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Mechanical • Electrical • Plumbing • Fire Protection
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03/23/2026

Engineer Adrian Baus		ARCHENOR OF RECORD	
DESIGNED BY AWB		DRAWN BY MM	
ISSUE DATE 03/23/2026		AE PROJECT NUMBER 2025-134	
SHEET TITLE COVER SHEET			
DRAWING NO. G001			

A/C	— AIR CONDITIONING	CONT.	— CONTINUOUS
A.C.	— ALTERNATING CURRENT	C.R.I.	— COLOR RENDERING INDEX
ADD #	— ADDENDA	C.T.	— CURRENT TRANSFORMER
A/E	— ARCHITECT/ENGINEER (OR ENGINEER WHEN ARCHITECT NOT APPLICABLE)	CUL	— CUPPER
AFD	— ADJUSTABLE FREQUENCY DRIVE	C.U.	— COMPRESSOR CONDENSER UNIT
AFB	— ABOVE FINISHED FLOOR	C.W.	— COLD WATER
AFG	— ABOVE FINISHED GRADE	D.B.	— DIRECT BURIAL
AHU	— AIR HANDLER UNIT	D.C.	— DIRECT CURRENT
AIR	— AIRS INTERRUPTING CAPACITY	DISC.	— DISCONNECT
AL	— ALUMINUM	DN.	— DOWN
ALT	— ALTERNATE	DPST	— DOUBLE POLE SINGLE THROW
AMP	— AMPERE	DWG	— DRAWING
ANSI	— AMERICAN NATIONAL STANDARDS INSTITUTE	E.C.	— ELECTRICAL CONTRACTOR (OR GENERAL CONTRACTOR)
AWG	— AMERICAN WIRE GAUGE	ELEV.	— ELEVATOR
Ⓢ	— AT	EMT	— ELECTRIC METALLIC TUBING
B.C.	— BARE COPPER	EQUIP.	— EQUIPMENT
BIDS	— BAGGAGE INFORMATION DISPLAY SYSTEM	EST	— ESTIMATE
BLDG	— BUILDING	FAAP	— FIRE ALARM ANNUNCIATOR PANEL
BRKR	— BREAKER	FACP	— FIRE ALARM CONTROL PANEL
BTU	— BRITISH THERMAL UNIT	FATC	— FIRE ALARM TERMINAL CABINET
BTUH	— BTU PER HOUR	FCFP	— FIRE ALARM COMMAND CENTER PANEL
C.	— CONDUIT	FHC	— FIRE HOSE CABINET
C.B.	— CIRCUIT BREAKER	FIDS	— FLIGHT INFORMATION DISPLAY SYSTEM
CD.	— CANDELA	FLA	— FULL LOAD AMPERES
CBM	— CERTIFIED BALLAST MANUFACTURERS	FT.	— FEET
CFM	— CUBIC FEET PER MINUTE	FLR	— FLOOR
CKT.	— CIRCUIT	F.C.	— FOOTCANDLES
CKT BRKR	— CIRCUIT BREAKER	FVNR	— FULL VOLTAGE NON—REVERSING
C/L	— CENTER LINE	GALLN	— GALLON
CLG	— CEILING	GALV.	— GALVANIZED
COMP.	— COMPRESSOR	GPH	— GALLONS PER HOUR
CONN.	— CONNECTION	GPM	— GALLONS PER MINUTE
COND.	— CONDENSER	GFI	— GROUND FAULT INTERRUPTING
		GRS	— GALVANIZED RIGID STEEL CONDUIT

-	GROUND	MCP	- MOTOR CIRCUIT PROTECTOR
-	HEATERS	MTD	- MOUNTED
-	HEIGHT	N.	- NEUTRAL
-	HERTZ (CYCLES)	NEC	- NATIONAL ELECTRIC CODE
-	HIGH POWER FACTOR	NEMA	- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
-	HIGH PRESSURE SODIUM	NFPA	- NATIONAL FIRE PROTECTION ASSOCIATION
-	HORSEPOWER	N.P.T.	- NATIONAL PIPE THREAD
-	HOUR	NF	- NON FUSED
-	HEAT STRIP	N.C.	- NORMALLY CLOSED
-	INTERMEDIATE METALLIC CONDUIT	N.O.	- NORMALLY OPEN
-	INCANDESCENT	NIC.	- NOT IN CONTRACT
-	INCHES	NO.	- NUMBER
-	JUNCTION BOX	OB	- OUTLET BOX
-	KILOVOLT AMPERE	OD	- OUTSIDE DIAMETER
-	KILOWATTS	OL	- OVERLOAD
-	KILOWATT HOUR	OLS	- OVERLOADS
-	KELVIN	OS&Y	- OUTSIDE SCREW AND YOKE (SPRINKLER)
-	LAMP LUMEN DEPRECIATION	%	- PERCENT
-	LIGHT EMITTING DIODE	/	- PHASE
-	LIGHT INTERFACE UNIT	P.	- POLE
-	LIGHT	PL	- COMPACT FLUORESCENT LAMP
-	LIGHTING	P.T.	- POTENTIAL TRANSFORMER
-	LIGHTS	PSF	- POUNDS PER SQUARE FOOT
-	LOW POWER FACTOR	PSI	- POUNDS PER SQUARE INCH
-	MAIN CIRCUIT BREAKER	PB	- PULLBOX
-	MAIN LUGS ONLY	PNL	- PANEL
-	MAINTENANCE	PR	- PAIR
-	MANHOLE METAL HALIDE	PR1.	- PRIMARY
-	MANUFACTURER	PVC	- POLYVINYL CHLORIDE
-	MAXIMUM	RECEPT.	- RECEPTACLE
-	THOUSAND CIRCULAR MILS	RPM	- REVOLUTIONS PER MINUTE
-	MINIMUM OVERCURRENT PROTECTION	R.S.	- RAPID START
-	MILES PER HOUR	SCA	- SHORT CIRCUIT AMPS
-	MILLIMETER	SEC.	- SECONDARY
-	MINIMUM		

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
TB - TELEPHONE TERMINAL BOARD
TTC - TELEPHONE TERMINAL CABINET
TV - TELEVISION
TVTC - TELEVISION TERMINAL CABINET
TVEC - TELEVISION EQUIP. CABINET
TYPIC - TYPICAL
TEMP. - TEMPERATURE
U.L. - UNDERWRITERS' LABORATORIES
V.F. - 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 - RAINPROOF
4X - STAINLESS STEEL DUSTPROOF, WATERIGHT

- 1) ALL DEVICES TO BE GREY WITH SMOOTH METAL #302 S.S. PLATES UNLESS OTHERWISE NOTED.
- 2) DASHED ITEM DENOTES "EXISTING".
- 3) "R" BY DEVICE DENOTES EXISTING TO BE REMOVED COMPLETELY.
- 4) "H" BY DEVICE DENOTES DEVICE TO BE MOUNTED HORIZONTALLY.
- 5) MOUNT SWITCHES AT 48" AFF TO TOP.
- 6) SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 7) ALL ITEMS NOTED ON THE LEGENDS DO NOT NECESSARILY APPEAR ON PLANS.

REMARKS:

- a) U.L. LISTED FOR WET LOCATION IN CLOSED POSITION.
- b) SUPPORT OUTLET BOX FROM STRUCTURE WITH (1) 3/8" ALL THREADS MINIMUM. BOXES LARGER THAN 25 SQUARE INCHES SHALL BE SUPPORTED WITH (2) 3/8" ALL THREADS MINIMUM.
- c) U.L. LISTED FOR WET LOCATION IN OPEN POSITION WITH ATTACHMENT PLUG INSERTED.
- d) JUNCTION/OUTLET BOX SHALL BE SIZED AS REQUIRED FOR CONDUCTOR/DEVICE FILL PER N.E.C.
- e) THREADED CONDUIT HUBS SHALL BE SIZED AND CONFIGURED AS REQUIRED FOR APPLICATION.
- f) IF WITHIN 30 MILES OF THE COAST LINE, COPPER FREE CAST ALUMINUM OUTLET BOXES SHALL BE USED FOR EXTERIOR APPLICATIONS.
- g) PROVIDE KINDORF MTG. RACK FOR FREE STANDING APPLICATIONS. KINDORF SHALL BE STAINLESS STEEL FOR EXTERIOR APPLICATIONS. ALL CUT ENDS ARE TO BE FREE OF SHARP EDGES AND BURRS.
- h) WHEN SURFACE JUNCTION BOX SYMBOL IS COMBINED WITH DEVICE SYMBOL, PROVIDE APPROPRIATE SURFACE PLATE FOR OUTLET APPLICATION.
- i) MAINTAIN WORKING CLEARANCES IN STRICT ACCORDANCE WITH N.E.C. COORDINATE EXACT LOCATION OF EQUIPMENT WITH ALL DISCIPLINES (I.E. STRUCTURAL, HVAC, PLUMBING, FIRE PROTECTION, KITCHEN, MILLWORK, ETC.) PRIOR TO ROUGH-IN TO MAINTAIN CLEARANCES.
- j) OUTLET BOX SHALL BE SIZED PER SYSTEM INSTALLER REQUIREMENTS.

U.L. LISTED FOR WET LOCATION IN CLOSED POSITION.

SUPPORT OUTLET BOX FROM STRUCTURE WITH (1) 3/8" ALL THREADS MINIMUM. BOXES LARGER THAN 25 SQUARE INCHES SHALL BE SUPPORTED WITH (2) 3/8" ALL THREADS MINIMUM.

