

SPECIFICATIONS

(REMODEL)

6/17/2008

ITEM	DESCRIPTION	
1.	STANDARDS AND CODES: ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. THIS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING WORK SHOWN OR SPECIFIED WHICH MAY EXCEED THE REQUIREMENTS OF SUCH ORDINANCES, LAWS, REGULATIONS AND CODES.	18.
2.	COMPLETE INSTALLATION: PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, ACCESSORIES, ETC., NECESSARY TO ACCOMPLISH A COMPLETE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE PLANS TOGETHER WITH THE SPECIFICATIONS.	19.
3.	PERMITS: OBTAIN AND PAY FOR ALL BUILDING AND WORKING PERMITS AND INSPECTION FEES REQUIRED FOR THIS PROJECT.	
4.	DRAWINGS: DATA PRESENTED ON THESE DRAWINGS SHALL BE FIELD VERIFIED SINCE ALL DIMENSIONS, LOCATIONS, AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS. REVIEW ALL ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL AND SPECIALTY SYSTEMS DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS ON CONDITIONS SHOWN THEREON. DO NOT SCALE ELECTRICAL PLANS FOR FIXTURE, DEVICE OR APPLIANCE LOCATIONS. USE CONFIGURED DIMENSIONS IF GIVEN OR CHECK ARCHITECTURAL OR MECHANICAL DRAWINGS.	
5.	COPYRIGHT: THESE PLANS, SPECIFICATIONS AND ALL RELATED ADDENDA AND DOCUMENTS CONSTITUTE COPYRIGHT MATERIALS OF PK ELECTRICAL, INC. ALL RIGHTS CONFERRED BY THE COPYRIGHT AND SIMILAR LAWS ARE RESERVED TO PK ELECTRICAL, INC. THESE MATERIALS SHALL REMAIN THE SOLE PROPERTY OF PK ELECTRICAL, INC. AND MAY NOT BE REPRODUCED, DISTRIBUTED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF PK ELECTRICAL, INC.	
6.	LOCATIONS: INDICATED LOCATIONS OF ALL OUTLETS AND EQUIPMENT ARE SUBJECT TO CHANGE. SHIFT/RELOCATE/RECONFIGURE ANY OUTLET, EQUIPMENT OR CONNECTION POINT UP TO 10' AS DIRECTED BY ENGINEER, AT NO ADDED COST.	20.
7.	RECORD DRAWINGS: CONTRACTOR SHALL PROVIDE, PRIOR TO FINAL ACCEPTANCE AND OBSERVATION, ONE SET OF REVISED RECORD ELECTRICAL CONSTRUCTION DOCUMENTS ON REPRODUCIBLE MEDIUM INDICATING THE FOLLOWING ADDITIONAL INFORMATION: EXACT ROUTING OF ALL CONDUITS LARGER THAN 1" EXACT LOCATION OF ALL SERVICE GROUNDING/BONDING CONNECTIONS CONTRACTORS NAME, ADDRESS AND TELEPHONE NUMBER RECORD NOTATIONS SHALL BE CLEARLY DRAWN AT A DRAFTING APPEARANCE EQUAL TO THE ORIGINAL DRAWINGS. CONTRACTOR SHALL ALSO PROVIDE ALL OPERATING AND MAINTENANCE MANUALS PRIOR TO FINAL PAYMENT.	21.
8.	EXAMINATION OF SITE AND EXISTING CONDITIONS: BEFORE SUBMITTING A PROPOSAL, CONTRACTOR SHALL EXAMINE THE SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND LIMITATIONS. NO EXTRAS WILL BE ALLOWED BECAUSE OF THE CONTRACTOR'S MISUNDERSTANDING OF THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK. ANY APPARENT VARIANCE OF THE DRAWINGS OR SPECIFICATIONS FROM THE EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER BEFORE SUBMITTING A PROPOSAL.	22.
9.	EXISTING OUTLETS: EXISTING OUTLETS AND CIRCUITING NOT IN CONFLICT WITH NEW CONDITIONS SHALL REMAIN. EXTEND OUTLETS TO NEW SURFACES, CAULK AND PROVIDE JIMBO PLATES AS REQUIRED TO PRESENT A SERVICEABLE AND FINISHED APPEARANCE.	23.
