HELIPORT LIGHTING

MERCY MEDICAL CENTER MT. SHASTA
Mt. Shasta, California
Construction Documents

Dignity Health
Mercy Medical Center
Mt. Shasta

PROJECT NOTICE

THE FINAL DESIGN DOCUMENTS ARE INTENDED TO BE USED AS A COMPLETE PACKAGE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH ANY SUBCONTRACTORS, MATERIAL OR EQUIPMENT SUPPLIERS ACCESS TO THE TOTAL BID PACKAGE OF FINAL DESIGN DOCUMENTS. ALL OF THE DOCUMENTS APPLY TO ALL MEMBERS OF THE GENERAL CONTRACTOR CONSTRUCTION TEAM.

THE ARCHITECT AND ENGINEERS HAVE SHOWN VARIOUS PORTIONS OF THE WORK ON SEPARATE SHEETS OF DRAWINGS OR IN SEPARATE PROJECT SPECIFICATION SECTIONS FOR CLARITY. SUCH SEPARATION SHALL NOT BE CONSIDERED AS THE LIMITS OF THE WORK REQUIRED OF ANY SEPARATE TRADE. THE TERMS AND CONDITIONS OF SUCH LIMITATIONS ARE WHOLLY BETWEEN THE CONTRACTOR AND HIS SUB- CONTRACTORS.

THE FINAL PROJECT SHALL REFLECT ALL THE WORK SHOWN ON ALL DOCUMENTS WITHOUT REGARD TO WHO SHALL PROVIDE THE WORK. FOR PURPOSES OF THIS PROJECT THE ARCHITECT / ENGINEER / OWNER SHALL CONSIDER THE GENERAL CONTRACTOR AS THE SOLE PROVIDER OF ALL ITEMS NECESSARY TO COMPLETE THE PROJECT.

ITEMS SHOWN ON ONE DRAWING OR SPECIFICATION SECTION BUT NOT OTHERS SHALL BE FURNISHED IN THEIR ENTIRETY AS IF SHOWN ON ALL DOCUMENTS. - THE USE OF THESE DOCUMENTS WITHOUT THE BENEFIT OF REVIEWING THE ENTIRE PACKAGE WILL BE AT THE RISK OF THE USER.

APPLICABLE CODES & STANDARDS

ALL WORK PERFORMED AND MATERIALS FURNISHED SHALL COMPLY WITH THE FOLLOWING CODES, INCLUDING JULY 2018 SUPPLEMENTS AND ERRATA.

APPLICABLE CODES, REGULATIONS (FOR HCAI):
2019 CALIFORNIA ADMINISTRATIVE CODE - PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2019 CALIFORNIA BUILDING CODE - PART 2, TITLE 24, CCR (BASED ON 2015 IBC)
2019 CALIFORNIA ELECTRICAL CODE - PART 3, TITLE 24, CCR (BASED ON 2014 NEC)
2019 CALIFORNIA MECHANICAL CODE - PART 4, TITLE 24, CCR (BASED ON 2015 UMC)
CALIFORNIA PLUMBING CODE - PART 5, TITLE 24, CCR (BASED ON 2015 UPC)
2019 CALIFORNIA FIRE CODE - PART 9 TITLE 24, CCR (BASED ON 2015 IFC)

OTHER APPLICABLE CODES AND REGULATIONS
TITLE 8 - ELEVATOR SAFETY ORDERS FOR ELEVATOR SAFETY STANDARDS
TITLE 19 - PUBLIC SAFETY, STATE FIRE MARSHAL, CALIFORNIA CODE OF REGULATIONS (CCR)
TITLE 22 - SOCIAL SECURITY, DIVISION 5: LICENSING AND CERTIFICATION OF HEALTH FACILITIES, HOME HEALTH AGENCIES, CLINICS AND REFERRAL AGENCIES; DIVISION 7: HEALTH PLANNING AND FACILITY CONSTRUCTION.
ADA REGULATION FOR TITLE III - 2010 - STANDARDS FOR ACCESSIBILITY DESIGN, U.S. DEPT. OF JUSTICE, CIVIL RIGHTS DIVISION.
ACCREDITATION MANUAL FOR HOSPITALS - JOINT COMMISSION ON ACCREDITATION OF HEALTH CARE ORGANIZATIONS (JCAHO) (2018)

NFPA NO. 10 - 2018	PORTABLE FIRE EXTINGUISHERS
NFPA NO. 13 - 2016	INSTALLATION OF SPRINKLER SYSTEMS
NFPA NO. 70 - 2017	NATIONAL ELECTRICAL CODE
NFPA NO. 72 - 2016	NATIONAL FIRE ALARM CODE
NFPA NO. 80 - 2016	FIRE DOORS, AND FIRE WINDOWS
NFPA NO. 90A - 2018	INSTALLATION OF AIR-CONDITIONING VENTILATING SYSTEMS
NFPA NO. 99 - 2018	HEALTH CARE FACILITIES
NFPA NO. 110 - 2016	EMERGENCY AND STANDBY POWER SYSTEMS
NFPA NO, 220 - 2018	TYPES OF BUILDING CONSTRUCTION

APPLICABLE STANDARD FOR FIRE LIFE SAFETY(NOT REVIEWED BY HCAI)
NFPA NO. 101 - 2018 NATIONAL FIRE LIFE SAFETY CODE

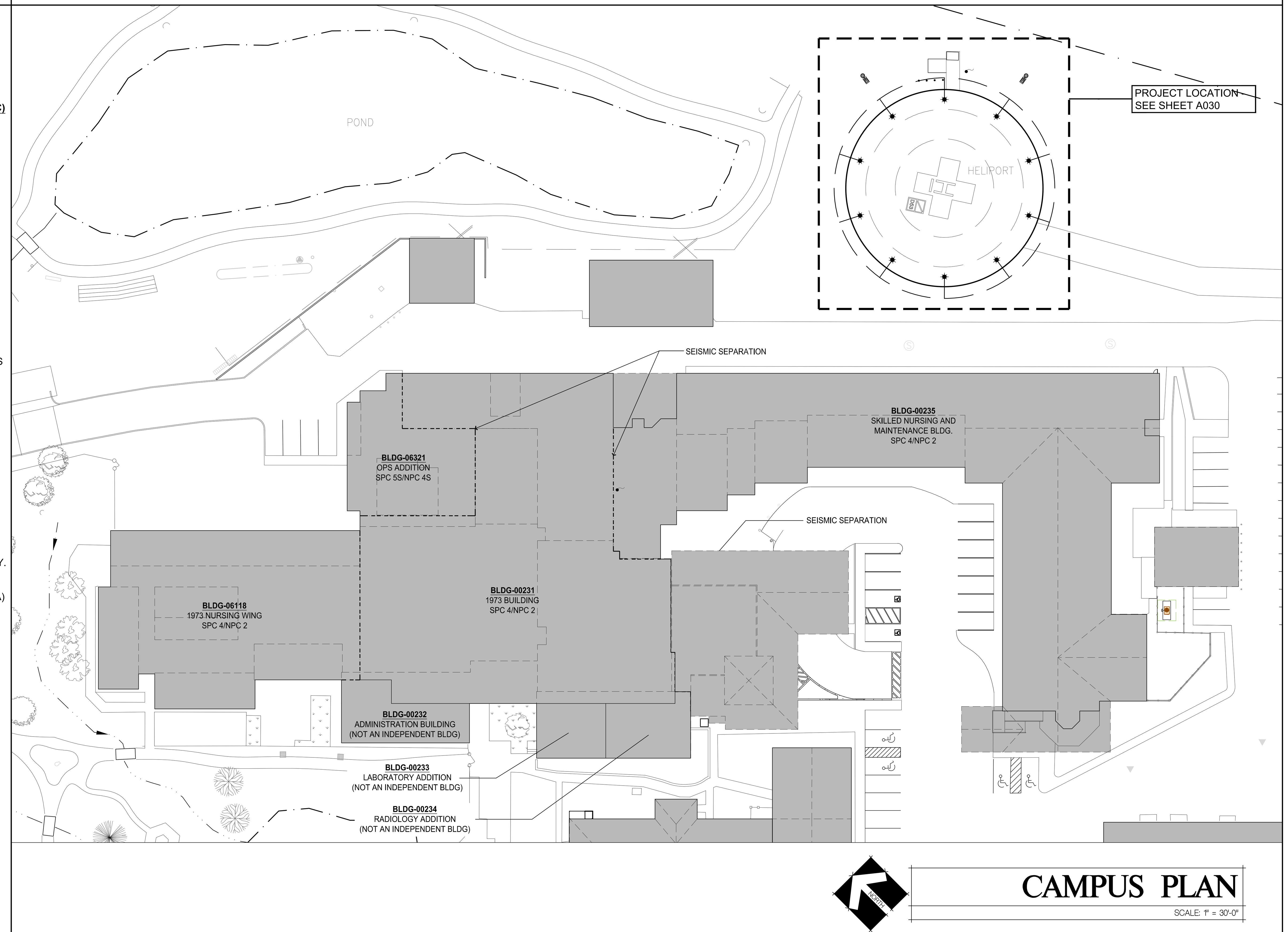
APPLICABLE STANDARDS FOR FIRE RATED SYSTEMS
UL - UNDERWRITER'S LABORATORIES, FIRE RESISTANCE DIRECTORY, 2016 EDITION
UL - UNDERWRITER'S LABORATORIES, BUILDING MATERIALS DIRECTORY, 2016 EDITION
SMACNA 1819 - FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC SYSTEMS, 5TH EDITION

WHERE THERE IS A CONFLICT BETWEEN CALIFORNIA (CBC) AND FEDERAL (ADA) DISABLED ACCESS REQUIREMENTS, GENERALLY THE MOST STRINGENT WILL APPLY.

1. UNIFORM FEDERAL ACCESSIBILITY STANDARD (UFAS)
2. CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (CAL OSHA)
3. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): HAZARD COMMUNICATIONS STANDARD
4. FM GLOBAL PROPERTY LOSS PREVENTION, FACTORY MUTUAL APPROVALS, FMAPPROVALS.COM, MOST CURRENT DATA

APPLICABLE STANDARDS FOR PHARMACY COMPOUNDING
TITLE 16, DIV 17 - COMPOUNDING IN LICENSED PHARMACIES (CCR)
USP 797 - REQUIREMENTS FOR STERILE COMPOUNDING
USP 800 - REQUIREMENTS FOR HAZARDOUS DRUGS STERILE COMPOUNDING

CAMPUS PLAN



TITLE 24 COMPLIANCE

THE INTENT OF THE CONSTRUCTION DOCUMENTS IS TO RECONSTRUCT THE HOSPITAL BUILDING IN ACCORDANCE WITH THE 2019 CALIFORNIA BUILDING STANDARDS CODE. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED CONSTRUCTION DOCUMENTS, WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2019 CALIFORNIA BUILDING STANDARDS CODE, AMENDED CONSTRUCTION DOCUMENTS DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE AUTHORITY HAVING JURISDICTION BEFORE PROCEEDING WITH THE WORK.

SEISMIC DESIGN CRITERIA

RISK CATEGORY:	IV
SITE CLASS:	D
DESIGN CATEGORY:	D
I	1.5
Ss	0.753
S1	0.327
Sds	0.602
Sd1	0.380

PROJECT DESCRIPTION

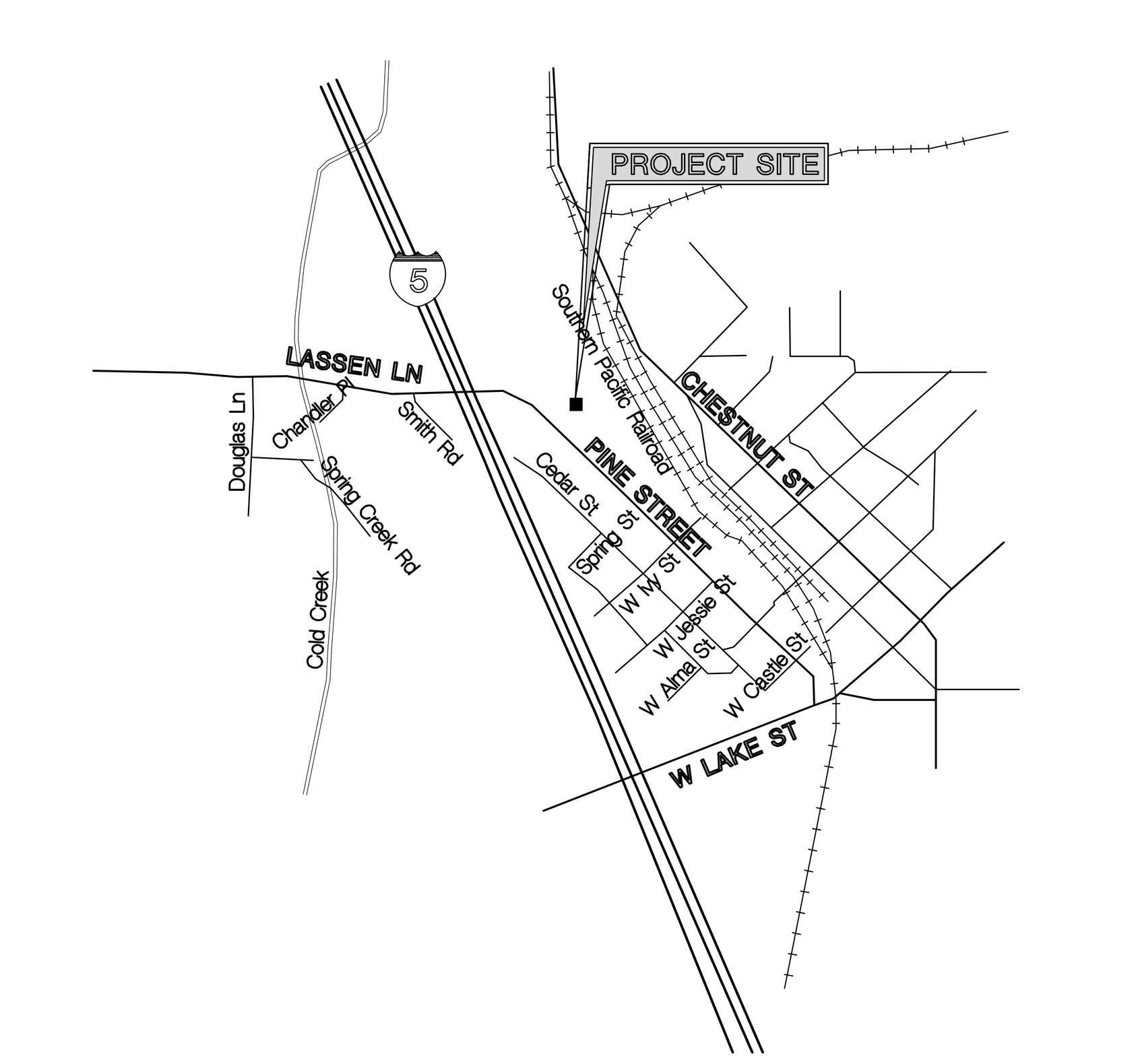
INSTALLATION OF ADDITIONAL LIGHTING TO THE EXISTING HELIPAD AT MERCY MEDICAL CENTER MT. SHASTA FOR USAGE DURING NIGHT OPERATIONS. THE HELIPORT LIGHTING SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS, TITLE 21 FOR LIGHTING AND VISUAL AIDS, INCLUDING THE INSTALLATION OF FLOODLIGHTS, DIRECTIONAL LIGHTS, PERIMETER LIGHTS, AND A LIGHTED WIND CONE.

