

POWER and LIGHTING

20 AMP, 125 VOLT, DUPLEX GROUNDING TYPE RECEPTACLE. HUBBELL #53621. MOUNT AT 18" AFF TO CENTERLINE UNLESS NOTED OTHERWISE.

TWO 20 AMP, 125 VOLT DUPLEX GROUNDING TYPE RECEPTACLES. HUBBELL #53621. MOUNT IN COMMON BOX WITH COMMON PLATE AT 18" AFF TO CENTERLINE UNLESS NOTED OTHERWISE.

20 AMP, 125 VOLT, DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE. HUBBELL #GF-53621. MOUNT AT 18" AFF TO CENTERLINE UNLESS NOTED OTHERWISE.

20 AMP, 125 VOLT, DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE. HUBBELL #GF-53621. WITH WEATHERPROOF COVERPLATE. MOUNT AT 24" AFF UNLESS NOTED OTHERWISE.

STANDARD STEEL JUNCTION BOX WITH COVER IN AN ACCESSIBLE LOCATION. LOCATE AND CONNECT AS DIRECTED.

FLOOR MOUNTED JUNCTION BOX.

20 AMP, SINGLE POLE SWITCH. HUBBELL #HBL1221. MOUNT AT 44" AFF TO CENTERLINE UNLESS NOTED OTHERWISE.

20 AMP, SINGLE POLE SWITCH. HUBBELL #HBL1221. PROVIDE WEATHERPROOF COVER WITH HINGE ON TOP. MOUNT AT 44" AFF TO CENTERLINE UNLESS NOTED OTHERWISE.

20 AMP, SINGLE POLE SWITCH. HUBBELL #HBL1221. SURFACE MOUNT AT 44" AFF TO CENTERLINE UNLESS NOTED OTHERWISE.

FLUORESCENT, INCANDESCENT, LED, AND/OR HID LIGHTING FIXTURE COMPLETE WITH LAMPS. REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.

SWITCHBOARD, UNIT SUBSTATION, OR MOTOR CONTROL CENTER. REFER TO DRAWINGS AND SPECIFICATIONS FOR DETAILS.

LIGHTING AND APPLIANCE PANEL BOARD - FLUSH MOUNTED REFER TO DRAWINGS AND SPECIFICATIONS FOR DETAILS.

LIGHTING AND APPLIANCE PANEL BOARD - SURFACE MOUNTED REFER TO DRAWINGS AND SPECIFICATIONS FOR DETAILS.

POWER TRANSFORMER. SIZE AND TYPE NOTED ON PLANS. REFER TO SPECIFICATIONS FOR DETAILS.

PHOTOCCELL. REFER TO DRAWINGS FOR DETAILS.

TIME CLOCK. REFER TO DRAWINGS FOR DETAILS.

RACEWAY AND CONDUCTORS CONCEALED ABOVE CEILING OR IN WALL AT ELECTRICAL CONTRACTOR'S OPTION. #12 AWG MINIMUM SIZE CONDUCTOR UNLESS NOTED OTHERWISE. ALL RACEWAYS TO CONTAIN SEPARATE EQUIPMENT GROUNDING CONDUCTOR.

CONDUIT BELOW FLOOR OR UNDERGROUND. DEPTH OF UNDERGROUND CONDUITS SHALL BE PER NEC.

RACEWAY DOWN. #12 AWG MINIMUM SIZE CONDUCTOR UNLESS NOTED OTHERWISE. ALL RACEWAYS TO CONTAIN SEPARATE EQUIPMENT GROUNDING CONDUCTOR.

RACEWAY UP. #12 AWG MINIMUM SIZE CONDUCTOR UNLESS NOTED OTHERWISE. ALL RACEWAYS TO CONTAIN SEPARATE EQUIPMENT GROUNDING CONDUCTOR.

