

Des Moines Public Schools
District Wide Site Lighting Upgrades at Various Schools
Addendum #1
April 16, 2021

This addendum is issued to modify, clarify, or amend the original Project Drawings and Specifications and is hereby made part of the Contract Documents. The Contractor shall be responsible for incorporating items in this Addendum to the Work. The following shall take precedence over anything to the contrary in the Drawings or Specifications.

Electrical Specifications:

1. Section 26 05 33 – ELECTRICAL RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
 - a. **ADD:** HDPE Conduit is allowable for underground raceway applications. Coordinate final routing with Owner and existing site conditions.

Electrical Drawings:

1. Drawing E0.0 – ELECTRICAL GENERAL NOTES, SYMBOLS, AND SCHEDULES
 - a. **ADD:** Precast pole bases from Iowa Pole Base or equal are allowed substitutes in lieu of form-in-place bases.
 - b. **REVISE:** Luminare Schedule
 - i. Refer to attached revised drawing E0.0.
2. Drawing E1.1 – ELECTRICAL SITE PLAN – EAST HIGH SCHOOL
 - a. **REVISE:** Keynote #2 shall read; "... using #1 conductors in minimum 1-1/2" conduit."
 - b. **REVISE:** Poles for P1A fixtures in West Parking Lot shall be max 17'-0" so that with pole base of 2'-6" above grade fixture shall not be more than 20'-0" above finished grade.

Electrical – Approved Manufacturers:

The following shall be added to specifications as approved manufacturers:

Light Fixture Type

Poles

Manufacturer

AV Poles, WJM Pole, Lithonia

End of Electrical Addendum.

GENERAL NOTES - ELECTRICAL

- A. COORDINATE LOCATION/INSTALLATION OF ELECTRICAL WORK WITH EXISTING CONDITIONS. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH EXISTING CONDITIONS ASSOCIATED WITH THE INSTALLATION HAS OCCURRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT. ANY REWORK OF INSTALLED EQUIPMENT OR SYSTEMS WILL BE AT THE CONTRACTOR'S EXPENSE.

SITE NOTES - ELECTRICAL

- A. UTILITIES SHOWN ON ELECTRICAL SITE PLAN ARE SCHEMATIC ONLY. VERIFY ALL SITE CONDITIONS AND DIMENSIONS ON SITE PRIOR TO COMPLETING BID AND ORDERING OF EQUIPMENT.
- B. CONTRACTOR SHALL REPAIR ALL AFFECTED SURFACES AND RESTORE TO EXISTING CONDITIONS AT COMPLETION OF PROJECT.
- C. WARNING - CALL 48 HOURS BEFORE YOU DIG: - IOWA LAW REQUIRES ANYONE DOING ANY EXCAVATION, FENCING, PLANTING OR DRILLING TO CALL 48 HOURS IN ADVANCE. HAND DIG WITHIN 18 INCHES OF ANY LOCATE MARK OR FLAG. IOWA ONE-CALL 1-800-292-8989.

CODE NOTES - ELECTRICAL

- A. THE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES.
- B. THE CURRENT ADOPTED EDITION OF THE ELECTRICAL CODE SHALL BE THE STANDARD FOR THE ELECTRICAL INSTALLATION. VERIFY WITH LOCAL OFFICIALS WHEN PERMITS ARE OBTAINED. NOTIFY DESIGN TEAM OF ANY DISCREPANCIES BETWEEN THE PROJECT MANUAL OR DRAWINGS AND THE GOVERNING CODE.
- C. INSTALLATION SHALL FOLLOW ALL REQUIREMENTS OF THE ADAAG - AMERICANS WITH DISABILITIES ACT.
- D. REFER TO PROJECT MANUAL AND PROJECT CODE REVIEW SHEET FOR LIST OF APPLICABLE CODES.