10.	DEMOLITION: PROVIDE COMPLETE ELECTRICAL DEMOLITION: REMOVE EXISTING OUTLETS AND EQUIPMENT IN CONFLICT WITH NEW CONDITIONS. EXISTING CONDUITS REMOVED FROM SERVICE MAY BE ABANDONED IN PLACE IF IN A CONCEALED LOCATION. REMOVE ALL WIRE FROM ABANDONED RACEWAYS. CONTRACTOR SHALL INSURE CONTINUITY OF EXISTING CIRCUITING PASSING THROUGH DEMOLITION AREAS. EXTEND AND/OR RELOCATED AS NECESSARY. SHIFT/RELOCATE EXISTING EQUIPMENT AND CIRCUITING AS REQUIRED TO ACCOMMODATE NEW WORK.	24.
11.	SALVAGE: ALL EXISTING EQUIPMENT REMOVED DURING THE COURSE OF THIS PROJECT SHALL BE OFFERED TO OWNER FOR SALVAGE. ANY EQUIPMENT SELECTED BY OWNER SHALL BE DELIVERED TO OWNER ON SITE. ALL REMAINING EQUIPMENT BECOMES THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.	25.
12.	TESTING: PRIOR TO PLACING IN SERVICE, ALL ELECTRICAL SYSTEMS SHALL BE TESTED FOR OPEN, GROUND, AND PHASE ROTATION. THE MAIN SERVICE GROUND AND ALL LOCAL TRANSFORMER MADE GROUNDS SHALL BE MEGGER-TESTED.	26.
13.	GROUNDING: TEST EXISTING SERVICE NEUTRAL FOR ADEQUACY AND FOR GROUND CONTINUITY. GROUND ALL EQUIPMENT AND SYSTEM NEUTRAL IN ACCORDANCE WITH ARTICLE 250 OF THE NEC. EQUIPMENT GROUNDS HAVE NOT BEEN SHOWN ON DRAWINGS - WHERE GROUND WIRES HAVE BEEN SHOWN THEY INDICATE AN INSULATED GROUND.	
14.	EQUIPMENT STANDARDS: ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND OF THE HIGHEST QUALITY AVAILABLE ("SPECIFICATION GRADE"). SERVICE EQUIPMENT SHALL BE FACTORY-ASSEMBLED COMMERCIAL-GRADE, CONFIGURED PER SERVING UTILITY STANDARDS. WIRING DEVICES SHALL BE SPECIFICATION GRADE WITH NYLON PLATES, WHITE UNLESS OTHERWISE NOTED. RAISED STEEL BOX COVERS MAY BE USED IN UTILITY AREAS.	
15.	MATCH EXISTING: EXISTING EQUIPMENT AND SYSTEMS SHALL BE CONSIDERED A MINIMUM STANDARD TO BE MET, IF NOT OTHERWISE EXCEEDED BY THESE PLANS AND SPECIFICATIONS. NEW MATERIALS AND EQUIPMENT SHALL MATCH EXISTING IN APPEARANCE AND FUNCTION.	
16.	TAMPER-PROOF: ALL EQUIPMENT AND CIRCUITING ACCESSIBLE BY THE PUBLIC SHALL BE TAMPER-PROOF AND VANDAL RESISTANT. OPENABLE DEVICES AND EQUIPMENT SHALL BE PADLOCKABLE.	
17.	CIRCUITING: ALL WIRING SHALL BE IN CONDUIT, CONCEALED EXCEPT WHERE NOTED. EMT WITH STEEL SET SCREW INSULATED-THROAT FITTINGS MAY BE USED IN DRY, PROTECTED INTERIOR LOCATIONS. PVC SCHEDULE 40 SHALL BE USED BELOW GRADE AT MINIMUM -24". WRAPPED RIGID ELBONS AND RISERS SHALL BE USED FOR ALL THROUGH-GRADE TRANSITIONS AND STUB-UPS. RGS OR IMC CONDUIT WITH THREADED FITTINGS SHALL BE USED IN ALL LOCATIONS WHERE EXPOSED TO THE ELEMENTS OR SUBJECT TO PHYSICAL DAMAGE. METAL GLAD CABLE (TYPE MC) WILL BE ACCEPTABLE FOR SINGLE CIRCUIT BRANCH CIRCUITING. FLEXIBLE WHIPS FROM JUNCTION BOXES TO LIGHTING FIXTURES AND WITHIN CASEWORK. TYPE MC CABLE MAY NOT BE USED FOR HOMERUNS. ENT IS NOT ALLOWED. CONNECT RECESSED AND SUSPENDED LIGHTING FIXTURES, MOTORIZED AND VIBRATING EQUIPMENT WITH STEEL FLEX. ALL CONDUIT SHALL HAVE FULL CORD IF OTHERWISE EMPTY.	
		18.
		19.
		20.
		21.
		22.
		23.
		24.
		25.
		26.

