FEEDER SCHEDULE
MAIN PANEL: LBW
(LOAD DATA SHOWN ON SCHEDULES)

FEEDER INFORMATION							
FEEDER NUMBER	FEEDER LOAD (A)	CONDUIT & WIRE DATA			CON TYPE	LENGTH (FT)	% VOLTS DROP
LBW-1	89.7	(1)2-1/2 IN.C.-	4	#300 MCM EA.	MET	10	0.07%
LBW-2	147.4	(1)2-1/2 IN.C.-	4	#300 MCM EA.	MET	80	0.87%
LBW-3	202.6	(1)2-1/2 IN.C.-	4	#300 MCM EA.	MET	80	1.19%
LBW-4	25.3	(1)1-1/2 IN.C.-	4	#1 EA.	MET	50	0.27%
LBW-5	97.7	(1)2-1/2 IN.C.-	4	#300 MCM EA.	MET	110	0.79%
LBW-6	114.4	(1)2-1/2 IN.C.-	4	#300 MCM EA.	MET	110	0.92%
LBW-7	15.8	(1)1-1/2 IN.C.-	4	#1 EA.	MET	70	0.24%
LBW-1A	25.5	(1)1-1/2 IN.C.-	4	#1 EA.	MET	10	0.05%

FEEDER SCHEDULE
MAIN PANEL: HR
(LOAD DATA SHOWN ON SCHEDULES)

FEEDER INFORMATION							
FEEDER NUMBER	FEEDER LOAD (A)	CONDUIT & WIRE DATA			CON TYPE	LENGTH (FT)	% VOLTS DROP
HR-1	21.0	(1)3/4 IN.C.-	3	#10 EA.	MET	30	0.28%
HR-2	21.0	(1)3/4 IN.C.-	3	#10 EA.	MET	35	0.32%
HR-3	124.9	(1)1 IN.C.-	3	#4 EA.	MET	10	0.33%
HR-3A	124.9	(1)1-1/2 IN.C.-	4	#2/0 EA.	MET	10	0.18%
HR-4	29.8	(1)2-1/2 IN.C.-	4	#300 MCM EA.	MET	10	0.01%
HR-4A	48.0	(1)1-1/2 IN.C.-	3	#2 EA.	MET	10	0.13%
HR-4B	48.0	(1)3 IN.C.-	4	#350 MCM EA.	MET	10	0.03%
HR-5	11.0	(1)3/4 IN.C.-	3	#12 EA.	MET		
HR-6	11.0	(1)3/4 IN.C.-	3	#12 EA.	MET		
HR-7	14.0	(1)3/4 IN.C.-	3	#12 EA.	MET		
HR-8	14.0	(1)3/4 IN.C.-	3	#12 EA.	MET		
HR-9	21.0	(1)3/4 IN.C.-	3	#10 EA.	MET		
HR-10	21.0	(1)3/4 IN.C.-	3	#10 EA.	MET		
HR-11	7.6	(1)3/4 IN.C.-	3	#12 EA.	MET		
HR-12	7.6	(1)3/4 IN.C.-	3	#12 EA.	MET		
HR-13	7.6	(1)3/4 IN.C.-	3	#12 EA.	MET		

710 WILSHIRE : PROJECT NAME
201225 : JOB NUMBER
9/29/15 : DATE

TRANSFORMER SCHEDULE										
TRANS. NUMBER	SIZE (KVA)	TYPE	INSL. TYPE	PRI. VOLTS	SEC. VOLTS	HARMONIC K FACTOR	GROUND WIRE	GROUND COND. (IN.)	MAX SECONDARY LENGTH	MOUNT-ING
TBW	125	DRY	220	480	120/208	1	#3/0	1"	100FT	FLOOR
TP	45	DRY	220	480	120/208	1	#4	3/4"	<10FT	FLOOR
TR	75	DRY	220	480	120/208	1	#1/0	3/4"	<10FT	FLOOR
TBE	300	DRY	220	480	120/208	1	#3/0	1"	20FT	FLOOR
CC	225	DRY	220	480	120/208	1	#3/0	1"	<10FT	FLOOR
ET1	30	DRY	220	480	120/208	1	#8	3/4"	<10FT	FLOOR
TBK	150	DRY	220	480	120/208	1	#3/0	1"	<10FT	FLOOR

