
4800	35W
6400	51W

SHIPPING DATA

Catalog No. Wt. 2 x 4 20 lbs.



Pallet

28



LD6B EU6B 6LBW 6LBM 6LBN

#### ORDERING INFORMATION

#### SAMPLE NUMBER: LD6B15D010EMBOD

Housing	Lumens <sup>1</sup>	Voltage	Driver	Options
LD6B=LED Downlight 6" Nominal Aperture LD6BCP=LED Downlight 6" Nominal Aperture, Chicago Plenum	10=1000 lumens 15=1500 lumens 20=2000 lumens 30=3000 lumens 40=4000 lumens 50=5000 lumens <sup>10</sup> 60=6000 lumens <sup>10</sup> 70=7000 lumens <sup>10</sup>	Blank=120-277V	1000 - 4000 Lumen  D010=0-10V Dimming, 1% to 100%, 120V-277V D010TR=0-10V or Line Voltage Dimming, 5% to 100%, 120V-277V DE010=0-10V Dimming, 0% to 100%, 120V-277V D5LT=Fifth Light® (DALI) Dimming, 0% to 100%, 120V-277V DMX=DMX Dimming, 0% to 100%, 120V-277V <sup>14</sup> DL2=Lutron® Hi-Lume Forward Phase Dimming, 1% to 100%, 120V Only DL3=Lutron® Hi-Lume 3 Wire Dimming, 1% to 100%, 120V-277V DLE=Lutron® Good of the Light of t	EMBOD=Bodine® Emergency Module with RemoteTest Switch³ EM7=7W Emergency Module with RemoteTest Switch³,4 EM14=14W Emergency Module with RemoteTest Switch³,4 EMBOD=Bodine® Emergency Module with IntegralTest Switch³,4 IEM8OD=Bodine® Emergency Module with IntegralTest Switch²,4 IEM14=14W Emergency Module with IntegralTest Switch²,4 IEM14=14W Low Voltage Emergency Module with Remote Test Switch²,4 EMV14=14W Low Voltage Emergency Module with Remote Test Switch³,4 IEMV14=7W Low Voltage Emergency Module with IntegralTest Switch³,4 IEMV14=14W Low Voltage Emergency Module with Integral Test Switch³,4 SWPD1=Factory installed WaveLinx tilemount daylight senso (includes control module, sensor, cable, and tile mount)¹¹¹\$ LWTPD1=Factory installed LumaWatt Pro wireless sensor kit¹¹

#### SAMPLE NUMBER: EU6B10208035

Power Module	Lumen Levels <sup>1</sup>	CRI	Color						
EU6B=6" Universal LED Module	1020=1000, 1500, 2000 lumens 3050=3000, 4000, 5000 lumens 6070=6000, 7000 lumens 1015IC=1000, 1500 lumen IC rated	80=80 CRI Minimum 90=90 CRI Minimum 97=97 CRI Minimum	80 CRI 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	90 CRI 24=2400K 27=2700K 30=3000K 35=3500K 40=4000K 50=5000K	97 CRI 27=2700K 30=3000K				
	Dim 2 Warm 109030D2W=1000 lumen, 90 CRI, Dim 2 Warm, IC rated 159030D2W=1500 lumen, 90 CRI, Dim 2 Warm, IC rated 209030D2W=2000 lumen, 90 CRI, Dim 2 Warm								

#### SAMPLE NUMBER: 6LBM1LIE

Trim	Distribution <sup>5</sup>	Flange	Finish	Options
6LB=6" LED	N=Narrow (30° Beam), Spun Aluminum  M=Medium (50° Beam), Spun Aluminum  W=Wide (75° Beam), Spun Aluminum  S=Shallow (75° Beam), Spun Aluminum  PS=Plastic Shallow (75° Beam), Injection Molded white 11, 12  CS=Cast Shallow (75° Beam), Die Cast Aluminum 12  BA=Baffle (50° Beam), Spun Aluminum 12	0=White PolymerTrim Ring 1=Self-flanged <sup>13</sup> 2=White Painted Self-flanged	LI=Specular Clear <sup>9</sup> H=Semi-Specular Clear <sup>9</sup> WMH=Warm Haze <sup>9</sup> WH=Wheat <sup>9</sup> GPH=Graphite Haze <sup>9</sup> B=Specular Black <sup>9</sup> MW=Matte White MB=Matte Black <sup>8</sup> MMS=Matte Metallic Silver <sup>8</sup>	E=Integral Emergency Test Switch Hole <sup>6</sup>

