

THE SCHOOL BOARD OF VOLUSIA
COUNTY FLORIDA
200 North Clara Avenue
Deland, Florida 32720

SCHOOL BOARD MEMBERS

CHAIRMAN
VICE CHAIRMAN
MEMBER
MEMBER
MEMBER

SUPERINTENDENT

ADDING BASEBALL FIELD LIGHTING TO THE EXISTING BASEBALL FIELD AS SHOWN ON THESE DRAWINGS AND DESCRIBED IN THE PROJECT MANUAL.

To the best of my knowledge, these drawings and the project manual are complete and comply with the Florida Building Code.

A.	SURVEY PARCEL ID	XXX
B.	LEGAL DESCRIPTION	XXX
C.	OCCUPANCY TYPE	Educational
D.	CONSTRUCTION TYPE	XXX
E.	RISK CATEGORY	XXX
F.	AUTOMATIC SPRINKLER	XXX
G.	BUILDING AREA	XXX
H.	BUILDING HEIGHT	XXX
I.	OCCUPANT LOAD	XXX

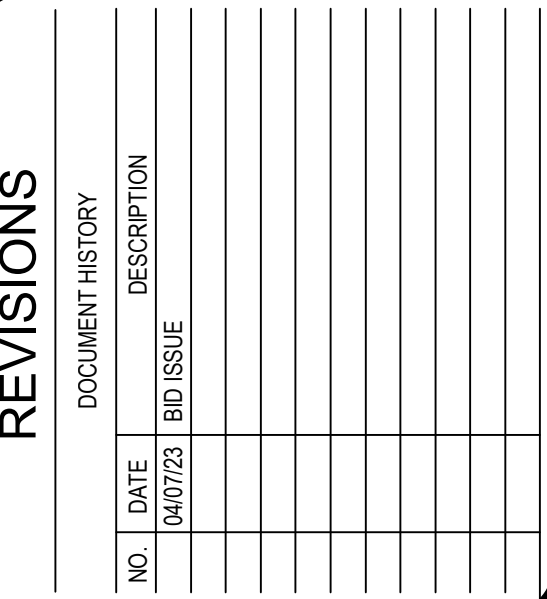


MATERN PROFESSIONAL ENGINEERING
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SHEET NO.	SHEET NAME	SCALE
G001	COVER SHEET	NONE
E001	GENERAL NOTES, SYMBOL LEGEND, AND ABBREVIATIONS	NONE
E100	SITE PLAN - ELECTRICAL	1" = 30'
E101	PARTIAL SITE PLAN - ELECTRICAL - RENOVATION	1" = 20'-0"
E501	DETAILS	NONE
E502	DETAILS	NONE
E503	DETAILS	NONE
E601	POWER RISER DIAGRAM AND SCHEDULES	NONE

CONSTRUCTION DOCUMENTS - 12/09/2022



DELAND HIGH SCHOOL
BASEBALL FIELD LIGHTING
VCS Project No. 2347965
800 NORTH HILL AVE.
DELAND, FLORIDA 32724

Engineer Adrian Baus		ARCHITECTOR OF RECORD	
DESIGNED BY AWB	DRAWN BY MM		
ISSUE DATE 2/09/2022	AE PROJECT NUMBER 2022-169		
SHEET TITLE COVER SHEET			
DRAWING NO. G001			

SYMBOL LEGEND					
SYMBOL	DESCRIPTION	DESIGN SELECTION	APPROVED SUBSTITUTION	APPROVED SUBSTITUTION	REMARKS
	POLE WITH MOUNTING ARM AND CUT-OFF LIGHT FIXTURE. BOXES INDICATE NUMBER OF FIXTURES AND ORIENTATION	SEE FIXTURE SCHEDULE			
	POLE WITH MOUNTING ARM AND FLOOD LIGHT FIXTURE	SEE FIXTURE SCHEDULE			
\$L	WALL OUTLET BOX AND SECURITY LOCKING KEY SWITCH, 20 AMP, SINGLE POLE, WITH S.S. PLATE, PROVIDE TWO KEYS	P&S #PS20AC1-KL-55-717	DEVICE: HUBBELL HBL1221RKL PLATE: S12RKL		d
\$WP	FLUSH WALL OUTLET BOX AND 20 AMP SINGLE POLE SWITCH, WITH DIE CAST WEATHERPROOF COVER	DEVICE: P&S #PS20AC1 PLATE: P&S #CA1-G	DEVICE: HUBBELL #HBL1221 PLATE: P&S #CA1-G	DEVICE: LEVITON #1221-2	a, d
\$WPL	FLUSH WALL OUTLET BOX AND 20 AMP SINGLE POLE SWITCH, WITH LOCKING STAINLESS STEEL WEATHERPROOF COVER. MOUNT OUTLET BOX HORIZONTALLY.	DEVICE: P&S #20AC1 PLATE: P&S #WPH-1L	DEVICE: HUBBELL #HBL1221 PLATE: P&S #WPH-1L	DEVICE: LEVITON #1221-2	a, d
	CAST IRON ZINC PLATED SURFACE MTD. OUTLET BOX AND 20 AMP SINGLE POLE SWITCH, WITH COPPER FREE CAST ALUMINUM WEATHERPROOF COVER	DEVICE: P&S #PS20AC1 BOX AND PLATE: APPLETON #FS/FD/FSK-WT2	DEVICE: HUBBELL #HBL1221 BOX AND PLATE: APPLETON #FS/FD/FSK-WT2	DEVICE: LEVITON #1221-2	a, d, e, f, g
	CAST IRON PLATED SURFACE MTD. OUTLET BOX AND 20 AMP WEATHER RESISTANT GFCI DUPLEX RECEPTACLE WITH CAST ALUMINUM WEATHERPROOF IN USE COVER	P&S #20951RWR WITH APPLETON #FS-ID AND THOMAS & BETTS #CKMUV OR INTERMATIC #WP1010MC	HUBBELL #GFR5362S APPLETON #FS-ID AND HUBBELL #WP26W COVER	LEVITON #W7899-TR APPLETON #FS-ID AND THOMAS & BETTS #CKMUV OR INTERMATIC #WP1010MC	a, c, d, e, f, g
	SURFACE MTD. WEATHERPROOF JUNCTION BOX AND COVER, AS NOTED ON PLANS	HOFFMAN			d, g, h
	CAST IRON ZINC PLATED SURFACE MTD. OUTLET BOX AND WEATHERPROOF BLANK PLATE	APPLETON #FS-ID WITH #DS-100G COVER			a, d, e, f, g, h
	FLUSH GRADE PULLBOX OR MANHOLE AS NOTED.	BROOKS	A.C. MILLER	HUGHES	d, j
	PUSHBUTTON, AS NOTED, MOUNTED AT 48" TO TOP				d
	FLUSH SHUNT-TRIP BUTTON, LABEL "EMERGENCY MAIN DISCONNECT", MOUNTED AT 48" TO TOP	SQUARE "D" #K-15	ASCO #124200		d
	METER, AS NOTED				
	MAGNETIC MOTOR STARTER, MOTOR CONTROLLER OR CONTACTOR, AS NOTED	SQUARE "D"	G.E. / SIEMENS	EATON-STAINLESS	g, i
	DISCONNECT SWITCH, SIZE AS NOTED	SQUARE "D"	G.E. / SIEMENS	EATON-STAINLESS	g, i
	120/208V BRANCH CIRCUIT PANELBOARD SURFACE MOUNTED	SQUARE "D"	G.E. / SIEMENS	EATON-STAINLESS	i
	TRANSFORMER	SQUARE "D"	G.E. / SIEMENS	EATON-STAINLESS	i
	LIGHTING CONTROL OR DIMMER PANEL - SURFACE MOUNTED				
	BRANCH CIRCUIT CONDUIT CONCEALED ABOVE CEILING OR IN WALL. SLASH MARKS INDICATE NUMBER OF CONDUCTORS (GROUND WIRE NOT SHOWN). TWO CONDUCTORS PLUS GROUND REQUIRED (UNLESS OTHERWISE NOTED OR MARKED)				
	BRANCH CIRCUIT CONDUIT CONCEALED BELOW SLAB OR UNDERGROUND				
	BRANCH CIRCUIT CONDUIT EXPOSED				
	HOME RUN WIRING. ONE CIRCUIT PER ARROW HEAD				
	CONDUIT CAPPED OFF				
	CONDUIT CONTINUED				
	CONDUIT RUN UP				
	CONDUIT RUN DOWN				
	CONDUIT SEAL-OFF FITTING	CROUSE HINDS	APPLETON		e
	GROUND WIRE, CONCEALED				
	GROUND OR GROUND ROD AS NOTED				

j) OUTLET BOX SHALL BE SIZED PER SYSTEM INSTALLER REQUIREMENTS.

