

## ELECTRICAL SYMBOL LEGEND

LIGHTING FIXTURES AND OUTLETS  
(LETTER INDICATES FIXTURE TYPE)

- A O CEILING FIXTURE  
A O WALL MOUNTED LIGHT FIXTURE  
A O WALL WASHER, NON-SHADED AREA LIGHT SIDE  
A O BATTERY PACK, NUMBER OF HEADS AS SHOWN

SWITCHES (ALL SWITCHES AT +44"  
UNLESS NOTED OTHERWISE)

- S SINGLE POLE SWITCH  
S<sub>P</sub> SWITCH & PILOT LIGHT  
S<sub>K</sub> KEY OPERATED SWITCH  
S<sub>D</sub> DIMMER SWITCH  
S<sub>M</sub> THERMAL OVERLOAD SWITCH

RECEPTACLES (MOUNTED AT +18" TO  
CENTER UNLESS NOTED OTHERWISE)

- ⊖ SINGLE RECEPTACLE  
⊖ DUPLEX RECEPTACLE  
⊖ DOUBLE DUPLEX RECEPTACLE  
⊖ GFI RECEPTACLE

## PANELS AND RELATED ITEMS

- PANELBOARD - SURFACE AT +12" TO TOP

## COMMUNICATIONS

- ◀ COMBINATION TELE/DATA OUTLET AT +18"

## GENERAL

- ⊙ JUNCTION BOX  
⊙ MOTOR  
⊙ DISCONNECT SWITCH  
⊙ CEILING FAN

## RACEWAYS

- CONDUIT CONCEALED ABOVE CEILING OR IN WALL

- HOMERUN CONDUIT  
LONG STROKES INDICATE NEUTRAL CONDUCTOR  
SHORT STROKES INDICATE PHASE OR SWITCHED  
WIRES LONG STROKES WITH DOT INDICATES  
GROUNDING CONDUCTOR

MOUNTING HEIGHTS GIVEN ARE STANDARD. WHERE DIMENSIONAL NUMBERS  
ARE SHOWN AT SYMBOL, THIS SHALL BE THE MOUNTING HEIGHT OF THIS  
DEVICE. MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE, UNLESS  
INDICATED OTHERWISE.

## ABBREVIATIONS

A AMP	AMPERE(S)	(E)	EXISTING TO REMAIN	MAX	MAXIMUM	SHT	SHEET
AC	ALTERNATING CURRENT	EC	ELECTRICAL CONTRACTOR	MIN	MINIMUM	SP	SINGLE POLE
AFF	ABOVE FINISH FLOOR	EA	EACH	MTD	MOUNTED	SPEC	SPECIFICATIONS
AFG	ALUMINUM	EC	EMPTY CONDUIT	MTR	MOTOR	SW	SWITCH
AL	ALTERNATE	ELEC	ELECTRICAL OR ELECTRIC	NEG	NATIONAL ELECTRIC CODE	TV	TELEVISION
AWG	AMERICAN WIRE GAUGE	EMT	ELECTRICAL METALLIC TUBING	NF	NON FUSED	TYP	TYPICAL
BC	BARE COPPER	GFI	GROUND FAULT INTERRUPTER	#	NUMBER	UG	UNDERGROUND
BLDG	BUILDING	GND	GROUND	NTS	NOT TO SCALE	V	VOLT(S)
C	CONDUIT	HP	HORSEPOWER	NIC	NOT IN THIS CONTRACT	VA	VOLT AMP(S)
CB	CIRCUIT BREAKER	IMC	INTERMEDIATE METALLIC CONDUIT	PH	PHASE	W	WATT(S)
CKT	CIRCUIT	IN	INCH	PNL	PANEL	WP	WEATHERPROOF
CLS	CEILING	J-BOX	JUNCTION BOX	(R)	RELOCATE		
CTR	COUNTER	KCM	THOUSAND CIRCULAR MIL(S)				
CW	COPPER	KV	KILOVOLT				
DISC	DISCONNECT	KVA	KILOVOLT AMPERE(S)				
DN	DOWN	KM	KILOWATT(S)				
DWG	DRAWING						