FLEXIBLE METAL CONDUIT OR LIQUIDTIGHT FLEXIBLE METAL CONDUIT (REFER TO SPECIFICATIONS) AND WIRING. #12 AWG MINIMUM SIZE CONDUCTOR UNLESS NOTED OTHERWISE. ALL RACEWAYS TO CONTAIN SEPARATE EQUIPMENT GROUNDING CONDUCTOR.

CONCEALED BRANCH CIRCUIT HOMERUN. FOR NORMAL BRANCH CIRCUIT WIRING CONTRACTOR MAY COMBINE UP TO THREE CIRCUITS IN ONE RACEWAY. ALL RACEWAYS TO CONTAIN SEPARATE EQUIPMENT GROUNDING CONDUCTOR.

NOTE:
(1) THE QUANTITY AND AMPLACITY OF BRANCH CIRCUIT CONDUCTORS, UNLESS NOTED OTHERWISE, OR AS REQUIRED BY THE ELECTRICAL SPECIFICATIONS, SHALL FOLLOW THE STANDARD OF ONE #12 AWG CONDUCTOR PER CIRCUIT/PHASE SHOWN PLUS ONE #12 AWG NEUTRAL CONDUCTOR (WHERE A NEUTRAL CONDUCTOR IS REQUIRED) FOR A TYPICAL THREE CIRCUIT OR LESS HOMERUN.

(2) WHEN SERVING FLUORESCENT AND/OR HID LIGHTING, COMBINED BRANCH CIRCUIT HOMERUN NEUTRAL CONDUCTOR SHALL BE CONSIDERED AS A CURRENT CARRYING CONDUCTORS AND ALL RESPECTIVE RACEWAY CONDUCTORS SHALL BE DE-RATED PER NEC.

(3) BRANCH CIRCUITS SERVING COMPUTER RECEPTACLES MAY BE COMBINED PROVIDING EACH BRANCH CIRCUIT IS EITHER WIRED WITH A SEPARATE NEUTRAL OR THE SHARED NEUTRAL IS OVERSIZED. EACH NEUTRAL SHALL BE CONSIDERED A CURRENT CARRYING CONDUCTOR AND ALL RESPECTIVE RACEWAY CONDUCTORS SHALL BE DE-RATED PER NEC.

RACEWAY AND CONDUCTORS RUN EXPOSED ON CEILING OR WALLS AT ELECTRICAL CONTRACTOR'S OPTION. #12 AWG MINIMUM SIZE CONDUCTOR UNLESS NOTED OTHERWISE. ALL RACEWAYS TO CONTAIN SEPARATE EQUIPMENT GROUNDING CONDUCTOR.

ONE LINE DIAGRAMS

POWER TRANSFORMER. REFER TO DRAWINGS, SCHEDULES, AND SPECIFICATIONS FOR DETAILS.

GROUND.

CIRCUIT BREAKER.

GROUND BUS.

NEUTRAL BUS.

UTILITY CO. (OR OWNER) WATT HOUR/DEMAND METER. COORDINATE TYPE AND INSTALLATION WITH UTILITY CO. REPRESENTATIVE.

NORMALLY OPEN CONTACTOR.

NORMALLY CLOSED CONTACTOR.

MLO PANEL BOARD. REFER TO DRAWINGS, PANELBOARD SCHEDULES, AND SPECIFICATIONS FOR DETAILS.

MCB PANEL BOARD. REFER TO DRAWINGS, PANELBOARD SCHEDULES, AND SPECIFICATIONS FOR DETAILS.

FAULT CALCULATION POINT.

NOTE: NOT ALL SYMBOLS ARE USED ON THIS PROJECT

THESE DRAWINGS ARE DIAGRAMMATIC. THE ELECTRICAL CONTRACTOR IS REQUIRED TO PROVIDE THE NECESSARY QUANTITY OF CONDUCTORS FOR SWITCHING AS SHOWN ON THE DRAWINGS IN ORDER TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL.

