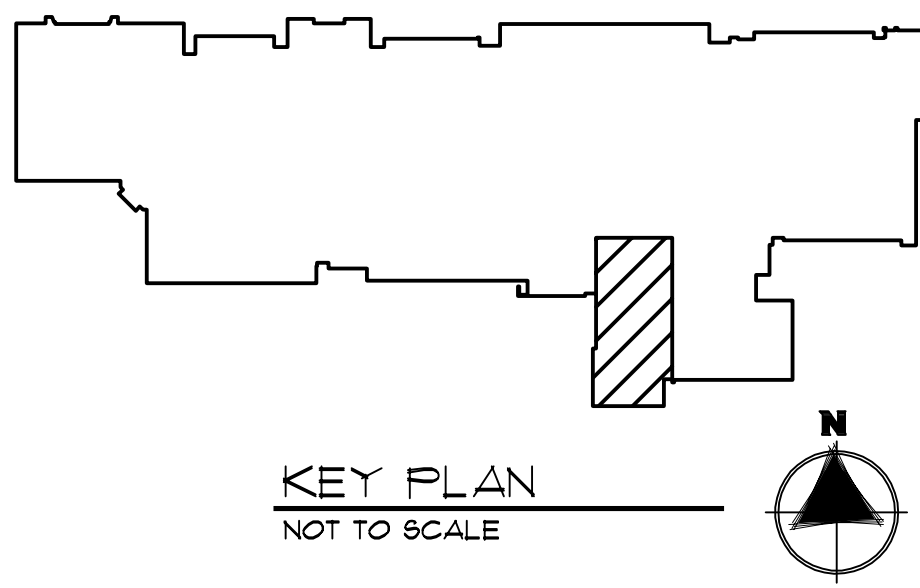


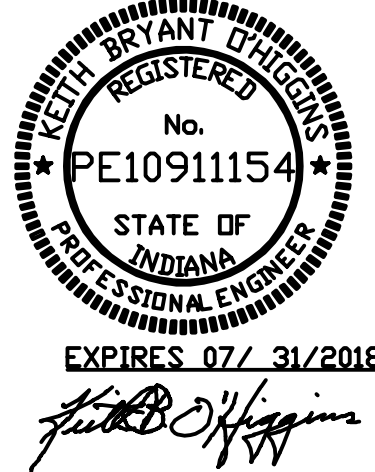
1 EXISTING FIRST FLOOR PLAN - LIGHTING - ELECTRICAL  
 1/8" = 1'-0"

ELECTRICAL DEMOLITION SYMBOLS	
SYMBOL	DESCRIPTION
R	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE REMOVED.
X	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO REMAIN.
XA	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE ABANDONED
XC	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE REMOVED AND JUNCTION BOX CAPPED OR REUSED AS REQUIRED.
XD	NEW ELECTRICAL EQUIPMENT INSTALLED OVER EXISTING OUTLET.
XDM	MECHANICAL EQUIPMENT DISCONNECTED BY ELECTRICAL CONTRACTOR AND REMOVED BY MECHANICAL CONTRACTOR
XN	EXISTING ELECTRICAL EQUIPMENT OR OUTLET RELOCATED (NEW LOCATION).
XR	EXISTING DEVICE TO BE REPLACED WITH NEW DEVICE (OF SAME TYPE).
XRR	EXISTING ELECTRICAL EQUIPMENT OR OUTLET TO BE REMOVED, RELOCATED AND JUNCTION BOX REMOVED OR CAPPED AS REQUIRED

DEMO NOTES	
D-1	REMOVE EXISTING LIGHTING FIXTURE. WIRING TO BE SPLICED IN JUNCTION BOX TO COMPLETE CIRCUIT. CONTRACTOR TO PROVIDE REMOVABLE SHEET METAL COVER OVER CEILING OPENING FOR ACCESS TO JUNCTION BOX.
D-2	REMOVE EXISTING LIGHTING FIXTURE AND LEAVE WIRING READY FOR INSTALLATION OF NEW LIGHTING FIXTURE.
D-3	REMOVE OLD SCORE/TIMING BOARD. REMOVE ALL CONDUIT AND WIRE SERVING UNIT BACK TO NEAREST JUNCTION BOX.
D-4	RELOCATE FOUR (4) LOUD SPEAKERS AND SINGLE BAR SPEAKER TO BELOW NEW CEILING. EXTEND ALL WIRING IN SURFACE MOUNTED WIREMOLD RACEWAY, SERIES 500/700, AS NECESSARY. PROVIDE NEW APPROPRIATE BRACKETING FOR WALL MOUNTING.
D-5	UNDER ALTERNATE BID NO. 1 REMOVE ELECTRICAL CONNECTION TO AIR COMPRESSORS (2) LOCATED ON MECHANICAL MEZZANINE (SEE SHEET M0.20) AND REMOVE DISCONNECTS, WIRING AND CONDUIT BACK TO MDP.



