

## ADDENDUM NO. 3

<b>Issue Date:</b>	March 8, 2024
<b>School / Facility Name:</b>	DeLand High
<b>Project Name:</b>	Softball Field Lighting
<b>Owner's Project No.:</b>	2448067

<b>Owner:</b>	School Board of Volusia County Florida 200 N. Clara Avenue, DeLand Florida 32720
<b>Owner's Project Manager:</b>	James Bott
<b>Project Manager's Location:</b>	3750 Olson Drive, Daytona Beach Florida 32124

<b>Engineer's Representative:</b>	Adrian W. Baus, PE, RCDD
<b>Engineer's Project No.:</b>	2023-130

The following modifications shall be incorporated to the previously distributed construction documents. Any questions regarding these modifications should be directed to the project architect or engineer for consideration.

**The Drawings and Specifications are hereby modified as follows:**

### QUESTIONS/RESPONSES

**QUESTION 1:** Page E503 shows NEMA 3R enclosures being mounted on the sidewalk lighting poles for the fusing & lightning arrestor. NEMA 3R still okay for these or are we switching everything to NEMA 4X stainless steel?

**RESPONSE:** Exterior enclosures for this application to be NEMA 3R stainless steel. NEMA 4SS may be utilized in place of NEMA 3R Stainless. Also note based on a different question the enclosures on the area light poles have been eliminate.

**QUESTION 2:** Plans do not clarify the height of the average foot candles for the Field Lighting. What is the height for the average foot candle per Page E102? Is it at field level or 36" above field level? Just confirming Luminaire Quantities will be correct.

**RESPONSE:** Foot-candle values are at 36" above the field level in accordance with IES standards.

**QUESTION 3:** Are neutrals required for the pole feeders?

**RESPONSE:** Neutrals are not required as Musco fixtures will utilize 480 volt ballasts.

**QUESTION 4:** Is intent for pole feeder and receptacle circuit to be run in the same conduit?

**RESPONSE:** Yes. The configuration of the pole base does not easily facilitate having separate conduits.

**QUESTION 5:** The 10x10' fenced area for new panels may end up being too small, depending on final equipment layout including adjustments required to avoid existing underground installations, etc.

**RESPONSE:** Bidders shall include fencing for up to a 10'X20' area. Final fence area dimensions to coordinated in field with VCS Project Manager and Engineer.

**QUESTION 6:** Most LED shoe box manufacturers are now offering fixtures that include surge protection in the fixture. If fixtures have internal surge protection the surge protection at the pole hand hole and the enclosure needed to contain it could be eliminated.

**RESPONSE:** Pole detail has been revised to delete the lightning arrestor and the enclosure on side of pole as part of this Addendum No. 3. Not has been added to light fixture schedule to clarify that fixtures are to include surge protection as part of this Addendum No. 3.

## **DRAWINGS**

### **1. SHEET E100 SITE PLAN – ELECTRICAL**

- a. REVISE: location that HSBF-6,8 homerun is connected to.
- b. ADD: Note clarifying that conduit and controls for area lighting shown on sheet shall be bid as part of Additive Alternate No. 1.

### **2. SHEET E503 DETAILS**

- a. REVISE: BASE DETAIL – CONCRETE LIGHT POLE to eliminate enclosure on side of pole and surge protection within said enclosure.
- b. ADD: Note to Lighting Fixture Schedule clarifying that fixtures are to include surge protection device.

### **3. SHEET E601 POWER RISER DIAGRAM AND SCHEDULES**

- a. DELETE: Neutrals in feeders to Poles A3, A4, B3 and B4

Attachments:

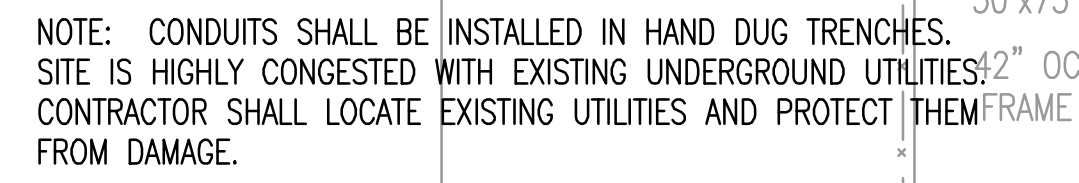
Drawings:  
E100, E503, E601

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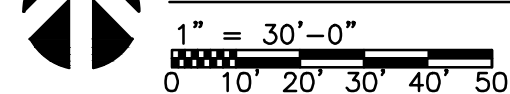
**END OF ADDENDUM**

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△ AREA LIGHTING INCLUDING CONDUIT, AND LIGHTING CONTROLS SHOWN ON THIS SHEET SHALL BE BID AS PART OF ADDITIVE ALTERNATE NO. 1.



NOTE: CONDUITS SHALL BE INSTALLED IN HAND DUG TRENCHES.  
SITE IS HIGHLY CONGESTED WITH EXISTING UNDERGROUND UTILITIES.  
CONTRACTOR SHALL LOCATE EXISTING UTILITIES AND PROTECT THEM  
FROM DAMAGE.