26. MINIMUM CONDUIT SIZE IS $\frac{3}{4}$ " EXCEPT FOR FIXTURE WHIPS NOT EXCEEDING 6 FEET IN LENGTH AND FINAL EQUIPMENT CONNECTIONS NOT EXCEEDING 6 FEET IN LENGTH ARE PERMITTED TO BE $\frac{1}{2}$ ".

A/C - AIR CONDITIONING
A.C. - ALTERNATING CURRENT
ADD # - ADDENDA #
A/E - ARCHITECT/ENGINEER (OR ENGINEER WHEN ARCHITECT NOT APPLICABLE)
AFD - ADJUSTABLE FREQUENCY DRIVE
AFF - ABOVE FINISHED FLOOR
AFB - ABOVE FINISHED GRADE
AFU - AIR HANDLER UNIT
AIC - AMPS INTERRUPTING CAPACITY
AL - ALUMINUM
ALT - ALTERNATE
AMP - AMPERE
ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
AWG - AMERICAN WIRE GAUGE
@ - AT
B.C. - BARE COPPER
BIDS - BAGGAGE INFORMATION DISPLAY SYSTEM
BLDG - BUILDING
BRKR - BREAKER
BTU - BRITISH THERMAL UNIT
BTU - BTU PER HOUR
C. - CONDUIT
C.B. - CIRCUIT BREAKER
C.D. - CANDELA
CBM - CERTIFIED BALLAST MANUFACTURERS
CFM - CUBIC FEET PER MINUTE
CKT. - CIRCUIT
CKT BRKR - CIRCUIT BREAKER
C/L - CENTER LINE
CLG. - CEILING
COMP. - COMPRESSOR
CONN. - CONNECTION
COND. - CONDENSER

CONT. - CONTINUOUS
C.R.I. - COLOR RENDERING INDEX
C.T. - CURRENT TRANSFORMER
CU. - COPPER
C.U. - COMPRESSOR CONDENSER UNIT
C.W. - COLD WATER
D.B. - DIRECT BURIAL
D.C. - DIRECT CURRENT
DISC. - DISCONNECT
DN. - DOWN
DPST - DOUBLE POLE SINGLE THROW
DWG - DRAWING
E.C. - ELECTRICAL CONTRACTOR (OR GENERAL CONTRACTOR)
ELEV. - ELEVATOR
EMT - ELECTRICIAN METALLIC TUBING
EQUIP. - EQUIPMENT
EST - ESTIMATE
FAAP - FIRE ALARM ANNUNCIATOR PANEL
FACP - FIRE ALARM CONTROL PANEL
FACF - FIRE ALARM TERMINAL CABINET
FCCP - FIRE ALARM COMMAND CENTER PANEL
FHC - FIRE HOSE CABINET
FIDS - FLIGHT INFORMATION DISPLAY SYSTEM
FLA - FULL LOAD AMPERES
FT. - FEET
FLR - FLOOR
F.C. - FOOTCANDLES
FVNR - FULL VOLTAGE NON-REVERSING
GAL. - GALLON
GALV. - GALVANIZED
GPH - GALLONS PER HOUR
GPM - GALLONS PER MINUTE
GFI - GROUND FAULT INTERRUPTING
GRS - GALVANIZED RIGID STEEL CONDUIT

GND. - GROUND
 HTG - HEATERS
 HT - HEIGHT
 HZ - HERTZ (CYCLES)
 HPF - HIGH POWER FACTOR
 HPS - HIGH PRESSURE SODIUM
 HP - HORSEPOWER
 HR - HOUR
 H.S. - HEAT STRIP
 IMC - INTERMEDIATE METALLIC CONDUIT
 INCAND. - INCANDESCENT
 IN. - INCHES
 J.B. - JUNCTION BOX
 KW - KILOWATT AMPERE
 KVA - KILOWATTS
 KWH - KILOWATT HOUR
 K - KELVIN
 L.L.D. - LAMP LUMEN DEPRECIATION
 LU - LIGHT EMITTING DIODE
 LU - LIGHT INTERFACE UNIT
 LT. - LIGHT
 LTG. - LIGHTING
 LTS. - LIGHTS
 L.P.F. - LOW POWER FACTOR
 M.C.B. - MAIN CIRCUIT BREAKER
 M.L.O. - MAIN LUGS ONLY
 MAINT. - MAINTENANCE
 MH. - MANHOLE METAL HALIDE
 MFG. - MANUFACTURER
 MAX. - MAXIMUM
 MCP - MINIMUM CIRCULAR MILS
 MOCM - MINIMUM OVERCURRENT PROTECTION
 MPH - MILES PER HOUR
 MM - MILLIMETER
 MIN. - MINIMUM

MCP – MOTOR CIRCUIT PROTECTOR
MTD – MOUNTED
N – NEUTRAL
NEC – NATIONAL ELECTRIC CODE
NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFA – NATIONAL FIRE PROTECTION ASSOCIATION
N.P.T. – NATIONAL PIPE THREAD
NF – NON FUSED
N.C. – NORMALLY CLOSED
N.O. – NORMALLY OPEN
NIC. – NOT IN CONTRACT
NO. – NUMBER
OB – OUTLET BOX
OD – OUTSIDE DIAMETER
O.L. – OVERLOAD
OLS – OVERLOADS
OS&Y – OUTSIDE SCREW AND YOKE (SPRINKLER)
% – PERCENT
/ – PHASE
P – POLE
PL – COMPACT FLUORESCENT LAMP
P.T. – POTENTIAL TRANSFORMER
PSF – POUNDS PER SQUARE FOOT
PSI – POUNDS PER SQUARE INCH
PB – PULLBOX
PNL – PANEL
PR – PAIR
PRI. – PRIMARY
PVC – POLYVINYL CHLORIDE
RECEPT. – RECEPTACLE
RPM – REVOLUTIONS PER MINUTE
R.S. – RAPID START
SCA – SHORT CIRCUIT AMPS
SEC. – SECONDARY

SHT - SHEET
S/N - SOLID NEUTRAL
SPST - SINGLE POLE SINGLE THROW
SQ - SQUARE FOOT
SW - SWITCH
SWBD - SWITCHBOARD
SYS - SYSTEM
THHN; - THWN NYLON JACKETED WIRE
TIB - TELEPHONE TERMINAL BOARD
TTC - TELEPHONE TERMINAL CABINET
TV - TELEVISION
TVTC - TELEVISION TERMINAL CABINET
TVEC - TELEVISION EQUIP. CABINET
TYP - TYPICAL
TEMP. - TEMPERATURE
U.F.D. - UNDERWRITERS' LABORATORIES
VLF - VARIABLE FREQUENCY DRIVE
VHF - VERY HIGH FREQUENCY
VHO - VERY HIGH OUTPUT
V - VOLT
VA - VOLT AMPERES
VOL. - VOLUME
W - WIRE
W.P. - WEATHERPROOF
XFMR - TRANSFORMER
Y - WYE
YD - YARD
YR - YEAR
3R - RAINFOOF
4X - STAINLESS STEEL DUSTIGHT, WATERIGHT

