

## GENERAL NOTES

1. REFER TO SYMBOLS AND ABBREVIATIONS LISTS ON SHEET NO. E-001.
2. REFER TO MOUNTING HEIGHTS AND ELECTRICAL NOTES ON SHEET NO. E-001.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL ELECTRICAL REQUIREMENTS.

## SHEET NOTES

1. MODIFIED EXISTING BRANCH CIRCUITS ARE INDICATED IN BOLD TEXT.

PANEL DESIGNATION: <b>EXISTING LP-CL3</b>														
PANEL LOCATION: ELECTRICAL ROOM LL659				MAIN: 125A BREAKER				P-P VOLTAGE: 480						
FED FROM: LP-C13				BUSSING: 100A				P-N VOLTAGE: 277						
FEEDER SIZE: 4#1 AND 1#6 GROUND				GROUND BUS: STANDARD				PHASE: 3						
IN 2 INCH CONDUIT				MOUNTING: SURFACE				WIRE: 4						
				NEUTRAL: 100%				SC INTERRUPTING RATING: 22KA						
Remarks	LIGHT LOAD	RECEPT LOAD	CONT LOAD	nonC LOAD	OC PROT	Ø A	Ø B	Ø C	OC PROT	nonC LOAD	CONT LOAD	RECEPT LOAD	LIGHT LOAD	Remarks
LIGHTING (LL658-59)	770					20A	1	X	2	15A				T-C13A FOR RP-C13A (15KVA TRANSFORMER)
SPARE						20A	3	X	4	15A				
SPARE						20A	5	X	6					
SPARE						20A	7	X	8	20A				SPARE
SPARE						20A	9	X	10	20A				SPARE
SPARE						20A	11	X	12	20A				SPARE
CONNECTED LOAD														
LOAD DESCRIPTION	ØA	ØB	ØC	TOTAL	DEMAND FACTOR				ØA	ØB	ØC	TOTAL		
LIGHTING LOAD (VOLT-AMPS)	770	0	0	770	1.00				770	0	0	770		
180VA RECEPTACLE LOAD (VOLT-AMPS)	0	0	0	0	1.00 (FIRST 10KVA)				0	0	0	0	RECEPTACLE DEMAND FACTOR PER ARTICLE 220.44 OF THE NATIONAL ELECTRICAL CODE.	
AMOUNT OVER 10KVA	0	0	0	0	0.50 (P 10KVA)				0	0	0	0		
CONTINUOUS LOAD (VOLT-AMPS)	0	0	0	0	1.00				0	0	0	0		
NON-CONTINUOUS LOAD (VOLT-AMPS)	5000	5000	5000	15000	0.65				3250	3250	3250	9750		
TOTAL LOAD (KVA)	5.77	5.00	5.00	15.77	125% OF LIGHT, CONT AND RECEPT				4.02	3.25	3.25	10.52		
TOTAL AMPACITY (AMPS)	20.8	18.0	18.0	19.0	<=10KVA) LOAD PLUS OTHER LOAD				14.5	11.7	11.7	12.7		
MINIMUM FEEDER SIZING (AMPS)	21.5	18.0	18.0	19.2	<= PER NEC ARTICLE 215.2				15.2	11.7	11.7	12.9		

