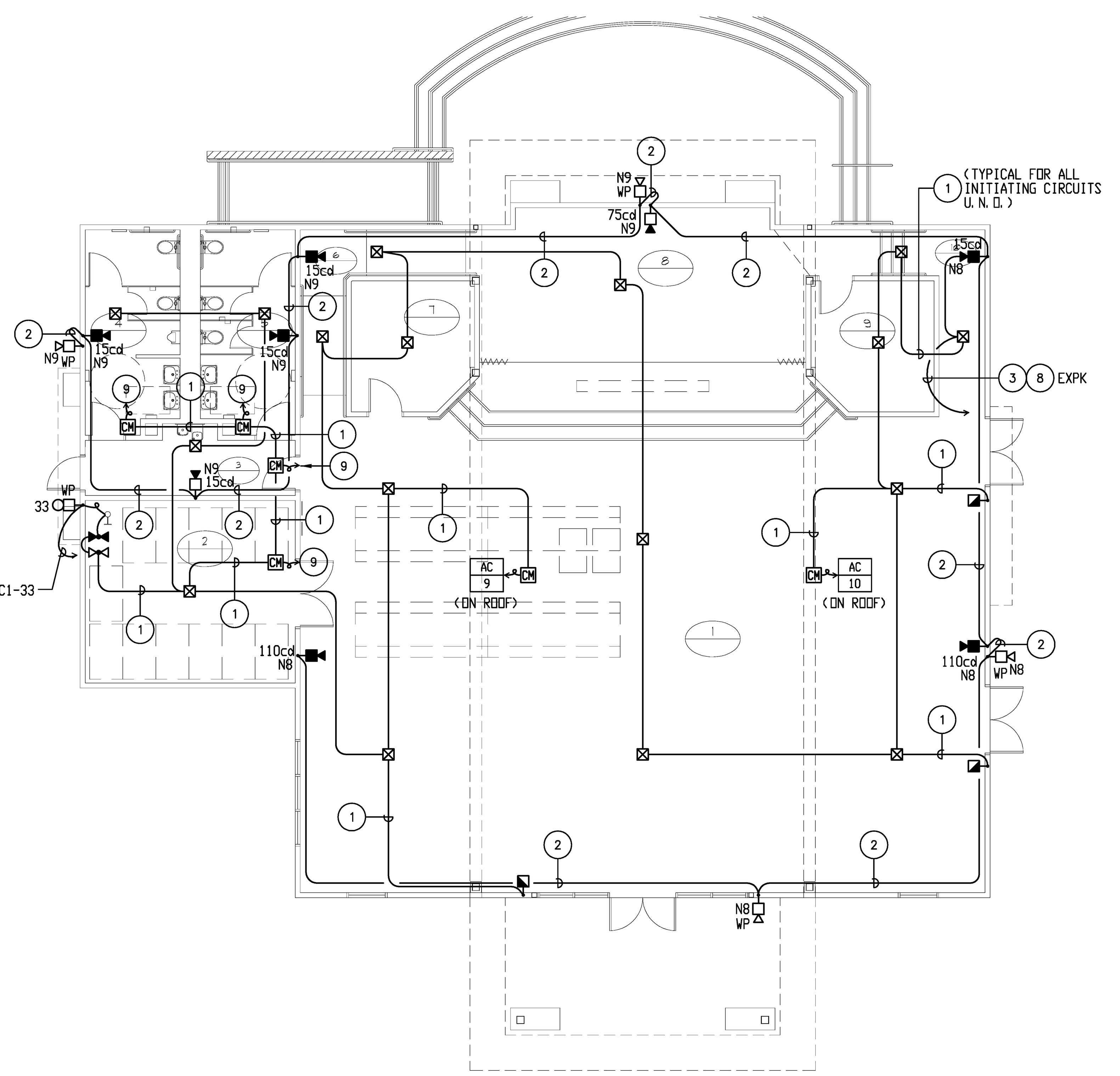