ALL PENETRATIONS OF FIRE RATED FLOORS OR SHAFT WALLS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAILS THAT CONFORM TO UNDERWRITER LAB-ORATORIES LISTINGS FOR THROUGH PENETRATION FIRE STOP SYSTEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING DETAILS WHICH SHOW COMPLETE CONFORMANCE TO THE U.L. LISTING TO THE ARCHITECT/ENGINEER AND SUCH DRAWINGS SHALL BE AVAILABLE TO THE CITY INSPECTORS. THE DRAWINGS SHALL BE SPECIFIC FOR EACH PENETRATION WITH ALL VARIABLES DEFINED.

ABBREVIATIONS

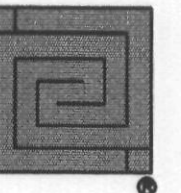
AFF	ABOVE FINISHED FLOOR	LP	LIGHTING PANEL
AFG	ABOVE FINISHED GRADE	MH	MANHOLE
ALT	ALTERNATE	MTS	MANUAL TRANSFER SWITCH
AWG	AMERICAN WIRE GAGE	M.C.	MECHANICAL CONTRACTOR
A	AMPERE(S)	MIKE	MICROPHONE
		MTR	MOTOR
CKT	CIRCUIT	MCC	MOTOR CONTROL CENTER
CB	CIRCUIT BREAKER	MTH	MOUNTING HEIGHT
COND	CONDUCTOR	NTS	NOT TO SCALE
C	CONDUIT	N.I.C.	NOT IN CONTRACT
CU	COPPER		
		OL	OVERLOAD ELEMENT
DIM	DIMMER CONTROL	PAN	PANEL
DN	DOWN	PVC	POLYVINYL CHLORIDE
EMT	ELECTRICAL METALLIC TUBING	PRI	PRIMARY
GEN	GENERATOR	RECEPT	RECEPTACLE
GND	GROUND	SEC	SECONDARY
GF1	GROUND FAULT INTERRUPTER	SMR	SURFACE METAL RACEWAY
		SW	SWITCH
H.I.D.	HIGH INTENSITY DISCHARGE	TB	TERMINAL BOX
H.P.S.	HIGH PRESSURE SODIUM	TYT	TYPICAL
IMC	INTERMEDIATE METALLIC CONDUIT	XFMR	TRANSFORMER
INC	INCANDESCENT	XFR	TRANSFER
JB	JUNCTION BOX	UG	UNDERGROUND
KVAR	KILOVAR(S)	UNO	UNLESS NOTED OTHERWISE
KVA	KILOVOLT AMPERE(S)		
KW	KILOWATT(S)	V	VOLT(S)
		VA	VOLTAMP(S)
		W	WATT(S)
		WP	WEATHERPROOF

PROMENADE SPIRE

PROMENADE SCOTTSDALE, ARIZONA

TALIESIN ARCHITECTS

TALIESIN WEST SCOTTSDALE, ARIZONA 85261-4430
TEL 480 860 2700 FAX 480 860 8472



NOTES

KEY NOTES

- TEMPORARY APS PAD MOUNTED TRANSFORMER. COORDINATE LOCATION WITH APS AND GENERAL CONTRACTOR TO MINIMIZE CONFLICTS DURING VISITOR CENTER CONSTRUCTION. TRANSFORMER SHALL BE APS STANDARD COLOR TO MATCH OTHER PAD MOUNTED TRANSFORMERS ON SITE.
- 2-1/2" SCHEDULE 40 PVC CONDUIT.
- 1-1/2" SCHEDULE 40 PVC CONDUIT WITH NYLON PULL-STRING STUBBED AND CAPPED AT LIMITS OF CONSTRUCTION. CLEARLY MARK STUB LOCATION.
- LOAD CENTER 'SP'.
- TEMPORARY PEDESTAL MOUNTED METER PER APS REQUIREMENTS.
- (12) 3/4" C, (10) 1" C, AND (8) 3/4" C. (SPARES) SCHEDULE 40 PVC CONDUIT STUBBED OUT 5' FROM BEYOND BUILDING WALL FOR FUTURE LANDSCAPE LIGHTING AND RECEPTACLES. CLEARLY MARK STUB LOCATION.
- EMPTY 3/4" FOR FUTURE BUS SHELTER STUB AS SHOWN
- (1) 2" C. CONNECT TO CONDUITS PROVIDED UNDER SITE PACKAGE.