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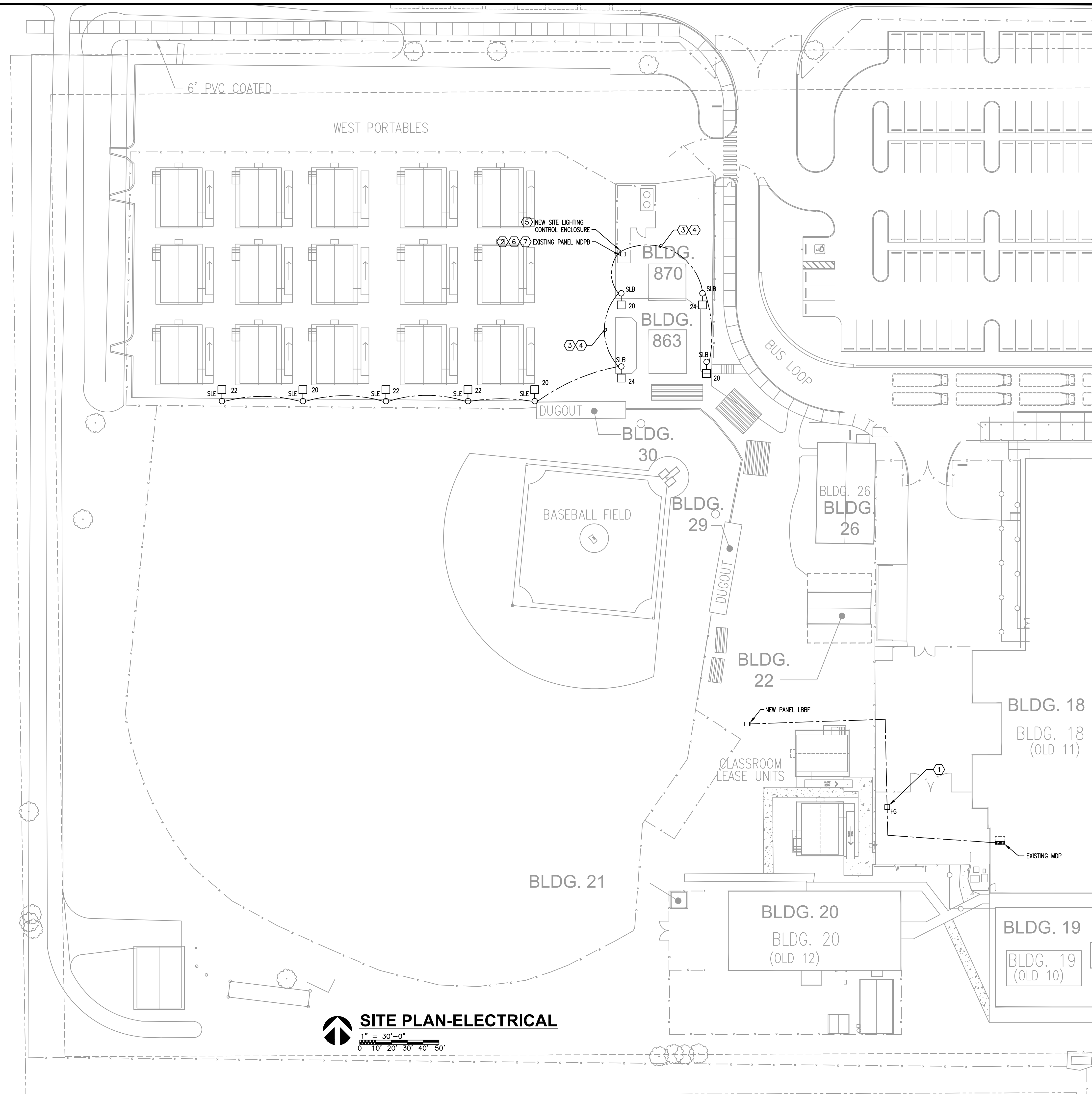
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**DELAND HIGH SCHOOL
BASEBALL FIELD LIGHTING
VCS Project No. 2347965
800 NORTH HILL AVE.
DELAND, FLORIDA 32724**

<h1>Engineer</h1> <h2>Adrian Baus</h2>		ARCHITENGTUR OF RECORD
DESIGNED BY AWB	DRAWN BY MM/AWB	
ISSUE DATE 12/09/2022	AE PROJECT NUMBER 2022-165	
SHEET TITLE <h1>GENERAL NOTES, SYMBOL LEGEND, AND ABBREVIATIONS</h1>		
DRAWING NO.		

