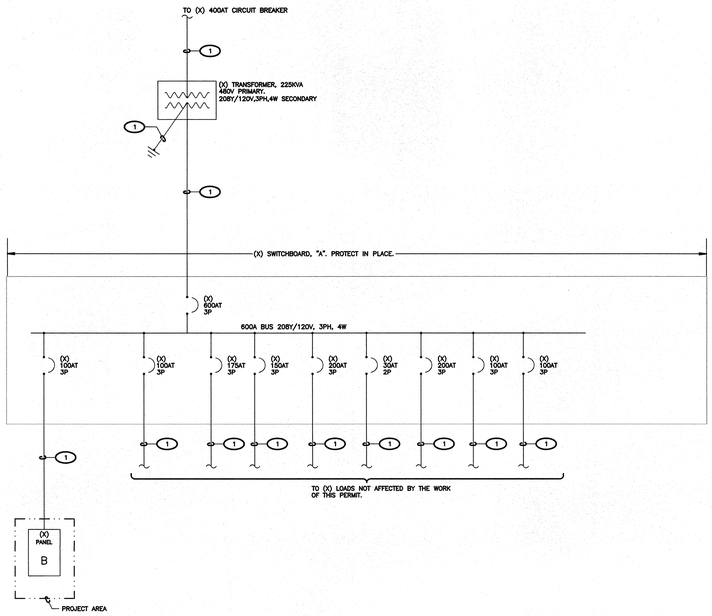
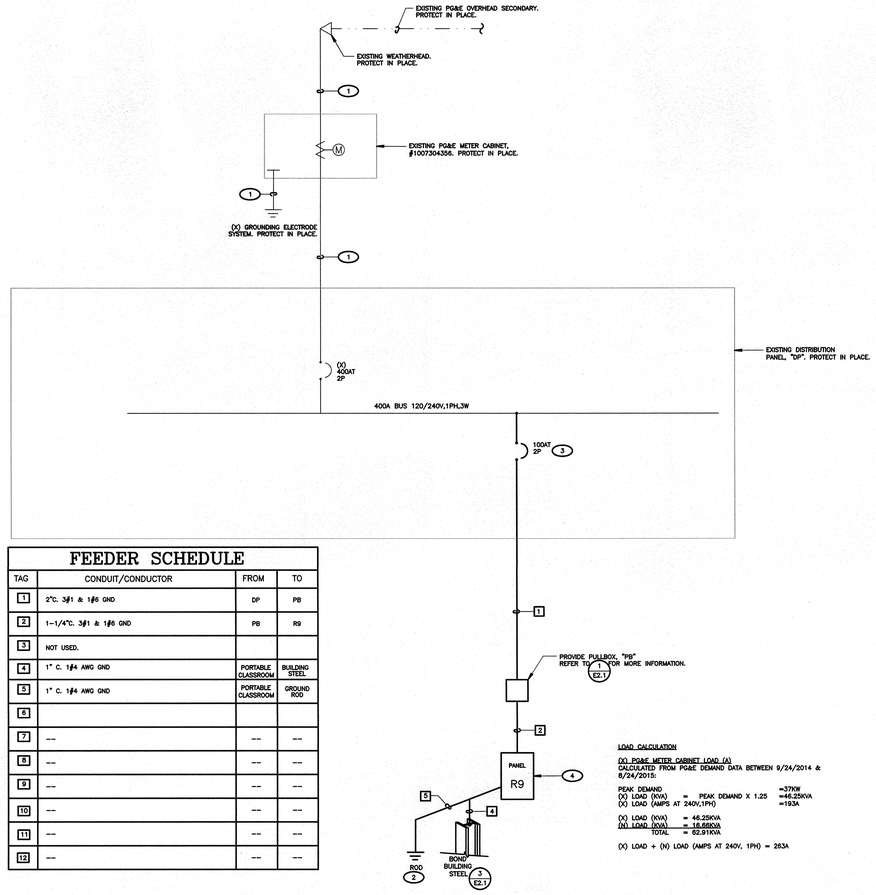


2 PARTIAL SINGLE LINE DIAGRAM
SCALE: NOT TO SCALE



1 SINGLE LINE DIAGRAM
SCALE: NOT TO SCALE

FEEDER SCHEDULE

TAG	CONDUIT/CONDUCTOR	FROM	TO
1	2"C. 3#1 & 1#6 GND	DP	PB
2	1-1/4"C. 3#1 & 1#6 GND	PB	R9
3	NOT USED.		
4	1" C. 1#4 AWG GND	PORTABLE CLASSROOM	BUILDING STEEL
5	1" C. 1#4 AWG GND	PORTABLE CLASSROOM	GROUND ROD
6			
7	---	---	---
8	---	---	---
9	---	---	---
10	---	---	---
11	---	---	---
12	---	---	---

