University of South Carolina UofSC Advising Center

3rd Floor, Close-Hipp Building 1705 College St, Columbia, South Carolina State Project Number: H27-Z411

March 10, 2020

ADDENDUM NO. 2

This addendum forms a part of the Contract documents and modifies the original Bidding Documents and any previous Addenda as noted below. Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may subject Bidder to disqualification.

MODIFICATIONS TO PREVIOUS ADDENDA:

None

MODIFICATIONS TO PROJECT MANUAL:

None

MODIFICATIONS TO DRAWINGS:

ARCHITECTURAL DRAWINGS:

None

ELECTRICAL DRAWINGS:

1. Reference Sheet E-002: **DELETE** Sheet E-002, dated 01/31/2020, Revised 02/28/2020. **ADD** Sheet E-002, dated 01/31/2020, Revised 03/10/2020.

MECHANICAL DRAWINGS:

None

PLUMBING DRAWINGS:

None

REQUESTED PRODUCT APPROVALS:

None

QUESTIONS FROM CONTRACTORS:

- 1. Question: Who is responsible for permits?
 - a. Answer: This project is under USC's certification granted by OSE. OSE is the authority having jurisdiction for state projects. No city building permit is required. Bidders must have appropriate LLR contractor's license and contractor's permits allowing them to work within city limits.
- 2. Question: Do we need a construction trailer/office?
 - a. Answer: The GC may set up a construction office within the tenant suite. If the GC determines they need more space, they may use a construction trailer at their discretion. Coordinate location with owner.
- 3. Question: Do we or the owner provide the post tension subcontractor?
 - a. Answer: See Section 011000 Summary Part 1.6 "WORK UNDER OWNER'S SEPARATE CONTRACTS". All work required for completion of this project and not listed in this section is to be provided by the GC.

