ADDENDUM 2

arcDESIGN
architecture + interiors

11 JULY 2025

IN000B – MULTI-BUILDING SCIENCE LABORATORY BUILDING & RENOVATION
Indiana University Indianapolis
IU 20230276
aD 23176

ADDENDUM NO. 2 – BID SET 5

Modifications described herein shall be incorporated into the Project Manual and the Drawings. All other Work described in the Project Manual and Drawings shall remain unchanged. Acknowledge receipt of this Addendum by inserting its number on the Bid Form. This Addendum is a part of the Contract Documents.

01. ATTACHMENTS

a. Miscellaneous
   i. 5N20-0379 - IU Indy LS & SL Lab Design - Controls Drawings.pdf

b. Specs
   i. 00 21 13 – Instructions to Bidders
   ii. 01 23 00 – Alternates BP5

c. Drawings
   i. G000 – COVER
   ii. M1.123i – MECHANICAL PLAN – THIRD FLOOR INTERSTITIAL
   iii. M2.601 – MECHANICAL SCHEDULES
   iv. E3.402 – GENERATOR POWER SINGLE LINE DIAGRAM
   v. EL0.001 – LIGHTING SYMBOLS, ABBREVIATIONS AND SCHEDULES

02. QUESTIONS / ANSWERS

a. Q: On Sheet E1.401 What are the partial bold lines on panels 3CH and 3CK representing?
   i. A: Should be existing feeders, lines were previous scope that was removed in the re-bid. No work is anticipated for these panels.

b. Q: On Sheet E1.401 What are the bold lines connecting panels (0CB + 0CC) and (0CE + 0CF) representing?
   i. A: Should be existing feeders, lines were previous scope that was removed in the re-bid. No work is anticipated for these panels.

c. Q: I see no "alternate" work called out for the SL 338 Suite Storage Room. Can you clarify what room and scope is considered an alternate?
   i. A: Alternate #06 has been adjusted to read:
      1. "ALTERNATE RENO #06 – SL CORE LAB SUITE, STORAGE ROOM SL344
         a. BASE BID: NO WORK.
         b. ALTERNATE: PROVIDE BUILDOUT OF STORAGE SPACE IN SL 344 AS SHOWN ON THE DOCUMENTS."

d. Q: On sheet E1.401, the one-line diagram does not show any demo of old/existing feeds for 0CH, 0CJ, and 0CG. As well as, 0CB and 0CE. I assume we will need included demo but it is not marked on the drawings. Please advise.
    i. A: Panels are existing to remain, panels are not removed. Existing feeds are to remain.

e. Q: On Sheet M123i Note #1 it talks about connecting the 4" chilled water lines into the 6" lines in the mechanical room , It doesn't show the path of the lines or the location of the mechanical room , can you provide additional information .
    i. A: The room that contains note #1 on sheet M123i is the mechanical room. Additional information is added to the drawing in addendum 2

03. MISCELLANEOUS

a. 5N20-0379 - IU Indy LS & SL Lab Design - Controls Drawings.pdf
    i. Provided controls drawings for HC and CIC scope

04. CHANGES TO SPECIFICATIONS

a. 00 21 13 – Instructions to Bidders
    i. Updated ALT. #06 wording for clarification

b. 01 23 00 – Alternates BP5
    i. Updated ALT. #06 wording for clarification

05. CHANGES TO DRAWINGS

a. G000 – COVER
    i. Updated ALT. #06 wording for clarification

a. EL0.001 – LIGHTING SYMBOLS, ABBREVIATIONS AND SCHEDULES
    i. Additions to The EQUAL MANUFACTURER column of the LIGHTING FIXTURE SCHEDULE - INTERIOR per attached drawing.

b. M1.123i – MECHANICAL PLAN – THIRD FLOOR INTERSTITIAL
    i. Clarify chilled water piping connection from note 1.

c. M2.601 – MECHANICAL SCHEDULES
    i. Remove unused note from top of AIR TERMINAL UNITS – HOT WATER HEAT schedule.

d. E3.402 – GENERATOR POWER SINGLE LINE DIAGRAM
    i. Clarify noting for conduit on the plan.

END OF ADDENDUM #2

IU Indy LD and SL Lab Design

5N20-0379

LEGEND

- S 20 — Main Air Supply Tube at 20 PSIG
- D-N 15-20 — Dual Air Supply Tube at 15/20 PSIG Day=15, Night=20
- S 80 — High Pressure Air Supply Tube at 80 PSIG
- Air line or Electrical Wire
- Connected Lines or Wires
- Crossing Lines or Wires, Not Connected
- In-Line Restrictor
- (7) — Pneumatic Tube indicating Tube Number
- 2/18 — Wire Symbol indicating: number of wires and size (E.G. 2 #18 wires)
- 3 2/18 — Wire Symbol indicating: Cable Destination (DA-T), Cable number (3), Number of wires and size (E.G. 2 #18 wires)
- 1 — Electrical Wire Terminal with Appropriate Number
- Item Located on Panel Face
- 1 — Drawing Revision Symbol with Appropriate Number
- NO — Opposed Blade Damper
- NO — Parallel Blade Damper
- Filter
- Air Flow Measuring Station
- Humidifier
- Fan
- Pump
- H/C — Heating or Cooling Coil
- Ductwork or Piping with Flow Direction Shown
- Gage
- Device
- Bulb Type Temperature Sensing Element Located under Shield in Outside air
- Humidity Sensing Element Located under Shield in Outside air
- Bulb Type Temperature Sensing Element Located inside Separable Socket/Well
- Strap-on Bulb Type Temperature Sensing Element
- Combination Bulb Type Temperature Sensing Element and Humidity Sensor (Duct Mount)
- Bulb Type Temperature Sensing Element
- Pressure Sensing Device
- Paddle Type Flow Switch
- Vapor Tension Temperature Sensing Element (Hi Limit)
- Vapor Tension Temperature Sensing Element (Low Limit)
- Current Sensing Switch or Combination Current Sensing switch & Command Relay
- Duct Detector (Smoke, CO, CO2)
- 2-Way Valve with Actuator (NC)
- 3-Way Valve with Actuator (C, NC, NO)

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- ☐ Instrumentation System Installation
- ☐ Building Operations Management
- ☐ Energy Conservation Control
- ☐ Training Programs
- ☐ Performance Contracting
- ☐ Planned Service Agreements

Air Conditioning
Heating
Diagnostic Services
Coil Cleaning
Refrigeration
Automatic Temperature Controls
Facility Management Systems
Fire Management
Security Management
Building Operations and Management
Water Treatment
Electrical Equipment
Emergency Generator / Lighting Equipment
Industrial Controls / Recording / Indication Equipment

PROJECT TITLE
IU Indianapolis LD and SL Lab Design

ARCHITECT	ENGINEER
, Phone:	, Phone:
MECHANICAL CONTRACTOR	**ELECTRICAL CONTRACTOR**
, Phone:	, Phone:

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Johnson Controls

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana 46250
Phone: 3176387611

SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DATE	CONTRACT NUMBER
JG	BS	DG	3/13/2025	5N20-0379

NAE-2 SL

MSTP TRUNK

DEVICE TAG	ADDRESS	TRUNK
SB-10	54	FC-2
SB-11	55	FC-2
IN072-AHU0E-VAV56	56	FC-2

3RD PARTY DEVICES		
DEVICE TAG	ADDRESS	TRUNK
HB-07	58	FC-2
HB-08	59	FC-2
HB-09A	60	FC-2
HB-09B	61	FC-2

NAE-27 SL

MSTP TRUNK

DEVICE TAG	ADDRESS	TRUNK
S3-05	29	FC-2
S3-02	30	FC-2
S3-01	32	FC-2
IN072-AHU3E-VAV33	33	FC-2
S3-03	35	FC-2
S3-04	36	FC-2
S3-09	37	FC-2
IN072-AHU3E-VAV40	40	FC-2
S3-07	46	FC-2
S3-06	60	FC-2
S3-08	61	FC-2