SHEET NOTES

1. VERIFY LOCATION OF ALL BUILDINGS AND APPENDITURES ON ARCHITECTURAL AND CIVIL PLANS.
2. CONTRACTOR SHALL VERIFY LOCATION & REQUIREMENTS OF ALL DEVICES/EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO BID PROPOSAL, ROUGH-IN, AND FINISH.
3. CONTRACTOR SHALL, IN ROUTING ALL CIRCUITS, INCREASE CONDUCTOR & CONDUIT SIZE TO ALLOW FOR VOLTAGE DROP SHOULD THE CONTRACTOR EXCEED ROUTING INDICATED ON DRAWINGS. ENGINEER OF RECORD MUST BE NOTIFIED PRIOR TO ANY DEVIATIONS FROM APPROVED PLAN CHECK (PERMIT SET) DRAWINGS.
4. ALL 90 DEGREE CONDUIT BENDS AND RISERS SHALL BE PVC COATED RIGID STEEL.
5. VERIFY LOCATION OF ALL EQUIPMENT ON ARCHITECTURAL AND CIVIL PLANS.
6. PROVIDE CODE SIZED EQUIPMENT GROUNDING CONDUCTORS IN ALL OCCUPIED CONDUITS.
7. 1" CONDUIT MINIMUM UNDERGROUND.
8. COORDINATE WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS, DEVICES, AND WIRING REQUIRED. WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
9. CONTRACTOR SHALL FURNISH AND INSTALL PULL BOXES AS REQUIRED TO INSTALL CONDUCTORS PER CONDUCTOR MANUFACTURERS RECOMMENDATIONS, PER THE NATIONAL ELECTRICAL CODE, AND PER LOCAL AUTHORITIES HAVING JURISDICTION.
10. FIELD CONDITIONS GOVERN DEMOLITION AND NEW CONSTRUCTION. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF POSSIBLE FIELD PROBLEMS PRIOR TO DEMOLITION.
11. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH DIMENSIONED NYLON PULL STRING.
12. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONTRACTOR SHALL PROTECT ALL EXISTING/REMAINING UTILITIES IN PLACE. CONTRACTOR, AT HIS SOLE EXPENSE, SHALL REPAIR ANY UTILITY SYSTEMS DAMAGED DURING CONSTRUCTION.
13. UNLESS NOTED OTHERWISE, ALL DEVICES AND TERMINATIONS SHALL BE RATED FOR 75 DEGREES CELSIUS.
14. ALL CONDUCTORS #8 AND SMALLER SHALL BE THHN/THWN CU. ALL CONDUCTORS #6 AND LARGER SHALL BE XHHW-2 CU.
15. PER CEC 110.24, SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
16. PER CEC 110.16, ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS, SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.

KEY NOTES
(NOTE: THESE NOTES MAY NOT APPEAR ON ALL SHEETS)

1. EXISTING FEEDER. PROTECT IN PLACE.
2. #4 AWG CU BOND TO GROUNDING LUGS ON STEEL BEAMS FOR EACH TRAILER MODULE PER MANUFACTURER'S &THE AHJ REQUIREMENTS.
3. PROVIDE CIRCUIT BREAKER THAT MEETS, OR EXCEEDS THE UTILITY COMPANY AVAILABLE FAULT CURRENT.
4. BRANCH CIRCUIT LOAD CENTER PROVIDED BY MODULAR CLASSROOM MANUFACTURER. SEE MODULAR CLASSROOM SHOP DRAWINGS FOR PANEL SCHEDULE. VERIFY LOCATION & PROVIDE CONNECTION PER VENDOR'S SHOP DRAWINGS.

LOAD CALCULATION

(X) PG&E METER CABINET LOAD (A)
CALCULATED FROM PG&E DEMAND DATA BETWEEN 9/24/2014 & 8/24/2015:

PEAK DEMAND
(X) LOAD (KVA) = PEAK DEMAND X 1.25 =37KW =46.25KVA
(X) LOAD (AMPS AT 240V,1PH) =193A

(X) LOAD (KVA) = 46.25KVA
(N) LOAD (KVA) = 18.66KVA
TOTAL = 62.91KVA

(X) LOAD + (N) LOAD (AMPS AT 240V, 1PH) = 263A

(X) PANEL

PANEL B — VOLTAGE 208Y/ 120V PHASE 3 WIRE 4 — MAIN MAIN LUGS ONLY
SOURCE SWITCHBOARD 'A' — A.I.C. 10,000 — ENCLOSURE NEMA 3R
PANEL LOCATION BLDG 'C' — BUS AMPERE RATING: 125 — MOUNTING FLUSH