U.L. LISTED FOR WET LOCATION IN OPEN POSITION WITH ATTACHMENT PLUG INSERTED.

JUNCTION/OUTLET BOX SHALL BE SIZED AS REQUIRED FOR CONDUCTOR/DEVICE FILL PER N.E.C.

THREADED CONDUIT HUBS SHALL BE SIZED AND CONFIGURED AS REQUIRED FOR APPLICATION.

IF WITHIN 30 FEET OF THE COAST LINE, COPPER FREE CAST ALUMINUM OUTLET BOXES SHALL BE USED FOR EXTERIOR APPLICATIONS.

PROVIDE KINDORF MTG. RACK FOR FREE STANDING APPLICATIONS. KINDORF SHALL BE STAINLESS STEEL FOR EXTERIOR APPLICATIONS. ALL CUT ENDS ARE TO BE FREE OF SHARP EDGES AND BURRS.

WHEN SURFACE JUNCTION BOX SYMBOL IS COMBINED WITH DEVICE SYMBOL, PROVIDE APPROPRIATE SURFACE PLATE FOR OUTLET APPLICATION.

MAINTAIN WORKING CLEARANCES IN STRICT ACCORDANCE WITH N.E.C. COORDINATE EXACT LOCATION OF EQUIPMENT WITH ALL DISCIPLINES (I.E. STRUCTURAL, HVAC, PLUMBING, FIRE PROTECTION, KITCHEN, MILLWORK, ETC.) PRIOR TO ROUGH-IN TO MAINTAIN CLEARANCES.

OUTLET BOX SHALL BE SIZED PER SYSTEM INSTALLER REQUIREMENTS.

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			
	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
	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
	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 #2095TRMR WITH APPLETON #FS-ID AND THOMAS & BETTS #CKMUV OR INTERMATIC #WP1010MC	HUBBELL #GFR5362S APPLETON #FS-ID AND HUBBELL #WP25W 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				

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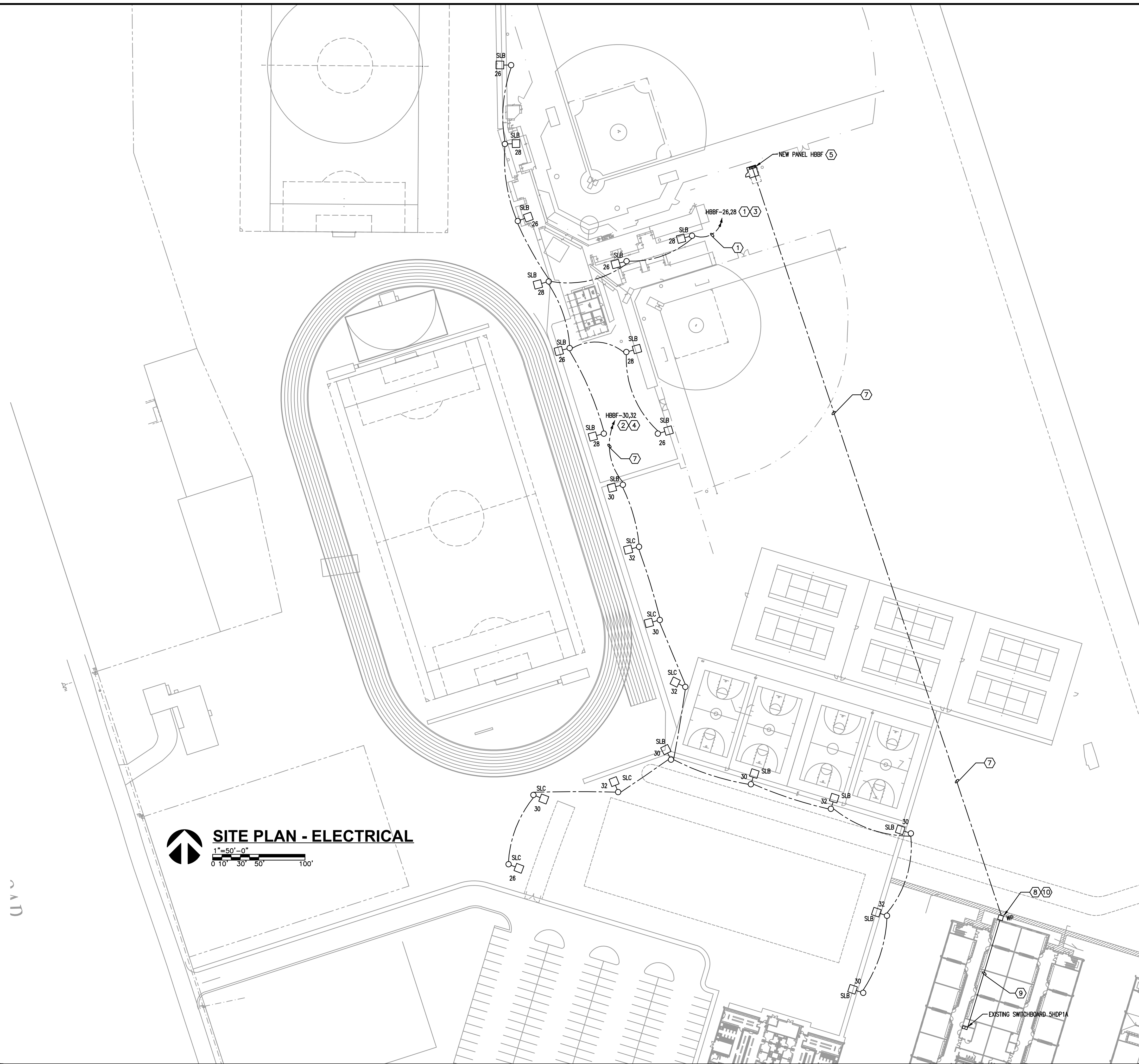
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[illegible]

NEW SMYRNA BEACH HIGH
BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

ENGINEER ADRIAN BAUS		ARCHITECT OF RECORD	
DESIGNED BY AWB		DRAWN BY MM/AWB	
ISSUE DATE 03/23/2026		AE PROJECT NUMBER 2025-134	
SHEET TITLE GENERAL NOTES, SYMBOL LEGEND, AND ABBREVIATIONS			
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) REMARK/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 PROVIDE #10 CONDUCTORS IN 1" MINIMUM CONDUIT THROUGH OUT CIRCUIT.
- ② PROVIDE #8 CONDUCTORS IN 1-1/4" MINIMUM CONDUIT THROUGH OUT CIRCUIT.
- ③ CONNECT CIRCUIT 26 VIA MXA FOR PHOTOCELL ON-OFF CONTROL. CONNECT CIRCUITS 28 VIA MXB FOR PHOTOCELL ON-TIMECLOCK OFF CONTROL.
- ④ CONNECT CIRCUIT 30 VIA MXA FOR PHOTOCELL ON-OFF CONTROL. CONNECT CIRCUITS 32 VIA MXB FOR PHOTOCELL ON-TIMECLOCK 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 DIRECTIONALLY BORED CONDUIT FOR LIGHTING CIRCUIT. PULL BACK #2 COUNTERPOISE CONDUIT ALONG WITH BORE PIPE.
- ⑦ DIRECTIONALLY BORED CONDUIT(S) FOR PANEL FEEDER. PULL BACK #2 COUNTERPOISE CONDUCTOR ALONG WITH BORE PIPE.
- ⑧ RISE UP EXTERIOR OF BUILDING WITH THREADED RIGID ALUMINUM CONDUIT.
- ⑨ RUN NEW CONDUITS THROUGH BUILDING. CONCEAL ABOVE EXISTING CEILINGS.
- ⑩ NEMA ASS HINGED DOOR ENCLOSURE FOR PULL BOX. SIZE PER NEC.

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REVISIONS

DOCUMENT HISTORY		
NO	DATE	DESCRIPTION

NEW SMYRNA BEACH HIGH
BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

1015 10th St, NEW SMYRNA BEACH, FL 32168

Engineer
Adrian Baus

DESIGNED BY
AWB

ISSUE DATE
03

SHEET TITLE

DRAWN BY
MM/AWB

3/2026	AE PROJECT NUMBER 2025-134
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SITE PLAN - ELECTRICAL

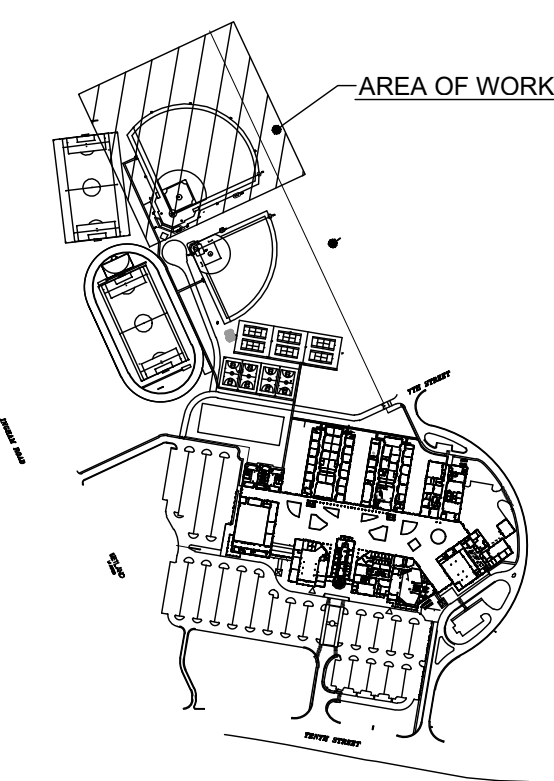
DRAWING M

E100



- 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 ROTATION 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.
- 11) DO NOT TRENCH ACROSS BASEBALL FIELD. CONDUITS SHALL BE DIRECTIONALLY BORED AS SHOWN. DIRECTIONALLY BORED CONDUITS SHALL BE INSTALLED AT A DEPTH OF NOT LESS THAN 5 FEET.