3RD PARTY DEVICES		
DEVICE TAG	ADDRESS	TRUNK
H3-10	77	FC-2
H3-11	78	FC-2

NAE-8 LD

MSTP TRUNK

DEVICE TAG	ADDRESS	TRUNK
IN073-AHU6-VAV27	27	FC-1
IN073-AHU6-VAV28	28	FC-1
IN073-AHU6-VAV29	29	FC-1
S2-07	30	FC-1
SB-02	7	FC-2
SB-03	93	FC-2
SB-04	95	FC-2
SB-05	96	FC-2
IN073-AHU2-VAV101	101	FC-2
S2-02	102	FC-2
S2-04	103	FC-2
S2-06	104	FC-2

3RD PARTY DEVICES		
DEVICE TAG	ADDRESS	TRUNK
H2-01A	11	FC-1
H2-01B	12	FC-1
H2-03	13	FC-1
H2-05	14	FC-1
HB-01A	19	FC-2
HB-01B	20	FC-2

NAE-25 LD

MSTP TRUNK

DEVICE TAG	ADDRESS	TRUNK
IN073-AHU7-VAV58	58	FC-1
S3-01	59	FC-1

3RD PARTY DEVICES		
DEVICE TAG	ADDRESS	TRUNK
H3-02A	72	FC-1
H3-02B	73	FC-1
H3-02C	74	FC-1
H3-02D	75	FC-1
H3-02E	76	FC-2
H3-02F	77	FC-2
H3-02G	78	FC-2
H3-02H	79	FC-2

Drawing Title

Riser Drawing

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/13/2025	BY DATE

Project Title

IU Indianapolis LD and SL Lab Design

Johnson Controls

Branch Information

BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER

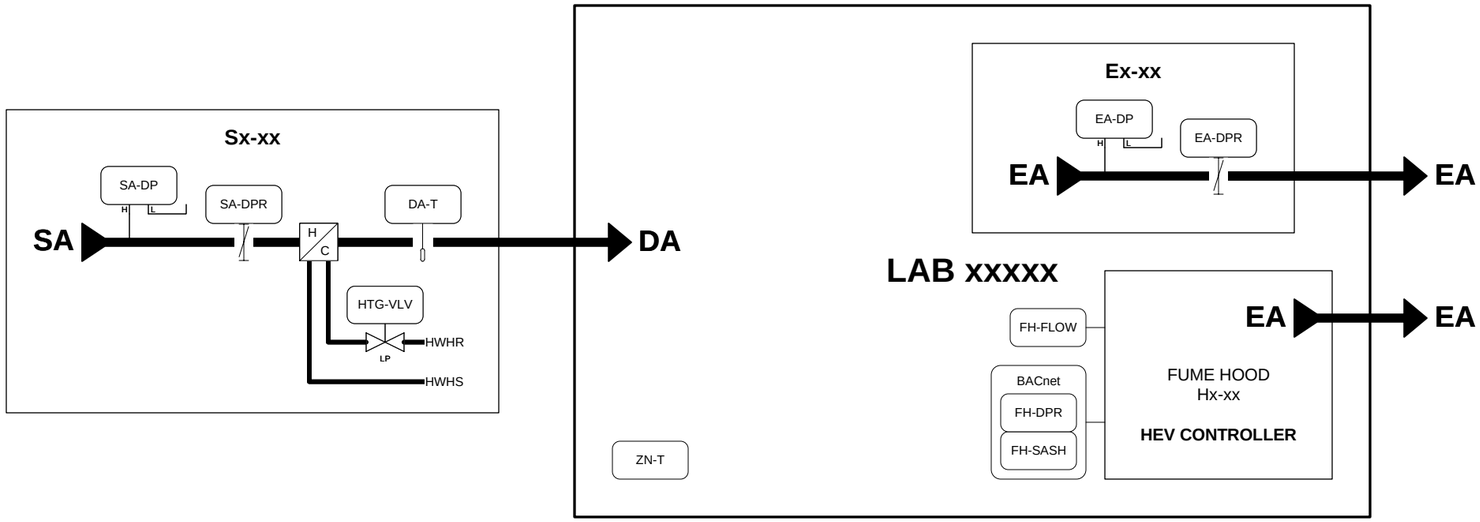
5N20-0379

DRAWING NUMBER

0.1

LAB SPACE CONTROL TYPE 1 - FLOW LAYOUT

TYPICAL OF (4)
SEE LAB SPACE SCHEDULE



Lab Space Type 1 - Controls Schedule			
Room	**Fume Hood**	**VAV**	**GEV**
SL342	H3-10	S3-10	E3-10
SL369	H3-11	S3-11	E3-11
LD220A	H2-03	S2-03	E2-05
LD220C	H2-05	S2-05	E2-05

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Drawing Title
Lab Space Type 1
Flow Layout

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Project Title
IU Indianapolis LD and SL
Lab Design

Johnson Controls

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
1.1

SEQUENCE OF OPERATION

LAB SPACE TEMPERATURE CONTROL:
When the zone temperature (ZN-T) is between the heating (EFFHTG-SP) and cooling (EFFCLG-SP) setpoints (inside of the bias), the supply air damper (SA-DPR) will be at the minimum CFM (SA-F) and there will be no mechanical heating. On a rise in zone temperature (ZN-T) above the cooling setpoint (EFFCLG-SP), the supply air damper (SA-DPR) will modulate between the minimum and maximum CFM setpoints (SAF-MIN, SAF-MAX) to increase the CFM (SA-F) and there will be no mechanical heating. On a drop in zone temperature below the heating setpoint (EFFHTG-SP), heating mode is enabled. When in heating mode, the reheat coil (HTG-VLV) will modulate to maintain the discharge air temperature (DA-T) to its setpoint. If the reheat coil (HTG-VLV) is 100% open, upon a continued call for heating, the supply air damper (SA-DPR) will modulate to increase the CFM (SA-F). When the reheat coil (HTG-VLV) drops below 90% open, the supply air damper (SA-DPR) will reset back down to its minimum CFM.

FUME HOOD EXHAUST CONTROL:
Values for fume hood sash position (FH-SASH) and damper position (FH-DPR) will be shared with BAS over BACnet. Fume hood airflow (FH-FLOW) will be hardwired to DDC controller. When the hood sash is proven open (FH-SASH), the fume hood exhaust valve controller will modulate to maintain constant fume hood face velocity of 80 FPM. When the hood sash is proven closed (FH-SASH), the airflow will be at a minimum.

GENERAL EXHAUST CONTROL:
The general exhaust damper (EA-DPR) will modulate to maintain exhaust airflow setpoint. BAS will sum all room supply and exhaust flows and damper actuators will be modulated to maintain constant total supply / total exhaust airflow offset in order to maintain room pressure.

BILL OF MATERIAL

DESIGNATION	QTY.	CODE NUMBER.	DESCRIPTION
FIELD MOUNTED	44		
DA-T	4	TE-635GV-2	DUCT PROBE TEMPERATURE SENSOR, 1K PLATINUM SENSOR 4 IN. PROBE
EA-DP	4	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	4	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	4	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
EA-DPR	4	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
HTG-VLV	4	VALVE	SEE VALVE SCHEDULE
SA-DPR	4	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
SA-DP	4	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	4	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	4	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
ZN-T	4	NSB8BTN040-0	NETWORK SENSOR, 3"X4.5" MS/TP, TEMP, WHITE, LOGO

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Drawing Title
Lab Space Type 1 Control BOM and Sequence

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

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CONTRACT NUMBER
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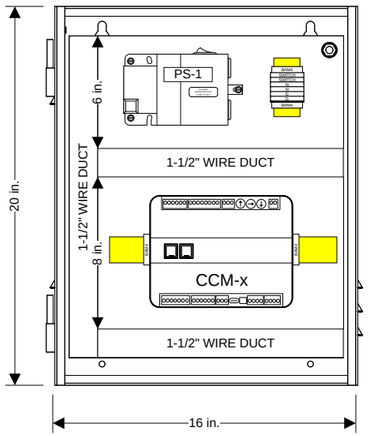
DRAWING NUMBER
1.2