FEEDER SCHEDULE
DISTRIBUTION PANEL: EH
(LOAD DATA SHOWN ON SCHEDULES)

FEEDER INFORMATION								
FEEDER NUMBER	FEEDER LOAD (A)	CONDUIT & WIRE DATA				CON TYPE	LENGTH (FT)	% VOLTS DROP
EH-2	32.6	(1)1-1/2 IN.C.-	4	#1 EA.		MET	50	0.15%
EH-3	11.2	(1)1-1/2 IN.C.-	4	#1 EA.		MET	140	0.15%
EH-4	21.0	(1)1 IN.C.-	3	#10 EA.		MET	180	1.65%
EH-5	11.0	(1)3/4 IN.C.-	3	#12 EA.		MET	100	0.76%
EH-6	26.3	(1)1-1/2 IN.C.-	4	#1 EA.		MET	10	0.02%
EH-6A	2.8	(1)1 IN.C.-	3	#6 EA.		MET	10	0.01%
EH-6B	2.8	(1)1-1/2 IN.C.-	4	#1 EA.		MET	10	0.01%
EH-7	52.0	(1)1-1/4 IN.C.-	3	#4	+1# 6 AL GND EA	MET	110	0.65%
EH-8	52.0	(1)1-1/4 IN.C.-	3	#4	+1# 6 AL GND EA	MET	100	0.59%
EH-9	52.0	(1)1-1/4 IN.C.-	3	#4	+1# 6 AL GND EA	MET	130	0.77%
EH-10	14.0	(1)3/4 IN.C.-	3	#12 EA.		MET	80	0.77%
EH-11	21.0	(1)1 IN.C.-	3	#10 EA.		MET	100	0.92%

CONDUIT TYPE: MET=METALIC CONDUIT
PVC=NON-METALIC

FEEDER SCHEDULE
DISTRIBUTION PANEL: MSH
(LOAD DATA SHOWN ON SCHEDULES)