KEY PLAN  
 NOT TO SCALE



**TRIA**  
ARCHITECTURE

NEPPF COMPLIANT

OAS, LLC  
OWNERS AND FINANCIAL SUSTAINABILITY, LLC  
10000 N. 100th Ave., Suite 1000  
Mokena, IL 60450

LEARNER ENGINEERING, INC.  
10000 N. 100th Ave., Suite 1000  
Mokena, IL 60450

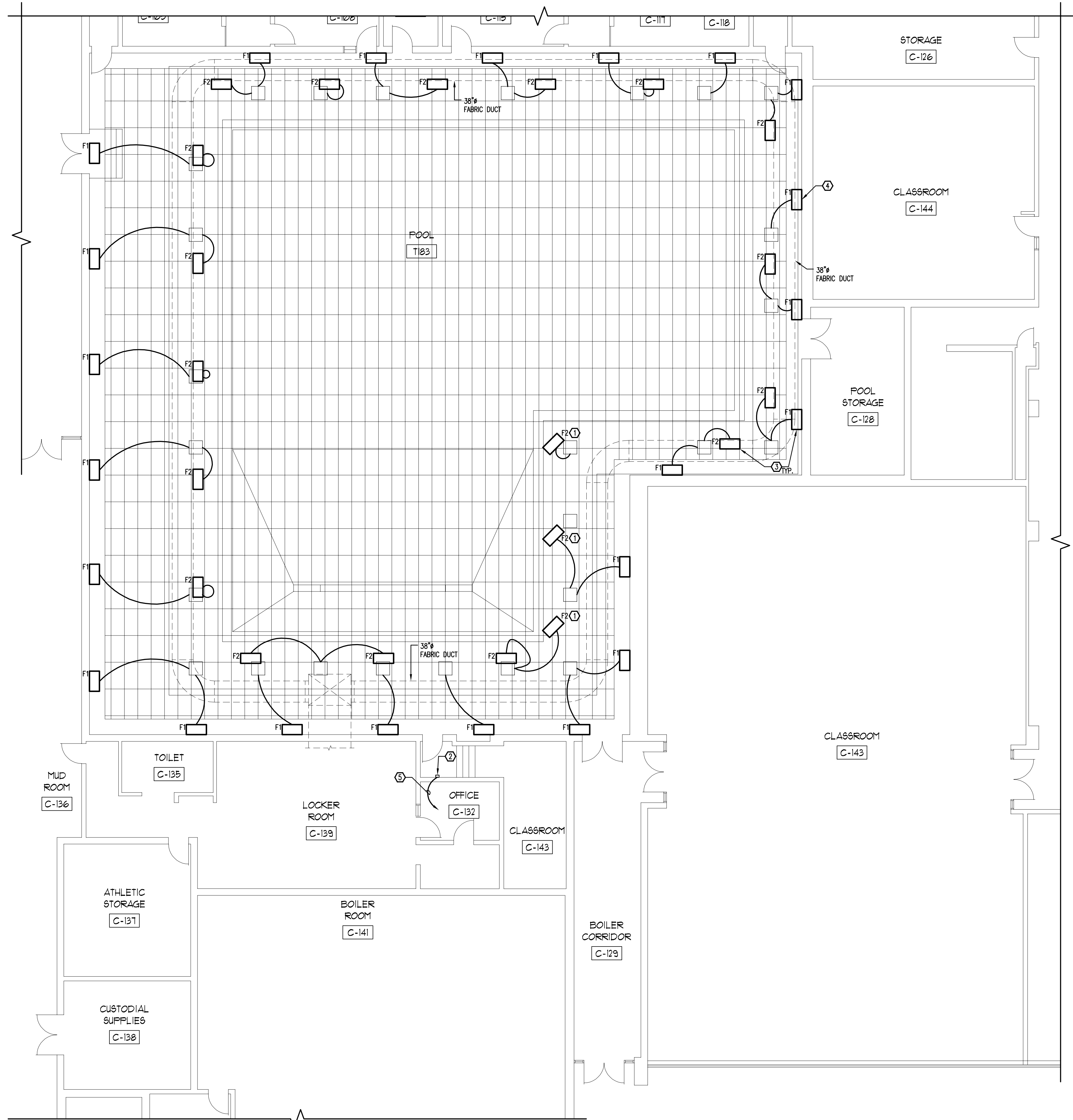
**DUNELAND SCHOOL CORPORATION**

**2017 RENOVATIONS AT:**

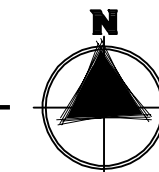
**CHESTERTON MIDDLE SCHOOL**

**651 W. MORGAN AVENUE, CHESTERTON, INDIANA 46304**

PROJECT NUMBER: T-009	REVISIONS:
PROJECT NUMBER: 138	
DRAWN BY: CLC	
DATE FOR BID AND PERMIT: 03/02/2017	
EXISTING FIRST FLOOR PLAN - LIGHTING - ELECTRICAL	

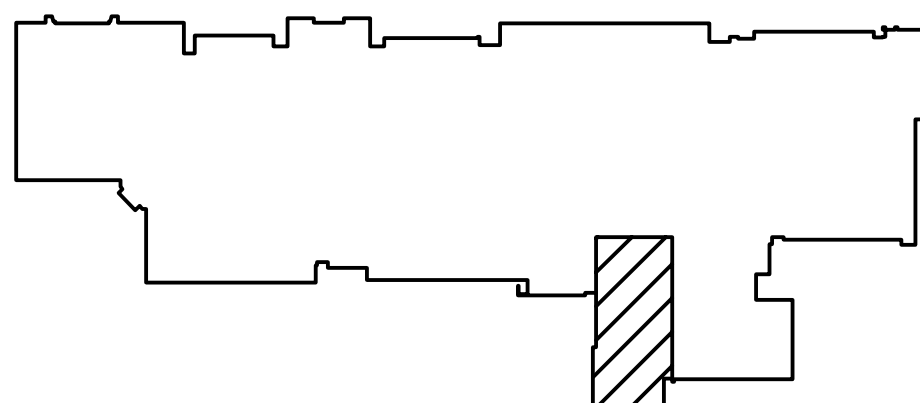


1 NEW WORK FIRST FLOOR PLAN - LIGHTING - ELECTRICAL  
 1/8" = 1'-0"

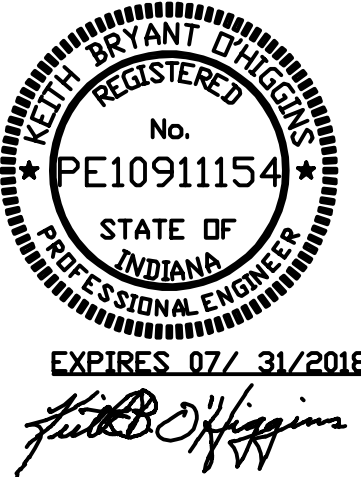


