Addendum #2

This Addendum modifies, amends, and supplements designated parts of the Contract Documents, Specifications and Drawings for:

Lewiston Armory Unheated Storage Building Project, Lewiston, Maine Project No. 23SC20-313-D, Bid Number #22-026

Directorate of Facilities Engineering

17 June 2022

It shall be the responsibility of the Contractor to notify all Subcontractors and Suppliers for various portions of the work of any changes or modifications contained in this Addendum.

Clarification Items:

1. Q: Spec section 102213 – Wire Mesh Partitions, Section 2.4 Heavy-Duty Wire Mesh Partitions, A. Mesh: - Two types of mesh are listed – crimped diamond and welded type. The Drawings note "Welded Wire Mesh Partitions" on AE220. Please clarify if crimped type is allowable or if the mesh must be welded type.

A: Please provide welded wire mesh partitions.

2. Q: Please confirm the location of the existing panel that will be feeding the new panel. I will also require pictures of this panel and breakers, so I know what type of breaker to provide. When onsite we couldn't locate this panel.

A: The existing panel connection is MDP, position 2, located in room 116B. Connect to the existing 100A, 3P breaker in position 2. No new breaker is required, the existing 100, 3P breaker will be used for new connection. (SEE PHOTOS BELOW.)

3. Q: Please provide pictures of the existing manholes (Covers off and pictures of the inside of the manhole) that we need to connect to per the drawings.

A: Conduit connections at existing manholes are not proposed as part of this project. Refer to drawings CS101 and ES101 for conduit routing. (SEE PHOTOS BELOW.)

4. Q: Plan ES101 shows adding a handhole for the fuel station and connecting to the existing UG conduit. You don't show this as a separate conduit going back to panel GP in the new building. It shows one 2" conduit that I am assuming is for the panel feed and not the fueling station feed. Please provide direction on this.

A: The 2" conduit running between the handhole and the proposed building will contain feeds for both the proposed building and the fuel tank, which will be fed from the panel in the new building.

5. Q: Plan CS101 Handhole to fuel station shows a 1" conduit but on plan C-502 detail 5 shows 1-1/2" RMC and 1". Please confirm what size conduit is required.

A: The conduit running from the handhole to the panel pedestal will be 1". Detail 5/C-502 has been revised.

6. Q: Plan C-502 detail 4 – shows that RMC through the concrete. Detail 5 shows RMC expansion fitting. Please confirm that this is required where the conduits are within the concrete pad.

A: Provide expansion fittings on all above-grade portions of all conduits.

7. Q: Plan C-502 detail 6 - Please confirm conduit size for the existing conduit runs where we need to tie into. Assuming that these existing runs are spares and are empty conduits?

A: New 2" conduit from new panelboard GP in storage facility to the handhole. MEARNG indicates that the existing conduit is 4" (abandoned line from the disconnection of the 3rd platoon storage building) is connected to the handhole, back to the readiness center. See detail 6/C-502 for handhole.

8. Q: Plan E-101 Conduit marking schedule – Will color conduit be excepted and eliminate color banding?

A: Banding must be used on surface-mounted conduit.

9. Q: Please confirm the following requirements in the specs:

Warranty

Q: Lighting, EM Lighting/Batteries – 5 years parts and labor

A: Correct, lighting warranty is 5 years.

Q: All items – 1 year warranty

A: 1 year warranty unless noted otherwise.

Attic Stock/Spare Parts – Electrical

Q: Please confirm that there are no spare parts or attic stock required for electrical materials.

A: Spare parts or stock are not required for electrical materials.

10. Q: Plan E-101 is showing fused disconnect switch for the overhead garage doors. Why does this need to be fused? Can we use a rated two pole toggle switch for the means of disconnect?

A: An HP-rated, lockable toggle switch is acceptable.

11. Q: Keynote 2 – Mount remote inverter for exterior fixtures. Can you provide a spec or an equal to model for the inverter you're looking for?

A: Lightgear 125W or approved equal sized for connected load, per sheet E-001 fixture schedule note 2.

12. Q: Sheet S-001 – Concrete Note # 2 calls for concrete exposed to weather to be 5000 PSI. Foundation Walls to be 4500 PSI. Since the foundation wall has exposed concrete above finished floor that will be exposed to weather, are we to use 5000 PSI mix for the foundation walls?