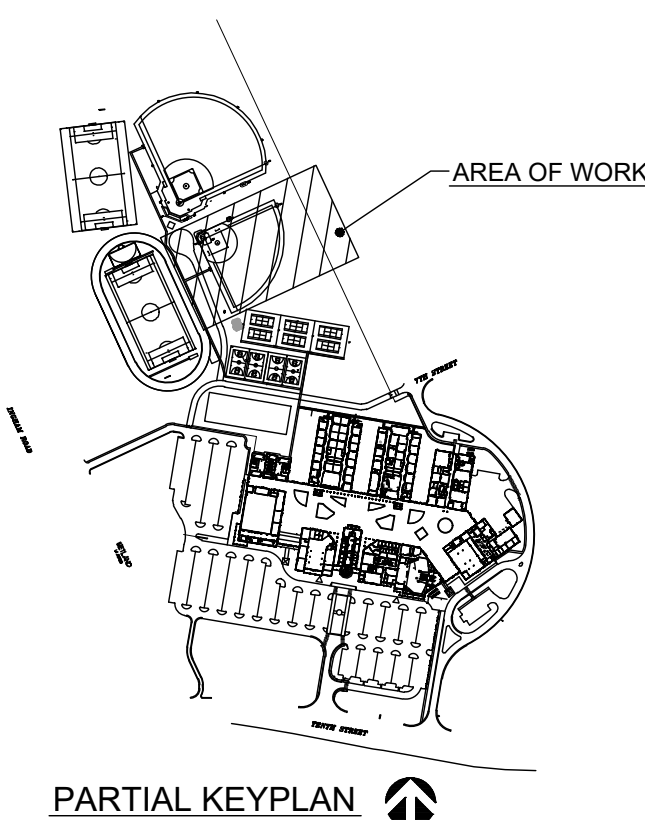
- (1) PROVIDE APPROXIMATELY 10'-0" BY 15'-0" FENCED AREA WITH A 4'-0" GATE AS SHOWN. FENCING TO BE 6 FOOT TALL BLACK VINYL COATED CHAIN LINK.
- (2) PROVIDE FREESTANDING RACKS FOR ALL NEW EQUIPMENT IN FENCED AREA. REFER TO DETAILS.
- (3) TO PANEL HBBF VIA CONTROL DEVICES IN LIGHTING CONTROL CABINET. REFER TO PANEL SCHEDULE FOR CIRCUIT ASSIGNMENTS.
- (4) PROVIDE 1-1/2" SPARE CONDUIT FROM POLE TO FENCED AREA FOR OWNER'S FUTURE USE.
- (5) TURN CONDUIT UP 24 INCHES ABOVE GRADE AS SCH 80 PVC AND CAP. SECURE CONDUIT TO SIDE OF CONCRETE FOUNDATION WITH 1/2" STEEL BANDING SYSTEM. PROVIDE TWO STAINLESS STEEL BANDS NOT LESS 3/4" WIDE BY 0.030" THICK.
- (6) TURN CONDUITS UP 24 INCHES ABOVE GRADE AS SCH 80 PVC AND CAP. SECURE CONDUITS TO RACK WITH STAINLESS STEEL STRUT.
- (7) RECEPTACLE MOUNTED IN POLE HANDHOLE. PROVIDE MUSCO SBB-030 GFDI BASE COVER ASSEMBLY FOR MOUNTING OF RECEPTACLE.
- (8) PROVIDE #8 CONDUCTORS TO FEED 120 VOLT RECEPTACLE IN ADDITION TO POLE FEEDER CONDUCTORS SHOWN IN SCHEDULE ON SHEET E601.
- (9) PROVIDE #6 CONDUCTORS TO FEED 120 VOLT RECEPTACLE IN ADDITION TO POLE FEEDER CONDUCTORS SHOWN IN SCHEDULE ON SHEET E601.
- (10) 1-1/2" DIRECTIONALLY BORED CONDUIT CONTAINING POLE FEEDER. PULL BACK #2 COUNTERPOISE CONDUCTOR ALONG WITH BORE PIPE.
- (11) 1-1/2" DIRECTIONALLY BORED CONDUIT CONTAINING POLE FEEDER. PULL BACK #3/0 GROUNDING ELECTRODE/COUNTERPOISE CONDUCTOR ALONG WITH BORE PIPE.
- (12) #2 GROUNDING CONDUCTOR DIRECTIONALLY BORED BETWEEN POLES.

[illegible]



- 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) REMARK/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.
- 11) DO NOT TRENCH ACROSS SOFTBALL FIELD. CONDUITS SHALL BE DIRECTIONALLY BORED AS SHOWN. DIRECTIONALLY BORED CONDUITS SHALL BE INSTALLED AT A DEPTH OF NOT LESS THAN 5 FEET.

- (1) REFER TO SHEET E101 FOR FENCED AREA REQUIREMENTS, PANELS, RACKS, ETC. PANELS, RACKS AND FENCED AREA ARE PART OF BASE BID.
- (2) TO PANEL HBBF VIA CONTROL DEVICES IN LIGHTING CONTROL CABINET. REFER TO PANEL SCHEDULE FOR CIRCUIT ASSIGNMENTS.
- (3) PROVIDE 1-1/2" SPARE CONDUIT FROM POLE TO FENCED AREA FOR OWNER'S FUTURE USE.
- (4) TURN CONDUIT UP 24 INCHES ABOVE GRADE AS SCH 80 PVC AND CAP. SECURE CONDUIT TO SIDE OF CONCRETE FOUNDATION WITH STAINLESS STEEL BANDING SYSTEM. PROVIDE TWO STAINLESS STEEL BANDS NOT LESS 3/4" WIDE BY 0.030" THICK.
- (5) TURN CONDUITS UP 24 INCHES ABOVE GRADE AS SCH 80 PVC AND CAP. SECURE CONDUITS TO RACK WITH STAINLESS STEEL STRUT.
- (6) RECEPTACLE MOUNTED IN POLE HANDHOLE. PROVIDE MUSCO SBP-030 GFCI BASE COVER ASSEMBLY FOR MOUNTING OF RECEPTACLE.
- (7) PROVIDE #6 CONDUCTORS TO FEED 120 VOLT RECEPTACLE IN ADDITION TO POLE FEEDER CONDUCTORS SHOWN IN SCHEDULE ON SHEET E601.
- (8) 1-1/2" DICTIONALLY BORED CONDUIT CONTAINING POLE FEEDER. PULL BACK #2 COUNTERPOISE CONDUCTOR ALONG WITH BORE PIPE.
- (9) #2 GROUNDING CONDUCTOR DIRECTIONALLY BORED BETWEEN POLES.
- (10) THIS POLE IS PROVIDED AS PART OF BASE BID. IF ALTERNATE FOR SOFTBALL LIGHTING IS NOT ACCEPTED THIS POLE SHALL BE CONFIGURED FOR FUTURE DRESSER CABINET AND CROSS ARMS FOR SOFTBALL LIGHTS. INSTALLATION OF SOFTBALL LIGHTING IN FUTURE SHALL NOT REQUIRE FIELD DRILLING POLE OR OTHER FIELD MODIFICATION OF POLE.
- (11) THIS CONDUIT IS PROVIDED AS PART OF BASE BID. IF ALTERNATE FOR SOFTBALL FIELD LIGHTING IS NOT ACCEPTED IN ADDITION TO CONDUCTORS SHOWN ON E101 A MULE TAPE SHALL BE INSTALLED TO PERMIT ADDITION OF SOFTBALL LIGHTING CONDUCTORS IN FUTURE POLE SHALL BE CONFIGURED TO ACCEPT DRESSER CABINET AND CROSS ARMS FOR SOFTBALL LIGHTS WITHOUT FIELD DRILLING POLE.
- (12) PROVIDE (4) #6 AND (1) 8 GROUND FOR SOFT BALL LIGHTING POLE FEEDER.