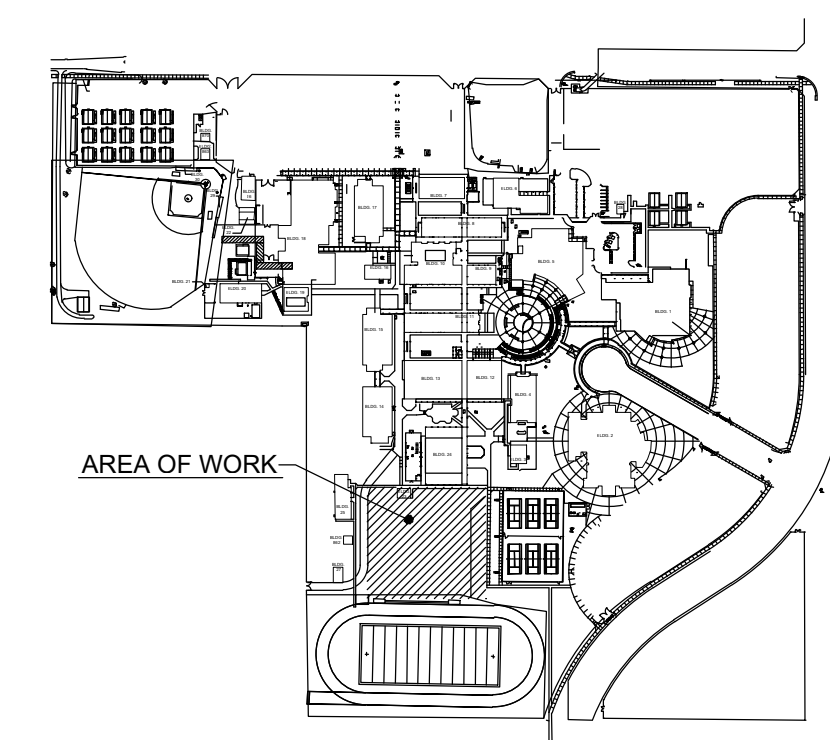

**SITE PLAN-ELECTRICAL**

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 PROVIDE #10 CONDUCTORS IN 1" MINIMUM CONDUIT THROUGH OUT CIRCUIT.
- ② CONNECT CIRCUIT 2 VIA MXA FOR PHOTOCELL ON-OFF CONTROL.  
CONNECT CIRCUIT 4 VIA MBX FOR PHOTOCELL ON-TIME/CLOCK OFF CONTROL.
- ③ CONNECT CIRCUIT 6 VIA MXA FOR PHOTOCELL ON-OFF CONTROL.  
CONNECT CIRCUIT 8 VIA MBX FOR PHOTOCELL ON-TIME/CLOCK OFF CONTROL.
- ④ PROVIDE HINGED DOOR STAINLESS STEEL ENCLOSURE TO HOLD MXA AND MBX LIGHTING CONTROLS. ALL WIRING WITHIN ENCLOSURE SHALL BE ENCLOSED IN CONDUIT. COORDINATE ENCLOSURE DIMENSIONS WITH LIGHTING CONTROL DEVICES. REFER TO DETAILS.


**KEYPLAN**[illegible]

DELAND HIGH SCHOOL  
SOFTBALL FIELD LIGHTING  
VCS Project No. 2448067  
800 NORTH HILL AVE.  
DELAND, FLORIDA 32724

Engineer  
Adrian Baus

DESIGNED BY <b>AWB</b>	DRAWN BY <b>MM/AWB</b>
ISSUE DATE <b>01/04/2024</b>	AE PROJECT NUMBER <b>2023-130</b>

SHEET TITLE

SITE PLAN -  
ELECTRICAL

DRAWING NO.

# E100

The diagram illustrates a control system for lighting circuits. A 120V CONTROL CIRCUIT (L and N) is connected to a PHOTOCELL. The PHOTOCELL is connected to a TIME CLOCK (M). The TIME CLOCK is connected to COIL CLEARING CONTACTS (OH and A). The COIL CLEARING CONTACTS are connected to a TWO WIRE 2P CONTROL RELAY (C). The TWO WIRE 2P CONTROL RELAY is connected to a LIGHTING CONTACTOR MOUNT IN NEMA 1 ENCL. - MXB. The LIGHTING CONTACTOR MOUNT IN NEMA 1 ENCL. - MXB is connected to the LIGHTING CIRCUITS (L and N) and 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

DIMENSION PER FIXTURE SCHEDULE

HANDHOLE COVER

HANDHOLE

LOCATE FUSING POLE HANDHOLE

12" MINIMUM

24"

PER MANUFACTURERS RECOMMENDATIONS

SCHEDULE 40 PVC

GRADE

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

CLASS 1 CU. LTNG. CONDUCTOR

GROUND RODS WITH GROUND WELLS PER SPECIFICATIONS AND DETAILS

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 7-16 AND THE FLORIDA BUILDING CODE SEVENTH EDITION (2020). PRIOR TO POLE FABRICATION SIGNED AND SEALED EMBEDMENT DETAILS SHALL BE PROVIDED TO ENGINEER AND VOLUSIA COUNTY SCHOOLS BUILDING DEPARTMENT.