POWER IS PROVIDED FROM AN EXISTING ADJACENT MAINTENANCE BUILDING ELECTRICAL SYSTEM AND IS NOT EXPECTED TO REQUIRE EMERGENCY POWER.

BUILDING OCCUPANCY AT PROJECT LOCATIONS:	I-2
CONSTRUCTION TYPE AT PROJECT LOCATIONS:	V-A
PROJECT AREA: APPROXIMATELY	7, 853 FT^2

ORIGINAL BUILDING CONSTRUCTED IN 1973

VICINITY MAP



PROJECT TEAM

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REVISIONS

Delta	Description	Date

If drawing is not 42" x 30" it is a reduced print

LICENSE STAMPS

LICENSED ARCHITECT
NATHAN THOMPSON
C 34159
REN. 7/31/23
STATE OF CALIFORNIA

KEY PLAN

PROJECT NAME

HELIPORT LIGHTING FOR

MERCY MEDICAL CENTER MT. SHASTA

914 PINE ST.
MT. SHASTA, CA 96067

SHEET TITLE

TITLE SHEET

DRAWING STATUS
CONSTRUCTION
DOCUMENTS

AGENCY APPROVAL

CONDITIONAL PLAN APPROVAL
FOR STATE AIRPORT/HELIPORT PERMIT PURPOSES ONLY
PROJECT MEETS DESIGN STANDARDS. FINAL APPROVAL IS SUBJECT TO CEQA COMPLIANCE LOCAL GOVT APPROVAL, AND OTHER PERMIT REQUIREMENTS.
CALTRANS
DIVISON OF AERONAUTICS
NAME Phillip Miller ASO
DATE 27 JUN 22

Drawn By	PW
Date Issued	04/22
Scale	1" = 30'-0"
Project No.	21-4175

SHEET No.

G000

ABBREVIATIONS

⊥	PERPENDICULAR
∠	ANGLE
#	NUMBER/POUNDS
&	AND
@	AT
℄	CENTERLINE
Ø	DIAMETER OR ROUND
PL	PROPERTY LINE
[	CHANNEL
□	SQUARE FEET
A.	AIR (MEDICAL)
ABV.	ABOVE
A.B.	ANCHOR BOLT
A.C.P.	ASPHALTIC CONCRETE PAVING
A.D.	AREA DRAIN
A.P.	ACCESS PANEL
A/C	AIR CONDITIONING
ABBR.	ABBREVIATION
ACP	ACOUSTIC CEILING PANEL
ACT	ACOUSTIC TILE
ACOUS.	ACOUSTICAL
ADHV.	ADHESIVE
ADJ.	ADJUSTABLE
AFD	AUTOMATIC FIRE DAMPER
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
ALT.	ALTERNATE
ALUM.	ALUMINUM
ANOD.	ANODIZED
APPROX.	APPROXIMATELY
ARCH.	ARCHITECTURAL
ASSY.	ASSEMBLY
AUTO.	AUTOMATIC
B.	BATH
B.W.	BOTH WAYS
BD.	BOARD
BHMS	BUGLE HEAD METAL SCREW
BITUM.	BITUMINOUS
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BOW.	BACK OF WALK
BR.	BEDROOM
BTWN.	BETWEEN
BUR.	BUILT-UP ROOFING
CA.	COMPRESSED AIR
C.B.	CATCH BASIN / CODE BLUE
C.BD.	CHALK BOARD
C.C.T.	CUBICLE CURTAIN TRACK
C.C.U.	CRITICAL CARE UNIT
C.F.C.I.	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
C.G.	CORNER GUARD
C.H.	CLOTHES HOOK
C.I.	CAST IRON
C.J.	CONTROL JOINT/ CONSTRUCTION JOINT
℄	CENTER LINE
C.O.	CASED OPENING/ CONDUIT ONLY/CLEANOUT
C.S.	CUP SINK
CW.	COLD WATER
CAB.	CABINET
CEM.	CEMENT
CER.	CERAMIC
CHAN.	CHANNEL
CHW	CHILLED WATER
CLG.	CEILING
CLKG.	CAULKING
CLOS.	CLOSET
CLR.	CLEAR
CMU.	CONCRETE MASONRY UNIT
CND.	CONDUCTIVE
CNTR.	COUNTER
COL.	COLUMN
COMPO.	COMPOSITION
CONC.	CONCRETE
COND.	CONDITION
CONF.	CONFERENCE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CORR.	CORRIDOR/CORRUGATED
CO_2	CARBON DIOXIDE
CPT.	CARPET
CTR.	CENTER
CTSK.	COUNTERSUNK
D.	DEEP
D.A.	DOUBLE ACTING
D.C.W.	DOMESTIC COLD WATER
D.H.W.	DOMESTIC HOT WATER
D.F.	DRINKING FOUNTAIN/ DOUGLAS FIR
D.O.	DOOR OPENING
D.RM.	DINING ROOM
D.S.	DOWNSPOUT
D.S.P.	DRY STAND PIPE
D.W.	DUMBWAITER
D/W	DISHWASHER
DBL.	DOUBLE
DEPT.	DEPARTMENT
DET.	DETAIL
DIW.	DEIONIZED WATER
DSA.	DIVISION OF THE STATE ARCHITECT
DIA.	DIAMETER
DIAG.	DIAGONAL
DIFF.	DIFFUSER
DIM.	DIMENSION
DISP.	DISPOSAL
DN.	DOWN
DR.	DOOR
DWG.	DRAWING
DRW.	DRAWER
(E)	EXISTING
E.	EAST
EWC.	ELECTRIC WATER COOLER
E.J.	EXPANSION JOINT
E.K.G.	ELECTROCARDIOGRAM
E.P.	ELECTRICAL PANEL
E.W.	EACH WAY
EA.	EACH
E.A.	EXHAUST AIR
EEG.	ELECTROENCEPHALOGRAPH
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMER.	EMERGENCY
EMG.	ELECTROMYOGRAPHY
ENCL.	ENCLOSURE
ENG.	ELECTRONYSTAGMOGRAPHY
EENT.	EAR,EYE,NOSE,THROAT
EP.	EVOKED POTENTIALS
EQ.	EQUAL
EQPT.	EQUIPMENT
ETO.	ETHYLENE OXIDE
EVAC.	GAS EVACUATION
EVS.	ENVIRONMENTAL SERVICES
EXAM.	EXAMINATION
EXH.	EXHAUST
EXP.	EXPANSION
EXPO.	EXPOSED
EXST'G	EXISTING
EXT.	EXTERIOR
F.	FIXED
F.A.	FIRE ALARM
F.B.	FLAT BAR
F.C.O.	FLOOR CLEAN OUT
F.D.	FLOOR DRAIN/FIRE DAMPER
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
F.H.&E.C.	FIRE HOSE & EXTINGUISHER CABINET
F.H.C.	FIRE HOSE CABINET
F.H.W.S.	FLAT HEAD WOOD SCREW
F.L.	FLOW LINE
F.S.	FLOOR SINK
F/F	FACE TO FACE
FDN.	FOUNDATION
FIN.	FINISH
FIXT.	FIXTURE
FLASG.	FLASHING
FLR.	FLOOR
FLUOR.	FLUORESCENT
F.O.	FINISH OPENING
FOC.	FACE OF CONCRETE
FOF.	FACE OF FINISH
FOM.	FACE OF MASONRY
FOS.	FACE OF STUD
FPRF.	FIREPROOF
FS.	FLAME SPREAD
FT.	FOOT OR FEET
FTG.	FOOTING
FURN.	FURNISH(ED)
FURR.	FURRING
FUT.	FUTURE
F.V.	FIELD VERIFY
G.	GAS (FUEL)
G.B.	GRAB BAR
G.F.I.	GROUND FAULT INTERRUPTER
G.I.	GALVANIZED IRON
G.L.B.	GLU-LAM BEAM
GA.	GAUGE
GALV.	GALVANIZED
GEN.	GENERAL
GL.	GLASS
GND.	GROUND
GR.	GRADE
GYP.	GYPSUM
GYP.BD.	GYPSUM BOARD
GFRC.	GLASS FIBER REINFORCED CONCRETE
H.	HIGH
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
HCAI	DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
He	HELIUM
H.M.	HOLLOW METAL
H.P.	HIGH POINT
HDCP.	HANDICAPPED
HD.	HARD
HDWD.	HARDWOOD
HDWR.	HARDWARE
HGT.	HEIGHT
HORIZ.	HORIZONTAL
HPA	HIGH PURITY AIR
HR.	HOUR
H.S.S.	HOLLOW STRUCTURAL SECTION
HVAC.	HEATING VENTILATING & AIR CONDITIONING
HW	HOT WATER
IBC	INTERNATIONAL BUILDING CODE
IDF	INTERMEDIATE DISTRIBUTION FRAME
I.C.U.	INTENSIVE CARE UNIT
I.D.	INSIDE DIAMETER (DIMENSION)
I.V.T.	INTRAVENOUS TRACK
IN.	INCH
INSUL.	INSULATION
INT.	INTERIOR
INV.	INVERT
IMP.	IMPRINTER
ICBO.	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
JAN.	JANITOR
JST.	JOIST
JT.	JOINT
KIT.	KITCHEN
L.	LENGTH
L.H.	LEFT HAND
L.P.	LOW POINT
LAB.	LABORATORY
LAM.	LAMINATE
LAND.	LANDSCAPED
LAV.	LAVATORY
LBS.	POUNDS
LGT.	LIGHT
LIN.	LINEN
LKR.	LOCKER
LN_2	LIQUID NITROGEN
LUM.	LUMINOUS
LVT	LUXURY VINYL TILE
M.A.	MEDICAL AIR
M.B.	MACHINE BOLT
MDF	MAIN DISTRIBUTION FRAME
MGA	MEDICAL GAS ALARM BOX
M.C.	MEDICINE CABINET
M.H.	MANHOLE
M.L.	METAL LATH
M.O.	MASONRY OPENING
MACH.	MACHINE
MAINT.	MAINTENANCE
MAS.	MASONRY
MAX.	MAXIMUM
MECH.	MECHANICAL
MEMB.	MEMBRANE
MET.	METAL
MTL.	METAL
MEZZ.	MEZZANINE
MFGR.	MANUFACTURER
MFR.	MANUFACTURER
MIN.	MINIMUM/ MINUTE
MIR.	MIRROR
MISC.	MISCELLANEOUS
MON.	MONITOR
MOS.	MOSAIC
MSL.	MEAN SEA LEVEL
MTD.	MOUNTED
MATL.	MATERIAL
MUL.	MULLION
N.	NORTH/ NITROGEN
NC.	NURSE CALL
N.G.	NATURAL GAS
N.I.C.	NOT IN CONTRACT
N.I.G.C.	NOT IN GENERAL CONTRACT
N.T.S.	NOT TO SCALE
NAT.	NATURAL
NO.	NUMBER
NOM.	NOMINAL
N_2O	NITROUS OXIDE
O.	OWNER
O.A.	OVERALL
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER (DIMENSION)
O.F.C.I.	OWNER FURNISHED/ CONTRACTOR INSTALLED
O.F.D.	OVERFLOW DRAIN
O.F.O.I.	OWNER FURNISHED/ OWNER INSTALLED
O.R.	OPERATING ROOM
O/	OVER
OBS.	OBSCURE
OFF.	OFFICE
OPNG.	OPENING
OPP.	OPPOSITE
O_2	OXYGEN
P.	PANTRY
P.LAM.	PLASTIC LAMINATE
P.C.	PRECAST CONCRETE
P.D.	PHYSICALLY DISABLED
P.O.C.	POINT OF CONNECTION
P.T.D.	PAPER TOWEL DISPENSER
P.T.D.& R.	COMBINATION PAPER TOWEL DISPENSER & RECEPTACLE
P.T.R.	PAPER TOWEL RECEPTACLE
P.T.S.	PNEUMATIC TUBE SYSTEM
P.W.	PASS WINDOW
PART.	PARTITION
PASS.	PASSENGER
PERF.	PERFORATED
PERIM.	PERIMETER
PL.	PLATE
PLAS.	PLASTER
PLBG.	PLUMBING
PLYWD.	PLYWOOD
PNT	PAINT(ED)
POL.	POLISHED
PR.	PAIR
PROJ.	PROJECTION/PROJECT
PT.	POINT/PAINT
PVC.	POLY-VINYL CHLORIDE
Q.T.	QUARRY TILE
R.	RISER
R.A.	RETURN AIR
RAD.	RADIUS
R.D.	ROOF DRAIN
R.D.L.	ROOF DRAIN LEADER
R.H.	RIGHT HAND
R.H.M.	ROUND HEAD METAL SCREW
R.H.W.S.	ROUND HEAD WOOD SCREW
RECEPT.	RECEPTION/IST
RECPT.	RECEPTACLE
RECT.	RECTANGULAR
REF.	REFERENCE
REFR/ REFRIG.	REFRIGERATOR
REG.	REGISTER
REINF.	REINFORCEMENT
REQD.	REQUIRED
RESIL.	RESILIENT
RET.	RETAIN(ING)/RETURN
REV.	REVERSE
RM.	ROOM
RMS.	ROOMS
R.O.	ROUGH OPENING
ROW.	REVERSE OSMOSIS WATER
R.O.W.	RIGHT OF WAY
RR#	LOS ANGELES CITY RESEARCH REPORT NUMBER
R.V.B.	RECESSED VALVE BOX
RWD.	REDWOOD
RWL.	RAINWATER LEADER
S.	SOUTH/SINK/STEAM/SLIDE (VACUUM BOTTLE)
S.A.	SUPPLY AIR
SASWP	SELF ADHESIVE STAINLESS WATERPROOFING
SAF	SELF ADHESIVE FLASHING
S.C.	SOLID CORE
S.C.D.	SEAT COVER DISPENSER
S.D.	SUBDRAIN/ SOAP DISPENSER
S.L.	SCORE LINE
S.N.R.	SANITARY NAPKIN RECEPTACLE
S.N.V	SANITARY NAPKIN VENDOR
S.S.	STAINLESS STEEL
S.SK.	SERVICE SINK
SCHED.	SCHEDULE
SEC.	SECURITY
SEC'Y	SECRETARY
SECT.	SECTION
SFM.	STATE FIRE MARSHAL
SHT.	SHEET
SHTG.	SHEATHING
SHWR.	SHOWER
SH.	SHELF
SIM.	SIMILAR
SL.	SLOPE
SPEC.	SPECIFICATIONS
SQ.	SQUARE
ST.	STEAM
STA.	STATION
STD.	STANDARD
STER.	STERILIZER
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
SMS.	SHEET METAL SCREW
T.	TREAD/TOP
T.&G.	TONGUE AND GROOVE
T.BD.	TACKBOARD
T.B.	TOWEL BAR
T.C.	TOP OF CURB
T.CL.	TIME CLOCK
T.D.	TOP OF DECK
T.P.D.	TOILET PAPER DISPENSER
T.PL.	TOP OF PLATE
TEL.	TELEPHONE
TEMP.	TEMPERED
TERR.	TERRAZZO
THK.	THICK
TOC.	TOP OF CONCRETE
TOIL.	TOILET
TOP.	TOP OF PAVEMENT/PARAPET
TOP.	TOP OF PLATE
TOS.	TOP OF SLAB
TR.	TREATMENT
TRANS.	TRANSFORMER
TW.	TOP OF WALL
TYP.	TYPICAL
TV.	TELEVISION
U.	UNDER
U.G.	UNDERGROUND
U.L.	UNDERWRITER'S LABORATORY
U.O.N.	UNLESS OTHERWISE NOTED
U/C	UNDERCOUNTER
UNF.	UNFINISHED
UR.	URINAL
V.C.	VALUE CABINET
V.C.T.	VINYL COMPOSITION TILE
V.T.R.	VENT THROUGH ROOF
V.W.C.	VINYL WALL COVERING
V	VACUUM
VEND.	VENDING
VENT.	VENTILATED/ VENTILATING
VERT.	VERTICAL
VEST.	VESTIBULE
W.	WEST/WIDE/WIDTH/WASTE/WALL
W/O	WITHOUT
W.C.	WATER CLOSET
W.H.	WATER HEATER
WHI	WARNOCK HERSEY INTERNATIONAL INC. CLASSIFICATION
W.I.	WROUGHT IRON
W.I.C.	WOODWORK INSTITUTE OF CALIFORNIA
W.R.	WATER RESISTANT/ WASTE RECEPT.
W.S.	WOOD SCREW
W.S.P.	WET STANDPIPE
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WOVEN WIRE MESH
W/	WITH
W/C	WHEELCHAIR
W/C.L.	WHEELCHAIR LAV
WD.	WOOD
WG.	WIRE GUARD/WIRE GLASS
WGT.	WEIGHT
WP.	WATERPROOF
WSCT.	WAINSCOT
WP#	GYPSUM ASSOCCIATION - WALL PARTITION ASSEMBLY NUMBER
XFMR.	TRANSFORMER