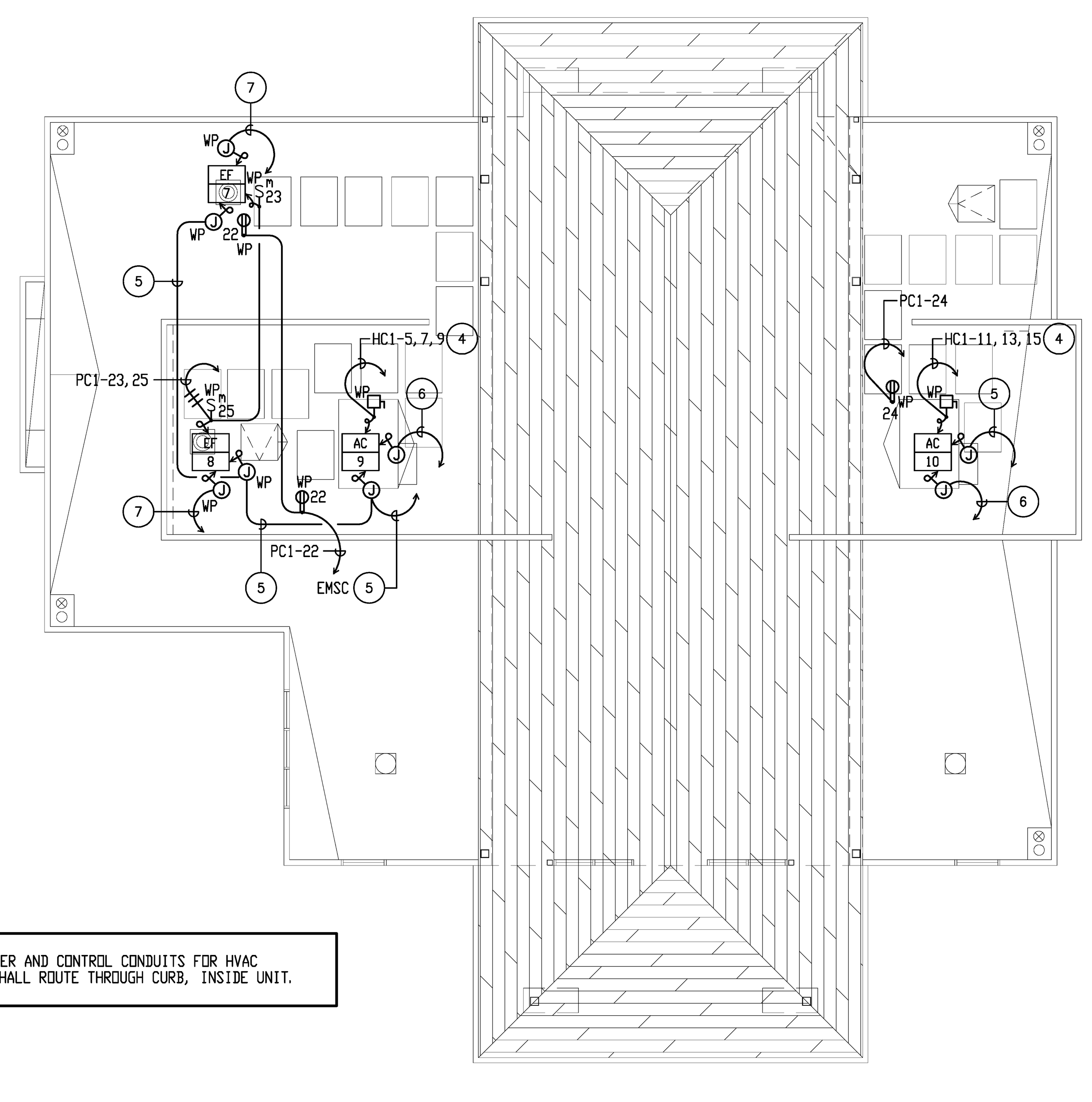


FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

B



POWER AND CONTROL CONDUITS FOR HVAC UNITS SHALL ROUTE THROUGH CURB, INSIDE UNIT.

ROOF ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

C

ROOSEVELT — PROJECT NO. 270.032

VOLTS 277/480, PHASE 3PH, 4W, MTG FLUSH — PANELBOARD HC1 — LOCATION ELECT. ROOM #9 — MAIN 225A/3P, BUS 225A

CKT	A (VA)	B (VA)	C (VA)	LOAD TYPE	BKR	OUTLET QUAN	DESCRIPTION		CKT	A (VA)	B (VA)	C (VA)	LOAD TYPE	BKR	OUTLET QUAN	DESCRIPTION
1	1588	-----	-----	L	20/1	24	RESTROOM LTG.	A	2	1820	-----	-----	L	20/1	20	MULTI-PURPOSE LTG.
3	-----	1250	-----	L	20/1	15	PLATFORM LTG.	B	4	-----		-----		20/1		SPARE
5	-----	-----	7645	M1	50/3	1	AC-9	C	6	-----	-----	90	L	20/1	2	X2-EXTERIOR LTG.
7	7645	-----	-----	M1	--	-	---------	A	8	100	-----	-----	G	20/1	1	EMERG. LTG. RELAY
9	-----	7645	-----	M1	--	-	---------	B	10	-----	300	-----	L	20/1	6	X2-COVERED WALKWAY LTG.
11	-----	-----	7645	M1	50/3	1	AC-10	C	12	-----	-----			20/1		SPARE
13	7645	-----	-----	M1	--	-	---------	A	14		-----	-----		20/1		SPARE
15	-----	7645	-----	M1	--	-	---------	B	16	-----		-----				PROVISION
17	-----	-----			20/1		SPARE	C	18	-----	-----					PROVISION
19		-----	-----		20/1		SPARE	A	20		-----	-----				PROVISION
21	-----		-----		20/1		SPARE	B	22	-----		-----				PROVISION
23	-----	-----					PROVISION	C	24	-----	-----					PROVISION
25		-----	-----				PROVISION	A	26		-----	-----				PROVISION
27	-----		-----				PROVISION	B	28	-----		-----				PROVISION
29	-----	-----					PROVISION	C	30	-----	-----					PROVISION
31		-----	-----				PROVISION	A	32		-----	-----				PROVISION
33	-----		-----				PROVISION	B	34	-----		-----				PROVISION
35	-----	-----					PROVISION	C	36	-----	-----					PROVISION
37		-----	-----				PROVISION	A	38		-----	-----				PROVISION
39	-----		-----				PROVISION	B	40	-----		-----				PROVISION
41	-----	-----					PROVISION	C	42	-----	-----					PROVISION

CONNECTED:

	VA	AMPS
PHASE A =	18798	68
PHASE B =	16840	61
PHASE C =	15380	56
TOTAL =	51018	61

L.C.L. @ 125% = 63648
RECEPT. ( ) 10 kVA @ 50%) =
KITCHEN @ 65% =
OTHER LOAD @ 100% = 100
TOTAL VA = 63748
TOTAL AMPS = 77

LOAD TYPE:
G - GENERAL (100%)
L - L.C.L. (125%)
R - RECEPTACLE (50%) (10 kVA @ 100%)
K - KITCHEN (65%)
M - MOTOR (100%)
M1 - MOTOR (125%)
X - X-RAY (100%)
X1 - X-RAY (50%)

X2 ? INDICATES CIRCUIT CONTROLLED BY MULTI-POLE RELAY OPERATED BY PHOTOCELL ON/ TIMECLOCK OFF FUNCTION OF THE ENERGY MANAGEMENT SYSTEM. MOUNT RELAYS IN LIGHTING TERMINAL CABINET LCC.

* PROVIDE CIRCUIT BREAKER LOCK-ON DEVICE.

