

Drawing Designation: Submittal

Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

As Prepared By:



Automatic Controls Equipment Systems, Inc.

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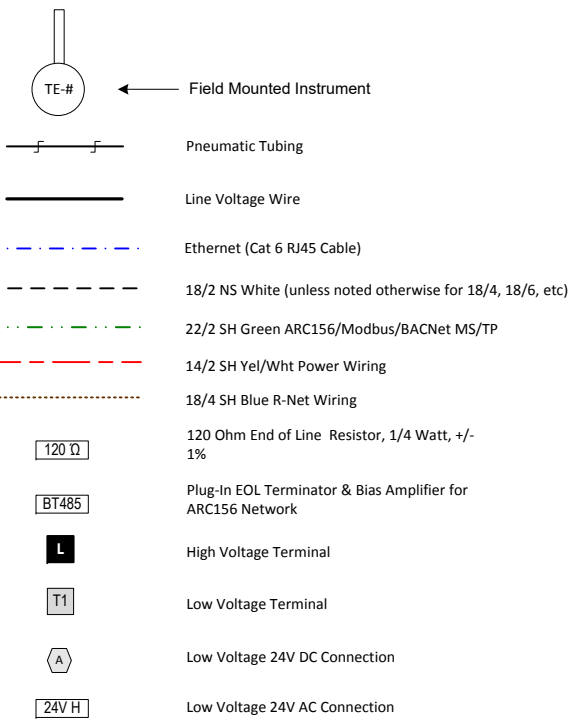
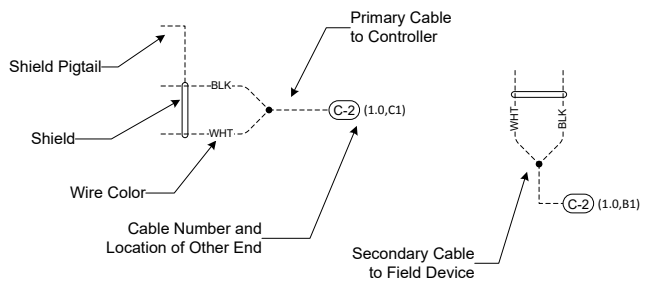
PROJECT TEAM

Client Name:	Webster University
Owner:	Webster University
Architect:	N/A
MEP Engineer:	N/A
Consulting Engineer:	N/A
Construction Manager:	N/A
General Contractor:	N/A
Mechanical Contractor:	N/A

ALC Design Engineer:	Paul Lane
ALC Project Manager:	Mike Manzelli

Project Number:	WU-02-16
Drawing Date:	7/28/2016

LEGEND



Miscellaneous Notations

FLP = Fails At Last Position
FC = Fails Closed
FO = Fails Open

TAG DESCRIPTIONS

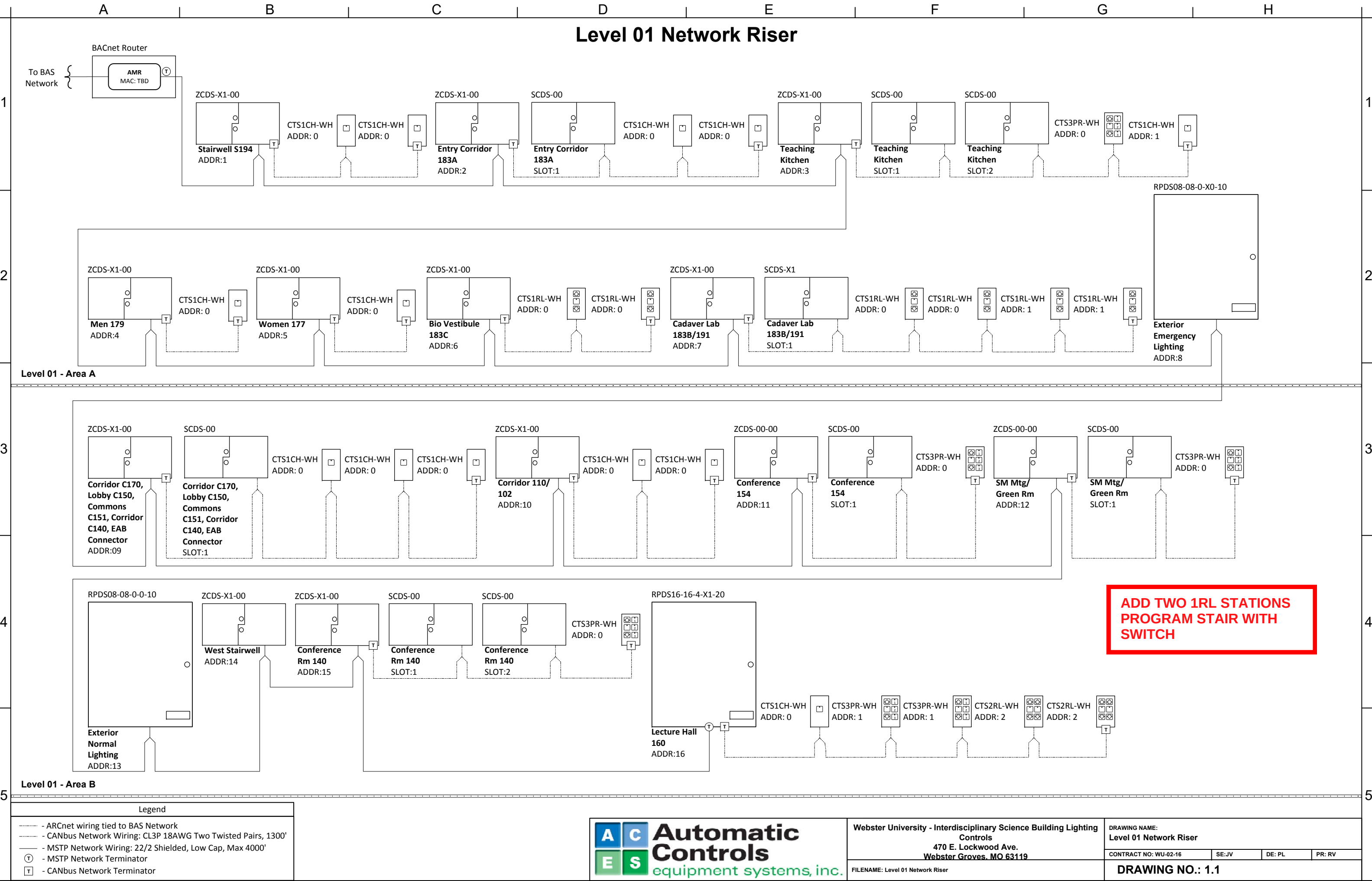
AA	Remote Annunciator Module & Auto Dialer	PDS	Pressure Differential Switch
ALC	Automated Logic Controller	PDT	Pressure Differential Transmitter
ASA	Smoke Detector	PS	Pressure Switch
CR	Control Relay	PT	Pressure Transmitter
ENC	Enclosure	QT	Gas Transmitter
ES	Direct Current Power Supply	RK	Retrofit Kit
FCV	Flow Control Valve / Damper Actuator	RP	Relay Panel
FE	Flow Element	SC	Satellite Controller
FS	Flow Switch	ST	Speed Transmitter
FT	Flow Transmitter	SUB	Subpanel
G	Generic Device	TE	Temperature Element
IP	Electro-Pneumatic Transducer	TS	Temperature Switch
IS	Current Switch	TSH	Temperature Switch High
ISE	Circuit Breaker	TSL	Temperature Switch Low
IT	Current Transducer	TT	Temperature Transmitter
JT	BTU Meter	TY	Dew Pt./Enthaply/Wet Bulb Transducer
JY	Power Meter	V	Valve
KS	Electronic Timeclock	VT	Vibration Transmitter / Switch
LS	Level Switch	X	Unclassified
LT	Level Transmitter	XF	Transformer
MS	Humidistat	YKS	Position Transmitter
MT	Humidity Transmitter	YL	Position Transmitter
MTE	Humidity Transmitter w/ Temperature Element	YS	Leak Detector
MTT	Humidity Transmitter w/ Temperature Transmitter	YSE	Emergency Stop
N	Accessories	YY	Transducer
NY	Network Device	ZC	Zone Controller
P	Pressure Probe	ZS	Position Indicating Switch
		ZT	Position Transmitter

<u>DRAWING#</u>	<u>DRAWING NAME</u>
SYM.1	Symbol Legend
TOC.1	Table of Contents
TOC.2	Table of Contents-2
TOC.3	Table of Contents-3
1.1	Level 01 Network Riser
1.2	Level 01 Area A Zone-1 Schedule
1.3	Level 01 Area A Zone-2 & 3 Schedule
1.4	Level 01 Area A Zone-3 Schedule
1.5	Level 01 Area A Zone-4 Schedule
1.6	Level 01 Area A Zone 5 Schedule
1.7	Level 01 Area A Zone-6 Schedule
1.8	Level 01 Area A Zone-7 & 8 Schedule
1.9	Level 01 Area A Exterior Emergency Lighting Schedule
1.10	Level 01 Area B Zone-1 Schedule
1.11	Level 01 Area B Zone-2 Schedule
1.12	Level 01 Area B Zone-3 Schedule
1.13	Level 01 Area B Zone-4 Schedule
1.14	Level 01 Area B Zone-5 Schedule
1.15	Level 01 Area B Zone-6 Schedule
1.16	Level 01 Area B Zone-7 Schedule
1.17	Level 01 Area B Exterior Normal Lighting Schedule
1.18	Level 01 Material List
1.19	Level 01 Commissioning Reports
2.1	Level 02 Area A Network Riser
2.2	Level 02 Area B Network Riser
2.3	Level 02 Area A Zone-1 Schedule
2.4	Level 02 Area A Zone-2 Schedule
2.5	Level 02 Area A Zone-3 Schedule
2.6	Level 02 Area A Zone-4 Schedule
2.7	Level 02 Area A Zone-5 Schedule

<u>DRAWING#</u>	<u>DRAWING NAME</u>
2.8	Level 02 Area A Zone-6 Schedule
2.9	Level 02 Area A Zone-7 Schedule
2.10	Level 02 Area A Zone-8 Schedule
2.11	Level 02 Area A Zone-9 Schedule
2.12	Level 02 Area A Zone-10 Schedule
2.13	Level 02 Area A Zone-11 Schedule
2.14	Level 02 Area A Zone-12 Schedule
2.15	Level 02 Area A Zone-13 Schedule
2.16	Level 02 Area B Zone-1 & 2 Schedule
2.17	Level 02 Area B Zone-3 & 4 Schedule
2.18	Level 02 Area B Zone-5 Schedule
2.19	Level 02 Area B Zone-6 Schedule
2.20	Level 02 Area B Zone-7 Schedule
2.21	Level 02 Area B Zone-8 Schedule
2.22	Level 02 Area B Zone-9 Schedule
2.23	Level 02 Area B Zone-10 Schedule
2.24	Level 02 Area B Zone-11 Schedule
2.25	Level 02 Material List
2.26	Level 02 Commissioning Reports
3.1	Level 03 Area A Network Riser
3.2	Level 03 Area B Network Riser
3.3	Level 03 Area A Zone-1 Schedule
3.4	Level 03 Area A Zone-2 Schedule
3.5	Level 03 Area A Zone-3 Schedule
3.6	Level 03 Area A Zone-4 Schedule
3.7	Level 03 Area A Zone-5 Schedule
3.8	Level 03 Area A Zone-6 Schedule
3.9	Level 03 Area A Zone-7 Schedule
3.10	Level 03 Area A Zone-8 Schedule
3.11	Level 03 Area A Zone-9 Schedule

<u>DRAWING#</u>	<u>DRAWING NAME</u>	<u>DRAWING#</u>	<u>DRAWING NAME</u>
3.12	Level 03 Area A Zone-10 Schedule	4.9	Level 04 Area A Zone-7 Schedule
3.13	Level 03 Area A Zone-11 Schedule	4.10	Level 04 Area A Zone-8 Schedule
3.14	Level 03 Area A Zone-12 Schedule	4.11	Level 04 Area A Zone-9 Schedule
3.15	Level 03 Area B Zone-1 Schedule	4.12	Level 04 Area A Zone-10 Schedule
3.16	Level 03 Area B Zone-2 & 3 Schedule	4.13	Level 04 Area A Zone-11 Schedule
3.17	Level 03 Area B Zone-4 & 5 Schedule	4.14	Level 04 Area B Zone-1 & 2 Schedule
3.18	Level 03 Area B Zone-6 & 7 Schedule	4.15	Level 04 Area B Zone-3 & 4 Schedule
3.19	Level 03 Area B Zone-8 & 9 Schedule	4.16	Level 04 Area B Zone-5 & 6 Schedule
3.20	Level 03 Area B Zone-10 & 11 Schedule	4.17	Level 04 Area B Zone-7 & 8 Schedule
3.21	Level 03 Area B Zone-12 & 13 Schedule	4.18	Level 04 Area B Zone-9 & 10 Schedule
3.22	Level 03 Area B Zone-14 & 15 Schedule	4.19	Level 04 Area B Zone-11 & 12 Schedule
3.23	Level 03 Area B Zone-16 & 17 Schedule	4.20	Level 04 Area B Zone-13 & 14 Schedule
3.24	Level 03 Area B Zone-18 Schedule	4.21	Level 04 Area B Zone-15 & 16 Schedule
3.25	Level 03 Area B Zone-19 & 20 Schedule	4.22	Level 04 Area B Zone-17 Schedule
3.26	Level 03 Area B Zone-21 & 22 Schedule	4.23	Level 04 Area B Zone-18 & 19 Schedule
3.27	Level 03 Area B Zone-23 Schedule	4.24	Level 04 Area B Zone-20 Schedule
3.28	Level 03 Area B Zone-24 & 25 Schedule	4.25	Level 04 Material List
3.29	Level 03 Area B Zone-26 & 27 Schedule	4.26	Level 04 Area A Commissioning Report
3.30	Level 03 Area B Zone-28 Schedule	4.27	Level 04 Area B Commissioning Report
3.31	Level 03 Material List	5.1	Zone Control Dimming Standard Wiring Detail
3.32	Level 03 Area A Commissioning Report	5.2	Zone Control Dimming Standard With Satellite Wiring Details
3.33	Level 03 Area B Commissioning Report	5.3	Zone Control Dimming Standard With Satellite (Emergency Lighting)
4.1	Level 04 Area A Network Riser	5.4	Wiring Details
4.2	Level 04 Area B Network Riser	5.5	RPDS08 - Relay Panel Wiring Details
4.3	Level 04 Area A Zone-1 Schedule	5.6	RPDS16 - Relay Panel Wiring Details
4.4	Level 04 Area A Zone-2 Schedule	5.7	Zone Control Detail
4.5	Level 04 Area A Zone-3 Schedule	5.8	Zone Control (Emergency Lighting) Detail
4.6	Level 04 Area A Zone-4 Schedule	5.9	Satellite Detail
4.7	Level 04 Area A Zone-5 Schedule	5.10	Satellite (Emergency Lighting) Detail
4.8	Level 04 Area A Zone-6 Schedule	5.11	Relay Panel Detail
			Relay Panel Detail W/ Emergency Bypass & Voltage Dividers Detail

<u>DRAWING#</u>	<u>DRAWING NAME</u>
5.12	Capacitive Touch Station Detail
6.1	Classroom/Labs Sequence of Operations
6.2	Offices & Restrooms Sequence of Operations
6.3	Conference Rooms Sequence of Operations
6.4	Teaching Kitchen & Corridors Sequence of Operations
6.5	Stairwells & Exterior Site Lighting Sequence of Operations
6.6	Lecture Hall Sequence of Operations
7.1	Master Material List



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Level 01 Area A Zone-1 Schedule

ZONE-1: Stairwell 2-1 S194

CHANNEL

1. Stairwells 2-1 through 2-4

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				1	1	On/Off												
CS-2	0	CTS1CH-WH				1	1	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 01

LOCATION: Stairwell 2-1 S194

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		RO-0-1	TO BE POWERED BY NORMAL POWER CIRCUIT AND NOT AN EMERGENCY CIRCUIT						LVI-0-1				
1	1	RO-0-2	Fixtures (1n)		1EH1	9			LVI-0-2				
1	1	AO-0-1	Ballasts (1n)		1EH1	9			UI-0-1				
		AO-0-2							UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 01 Area A Zone-1 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 01 Network Riser

DRAWING NO.: 1.2

Level 01 Area A Zone-3 Schedule

ZONE-3: Teaching Kitchen

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	ON	OFF	OFF

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

[illegible]

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 03

LOCATION: Teaching Kitchen

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		RO-0-1	TO BE POWERED BY NORMAL POWER CIRCUIT AND NOT AN EMERGENCY CIRCUIT			
3	3	RO-0-2	Fixtures (c) - Teaching Kitchen		1EH1	8
3	3	AO-0-1	Ballasts (c) - Teaching Kitchen		1EH1	8
		AO-0-2				

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-0-1				
		LVI-0-2				
3	1-4	UI-0-1	Teaching Kitchen Occupancy	WV PDT 16-R (Typical of 2)		
		UI-0-2				
		UI-0-3				
		UI-0-4				
		UI-0-5				
		UI-0-6				

PRODUCT: SCDS-00

SLOT: 01

[illegible]

PRODUCT: SCDS-00

SLOT: 02

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	4	RO-2-1	Fixtures (d) - Teaching Kitchen		1NH1	14
		RO-2-2				
		AO-2-1				
		AO-2-2				

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-2-1				
		LVI-2-2				
		UI-2-1				
		UI-2-2				
		UI-2-3				
		UI-2-4				
		UI-2-5				
		UI-2-6				

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Level 01 Area A Zone-4 Schedule

ZONE-4: Mens 179

CHANNEL
1. Fixtures (a)
2. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				4	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 04 LOCATION: Mens 179

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
4	2	RO-0-1	Fixtures (b) - Mens 179		1NH1	12			LVI-0-1				
4	1	RO-0-2	Fixtures (a) - Mens 179		1EH1	8			LVI-0-2				
4	2	AO-0-1	Ballasts (b) - Mens 179		1NH1	12	4	1-2	UI-0-1	Mens 179 Occupancy	CM-PDT-9-R		
4	1	AO-0-2	Ballasts (a) - Mens 179		1EH1	8			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 01 Area A Zone-4 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 01 Network Riser

DRAWING NO.: 1.5

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Level 01 Area A Zone 5 Schedule

ZONE-5: Womens 177

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				5	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 05 LOCATION: Womens 177

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	2	RO-0-1	Fixtures (d) - Womens 177		1NH1	12			LVI-0-1				
5	1	RO-0-2	Fixtures (c) - Womens 177		1EH1	8			LVI-0-2				
5	2	AO-0-1	Ballasts (d) - Womens 177		1NH1	12	5	1-2	UI-0-1	Womens 177 Occupancy	CM-PDT-9-R		
5	1	AO-0-2	Ballasts (c) - Womens 177		1EH1	8			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 01 Area A Zone 5 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 01 Network Riser

DRAWING NO.: 1.6

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Level 01 Area A Zone-6 Schedule

ZONE-6: Bio Vestibule 183C

CHANNEL
1. Fixtures (b)
2. Fixtures (e)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	6	1-2	Raise	6	1-2	On/Off	6	1-2	Lower									
CS-2	0	CTS1RL-WH	6	1-2	Raise	6	1-2	On/Off	6	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 06

LOCATION: Bio Vestibule 183C

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	1	RO-0-1	Fixtures (b) - Bio Vestibule 183C		1NH1	12			LVI-0-1				
6	2	RO-0-2	Fixtures (e) - Bio Vestibule 183C		1EH1	8			LVI-0-2				
6	1	AO-0-1	Ballasts (b) - Bio Vestibule 183C		1NH1	12	6	1-2	UI-0-1	Bio Vestibule 183C Occupancy	CM-PDT-9-R		
6	2	AO-0-2	Ballasts (e) - Bio Vestibule 183C		1EH1	8			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 01 Area A Zone-6 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 01 Network Riser

DRAWING NO.: 1.7

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Level 01 Area A Zone-7 & 8 Schedule

PROJECT: Interdisciplinary Science Building

AREA: Level 01 Area A

ZONE-7: Cadaver Lab Workroom 183B

CHANNEL
1. Fixtures (a)
2. Fixtures (f)
3. Fixtures (g)

ZONE-8: Cadaver Lab 191

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	7	1-2	Raise	7	1-3	On/Off	7	1-2	Lower									
CS-2	0	CTS1RL-WH	7	1-2	Raise	7	1-3	On/Off	7	1-2	Lower									
CS-3	1	CTS1RL-WH	8	1-2	Raise	8	1-2	On/Off	8	1-2	Lower									
CS-4	1	CTS1RL-WH	8	1-2	Raise	8	1-2	On/Off	8	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 07

LOCATION: Cadaver Lab Workroom 183B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	1 & 3	RO-0-1	Fixtures (a,g) - Cadaver Lab Workroom 183B		1NH1	12			LVI-0-1				
7	2	RO-0-2	Fixtures (f) - Cadaver Lab Workroom 183B		1EH1	8			LVI-0-2				
7	1	AO-0-1	Ballasts (a) - Cadaver Lab Workroom 183B		1NH1	12	7	1-3	UI-0-1	Cadaver Lab Workroom 183B Occupancy	CM-PDT-9-R		
7	2	AO-0-2	Ballasts (f) - Cadaver Lab Workroom 183B		1EH1	8			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-X1

SLOT: 01

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	1	RO-1-1	Fixtures (c) - Cadaver Lab 191		1NH1	12			LVI-0-1				
8	2	RO-1-2	Fixtures (d) - Cadaver Lab 191		1EH1	8			LVI-0-2				
8	1	AO-1-1	Ballasts (c) - Cadaver Lab 191		1NH1	12	8	1-2	UI-0-1	Cadaver Lab 191	WV PDT 16-R (Typical of 2)		
8	2	AO-1-2	Ballasts (d) - Cadaver Lab 191		1EH1	8			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 01 Network Riser

DRAWING NAME:
Level 01 Area A Zone-7 & 8 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 1.8

AREA: Level 01 Area A - Exterior Emergency Lighting

HARDWARE:

PRODUCT: RPDS08-08-0-X0-10 ADDRESS: 8

LOCATION: Electrical 192

[illegible]

HARDWARE:

PRODUCT: MIO-A008

ADDRESS: 00

SLOT: 01

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		AO-01-01	Exterior Ballasts (ea)		1EH1	2
		AO-01-02	Exterior Ballasts (ec)		1EH1	2
		AO-01-03	Exterior Ballasts (ed)		1EH1	2
		AO-01-04	Exterior Ballasts (eh)		1EH1	2
		AO-01-05	Exterior Ballasts (ef)		1EH1	7
		AO-01-06	Exterior Ballasts (ek)		1EH1	7
		AO-01-07	Exterior Ballasts (em)		1EH1	7
		AO-01-08				

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Level 01 Area B Zone-1 Schedule

ZONE-1: Corridor C170, Lobby C150, Commons C151, Corridor C140, EAB Connector

CHANNEL
1. Corridor C170, Lobby C150, Commons C151, Corridor C140, EAB Connector

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				1	1	On/Off												
CS-1	0	CTS1CH-WH				1	1	On/Off												
CS-1	0	CTS1CH-WH				1	1	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 09

LOCATION: Entry Corridor 183A

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	1	RO-0-1	Fixtures (1d)		1NH1	10			LVI-0-1				
1	1	RO-0-2	Fixtures (1c)		1EH1	6			LVI-0-2				
1	1	AO-0-1	Ballasts (1d)		1NH1	10			UI-0-1				
1	1	AO-0-2	Ballasts (1c)		1EH1	6			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 01

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	1	RO-1-1	Fixtures (1e)		1NH1	10			LVI-0-1				
1	1	RO-1-2	Fixtures (1f)		1NH1	10			LVI-0-2				
1	1	AO-1-1	Ballasts (1e)		1NH1	10			UI-0-1				
1	1	AO-1-2	Ballasts (1f)		1NH1	10			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 01 Network Riser

DRAWING NAME:
Level 01 Area B Zone-1 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 1.10

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Level 01 Area B Zone-2 Schedule

ZONE-2: Corridor 110 and Corridor 102

CHANNEL
1. Fixtures (b)
2. Fixtures (a)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				2	1-2	On/Off												
CS-2	0	CTS1CH-WH				2	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 10

LOCATION: Corridor 102

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	1	RO-0-1	Fixtures (b) - Corridors 110 and 102		1NH1	10			LVI-0-1				
2	2	RO-0-2	Fixtures (a) - Corridors 110 and 102		1EH1	6			LVI-0-2				
2	1	AO-0-1	Ballasts (b) - Corridors 110 and 102		1NH1	10			UI-0-1				
2	2	AO-0-2	Ballasts (a) - Corridors 110 and 102		1EH1	6			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster Groves, MO 63119

DRAWING NAME:

Level 01 Area B Zone-2 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 1.11

FILENAME: Level 01 Network Riser

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Level 01 Area B Zone-3 Schedule

ZONE-3: Conference Room 154

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	3	1-3	Raise	3	1-3	On/Off	3	1-3	Lower	3	1-3	Preset-1	3	1-3	Preset-2	3	1-3	Preset-3

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 11

LOCATION: Conference Room 154

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	1	RO-0-1	Fixtures (a) - Conference Room 154		1HN1	4			LVI-0-1				
3	2	RO-0-2	Fixtures (b) - Conference Room 154		1HN1	4			LVI-0-2				
3	1	AO-0-1	Ballasts (a) - Conference Room 154		1HN1	4	3	1-3	UI-0-1	Conference Room 154 Occupancy	CM-PDT-9-R		
3	2	AO-0-2	Ballasts (b) - Conference Room 154		1HN1	4			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 01

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	3	RO-1-1	Fixtures (c) - Conference Room 154		1HN1	4			LVI-0-1				
		RO-1-2							LVI-0-2				
3	3	AO-1-1	Ballasts (c) - Conference Room 154		1HN1	4							
		AO-1-2							UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 01 Area B Zone-3 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 1.12

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Level 01 Area B Zone-4 Schedule

ZONE-4: SM MTG/Green Room

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (d)	100%	75%	50%
2. Fixtures (e)	100%	75%	50%
3. Fixtures (f)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	4	1-3	Raise	4	1-3	On/Off	4	1-3	Lower	4	1-3	Preset-1	4	1-3	Preset-2	4	1-3	Preset-3

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 12

LOCATION: SM MTG/Green Room

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
4	1	RO-0-1	Fixtures (d) - SM MTG/Green Room		1HN1	4			LVI-0-1				
4	2	RO-0-2	Fixtures (e) - SM MTG/Green Room		1HN1	4			LVI-0-2				
4	1	AO-0-1	Ballasts (d) - SM MTG/Green Room		1HN1	4	4	1-3	UI-0-1	SM MTG/Green Room Occupancy	CM-PDT-9-R		
4	2	AO-0-2	Ballasts (e) - SM MTG/Green Room		1HN1	4			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 01

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
4	3	RO-1-1	Fixtures (f) - SM MTG/Green Room		1HN1	4			LVI-0-1				
		RO-1-2							LVI-0-2				
4	3	AO-1-1	Ballasts (f) - SM MTG/Green Room		1HN1	4							
		AO-1-2							UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 01 Network Riser

DRAWING NAME: Level 01 Area B Zone-4 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 1.13

ZONE-5: West Stairwell

Channel 1 to be controlled by Level 02 Area B ZONE-10 (Corridor C230, Lobby C250, Cormmons C250B) Stations CS-1 and CS-2.