DRAWING INDEX

GENERAL

G000 TITLE SHEET
G001 ABBREVIATIONS & DRAWING INDEX

ARCHITECTURAL

A030 ARCHITECTURAL SITE PLAN
A031 HELIPORT LAYOUT PLAN

ELECTRICAL

E0.0 ELECTRICAL SPECIFICATIONS
E0.1 ELECTRICAL SCHEDULES
E2.1 ENLARGED ELECTRICAL SITE PLAN

NICHOLS MELBURG & ROSSETTO
ARCHITECTS + ENGINEERS
300 Knollcrest Drive Redding, CA 96002
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KEY PLAN

PROJECT NAME

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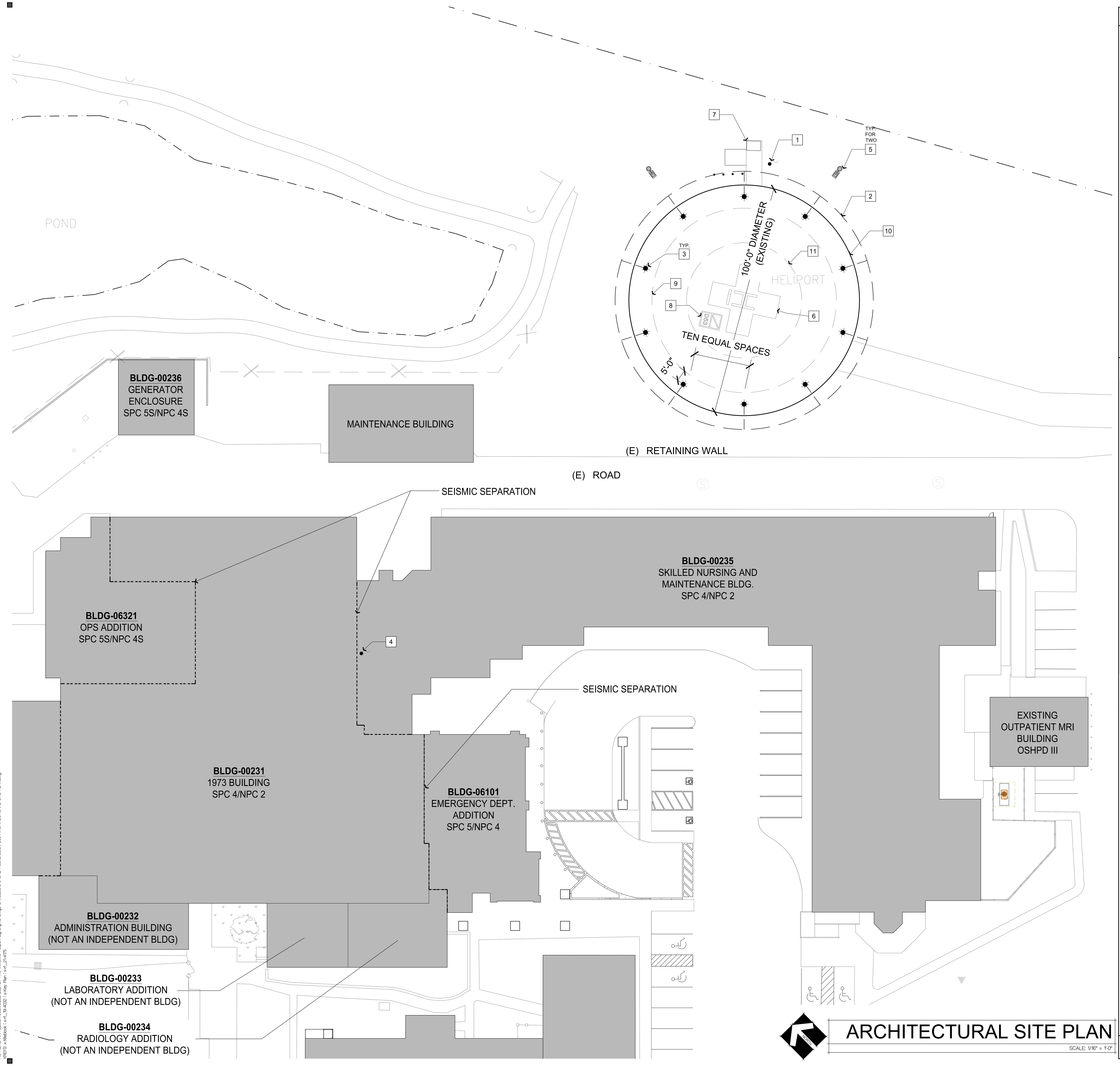
SHEET No.

G001



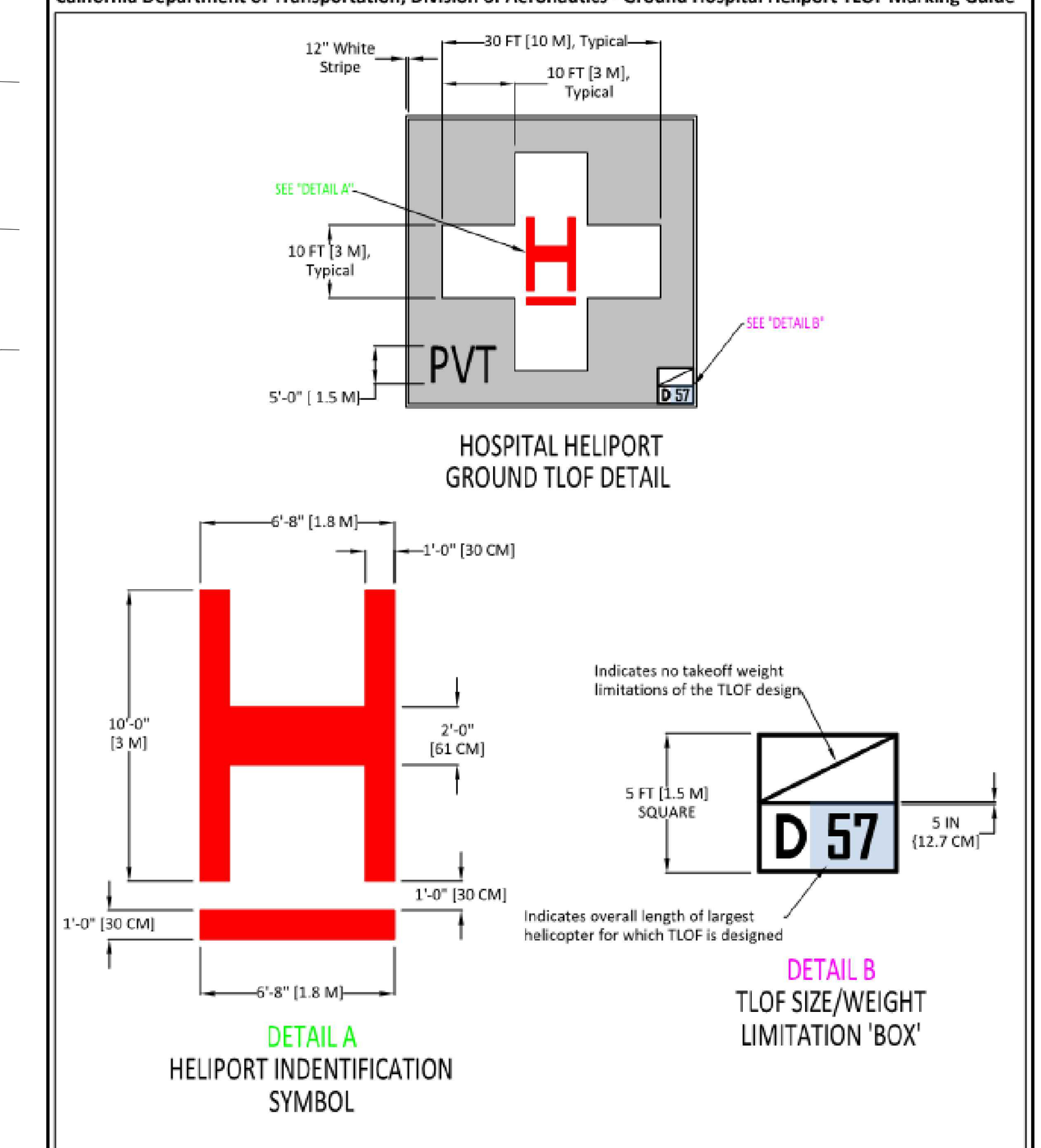
ARCHITECTURAL SITE PLAN

SCALE: 1/16" = 1'-0"

KEYNOTES

1. *OWNER OPTION:* PROVIDE POLE-MOUNTED LIGHTED WIND SOCK FOR NIGHT OPERATIONS; VERIFY PROPOSED LOCATION WITH OWNER IN COMPLIANCE WITH FAA REGULATIONS (*This item would supplement the existing lighted wind sock*).
2. PROVIDE UNDERGROUND CONDUIT FOR HELIPAD LIGHTING WHERE INDICATED. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. PROVIDE FLUSH-MOUNTED HELIPAD LIGHTING WHERE INDICATED. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. EXISTING LIGHTED WIND SOCK TO REMAIN
5. POLE-MOUNTED LIGHT FIXTURE, 10'-0" TALL
6. EXISTING HELIPAD MARKINGS, SEE DETAIL 1/A030 FOR MORE INFORMATION
7. (E) FUEL FACILITY ON CONCRETE PAD
8. (E) WEIGHT AND OVERALL LENGTH LIMITATION MARKING
9. (E) DASHED LINE INDICATES 80'-0" DIA. FATO (FINAL APPROACH AND TAKE-OFF AREA)
10. LINE OF EXISTING 100'-0" DIA. CONC HELIPAD WITH EXISTING MARKING
11. LINE OF EXISTING 50'-0" DIA. TLOF (TOUCHDOWN & LIFT-OFF)

California Department of Transportation, Division of Aeronautics - Ground Hospital Heliport TLOF Marking Guide



Notes:
1. Details adapted from "FAA AC 150/5390-2C, Heliport Design, Figure 4-25" and modified for California Heliports.
2. See "Figure C-2" (on reverse) for the form and proportion of the numbers used in the TLOF Size and Limitation Box.
3. See "FAA AC 150/5390-2C" for alternate marking options.

AC 150/5390-2C 4/24/2012

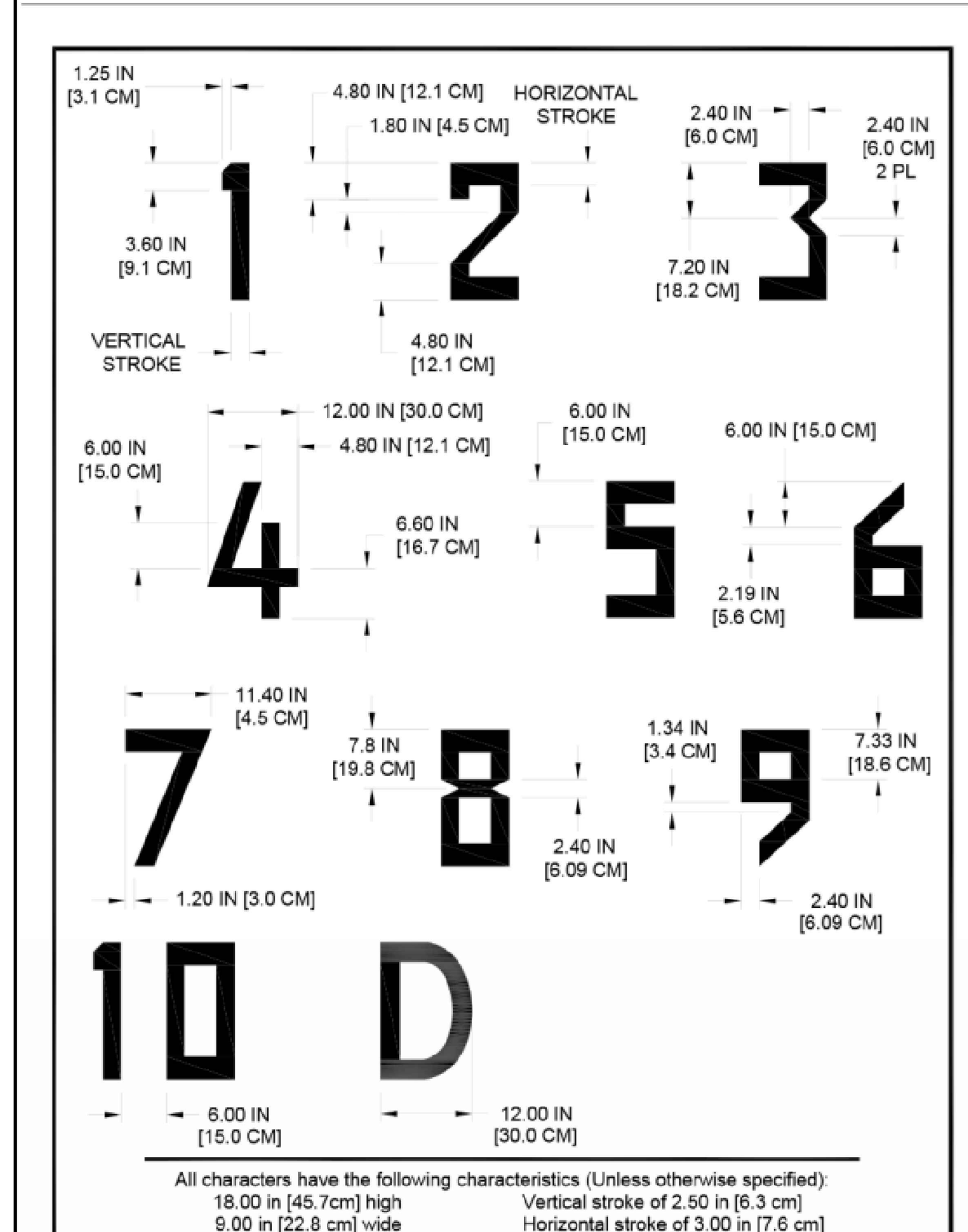


Figure C-2. Form and Proportions of 18 Inch (45.7 cm) Numbers for Marking Size and Weight Limitation

1 EXISTING HOSPITAL HELIPORT MARKINGS

SCALE: N.T.S.