FEEDER INFORMATION								
FEEDER NUMBER	FEEDER LOAD (A)	CONDUIT & WIRE DATA				CON TYPE	LENGTH (FT)	% VOLTS DROP
MSH-1	52.0	(1)1-1/4 IN.C.-	3	#4	+1# 6 AL GND EA	MET	120	0.71%
MSH-2	65.0	(1)1-1/4 IN.C.-	3	#2	+1# 6 AL GND EA	MET	120	0.91%
MSH-3	65.0	(1)1-1/4 IN.C.-	3	#2	+1# 6 AL GND EA	MET	60	0.46%
MSH-4	65.0	(1)1-1/4 IN.C.-	3	#2	+1# 6 AL GND EA	MET	80	0.61%
MSH-5						MET		
MSH-6	52.0	(1)1-1/4 IN.C.-	3	#4	+1# 6 AL GND EA	MET	100	0.59%
MSH-7						MET		
MSH-8						MET		
MSH-9	52.0	(1)1-1/4 IN.C.-	3	#4	+1# 6 AL GND EA	MET	130	0.77%
MSH-10	203.0	(1)2-1/2 IN.C.-	3	#500 MCM EA.		MET	180	0.87%
MSH-11	203.0	(1)2-1/2 IN.C.-	3	#500 MCM EA.		MET	180	0.87%
MSH-12	7.6	(1)1-1/4 IN.C.-	4	#1 EA.		MET	60	0.04%
MSH-13	166.5	(1)2 IN.C.-	3	#3/0	+1# 4 AL GND EA	MET	20	0.39%
MSH-13A	166.5	(2)2-1/2 IN.C.-	4	#250 MCM EA.		MET	100	0.70%
MSH-13B	78.6	(1)1-1/4 IN.C.-	4	#250 MCM EA.		MET	100	0.66%
MSH-14	63.0	(1)1-1/4 IN.C.-	3	#2 EA.		MET	80	0.59%
MSH-15	234.1	(2)2-1/2 IN.C.-	4	#250 MCM EA.		MET	150	0.64%
MSH-16	108.0	(1)1-1/4 IN.C.-	4	#1/0 EA.		MET	100	0.81%
MSH-17	202.8	(2)3 IN.C.-	4	#250 MCM EA.		MET	20	0.07%
MSH-18	223.0	(2)3 IN.C.-	4	#250 MCM EA.		MET	20	0.08%
MSH-19	743.9	(1)4 IN.C.-	3	#500 MCM	+1# 1 AL GND EA	MET	20	0.82%
MSH-19A	743.9	(3)2-1/2 IN.C.-	4	#300 MCM EA.		MET	20	0.36%
MSH-20	58.6	(1)1-1/4 IN.C.-	4	#1 EA.		MET	60	0.33%
MSH-21	554.3	(1)4 IN.C.-	3	#500 MCM	+1# 2 AL GND EA	MET	20	0.61%
MSH-21A	554.3	(3)2-1/2 IN.C.-	4	#250 MCM EA.		MET	20	0.31%
MSH-21B	242.6	(1)3 IN.C.-	4	#500 MCM EA.		MET	20	0.27%
MSH-22	264.2	(2)3 IN.C.-	4	#250 MCM EA.		MET	50	0.24%
MSH-22A	264.2	(2)3 IN.C.-	4	#250 MCM EA.		MET	10	0.11%
MSH-22B	264.2	(2)3 IN.C.-	4	#250 MCM EA.		MET	30	0.33%
MSH-23	96.2	(1)1-1/2 IN.C.-	3	#1	+1# 6 AL GND EA	MET	40	0.36%
FP-1	240.0	(2)2 IN.C.-	3	#4/0	+1# 1/0 AL GND EA	MET	160	0.78%
FP-1A	276.0	(2)2 IN.C.-	3	#4/0	+1# 1/0 AL GND EA	MET	160	2.06%
FP-1B	360.0	(2)2 IN.C.-	3	#4/0	+1# 1/0 AL GND EA	MET	160	2.69%

CONDUIT TYPE: MET=METALIC CONDUIT
PVC=NON-METALIC

KEY NOTES:

1. REFER TO DIAGRAM 6/E700 FOR SERVICE GROUNDING DIAGRAM.
2. REFER TO DIAGRAM 7/E700 FOR TRANSFORMER GROUNDING DIAGRAM. REFER TO TRANSFORMER SCHEDULE FOR ADDITIONAL INFORMATION.
3. GENERATOR NOISE LEVEL SHALL NOT EXCEED 50DB TO THE OUTSIDE PER SMMC 4.12.060. SUBMIT NOISE TEST TO DEMONSTRATE COMPLIANCE TO THE SANTA MONICA COMMUNITY NOISE OFFICER FOR REVIEW.
4. FIRE PUMP CIRCUIT BREAKER SHALL BE CAPABLE OF BEING LOCKED IN THE 'ON' POSITION. FIRE PUMP SECTION SHALL BE SERVICE RATED.
5. PROVIDE PANEL BOARDS WITH MAIN CIRCUIT BREAKER. LOADS AND SCHEDULES SHALL BE PROVIDED AT A LATER PHASE.

SHEET NOTES:

1. CONTROL WIRING BETWEEN THE CONTROLLER AND THE DIESEL ENGINE GENERATOR SHALL BE STRANDED PER SECTION 695.14(D).

2. ELECTRIC MOTOR-DRIVEN FIRE PUMP CONTROL WIRING FROM CONTROLLER TO THE PUMP MOTORS SHALL BE RIGID METAL CONDUIT, LIQUID TIGHT FLEXIBLE METAL CONDUIT TYPE LFNC-B, OR MI CABLE. SECTION 695.6(E).