E001

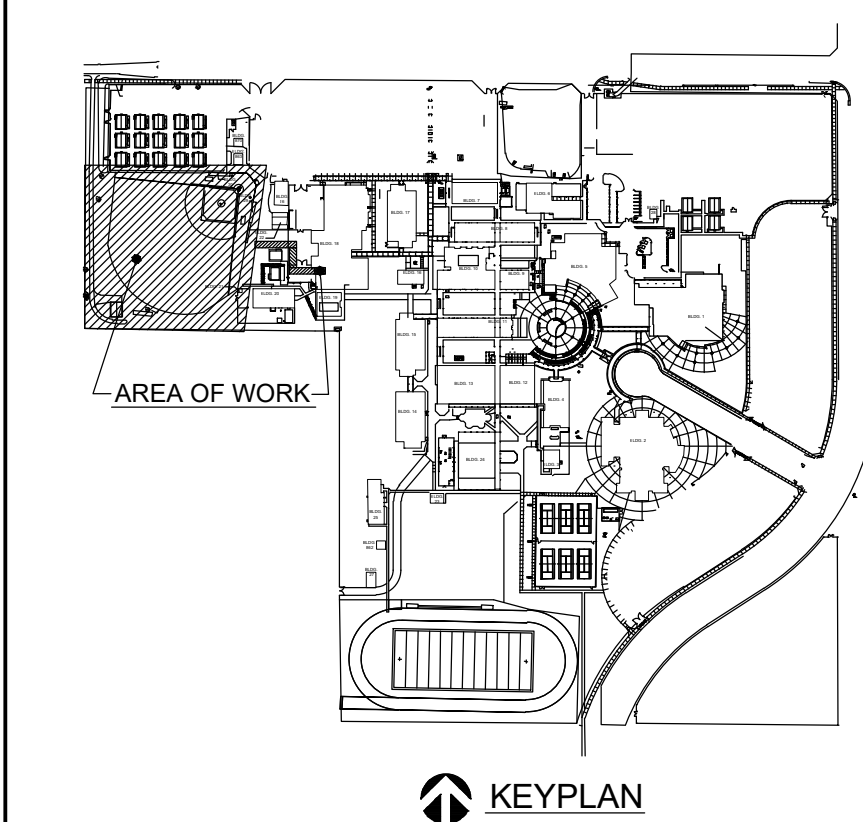


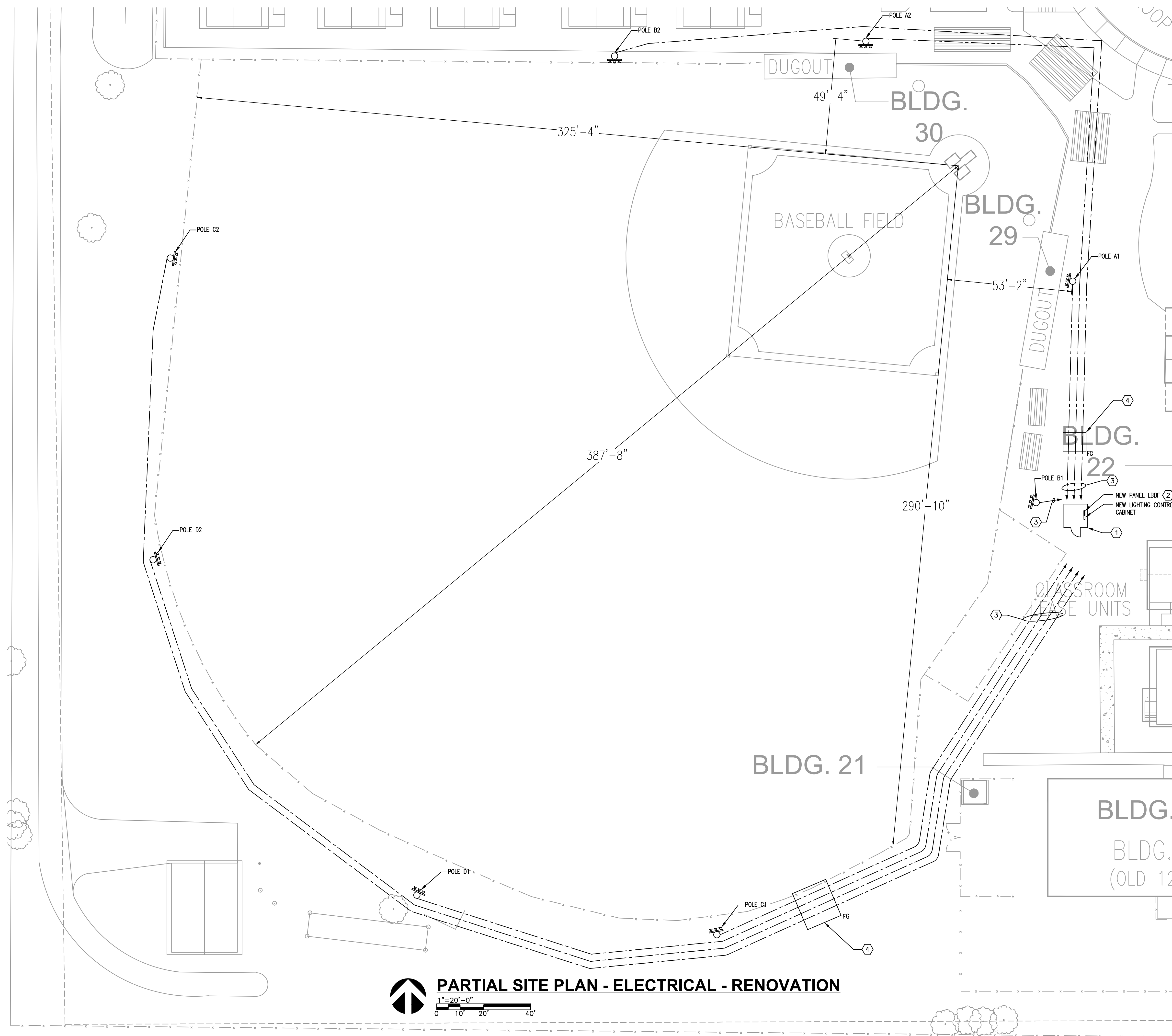
GENERAL NOTES

- 1) REFER TO GENERAL NOTES FOR THIS DISCIPLINE.
- 2) REFER TO SPECIFICATIONS.
- 3) WHERE CONDUIT ROUTING IS SHOWN, THE CONDUITS ARE SHOWN FOR DIAGRAMMATIC PURPOSES AND ARE NOT NECESSARILY REPRESENTATIVE OF EXACT PLACEMENT.
- 4) REWORK/RELOCATE EXISTING ELECTRICAL AS REQUIRED TO FACILITATE CONSTRUCTION.
- 5) CONTRACTOR SHALL MAINTAIN CONTINUITY TO EXISTING DEVICES REMAINING.
- 6) ALL EXISTING ELECTRICAL IS NOT SHOWN.
- 7) VERIFY EXISTING PHASE ROTATIONS AT ALL EXISTING EQUIPMENT PRIOR TO DISCONNECTING ANY LOADS. VERIFY PHASE ROTATION HAS NOT CHANGED PRIOR TO REENERGIZING ANY LOADS.
- 8) ALL CONNECTIONS TO EXTERIOR ENCLOSURES MADE AT OTHER THAN BOTTOM OF ENCLOSURE SHALL BE MADE WITH WEATHERPROOF MYERS HUBS.
- 9) PROVIDE ALL CONTROL WIRING AND MISCELLANEOUS ELECTRICAL REQUIRED FOR COMPLETE AND OPERATIONAL INSTALLATIONS.
- 10) PROVIDE PERMANENT LOCKOUT PROVISIONS THAT REMAIN IN PLACE FOR ALL BREAKERS FEEDING NEW OR REPLACED EQUIPMENT.

HEX NOTES

- ① COORDINATE EXACT PLACEMENT OF PULL BOX WITH EXISTING CONDITIONS.
- ② PROVIDE (3) ONE POLE 20 AMP CIRCUIT BREAKERS IN EXISTING PANEL FOR NEW CIRCUITS.
- ③ PROVIDE #10 CONDUCTORS IN 1" MINIMUM CONDUIT THROUGH OUT CIRCUIT.
- ④ CONNECT CIRCUIT 20 VIA MXA FOR PHOTOCELL ON-OFF CONTROL. CONNECT CIRCUITS 22 AND 24 VIA MXB FOR PHOTOCELL ON-TIME-LOCK OFF CONTROL.
- ⑤ PROVIDE HINGED DOOR STAINLESS STEEL ENCLOSURE TO HOLD MXA AND MXB LIGHTING CONTROLS. ALL WIRING WITHIN ENCLOSURE SHALL BE ENCLOSED IN CONDUIT. COORDINATE ENCLOSURE DIMENSIONS WITH LIGHTING CONTROL DEVICES. PROVIDE FREE STANDING RACK FOR MOUNTING OF ENCLOSURE. REFER TO DETAILS.
- ⑥ REPLACE EXISTING SURGE PROTECTION DEVICE ON PANEL WITH NEW. REFER TO SPECIFICATIONS.
- ⑦ REMOVE AND RUST FROM PANEL AND SUPPORT RACK. APPLY TWO COATS OF COLD GALVANIZING SPRAY TO DAMAGED GALVANIZED SURFACES. APPLY THREE COATS OF PAINT TO PAINTED SURFACES. REPLACE CORRODED OR MISSING HARDWARE.

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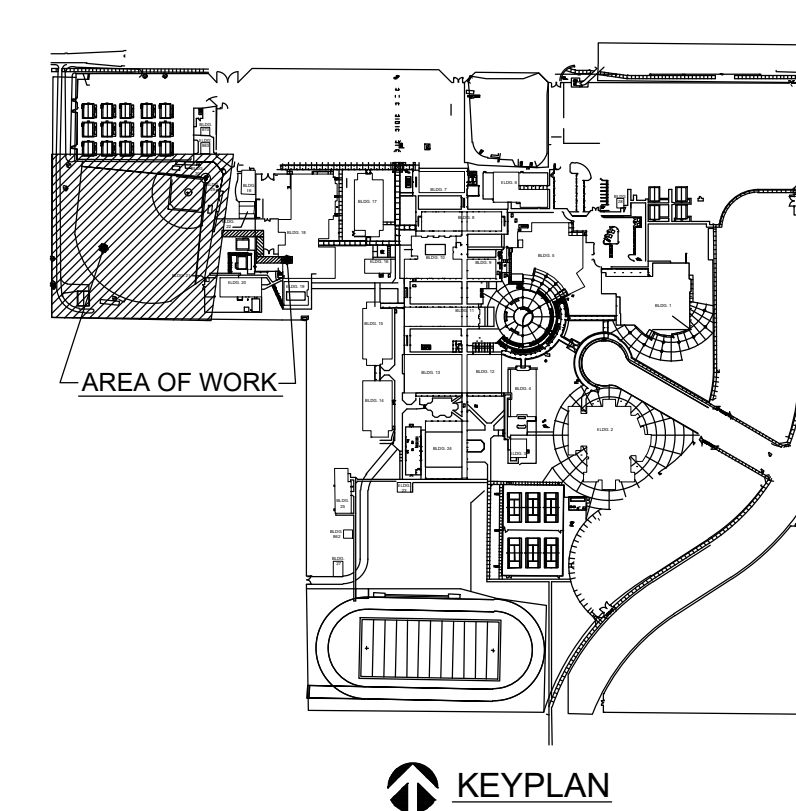


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- 10) PROVIDE PERMANENT LOCKOUT PROVISIONS THAT REMAIN IN PLACE FOR ALL BREAKERS FEEDING NEW OR REPLACED EQUIPMENT.
- 11) DO NOT TRENCH ACROSS BASEBALL FIELD. CONDUITS SHALL BE INSTALLED AROUND PERIMETER OF FENCED AREA AS SHOWN. CONTRACTOR AT HIS OPTION MAY UTILIZE DIRECTIONAL BORING TO INSTALL NEW CONDUITS IN A MORE DIRECT ROUTE THAT DOES NOT GO UNDER FIELD. DIRECTIONALLY BORED CONDUITS SHALL BE INSTALLED AT A DEPTH OF NOT LESS THAN 5 FEET.

HEX NOTES

- 1 PROVIDE APPROXIMATELY 10'-0" BY 10'-0" FENCED AREA WITH A 4'-0" GATE AS SHOWN. FENCING TO BE 6 FOOT TALL BLACK VINYL COATED CHAIN LINK.
- 2 PROVIDE FREE STANDING RACK FOR NEW EQUIPMENT. REFER TO DETAILS.
- 3 TO PANEL LBFF VIA CONTROL DEVICES IN LIGHTING CONTROL CABINET. REFER TO PANEL SCHEDULE FOR CIRCUIT ASSIGNMENTS.
- 4 COORDINATE EXACT PLACEMENT OF PULL BOX WITH EXISTING CONDITIONS.