END OF ADDENDUM NO. 2

	SEISMIC REQUIREMENTS FOR ELECTRICAL SYSTEMS							
-	PER IBC-2015/ASCE 7-10							
	 A. EQUIPMENT, APPLIANCES AND SUPPORTS (INCLUDING ROOF CURBS & ROOF RAILS) EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST THE WIND PRESSURES DETERMINED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. WHERE SEISMIC RESTRAINT IS REQUIRED, THE MORE DEMANDING FORCE OF WIND AND SEISMIC MUST BE USED. SEE SEISMIC INFORMATION CONTAINED IN THE STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC DESIGN CATEGORY.SEE EQUIPMENT SCHEDULES AND DETAILS FOR SPECIFIC COMPONENT IMPORTANCE FACTOR DESIGNATIONS. B. USE APPLICABLE TABLE BELOW TO DETERMINE SEISMIC RESTRAINT REQUIREMENTS FOR EACH MECHANICAL COMPONENT. C. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL. SUBMITTALS MUST INCLUDE STAMPED AND SIGNED DRAWINGS AND CALCULATIONS. D. WHERE SEISMIC RESTRAINT IS REQUIRED, HOUSEKEEPING PADS NEEDED FOR THE INSTALLATION OF EQUIPMENT UNDER THIS CONTRACT MUST BE DESIGNED BY THE SEISMIC ENGINEER. DO NOT POUR ANY HOUSEKEEPING PADS PRIOR TO THE RECEIPT OF THE SEISMIC SUBMITTAL. E. SEISMIC RESTRAINTS FOR CONDUIT, CABLE TRAY, AND BUS DUCT MUST BE SHOWN ON LAYOUT DRAWINGS SHOWING SPECIFIC BESTRAINTS FOR CONDUIT, CABLE TRAY, AND BUS DUCT MUST BE SHOWN ON LAYOUT DRAWINGS SHOWING SPECIFIC 							
	F. REFER TO ASCE 7-10 FOR SEISMIC INSTALLATION GUIDELINES. ELECTRICAL COMPONENT IMPORTANCE FACTOR (Ip) DESIGNATION							
	Ip = 1.0 $Ip = 1.5$							
	 ALL ASSOCIATED ELECTRICAL WORK UNLESS NOTED OTHERWISE. EMERGENCY LIGHTS & EXIT SIGNS GENERATOR TRANSFER SWITCHES PANELBOARDS & TRANSFORMERS TIED TO EMERGENCY SYSTEM PANELBOARDS & TRANSFORMERS TIED TO STAND-BY SYSTEM RACEWAY SYSTEMS ASSOCIATED WITH EMERGENCY SYSTEM CABLE-TBAY SYSTEMS 							
		SEISMIC	DESIGN CAT	TEGORIES C				
		СОМРО	ONENT IMPO	ORTANCE FACTOR (Ip)				
_		1.0		1.5				
	COMPONENT IDENTIFICATION	SEISMIC RESTRAINT REQUIREMENT	NOTES	SEISMIC RESTRAINT REQUIREMENT	NOTES			
	ROOF MOUNTED	NOT REQUIRED	-	RESTRAIN ALL	-			
	FLOOR MOUNTED	NOT REQUIRED	-	RESTRAIN ALL	-			
	WALL MOUNTED	NOT REQUIRED	-	RESTRAIN ALL	-			
			-		-			
				\NLN ALL	34			
				RESTRAIN IF ANY CONDUIT	о,т 			