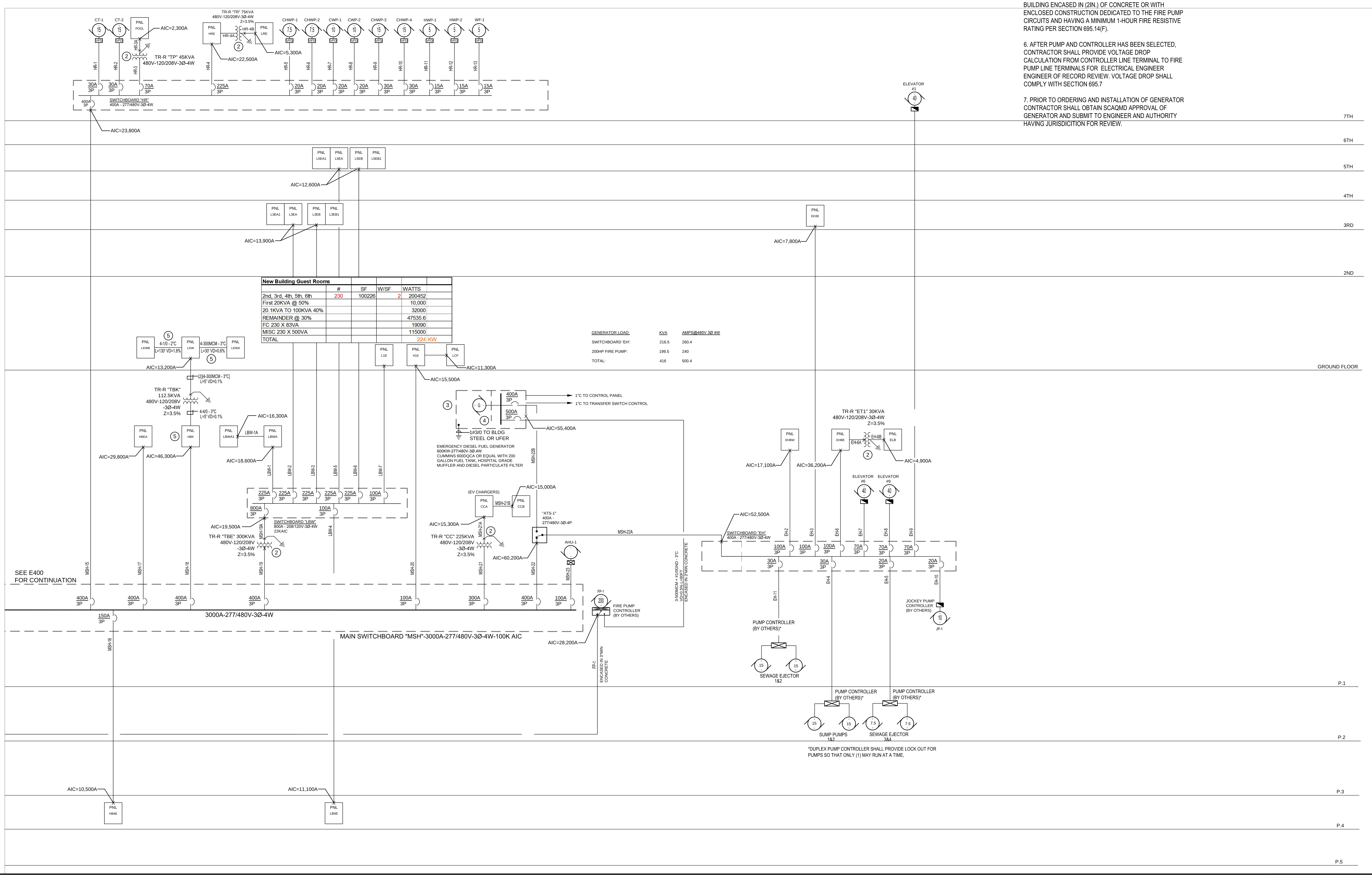
3. PROVIDE PERMANENT SIGN AT SERVICE ENTRANCE EQUIPMENT INDICATING THE TYPE AND LOCATION OF ON SITE EMERGENCY POWER SOURCE, SECTION 700.8.