CKT	VA LOAD LINE A	VA LOAD LINE B	VA LOAD LINE C	LOAD DESCRIPTION	LCL	OUTLETS MIS	OUTLETS REC	OUTLETS LTS	CIRCUIT BREAKER POL	CIRCUIT BREAKER TRP	BUS A	BUS B	BUS C	CIRCUIT BREAKER TRP	CIRCUIT BREAKER POL	OUTLETS LTS	OUTLETS REC	OUTLETS MIS	LCL	LOAD DESCRIPTION	VA LOAD LINE A	VA LOAD LINE B	VA LOAD LINE C	CKT
1				RM 410					1	20	■			20	1					(X) LOAD				2
3				RM 410					1	20		■		20	1					RM 409				4
5				(X) LOAD					1	20			■	20	1					RM 409				6
7				RM 408					1	20	■			20	1					(X) LOAD				8
9				RM 408					1	20		■		20	1					RM 404				10
11				(X) LOAD					1	20			■	20	1					RM 404				12
13				RM 403					1	20	■			20	1					(X) LOAD				14
15				RM 403					1	20		■		20	1					EXT. LIGHTS				16
17				UV-2 (3)					1	20			■	20	1					TOILETS				18
19				UV-2 (2), UV-1					1	20	■			20	1					SPARE				20
21				(X) LOAD					1	20		■		20	1					SPARE				22
23									1	20			■	20	1					SPARE				24
25									1	20	■			20	1					SPARE				26
27				F-1A					1	20		■		30	2					INSTA-HOT RM 103 WOM		2750		28
29									1	20			■							INSTA-HOT RM 103 WOM			2750	30
31											■													32
33												■												34
35													■											36
37											■													38
39												■												40
41													■											42
				SUBTOTALS																		2750	2750	

NOTES: 30 SPACE PANEL

LINE TOTALS	2,750	2,750
LCL ADDER		
TOTAL VA/PH	2,750	2,750
LINE AMPS	23	23

EXISTING PANEL GENERAL NOTES:
1. UON, ALL LOADS ARE EXISTING
2. UON, ALL CIRCUIT BREAKERS DESIGNATED IN PANEL SCHEDULE ARE, EXISTING, TO REMAIN.
3. ALL CIRCUIT BREAKERS THAT ARE CALLED TO BE DISCONNECTED SHALL BE DELIVERED TO OWNER.

PANEL SCHEDULE WORK LEGEND
□ DISCONNECT & (R) CIRCUIT BREAKER AT THIS LOCATION. PROVIDE CIRCUIT BREAKER SHOWN IN SCHEDULE.

(X) PANEL

PANEL DP — VOLTAGE 240/ 120V PHASE 1 WIRE 3 — MAIN 400A MCB
SOURCE PG&E METER CABINET — A.I.C. 10,000 — ENCLOSURE NEMA 3R
PANEL LOCATION WEST SIDE — BUS AMPERE RATING: 400 — MOUNTING SURFACE

CKT	VA LOAD LINE A	VA LOAD LINE B	LOAD DESCRIPTION	LCL	OUTLETS MIS	OUTLETS REC	OUTLETS LTS	CIRCUIT BREAKER POL	CIRCUIT BREAKER TRP	BUS A	BUS B	BUS C	CIRCUIT BREAKER TRP	CIRCUIT BREAKER POL	OUTLETS LTS	OUTLETS REC	OUTLETS MIS	LCL	LOAD DESCRIPTION	VA LOAD LINE A	VA LOAD LINE B	CKT
1			SPARE						100	■			100						NORTH TRAILER			2
3			SPARE					2			■			2					NORTH TRAILER			4
5			TRAILER #2 PREK						100			■	100						TRAILER 3			6
7			TRAILER #2 PREK					2		■				2					TRAILER 3			8
9			SPACE						100		■		100						RELO R9	8330		10
11												■		2					RELO R9		8330	12
13										■									SPACE			14
15											■											16
17												■										18
19										■												20
21											■											22
23												■										24
25										■												26
27											■											28
29												■										30
31										■												32
33											■											34
35												■										36
37										■												38
39											■											40
41												■										42
			SUBTOTALS																	8330	8330	

NOTES: 30 SPACE PANEL

LINE TOTALS	8,330	8,330
LCL ADDER		
TOTAL VA/PH	8,330	8,330
LINE AMPS	69	69

EXISTING PANEL GENERAL NOTES:
1. UON, ALL LOADS ARE EXISTING
2. UON, ALL CIRCUIT BREAKERS DESIGNATED IN PANEL SCHEDULE ARE, EXISTING, TO REMAIN.
3. ALL CIRCUIT BREAKERS THAT ARE CALLED TO BE DISCONNECTED SHALL BE DELIVERED TO OWNER.

PANEL SCHEDULE WORK LEGEND
O PROVIDE CIRCUIT BREAKER IN (X) SPACE.

MARK	DATE	REVISIONS
1		
2		
3		

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT. ALL CONSTRUCTION SHALL CONFORM TO THE C.B.C.

SITE IMPROVEMENTS FOR MODULAR CLASSROOM ROOSEVELT ELEMENTARY SCHOOL
2324 VERDE STREET
FOR
BAKERSFIELD CITY SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA, 93306

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STEPHEN J. CORBIN, NCARB, AIA, LEED AP BD+C

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SINGLE LINE DIAGRAM, PANEL SCHEDULES

Know what's below. Call before you dig.

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1211 MARICOPA HWY, SUITE 250
OJAI, CA 93023
(805) 705-4772
DALEFERRANTI@LIVE.COM

PERMIT SUBMITTAL

JOB NO.
DRAWN: G.GARCIA
CHECKED: D.FERRANTI
DATE: 2/12/2016

E
5.0 OF SHEETS