



R1 North 1st Floor – Replace Hensel Phelps West Auditorium & East Classroom Lighting & Lighting Controls

Project Number: 22-122843

**Friday April 1, 2022
ADDENDUM 1**

QUESTIONS/RESPONSES:

1. Who will provide data drops to the new lighting control panels?

Response: The CU Anschutz Office of Information Technology (OIT) group will provide and install cabling, data jacks and device plate. Electrical contractor to provide raceway as indicated on attached Addendum #1 drawings.

2. Can the wiring to the existing override switches be reused for new touch screen override switch?

Response: No, new CAT5 wiring shall be provided, as indicated on lighting control one-line.

DRAWING SCOPE AND CLARIFICATIONS:

1. Contractor to provide Masonite board, or approved equal, for protection of existing flooring.
2. Provide new light fixture/trim kit where missing in East Classroom P18-1000, as indicated on attached Addendum #1 drawings.

SPECIFICATIONS CLARIFICATIONS:

1. None

ADDITIONAL INFORMATION:

1. In addition to the Electrical Contractors shown on the SCPP list, the following companies are also approved to work on this project:

**Legault Electric
4960 Iris Street**

**Wheat Ridge, CO 80033
(303) 927-6662**

**Celtic Electric, LLC
P.O. Box 33571
Northglenn, CO 80233
(303) 472-6961**

- 2. A copy of the 3/17/22 Pre-Bid Attendance List is attached to this addendum.**

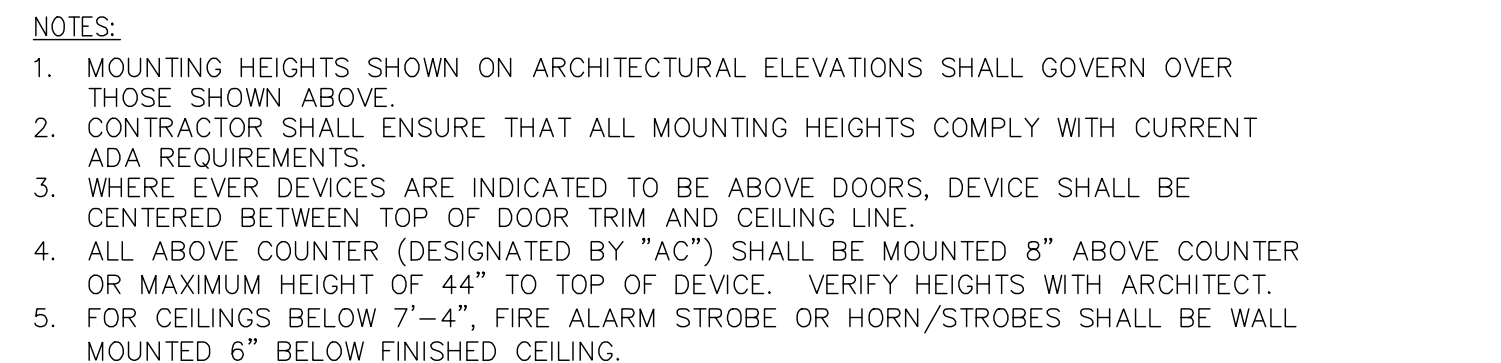
END OF ADDENDUM 1

Pre-Bid Sign In





































22-122843 / R1 North 1st Floor – Replace Hensel Phelps West Auditorium & East Classroom Lighting & Lighting Controls

Time	Name (First)	Name (Last)	Email	Phone	Company Name
3/17/2022 8:17	Corby	Legault	corby@legaultelectric.com	(303) 551-5502	Legault Electric
3/17/2022 8:20	Scott	Kennerly	scott@kennerlyconst.com	(720) 436-1953	Kennerly Const.
3/17/2022 8:22	Keith	Seiden	keith.seiden@yahoo.com	(720) 854-4872	Rapid Restoration and construction
3/17/2022 8:24	Leonard	Gurule	leonard.gurule@me-engineers.com	(720) 898-3144	ME Engineers
3/17/2022 8:26	Gary	Shironaka	garyshironaka1@growlingbear.com	(970) 353-6964	Growling Bear
3/17/2022 8:31	Rick	Garcia	rick.garcia@fsgi.com	(303) 669-7262	FSG Electric
3/17/2022 8:33	Russell	Harrison	russell.harrison@duroelectric.com	(720) 335-4234	Duro Electric