A: The foundation walls can use the 4500 PSI concrete.

Drawing Items:

1. Drawing CS101, Plan 1 - ADD demolition of three (3) 8' x 20' metal storage containers.

- 2. **Drawing CG101, Detail 3** Provide underdrain **sand** at stone drip edge as indicated on revised detail (attached).
- 3. Drawing CS101, Plan 2 and Drawing C-502, Detail 2 Revise size and location of fuel storage cabinet pad as indicated on attached Drawings.
- 4. Drawing C-502, Detail 5 Revise above ground conduit size to 1-inch.
- 5. **Drawing E-001** Revise Panelboard Schedule as indicated on revised plan (attached).
- 6. Drawing ES101, Keynote 2 Revise as indicated on attached plan.
- 7. **Drawing E-101** Revise circuiting for exterior GFCI of receptacles as indicated on revised plan (attached).

Specification Items:

- Specification 312000, Paragraph 2.1 ADD: K. Underdrain Sand: Clean, free drainingsand, free from organic matter, frozen material, and conforming to MDOT subsection 703.22, "Underdrain Backfill Material, Type B."
- 2. **Specification 024116, Paragraph 1.8.C DELETE** paragraph in its entirety and replace with the following:
 - C. Hazardous Materials: With the exception of Universal Waste, it is not expected that hazardous materials will be encountered in the Work.
 - 1. Universal Waste: Lamps in existing 4' Fluorescent fixtures are to be removed and separated from general construction waste and protected from breakage. Lamps are to be disposed of in accordance with the requirements of the State of Maine and EPA or other local authority having jurisdiction.
 - 2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by the Contractor at a negotiated rate.
- 3. Specification 102213, Paragraph 2.4.A DELETE subsection 1, in its entirety.

Attachments:

- 4. Drawing CS101, Revised June 17, 2022.
- 5. Drawing CG101, Revised June 17, 2022.
- 6. Drawing C-502, Revised June 17, 2022.
- 7. Drawing E-001, Revised June 17, 2022.
- 8. Drawing ES101, Revised June 17, 2022.
- 9. Drawing E-101, Revised June 17, 2022.

<section-header>

Panel Board MDP, Armory Room 116B



Panel Board – Detail





Electrical Manhole

Electrical Manhole







1 SILT FENCE. SEE DETAIL 1/C-501

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<u>ELECTRICAL</u> S	YMBOLS				
LIGHTING		RECEPTACLES			
NOTE: UPPER REFER	CASE SUBSCRIPTS INDICATE FIXTURE TYPE. TO LIGHTING FIXTURE SCHEDULE.	Ψ	ACLE, 120V, 20A, RADE, NEMA 5-20R		
S	120/277V, 20A LIGHT SWITCH, SPECIFICATION GRADE	₽ ^G	DUPLEX RECEPTA SPECIFICATION G	ACLE, 120V, 20A RADE, NEMA 5-20R	
ь	WALL MOUNTED FIXTURE WITH EMERGENCY DRIVER SUBSCRIPT INDICATES FIXTURE TYPE		SUBSCRIPT "G" INDICATES GROUND FAULT INTERRUPT, WP INDICATES WEATHERPROOF GROUND FAULT		
	1'X4' LED FIXTURE		INTERNOFT.		
		<u>LINE TYPE LEC</u>	<u>Send</u>		
ď	OCCUPANCY SENSOR			REMOVE EXISTING ITEMS	
	W = WALL SWITCH TYPE			EXIST ITEMS TO REMAIN	
	EMERGENCY LIGHT, BATTERY POWERED			PROVIDE ITEMS	
	TWO LAMPS. WP = WET LOCATION LOWER CASE SUBSCRIPT INDICATES LOCAL CIRCUIT TO WHICH UNIT IS CONNECTED	Ś	PROVIDE SWITCH	(INSTALLATION DRAWINGS)	
\boxtimes	ILLUMINATED EXIT SIGN, LED TYPE SINGLE FACE OR DOUBLE FACE.			UNDERGROUND ELECTRIC	
PE	EXTERIOR PHOTOCELL			UNDERGROUND ELECTRIC	

