SAGINAW VALLEY STATE UNIVERSITY
7400 Bay Road, University Center, MI 48710
(989) 964-4080 | www.svsu.edu

ADDENDUM NO. 1 – Page 1

PROJECT: WEST COMPLEX – BANQUET & SEMINAR ROOMS RENOVATIONS 2023

BID NUMBER: 23012
Date: September 22, 2022

For Bids Due: Tuesday, September 27, 2022 at 2:00 p.m.

The following clarifications, modifications, and/or revisions to the above project shall be considered a part of the original Contract Documents. It shall be the responsibility of the contractors to notify their subcontractors and/or suppliers of the clarifications, modifications and/or revisions included herein.

Item No. 1: Clarification: Project Allowances shall be included in each trade's proposal as noted.

Item No. 2: Lutron representative's contact information.

Gary Wright
garyw@electricalmaterialsinc.com
586-484-1275

Item No. 3: Reference attached additional Lutron control information, showing fixture schedule, panel schedule and riser diagram, including original circuiting.

Item No. 4: Clarification: The existing dimming panel is located in Electrical Room C2E2, which is located in the corridor east of the Banquet Rooms. Relays for the new/upgraded system will be installed in this room.

Item No. 5: Clarification: Electrical contractor shall include in their scope of work the cost of Crestron programming of the system.

Item No. 6: Reference Drawing E1.10, Fixture Schedule, revise to read: Type A shall be a series of 4 LED strip fixtures mounted to the existing fixture metal pan; two (2) CLX L48 5000LM SEF FDL MVOLT GZI 35K 80CRI and tow (2) CLX L36 3750LM SEF FDL MVOLT GZI 35K 80CRI.

END OF ADDENDUM NO. 1

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Fixture Schedule

Fixture	Fixture Description	Type	Load Type	Total Wattage	Voltage
A	Retrofit Cans	None	LED 0-10 V	Unspecified	120 V
B	RetrofitLinear	None	LED Switched	Unspecified	120 V
C	Decorative Pendant	None	LED 0-10 V	Unspecified	120 V
D	Exist Pendant	None	LED 0-10 V	440 W	277 V
D2	Retrofit Cans	None	LED 0-10 V	Unspecified	120 V
D2nd	Downlight	None	LED Switched	Unspecified	120 V
Dmini	Pendant	None	LED Forward Phase	20 W	120 V
E	Soffit	None	LED 0-10 V	Unspecified	120 V
F	Linear in grid	None	LED 0-10 V	Unspecified	277 V
J	Downlight	None	LED 0-10 V	50 W	120 V
Q	Downlight	None	LED 0-10 V	50 W	120 V
R	LED REcessed Linear	None	LED Switched	32 W	277 V
S	Sconce	None	LED Switched	30 W	277 V

Panel Schedule

ESN Name: Banquet A -277
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\1
Emergency: No
Max Load/Circuit: 5540 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Banquet A 2001	a	Existing Sconces	277 V	LED ND	270	DB2-6
2	Banquet A 2001	c	Linear	277 V	LED ND	1440	DB2-5
3	Banquet A 2001	d	Existing Pyramid	277 V	LED 0-10	1760	DB21-4
4	-	-	Spare	-	-	-	-

Total Wattage: 3470 W/VA

ESN Name: Banquet A & B 120
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\6
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Banquet A 2001	b	Downlights	120 V	LED 0-10	1200	DB1-1&2
2	Banquet A 2001	e	Downlights at Window	120 V	LED 0-10	600	DB1-3
3	Banquet B 2002	b	Inner Downlights	120 V	LED 0-10	1600	DB1-4-7
4	Banquet B 2002	e	Back Downlights	120 V	LED 0-10	800	DB1-?

Total Wattage: 4200 W/VA

Load Types

LED ND: LED Switched
LED 0-10: LED 0-10 V

Panel Schedule

ESN Name: Banquet B 277
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\5
Emergency: No
Max Load/Circuit: 5540 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Banquet B 2002	a	Sconces	277 V	LED ND	300	DB2-12
2	Banquet B 2002	c	Recessed Linear	277 V	LED ND	1024	DB2-11
3	Banquet B 2002	d	Existing Pendant	277 V	LED 0-10	1760	DB2-7-10
4	-	-	Spare	-	-	-	-

Total Wattage: 3084 W/VA

ESN Name: Banquet B&C 120V
Model Number: QSN-4A5-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\2
Emergency: No
Max Load/Circuit: Varies**

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Banquet B 2002	f	Little Pyramid	120 V	LED Fwd	46	DB1-2
2	Banquet C 2003	f	Little Pyramids	120 V	LED Fwd	46	
3	-	-	Spare	-	-	-	-
4	-	-	Spare	-	-	-	

Total Wattage: 92 W/VA

** Max load/circuit depends on the load type and the output number. See the QSN-4A5-S specification submittal for details.