- ELECTRICAL KEY NOTES**
- ① LIGHT FIXTURES TO BE INSTALLED AT A 45° ANGLE DIRECTED TOWARDS CENTER OF POOL.
  - ② DIMMER CONTROL TO BE LOCATED BY OWNER. SEE DETAIL E3.10.
  - ③ CONTRACTOR TO PROVIDE ALL CAT 5E PLENUM RATED CABLING BETWEEN FIXTURES FOR DIMMER CONTROL.
  - ④ ALL EXPOSED CONDUIT, BOXES AND FITTINGS IN POOL ROOM (ABOVE AND BELOW NEW CEILING) SHALL BE EITHER RIGID ALUMINUM CONDUIT OR PVC COATED CONDUIT (COLOR AS SELECTED BY ARCHITECT).
  - ⑤ PROVIDE 20A, 1PH POWER CIRCUIT FROM NEAREST 120/208V PANEL IN BOILER ROOM.

- GENERAL ELECTRICAL NOTES**
- 1. ALL FIXTURES TO BE ON UNIVERSAL DIMMER.
  - 2. ALL FIXTURES ARE FED FROM EXISTING LIGHTING CIRCUIT UNLESS SPECIFICALLY NOTED OTHERWISE.
  - 3. ALL NEW LIGHTING TO BE COORDINATED WITH NEW FABRIC DUCT INSTALLATION.