BILL OF MATERIALS

Designation	Qty	Part Number	Description
ENCLOSURE	4	PAN-ENC1620WDP	16X20X6.62 ENCLOSURE SOLID DOOR PERFORATED SUB-PANEL STEEL UL TYPE 1
CCM-x	4	M4-CCM09090-0	18 PT CRITICAL CNTL, 7 UI, 2 BI, 4 CO, 2 AO, 3 BO, MSTP
PS-1	4	PAN-PWRSP	SWITCH AND TWO 120 VAC OUTLETS PANEL POWER SUPPLY 96VA 120/24VAC POWER SWITCH 120VAC OUTLETSPOWER
TERM BLK	16	BAM4	END STOP, TERM BLK
	4	DIN-3F	DIN RAIL
	4	FEM6	END SECTION, TERM BLK
	8	M4/6	DIN RAIL TERM BLK, 6mm, GRAY
	8	M4/6.P	GROUNDING LUG GREEN/YELLOW, 6mm,
	8	M4/6SNBT	120V BLADE SWITCH
WIRE DUCT	4	T1-1530G	WIRE DUCT, 1.5" W x 3" H x 6.5FT, GRAY

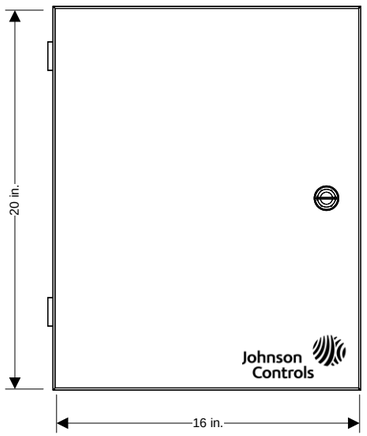
PANEL LAYOUT

(TYPICAL OF 4)
SCALE: 1/8" = 1"



FACE LAYOUT

(TYPICAL OF 4)
SCALE: 1/8" = 1"



Drawing Title **Lab Space Type 1 Control Panel Layout**								
REFERENCE DRAWING		NO.	REVISION-LOCATION			ECN	DATE	BY
Sales Engineer	Project Manager	Application Engineer	DRAWN			APPROVED		
JG	BS	DG	BY DRG	DATE 3/12/2025		BY	DATE	
Project Title **IU Indianapolis LD and SL Lab Design**			Johnson Controls	Branch Information BSNA - INDIANAPOLIS, IN 5920 Castleway West Dr, Indianapolis, Indiana 46250 Phone: 3176387611		CONTRACT NUMBER **5N20-0379** DRAWING NUMBER **1.3**		

LAB SPACE TYPE 1 - POINT SCHEDULE

TYPICAL OF (4)
SERVING: SEE ROOM SCHEDULE

Electrician/Fitter		Point Information			Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		IN0xx-xxxx-xxxxx			CCM09090											Power to Controller
		IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x								BacNet FC Bus
	UI IN-1	Sx-xx	DA-T	Discharge Air Temp	CCM09090	MS/TP	2	x	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	F131	
	UI IN-2	Hx-xx	FH-FLOW	Exhaust Airflow	CCM09090	MS/TP	2	x	UI IN-2		IN2, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-3	Ex-xx	EA-DP	Exhaust Air Diff Pressure	CCM09090	MS/TP	2	x	UI IN-3		IN3, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-4	Sx-xx	SA-DP	Supply Air Diff Pressure	CCM09090	MS/TP	2	x	UI IN-4		IN4, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-5	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	UI IN-5							
	UI IN-6	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	UI IN-6							
	UI IN-7	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	UI IN-7							
	BI IN-1	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	BI IN-1							
	BI IN-2	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	BI IN-2							
	BO OUT-1	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	BO OUT-1							
	BO OUT-2	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	BO OUT-2							
	BO OUT-3	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	BO OUT-3							
	CO OUT-1	Sx-xx	SA-DPR	Supply Air Damper Output	CCM09090	MS/TP	2	x	CO OUT-1		OUT1, OCOM1	2/22	See wiring detail	Belimo	Y202	
	CO OUT-2	Ex-xx	EA-DPR	Exhaust Air Damper Output	CCM09090	MS/TP	2	x	CO OUT-2		OUT2, OCOM2	2/22	See wiring detail	Belimo	Y202	
	CO OUT-3	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	CO OUT-3							
	CO OUT-4	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	CO OUT-4							
	AO OUT-1	Sx-xx	HTG-VLV	Heating Valve Output	CCM09090	MS/TP	2	x	AO OUT-1		OUT1, OCOM1,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	F250	
	AO OUT-2	IN0xx-xxxx-xxxxx			CCM09090	MS/TP	2	x	AO OUT-2							
		IN0xx-xxxx-xxxxx			NET STAT											
		IN0xx-xxxx-xxxxx			NET STAT	SA Bus	2	199								BacNet SA Bus
	STAT	IN0xx-xxxx-xxxxx	ZN-T	Zone Temperature	NET STAT	SA Bus	2	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title

Lab Space Type 1 Control Point Schedule

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

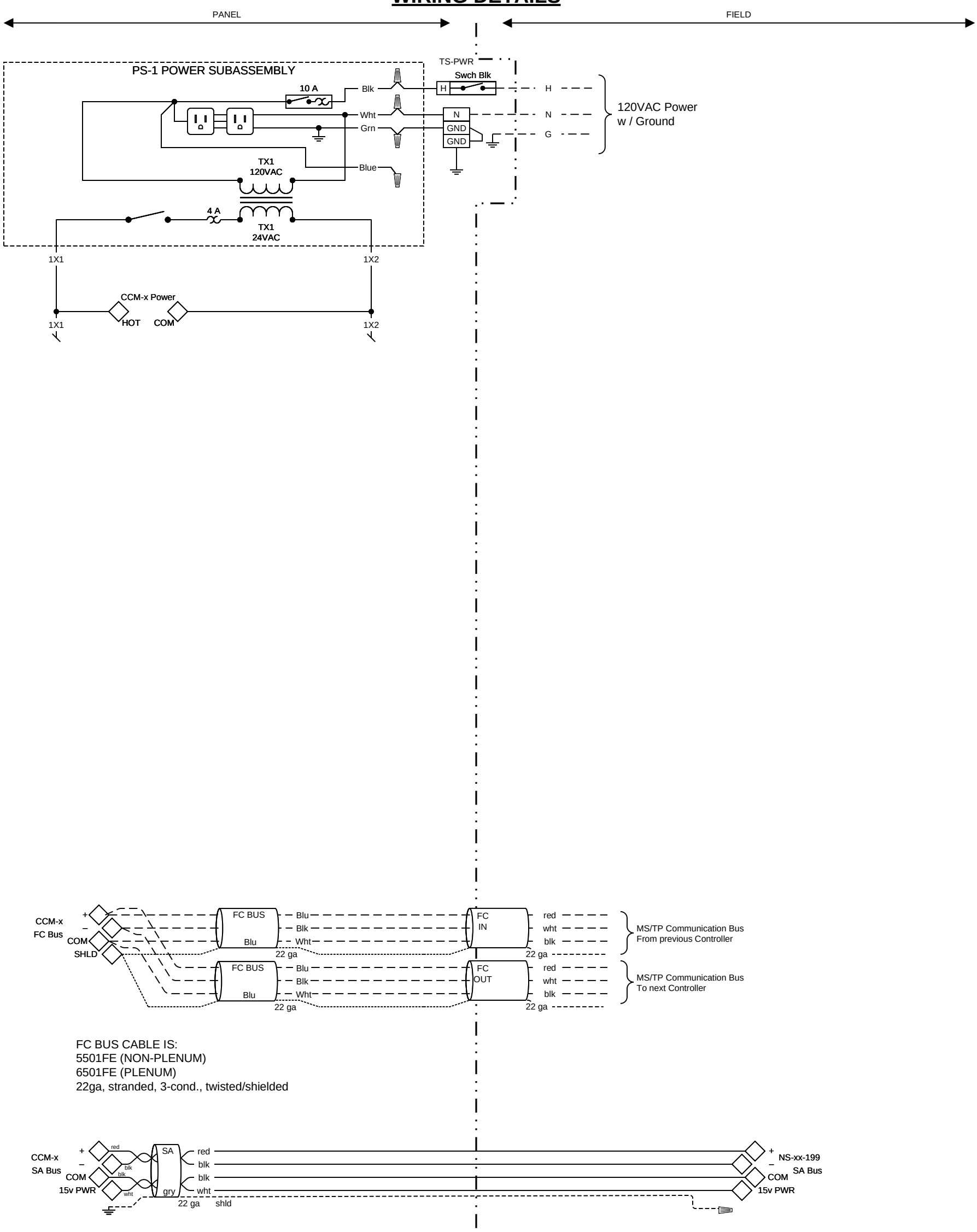
Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
1.4