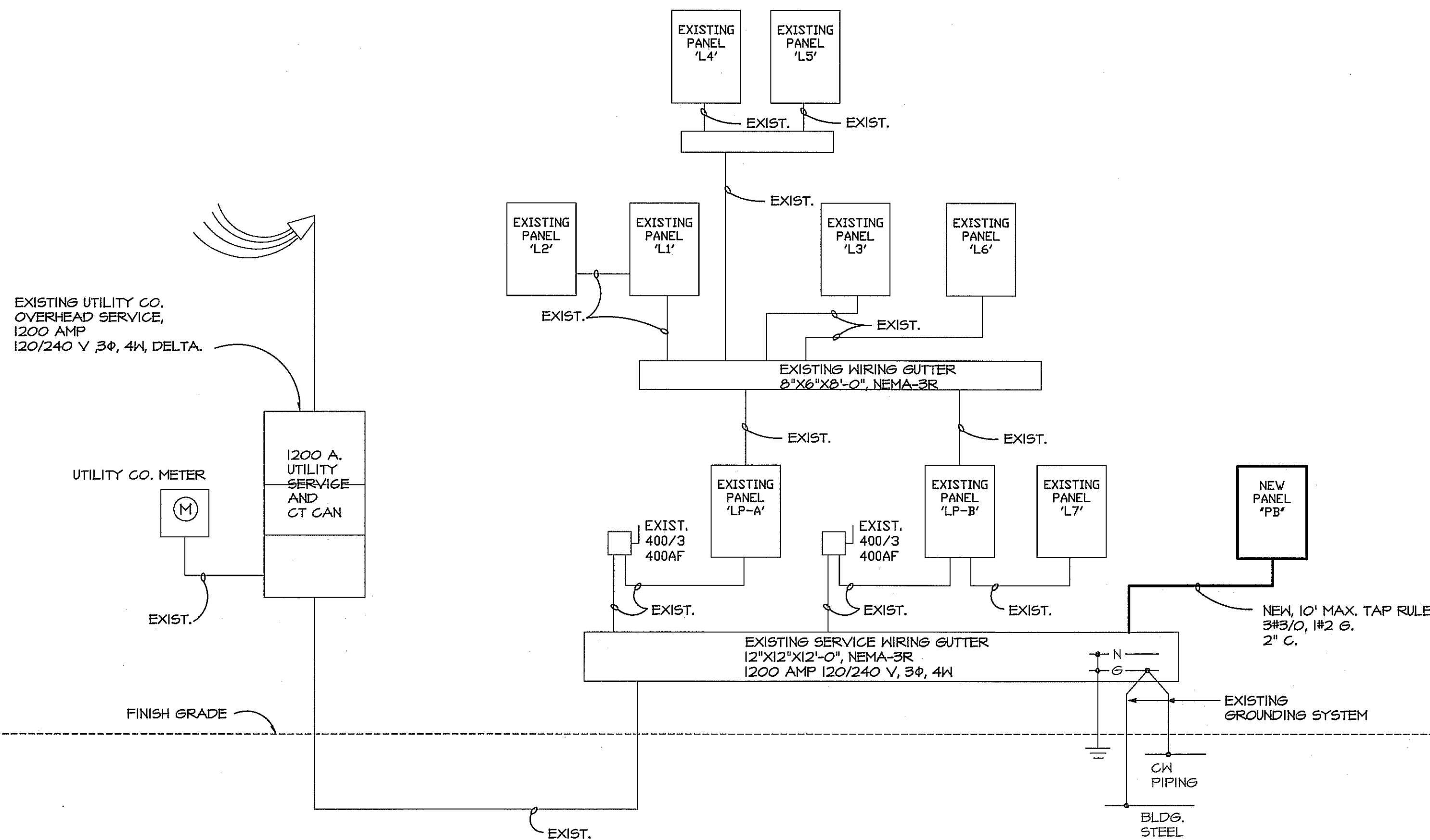
## LIGHTING FIXTURE SCHEDULE

TAG	MANUFACTURER	SERIES	LAMPS		VOLTS	VA	MOUNTING	DESCRIPTION/OPTIONS
			NO.	TYPE				
A	TROY-CSL LIGHTING	South Street F43450R-Small	1	60W	120	60	PEND 6'-6" AFF	SMALL PENDANT FIXTURE, HAND FORGED & CAST IRON, ANTIQUE PRISMATIC GLASS LENS U.L. LISTED WET LOCATION, FINISH SPECIFIED BY ARCHT. FIELD VERIFY STEM LENGTH.
B	LUMIERE	830-75PAR30/NFL/120/BZ	1	75W PAR30/NFL	120	75	SURFACE	SURFACE MOUNTED 4" DIA, ADJUSTABLE ACCENT/FLOOD LIGHT, DARK BRONZE, U.L. LISTED DAMP LOCATION.
R	LITON LIGHTING	1C22	-	LED, 3W/FT	120	66	SURFACE UNDER COUNTER	CLEAR ROPE LIGHT, 1/2"DIA, 22' CONTINUOUS LENGTH, PROVIDE ASSOC. CONNECTORS, PWR. CORD, MNTG CLIPS, FIELD VERIFY LENGTH. SEE LIGHTING PLAN FOR ADDITIONAL MOUNTING INFORMATION.

\*\* - CONTRACTOR TO PROVIDE A LIGHT FIXTURE ALLOWANCE TO OWNER FOR DESCRIBED FIXTURE IN BID. COORDINATE WITH OWNER AND ARCHITECT FOR LIGHT FIXTURE SELECTION AND SUBMIT CUT SHEETS FOR APPROVAL.