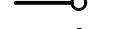




1. ALL EXPOSED RACEWAYS ARE TO BE INSTALLED PARALLEL OR PERPENDICULAR TO WALLS OR STRUCTURAL MEMBERS SUCH THAT THEY FOLLOW STRUCTURAL SURFACE CONTOURS AND SHALL BE INSTALLED SUCH THAT THEY DO NOT OBSTRUCT PASSAGeways OR ACCESS TO EQUIPMENT. ALL RACEWAYS SHOULD BE INSTALLED GROUPED TOGETHER. THE LOCATION OF PUBLICLY VISIBLE RACEWAYS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. (EXTRA TIME SHOULD BE ALLOWED FOR THIS REVIEW AND APPROVAL.)
2. THE DISCONNECTING MEANS FOR ALL MECHANICAL EQUIPMENT SHALL BE ACCESSIBLE AND HAVE THE CLEARANCE IN FRONT AS REQUIRED BY NEC AMENDMENTS.
3. ALL CEILING ATTACHED OBJECTS AND FLOOR ATTACHED EQUIPMENT INCLUDING BUT NOT LIMITED TO PENDANT LIGHTING FIXTURES, GENERAL LIGHTING, MULTIPLE RACEWAYS, GENERATOR, TRANSFORMER ELECTRICAL SWITCHGEAR, AND SWITCHBOARDS SHALL BE INSTALLED IN ACCORDANCE WITH SUPPORTING OBJECTS FOR SEISMIC ZONE AS REQUIRED BY STATE AND LOCAL CODES.
4. ALL SWITCHGEAR, SWITCHBOARDS AND TRANSFORMERS SHALL HAVE A 4 INCH HOUSE KEEPING PAD, UNDER NO CONDITION SHALL THE HIGHEST SWITCH OR BREAKER EXCEED 6'-6" AFF.
5. DATA GIVEN ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED. ABSOLUTE ACCURACY IS NOT GUARANTEED AND THE CONTRACTOR SHALL OBTAIN AND VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS WITH OTHER TRADES, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT HIS WORK TO ACTUAL CONDITIONS AT THE BUILDING. THE DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND SHALL NOT BE SCALED. HOWEVER THIS DOES NOT RELIEVE ANY SUB-CONTRACTOR FROM COORDINATING HIS WORK WITH ALL OTHER TRADES AND FROM ADJUSTING HIS WORK AS REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING COSTS TO BECOME THOROUGHLY FAMILIAR WITH THE ACTUAL CONDITIONS OF THE PROJECT.
6. COORDINATE AND ADJUST ALL WORK BETWEEN TRADES AND EXISTING CONDITIONS IN ORDER TO ACCOMPLISH A NEAT, INTEGRATED AND EFFICIENT INSTALLATION WHICH INCLUDE BUT ARE NOT LIMITED TO:
 - a. EXAMINE THE CONTRACTOR DOCUMENTS OF ALL TRADES (IE. THE ARCHITECTURAL REFLECTED CEILING PLAN, MECHANICAL HVAC DRAWINGS, ELECTRICAL LIGHTING PLAN, FIRE PROTECTION PLAN, ETC.).
 - b. COORDINATE NECESSARY EQUIPMENT, FIXTURES, ETC. SO THAT THE FINAL INSTALLATION IS COMPATIBLE WITH THE MATERIALS AND EQUIPMENT OF THE OTHER TRADES.
 - c. THIS CONTRACTOR SHALL ASSIST THE DIVISION 23 CONTRACTOR IN PREPARING SHOP DRAWINGS FOR COORDINATING INSTALLATION OF ALL WORK (IE. LOCATING ALL LIGHTING FIXTURES IN CEILING WITH CEILING CLEARANCES, RACEWAYS, PIPING, EQUIPMENT FOR CLEARANCE THROUGHOUT).
 - d. THE ELECTRICAL DRAWINGS INDICATE THE ELECTRICAL REQUIREMENTS FOR A SIGNIFICANT PORTION OF THE MECHANICAL AND PLUMBING SYSTEMS. ADDITIONAL MECHANICAL AND PLUMBING EQUIPMENT IS INDICATED ON THE DIVISION 15 DRAWINGS. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE COMPLETE WIRING AND FUSIBLE DISCONNECTING MEANS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT.
7. DEFINITIONS:
 - a. "FURNISH" MEANS TO "SUPPLY" AND USUALLY REFERS TO AN ITEM OF EQUIPMENT.
 - b. "INSTALL" MEANS TO "SET IN PLACE, CONNECT AND PLACE IN FULL OPERATIONAL ORDER".
 - c. "PROVIDE" MEANS TO "FURNISH AND INSTALL".
 - d. "EQUIVALENT" MEANS "MEETS THE SPECIFICATIONS OF THE REFERENCE PRODUCT OR ITEM IN ALL SIGNIFICANT ASPECTS." SIGNIFICANT ASPECTS SHALL BE DETERMINED BY THE ENGINEER.
 - e. "RE: _____ DIVISION", AND SIMILAR EXPRESSIONS MEANS WORK TO BE PERFORMED UNDER THE CONTRACTOR'S _____ DOCUMENTS, BUT NOT NECESSARILY UNDER THE DIVISION _____ SECTION OF THE WORK ON WHICH THE NOTE APPEARS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE THE WORK OF THE CONTRACT BETWEEN HIS/HER SUPPLIERS, SUBCONTRACTORS, AND EMPLOYEES. IF CLARIFICATION IS REQUIRED, CONSULT ARCHITECT.
8. "FIRESTOPPING" REQUIREMENT. ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS SHALL BE SEALED WITH MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARDS FOR FIRE STOP. ASTM-E-814. ALL PENETRATIONS SHALL MEET F AND T RATINGS AS REQUIRED BY THE BUILDING CODE.
9. WHERE DISCONNECTS ARE INDICATED ON DRAWINGS CONTRACTOR SHALL PROVIDE FINAL CONNECTION TO EQUIPMENT BEING SERVED BY DISCONNECT.
10. CONTRACTOR PROVIDE ALL MISCELLANEOUS SUPPORTS AS REQUIRED FOR A COMPLETE OPERABLE ELECTRICAL INSTALLATION INCLUDING MISCELLANEOUS STEEL, UNI-STRUT, ALL-THREAD, AIRCRAFT CABLE, ETC.
11. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR ALL SINGLE PHASE CIRCUITS. A SHARED NEUTRAL CONDUCTOR IS NOT ACCEPTABLE ON SINGLE PHASE CIRCUITS.
12. PROVIDE MASONITE OR APPROVED EQUAL TO PROTECT ALL EXISTING FLOOR FINISHES.