[illegible]

BASEBALL FIELD POLE /FIXTURE SCHEDULE											
POLE	DECRPTION	#LUMINAIRES/POLE	LUMINAIRE MODEL	POLE HEIGHT	FIXTURE GROUP MOUNTING HEIGHT	CONTRACTOR	FLA	CONTRACTOR SIZE	CIRCUIT SIZE	ZONE	PANEL /CKT
A1	BASEBALL	4	MUSCO TLC-LED-1500	80'	80'	C1	12.74	30	20	A	HBBF-1:3:5
		1	MUSCO TLC-BT-575		19'						
A2	BASEBALL	4	MUSCO TLC-LED-1500	80'	80'	C2	12.74	30	20	A	HBBF-7:9:11
		1	MUSCO TLC-BT-575		19'						
B1	BASEBALL	5	MUSCO TLC-LED-1500	80'	80'	C3	15.00	30	20	A	HBBF-13:15:17
		1	MUSCO TLC-BT-575		16'						
B2	BASEBALL	5	MUSCO TLC-LED-1500	80'	80'	C4	15.00	30	20	A	HBBF-19:21:23
		1	MUSCO TLC-BT-575		16'						
C1	BASEBALL	5	MUSCO TLC-LED-1500	70'	70'	C5	12.74	30	20	A	HBBF-25:27:29
		2	MUSCO TLC-BT-575		70'						
					16'						
C2	BASEBALL	5	MUSCO TLC-LED-1500	70'	70'	C6	12.74	30	20	A	HBBF-31:33:35
		2	MUSCO TLC-BT-575		70'						
					16'						
TOTAL		36					80.96				

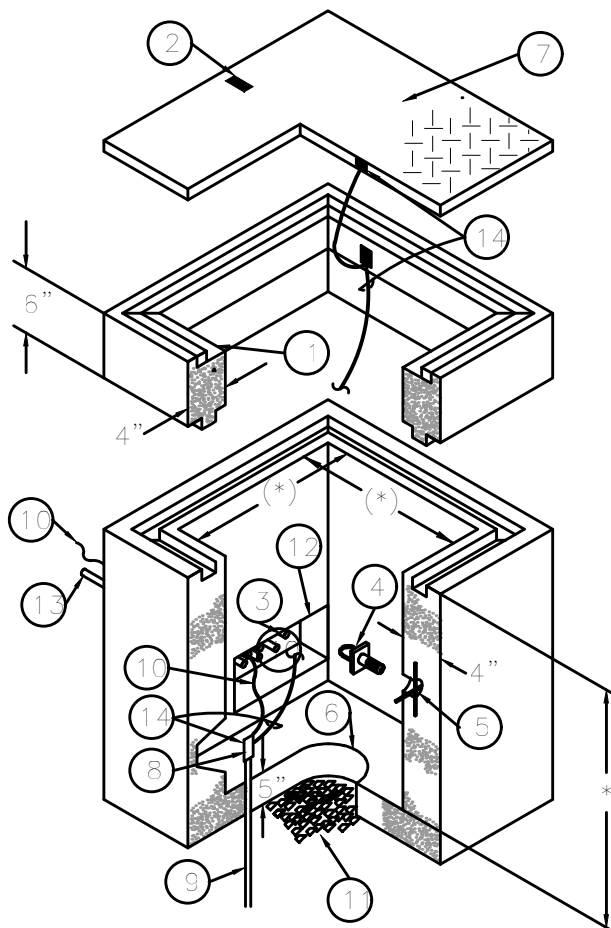
LUMINAIRE DESCRIPTION								
TYPE	SOURCE	WATTAGE	MAX AMPS	LUMENS	L90	L80	L70	QUANTITY
TLC-LED-1500	LED 5700K - 75 CRI	1410 WATTS	3.6	181,000	>120,000	>120,000	>120,000	28
TLC-LED-1200	LED 5700K - 75 CRI	1170 WATTS	3.0	150,000	>120,000	>120,000	>120,000	
TLC-LED-900	LED 5700K - 75 CRI	880 WATTS	2.3	104,000	>120,000	>120,000	>120,000	
TLC-BT-575 LED	LED 5700K - 75 CRI	575 WATTS	1.5	52,000	>120,000	>120,000	>120,000	8

CALCULON GRID SUMMARY							
GRID NAME	CALCULATION METRIC	AVERAGE	MINIMUM	MAXIMUM	MAX/MIN	ZONES OPERATING	# FIXTURES OPERATING
INFIELD	HORIZONTAL ILLUMINANCE	52.33	38.7	64.33	1.66	A	36
OUTFIELD	HORIZONTAL ILLUMINANCE	33.28	25.38	44.79	1.76	A	36

GENERAL NOTES:

1. ALL STEEL COMPONENTS OF PULL BOX SHALL BE HOT DIPPED GALVANIZED.
2. PROVIDE EXTENSIONS AS REQUIRED.
3. INCREASE SIZE OF PULLBOX IF NECESSARY FOR SPECIFIC INSTALLATION.
4. PULLBOXES TO BE PRECAST WITH VERTICAL AND HORIZONTAL REBARS, BROOKS, A.C. MILLER, HUGHES, MACK, OR EQUAL.
5. FIELD FABRICATED PULLBOXES ARE NOT ACCEPTABLE.
6. SUBMIT SHOP DRAWING(S).
7. COMMUNICATIONS CONDUITS ENTERING PULLBOX SHALL BE ALIGNED ON OPPOSITE WALLS OF PULLBOX AT THE SAME ELEVATION.
8. GROUT AROUND CONDUIT ENTRIES TO PREVENT SAND INTRUSION INTO PULLBOX.

(*) = BOX SIZE = 36"W MIN x 36"L MIN X 36"D MIN



NOTES

- HOT DIPPED GALVANIZED ARMOR FRAME
- LIFTING EYE
- 6" x 9" KNOCKOUT (4 PLACES)
OR AS REQUIRED.
- 1" PULL EYE (4 REQUIRED)
- 1" THREADED SPIDER INSERT (4)
- SUMP
- HOT DIPPED GALVANIZED TRAFFIC
RATED COVER AND FRAME. BEAD
WELD LETTERS ON COVER TO READ
"ELECTRIC" OR "COMMUNICATIONS"
AS APPLICABLE.
- CONNECTIONS TO GROUND ROD TO
BE MADE WITH EXOTHERMIC WELD.
- GROUND ROD.
- ONE (1) 2 #AWG CU BARE STRANDED
GROUND BOND WIRE CONNECTING
ALL GROUND RODS TOGETHER.
GROUND WIRE TO BE 6" DIRECTLY
ABOVE CONDUIT.
- 18" BED OF CRUSHED ROCK FOR
DRAINAGE.
- SEAL ALL CONDUIT ENDS.
- CONDUITS.
- PULL BOX COVER GROUNDED
WITH #6 STRANDED INSULATED
CONDUCTOR FROM PULL BOX
COVER TO ARMOR FRAME THEN
TO GROUND ROD. SEE
SPECIFICATIONS.

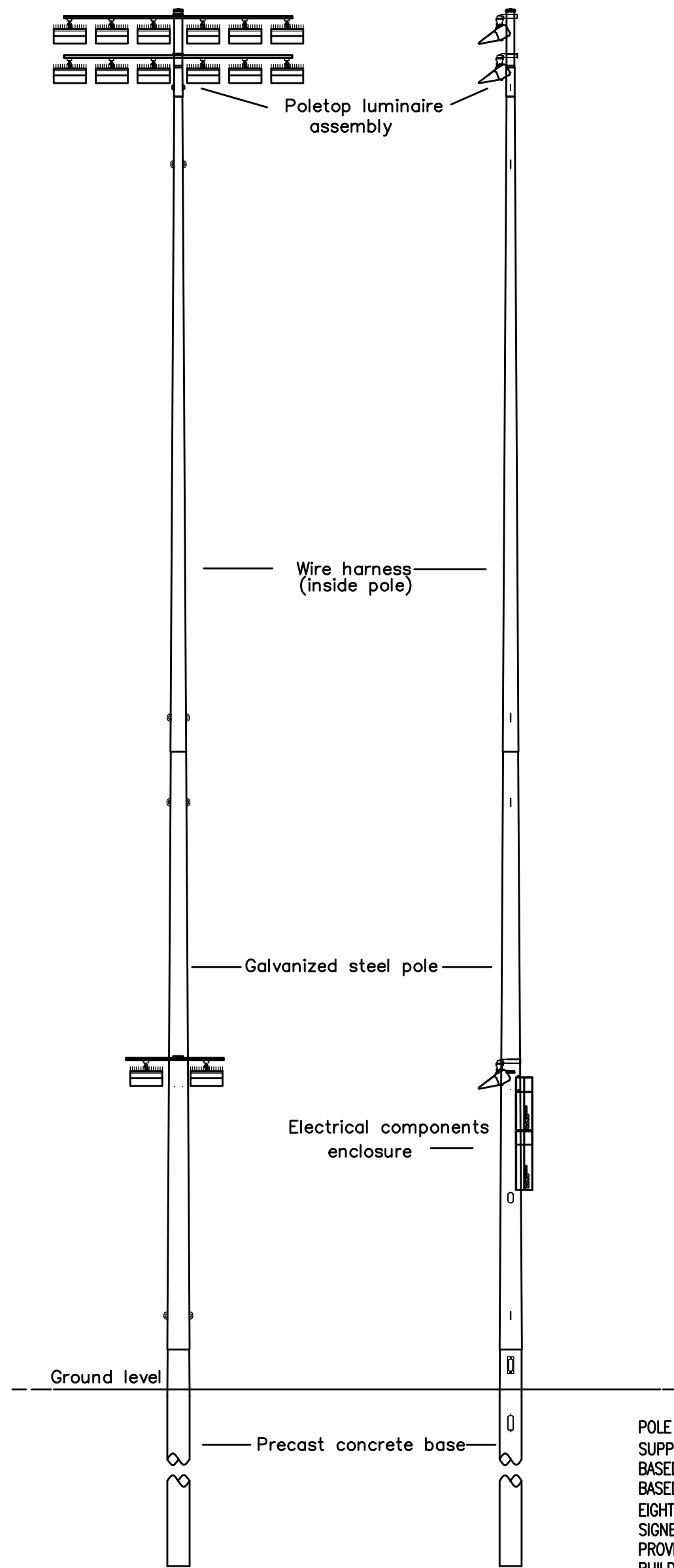
A TOTAL OF FIVE (5) FLUSH GRADE HANDHOLES AS SHOWN IN THIS FLUSH GRADE HANDHOLE DETAIL - 'PBD2' SHALL BE INCLUDED IN BID. BOXES SHALL BE USED WITH APPROVAL OF ENGINEER TO ADDRESS ROUTING CHALLENGES THAT ARISE DURING CONSTRUCTION. ANY BOXES NOT USED IN THE COURSE OF CONSTRUCTION SHALL BE TURNED OVER TO THE OWNER.