## FIXTURE SCHEDULE NOTES:

- FIXTURES INDICATED ABOVE SHALL BE USED AS BASIS FOR ALL BIDDING. ALTERNATE LIGHT FIXTURE PACKAGES SHALL BE SUBMITTED AS OUTLINED IN PRIOR APPROVALS. ACTUAL FIXTURES SUBMITTED WILL BE REVIEWED FOR ACCEPTABLE MANUFACTURER'S ONLY. THE CONTRACTOR WILL HAVE TO MAKE REQUIRED SUBMITTALS TO BE REVIEW FOR EQUIVALENCE AFTER AWARD OF CONTRACT AND BEFORE ORDERING LIGHT FIXTURES. IF ALTERNATE FIXTURE PACKAGE IS NOT SUBMITTED OR APPROVED, ADDITIONAL SUBSTITUTIONS WILL ONLY BE ACCEPTED AT THE ARCHITECT/ENGINEERS REQUEST.
- MANUFACTURER'S SERIES SHOWN INDICATES BASIC FIXTURE TYPES REQUIRED FOR THIS PROJECT. PROVIDE ALL OPTIONS AND ACCESSORIES REQUIRED IN DESCRIPTION/OPTIONS TO PROVIDE A COMPLETE AND FUNCTIONAL INSTALLATION.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING FIXTURE LOCATIONS, MOUNTING REQUIREMENTS AND U.L. LABELING OF FIXTURES PRIOR TO ORDERING. INCLUDE MOUNTING CLIPS, HARDWARE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION.
- ALL EMERGENCY LIGHTING FIXTURES SHALL BE PROVIDED WITH 90 MINUTES OF BATTERY BACK UP.
- ALL EXIT SIGNS SHALL BE PROVIDED WITH EMERGENCY MAINTENANCE FREE NICKEL CADMIUM BATTERY AND SOLID STATE CHARGING SYSTEM.



## SINGLE LINE DIAGRAM

NOT TO SCALE

## LOAD CALCULATION - SES

SERVICE VOLTAGE	=	240 V, 3PH, 4W
SERVICE PEAK DEMAND	=	161.0 KW
161.0 KW / 0.8	=	201.3 KVA
201.3 KVA X 1.25	=	251.6 KVA
( 251.6 KVA / 0.416	=	605.2 CODE AMPS)

CODE LOAD = 251.6 KVA

LOAD ADDED:  
NEW PANEL 'PB' = 25.1 KVA  
TOTAL LOAD ADDED = 251.6 KVA

TOTAL NEW LOAD ON 'SES' = 276.7 KVA  
AMPS AT 240 = 665.6 AMPS

PANELBOARD				PB		SCHEDULE			
VOLTAGE: 120/240V, 1Ph, 3W				LOAD - VA		LOCATION: Nema-3R			
BUS RATING: 225						ENCLOSURE: SURFACE			
MAINS: 200/2 MCB						MOUNTING: MIN. AIC: 10000			
TYPE:									
CIRCUIT DESCRIPTION		BKR	CKT NUM	PHASE A	PHASE B	CKT NUM	BKR	CIRCUIT DESCRIPTION	
Recept. Conv. Outlet		20	1	600			50		
			1	4800		2		Glass Washer #E08	
Recept. Conv. Outlet		20	3		600				
			1		4800	4	2		
Spare		20	5	960			20		
			1			6		Margarita Machines #E12	
Spare		20	7		960	8	2		
			1			10		Roll Up Door 1/2 HP	
Recept. P.O.S. #E01		20	9	600			20		
			1	1176					
Recept. P.O.S. #E01		20	11		600		20	1 Spare	
			1			12			
Recept. P.O.S. #E01		20	13	600			20	1 Spare	
			1						
Salsa Cooler #E17		20	15		588		20		
			1			16	1	Spare	
Chip Warmer #E14		20	17	1530					
			1			18		Space	
Bar Cooler #E06		20	19		780				
			1			20		Space	
Bar Cooler #E13		20	21	780					
			1			22		Space	
Wk top Freezer #E12		20	23		996				
			1			24		Space	
Mug Froster #E07		20	25	984					
			1			26		Space	
Mug Froster #E07		20	27		984				
			1			28		Space	
Blender #E05		20	29	1176					
			1			30		Space	
Spare		20	31						
			1			32		Space	
Spare		20	33						
			1			34		Space	
Space			35						
						36		Space	
Space			37						
						38		Space	
Bar Lighting		20	39		1010				
			1			40		Space	
FEED THROUGH LOAD									
CONNECTED LOAD				13206	11318	OPTIONS			
DESIGN LOAD				13500	11571				
LINE AMPS				112.5	96.4				
DESIGN LOAD KVA				25.0705					