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 14

LOCATION: West Stairwell

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 01 Network Riser

DRAWING NAME:
Level 01 Area B Zone-5 Schedule

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 1.14

Level 01 Area B Zone-6 Schedule

ZONE-6: Conference Room 140

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	100%	75%	50%
5. Fixtures (e)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	6	1-5	Raise	6	1-5	On/Off	6	1-5	Lower	6	1-5	Preset-1	6	1-5	Preset-2	6	1-5	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 15

LOCATION: Conference Room 140

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	3	RO-0-1	Fixtures (c) Conference Room 140		1HN1	10
6	4	RO-0-2	Fixtures (d) Conference Room 140		1EH1	6
6	3	AO-0-1	Ballasts (c) Conference Room 140		1HN1	10
6	4	AO-0-2	Ballasts (d) Conference Room 140		1EH1	6

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-0-1				
		LVI-0-2				
6	1-6	UI-0-1	Conference Room 140 Occupancy	CM-PDT-9-R		
		UI-0-2				
		UI-0-3				
		UI-0-4				
		UI-0-5				
		UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

[illegible]

PRODUCT: SCDS-00

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	5	RO-2-1	Fixtures (e) Conference Room 140		1HN1	10
		RO-2-2				
6	5	AO-2-1	Ballasts (e) Conference Room 140		1HN1	10
		AO-2-2				

Level 01 Area B Zone-7 Schedule

ZONE-7: Lecture Hall 160

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	100%	75%	50%
5. Fixtures (e)	100%	75%	50%
6. Fixtures (f)	100%	75%	50%
7. Fixtures (g)	100%	75%	50%
8. Fixtures (l)	100%	75%	50%
9. Fixtures (m)	100%	75%	50%
10. Fixtures (r)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS1	0	CTS1CH-WH				7	1-10	On/Off												
CS2	1	CTS3PR-WH	7	2 and 9	Raise	7	1-10	On/Off	7	2 and 9	Lower	7	1-10	Preset-1	7	1-10	Preset-2	7	1-10	Preset-3
CS3	1	CTS3PR-WH	7	2 and 9	Raise	7	1-10	On/Off	7	2 and 9	Lower	7	1-10	Preset-1	7	1-10	Preset-2	7	1-10	Preset-3
CS4	2	CTS2RL-WH	7	5	Raise	7	5	On/Off	7	5	Lower	7	6 and 7	Raise	7	6 and 7	On/Off	7	6 and 7	Lower
CS5	2	CTS2RL-WH	7	5	Raise	7	5	On/Off	7	5	Lower	7	6 and 7	Raise	7	6 and 7	On/Off	7	6 and 7	Lower

HARDWARE:

PRODUCT: RPDS16-16-4-X1-20 ADDRESS: 16

LOCATION: Lecture Hall 160

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	6	RO-0-1	Fixtures (f) - Lecture Hall 160		1EH1	6			UI-0-1				
7	1	RO-0-2	Fixtures (a) - Lecture Hall 160		1NH1	4			UI-0-2				
7	9	RO-0-3	Fixtures (m) - Lecture Hall 160		1EH1	6			UI-0-3				
7	2	RO-0-4	Fixtures (b) - Lecture Hall 160		1NH1	4			UI-0-4				
		RO-0-5							UI-0-5				
7	3	RO-0-6	Fixtures (c) - Lecture Hall 160		1NH1	4			UI-0-6				
		RO-0-7							UI-0-7				
7	4	RO-0-8	Fixtures (d) - Lecture Hall 160		1NH1	4			UI-0-8				
		RO-0-9							UI-0-9				
7	5	RO-0-10	Fixtures (e) - Lecture Hall 160		1NH1	4			UI-0-10				
		RO-0-11							UI-0-11				
7	7	RO-0-12	Fixtures (g) - Lecture Hall 160		1NH1	4			UI-0-12				
		RO-0-13							UI-0-13				
7	8	RO-0-14	Fixtures (l) - Lecture Hall 160		1NH1	4			UI-0-14				
		RO-0-15							UI-0-15				
7	10	RO-0-16	Fixtures (r) - Lecture Hall 160		1NH1	4			UI-0-16				
									UI-0-17				
									UI-0-18				
									UI-0-19				
									UI-0-20				
									UI-0-21				
									UI-0-22				
									UI-0-23				
									UI-0-24				

HARDWARE:

PRODUCT: MIO-AO08

ADDRESS: 00

SLOT: 01

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	1	AO-01-01	Ballasts (a) - Lecture Hall 160		1NH1	4
7	2	AO-01-02	Ballasts (b) - Lecture Hall 160		1NH1	4
7	3	AO-01-03	Ballasts (c) - Lecture Hall 160		1NH1	4
7	4	AO-01-04	Ballasts (d) - Lecture Hall 160		1NH1	4
7	5	AO-01-05	Ballasts (e) - Lecture Hall 160		1NH1	4
7	6	AO-01-06	Ballasts (f) - Lecture Hall 160		1EH1	6
7	7	AO-01-07	Ballasts (g) - Lecture Hall 160		1NH1	4
7	8	AO-01-08	Ballasts (l) - Lecture Hall 160		1NH1	4

HARDWARE:

PRODUCT: MIO-AO08

ADDRESS: 00

SLOT: 02

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	9	AO-01-01	Ballasts (m) - Lecture Hall 160		1EH1	6
7	10	AO-01-02	Ballasts (r) - Lecture Hall 160		1NH1	4
		AO-01-03				
		AO-01-04				
		AO-01-05				
		AO-01-06				
		AO-01-07				
		AO-01-08				



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 01 Network Riser

DRAWING NAME:
Level 01 Area B Zone-7 Schedule

CONTRACT NO: WU-02-16 SE: JV DE: PL PR: RV

DRAWING NO.: 1.16

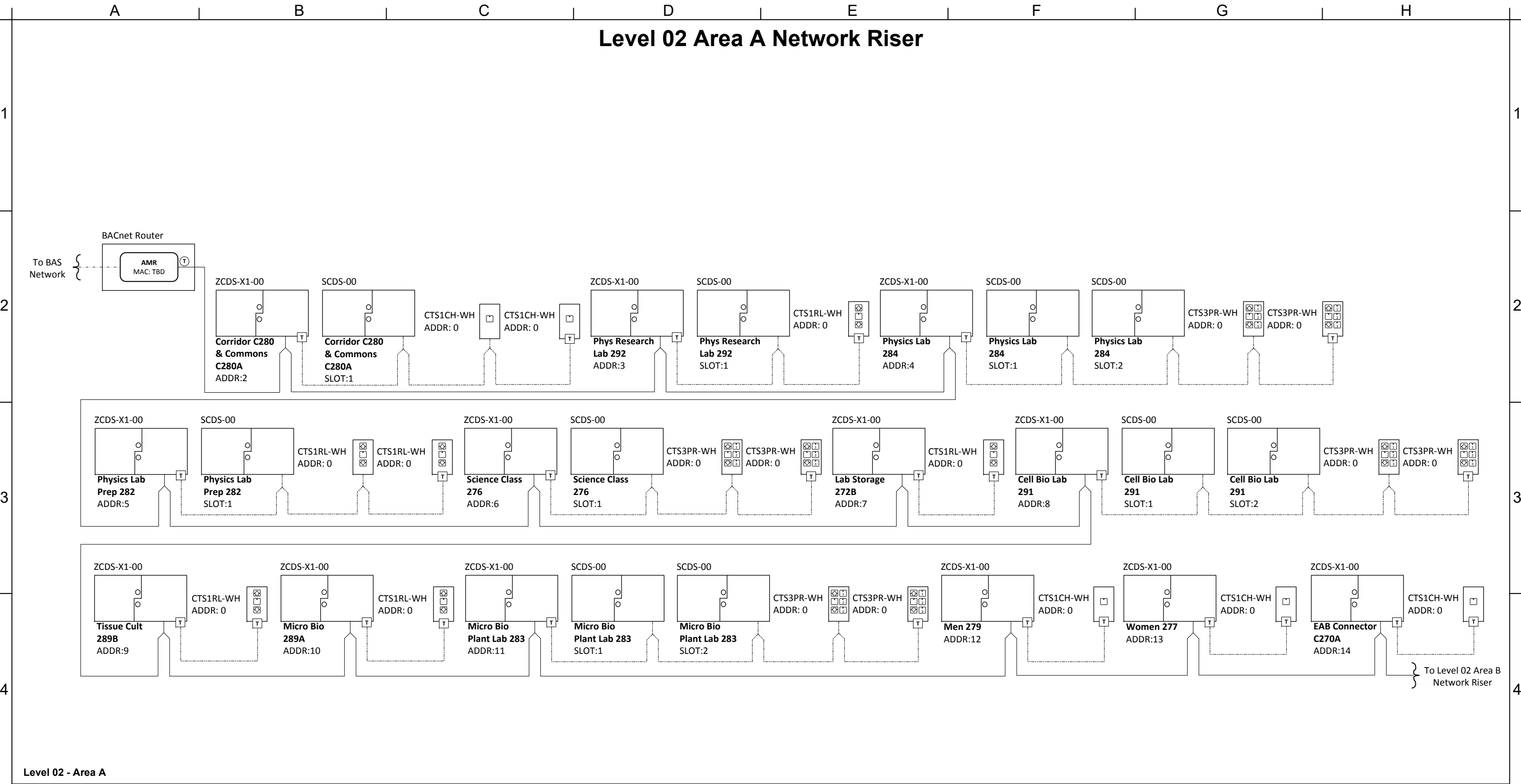
Level 01 Material List

Manufacturer	Part Number	Product Description	Quantity
Acuity Controls	CM-PDT-9-R	Ceiling Mount Occupancy Sensor, Dual Technology (PIR/Microphonics), Small Motion 360°, Low Voltage Relay	7
Acuity Controls	WV-PDT-16-R	Dual Technology Wide View Occupancy Sensor w/ Low Voltage Relay	4
Automated Logic	AMR	ARCnet to MS/TP Router	1
Blue Ridge Technologies	CTS1CH-WH	Capacitive Touch Station, 1 Channel, White (wallplate not included)	13
Blue Ridge Technologies	CTS1RL-WH	Capacitive Touch Station, 1 Raise/Lower, White (wallplate not included)	6
Blue Ridge Technologies	CTS2RL-WH	Capacitive Touch Station, 2 Raise/Lower, White (wallplate not included)	2
Blue Ridge Technologies	CTS3PR-WH	Capacitive Touch Station, 3 Preset, White (wallplate not included)	6
Blue Ridge Technologies	LS24O	Light Level Sensor, 10VDC, Indoor, 0-50FC, Recessed Ceiling Mount	2
Blue Ridge Technologies	RPDS08-08-0-00-10	Relay Panel Dimming Standard, 8 Relay Capacity	1
Blue Ridge Technologies	RPDS08-08-0-XO-10	Relay Panel Dimming Standard, 8 Relay Capacity	1
Blue Ridge Technologies	RPDS16-16-4-X1-20	Relay Panel Dimming Standard, 16 Relay Capacity	1
Blue Ridge Technologies	SCDS-00	Satellite, Dimming Standard, 120/277	8
Blue Ridge Technologies	SCDS-X1	Satellite, Dimming Standard, UL924, 120/277	1
Blue Ridge Technologies	ZCDS-00-00	Zone Controller, Dimming Standard, 120/277	2
Blue Ridge Technologies	ZCDS-X1-00	Zone Controller, Dimming Standard, UL924, 120/277	11

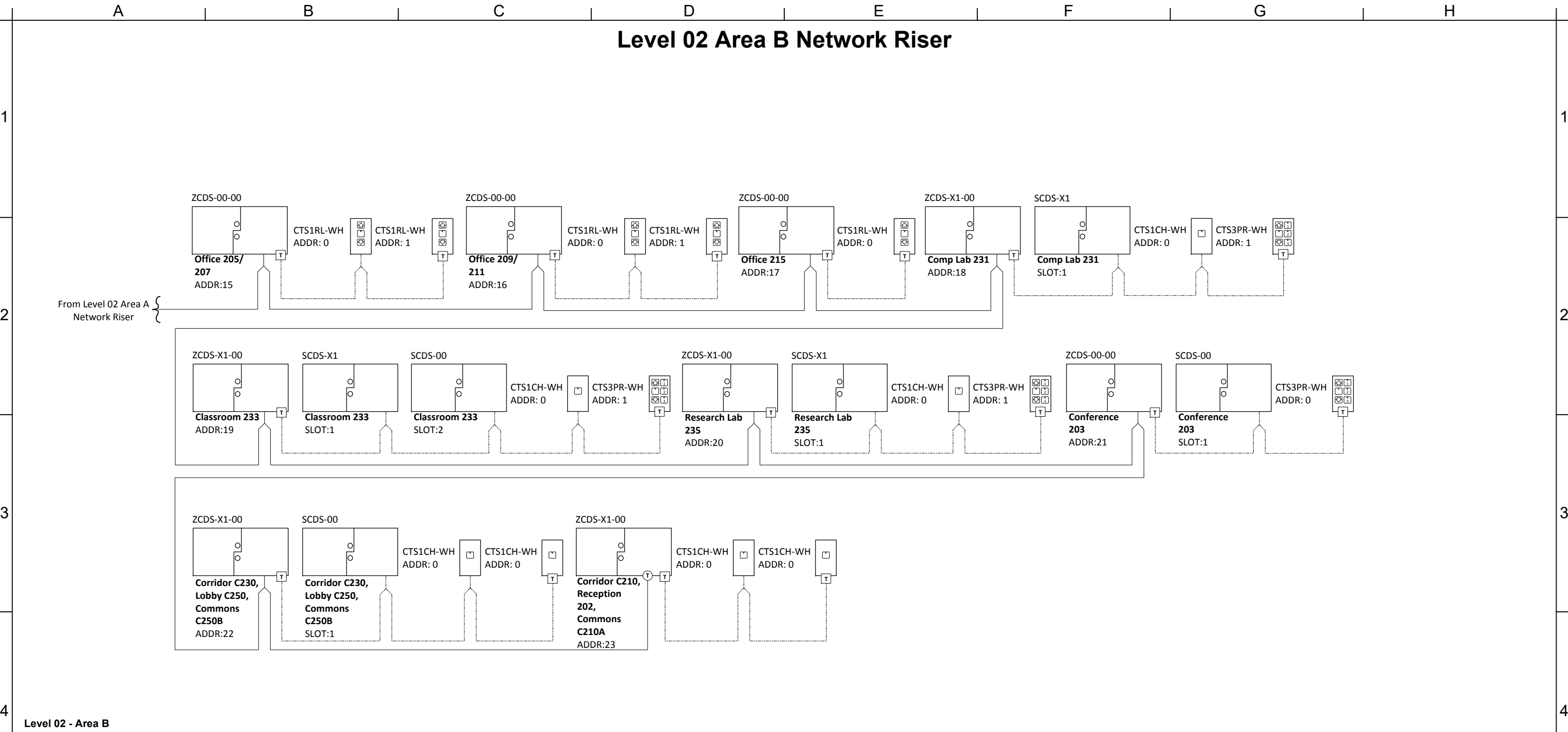
 Automatic Controls equipment systems, inc.	Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119	DRAWING NAME: Level 01 Material List			
	FILENAME: Level 01 Network Riser	CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV DRAWING NO.: 1.18			

Level 01 Commissioning Reports

[illegible][illegible]



Level 02 - Area A



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Level 02 Area A Zone-1 Schedule

ZONE-1: Corridor C280 and Commons C280A

CHANNEL
1. Fixtures (2f)
2. Fixtures (2g)
3. Fixtures (2h)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				1	1-3	On/Off												
CS-2	0	CTS1CH-WH				1	1-3	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 2

LOCATION: Corridor C280 and Commons C280A

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	2	RO-0-1	Fixtures (2g) - Corridor/Commons		2NH1	1			LVI-0-1				
1	1	RO-0-2	Fixtures (2f) - Corridor/Commons		1EH1	12			LVI-0-2				
		AO-0-1	Ballasts (2g) - Corridor/Commons		2NH1	1			UI-0-1				
		AO-0-2	Ballasts (2f) - Corridor/Commons		1EH1	12			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	3	RO-1-1	Fixtures (2h) - Corridor/Commons		2NH1	1			LVI-1-1				
		RO-1-2							LVI-1-2				
1	3	AO-1-1	Ballasts (2h) - Corridor/Commons		2NH1	1			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area A Zone-1 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 2.3

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Level 02 Area A Zone-2 Schedule

ZONE-2: Phys. Research Lab 292

CHANNEL
1. Fixtures (a)
2. Fixtures (b)
3. Fixtures (c)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	2	1-2	Raise	2	1-3	On/Off	2	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 3 LOCATION: Phys. Research Lab 292

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	2	RO-0-1	Fixtures (b) - Research Lab 292		2NH1	5			LVI-0-1				
2	1	RO-0-2	Fixtures (a) - Research Lab 292		1EH1	12			LVI-0-2				
2	2	AO-0-1	Ballasts (b) - Research Lab 292		2NH1	5	2	1-3	UI-0-1	Phys. Research Lab 292 Occupancy	CM-PDT-9-R		
2	1	AO-0-2	Ballasts (a) - Research Lab 292		1EH1	12			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	3	RO-1-1	Fixtures (c) - Research Lab 292		2NH1	5			LVI-1-1				
		RO-1-2							LVI-1-2				
		AO-1-1							UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:
Level 02 Area A Zone-2 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 2.4

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Level 02 Area A Zone-3 Schedule

ZONE-3: Physics Lab 284

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (c)	100%	75%	50%
2. Fixtures (d)	100%	75%	50%
3. Fixtures (e)	100%	75%	50%
4. Fixtures (f)	100%	75%	50%
5. Fixtures (q)	On	On	On

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	3	1-4	Raise	3	1-5	On/Off	3	1-4	Lower	3	1-5	Preset-1	3	1-5	Preset-2	3	1-5	Preset-3
CS-2	0	CTS3PR-WH	3	1-4	Raise	3	1-5	On/Off	3	1-5	Lower	3	1-5	Preset-1	3	1-5	Preset-2	3	1-5	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 4

LOCATION: Physics Lab 284

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	2	RO-0-1	Fixtures (d) - Physics Lab 284		2NH1	5			LVI-0-1				
3	1	RO-0-2	Fixtures (c) - Physics Lab 284		1EH1	12			LVI-0-2				
3	2	AO-0-1	Ballasts (d) - Physics Lab 284		2NH1	5	3	1-5	UI-0-1	Physics Lab 284 Occupancy	CM-PDT-9-R (Typical of 3)		
3	1	AO-0-2	Ballasts (c) - Physics Lab 284		1EH1	12	3	2	UI-0-2	Physics Lab 284 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	3	RO-1-1	Fixtures (e) - Physics Lab 284		2NH1	5			LVI-1-1				
3	4	RO-1-2	Fixtures (f) - Physics Lab 284		2NH2	5			LVI-1-2				
3	3	AO-1-1	Ballasts (e) - Physics Lab 284		2NH1	5	3	4	UI-0-3	Physics Lab 284	BPD-500SR-L		
3	4	AO-1-2	Ballasts (f) - Physics Lab 284		2NH2	5			UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

PRODUCT: SCDS-00

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	5	RO-2-1	Fixtures (q) - Physics Lab 284		2NH1	5			LVI-2-1				
		RO-2-2							LVI-2-2				
		AO-2-1							UI-2-1				
		AO-2-2							UI-2-2				
									UI-2-3				
									UI-2-4				
									UI-2-5				
									UI-2-6				

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470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 02 Area A Zone-3 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 2.5

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Level 02 Area A Zone-5 Schedule

ZONE-5: Science Class 276

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (i)	100%	75%	50%
2. Fixtures (j)	100%	75%	50%
3. Fixtures (k)	100%	75%	50%
4. Fixtures (m)	On	On	On

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	5	1-3	Raise	5	1-4	On/Off	5	1-3	Lower	5	1-4	Preset-1	5	1-4	Preset-2	5	1-4	Preset-3
CS-2	0	CTS3PR-WH	5	1-3	Raise	5	1-4	On/Off	5	1-3	Lower	5	1-4	Preset-1	5	1-4	Preset-2	5	1-4	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 6 LOCATION: Science Class 276

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	2	RO-0-1	Fixtures (j) - Science Class 276		2NH1	5			LVI-0-1				
5	1	RO-0-2	Fixtures (i) - Science Class 276		1EH1	12			LVI-0-2				
5	2	AO-0-1	Ballasts (j) - Science Class 276		2NH1	5	5	1-4	UI-0-1	Science Class 276 Occupancy	CM-PDT-9-R (Typical of 2)		
5	1	AO-0-2	Ballasts (i) - Science Class 276		1EH1	12	5	2	UI-0-2	Science Class 276 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	3	RO-1-1	Fixtures (k) - Science Class 276		2NH1	5			LVI-1-1				
5	4	RO-1-2	Fixtures (m) - Science Class 276		2NH2	5			LVI-1-2				
5	3	AO-1-1	Ballasts (k) - Science Class 276		2NH1	5			UI-0-3				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area A Zone-5 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 2.7

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Level 02 Area A Zone-6 Schedule

ZONE-6: Lab Storage 272B

CHANNEL
1. Fixtures (a)
2. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	CTIO	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	6	1-2	Raise	6	1-2	On/Off	6	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 7 LOCATION: Lab Storage 272B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	1	RO-0-1	Fixtures (a) - Lab Storage 272B		2NH1	5			LVI-0-1				
6	2	RO-0-2	Fixtures (b) - Lab Storage 272B		1EH1	12			LVI-0-2				
6	1	AO-0-1	Ballasts (a) - Lab Storage 272B		2NH1	5	6	1-2	UI-0-1	Lab Storage 272B Occupancy	CM-PDT-9-R		
6	2	AO-0-2	Ballasts (b) - Lab Storage 272B		1EH1	12	6	1	UI-0-2	Lab Storage 272B Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:
Level 02 Area A Zone-6 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 2.8

A	B	C	D	E	F	G	H													
Level 02 Area A Zone-7 Schedule																				
ZONE-7: Cell BIO Lab 291																				
CHANNEL		PRESET-1	PRESET-2	PRESET-3																
1. Fixtures (q)		100%	75%	50%																
2. Fixtures (r)		100%	75%	50%																
3. Fixtures (s)		100%	75%	50%																
4. Fixtures (t)		On	On	On																
5. Fixtures (u)		100%	75%	50%																
Note: Preset values and channel configuration options to be determined by owner during start-up.																				
STATIONS:																				
NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	7	1-3 & 5	Raise	7	1-5	On/Off	7	1-3 & 5	Lower	7	1-5	Preset-1	7	1-5	Preset-2	7	1-5	Preset-3
CS-2	0	CTS3PR-WH	7	1-3 & 5	Raise	7	1-5	On/Off	7	1-3 & 5	Lower	7	1-5	Preset-1	7	1-5	Preset-2	7	1-5	Preset-3
HARDWARE:																				
PRODUCT: ZCDS-X1-00		ADDRESS: 8		LOCATION: Cell BIO Lab 291																
ZN	CH	OUTPUT	DESCRIPTION		DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE	PANEL BOARD	CIRCUIT					
7	1	RO-0-1	Fixtures (q) - Cell BIO Lab 291			2NH1	3			LVI-0-1										
7	2	RO-0-2	Fixtures (r) - Cell BIO Lab 292			1EH1	12			LVI-0-2										
7	1	AO-0-1	Ballasts (q) - Cell BIO Lab 291			2NH1	3	7	1-5	UI-0-1	Cell BIO Lab 291 Occupancy		CM-PDT-9-R (Typical of 3)							
7	2	AO-0-2	Ballasts (r) - Cell BIO Lab 292			1EH1	12	7	1	UI-0-2	Cell BIO Lab 291 Light Level		BPD-500SR-L							
										UI-0-3										
										UI-0-4										
										UI-0-5										
										UI-0-6										
PRODUCT: SCDS-00								SLOT: 1												
ZN	CH	OUTPUT	DESCRIPTION		DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE	PANEL BOARD	CIRCUIT					
7	3	RO-1-1	Fixtures (s) - Cell BIO Lab 291			2NH1	3			LVI-1-1										
7	4	RO-1-2	Fixtures (t) - Cell BIO Lab 292			2NH1	3			LVI-1-2										
7	3	AO-1-1	Ballasts (s) - Cell BIO Lab 291			2NH1	3			UI-1-1										
		AO-1-2								UI-1-2										
										UI-1-3										
										UI-1-4										
										UI-1-5										
										UI-1-6										
PRODUCT: SCDS-00								SLOT: 2												
ZN	CH	OUTPUT	DESCRIPTION		DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE	PANEL BOARD	CIRCUIT					
7	5	RO-2-1	Fixtures (u) - Cell BIO Lab 292			2NH1	3			LVI-2-1										
		RO-2-2								LVI-2-2										
7	5	AO-2-1	Ballasts (u) - Cell BIO Lab 291			2NH1	3			UI-2-1										
		AO-2-2								UI-2-2										
										UI-2-3										
										UI-2-4										
										UI-2-5										
										UI-2-6										

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area A Zone-7 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 2.9

ZONE-8: Tissue Culture 289B

STATIONS:

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 9

LOCATION: Tissue Culture 289B

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area A Zone-8 Schedule

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 2.10

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Level 02 Area A Zone-9 Schedule

ZONE-9: MicroBio 289A

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	9	2	Raise	9	1-2	On/Off	9	2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 10

LOCATION: Tissue Culture 289B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	2	RO-0-1	Fixtures (c) - MicroBio 289A		2NH1	3			LVI-0-1				
9	1	RO-0-2	Fixtures (d) - MicroBio 289A		1EH1	12			LVI-0-2				
9	1	AO-0-1	Ballasts (d) - MicroBio 289A		1EH1	12	9	1-2	UI-0-1	MicroBio 289A Occupancy	WV 16-R		
		AO-0-2							UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.
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DRAWING NAME:
Level 02 Area A Zone-9 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 2.11

Level 02 Area A Zone-10 Schedule

1

ZONE-10: MicroBio Plant Lab 283

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (m)	100%	75%	50%
2. Fixtures (n)	100%	75%	50%
3. Fixtures (o)	100%	75%	50%
4. Fixtures (p)	On	On	On
5. Fixtures (q)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	10	1-3 & 5	Raise	10	1-5	On/Off	10	1-3 & 5	Lower	10	1-5	Preset-1	10	1-5	Preset-2	10	1-5	Preset-3
CS-2	0	CTS3PR-WH	10	1-3 & 5	Raise	10	1-5	On/Off	10	1-3 & 5	Lower	10	1-5	Preset-1	10	1-5	Preset-2	10	1-5	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 11

LOCATION: MicroBio Plant Lab 283

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	1	RO-0-1	Fixtures (m) - MicroBio Lab 283		2NH1	3			LVI-0-1				
10	2	RO-0-2	Fixtures (n) - MicroBio Lab 283		1EH1	12			LVI-0-2				
10	1	AO-0-1	Ballasts (m) - MicroBio Lab 283		2NH1	3	10	1-5	UI-0-1	MicroBio Plant Lab 283 Occupancy	CM-PDT-9-R (Typical of 3)		
10	2	AO-0-2	Ballasts (n) - MicroBio Lab 283		1EH1	12	10	1	UI-0-2	MicroBio Plant Lab 283 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	3	RO-1-1	Fixtures (o) - MicroBio Lab 283		2NH1	3			LVI-1-1				
10	4	RO-1-2	Fixtures (p) - MicroBio Lab 283		2NH1	3			LVI-1-2				
10	3	AO-1-1	Ballasts (o) - MicroBio Lab 283		2NH1	3			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

PRODUCT: SCDS-00

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	5	RO-2-1	Fixtures (q) - MicroBio Lab 283		2NH1	3			LVI-2-1				
		RO-2-2							LVI-2-2				
10	5	AO-2-1	Ballasts (q) - MicroBio Lab 283		2NH1	3			UI-2-1				
		AO-2-2							UI-2-2				
									UI-2-3				
									UI-2-4				
									UI-2-5				
									UI-2-6				

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A	B	C	D	E	F	G	H
Level 02 Area A Zone-11 Schedule							
1							1
2							2
3							3
4							4
5							5

ZONE-11: Mens 279

CHANNEL
1. Fixtures (a)
2. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				11	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 12

LOCATION: Mens 279

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
11	2	RO-0-1	Fixtures (b) - Mens 279		2NH1	1			LVI-0-1				
11	1	RO-0-2	Fixtures (a) - Mens 279		1EH1	12			LVI-0-2				
11	2	AO-0-1	Ballasts (b) - Mens 279		2NH1	1	11	1-2	UI-0-1	Mens 279 Occupancy	CM-PDT-9-R		
11	1	AO-0-2	Ballasts (a) - Mens 279		1EH1	12			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 02 Area A Zone-11 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 02 Network Riser

DRAWING NO.: 2.13

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Level 02 Area A Zone-12 Schedule

ZONE-12: Womens 277

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				12	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 13

LOCATION: Womens 277

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
12	2	RO-0-1	Fixtures (d) - Womens 277		2NH1	1			LVI-0-1				
12	1	RO-0-2	Fixtures (c) - Womens 277		1EH1	12			LVI-0-2				
12	2	AO-0-1	Ballasts (d) - Womens 277		2NH1	1	12	1-2	UI-0-1	Womens 277 Occupancy	CM-PDT-9-R		
12	1	AO-0-2	Ballasts (c) - Womens 277		1EH1	12			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:
Level 02 Area A Zone-12 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 2.14

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Level 02 Area A Zone-13 Schedule

ZONE-13: EAB Connector 270A

CHANNEL
1. Fixtures (j)
2. Fixtures (k)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				13	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 14

LOCATION: EAB Connector C270A

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
13	2	RO-0-1	Fixtures (k) - EAB Connector C270A		2NH1	7			LVI-0-1				
13	1	RO-0-2	Fixtures (j) - EAB Connector C270A		1EH1	12			LVI-0-2				
13	2	AO-0-1	Ballasts (k) - EAB Connector C270A		2NH1	7			UI-0-1				
13	1	AO-0-2	Ballasts (j) - EAB Connector C270A		1EH1	12			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.