NICHOLS MELBURG & ROSSETTO
ARCHITECTS + ENGINEERS
300 Knollcrest Drive Redding, CA 96002
(530) 222-3300
(530) 222-3538 Fax
http://www.nmrdesign.com

REVISIONS

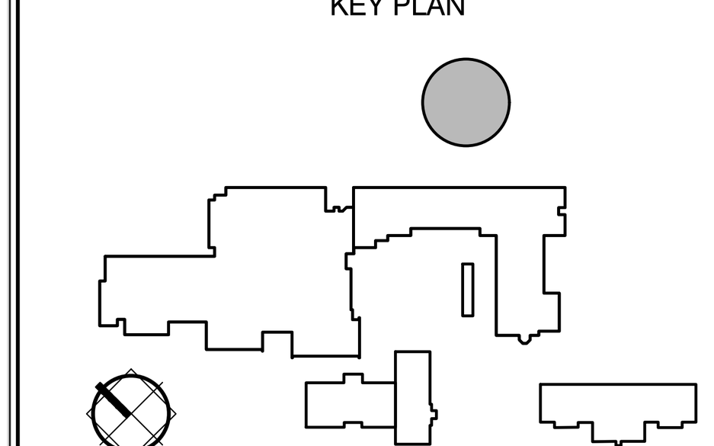
Delta	Description	Date

If drawing is not 42" x 30" it is a reduced print

LICENSE STAMPS

LICENSED ARCHITECT · NATHAN THOMPSON · REN. 7/31/23 · STATE OF CALIFORNIA

KEY PLAN



PROJECT NAME

HELIPORT LIGHTING FOR

MERCY MEDICAL CENTER MT. SHASTA

914 PINE ST.
MT. SHASTA, CA 96067

SHEET TITLE

ARCHITECTURAL SITE PLAN

DRAWING STATUS
CONSTRUCTION DOCUMENTS

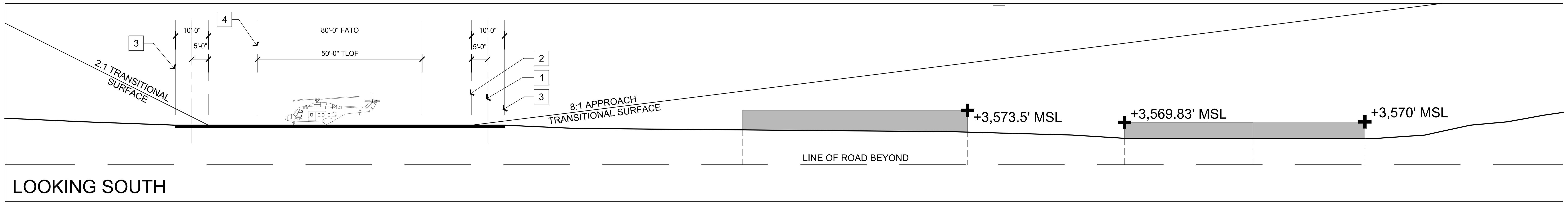
AGENCY APPROVAL

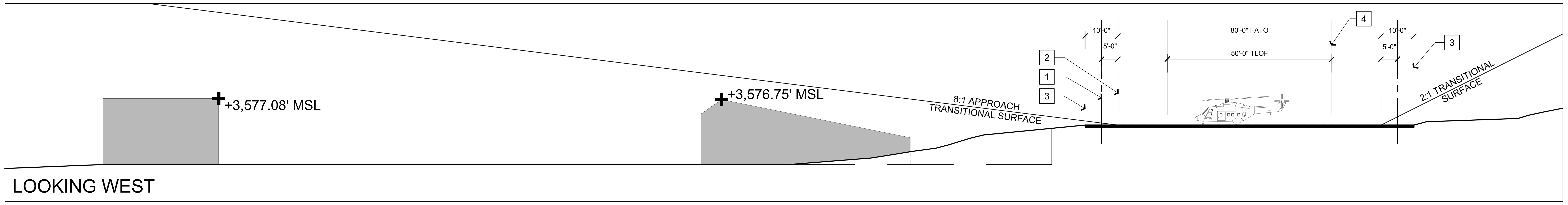
CONDITIONAL PLAN APPROVAL
FOR STATE AIRPORT/HELIPORT PERMIT PURPOSES ONLY
PROJECT MEETS DESIGN STANDARDS. FINAL APPROVAL IS SUBJECT TO CEQA COMPLIANCE LOCAL GOVT APPROVAL AND OTHER PERMIT REQUIREMENTS.
CALTRANS DIVISON OF AERONAUTICS
NAME Phillip Miller ASO
DATE 27 JUN 22

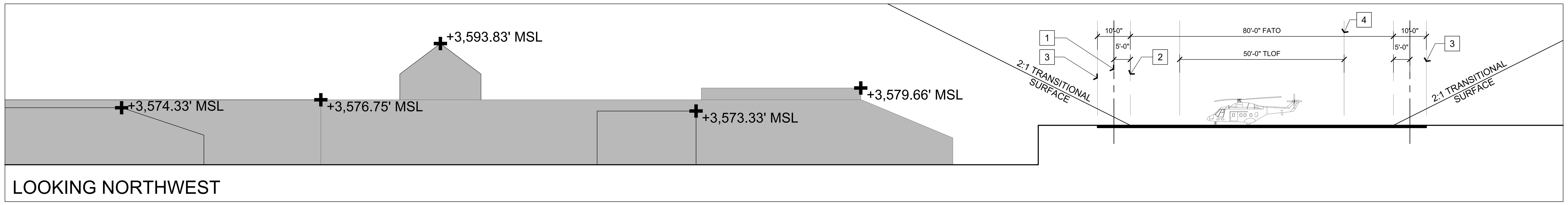
Drawn By	EL
Date Issued	04/22
Scale	AS NOTED
Project No.	21-4175

SHEET No.

A030







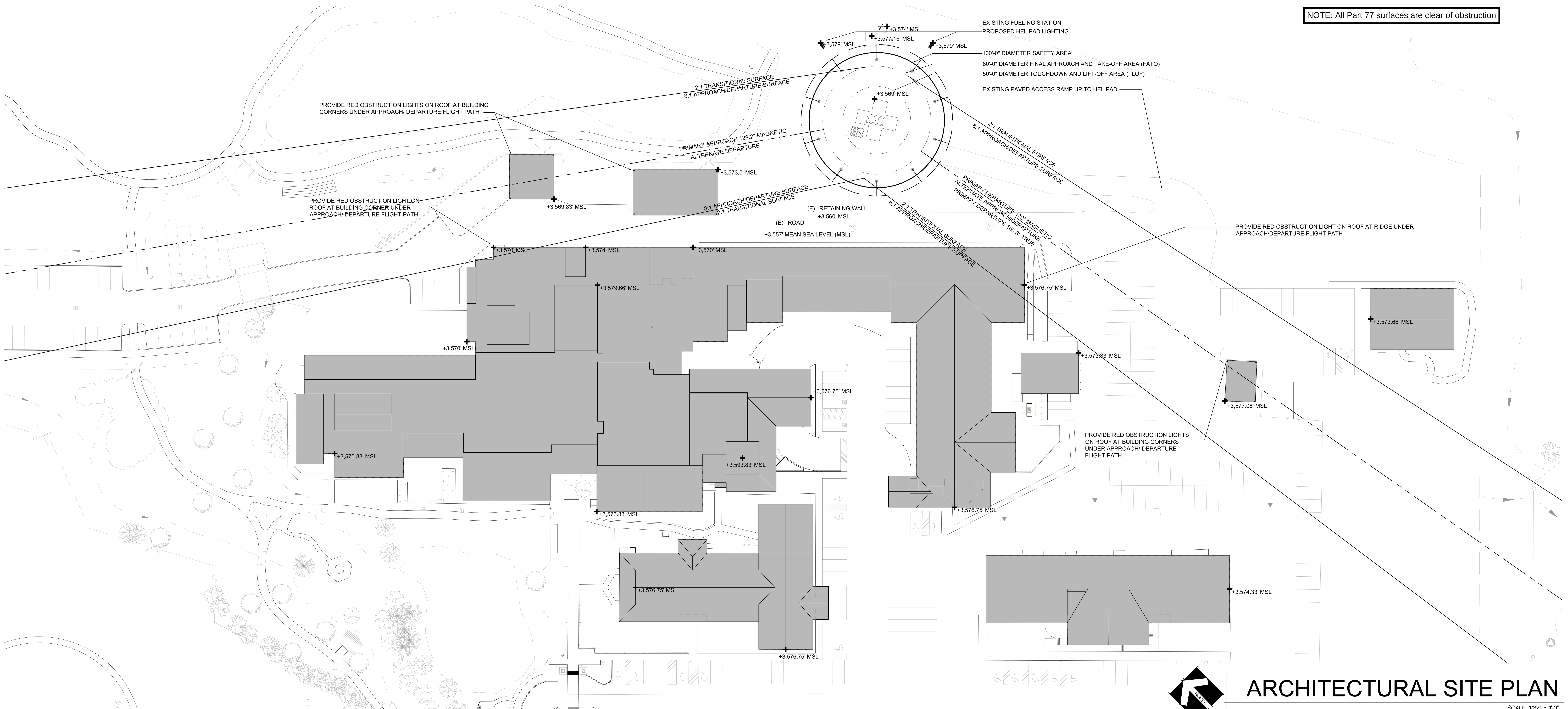
KEYNOTES

1. PROVIDE FLUSH-MOUNTED HELIPAD LIGHTING WHERE INDICATED. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. (E) DASHED LINE INDICATES 80'-0" DIA. FATO (FINAL APPROACH AND TAKE-OFF AREA)
3. LINE OF EXISTING 100'-0" DIA. CONC HELIPAD WITH EXISTING MARKING
4. LINE OF EXISTING 50'-0" DIA. TLOF (TOUCHDOWN & LIFT-OFF)

HELIPORT DATA PANEL

HELIPORT NAME	MERCY MEDICAL CENTER OF MT. SHASTA HELIPORT
STREET ADDRESS	914 PINE STREET, MOUNT SHASTA, CA 96067
USAGE	PRIVATE
GEOGRAPHIC COORDINATES (NAD 83) AT HELIPORT CENTER: LATITUDE 41° 19.12' N	LONGITUDE 122° 19.20' W
APPROACH COURSE	125°
DEPARTURE COURSE	350°
FATO (FINAL APPROACH & TAKEOFF AREA)	80'-0" DIA.
TLOF (TOUCHDOWN & LIFT-OFF AREA)	50'-0" DIA.
SAFETY AREA WIDTH	10'-0" W.
TOTAL UNOBSTRUCTED WIDTH (FATO plus SAFETY AREA on each side)	100'-0" DIA.
TLOF SURFACE MATERIAL	CONCRETE
TLOF SURFACE GRADIENT & DIRECTION	1% SW

NOTE: All Part 77 surfaces are clear of obstruction



ARCHITECTURAL SITE PLAN

SCALE: 1/32" = 1'-0"

NICHOLS MELBURG & ROSSETTO
ARCHITECTS + ENGINEERS
300 Knollcrest Drive Redding, CA 96002
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(530) 222-3538 Fax
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REVISIONS

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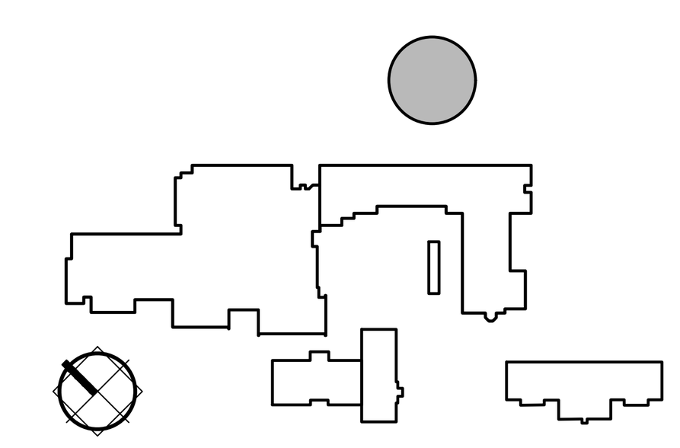
LICENSE STAMPS

KEY PLAN



PROJECT NAME

HELIPORT LIGHTING FOR

MERCY MEDICAL CENTER MT. SHASTA

914 PINE ST.
MT. SHASTA, CA 96067

SHEET TITLE

HELIPORT LAYOUT PLAN

DRAWING STATUS
CONSTRUCTION DOCUMENTS

AGENCY APPROVAL

CONDITIONAL PLAN APPROVAL
FOR STATE AIRPORT/HELIPORT PERMIT PURPOSES ONLY
PROJECT MEETS DESIGN STANDARDS. FINAL APPROVAL IS SUBJECT TO CEQA COMPLIANCE LOCAL GOVT APPROVAL, AND OTHER PERMIT REQUIREMENTS.
CALTRANS DIVISON OF AERONAUTICS
NAME Phillip Miller ASO
DATE 27 JUN 22

Drawn By	EL
Date Issued	04/22
Scale	AS NOTED
Project No.	21-4175

SHEET No.

A031

ELECTRICAL SPECIFICATIONS

PART 1 – GENERAL

1.1 INTENT OF PLANS

A. ELECTRICAL PLAN DRAWINGS SHOW ONLY GENERAL LOCATIONS OF EQUIPMENT, DEVICES, AND RACEWAY UNLESS SPECIFICALLY DIMENSIONED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER ROUTING OF RACEWAY, SUBJECT TO THE APPROVAL OF THE ENGINEER. MAKE ADJUSTMENTS AS NECESSARY TO WIRING, CONDUIT, DISCONNECTS, BRANCH CIRCUIT PROTECTION, AND OTHER AFFECTED MATERIAL OR EQUIPMENT TO ACCOMMODATE ACTUAL EQUIPMENT SUPPLIED FOR THIS PROJECT.

1.2 CODES, PERMITS, AND REGULATIONS

A. DO ALL WORK AND INSTALL PRODUCTS IN ACCORDANCE WITH APPLICABLE NECA REQUIREMENTS, THE REQUIREMENTS OF APPLICABLE STATE AND LOCAL LAWS, CODES AND ORDINANCES.

B. IT IS OF THE UTMOST IMPORTANCE THAT THE INSTALLING CONTRACTOR HAVE A MASTERY OF THE PROJECT-SPECIFIC REQUIREMENTS SHOWN IN SPECIFICATIONS AND PLANS. IT IS STRONGLY ADVISED THAT THE CONTRACTOR CONTACT THE EEOR FOR CLARIFICATION OR RFI THE EEOR IF FURTHER INFORMATION IS REQUIRED. THE EEOR SHALL REQUIRE REVISIONS TO BE MADE IN THE FIELD IF THE INSTALLATION DOES NOT FALL WITHIN THESE PROJECT-SPECIFIC GUIDELINES. NO ALLOWANCE SHALL BE MADE FOR INSTALLATIONS NOT ADHERING TO THESE REQUIREMENTS.

1.3 SUBMITTALS

A. GENERAL:

1. BEFORE ANY MATERIAL IS FABRICATED OR SHIPPED, FURNISH TO THE ENGINEER FULL DETAILS, SHOP DRAWINGS, DIMENSIONS, CATALOG CUTS, SCHEMATIC (ELEMENTARY) DIAGRAMS, AND OTHER DESCRIPTIVE MATTER AS REQUIRED TO FULLY DESCRIBE THE EQUIPMENT SPECIFIED.