FLUSH GRADE HANDHOLE DETAIL - 'PBD2'

N.T.S.

PBD2-AWB

REV. 6/29/2017



POLE EMBEDMENTS SHALL BE DESIGNED BY POLE SUPPLIER'S FLORIDA LICENSED PROFESSIONAL ENGINEER BASED ON A 155 MPH WIND SPEED. DESIGN SHALL BE BASED ON ASCE 7-22 AND THE FLORIDA BUILDING CODE EIGHTH EDITION (2023). PRIOR TO POLE FABRICATION SIGNED AND SEALED EMBEDMENT DETAILS SHALL BE PROVIDED TO ENGINEER AND VOLUSIA COUNTY SCHOOLS BUILDING DEPARTMENT.

TYPICAL POLE CONFIGURATION

NOT TO SCALE

MATERN

Mechanical • Electrical • Plumbing • Fire Protection
Technology • Commissioning • Energy Engineers

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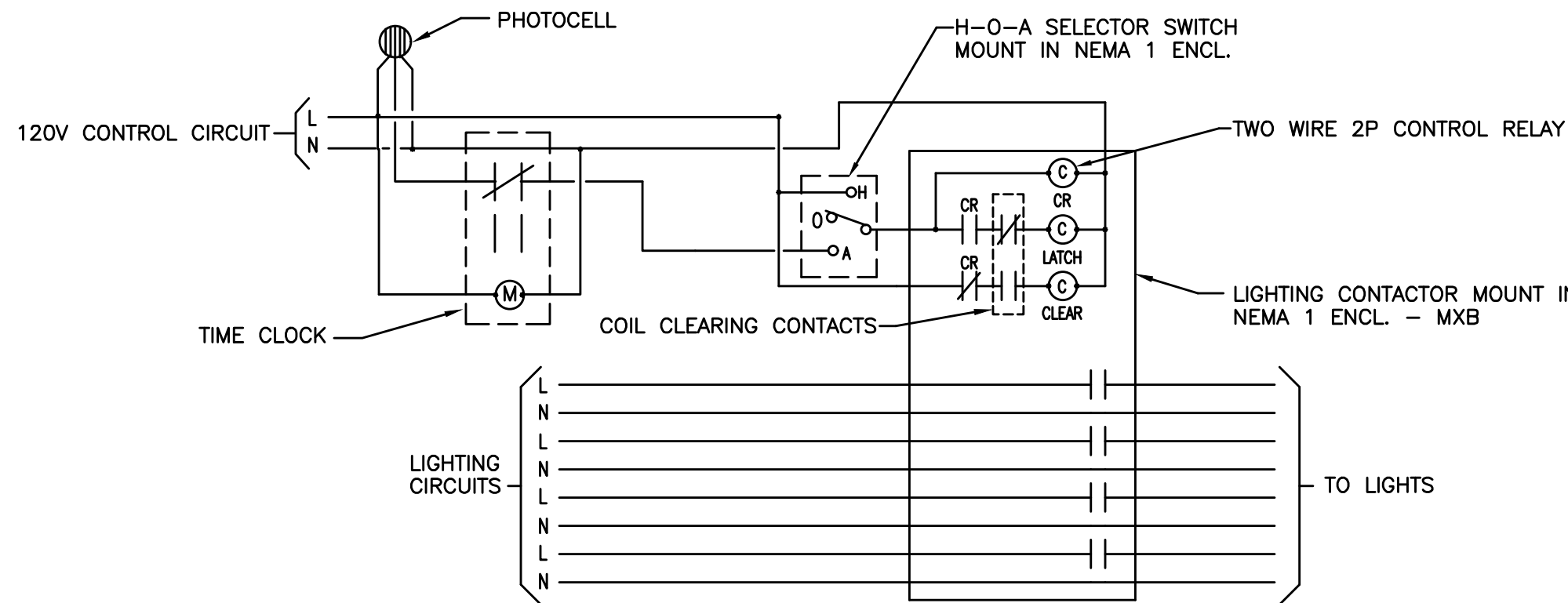
NEW SMYRNA BEACH HIGH
BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

1015 10th St, NEW SMYRNA BEACH, FL 32168

Engineer Adrian Baus		ARCHENGHER OF RECORD
DESIGNED BY AWB	DRAWN BY MMB/AWB	
ISSUE DATE 03/23/2026	AE PROJECT NUMBER 2025-134	
SHEET TITLE		
DETAILS		
DRAWING NO.		

E501

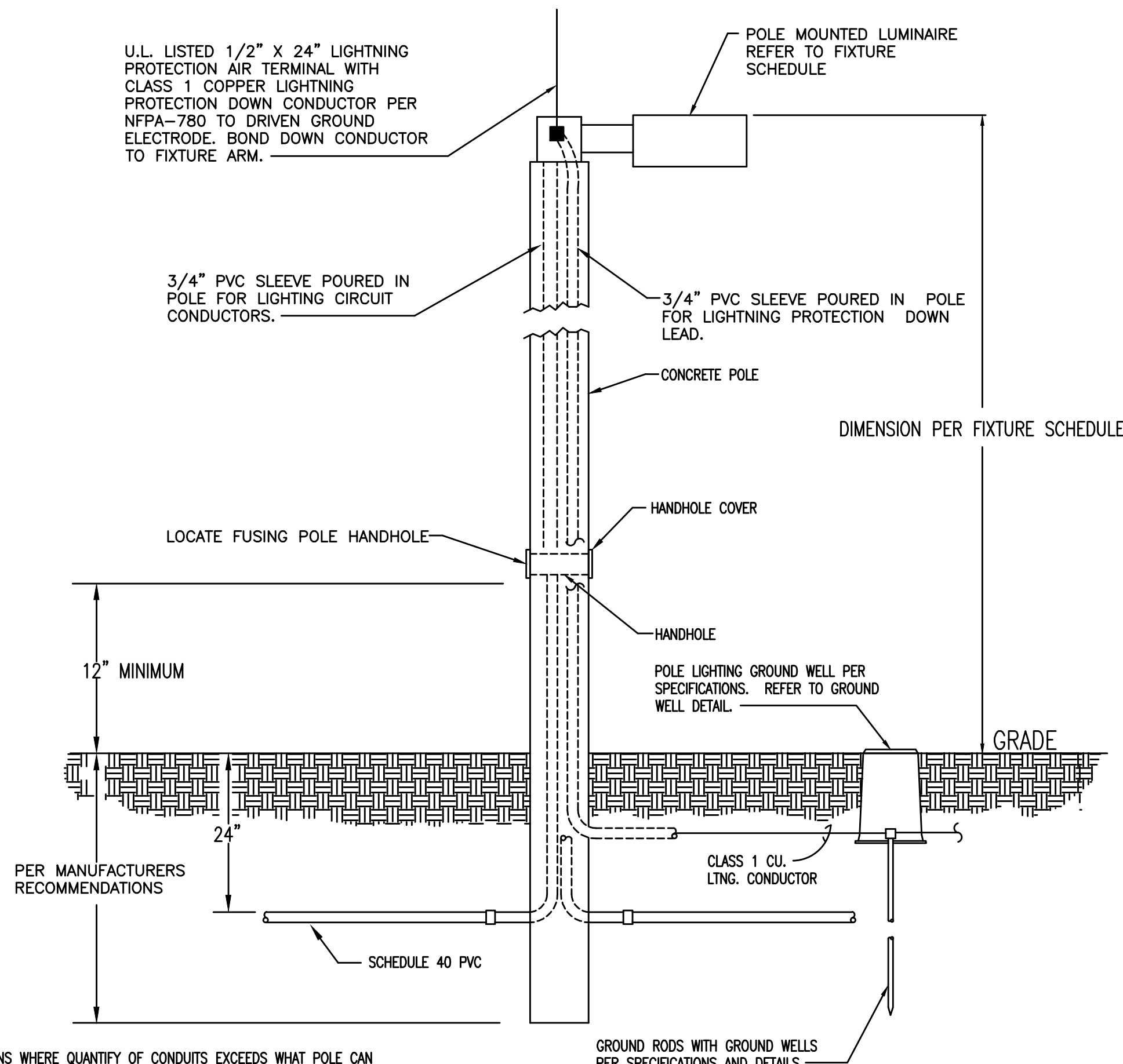
DEVICE	DESIGN SELECTION	APPROVED SUBSTITUTE	APPROVED SUBSTITUTE	VOLTAGE	#CONTACTS REQ.
PHOTOCELL	TORK #2101 (2104)	PARAGON #CW201-00 (CW201-27)	PRECISION #T-15 (T-168)	120V(277)	-----
TIME CLOCK	TORK #220L (W222L)	PARAGON #7218-00 (7218-27)	PRECISION #SDT218-00 (SDT718-20)	120V(277)	2-N.O. 2-N.C.
HOA SEL. SW.	SQ. D. #K5438 B #KA-1	G.E. #CR2940UB0202B	ALLEN BRADLEY #000T-J2A	600V MAX.	1-N.O. 1-N.C.
CONTACTOR	SQ. D. #JSMC 38B WITH CONTROL RELAY	G.E. #JRM68MB WITH CONTROL RELAY	ALLEN BRADLEY #70L0-B4 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 HEAVY AND HAVE 30 AMP CONTINUOUS RATING FOR TUNGSTEN & BALLAST LIGHTING AND RESISTIVE HEATING LOADS.					