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DRAWING NAME:

Level 02 Area A Zone-13 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 02 Network Riser

DRAWING NO.: 2.15

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Level 02 Area B Zone-1 & 2 Schedule

ZONE-1: Office 205

CHANNEL
1. Fixtures (e)

ZONE-2: Office 207

CHANNEL
1. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	1	1	Raise	1	1	On/Off	1	1	Lower									
CS-2	1	CTS1RL-WH	2	1	Raise	2	1	On/Off	2	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 15

LOCATION: Office 205

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	1	RO-0-1	Fixtures (e) - Office 205		2NH1	11			LVI-0-1				
2	1	RO-0-2	Fixtures (d) - Office 207		2NH1	11			LVI-0-2				
1	1	AO-0-1	Ballasts (e) - Office 205		2NH1	11	1	1	UI-0-1	Office 205 Occupancy	WV PDT 16-R		
2	1	AO-0-2	Ballasts (d) - Office 207		2NH1	11	1	1	UI-0-2	Office 205 Light Level	BPD-500SR-L		
							2	1	UI-0-3	Office 207 Occupancy	WV PDT 16-R		
							2	1	UI-0-4	Office 207 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area B Zone-1 & 2 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 2.16

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Level 02 Area B Zone-3 & 4 Schedule

ZONE-3: Office 209

CHANNEL
1. Fixtures (c)

ZONE-4: Office 211

CHANNEL
1. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	3	1	Raise	3	1	On/Off	3	1	Lower									
CS-2	1	CTS1RL-WH	4	1	Raise	4	1	On/Off	4	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 16

LOCATION: Office 209

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	1	RO-0-1	Fixtures (c) - Office 209		2NH1	11			LVI-0-1				
4	1	RO-0-2	Fixtures (b) - Office 211		2NH1	11			LVI-0-2				
3	1	AO-0-1	Ballasts (c) - Office 209		2NH1	11	3	1	UI-0-1	Office 209 Occupancy	WV PDT 16-R		
4	1	AO-0-2	Ballasts (b) - Office 201		2NH1	11	3	1	UI-0-2	Office 209 Light Level	BPD-500SR-L		
							4	1	UI-0-3	Office 211 Occupancy	WV PDT 16-R		
							4	1	UI-0-4	Office 211 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area B Zone-3 & 4 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 2.17

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Level 02 Area B Zone-5 Schedule

ZONE-5: Office 215

CHANNEL
1. Fixtures (a)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	5	1	Raise	5	1	On/Off	5	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 17

LOCATION: Office 215

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	1	RO-0-1	Fixtures (a) - Office 215		2NH1	11			LVI-0-1				
		RO-0-2							LVI-0-2				
5	1	AO-0-1	Ballasts (a) - Office 215		2NH1	11	5	1	UI-0-1	Office 215 Occupancy	CM-PDT-9-R		
		AO-0-2					5	1	UI-0-2	Office 215 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 02 Area B Zone-5 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 02 Network Riser

DRAWING NO.: 2.18

Level 02 Area B Zone-6 Schedule

ZONE-6: Computer Lab 231

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				6	1-4	On/Off												
CS-2	1	CTS3PR-WH	6	1-4	Raise	6	1-4	On/Off	6	1-4	Lower	6	1-4	Preset-1	6	1-4	Preset-2	6	1-4	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 18

LOCATION: Computer Lab 231

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	1	RO-0-1	Fixtures (a) - Computer Lab 231		2NH1	9
6	3	RO-0-2	Fixtures (c) - Computer Lab 231		1EH1	10
6	2	AO-0-1	Ballasts (a) - Computer Lab 231		2NH1	9
6	4	AO-0-2	Ballasts (c) - Computer Lab 231		1EH1	10

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-0-1				
		LVI-0-2				
6	1-4	UI-0-1	Computer Lab 231 Occupancy	WV PDT 16-R (Typical of 2)		
6	1 & 3	UI-0-2	Computer Lab 231 Light Level	BPD-500SR-L		
		UI-0-3				
		UI-0-4				
		UI-0-5				
		UI-0-6				

PRODUCT: SCDS-X1

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	2	RO-1-1	Fixtures (b) - Computer Lab 231		2NH1	9			LVI-1-1				
6	4	RO-1-2	Fixtures (d) - Computer Lab 231		1EH1	10			LVI-1-2				
6	2	AO-1-1	Ballasts (b) - Computer Lab 231		2NH1	9			UI-1-1				
6	4	AO-1-2	Ballasts (d) - Computer Lab 231		1EH1	10			UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Level 02 Area B Zone-7 Schedule

ZONE-7: Classroom 233

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (e)	100%	75%	50%
2. Fixtures (f)	100%	75%	50%
3. Fixtures (g)	100%	75%	50%
4. Fixtures (h)	100%	75%	50%
5. Fixtures (j)	100%	75%	50%
6. Fixtures (k)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				7	1-6	On/Off												
CS-2	1	CTS3PR-WH	7	1-6	Raise	7	1-6	On/Off	7	1-6	Lower	7	1-6	Preset-1	7	1-6	Preset-2	7	1-6	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 19 LOCATION: Classroom 233

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	1	RO-0-1	Fixtures (e) - Classroom 233		2NH1	9			LVI-0-1				
7	5	RO-0-2	Fixtures (j) - Classroom 233		1EH1	10			LVI-0-2				
7	1	AO-0-1	Ballasts (e) - Classroom 233		2NH1	9	7	1-6	UI-0-1	Classroomm 233 Occupancy	WV PDT 16-R (Typical of 2)		
7	5	AO-0-2	Ballasts (j) - Classroom 233		1EH1	10	7	1,3,5	UI-0-2	Classroom 233 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-X1 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	2	RO-1-1	Fixtures (f) - Classroom 233		2NH1	9			LVI-1-1				
7	6	RO-1-2	Fixtures (k) - Classroom 233		1EH1	10			LVI-1-2				
7	2	AO-1-1	Ballasts (f) - Classroom 233		2NH1	9			UI-1-1				
7	6	AO-1-2	Ballasts (k) - Classroom 233		1EH1	10			UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

PRODUCT: SCDS-00 SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	3	RO-2-1	Fixtures (g) - Classroom 233		2NH1	9			LVI-2-1				
7	4	RO-2-2	Fixtures (h) - Classroom 233		2NH1	9			LVI-2-2				
7	3	AO-2-1	Ballasts (g) - Classroom 233		2NH1	9			UI-2-1				
7	4	AO-2-2	Ballasts (h) - Classroom 233		2NH1	9			UI-2-2				
									UI-2-3				
									UI-2-4				
									UI-2-5				
									UI-2-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

DRAWING NAME:
Level 02 Area B Zone-7 Schedule

CONTRACT NO: WU-02-16 SE: JV DE: PL PR: RV

DRAWING NO.: 2.20

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Level 02 Area B Zone-8 Schedule

ZONE-8: Research Lab 235

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				8	1-4	On/Off												
CS-2	1	CTS3PR-WH	8	1-4	Raise	8	1-4	On/Off	8	1-4	Lower	8	1-4	Preset-1	8	1-4	Preset-2	8	1-4	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 20 LOCATION: Research Lab 235

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	1	RO-0-1	Fixtures (a) - Research Lab 235		2NH1	9			LVI-0-1				
8	3	RO-0-2	Fixtures (c) - Research Lab 235		1EH1	10			LVI-0-2				
8	2	AO-0-1	Ballasts (a) - Research Lab 235		2NH1	9	6	1-4	UI-0-1	Research Lab 235 Occupancy	WV PDT 16-R (Typical of 3)		
8	4	AO-0-2	Ballasts (c) - Research Lab 235		1EH1	10	6	1 & 3	UI-0-2	Research Lab 235 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-X1 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	2	RO-1-1	Fixtures (b) -Research Lab 235		2NH1	9			LVI-1-1				
8	4	RO-1-2	Fixtures (d) - Research Lab 235		1EH1	10			LVI-1-2				
8	2	AO-1-1	Ballasts (b) - Research Lab 235		2NH1	9			UI-1-1				
8	4	AO-1-2	Ballasts (d) - Research Lab 235		1EH1	10			UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area B Zone-8 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 2.21

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Level 02 Area B Zone-9 Schedule

ZONE-9: Conference 203

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	9	1-3	Raise	9	1-3	On/Off	9	1-3	Lower	9	1-3	Preset-1	9	1-3	Preset-2	9	1-3	Preset-3

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 21

LOCATION: Conference 203

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	1	RO-0-1	Fixtures (a) - Conference 203		2NH1	11			LVI-0-1				
9	2	RO-0-2	Fixtures (b) - Conference 203		2NH1	11			LVI-0-2				
9	1	AO-0-1	Ballasts (a) - Conference 203		2NH1	11	9	1-3	UI-0-1	Conference 203 Occupancy	CM-PDT-9-R		
9	2	AO-0-2	Ballasts (b) - Conference 203		2NH1	11	9	1-3	UI-0-2	Conference 203 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	3	RO-1-1	Fixtures (c) -Conference 203		2NH1	11			LVI-1-1				
		RO-1-2							LVI-1-2				
9	3	AO-1-1	Ballasts (c) - Conference 203		2NH1	11			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

DRAWING NAME:
Level 02 Area B Zone-9 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 2.22

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Level 02 Area B Zone-10 Schedule

ZONE-10: Corridor C230, Lobby C250, Commons C250B

CHANNEL
1. Fixtures (a)
2. Fixtures (b)
3. Fixtures (c)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				10	1-3	On/Off												
CS-2	0	CTS1CH-WH				10	1-3	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 22

LOCATION: Cormmons C250B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	2	RO-0-1	Fixtures (b) - Corr. C230, Lobby C250, Comm. C250B		2NH1	7			LVI-0-1				
10	1	RO-0-2	Fixtures (a) - Corr. C230, Lobby C250, Comm. C250B		1EH1	10			LVI-0-2				
10	2	AO-0-1	Ballasts (b) - Corr. C230, Lobby C250, Comm. C250B		2NH1	7			UI-0-1				
10	1	AO-0-2	Ballasts (a) - Corr. C230, Lobby C250, Comm. C250B		1EH1	10			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	3	RO-1-1	Fixtures (c) - Corr. C230, Lobby C250, Comm. C250B		2NH1	7			LVI-1-1				
		RO-1-2							LVI-1-2				
10	3	AO-1-1	Ballasts (c) - Corr. C230, Lobby C250, Comm. C250B		2NH1	7			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area B Zone-10 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 2.23

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Level 02 Area B Zone-11 Schedule

ZONE-11: Corridor C210, Reception 202, Commons C210A

CHANNEL		
1. Fixtures (d)		
2. Fixtures (e)		

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				11	1-2	On/Off												
CS-2	0	CTS1CH-WH				11	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00ADDRESS: 23LOCATION: Cormmons C250B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
11	2	RO-0-1	Fixtures (e) - Corr. C210, Recp. 202, Comm. C210A		2NH1	7			LVI-0-1				
11	1	RO-0-2	Fixtures (d) - Corr. C210, Recp. 202, Comm. C210A		1EH1	10			LVI-0-2				
11	2	AO-0-1	Ballasts (e) - Corr. C210, Recp. 202, Comm. C210A		2NH1	7			UI-0-1				
11	1	AO-0-2	Ballasts (d) - Corr. C210, Recp. 202, Comm. C210A		1EH1	10			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 02 Network Riser

DRAWING NAME:
Level 02 Area B Zone-11 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 2.24

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Level 02 Commissioning Reports

LIGHTING CONTROL COMMISSIONING REPORT																		
AREA: LEVEL-02A			DIGITAL KEYPAD					OCCUPANCY SENSOR			DAYLIGHT SENSOR					NETWORK COMMUNICATIONS	WIRING DIAGRAM REFERENCE	SEQUENCE OF OPERATION
ZONE	ROOM NUMBER	ROOM NAME	MANUAL ON	MANUAL OFF	OVERRIDE SWITCH	DIMMING SWITCH	PRESET SCENE SWITCHING	MANUAL ON	MANUAL OFF	GRACE PERIOD	DAYLIGHT HARVESTING	TARGET LIGHT LEVEL	HIGH END TRIM	LOW END TRIM	INDEPENDENT OPERATION			
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		

LIGHTING CONTROL COMMISSIONING REPORT																		
AREA: LEVEL-02B			DIGITAL KEYPAD					OCCUPANCY SENSOR			DAYLIGHT SENSOR					NETWORK COMMUNICATIONS	WIRING DIAGRAM REFERENCE	SEQUENCE OF OPERATION
ZONE	ROOM NUMBER	ROOM NAME	MANUAL ON	MANUAL OFF	OVERRIDE SWITCH	DIMMING SWITCH	PRESET SCENE SWITCHING	MANUAL ON	MANUAL OFF	GRACE PERIOD	DAYLIGHT HARVESTING	TARGET LIGHT LEVEL	HIGH END TRIM	LOW END TRIM	INDEPENDENT OPERATION			
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
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Level 03 Area A Network Riser

The diagram illustrates the network topology for Level 03 Area A, showing connections between various labs and a central riser. The riser is divided into four horizontal sections, each containing a series of network devices (switches and routers) connected to specific labs.

Top Section (Riser 1):

- Corridor C380 & Commons C380A ADDR:2:** Connected to ZCDS-X1-00.
- Corridor C380 & Commons C380A SLOT:1:** Connected to SCDS-00.
- CTS1CH-WH ADDR: 0:** Connected to SCDS-00.
- Molecular Bio Lab 388 ADDR:3:** Connected to ZCDS-X1-00.
- Molecular Bio Lab 388 SLOT:1:** Connected to SCDS-00.
- Molecular Bio Lab 388 SLOT:2:** Connected to SCDS-00.
- CTS3PR-WH ADDR: 0:** Connected to SCDS-00.
- Bio Lab Prep 386 ADDR:4:** Connected to ZCDS-X1-00.
- Bio Lab Prep 386 SLOT:1:** Connected to SCDS-00.
- CTS1RL-WH ADDR: 0:** Connected to SCDS-00.

Second Section (Riser 2):

- Organis Bio Lab 378 ADDR:5:** Connected to ZCDS-X1-00.
- Organis Bio Lab 378 SLOT:1:** Connected to SCDS-00.
- Organis Bio Lab 378 SLOT:2:** Connected to SCDS-00.
- CTS3PR-WH ADDR: 0:** Connected to SCDS-00.
- Tissue Culture 374B ADDR:6:** Connected to ZCDS-X1-00.
- Tissue Culture 374B SLOT:1:** Connected to SCDS-00.
- CTS1RL-WH ADDR: 0:** Connected to SCDS-00.
- Bio Fac. Research 374A ADDR:7:** Connected to ZCDS-X1-00.
- Bio Fac. Research 374A SLOT:1:** Connected to SCDS-00.
- CTS1RL-WH ADDR: 0:** Connected to SCDS-00.
- Commons C370B ADDR:8:** Connected to ZCDS-X1-00.
- CTS1CH-WH ADDR: 0:** Connected to SCDS-00.

Third Section (Riser 3):

- Anat Lab 391 ADDR:9:** Connected to ZCDS-X1-00.
- Anat Lab 391 SLOT:1:** Connected to SCDS-00.
- CTS3PR-WH ADDR: 0:** Connected to SCDS-00.
- Bio Lab Prep 389 ADDR:10:** Connected to ZCDS-X1-00.
- Bio Lab Prep 389 SLOT:1:** Connected to SCDS-00.
- CTS1RL-WH ADDR: 0:** Connected to SCDS-00.
- Cell Bio Lab 383 ADDR:11:** Connected to ZCDS-X1-00.
- Cell Bio Lab 383 SLOT:1:** Connected to SCDS-00.
- CTS3PR-WH ADDR: 0:** Connected to SCDS-00.

Bottom Section (Riser 4):

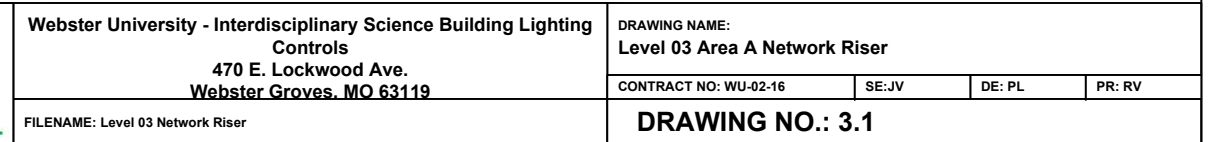
- Men 379 ADDR:12:** Connected to ZCDS-X1-00.
- CTS1CH-WH ADDR: 0:** Connected to SCDS-00.
- Women 377 ADDR:13:** Connected to ZCDS-X1-00.
- CTS1CH-WH ADDR: 0:** Connected to SCDS-00.

Connections:

- To BAS Network:** Connected to the top left of the riser.
- To Level 03 Area B Network Riser:** Connected to the bottom right of the riser.

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- - ARCnet wiring tied to BAS Network
- - CANbus Network Wiring: CL3P 18AWG Two Twisted Pairs, 1300'
- - MSTP Network Wiring: 22/2 Shielded, Low Cap, Max 4000'
- Ⓢ - MSTP Network Terminator
- Ⓣ - CANbus Network Terminator



Level 03 Area B Network Riser

The diagram illustrates the network riser for Level 03 Area B, showing the connection of various network devices to the riser system. The riser is organized into a grid with columns A through H and rows 1 through 4.

Row 1:

- Column A:** ZCDS-00-00, Perimeter Cove Lighting ADDR:14
- Column B:** ZCDS-X1-00, Corridor & Commons C350A and Commons 302 & 303 ADDR:16
- Column C:** SCDS-00, Corridor & Commons C350A and Commons 302 & 303 SLOT:1
- Column D:** SCDS-X1, Corridor & Commons C350A and Commons 302 & 303 SLOT:2
- Column E:** SCSS-00, Corridor & Commons C350A and Commons 302 & 303 SLOT:3
- Column F:** CTS1CH-WH ADDR: 0, CTS1CH-WH ADDR: 0, CTS1CH-WH ADDR: 1, CTS1CH-WH ADDR: 1
- Column G:** ZCDS-00-00, Office 305/311 ADDR:17
- Column H:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1

Row 2:

- Column A:** ZCDS-00-00, Office 313/315 ADDR:18
- Column B:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column C:** ZCDS-00-00, Office 317/319 ADDR:19
- Column D:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column E:** ZCDS-00-00, Office 321/323 ADDR:20
- Column F:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column G:** ZCDS-00-00, Conference 325/Office 327 ADDR:21
- Column H:** SCDS-00, Conference 325/Office 327 SLOT:1, CTS2RL-WH ADDR: 0, CTS1RL-WH ADDR: 1

Row 3:

- Column A:** ZCDS-00-00, Office 329/331 ADDR:22
- Column B:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column C:** ZCDS-00-00, Office 333/335 ADDR:23
- Column D:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column E:** ZCDS-00-00, Office 337 ADDR:24
- Column F:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column G:** ZCDS-00-00, Office 342/344 ADDR:25
- Column H:** ZCDS-00-00, Office 346/348 ADDR:26, CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1

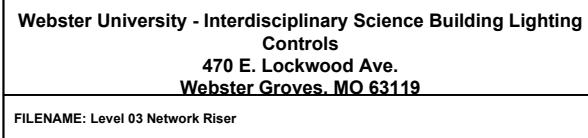
Row 4:

- Column A:** ZCDS-00-00, Conference 352 ADDR:27
- Column B:** CTS2RL-WH ADDR: 0
- Column C:** ZCDS-00-00, Commons 354/356 ADDR:28
- Column D:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column E:** ZCDS-00-00, Office 360/362 ADDR:29
- Column F:** CTS1RL-WH ADDR: 0, CTS1RL-WH ADDR: 1
- Column G:** ZCDS-00-00, Office 364 ADDR:30
- Column H:** CTS1RL-WH ADDR: 0

From Level 03 Area A Network Riser

5		5																		
	<table border="1"> <thead> <tr> <th data-bbox="344 1739 646 1747">Legend</th></tr> </thead> <tbody> <tr> <td data-bbox="344 1747 646 1755">----- - CANbus Network Wiring: CL3P 18AWG Two Twisted Pairs, 1300'</td></tr> <tr> <td data-bbox="344 1755 646 1764">——— - MSTP Network Wiring: 22/2 Shielded, Low Cap, Max 4000'</td></tr> <tr> <td data-bbox="344 1764 646 1770">Ⓟ - MSTP Network Terminator</td></tr> <tr> <td data-bbox="344 1770 646 1778">Ⓡ - CANbus Network Terminator</td></tr> </tbody> </table>	Legend	----- - CANbus Network Wiring: CL3P 18AWG Two Twisted Pairs, 1300'	——— - MSTP Network Wiring: 22/2 Shielded, Low Cap, Max 4000'	Ⓟ - MSTP Network Terminator	Ⓡ - CANbus Network Terminator														
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	<table border="1"> <tr> <td data-bbox="344 1778 1249 1816"> </td><td data-bbox="1249 1778 1855 1816"> Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119 </td><td data-bbox="1855 1778 2759 1816"> <table> <tr> <td colspan="4">DRAWING NAME: Level 03 Area B Network Riser</td></tr> <tr> <td>CONTRACT NO: WU-02-16</td> <td>SE:JV</td> <td>DE: PL</td> <td>PR: RV</td> </tr> <tr> <td colspan="4">DRAWING NO.: 3.2</td></tr> </table> </td></tr> <tr> <td colspan="2">FILENAME: Level 03 Network Riser</td><td></td></tr> </table>		Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119	<table> <tr> <td colspan="4">DRAWING NAME: Level 03 Area B Network Riser</td></tr> <tr> <td>CONTRACT NO: WU-02-16</td> <td>SE:JV</td> <td>DE: PL</td> <td>PR: RV</td> </tr> <tr> <td colspan="4">DRAWING NO.: 3.2</td></tr> </table>	DRAWING NAME: Level 03 Area B Network Riser				CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV	DRAWING NO.: 3.2				FILENAME: Level 03 Network Riser			
	Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119	<table> <tr> <td colspan="4">DRAWING NAME: Level 03 Area B Network Riser</td></tr> <tr> <td>CONTRACT NO: WU-02-16</td> <td>SE:JV</td> <td>DE: PL</td> <td>PR: RV</td> </tr> <tr> <td colspan="4">DRAWING NO.: 3.2</td></tr> </table>	DRAWING NAME: Level 03 Area B Network Riser				CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV	DRAWING NO.: 3.2									
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CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV																	
DRAWING NO.: 3.2																				
FILENAME: Level 03 Network Riser																				

- CANbus Network Wiring: CL3P 18AWG Two Twisted Pairs, 1300'
- MSTP Network Wiring: 22/2 Shielded, Low Cap, Max 4000'
- Ⓟ MSTP Network Terminator
- Ⓟ CANbus Network Terminator



DRAWING NAME: Level 03 Area B Network Riser			
CONTRACT NO: WU-02-16	SE: JV	DE: PL	PR: RV
DRAWING NO.: 3.2			

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Level 03 Area A Zone-1 Schedule

ZONE-1: Corridor C380 and Commons C380A

CHANNEL
1. Fixtures (3f)
2. Fixtures (3g)
3. Fixtures (3h)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				1	1-3	On/Off												
CS-2	0	CTS1CH-WH				1	1-3	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 2

LOCATION: Corridor C380

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	2	RO-0-1	Fixtures (3g) - Corridor/Commons		3NH1	3			LVI-0-1				
1	1	RO-0-2	Fixtures (3f) - Corridor/Commons		1EH1	14			LVI-0-2				
		AO-0-1	Ballasts (3g) - Corridor/Commons		3NH1	3			UI-0-1				
		AO-0-2	Ballasts (3f) - Corridor/Commons		1EH1	14			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	3	RO-1-1	Fixtures (3h) - Corridor/Commons		3NH1	3			LVI-1-1				
		RO-1-2							LVI-1-2				
1	3	AO-1-1	Ballasts (3h) - Corridor/Commons		3NH1	3			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Zone-1 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 3.3

Level 03 Area A Zone-2 Schedule

ZONE-2: Molecular Bio Lab 388

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	100%	75%	50%
5. Fixtures (e)	On	On	On

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	2	1-4	Raise	2	1-5	On/Off	2	1-4	Lower	2	1-5	Preset-1	2	1-5	Preset-2	2	1-5	Preset-3
CS-2	0	CTS3PR-WH	2	1-4	Raise	2	1-5	On/Off	2	1-4	Lower	2	1-5	Preset-1	2	1-5	Preset-2	2	1-5	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 3

LOCATION: Molecular Bio Lab 388

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	2	RO-0-1	Fixtures (b) - Molecular Bio Lab 388		3NH1	5
2	1	RO-0-2	Fixtures (a) - Molecular Bio Lab 388		1EH1	14
2	2	AO-0-1	Ballasts (b) - Molecular Bio Lab 388		3NH1	5
2	1	AO-0-2	Ballasts (a) - Molecular Bio Lab 388		1EH1	14

PRODUCT: SCDS-00

SLOT: 1

[illegible]

PRODUCT: SCDS-00

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	5	RO-2-1	Fixtures (e) - Molecular Bio Lab 388		3NH1	5
		RO-2-2				
		AO-2-1				
		AO-2-2				

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-2-1				
		LVI-2-2				
		UI-2-1				
		UI-2-2				
		UI-2-3				
		UI-2-4				
		UI-2-5				
		UI-2-6				

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Level 03 Area A Zone-3 Schedule

ZONE-3: BIO Lab Prep 386

CHANNEL
1. Fixtures (e)
2. Fixtures (f)
3. Fixtures (g)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	3	1-2	Raise	3	1-3	On/Off	3	1-2	Lower									
CS-2	0	CTS1RL-WH	3	1-2	Raise	3	1-3	On/Off	3	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 4

LOCATION: BIO Lab Prep 386

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	2	RO-0-1	Fixtures (f) - BIO Lab Prep 386		3NH1	5			LVI-0-1				
3	1	RO-0-2	Fixtures (e) - BIO Lab Prep 386		1EH1	14			LVI-0-2				
3	2	AO-0-1	Ballasts (f) - BIO Lab Prep 386		3NH1	5	3	1-3	UI-0-1	BIO Lab Prep 386 Occupancy	CM-PDT-9-R		
3	1	AO-0-2	Ballasts (e) - BIO Lab Prep 386		1EH1	14	3	2	UI-0-2	BIO Lab Prep 386 Light Level (h)	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	3	RO-1-1	Fixtures (g) - BIO Lab Prep 386		3NH1	5			LVI-1-1				
		RO-1-2							LVI-1-2				
		AO-1-1							UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster Groves, MO 63119

DRAWING NAME:

Level 03 Area A Zone-3 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.5

A	B	C	D	E	F	G	H																						
Level 03 Area A Zone-4 Schedule																													
ZONE-4: Organio BIO Lab 378																													
CHANNEL		PRESET-1	PRESET-2	PRESET-3																									
1. Fixtures (g)		100%	75%	50%																									
2. Fixtures (h)		100%	75%	50%																									
3. Fixtures (i)		100%	75%	50%																									
4. Fixtures (j)		100%	75%	50%																									
5. Fixtures (k)		On	On	On																									
Note: Preset values and channel configuration options to be determined by owner during start-up.																													
STATIONS:																													
NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT											
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION									
CS-1	0	CTS3PR-WH	4	1-4	Raise	4	1-5	On/Off	4	1-4	Lower	4	1-5	Preset-1	4	1-5	Preset-2	4	1-5	Preset-3									
CS-2	0	CTS3PR-WH	4	1-4	Raise	4	1-5	On/Off	4	1-4	Lower	4	1-5	Preset-1	4	1-5	Preset-2	4	1-5	Preset-3									
HARDWARE:																													
PRODUCT: ZCDS-X1-00		ADDRESS: 5		LOCATION: Organio BIO Lab 378																									
ZN	CH	OUTPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT										
4	2	RO-0-1	Fixtures (h) - Organio BIO Lab 378				3NH1		5			LVI-0-1																	
4	1	RO-0-2	Fixtures (g) - Organio BIO Lab 378				1EH1		14			LVI-0-2																	
4	2	AO-0-1	Ballasts (h) - Organio BIO Lab 378				3NH1		5	4	1-5	UI-0-1	Organio BIO Lab 378 Occupancy		CM-PDT-9-R (Typical of 3)														
4	1	AO-0-2	Ballasts (g) - Organio BIO Lab 378				1EH1		14	4	2	UI-0-2	Organio BIO Lab 378 Light Level (h)		BPD-500SR-L														
										4	4	UI-0-3	Organio BIO Lab 378 Light Level (j)		BPD-500SR-L														
												UI-0-4																	
												UI-0-5																	
												UI-0-6																	
PRODUCT: SCDS-00								SLOT: 1																					
ZN	CH	OUTPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT										
4	3	RO-1-1	Fixtures (i) - Organio BIO Lab 378				3NH1		5			LVI-1-1																	
4	4	RO-1-2	Fixtures (j) - Organio BIO Lab 378				3NH1		5			LVI-1-2																	
4	3	AO-1-1	Ballasts (i) - Organio BIO Lab 378				3NH1		5			UI-1-1																	
4	4	AO-1-2	Ballasts (j) - Organio BIO Lab 378				3NH1		5			UI-1-2																	
												UI-1-3																	
												UI-1-4																	
												UI-1-5																	
												UI-1-6																	
PRODUCT: SCDS-00								SLOT: 2																					
ZN	CH	OUTPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT										
4	5	RO-2-1	Fixtures (k) - Organio BIO Lab 378				3NH1		5			LVI-2-1																	
		RO-2-2										LVI-2-2																	
		AO-2-1										UI-2-1																	
		AO-2-2										UI-2-2																	
												UI-2-3																	
												UI-2-4																	
												UI-2-5																	
												UI-2-6																	
A C E S Automatic Controls equipment systems, inc.										Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119										DRAWING NAME: Level 03 Area A Zone-4 Schedule CONTRACT NO: WU-02-16SE: JVDE: PLPR: RV DRAWING NO.: 3.6									
FILENAME: Level 03 Network Riser																													

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Level 03 Area A Zone-5 Schedule

ZONE-5: Tissue Culture 374B

CHANNEL
1. Fixtures (n)
2. Fixtures (o)
3. Fixtures (p)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	5	2-3	Raise	5	1-3	On/Off	5	2-3	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 6

LOCATION: Tissue Culture 374B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	2	RO-0-1	Fixtures (o) - Tissue Culture 374B		3NH1	5			LVI-0-1				
5	3	RO-0-2	Fixtures (p) - Tissue Culture 374B		1EH1	14			LVI-0-2				
5	2	AO-0-1	Ballasts (o) - Tissue Culture 374B		3NH1	5	5	1-3	UI-0-1	Tissue Culture 374B Occupancy	CM-PDT-9-R		
5	3	AO-0-2	Ballasts (p) - Tissue Culture 374B		1EH1	14	5	3	UI-0-2	Tissue Culture 374B Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	1	RO-1-1	Fixtures (n) - Tissue Culture 374B		3NH1	5			LVI-1-1				
		RO-1-2							LVI-1-2				
		AO-1-1							UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Zone-5 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 3.7

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Level 03 Area A Zone-6 Schedule

ZONE-6: BIO Fac. Research 374A

CHANNEL
1. Fixtures (k)
2. Fixtures (l)
3. Fixtures (m)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	6	1-2	Raise	6	1-3	On/Off	6	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 7 LOCATION: BIO Fac. Research 374A

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	2	RO-0-1	Fixtures (l) - BIO Fac. Research 374A		3NH1	5			LVI-0-1				
6	1	RO-0-2	Fixtures (k) - BIO Fac. Research 374A		1EH1	14			LVI-0-2				
6	2	AO-0-1	Ballasts (l) - BIO Fac. Research 374A		3NH1	5	6	1-3	UI-0-1	BIO Fac. Research 374A Occupancy	CM-PDT-9-R		
6	1	AO-0-2	Ballasts (l) - BIO Fac. Research 374A		1EH1	14	6	2	UI-0-2	BIO Fac. Research 374A Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	3	RO-1-1	Fixtures (m) - BIO Fac. Research 374A		3NH1	5			LVI-1-1				
		RO-1-2							LVI-1-2				
		AO-1-1							UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Zone-6 Schedule

CONTRACT NO: WU-02-16 SE: JV DE: PL PR: RV

DRAWING NO.: 3.8

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Level 03 Area A Zone-7 Schedule

ZONE-7: Commons C370B

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				7	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 8

LOCATION: Commons C370B

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	2	RO-0-1	Fixtures (3d) - Commons C370B		3NH1	13			LVI-0-1				
7	1	RO-0-2	Fixtures (3c) - Commons C370B		1EH1	14			LVI-0-2				
7	2	AO-0-1	Ballasts (3d) - Commons C370B		3NH1	13			UI-0-1				
7	1	AO-0-2	Ballasts (3c) - Commons C370B		1EH1	14			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 03 Area A Zone-7 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 3.9

Level 03 Area A Zone-8 Schedule

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ZONE-8: ANAT Lab 391

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (s)	100%	75%	50%
2. Fixtures (t)	100%	75%	50%
3. Fixtures (u)	On	On	On
4. Fixtures (v)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	8	1,2,4	Raise	8	1-4	On/Off	8	1,2,4	Lower	8	1-4	Preset-1	8	1-4	Preset-2	8	1-4	Preset-3
CS-1	0	CTS3PR-WH	8	1,2,4	Raise	8	1-4	On/Off	8	1,2,4	Lower	8	1-4	Preset-1	8	1-4	Preset-2	8	1-4	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 9