Load Types

LED ND: LED Switched
LED 0-10: LED 0-10 V
LED Fwd: LED Forward Phase

Panel Schedule

ESN Name: Banquet C 120
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\4
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Banquet C 2003	b	Inner Downlights	120 V	LED 0-10	1600	DB1-8-11
2	-	-	Spare	-	-	-	-
3	-	-	Spare	-	-	-	
4	-	-	Spare	-	-	-	

Total Wattage: 1600 W/VA

ESN Name: Banquet C 277
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\3
Emergency: No
Max Load/Circuit: 5540 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Banquet C 2003	a	Sconce	277 V	LED ND	270	DB2-12
2	Banquet C 2003	c	Recessed Linear	277 V	LED ND	1024	DB2-11
3	Banquet C 2003	d	Existing Pendant	277 V	LED 0-10	1760	DB2-7-10
4	-	-	Spare	-	-	-	-

Total Wattage: 3054 W/VA

Load Types

LED 0-10: LED 0-10 V

LED ND: LED Switched

Panel Schedule

ESN Name: Seminar B
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\14
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar E 2026	a		120 V	LED ND	-	
2	Seminar E 2026	b		120 V	LED ND	-	
3	Seminar E 2026	c		120 V	LED 0-10	-	
4	Seminar E 2026	d		120 V	LED 0-10	-	

Total Wattage: Unspecified

ESN Name: Seminar B2
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\13
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar E 2026	f		120 V	LED 0-10	-	
2	Seminar E 2026	g		120 V	LED 0-10	-	
3	Seminar E 2026	h		120 V	LED 0-10	-	
4	-	-	Spare	-	-	-	-

Total Wattage: Unspecified

Load Types

LED ND: LED Switched
LED 0-10: LED 0-10 V

Panel Schedule

ESN Name: Seminar C
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\12
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar F 2029	a		120 V	LED ND	-	
2	Seminar F 2029	b		120 V	LED ND	-	
3	Seminar F 2029	c		120 V	LED 0-10	-	
4	Seminar F 2029	d		120 V	LED 0-10	-	

Total Wattage: Unspecified

ESN Name: Seminar C2
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\11
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar F 2029	f		120 V	LED 0-10	-	
2	Seminar F 2029	g		120 V	LED 0-10	-	
3	Seminar F 2029	h		120 V	LED 0-10	-	
4	-	-	Spare	-	-	-	-

Total Wattage: Unspecified

Load Types

LED ND: LED Switched
LED 0-10: LED 0-10 V

Panel Schedule

ESN Name: Seminar D2
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\15
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar D 2023	f	Decorative 1	120 V	LED 0-10	-	
2	Seminar D 2023	g	Decorative 2	120 V	LED 0-10	-	
3	Seminar D 2023	h	Back Table	120 V	LED 0-10	-	
4	-	-	Spare	-	-	-	-

Total Wattage: Unspecified

ESN Name: Seminar D2 120
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\9
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar G 2033	f		120 V	LED 0-10	-	
2	Seminar G 2033	g		120 V	LED 0-10	-	
3	Seminar G 2033	h		120 V	LED 0-10	-	
4	-	-	Spare	-	-	-	-

Total Wattage: Unspecified

Load Types

LED 0-10: LED 0-10 V

Panel Schedule

ESN Name: Seminar D 120
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\7
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar D 2023	a	Door Entry	120 V	LED ND	-	
2	Seminar D 2023	b	Behind Screen	120 V	LED ND	-	
3	Seminar D 2023	c	ScreenLight	120 V	LED 0-10	-	
4	Seminar D 2023	d	soffit	120 V	LED 0-10	-	

Total Wattage: Unspecified

ESN Name: Seminar D 120V
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\10
Emergency: No
Max Load/Circuit: 2400 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar G 2033	a		120 V	LED ND	-	
2	Seminar G 2033	b		120 V	LED ND	-	
3	Seminar G 2033	c		120 V	LED 0-10	-	
4	Seminar G 2033	d		120 V	LED 0-10	-	

Total Wattage: Unspecified

Load Types

LED ND: LED Switched
LED 0-10: LED 0-10 V

Panel Schedule

ESN Name: Seminar D-G 277
Model Number: QSN2-4T20-S
ESN Location: Electrical room
QS Device #: Electrical room\Hub 001\Link 1\8
Emergency: No
Max Load/Circuit: 5540 W

#	Area	Zone Name	Zone Description	Voltage	Load Type	Actual Load (W)	Feed Circuit
1	Seminar D 2023	e	Linear	277 V	LED 0-10	-	
2	Seminar E 2026	e		277 V	LED 0-10	-	
3	Seminar F 2029	e		277 V	LED 0-10	-	
4	Seminar G 2033	e		277 V	LED 0-10	-	