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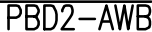
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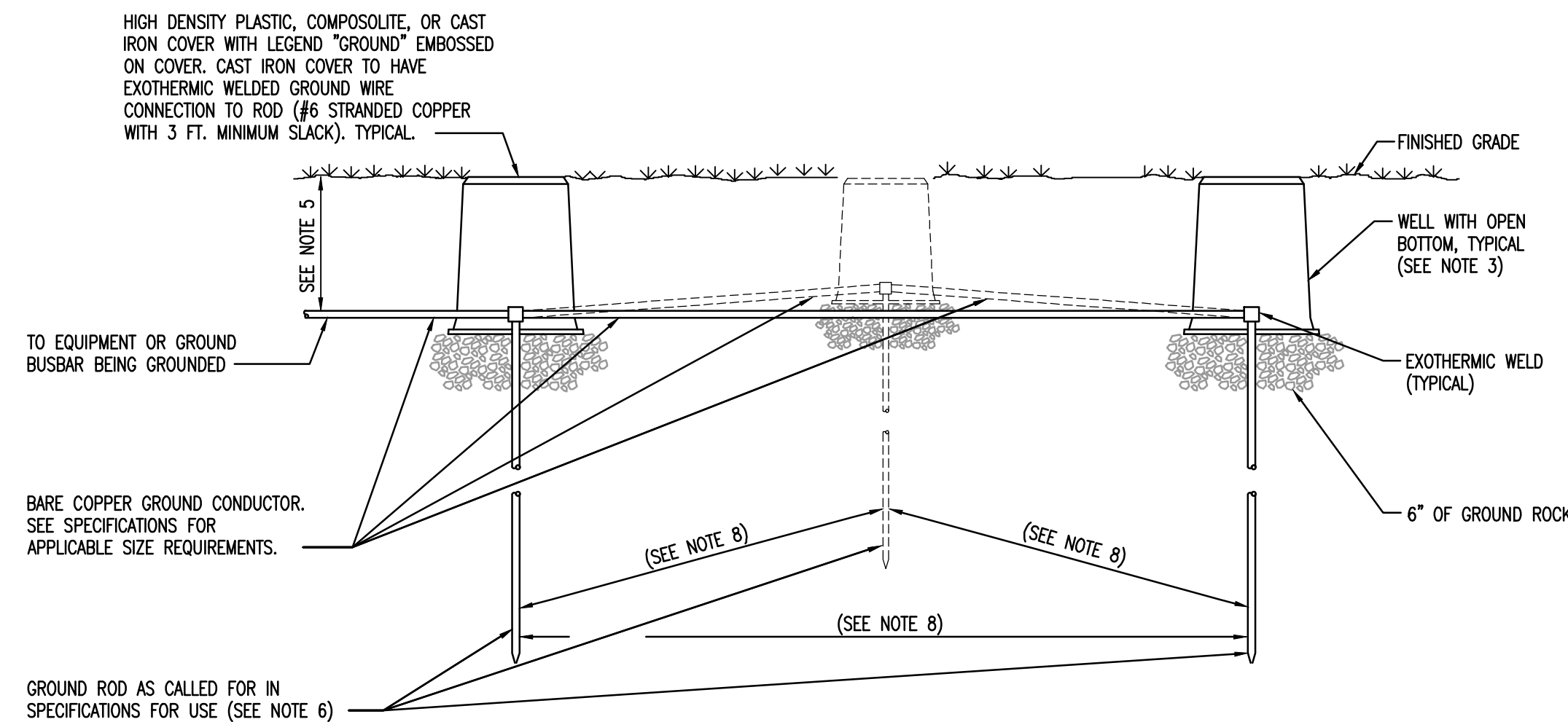
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Engineer Adrian Baus		ARCHENGHR OF RECORD
DESIGNED BY AWB	DRAWN BY MM/AWB	
ISSUE DATE 12/09/2022	AE PROJECT NUMBER 2022-165	
SHEET TITLE PARTIAL SITE PLAN - ELECTRICAL- RENOVATION		
DRAWING NO. E101		

CALCULON GRID SUMMARY							
GRID NAME	CALCULATION METRIC	AVERAGE	MINIMUM	MAXIMUM	MAX/MIN	ZONES OPERATING	# FIXTURES OPERATING
INFIELD	HORIZONTAL ILLUMINANCE	52	36	63	1.78	1	42
OUTFIELD	HORIZONTAL ILLUMINANCE	30.9	23	46	2.03	1	42



NOT TO SCALE



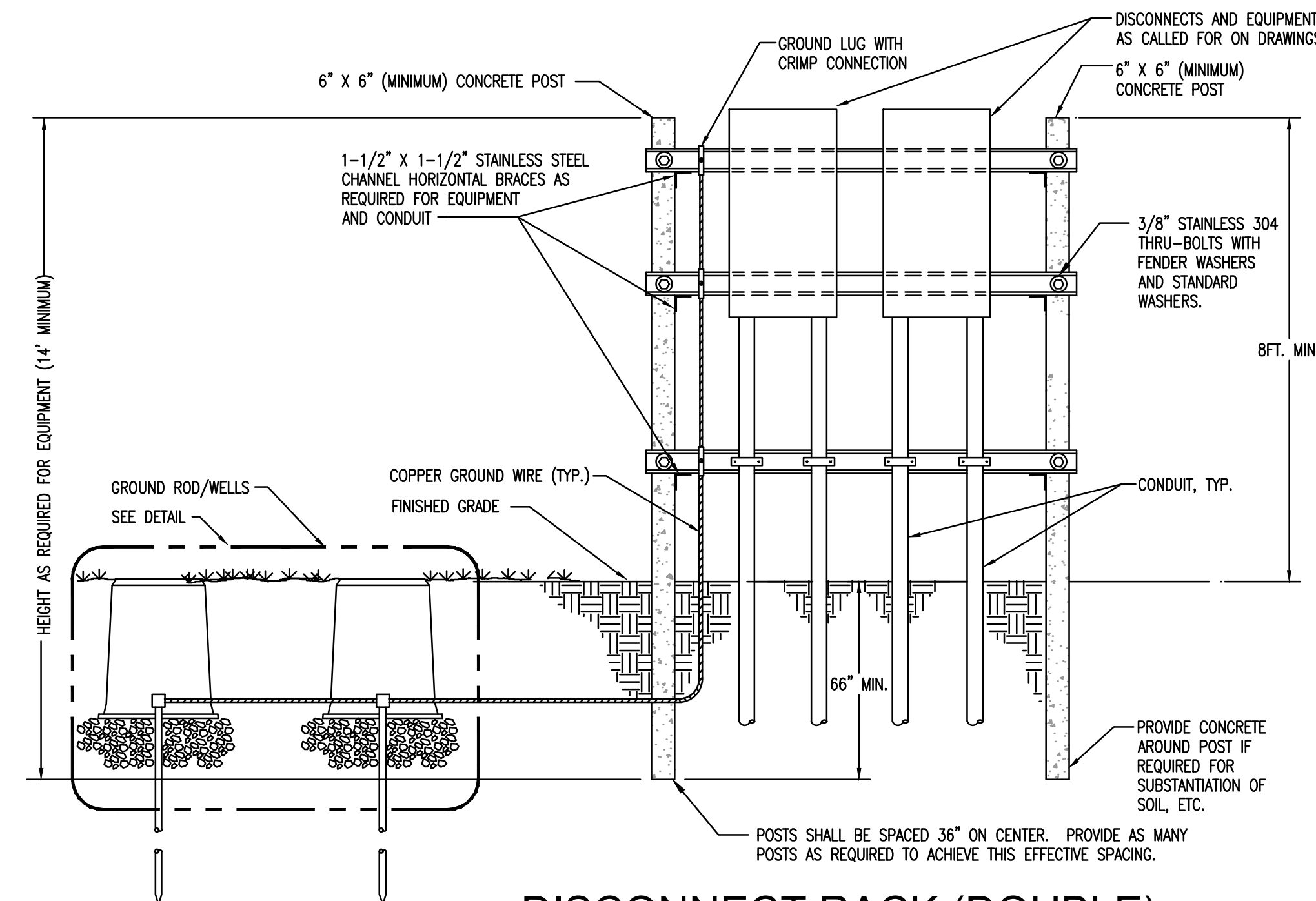
- WELL: (SEE NOTE 3)
INSIDE DIMENSIONS: 12 INCHES (MINIMUM)
HEIGHT: 18 INCHES (MINIMUM).
MATERIAL: STRUCTURAL PLASTIC, CONCRETE
OR COMPOSOLITE.
MANUF.: QUAZITE OR BROOKS PRODUCTS.

GROUND WELL DETAIL (MAIN SERVICE) FOR GRASSY UNPAVED NON-TRAFFIC AREAS

N.T.S

GNDWEL3

REV: 8/16/06



DISCONNECT RACK (DOUBLE) -
FREESTANDING/GRADE MOUNTED

N.T.S.