ELECTRICAL LEGEND:

<ul style="list-style-type: none"> PANELBOARD: SURFACE MOUNTED PANELBOARD: FLUSH MOUNTED SWITCHBOARD TERMINAL CABINET TRANSFORMER PULLBOX MOTOR STARTER COMBINATION MOTOR STARTER COMBINATION MOTOR STARTER VENDOR FURNISHED DISCONNECT SWITCH 'F' INDICATES FUSIBLE DISCONNECT SWITCH VENDOR FURNISHED DISCONNECT SWITCH ENCLOSED CIRCUIT BREAKER CONTACTOR OR RELAY CONTACTOR VENDOR FURNISHED GROUND ROD 	<ul style="list-style-type: none"> GROUND FAULT INTERRUPTER DEVICE METERING SHUNT TRIP TRANSFORMER MOTOR OUTLET/ NUMBER = HORSEPOWER GENERATOR INTERRUPTER SWITCH FUSE CIRCUIT BREAKER DRAWOUT CIRCUIT BREAKER CONTROL DEVICE. LETTERS INDICATE TYPE: FLS = FLOAT SWITCH, FS = FLOW SWITCH FTS = FOOT SWITCH, LS = LIMIT SWITCH FE = PNEUMATIC SWITCH, PS = PRESSURE SWITCH TS = TEMPERATURE SWITCH SPEAKER CCTV SURVEILLANCE CAMERA OUTLET TELEVISION OUTLET: 18" AFF (UNO) TELEPHONE TERMINAL BOARD - 4 x 8 x 3/4" FIRE TREATED PLYWOOD TELEPHONE TERMINAL CABINET CLOCK OUTLET THERMOSTAT JUNCTION BOX (USED FOR CLARITY ONLY) ELECTRIC SHEET NOTE DESIGNATION FIXTURE DESIGNATION: FI = TYPE (SEE FIXTURE SCHEDULE) REVISION DELTA: NUMBER REPRESENTS REVISION SIGNAGE CONNECTION MECHANICAL AND PLUMBING EQUIPMENT 	<ul style="list-style-type: none"> AFB ABOVE FINISHED CEILING AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AIC AMP. INTERRUPTING CAPACITY AL ALUMINUM ATS AUTOMATIC TRANSFER SW. BKR BREAKER C CONDUIT CKT CIRCUIT CLG CEILING CO CONDUIT ONLY CU COPPER DWS DRAWING ELEC ELECTRICAL (E) EXISTING FFEN FUSE PER EQUIP. NAMEPLATE FBO FURNISHED BY OTHERS GFI GROUND FAULT INTERRUPT GND GROUND HSKP HOUSEKEEPING J-BOX JUNCTION BOX K kcmil (BOOK = 300 kcmil) KVA KILOVOLT AMPS KW KILOWATT LTG LIGHTING IG ISOLATED GROUND MTS MANUAL TRANSFER SW. (N) NEW NL NIGHTLIGHT NTS NOT TO SCALE PNL PANEL PWR POWER (R) RELOCATED OR REMAIN TEL TELECOM TYP TYPICAL UNO UNLESS NOTED OTHERWISE UNSW UNSWITCHED V VOLTS VA VOLT AMPS WP WEATHER PROOF XF TRANSFORMER (X) EXISTING TO BE REMOVED
<ul style="list-style-type: none"> LIGHTING FIXTURE - LOWERCASE LETTER DENOTES SWITCHING (a = CENTER LAMP, b = OUTER LAMPS) WALL MOUNTED FIXTURE: SEE SCHEDULE FOR TYPE RECESSED DOWNLIGHT SURFACE LUMINAIRE POLE MOUNTED LIGHT FLUORESCENT STRIP FIXTURE TRACK LIGHTING EMERGENCY LIGHTING UNIT EXIT FIXTURE - SHADED AREA DENOTES LIGHTED FACE - ARROWS DENOTE DIRECTION NIGHT LIGHT OR EMERGENCY CONNECTED FIXTURE PHOTOELECTRIC CELL (ON ROOF FACING NORTH UCN) TIMECLOCK SINGLE RECEPTACLE: 20A, 125V, NEMA 5-20, 18" AFF (UNO) DUPLEX RECEPTACLE: 20A, 125V, NEMA 5-20, 18" AFF (UNO) DUPLEX RECEPTACLE: FLOOR MOUNTED QUAD RECEPTACLE: 20A, 125V, NEMA 5-20, 18" AFF (UNO) ISOLATED GROUND TYPE RECEPTACLE (ORANGE TRIANGLE) - 20A, 125V, NEMA 5-20IG, 18" AFF (UNO) DUPLEX RECEPTACLE GFI TYPE - 20A, 125V, NEMA 5-20GFI 18" AFF (UNO) DUPLEX RECEPTACLE: ABOVE COUNTER (VERIFY HEIGHT) SPECIAL PURPOSE RECEPTACLE - NUMBER REFERS TO - NUMBER REFERS TO RECEPT SCHEDULE NEMA CONFIG MULTIOUTLET ASSEMBLY - ARROW HEADS INDICATE EXTENT, - NUMBERS INDICATE SPACING IN INCHES DATA/PHONE OUTLET: 18" AFF (UNO) - 1 PHONE, 1 DATA JACK, 4 BLANKS DATA OUTLET: FLOOR MOUNTED MULTIOUTLET ASSEMBLY - ARROW HEADS INDICATE EXTENT, - NUMBERS INDICATE SPACING IN INCHES TELEPHONE OUTLET: 18" AFF (UNO) PAY TELEPHONE OUTLET: 48" AFF (UNO) FLOOR MOUNTED TELEPHONE OUTLET 	<ul style="list-style-type: none"> CONDUIT IN WALL OR ABOVE CEILING CONDUIT IN FLOOR OR BELOW GRADE METAL GLAD CABLE (MC) OVERHEAD SERVICE PRIMARY SECONDARY TELEPHONE TELEVISION LOW VOLTAGE AND/OR CONTROL CIRCUITING STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN TICS = NO. OF #12 WIRES (UNO) IF MORE THAN TWO WITHIN RACEWAY. GROUNDING WIRE (NOT SHOWN) ALWAYS REQUIRED. ISOLATED GROUNDING CONDUCTOR NEUTRAL CONDUCTOR PHASE CONDUCTOR(S) WHEN TIC MARKS ARE NOT INDICATED, BRANCH CIRCUIT WITH (1)PHASE AND (1)NEUTRAL CONDUCTOR AND (1)GROUNDING WIRE HOMERUN TO PANELBOARD OR DEVICE HOMERUN CIRCUIT DESIGNATION (ROUND ROBIN SHOWN) GROUNDING WIRE NEUTRAL CONDUCTOR PHASE CONDUCTOR(S) PANEL NAME HOMERUN CIRCUIT DESIGNATION (3 PHASE CIRCUIT SHOWN) GROUNDING WIRE PHASE CONDUCTOR(S) PANEL NAME 	<ul style="list-style-type: none"> 20 SINGLE POLE CIRCUIT BREAKER 20/2 TWO POLE CIRCUIT BREAKER 20/3 THREE POLE CIRCUIT BREAKER 20G GFI CIRCUIT BREAKER 20AG ARC FAULT GFI COMBINATION CIRCUIT BREAKER 20C CONTROLLABLE CIRCUIT BREAKER
<ul style="list-style-type: none"> S SINGLE POLE SWITCH 48" AFF (UNO) S₃ THREE WAY SWITCH 48" AFF (UNO) S₄ FOUR WAY SWITCH 48" AFF (UNO) S_K KEY OPERATED SWITCH 48" AFF (UNO) S_D DIMMER OPERATED SWITCH 48" AFF (UNO) S_P SWITCH WITH PILOT LIGHT 48" AFF (UNO) S_M MANUAL MOTOR STARTER S_T TIME WALL SWITCH 48" AFF (UNO) OCUPANCY DETECTOR - WALL MOUNTED 48" AFF (UNO) OCUPANCY DETECTOR - CEILING MOUNTED ULTRASONIC TYPE. ARROWS INDICATE DIRECTION & COVERAGE PROVIDE WITH POWER PACK PER MFG. REQUIREMENTS CONTROL STATION 	<ul style="list-style-type: none"> OCUPANCY DETECTOR - WALL MOUNTED 48" AFF (UNO) OCUPANCY DETECTOR - CEILING MOUNTED ULTRASONIC TYPE. ARROWS INDICATE DIRECTION & COVERAGE PROVIDE WITH POWER PACK PER MFG. REQUIREMENTS CONTROL STATION 	<p>NOTE: THIS IS A MASTER SYMBOL LIST. ALL SYMBOLS SHOWN MAY NOT BE USED WITH THIS SET OF PLANS.</p>