Total Wattage: Unspecified

Load Types

LED 0-10: LED 0-10 V

NOTES ON WIRING

QS CONTROL LINK

THE QS CONTROL LINK HAS A FREE WIRING TOPOLOGY (DAISY CHAIN, T-TAP, ETC). THE SYSTEM WIRING ILLUSTRATED BY THIS DRAWING HAS BEEN LAID OUT TO ENSURE APPROPRIATE POWER TO EACH DEVICE. IF FOR ANY REASON THE SYSTEM IS TO BE WIRED DIFFERENTLY THAN WHAT IS SHOWN, PLEASE CONFIRM ALL DEVICE POWER REQUIREMENTS ARE MET (PLEASE REFER TO "QS LINK POWER REQUIREMENTS" FOR INDIVIDUAL DEVICE POWER REQUIREMENTS).
FOR QS CONTROL WIRE LENGTHS TOTALING LESS THAN 500 FT (153 M), USE LUTRON CABLE GRX-CBL-346S (4 CONDUCTOR NON-PLENUM), OR GRX-PCBL-346S (4 CONDUCTOR PLENUM). OTHERWISE USE 2 #18 AWG (1.0 SQ MM) + 2 #22 AWG (0.5 SQ MM) TWISTED AND SHIELDED OR EQUIVALENT (BELDEN #9461). FOR QS CONTROL WIRE LENGTHS TOTALING UP TO 2,000 FT, USE GRX-CBL-46L (5 CONDUCTOR NON-PLENUM) OR GRX-PCBL-46L (5 CONDUCTOR PLENUM). TOTAL QS CONTROL WIRE LENGTH MUST NOT EXCEED 2,000 FT (600 M).

QS LINK POWER REQUIREMENTS	
DEVICE	PDUS
QS DEVICES THAT SUPPLY PDU	
DIN RAIL POWER SUPPLY	+75
MYROOM DIN RAIL POWER SUPPLY	+30
QS PLUG-IN POWER SUPPLY, QS J-BOX POWER SUPPLY	+8
ENERGI SAVR NODE WITH ECOSYSTEM, ENERGI SAVR NODE WITH DALI, ENERGI SAVR NODE WITH T-SERIES TUNABLE-WHITE	+30
ENERGI SAVR NODE FOR 0–10 V, ENERGI SAVR NODE WITH SOFTSWITCH, ENERGI SAVR NODE FOR 0–10 V (DIN RAIL), ENERGI SAVR NODE WITH SOFTSWITCH (DIN RAIL)	+14
1 A MYROOM DIN RAIL POWER MODULE SWITCHING, 1 A MYROOM DIN RAIL POWER MODULE PHASE ADAPTIVE	+4
ENERGI SAVR NODE WITH DALI (DIN RAIL), ENERGI SAVR NODE WITH ECOSYSTEM (DIN RAIL)	+3
ENERGI SAVR NODE PHASE ADAPTIVE (DIN RAIL), QS MOTOR GROUP CONTROLLER (DIN RAIL), HOMEWORKS QS DIN RAIL POWER MODULES	0
GRAFIK EYE QS (ALL MODELS EXCEPT GRAFIK EYE QS DALI WITH KNX), QS TIMECLOCK	+3
QP2 QUANTUM LIGHTING HUB	LINK A : 0 LINKS B,C,D : +33 EACH
QP3 QUANTUM LIGHTING HUB	LINKS A,B : +33 EACH
TWO PROCESSOR LIGHTING HUB (QP5)	LINKS A,B,C,D : +33 EACH
SINGLE PROCESSOR LIGHTING HUB (QP5), 2-LINK PROCESSOR (QP-2L)	LINKS A,B : +33 EACH
1-LINK PROCESSOR LIGHTING HUB (QP6), 1-LINK PROCESSOR LIGHTING HUB (QP5), 1-LINK PROCESSOR (QP-1L)	LINKS A : +33 EACH
QS DEVICES THAT CONSUME PDU	
QS WALLSTATION (SEETOUCH, ARCHITRAVE, SIGNATURE SERIES, QS PICO, KEYSWITCH, SINGLE COLUMN PALLADIOM), QS SLIDER, GRAFIK T SLIDER, QS INFRARED (IR) EYE, WALLBOX INPUT CLOSURE INTERFACE	-1
QS NETWORK INTERFACE, QS DMX INTERFACE, ENERGI SAVR NODE PROGRAMMING INTERFACE, QS WALLSTATION (DOUBLE COLUMN PALLADIOM)	-2
QS SENSOR MODULE (QSM), NOT INCLUDING ATTACHED WIRED SENSORS (SEE SECTION BELOW FOR MORE INFORMATION), QS CONTACT CLOSURE INTERFACE, PALLADIOM ROOM THERMOSTAT	-3
GUESTROOM CONTROL UNIT	-8
SENSORS & DEVICES THAT CONSUME PDUS WHEN WIRED TO A QSM	
LUTRON DAYLIGHT SENSOR, LUTRON INFRARED (IR) RECEIVER, PICO WIRED CONTROLLER	-0.5
ECOSYSTEM WALLSTATION	-1
LOS C SERIES OCCUPANCY SENSOR, HIGH BAY OCCUPANCY SENSOR	-2