WIRING DETAILS



FC BUS CABLE IS:
5501FE (NON-PLENUM)
6501FE (PLENUM)
22ga, stranded, 3-cond., twisted/shielded

SA BUS CABLE IS:
5541FE (NON-PLENUM)
6541FE (PLENUM)
22ga, stranded, (2) twisted pairs, shielded

DRAWING NUMBER **1.5**

CONTRACT NUMBER **5N20-0379**

APPROVED BY / DATE

DRAWING TITLE
Lab Space Type 1 Control Power Wiring Details

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY / DATE
1.5 LAB SPACE TYPE 1 - POWER WIRING DETAILS.VSDX	07/10/25 3:27 PM		JG	BS	DG	DRG 3/12/2025

PROJECT NAME
IU Indianapolis LD and SL Lab Design

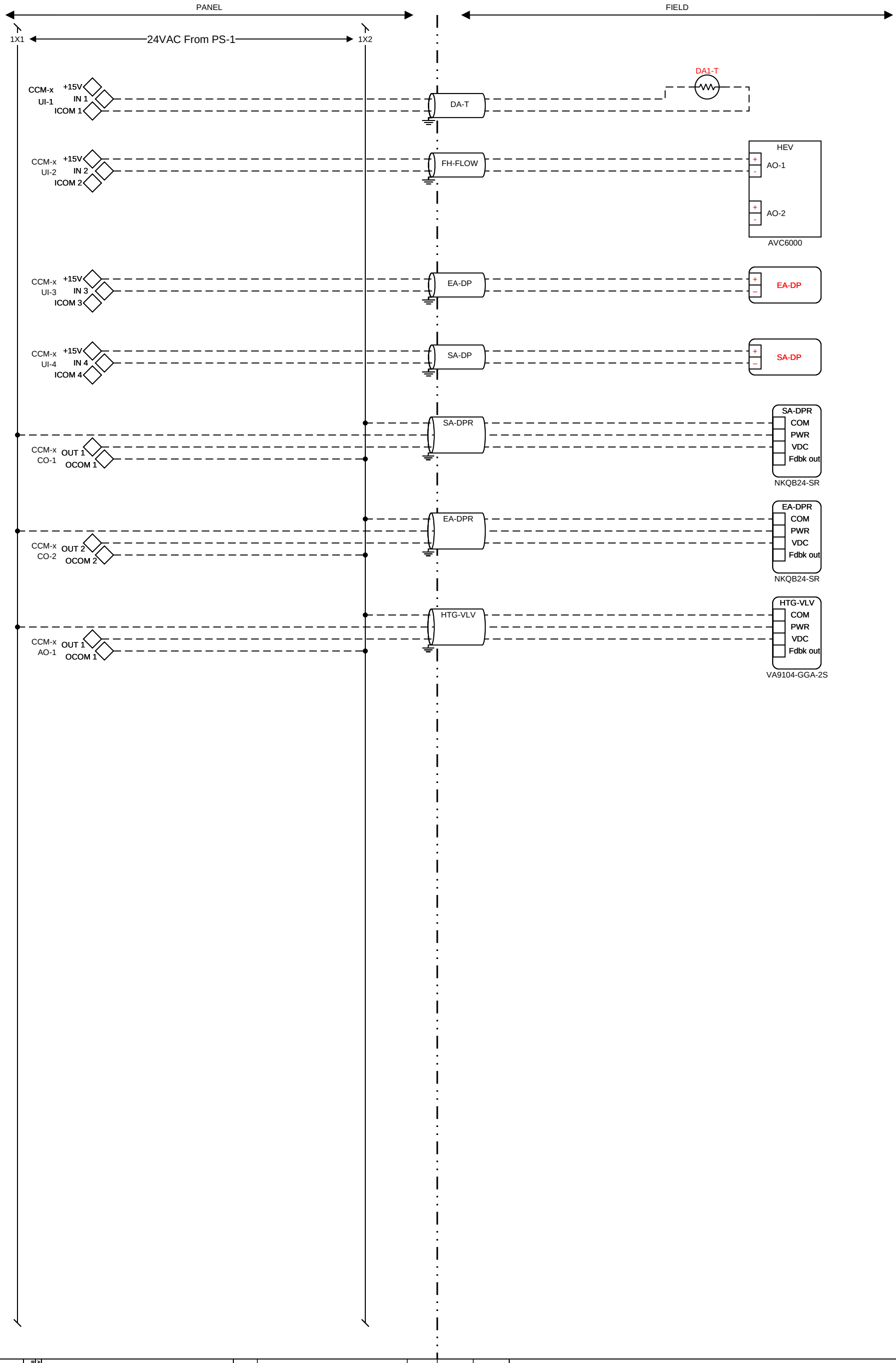
Johnson Controls

BRANCH INFORMATION
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana 46250
Phone: 3176387611

Wiring Notes

- nn — Terminal in DDC controller. nn indicates terminal number.
- nn — Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
- nn — Cable-no shield. nn indicates cable number (labeled at both ends of cable).
- — —nnn — · — Indicates field-installed wiring. nnn indicates wire number (labeled at both ends of wire).
- ——nnn—— Indicates factory wiring. nnn indicates wire number (labeled at both ends of wire).
- [nnn] Terminal in JCI panel. nnn indicates terminal number.

WIRING DIAGRAM



DRAWING NUMBER	CONTRACT NUMBER	APPROVED BY / DATE	DRAWING TITLE
1.6	5N20-0379		Lab Space Type 1 Control Wiring Details 2

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY	DRAWN DATE
1.6 LAB SPACE TYPE 1 - WIRING DETAILS 2.VSDX	07/10/25 3:28 PM	0000040	JG	BS	DG	DRG	3/12/2025

PROJECT NAME

IU Indianapolis LD and SL Lab Design

Johnson Controls

BRANCH INFORMATION

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Phone: 3176387611

Wiring Notes

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- nn — Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
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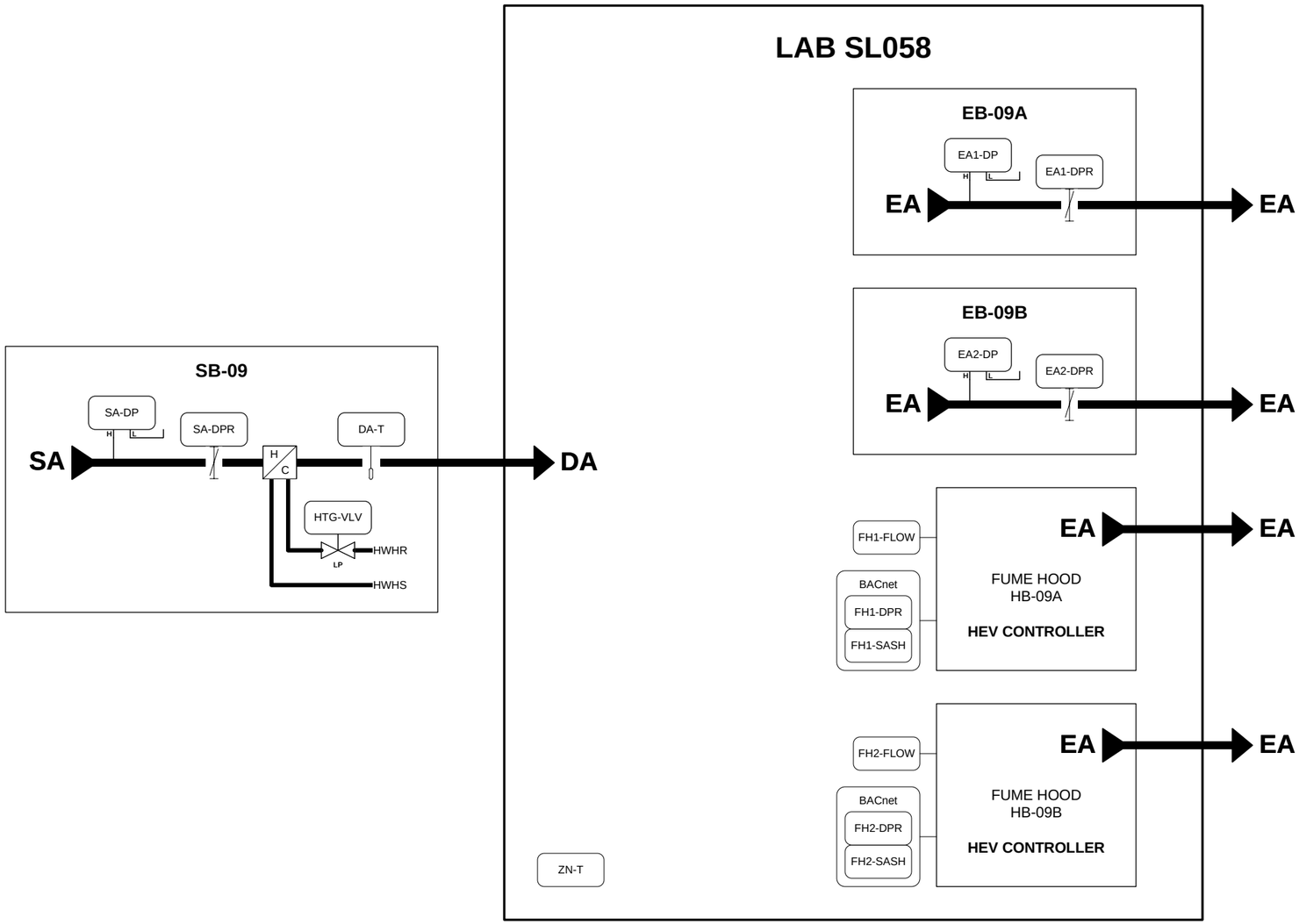
- nnn — Indicates factory wiring. nnn indicates wire number (labeled at both ends of wire).
- nnn — Terminal in JCI panel. nnn indicates terminal number.