	CABLE TRAY/BUS DUCT TRAPEZED CONDUIT	NOT REQUIRED	-	ON TRAPEZE > 1" RESTRAIN IF TOTAL WEIGHT OF SUPPORTED COMPONENT > 10 LBS/FT	4			
	COMPONENT CERTIFICATION (SEE NOTE 5)	NOT REQUIRED	-	REQUIRED	-	EXISTING FLC		
	PENDANT, LAY-IN, & CAN LIGHTS	NOT REQUIRED	-	REQUIRED	-	<u>م</u> م		
	 EQUIPMENT 20 LBS. OR LEST DUCTWORK, PIPING, AND CO RESTRAINTS ARE NOT REQUINE FLEXIBLE CONNECTIONS BE ALL NON-DUCTILE PIPING (IE RESTRAINT IS NOT REQUIRE SIGNIFICANT BENDING OF TI EXPECTED DEFLECTIONS. COMPONENT CERTIFICATION OF RECORD. THE RESTRAINT OF PENDAN CONSTRUCTION ASSOCIATION 	DISEAEIVIET IF FLEXIBLE CONNECTION DNDUIT. JIRED IF THE COMPONENT WEIGHS 400 TWEEN THE COMPONENT AND ASSOCI E - PLASTIC) MUST BE RESTRAINED. ED IF SUSPENDED 12" OR LESS FROM T HE HANGERS AND THEIR ATTACHMENT N MUST BE SUPPLIED BY THE EQUIPME IT, LAY-IN, & CAN LIGHTS IS GOVERNED DN).	D LBS. OR LESS, IS IATED DUCTWORN HE STRUCTURE A TS AND PROVISIO INT MANUFACTUR BY "CISCA-04 FO	MOUNTED AT 4 FT. OR LESS ABOVE A F (, PIPING, AND CONDUIT. IND THE HANGERS ARE DETAILED TO AN NS ARE MADE FOR PIPING TO ACCOMM RER AT TIME OF SUBMITTAL FOR REVIEV R SEISMIC ZONES" (CEILINGS AND INTER	FLOOR, AND HAS VOID ODATE V BY ENGINEER RIOR SYSTEMS			
	TO OTHER INITIATII REFER TO FLOO QUANTITIES AND	NG DEVICES. R PLAN FOR LOCATIONS. S O OTHER INITIATING DEVICES. REFER TO FLOOR PLAN FOR QUANTITIES AND LOCATIONS.	ROM NEW OR I	EXISTING E CIRCUIT TO OTHER SIGNAL REFER TO FLO QUANTITIES AN FROM NEW OR EXISTING INTIATING DEVICE CIRCUIT	LING DEVICES. OR PLAN FOR D LOCATIONS. TO OTHER REFER QUANTIT	FRO SIGN F R INITIATING DEVICES. TO FLOOR PLAN FOR TIES AND LOCATIONS.		
	 EXISTING FIRE ALARM SYSTEM SEE FLOOR PLANS FOR INTENDED COVERAGE OF FIRE ALARM SYSTEM. EXISTING BUILDING FIRE ALARM SYSTEM IS BASED ON <u>GAMEWELL / E3</u>. PROVIDE ADDITIONAL POWER SUPPLIES AND OTHER SYSTEM ACCESSORIES REQUIRED TO SUPPORT ADDITIONAL DEVICES. INITIATING DEVICES SHALL BE SMOKE DETECTORS, DUCT-MOUNTED SMOKE DETECTORS, HEAT DETECTORS, MANUAL PULL STATIONS / ABORT STATIONS, AND WATER FLOW SWITCHES. THE AUTHORITY HAVING JURISDICTION SHALL BE SENT TO THE FACP. VISUAL PORTION OF SIGNAL SHALL BE CONTINUOUS. TONE DURATION SHALL BE 3 SECONDS. 							
			4 EXI E-002 NOT	STING FIRE ALARM to scale	1 SYSTEN	M SINGLE-L		
		Α		.		B		