LUTRON SERVICES		
QTY	SERVICE TITLE (MODEL NUMBER)	SERVICE DESCRIPTION
	THE QUANTITY OF SERVICES BELOW ARE TO BE INCLUDED AS PART OF THIS PROJECT'S SCOPE OF WORK AND SPECIFIED INTO THE WRITTEN SPEC DOCUMENTS	
PRE-STARTUP ELECTIVE SERVICES		
	REMOTE PRE-WIRE SESSION (LSC-PREWIRE-RMTE)	A REMOTE SESSION WHERE THE LUTRON FIELD SERVICE ENGINEER REVIEWS THE LUTRON SUBMITTAL PACKAGE (PARTICULARLY THE ONE LINE AND DEVICE SPECIFICATIONS) WITH THE ELECTRICAL CONTRACTOR, ANSWERS QUESTIONS, AND REVIEWS THE CONSTRUCTION TIMELINE ALONG WITH BEST PRACTICES FOR INSTALLATION. THIS SESSION IS DELIVERED USING A VIRTUAL SCREEN SHARING PLATFORM AND SHOULD NOT EXCEED 4-HOURS.
	ONSITE PRE-WIRE VISIT (LSC-PREWIRE-ONST)	AN ONSITE VISIT WHERE THE LUTRON FIELD SERVICE ENGINEER REVIEWS THE LUTRON SUBMITTAL PACKAGE (PARTICULARLY THE ONE LINE AND DEVICE SPECIFICATIONS) WITH THE ELECTRICAL CONTRACTOR, ANSWERS QUESTIONS, AND REVIEWS THE CONSTRUCTION TIMELINE ALONG WITH BEST PRACTICES FOR INSTALLATION.
	POST-WIRE TERMINATION VISIT (LSC-POSTWIRE-VST)	AN ON-SITE WALK THROUGH BY A LUTRON FIELD SERVICE ENGINEER WITH THE ELECTRICAL CONTRACTOR TO CONFIRM THE PROCESSORS ARE ONLINE, THE DEVICES ARE INSTALLED AND WIRED PROPERLY, AND THE SYSTEM IS COMMUNICATING EFFICIENTLY PRIOR TO LUTRON RETURNING TO SITE FOR THE PHYSICAL STARTUP OF THE SYSTEM. THIS VISIT IS INTENDED AS A HIGH LEVEL VERIFICATION/CONFIRMATION THAT THE LUTRON EQUIPMENT IS WIRED AND POWERED; IT DOES NOT INCLUDE WIRING TROUBLESHOOTING, OR VALIDATION THAT THE ENTIRE SYSTEM WAS INSTALLED PER THE APPROVED SUBMITTAL. LUTRON WILL WORK TO CONFIRM OVERALL WIRING READINESS AND BASIC SYSTEM FUNCTIONALITY PRIOR TO START-UP AND WILL NOTE ANY DEFICIENCIES FOR THE ELECTRICAL CONTRACTOR. THE LUTRON SYSTEM MUST BE WIRED AND POWERED PRIOR TO THIS SITE VISIT.
	SENSOR LAYOUT & TUNING (LSC-SENS-LT)	LUTRON WILL TAKE RESPONSIBILITY FOR LUTRON-PROVIDED SENSOR PLACEMENT AND PERFORMANCE BY CREATING SENSOR LAYOUTS AND COORDINATING SENSOR PLACEMENT BEFORE AND AFTER INSTALLATION. ONCE THE BUILDING IS OCCUPIED, LUTRON WILL RETURN UP TO TWO TIMES TO PERFORM SENSOR FINE-TUNING.
	SYSTEM & NETWORK INTEGRATION CONSULTATION (LSC-INT-VISIT)	A CONSULTATIVE VISIT WITH THIRD PARTY INTEGRATORS TO CONFIRM THE SPECIFIED SEQUENCE OF OPERATION AND DISCUSS INTEGRATION PROCEDURES NEEDED IN ORDER TO INTEGRATE WITH THE LUTRON EQUIPMENT. THIS MAY INCLUDE ANY OF THE FOLLOWING THIRD PARTY SYSTEMS: BMS, BAS, IT, NON-LUTRON SHADES, BACNET, AV, OR ENERGY DASHBOARDS.
STARTUP ELECTIVE SERVICES (THESE SERVICES ARE ADDITIONAL TO YOUR SPECIFIED STARTUP BASED ON YOUR REQUIREMENTS)		
	ONSITE SCENE & LEVEL TUNING (LSC-AF-VISIT)	AN ONSITE VISIT WITH THE SPECIFIER OR CUSTOMER REPRESENTATIVE TO REVIEW THE DESIGN INTENT, FINE-TUNE THE SCENE LEVEL PROGRAMMING, AND MAKE ADJUSTMENTS TO TIMECLOCKS.