PHOTOCONTROL TIME CLOCK SCHEMATIC - MXB

NTS LCS9-MODIFIED

NOTE: PROVIDE, INSTALL & CONNECT ADDITIONAL CONTACTS AND/OR CONTACTORS COMPLETE WITH ENCLOSURES AS REQUIRED PER APPLICATION, SEE ELECTRICAL DRAWINGS TO DETERMINE EXACT NUMBER OF DEVICES. SEE ELECTRICAL DRAWINGS FOR ACTUAL CIRCUIT NUMBERS. PROVIDE MINIMUM OF 2 ADDITIONAL/SPARE CONTACTS.



AT POLE LOCATIONS WHERE QUANTITY OF CONDUITS EXCEEDS WHAT POLE CAN ACCEPT OR WHERE CONDUIT/POLE GEOMETRY DOES NOT PERMIT MORE THAN ONE CONDUIT TO ENTER A POLE, A SUITABLE PULL BOX SHALL BE PROVIDED ADJACENT TO POLE AND A SINGLE CONDUIT RUN INTO POLE. ALL CONDUCTORS FROM OTHER CONDUITS SHALL PASS THROUGH HANDHOLE UNBROKEN, UP INTO POLE WITH ALL SPLICES AND JOINTS IN WIRING BEING MADE ABOVE GRADE IN POLE HAND HOLE. PULL BOX SHALL BE A MINIMUM OF 12"x12"x18" DEEP. PULL BOX SHALL BE RATED TIER 15 OR GREATER RATING IN GRASS AREAS AND TIER 22 IN PAVED AREAS INCLUDING PARKING LOTS/SIDEWALKS

POLE EMBEDMENTS SHALL BE DESIGNED BY POLE SUPPLIER'S A FLORIDA LICENSED PROFESSIONAL ENGINEER BASED ON A 155 MPH WIND SPEED. DESIGN SHALL BE BASED ON ASCE 7-22 AND THE FLORIDA BUILDING CODE EIGHTH EDITION (2023). PRIOR TO POLE FABRICATION SIGNED AND SEALED EMBEDMENT DETAILS SHALL BE PROVIDED TO ENGINEER AND VOLUSIA COUNTY SCHOOLS BUILDING DEPARTMENT.

BASE DETAIL - CONCRETE LIGHT POLE

N.T.S. NOTE: EMBEDMENT OF POLE SHALL BE PER MODIFIED
DETAIL BY STRUCTURAL ENGINEER.

FIXTURE TYPES SLB, SLC, AND SLCBC TO BE PROVIDED WITH FIELD REPLACEABLE SURGE PROTECTION DEVICE THAT PROVIDES 20KA AND 10KV PROTECTION MEETING ANSI/IEEE C62.41.2 CATEGORY C HIGH AND SURGE LOCATION CATEGORY C3.

LIGHTING FIXTURE SCHEDULE									
VCS - NEW SMYRNA HIGH									
TYPE	DESCRIPTION	DESIGN SELECTION	APPROVED SUBSTITUTION	APPROVED SUBSTITUTION	VOLTS	CCT	WATTAGE	LUMENS	LAMP
SLB	ONE (1) ARM MOUNTED LED SHOEBOX LUMINAIRE, TYPE V DISTRIBUTION, DARK BRONZE COLOR, MOUNT 20'-0" AFG TO DIRECT BURIED CONCRETE POLE WITH 155 MPH WIND LOADING BASED ON EMBEDMENT IN SAND	CURRENT LIGHTING # ASL1 160L-115 4K7 50W UNV MAF SP DBT SEMINOLE POLES # 28FT (NOTE 9 & 10)	LEOTEK LIGHTING # POLE: PRE-CAST SPECIALTIES # (NOTE 9 & 10)	LITHONIA/ACUITY#	277	4000K	110	15,632	LED
SLC	ONE (1) ARM MOUNTED LED SHOEBOX LUMINAIRE, TYPE III DISTRIBUTION, DARK BRONZE COLOR, MOUNT 20'-0" AFG TO DIRECT BURIED CONCRETE POLE WITH 155 MPH WIND LOADING BASED ON EMBEDMENT IN SAND	CURRENT LIGHTING # ASL1 160L-115 4K7 3 UNV MAF SP DBT SEMINOLE POLES # 28FT (NOTE 9 & 10)	LEOTEK LIGHTING # POLE: PRE-CAST SPECIALTIES # (NOTE 9 & 10)	LITHONIA/ACUITY#	277	4000K	110	15,413	LED

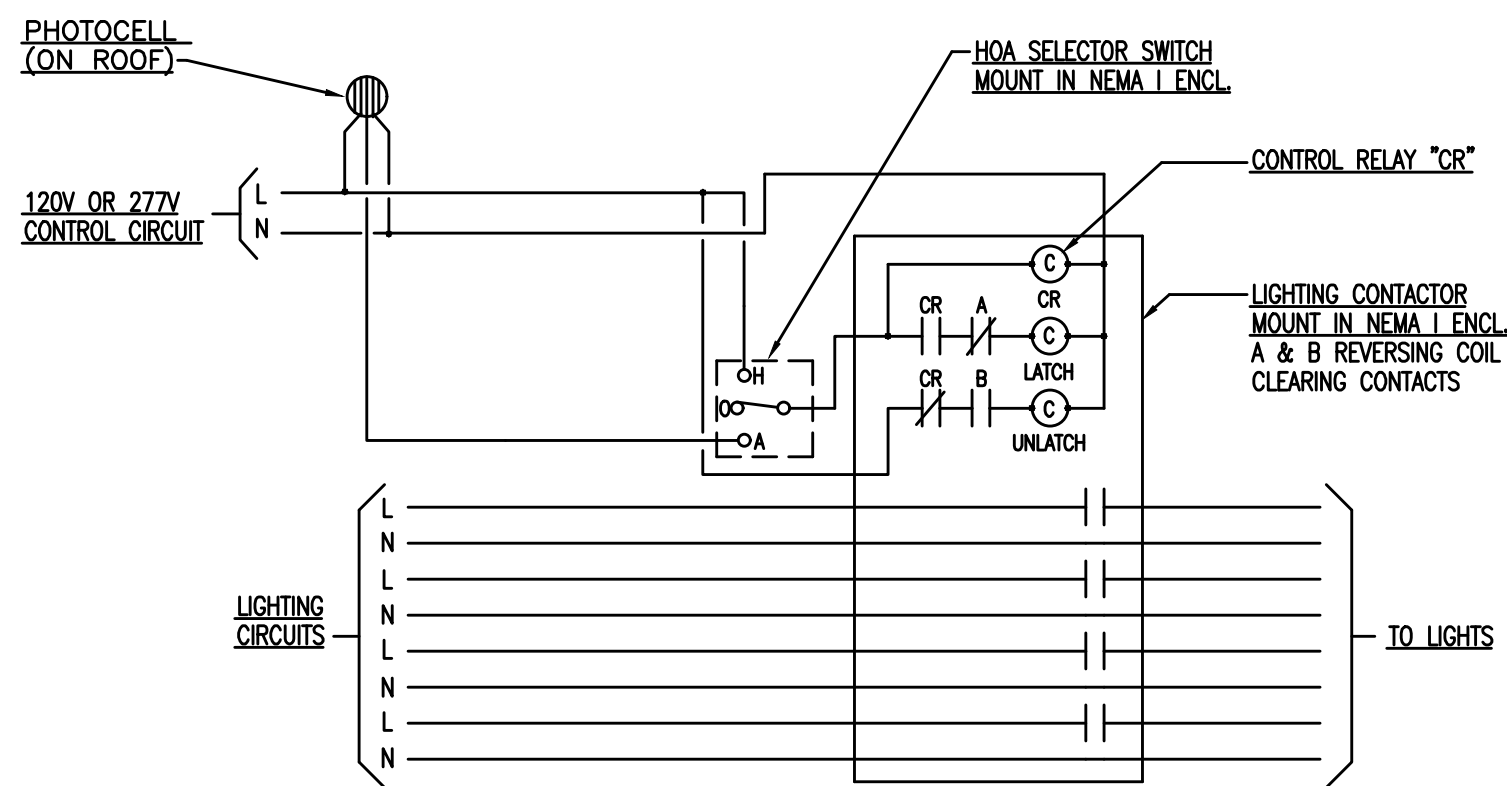
LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

- (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 WARRENTY AGAINST LOSS OF PERFORMANCE AND DEFECTS IN MATERIALS AND WORKMANSHIP FOR THE LUNINAIRES 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.

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.D.T.#K5438 B #KA-1	C.E.#CR249A00B202B	ALLEN BRADLEY #800TT-J2A	600V MAX.	1-N.O. 1-N.C.
CONTRACTOR	SW. WITH CONTROL RELAY	SW. WITH CONTROL RELAY	ALLEN BRADLEY #170D-B4 SERIES WITH CONTROL RELAY	120V(277)	4-N.O.

() INDICATES CAT # FOR 277V. SELECT DEVICE TO MATCH CONTROL CIRCUIT VOLTAGE.

NOTE: LIGHTING CIRCUIT SHALL BE MECHANICALLY HELD AND HAVE 30 AMP CONTINUOUS RATING FOR TUNGSTEN & BALLAST LIGHTING AND RESISTIVE HEATING LOADS.