1.4 TESTING RELATED SUBMITTALS

A. TEST PROCEDURES: SUBMIT THE PROCEDURES TO BE FOLLOWED DURING THE OPERATIONAL READINESS TEST. PROCEDURES SHALL INCLUDE TEST DESCRIPTIONS, FORMS, AND CHECKLISTS TO BE USED TO CONTROL AND DOCUMENT THE REQUIRED TESTS. UPON COMPLETION OF EACH REQUIRED TEST, DOCUMENT THE TEST BY SUBMITTING A COPY OF THE SIGNED OFF TEST PROCEDURES.

1.5 ADDITIONAL SERVICES

A. ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES FOR THE DURATION OF THIS PROJECT. PROVIDE AND INSTALL TEMPORARY PANELBOARDS, SPYDER BOXES, FESTOON LIGHTING OR OTHER ELECTRICAL ITEMS AS NEEDED. COORDINATE WITH THE GENERAL CONTRACTOR.

PART 2 – PRODUCTS

2.1 NOTE

A. UNLESS OTHERWISE INDICATED, PROVIDE ALL FIRST-QUALITY NEW MATERIALS, FREE FROM ANY DEFECTS, AND SUITABLE FOR THE INTENDED USE AND THE SPACE PROVIDED. PROVIDE MATERIALS APPROVED BY UL WHEREVER STANDARDS HAVE BEEN ESTABLISHED BY THAT ORGANIZATION. FURNISH AND INSTALL ALL INCIDENTAL ITEMS NOT SPECIFICALLY SHOWN OR SPECIFIED WHICH ARE REQUIRED TO PROVIDE THE COMPLETE SYSTEMS SPECIFIED HEREIN. WHERE TWO OR MORE UNITS OF THE SAME CLASS OF MATERIAL OR EQUIPMENT ARE REQUIRED, PROVIDE PRODUCTS OF A SINGLE MANUFACTURER. COMPONENT PARTS OF MATERIALS OR EQUIPMENT NEED NOT BE PRODUCTS OF THE SAME MANUFACTURER.

2.2 EQUIPMENT FINISH

A. UNLESS OTHERWISE INDICATED, FINISH FOR ELECTRICAL EQUIPMENT AND ENCLOSURES SHALL BE MANUFACTURER'S STANDARD GRAY OR ANSI 61 GRAY OVER A PRIMER AND RUST INHIBITOR.

2.3 OUTLET AND DEVICE BOXES

A. SHEET STEEL: ONE-PIECE DRAWN TYPE, ZINC- OR CADMIUM-PLATED.

2.4 JUNCTION AND PULL BOXES

A. OUTLET BOXES USED AS JUNCTION OR PULL BOX: AS SPECIFIED UNDER OUTLET AND DEVICE BOXES.

B. LARGE WEATHERPROOF: NEMA 3R.
1. BOX: GALVANIZED STEEL.
2. COVER: SCREW WITH PROVISIONS FOR PAD LOCKING.
3. EMBOSSED MOUNTING HOLES ON BACK OF ENCLOSURE.
4. NO GASKETING.

C. CONCRETE PULL BOX:
1. BOX: PRECAST CONCRETE.
2. EXTENSIONS: PRECAST CONCRETE, 12 INCHES DEEP, PROVIDE MINIMUM OF TWO PER BOX.
3. COVER: STEEL TRAFFIC COVER, CLEARLY AND PERMANENTLY LABEL BOX ELECTRICAL, TELEPHONE, OR TELEMETRY, AS APPLICABLE.
4. SIZE: SIZED IN ACCORDANCE WITH CEC, BUT MINIMUM SIZE 17"H X 30"W WITH DEPTH AS REQUIRED OR AS SHOWN.

2.5 CONDUIT AND CONDUIT FITTINGS:

A. GALVANIZED RIGID STEEL CONDUIT (GRS):
1. CONDUIT:
   A. MEET REQUIREMENTS OF ANSI C80.1 AND UL 6.
   B. MATERIAL: HOT-DIP GALVANIZED, WITH CHROMATED PROTECTIVE LAYER.
2. FITTINGS:
   A. MEET REQUIREMENTS OF UL 514B.
   B. TYPE: THREADED, GALVANIZED. SETSCREW FITTINGS NOT PERMITTED.
   C. MATERIAL: MALLEABLE IRON WITH INSULATED THROAT.

B. PVC SCHEDULE 40 CONDUIT:
1. CONDUIT:
   A. MEET REQUIREMENTS OF NEMA TC2 AND UL 651.
   B. UL LISTED FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR DIRECT SUNLIGHT EXPOSURE, AND 90°C INSULATED CONDUCTORS.
2. FITTINGS
   A. MEET REQUIREMENTS OF NEMA TC-3 AND UL 514B.
   B. TYPE: PVC, SLIP-ON.

C. RACEWAY WARNING TAPE:
1. HEAVY-GAUGE, YELLOW PLASTIC TAPE OF 6-INCH MINIMUM WIDTH FOR USE IN TRENCHES CONTAINING ELECTRIC CIRCUITS.
2. UTILIZE TAPE MADE OF MATERIAL RESISTANT TO CORROSIVE SOIL.
3. PRINTED WARNING THAT AN ELECTRIC CIRCUIT IS LOCATED BELOW THE TAPE.

2.6 CONDUCTORS

A. ELECTRICAL TERMINALS AND TERMINATIONS: IT IS ASSUMED THAT ALL TERMINATIONS IN THE FIELD SHALL HAVE MINIMUM RATED 75°C RATED TERMINALS. THE CONTRACTOR SHALL FIELD VERIFY ALL TERMINALS FOR CONNECTION IN COMPLIANCE WITH CEC 110.14. THE CONTRACTOR SHALL INFORM THE ENGINEER OF RECORD OF ANY TERMINALS DEVIATING FROM A RATING OF 75°C.
1. ALL CONDUCTORS ARE RATED FOR 75°C ON PLANS UNLESS OTHERWISE NOTED.

B. ALL CONDUCTORS SHOWN SHALL BE NEW UNLESS OTHERWISE INDICATED.

C. CONDUCTOR TYPE:
1. 120 VAC AND 277 VAC LIGHTING: SOLID.
2. 120 VAC RECEPTACLE CIRCUITS: SOLID.
3. ALL OTHER CIRCUITS: STRANDED.
4. INSULATION: TYPE THHN/THWN, 90°C DRY OR 75°C WET.

D. COPPER BUILDING WIRE:
1. DESCRIPTION: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN COPPER CURRENT-CARRYING CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600 VAC OR LESS.
   a. INSULATION:
      - TYPE THHN AND TYPE THWN-2: COMPLY WITH UL 83.

2.7 CONDUCTOR ACCESSORIES

A. TAPE:
1. GENERAL PURPOSE, FLAME RETARDANT: 7-MIL, VINYL PLASTIC, RATED FOR 90°C MINIMUM MEETING REQUIREMENTS OF UL 510.
2. FLAME RETARDANT, COLD AND WEATHER RESISTANT: 8.5 MIL, VINYL PLASTIC.

B. CABLE TIES:
1. NYLON, ADJUSTABLE, AND SELF-LOCKING.
2. COMPLY WITH UL 20 AND FS W-S-896.
3. BARREL KEY.

2.8 MINI-POWER CENTER (MPC)

A. RATINGS:
1. KVA AND VOLTAGE RATINGS SHALL BE AS SHOWN ON THE DRAWINGS.
2. UNITS SHALL BE DESIGNED FOR CONTINUOUS OPERATION AT RATED KVA, FOR 24 HOURS A DAY, 365 DAYS A YEAR OPERATION, WITH NORMAL LIFE EXPECTANCY AS DEFINED IN ANSI C57.96.
3. TRANSFORMER SOUND LEVELS SHALL NOT EXCEED THE FOLLOWING ANSI AND NEMA LEVELS FOR SELF-COOLED RATINGS:
   a. 10 TO 30 KVA 45 DB.

B. CONSTRUCTION:
1. EACH MINI-POWER CENTER SHALL INCLUDE A PRIMARY MAIN BREAKER, AND ENCAPSULATED DRY-TYPE TRANSFORMER AND LOADCENTER WITH SECONDARY MAIN BREAKER.
2. PRIMARY MAIN, SECONDARY MAIN AND FEEDER BREAKERS SHALL BE ENCLOSED WITH PADLOCKABLE HINGED DOOR.
3. MINI-POWER CENTERS SHALL BE SUITABLE FOR SERVICE ENTRANCE APPLICATION.
4. INSULATION SYSTEMS:
   a. TRANSFORMERS SHALL BE INSULATED WITH A 185°C INSULATION SYSTEM AND RATED AT 115°C TEMPERATURE RISE.
   b. REQUIRED PERFORMANCE SHALL BE OBTAINED WITHOUT EXCEEDING THE ABOVE-INDICATED TEMPERATURE RISE IN A 40°C MAXIMUM AMBIENT, WITH A 30°C AVERAGE OVER 24 HOURS.
   c. ALL INSULATION MATERIALS SHALL BE FLAME-RETARDANT AND SHALL NOT SUPPORT COMBUSTION AS DEFINED IN ASTM STANDARD TEST METHOD D635.
5. CORE AND COIL ASSEMBLIES:
   a. TRANSFORMER CORE SHALL BE CONSTRUCTED WITH HIGH-GRADE, NONAGING, GRAIN-ORIENTED SILICON STEEL WITH HIGH MAGNETIC PERMEABILITY, AND LOW HYSTERESIS AND EDDY CURRENT LOSSES. MAXIMUM MAGNETIC FLUX DENSITIES SHALL BE SUBSTANTIALLY BELOW THE SATURATION POINT. THE TRANSFORMER CORE VOLUME SHALL ALLOW EFFICIENT TRANSFORMER OPERATION OF 10% ABOVE THE NOMINAL TAP VOLTAGE. THE CORE LAMINATIONS SHALL BE TIGHTLY CLAMPED AND COMPRESSED. COILS SHALL BE WOUND OF ELECTRICAL GRADE ALUMINUM WITH CONTINUOUS WOUND CONSTRUCTION.
   b. THE CORE AND COIL ASSEMBLY SHALL BE COMPLETELY ENCAPSULATED IN A PROPORTIONED MIXTURE OF RESIN AND AGGREGATE TO PROVIDE A MOISTURE PROOF, SHOCK-RESISTANT SEAL. THE CORE AND COIL ENCAPSULATION SYSTEM SHALL MINIMIZE THE SOUND LEVEL.
   c. THE CORE OF THE TRANSFORMER SHALL BE GROUNDED TO THE ENCLOSURE.
   d. PROVIDE TWO (2) 5% FCBN TAPS.

C. BUS:
1. SECONDARY BUS SHALL BE ALUMINUM.

D. WIRING/TERMINATIONS:
1. ALL INTERCONNECTING WIRING BETWEEN THE PRIMARY BREAKER AND TRANSFORMER, SECONDARY MAIN BREAKER AND TRANSFORMER AND DISTRIBUTION SECTION SHALL BE FACTORY INSTALLED.
2. ALL TRANSITIONS SHALL BE EQUIPPED WITH A WIRING COMPARTMENT SUITABLE FOR CONDUIT ENTRY AND LARGE ENOUGH TO ALLOW CONVENIENT WIRING.

E. MAIN DEVICES:
1. EACH MINI-POWER CENTER SHALL INCLUDE A PRIMARY MAIN BREAKER WITH AN INTERRUPTING RATING OF 14 KA AT 277/480 VAC; AND A SECONDARY MAIN BREAKER RATED AT 10 KA INTERRUPTING RATING AT 120/240 VAC, AND A PANELBOARD.

F. FEEDER DEVICES:
1. THE SECONDARY DISTRIBUTION SECTION SHALL ACCOMMODATE BOLT-ON BREAKERS WITH 10 KA INTERRUPTING CAPACITY.

G. ENCLOSURE:
1. THE ENCLOSURE SHALL BE MADE OF HEAVY-GAUGE STEEL AND THE MAXIMUM TEMPERATURE OF THE ENCLOSURE SHALL NOT EXCEED 90°C.
2. THE ENCLOSURE SHALL BE TOTALLY ENCLOSED, NONVENTILATED, NEMA 3R, WITH LIFTING EYES.

H. MANUFACTURERS:
1. EATON.
2. SQUARE D.
3. OR EQUAL.

2.9 TIME SWITCHES

A. ASTRONOMIC TIME SWITCHES: COMPLYING WITH UL 917.
1. LISTED AND LABELED AS DEFINED IN NFPA 70 AND MARKED FOR INTENDED LOCATION AND APPLICATION.

B. RETAIN "CONTACT CONFIGURATION" SUBPARAGRAPH BELOW IF CONFIGURATION IS NOT INDICATED ON DRAWINGS.
1. CONTACT RATING:
   a. NORMALLY OPEN, 20A GENERAL PURPOSE AND RESISTIVE.
2. PROGRAMS: BASIC 24-HOUR, 7 DAY ELECTRONIC CONTROL.
3. ASTRONOMIC PROGRAMMING.
4. AUTOMATIC DAYLIGHT SAVINGS TIME CHANGEOVER.
5. SMALL CASE NEMA 3R ENCLOSURE.
   a. NUMBER OF CIRCUITS: 4.

2.10 OUTDOOR PHOTOELECTRIC SWITCHES

A. DESCRIPTION: SOLID STATE, WITH SPST DRY CONTACTS RATED FOR 1000 W INCANDESCENT OR 1800 VA INDUCTIVE, TO OPERATE CONNECTED RELAY, CONTACTOR COILS, OR MICROPROCESSOR INPUT; COMPLYING WITH UL 773A, AND COMPATIBLE WITH BALLASTS AND LED LAMPS.
1. LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
2. LIGHT-LEVEL MONITORING RANGE: 1.5 TO 10 FC, WITH AN ADJUSTMENT FOR TURN-ON AND TURN-OFF LEVELS WITHIN THAT RANGE.
3. TIME DELAY: FIFTEEN-SECOND MINIMUM, TO PREVENT FALSE OPERATION.
4. MOUNTING: TWIST LOCK COMPLIES WITH NEMA C136.10, WITH BASE-AND-STEM MOUNTING OR STEM-AND-SWIVEL MOUNTING ACCESSORIES AS REQUIRED TO DIRECT SENSOR TO THE NORTH SKY EXPOSURE.
5. FAILURE MODE: LUMINAIRE STAYS ON.
6. LED RATED CONTACTS WHEN USED FOR LED LUMINAIRES.

PART 3 – EXECUTION

3.1 NOTE:

A. COORDINATE ELECTRICAL WORK WITH THE OWNER AND THE WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, DELAYS, AND UNNECESSARY INTERFERENCE DURING CONSTRUCTION.

3.2 PROTECTION DURING CONSTRUCTION

A. FOLLOWING INSTALLATION, PROTECT MATERIALS, EQUIPMENT, AND INSULATION FROM CORROSION, PHYSICAL DAMAGE, AND MOISTURE. CAP CONDUIT RUNS DURING CONSTRUCTION WITH MANUFACTURED SEALS. KEEP OPENINGS IN BOXES OR EQUIPMENT CLOSED DURING CONSTRUCTION.

3.3 MATERIAL AND EQUIPMENT INSTALLATION

FOLLOW THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS UNLESS OTHERWISE INDICATED. FOLLOW THE ENGINEER'S DECISION, WHEREVER ANY CONFLICT ARISES. KEEP COPY OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AVAILABLE ON THE JOBSITE FOR REVIEW AT ALL TIMES.