#### Accessories

HSA6=Slope Adapter for 6" Aperture Housings, Specify Slope

TRM6=MetalTrim Ring, Specify Color<sup>2</sup>

PRR6=Rimless Trim Ring for Flush Mount<sup>2</sup>

LGSKT6IP66=IP66 Gasket Kit

DT6=Deco Trim2

#### **Bar Hangers**

HB26=C-channel Bar Hanger, 26" Long, Pair

HB50=C-channel Bar Hanger, 50" Long, Pair

RMB22=Wood Joist Bar Hanger, 22" Long, Pai

#### Transformers

H347=347 to 120V Step Down Transformer, 75VA

H347200=347 to 120V Step Down Transformer, 20

#### **Connected Lighting Systems**

PORLWTPD1=LumaWatt Pro wireless sensor kit (0-10V only) field stelles TMSWPD1=WaveLinx tilemount daylight sensor (includes introl of the sensor).

cable and tile mount) field installed<sup>15</sup>

- ending on selected color, driver and reflector finish.
- g (Consult specification sheet for color ordering information

- dium Spun Aluminum trims. Required for use with all IEMBOD, s above ceiling access with wide beam trim.
- 7 Only available hite and Matte Black Finishes.
- distributions.
- or BA distributions.
- spacing and must be installed with the following minimum spacing.
- ter to center of adjacent luminaires: 36"
- Center of luminaire to side of building member: 18"
- Minimum overhead: 1/2"
- Not available with CS or PS trims
- 11 PS available in self-flanged MW finish only.
- 12 Offered up to 2000 lumens
- 13 Flange is the same finish as the reflector
- 14 DMX fixtures default to full on upon loss of DMX signal.
- 15 Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Use with 0-10V driver.

#### ENERGY

ENERGY DATA
Sound Rating: Class A standards
(Values at non-dimming line voltage)
Minimum Starting Temperature: -30°C (-22°F)

1000 Lumen D010		1500 Lumen D010		
Input Power: 11W	THD: <14%	Input Power: 15.5W	THD: <13%	
120V Input Current: 0.09A	277V Input Current: 0.04A	120V Input Current: 0.13A	277V Input Current: 0.06A	

		120V		277V	
F	Lumens	Inrush (A)	Duration (ms)	Inrush (A)	Duration (ms)
T	1000 Lumen D010	1.02	0.041	2.18-	0.021
1	1500 Lumen D010	1.02	0.042	2.24	0.064

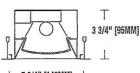
## Corelite...

# FIXTURE "C"

#### ORDERING INFORMATION:

SAMPLE NUMBER: R6-W-L-1-L35-1-C-120-4-T1

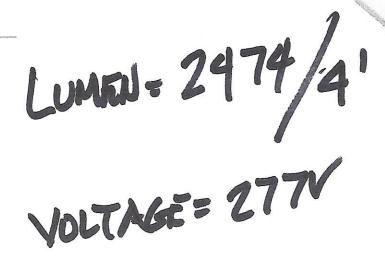
SERIES	R6 = Class R6		
REFLECTOR	W=White		
SHIELDING	L=Linear Prismatic Lens		
LIGHT LEVEL	1=Light Level 1 2=Light Level 2	1=1 Lamp	
LAMP TYPE	L30=LED 3000K L36=LED 3500K L40=LED 4000K	N5=15 Normal Output T5=16 High Output T8=18 Normal Output	
NUMBER OF CIRCUITS	1=1 Circuit	Linear Fluorescent 1=1 Circuit	
WIRING	C=Standard Circuit B=Battery* B=Dimming / Step Dimming*	E=Emergency* Y=Daylight* T=Nightlight*	
VOLTAGE	120=120V 227=277V 347=347V* UNV=Universal (120V-277V)		
SIZE	2=2 foot 4=4 foot		
CEILING TYPE	T1 = 1" Grid, Siot-Grid, 9/16" Tegular T9 = 9/16" Grid		
OPTIONS	AR = Air Return CP = Chicago Plenum NY = New York City Construction AM = Anti-Microbial Coasting W6 = 6' Whip Flex W12 = 12' Whip Flex		



- 5 3/4" [146MM] -

24"

48"



PROJECT NAME:

TYPE:

CATALOG #:

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