KEY PLAN  
 NOT TO SCALE



**TRIA**  
ARCHITECTURE

NEPFF CONSULTANT

**OAS, LLC**  
DESIGNED AND PROVIDED SUSTAINABILITY, LLC  
1000 W. 10TH AVE., SUITE 1000  
CHICAGO, IL 60607

**Structural Consultant:**  
 (P) 630.341.0640  
 (F) 630.351.0641

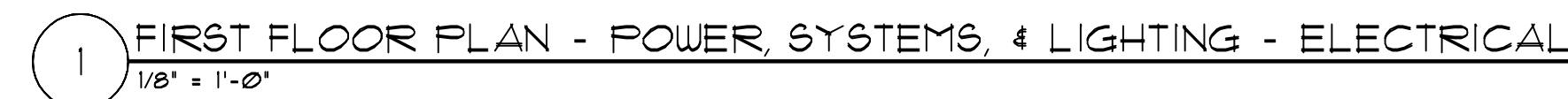
**DUNELAND SCHOOL CORPORATION**

**2017 RENOVATIONS AT:**

**CHESTERTON MIDDLE SCHOOL**

**651 W. MORGAN AVENUE, CHESTERTON, INDIANA 46304**

PROJECT NUMBER:	11-005	REVISIONS:	
PROJECT MANAGER:	LEO		
DRAWN BY:	CJC		
BASED FOR BID AND PERMIT: 06/02/2017			
NEW WORK - FIRST FLOOR PLAN			
LIGHTING - ELECTRICAL			



- ① VARIABLE FREQUENCY DRIVE PROVIDED BY MECHANICAL CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR.
- ② REF HAS 15HP, 460V, 3PH MOTOR.
- ③ FURNISH AND INSTALL 30A, 3P CIRCUIT BREAKER IN SPACE IN PP-HOI; 300-480V, 3PH, 800A PANEL TO FEED NEW REF-1. PANEL PP-HOI IS LOCATED AT BOILER ROOM LEVEL.
- ④ REMOVE EXISTING LIGHT FIXTURE AND CAP JB.
- ⑤ RELOCATE EXISTING LIGHT FIXTURE.
- ⑥ NEW LOCATION OF RELOCATED FIXTURE. EXTEND CONDUIT WIRE TO NEW JB.
- ⑦ EXISTING LIGHT FIXTURE TO REMAIN. COORDINATE WITH NEW DUCT ROUTING.
- ⑧ UNIT HEATER REMOVED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO REMOVE WIRE AND CONDUIT BACK TO PANEL.
- ⑨ FURNISH AND INSTALL NEW DUCT SMOKE DETECTORS IN THE SUPPLY AND RETURN DUCT. ACTIVATION OF DETECTOR SHALL SHUT DOWN SYSTEM FANS. FURNISH AND INSTALL AN ADDRESSABLE FIRE ALARM RELAY AND MOUNT ON CONTROL BOX. COORDINATE INSTALLATION WITH BAS CONTRACTOR.



PROJECT NUMBER: K80	△
DRAWN BY: CJC	△
	△
	△
	△
ISSUED FOR BID AND PERMIT: 01/20/2011	△

FIRST & SECOND FLOOR PLANS  
POWER SYSTEMS, & LIGHTING  
ELECTRICAL

## 2.10



## LIGHTING FIXTURE SCHEDULE

[illegible]