3.4 CUTTING AND PATCHING

A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC APPROVAL OF THE ENGINEER. FOLLOWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED.

3.5 CLEANING AND TOUCH-UP PAINTING

A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH. UPON COMPLETION OF WORK, REMOVE MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM THE INTERIOR AND EXTERIOR OF ALL DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED.

3.6 RACEWAY SYSTEM

A. UNLESS OTHERWISE SPECIFIED OR INDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS INSTALLED IN RACEWAYS OF THE TYPES INDICATED:

B. EXTERIOR, EXPOSED: GALVANIZED RIGID STEEL.

C. DIRECT EARTH BURIAL: PVC SCHEDULE 40.

D. BOX TYPE (ALL RACEWAY SYSTEMS):
1. EXTERIOR LOCATIONS: WEATHERPROOF TYPE 3R.
2. BURIED RACEWAY: CONCRETE PULLBOX.

E. INSTALL PULL BOXES WHERE SHOWN AND WHERE NECESSARY TO TERMINATE, TAP-OFF, OR REDIRECT MULTIPLE CONDUIT RUNS. INSTALL PULL BOXES WHERE NECESSARY IN RACEWAY SYSTEM TO FACILITATE CONDUCTOR INSTALLATION. INSTALL PULL BOXES IN CONDUIT RUNS AT LEAST EVERY 150 FEET OR AFTER THE EQUIVALENT OF THREE RIGHT-ANGLE BENDS. USE OUTLET BOXES AS JUNCTION AND PULL BOXES WHEREVER POSSIBLE AND ALLOWED BY APPLICABLE CODES.

F. SUPPORT BOXES INDEPENDENTLY OF CONDUIT BY ATTACHMENT TO BUILDING STRUCTURE OR STRUCTURAL MEMBER. INSTALL BAR HANGERS IN FRAME CONSTRUCTION, OR FASTEN BOXES DIRECTLY WITH WOOD SCREWS ON WOOD, BOLTS AND EXPANSION SHIELDS ON CONCRETE OR BRICK, TOGGLE BOLTS ON HOLLOW MASONRY UNITS, AND MACHINE SCREWS OR WELDED THREADED STUDS ON STEELWORK.

3.7 RACEWAY INSTALLATION

A. CONDUIT AND TUBING SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS.

B. MAINTAIN RACEWAY ENTIRELY FREE OF OBSTRUCTIONS AND MOISTURE.

C. GROUP RACEWAYS INSTALLED IN SAME AREA.

D. FOLLOW STRUCTURAL SURFACE CONTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES.

E. INSTALL WATERTIGHT FITTINGS IN OUTDOOR, UNDERGROUND, OR WET LOCATIONS.

F. ALL METAL CONDUIT TO BE REAMED, BURRS REMOVED, AND CLEANED BEFORE INSTALLATION OF CONDUCTORS, WIRES, OR CABLES.

3.8 RACEWAY PENETRATIONS

A. MAKE AT RIGHT ANGLES, UNLESS OTHERWISE SHOWN.

B. NOTCHING OR PENETRATION OF STRUCTURAL MEMBERS, INCLUDING FOOTINGS AND BEAMS, NOT PERMITTED.

C. APPLY SINGLE LAYER OF WRAPAROUND DUCT BAND TO ALL METALLIC CONDUIT PROTRUDING THROUGH CONCRETE FLOOR SLABS TO A POINT 2 INCHES ABOVE CONCRETE SURFACE.

D. CONCRETE WALLS, FLOORS, OR CEILINGS (ABOVEGROUND): PROVIDE AND INSTALL WATERTIGHT SEAL DEVICE.

3.9 RACEWAY SUPPORT

A. SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, AND IN ANY CASE NOT EXCEEDING 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR OTHER RACEWAYS.

B. WALL BRACKETS AND ASSOCIATED HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE STAINLESS STEEL. PROVIDE GALVANIZED STEEL AT ALL OTHER LOCATIONS. STRAP HANGERS AND CEILING TRAPEZE INCLUDING HARDWARE, SHALL BE GALVANIZED STEEL.

C. PROVIDE AND ATTACH WALL BRACKETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS:
1. WOOD: WOOD SCREWS.
2. CONCRETE OR BRICK: EXPANSION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER CHARGE, WITH LOCK WASHERS AND NUTS.

D. NAILS OR WOODEN PLUGS INSERTED IN CONCRETE OR MASONRY FOR ATTACHING RACEWAY NOT PERMITTED. DO NOT WELD RACEWAYS OR PIPE STRAPS TO STEEL STRUCTURES. DO NOT USE WIRE IN LIEU OF STRAPS OR HANGERS.

3.10 RACEWAY BENDS

A. INSTALL CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE.

B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY OR BENDING MACHINE. DO NOT HEAT METAL RACEWAYS TO FACILITATE BENDING.

C. PVC CONDUIT:
1. BENDS 30° AND LARGER: PROVIDE FACTORY-MADE ELBOWS.
2. 90° BENDS: PROVIDE GALVANIZED RIGID STEEL ELBOWS; EXCEPT ON UTILITY SERVICE RUNS IF NOT ALLOWED BY THE UTILITY.

3.11 PVC CONDUIT

A. SOLVENT WELDING:
1. PROVIDE MANUFACTURER RECOMMENDED SOLVENT; APPLY TO ALL JOINTS.
2. INSTALL SUCH THAT JOINT IS WATERTIGHT.

B. ADAPTERS:
1. PVC TO METALLIC FITTINGS: PVC TERMINAL TYPE.
2. PVC TO RIGID METAL CONDUIT: PVC FEMALE ADAPTER.

C. BELLED END CONDUIT: BEVEL THE UNBELLED END OF THE JOINT PRIOR TO JOINING.

3.12 TERMINATION AT ENCLOSURES

A. SHEET METAL BOXES, CABINETS, AND ENCLOSURES:
1. GALVANIZED RIGID STEEL CONDUIT:
   a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
   b. INSTALL GROUNDING BUSHING.
   c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE.
   d. INSTALL INSULATED BUSHING ON ENDS OF CONDUIT WHERE GROUNDING IS NOT REQUIRED.
   e. PROVIDE INSULATED THROAT WHEN CONDUIT TERMINATES IN SHEET METAL BOXES HAVING THREADED HUBS.

3.13 UNDERGROUND RACEWAYS

A. COVER: MAINTAIN MINIMUM 2-FOOT COVER ABOVE CONDUIT, UNLESS OTHERWISE SHOWN.

3.14 CONDUCTORS

A. CONNECTIONS AND TERMINATIONS:
1. INSTALL WIRE NUTS ONLY ON SOLID CONDUCTORS.
2. INSTALL NYLON SELF-INSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 6 AWG AND SMALLER.
3. INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG.
4. TAPE INSULATE ALL UNINSULATED CONNECTIONS.
5. PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION.
6. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER.
7. COMPRESSION LUGS:
   a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE.
   b. TOOL SHALL PROVIDE COMPLETE, CONTROLLED CRIMP AND SHALL NOT RELEASE UNTIL CRIMP IS COMPLETE.
   c. DO NOT USE PLIER TYPE CRIMPERS.

B. DO NOT USE SOLDERED MECHANICAL JOINTS.

C. SPLICES AND TERMINATIONS:
1. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.

D. CAP SPARE CONDUIT WITH UL LISTED END CAPS.

E. CABINETS AND PANELS:
1. REMOVE SURPLUS WIRE, BRIDLE AND SECURE.
2. WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING MATERIAL TO PROTECT THE CONDUCTORS.

F. PROVIDE ADEQUATE LENGTH PIGTAILS FOR CONDUCTORS CONNECTED BY OTHERS.

3.15 GROUNDING

A. UNLESS OTHERWISE INDICATED, GROUND ALL EXPOSED NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, AND THE NEUTRAL OF ALL WIRING SYSTEMS IN ACCORDANCE WITH THE CEC, STATE, AND OTHER APPLICABLE LAWS AND REGULATIONS.

3.16 TRANSFORMER FIELD QUALITY CONTROL

A. PERFORM TESTS AND INSPECTIONS.

B. TESTS REFERENCED IN SUBPARAGRAPH BELOW ARE FROM NETA ATS AND INCLUDE INSPECTION PROCEDURES TO VERIFY PROPER INSTALLATION. THEY ALSO INCLUDE TESTS AND MEASUREMENTS OF INSULATION RESISTANCE AND TURNS RATIOS. COST OF EXTENSIVE TESTING MAY NOT BE WARRANTED FOR SOME PROJECTS. REVISE SUBPARAGRAPH TO SUIT PROJECT.

C. TESTS AND INSPECTIONS:
1. INSPECT PHYSICAL AND MECHANICAL CONDITION.
2. INSPECT ANCHORAGE, ALIGNMENT AND GROUNDING.
3. VERIFY RESILIENT MOUNTS ARE FREE AND THAT SHIPPING BRACKETS HAVE BEEN REMOVED.
4. VERIFY THE UNIT IS CLEAN.
5. PERFORM RESISTANCE MEASUREMENTS THROUGH BOLTED CONNECTIONS WITH A LOW-RESISTANCE OHMMETER, IF APPLICABLE, IN ACCORDANCE WITH 2009 NETA ACCEPTANCE TESTING SPECIFICATIONS.
6. PERFORM INSULATION-RESISTANCE TEST WINDING-TO-WINDING AND EACH WINDING-TO-GROUND WITH 1,000 VDC TEST VOLTAGE. CALCULATE DIELECTRIC ABSORPTION RATIO OR POLARIZATION INDEX.

D. TEST VALUES:
1. INSULATION-RESISTANCE TEST VALUES AT ONE MINUTE SHOULD BE IN A MINIMUM 500 MEGOHMS.
2. THE DIELECTRIC ABSORPTION RATIO OR POLARIZATION INDEX SHALL BE GREATER THAN 1.0 AND SHALL BE RECORDED FOR FUTURE REFERENCE.

3.17 LIGHTING FIXTURES

A. DELIVER LUMINAIRES TO THE PROJECT IN THEIR ORIGINAL CARTONS. AFTER CONSTRUCTION OF THE TOTAL PROJECT IS COMPLETED, WASH FIXTURES, CLEAN LUMINAIRES, TOUCH UP ANY PAINT SCRATCHES OR CHIPS AND REMOVE LABELS FROM FIXTURE LENSES.

3.18 OPERATIONAL READINESS TEST (ORT)

A. TESTING, TEST PLANS, AND TEST REPORTS SHALL BE PROVIDED BY THE CONTRACTOR AS SPECIFIED HEREIN. THE CONTRACTOR SHALL PROVIDE LABOR, INSTRUMENTS, AND OTHER MATERIAL TO COMPLETE THE TEST.

B. THE ENTIRE INSTALLED ELECTRICAL SYSTEM SHALL BE CERTIFIED (INSPECTED, TESTED, AND DOCUMENTED) THAT IT IS READY FOR OPERATION. THE OBJECTIVE OF THIS TEST IS TO DEMONSTRATE THAT THE ELECTRICAL SYSTEM IS COMPLETE AND READY FOR USE.
1. INSULATION RESISTANCE TEST:
   a. PERFORM INSULATION RESISTANCE TEST ON EACH CONDUCTOR NO. 6 AND LARGER WITH RESPECT TO GROUND. APPLIED POTENTIAL TO BE 1,000 VDC FOR ONE MINUTE.
   b. RECORD TEST VALUES AND SUBMIT TO THE ENGINEER. INSULATION RESISTANCE TO BE 50 MEGAOHMS MINIMUM.
   c. MEASURE INSULATION RESISTANCE OF COMPLETE CIRCUITS WITH THE CIRCUIT BREAKERS OPEN.
   d. NOTIFY THE ENGINEER ONE WEEK PRIOR TO THE INSULATION TEST.
2. GROUNDING SYSTEM:
   a. VERIFY GROUND SYSTEM IS IN COMPLIANCE WITH THE PLANS.
   b. PERFORM FALL-OF-POTENTIAL TEST OR ALTERNATIVE IN ACCORDANCE WITH IEEE STANDARD 81-1991 ON THE MAIN GROUNDING ELECTRODE OR SYSTEM.
   c. PERFORM POINT-TO-POINT TESTS TO DETERMINE THE RESISTANCE BETWEEN THE MAIN GROUNDING SYSTEM AND ALL MAJOR ELECTRICAL EQUIPMENT FRAMES.
   d. THE RESISTANCE BETWEEN THE MAIN GROUNDING ELECTRODE AND GROUND SHOULD BE NO GREATER THAN 5 OHMS. INVESTIGATE POINT-TO-POINT RESISTANCE VALUES WHICH EXCEED 0.5 OHMS.
3. DEMONSTRATION:
   a. DEMONSTRATE PROPER CIRCUITING.
   b. DEMONSTRATE PROPER SWITCHING OF FIXTURES.
   c. DEMONSTRATE THAT ALL FIXTURES ARE OPERATING AND ALL LUMINAIRES ARE LIT.
   d. DEMONSTRATE PROPER PANEL RELABELING.

C. PANELBOARD DIRECTORIES SHALL MEET MINIMUM CEC 408.4 REQUIREMENTS. THE CONTRACTOR SHALL IDENTIFY EACH CIRCUIT WITH ROOM NUMBER, ROOM NAME AND EQUIPMENT SERVED. STANDARD ABBREVIATIONS FROM THE NEC AND WEBSTER'S DICTIONARY ARE ALLOWED. (E.G., "207 JANITOR WH" OR "102,103 RR RCPT".)