F	I										
	LIGHT FIXTURE SCHEDULE										
	FIXTURE SPECIFICATIONS				LAMPING ELECTRICAL						
								FIXT.			
	SYMBOL	TYPE	FIXTURE DESCRIPTION	MANUFACTURER	CAT. #	NO.	LAMP TYPE	LOAD	VOLTS	MOUNTING REMARKS	NOTES
	. o	Α4	2'X4' LED RECESSED TROFFER	HE WILLIAMS	LT-24-L40/835-AF-DIM-UNV	_	LED (3972 LUMENS, 835)	32	277 V	RECESSED IN GRID CEILING	2,3,4,5
		A4E	SAME AS TYPE "A4" EXCEPT FED FROM GENERATOR BACKED CIRCUIT THROUGH GTD	HE WILLIAMS	LT-24-L40/835-AF-DIM-UNV	_	LED (3972 LUMENS, 835)	32	277 V	RECESSED IN GRID CEILING	2,3,4,5
\wedge		BN	DECORATIVE LED PENDANT	LZE	BKNT KS S BK LED DIM UL	-	LED	80	277 V	PENDANT MTD AT 7'-6"AFF.	3,4,5
	0	D	4" ROUND LED DOWNLIGHT	HE WILLIAMS	4DR-TL-L15-835-DIM-UNV-OW-OF-W H	_	LED (1466 LUMENS, 835)	14	277 V	RECESSED IN GRID CEILING	1,2,3,4,5
	•	DE	4" ROUND LED DOWNLIGHT EMERGENCY	HE WILLIAMS	4DR-TL-L15-835-DIM-UNV-OW-OF-W H	_	LED (1466 LUMENS, 835)	14	277 V	RECESSED IN GRID CEILING	1,2,3,4,5
Z	0	DW	4" ADJUSTABLE LED DOWNLIGHT	HE WILLIAMS	4AR-TL-L10-835-DIM-UNV-OM-OF-C	_	LED (946 LUMENS, 835)	12	277 V	RECESSED IN GRID CEILING	2,3,4,5
		J2	2' LINEAR LED RECESSED WALL WASH	ALW	LP3 5RWWI=SLOT-S2=H1/80/3500-0/1 0V/1%=HT-WH-UNV		LED (1796 LUMENS, 835)	25	277 V	RECESSED IN CEILING	3,4,5
		J4	4' LINEAR LED RECESSED	FINELITE	HP-2R-4'-B-835-F-277V-FE-SC	_	LED (1692 LUMENS, 835)	18	277 V	RECESSED IN CEILING	2,3,4,5
		J4E	SAME AS TYPE "J4" EXCEPT FED FROM GENERATOR BACKED CIRCUIT THROUGH GTD	FINELITE	HP-2R-4'-B-835-F-277V	_	LED (1692 LUMENS, 835)	18	277 V	RECESSED IN CEILING	2,3,4,5
		J10P	10' LINEAR LED DIRECT/INDIRECT PENDANT	FINELITE	HP-4ID-10'-S-S-835-TG-F-277V-FA -FE-SC	} -	LED (3228 LUMENS, 835)	73	277 V	PENDANT MTD AT 7'-6"AFF.	1,2,3,4,5
		J12	12' LINEAR LED RECESSED	FINELITE	HP-2R-12'-S-835-F-277V-FE-SC	-	LED (4392 LUMENS, 835)	43	277 V	RECESSED IN CEILING	2,3,4,5
		J16	16' LINEAR LED RECESSED	FINELITE	HP-4R-16'-S-835-F-277V	_	LED (6096 LUMENS, 835)	58	277 V	RECESSED IN GRID CEILING	2,3,4,5
		J16E	SAME AS TYPE "J16" EXCEPT FED FROM GENERATOR BACKED CIRCUIT FED THROUGH GTD	FINELITE	HP-4R-16'-S-835-F-277V	_	LED (6096 LUMENS, 835)	58	277 V	RECESSED IN GRID CEILING	2,3,4,5
	0	P1	LED PENDANT	TECH LIGHTING	700TDMINAP1UB-LEDWD	_	LED (135 LUMENS, 930)	9	277 V	PENDANT MTD AT 7'-6" AFF.	3,4,5
	0	P2	LED PENDANT WITH LOCUS RING	TECH LIGHTING	700TDMINAP1UB-LEDWD 700LOCUSR 13 B	-	LED (135 LUMENS, 930)	9	277 V	PENDANT MTD AT 7'-6" AFF.	1,3,4,5
		X1	EXIT SIGN	EMERGI-LITE	WLX1NGMUA-C	-	LED	1	277 V	CEILING MOUNTED	3,4,5
	. H	X3	EXIT SIGN	EMERGI-LITE	WLX1NGMUA-C	_	LED	1	277 V	WALL MOUNTED	4,5

