

ELECTRICAL LOAD ANALYSIS						
I. LIGHTING AND GENERAL POWER PER NEC 220:						
DESCRIPTION OF LOADS	SQ. FT.	V/A PER SQ. FT.	NO. ROOMS	TOTAL VA	DEMAND LOAD	
A. GUEST ROOMS						
TOTAL GUESTROOMS	38,992	3		116,976		
				SUBTOTAL=	116,976	
B. CORRIDORS	7,296	0.50		3,648		
C. STORAGE	10,425	0.25		2,606		
D. OUTSIDE LIGHTING	6,229			4,500		
				SUBTOTAL=	10,754	
				SUBTOTAL GENERAL LIGHTING AND POWER	127,730	
F. LIGHTING LOAD CALCULATIONS:						
1) 1st 20,000 W @ 50%					10,000	
2) NEXT 80,000 W @ 40%					32,000	
3) REMAINDER OF WATTAGE @ 30%					8,319	
				TOTAL =	50,319	
G. COMMERCIAL AREA LIGHTING						
1) 2 W PER SQ. FT. 14,824 SQ. FT. @ 100%					29,648	
H. COMM. AREA RECEPTACLES (1 W PER SQ. FT.)					14,824	
1) 1st 10,000 WATTS @ 100%					10,000	
2) REMAINDER OF WATTAGE @ 50%					2,412	
				TOTAL =	42,060	
II. GUESTROOM HVAC						
A. WSHP-A	@mca	1,088 V-A	90 ROOMS	97,906		
B. WSHP-B	@mca	1,785 V-A	14 ROOMS	24,985		
C. WSHP-C	@mca	2,201 V-A	9 ROOMS	19,806		
III. MISCELLANEOUS EQUIPMENT						
A. KITCHEN EQUIPMENT DEMAND LOAD PER PANEL SCHEDULES	(estimated 9/30/13)			136,800		
B. ELEVATOR EQUIPMENT				88,200		
C. LAUNDRY EQUIPMENT	(estimated 9/30/13)			33,000		
D. JOCKEY FAIR COMPRESSOR				20,320		
E. SLUMP PUMPS				9,400		
F. REMAINING PLUMBING EQUIPMENT				5,000		
G. COOLING TOWERS				66,560		
H. MAKE-UP AIR UNITS	(at full load amps)			71,640		
I. P-1, P-3(P-2 AND P-4 REDUNDANT AND CANNOT RUN SIMULTANEOUS TO 1 AND 3)				81,540		
J. HP-1	@fla			3,312		
K. HP-2	@fla			894		
L. HP-3	@fla			1,456		
M. HP-4	@fla			2,184		
N. HP-5	@fla			3,312		
O. HP-6	@fla			3,960		
P. HP-7	@fla			2,184		
Q. HP-8	@fla			3,960		
R. HP-9	@fla			3,312		
S. HP-10	@fla			3,960		
T. HP-11	@fla			3,960		
U. HP-12	@fla			1,789		
V. HP-13	@fla			2,184		
W. HP-14	@fla			2,184		
X. HP-15	@fla			2,184		
Y. HP-16	@fla			5,040		
Z. HP-17	@fla			3,960		
AA. HP-18	@fla			811		
AB. HP-19	@fla			7,560		
AC. HP-20	@fla			3,960		
AD. HP-21	@fla			1,789		
AE. HP-22	@fla			3,312		
AF. HP-23	@fla			3,960		
AG. HP-24A	@fla			13,464		
AH. HP-24B	@fla			6,048		
AI. TOWER FANS				1,000		
AJ. F-1				3,990		
AK. S-1				6,319		
AL. S-2				6,319		
AM. S-3				1,746		
AN. S-4				3,990		
AO. S-5				1,176		
AP. S-6				696		
AQ. S-7				1,176		
AR. 25% LARGEST MOTOR				18,720		
				DEMAND TOTAL=	883,407	
TOTAL AMPERES @ 120/208V, 3 - PH, 4 - W =				2,454	AMPERES	
60HP FIRE PUMP TAPPED AHEAD OF THE MAIN						