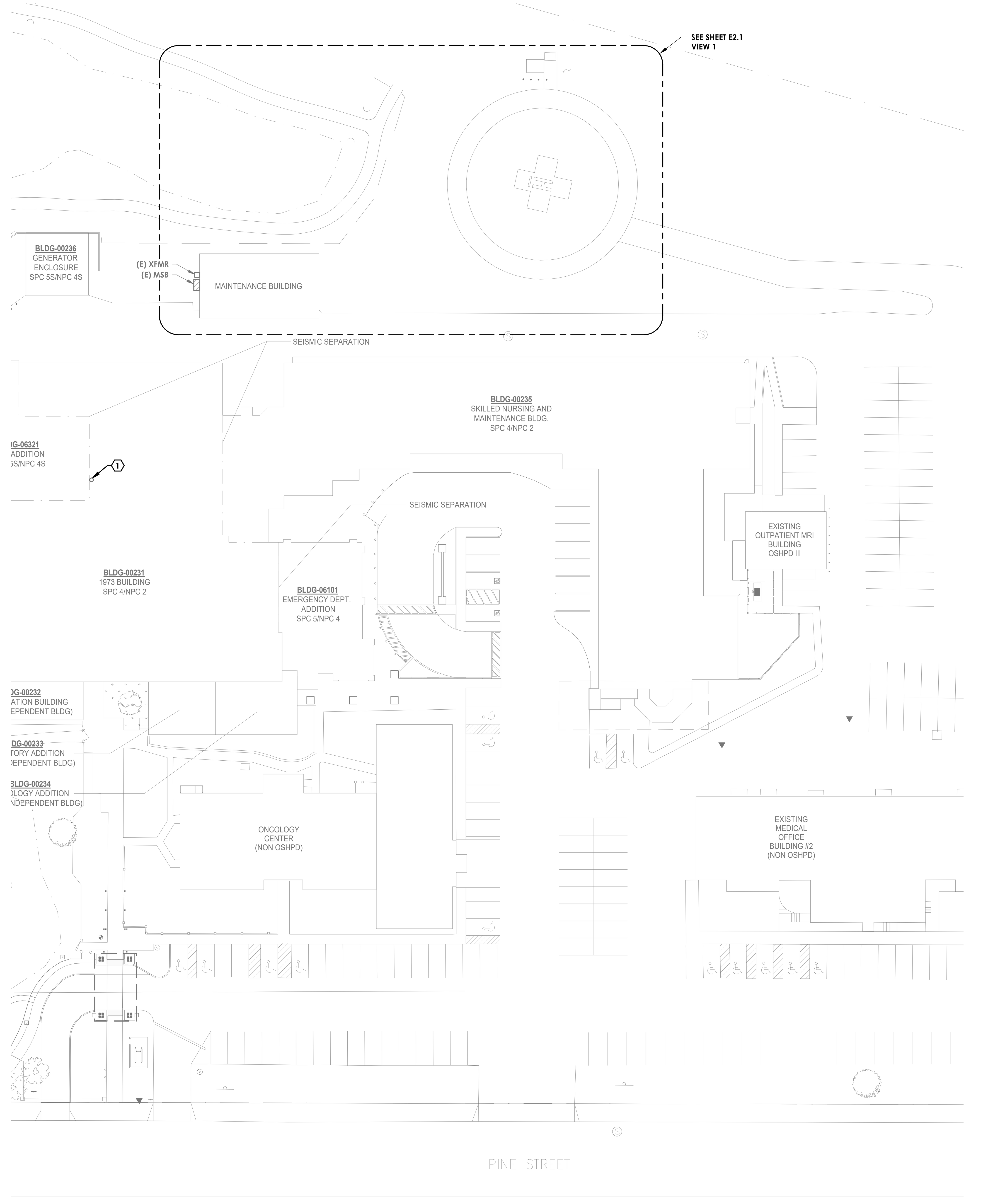
D. LABELS SHALL BE MELAMINE, FLEXI-BRASS, OR EQUAL MATERIAL, 1.5"HX3"L, WITH 3/8"H TIMES NEW ROMAN LETTERING.
1. BACKGROUND/LETTERING COLOR SHALL BE AS FOLLOWS:
   a. BLACK/WHITE (NORMAL BRANCHES)
   b. RED/WHITE (EMERGENCY BRANCHES)
   c. WHITE/RED (CRITICAL BRANCHES)
2. EQUIPMENT LABELING (FOR ALL PROJECT TYPES) SHALL FOLLOW AFTER THE EXAMPLES SHOWN BELOW (FOR GENERATOR/ATS, PANELBOARDS, DISCONNECTS, LIGHTING CONTROL PANELS, ETC.):

PANEL A2
FED FROM PNL B1
400A, 120/208V, 3Ø

DISCONNECT B1
FED FROM PNL M1
60A/15F, 208V/3Ø

KEYNOTES

#	NOTE
1.	EXISTING LIGHTED WIND SOCK TO REMAIN IN PLACE.



OVERALL ELECTRICAL SITE PLAN
1" = 30'-0"

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REVISIONS

Delta	Description	Date

If drawing is not 42" x 30" it is a reduced print

CONSULTANT

PACE ENGINEERING

LICENSE STAMPS

REGISTERED PROFESSIONAL ENGINEER
BRYAN MICHAEL BARNES
No. E22549
ELECTRICAL
STATE OF CALIFORNIA

KEY PLAN

PROJECT NAME

HELIPORT LIGHTING
FOR

MERCY MEDICAL CENTER MT. SHASTA

914 PINE ST, MT SHASTA, CA 96067

SHEET TITLE

ELECTRICAL SPECIFICATIONS

DRAWING STATUS

CONSTRUCTION DOCUMENTS

AGENCY APPROVAL

CONDITIONAL PLAN APPROVAL
FOR STATE AIRPORT/HELIPORT PERMIT PURPOSES ONLY
PROJECT MEETS DESIGN STANDARDS. FINAL APPROVAL IS SUBJECT TO CEQA COMPLIANCE LOCAL GOVT APPROVAL, AND OTHER PERMIT REQUIREMENTS.
CALTRANS
DIVISON OF AERONAUTICS
NAME Phillip Miller ASO
DATE 27 JUN 22

Drawn By	KB
Date Issued	11/22/21
Scale	AS NOTED
Project No.	21-4175

SHEET No.

E0.0

Plot Date: 11/24/2021 4:42:36 PM
File Name: C:\Revit Local Files\0404.759 MMCMS Heliport Lighting\0404.759_MMCMS HELIPORT LIGHTING_R20_FCARVALHO.rvt

ELECTRICAL SYMBOLS

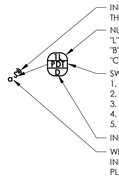
LINE TYPES AND SYMBOLS		CONDUIT EXPOSED			
		CONDUIT CONCEALED or BURIED			
		INDICATES FIRE RATED WALL			
		CONDUIT UP			
		CONDUIT DOWN			
	LA-2	HOME RUN-DESTINATION SHOWN			
TICK MARKS		TICK MARKS W/BARS INDICATES NUMBER OF #10 CONDUCTORS WITH #10 GROUND			
		TICK MARKS WITHOUT BARS INDICATES NUMBER OF #12 CONDUCTORS WITH #12 GROUND			
		"L" INDICATES 0-10V DIMMING CABLE, "SE" INDICATES CAT5E CABLE			
DEVICES, BOXES AND TERMINATIONS		JUNCTION BOX			
		PORCELAIN LAMP HOLDER WITH PULL CHAIN AND INTEGRAL RECEPTACLE (HVAC LIGHT/PLUG ONLY)			
		CONNECTION POINT (CONTRACTOR SHALL DETERMINE CONNECTION CONFIGURATION)			
		LOW VOLTAGE DEVICE BOX	DEVICE BOXES SHALL BE 18" COD UNLESS OTHERWISE NOTED		
		DUPLEX RECEPTACLE			
		QUADRUPLEX RECEPTACLE			
		EMERGENCY RECEPTACLE			
		CONTROLLED SPLIT DUPLEX RECEPTACLE			
		QUADRUPLEX RECEPTACLE: (1) CONTROLLED SPLIT DUPLEX RECEPTACLE, (1) DUPLEX RECEPTACLE			
		SINGLE OR THREE PHASE RECEPTACLE, SEE PLAN SHEETS TYPE PER LOCATION			
	FB	FLOOR BOX			
		FLOOR BOX			
		PULLBOX			
EQUIPMENT		FUSED DISCONNECT	XXA/XXF XX	60AS/20F WP	60A DISCONNECT / 20A FUSE NEMA 3R
		NON-FUSED DISCONNECT	XX XX	60AS/20F WP	60A DISCONNECT NEMA 3R
		MAJOR ELECTRICAL COMPONENT OR DEVICE NAME OR IDENTIFYING SYMBOL AS SHOWN			
		SURFACE MOUNT PANELBOARD			
		FLUSH MOUNT PANELBOARD			
		EXOTHERMIC WELD, TERMINATION OR SPLICE POINT			
		GROUND ROD			
		GROUNDING ELECTRODE			
		CIRCUIT BREAKER			
	3	CURRENT TRANSFORMER, NUMBER INDICATED			
ANNOTATION	(#)	KEYNOTE			
	(A : B)	INDICATES INTERCONNECTION OF PATHWAYS AND/OR CONDUCTORS, E.G., 4"C-4#500,1#3G (MSB : PNL A) INDICATES CONDUIT AND CONDUCTORS ROUTED FROM THE MAIN SWITCHBOARD TO PANELBOARD A.			
	26 00 00	SPECIFICATION NUMBER REFERENCE TAG. CONFORMANCE TO PROJECT SPECIFICATIONS IS REQUIRED. WHERE TAGS ARE SHOWN ON THE DRAWINGS, IT IS THE ENGINEER'S INTENT TO RAISE ADDITIONAL AWARENESS TO PRODUCTS OR EXECUTION METHODS THAT ARE CRITICAL, ATYPICAL OR NOT EXPRESSLY DETAILED ON THE DRAWINGS.			

NOTE: THIS IS A SUPPLEMENTAL STANDARD ELECTRICAL LEGEND. SOME SYMBOLS MAY APPEAR ON THIS LEGEND AND NOT ON THE PLANS. SEE LIGHTING CONTROL SHEET FOR LIGHTING LEGEND.

LIGHTING SYMBOLS

LIGHTING DEVICES	S	LIGHT SWITCH (46" AFF COD UNLESS OTHERWISE NOTED)	
		CEILING DAYLIT SENSOR	POWER SUPPLY
		CEILING PDT MOTION	REMOTE ACCESS BRIDGE
		CEILING PIR MOTION	INPUT CONTROL MODULE
		0-10V DIMMING RELAY (CLASS 1)	OUTPUT CONTROL MODULE
		PLUGLOAD RELAY	TIME CLOCK OR TIME KEEPER
		PHASE DIMMING RELAY	LIGHTING CONTROL PANEL
LUMINAIRES		SEE LIGHTING PLAN FOR SYMBOL TYPE MARKS ASSOCIATED WITH EACH LUMINAIRE SYMBOL. TYPE MARKS ASSOCIATED WITH LUMINAIRE SYMBOLS ON PLANS ARE LINKED TO THE LUMINAIRE SCHEDULE. SEE LUMINAIRE SCHEDULE FOR LUMINAIRE DESCRIPTION INFORMATION. HATCH AND/OR "E" FOLLOWING A LIGHT TYPE NUMERAL (E.G., "TYPE A" BECOMES TYPE "AE") INDICATES A LUMINAIRE WITH INTEGRAL BATTERY BACKUP.	
		EXIT SIGN: SEE LUMINAIRE SCHEDULE FOR TYPE "EXIT" DESCRIPTION AND INFORMATION.	
		EMERGENCY EGRESS LIGHT. SEE LUMINAIRE SCHEDULE FOR "EM" DESCRIPTION AND INFORMATION.	

LIGHTING SYMBOL ATRIBUTES



- INDICATES WIRELESS CONTROL. ALL OTHER CONTROLS IN THIS SPACE SHALL BE COMPATIBLE WITH THE SWITCH SHOWN UNLESS OTHERWISE NOTED ON PLANS.
- NUMERAL INDICATES CHANNELS OR WAYS.
  "L" INDICATES LINE VOLTAGE REQUIRED AT THE SWITCH
  "B" INDICATES THE SWITCH IS BATTERY POWERED
  "C" INDICATES THE SWITCH IS INTERTIED USING LOW VOLTAGE CABLE (TYP. CAT5E)
- SWITCH TYPE:
  1. PIR - PASSIVE INFRARED
  2. PDT- DUAL TECHNOLOGY (INFRA-RED WITH ULTRASONIC OR MICROPHONIC TECHNOLOGY)
  3. ST - STANDARD TOGGLE
  4. PL - TOGGLE WITH PILOT LIGHT
  5. KEY - KEYED SWITCH
- INDICATES DIMMING * (SEE LUMINAIRE SCHEDULE FOR DIM TYPE)
- WHEN SUBSCRIPT "a," "b" (ETC.), IS PRESENT WITH THE LIGHT SWITCH SYMBOL, THE SUBSCRIPT INDICATES SWITCHING OF SEPARATE GROUPS WITHIN THE SAME SPACE, OR WILL BE EMPLOYED ON PLANS WHEN CLARIFICATION MAY BE REQUIRED.

* NOTE:
1. ABSENCE OF PROPERTIES SHALL BE INDICATED AS AN "-" WITHIN THE LIGHT SWITCH TAG
2. COORDINATE SWITCH OPERATION WITH REQUIREMENTS LISTED IN THE LIGHT SWITCH TAG AND THE LIGHTING MATRIX. SWITCH DIMMING SHALL BE COMPATIBLE WITH LUMINAIRE ASSOCIATED WITH THE SWITCH (SEE "DIM TYPE" IN LUMINAIRE SCHEDULE)

NOTE:
1. THIS IS A SUPPLEMENTAL STANDARD ELECTRICAL LEGEND. SOME SYMBOLS MAY APPEAR ON THIS LEGEND AND NOT ON THE PLANS. SEE LIGHTING CONTROL SHEET FOR LIGHTING LEGEND.
2. DEVICE BOXES ARE MEASURED TO CENTER OF DEVICE ON PLANS UNLESS OTHERWISE NOTED.

LUMINAIRE SCHEDULE

#	MANUFACTURER	MODEL	LOAD	VOLTAGE	LAMP	DIM TYPE	LUMENS	DESCRIPTION	MOUNTING TYPE & HEIGHT
A	PLUSAFE AVIATION LIGHTING	HL-50	20 VA	120V	LED	N/A	1000 lm	8" ROUND LED FLUSH HELIPAD LIGHT, OMNIDIRECTIONAL GREEN PERIMETER LIGHT, DIE-CAST ALUMINUM HOUSING, STAINLESS STEEL HARDWARE, IP68 RATED.	IN GRADE
B	PLUSAFE AVIATION LIGHTING	HL-300	15 VA	120V	LED	N/A	1500 lm	10" SQUARE LED HELIPORT FLOODLIGHT, LENS HOOD, ELEVATED MOUNT, BUILT-IN SURGE PROTECTION. IP65 RATED. PROVIDE AND INSTALL HARDWARE AS REQUIRED FOR POLE MOUNTING.	POLE MOUNTED
B-POLE	LITHONIA LIGHTING	10'-0" POLE PER MFR.		120V				STRAIGHT SQUARE STEEL, 10 FT. TALL, BRONZE ANODIZED FINISH, 4.5 EPA-FT² @ 100MPH WIND VELOCITY MINIMUM RATING, 0.125-INCH WALL THICKNESS MINIMUM.	POLE FOUNDATION

BRANCH PANEL MPC

LOCATION	MAINTENANCE BLDG OUTDOOR	**VOLTS**	120/208 WYE
MOUNTING TYPE	SURFACE	**WIRES**	4
ENCLOSURE TYPE	NEMA 3R	**CIRCUITS**	18
AIC RATING	65,000
BUS RATING	100 A
MAIN BREAKER	40 A

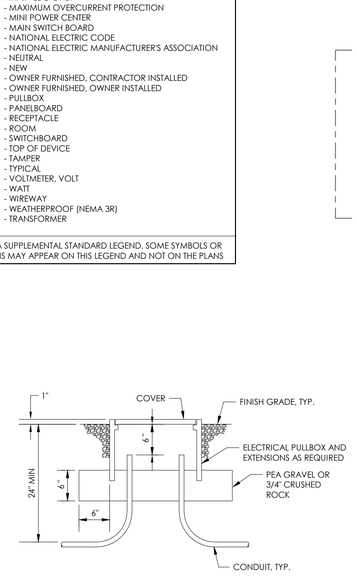
(LABEL PANELBOARDS ACCORDING TO NAMING CONVENTIONS LISTED IN ELECTRICAL SPECIFICATIONS)

CKT	HOME RUN	LOAD NAME	TRIP	INT TYPE	A	B	C	A	B	C	INT TYPE	TRIP	LOAD NAME	HOME RUN	CKT
1	3/4"C-2#10,1#10G	TIMECLOCK/HELIPORT LTG	20 A	--	200 VA			0 VA			--	--	SPACE	--	2
3	--	SPARE	20 A	--		0 VA			0 VA		--	--	SPACE	--	4
5	--	SPARE	20 A	--			0 VA			0 VA	--	--	SPACE	--	6
7	--	SPACE	--	--	0 VA			0 VA			--	--	SPACE	--	8
9	--	SPACE	--	--		0 VA			0 VA		--	--	SPACE	--	10
11	--	SPACE	--	--			0 VA			0 VA	--	--	SPACE	--	12
13	--	SPACE	--	--	0 VA			0 VA			--	--	SPACE	--	14
15	--	SPACE	--	--		0 VA			0 VA		--	--	SPACE	--	16
17	--	SPACE	--	--			0 VA			0 VA	--	--	SPACE	--	18
					PHASE A		PHASE B			PHASE C	Notes:				
		TOTAL LOAD (VA)			200 VA		0 VA			0 VA					
		TOTAL LOAD (AMPS)			2		0			0					