LOCATION: ANAT Lab 391

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	1	RO-0-1	Fixtures (s) - ANAT Lab 391		3NH1	3			LVI-0-1				
8	2	RO-0-2	Fixtures (t) - ANAT Lab 391		1EH1	14			LVI-0-2				
8	1	AO-0-1	Ballasts (s) - ANAT Lab 391		3NH1	3	8	1-4	UI-0-1	ANAT Lab 391 Occupancy	CM-PDT-9-R (Typical of 2)		
8	2	AO-0-2	Ballasts (t) - ANAT Lab 391		1EH1	14	8	1	UI-0-2	ANAT Lab 391 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	3	RO-1-1	Fixtures (u) - ANAT Lab 391		3NH1	3			LVI-1-1				
8	4	RO-1-2	Fixtures (v) - ANAT Lab 391		3NH1	3			LVI-1-2				
8	4	AO-1-1	Ballasts (v) - ANAT Lab 391		3NH1	3			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				



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FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Zone-8 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 3.10

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Level 03 Area A Zone-9 Schedule

ZONE-9: BIO Lab Prep 389

CHANNEL
1. Fixtures (q)
2. Fixtures (r)
3. Fixtures (w)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	9	1-2	Raise	9	1-3	On/Off	9	1-2	Lower									
CS-2	0	CTS1RL-WH	9	1-2	Raise	9	1-3	On/Off	9	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 10 LOCATION: BIO Lab Prep 389

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	1	RO-0-1	Fixtures (q) - BIO Lab Prep 389		3NH1	3			LVI-0-1				
9	2	RO-0-2	Fixtures (r) - BIO Lab Prep 389		1EH1	14			LVI-0-2				
9	1	AO-0-1	Ballasts (q) - BIO Lab Prep 389		3NH1	3	9	1-3	UI-0-1	BIO Lab Prep 389 Occupancy	CM-PDT-9-R		
9	2	AO-0-2	Ballasts (r) - BIO Lab Prep 389		1EH1	14	9	1	UI-0-2	BIO Lab Prep 389 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	3	RO-1-1	Fixtures (w) - BIO Lab Prep 389		3NH1	3			LVI-1-1				
		RO-1-2							LVI-1-2				
		AO-1-1							UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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DRAWING NAME:
Level 03 Area A Zone-9 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 3.11

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Level 03 Area A Zone-10 Schedule

ZONE-10: Cell Bio Lab 383

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (m)	100%	75%	50%
2. Fixtures (n)	100%	75%	50%
3. Fixtures (o)	On	On	On
4. Fixtures (p)	100%	75%	50%

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	10	1,2,4	Raise	10	1-4	On/Off	10	1,2,4	Lower	10	1-4	Preset-1	10	1-4	Preset-2	10	1-4	Preset-3
CS-2	0	CTS3PR-WH	10	1,2,4	Raise	10	1-4	On/Off	10	1,2,4	Lower	10	1-4	Preset-1	10	1-4	Preset-2	10	1-4	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 11

LOCATION: Cell Bio Lab 383

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	1	RO-0-1	Fixtures (m) - Cell Bio Lab 383		3NH1	3			LVI-0-1				
10	2	RO-0-2	Fixtures (n) - Cell Bio Lab 383		1EH1	14			LVI-0-2				
10	1	AO-0-1	Ballasts (m) - Cell Bio Lab 383		3NH1	3	10	1-4	UI-0-1	Cell BIO Lab 383 Occupancy	CM-PDT-9-R (Typical of 2)		
10	2	AO-0-2	Ballasts (n) - Cell Bio Lab 383		1EH1	14	10	1	UI-0-2	Cell BIO Lab 383 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	3	RO-1-1	Fixtures (o) - Cell Bio Lab 383		3NH1	3			LVI-1-1				
10	4	RO-1-2	Fixtures (p) - Cell Bio Lab 383		3NH1	3			LVI-1-2				
10	4	AO-1-1	Ballasts (p) - Cell Bio Lab 383		3NH1	3			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Zone-10 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 3.12

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Level 03 Area A Zone-11 Schedule

ZONE-11: Mens 379

CHANNEL
1. Fixtures (a)
2. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				11	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 12

LOCATION: Mens 379

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
11	2	RO-0-1	Fixtures (b) - Mens 379		3NH1	1			LVI-0-1				
11	1	RO-0-2	Fixtures (a) - Mens 379		1EH1	14			LVI-0-2				
11	2	AO-0-1	Ballasts (b) - Mens 379		3NH1	1	11	1-2	UI-0-1	Mens 379 Occupancy	CM-PDT-9-R		
11	1	AO-0-2	Ballasts (a) - Mens 379		1EH1	14			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:
Level 03 Area A Zone-11 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 3.13

Level 03 Area A Zone-12 Schedule

ZONE-12: Womens 377

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				12	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 13

LOCATION: Womens 377

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
12	2	RO-0-1	Fixtures (d) - Womens 377		3NH1	1			LVI-0-1				
12	1	RO-0-2	Fixtures (c) - Womens 377		1EH1	14			LVI-0-2				
12	2	AO-0-1	Ballasts (d) - Womens 377		3NH1	1	12	1-2	UI-0-1	Womens 377 Occupancy	CM-PDT-9-R		
12	1	AO-0-2	Ballasts (c) - Womens 377		1EH1	14			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				



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470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Zone-12 Schedule

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 3.14

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Level 03 Area B Zone-1 Schedule

ZONE-1: Perimeter Cove Lighting

CHANNEL
1. Fixtures (3m)
2. Fixtures (3n)

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 14

LOCATION: Commons Area

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	1	RO-0-1	Fixtures (3m) - Perimeter Cove Lighting		3NH1	15			LVI-0-1				
1	2	RO-0-2	Fixtures (3n) - Perimeter Cove Lighting		3NH1	15			LVI-0-2				
1	1	AO-0-1	Ballasts (3m) - Perimeter Cove Lighting		3NH1	15			UI-0-1				
1	2	AO-0-2	Ballasts (3n) - Perimeter Cove Lighting		3NH1	15			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 03 Area B Zone-1 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 3.15

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Level 03 Area B Zone-4 & 5 Schedule

ZONE-4: Office 305

CHANNEL
1. Fixtures (j)

ZONE-5: Office 311

CHANNEL
1. Fixtures (h)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	4	1	Raise	4	1	On/Off	4	1	Lower									
CS-2	1	CTS1RL-WH	5	1	Raise	5	1	On/Off	5	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 17

LOCATION: 305

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
4	1	RO-0-1	Fixtures (j) - Office 305		3NH1	11			LVI-0-1				
5	1	RO-0-2	Fixtures (h) - Office 311		3NH1	11			LVI-0-2				
4	1	AO-0-1	Ballasts (j) - Office 305		3NH1	11	4	1	UI-0-1	Office 305 Occupancy	CM-PDT-9-R		
5	1	AO-0-2	Ballasts (h) - Office 311		3NH1	11	4	1	UI-0-2	Office 305 Light Level	BPD-500SR-L		
							5	1	UI-0-3	Office 311 Occupancy	WV PDT 16-R		
							5	1	UI-0-4	Office 311 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 03 Area B Zone-4 & 5 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.17

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Level 03 Area B Zone-6 & 7 Schedule

ZONE-6: Office 313

CHANNEL
1. Fixtures (g)

ZONE-7: Office 315

CHANNEL
1. Fixtures (f)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	6	1	Raise	6	1	On/Off	6	1	Lower									
CS-2	1	CTS1RL-WH	7	1	Raise	7	1	On/Off	7	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 18

LOCATION: Office 313

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	1	RO-0-1	Fixtures (g) - Office 313		3NH1	11			LVI-0-1				
7	1	RO-0-2	Fixtures (f) - Office 315		3NH1	11			LVI-0-2				
6	1	AO-0-1	Ballasts (g) - Office 313		3NH1	11	6	1	UI-0-1	Office 313 Occupancy	WV PDT 16-R		
7	1	AO-0-2	Ballasts (f) - Office 35		3NH1	11	6	1	UI-0-2	Office 313 Light Level	BPD-500SR-L		
							7	1	UI-0-3	Office 315 Occupancy	WV PDT 16-R		
							7	1	UI-0-4	Office 315 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 03 Area B Zone-6 & 7 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.18

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Level 03 Area B Zone-8 & 9 Schedule

ZONE-8: Office 317

CHANNEL
1. Fixtures (e)

ZONE-9: Office 319

CHANNEL
1. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	8	1	Raise	8	1	On/Off	8	1	Lower									
CS-2	1	CTS1RL-WH	9	1	Raise	9	1	On/Off	9	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 19 LOCATION: Office 317

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	1	RO-0-1	Fixtures (e) - Office 317		3NH1	11			LVI-0-1				
9	1	RO-0-2	Fixtures (d) - Office 319		3NH1	11			LVI-0-2				
8	1	AO-0-1	Ballasts (e) - Office 317		3NH1	11	8	1	UI-0-1	Office 317 Occupancy	WV PDT 16-R		
9	1	AO-0-2	Ballasts (d) - Office 319		3NH1	11	8	1	UI-0-2	Office 317 Light Level	BPD-500SR-L		
							9	1	UI-0-3	Office 319 Occupancy	WV PDT 16-R		
							9	1	UI-0-4	Office 319 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 03 Area B Zone-8 & 9 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.19

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Level 03 Area B Zone-10 & 11 Schedule

ZONE-10: Office 321

CHANNEL
1. Fixtures (c)

ZONE-11: Office 323

CHANNEL
1. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	10	1	Raise	10	1	On/Off	10	1	Lower									
CS-2	1	CTS1RL-WH	11	1	Raise	11	1	On/Off	11	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 20

LOCATION: Office 321

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	1	RO-0-1	Fixtures (c) - Office 321		3NH1	11			LVI-0-1				
11	1	RO-0-2	Fixtures (b) - Office 323		3NH1	11			LVI-0-2				
10	1	AO-0-1	Ballasts (c) - Office 321		3NH1	11	10	1	UI-0-1	Office 321 Occupancy	WV PDT 16-R		
11	1	AO-0-2	Ballasts (b) - Office 323		3NH1	11	10	1	UI-0-2	Office 321 Light Level	BPD-500SR-L		
							11	1	UI-0-3	Office 323 Occupancy	WV PDT 16-R		
							11	1	UI-0-4	Office 323 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-10 & 11 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 3.20

ZONE-12: Conference 325

ZONE-13: Office 327

STATIONS:

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 21

LOCATION: Conference 325

PRODUCT: SCDS-00

SLOT: 1

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-12 & 13 Schedule

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 3.21

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Level 03 Area B Zone-14 & 15 Schedule

ZONE-14: Office 329

CHANNEL
1. Fixtures (c)

ZONE-15: Office 331

CHANNEL
1. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	14	1	Raise	14	1	On/Off	14	1	Lower									
CS-2	1	CTS1RL-WH	15	1	Raise	15	1	On/Off	15	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 22 LOCATION: Office 329

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
14	1	RO-0-1	Fixtures (c) - Office 329		3NH1	11			LVI-0-1				
15	1	RO-0-2	Fixtures (d) - Office 331		3NH1	11			LVI-0-2				
14	1	AO-0-1	Ballasts (c) - Office 329		3NH1	11	14	1	UI-0-1	Office 329 Occupancy	WV PDT 16-R		
15	1	AO-0-2	Ballasts (d) - Office 331		3NH1	11	14	1	UI-0-2	Office 329 Light Level	BPD-500SR-L		
							15	1	UI-0-3	Office 331 Occupancy	WV PDT 16-R		
							15	1	UI-0-4	Office 331 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-14 & 15 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 3.22

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Level 03 Area B Zone-16 & 17 Schedule

ZONE-16: Office 333

CHANNEL
1. Fixtures (e)

ZONE-17: Office 335

CHANNEL
1. Fixtures (f)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	16	1	Raise	16	1	On/Off	16	1	Lower									
CS-2	1	CTS1RL-WH	17	1	Raise	17	1	On/Off	17	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 23

LOCATION: Office 333

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
16	1	RO-0-1	Fixtures (e) - Office 333		3NH1	11			LVI-0-1				
17	1	RO-0-2	Fixtures (f) - Office 335		3NH1	11			LVI-0-2				
16	1	AO-0-1	Ballasts (e) - Office 333		3NH1	11	16	1	UI-0-1	Office 333 Occupancy	WV PDT 16-R		
17	1	AO-0-2	Ballasts (f) - Office 335		3NH1	11	16	1	UI-0-2	Office 333 Light Level	BPD-500SR-L		
							17	1	UI-0-3	Office 335 Occupancy	WV PDT 16-R		
							17	1	UI-0-4	Office 335 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 03 Area B Zone-16 & 17 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.23

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Level 03 Area B Zone-18 Schedule

ZONE-18: Office 337

CHANNEL
1. Fixtures (g)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	18	1	Raise	18	1	On/Off	18	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 24

LOCATION: Office 337

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
18	1	RO-0-1	Fixtures (g) - Office 337		3NH1	11			LVI-0-1				
		RO-0-2							LVI-0-2				
18	1	AO-0-1	Ballasts (g) - Office 337		3NH1	11	18	1	UI-0-1	Office 337 Occupancy	WV PDT 16-R		
		AO-0-2					18	1	UI-0-2	Office 337 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-18 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 3.24

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Level 03 Area B Zone-19 & 20 Schedule

ZONE-19: Office 342

CHANNEL
1. Fixtures (h)

ZONE-20: Office 344

CHANNEL
1. Fixtures (j)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	19	1	Raise	19	1	On/Off	19	1	Lower									
CS-2	1	CTS1RL-WH	20	1	Raise	20	1	On/Off	20	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 25 LOCATION: Office 342

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
19	1	RO-0-1	Fixtures (h) - Office 342		3NH1	7			LVI-0-1				
20	1	RO-0-2	Fixtures (j) - Office 344		3NH1	7			LVI-0-2				
19	1	AO-0-1	Ballasts (h) - Office 342		3NH1	7	19	1	UI-0-1	Office 342 Occupancy	WV PDT 16-R		
20	1	AO-0-2	Ballasts (j) - Office 344		3NH1	7	19	1	UI-0-2	Office 342 Light Level	BPD-500SR-L		
							20	1	UI-0-3	Office 344 Occupancy	WV PDT 16-R		
							20	1	UI-0-4	Office 344 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-19 & 20 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 3.25

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Level 03 Area B Zone-21 & 22 Schedule

ZONE-21: Office 346

CHANNEL
1. Fixtures (k)

ZONE-22: Office 348

CHANNEL
1. Fixtures (m)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	21	1	Raise	21	1	On/Off	21	1	Lower									
CS-2	1	CTS1RL-WH	22	1	Raise	22	1	On/Off	22	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 26 LOCATION: Office 346

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
21	1	RO-0-1	Fixtures (k) - Office 346		3NH1	7			LVI-0-1				
22	1	RO-0-2	Fixtures (m) - Office 348		3NH1	7			LVI-0-2				
21	1	AO-0-1	Ballasts (k) - Office 346		3NH1	7	21	1	UI-0-1	Office 346 Occupancy	WV PDT 16-R		
22	1	AO-0-2	Ballasts (m) - Office 348		3NH1	7	21	1	UI-0-2	Office 346 Light Level	BPD-500SR-L		
							22	1	UI-0-3	Office 348 Occupancy	WV PDT 16-R		
							22	1	UI-0-4	Office 348 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Automatic Controls
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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-21 & 22 Schedule

CONTRACT NO: WU-02-16 SE: JV DE: PL PR: RV

DRAWING NO.: 3.26

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Level 03 Area B Zone-23 Schedule

ZONE-23: Conference Room 352

CHANNEL
1. Fixtures (n)
2. Fixtures (p)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS2RL-WH	23	1	Raise	23	1	On/Off	23	1	Lower	23	2	Raise	23	2	On/Off	23	2	Lower

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 27

LOCATION: Conference Room 352

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
23	1	RO-0-1	Fixtures (n) - Conference Room 352		3NH1	7			LVI-0-1				
23	2	RO-0-2	Fixtures (p) - Conference Room 352		3NH1	7			LVI-0-2				
23	1	AO-0-1	Ballasts (n) - Conference Room 352		3NH1	7	23	1-2	UI-0-1	Conference 352 Occupancy	WV PDT 16-R		
23	2	AO-0-2	Ballasts (p) - Conference Room 352		3NH1	7	23	1	UI-0-2	Conference 352 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-23 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 3.27

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Level 03 Area B Zone-24 & 25 Schedule

ZONE-24: Commons 354

CHANNEL
1. Fixtures (q)

ZONE-25: Commons 356

CHANNEL
1. Fixtures (r)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	24	1	Raise	24	1	On/Off	24	1	Lower									
CS-2	1	CTS1RL-WH	25	1	Raise	25	1	On/Off	25	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 28

LOCATION: Commons 354

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
24	1	RO-0-1	Fixtures (q) - Commons 354		3NH1	13			LVI-0-1				
25	1	RO-0-2	Fixtures (r) - Commons 356		3NH1	13			LVI-0-2				
24	1	AO-0-1	Ballasts (q) - Commons 354		3NH1	13	24	1	UI-0-1	Commons 354 Light Level	BPD-500SR-L		
25	1	AO-0-2	Ballasts (r) - Commons 356		3NH1	13			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area B Zone-24 & 25 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 3.28

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Level 03 Area B Zone-26 & 27 Schedule

ZONE-26: Office 360

CHANNEL
1. Fixtures (r)

ZONE-27: Office 362

CHANNEL
1. Fixtures (s)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	26	1	Raise	26	1	On/Off	26	1	Lower									
CS-2	1	CTS1RL-WH	27	1	Raise	27	1	On/Off	27	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 29

LOCATION: Office 360

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
26	1	RO-0-1	Fixtures (r) - Office 360		3NH1	7			LVI-0-1				
27	1	RO-0-2	Fixtures (s) - Office 362		3NH1	7			LVI-0-2				
26	1	AO-0-1	Ballasts (r) - Office 360		3NH1	7	26	1	UI-0-1	Office 360 Occupancy	WV PDT 16-R		
27	1	AO-0-2	Ballasts (s) - Office 362		3NH1	7	26	1	UI-0-2	Office 360 Light Level	BPD-500SR-L		
							27	1	UI-0-3	Office 362 Occupancy	WV PDT 16-R		
							27	1	UI-0-4	Office 362 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 03 Area B Zone-26 & 27 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.29

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Level 03 Area B Zone-28 Schedule

ZONE-28: Office 364

CHANNEL
1. Fixtures (t)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	28	1	Raise	28	1	On/Off	28	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 30

LOCATION: Office 364

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
28	1	RO-0-1	Fixtures (t) - Office 364		3NH1	7			LVI-0-1				
		RO-0-2							LVI-0-2				
28	1	AO-0-1	Ballasts (t) - Office 364		3NH1	7	28	1	UI-0-1	Office 364 Occupancy	WV PDT 16-R		
		AO-0-2					28	1	UI-0-2	Office 364 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 03 Area B Zone-28 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.30

A	B	C	D	E	F	G	H
Level 03 Material List							
1							1
2							2
3							3
4							4
5							5

Manufacturer	Part Number	Product Description	Quantity
Acuity Controls	CM-PDT-9-R	Ceiling Mount Occupancy Sensor, Dual Technology (PIR/Microphonics), Small Motion 360°, Low Voltage Relay	17
Acuity Controls	WV-PDT-16-R	Dual Technology Wide View Occupancy Sensor w/ Low Voltage Relay	21
Automated Logic	AMR	ARCnet to MS/TP Router	1
Blue Ridge Technologies	CTS1CH-WH	Capacitive Touch Station, 1 Channel, White (wallplate not included)	8
Blue Ridge Technologies	CTS1RL-WH	Capacitive Touch Station, 1 Raise/Lower, White (wallplate not included)	29
Blue Ridge Technologies	CTS3PR-WH	Capacitive Touch Station, 3 Preset, White (wallplate not included)	8
Blue Ridge Technologies	CTS2RL-WH	Capacitive Touch Station, 2 Raise/Lower, White (wallplate not included)	2
Blue Ridge Technologies	SCDS-00	Satellite, Dimming Standard, 120/277	13
Blue Ridge Technologies	SCDS-X1	Satellite, Dimming Standard, UL924, 120/277	1
Blue Ridge Technologies	ZCDS-00-00	Zone Controller, Dimming Standard, 120/277	15
Blue Ridge Technologies	ZCDS-X1-00	Zone Controller, Dimming Standard, UL924, 120/277	13
Blue Ridge Technologies	SCSS-00	Satellite, Switching Standard, 120/277	1
IR-Tec	BPD-500-SR-L	IR-TEC Light Level Sensor, 10VDC Linear Photodiode, Indoor, 0-50FC, Recessed Ceiling Mount	35

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:
Level 03 Material List

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 03 Network Riser

DRAWING NO.: 3.31

Level 03 Area A Commissioning Report																		
LIGHTING CONTROL COMMISSIONING REPORT																		
AREA: LEVEL-03A			DIGITAL KEYPAD					OCCUPANCY SENSOR			DAYLIGHT SENSOR					NETWORK COMMUNICATIONS	WIRING DIAGRAM REFERENCE	SEQUENCE OF OPERATION
ZONE	ROOM NUMBER	ROOM NAME	MANUAL ON	MANUAL OFF	OVERRIDE SWITCH	DIMMING SWITCH	PRESET SCENE SWITCHING	MANUAL ON	MANUAL OFF	GRACE PERIOD	DAYLIGHT HARVESTING	TARGET LIGHT LEVEL	HIGH END TRIM	LOW END TRIM	INDEPENDENT OPERATION			
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

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Automatic Controls
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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:
Level 03 Area A Commissioning Report

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 3.32

Level 03 Area B Commissioning Report																			
LIGHTING CONTROL COMMISSIONING REPORT																			
AREA: LEVEL-03B			DIGITAL KEYPAD					OCCUPANCY SENSOR			DAYLIGHT SENSOR					NETWORK COMMUNICATIONS	WIRING DIAGRAM REFERENCE	SEQUENCE OF OPERATION	
ZONE	ROOM NUMBER	ROOM NAME	MANUAL ON	MANUAL OFF	OVERRIDE SWITCH	DIMMING SWITCH	PRESET SCENE SWITCHING	MANUAL ON	MANUAL OFF	GRACE PERIOD	DAYLIGHT HARVESTING	TARGET LIGHT LEVEL	HIGH END TRIM	LOW END TRIM	INDEPENDENT OPERATION				
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 03 Network Riser

DRAWING NAME:

Level 03 Area B Commissioning Report

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 3.33

Level 04 Area A Network Riser

The diagram illustrates the network topology for Level 04 Area A. It shows a central network riser connected to a BAS Network (To BAS Network) via a BACnet Router (AMR, MAC: TBD). The riser is divided into four horizontal sections, each containing various network devices and their connections.

Section 1 (Top):

- Corridor C480 ADDR:2** (ZCDS-X1-00) connected to **Corridor C480 SLOT:1** (SCDS-00).
- Corridor C480 SLOT:1** (SCDS-00) connected to **CTS1CH-WH ADDR: 0** (CTS1CH-WH).
- CTS1CH-WH ADDR: 0** (CTS1CH-WH) connected to **Perimeter Cove Lighting ADDR:14** (ZCDS-00-00).
- Perimeter Cove Lighting ADDR:14** (ZCDS-00-00) connected to **Chem Lab 488 ADDR:4** (ZCDS-X1-00).
- Chem Lab 488 ADDR:4** (ZCDS-X1-00) connected to **Chem Lab 488 SLOT:1** (SCDS-00).
- Chem Lab 488 SLOT:1** (SCDS-00) connected to **Chem Lab 488 SLOT:2** (SCDS-00).
- Chem Lab 488 SLOT:2** (SCDS-00) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).

Section 2:

- Chem Lab 480 ADDR:5** (ZCDS-X1-00) connected to **Chem Lab 480 SLOT:1** (SCDS-00).
- Chem Lab 480 SLOT:1** (SCDS-00) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **Chem Lab 472 ADDR:6** (ZCDS-X1-00).
- Chem Lab 472 ADDR:6** (ZCDS-X1-00) connected to **Chem Lab 472 SLOT:1** (SCDS-00).
- Chem Lab 472 SLOT:1** (SCDS-00) connected to **Chem Lab 472 SLOT:2** (SCDS-00).
- Chem Lab 472 SLOT:2** (SCDS-00) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **Chem Lab Prep 478 ADDR:7** (ZCDS-X1-00).
- Chem Lab Prep 478 ADDR:7** (ZCDS-X1-00) connected to **Chem Lab Prep 478 SLOT:1** (SCDS-00).
- Chem Lab Prep 478 SLOT:1** (SCDS-00) connected to **CTS1RL-WH ADDR: 0** (CTS1RL-WH).
- CTS1RL-WH ADDR: 0** (CTS1RL-WH) connected to **CTS1RL-WH ADDR: 0** (CTS1RL-WH).

Section 3:

- Chem Lab 491 ADDR:8** (ZCDS-X1-00) connected to **Chem Lab 491 SLOT:1** (SCDS-00).
- Chem Lab 491 SLOT:1** (SCDS-00) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **Chem Lab Prep 489 ADDR:9** (ZCDS-X1-00).
- Chem Lab Prep 489 ADDR:9** (ZCDS-X1-00) connected to **CTS1RL-WH ADDR: 0** (CTS1RL-WH).
- CTS1RL-WH ADDR: 0** (CTS1RL-WH) connected to **CTS1RL-WH ADDR: 0** (CTS1RL-WH).
- CTS1RL-WH ADDR: 0** (CTS1RL-WH) connected to **Chem Lab 483 ADDR:10** (ZCDS-X1-00).
- Chem Lab 483 ADDR:10** (ZCDS-X1-00) connected to **Chem Lab 483 SLOT:1** (SCDS-00).
- Chem Lab 483 SLOT:1** (SCDS-00) connected to **Chem Lab 483 SLOT:2** (SCDS-00).
- Chem Lab 483 SLOT:2** (SCDS-00) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).
- CTS3PR-WH ADDR: 0** (CTS3PR-WH) connected to **CTS3PR-WH ADDR: 0** (CTS3PR-WH).

Section 4 (Bottom):

- Men 479 ADDR:11** (ZCDS-X1-00) connected to **CTS1CH-WH ADDR: 0** (CTS1CH-WH).
- CTS1CH-WH ADDR: 0** (CTS1CH-WH) connected to **Women 477 ADDR:12** (ZCDS-X1-00).
- Women 477 ADDR:12** (ZCDS-X1-00) connected to **CTS1CH-WH ADDR: 0** (CTS1CH-WH).

The diagram also shows connections to **To Level 04 Area B Network Riser** and **To BAS Network**.