INSTALLATION NOTES - ELECTRICAL

- A. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS PRIOR TO BID.
- B. INCREASE CONDUCTOR SIZES ON 120V-1 PHASE CIRCUITS EXCEEDING 100 FEET TO CENTER OF LOAD TO ACCOUNT FOR VOLTAGE DROP.
- C. RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE THE GENERAL AND APPROXIMATE LOCATION. THE LAYOUT DOES NOT NECESSARILY SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED, NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
- D. LIGHT FIXTURES, SWITCHES, DEVICES, ETC. ARE SHOWN IN PREFERRED LOCATION. E.C. RESPONSIBLE FOR MODIFYING CONDUIT, HANGERS, CIRCUITING, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- E. PROVIDE A DEDICATED GREEN INSULATED GROUND CONDUCTOR TO ALL DEVICES. THE CONDUIT SYSTEM SHALL NOT BE USED AS THE ONLY EQUIPMENT GROUNDING METHOD. BALANCE THE LOAD ON PANELS AS EVENLY AS POSSIBLE DURING INSTALLATION.
- F. CIRCUIT NUMBERING SHOWN ON PLANS MAY BE ADJUSTED.
- G. PROVIDE FINAL TYPED PERMANENT PANEL DIRECTORY AT PROJECT COMPLETION.
- H. CONTRACTOR IS RESPONSIBLE FOR OPENINGS IN WALLS CREATED BY THEIR WORK. PENETRATIONS SHALL BE SEALED IN ACCORDANCE WITH THE RATINGS OF THE AFFECTED WALL.

ELECTRICAL SYMBOLS

- [Symbol] EXTERIOR LIGHT FIXTURE, WALL MOUNT +10', OR AS NOTED
- [Symbol] EXTERIOR POLE MOUNTED LIGHT FIXTURE, REFER TO LIGHT FIXTURE SCHEDULE
- [Symbol] PANELBOARD - SURFACE MOUNTED

GENERAL SYMBOLS

- [Symbol] CONDUIT SLEEVE
- [Symbol] CONDUIT UP, REFER TO TAG ON DRAWING FOR SIZE
- [Symbol] CONDUIT DOWN, REFER TO TAG ON DRAWING FOR SIZE
- [Symbol] JUNCTION BOX, CEILING OR FLOOR MOUNTED.
- [Symbol] JUNCTION BOX, WALL MOUNTED, ELEVATION AS NOTED.
- [Symbol] CIRCUIT HOMERUN, CONCEALED CONDUIT OR CABLE
- [Symbol] CIRCUIT HOMERUN, UNDER FLOOR CONDUIT OR CABLE
- [Symbol] KITCHEN EQUIPMENT TAG NUMBER, REFER TO KITCHEN EQUIPMENT CONNECTION SCHEDULE
- [Symbol] KEYNOTE
- [Symbol] EQUIPMENT IDENTIFICATION TAG. REFER TO EQUIPMENT CONNECTION SCHEDULE
- [Symbol] DETAIL DRAWING REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
- [Symbol] SECTION CUT REFERENCE TAG, SIM-SIMILAR, TYP-TYPICAL, OPP-OPPOSITE SHEET REFERENCE
- [Symbol] INTERIOR ELEVATION DRAWING REFERENCE TAG

ELECTRICAL ABBREVIATIONS

A	DEVICE MOUNTED +8" ABOVE COUNTER TOP (VERIFY LOCATION)	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	NM	NONMETALLIC
ATS	AUTOMATIC TRANSFER SWITCH	NTS	NOT TO SCALE
C	CEILING	OC	ON CENTER
CB	CIRCUIT BREAKER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CT	CURRENT TRANSFORMER	OFOI	OWNER FURNISHED, OWNER INSTALLED
E	EXISTING ITEM TO REMAIN	R	EXISTING ITEM TO BE REMOVED
EC	ELECTRICAL CONTRACTOR	RR	EXISTING ITEM TO BE REMOVED AND RELOCATED
EM	EMERGENCY LIGHT FIXTURE	RN	EXISTING ITEM TO BE REMOVED AND REPLACED WITH NEW
ER	NEW LOCATION OF EXISTING ITEM	SCCR	SHORT CIRCUIT CURRENT RATING
F	ROUGH IN FOR FUTURE DEVICE	T	TAMPER PROOF DEVICE
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TCC	TEMPERATURE CONTROL CONTRACTOR
FACP	FIRE ALARM CONTROL PANEL	TV	TELEVISION
FSD	FIRE SMOKE DAMPER	TYP	TYPICAL
G	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GND	GROUND	V	VOLTS
KVA	KILO-VOLT-AMPERES	VA	VOLT-AMPERES
KW	KILOWATTS	WG	WIREGUARD COVER
MC	MECHANICAL CONTRACTOR	WP	WEATHERPROOF DEVICE
MCB	MAIN CIRCUIT BREAKER	WR	WEATHER RESISTANT DEVICE
MDP	MAIN DISTRIBUTION PANEL	+24"	INDICATES MOUNTING HEIGHT CENTER LINE OF DEVICE TO FINISHED FLOOR
MLO	MAIN LUGS ONLY		
N	NEW DEVICE IN EXISTING LOCATION		