LAB SPACE CONTROL TYPE 2 - FLOW LAYOUT

SERVING SL058



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Drawing Title

Lab Space Type 2 Control Flow Layout

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Johnson Controls

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5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
2.1

SEQUENCE OF OPERATION

LAB SPACE TEMPERATURE CONTROL:
When the zone temperature (ZN-T) is between the heating (EFFHTG-SP) and cooling (EFFCLG-SP) setpoints (inside of the bias), the supply air damper (SA-DPR) will be at the minimum CFM (SA-F) and there will be no mechanical heating. On a rise in zone temperature (ZN-T) above the cooling setpoint (EFFCLG-SP), the supply air damper (SA-DPR) will modulate between the minimum and maximum CFM setpoints (SAF-MIN, SAF-MAX) to increase the CFM (SA-F) and there will be no mechanical heating. On a drop in zone temperature below the heating setpoint (EFFHTG-SP), heating mode is enabled. When in heating mode, the reheat coil (HTG-VLV) will modulate to maintain the discharge air temperature (DA-T) to its setpoint. If the reheat coil (HTG-VLV) is 100% open, upon a continued call for heating, the supply air damper (SA-DPR) will modulate to increase the CFM (SA-F). When the reheat coil (HTG-VLV) drops below 90% open, the supply air damper (SA-DPR) will reset back down to its minimum CFM.

FUME HOOD EXHAUST CONTROL:
Values for fume hood sash positions (FH1-SASH, FH2-SASH) and damper positions (FH1-DPR, FH2-DPR) will be shared with BAS over BACnet. Fume hood airflow (FH1-FLOW, FH2-FLOW) will be hardwired to DDC controller. When the hood sash is proven open for one or both fume hoods (FH1-SASH, FH2-SASH), the associated fume hood exhaust valve controller will modulate to maintain constant fume hood face velocity of 80 FPM. When either hood sash is proven closed (FH1-SASH, FH2-SASH), the airflow for the associated exhaust valve will be at a minimum.

GENERAL EXHAUST CONTROL:
The general exhaust dampers (EA1-DPR, EA2-DPR) will modulate to maintain exhaust airflow setpoint. BAS will sum all room supply and exhaust flows and damper actuators will be modulated to maintain constant total supply / total exhaust airflow offset in order to maintain room pressure.

BILL OF MATERIAL

DESIGNATION	QTY.	CODE NUMBER.	DESCRIPTION
FIELD MOUNTED	15		
DA-T	1	TE-635GV-2	DUCT PROBE TEMPERATURE SENSOR, 1K PLATINUM SENSOR 4 IN. PROBE
EAx-DP	2	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	2	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	2	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
EAx-DPR	2	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
HTG-VLV	1	VALVE	SEE VALVE SCHEDULE
SA-DPR	1	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
SA-DP	1	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	1	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	1	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
ZN-T	1	NSB8BTN040-0	NETWORK SENSOR, 3"X4.5" MS/TP, TEMP, WHITE, LOGO

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Drawing Title
Lab Space Type 2 Control BOM and Sequence

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

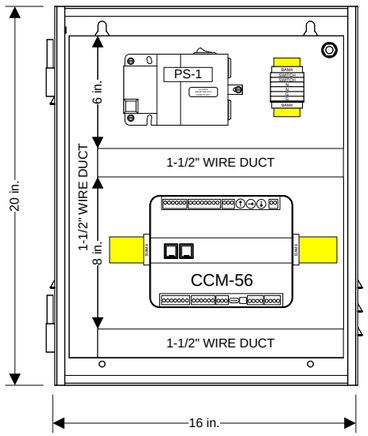
DRAWING NUMBER
2.2

BILL OF MATERIALS

Designation	Qty	Part Number	Description
ENCLOSURE	1	PAN-ENC1620WDP	16X20X6.62 ENCLOSURE SOLID DOOR PERFORATED SUB-PANEL STEEL UL TYPE 1
CCM-56	1	M4-CCM09090-0	18 PT CRITICAL CNTL, 7 UI, 2 BI, 4 CO, 2 AO, 3 BO, MSTP
PS-1	1	PAN-PWRSP	SWITCH AND TWO 120 VAC OUTLETS PANEL POWER SUPPLY 96VA 120/24VAC POWER SWITCH 120VAC OUTLETSPOWER
TERM BLK	4	BAM4	END STOP, TERM BLK
	1	DIN-3F	DIN RAIL
	1	FEM6	END SECTION, TERM BLK
	2	M4/6	DIN RAIL TERM BLK, 6mm, GRAY
	2	M4/6.P	GROUNDING LUG GREEN/YELLOW, 6mm,
	2	M4/6SNBT	120V BLADE SWITCH
WIRE DUCT	1	T1-1530G	WIRE DUCT, 1.5" W x 3" H x 6.5FT, GRAY

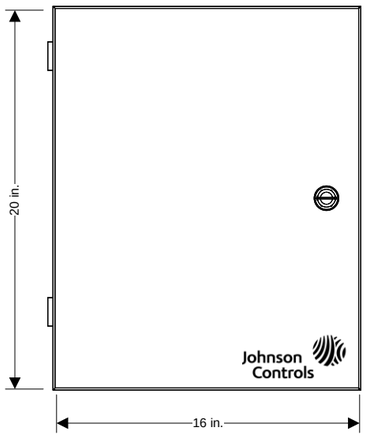
PANEL LAYOUT

SCALE: 1/8" = 1"



FACE LAYOUT

SCALE: 1/8" = 1"



