

EXISTING PANEL BY LANDLORD

NEW PANEL BY TENANT CONTRACTOR

ELECTRIC LOAD SUMMARY				
DESCRIPTION	208Y/120V SERVICE	N.E.C. CONNECTED	N.E.C. DEMAND	N.E.C. DEMAND
LIGHTING (CONTINUOUS)		12.311	[1]	1.25
TRACK LIGHT DEMAND ALLOWANCE		-	[2]	-
SHOW WINDOW/DEMAND ALLOWANCE		-	[3]	-
KIT APPLIANCE		2.000	[4]	1.00
RECEPTACLES		11.755	[5]	-
MOTORS		0.000	[6]	-
FIXED ELECTRIC SPACE HEATING		87.000	[7]	-
AIR CONDITIONING SYSTEM		0.000	[8],[9]	-
ELECTRIC WATER HEATER		3.000	-	1.0
MISCELLANEOUS		11.800	-	1.0
		127.866		141.448
N.E.C. DEM. KVA X 1000				
SYS. VOLTAGE X 1.732				
141.448 X 1000				
208 X 1.732				
= 392.0 AMPS				
MINIMUM FEEDER AMPERAGE				

- LOAD SUMMARY NOTES:
- [1] POWER FACTOR IS ALREADY INCLUDED IN LIGHTING LOAD.
 - [2] 150VA/2FT OF LINE VOLTAGE TRACK + SUM LOW VOLTAGE XFMR'S - CONNECTED LOAD
 - [3] 200VA/LF - ACTUAL CONNECTED LOAD
 - [4] KIT APPLIANCE DEMAND FACTOR PER NEC 220-58
 - [5] 0.0 - 10KW + 100% REMAINING - 50%
 - [6] 125% OF THE LARGEST MOTOR OR COMPRESSOR IN SYSTEM APPLIED ON ONE UNIT.
 - [7] USE GREATER VALUE OF THESE TWO CATEGORIES

Panel Wiring Schedule (3-Phase)											
Panelboard		"A"		Voltage		208Y/120		Phase		Options/Notes: EXISTING TO REMAIN	
Panel Type	NEMA Type	EXISTING		MOUNTING		M.L.O.		WIRE		AIC Rating	
CHL	No.	Zone	Load Description	Bkfr. Size	Opts.	N.E.C. kVA	Phase	N.E.C. kVA	Bkfr. Size	Opts.	CHL No.
1						9.160	A	1.200			2
3						9.790	B	1.200			4
5						9.325	C	0.625			6
7						0.000	A	1.440			8
9	E		RTU LTG REC.			0.280	B	0.000			10
11						14.500	C	0.000			12
13	E		RTU-1	175/3	HACR	14.500	A	1.152			14
15						14.500	B	1.536			16
17						14.500	C	1.536			18
19	E		RTU-2	175/3	HACR	14.500	A	0.000			20
21						14.500	B	0.500			22
23						0.000	C	0.400			24
25						0.000	A	0.550			26
27						0.000	B	0.000			28
29						0.000	C	0.000			30
31						0.000	A	0.000			32
33						0.000	B	0.600			34
35						0.000	C	0.000			36
37						0.000	A	0.000			38
39						0.000	B	0.850			40
41						0.000	C	0.722			42

- Notes:
- All circuit breakers to be 20-Amp, 1-Pole unless otherwise noted.
 - All Phases to be balanced to within 10% using Actual Load Totals.
- Breaker Options:
- AS Powerlink AS Breaker
 - LO Handle lock-on device
 - ST Shunt Trip Type
 - AUX Auxiliary Contacts
 - PA Handle Padlock Attachment
 - GFCI Ground Fault Circuit Interrupter
 - HACR Heating, A/C & Refrigeration
 - SF Subfeed
 - AFCI Arc Fault Circuit Interrupter
- E Existing Circuit to remain
IG Isolated Ground Circuit
- Connected Load: **354.9** amps
NEC Demand Feeder Load: **392.6** amps