DRAWING SCHEDULE

SHEET	DESCRIPTION	ISSUED FOR PERMIT
E1	ELECTRICAL LEGEND, SPECIFICATIONS & DRAWING SCHEDULE	25 AUGUST 2010
E2	DEMOLITION ELECTRICAL PLAN	
E3	LIGHTING PLAN, IECC CALCULATIONS & FIXTURE SCHEDULE	
E4	POWER PLAN	
TOTAL SHEETS IN ISSUE:		4

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**Carson City Community Center
ADA Improvements**
Carson City Parks & Recreation Department
Carson City, Nevada

REVISIONS

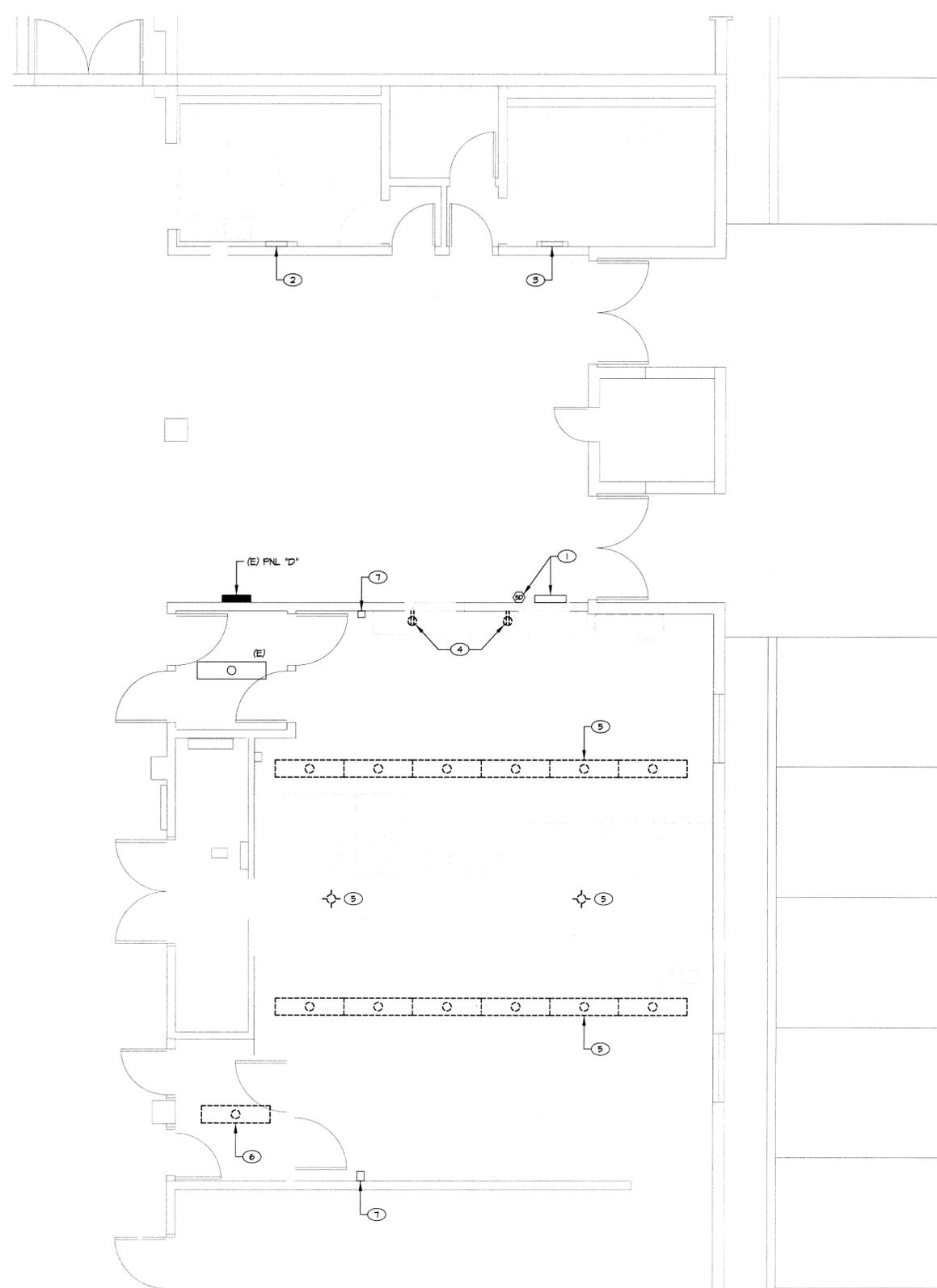
SHEET TITLE

ELECTRICAL LEGEND, SPECIFICATIONS & DRAWING SCHEDULE

NO. REV.	BY
CHECKED	KDP
DATE	8/25/2010
JOB NUMBER	10084
PK	RT

E1





SHEET NOTES

- ① RELOCATE (E) FIRE ALARM PANEL AND FIRE ALARM PULL STATION TO THE ADJACENT LOCATION AS SHOWN TO ALLOW FOR THE NEW DOOR OPENING. EXTEND ALL WIRING AS REQUIRED TO THE NEW LOCATION. SEE SHEET E4 FOR NEW LOCATION.
- ② REMOVE THE (E) HAND DRYER AND REPLACE WITH RECEPTACLE FOR THE FLOOR CLEANING MACHINE BATTERY CHARGER. MATCH RECEPTACLE TO THE CORD SET ON THE MACHINE.
- ③ REMOVE THE HAND DRYER AND PLACE BLANK COVER ON J-BOX.