Drawing Title

Lab Space Type 2 Control Panel Layout

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Project Title

IU Indianapolis LD and SL Lab Design

Johnson Controls

Branch Information

BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER

5N20-0379

DRAWING NUMBER

2.3

LAB SPACE TYPE 2 - POINT SCHEDULE

SERVING LAB SL058

Electrician/Fitter		Point Information			Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		IN072-AHU0E-VAV56			CCM09090											Power to Controller
		IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56								BacNet FC Bus
	UI IN-1	SB-09	DA-T	Discharge Air Temp	CCM09090	MS/TP	2	56	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	F131	
	UI IN-2	HB-09A	FH1-FLOW	Exhaust Airflow (HB-09A)	CCM09090	MS/TP	2	56	UI IN-2		IN2, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-3	HB-09B	FH2-FLOW	Exhaust Airflow (HB-09B)	CCM09090	MS/TP	2	56	UI IN-3		IN3, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-4	EB-09A	EA1-DP	Exhaust Air Diff Pressure (EB-09A)	CCM09090	MS/TP	2	56	UI IN-4		IN4, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-5	EB-09B	EA2-DP	Exhaust Air Diff Pressure (EB-09B)	CCM09090	MS/TP	2	56	UI IN-5		IN5, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-6	SB-09	SA-DP	Supply Air Diff Pressure	CCM09090	MS/TP	2	56	UI IN-6		IN6, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-7	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	UI IN-7							
	BI IN-1	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	BI IN-1							
	BI IN-2	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	BI IN-2							
	BO OUT-1	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	BO OUT-1							
	BO OUT-2	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	BO OUT-2							
	BO OUT-3	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	BO OUT-3							
	CO OUT-1	SB-09	SA-DPR	Supply Air Damper Output	CCM09090	MS/TP	2	56	CO OUT-1		OUT1, OCOM1	2/22	See wiring detail	Belimo	Y202	
	CO OUT-2	EB-09A	EA1-DPR	Exhaust Air Damper Output (EB-09A)	CCM09090	MS/TP	2	56	CO OUT-2		OUT2, OCOM2	2/22	See wiring detail	Belimo	Y202	
	CO OUT-3	EB-09B	EA2-DPR	Exhaust Air Damper Output (EB-09B)	CCM09090	MS/TP	2	56	CO OUT-3		OUT3, OCOM3	2/22	See wiring detail	Belimo	Y202	
	CO OUT-4	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	CO OUT-4							
	AO OUT-1	SB-09	HTG-VLV	Heating Valve Output	CCM09090	MS/TP	2	56	AO OUT-1		OUT1, OCOM1,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	F250	
	AO OUT-2	IN072-AHU0E-VAV56			CCM09090	MS/TP	2	56	AO OUT-2							
		IN072-AHU0E-VAV56			NET STAT											
		IN072-AHU0E-VAV56			NET STAT	SA Bus	2	199								BacNet SA Bus
	STAT	IN072-AHU0E-VAV56	ZN-T	Zone Temperature	NET STAT	SA Bus	2	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title

Lab Space Type 2 Control Point Schedule

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

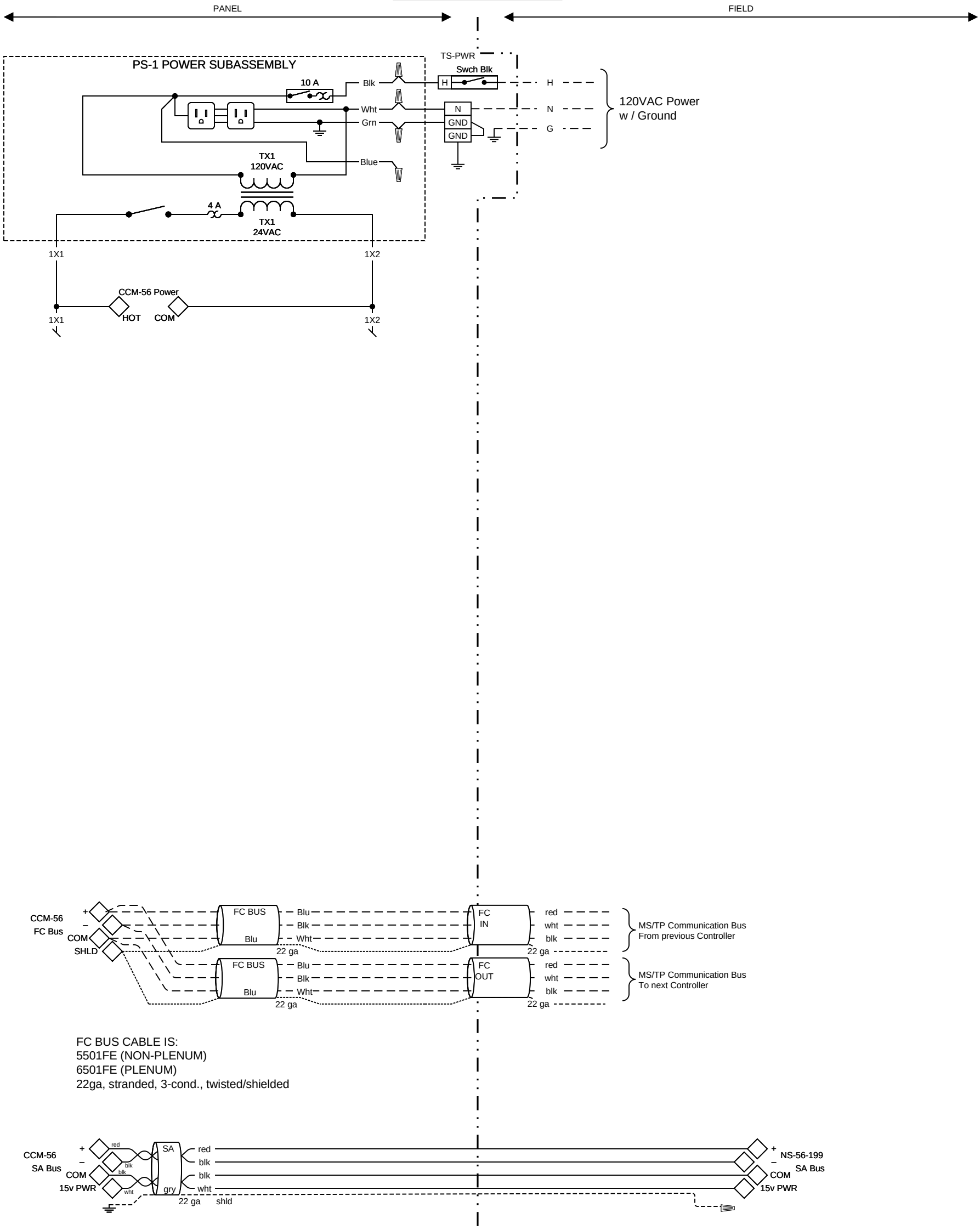
Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/13/2025	BY DATE

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
2.4

WIRING DETAILS



FC BUS CABLE IS:
5501FE (NON-PLENUM)
6501FE (PLENUM)
22ga, stranded, 3-cond., twisted/shielded

SA BUS CABLE IS:
5541FE (NON-PLENUM)
6541FE (PLENUM)
22ga, stranded, (2) twisted pairs, shielded

DRAWING NUMBER **2.5**

CONTRACT NUMBER **5N20-0379**

APPROVED BY / DATE

DRAWING TITLE
Lab Space Type 2 Control Power Wiring Details

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY	DRAWN DATE
3.5 LAB SPACE TYPE 3 - POWER WIRING DETAILS.VSDX	07/10/25 3:28 PM		JG	BS	DG	DRG	3/13/2025