ABBREVIATIONS	
LV	LOW VOLTAGE
MA	MILLIAMPERE
MAX	MAXIMUM
MB	MAIN BREAKERS
MC	MECHANICAL CONTRACTOR
MC	MAIN CROSS CONNECT
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDF	MAIN DISTRIBUTION FRAME
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MFR	MANUFACTURER
MG	MOTOR GENERATOR
MH	MANHOLE OR METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOV	MOTOR OPERATED VALVE
MPOE	MAIN POINT OF ENTRY
MTG	MOUNTING HEIGHT
MS	MOTOR STARTER
MSB	MAIN SWITCHBOARD
MTB	MAIN TERMINAL BOARD
MTD	MOUNTED
MTG	MOUNTING
MTGB	MAIN TELECOMMUNICATIONS GROUND BUS
MV	MEDIUM VOLTAGE
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON FUSED
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
P	POLE
PA	PUBLIC ADDRESS
PB	PUSH BUTTON
PBX	PRIVATE BRANCH EXCHANGE
PE	PHOTOELECTRIC
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
QR	QUARTZ RESTRIKE
R	EXISTING TO RELOCATE
REC	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SCP	SECURITY CONTROL PANEL
SEC	SECONDARY/SECOND
SECT	SECTION
SHT	SHEET
SMPOE	SECONDARY MAIN POINT OF ENTRY
SP	SERVICE PROVIDER
SPD	SURGE PROTECTIVE DEVICE
SPDT	SINGLE POLE, DOUBLE THROW
ST	SHUNT TRIP
STD	STANDARD
SW	SWITCH
SWBD	SWITCHBOARD
T	TWIST LOCK
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TC	TIME CLOCK
TTC	TELEPHONE TERMINAL CABINET OR CLOSE
TTB	TELEPHONE TERMINAL BOARD
TEL	TELEPHONE
TELCO	TELEPHONE COMPANY
TELCOM	TELECOMMUNICATIONS
TEMP	TEMPERATURE
TGB	TELECOMMUNICATIONS GROUND BUS
TO	THERMAL OVERLOAD
TR	TAMPER RESISTANT
TYP	TYPICAL
UC	UNDER COUNTER
UG	UNDER GROUND
UH	UNIT HEATER
UL	UNDERWRITER LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
USB	UNIVERSAL SERIAL BUS
UTP	UNSHIELDED TWISTED PAIR
V	VOLT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLTMETER
W	WATT
W/	WITH
WH	WATT HOUR
WHM	WATT HOUR METER
WLAN	WIRELESS-LOCAL AREA NETWORK
WP	WEATHERPROOF
WPL	WEATHER PROOF LOCKABLE ENCLOSURE
WT	WATERTIGHT
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