PANEL DESIGNATION: <b>EXISTING LP-CL4</b>												MAIN: 125A BREAKER		P-P VOLTAGE: 480		
PANEL LOCATION: ELECTRICAL ROOM LL75				BUSSING: 100A				P-N VOLTAGE: 277								
FED FROM: LP-C14				GROUND BUS: STANDARD				PHASE: 3								
FEEDER SIZE: 4#1 AND 1#6 GROUND				MOUNTING: SURFACE				WIRE: 4								
IN 2 INCH CONDUIT				NEUTRAL: 100%				SC INTERRUPTING RATING: 22KA								
Remarks	LIGHT LOAD	RECEPT LOAD	CONT. LOAD	nonC LOAD	OC PROT	Ø A	Ø B	Ø C	OC PROT	nonC LOAD	CONT. LOAD	RECEPT LOAD	LIGHT LOAD	Remarks		
LIGHTING (LL773-78)	770					20A	1	X	2	15A				T-C14A FOR RP-CL4A (15KVA TRANSFORMER)		
LIGHTING (SUBSTATION ROOM)	1410					20A	3	X	4	25A						
LIGHTING (LL800, 02, 04-06, 13, 20, 25, & 30)	468					20A	5	X	6	5000						
SPARE						20A	7	X	8	5000				T-C14B FOR RP-CL4B (15KVA TRANSFORMER)		
SPARE						20A	9	X	10	25A						
SPARE						20A	11	X	12	5000						
CONNECTED LOAD												DEMAND FACTOR		DEMAND LOAD		
LOAD DESCRIPTION	ØA	ØB	ØC	TOTAL						ØA	ØB	ØC	TOTAL			
LIGHTING LOAD (VOLT-AMPS)	770	1410	468	2648	1.00 (FIRST 10KVA)					770	1410	468	2648	RECEPTACLE DEMAND FACTOR PER ARTICLE 220.44 OF THE NATIONAL ELECTRICAL CODE.		
180VA RECEPTACLE LOAD (VOLT-AMPS)	0	0	0	0	0.50 (P 10KVA)					0	0	0	0			
AMOUNT OVER 10KVA	0	0	0	0	0.65					0	0	0	0			
CONTINUOUS LOAD (VOLT-AMPS)	0	0	0	0	1.00					0	0	0	0			
NON-CONTINUOUS LOAD (VOLT-AMPS)	10000	10000	10000	30000	0.65					6500	6500	6500	19500			
TOTAL LOAD (KVA)	10.77	11.41	10.47	32.65	125% OF LIGHT, CONT AND RECEPT					7.27	7.97	6.97	22.21			
TOTAL AMPACITY (AMPS)	38.9	41.2	39.8	39.3	<=10KVA) LOAD PLUS OTHER LOAD					26.3	28.5	25.1	26.6			
MINIMUM FEEDER SIZING (AMPS)	39.6	42.4	38.2	40.1	PER NEC ARTICLE 215.2					26.9	29.8	25.6	27.4			

PANEL DESIGNATION: <b>EXISTING LP-L3</b>												MAIN: HALO		P-P VOLTAGE: 480			
PANEL LOCATION: ELECTRICAL ROOM LL659				BUSSING: 225A				P-N VOLTAGE: 277									
FED FROM: BUS DUCT #3 VIA SUBSTATION #4				GROUND BUS: STANDARD				PHASE: 3									
FEEDER SIZE: 4#4/0 AND 1#4 GROUND				MOUNTING: SURFACE				WIRE: 4									
IN 3/4 INCH CONDUIT				NEUTRAL: 100%				SC INTERRUPTING RATING: 22KA									
Remarks	LIGHT LOAD	RECEPT LOAD	CONT LOAD	nonC LOAD	OC PROT	Ø A	Ø B	Ø C	OC PROT	nonC LOAD	CONT LOAD	RECEPT LOAD	LIGHT LOAD	Remarks			
LIGHTING (LL676-72)	1920				20A	1	X	2		10000				T-3A FOR RP-L3A (30KVA TRANSFORMER)			
LIGHTING (LL673-74)	2480				20A	3	X	4	45A	10000							
LIGHTING (LL677-79)	2430				20A	5	X	6		10000							
LIGHTING (LL676, 80)	2030				20A	7	X	8	20A	20A			1395	LIGHTING CORRIDOR (CLLR0, 97, LL658)			
LIGHTING (LL681-82)	1890				20A	9	X	10	20A	20A			2940	INTERSTICE LIGHTING			
LIGHTING (LL620-33)	2110				20A	11	X	12	20A	20A			3430	INTERSTICE LIGHTING			
LIGHTING (LL635-40, 42, 44)	2560				20A	13	X	14	20A	20A				SPARE			
LIGHTING (LL641, 43, 45-48, 75, CLLR9)	2780				20A	15	X	16	20A	20A				SPARE			
LIGHTING (LL650, 54, 56)	2430				20A	17	X	18	20A	20A				SPARE			
SPARE					20A	19	X	20	20A	20A				SPARE			
SPARE					20A	21	X	22	20A	20A				SPARE			
SPARE					20A	23	X	24	20A	20A				SPARE			
SPARE					20A	25	X	26	20A	20A				SPARE			
SPARE					20A	27	X	28	20A	20A				SPARE			
SPARE					20A	29	X	30	20A	20A				SPARE			
CONNECTED LOAD												DEMAND FACTOR			DEMAND LOAD		
LOAD DESCRIPTION	ØA	ØB	ØC	TOTAL							ØA	ØB	ØC	TOTAL			
LIGHTING LOAD (VOLT-AMPS)	7935	10090	10400	28425	1.00						7935	10090	10400	28425			
180VA RECEPTACLE LOAD (VOLT-AMPS)	0	0	0	0	1.00 (FIRST 10KVA)						0	0	0	0			
AMOUNT OVER 10KVA	0	0	0	0	0.50 (P 10KVA)						0	0	0	0			
CONTINUOUS LOAD (VOLT-AMPS)	0	0	0	0	1.00						0	0	0	0			
NON-CONTINUOUS LOAD (VOLT-AMPS)	10000	10000	10000	30000	0.65						6500	6500	6500	19500			
TOTAL LOAD (KVA)	17.94	20.09	20.40	58.43	125% OF LIGHT, CONT AND RECEPT						14.44	16.39	16.30	47.13			
TOTAL AMPACITY (AMPS)	64.7	72.5	73.6	70.3	<=10KVA) LOAD PLUS OTHER LOAD						32.1	35.9	31.0	37.6			
MINIMUM FEEDER SIZING (AMPS)	71.9	81.6	83.0	78.8	PER NEC ARTICLE 215.2						39.2	49.0	70.4	66.2			