PROJECT NAME
IU Indianapolis LD and SL Lab Design

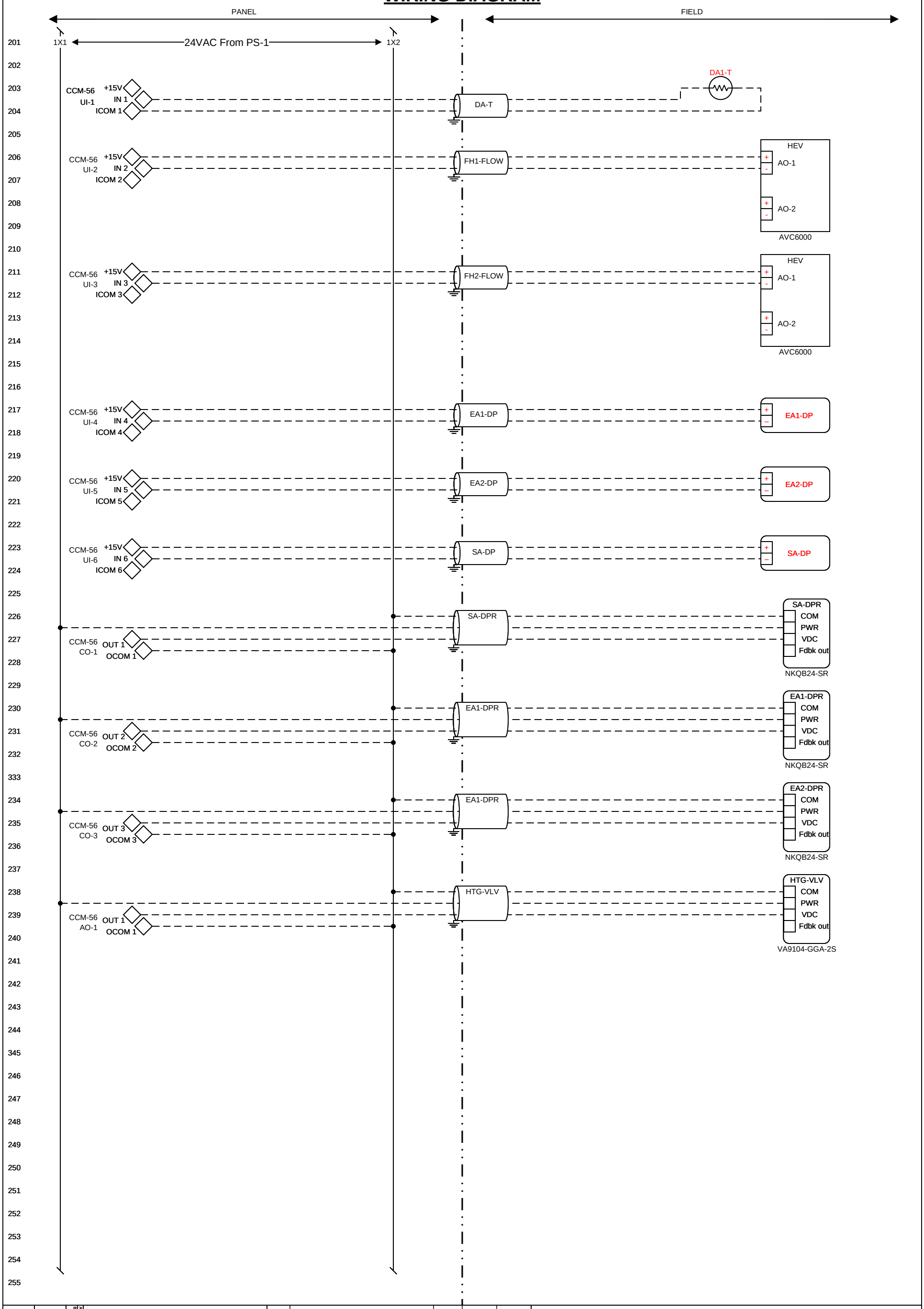
Johnson Controls

BRANCH INFORMATION
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana 46250
Phone: 3176387611

Wiring Notes

- nn — Terminal in DDC controller. nn indicates terminal number.
- nn — Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
- nn — Cable-no shield. nn indicates cable number (labeled at both ends of cable).
- — —nnn — · — Indicates field-installed wiring. nnn indicates wire number (labeled at both ends of wire).
- ——nnn—— Indicates factory wiring. nnn indicates wire number (labeled at both ends of wire).
- [nnn] Terminal in JCI panel. nnn indicates terminal number.

WIRING DIAGRAM



Wiring Notes

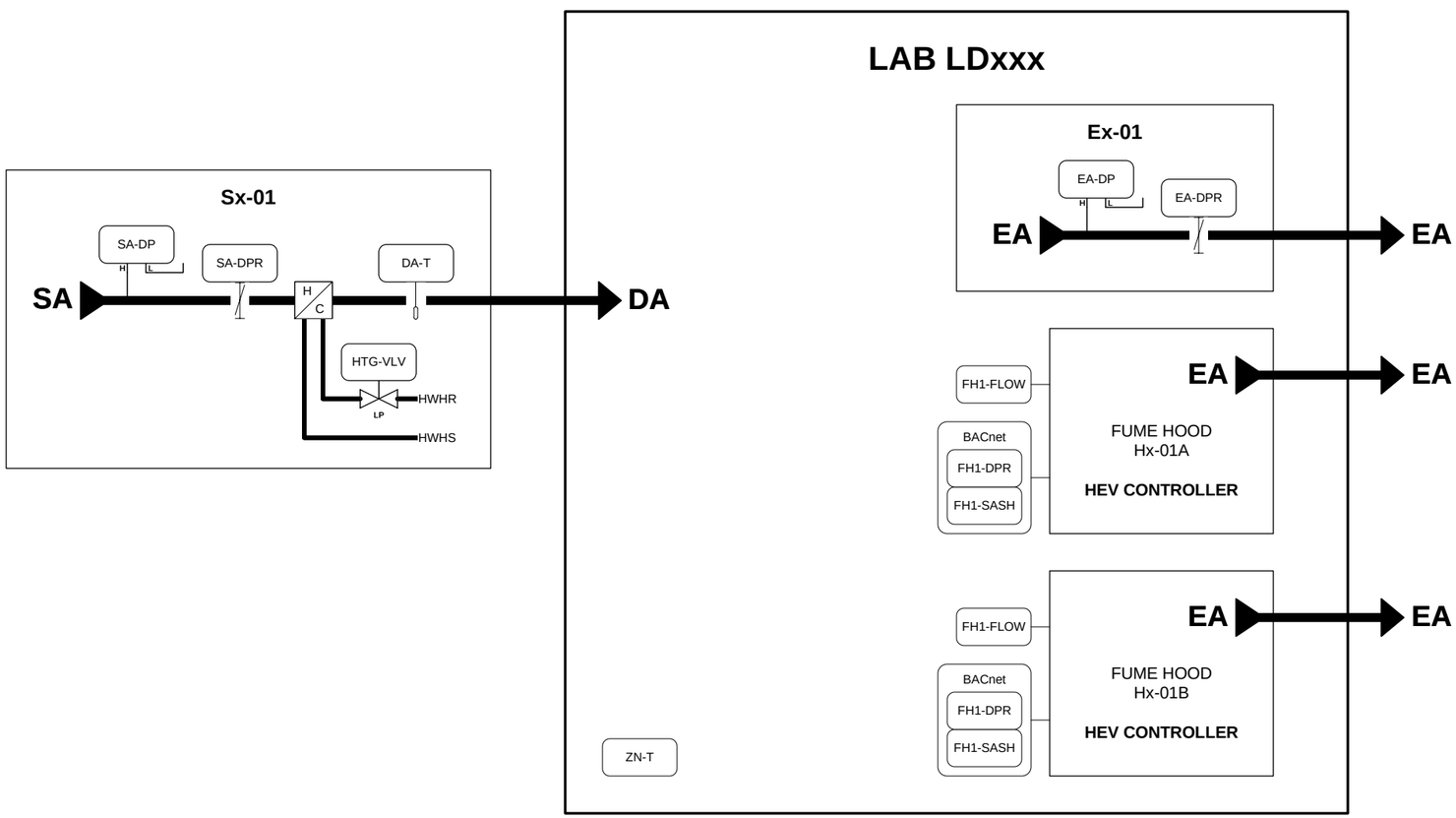
- Terminal in DDC controller. nn indicates terminal number.
- Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
- Cable-no shield. nn indicates cable number (labeled at both ends of cable).
- Indicates field-installed wiring. nnn indicates wire number (labeled at both ends of wire).
- Indicates factory wiring. nnn indicates wire number (labeled at both ends of wire).
- Terminal in JCI panel. nnn indicates terminal number.

DRAWING NUMBER 2.6	CONTRACT NUMBER 5N20-0379	APPROVED BY / DATE	DRAWING TITLE: Lab Space Type 2 Control Wiring Details 2	NO.	REVISION-LOCATION	ECN	DATE	BY		
			FILENAME: 3.6 LAB SPACE TYPE 3 - WIRING DETAILS 2.VSDX	REVISION DATE/TIME: 07/10/25 3:29 PM	SLW: 0000040	SALES ENGINEER: JG	PROJECT MANAGER: BS	APPLICATION ENGINEER: DG	DRAWN BY: DRG	DATE: 3/13/2025
			PROJECT NAME: IU Indianapolis LD and SL Lab Design							

BRANCH INFORMATION
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana 46250
Phone: 3176387611

LAB SPACE CONTROL TYPE 3 - FLOW LAYOUT

TYPICAL OF (2)
SEE LAB SPACE SCHEDULE



Lab Space Type 3 - Controls Schedule			
Room	**Fume Hood**	**VAV**	**GEV**
LD055	HB-01A	SB-01	EB-01
	HB-01B		
LD204	H2-01A	S2-01	E2-01
	H2-01B		

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Drawing Title

Lab Space Type 3 Control Flow Layout

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Project Title

IU Indianapolis LD and SL Lab Design

Johnson Controls

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
3.1

SEQUENCE OF OPERATION

LAB SPACE TEMPERATURE CONTROL:
When the zone temperature (ZN-T) is between the heating (EFFHTG-SP) and cooling (EFFCLG-SP) setpoints (inside of the bias), the supply air damper (SA-DPR) will be at the minimum CFM (SA-F) and there will be no mechanical heating. On a rise in zone temperature (ZN-T) above the cooling setpoint (EFFCLG-SP), the supply air damper (SA-DPR) will modulate between the minimum and maximum CFM setpoints (SAF-MIN, SAF-MAX) to increase the CFM (SA-F) and there will be no mechanical heating. On a drop in zone temperature below the heating setpoint (EFFHTG-SP), heating mode is enabled. When in heating mode, the reheat coil (HTG-VLV) will modulate to maintain the discharge air temperature (DA-T) to its setpoint. If the reheat coil (HTG-VLV) is 100% open, upon a continued call for heating, the supply air damper (SA-DPR) will modulate to increase the CFM (SA-F). When the reheat coil (HTG-VLV) drops below 90% open, the supply air damper (SA-DPR) will reset back down to its minimum CFM.