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FILENAME: Level 04 Network Riser

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 4.1

Level 04 Area B Network Riser

From Level 04 Area A Network Riser

Row 2 Equipment:

- ZCDS-X1-00:** Corridor C470, C450, C410, C410A & Commons C450A ADDR:14
- SCDS-00:** Corridor C470, C450, C410, C410A & Commons C450A SLOT:1
- SCDS-X1:** Corridor C470, C450, C410, C410A & Commons C450A SLOT:2
- CTS1CH-WH ADDR: 0**
- CTS1CH-WH ADDR: 0**
- CTS1CH-WH ADDR: 1**
- ZCDS-00-00:** Office 401/403 ADDR:16
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- ZCDS-00-00:** Office 405/407 ADDR:17
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- CTS1RL-WH ADDR: 1**
- CTS1RL-WH ADDR: 1**

Row 3 Equipment:

- ZCDS-00-00:** Office 411/413 ADDR:18
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- ZCDS-00-00:** Office 415/417 ADDR:19
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- ZCDS-00-00:** Office 419/431 ADDR:20
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- ZCDS-00-00:** Office 433/435 ADDR:21
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- ZCDS-00-00:** Office 437/439 ADDR:22
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**

Row 4 Equipment:

- ZCDS-00-00:** Office 441 ADDR:23
- CTS1RL-WH ADDR: 0**
- ZCDS-00-00:** Office 452/454 ADDR:24
- CTS1RL-WH ADDR: 0**
- CTS1RL-WH ADDR: 1**
- ZCDS-00-00:** Office 456 ADDR:25
- CTS1RL-WH ADDR: 0**

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DRAWING NAME: Level 04 Area B Network Riser			
CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
DRAWING NO.: 4.2			

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Level 04 Area A Zone-1 Schedule

ZONE-1: Corridor C480

CHANNEL
1. Fixtures (4f)
2. Fixtures (4g)
3. Fixtures (4h)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				1	1-3	On/Off												
CS-2	0	CTS1CH-WH				1	1-3	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 2 LOCATION: Corridor C480

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	2	RO-0-1	Fixtures (4g) - Corridor C480		4NH1	1			LVI-0-1				
1	1	RO-0-2	Fixtures (4f) - Corridor C480		1EH1	16			LVI-0-2				
1	2	AO-0-1	Ballasts (4g) - Corridor C480		4NH1	1			UI-0-1				
1	1	AO-0-2	Ballasts (4f) - Corridor C480		1EH1	16			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00 SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	3	RO-1-1	Fixtures (4h) - Corridor C480		4NH1	1			LVI-1-1				
		RO-1-2							LVI-1-2				
1	3	AO-1-1	Ballasts (4h) - Corridor C480		4NH1	1			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.3

DRAWING NAME: Level 04 Area A Zone-1 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

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Level 04 Area A Zone-2 Schedule

ZONE-2: Perimeter Cove Lighting

CHANNEL

1. Fixtures (4k)

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 14

LOCATION: Commons Area

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	1	RO-0-1	Fixtures (4k) - Perimeter Cove Lighting		4NH1	17
		RO-0-2				
2	1	AO-0-1	Ballasts (4k) - Perimeter Cove Lighting		4NH1	17
		AO-0-2				

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-0-1				
		LVI-0-2				
		UI-0-1				
		UI-0-2				
		UI-0-3				
		UI-0-4				
		UI-0-5				
		UI-0-6				

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Webster Groves, MO 63119

DRAWING NAME:

Level 04 Area A Zone-2 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.4

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Level 04 Area A Zone-3 Schedule

ZONE-3: Chem Lab 488

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (a)	100%	75%	50%
2. Fixtures (b)	100%	75%	50%
3. Fixtures (c)	100%	75%	50%
4. Fixtures (d)	100%	75%	50%
5. Fixtures (s)	On	On	On

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	3	1-4	Raise	3	1-5	On/Off	3	1-4	Lower	3	1-5	Preset-1	3	1-5	Preset-2	3	1-5	Preset-3
CS-2	0	CTS3PR-WH	3	1-4	Raise	3	1-5	On/Off	3	1-4	Lower	3	1-5	Preset-1	3	1-5	Preset-2	3	1-5	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 4

LOCATION: Chem Lab 488

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	2	RO-0-1	Fixtures (b) - Chem Lab 488		4NH1	5			LVI-0-1				
3	1	RO-0-2	Fixtures (a) - Chem Lab 488		1EH1	16			LVI-0-2				
3	2	AO-0-1	Ballasts (b) - Chem Lab 488		4NH1	5	3	1-5	UI-0-1	Chem Lab 488 Occupancy	CM-PDT-9-R (Typical of 2)		
3	1	AO-0-2	Ballasts (a) - Chem Lab 489		1EH1	16	3	4	UI-0-2	Chem Lab 488 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	3	RO-1-1	Fixtures (c) - Chem Lab 488		4NH1	5			LVI-1-1				
3	4	RO-1-2	Fixtures (d) - Chem Lab 488		4NH1	5			LVI-1-2				
3	3	AO-1-1	Ballasts (c) - Chem Lab 488		4NH1	5			UI-1-1				
3	4	AO-1-2	Ballasts (d) - Chem Lab 488		4NH1	5			UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

PRODUCT: SCDS-00

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	5	RO-2-1	Fixtures (s) - Chem Lab 488		4NH1	5			LVI-2-1				
		RO-2-2							LVI-2-2				
		AO-2-1							UI-2-1				
		AO-2-2							UI-2-2				
									UI-2-3				
									UI-2-4				
									UI-2-5				
									UI-2-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

DRAWING NAME:
Level 04 Area A Zone-3 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 4.5

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Level 04 Area A Zone-4 Schedule

ZONE-4: Chem Lab 480

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (e)	100%	75%	50%
2. Fixtures (f)	100%	75%	50%
3. Fixtures (g)	On	On	On

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	4	1-2	Raise	4	1-3	On/Off	4	1-2	Lower	4	1-3	Preset-1	4	1-3	Preset-2	4	1-3	Preset-3
CS-2	0	CTS3PR-WH	4	1-2	Raise	4	1-3	On/Off	4	1-2	Lower	4	1-3	Preset-1	4	1-3	Preset-2	4	1-3	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 5

LOCATION: Chem Lab 480

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
4	2	RO-0-1	Fixtures (f) - Chem Lab 480		4NH1	5			LVI-0-1				
4	1	RO-0-2	Fixtures (e) - Chem Lab 480		1EH1	16			LVI-0-2				
4	2	AO-0-1	Ballasts (f) - Chem Lab 480		4NH1	5	4	1-3	UI-0-1	Chem Lab 480 Occupancy	CM-PDT-9-R (Typical of 3)		
4	1	AO-0-2	Ballasts (e) - Chem Lab 480		1EH1	16	4	2	UI-0-2	Chem Lab 480 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
4	3	RO-1-1	Fixtures (g) - Chem Lab 480		4NH1	5			LVI-1-1				
		RO-1-2							LVI-1-2				
4	3	AO-1-1	Ballasts (g) - Chem Lab 480		4NH1	5			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:

Level 04 Area A Zone-4 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 4.6

A	B	C	D	E	F	G	H																
Level 04 Area A Zone-5 Schedule																							
ZONE-5: Chem Lab 472																							
CHANNEL		PRESET-1	PRESET-2	PRESET-3																			
1. Fixtures (k)		100%	75%	50%																			
2. Fixtures (l)		100%	75%	50%																			
3. Fixtures (m)		100%	75%	50%																			
4. Fixtures (n)		100%	75%	50%																			
5. Fixtures (s)		On	On	On																			
Note: Preset values and channel configuration options to be determined by owner during start-up.																							
STATIONS:																							
NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT					
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION			
CS-1	0	CTS3PR-WH	5	1-4	Raise	5	1-5	On/Off	5	1-4	Lower	5	1-5	Preset-1	5	1-5	Preset-2	5	1-5	Preset-3			
CS-2	0	CTS3PR-WH	5	1-4	Raise	5	1-5	On/Off	5	1-4	Lower	5	1-5	Preset-1	5	1-5	Preset-2	5	1-5	Preset-3			
HARDWARE:																							
PRODUCT: ZCDS-X1-00		ADDRESS: 6		LOCATION: Chem Lab 472																			
ZN	CH	OUTPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT				
5	2	RO-0-1	Fixtures (l) - Chem Lab 472				4NH1		5			LVI-0-1											
5	1	RO-0-2	Fixtures (k) - Chem Lab 472				1EH1		16			LVI-0-2											
5	2	AO-0-1	Ballasts (l) - Chem Lab 472				4NH1		5	5	1-5	UI-0-1	Chem Lab 472 Occupancy		CM-PDT-9-R (Typical of 3)								
5	1	AO-0-2	Ballasts (k) - Chem Lab 472				1EH1		16	5	4	UI-0-2	Chem Lab 472 Light Level		BPD-500SR-L								
												UI-0-3											
												UI-0-4											
												UI-0-5											
												UI-0-6											
PRODUCT: SCDS-00								SLOT: 1															
ZN	CH	OUTPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT				
5	3	RO-1-1	Fixtures (m) - Chem Lab 472				4NH1		5			LVI-1-1											
5	4	RO-1-2	Fixtures (n) - Chem Lab 472				4NH1		5			LVI-1-2											
5	3	AO-1-1	Ballasts (m) - Chem Lab 472				4NH1		5			UI-1-1											
5	4	AO-1-2	Ballasts (n) - Chem Lab 472				4NH1		5			UI-1-2											
												UI-1-3											
												UI-1-4											
												UI-1-5											
												UI-1-6											
PRODUCT: SCDS-00								SLOT: 2															
ZN	CH	OUTPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT	ZN	CH	INPUT	DESCRIPTION		DEVICE		PANEL BOARD		CIRCUIT				
5	5	RO-2-1	Fixtures (s) - Chem Lab 472				4NH1		5			LVI-2-1											
		RO-2-2										LVI-2-2											
		AO-2-1										UI-2-1											
		AO-2-2										UI-2-2											
												UI-2-3											
												UI-2-4											
												UI-2-5											
												UI-2-6											
Automatic Controls equipment systems, inc.										Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119										DRAWING NAME: Level 04 Area A Zone-5 Schedule			
										FILENAME: Level 04 Network Riser										CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV			
																				DRAWING NO.: 4.7			

Level 04 Area A Zone-6 Schedule

ZONE-6: Chem Lab Prep 478

CHANNEL
1. Fixtures (h)
2. Fixtures (j)
3. Fixtures (s)

STATIONS:

[illegible]

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 7

LOCATION: Chem Lab Prep 478

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	2	RO-0-1	Fixtures (j) - Chem Lab Prep 478		4NH1	5
6	1	RO-0-2	Fixtures (h) - Chem Lab Prep 478		1EH1	16
6	2	AO-0-1	Ballasts (j) - Chem Lab Prep 478		4NH1	5
6	1	AO-0-2	Ballasts (h) - Chem Lab Prep 478		1EH1	16

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-0-1				
		LVI-0-2				
6	1-3	UI-0-1	Chem Lab Prep 478 Occupancy	CM-PDT-9-R		
6	2	UI-0-2	Chem Lab Prep 478 Light Level	BPD-500SR-L		
		UI-0-3				
		UI-0-4				
		UI-0-5				
		UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
6	3	RO-1-1	Fixtures (s) - Chem Lab Prep 478		4NH1	5
		RO-1-2				
		AO-1-1				
		AO-1-2				

ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
		LVI-1-1				
		LVI-1-2				
		UI-1-1				
		UI-1-2				
		UI-1-3				
		UI-1-4				
		UI-1-5				
		UI-1-6				



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:
Level 04 Area A Zone-6 Schedule

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 4.8

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Level 04 Area A Zone-8 Schedule

ZONE-8: Chem Lab Prep 489

CHANNEL
1. Fixtures (s)
2. Fixtures (t)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	8	1-2	Raise	8	1-2	On/Off	8	1-2	Lower									
CS-2	0	CTS1RL-WH	8	1-2	Raise	8	1-2	On/Off	8	1-2	Lower									

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 9

LOCATION: Chem Lab 489

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
8	1	RO-0-1	Fixtures (s) - Chem Lab 489		4NH1	3			LVI-0-1				
8	2	RO-0-2	Fixtures (t) - Chem Lab 489		1EH1	16			LVI-0-2				
8	1	AO-0-1	Ballasts (s) - Chem Lab 489		4NH1	3	8	1-2	UI-0-1	Chem Lab 489 Occupancy	CM-PDT-9-R		
8	2	AO-0-2	Ballasts (t) - Chem Lab 489		1EH1	16	8	1	UI-0-2	Chem Lab 489 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster Groves, MO 63119

DRAWING NAME:

Level 04 Area A Zone-8 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.10

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Level 04 Area A Zone-9 Schedule

ZONE-9: Chem Lab 483

CHANNEL	PRESET-1	PRESET-2	PRESET-3
1. Fixtures (q)	100%	75%	50%
2. Fixtures (p)	100%	75%	50%
3. Fixtures (r)	100%	75%	50%
4. Fixtures (s)	On	On	On
5. Fixtures (u)	On	On	On

Note: Preset values and channel configuration options to be determined by owner during start-up.

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS3PR-WH	9	1-3	Raise	9	1-5	On/Off	9	1-3	Lower	9	1-5	Preset-1	9	1-5	Preset-2	9	1-5	Preset-3
CS-2	0	CTS3PR-WH	9	1-3	Raise	9	1-5	On/Off	9	1-3	Lower	9	1-5	Preset-1	9	1-5	Preset-2	9	1-5	Preset-3

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 10

LOCATION: Chem Lab 483

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	1	RO-0-1	Fixtures (q) - Chem Lab 483		4NH1	3			LVI-0-1				
9	2	RO-0-2	Fixtures (p) - Chem Lab 483		1EH1	16			LVI-0-2				
9	1	AO-0-1	Ballasts (q) - Chem Lab 483		1EH1	16	9	1-4	UI-0-1	Chem Lab 483 Occupancy	CM-PDT-9-R (Typical of 3)		
9	2	AO-0-2	Ballasts (p) - Chem Lab 484				9	1	UI-0-2	Chem Lab 483 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	3	RO-1-1	Fixtures (r) - Chem Lab 483		4NH1	3			LVI-1-1				
9	4	RO-1-2	Fixtures (s) - Chem Lab 483		4NH1	3			LVI-1-2				
9	3	AO-1-1	Ballasts (r) - Chem Lab 483		4NH1	3			UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

PRODUCT: SCDS-00

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	5	RO-1-1	Fixtures (u) - Chem Lab 483		4NH1	3			LVI-1-1				
		RO-1-2							LVI-1-2				
		AO-1-1							UI-1-1				
		AO-1-2							UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

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DRAWING NAME:

Level 04 Area A Zone-9 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 4.11

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Level 04 Area A Zone-10 Schedule

ZONE-10: Mens 479

CHANNEL
1. Fixtures (c)
2. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				10	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 11 LOCATION: Mens 479

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
10	2	RO-0-1	Fixtures (d) - Mens 479		4NH1	1			LVI-0-1				
10	1	RO-0-2	Fixtures (c) - Mens 479		1EH1	16			LVI-0-2				
10	2	AO-0-1	Ballasts (d) - Mens 479		4NH1	1	10	1-2	UI-0-1	Mens 479 Occupancy	CM-PDT-9-R		
10	1	AO-0-2	Ballasts (c) - Mens 479		1EH1	16			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster Groves, MO 63119

DRAWING NAME:

Level 04 Area A Zone-10 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.12

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Level 04 Area A Zone-11 Schedule

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ZONE-11: Womens 477

CHANNEL
1. Fixtures (a)
2. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				11	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00 ADDRESS: 12 LOCATION: Womens 477

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
11	2	RO-0-1	Fixtures (b) - Womens 477		4NH1	1			LVI-0-1				
11	1	RO-0-2	Fixtures (a) - Womens 477		1EH1	16			LVI-0-2				
11	2	AO-0-1	Ballasts (b) - Womens 477		4NH1	1	11	1-2	UI-0-1	Womens 477 Occupancy	CM-PDT-9-R		
11	1	AO-0-2	Ballasts (a) - Womens 477		1EH1	16			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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DRAWING NAME:

Level 04 Area A Zone-11 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.13

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Level 04 Area B Zone-1 & 2 Schedule

ZONE-1: Corridor C470, C450 and Commons C450A

CHANNEL
1. Fixtures (4c)
2. Fixtures (4d)
3. Fixtures (4e)
4. Fixtures (4j)

ZONE-2: Corridor C410 and Commons C410A

CHANNEL
1. Fixtures (4a)
2. Fixtures (4b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1CH-WH				1	1-4	On/Off												
CS-2	0	CTS1CH-WH				1	1-4	On/Off												
CS-3	1	CTS1CH-WH				2	1-2	On/Off												

HARDWARE:

PRODUCT: ZCDS-X1-00

ADDRESS: 14

LOCATION: Corridor

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	2	RO-0-1	Fixtures (4d) - Corr C470,C450,Comm C450A		4NH1	11			LVI-0-1				
1	1	RO-0-2	Fixtures (4c) - Corr C470,C450,Comm C450A		1EH1	16			LVI-0-2				
1	2	AO-0-1	Ballasts (4d) - Corr C470,C450,Comm C450A		4NH1	11			UI-0-1				
1	1	AO-0-2	Ballasts (4c) - Corr C470,C450,Comm C450A		1EH1	16			UI-0-2				
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

PRODUCT: SCDS-00

SLOT: 1

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
1	3	RO-1-1	Fixtures (4e) - Corr C470,C450,Comm C450A		4NH1	11			LVI-1-1				
1	4	RO-1-2	Fixtures (4j) - Corr C470,C450,Comm C450A		4NH1	11			LVI-1-2				
1	3	AO-1-1	Ballasts (4e) - Corr C470,C450,Comm C450A		4NH1	11	1	4	UI-1-1	Commons C450A Light Level	BPD-500SR-L		
1	4	AO-1-2	Ballasts (4j) - Corr C470,C450,Comm C450A		4NH1	11			UI-1-2				
									UI-1-3				
									UI-1-4				
									UI-1-5				
									UI-1-6				

PRODUCT: SCDS-X1

SLOT: 2

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
2	2	RO-2-1	Fixtures (b) - Corr C410,Comm C410A		4NH1	7			LVI-2-1				
2	1	RO-2-2	Fixtures (a) - Corr C410,Comm C410A		1EH1	16			LVI-2-2				
2	2	AO-2-1	Ballasts (b) - Corr C410,Comm C410A		4NH1	7			UI-2-1				
2	1	AO-2-2	Ballasts (a) - Corr C410,Comm C410A		1EH1	16			UI-2-2				
									UI-2-3				
									UI-2-4				
									UI-2-5				
									UI-2-6				

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470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 04 Area B Zone-1 & 2 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 4.14

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Level 04 Area B Zone-3 & 4 Schedule

ZONE-3: Office 401

CHANNEL
1. Fixtures (b)

ZONE-4: Office 403

CHANNEL
1. Fixtures (c)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	3	1	Raise	3	1	On/Off	3	1	Lower									
CS-2	1	CTS1RL-WH	4	1	Raise	4	1	On/Off	4	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 16 LOCATION: Office 401

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
3	1	RO-0-1	Fixtures (b) - Office 401		4NH1	13			LVI-0-1				
4	1	RO-0-2	Fixtures (c) - Office 403		4NH1	13			LVI-0-2				
3	1	AO-0-1	Ballasts (b) - Office 401		4NH1	13	3	1	UI-0-1	Office 401 Occupancy	WV PDT 16-R		
4	1	AO-0-2	Ballasts (c) - Office 403		4NH1	13	3	1	UI-0-2	Office 401 Light Level	BPD-500SR-L		
							4	1	UI-0-3	Office 403 Occupancy	WV PDT 16-R		
							4	1	UI-0-4	Office 403 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:

Level 04 Area B Zone-3 & 4 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

DRAWING NO.: 4.15

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Level 04 Area B Zone-5 & 6 Schedule

ZONE-5: Office 405

CHANNEL
1. Fixtures (d)

ZONE-6: Office 407

CHANNEL
1. Fixtures (e)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	5	1	Raise	5	1	On/Off	5	1	Lower									
CS-2	1	CTS1RL-WH	6	1	Raise	6	1	On/Off	6	1	Lower									
CS-3	1	CTS1RL-WH	6	1	Raise	6	1	On/Off	6	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 17

LOCATION: Office 405

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
5	1	RO-0-1	Fixtures (d) - Office 405		4NH1	13			LVI-0-1				
6	1	RO-0-2	Fixtures (e) - Office 407		4NH1	13			LVI-0-2				
5	1	AO-0-1	Ballasts (d) - Office 405		4NH1	13	5	1	UI-0-1	Office 405 Occupancy	WV PDT 16-R		
6	1	AO-0-2	Ballasts (e) - Office 407		4NH1	13	5	1	UI-0-2	Office 405 Light Level	BPD-500SR-L		
							6	1	UI-0-3	Office 407 Occupancy	WV PDT 16-R		
							6	1	UI-0-4	Office 407 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:
Level 04 Area B Zone-5 & 6 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 4.16

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Level 04 Area B Zone-7 & 8 Schedule

ZONE-7: Office 411

CHANNEL
1. Fixtures (f)

ZONE-8: Office 413

CHANNEL
1. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	7	1	Raise	7	1	On/Off	7	1	Lower									
CS-2	1	CTS1RL-WH	8	1	Raise	8	1	On/Off	8	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 18 LOCATION: Office 411

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
7	1	RO-0-1	Fixtures (f) - Office 411		4NH1	13			LVI-0-1				
8	1	RO-0-2	Fixtures (d) - Office 413		4NH1	13			LVI-0-2				
7	1	AO-0-1	Ballasts (f) - Office 411		4NH1	13	7	1	UI-0-1	Office 411 Occupancy	WV PDT 16-R		
8	1	AO-0-2	Ballasts (d) - Office 413		4NH1	13	7	1	UI-0-2	Office 411 Light Level	BPD-500SR-L		
							8	1	UI-0-3	Office 413 Occupancy	WV PDT 16-R		
							8	1	UI-0-4	Office 413 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:
Level 04 Area B Zone-7 & 8 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 4.17

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Level 04 Area B Zone-9 & 10 Schedule

ZONE-9: Office 415

CHANNEL
1. Fixtures (c)

ZONE-10: Office 417

CHANNEL
1. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	9	1	Raise	9	1	On/Off	9	1	Lower									
CS-2	1	CTS1RL-WH	10	1	Raise	10	1	On/Off	10	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 19 LOCATION: Office 415

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
9	1	RO-0-1	Fixtures (c) - Office 415		4NH1	13			LVI-0-1				
10	1	RO-0-2	Fixtures (b) - Office 417		4NH1	13			LVI-0-2				
9	1	AO-0-1	Ballasts (c) - Office 415		4NH1	13	9	1	UI-0-1	Office 415 Occupancy	WV PDT 16-R		
10	1	AO-0-2	Ballasts (b) - Office 417		4NH1	13	9	1	UI-0-2	Office 415 Light Level	BPD-500SR-L		
							10	1	UI-0-3	Office 417 Occupancy	WV PDT 16-R		
							10	1	UI-0-4	Office 417 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:
Level 04 Area B Zone-9 & 10 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 4.18

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Level 04 Area B Zone-11 & 12 Schedule

ZONE-11: Office 419

CHANNEL
1. Fixtures (a)

ZONE-12: Office 431

CHANNEL
1. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	11	1	Raise	11	1	On/Off	11	1	Lower									
CS-2	1	CTS1RL-WH	12	1	Raise	12	1	On/Off	12	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 20

LOCATION: Office 419

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
11	1	RO-0-1	Fixtures (a) - Office 419		4NH1	13			LVI-0-1				
12	1	RO-0-2	Fixtures (b) - Office 431		4NH1	13			LVI-0-2				
11	1	AO-0-1	Ballasts (a) - Office 419		4NH1	13	11	1	UI-0-1	Office 419 Occupancy	CM-PDT-9-R		
12	1	AO-0-2	Ballasts (b) - Office 431		4NH1	13	11	1	UI-0-2	Office 419 Light Level	BPD-500SR-L		
							12	1	UI-0-3	Office 431 Occupancy	WV PDT 16-R		
							12	1	UI-0-4	Office 431 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.
Webster Groves, MO 63119

DRAWING NAME:
Level 04 Area B Zone-11 & 12 Schedule

CONTRACT NO: WU-02-16SE:JVDE: PLPR: RV

DRAWING NO.: 4.19

Level 04 Area B Zone-13 & 14 Schedule

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ZONE-13: Office 433

CHANNEL
1. Fixtures (a)

ZONE-14: Office 435

CHANNEL
1. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	13	1	Raise	13	1	On/Off	13	1	Lower									
CS-2	1	CTS1RL-WH	14	1	Raise	14	1	On/Off	14	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 21

LOCATION: Office 433

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
13	1	RO-0-1	Fixtures (a) - Office 433		4NH1	13			LVI-0-1				
14	1	RO-0-2	Fixtures (b) - Office 435		4NH1	13			LVI-0-2				
13	1	AO-0-1	Ballasts (a) - Office 433		4NH1	13	13	1	UI-0-1	Office 433 Occupancy	WV PDT 16-R		
14	1	AO-0-2	Ballasts (b) - Office 435		4NH1	13	13	1	UI-0-2	Office 433 Light Level	BPD-500SR-L		
							14	1	UI-0-3	Office 435 Occupancy	WV PDT 16-R		
							14	1	UI-0-4	Office 435 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Level 04 Area B Zone-15 & 16 Schedule

ZONE-15: Office 437

CHANNEL
1. Fixtures (c)

ZONE-16: Office 439

CHANNEL
1. Fixtures (d)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	15	1	Raise	15	1	On/Off	15	1	Lower									
CS-2	1	CTS1RL-WH	16	1	Raise	16	1	On/Off	16	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00 ADDRESS: 22 LOCATION: Office 437

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
15	1	RO-0-1	Fixtures (c) - Office 437		4NH1	13			LVI-0-1				
16	1	RO-0-2	Fixtures (d) - Office 439		4NH1	13			LVI-0-2				
15	1	AO-0-1	Ballasts (c) - Office 437		4NH1	13	15	1	UI-0-1	Office 437 Occupancy	WV PDT 16-R		
16	1	AO-0-2	Ballasts (d) - Office 439		4NH1	13	15	1	UI-0-2	Office 437 Light Level	BPD-500SR-L		
							16	1	UI-0-3	Office 439 Occupancy	WV PDT 16-R		
							16	1	UI-0-4	Office 439 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:
Level 04 Area B Zone-15 & 16 Schedule

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 4.21

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Level 04 Area B Zone-17 Schedule

ZONE-17: Office 441

CHANNEL
1. Fixtures (a)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	17	1	Raise	17	1	On/Off	17	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 23

LOCATION: Office 441

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
17	1	RO-0-1	Fixtures (a) - Office 441		4NH1	13			LVI-0-1				
		RO-0-2							LVI-0-2				
17	1	AO-0-1	Ballasts (a) - Office 441		4NH1	13	17	1	UI-0-1	Office 441 Occupancy	WV PDT 16-R		
		AO-0-2					17	1	UI-0-2	Office 441 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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470 E. Lockwood Ave.

Webster Groves, MO 63119

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.22

DRAWING NAME:

Level 04 Area B Zone-17 Schedule

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Level 04 Area B Zone-18 & 19 Schedule

ZONE-18: Office 452

CHANNEL
1. Fixtures (a)

ZONE-19: Office 454

CHANNEL
1. Fixtures (b)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	18	1	Raise	18	1	On/Off	18	1	Lower									
CS-2	1	CTS1RL-WH	19	1	Raise	19	1	On/Off	19	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 24

LOCATION: Office 452

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
18	1	RO-0-1	Fixtures (a) - Office 452		4NH1	13			LVI-0-1				
19	1	RO-0-2	Fixtures (d) - Office 454		4NH1	13			LVI-0-2				
18	1	AO-0-1	Ballasts (a) - Office 452		4NH1	13	18	1	UI-0-1	Office 452 Occupancy	WV PDT 16-R		
19	1	AO-0-2	Ballasts (b) - Office 454		4NH1	13	18	1	UI-0-2	Office 452 Light Level	BPD-500SR-L		
							19	1	UI-0-3	Office 454 Occupancy	WV PDT 16-R		
							19	1	UI-0-4	Office 454 Light Level	BPD-500SR-L		
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

DRAWING NAME:

Level 04 Area B Zone-18 & 19 Schedule

CONTRACT NO: WU-02-16

SE:JV

DE: PL

PR: RV

FILENAME: Level 04 Network Riser

DRAWING NO.: 4.23

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Level 04 Area B Zone-20 Schedule

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ZONE-20: Office 456

CHANNEL
1. Fixtures (c)

STATIONS:

NAME	ADDRESS	PRODUCT	TOP LEFT			MIDDLE LEFT			BOTTOM LEFT			TOP RIGHT			MIDDLE RIGHT			BOTTOM RIGHT		
			ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION	ZN	CH	ACTION
CS-1	0	CTS1RL-WH	20	1	Raise	20	1	On/Off	20	1	Lower									

HARDWARE:

PRODUCT: ZCDS-00-00

ADDRESS: 25

LOCATION: Office 456

ZN	CH	OUTPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT	ZN	CH	INPUT	DESCRIPTION	DEVICE	PANEL BOARD	CIRCUIT
20	1	RO-0-1	Fixtures (c) - Office 456		4NH1	13			LVI-0-1				
		RO-0-2							LVI-0-2				
20	1	AO-0-1	Ballasts (c) - Office 456		4NH1	13	20	1	UI-0-1	Office 456 Occupancy	WV PDT 16-R		
		AO-0-2					20	1	UI-0-2	Office 456 Light Level	BPD-500SR-L		
									UI-0-3				
									UI-0-4				
									UI-0-5				
									UI-0-6				

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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:
Level 04 Area B Zone-20 Schedule

CONTRACT NO: WU-02-16

SE: JV

DE: PL

PR: RV

DRAWING NO.: 4.24

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<table><tr><th colspan="19">LIGHTING CONTROL COMMISSIONING REPORT</th></tr><tr><th colspan="3">AREA: LEVEL-04A</th><th colspan="5">DIGITAL KEYPAD</th><th colspan="3">OCCUPANCY SENSOR</th><th colspan="5">DAYLIGHT SENSOR</th><th rowspan="2">NETWORK COMMUNICATIONS</th><th rowspan="2">WIRING DIAGRAM REFERENCE</th><th rowspan="2">SEQUENCE OF OPERATION</th></tr><tr><th>ZONE</th><th>ROOM NUMBER</th><th>ROOM NAME</th><th>MANUAL ON</th><th>MANUAL OFF</th><th>OVERRIDE SWITCH</th><th>DIMMING SWITCH</th><th>PRESET SCENE SWITCHING</th><th>MANUAL ON</th><th>MANUAL OFF</th><th>GRACE PERIOD</th><th>DAYLIGHT HARVESTING</th><th>TARGET LIGHT LEVEL</th><th>HIGH END TRIM</th><th>LOW END TRIM</th><th>INDEPENDENT OPERATION</th></tr><tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>								LIGHTING CONTROL COMMISSIONING REPORT																			AREA: LEVEL-04A			DIGITAL KEYPAD					OCCUPANCY SENSOR			DAYLIGHT SENSOR					NETWORK COMMUNICATIONS	WIRING DIAGRAM REFERENCE	SEQUENCE OF OPERATION	ZONE	ROOM NUMBER	ROOM NAME	MANUAL ON	MANUAL OFF	OVERRIDE SWITCH	DIMMING SWITCH	PRESET SCENE SWITCHING	MANUAL ON	MANUAL OFF	GRACE PERIOD	DAYLIGHT HARVESTING	TARGET LIGHT LEVEL	HIGH END TRIM	LOW END TRIM	INDEPENDENT OPERATION	1																			2																			3																			4																			5																			6																			7																			8																			9																			10																			11																		
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A C E S Automatic Controls equipment systems, inc. Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119 CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV DRAWING NAME: Level 04 Area A Commissioning Report DRAWING NO.: 4.26																																																																																																																																																																																																																																																																														

Level 04 Area B Commissioning Report																		
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ZONE	ROOM NUMBER	ROOM NAME	MANUAL ON	MANUAL OFF	OVERRIDE SWITCH	DIMMING SWITCH	PRESET SCENE SWITCHING	MANUAL ON	MANUAL OFF	GRACE PERIOD	DAYLIGHT HARVESTING	TARGET LIGHT LEVEL	HIGH END TRIM	LOW END TRIM	INDEPENDENT OPERATION			
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Webster University - Interdisciplinary Science Building Lighting Controls

470 E. Lockwood Ave.

Webster Groves, MO 63119

FILENAME: Level 04 Network Riser

DRAWING NAME:

Level 04 Area B Commissioning Report

CONTRACT NO: WU-02-16

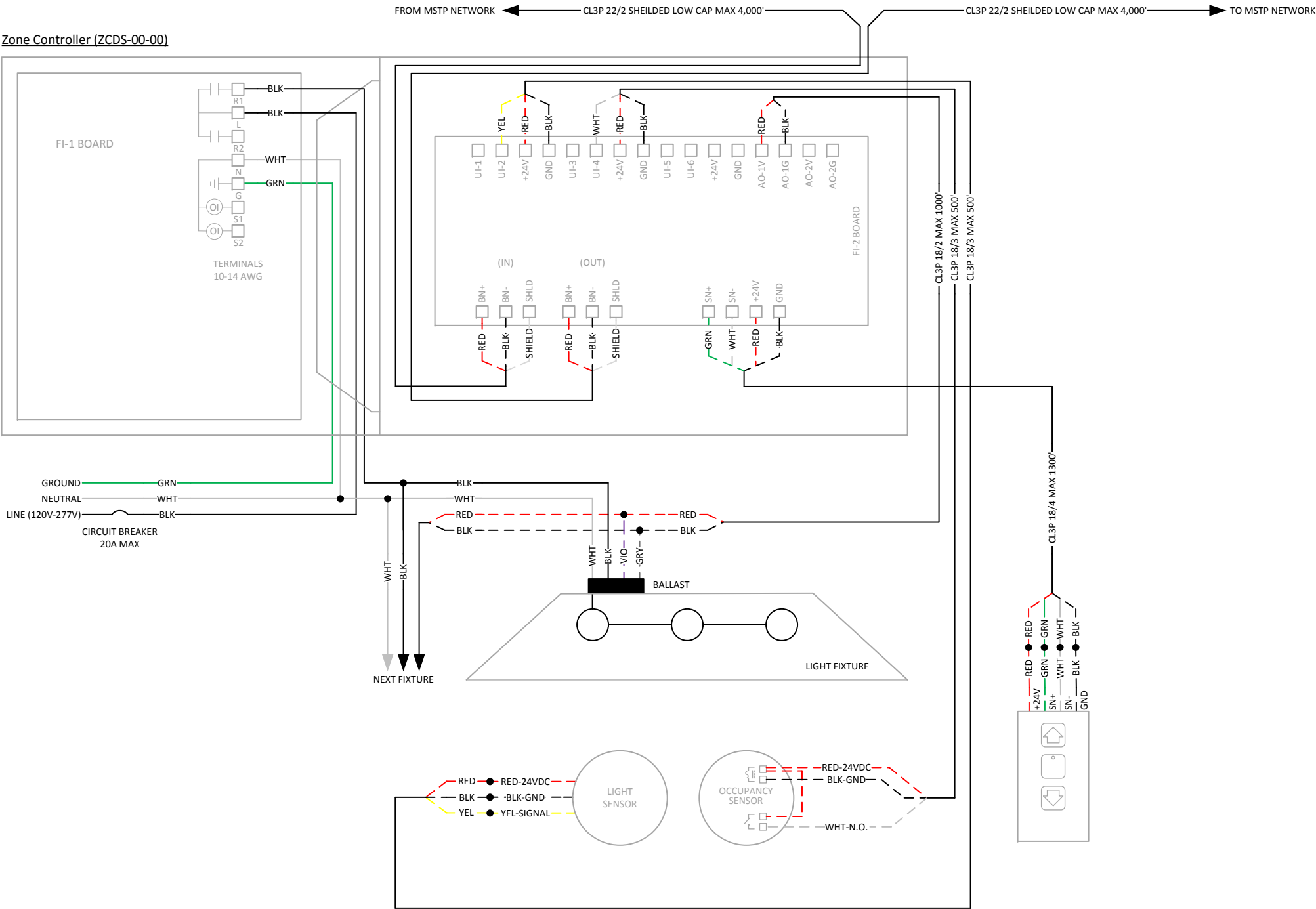
SE:JV

DE: PL

PR: RV

DRAWING NO.: 4.27

Zone Control Dimming Standard Wiring Detail



INSTALLATION NOTES:

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Detail Drawings

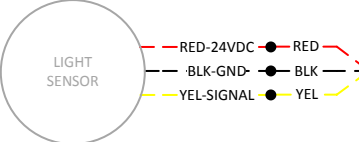
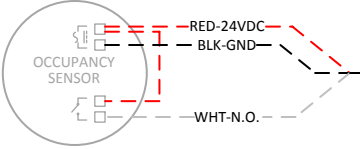
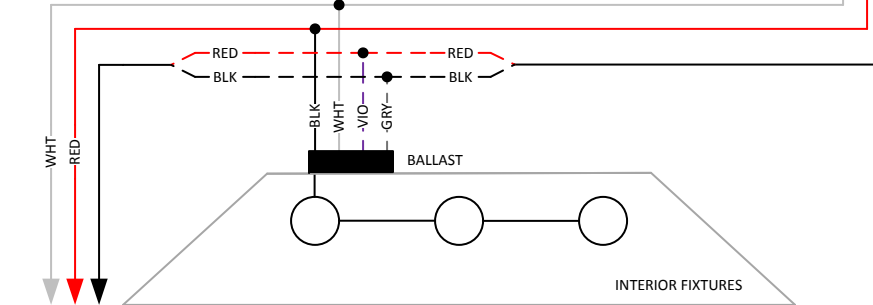
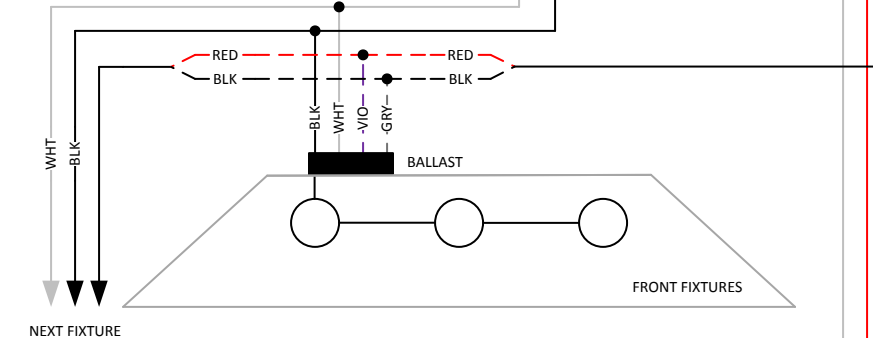
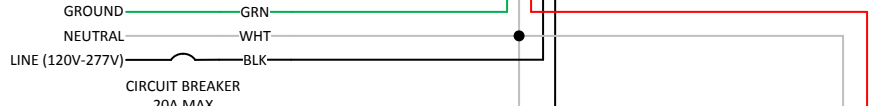
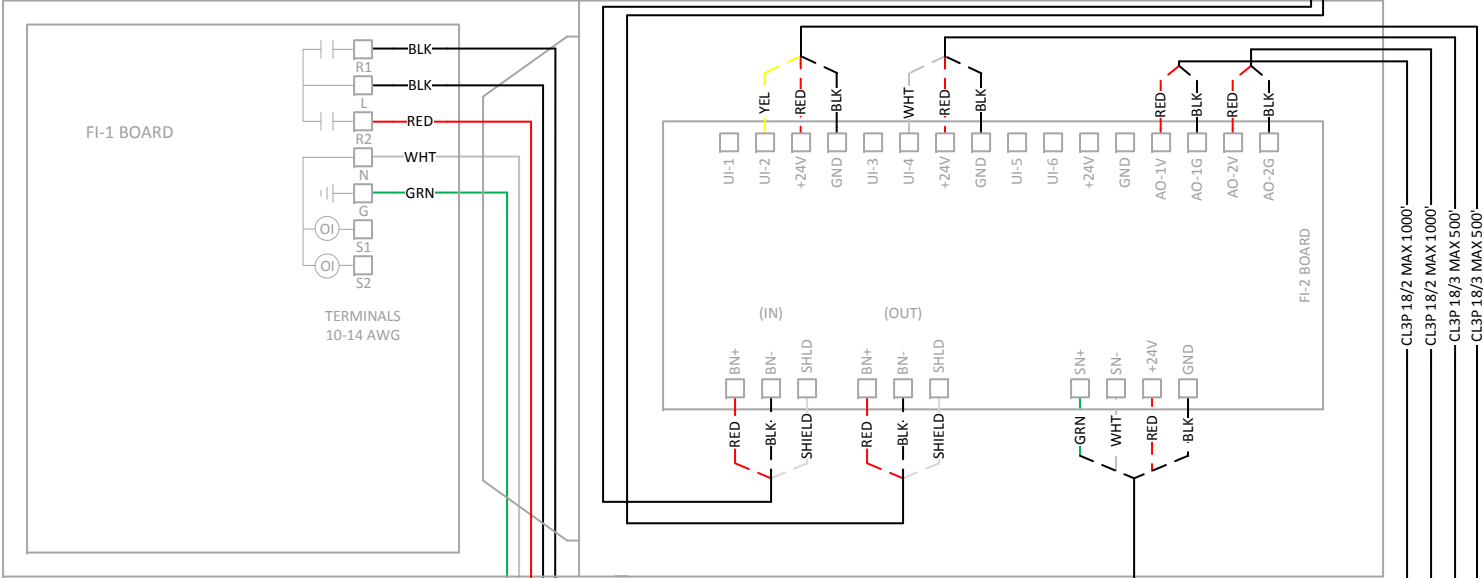
DRAWING NAME:
Zone Control Dimming Standard Wiring Detail

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

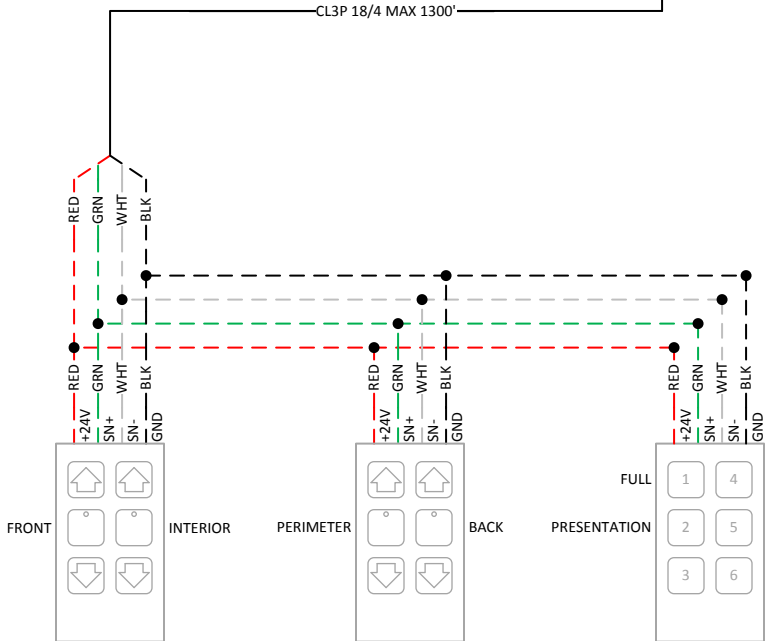
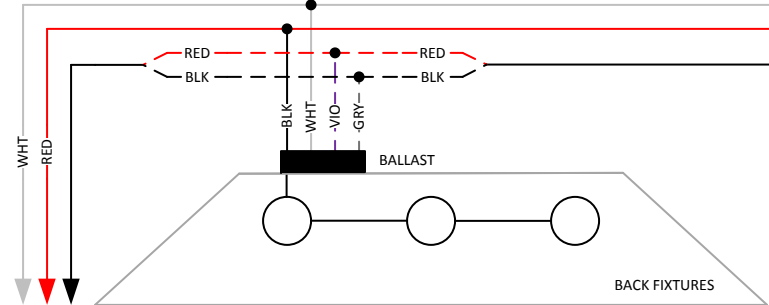
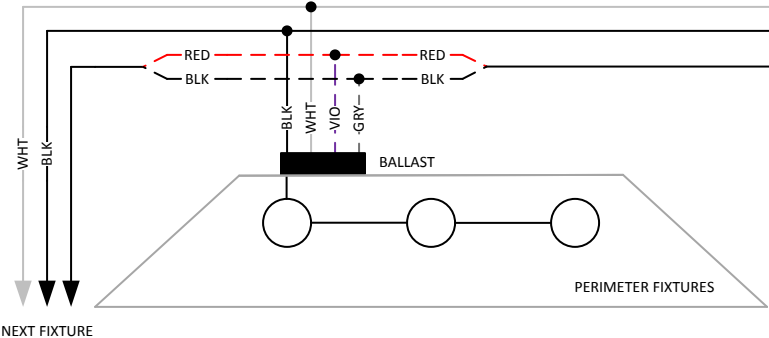
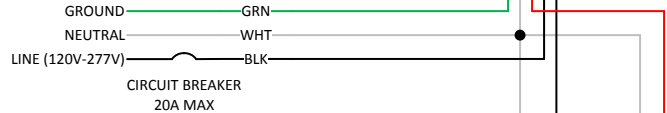
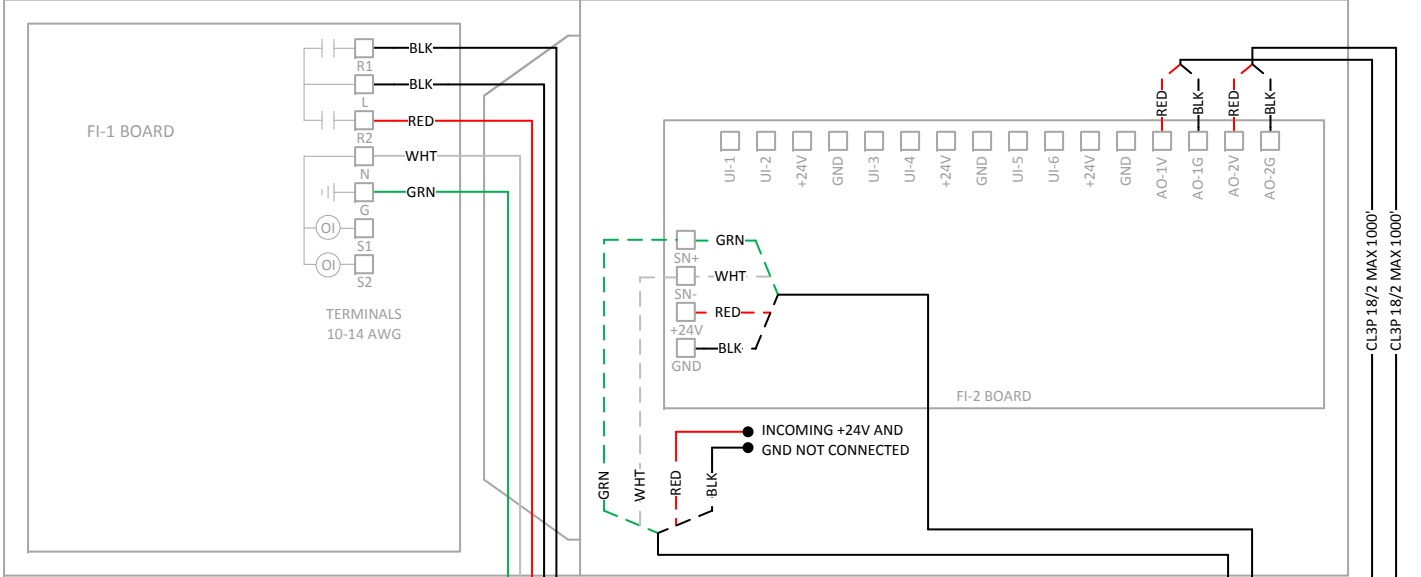
DRAWING NO.: 5.1

Zone Control Dimming Standard With Satellite Wiring Details

Zone Controller (ZCDS-00-00)



Satellite (SCDS-00)



INSTALLATION NOTES:
1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.

Zone Control Dimming Standard With Satellite (Emergency Lighting) Wiring Details

Zone Controller (ZCDS-X1-00)

FROM MSTP NETWORK ← CL3P 22/2 SHIELDED LOW CAP MAX 4,000' → CL3P 22/2 SHIELDED LOW CAP MAX 4,000' → TO MSTP NETWORK

Satellite (SCDS-X1)

GROUND — GRN
NEUTRAL — WHT
LINE (120V/277V) — BLK (NORMAL)
CIRCUIT BREAKER 20A MAX
LINE (120V/277V) — BLK (EMERGENCY)
CIRCUIT BREAKER 20A MAX

WHT — BLK — NEXT FIXTURE

BALLAST-1
BALLAST-2
STUDENT - EMERGENCY
STUDENT - NORMAL

LIGHT SENSOR
OCCUPANCY SENSOR

RED-24VDC
BLK-GND
YEL-SIGNAL
WHT-N.O.

Satellite (SCDS-X1)

GROUND — GRN
NEUTRAL — WHT
LINE (120V/277V) — BLK
CIRCUIT BREAKER 20A MAX
LINE (120V/277V) — BLK (EMERGENCY)
CIRCUIT BREAKER 20A MAX

WHT — BLK — NEXT FIXTURE

BALLAST-1
BALLAST-2
STUDENT - EMERGENCY
STUDENT - NORMAL

ALL CHANNELS
TEACHER

CL3P 18/2 MAX 1000'
CL3P 18/2 MAX 1000'
CL3P 18/3 MAX 500'
CL3P 18/3 MAX 500'

CL3P 18/4 MAX 1300'

INSTALLATION NOTES:

- Refer to the zone schedules for specific parts numbers and list of end devices included per zone.
- Emergency lighting circuit must be wired to relay 2.

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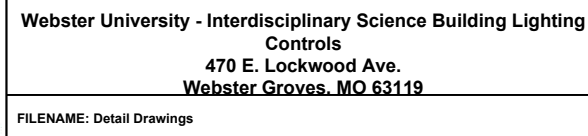
Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Detail Drawings

DRAWING NAME:
Zone Control Dimming Standard With Satellite (Emergency Lighting) Wiring Details
CONTRACT NO: WU-02-16
SE:JV
DE: PL
PR: RV

DRAWING NO.: 5.3

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.
2. Emergency lighting circuit must be wired to relay 2.

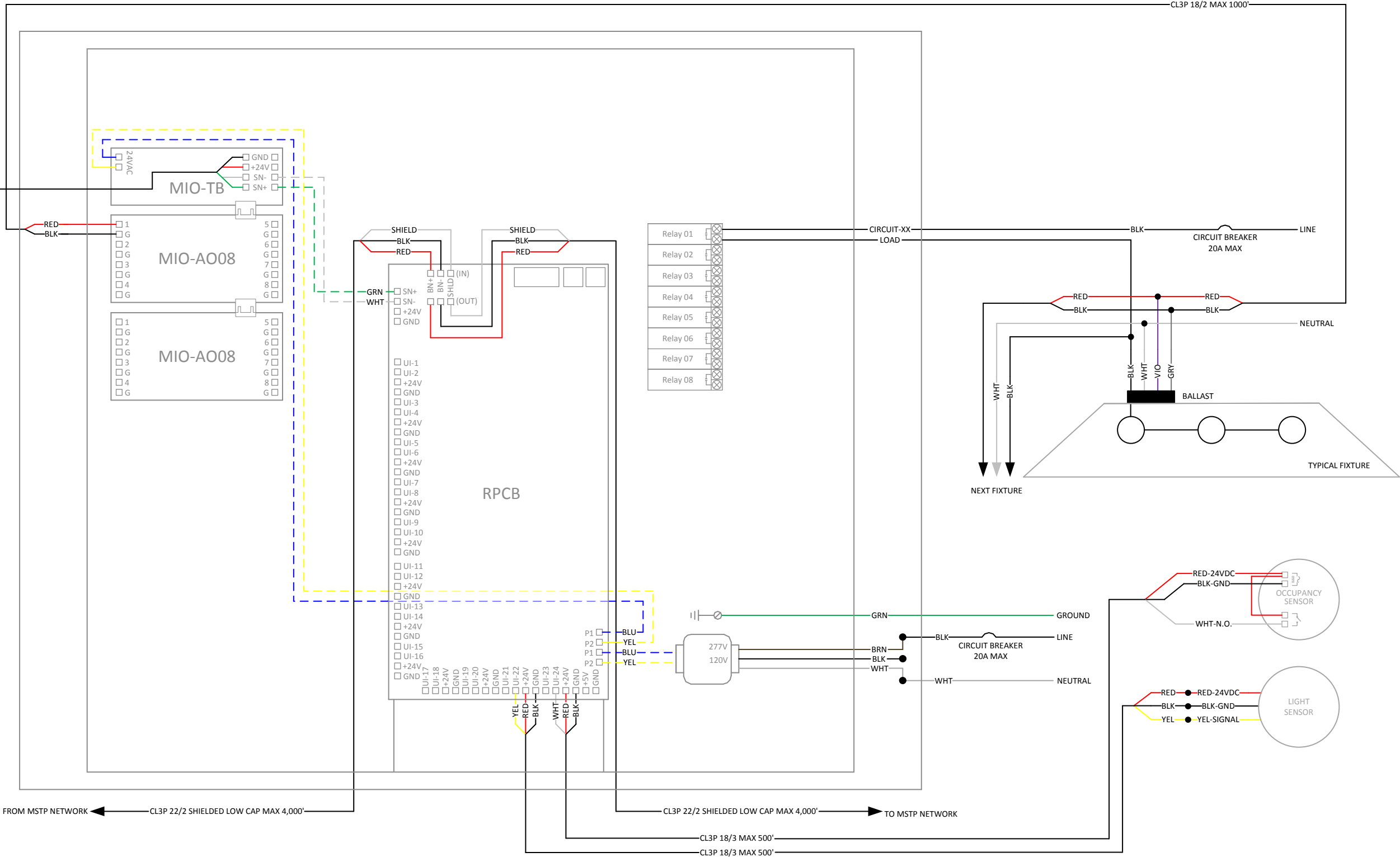


DRAWING NAME: Zone Control Dimming Standard With Satellite (Emergency Lighting) Wiring Details			
CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
DRAWING NO.: 5.3			

RPDS08 - Relay Panel Wiring Details

Wiring Legend

- Field Wiring
- Factory Wiring



INSTALLATION NOTES:

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



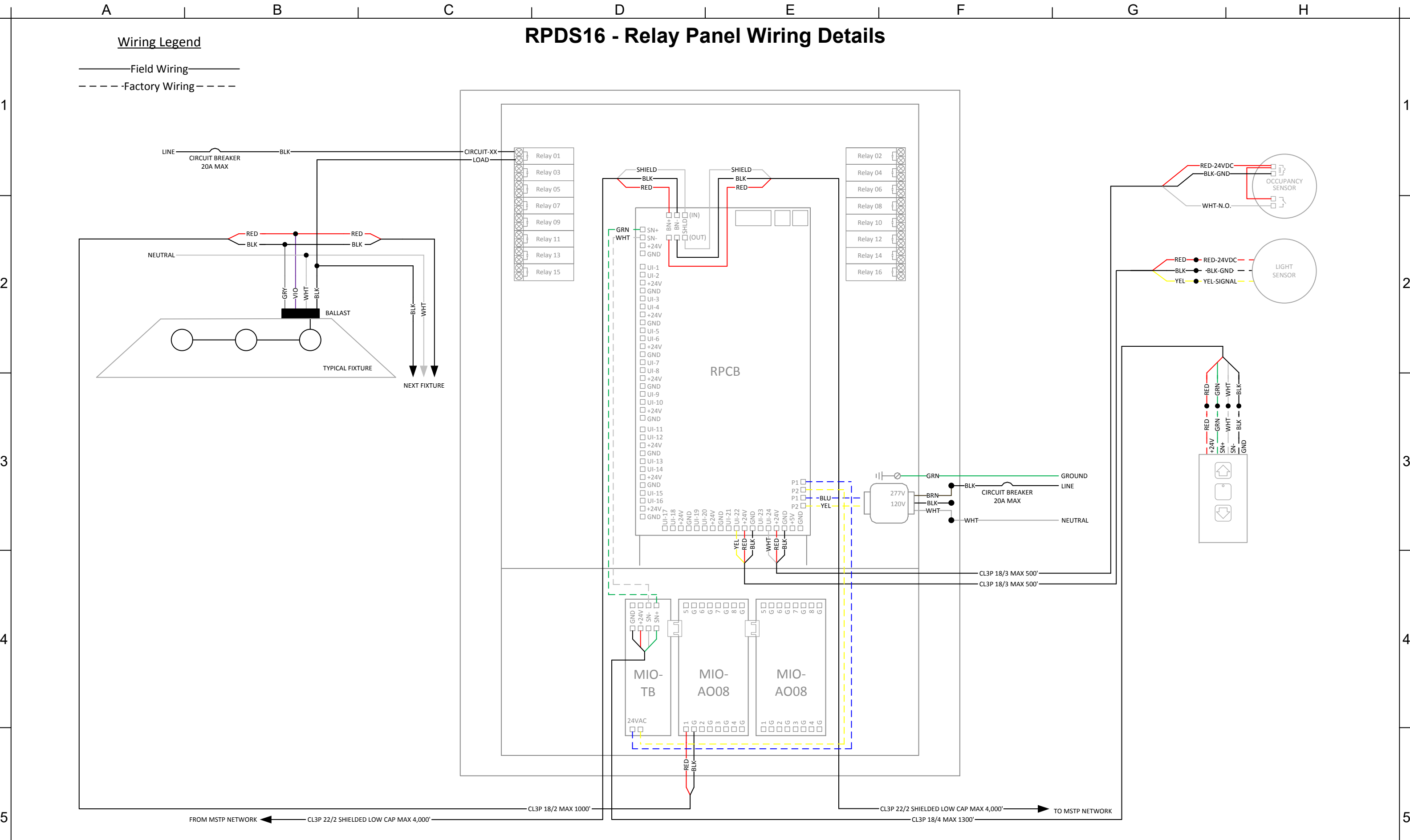
Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Detail Drawings

DRAWING NAME:
RPDS08 - Relay Panel Wiring Details

CONTRACT NO: WU-02-16	SE: JV	DE: PL	PR: RV
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DRAWING NO.: 5.4



INSTALLATION NOTES:

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



Webster University - Interdisciplinary Science Building Lighting Controls
CL3P 18/4 MAX 1470 E. Lockwood Ave.
Webster Groves, MO 63119

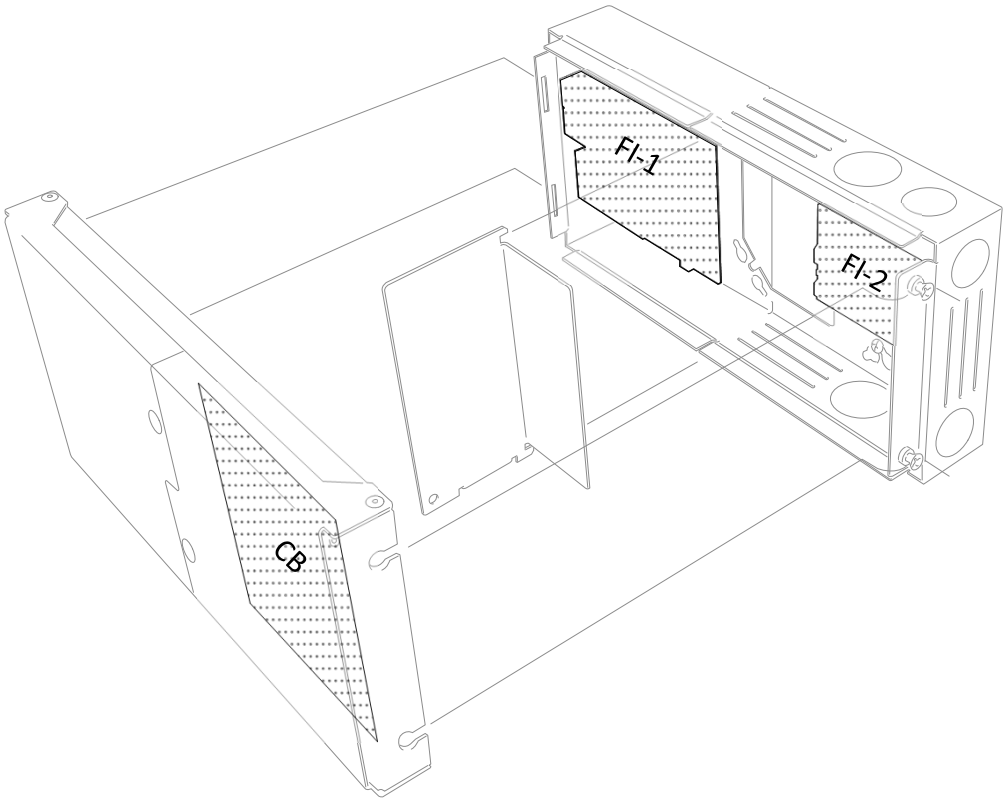
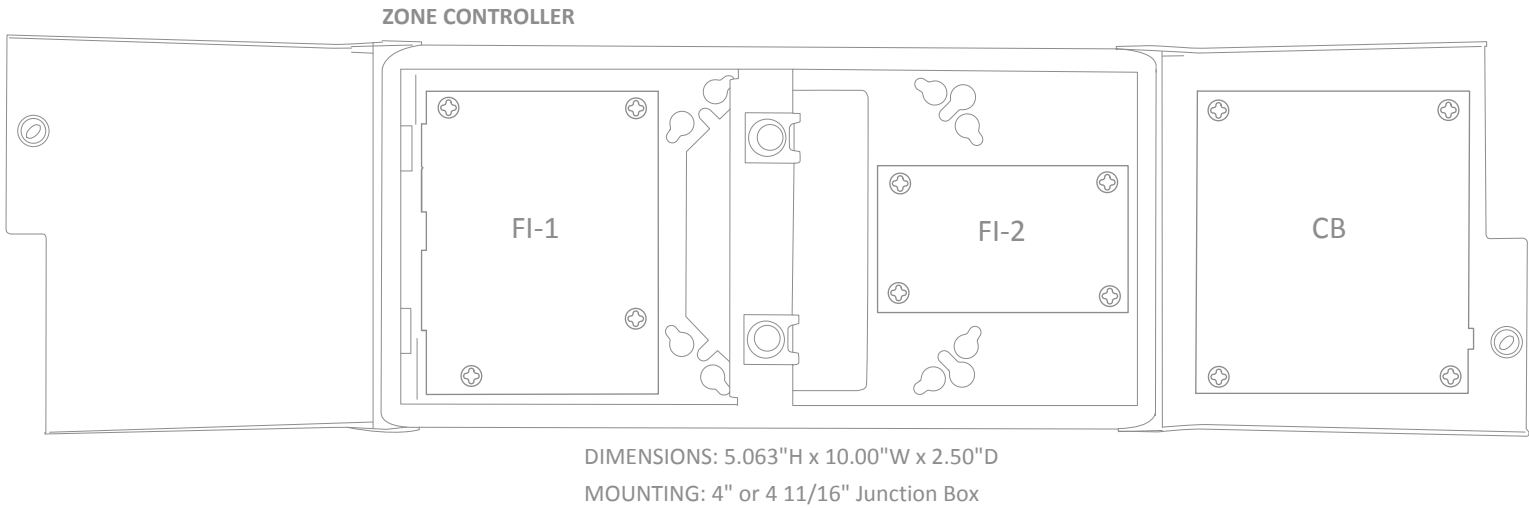
FILENAME: Detail Drawings