Panel Wiring Schedule (3-Phase)											
Panelboard		"B"		Voltage		208Y/120		Phase		Options/Notes	
Panel Type	NEMA Type	NQ		MOUNTING		M.L.O.		WIRE		AIC Rating	
CHL	No.	Zone	Load Description	Bkfr. Size	Opts.	N.E.C. kVA	Phase	N.E.C. kVA	Bkfr. Size	Opts.	CHL No.
1						0.360	A	1.800			2
3						0.360	B	0.550			4
5						0.180	C	0.825			6
7						0.360	A	0.720			8
9						1.500	B	0.820			10
11						1.500	C	0.900			12
13						3.000	A	0.200			14
15						3.000	B	0.200			16
17						3.000	C	0.720			18
19						0.500	A	0.720			20
21						1.200	B	0.900			22
23						0.800	C	0.900			24
25						0.500	A	0.000			26
27						0.720	B	0.000			28
29						0.000	C	0.000			30
31						0.000	A	0.000			32
33						0.540	B	0.000			34
35						0.500	C	0.000			36
37						0.400	A	0.000			38
39						0.000	B	0.000			40
41						0.000	C	0.000			42

- Notes:
- All circuit breakers to be 20-Amp, 1-Pole unless otherwise noted.
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- Breaker Options:
- AS Powerlink AS Breaker
 - LO Handle lock-on device
 - ST Shunt Trip Type
 - AUX Auxiliary Contacts
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 - GFCI Ground Fault Circuit Interrupter
 - HACR Heating, A/C & Refrigeration
 - SF Subfeed
 - AFCI Arc Fault Circuit Interrupter
- E Existing Circuit to remain
IG Isolated Ground Circuit
- Connected Load: **78.5** amps
NEC Demand Feeder Load: **76.4** amps

LIGHTING CONTROL LEGEND:

- A - SHOW WINDOW LIGHTS, SHOW WINDOW RECEPTACLES, EXTERIOR SIGNAGE
- B - STOCKING LEVEL SALES AREA LIGHTING, GENERAL SALES FLOOR RECEPTACLES, STOCKING FITTING ROOM LIGHTING
- C - SALES LEVEL SALES AREA LIGHTING, INTERIOR DISPLAY LIGHTING DISPLAY, CABINET LIGHTING RECEPTACLES SALES LEVEL, FITTING ROOM LIGHTING

ELECTRICAL POWER GENERAL NOTES:

- HVAC CIRCUIT BREAKERS SHALL BE "HACR" TYPE WHEN REQUIRED BY EQUIPMENT NAMEPLATE PER N.E.C.
- ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXACT K.A.I.C. RATING (BUILDING SERVICE AVAILABLE FAULT CURRENT) OF LANDLORD DISTRIBUTION EQUIPMENT PRIOR TO BID AND WORK COMMENCEMENT. IF FOUND TO BE GREATER THAN PANEL RATING, NOTIFY YOUR ESDC PROJECT MANAGER IMMEDIATELY.
- ELECTRICAL CONTRACTOR SHALL BALANCE ALL PANELS AND ELECTRICAL EQUIPMENT TO 7% (+/-) BETWEEN PHASES: A/B, B/C, A/C, REGARDLESS OF CIRCUITING INDICATED.
- PROPER CLEARANCE MUST BE MAINTAINED ABOUT ELECTRICAL EQUIPMENT PER N.E.C. FIELD VERIFY EXACT MOUNTING SPACE AVAILABLE IN ELECTRICAL ROOM/AREA PRIOR TO INSTALLATION OF ELECTRICAL EQUIPMENT.
- ALL PANEL BRANCH CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE.
- ALL PANEL BUS BARS SHALL BE COPPER.
- MOUNT A TYPEWRITTEN DIRECTORY BEHIND GLASS OR PLASTIC ON THE INSIDE OF EACH PANEL DOOR AND, ON THE DIRECTORY, SHOW THE CIRCUIT NUMBER AND COMPLETE DESCRIPTION OF ALL OUTLETS ON EACH CIRCUIT.
- ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL ELECTRICAL CONNECTIONS FOR A COMPLETE AND OPERABLE ELECTRICAL DISTRIBUTION SYSTEM.
- ALL PANELBOARDS, SWITCHBOARDS AND LINE VOLTAGE CONTROL EQUIPMENT SHALL BE FACTORY MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTING, SERVICING OR MAINTENANCE OF EQUIPMENT.
- ELECTRICAL CONTRACTOR SHALL MAKE SURE ENTIRE INSTALLATION CONFORMS TO N.E.C. 110.3 - EXAMINATION, IDENTIFICATION, INSTALLATION, AND USE OF EQUIPMENT.
- SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, AND CONTACTORS ARE TO BE "LISTED" AND "IDENTIFIED" AS RATED FOR A MINIMUM OF 75C CONDUCTOR TERMINATION.
- IFB ENCLOSURE LIGHTING CONTROLS: SOLENOID OPERATED BABR BREAKERS ARE PROVIDED WITH IFB PANELS FOR STORE LIGHTING CONTROLS AND STOREFRONT SIGNS. SEE PANEL SCHEDULES FOR LIGHTING ZONE DESIGNATIONS (ie: ZONE A, B, C).
- IFB ENCLOSURE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR IS HEREIN DESCRIBED:
 - UNIT WILL BE SHIPPED TO PROJECT IN MULTIPLE SECTIONS AND THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR OFF-LOADING OF EQUIPMENT, INSPECTION OF EQUIPMENT FOR DAMAGE, VERIFICATION OF EQUIPMENT RECEIVED FOR PROPER STORAGE, SETTING AND MOVING OF EQUIPMENT INTO SPACE AS WELL AS REASSEMBLING OF SECTIONS INTO ONE COMPLETE UNIT PER MANUFACTURER'S DOCUMENTATION.
 - ELECTRICAL CONTRACTOR SHALL CONNECT ALL PROVIDED INTERCONNECTING CABLES BETWEEN SECTIONS AND TORQUE CONNECTIONS PER MANUFACTURER'S REQUIREMENTS.
 - ALL CONNECTIONS WITHIN THE TELEPHONE/DATA SECTION AND HVAC CONTROL SECTION OF THE IFB ENCLOSURE WILL BE DONE BY OTHERS. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION OF LOW VOLTAGE CONDUIT SYSTEM (IF REQUIRED BY CODE OR LANDLORD) INTO THESE SECTIONS ONLY.
 - SWITCHBOARD WILL BE SHIPPED ON AN ENCLOSED SEMI-TRAILER. ELECTRICAL CONTRACTOR MUST ARRANGE FOR A FORKLIFT TO OFF-LOAD AT JOB SITE. ELECTRICAL CONTRACTOR WILL RECEIVE 24 HOUR NOTICE PRIOR TO DELIVERY.
- ELECTRICAL CONTRACTOR SHALL INCLUDE ALL COSTS TO FURNISH AND INSTALL ALL LOW VOLTAGE WIRING IN CONDUIT, AS PART OF BASE BID.

DEMARC DEMOLITION NOTES:

- THE G.C. SHALL NOT CUT THE MAIN TELEPHONE WIRES LEADING TO THE TERMINATION STRIP (DEMARC BLOCK) OR PHONE SYSTEM.
- IF THE DEMARC IS TO BE RELOCATED, IT SHALL BE COORDINATED WITH EXPRESS TECHNICAL SERVICES (ETS). THE PRIMARY CONTACT IS BRENDEN SPIVEY AT 614-416-4077, AND THE SECONDARY CONTACT IS ZELDA WARD AT 614-416-2162.
- THE G.C. SHALL ALLOW ADEQUATE TIME FOR RELOCATION IN THE CONSTRUCTION SCHEDULE.
- IF THE WALL WITH THE TELEPHONE BLOCK IS SCHEDULED FOR DEMOLITION, THE ENTIRE BACKING PANEL SHALL BE REMOVED FROM THE WALL (WITHOUT DISCONNECTING THE WIRING) AND IT SHALL BE SAFELY SECURED IN THE CEILING UNTIL IT CAN BE RELOCATED TO THE NEW AREA OR REINSTALLED ON WALL.