4. AUTOMATIC TRANSFER SWITCH AND FIRE PUMP CONTROLLER SHALL BE LISTED IN ACCORDANCE WITH SECTION 695.4(A).

5. CONTROL CONDUCTORS INSTALLED BETWEEN FIRE PUMP TRANSFER SWITCH AND THE GENERATOR SUPPLYING THE FIRE PUMP DURING NORMAL POWER SHALL BE KEPT ENTIRELY INDEPENDENT OF ALL OTHER WIRING. THEY SHALL BE PERMITTED TO BE ROUTED THROUGH THE BUILDING ENCASED IN (2IN.) OF CONCRETE OR WITH ENCLOSED CONSTRUCTION DEDICATED TO THE FIRE PUMP CIRCUITS AND HAVING A MINIMUM 1-HOUR FIRE RESISTIVE RATING PER SECTION 695.14(F).

6. AFTER PUMP AND CONTROLLER HAS BEEN SELECTED, CONTRACTOR SHALL PROVIDE VOLTAGE DROP CALCULATION FROM CONTROLLER LINE TERMINAL TO FIRE PUMP LINE TERMINALS FOR ELECTRICAL ENGINEER ENGINEER OF RECORD REVIEW. VOLTAGE DROP SHALL COMPLY WITH SECTION 695.7

7. PRIOR TO ORDERING AND INSTALLATION OF GENERATOR CONTRACTOR SHALL OBTAIN SCAQMD APPROVAL OF GENERATOR AND SUBMIT TO ENGINEER AND AUTHORITY HAVING JURISDICITION FOR REVIEW.



SWITCHBOARD "HR" 400A - 277/480V-3Ø-4W
TR-R "TP" 45KVA 480V-120/208V-3Ø-4W
7TH
6TH
5TH
4TH
3RD
2ND
GROUND FLOOR
SWITCHBOARD "LBW" 800A - 208/120V-3Ø-4W 22KAIC
TR-R "TBE" 300KVA 480V-120/208V -3Ø-4W Z=3.5%
TR-R "CC" 225KVA 480V-120/208V -3Ø-4W Z=3.5%
TR-R "ET1" 30KVA 480V-120/208V-3Ø-4W Z=3.5%
EMERGENCY DIESEL FUEL GENERATOR 600KW-277/480V-3Ø-4W
1"C TO CONTROL PANEL
1"C TO TRANSFER SWITCH CONTROL
SEE E400 FOR CONTINUATION
3000A-277/480V-3Ø-4W
MAIN SWITCHBOARD "MSH"-3000A-277/480V-3Ø-4W-100K AIC
FIRE PUMP CONTROLLER (BY OTHERS)
JOCKEY PUMP CONTROLLER (BY OTHERS)
PUMP CONTROLLER (BY OTHERS)*
SEWAGE EJECTOR 1&2
SUMP PUMPS 1&2
SEWAGE EJECTOR 3&4
*DUPLEX PUMP CONTROLLER SHALL PROVIDE LOCK OUT FOR PUMPS SO THAT ONLY (1) MAY RUN AT A TIME.
P.1
P.2
P.3
P.4
P.5

New Building Guest Rooms					
	#	SF	W/SF	WATTS	
2nd, 3rd, 4th, 5th, 6th	230	100226	2	200452	
First 20KVA @ 50%				10,000	
20.1KVA TO 100KVA 40%				32000	
REMAINDER @ 30%				47535.6	
FC 230 X 83VA				19090	
MISC 230 X 500VA				115000	
TOTAL				224	KW

GENERATOR LOAD:	KVA	AMPS@480V 3Ø 4W
SWITCHBOARD 'EH':	216.5	260.4
200HP FIRE PUMP:	199.5	240
TOTAL:	416	500.4

REVISIONS		
BY	DATE	DESCRIPTION
-	05/07/2015	Addendum 02
-	09/04/2015	Addendum 03
-	10/30/2015	Addendum 04
-	05/27/2016	Addendum 05

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JOB NO. 201225

710 WILSHIRE BOULEVARD
MIXED-USE HOTEL PROJECT
SANTA MONICA - CALIFORNIA, 90401

SINGLE LINE DIAGRAM

DRAWN AJH
CHECKED HLA
APPROVED -
SCALE N/A
SHEET E-401
DATE June 25, 2013
PROJECT NUMBER HLA 0000000-00000