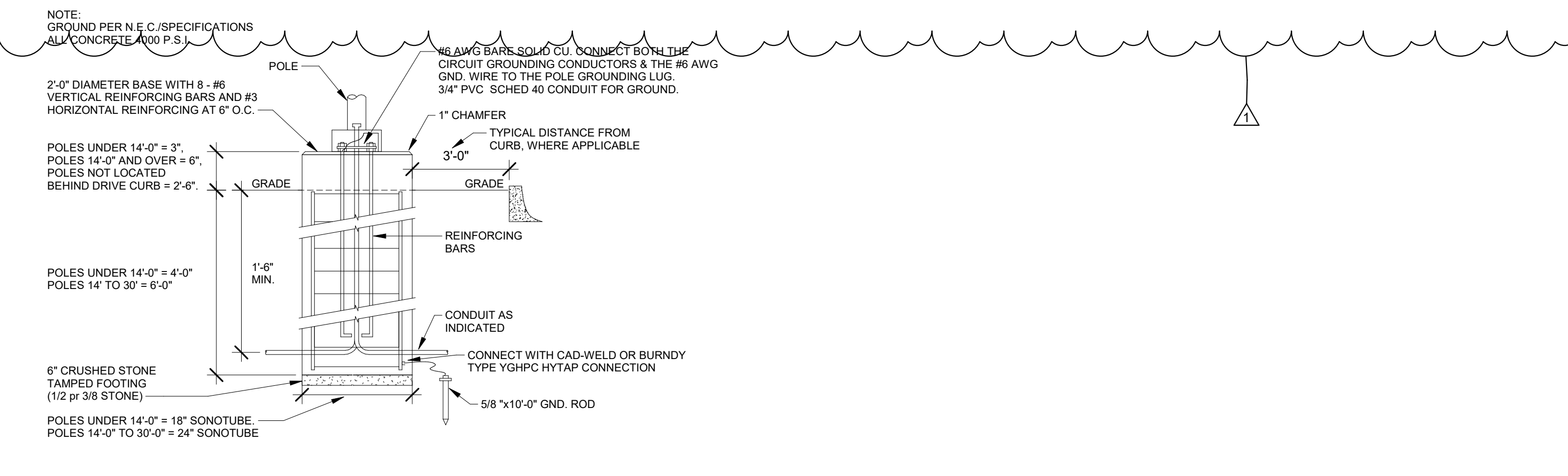
GENERAL NOTE:

UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN SHOWN BASED UPON INFORMATION OBTAINED FROM FIELD LOCATIONS BY UTILITY COMPANIES, AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS ALSO POSSIBLE THAT THERE MAY BE OTHER UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES IN EXISTENCE THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL PARTY REFERENCING THIS PLAN TO DETERMINE THE EXACT LOCATION AND TYPE OF UNDERGROUND FACILITIES ON THE SITE. HAND EXCAVATE AT CRITICAL POINTS AS NECESSARY TO VERIFY LOCATIONS, SIZES, ELEVATIONS, FLOW LINES, ETC. IF A PROBLEM OR INTERFERENCE EXISTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING.