	DYNAMIC WHITE PROGRAMMING PACKAGE (LSC-DWP-PKG)	A SPECIFIER DRIVEN PACKAGE WHICH INCLUDES ONE (1) POST WIRE TERMINATION VISIT (FOR WIRE VERIFICATION), TWO (2) VISITS TO PERFORM FINE TUNING OF FIXTURES AND PROGRAMMING ADJUSTMENTS PER THE DIRECTION OF A LIGHTING DESIGNER AND/OR A PRE-DETERMINED SEQUENCE OF OPERATIONS PROVIDED BY THE SPECIFIER. THE FIRST FINE-TUNING VISIT IS DURING NORMAL BUSINESS HOURS AND THE SECOND VISIT IS AN AFTER HOUR SITE VISIT. ALSO INCLUDED IN THIS PACKAGE IS A TWO-HOUR REMOTE SESSION FOR MINOR ADJUSTMENTS. REMOTE NETWORK ACCESS IS REQUIRED FOR THE REMOTE TWO HOUR SESSION AND THE SYSTEM MUST BE ABLE TO CONNECT TO THE INTERNET.
	ONSITE PERFORMANCE-VERIFICATION WALKTHROUGH (LSC-WALK)	AN ONSITE WALKTHROUGH WITH FACILITY REPRESENTATIVES OR PROJECT COMMISSIONING AGENTS TO DEMONSTRATE THAT THE SYSTEM FUNCTIONALITY MEETS THE DESIGN INTENT. THIS MAY INCLUDE ANY OF THE FOLLOWING ONSITE ACTIVITIES – CONSULTATION/TRAINING DEMOS, FUNCTIONAL TESTING ASSISTANCE, OR INVENTORY OF LUTRON EQUIPMENT.
	SYSTEM PERFORMANCE-VERIFICATION DOCUMENTATION (LSC-SPV-DOC)	COMPLETION OF DOCUMENTATION WHICH PROVIDES PERFORMANCE VERIFICATION CERTIFYING THE LUTRON EQUIPMENT HAS BEEN THOROUGHLY TESTED. IT SUPPORTS THE DOCUMENTATION REQUIREMENTS OF MANY BUILDING STANDARDS.
	SYSTEM PERFORMANCE-VERIFICATION DOCUMENTATION TITLE 24 (LSC-SPV-DOC-T24)	DOCUMENTS THE TITLE 24 ACCEPTANCE TESTS REQUIRED FOR THE LIGHTING CONTROL SYSTEM AND THE TEST'S RESULTS. DOCUMENTATION IS TO BE FILLED OUT AS A SEPARATE VISIT AFTER ONSITE STARTUP BY LUTRON'S CALIFORNIA CERTIFIED CALCTP TECHNICIAN. UPON COMPLETION, A LUTRON SERVICES REPRESENTATIVE WILL SUPPLY THE JOB-SPECIFIC TITLE 24 DOCUMENTATION THAT SHOWS THE RESULTS OF THE LIGHTING CONTROL SYSTEM TESTING.
	AFTER HOURS STARTUP (LSC-AH-SU)	STARTUP PROVIDED BETWEEN THE HOURS OF 5:00PM – 7:00AM, MONDAY - FRIDAY. THIS SCOPE OF WORK DOES NOT INCLUDE HOLIDAY OR WEEKEND WORK. ADDITIONAL FEES MAY APPLY FOR WORK TO BE COMPLETED ON WEEKENDS (FRIDAY 5:00PM – MONDAY 7:00AM).
POST-STARTUP ELECTIVE SERVICES		
	CUSTOMER SYSTEM ORIENTATION VISIT (LSC-CSO-VST)	AN ON-SITE VISIT WHERE THE LUTRON FIELD SERVICE ENGINEER COMES OUT 30-90 DAYS POST-OCCUPANCY TO GO OVER THE LUTRON SYSTEM COMPONENTS WITH THE SYSTEM USER AND PERFORMS A THOROUGH TRAINING. THE FIELD SERVICE ENGINEER WILL ENSURE THE SYSTEM USER KNOWS HOW TO NAVIGATE WITHIN THEIR SYSTEM AND MAKE APPROPRIATE ADJUSTMENTS. THEY WILL ALSO PROVIDE A LEAVE BEHIND SYSTEM OPTIMIZATION RECOMMENDATION REPORT.
	TRAINING VISIT (LSC-TRAINING-SP)	CUSTOMER-SITE SOLUTION TRAINING – THIS TRAINING VISIT IS PROVIDED BY A LUTRON SERVICES REPRESENTATIVE TO TEACH SYSTEM USERS HOW TO OPERATE AND MAINTAIN THE LIGHTING CONTROL SYSTEM. QUANTITY DICTATES THE NUMBER OF VISITS PURCHASED.
	SYSTEM OPTIMIZATION (LSC-SYSOPT-SP)	AN ONSITE CONSULTATIVE VISIT TO IDENTIFY AND IMPLEMENT LIGHTING CONTROL ADJUSTMENTS TO SAVE ADDITIONAL ENERGY AND CREATE A MORE PRODUCTIVE WORK ENVIRONMENT.
	PREVENTATIVE MAINTENANCE VISIT (LSC-SCHD-MAINT)	VISIT TO PERFORM PREVENTATIVE MAINTENANCE, MINOR REPROGRAMMING, AND CONDUCT SYSTEM TRAINING. THE LUTRON SERVICE REPRESENTATIVE WILL REVIEW SERVICE OPTIONS WITH THE END-USER PRIOR TO BEGINNING ANY WORK. THE END-USER WILL RECEIVE DOCUMENTATION THAT DESCRIBES THE WORK PERFORMED AND ANY RECOMMENDATIONS FOR FUTURE SERVICE. QUANTITY DICTATES THE NUMBER OF DAYS PURCHASED.
	ADDITIONAL DAY OF SERVICE (LSC-DAY-ADDL-CS)	ONSITE DAY OF SERVICE BY A LUTRON SERVICE REPRESENTATIVE.