FIRE ALARM	
	SMOKE DETECTOR
	WALL SMOKE DETECTOR
	SMOKE/CARBON MONOXIDE DETECTOR
	WALL SMOKE/CARBON MONOXIDE DETECTOR
	HEAT DETECTOR
	DUCT DETECTOR
	BEAM DETECTOR RECEIVER
	BEAM DETECTOR TRANSMITTER
	VOICE EVAC PANEL
	ELEVATOR STATUS PANEL
	CEILING MOUNTED SPEAKER
	WALL MOUNTED SPEAKER
	CEILING MOUNTED SPEAKER/STROBE
	WALL MOUNTED SPEAKER/STROBE
	WALL MOUNTED SILENTONE
	FIRE SERVICE PHONE
	FIREMAN'S PHONE JACK
	ROTATING BEACON
	MANUAL PULL STATION
	MAGNETIC DOOR HOLD OPEN DEVICE
	TAMPER SWITCH
	FLOW SWITCH
	CEILING MOUNTED REMOTE INDICATOR LIGHT
	WALL MOUNTED REMOTE INDICATOR LIGHT
	WALL MOUNTED ADA STROBE
	CEILING MOUNTED STROBE
	ADDRESSABLE INPUT MODULE
	FIRE ALARM ADDRESSABLE RELAY
	ALARM BELL
	FIRE SMOKE DAMPER
	SMOKE CONTROL DAMPER
	CARBON MONOXIDE DETECTOR
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL
	TWO-WAY COMMUNICATION CALL BUTTON
	TWO-WAY COMMUNICATION PANEL

RACEWAY LEGEND

	BRANCH CIRCUIT HOMERUN TO PANELBOARD, NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS, NUMERAL INDICATES CIRCUIT NUMBER.
	BRANCH CIRCUIT HOMERUN CONTROLLED BY LIGHTING CONTROL SYSTEM. FIRST HEXAGON LETTER CORRESPONDS TO FIRST CIRCUIT NUMBER. (i.e. CIRCUIT #2 IS ON ZONE A)
	UNDERGROUND FEEDER
	UNDERGROUND BRANCH CIRCUIT HOMERUN
	CONDUIT UP
	CONDUIT DOWN
	CONDUIT RUNS UNDERFLOOR OR BELOW GRADE
	CONDUIT RUN CONCEALED IN WALLS OR CEILING, OR EXPOSED WHEN CEILINGS ARE NOT PRESENT.
	MOTOR CONNECTION