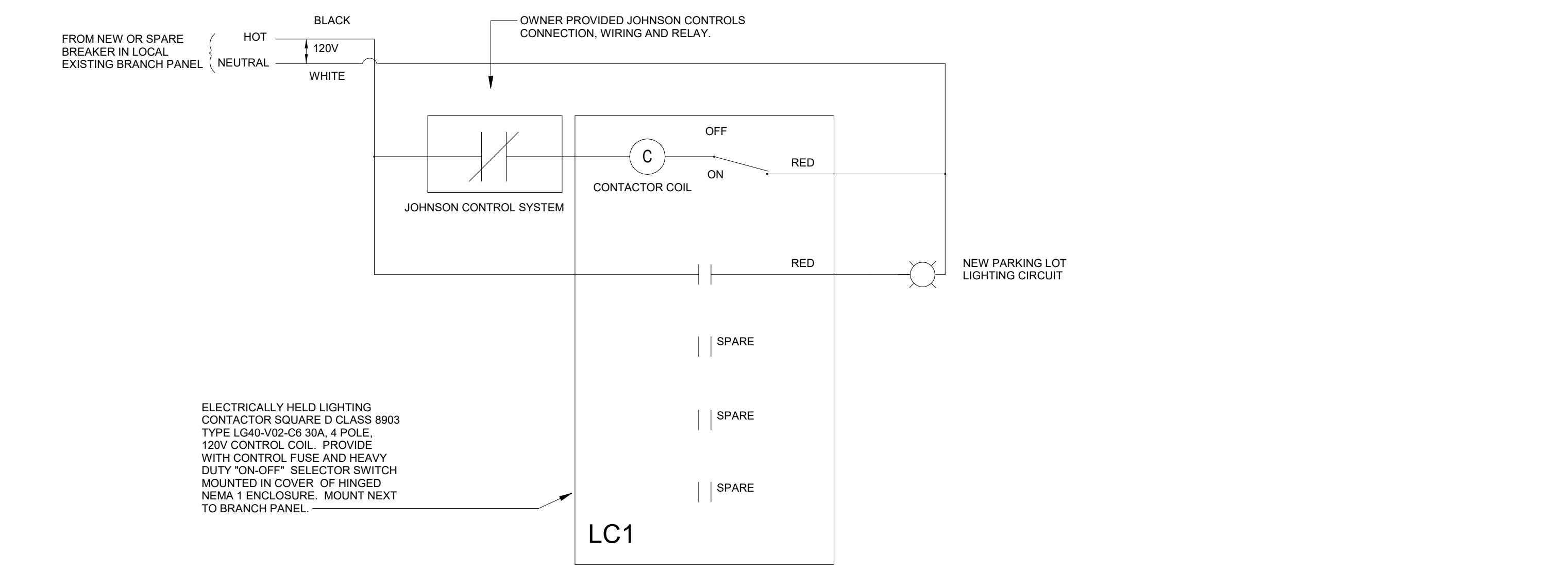
LIGHTING FIXTURE SCHEDULE

- NOTES:**
- ALL FIXTURES SHALL BE U.L. OR SIMILARLY LISTED.
 - REFER TO ARCHITECTURAL DOCUMENTS FOR EXACT MOUNTING LOCATIONS, DETAILS, AND CONFIGURATIONS OF ALL LUMINAIRES. IF ARCHITECTURAL DRAWINGS DO NOT CLARIFY EXACT MOUNTING LOCATION OR DETAIL, ISSUE AN RFI FOR ARCHITECT TO SPECIFICALLY CLARIFY PRIOR TO FIXTURE ROUGH-IN.
 - VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL. NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
 - CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.
 - AIM AND TARGET ADJUSTABLE INTERIOR AND EXTERIOR LIGHT FIXTURES UNDER THE OBSERVATION AND IN COMPLIANCE WITH RECOMMENDATIONS OF THE ARCHITECT. INCLUDE LABOR AND MATERIAL COSTS MADE NECESSARY BY THIS REQUIREMENT.
 - CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FILLING OUT ALL UTILITY REBATE FORMS FOR OWNER.