UTILITY INFORMATION

POWER: APS
CONTACT: MARILYN CHATWOOD
PHONE: & CHRIS WESTLING (602) 493-4432

APPROVED

FINAL PLANS PLANNING

DATE: 6.10.03 APPROVED BY: [Signature]

RECOMMENDATION

ARIZONA REVISED STATUTES 32-1129.01.

NOTICE OF EXTENDED CERTIFICATION AND APPROVAL PERIOD PROVISION.
This contract allows the owner to certify and approve billings and estimates within 30 days after the billings and estimates are received from the contractor.

NOTICE OF EXTENDED PAYMENT PROVISION.
This contract allows the owner to make payments within 30 days after certification and approval of billings and estimates.

BVA Baltes/Valentino Associates, Limited
Mechanical & Electrical Consulting Engineers
7250 N. 16th St. #102 • Phoenix, AZ 85020 • (602) 371-1333
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DESIGNED BY: J. YURKUS
DRAWN BY: TCK

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NO.	DATE	COORDINATION	REVISION
NO. 1	5/8/03	CITY COMMENTS	REVISION
February 7, 2003			DATE
ARNOLD ROY			ARCHITECT
GUSTAD			PROJECT MANAGER
TA 0114			PROJECT NUMBER
1/16"=1'-0"			SCALE
TCK			DRAWN BY
J. YURKUS			CHECKED BY
			SHEET TITLE

ELECTRICAL SITE POWER SYMBOL LIST

SHEET NUMBER

SE1

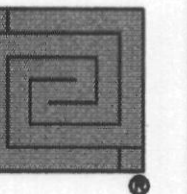
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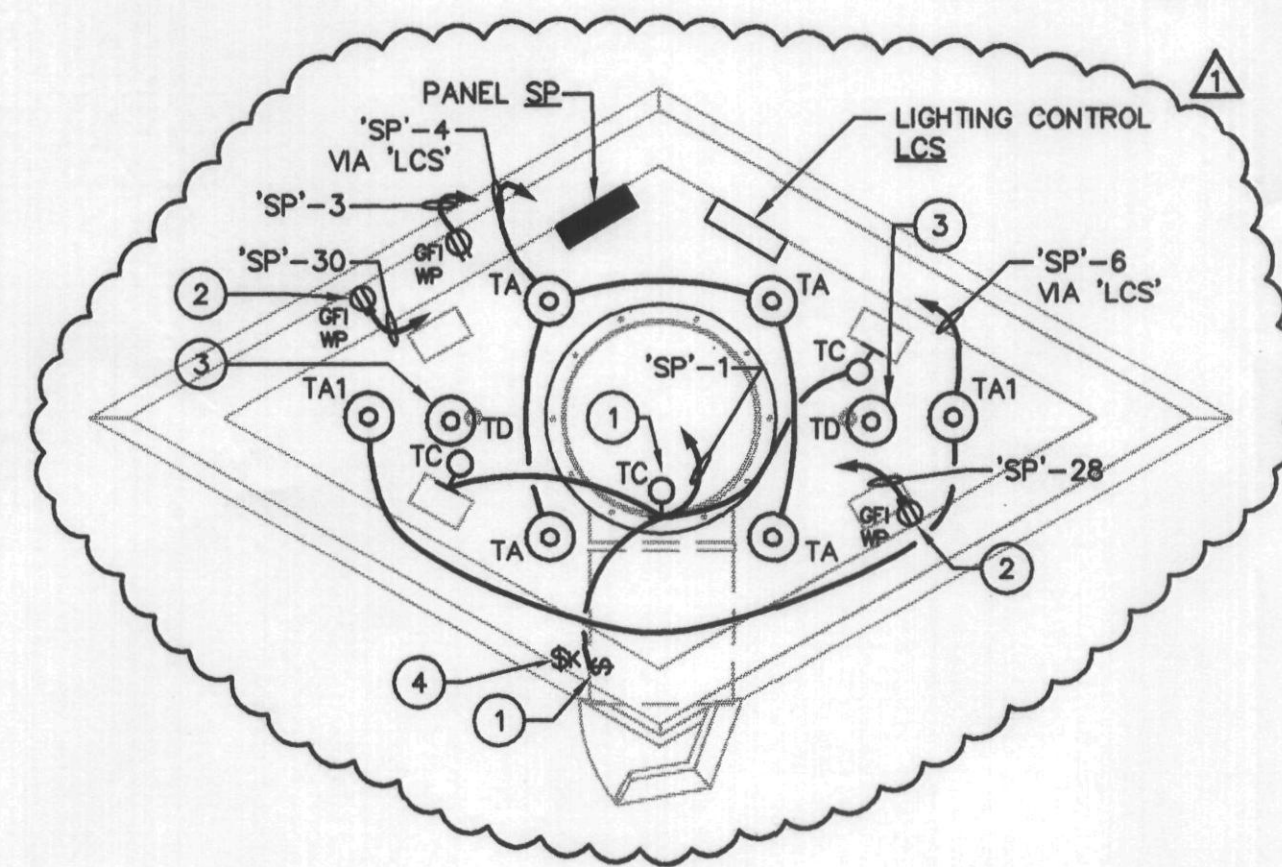
NOTES