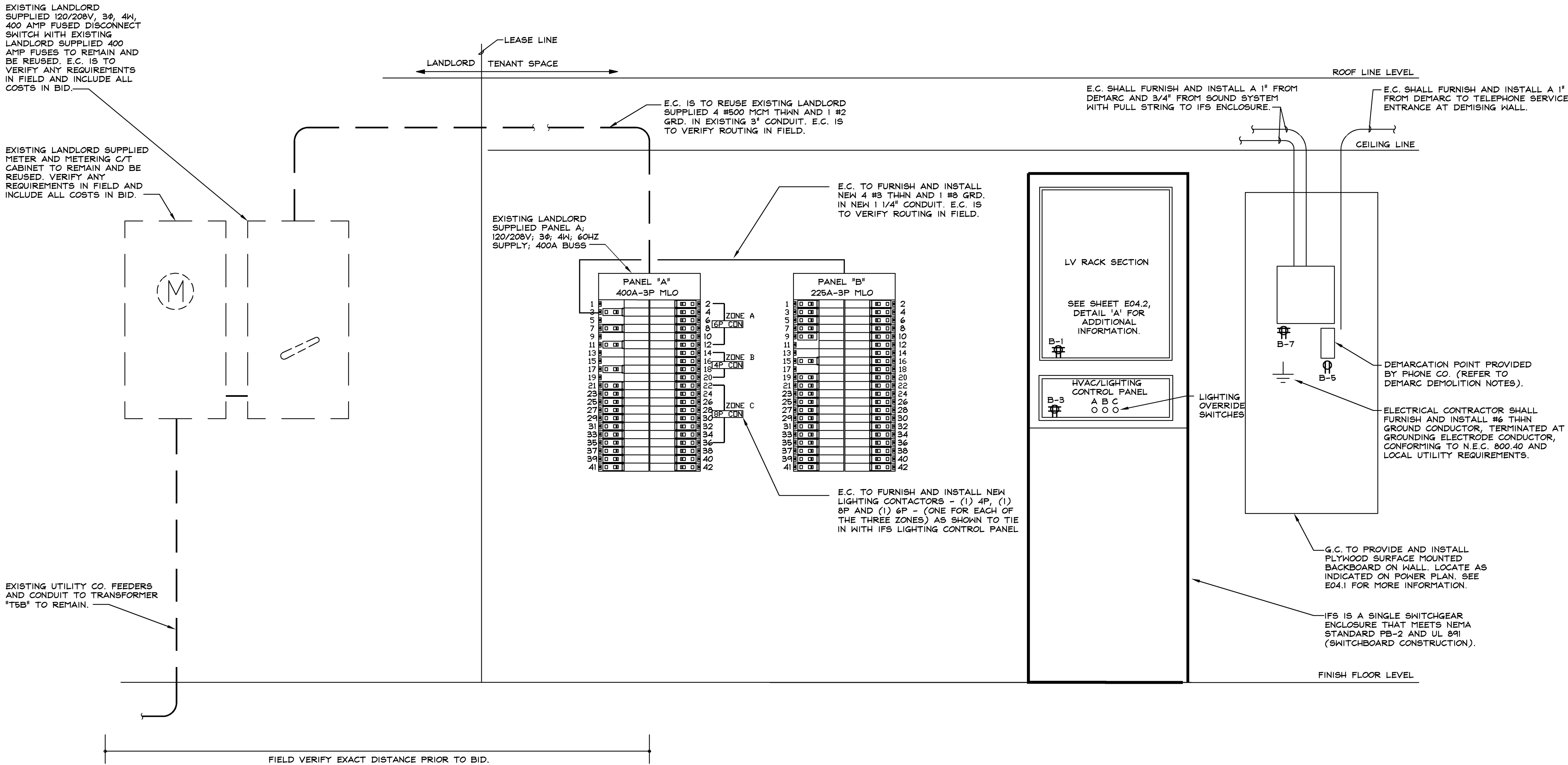
SERIES-RATED NOTES:

- MAIN CIRCUIT BREAKER IN 'PANEL IFB' SHALL BE FULLY RATED TO PROVIDE AN INTERRUPTING RATING OF 65,000 AMPS RMS.
- MAIN CIRCUIT BREAKER SHALL BE 'SERIES' RATED WITH ALL OTHER FEEDER BREAKERS IN 'PANEL IFB' TO PROVIDE AN INTERRUPTING RATING OF 65,000 AMPS RMS.
- PANELBOARDS OR OTHER EQUIPMENT THAT IS PROTECTED BY 'SERIES' RATED OVERCURRENT-PROTECTED DEVICES UPSTREAM SHALL BE MARKED WITH A PERMANENT LABEL THAT INDICATES THE SHORT-CIRCUIT RATING OF THE SERIES COMBINATION AND CALLS OUT THE SPECIFIC RELEVANT OVERCURRENT DEVICE(S) THAT CAN BE UTILIZED.

ELECTRICAL EQUIPMENT DATA

SYM	ITEM	VOLTAGE	HP	KW	M.C.A.	FEEDERS		TYPE OF CONN	BRANCH BREAKER	DISC SWITCH	BUSS/ FUSES	REMARKS
						WIRE	COND					
①	WATER HEATER	208V, 1PH	---	3.0	---	2#12 THHN #12 G	1/2"	'AC' TOGGLE SWITCH	20A-2P	---	---	SEE NOTE NO.3 BELOW
②	DREAM STEAMER	208V, 3PH	---	9.0	---	3#10 THHN #10 G	3/4"	THRU RECEPTACLE	30A-3P	---	---	---
③	RTU-1	208V, 3PH	---	---	150.9	EXISTING	EXISTING	EXISTING	EXIST 175A-3P HACR	---	---	SEE NOTE NO.1 & 2 BELOW
④	RTU-2	208V, 3PH	---	---	150.9	EXISTING	EXISTING	EXISTING	EXIST 175A-3P HACR	---	---	SEE NOTE NO.1 & 2 BELOW

- NOTE:
- LANDLORD SUPPLIED.
 - EXISTING TO REMAIN. REUSE EXISTING DISCONNECT, CIRCUIT BREAKER, WIRE, CONDUIT, ETC. AND LEAVE IN GOOD OPERATING CONDITION.
 - 'AC' TOGGLE SWITCH TO BE FURNISHED BY ESDC AND INSTALLED BY ELECTRICAL CONTRACTOR.



ELECTRICAL RISER DIAGRAM, PANEL SCHEDULES AND NOTES

EXPRESS

EXPRESS FASHION OPERATIONS, LLC
d/b/a STORE DESIGN & CONSTRUCTION

1 Express Drive Columbus, Ohio 43230
Telephone: 614.474.4001 Express.com

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OUTLET
SPRING 2015
140414

PROJECT INFORMATION:

EXPRESS
OUTLET MALL OF SAVANNAH
200 TANKER OUTLET BLD.
SPACE NO. 521
POOLER, GA 31322

NEW PACKAGE: DG
GENERATION: 94982
A/E PROJECT #:

REVISIONS:

REQUIRED BY:	DATE:

* INDICATES NO REVISION TO THIS SHEET



M-Engineering
750 Brookside Blvd.
Westerville, Ohio 43081
phone: 614.839.4039
fax: 614.839.2222

ELITE CONSTRUCTION GROUP
LAKE JACKSON, TX
PHONE: 979-385-0713
NOTE: THESE PRINTS HAVE BEEN
REDUCED BY 50 PERCENT SCALE.
WILL BE 50 PERCENT OF WHAT IS
NOTED ON PLANS

DATE ISSUED: 09/26/14
DESIGNED BY: CDH
DRAWN BY: CDH
CHECKED BY: DFG

**ELECTRICAL
PANELS AND
RISER DIAGRAM**

DRAWING NUMBER:

E05.1

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