- ④ REMOVE RECEPTACLES AND EXTEND (E) CIRCUIT D-18 BRANCH WIRING TO NEW MEN'S AND WOMEN'S REST ROOM RECEPTACLES AS SHOWN ON SHEET E4.
- ⑤ REMOVE AND PROPERLY DISCARD LIGHTING FIXTURES, BRANCH WIRING AND SWITCH LOOPS.
- ⑥ REMOVE FIXTURE AND EXTEND WIRING TO NEW LIGHTING FIXTURE AND OCCUPANCY SENSOR, SEE SHEET E3.
- ⑦ REMOVE AND RELOCATE (E) FIRE ALARM SYSTEM HORN/STROBES. SEE SHEET E4 FOR NEW LOCATIONS.



Carson City Community Center
ADA Improvements
 Carson City Parks & Recreation Department
 Carson City, Nevada

REVISIONS	

SHEET TITLE
 DEMOLITION ELECTRICAL PLAN

BUILDING & SAFETY DIVISION
 CARSON CITY
 APPROVED
 SEP - 8 2010
 BY: [Signature]

DRAWN:	JLB
CHECKED:	KDP
DATE:	8/25/2010
JOB NUMBER:	10084
BY:	RT



A
E2

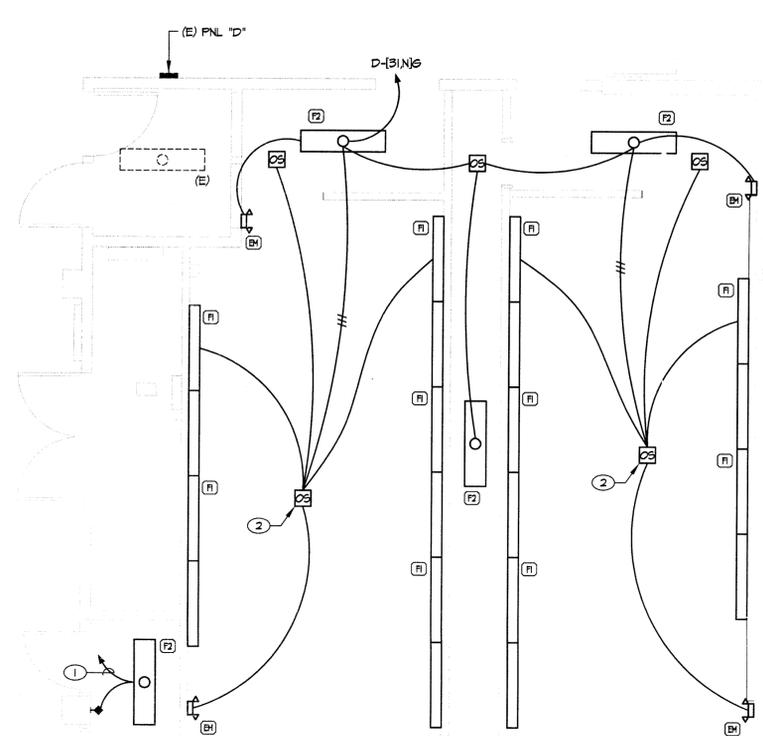
DEMOLITION ELECTRICAL PLAN
 SCALE: 1/4" = 1'-0"

E2

SHEET NOTES

- ① CONTROL FIXTURE WITH OCCUPANCY SENSOR AND CONNECT TO (E) LIGHTING CIRCUIT.
- ② DUAL TECH LINE-VOLTAGE OCCUPANCY SENSOR EQUAL TO WATTSTOPPER P/N DT-355.