PANEL DESIGNATION: <b>EXISTING LP-L4</b>												P-P VOLTAGE: 480															
PANEL LOCATION: ELECTRICAL ROOM LL75				BASSING: 225A				P-N VOLTAGE: 277																			
FED FROM: BUS DUCT #4 VIA SUBSTATION #5				GROUND BUS: STANDARD				PHASE: 3																			
FEEDER SIZE: 4#4/0 AND 1#4 GROUND				MOUNTING: SURFACE				WIRE: 4																			
IN 3/4 INCH CONDUIT				NEUTRAL: 100%				SC INTERRUPTING RATING: 22KA																			
Remarks	LIGHT LOAD	RECEPT LOAD	CONT LOAD	nonC LOAD	OC PROT	Ø A	Ø B	Ø C	OC PROT	nonC LOAD	CONT LOAD	RECEPT LOAD	LIGHT LOAD	Remarks													
LIGHTING (LL700-12, CLLY8)	2140					20A	1	X	2	20A			1857	LIGHTING (LL800-07, 830-31, 836, CLLY05-08)													
LIGHTING (LL686-95, ODD)	1790					20A	3	X	4	20A			1790	LIGHTING (LL772, 810, 812-15, 820-25, CLLY09)													
LIGHTING (LL686, 92)	2280					20A	5	X	6	20A			2280	LIGHTING (LL772)													
LIGHTING (LL715-18, 40, 42-46, 50, CLLY9)	2520					20A	7	X	8	20A			2640	INTERSTICE LIGHTING													
LIGHTING (LL719-23, 34, 36, 38, 47-49)	2280					20A	9	X	10	20A			2640	INTERSTICE LIGHTING													
LIGHTING (LL724-30, 32, CLLY4)	2400					20A	11	X	12	20A			2400	INTERSTICE LIGHTING													
LIGHTING (LL700-60)	1800					20A	13	X	14	20A			2280	LIGHTING (LL772)													
LIGHTING (LL723-27)	1130					20A	15	X	16	20A				SPARE													
LIGHTING (LL776, CLLY4)	630					20A	17	X	18	20A				SPARE													
LIGHTING (LL772)	2940					20A	19	X	20	20A			2520	LIGHTING (LL772)													
LIGHTING (LL772)	2870					20A	21	X	22	20A			2640	LIGHTING (LL772)													
SPARE						20A	23	X	24	20A				LIGHTING (LL772)													
T-4B VIA RP-L4D (30KVA TRANSFORMER)	0	10620	0	1440		25	X	26		15000				T-4A VIA RP-L4A (45KVA TRANSFORMER)													
	0	7740	0	3684		45A	27	X	28	15000																	
	0	8100	0	1800		29	X	30		15000																	
CONNECTION LOAD														DEMAND FACTOR													
Ø A Ø B Ø C TOTAL														Ø A Ø B Ø C TOTAL													
LIGHTING (VOLT-AMPS)														100%													
19047 15129 13550 47726														19047 15129 13550 47726													
100VA RECEPT (VOLT-AMPS)														1.000 175% (TORQ)													
16250 7740 8100 26460														16250 7740 8100 26460													
AMOUNT OVER TORQA														0.350 100% (RECV)													
1000 1000 1000 3000														0 0 0 0													
CONTINUOUS LOAD (VOLT-AMPS)														0.665													
16440 13584 16860 51824														10684 12000 2019 33868													
NON-CONTINUOUS LOAD (VOLT-AMPS)														0.65													
TOTAL LOAD (VOLT-AMPS)														125% OF LIGHT-CONT AND RECEPT													
46.11 41.43 38.43 126.51														37.53 32.34 30.35 99.64													
1167.1 1092.8 1083.8 151.6														133.7 117.4 109.8 359.9													
MINIMUM FEEDER SIZING (AMP)														((=) PER NEC ARTICLE 216.2 )													
193.1 170.2 158.3 173.9														154.5 133.7 123.4 137.2													