NOTE: CONTRACTOR TO PROVIDE ADDITIONAL SUPPORT AS REQUIRED TO HANG PENDANT MOUNTED FIXTURE ON NEW CEILING

## LIGHTING FIXTURE CONTROL

FURNISHED BY OWNER - INSTALLED BY CONTRACTOR

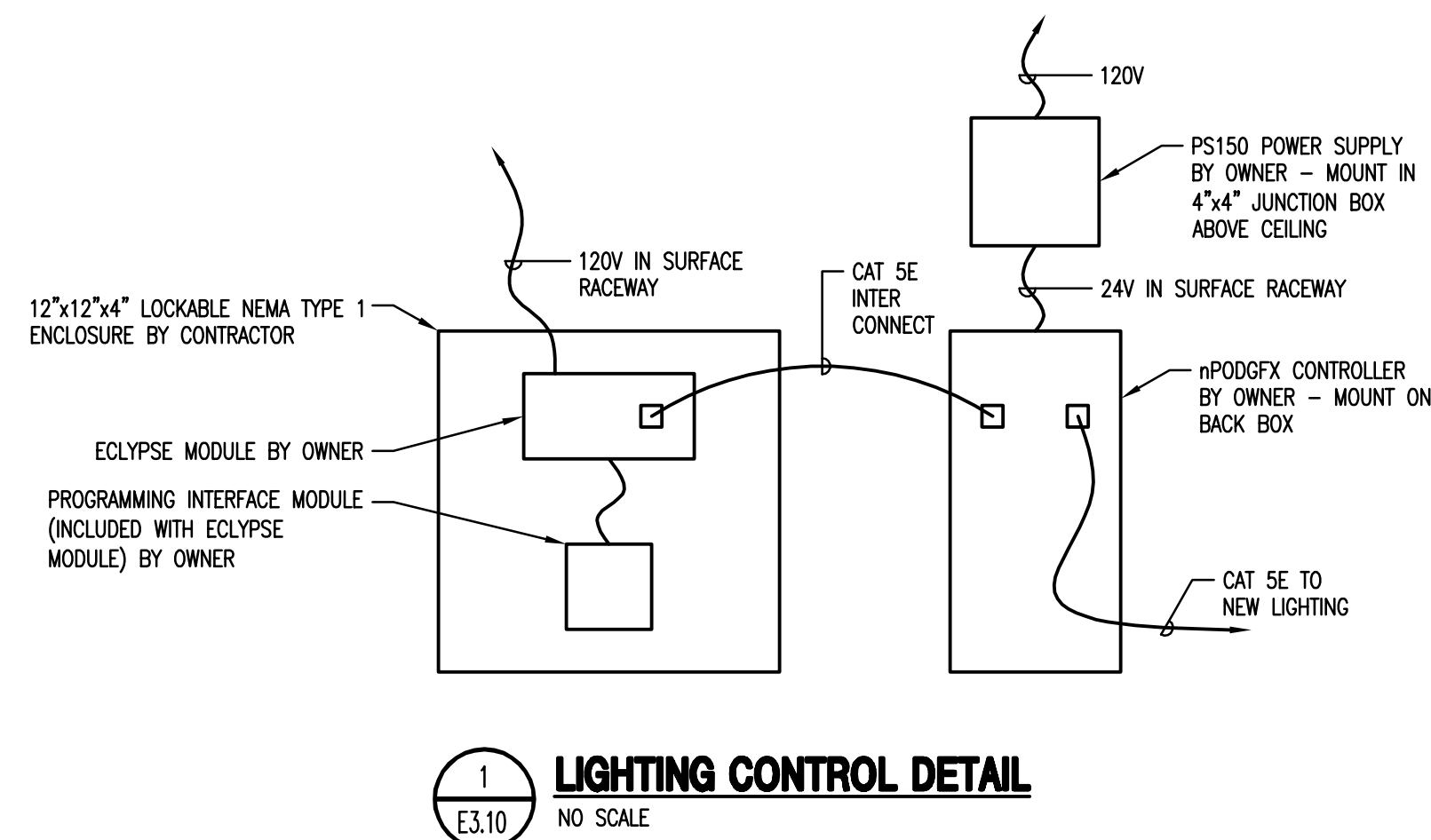
1. ACUITY CONTROLS nLIGHT ECLYPSE PACKAGE. (INCLUDES ECLYPSE MODULE, PROGRAMMING INTERFACE MODULE AND ENCLOSURE.)
2. ACUITY CONTROLS nPODGFx CONTROLLER, WITH PS150 POWER SUPPLY.

DETAIL NOTES:

1. ALL ITEMS MARKED BY OWNER ARE FURNISHED TO BE INSTALLED BY ELECTRICAL CONTRACTOR.
2. ALL POWER REQUIREMENTS, INTER CONNECTING WIRING AND CAT 5E CABLEING ARE BY ELECTRICAL CONTRACTOR.
3. ALL WIRING AND CABLEING SHALL BE RUN IN 500/700 SERIES WIREMOLD RACEWAY.