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

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 7-16 AND THE FLORIDA BUILDING CODE SEVENTH EDITION (2020). PRIOR TO POLE FABRICATION SIGNED AND SEALED EMBEDMENT DETAILS SHALL BE PROVIDED TO ENGINEER AND VOLUSIA COUNTY SCHOOLS BUILDING DEPARTMENT.

LIGHTING FIXTURE SCHEDULE									
VCS - DELAND HS - SOFTBALL									
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	HUBBELL LIGHTING # ASL1 160L-115 4K7 5QW UNV MAF DBT SEMINOLE POLES # TYPE II-0 28FT (NOTE 9 & 10)	LEOTEK LIGHTING #  POLE: PRE-CAST SPECIALTIES # (NOTE 9 & 10)	LITHONIA/ACUITY#	120	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	HUBBELL LIGHTING # ASL1 160L-115 4K7 3 UNV MAF DBT SEMINOLE POLES # TYPE II-0 28FT (NOTE 9 & 10)	LEOTEK LIGHTING #  POLE: PRE-CAST SPECIALTIES # (NOTE 9 & 10)	LITHONIA/ACUITY#	120	4000K	110	15,486	LED
SLE	ONE (1) ARM MOUNTED LED SHOEBOX LUMINAIRE, TYPE IV DISTRIBUTION, DARK BRONZE COLOR, MOUNT 20'-0" AFG TO DIRECT BURIED CONCRETE POLE WITH 155 MPH WIND LOADING BASED ON EMBEDMENT IN SAND	HUBBELL LIGHTING # ASL1 160L-100 4K7 4W UNV MAF DBT SEMINOLE POLES # TYPE II-0 28FT (NOTE 9 & 10)	LEOTEK LIGHTING #  POLE: PRE-CAST SPECIALTIES # (NOTE 9 & 10)	LITHONIA/ACUITY#	120	4000K	88	11,787	LED

(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.

(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.

**(10) PROVIDE MANUFACTURER'S POINT BY POINT PHOTOMETRIC ANALYSIS FOR SITE LIGHTING WITH SUBMITTALS.**

PHOTOCELL (ON ROOF)

120V. OR 277V CONTROL CIRCUIT

L N

HOA SELECTOR SWITCH MOUNT IN NEMA 1 ENCL.

CONTROL RELAY "CR"

CR CR CR CR

OH 100 OA

LATCH

UNLATCH

LIGHTING CONTACTOR MOUNT IN NEMA 1 ENCL. A & B REVERSING COIL CLEARING CONTACTS

LIGHTING CIRCUITS

L N L N L N

TO LIGHTS

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]

DELAND HIGH SCHOOL  
SOFTBALL FIELD LIGHTING  
VCS Project No. 2448067  
800 NORTH HILL AVE.  
DELAND, FLORIDA 32724

ARCHIENGR OF RECOR

2023-130

## DETAILS

DRAWING M

# E503



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- 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.

- (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 200 AMP BREAKER IN EXISTING SWITCHBOARD.
- (9) TWO RUNS OF 3.5" SPARE CONDUIT FOR FUTURE.
- (10) SAW CUT INTO CHILLER YARD SO THAT CONDUITS ARE CONCEALED IN CHILLER YARD.
- (11) TURN CONDUITS UP AT RACK AND CAP.
- (12) MOUNT EQUIPMENT ON FREE STANDING RACK. REFER TO DETAILS.
- (13) INTERCONNECT MDP GROUNDING WITH NEW PANEL GROUNDING USING A #3/0 COPPER CONDUCTOR.
- (14) RECONDITION EXISTING MDP GROUNDING. PROVIDE ADDITIONAL GROUND ROD WITH WELL IF EXISTING GROUND ROD AT MDP EXCEEDS 5 OHMS.
- (15) PROVIDE NEW CIRCUIT BREAKER FOR NEW SURGE PROTECTION DEVICE.
- (16) 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 3Ø STAINLESS ENCLOSURE CONSTRUCTED FROM 304 OR 316 STAINLESS STEEL.
- (17) PROVIDE 10 INCH (MINIMUM) THICK REINFORCED HOUSE 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.
- (18) COPPER GROUND WIRE TO PANEL GROUND RODS SIZED PER N.E.C. TABLE 250.66 BUT IN NO CASE SMALLER THAN A #2.

REVISIONS		DOCUMENT HISTORY	
NO.	DATE	DESCRIPTION	
1	03.05.2024	ADDENDUM NO. 1	
2	03.08.2024	ADDENDUM NO. 3	
3			
4			
5			
6			
7			
8			
9			
10			

## DOCUMENT HISTORY

DOCUMENT HISTORY		
NO	DATE	DESCRIPTION
1	01.05.2024	ADDENDUM NO. 1
2	01.08.2024	ADDENDUM NO. 2
3		
4		
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ARCHIENGR OF RECORD

DRAWING NO.

E601