DRM3

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ARCHIENGR OF RECOR

Engineer
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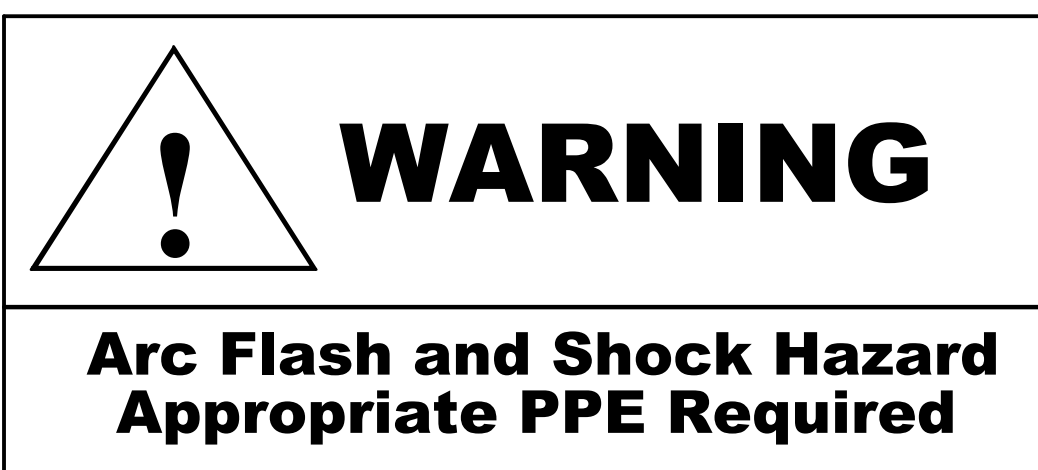
DESIGNED BY AWB	DRAWN BY MM/AWB
ISSUE DATE 12/09/2022	AE PROJECT NUMBER 2022-165

SHEET TITLE

DETAILS

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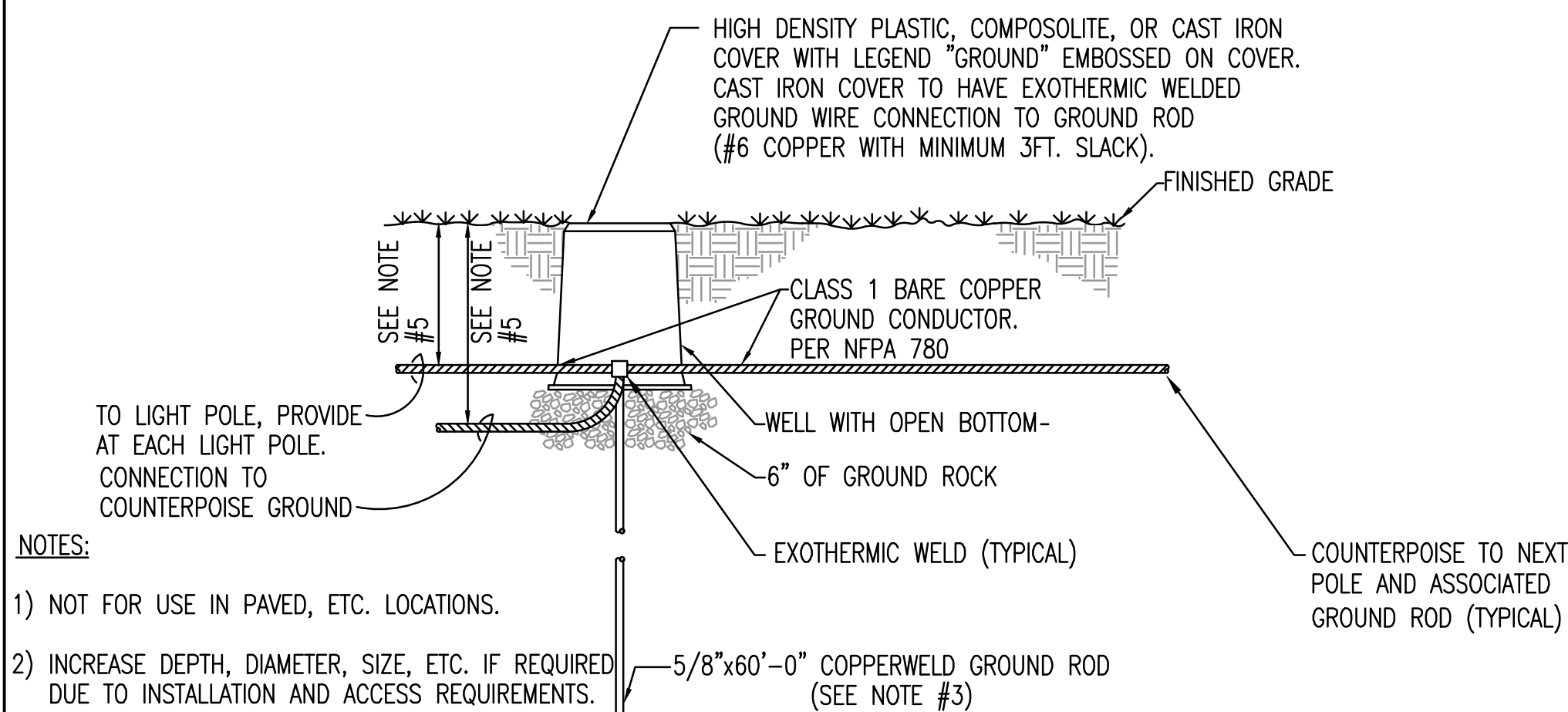
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"ARC FLASH AND SHOCK HAZARD" SIGN

N.T.S.

AFSH



GROUND WELL DETAIL - POLE LIGHTING

N.T.S.

GNDWEI 4 MODIFIED

WELL: (SEE NOTE #2)

INSIDE DIMENSIONS: 12 INCHES (MINIMUM)

HEIGHT: 18 INCHES (MINIMUM).

MATERIAL: STRUCTURAL PLASTIC, CONCRETE,
OR COMPOSOLITE.

MANUFACTURER: QUAZITE OR BROOKS PRODUCTS.

CHILLER CH-1 HEAT TAPE

20 AMP 120V 1PH 2W
FED FROM
1L1-73 LOCATED IN
BUILDING 1 ROOM 01-14

BLACK LAMACOID WITH WHITE CORE

GENERAL NOTES:

1. EQUIPMENT NAMEPLATES SHALL BE PROVIDED FOR ALL PANELS, SWITCHES AND LOADS.
2. NAMEPLATES SHALL COMPLY WITH NEC REQUIREMENTS AND CLEARLY IDENTIFY THE LOAD SERVED, THE SOURCE AND THE LOCATION OF THE SOURCE.
3. NAMEPLATES SHALL BE COLOR CODED PER SPECIFICATIONS AND EXISTING BUILDING CONVENTIONS.

TYPICAL NAMEPLATE

N.T.S.

PHOTOCELL

120V CONTROL CIRCUIT (L N)

TIME CLOCK

COIL CLEARING CONTACTS

H-O-A SELECTOR SWITCH MOUNT IN NEMA 1 ENCL.

TWO WIRE 2P CONTROL RELAY

LIGHTING CONTACTOR MOUNT IN NEMA 1 ENCL. - MXB

LIGHTING CIRCUITS (L N L N L N L N)

TO LIGHTS

NTS LCS9-MODIFIED

U.L. LISTED 1/2" X 24" LIGHTNING PROTECTION AIR TERMINAL WITH CLASS 1 COPPER LIGHTNING PROTECTION DOWN CONDUCTOR PER NFPA-780 TO DRIVEN GROUND ELECTRODE. BOND DOWN CONDUCTOR TO FIXTURE ARM.

POLE MOUNTED LUMINAIRE REFER TO FIXTURE SCHEDULE

3/4" PVC SLEEVE POURED IN POLE FOR LIGHTING CIRCUIT CONDUCTORS.

3/4" PVC SLEEVE POURED IN POLE FOR LIGHTNING PROTECTION DOWN LEAD.

CONCRETE POLE

NEMA 3R 6" x 6" x 4" MINIMUM ENCLOSURE MOUNTED ON POLE. LOCATE FUSING AND LIGHTNING ARRESTOR IN ENCLOSURE. PROVIDE NIPPLE FROM BACK OF BOX TO POLE

HANDHOLE COVER

HANDHOLE

3/4" MINIMUM GALVANIZED RIGID STEEL CONDUIT.

METALLIC CONDUIT BELOW GRADE SHALL BE MASTIC OR PVC COATED.

24"

GALVANIZED RIGID STEEL SWEEP BELOW

SCHEDULE 40 PVC

POLE LIGHTING GROUND WELL PER SPECIFICATIONS. REFER TO GROUND WELL DETAIL.

GRADE

CLASS 1 CU. LTNG. CONDUCTOR

GROUND RODS WITH GROUND WELLS PER SPECIFICATIONS AND DETAILS.