LIGHTING FIXTURE SCHEDULE		PK ELECTRICAL, INC. @ 2007
<p>LIGHTING FIXTURE CATALOG NUMBERS ARE SERIES TYPE ONLY. PROVIDE TRIMS, BALLASTS, MOUNTING EQUIPMENT, FITTINGS AND LAMPS AS REQUIRED BY THE SPECIFICATIONS AND PROJECT CONDITIONS FOR A COMPLETE INSTALLATION. THIS IS NOT A STANDALONE SCHEDULE AND FIXTURES MUST INCORPORATE ALL WORK INDICATED OR IMPLIED THROUGHOUT THE DRAWINGS AND SPECIFICATIONS.</p> <p>SUBSTITUTION DEFINITIONS</p> <ul style="list-style-type: none"> ⊙ OR EQUAL = EQUAL OR SUPERIOR TO SPECIFIED IN ALL RESPECTS WILL BE ALLOWED. ENGINEER'S PRE-BID APPROVAL IS NOT REQUIRED. PROPOSED EQUAL FIXTURES ARE SUBJECT TO REVIEW DURING THE STANDARD SUBMITTAL PROCESS. ⊙ NO EQUAL = PROVIDE SPECIFIED FIXTURE. SUBSTITUTIONS ARE NOT ALLOWED. ⊙ SUBJECT TO REVIEW = EQUAL OR SUPERIOR TO SPECIFIED IN ALL RESPECTS MAY BE ALLOWED ONLY WITH ENGINEER'S APPROVAL. ALL SUBSTITUTIONS MUST BE SUBMITTED AS REQUIRED BY SPECIFICATIONS AND ACCOMPANIED WITH POINT BY POINT LIGHTING CALCULATIONS. DETERMINATION OF EQUAL IS ENGINEER'S SOLE DISCRETION. 		
TYPE	SYMBOL	DESCRIPTION AND MANUFACTURER
F1		SURFACE MOUNTED, 8'-0", SINGLE-TUBE FLUORESCENT, CORNER MOUNTED. LAMP: (1) 32W T8 VOLTAGE: 120 MANUFACTURER: LITHONIA VDC 132 MVOLT SUBSTITUTIONS: ⊙ OR EQUAL ⊙ SUBJECT TO REVIEW ⊙ NO EQUAL
F2		SURFACE MOUNTED, 4'-0", PLASTIC WRAP, 2-TUBE FLUORESCENT. LAMP: (1) 32W T8 VOLTAGE: 120 MANUFACTURER: LITHONIA VDS 132 MVOLT SUBSTITUTIONS: ⊙ OR EQUAL ⊙ SUBJECT TO REVIEW ⊙ NO EQUAL
EM		EMERGENCY LIGHTING WITH BATTERY BACK-UP. LAMP: INCLUDED VOLTAGE: 120 MANUFACTURER: LITHONIA EML2 SUBSTITUTIONS: ⊙ OR EQUAL ⊙ SUBJECT TO REVIEW ⊙ NO EQUAL
<p>LIGHTING SYSTEM FOOTCANDLE LEVELS ARE BASED ON THE UTILIZATION OF STANDARD REFLECTANCES OF 80-90-20 (CEILING-WALL-FLOOR) PER I.E.S. (ILLUMINATED ENGINEERING SOCIETY). THE ROOM SURFACES ARE USED AS AN INTEGRAL COMPONENT OF THE LIGHTING SYSTEMS. THE REFLECTANCE OF THE SURFACE PAINT COLOR, MATERIAL, AND OTHER ROOM SURFACES, DIRECTLY AFFECTS THE DELIVERY OF LIGHT TO THE WORK PLANE. A SIGNIFICANT DROP IN OVERALL LIGHTING LEVELS WILL OCCUR IF REFLECTANCES ARE LOWERED. THE ARCHITECT/OWNER SHALL NOTIFY THE ENGINEER IMMEDIATELY IF FINISHES DO NOT FALL IN LINE WITH THE REFLECTANCES MENTIONED ABOVE.</p>		



A LIGHTING PLAN
 E3 SCALE: 1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

2006 IECC

Section 1: Project Information

Project Type: Addition
 Project Title: Carson City Community Center ADA Improv
 Construction Site: 851 E. Wilson Street, Carson City, NV 89701
 Owner/Agent: Carson City, 681 Sierra Rose Drive, Suite B, Carson City, NV 89701
 Designer/Contractor: Lanna Pizzelli, PK Electrical, 681 Sierra Rose Drive, Suite B, Reno, NV 89511, 775-826-9010, www.pkelectrical.com

Section 2: General Information

Building Use Description by Activity Type
 Activity Types: Gymnasium, Floor Area: 874

Section 3: Requirements Checklist

Interior Lighting:

- 1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
961	758	YES

Controls, Switching, and Wiring:

- 2. Independent controls for each space (wall switch, occupancy sensor, etc.)
 Exemptions:
 - Areas designated as security or emergency areas that must be continuously illuminated.
 - Lighting in stairways or other areas that are elements of the means of egress.
- 3. Master switch at entry to hotel/motel/guest room.
- 4. Individual dwelling units separately metered.
- 5. Each space provided with a manual control to provide uniform light reduction by at least 50%.
 Exemptions:
 - One luminaire in space.
 - An occupant sensing device controls the area.
 - The area is a corridor, store room, rest room, public lobby or sleeping unit.
 - Areas that use less than 0.6 Watts/sq ft.
- 6. Automatic lighting shutoff controls in corridors larger than 5,000 sq ft.
 Exemptions:
 - Sleeping units, patient care areas, and spaces where automatic shutoff would endanger safety or security.
- 7. The occupant sensing device controls the area.
 Exemptions:
 - Lighting intended for 24-hour use.
- 8. Tandem wired or hard-wired, dimmable ballasts (no stage lamp ballasts).
 Exemptions:

Electronic high-frequency ballasts. Luminaires on emergency circuits or with no available par.