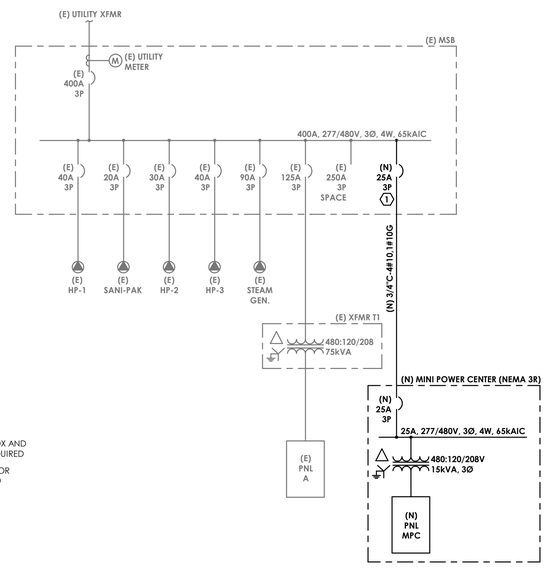
ELECTRICAL ABBREVIATIONS

A	- AMMETER, AMPERE
AC	- ALTERNATING CURRENT
AFF	- ABOVE FINISHED FLOOR OR GRADE
AIC	- AMPS INTERRUPTING CAPACITY
BRKR	- BREAKER
BOD	- BOTTOM OF DEVICE
C or COND	- CONDUIT
CEC	- CALIFORNIA ELECTRIC CODE
CKT	- CIRCUIT
COD	- CENTER OF DEVICE
CT	- CURRENT TRANSFORMER
DC	- DIRECT CURRENT
(E) or EXIST	- EXISTING
EEOR	- ELECTRICAL ENGINEER OF RECORD
EGC	- EQUIPMENT GROUNDING CONDUCTOR
ENC	- ENCLOSURE
(F)	- FUTURE
G	- EQUIPMENT GROUNDING CONDUCTOR
GEC	- GROUNDING ELECTRODE CONDUCTOR
GFCI	- GROUND FAULT CIRCUIT INTERRUPT
GND	- GROUND
J	- JUNCTION BOX
LTG	- LIGHTING
MBJ	- MAIN BONDING JUMPER
MCB	- MAIN CIRCUIT BREAKER
MFR	- MANUFACTURER
MLO	- MAIN LUG ONLY
MOCP	- MAXIMUM OVERCURRENT PROTECTION
MPC	- MINI POWER CENTER
MSB	- MAIN SWITCH BOARD
NEC	- NATIONAL ELECTRIC CODE
NEMA	- NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
N	- NEUTRAL
(N)	- NEW
OFCI	- OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED, OWNER INSTALLED
PB	- PULLBOX
PNL	- PANELBOARD
RCPT	- RECEPTACLE
RM	- ROOM
SWBD	- SWITCHBOARD
TOD	- TOP OF DEVICE
TR	- TAMPER
TYP	- TYPICAL
V	- VOLTMETER, VOLT
W	- WATT
WW	- WIREWAY
WP	- WEATHERPROOF (NEMA 3R)
XFMR	- TRANSFORMER

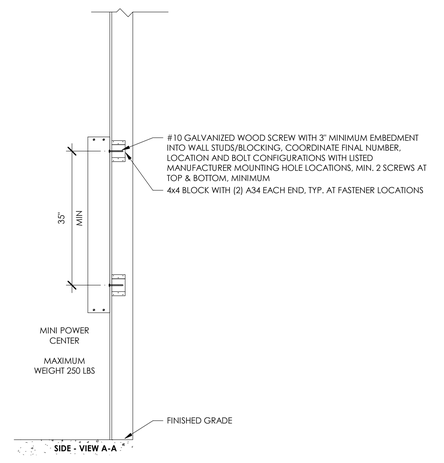
NOTE: THIS IS A SUPPLEMENTAL STANDARD LEGEND. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS LEGEND AND NOT ON THE PLANS



BOXES - UNDERGROUND SWEEP UP (1 / E0.1)
NTS



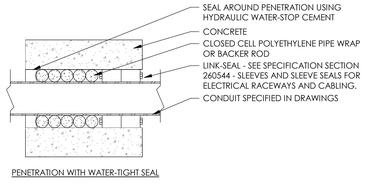
ONE-LINE DIAGRAM (2 / E0.1)



MINI POWER CENTER MOUNTING DETAIL (4 / E0.1)
NTS

NOTE:

1. TYPICAL CABINET MAY VARY IN WIDTH AND LENGTH. THIS DETAIL SHALL ACCOUNT FOR LARGEST AND HEAVIEST PANELBOARD AVAILABLE, BUT FASTENING AND ANCHORAGE SHALL BE USED EQUALLY FOR SMALLER CABINET CONFIGURATIONS.
2. WHERE MANUFACTURER REQUIRES A THIRD FASTENING LOCATION, PROVIDE ADDITIONAL STRUT CHANNEL AND FASTENERS. MATCH ADDITIONAL STRUT CHANNEL WITH OTHERS SHOWN (THIS DETAIL).
3. MAXIMUM BREAKER HANDLE HEIGHT SHALL BE 78".

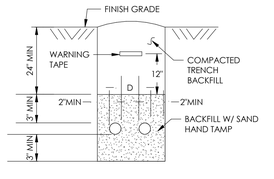


PENETRATION WITH WATER-TIGHT SEAL

NOTES:

1. SCAN WALLS PRIOR TO CORING. EXISTING REBAR SHALL NOT BE DAMAGED.

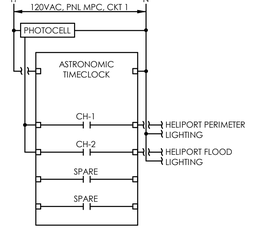
SLEEVE - CORE THROUGH CONRETE (5 / E0.1)
NTS



NOTES:

1. D=3" MIN FOR 2" AND LARGER CONDUIT
2. D=2" MIN FOR 1 1/2" AND SMALLER CONDUIT
3. CONDUIT DETAIL FOR LESS THAN 4 RACEWAYS PER TRENCH

RACEWAY - UNDERGROUND CONDUIT (6 / E0.1)
NTS



WIRING DEVICE - ASTRONOMIC TIMECLOCK (7 / E0.1)
NTS

KEYNOTES

(#)	NOTE
1.	PROVIDE AND INSTALL NEW BREAKER IN EXISTING SPACE. NEW BREAKER SHALL BE OF THE SAME TYPE AND RATING AS EXISTING. PROVIDE NEW SWITCHBOARD LABEL PER ELECTRICAL SPECIFICATIONS.

COMPLY WITH APPLICABLE CODES

#	CODE
1.	CALIFORNIA BUILDING CODE.
2.	CALIFORNIA ELECTRIC CODE.

LIGHTING CONTROL NOTES

#	NOTE
1.	CONTRACTOR SHALL VERIFY ALL REQUIRED COMPONENTS, INTERFACES, AND DEVICES ARE PROVIDED AND INSTALLED TO FURNISH A COMPLETE LIGHTING CONTROL SYSTEM AS DESIGNED AND DESCRIBED.
2.	CONTRACTOR SHALL PROGRAM THE SYSTEM AS SHOWN AND DESCRIBED. THE CONTRACTOR MAY SUBCONTRACT COMMISSIONING, PROGRAMMING AND OWNER TRAINING TO AN AUTHORIZED FACTORY TECHNICIAN OR REGISTERED PROFESSIONAL ENGINEER.
3.	INTERCONNECTION AND LOW VOLTAGE POWER TO LIGHTING DEVICES SHALL BE PER MANUFACTURER'S RECOMMENDATION. INSTALLATION SHALL BE IN COMPLIANCE WITH THE CEC AND IN ACCORDANCE TO THE MANUFACTURER'S INSTRUCTIONS. LOW VOLTAGE CONNECTIONS ARE NOT SHOWN ON PLANS.
4.	THE MANUFACTURER SHALL PROVIDE SUBMITTALS DESCRIBING LOCATIONS AND ADDITIONS OF ANY PERIPHERAL COMPONENTS NOT SHOWN ON PLANS. THESE COMPONENTS SHALL BE A PART OF THE BID AND SUBMITTAL PROCESS.

LUMINAIRE NOTES

#	NOTE
1.	IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT, PROVIDE AND INSTALL ACCESSORIES NECESSARY TO RENDER A COMPLETE, PROFESSIONAL AND CODE COMPLIANT INSTALLATION OF ALL LUMINARIES ASSOCIATED WITH THE PROJECT. THIS INCLUDES WHIPS, CABLING OR ANY OTHER ITEMS REQUIRED FOR EACH LUMINAIRE'S SPECIFIC INSTALLATION LOCATION.
2.	ALL LUMINAIRES SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS AND AS DETAILED IN DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT ARISES, RFI THE EEOR.

NICHOLS MELBURG & ROSSETTO
ARCHITECTS + ENGINEERS
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(530) 222-3300
(530) 222-3538 FAX
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REVISIONS

Delta	Description	Date

If drawing is not 42" x 30" it is a reduced print

CONSULTANT

PACE ENGINEERING

LICENSE STAMPS

REGISTERED PROFESSIONAL ENGINEER — No. E22549 — ELECTRICAL — STATE OF CALIFORNIA

KEY PLAN

PROJECT NAME

HELIPORT LIGHTING
FOR
MERCY MEDICAL CENTER
MT. SHASTA

914 PINE ST, MT SHASTA, CA 96067

SHEET TITLE

ELECTRICAL SCHEDULES

DRAWING STATUS

CONSTRUCTION DOCUMENTS

AGENCY APPROVAL

CONDITIONAL PLAN APPROVAL
FOR STATE AIRPORT/HELIPORT PERMIT PURPOSES ONLY
PROJECT MEETS DESIGN STANDARDS, FINAL APPROVAL IS SUBJECT TO CEQA COMPLIANCE LOCAL GOVT APPROVAL, AND OTHER PERMIT REQUIREMENTS.

CALTRANS
DIVISON OF AERONAUTICS
NAME Phillip Miller ASO
DATE 27 JUN 22

Drawn By	KB
Date Issued	11/22/21
Scale	AS NOTED
Project No.	21-4175

SHEET No.

E0.1

Plot Date: 11/24/2021 4:42:38 PM
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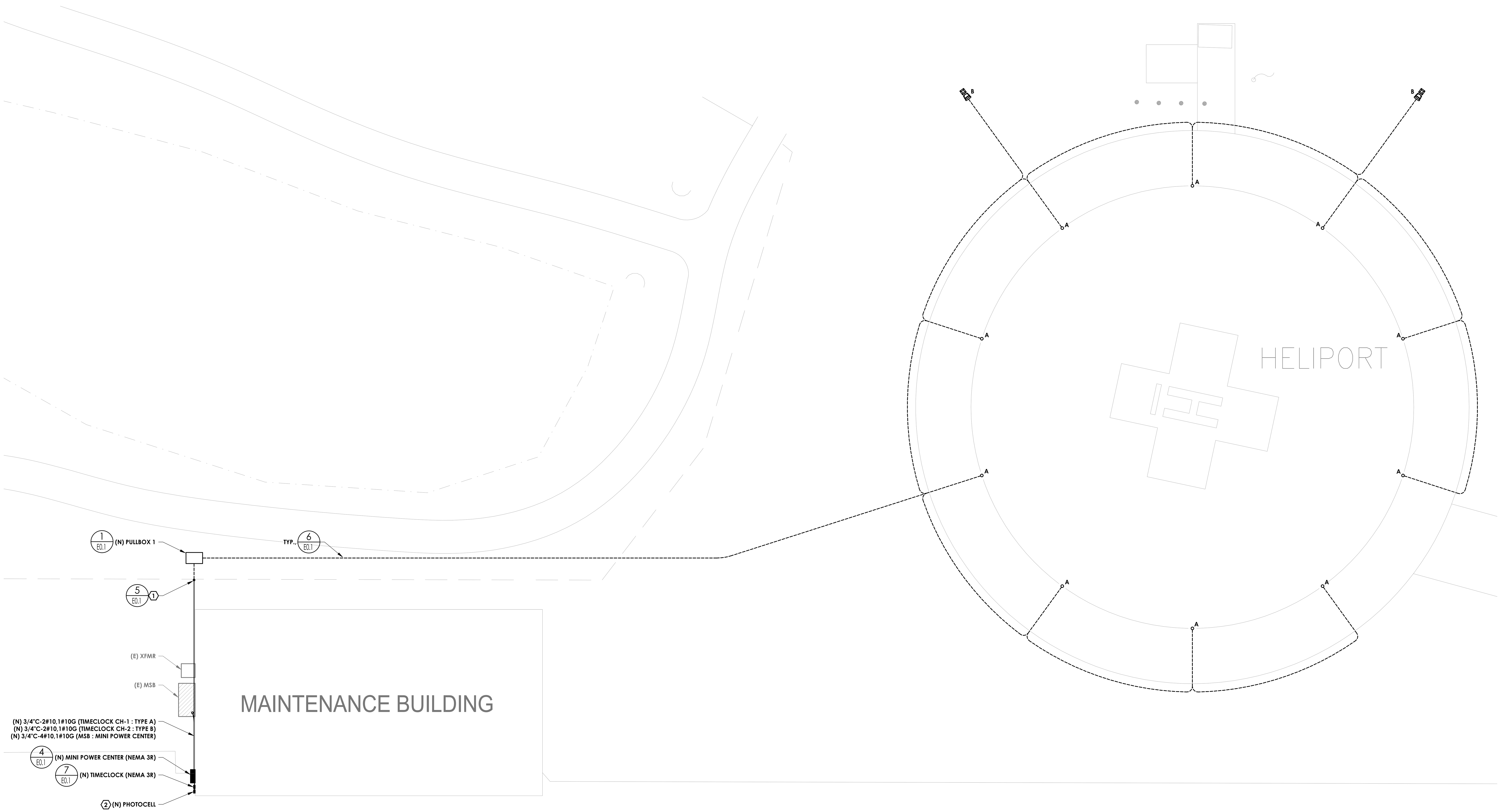
KEYNOTES

#	NOTE
1.	ROUTE CONDUIT FROM BUILDING EXTERIOR TO CONCRETE RETAINING WALL. CORE DRILL AND PENETRATE CONCRETE RETAINING WALL AND TRANSITION TO UNDERGROUND. SAWCUT EXISTING SURFACES WHERE REQUIRED; PATCH AND REPAIR SURFACES TO MATCH EXISTING CONDITIONS.
2.	PROVIDE AND INSTALL PHOTOCELL 0'-6" BELOW ROOF.



ENLARGED ELECTRICAL SITE PLAN
1/8" = 1'-0"

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BRYAN MICHAEL BARNES
No. E22549
ELECTRICAL
STATE OF CALIFORNIA

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PROJECT NAME

HELIPORT LIGHTING
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MERCY MEDICAL CENTER MT. SHASTA

914 PINE ST, MT SHASTA, CA 96067

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Plot Date: 11/24/2021 4:42:37 PM
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