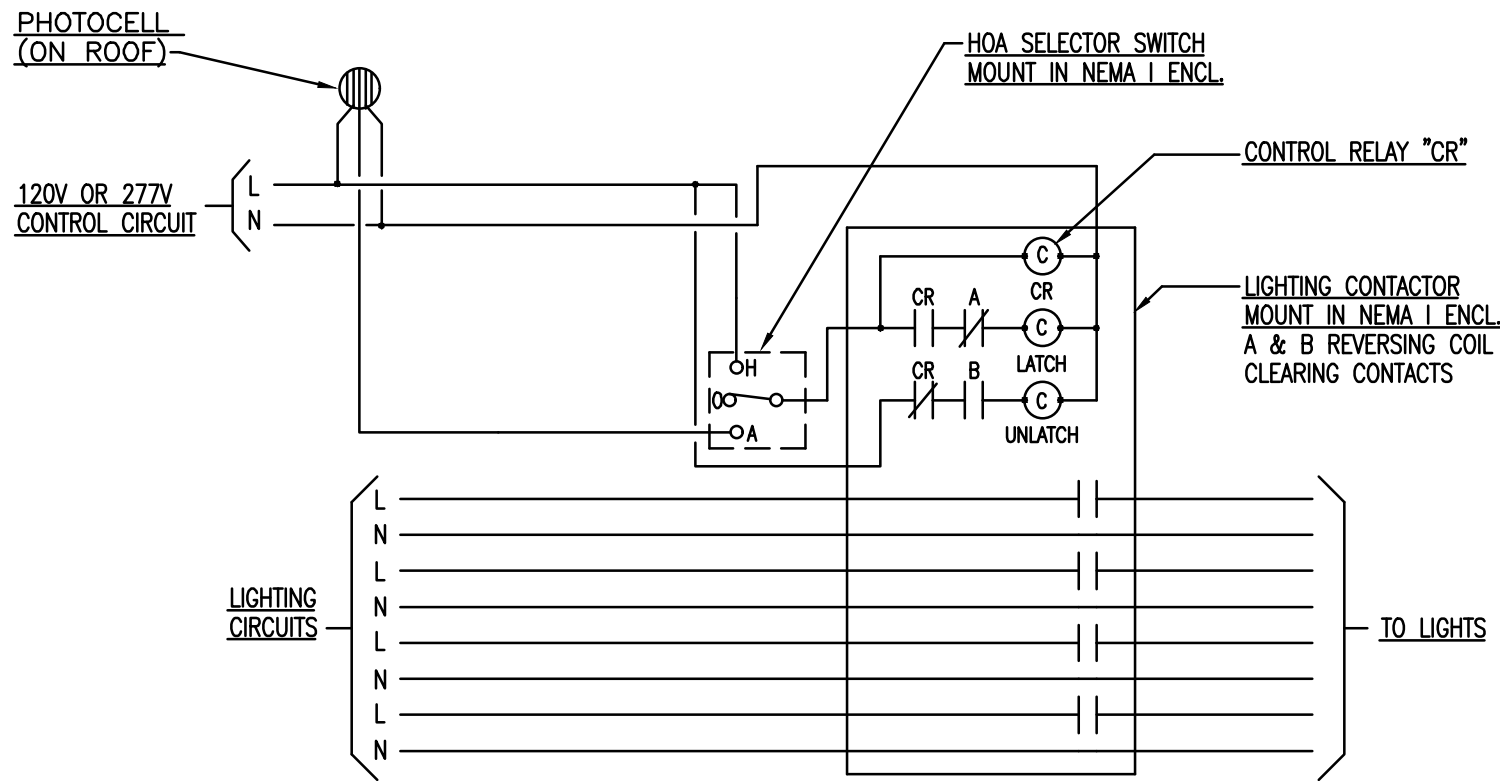
DIMENSION PER FIXTURE SCHEDULE

PER MANUFACTURERS RECOMMENDATIONS

N.T.S. NOTE: EMBEDMENT OF POLE SHALL BE PER MODIFIED

DEVICE	DESIGN SELECTION	APPROVED SUBSTITUTE	APPROVED SUBSTITUTE	VOLTAGE	#CONTACTS REQ.
PHOTOCELL	TORK #2101 (2104)	PARAGON #CW201-00 (CW201-27)	PRECISION #T-15 (T-168)	120V(277)	-----
HOA SEL. SW.	SO ₂ R #K543B 8 #KA-1	G.E. #CR2940UB022B	ALLEN BRADLEY #900TT-12A	600V MAX.	1-N.O. 1-N.C.
CONTACTOR	SO ₂ R #K6M6 SERIES WITH CONTROL RELAY	G.E. #PL60M6 SERIES WITH CONTROL RELAY	ALLEN BRADLEY #702LP-BA SERIES WITH CONTROL RELAY	120V(277)	4-N.O.
() INDICATES CAT # FOR 277V. SELECT DEVICE TO MATCH CONTROL CIRCUIT VOLTAGE.					
NOTE: LIGHTING CONTACTOR SHALL BE MECHANICALLY HELD AND HAVE 30 AMP CONTINUOUS RATING FOR TUNGSTEN & BALLAST LIGHTING AND RESISTIVE HEATING LOADS.					

- (1) CONTRACTOR SHALL CAREFULLY COORDINATE THE LIGHTING FIXTURE TRIM TYPES WITH THE TYPE OF CEILING WHERE THE LIGHTING FIXTURES ARE TO BE INSTALLED. MODIFY FIXTURE CATALOG NUMBER AS REQUIRED TO COORDINATE FIXTURE WITH CEILING.
- (2) ALL FIXTURES TO HAVE IN-LINE FUSE AND FUSE HOLDER.
- (3) PROVIDE MANUFACTURER'S POINT BY POINT PHOTOMETRIC ANALYSIS FOR SITE LIGHTING WITH SUBMITTALS 10 DAYS PRIOR TO BID FOR APPROVAL BY DESIGN ENGINEER. PROVIDE EMBEDMENT DETAILS FOR SAND
- (4) CONTRACTOR, AT HIS OPTION, MAY USE A U.L. LISTED FLEXIBLE WIRING SYSTEM FOR LIGHTING FIXTURE BRANCH CIRCUITRY ABOVE ACCESSIBLE LAY-IN CEILINGS. ALL HOMERUNS, CONNECTIONS TO LIGHT SWITCHES, AND BRANCH CIRCUITRY FOR ALL OTHER CEILING CONDITIONS SHALL BE IN A CONVENTIONAL RACEWAY SYSTEM PER SPECIFICATIONS.
- (5) WHEN FIXTURE MODEL NUMBER DIFFERS FROM FIXTURE DESCRIPTION, CONTRACTOR IS TO SUBMIT RFI REQUESTING CLARIFICATION PRIOR TO BID, PRIOR TO SHOP DRAWING SUBMITTAL AND PRIOR TO ORDERING OF FIXTURE. WHERE CONTRACTOR DOES NOT REQUEST CLARIFICATION PRIOR TO BID, CONTRACTOR SHALL PROVIDE THE MOST EXPENSIVE OPTION BETWEEN A FIXTURE THAT MATCHES THE DESCRIPTION AND A FIXTURE THAT MATCHES THE MODEL NUMBER. AFTER BID, CONTRACTOR SHALL SUBMIT RFI REQUESTING CLARIFICATION SO PROPER FIXTURE GETS SUBMITTED, PROVIDED AND INSTALLED.
- (6) MOUNT LINEAR FIXTURES TOGETHER, END TO END, WHERE SHOWN IN CONTINUOUS ROWS.
- (7) MANUFACTURER SHALL PROVIDE A WARRANTY AGAINST LOSS OF PERFORMANCE AND DEFECTS IN MATERIALS AND WORKMANSHIP FOR THE LUMINAIRES FOR A PERIOD OF 10 YEARS AFTER ACCEPTANCE OF THE LUMINAIRES. WARRANTY SHALL COVER ALL COMPONENTS COMPRISING THE LUMINAIRE.
- (8) AT TIME OF PURCHASE, ALL APPROVED MANUFACTURERS MUST BE USING CREE, PHILLIPS, SAMSUNG, BRIDGELUXE LED'S, NO OTHER LED MANUFACTURERS ARE PERMITTED.
- (9) PROVIDE SEPARATE SLEEVE IN CONCRETE POLES FOR LIGHTNING PROTECTION DOWN CONDUCTOR.
- (10) PROVIDE MANUFACTURER'S POINT BY POINT PHOTOMETRIC ANALYSIS FOR SITE LIGHTING WITH SUBMITTALS.