LIGHT FIXTURE SCHEDULE NOTES

- 1 LUMENS LISTED IN SCHEDULE REPRESENT DELIVERED LUMENS OF FIXTURES. 2 THREE DIGIT NUMBERS LISTED IN LAMP COLUMN REPRESENT CRI AND COLOR TEMPERATURE. FIRST DIGIT INDICATES MINIMUM CRI AND LAST TWO DIGITS INDICATE COLOR TEMPERATURE.
- EXAMPLE: 830 INDICATES MINIMUM CRI OF 80 AND A COLOR TEMPERATURE OF 3000K.
- 3 SEE ARCHITECTURAL RCP AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHTS. 4 CONFIRM QUANTITIES OF FIXTURES SHOWN IN RCP MATCH QUANTITIES SHOWN ON ELECTRICAL PLANS PRIOR TO BID. IF NO DISCREPANCIES ARE NOTED PRIOR TO BID THE HIGHEST
- QUANTITY OF EACH FIXTURE TYPE SHOWN SHALL BE PROVIDED.
- 5 COORDINATE CEILING TYPE WITH GENERAL CONTRACTOR PRIOR TO ORDER.



		LIGH	ring fixture / Pf	RIOR APPROVED S
\ \	TYPE	MANUFACTURER	CAT #	MANUFACTURER
$\langle \cdot \rangle$	Α4	HUBBELL	LCAT24 SERIES	MERCURY LIGHTING
	A4E	HUBBELL	LCAT24 SERIES	MERCURY LIGHTING
7	BN			
\geq	D	LUMENPULSE	LCRS SERIES	ATLANTIC LIGHTING
(DE	LUMENPULSE	LCRS SERIES	ATLANTIC LIGHTING
\mathbf{i}	DW	LUMENPULSE	LCRS SERIES	ATLANTIC LIGHTING
\geq	J2	ELLIPTIPAR	S224 SERIES	FINELITE
$\left(\right)$	J4	LITE CONTROL	2L SERIES	ALW
	J4E	LITE CONTROL	2L SERIES	ALW
(J10P	LITE CONTROL	4L SERIES	ALW
	J12	LITE CONTROL	2L SERIES	ALW
(J16	LITE CONTROL	4L SERIES	ALW
7	J16E	LITE CONTROL	4L SERIES	ALW
\geq	P1		\downarrow	
(P2			
\mathbf{i}	X 1	LIGHT ALARMS	SLEDN SERIES	EXITRONIX
	Х3	LIGHT ALARMS	SLEDN SERIES	EXITRONIX

ightarrow FROM NEW OR EXISTING SIGNALING LINE CIRCUIT F INITIATING DEVICES. TO FLOOR PLAN FOR

F

ightarrow from new or existing ightarrowINTIATING DEVICE CIRCUIT

3RD FLOOR

M NOTES

TEM TROUBLE (OPEN WIRING, SHORTED WIRING, OR GROUND FAULTS) SHALL BE ANNUNCIATED H AUDIBLY AND VISUALLY AT THE FACP AND AT ALL ANNUNCIATORS.

IFICATION APPLIANCE CIRCUITS THAT PASS THROUGH A ZONE OTHER THAN THE ZONE IN WHICH (ARE NOTIFYING SHALL BE INSTALLED IN A 2-HOUR RATED CABLE/CONDUIT ASSEMBLY.

ALARM CONTRACTOR SHALL COORDINATE WITH THE OWNER, AND LOCAL FIRE MARSHALL ARDING THE REQUIRED NOTIFICATION ZONING REQUIREMENTS AND PROVIDE 2-HOUR RATED LE/CONDUIT ASSEMBLY FOR EACH REQUIRED ZONE.

SYSTEM WIRING SHALL BE CLASS A, NO T-TAPPING IS PERMITTED. CIRCUIT LOOP "SUPPLY AND URN" PATHS SHALL BE IN SEPARATE CONDUITS.

EQUIPMENT CONNECTION SCHEDULE ELECTRICAL UNIT I.D. VOLTS # OF POLES AMPS TWH 277 V 50 A 1 VAV-3.11 277 V 0 A 1 VAV-3.12 277 V 0 A 1

EQUIPMENT CONNECTION SCHEDULE NOTES

1 ALL SWITCHES SHALL BE GENERAL DUTY TYPE, FUSIBLE UNLESS NOTED WITH "NF" (NON-FUSIBLE).

2 "M" DENOTES DISCONNECT SWITCH INTEGRAL WITH MECHANICAL EQUIPMENT. 3 PROVIDE MOTOR-RATED TOGGLE SWITCH MOUNTED ON OR ADJACENT TO EQUIPMENT.

SINGLE-LINE



NEMA	LOAD (VA)	NOTES
1	10000	3
	1108	
	1108	



	STUDIO 2 LA	STUDIO 2LR, INC. 2428 MAIN STREET	COLUMPIA, SC 23201 P 803.233.6602 STUDIO2LR.COM		
	BELKA ENGINEERING ASSOC. INC. No. CO0953				
	No. 26181 POOL L. AREHINN				
/2020	CLIENT NAME UNIVERSITY OF SOUTH CAROLINA PROJECT NAME	UofSC ADVISING CENTER CLOSE-HIPP BLDG, 3RD FLR	LOCATION 1705 COLLEGE ST. COLUMBIA, SC		
1/31	RE NO. DATE	VISIONS DESCR	IPTION		
3 BIDDING - C	2 3/10/20	REVISION 2	2		
SSUED FOI	PROJECT NU SHEET NUME E-O SHEET NAME SCHEDUL DETAILS	MBER 19	9045		

DATE 1/31/2020