DRAWING NAME:
RPDS16 - Relay Panel Wiring Details

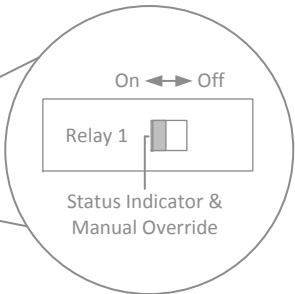
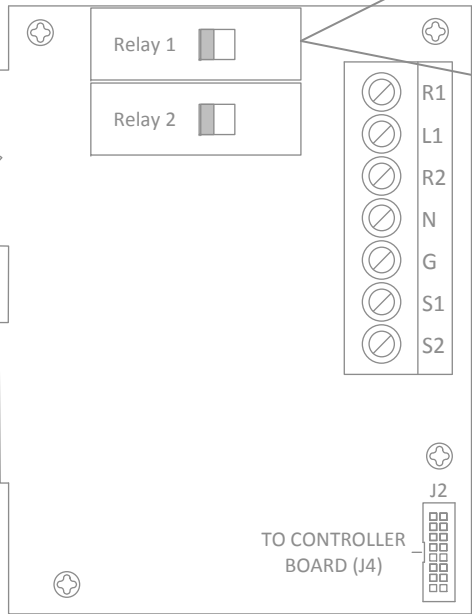
CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 5.5

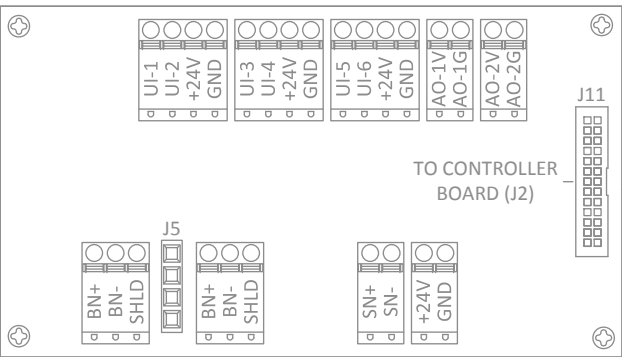
Zone Control Detail



FIELD INTERFACE-1 (FI-1)



FIELD INTERFACE-2 (FI-2)



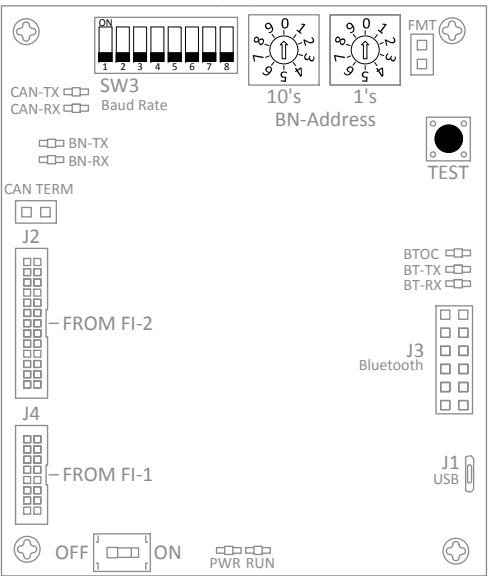
UNIVERSAL INPUTS (UI)

POWER: 24 VDC, 200mA shared between UI's & Station Network
WIRE: 18 AWG Solid or Stranded, 500' Max

ANALOG OUTPUTS (AO)

POWER: 0-10 VDC, Sink 100mA or Source 5mA Each
WIRE: 18 AWG Solid or Stranded, 1000' Max

CONTROLLER BOARD (CB)



CANbus NETWORK-SN

TERMINATION-SN

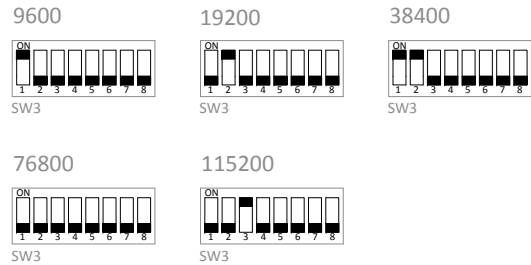
(Un-terminated) (Terminated)

JP2 JP2

BACnet MS/TP NETWORK-BN

TOPOLOGY: RS-485, (Half Duplex) Daisy Chain
WIRE: CL3P 22/2 Shielded, Low Cap, 4000' Max

BAUD RATE SELECTION-BN



TERMINATION-BN

Plug EOL Resistor into J5 to Terminate BACnet

INSTALLATION NOTES:
1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

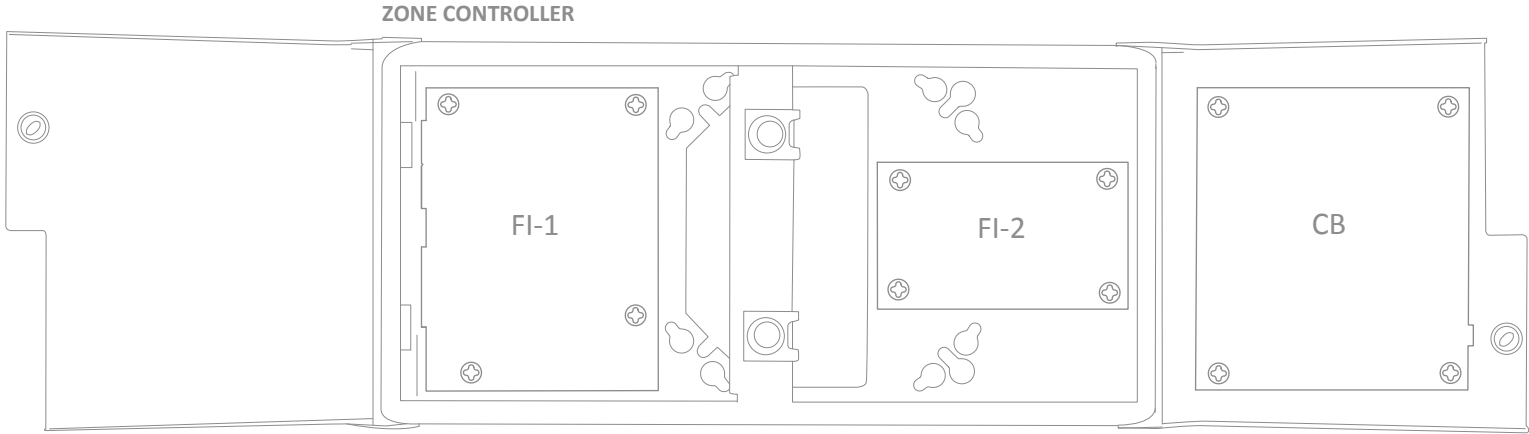
FILENAME: Detail Drawings

DRAWING NAME:
Zone Control Detail

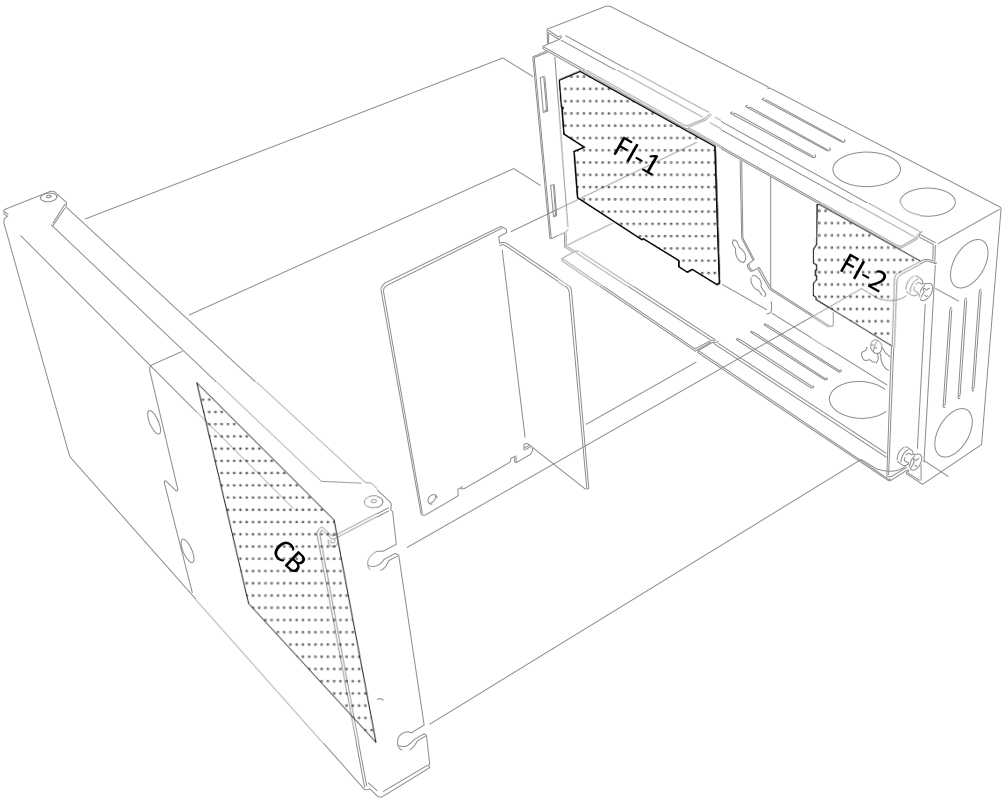
CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 5.6

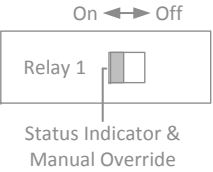
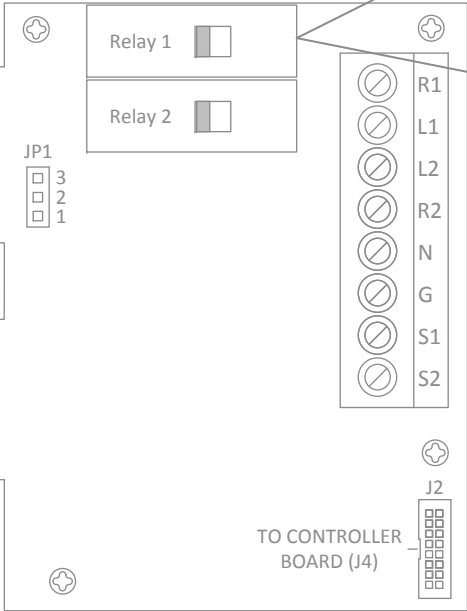
Zone Control (Emergency Lighting) Detail



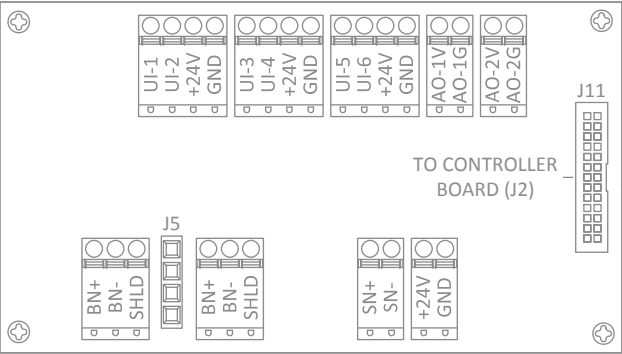
DIMENSIONS: 5.063"H x 10.00"W x 2.50"D
MOUNTING: 4" or 4 11/16" Junction Box



FIELD INTERFACE-1 (FI-1)



FIELD INTERFACE-2 (FI-2)



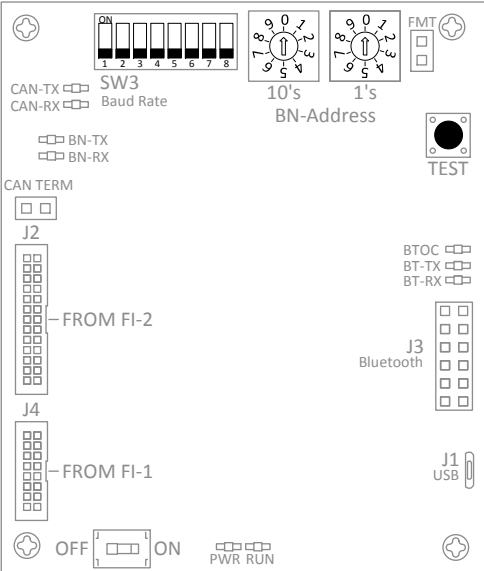
UNIVERSAL INPUTS (UI)

POWER: 24 VDC, 200mA shared between UI's & Station Network
WIRE: 18 AWG Solid or Stranded, 500' Max

ANALOG OUTPUTS (AO)

POWER: 0-10 VDC, Sink 100mA or Source 5mA Each
WIRE: 18 AWG Solid or Stranded, 1000' Max

CONTROLLER BOARD (CB)



CANbus NETWORK-SN

TOPOLOGY: Daisy Chain Only
WIRE: CL3P 18/4 Unshielded, 1300' Max

TERMINATION-SN

(Un-terminated) (Terminated)



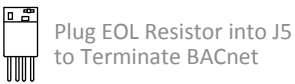
BACnet MS/TP NETWORK-BN

TOPOLOGY: RS-485, (Half Duplex) Daisy Chain
WIRE: CL3P 22/2 Shielded, Low Cap, 4000' Max

BAUD RATE SELECTION-BN



TERMINATION-BN



FIELD INTERFACE (FI-1)

POWER: 120-277 VAC, 50/60HZ, +/-10%
Single Phase 20A Circuit

RELAY OUTPUTS (RO)

LOAD RATINGS: 20A Tungsten at 120 VAC
20A Ballast at 277 VAC
20A Resistive at 277 VAC
ZC Maximum Load Rating: 20A per circuit
WIRE: 14-10 AWG Solid or Stranded, Copper

UL924 JUMPER (JP1)

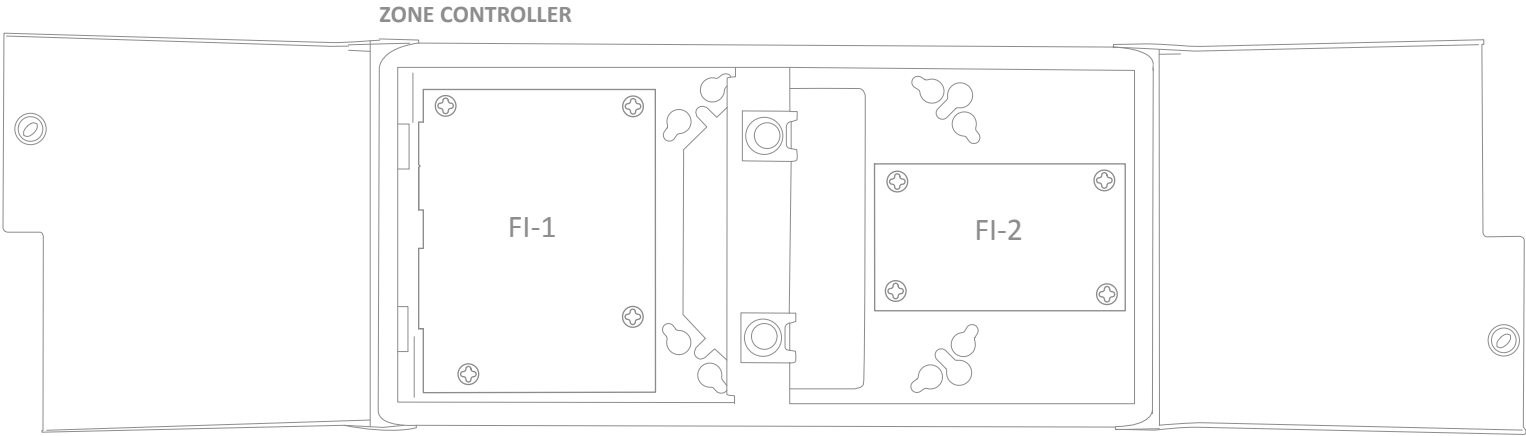
(Emergency Disabled) (Emergency Action – Close R2) (Emergency Action – Open R2)



INSTALLATION NOTES:

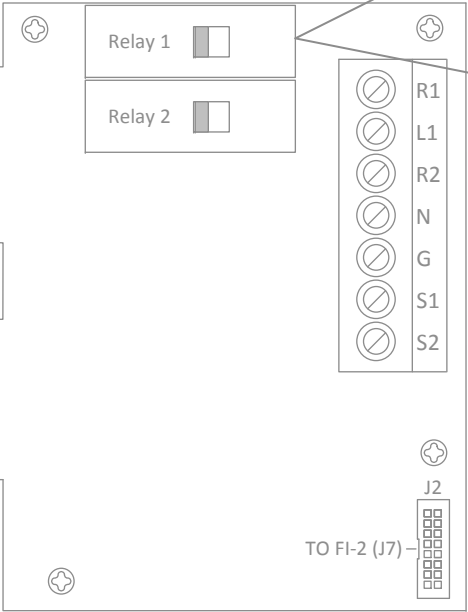
1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.
2. Emergency lighting circuit must be wired to relay 2.

Satellite Detail



DIMENSIONS: 5.063"H x 10.00"W x 2.50"D
MOUNTING: 4" or 4 11/16" Junction Box

FIELD INTERFACE-1 (FI-1)



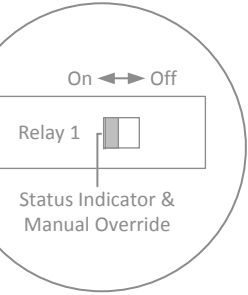
FIELD INTERFACE (FI-1)

POWER: 120-277 VAC, 50/60HZ, +/-10%
Single Phase 20A Circuit

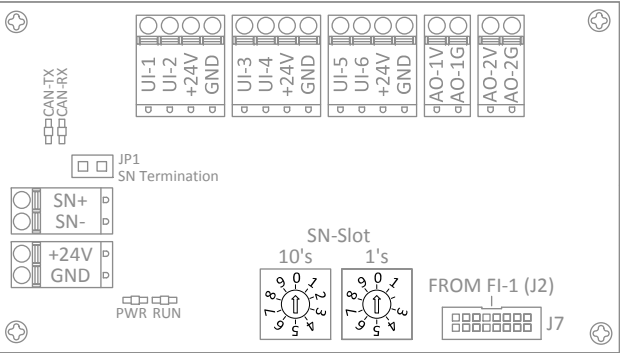
RELAY OUTPUTS (RO)

LOAD RATINGS: 20A Tungsten at 120 VAC
20A Ballast at 277 VAC
20A Resistive at 277 VAC

WIRE: 14-10 AWG Solid or Stranded, Copper



FIELD INTERFACE-2 (FI-2)



UNIVERSAL INPUTS (UI)

POWER: 24 VDC, 200mA shared between UI's & Station Network

WIRE: 18 AWG Solid or Stranded, 500' Max

ANALOG OUTPUTS (AO)

POWER: 0-10 VDC, Sink 100mA or Source 5mA Each

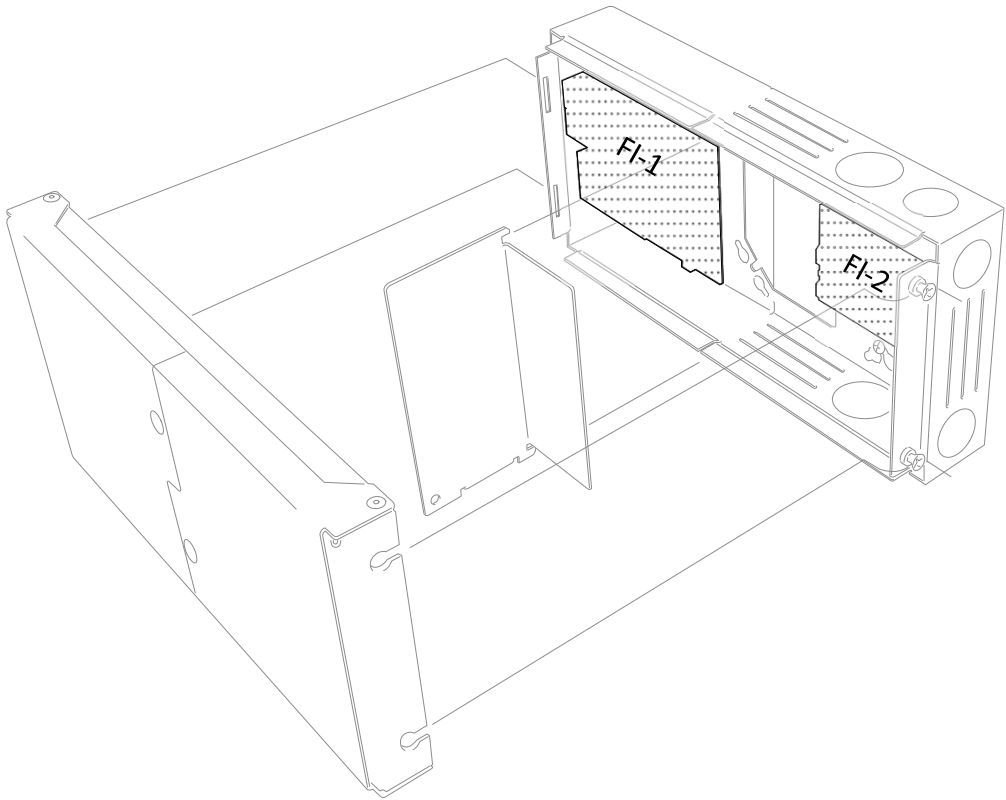
WIRE: 18 AWG Solid or Stranded, 1000' Max

CANbus NETWORK-SN

TOPOLOGY: Daisy Chain Only (Un-terminated) (Terminated)

WIRE: CL3P 18/4 Unshielded, 1300' Max

TERMINATION-SN



INSTALLATION NOTES:

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Detail Drawings

DRAWING NAME:
Satellite Detail

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 5.8

SATELLITE



FI-2

MOUNTING: 4" or 4 11/16" Junction Box

Relay 2 

On  Off

Relay 1 

Status Indicator & Manual Override

R1

11

12

D2

100

2

G

S1

S2

TO CONTROLLER
BOARD (J4)

POWER: 120-277 VAC, 50/60HZ, +/-10%
Single Phase 20A Circuit

LOAD RATINGS: 20A Tungsten at 120 VAC
20A Ballast at 277 VAC
20A Resistive at 277 VAC
ZC Maximum Load Rating: 20A per circuit

UL924 JUMPER (JP1)

(Emergency Disabled) (Emergency Action – Close R2) (Emergency Action – Open R2)



The diagram illustrates the pinout and connections for the CAN module. It includes the following components:

- Header Pinout:** A 16-pin header with the following labels from left to right: CAN-TX, CAN-RX, J1 (2-pin), SN Termination (2-pin), PWR (2-pin), RUN (2-pin), and a 6-pin connector labeled FROM FI-1 (J2).
- Internal Connections:**
 - CAN-TX is connected to UI-1.
 - CAN-RX is connected to UI-2.
 - UI-1 is connected to UI-2.
 - UI-2 is connected to +24V.
 - +24V is connected to GND.
 - UI-3 is connected to UI-4.
 - UI-4 is connected to +24V.
 - +24V is connected to GND.
 - UI-5 is connected to UI-6.
 - UI-6 is connected to +24V.
 - +24V is connected to GND.
 - AO-1V is connected to AO-1G.
 - AO-2V is connected to AO-2G.
 - AO-3V is connected to AO-3G.
 - AO-4V is connected to AO-4G.
 - AO-5V is connected to AO-5G.
 - AO-6V is connected to AO-6G.
 - AO-7V is connected to AO-7G.
 - AO-8V is connected to AO-8G.
 - AO-9V is connected to AO-9G.
 - AO-10V is connected to AO-10G.
 - AO-11V is connected to AO-11G.
 - AO-12V is connected to AO-12G.
 - AO-13V is connected to AO-13G.
 - AO-14V is connected to AO-14G.
 - AO-15V is connected to AO-15G.
 - AO-16V is connected to AO-16G.
 - AO-17V is connected to AO-17G.
 - AO-18V is connected to AO-18G.
 - AO-19V is connected to AO-19G.
 - AO-20V is connected to AO-20G.
 - AO-21V is connected to AO-21G.
 - AO-22V is connected to AO-22G.
 - AO-23V is connected to AO-23G.
 - AO-24V is connected to AO-24G.
 - AO-25V is connected to AO-25G.
 - AO-26V is connected to AO-26G.
 - AO-27V is connected to AO-27G.
 - AO-28V is connected to AO-28G.
 - AO-29V is connected to AO-29G.
 - AO-30V is connected to AO-30G.
 - AO-31V is connected to AO-31G.
 - AO-32V is connected to AO-32G.
 - AO-33V is connected to AO-33G.
 - AO-34V is connected to AO-34G.
 - AO-35V is connected to AO-35G.
 - AO-36V is connected to AO-36G.
 - AO-37V is connected to AO-37G.
 - AO-38V is connected to AO-38G.
 - AO-39V is connected to AO-39G.
 - AO-40V is connected to AO-40G.
 - AO-41V is connected to AO-41G.
 - AO-42V is connected to AO-42G.
 - AO-43V is connected to AO-43G.
 - AO-44V is connected to AO-44G.
 - AO-45V is connected to AO-45G.
 - AO-46V is connected to AO-46G.
 - AO-47V is connected to AO-47G.
 - AO-48V is connected to AO-48G.
 - AO-49V is connected to AO-49G.
 - AO-50V is connected to AO-50G.
 - AO-51V is connected to AO-51G.
 - AO-52V is connected to AO-52G.
 - AO-53V is connected to AO-53G.
 - AO-54V is connected to AO-54G.
 - AO-55V is connected to AO-55G.
 - AO-56V is connected to AO-56G.
 - AO-57V is connected to AO-57G.
 - AO-58V is connected to AO-58G.
 - AO-59V is connected to AO-59G.
 - AO-60V is connected to AO-60G.
 - AO-61V is connected to AO-61G.
 - AO-62V is connected to AO-62G.
 - AO-63V is connected to AO-63G.
 - AO-64V is connected to AO-64G.
 - AO-65V is connected to AO-65G.
 - AO-66V is connected to AO-66G.
 - AO-67V is connected to AO-67G.
 - AO-68V is connected to AO-68G.
 - AO-69V is connected to AO-69G.
 - AO-70V is connected to AO-70G.
 - AO-71V is connected to AO-71G.
 - AO-72V is connected to AO-72G.
 - AO-73V is connected to AO-73G.
 - AO-74V is connected to AO-74G.
 - AO-75V is connected to AO-75G.
 - AO-76V is connected to AO-76G.
 - AO-77V is connected to AO-77G.
 - AO-78V is connected to AO-78G.
 - AO-79V is connected to AO-79G.
 - AO-80V is connected to AO-80G.
 - AO-81V is connected to AO-81G.
 - AO-82V is connected to AO-82G.
 - AO-83V is connected to AO-83G.
 - AO-84V is connected to AO-84G.
 - AO-85V is connected to AO-85G.
 - AO-86V is connected to AO-86G.
 - AO-87V is connected to AO-87G.
 - AO-88V is connected to AO-88G.
 - AO-89V is connected to AO-89G.
 - AO-90V is connected to AO-90G.
 - AO-91V is connected to AO-91G.
 - AO-92V is connected to AO-92G.
 - AO-93V is connected to AO-93G.
 - AO-94V is connected to AO-94G.
 - AO-95V is connected to AO-95G.
 - AO-96V is connected to AO-96G.
 - AO-97V is connected to AO-97G.
 - AO-98V is connected to AO-98G.
 - AO-99V is connected to AO-99G.
 - AO-100V is connected to AO-100G.