NTS LCS8-MODIFIED

MATERN

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[illegible]

DELAND HIGH SCHOOL
BASEBALL FIELD LIGHTING
VCS Project No. 2347965
800 NORTH HILL AVE.
DELAND, FLORIDA 32724

DESIGNED BY AWB	DRAWN BY MM/AWB
ISSUE DATE 12/09/2022	AE PROJECT NUMBER 2022-165

E503

[illegible]

GENERAL NOTES:

- 1) CONDUIT SIZE IS BASED ON 2017 N.E.C. FOR EMT, IMC, RMC, FLEXIBLE METAL, AND SCHED 40 PVC. IF ANY OTHER TYPE OF CONDUIT/TUBING IS USED, THE CONTRACTOR SHALL RESIZE CONDUIT AND SIZE AS REQUIRED TO COMPLY WITH THE N.E.C..
- 2) USE CABLE REDUCERS AT TERMINATIONS AND/OR AT IN JUNCTION BOX NEAR TERMINATIONS AS REQUIRED TO COORDINATE OVERSIZED PHASE OR NEUTRAL CONDUCTORS WITH TERMINATION LUG SIZE OR PROVIDE TERMINATION/LUGS SIZED FOR FEEDERS.
- 3) CONTRACTOR IS TO MEGGER TEST ALL FEEDERS PER SPECIFICATIONS.
- 4) WHERE DISCONNECT SWITCH (DISC SW) IS INCLUDED IN THE NAME UNDER "FEEDER FEEDING", PROVIDE DISC SW TO MEET ALL ELECTRICAL CHARACTERISTICS PER THIS SCHEDULE, INCLUDING SCRR RATING. PROVIDE FUSE IN FUSIBLE SWITCHES OR PROVIDE UPSTREAM CIRCUIT BREAKER, WHERE NON-FUSED SWITCHES ARE USED, AS REQUIRED BY DISCONNECT SWITCH MANUFACTURER FOR SHORT CIRCUIT AMPS SHOWN.

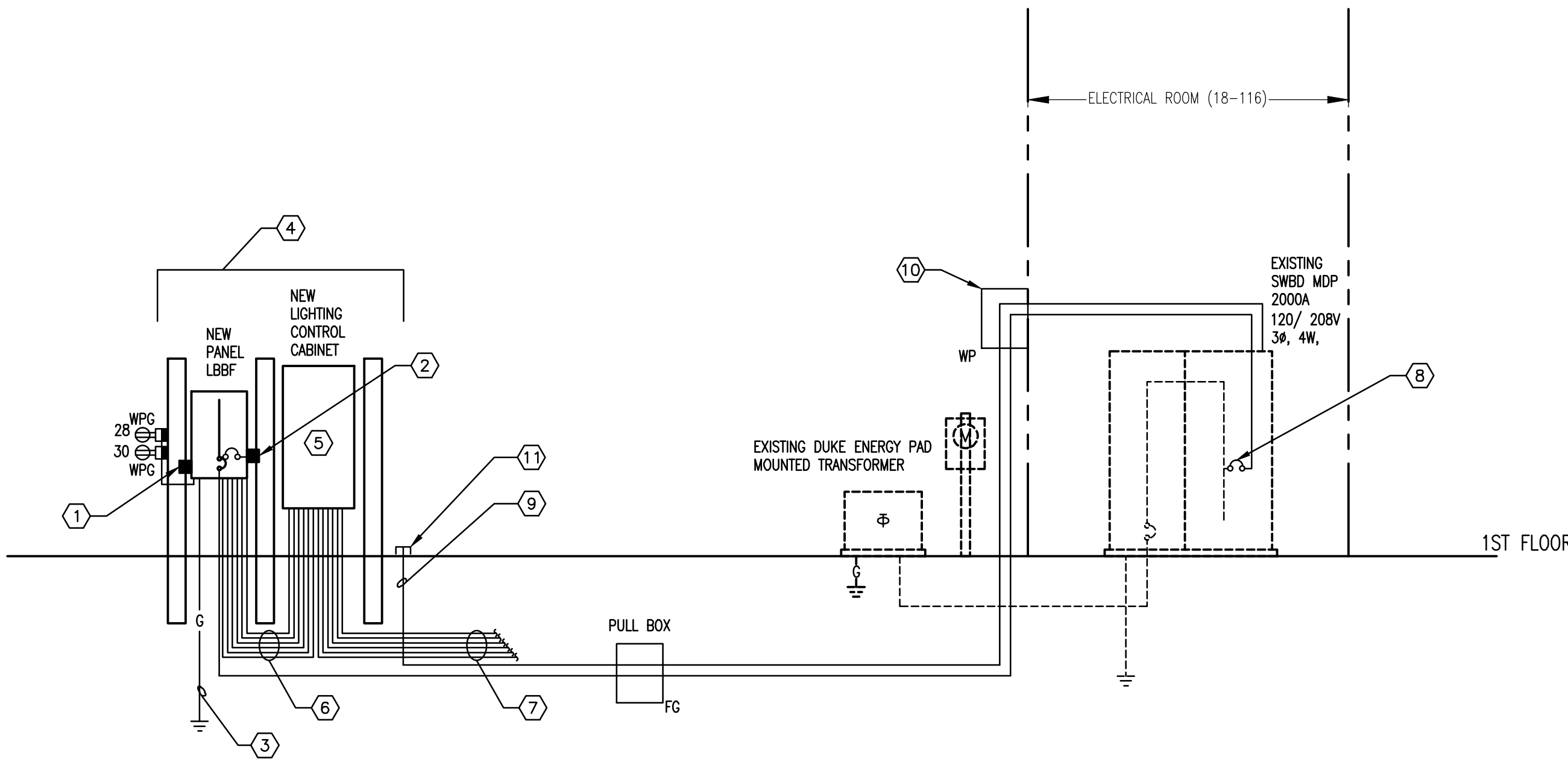
GENERAL NOTES

- 1) REFER TO GENERAL NOTES FOR THIS DISCIPLINE.
- 2) REFER TO SPECIFICATIONS.
- 3) WHERE CONDUIT ROUTING IS SHOWN, THE CONDUITS ARE SHOWN FOR DIAGRAMMATIC PURPOSES AND ARE NOT NECESSARILY REPRESENTATIVE OF EXACT PLACEMENT.
- 4) ALL CONNECTIONS TO EXTERIOR ENCLOSURES MADE AT OTHER THAN BOTTOM OF ENCLOSURE SHALL BE MADE WITH WEATHERPROOF MYERS HUBS.
- 5) PROVIDE ALL MISCELLANEOUS ELECTRICAL REQUIRED FOR COMPLETE AND OPERATIONAL INSTALLATIONS.
- 6) PROVIDE PERMANENT LOCKOUT PROVISIONS THAT REMAIN IN PLACE FOR ALL BREAKERS FEEDING NEW OR REPLACED EQUIPMENT.

HEX NOTES

- ① LIGHTNING ARRESTOR.
- ② SURGE SUPPRESSION DEVICE. SEE SPECIFICATIONS.
- ③ #3/0 COPPER GROUND WIRE TO (THREE) 80' X 5/8" COPPER-PLATED
DRIVEN GROUND RODS.
- ④ MOUNT EQUIPMENT ON FREE STANDING RACK. REFER TO DETAILS.
- ⑤ MUSCO LIGHTING CONTROL CABINET WITH CONTACTORS AND CONTROLS
FOR LIGHTS.
- ⑥ LIGHTING CIRCUITS RUNNING FROM PANEL TO CONTROL CABINET.
- ⑦ LIGHTING CIRCUITS OUT TO POLES.
- ⑧ PROVIDE 3 POLE 250 AMP BREAKER IN EXISTING SWITCHBOARD.
- ⑨ TWO RUNS OF 3.5" SPARE CONDUIT FOR FUTURE.
- ⑩ PROVIDE STAINLESS STEEL PULL BOX ON EXTERIOR OF BUILDING.
SIZE PER NEC.
- ⑪ TURN CONDUITS UP AT RACK AND CAP.

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POWER RISER DIAGRAM

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REVISIONS

[illegible]

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BASEBALL FIELD LIGHTING
VCS Project No. 2347965
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ARCHIENGR OF RECORD

Engineer
Adrian Baus

DESIGNED BY

AWB

DRAWN BY

MM/AWE

ISSUE DATE

12/0

AE PROJECT NUMBER
2022-1

SHEET TITLE

POWER RISER DIAGRAM AND SCHEDULES

DRAWING NO.

E601