PHOTOCONTROL CONTACTOR MXA SCHEMATIC - MXA

NTS LCS8-MODIFIED

NOTE: PROVIDE, INSTALL & CONNECT ADDITIONAL CONTACTS AND/OR CONTACTORS COMPLETE WITH ENCLOSURES AS REQUIRED PER APPLICATION, SEE ELECTRICAL DRAWINGS TO DETERMINE EXACT NUMBER OF DEVICES. SEE ELECTRICAL DRAWINGS FOR ACTUAL CIRCUIT NUMBERS. PROVIDE MINIMUM OF 2 ADDITIONAL/SPARE CONTACTS.

[illegible]

NEW SMYRNA BEACH HIGH
BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

1015 10th St, NEW SMYRNA BEACH, FL 32168

ARCH/ENGR OF RECORD

Engineer
Adrian Baus

DESIGNED BY

AWB

ISSUE DATE

03/23/2026

SHEET TITLE

DETAILS

DRAWING NO.

E503

SOFTBALL FIELD POLE /FIXTURE SCHEDULE											
POLE	DECRPTION	#LUMINAIRES/POLE	LUMINAIRE MODEL	POLE HEIGHT	FIXTURE GROUP MOUNTING HEIGHT	CONTACTOR	FLA	CONTACTOR SIZE	CIRCUIT SIZE	ZONE	PANEL /CKT
A2	SOFTBALL	1	MUSCO TLC-LED-1200	80'	70'	C7	5.17	30	15	B	HBBF-2:4:6
		2	MUSCO TLC-LED-550		70'						
		1	MUSCO TLC-BT-575		16'						
A3	SOFTBALL	1	MUSCO TLC-LED-1200	70'	70'	C8	5.17	30	15	B	HBBF-8:10:12
		2	MUSCO TLC-LED-550		70'						
		1	MUSCO TLC-BT-575		16'						
B3	SOFTBALL	5	MUSCO TLC-LED-1500	70'	70'	C9	12.47	30	20	B	HBBF-14:16:18
			MUSCO TLC-LED-550		70'						
		1	MUSCO TLC-BT-575		16'						
B4	SOFTBALL	4	MUSCO TLC-LED-1500	70'	70'	C10	12.47	30	20	B	HBBF-20:22:24
			MUSCO TLC-LED-550		70'						
		1	MUSCO TLC-BT-575		16'						
TOTAL		19					35.28				

LUMINAIRE DESCRIPTION								
TYPE	SOURCE	WATTAGE	MAX AMPS	LUMENS	L90	L80	L70	QUANTITY
TLC-LED-1500	LED 5700K - 75 CRI	1410 WATTS	3.6	181,000	>120,000	>120,000	>120,000	9
TLC-LED-1200	LED 5700K - 75 CRI	1170 WATTS	3.0	150,000	>120,000	>120,000	>120,000	2
TLC-LED-900	LED 5700K - 75 CRI	880 WATTS	2.3	104,000	>120,000	>120,000	>120,000	
TLC-LED-550	LED 5700K - 75 CRI	540 WATTS	1.4	67,000	>120,000	>120,000	>120,000	4
TLC-BT-575 LED	LED 5700K - 75 CRI	575 WATTS	1.5	52,000	>120,000	>120,000	>120,000	4

CALCULATON GRID SUMMARY							
GRID NAME	CALCULATION METRIC	AVERAGE	MINIMUM	MAXIMUM	MAX/MIN	ZONES OPERATING	# FIXTURES OPERATING
INFIELD	HORIZONTAL ILLUMINANCE	50.29	34.91	64.33	1.84	A	19
OUTFIELD	HORIZONTAL ILLUMINANCE	31.43	18.42	42.88	2.33	A	19

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NEW SMYRNA BEACH HIGH
BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

Engineer Adrian Baus		ARCHIVER OF RECORD	
DESIGNED BY AWB		DRAWN BY MM/AWB	
ISSUE DATE 03/23/2026		AE PROJECT NUMBER 2025-134	
SHEET TITLE			
DETAILS			
DRAWING NO.			
E504			

[illegible]

GENERAL NOTES:

- 1) CONDUIT SIZE IS BASED ON 2020 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 SCCR RATING, PROVIDE FUSE IN FUSIBLE SWITCHES OR PROVIDE UPSTREAM CIRCUIT BREAKER, WHEN NON-FUSIBLE 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" COPPERWELD DRIVEN GROUND RODS.
- (4) COORDINATE PLACEMENT OF EQUIPMENT WITH VCS PROJECT MANAGER.
- (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 CIRCUIT BREAKER FOR NEW PANEL HBBF.
- (9) NEMA 4SS HINGED DOOR ENCLOSURE FOR PULL BOX. SIZE PER NEC.
- (10) DIRECTIONALLY BORE FEEDER CONDUITS ACROSS SITE AT A DEPTH OF 5 FEET OR GREATER BELOW GRADE
- (11) COUNTERPOISE CONDUCTOR MAY BE IN SAME BORE AS FEEDER.
- (12) MOUNT EQUIPMENT ON FREE STANDING RACK. REFER TO DETAILS.
- (13) INTERCONNECT SWITCHBOARD A GROUNDING WITH NEW PANEL GROUNDING USING A #2 BARE COPPER COUNTERPOISE CONDUCTOR.
- (14) RECONDITION EXISTING SWITCHBOARD A GROUNDING. PROVIDE ADDITIONAL GROUND WIRE WITH WELL IF EXISTING GROUND ROD AT SWITCHBOARD A EXCEEDS 5 OHMS.
- (15) STEP DOWN TRANSFORMER. 480V, 3Ø PRIMARY. 120/208V, 3Ø, 4W SECONDARY; 150' C RISE. WINDINGS OF TRANSFORMER SHALL BE COPPER AND INSULATION SHALL BE RATED FOR NOT LESS THAN 220' C TRANSFORMER SHALL HAVE A 3R STAINLESS ENCLOSURE CONSTRUCTED FROM 304 OR 316 STAINLESS STEEL.
- (16) PROVIDE 10 INCH (MINIMUM) THICK REINFORCED WALKWAY KEEPING PAD FOR TRANSFORMER. TOP OF PAD SHALL BE NOT LESS THAN 6 INCHES ABOVE FINISHED GRADE AND BOTTOM OF PAD NOT LESS THAN 4 INCHES BELOW GRADE.
- (17) COPPER GROUND WIRE TO PANEL GROUND RODS SIZED PER N.E.C. TABLE 250.66 BUT IN NO CASE SMALLER THAN A #2.
- (18) PROVIDE ADDITIONAL SURGE PROTECTION DEVICE FOR EXISTING SWITCHBOARD. PROVIDE 3 POLE 30 AMP CIRCUIT BREAKER FOR CONNECTION OF ADDITIONAL SURGE PROTECTION DEVICE.

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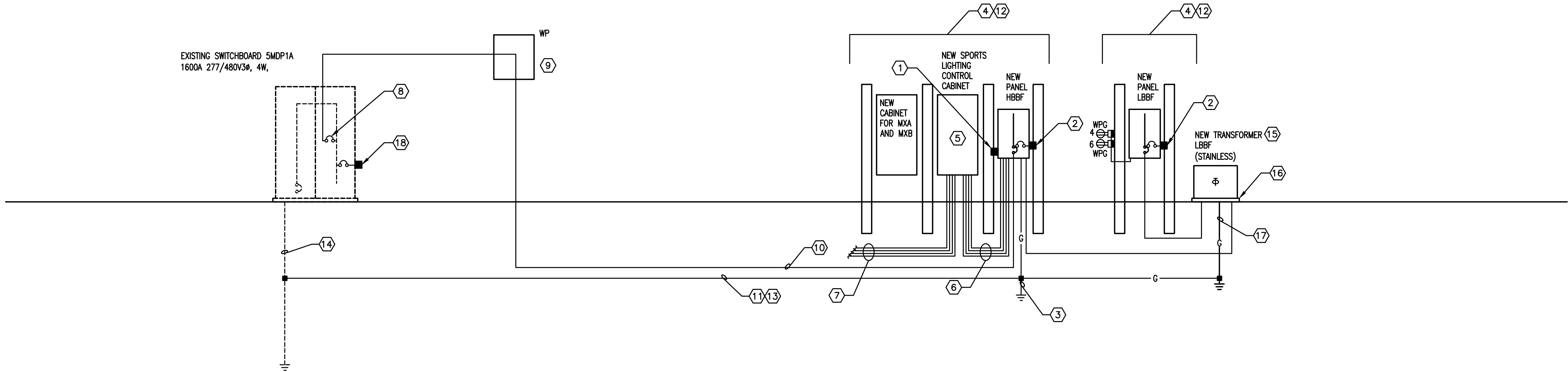
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[illegible]

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BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