POWER: 24 VDC, 200mA shared between UI's & Station Network
WIRE: 18 AWG Solid or Stranded, 500' Max

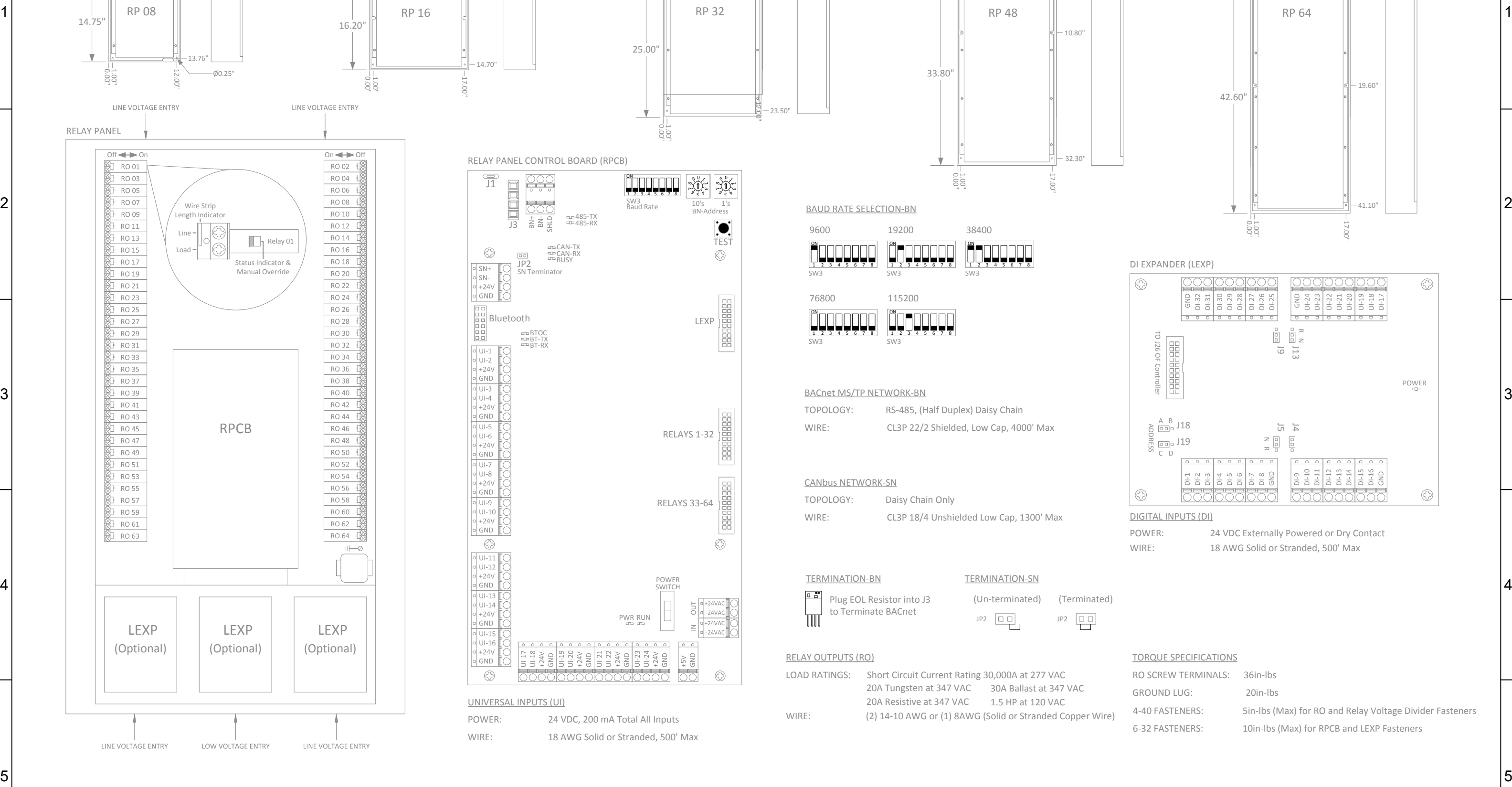
POWER: 0-10 VDC, Sink 100mA or Source 5mA Each
WIRE: 18 AWG Solid or Stranded, 1000' Max

TOPOLOGY: Daisy Chain Only

WIRE: CL3P 18/4 Unshielded, 1300' Max

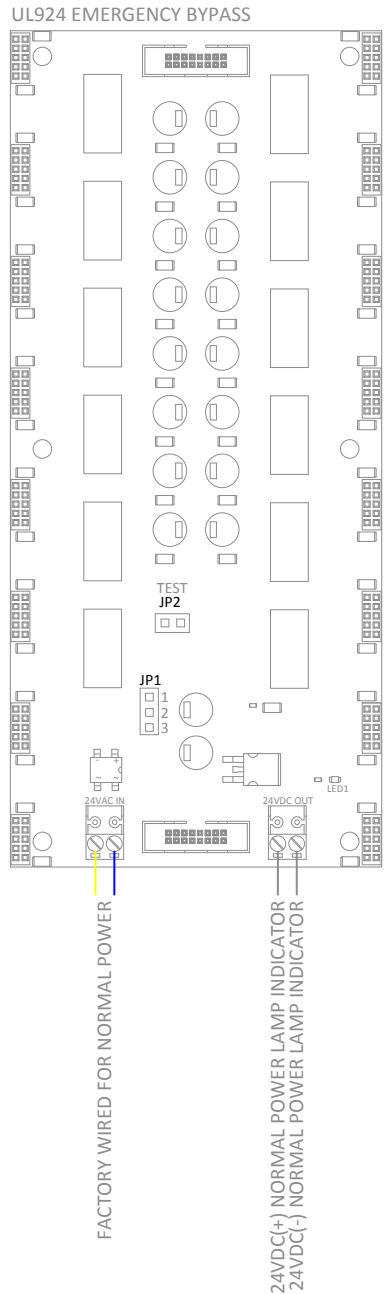
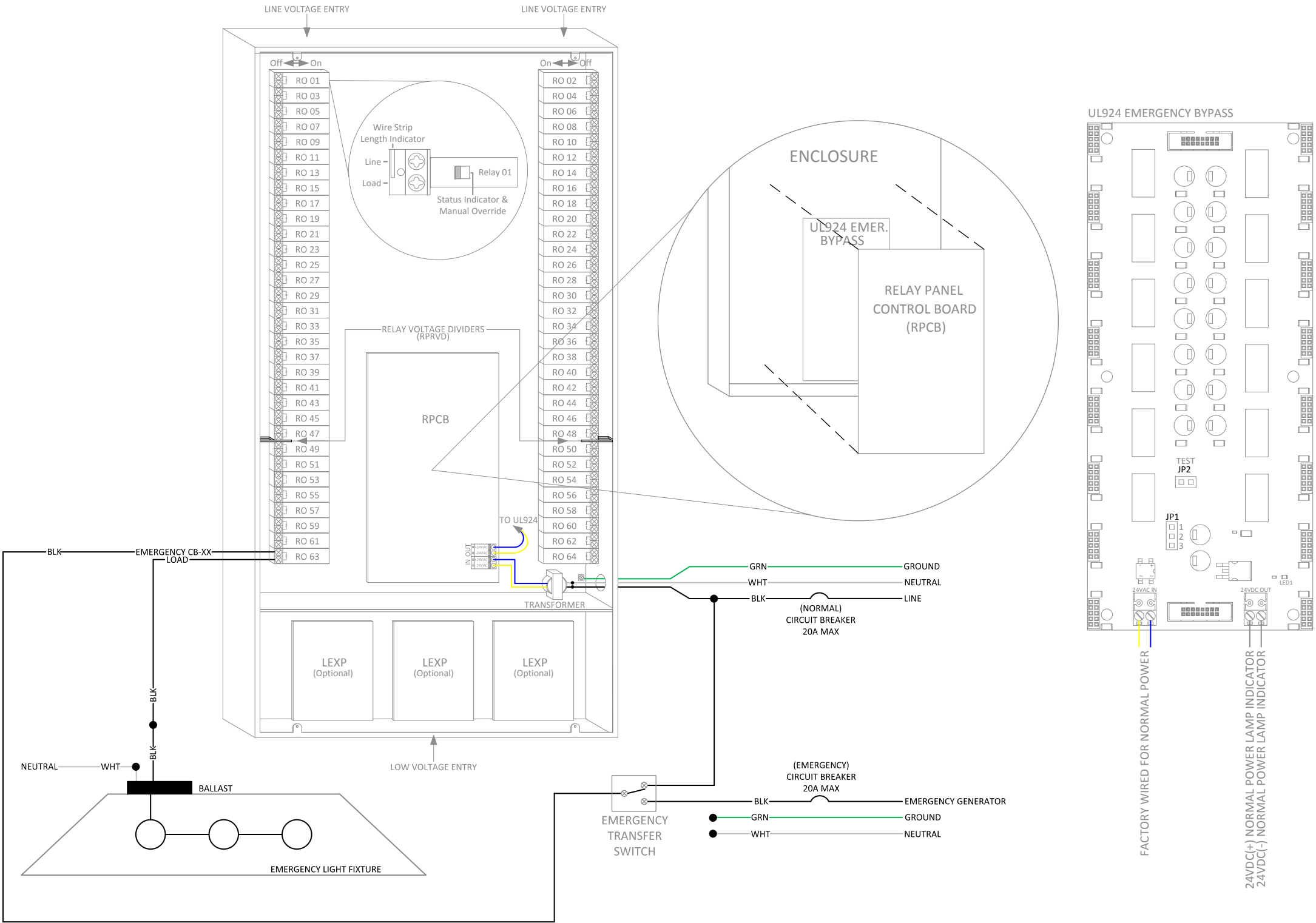
(Un-terminated) (Terminated)

JP1 JP1



DRAWING NO.: 5.10

Relay Panel Detail W/ Emergency Bypass & Voltage Dividers Detail



- CONFIGURATION JUMPER**
- JP1
1 NO JUMPER: EMERGENCY ACTION DISABLED
2
3
- JP1
1 1-2 JUMPED: EMERGENCY ACTION CLOSSES ALL RELAYS
2
3
- JP1
1 2-3 JUMPED: EMERGENCY ACTION OPENS ALL RELAYS
2
3
- TEST JUMPER**
- JP2
NO JUMPER: SIMULATED POWER LOSS
- UL924 EMERGENCY BYPASS**
- POWER IN: 24VAC IN +/-10%, 30VA, 50-60 Hz, Factory Wired for Normal Power
- POWER OUT: 24VDC for Normal Power Indicator Lamp (User Installed Option)
- POWER AVAILABLE: 200mA Shared Between UI's, SN, and UL924 Auxiliary Out
- UL924 RELAY CONTROL**
- RP16: UL924 Controls RO 1-16
- RP32: UL924 Controls RO 17-32
- RP48: UL924 Controls RO 33-48
- RP64: UL924 Controls RO 49-64

INSTALLATION NOTES:

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



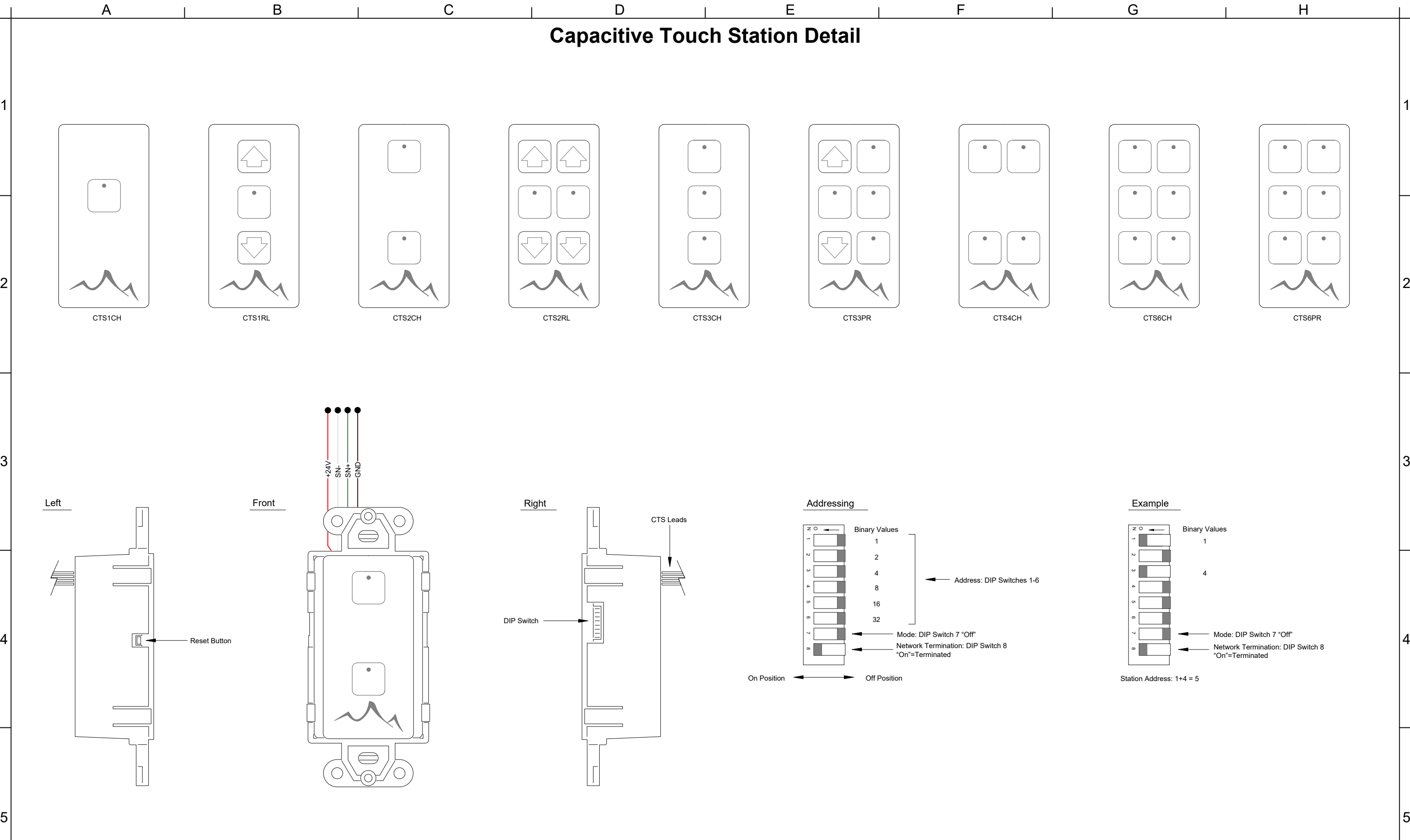
Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Detail Drawings

DRAWING NAME:
Relay Panel Detail W/ Emergency Bypass & Voltage Dividers Detail

CONTRACT NO: WU-02-16 SE:JV DE: PL PR: RV

DRAWING NO.: 5.11



INSTALLATION NOTES:

1. Refer to the zone schedules for specific parts numbers and list of end devices included per zone.



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Detail Drawings

DRAWING NAME:
Capacitive Touch Station Detail

CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 5.12

	A	B	C	D	E	F	G	H
	Classroom/Labs Sequence of Operations							
1	Classrooms/Labs				Independent Operation – Where rooms are large enough or include multiple window exposures, multiple daylight sensors are shown. These sensors will independently control the lights in their immediate area, and operate independently from other sensors in the same room.			
	Digital Keypad:				High End Trim:			
	Entry station will be as indicated on plans. One button entry stations (1CH) (where shown on plans) will turn the lights on (Scene 1) and off. Six button stations (3PR) at the teaching wall will allow users to adjust the lights between one of three pre-set scenes, and raise/lower the dim level of the lights from 0% to 100% light output.				Maximum light output will be capped to save energy, control glare, increase LED life, and meet target light levels.			
2	Scene 1: Energy Saving – Lights will operate at high end trim. Daylight sensor (where indicated on plans) will dim lights in response to daylight.				Networked:			
	Scene 2: Media – The lighting is dimmed to a comfortable level. Daylight sensor (if any) is disabled.				These controls are connected to the building lighting control system.			
	Scene 3: Board Lights – The lights at the teaching wall will toggle between on and off, allowing users to turn board lights off for AV Presentations, or on for writing on white board. Daylight sensor is diasabled.							
	Scene 4: - Off							
	Fade rate between scenes – 2 seconds.							
3	Occupancy Sensors:							
	Manual On – When a room is unoccupied and occupancy is detected, the lights will not automatically turn on.							
	Dim Warn/Off – 20 minutes after room has been vacated, the lights will automatically shut off. Approximately 3 minutes prior to shutting off, the lights will dim to 50% warning the users the lights will be shutting off.							
4	Grace Period – If motion is detected within 10 seconds of the lights turning off, they will automatically turn back on.							
	Daylight Sensor:							
	Daylight Harvesting – In rooms with windows, daylight sensor will continuously dim the light output in response to available daylight. Daylight harvesting zone will encompass lights within 15’ of glass.							
	Target Light Level – 50 footcandles average.							
5	Low End Trim – Sensor will not dim the lights below 20% or turn off the lights completely.							
A C E S Automatic Controls equipment systems, inc.					Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119		DRAWING NAME: Classroom/Labs Sequence of Operations	
					FILENAME: Sequence of Operations		CONTRACT NO: WU-02-16	SE:JV
							DE: PL	PR: RV
					DRAWING NO.: 6.1			

A	B	C	D	E	F	G	H	
Offices & Restrooms Sequence of Operations								
1	Networked Offices and Similarly Configured Spaces			Restrooms				1
	Digital Keypad:			Digital Keypad:				
	One button with raise lower keypad (1RL) will allow users to turn on the lights, turn off the lights, and raise/lower the dim level of the lights, from 0% to 100% light output.			One button manual station (1CH) will toggle lights on and off.				
	Occupancy Sensors:			Occupancy Sensors:				
2	Manual On – When a room is unoccupied and occupancy is detected, the lights will not automatically turn on.			Auto On – When occupancy is detected, lights will automatically turn on.				2
	Dim Warn/Off – 20 minutes after room has been vacated, the lights will automatically shut off. Approximately 3 minutes prior to shutting off, the lights will dim to 50% warning the users the lights will be shutting off.			Dim Warn/Off – 20 minutes after room has been vacated, the lights will automatically shut off. Approximately 3 minutes prior to shutting off, the lights will dim to 50% warning the users the lights will be shutting off.				
	Grace Period – If motion is detected within 10 seconds of the lights turning off, they will automatically turn back on.			When lights are manually turned off, the system will not automatically turn on lights until sensor times out.				
	Daylight Sensor:			Emergency Night Light:				
3	Daylight Harvesting – In rooms with windows, daylight sensor will continuously dim the light output in response to available daylight. Daylight harvesting zone will encompass lights within 15’ of glass.			Life safety entry door night light will remain at 50% light output, while remainder of lights turn off.				3
	Target Light Level – 50 footcandles average.			High End Trim:				
	Low End Trim – Sensor will not dim the lights below 20% or turn off the lights completely.			Maximum light output will be capped to save energy, control glare, increase LED life, and meet target light levels.				
	High End Trim:			Networked:				
4	Maximum light output will be capped to save energy, control glare, increase LED life, and meet target light levels.			These controls are connected to the building lighting control system.				4
	Exterior Lighting Cove:							
	Where the exterior lighting cove passes through an office (3 rd and 4 th floor), the lighting cove will operate independently from the office lighting. Cove will be dimmed and operate off a schedule.							
	Networked:							
5	These controls are connected to the building lighting control system.							5
A C E S Automatic Controls equipment systems, inc.				Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119		DRAWING NAME: Offices & Restrooms Sequence of Operations		
						CONTRACT NO: WU-02-16	SE:JV	DE: PL
				FILENAME: Sequence of Operations		DRAWING NO.: 6.2		

A	B	C	D	E	F	G	H		
Conference Rooms Sequence of Operations									
1	Conference Rooms			High End Trim:				1	
	Digital Keypad:			Maximum light output will be capped to save energy, control glare, increase led life, and meet target light levels.					
	Six button stations (3pr) will allow users to adjust the lights between one of three pre-set scenes, and raise/lower the dim level of the lights, from 0% to 100%light output.			Networked:					
	Scene 1 - Energy saving - The lights will operate at high end trim. Daylight sensor will dim lights in response to daylight.			These controls are connected to the building lighting control system.					
2	Scene 2 - Meeting - The lighting is dimmed to a comfortable level. Display walls and tables are highlighted. General ambient lighting is dimmed. Daylight sensor is disabled.							2	
	Scene 3 - AV - The lighting will be dimmed low to allow projectors / monitors to be viewed. Daylight sensor is disabled.								
	Scene 4 – Off								
	Fade rate between scenes - 2 seconds								
3	Occupancy Sensors:							3	
	Manual on - When a room is unoccupied and occupancy is detected, the lights will not automatically turn on.								
	Dim warn/off - 15 minutes after room has been vacated, the lights will automatically shut off. Approximately 3 minutes prior to shutting off, the lights will dim to 50%, warning the users the lights will be shutting off.								
	Grace period - If motion is detected within 10 seconds of the lights turning off, they will automatically turn back on.								
4	Daylight Sensor:							4	
	Daylight Harvesting - In rooms with windows, daylight sensor will continuously dim the light output in response to available daylight. Daylight harvesting zone will encompass lights within 15' of glass.								
	Target Light Level - 50 footcandles average								
	Low End Trim - sensor will not dim the lights below 20% or turn off the lights completely.								
5								5	
A C E S Automatic Controls equipment systems, inc.				Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119		DRAWING NAME: Conference Rooms Sequence of Operations			
				FILENAME: Sequence of Operations		CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
				DRAWING NO.: 6.3					

A	B	C	D	E	F	G	H	
Teaching Kitchen & Corridors Sequence of Operations								
1	Teaching Kitchen			Corridors/Circulation				1
	Digital Keypad:			Digital Keypad:				
	Entry one button wall station (1ch) will allow users to turn lights on and off. Six button stations (3pr) will allow users to adjust the lights between one of three pre-set scenes, and raise/lower the dim level of the lights, from 0% to 100%light output.			Manual On - One button keypad (1ch) will allow users to manually turn the lights on and off.				
	Fade rates - 2 seconds			Scheduled Off:				
				Scheduled Off - Lighting will shut off at a pre-determined time.				
2	Occupancy Sensors:			Daylight Sensor:				2
	Manual On - When a room is unoccupied and occupancy is detected, the lights will not automatically turn on.			Daylight Harvesting - In circulation areas with windows, daylight sensor will continuously dim the light output in response to available daylight. Daylight harvesting zone will encompass lights within 15' of glass				
	Dim Warn/off - 15 minutes after room has been vacated, the lights will automatically shut off. Approximately 3 minutes prior to shutting off, the lights will dim to 50%, warning the users the lights will be shutting off.			Target Light Level - 20 footcandles average				
	Grace Period - If motion is detected within 10 seconds of the lights turning off, they will automatically turn back on.			Low End Trim - Sensor will not dim the lights below 20% or turn off the lights completely.				
3	High End Trim:			High End Trim:				3
	Maximum light output will be capped to save energy, control glare, increase led life, and meet target light levels.			Maximum light output will be capped to save energy, control glare, increase led life, and meet target light levels.				
	Networked:			Networked:				
	These controls are connected to the building lighting control system.			These controls are connected to the networked building lighting control system.				
4								4
5								5
A C E S Automatic Controls equipment systems, inc.				Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119		DRAWING NAME: Teaching Kitchen & Corridors Sequence of Operations		
						CONTRACT NO: WU-02-16	SE:JV	DE: PL
				FILENAME: Sequence of Operations		DRAWING NO.: 6.4		

Stairwells & Exterior Site Lighting Sequence of Operations

Stairwells

Digital keypad:

Manual On - One button keypad (1ch) will allow users to manually turn the lights on and off.

Scheduled Off:

Scheduled Off - Lighting will shut off at a pre-determined time.

High End Trim:

Maximum light output will be capped to save energy, control glare, increase led life, and meet target light levels.

Networked:

These controls are connected to the networked building lighting control system.

Exterior Site Lighting

Outdoor Daylight Sensor:

Photo On/Photo Off - Lighting zones will energize when there is insufficient daylight, and turn off when there is sufficient daylight.

Scheduled On/Off:

Photo On/Time Clock Off - Select landscape and architectural lighting zones will energize when there is insufficient daylight. The lights will then turn off at a predetermined time.

High End Trim:

Maximum light output will be capped to save energy, control glare, increase led life, and meet target light levels.

Networked:

These controls are connected to the building lighting control system.



Webster University - Interdisciplinary Science Building Lighting Controls
470 E. Lockwood Ave.
Webster Groves, MO 63119

FILENAME: Sequence of Operations

DRAWING NAME:	Stairwells & Exterior Site Lighting Sequence of Operations
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CONTRACT NO: WU-02-16	SE:JV	DE: PL	PR: RV
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DRAWING NO.: 6.5

A	B	C	D	E	F	G	H
Lecture Hall Sequence of Operations							
1	Lecture Hall Digital Keypad: One button entry station (1ch) will turn the lights on (scene 1) and off. The six button station (3pr) at the presenter wall will allow users to adjust the lights between one of three pre-set scenes, and raise/lower the dim level of the lights, from 0% to 100% light output. One (3rl) keypad will provide raise lower control for stage left, stage center, and stage right lighting zones. In the control room, one (3pr) keypad will recall pre-set scenes 1-3 and provide raise lower. In addition, one (3rl) keypad will provide raise lower control for stage left, stage center, and stage right lighting zones. Scene 1 - General Presentation - lights will operate at owner selected dim level. Speaker and audience are well lit. Scene 2 - Speaker Presentation - the stage is well lit while the audience lighting is subdued. Scene 3 - AV Mode - The lighting will be dimmed low to allow projectors / monitors to be easily viewed. Scene 4 – Off Stage left: Switch leg "c". Stage center: Switch legs "d", "e", and "f". (multiple switch legs allow the owner to reconfigure the stage without re-wiring the lights.) Stage right: Switch leg "g". Fade rate between scenes - 2 seconds Scheduled off: Scheduled Off - Lighting will shut off at a pre-determined time. High end trim: Maximum light output will be capped to save energy, control glare, increase led life, and meet target light levels. Networked: These controls are connected to the building lighting control system.						1
2							2
3							3
4							4
5							5
A C E S Automatic Controls equipment systems, inc.				Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119		DRAWING NAME: Lecture Hall Sequence of Operations CONTRACT NO: WU-02-16 SE: JV DE: PL PR: RV DRAWING NO.: 6.6	

A	B	C	D	E	F	G	H
Master Material List							
1							1
2							2
3							3
4							4
5							5

Manufacturer	Part Number	Product Description	Quantity
Acuity Controls	CM-PDT-9-R	Ceiling Mount Occupancy Sensor, Dual Technology (PIR/Microphonics), Small Motion 360°, Low Voltage Relay	60
Acuity Controls	WV-16-R	Wide View Occupancy Sensor, PIR, w/ Low Voltage Relay	2
Acuity Controls	WV-PDT-16-R	Dual Technology Wide View Occupancy Sensor w/ Low Voltage Relay	53
Automated Logic	AMR	ARCnet to MS/TP Router	4
Blue Ridge Technologies	CTS1CH-WH	Capacitive Touch Station, 1 Channel, White (wallplate not included)	40
Blue Ridge Technologies	CTS1RL-WH	Capacitive Touch Station, 1 Raise/Lower, White (wallplate not included)	69
Blue Ridge Technologies	CTS2RL-WH	Capacitive Touch Station, 2 Raise/Lower, White (wallplate not included)	4
Blue Ridge Technologies	CTS3PR-WH	Capacitive Touch Station, 3 Preset, White (wallplate not included)	36
Blue Ridge Technologies	LS24O	Light Level Sensor, 10VDC, Indoor, 0-50FC, Recessed Ceiling Mount	2
Blue Ridge Technologies	RPDS08-08-0-00-10	Relay Panel Dimming Standard, 8 Relay Capacity	1
Blue Ridge Technologies	RPDS08-08-0-XO-10	Relay Panel Dimming Standard, 8 Relay Capacity	1
Blue Ridge Technologies	RPDS16-16-4-X1-20	Relay Panel Dimming Standard, 16 Relay Capacity	1
Blue Ridge Technologies	SCDS-00	Satellite, Dimming Standard, 120/277	45
Blue Ridge Technologies	SCDS-X1	Satellite, Dimming Standard, UL924, 120/277	6
Blue Ridge Technologies	SCSS-00	Satellite, Switching Standard, 120/277	1
Blue Ridge Technologies	ZCDS-00-00	Zone Controller, Dimming Standard, 120/277	32
Blue Ridge Technologies	ZCDS-X1-00	Zone Controller, Dimming Standard, UL924, 120/277	53
IR-Tec	BPD-500-SR-L	IR-TEC Light Level Sensor, 10VDC Linear Photodiode, Indoor, 0-50FC, Recessed Ceiling Mount	77

A C E S Automatic Controls equipment systems, inc.	Webster University - Interdisciplinary Science Building Lighting Controls 470 E. Lockwood Ave. Webster Groves, MO 63119	DRAWING NAME: Master Material List		
	FILENAME: Full Schedules	CONTRACT NO: WU-02-16	SE:JV	DE: PL
			PR: RV	DRAWING NO.: 7.1

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: August 9, 2016

Attention: stl-cac@cannondesign.com

Contact Person / WTA Field Inspector:
Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Mark de la Fuente

Project No. WT 14127.01

☐

UPS

☐

Courier

☒

Email

Copies	No.	Description
1 PDF	265700E01A	(Submittal No.'s) (R&B CxSRC)
		(Cannon #2605700-002 REV001) – (Paric #15051-) – (WES #607)
		• Lighting Controls Product Data REV1

***Remarks: Please see PAGE 2 for remarks.**

c: Kelvin Patel
Kpatel@cannondesign.com

☐ Furnish as Submitted

☒ ***Furnish as Noted**

☐ Rejected

☐ Revise & Resubmit

☐ Not Reviewed

☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

Shop Drawing Submittal Review

***Submittal Review Comments**

1. Configure lighting control system to energize emergency lights upon loss of normal power.
2. Per E0601, contractor shall coordinate a meeting between design team, owner, and lighting control system start up technician, to review sequence of operations. The intent of this meeting is to identify any programming open items that need to be resolved. And to answer any questions the technician might have regarding design intent.
3. Provide two extra "1RL" wall stations (one on stage and one in control 160B) to serve stage lighting in combination with "2RL" stations, as intended with "3RL" station callout shown on plans.
4. Level 01: Materials list calls for 2 light level sensors, but it is unclear where these are intended to go.
5. Area 2B: Missing light level sensor in Comp Lab 231.
6. Area 3B: Missing Office 311 and Commons 339.
7. Area 4B: Missing "4i" fixtures in main stairwell. Configure these fixtures to operate with "1m" fixtures in main stairwell.
8. Sequence of operations: Coordinate dim-warn settings with engineer.

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, WTASHOP <wtashop@wmtao.com>
CC: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>
Date: 8/2/2016 11:02 AM
Subject: Webster ISB - 26 5700-002 ~~REV002~~ **REV001**
Attachments: 265700-002 Lighting Controls Product Data REV1.pdf

Attached for review.

Melissa Pirtle
Construction Admin
[cid:image001.png@01D1ECAD.889AF8D0]
1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8797 * M
cannondesign.com



77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0163

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 08/01/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Lighting Controls Product Data REV1

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:		SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings		☐ Approval	☐ Approved as Submitted
☐ Letter		☐ Your Use	☐ Approved as Noted
☐ Prints		☐ As Requested	☐ Returned After Loan
☐ Change Order		☐ Review and Comment	☐ Resubmit
☐ Plans			☐ Submit
☐ Samples		SENT VIA:	☐ Returned
☐ Specifications		☐ Attached	☐ Returned for Corrections
☒ Other: Product Data		☐ Separate Cover Via:	☐ Due Date:

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		265700-002	2		08/01/2016	Lighting Controls Product Data REV1	Submitted

NOTES:

CC:

Signed: _____
Devin Gates

Transmittal

To Paric Corporation

Date 7/29/16

Job Number 11317

Job Name Webster Univ. ISB Building

Attention Devin Gates

Transmittal Number 11317-012

We are sending you:

☒ Attached

☐ Under separate cover, the following:

☐ Preliminary Drawings

☐ Samples

☐ Construction Drawings

☐ Copy of Letter

☐ Specifications

☐ Other _____

Quantity	Drawing #	Date/Revision	Description
1			Submittal for Lighting Controls (Hardware &
			Wiring Diagram) - Spec Section 26 57 00

These are transmitted as checked:

☒ For Your Review & Comment

☐ Approved As Noted

☒ For Approval

☐ Returned For Corrections

☐ For Your File

☐ Approved As Submitted

☐ As Requested

☐

Copy:

Transmittal

Enclosure

Rick Branstetter

Signed: Rick Branstetter, Project Manager