BASIS OF DESIGN NOTE: FIXTURE MANUFACTU NUMBERS ARE LISTED TO ESTABLISH QUALITY AESTHETICS. OTHER MANUFACTURERS ARE AC PROPOSED LIGHT FIXTURES MEET THE SPECI							BASIS OF DESIGN NOTE: FIXTURE MANUFACTURER AND CATALOG NUMBERS ARE LISTED TO ESTABLISH QUALITY, PERFORMANCE, AND AESTHETICS. OTHER MANUFACTURERS ARE ACCEPTABLE OF THE PROPOSED LIGHT FIXTURES MEET THE SPECIFIED REQUIREMENTS.	
TYPE	DESCRIPTION	SOURCE (LUMENS)	VOLTS	W/VA	MOUNTING	NOTES	MANUFACTURER	CATALOG NUMBER
А	HIGH BAY	LED (3276)	120	30.6	SURFACE	1,3	COLUMBIA	LAW4-35MW-EU
E	EXTERIOR WALL MOUNT LED	LED (762)	120	10.8	WALL	2,4	HUBBELL OUTDOOR	LNC2-9L-070-2-LGS-SCP-20F
⊠	EXIT SIGN – SINGLE FACE	LED'S (2)	120	2	UNIVERSAL	—	DUAL LITE	EVE-U-R-W-E
4.7	DUAL HEAD EMERGENCY LIGHT W/BATTERY	LED	12	10.8	WALL	_	HUBBEL	LM-16-12-1205L

FIXTURE SCHEDULE NOTES:

COORDINATE MOUNTING WITH ARCHITECTURAL TRADE. 1

2. PROVIDE REMOTE MOUNTED EMERGENCY INVERTER TO OPERATE EXTERIOR FIXTURES LITEGEAR 125W, SIZE FOR CONNECTED LOAD.

3. COORDINATE MOUNTING TYPE WITH CEILING.

4. MOUNT AT 12 FEET.

						PA	ANELB	OARD	SCHEE	OULE (GP					
CKT AMPS PER PHASE			LOAD	LOAD CKT BKR CKT BKR LOAD			LOAD		AMF	AMPS PER PHASE						
NO	Α	В	C	DESCRIPTION		TYPE	TRIP	POLE	TRIP	POLE	TYPE	DESCRIPTION	A	В	С	NO
1	9	\searrow	G	ARAGE DOOR OPE	NER (DOOR 104A)	М	20	2	20	1	R	REC - RM 101	(10		\geq	2
3	\ge	9		V					20	1	R	REC - RM 102	X	6		4
5	\ge	\searrow	9 G,	ARAGE DOOR OPE	NER (DOOR 103A)	M	20	2	20	1	R	REC - RM 103	\sim		12	6
7	9	\searrow	\searrow	V					20	1	R	REC - RM 104	9	\geq	\searrow	8
9	\ge	9	G	ARAGE DOOR OPE	NER (DOOR 102A)	M	20	2	20	1	L	LIGHTING 103 & 104	\sim	4.6	\geq	10
11	\geq	\sum	9						20	1	L	LIGHTING 101 & 102	\sim	\geq	4.6	12
13	9	\searrow	G	ARAGE DOOR OPE	NER (DOOR 101A)	M	20	2	20	1	\langle	EXTERIOR LIGHTING			\geq	14
15	\ge	9	\searrow						20	1	(–	SPARE	\sim	· }	\triangleright	16
17	\geq	\sum	· SI	PARE		_	20	1	20	1		SPARE		\searrow		18
19	•	\searrow	SI	PARE		_	20	1	20	1	_	SPARE	•	\geq	\geq	20
21	\ge	·	SI	PARE		_	20	2	20	2	_	FUEL DISPENSING EQUIPMENT	\sim	4.9	\geq	22
23	\geq	\sum											\sim	\geq	4.9	24
	\frown															
	(47	42.5	39.5) T	OTAL/PHASE	VOLTS: 120/208,	3 PHASE, 4	WIRE			•			DESIGNAT	ION: GP		
	\sim	$\overline{\gamma}$	$\neg \neg \neg$		мсв: 🔀			МСВ	AMPS:	100			LOCATION	: STOR	AGE 104	
				$\overline{1}$	MLO:			BUS	AMPS:	100			MOUNTING	SURF.	ACE	
				\sim	FAULT AMPS: 10,0	00 KAIC										