Section 4: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2006 IECC requirements in COMcheck Version 3.6.0 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title: *Lanna Pizzelli*
 Signature: *Lanna Pizzelli*
 Date: 8/25/10

2006 IECC

Section 1: Allowed Lighting Power Calculation

A Area Category	B Floor Area (ft²)	C Allowed Watts/ft²	D Allowed Watts (B x C)
Gymnasium	874	1.1	961
Total Allowed Watts =			961

Section 2: Proposed Lighting Power Calculation

Fixture ID	Description	Lamp	Wattage Per Lamp	Ballast	B Lamps/ Fixture	C # of Fixtures	D Total Watt (C x D)	E (C x D)
Gymnasium (874 sq ft):								
L1	Linear Fluorescent 1 - 8'1"	Corner Surface Fluor	48" 18.0W	Electronic	1	20	32	640
L2	Linear Fluorescent 2 - 4'2"	Ceiling Surface Fluor	48" T8 32W	Electronic	1	4	32	128
Total Proposed Watts =							758	

Section 3: Compliance Calculation

File Total Allowed Watts minus the Total Proposed Watts is greater than or equal to zero, the building complies.

Total Allowed Watts =	961
Total Proposed Watts =	758
Project Compliance =	193

**Carson City Community Center
 ADA Improvements**
 Carson City Parks & Recreation Department
 Carson City, Nevada

REVISIONS

NO.	DESCRIPTION

SHEET TITLE

LIGHTING PLAN, IECC CALCULATIONS & FIXTURE SCHEDULE

DRAWN	JLB
CHECKED	KDP
DATE	8/25/2010
JOB NUMBER	10084
BY	RT

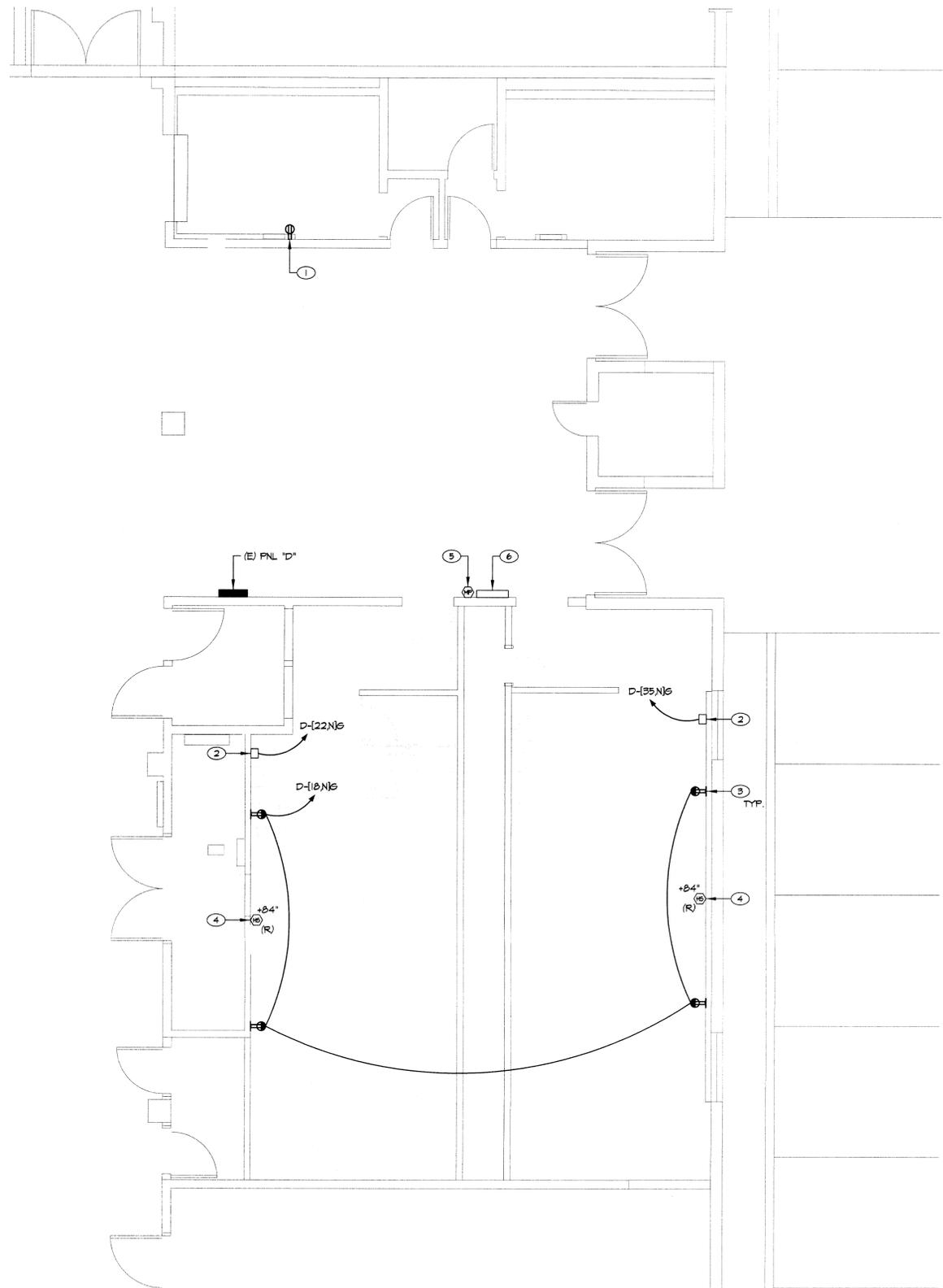
E3



BUILDING & SAFETY DIVISION
 CARSON CITY
 APPROVAL
 SEP 18 2010
 BY: K.D.G.