	REMOTE SUPPLEMENTAL TRAINING (LSC-TRAIN-RMTE)	A SUPPLEMENTAL REMOTE TRAINING FOR SITE PERSONNEL. THIS SERVICE IS AVAILABLE FOR LUTRON QUANTUM AND ATHENA SYSTEMS. THIS TRAINING IS NOT TO EXCEED 4 HOURS. REMOTE NETWORK ACCESS IS REQUIRED FOR THIS VISIT AND THE SYSTEM MUST BE ABLE TO CONNECT TO THE INTERNET.
	REMOTE PROGRAMMING ASSISTANCE (LSC-PRG-AST-RMTE)	ONE 4-HOUR REMOTE PROGRAMMING ASSISTANCE SESSION TO MAKE PROGRAMMING ADJUSTMENTS PER THE DIRECTION OF A FACILITY MANAGER OR SPECIFIER. THIS SERVICE IS AVAILABLE FOR LUTRON QUANTUM AND ATHENA SYSTEMS. REMOTE NETWORK ACCESS IS REQUIRED FOR THIS VISIT AND THE SYSTEM MUST BE ABLE TO CONNECT TO THE INTERNET.
MAINTENANCE & SUPPORT SERVICES		
	SOFTWARE MAINTENANCE AGREEMENT (LSC-SMA-SP)	PROVIDES COMPATIBILITY TESTING RESULTS OF QUANTUM WITH OPERATING SYSTEM PATCHES AND WEB BROWSER UPDATES. INCLUDES AN ELECTIVE FREE SOFTWARE UPGRADE LICENSE.
1	COMMERCIAL SYSTEMS 2-YEAR LIMITED WARRANTY (LSC-B2)	A 2-YEAR SYSTEM WARRANTY PROVIDING 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A FIRST-AVAILABLE RESPONSE TIME.
	ENHANCED SILVER (LSC-E8S)	YEARS 1-2 - 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A FIRST-AVAILABLE RESPONSE TIME; YEARS 3-5 - 50% PARTS ONLY COVERAGE; YEARS 6-8 - 25% PARTS ONLY COVERAGE.
	ENHANCED GOLD (LSC-E8G)	YEARS 1-2 - 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A 72-HOUR RESPONSE TIME AND AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT; YEARS 3-5 - 50% PARTS ONLY COVERAGE; YEARS 6-8 - 25% PARTS ONLY COVERAGE.
	ENHANCED PLATINUM (LSC-E8P)	YEARS 1-2 - 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A 24-HOUR RESPONSE TIME AND AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT; YEARS 3-5 - 50% PARTS ONLY COVERAGE; YEARS 6-8 - 25% PARTS ONLY COVERAGE.
	SILVER TECHNOLOGY SUPPORT PLAN (LSC-SILV-IW)	AN ANNUAL SERVICE PLAN THAT COVERS 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR WITH A FIRST-AVAILABLE ONSITE OR REMOTE RESPONSE TIME.
	GOLD TECHNOLOGY SUPPORT PLAN (LSC-GOLD-IW)	AN ANNUAL SERVICE PLAN THAT COVERS 100% REPLACEMENT PARTS AND 100% LUTRON LABOR WITH A 72-HOUR ONSITE OR REMOTE RESPONSE TIME. ALSO INCLUDES AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT EACH YEAR.
	PLATINUM TECHNOLOGY SUPPORT PLAN (LSC-PLAT-IW)	AN ANNUAL SERVICE PLAN THAT COVERS 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR WITH A 24-HOUR ONSITE OR REMOTE RESPONSE TIME. ALSO INCLUDES AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT EACH YEAR.
	PREVENTIVE MAINTENANCE VISIT(S) (LSC-SCH-MAINT)	SCHEDULED MAINTENANCE VISIT TO PERFORM PREVENTIVE MAINTENANCE, MINOR PROGRAMMING, AND CONDUCT SYSTEM TRAININGS. QUANTITY IS IN ADDITION TO ANY YEARLY VISITS SPECIFIED WITH AN ENHANCED WARRANTY OR TECHNOLOGY SUPPORT PLAN.
	ATHENA DASHBOARD SERVICE (LSC-ADB-1Y-R)	INITIAL DASHBOARD ONBOARDING, ANNUAL REMOTE SERVICE SESSIONS WITH END-USER, CONTINUAL NEW USER TRAINING, AND SYSTEM OPTIMIZATION. REQUIRED WITH THE SUBSCRIPTION OF THE ATHENA DASHBOARD. REQUIRES AN OUTBOUND INTERNET CONNECTION.
PLEASE GO TO WWW.LUTRON.COM/SERVICES FOR FURTHER INFORMATION.		