ROOSEVELT — PROJECT NO. 270.032

VOLTS 120/208, PHASE 3PH, 4W, MTG FLUSH — PANELBOARD PC1 — LOCATION ELECT. ROOM #9 — MAIN 225A/3P, BUS 225A

CKT	A (VA)	B (VA)	C (VA)	LOAD TYPE	BKR	OUTLET QUAN	DESCRIPTION		CKT	A (VA)	B (VA)	C (VA)	LOAD TYPE	BKR	OUTLET QUAN	DESCRIPTION
1	1000	-----	-----	M1	20/1	1	HAND DRYER	A	2	900	-----	-----	R	20/1	5	CONV. RECEPTS.
3	-----	500	-----	R	20/1	1	DRINKING FOUNTAIN	B	4	-----	900	-----	R	20/1	5	CONV. RECEPTS.
5	-----	-----	1000	M1	20/1	1	HAND DRYER	C	6	-----	-----	180	R	20/1	1	PLATFORM RECEPTS.
7	180	-----	-----	R	20/1	1	FLOOR RECEPTS.	A	8	540	-----	-----	R	20/1	3	CONV. RECEPTS.
9	-----	180	-----	R	20/1	1	FLOOR RECEPTS.	B	10	-----	500	-----	G	20/1	1	PROJECTOR RECEPTS.
11	-----	-----	180	R	20/1	1	FLOOR RECEPTS.	C	12	-----	-----	1000	G	20/1	1	MOTORIZED CURTAIN
13	540	-----	-----	R	20/1	3	PLATFORM RECEPTS.	A	14	1000	-----	-----	G	20/1	1	PROJECTOR SCREEN
15	-----	540	-----	R	20/1	3	PLATFORM RECEPTS.	B	16	-----	500	-----	G	20/1	1	'MPPA'
17	-----	-----	500	G	20/1	1	'IDC'	C	18	-----	-----	500	G	20/1	1	*'FXPC'
19	500	-----	-----	G	20/1	1	'IDFC'	A	20	500	-----	-----	G	20/1	1	'FATC'
21	-----	500	-----	G	20/1	1	'TVC'	B	22	-----	360	-----	R	20/1	2	ROOF RECEPTS.
23	-----	-----	506	M1	20/1	1	EF-7	C	24	-----	-----	180	R	20/1	1	ROOF RECEPT.
25	506	-----	-----	M1	20/1	1	EF-8	A	26		-----	-----		20/1		SPARE
27	-----	200	-----	G	20/1	4	*SMOKE/FIRE DAMPER	B	28	-----	768	-----	L	20/1	1	MULTI-PURPOSE LTG
29	-----	-----	1200	L	20/1	8	TRACK LTS	C	30	-----	-----	968	L	20/1	1	MULTI-PURPOSE LTG
31		-----	-----		20/1		SPARE	A	32		-----	-----				PROVISION
33	-----	200	-----	G	20/1	1	FSR BELL	B	34	-----		-----				PROVISION
35	-----	-----			20/1		SPARE	C	36	-----	-----					PROVISION
37		-----	-----				PROVISION	A	38		-----	-----				PROVISION
39	-----		-----				PROVISION	B	40	-----		-----				PROVISION
41	-----	-----					PROVISION	C	42	-----	-----					PROVISION

CONNECTED:

	VA	AMPS
PHASE A =	5666	47
PHASE B =	5148	43
PHASE C =	6214	52
TOTAL =	17028	47

L.C.L. @ 125% = 7435
RECEPT. ( ) 10 kVA @ 50%) = 5180
KITCHEN @ 65% = 0
OTHER LOAD @ 100% = 5900
TOTAL VA = 18515
TOTAL AMPS = 51

LOAD TYPE:
G - GENERAL (100%)
L - L.C.L. (125%)
R - RECEPTACLE (50%) (10 kVA @ 100%)
K - KITCHEN (65%)
M - MOTOR (100%)
M1 - MOTOR (125%)
X - X-RAY (100%)
X1 - X-RAY (50%)

* PROVIDE CIRCUIT BREAKER LOCK-ON DEVICE.

PLAN NOTES:

1. PROVIDE 2#14 TSP (INITIATING) - 3/4"C.
2. PROVIDE 4#12 (NOTIFICATION) - 3/4"C.
3. PROVIDE 4#12 (NOTIFICATION) AND 2#14 (INITIATING) - 3/4"C.
4. PROVIDE 3#6, 1#8 GRD. - 1"C.
5. PROVIDE 3/4"C.O. TO 'EMTC'.
6. PROVIDE 3/4"C. WITH CONTROL WIRING DOWN TO RESPECTIVE THERMOSTAT.
7. PROVIDE 3/4"C. WITH INTERLOCKING CONTROL WIRING DOWN TO RESPECTIVE HVAC UNIT.
8. FIRE ALARM EXPANDER PANEL LOCATED IN BUILDING 'K'.
9. CONNECT TO COMBINATION SMOKE FIRE DAMPER IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

MECHANICAL EQUIPMENT GENERAL NOTES:

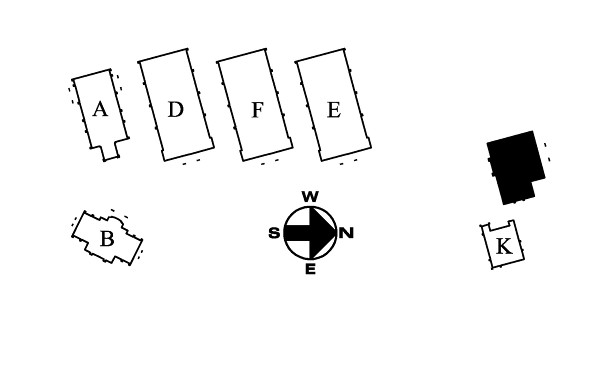
1. VERIFY EXACT LOCATION OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION OF CONDUIT.
2. ALL EQUIPMENT, DEVICES, SAFETY SWITCHES, JUNCTION BOXES CONNECTIONS, ETC. MOUNTED ON THE ROOF OR EXTERIOR SHALL BE WEATHERPROOF.
3. REFER TO MECHANICAL DRAWING CONTROL DIAGRAM FOR ALL SENSORS, TIME CLOCKS, RELAYS, TIMERS, STARTERS, LINE AND LOW VOLTAGE CONDUIT AND PROVIDE AS REQUIRED.
4. SAFETY SWITCHES SHALL BE HORSEPOWER RATED WITH CURRENT LIMITING FUSES, SIZED PER THE MANUFACTURER'S RECOMMENDATION. SWITCHES SHALL HAVE 'RK-1' FUSE REJECTION CLIPS.
5. ELECTRICAL PLANS DO NOT INDICATE MECHANICAL AND PLUMBING EQUIPMENT CONTROL. REFER TO MECHANICAL AND PLUMBING PLANS AND SPECIFICATIONS AND PROVIDE ALL CONDUIT, WIRE, J-BOXES, OUTLET BOXES, RELAY SWITCHES, TIMESWITCHES, CONTROL CIRCUITS, ETC. REQUIRED FOR A COMPLETE AND OPERABLE MECHANICAL AND PLUMBING INSTALLATION. ALL WIRE SHALL BE INSTALLED IN CODE SIZED CONDUIT.
6. LOCATIONS OF SAFETY SWITCHES AND CONNECTIONS FOR MECHANICAL AND PLUBING EQUIPMENT ARE SHOWN DIAGRAMMATICALLY. VERIFY ACTUAL LOCATIONS WITH EQUIPMENT SHOP DRAWINGS AND LOCATE SAFETY SWITCHES LOCATED TO PROVIDE CODE REQUIRED CLEARANCES AND ACCESS. SAFETY SWITCHES LOCATED ON THE ROOF SHALL BE MOUNTED 30" MINIMUM ABOVE THE ROOF. IF THE MOUNTING OF SWITCHES DIRECTLY TO MECHANICAL EQUIPMENT IS NOT POSSIBLE, PROVIDE ANGLE IRON SUPPORT BRACKETS BOLTED TO THE ROOF FRAMING.

ROOM TITLES

● ONE-HOUR SEPARATION

1. MULTI-PURPOSE
● 2. TABLE STORAGE
● 3. VESTIBULE
4. MEN'S TOILET
5. WOMEN'S TOILET
6. PLATFORM RAMP
● 7. STORAGE
8. PLATFORM
● 9. STORAGE
10. HALLWAY

KEYPLAN



LICENSED ARCHITECT JAMES M. STINSON C19098 RENEWAL 02/28/ STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER STEPHEN R. ZAJICEK No. E 10372 Exp. 09-30-12 ELECTRICAL STATE OF CALIFORNIA

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ROOSEVELT II ELEMENTARY SCHOOL
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
1261 W. 16TH STREET, SAN BEERNARDINO, CA.

BUILDING C
FIRE ALARM, ROOF ELEC. PLANS AND PANEL SCHEDULES

JOB NO. P520
DRAWN BY FBA
DATE 12/8/2011

E-C.2

RE-BID #F09-02 ROOSEVELT II (HENRY) E.S. NEW CONSTRUCTION BID ISSUANCE SET 12/09/11

Filename: I:\270\032\E-C.2.dwg (jmusick) Dimscale: 1=1(PS) Date: DEC 07, 2011 Time: 1:37 PM Xrefs: X-KEYPLAN-ROOSEVELT, X-Base-MPR-ROOF, X-Base-MPR, TITLEBLOCK