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SHEET NOTES

- ① PROVIDE RECEPTACLE FOR BATTERY CHARGER ON FLOOR CLEANING MACHINE. MATCH RECEPTACLE TO CORD SET ON MACHINE.
- ② PROVIDE 20 AMP, 120 VAC POWER FOR NEW HAND DRYER. VERIFY EXACT LOCATION AND FINAL CONNECTION REQUIREMENTS WITH INSTALLER.
- ③ INSTALL GFCI TYPE RECEPTACLES ABOVE COUNTER SPLASH. COORDINATE INSTALLATION HEIGHT WITH MIRROR.
- ④ RELOCATE (E) FIRE ALARM HORN/STROBE ALARM UNITS TO THE NEW LOCATIONS AS SHOWN. EXTEND FIRE ALARM WIRING AS REQUIRED TO THE NEW LOCATIONS.
- ⑤ RELOCATE FIRE ALARM PULL STATION TO THE NEW LOCATION AS SHOWN. SEE SHEET E2, ELECTRICAL DEMOLITION FOR (E) LOCATION. EXTEND FIRE ALARM WIRING AS REQUIRED TO THE NEW LOCATION.
- ⑥ RELOCATE FIRE ALARM PANEL TO THE NEW LOCATION AS SHOWN. SEE SHEET E2, ELECTRICAL DEMOLITION FOR (E) LOCATION. EXTEND FIRE ALARM WIRING AS REQUIRED TO THE NEW LOCATION.

25-Aug-10		PANEL: (E) D			LOCATION: GYM ENTRANCE LOBBY								
#	DESCRIPTION	LOAD	BKR	CIR	A	B	C	CIR	BKR	LOAD	DESCRIPTION	#	
M1	HEATER	1000	X	20/3	1	1500			2	20	500	LOCKER RM FANS	M
M1	X	1000	X	3		1100			4	20	100	HVAC CONTROLS	E
R	RECEPTACLES	720	X	5	1920		1720		6	20	720	RECEPTACLES	R
R	RECEPTACLES	720	X	7		1440			8	20	1200	RECIRC PUMP	M
R	RECEPTACLES	720	X	9		1440		1440	10	20	720	RECEPTACLES	R
R	RECEPTACLES	720	X	11					12	20	720	RECEPTACLES	R
E	HEATER	750	X	13	1470				14	20	720	RECEPTACLES	R
R	RECEPTACLES	720	X	15		1440			16	20	720	RECEPTACLES	R
E	* FLOOR POLISHER	500	X	17			1220		18	20	720	* RST RM RECEPTACLES	R
R	RECEPTACLES	720	X	19	1440				20	20	720	RECPTS MULTI PURPOSE	R
R	RECEPTACLES	720	X	21		2220			22	20	1500	* HAND DRYER WOMENS	E
L	EAST SCOREBOARD	1500	X	23			1700		24	20	200	LIGHTS TICKET BOOTH	L
M	HEATER	1000	X	25	2200				26	20/3	1200	SWAMP COOLER	M
M	X	1000	X	27		2200			28	X	1200	X	M
M	X	1000	X	29			2200		30	X	1200	X	M
L	* RST RM LIGHTS	100	X	31	1300				32	20/3	1200	SWAMP COOLER	M
L	MULTI-PURP RM LIGHT	700	X	33		1900			34	X	1200	X	M
E	* HAND DRYER MENS	1500	X	35			2700		36	X	1200	X	M
M	SWAMP COOLER	1200	X	37	2400				38	20/3	1200	SWAMP COOLER	M
M	X	1200	X	39		2400			40	X	1200	X	M
M	X	1200	X	41			2400		42	X	1200	X	M
						12230	12700	13380					
SIZE:	200	GROUND:			STANDARD						NOTES:		
VOLTAGE:	208	MOUNTING:			SURFACE						* THESE CIRCUITS ARE		
PHASE:	3	ENCLOSURE:			NEMA 1						RECONNECTED TO NEW LOADS		
WIRE:	4	# OF 1-POLE CIRCUITS			42						FOR THIS PROJECT. ALL OTHER		
LUGS:	MLO	CONNECTED KVA:									CIRCUITS REMAIN AS IS.		
BREAKER AIC RATING:	10 K	CONNECTED AMPS:											
BUS:	COPPER	NET KVA:											
NEUTRAL:	100%	NET AMPS:											

**Carson City Community Center
ADA Improvements**
 Carson City Parks & Recreation Department
 Carson City, Nevada

REVISIONS

SHEET TITLE
POWER & SIGNAL PLAN

BUILDING & SAFETY DIVISION
CARSON CITY
APPROVAL
SEP - 8 2010
BY: J.E.G.

A POWER & SIGNAL PLAN
E4 SCALE: 1/4" = 1'-0"



DRAWN	JLB
CHECKED	KDP
DATE	8/25/2010
JOB NUMBER	10084
REV	RT

E4