ONE-LINE

WIRE LEGEND

△Q QS CONTROL LINK (CONNECT WIRES 1, 2, 3 AND 4)*

▲Q QS CONTROL LINK (CONNECT WIRES 1, 3 AND 4. DO NOT CONNECT WIRE 2)*

▽P PANEL CONTROL LINK (CONNECT WIRES 1, 2, 3, 4 AND 5)*

▼P PANEL CONTROL LINK (CONNECT WIRES 1, 2, 3 AND 4. DO NOT CONNECT WIRE #5)*

▷P PANEL CONTROL LINK (CONNECT WIRES 1, 3, 4 AND 5. DO NOT CONNECT WIRE #2)*

◁S QS SIVOIA SHADE CONTROL LINK*

▲T BELDEN CABLE 1387LA(OR EQUIVALENT)

□ NORMAL INPUT POWER 2 #12 AWG (4 SQ MM) + GROUND

◪ NORMAL-EMERGENCY INPUT POWER 2 #12 AWG (4 SQ MM) + GROUND

③ 3 PHASE 4 WIRE INPUT POWER, 4 #12 AWG (4 SQ MM) + GROUND

● 2 #12 AWG (4 SQ MM) + GROUND

○ 3 #12 AWG (4 SQ MM) + GROUND

◆ 0-10 V SIGNAL: 2#18AWG (1.0 SQ MM)

●● 2#18 AWG (1.0 SQ MM)

○○ 3#18 AWG (1.0 SQ MM)

◇ ECOSYSTEM BUS/LOOP*

◐ DALI LOOP

Ⓣ T-SERIES TUNABLE-WHITE LOOP

⧗ LUTRON SENSOR CABLE C-CBL-522S OR USE 4#22 AWG (1.0 SQ MM)

⧖ LUTRON SENSOR CABLE C-CBL-522S OR USE 3#22 AWG (1.0 SQ MM)

D DMX CABLE. USE LUTRON GRX-CBL-DMX-250/GRX-CBL-DMX-500 OR BELDEN #9729 (NON-PLENUM) OR BELDEN #89729 (PLENUM) OR DURA FLEX 22/4 WA CABLE.

E ETHERNET CABLE. CAT5E OR BETTER CABLE FOR LUTRON NETWORK TERMINATED WITH RJ45 CONNECTORS (NOT PROVIDED BY LUTRON). 328 FT (100 M) MAXIMUM RUN.

F FIBER OPTIC CABLE FOR LUTRON NETWORK TERMINATED WITH APPROPRIATE FIBER OPTIC CONNECTORS (NOT PROVIDED BY LUTRON). REQUIRES DEDICATED FIBER OPTIC LINK (SINGLE-MODE OR MULTI-MODE)

– – – RF CONNECTION

——— WIRED CONNECTION

*PLEASE REFER TO NOTES ON WIRING FOR MORE WIRING GUIDELINES.
**REFER TO LOAD SCHEDULE FOR FEED AND LOAD INFORMATION

PROJECT NAME:
SVSU PROJECT

LOCATION:
SAGINAW, MICHIGAN

PROJECT NUMBER:

CREATED BY:
GARY WRIGHT

FILE NAME:
SVSU PROJECT-V22.4.0.7531.LUTD

DOCUMENT REVISION:

SEPTEMBER 22, 2022 | Sheet 11

FOR DETAILED DEFINITION OF PRODUCT CAPABILITIES REFER TO PRODUCT SPECIFICATION SUBMITTAL SHEETS.