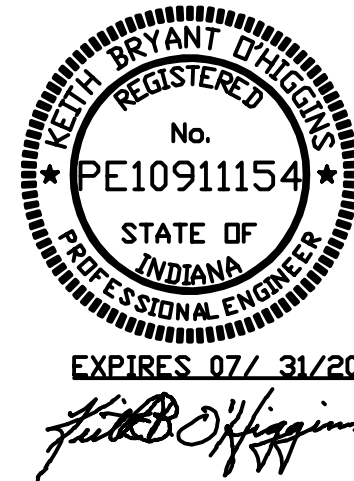
### LIGHTING FIXTURE SCHEDULE NOTES

1. ALL LIGHTING FIXTURES SHALL BE RATED FOR BUILDING SYSTEM VOLTAGE. CONTRACTOR MUST VERIFY ALL CONDITIONS.
2. VERIFY ALL LIGHTING FIXTURE LOCATIONS, FINISHES, VOLTAGE AND CEILING TYPES WITH ARCHITECT PRIOR TO INSTALLING.
3. ELECTRICAL CONTRACTOR SHALL CHECK AND COORDINATE ALL LIGHTING FIXTURE CATALOG NUMBERS WITH THE INTENT OF FIXTURE DESCRIPTIONS, LISTED ACCESSORIES AND TYPE OF INSTALLATION.
4. CONTRACTOR TO VERIFY PRIOR TO INSTALLATION THAT ALL FIXTURES SHALL BE "UL" LABELED. ALL LIGHTING FIXTURES EXPOSED TO WEATHER OR MOISTURE SHALL BEAR U.L. "WET LOCATION" LABEL AND LIGHTING FIXTURES EXPOSED TO DAMPNESS SHALL BEAR U.L. "DAMP LOCATION" LABEL.
5. OWNER SHALL PROVIDE A LIGHT DIMMER CONTROL SYSTEM FOR INSTALLATION BY THIS CONTRACTOR. SEE DETAIL THIS SHEET.
6. CONTRACTOR SHALL PROVIDE CAT 6 CABLEING, DASHY CHAINING FIXTURES TOGETHER BACK TO DIMMING CONTROL WIRE IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.