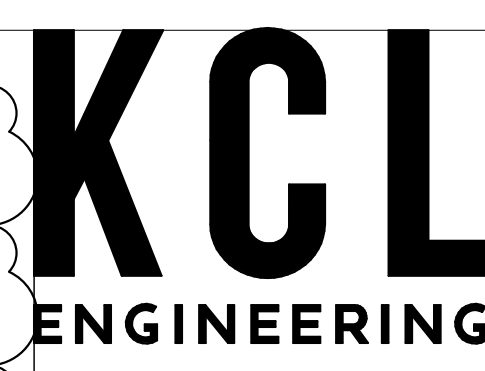
TYPE	MANUFACTURER	MODEL	DESCRIPTION	VOLTAGE	LOAD-VA	LAMP TYPE	APPROVED EQUALS
P1A	CREE	OSQ-A-NM-4ME-K-40K-UL-BZ OSQ-AA-BZ (2@180)	POLE MOUNTED AREA LIGHT, TYPE 4 MEDIUM DISTRIBUTION, DIE-CAST ALUMINUM HOUSING, ADJUSTABLE-ARM MOUNT, BRONZE FINISH, * 20" POLE, EPA - SINGLE 0.74, 2@180" 1.48, 13,000 LUMENS, 70 CRI, MINIMUM 5 YEAR FIXTURE / FINISH WARRANTY. MULTI VOLTAGE DRIVER 120/277V. PROVIDE VERTICAL TENON MOUNT AND HORIZONTAL CROSS ARM.	120 V	260 VA	LED 4,000K CCT	HUBBELL, EATON, LITHONIA OR AS APPROVED BY ENGINEER
P1B	CREE	OSQ-A-NM-4ME-K-40K-UL-BZ OSQ-AA-BZ	SIMILAR TO P1A, BUT SINGLE FIXTURE.	120 V	130 VA	LED 4,000K CCT	HUBBELL, EATON, LITHONIA OR AS APPROVED BY ENGINEER
P1C	CREE	OSQ-A-NM-4ME-K-40K-UL-BZ OSQ-AA-BZ (2@90)	SIMILAR TO P1A, BUT DUAL HEADS MOUNTED 90 DEGREE CONFIGURATION. PROVIDE VERTICAL TENON MOUNT AND HORIZONTAL CROSS ARM.	120 V	260 VA	LED 4,000K CCT	HUBBELL, EATON, LITHONIA OR AS APPROVED BY ENGINEER
P2	CREE	OSQ-A-NM-4ME-U-40K-UL-BZ OSQ-AA-BZ	POLE MOUNTED AREA LIGHT, TYPE 4 MEDIUM DISTRIBUTION, DIE-CAST ALUMINUM HOUSING, ADJUSTABLE-ARM MOUNT, BRONZE FINISH, * 20" POLE, EPA - SINGLE 0.74, 2@180" 1.48, 22,000 LUMENS, 70 CRI, MINIMUM 5 YEAR FIXTURE / FINISH WARRANTY. MULTI VOLTAGE DRIVER 120/277V.	120 V	200 VA	LED 4,000K CCT	HUBBELL, EATON, LITHONIA OR AS APPROVED BY ENGINEER
P3	CREE	OSQ-A-NM-2ME-K-40K-UL-BZ OSQ-AA-BZ	POLE MOUNTED AREA LIGHT, TYPE 2 MEDIUM DISTRIBUTION, DIE-CAST ALUMINUM HOUSING, ADJUSTABLE-ARM MOUNT, BRONZE FINISH, * 20" POLE, EPA - SINGLE 0.74, 2@180" 1.48, 13,000 LUMENS, 70 CRI, MINIMUM 5 YEAR FIXTURE / FINISH WARRANTY. MULTI VOLTAGE DRIVER 120/277V.	120 V	130 VA	LED 4,000K CCT	HUBBELL, EATON, LITHONIA OR AS APPROVED BY ENGINEER
POLE	KW INDUSTRIES	RTAP20-7.0-7-BR2-DM10-BC-VD-58HH	POLE FOR P1/P2/P3 FIXTURES: ROUND TAPERED SPUN ALUMINUM POLE, 20'-0" HEIGHT, 4" TOP DIA, 7" BOTTOM DIA, TENON MOUNTING, SHAFT WALL THICK .188", 6063 ALLOY, T6 TEMPER, CAST ALUMINUM BASE A356, T6, SHAFT CIRCUMFERENTIALLY WELDED TOP AND BOTTOM, 5" X 8" HAND HOLE WITH COVER, BASE COVER INCLUDED, VIBRATION DAMPER INCLUDED, BML POWDER COAT FINISH WITH 5-YEAR WARRANTY, EPA 4.5 @100MPH	0 V	0 VA	-	VALMONT STRUCTURES, U.S. ARCHITECTURAL LIGHTING, AS APPROVED BY ENGINEER
W1	WILLIAMS	VWP-H-L30-7-40K-TFT-DB2-CGL-EM10WC-PC-DIM-UNV	EXTERIOR WALL PACK, MINIMUM 3,000 LUMENS AT 4,000K CCT AT TYPE 3 DISTRIBUTION, PROVIDE WITH INTEGRAL EMERGENCY BATTERY. MULTI VOLTAGE DRIVER 120/277V. PROVIDE WITH INTEGRAL PHOTOCELL. EMERGENCY BATTERY SHALL BE LOW TEMPERATURE RATED OR PROVIDED WITH HEATER.	120 V	31 VA	LED 4,000K CCT	HUBBELL, EATON, LITHONIA OR AS APPROVED BY ENGINEER



1 LIGHTING SITE - LIGHTING POLE BASE - POURED IN PLACE NOT TO SCALE



2 SITE LIGHTING CONTACTOR DETAIL 1/8" = 1'-0"



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These documents have been prepared specifically for the DMPS - DISTRICT WIDE SITE LIGHTING UPGRADES AT VARIOUS SCHOOLS

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DES MOINES PUBLIC SCHOOLS
DISTRICT WIDE SITE LIGHTING
UPGRADES AT VARIOUS SCHOOLS

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KCL Project No: 20135
Date: 04/08/2021

CONSTRUCTION DRAWINGS		
Revision	Date	
1	ADDENDUM #1	04/16/2021

Drawing Name:
ELECTRICAL GENERAL NOTES, SYMBOLS AND SCHEDULES

Drawing #:
E0.0