⚠ **NOT FOR CONSTRUCTION**

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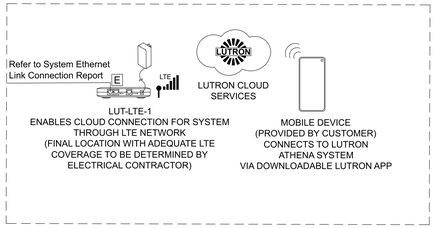
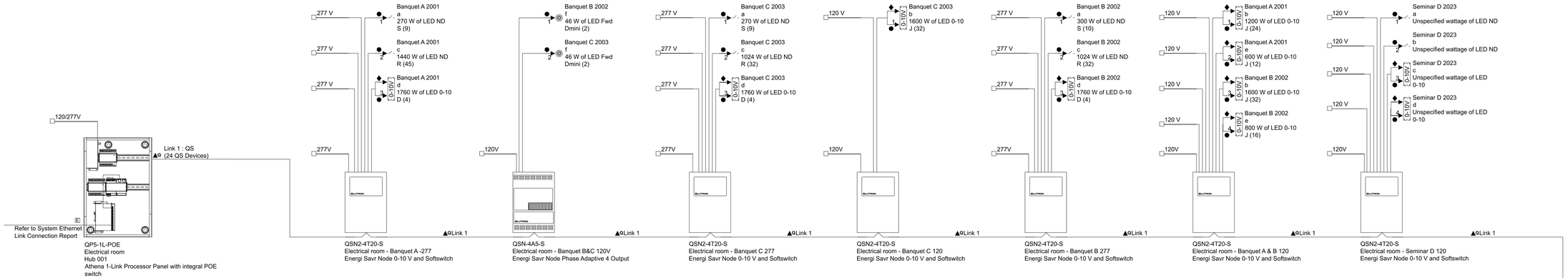
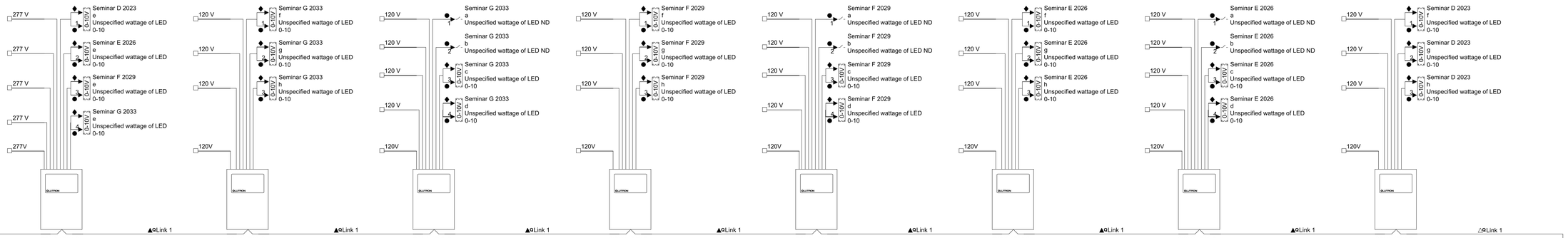
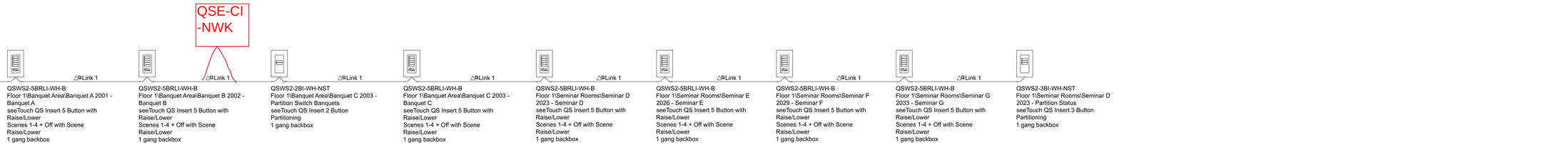
7200 SUTER ROAD
COOPERSBURG, PA 18036, USA
+1.610.282.3800 | FAX: +1.610.282.1146

TEMPORARY START-UP CONNECTION.
LTE SERVICE WILL BE TURNED OFF AFTER 30 DAYS. ATHENA SYSTEM MUST BE CONNECTED TO BUILDING NETWORK FOR UPDATES AND APP FUNCTIONALITY.









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