## PANEL SCHEDULE

CALLOUT	TOTAL CONNECTED AMPS	TOTAL CALCULATED AMPS	BUS AMPS	POLES	IG BUS	LOCATION	FEEDER SIZE	UPSTREAM CIRCUIT	UPSTREAM BREAKER AND POLES
1CK	0	0	200	42	NO	KITCHEN BY FREIGHT ELEVATOR	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-11	200/3
2B	157	157	200	42	NO	ROOM 007	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-25	200/3
2CK	0	0	200	42	NO	KITCHEN BY SERVICE ELEVATOR	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-12	200/3
2L	51.5	52.5	100	42	NO		1-1/2"C, 3#1/0 AL, #1/0 AL N, #6 AL G	MSB-28	100/3
2SB	384	381	400	42	NO	ROOM 007	(2)2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #1 AL G	MSB-24	400/3
3B	101	108	200	42	NO	ROOM 007	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-27	200/3
B	117	101	200	42	NO	ELEC 007	2"C, 3#3/0 AL, #3/0 AL N, #4 AL G	MSB-16	150/3
EM	63.8	79.7	100	42	NO	ROOM 008	1-1/2"C, 3#1/0 AL, #1/0 AL N, #6 AL G	ATS1-1	100/3
HM	114	110	200	42	YES	TELECOMM 006	2"C, 3#3/0 AL, #3/0 AL N, #4 AL G, #4 AL IG	MSB-17	150/3
L	74.9	85.9	200	42	NO	ROOM 115	2"C, 3#3/0 AL, #3/0 AL N, #4 AL G	MSB-18	200/3
LDY	91.6	98	200	42	NO	LAUNDRY 021	2"C, 3#3/0 AL, #3/0 AL N, #4 AL G	MSB-26	200/3
MR	249	272	400	42	NO	ROOM 700A	(2)2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #1 AL G	MSB-19	400/3
R2	165	164	200	84	NO	ROOM 200C	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-1	200/3
R2A	40	40.4	100	20	NO	ROOM 200C	1-1/2"C, 3#1/0 AL, #1/0 AL N, #6 AL G	MSB-2	100/3
R3	174	172	200	84	NO	ROOM 300C	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-3	200/3
R3A	29.8	30.2	100	20	NO	ROOM 300C	1-1/2"C, 3#1/0 AL, #1/0 AL N, #6 AL G	MSB-4	100/3
R4	172	169	200	84	NO	ROOM 400C	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-5	200/3
R4A	25.4	25.8	100	20	NO	ROOM 400C	1-1/2"C, 3#1/0 AL, #1/0 AL N, #6 AL G	MSB-6	100/3
R5	197	194	200	84	NO	ROOM 500C	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-7	200/3
R5A	20.5	20.9	100	20	NO	ROOM 500C	1-1/2"C, 3#1/0 AL, #1/0 AL N, #6 AL G	MSB-8	100/3
R6	141	142	200	84	NO	ROOM 600C	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-9	200/3
R7	93.5	94.1	200	84	NO	ROOM 700A	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-10	200/3
SB	79.7	85.8	200	42	NO	SUBBASEMENT	2-1/2"C, 3#250KCMIL AL, #250KCMIL AL N, #4 AL G	MSB-15	200/3

ALL PANELBOARDS 120/208V 3PH 4W, 100% NEUTRAL, MAIN LUG ONLY

Prepared For:	119 Development, LLC P.O. Box 7468 Portland, ME 04112
Consultant:	CJS ENGINEERING CONSTANCE HIGKEY SCOTT, PE 7846 WOOD OAK COVE CORDOVA, TN 38016 TEL: (901) 830-5300 EMAIL: cbscott@cjsengineering.com
Architect:	ARCHETYPE architects 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056
Project:	Press Hotel 119 Exchange St. Portland, ME 04101
Revisions:	ISSUED FOR BID 10/14/13
Scale:	LOAD CALCULATION PANELBOARD SCHEDULE
Date:	E6.02