<u>GENERAL</u>

Ń	MOTOR
다	HP RATED, LOCKABLE TOGGLE SWITCH
\Box_1	FUSED DISCONNECT SWITCH
٩	JUNCTION BOX
A <u>-1</u>	BRANCH CIRCUIT HOMERUN, A—1 INDICATES PANEL DESIGNATION AND CIRCUIT NUMBER
	PANELBOARD
EGB	ELECTRICAL GROUNDING BUSBAR
GROUNDING	
\odot	GROUND ROD, COPPER CLAD
۵	PUSH BUTTON

ELECTRICAL ABBREVIATIONS

, AMP	AMPERE
3P	AMPERES, 3-POLE
С	ALTERNATING CURRENT
FF	ABOVE FINISHED FLOOR
IC	AMPERE INTERRUPTING CAPACITY
VG	AVERAGE
WG	AMERICAN WIRE GAUGE
KR	BREAKER
:	CONDUCTOR, CONDUIT, CEILING
AT	CATALOG, CATEGORY
B	CIRCUIT BREAKER
CTV	CLOSED CIRCUIT TELEVISION
KT	CIRCUIT
T.	CURRENT TRANSFORMER
U	COPPER
WG	DRAWING
MI	ELECTRICAL METALLIC TUBING
	GROUND; GROUND FAULT CIRCUIT INTERRUPTER
FCI	GROUND FAULT CIRCUIT INTERRUPTER
	HEATING LOAD TYPE FOR PANEL SCHEDULE
IP	HORSEPOWER
IVAC	HEATING, VENTILATION, AND AIR CONDITIONING
	KILO-CIRCULAR MILS
.VA	KILO-VOLI-AMPERE
W	KILO-WALI
	LIGHTING LOAD TYPE FOR PANEL SCHEDULE
ED	LIGHT EMITTING DIODE
IG 1	LIGHTING MOTOR LOAD TYPE FOR DANEL SCHEDULE
I I∧∨	MOTOR LOAD TIPE FOR PANEL SCHEDULE
	MINIMUM
	NELITRAL
IFMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
IFPA	NATIONAL FIRE PROTECTION ASSOCIATION
liC	NOT IN CONTRACT
10. #	NUMBER
	OCCUPANCY
	PHASE
,	POLE
/0	PART OF
	RECEPTACLE LOAD TYPE FOR PANEL SCHEDULE
EC	RECEPTACLE
GS	RIGID GALVANIZED STEEL
M	ROOM
MC	RIGID METAL CONDUIT
PD	SURGE PROTECTION DEVICE
Q	SQUARE
W	SWITCH
HHN	HEAT RESISTANT THERMOPLASTIC WIRE
	WITH NYLON JACKET
HWN	MOISTURE & HEAT RESISTANT THERMOPLASTIC
	WIRE WITH NYLON JACKET
PA VD	IRAP PRIMER
YP v=	
	UNDERGROUND ELECTRIC
	UNDERGRUUND ELECTRICAL
	VOLT
Δ	
1	WATT WIRE
/	WITH
1	



WP

WEATHERPROOF

ELECTRIC SERVICE GROUNDING DETAIL NOTES

- 1. COMPLY WITH NEC, SPECIFICALLY NEC 250.50 AND 250.52.
- 3. MINIMUM CONDUCTOR SIZE TO GROUND RODS MUST BE #1/0 COPPER.
- COPPER.
- 5. GROUND ROD CONNECTION MUST BE UL LISTED, SUITABLE FOR DIRECT BURIAL, THERMAL WELD.
- 6. CONDUCTORS AND CONDUIT MUST BE CONCEALED.

GROUNDING ELECTRODE SYSTEM DETAIL E-001 NOT TO SCALE

- → → TO GROUNDING RODS
- → → TO CONCRETE ENCASED REBAR

2. PROVIDE THERMAL WELDED OR IRREVERSIBLE COMPRESSION CONNECTIONS. 4. MINIMUM CONDUCTOR SIZE TO OTHER GROUNDING ELECTRODES MUST BE #4/0