KEY NOTES

- 1 LOCATED IN ACCESS PIPE.
- 2 RECEPTACLE FOR TD FIXTURE.
- 3 EXACT LOCATION AND AIMING DETERMINED IN THE FIELD AS DIRECTED BY CREATIVE DESIGNS LIGHTING.
- 4 SEE ONE-LINE DIAGRAM ON DWG SE4

LIGHTING FIXTURE SCHEDULE

TAG	FIXTURE DESCRIPTION	MANUFACTURER	CATALOG NUMBER	OR APPROVED EQUAL BY	#	LAMPING TYPE	VOLTS	MOUNTING	CONTROLS	
									ON	OFF
TA	HID FOCUSING ADJUSTABLE FLOOD WITH PARABOLIC REFLECTOR, HOOD SHIELD AND 5000° K CCT LAMP	ARCHITECTURAL AREA LIGHTING	OLR-175MH17/LLR/MST	NONE	1	MH 175W/U/5K VENTURE	120	POST	PHOTO CELL DUSK	PHOTO CELL DAWN
TA1	HID FOCUSING ADJUSTABLE FLOOD WITH PARABOLIC REFLECTOR, WIDE-ANGLE LENS AND 5000° K CCT LAMP	ARCHITECTURAL AREA LIGHTING	OLR-175MH17/LWA/MST	NONE	1	175W MH	120	POST	PHOTO CELL DUSK	PHOTO CELL DAWN
TC	VAPORPROOF COMPACT FLUORESCENT WALL MOUNTED FIXTURE	CANLET	GFWF32H126-GPC	GUTH MORLIGHT	1	CFT32W/GX24q/835	120	WALL	SWITCH	SWITCH
TD	HID FOCUSING FLOOD LIGHT	STERNER	595-N-N-N-J-10X10-1000-H-120-E-12' CORD	NONE	1	MH 1000W/A/5K VENTURE	120	YOKE	PHOTO CELL DUSK	PHOTO CELL DAWN



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

Approved
APPROVED
FINAL PLANS
DATE 6.10.03
APPROVED BY
Per Don
RECOMMENDATION

ARIZONA REVISED STATUTES 32-1129.01.

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1/4"=1'-0"		SCALE
TCK		DRAWN BY
J. YURKUS		CHECKED BY
		SHEET TITLE

ELECTRICAL SPIRE PLAN LIGHTING

SHEET NUMBER

SE2

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