## GENERAL ELECTRICAL NOTES

1. DO NOT SCALE DRAWINGS.
2. NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER THEY ARE REPEATED OR NOT.
3. THE CONTRACTOR MUST VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING SITE AND BUILDING CONDITIONS WHICH WILL BE AFFECTED DURING CONSTRUCTION PRIOR TO SUBMITTING HIS BID. PROPOSED CONTRACTOR IS CAUTIONED THAT THE PROJECT IS A REMODELING JOB AND IT IS ASSUMED THAT HE HAS INCLUDED FUNDS IN HIS BID TO COVER UNFORESEEN ITEMS WHICH MUST BE MOVED, RELOCATED OR ADJUSTED TO FIT HIS WORK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY EXTRA WORK CAUSED BY FAILURE TO VISIT, EXAMINE OR VERIFY.
4. ALL EXISTING EQUIPMENT IS TO REMAIN OPERATIONAL DURING CONSTRUCTION PERIOD. ALL TEMPORARY WIRING OR REROUTING OF CIRCUITS TO ACHIEVE THIS IS BY THE ELECTRICAL CONTRACTOR. SHUTDOWN OF EXISTING SERVICES SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL FROM THE OWNER AND THEN ONLY FOR THAT DATE AND DURATION AGREED UPON. INCLUDE ALL PREMIUM TIME CHARGES IN THE BASE BID.
5. ALL EXISTING UNUSED CONDUIT, WIRE, JUNCTION BOXES, ETC. WILL BE REMOVED. ALL JUNCTION BOXES MUST HAVE COVERS. VERIFY REQUIREMENTS IN FIELD.
6. ELECTRICAL CONTRACTOR SHALL VERIFY TOTAL CONNECTED LOAD/HP WITH ALL OTHER TRADES PRIOR TO WIRING OF ALL OTHER TRADES' EQUIPMENT. MAKE ANY CHANGES TO OVERCURRENT DEVICES AND FEEDER SIZE PER ELECTRICAL CODE AS REQUIRED.
7. THE EXISTING EQUIPMENT IS SHOWN BASED UPON THE INFORMATION OBTAINED THROUGH BRIEF SURVEY OF THE FACILITY. CONTRACTOR IS TO SURVEY THE EXISTING FACILITY IN ORDER TO DETERMINE THE FULL EXTENT OF WORK AND BE COMPLETELY FAMILIAR WITH ALL THE EXISTING CONDITIONS INCLUDING PLUMBING, HVAC, ELECTRICAL, ETC. THE ARCHITECT/ENGINEER AND OWNER ASSUME NO RESPONSIBILITY IN RESPECT TO THE ACCURACY OF SUCH INFORMATION SHOWN ON THE DRAWINGS. CONTRACTOR SHALL MAKE ADEQUATE ALLOWANCE IN HIS BID FOR SOME DEVIATIONS TO SUCH INFORMATION.
8. WHERE EXISTING CONDITIONS PREVENT PROPER INSTALLATION OF PROPOSED WORK, REROUTE, EXTEND OR ALTER EXISTING WORK SO AS TO ACCOMMODATE PROPOSED WORK REQUIREMENTS.
9. CIRCUIT NUMBERS SHOWN FOR EXISTING PANELS ARE FOR REFERENCE ONLY. USE NEXT AVAILABLE CIRCUITS AND PROVIDE APPROPRIATE SIZE BREAKERS.
10. IN GENERAL, DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED, LIGHT SOLID LINES INDICATE ITEMS TO REMAIN AND DARK SOLID LINES INDICATE NEW ITEMS.
11. THE SYSTEMS PROVIDED BY THIS CONTRACTOR SHALL BE COMPLETELY OPERATIONAL REGARDLESS OF OMISSION OF MINOR ITEMS, SUCH AS CIRCUIT NUMBER FOR RELAY, A CIRCUIT NUMBER NEXT TO A LIGHTING FIXTURE, ETC.
12. DUE TO THE SMALL SCALE AND INTERFERENCE OF EXISTING EQUIPMENT, EACH AND EVERY ITEM IS NOT SHOWN. SHOWN INFORMATION IS INTENDED AS A GUIDE. CONTRACTOR SHALL VERIFY INFORMATION AND CONDITIONS IN THE FIELD.
13. PROVIDE EXPANSION FITTINGS FOR ALL ELECTRICAL RACEWAYS AT EVERY EXPANSION JOINT. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF EXPANSION JOINTS.
14. VERIFY QUANTITY AND SIZE OF LUGS PROVIDED IN OTHER TRADE'S EQUIPMENT (FOR EXAMPLE, FANS, VFD'S, ETC.) BEFORE STARTING ANY WORK ASSOCIATED WITH SUCH EQUIPMENT. IF THEIR LUGS CANNOT ACCOMMODATE THE CABLES INDICATED IN ELECTRICAL DOCUMENT, PROVIDE LUG FITTINGS TO ACCOMMODATE CHANGE IN THE CABLES. PROVIDE SUCH FITTINGS IN A JUNCTION BOX AS CLOSE AS POSSIBLE TO THEIR EQUIPMENT. IF ALLOWED BY THE EQUIPMENT MANUFACTURER, SUCH FITTINGS MAY BE INSTALLED IN THEIR EQUIPMENT RATHER THAN IN A SEPARATE JUNCTION BOX.
15. PROVIDE SEPARATE DEDICATED GROUNDING CONDUCTOR IN EACH FEEDER AND BRANCH CIRCUIT WIRING CIRCUIT.
16. THE ELECTRICAL DRAWINGS SHOW DIRECT PRINCIPLE WORK WHICH MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INDIRECT AND INCIDENTAL WORK WILL ALSO BE NECESSARY DUE TO CHANGES AFFECTING EXISTING ARCHITECTURAL, MECHANICAL, PLUMBING OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREA, AND ASCERTAIN WORK NEEDED AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST.
17. ELECTRICAL CONTRACTOR SHALL SEAL ALL PENETRATIONS THRU WALLS, FLOORS AND CEILINGS WHERE CONDUITS HAVE TO BE REMOVED AND FIRE CAULK AT ALL NEW PIPE PENETRATIONS.



**DUNELAND SCHOOL CORPORATION**

## 2017 RENOVATIONS AT:

**CHESTERTON MIDDLE SCHOOL  
651 W. MORGAN AVENUE, CHESTERTON, INDIANA 46304**

PROJECT NUMBER: 11-0095	REVISIONS:
PROJECT MANAGER: KEO	1
DRAWN BY: CJC	2
	3
	4
	5
ISSUED FOR BID AND PERMIT: 03/09/2011 / 5	

SYMBOLS, NOTES, ABBREVIATIONS &  
SCHEDULES  
ELECTRICAL

## E3.10