1015 10th St, NEW SMYRNA BEACH, FL 32168



POWER RISER DIAGRAM

ARCH/ENGR OF RECOR

Engineer
Adrian Baus

Adrian Baus

DESIGNED BY

AWB

DRAWN BY

MM/AWE

ISSUE DATE

ISSUE DATE

AE PROJECT NUMBER
2025-13

SHEET TITLE

POWER RISER DIAGRAM

DRAWING P

E601

						COPYRIGHT ME. LLC 06/01/03							VERSION: C1x68							REVISED: 09/09/21														
VOLTS L/N:		277																		EXISTING : NO														
VOLTS P/H :		480				PANEL : HBBF														SECTIONS : 1														
PHASE :		3				MLO(****)														NEMA 4SS : YES														
MOUNTING :		Surface				MCB _____ 250 _____																												
TYPE :						SH.TRIP _____																												
MFR :		SIEMENS				_____																												
GENERAL NOTES: (1) ALL C.B.'S FEEDING HVAC EQUIPMENT TO BE HACR TYPE. (2) ALL C.B.'S FEEDING ELEV EQUIP TO BE SHUNT-TRIP TYPE. (3) ALL C.B.'S FEEDING ELEV EQUIP TO BE SIZED AS REQ'D BY MFR. (4) ALL C.B.'S FEEDING HID LTG TO BE HD RATED. (5) NO MULTIWIRE BRANCH CKTS ARE ALLOWED (6) NOT USED. <-----AIC RATING-----> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%;">SERIES RATED FULLY RATED</td> <td style="width:20%; text-align:center; border-top: 1px solid black;">22</td> <td style="width:40%;">KA(*) KA</td> </tr> </table> (*) NOTE: MAY REQUIRE FULL RATING TO ACHIEVE NOTES AND REFERENCE NOTES: MFR = SIZE CB PER MFR. RECOMMENDATIONS. & = NEW CB IN EXIST SPACE & = REPLACE EXIST CB WITH NEW SH = SHUNT TRIP C.B. AF = ARC FAULT CB G1 GCFCI CB G2 GPPE CB																									SERIES RATED FULLY RATED	22	KA(*) KA							
SERIES RATED FULLY RATED	22	KA(*) KA																																
TOTAL AMPS A PH		129				(****) NOTE: SIZE SHOWN IS MINIMUM ACCEPTABLE MLO AMPERAGE.														OPTIONAL CALC		NO												
TOTAL AMPS B PH		121				INCREASE SIZE IF REQUIRED TO ACHIEVE QUANTITY OF POLES OR BREAKER SIZE/AIC RATING AS CALLED FOR IN SCHEDULE.														CONNECTED LOAD		103 KVA		124 AMPS										
TOTAL AMPS C PH		121																		DEMAND		103 KVA		124 AMPS										
INFO CODE:																				DIVERSITY		103 KVA		124 AMPS										
																				TRANSFORMER SIZE				KVA										
SECTION 1 WITH MAINS																																		
LOAD															LOAD										WIDTH: 20 DEPTH: 5.75									
DESCRIPTION					CONN	TYPE	AMPS	AMPS	AMPS	C.B. AMPS	C.B. POLE	REF NOTE	CKT. NO.	CKT. NO.	REF NOTE	C.B. POLE	C.B. AMPS	AMPS	AMPS	AMPS	DESCRIPTION	CONN	TYPE											
POLE A1 (BASEBALL)					11	2.0	11			20	3		1	2		3	15	6			POLE A2 (SOFTBALL)	6	2.0											
*****					11	2.0		11		*****		3	4		*****				6		*****	6	2.0											
POLE A2 (BASEBALL)					11	2.0			11	*****		5	6		*****				6		*****	6	2.0											
*****					11	2.0	11			20	3		7	8		3	15	6	6		POLE A3 (SOFTBALL)	6	2.0											
*****					11	2.0		11		*****		9	10		*****				6		*****	6	2.0											
POLE B1 (BASEBALL)					13	2.0	13			20	3		13	14		3	20	13		6	*****	13	2.0											
*****					13	2.0			13	*****		15	16		*****			13		*****	13	2.0												
*****					13	2.0		13		*****		17	18		*****			13		*****	13	2.0												
POLE B2 (BASEBALL)					12	2.0	12			20	3		19	20		3	20	13		13	*****	13	2.0											
*****					12	2.0		12		*****		21	22		*****			13		*****	13	2.0												
*****					12	2.0		12		*****		23	24		*****			13		*****	13	2.0												
POLE C1 (BASEBALL)					13	2.0	13			20	3		25	26		1	20	8		13	*****	8	2.0											
*****					13	2.0		13		*****		27	28		1	20	8		8	*****	8	2.0												
*****					13	2.0		13		*****		29	30		1	20			8	*****	8	2.0												
POLE C2 (BASEBALL)					13	2.0	13			20	3		31	32		1	20	8			SITE LIGHTING	8	2.0											
*****					13	2.0		13		*****		33	34		1	20				SITE LIGHTING	8													

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VOLTS L/N: 120 VOLTS PH: 208 PHASE: 3 MOUNTING: Surface TYPE: P1 MFR: SIEMENS										PANEL: LBFF MLO(****) _____ MCB 175 SH.TRIP _____										LOCATION: _____										EXISTING: NO SECTIONS: 1 NEMA ASS: YES																			
GENERAL NOTES: (1) ALL C.B.'S FEEDING HVAC EQUIPMENT TO BE HACR TYPE. (2) ALL C.B.'S FEEDING ELEV EQUIP TO BE SHUNT-TRIP TYPE. (3) ALL C.B.'S FEEDING ELEV EQUIP TO BE SIZED AS REQ'D BY MFR. (4) ALL C.B.'S FEEDING HID LTG TO BE HID RATED. (5) NO MULTIWIRE BRANCH CKTS ARE ALLOWED (6) NOT USED.																														<-----AIC RATING-----> SERIES RATED FULLY RATED 10 KA(*) KA (1) NOTE: MAY REQUIRE FULL RATING TO ACHIEVE										NOTES AND REFERENCE NOTES: MFR = SIZE CB PER MFR. RECOMMENDATIONS. S = NEW CB IN EXIST SPACE & = REPLACE EXIST CB WITH NEW SH = SHUNT TRIP C.B. AF = ARC FAULT CB G1 = GFCI CB G2 = GFPE CB									
TOTAL AMPS A PH 5 TOTAL AMPS B PH 4 TOTAL AMPS C PH 4 INFO CODE: _____										(****) NOTE: SIZE SHOWN IS MINIMUM ACCEPTABLE MLO AMPERAGE. INCREASE SIZE IF REQUIRED TO ACHIEVE QUANTITY OF POLES OR BREAKER SIZE/AIC RATING AS CALLED FOR IN SCHEDULE.										OPTIONAL CALC CONNECTED LOAD 2 KVA 5 AMPS DEMAND 2 KVA 5 AMPS DIVERSITY 2 KVA 5 AMPS TRANSFORMER SIZE 45.0 KVA																													
SECTION 1 WITH MAINS																														WIDTH: 20 DEPTH: 5.75																			
LOAD																				LOAD																													
DESCRIPTION	CONN	TYPE	AMPS	AMPS	AMPS	C.B. AMPS	C.B. POLE	REF NOTE	CKT. NO.	CKT. NO.	REF NOTE	C.B. POLE	C.B. AMPS	AMPS	AMPS	AMPS	DESCRIPTION	CONN	TYPE																														
POLE A2 RECEPTACLE	1	4.0	1			20	1		1	2		1	20	2	1		MUSCO LIGHTING CONTROLS	2	5.0																														
POLE A1 RECEPTACLE	1	4.0	1			20	1		3	4		1	20				RACK RECEPTACLES	1	4.0																														
POLE B1 RECEPTACLE	1	4.0		1		20	1		5	6		1	20			1	RACK RECEPTACLES	1	4.0																														
POLE B4 RECEPTACLE	1	4.0	1			20	1		7	8		1	20				SPARE		0.2																														
POLE A3 RECEPTACLE	1	4.0		1		20	1		9	10		1	20				SPARE		0.2																														
POLE B3 RECEPTACLE	1	4.0		1		20	1		11	12		1	20				SPARE		0.2																														
SPARE		0.2				20	1		13	14		1	20				SPARE		0.2																														
SPARE		0.2				20	1		15	16		1	20				SPARE		0.2																														
SPARE		0.2				20	1		17	18		1	20				SPARE		0.2																														
SPARE		0.2				20	1		19	20		1	20				SPARE		0.2																														
SPARE		0.2				20	1		21	22		1	20				SPARE		0.2																														
SPARE		0.2				20	1		23	24		1	20				SPARE		0.2																														
SPACE									1	25		1					SPACE																																
SPACE									1	27		1					SPACE																																
SPACE									1	29		1					SPACE																																
SPACE									1	31		1					SPACE																																
SPACE									1	33		1					SPACE																																
SPACE									1	35		1					SPACE																																
SPACE									1	37		30					SPD		18.0																														
SPACE									1	39									18.0																														
SPACE									1	41									18.0																														
SUBFEED LUGS/BREAKER																				SUBFEED LUGS/BREAKER																													
S.F.										S.F.																																							
S.F.										S.F.																																							

TYPE WRITTEN PANEL DIRECTORIES SHALL BE PROVIDED FOR EACH PANEL AS REQUIRED BY THE 2020 NEC. DIRECTORIES SHALL IDENTIFY LOAD AND THE ROOM(S) WHERE LOADS ARE LOCATED IN SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS. ROOM NUMBERS SHALL BE ACTUAL ROOM NUMBERS USED FOR ROOM SIGNAGE.	SCHEDULE KEY	
	HBBF	LBBF

MATERN
Mechanical • Electrical • Plumbing • Fire Protection
Technology • Commissioning • Energy Engineers

**130 Candace Drive
Maitland, FL 32751**

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[illegible]

NEW SMYRNA BEACH HIGH
BASEBALL AND SOFTBALL FIELD LIGHTING
VCS Project NO. 2648276
1015 10th St, NEW SMYRNA BEACH, FL 32168

Engineer Adrian Baus		ARCHITENGER OF RECORD	
DESIGNED BY AWB	DRAWN BY MM/AWB		
SUE DATE 03/23/2026	AE PROJECT NUMBER 2025-134		
SHEET TITLE SCHEDULES			
DRAWING NO. E602			