POWER DEVICES	
	WALL RECEPTACLE
	WALL DUPLEX RECEPTACLE
	WALL DUPLEX RECEPTACLE (EMERGENCY)
	WALL FOURPLEX RECEPTACLE
	WALL FOURPLEX RECEPTACLE (EMERGENCY)
	WALL SPECIAL RECEPTACLE (FOR "X" SEE TABLE BELOW)
	WALL COMBINATION TV / POWER OUTLET
	WALL CLOCK RECEPTACLE
	WALL JUNCTION BOX
	WALL FURNITURE FEED
	FLOOR DUPLEX RECEPTACLE
	FLOOR FOURPLEX RECEPTACLE (POWER/DATA DEVICE. REFER TO TECHNOLOGY DRAWINGS)
	FLOOR FOURPLEX RECEPTACLE WITH AV (POWER/DATA/AV COMBO DEVICE. REFER TO TECHNOLOGY DRAWINGS)
	FLOOR JUNCTION BOX
	FLOOR FURNITURE FEED
	CEILING RECEPTACLE
	CEILING DUPLEX RECEPTACLE
	CEILING FOURPLEX RECEPTACLE
	CEILING / FLOOR SPECIAL RECEPTACLE (FOR "X" SEE TABLE BELOW)
	CEILING JUNCTION BOX
	CEILING TV OUTLET
	POWER POLE
	SINGLE TOGGLE SWITCH
	PLUGMOLD
	EMERGENCY POWER OFF
	SINGLE PUSH BUTTON
	DUPLEX PUSH BUTTON
	WALL BUZZER
GENERAL NOTES: <ol style="list-style-type: none"> REFER TO SPECIFICATION SECTION 26 27 26 FOR SPECIFIC FLOOR PRODUCT INFORMATION. REFER TO TECHNOLOGY LEGEND AND FLOOR PLANS TO CONFIRM ALL LOCATIONS THAT HAVE DATA OR DATA/AV REQUIREMENTS COMBINED WITH POWER IN FLOOR BOXES. REFER TO TECHNOLOGY (AND/OR AV) DRAWINGS FOR DEDICATED LOW VOLTAGE CONDUIT AND FLOOR BOX DEVICE MOUNTING PLATE REQUIREMENTS. LOW VOLTAGE CONDUIT REQUIREMENTS ARE NOT DOCUMENTED ON POWER DRAWINGS. 	

CU ANSCHUTZ RC1
HENSEL PHELPS AUDITORIUM & CLASSROOM
LIGHTING & CONTROLS

ELECTRICAL LEGEND

DISCIPLINE - CATEGORY - SUB-CATEGORY - SHEET

E0.0




1. NOT USED.
2. ALL EXPOSED CONDUIT SHALL BE ROUTED PERPENDICULAR, PARALLEL OR AT 45 DEGREE ANGLES TO COLUMNS AND BEAMS. ALL EXPOSED CONDUIT ROUTING SHALL BE COORDINATED WITH ENGINEER AND ARCHITECT PRIOR TO INSTALLATION. NO ADDITIONAL COST TO OWNER WILL BE ALLOWED FOR RELOCATING CONDUIT DUE TO THE LACK OF COORDINATION WITH ARCHITECT.
3. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS NOTED OTHERWISE. ALL VERTICAL SECTIONS OF CONDUIT SHALL BE CONCEALED. CONTRACTOR SHALL COORDINATE ALL VERTICAL CONDUIT AND BACK BOXES IN CONCRETE, MASONRY AND GYP. WALLS.

14143 Denver West Pkwy. Suite 300
Golden, CO 80401
303.421.6655
www.me-engineers.com

CU ANSCHUTZ RC1
HENSEL PHELPS AUDITORIUM & CLASSROOM
LIGHTING & CONTROLS

100%
CONSTRUCTION
DOCUMENTS



KEYPLAN

**NORTH BUILDING
ELECTRICAL PLAN
LEVEL 1
WEST AUDITORIUM**

DISCIPLINE - CATEGORY - SUB-CATEGORY - SHEET

E2.1