FUME HOOD EXHAUST CONTROL:
Values for fume hood sash positions (FH1-SASH, FH2-SASH) and damper positions (FH1-DPR, FH2-DPR) will be shared with BAS over BACnet. Fume hood airflow (FH1-FLOW, FH2-FLOW) will be hardwired to DDC controller. When the hood sash is proven open for one or both fume hoods (FH1-SASH, FH2-SASH), the associated fume hood exhaust valve controller will modulate to maintain constant fume hood face velocity of 80 FPM. When either hood sash is proven closed (FH1-SASH, FH2-SASH), the airflow for the associated exhaust valve will be at a minimum.

GENERAL EXHAUST CONTROL:
The general exhaust damper (EA-DPR) will modulate to maintain exhaust airflow setpoint. BAS will sum all room supply and exhaust flows and damper actuators will be modulated to maintain constant total supply / total exhaust airflow offset in order to maintain room pressure.

BILL OF MATERIAL

DESIGNATION	QTY.	CODE NUMBER.	DESCRIPTION
FIELD MOUNTED	22		
DA-T	2	TE-635GV-2	DUCT PROBE TEMPERATURE SENSOR, 1K PLATINUM SENSOR 4 IN. PROBE
EA-DP	2	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	2	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	2	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
EA-DPR	2	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
HTG-VLV	2	VALVE	SEE VALVE SCHEDULE
SA-DPR	2	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
SA-DP	2	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	2	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	2	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
ZN-T	2	NSB8BTN040-0	NETWORK SENSOR, 3"X4.5" MS/TP, TEMP, WHITE, LOGO

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Drawing Title
Lab Space Type 3 Control BOM and Sequence

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Johnson Controls

Branch Information
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5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

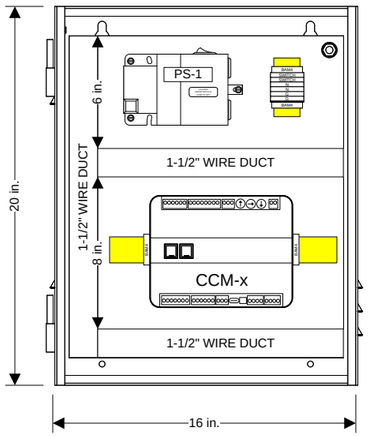
DRAWING NUMBER
3.2

BILL OF MATERIALS

Designation	Qty	Part Number	Description
ENCLOSURE	2	PAN-ENC1620WDP	16X20X6.62 ENCLOSURE SOLID DOOR PERFORATED SUB-PANEL STEEL UL TYPE 1
CCM-x	2	M4-CCM09090-0	18 PT CRITICAL CNTL, 7 UI, 2 BI, 4 CO, 2 AO, 3 BO, MSTP
PS-1	2	PAN-PWRSP	SWITCH AND TWO 120 VAC OUTLETS PANEL POWER SUPPLY 96VA 120/24VAC POWER SWITCH 120VAC OUTLETSPOWER
TERM BLK	8	BAM4	END STOP, TERM BLK
	2	DIN-3F	DIN RAIL
	2	FEM6	END SECTION, TERM BLK
	4	M4/6	DIN RAIL TERM BLK, 6mm, GRAY
	4	M4/6.P	GROUNDING LUG GREEN/YELLOW, 6mm,
	4	M4/6SNBT	120V BLADE SWITCH
WIRE DUCT	2	T1-1530G	WIRE DUCT, 1.5" W x 3" H x 6.5FT, GRAY

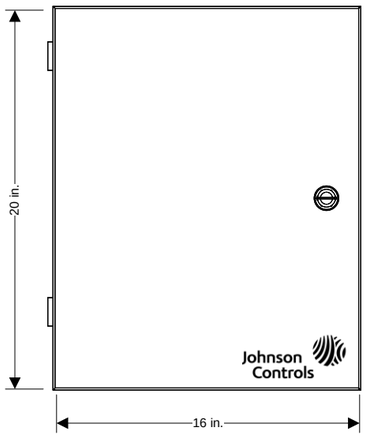
PANEL LAYOUT

(TYPICAL OF 2)
SCALE: 1/8" = 1"



FACE LAYOUT

(TYPICAL OF 2)
SCALE: 1/8" = 1"



Drawing Title **Lab Space Type 3 Control Panel Layout**								
REFERENCE DRAWING		NO.	REVISION-LOCATION			ECN	DATE	BY
Sales Engineer	Project Manager	Application Engineer	DRAWN			APPROVED		
JG	BS	DG	BY DRG	DATE 3/12/2025		BY	DATE	
Project Title **IU Indianapolis LD and SL Lab Design**			Johnson Controls	Branch Information BSNA - INDIANAPOLIS, IN 5920 Castleway West Dr, Indianapolis, Indiana 46250 Phone: 3176387611		CONTRACT NUMBER **5N20-0379** DRAWING NUMBER **3.3**		

LAB SPACE TYPE 3 - POINT SCHEDULE

TYPICAL OF (2)
SERVING: SEE ROOM SCHEDULE

Electrician/Fitter		Point Information			Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		IN073-AHUx-xxxxx			CCM09090											Power to Controller
		IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x								BacNet FC Bus
	UI IN-1	Sx-01	DA-T	Discharge Air Temp	CCM09090	MS/TP	x	x	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	F131	
	UI IN-2	Hx-01A	FH1-FLOW	Exhaust Airflow (Hx-01A)	CCM09090	MS/TP	x	x	UI IN-2		IN2, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-3	Hx-01B	FH2-FLOW	Exhaust Airflow (Hx-01B)	CCM09090	MS/TP	x	x	UI IN-3		IN3, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-4	Ex-01	EA-DP	Exhaust Air Diff Pressure	CCM09090	MS/TP	x	x	UI IN-4		IN4, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-5	Sx-01	SA-DP	Supply Air Diff Pressure	CCM09090	MS/TP	x	x	UI IN-5		IN5, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-6	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	UI IN-6							
	UI IN-7	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	UI IN-7							
	BI IN-1	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	BI IN-1							
	BI IN-2	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	BI IN-2							
	BO OUT-1	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	BO OUT-1							
	BO OUT-2	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	BO OUT-2							
	BO OUT-3	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	BO OUT-3							
	CO OUT-1	Sx-01	SA-DPR	Supply Air Damper Output	CCM09090	MS/TP	x	x	CO OUT-1		OUT1, OCOM1	2/22	See wiring detail	Belimo	Y202	
	CO OUT-2	Ex-01	EA-DPR	Exhaust Air Damper Output	CCM09090	MS/TP	x	x	CO OUT-2		OUT2, OCOM2	2/22	See wiring detail	Belimo	Y202	
	CO OUT-3	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	CO OUT-3							
	CO OUT-4	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	CO OUT-4							
	AO OUT-1	Sx-01	HTG-VLV	Heating Valve Output	CCM09090	MS/TP	x	x	AO OUT-1		OUT1, OCOM1,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	F250	
	AO OUT-2	IN073-AHUx-xxxxx			CCM09090	MS/TP	x	x	AO OUT-2							
		IN073-AHUx-xxxxx			NET STAT											
		IN073-AHUx-xxxxx			NET STAT	SA Bus	x	199								BacNet SA Bus
	STAT	IN073-AHUx-xxxxx	ZN-T	Zone Temperature	NET STAT	SA Bus	x	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title

Lab Space Type 3 Control Point Schedule

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

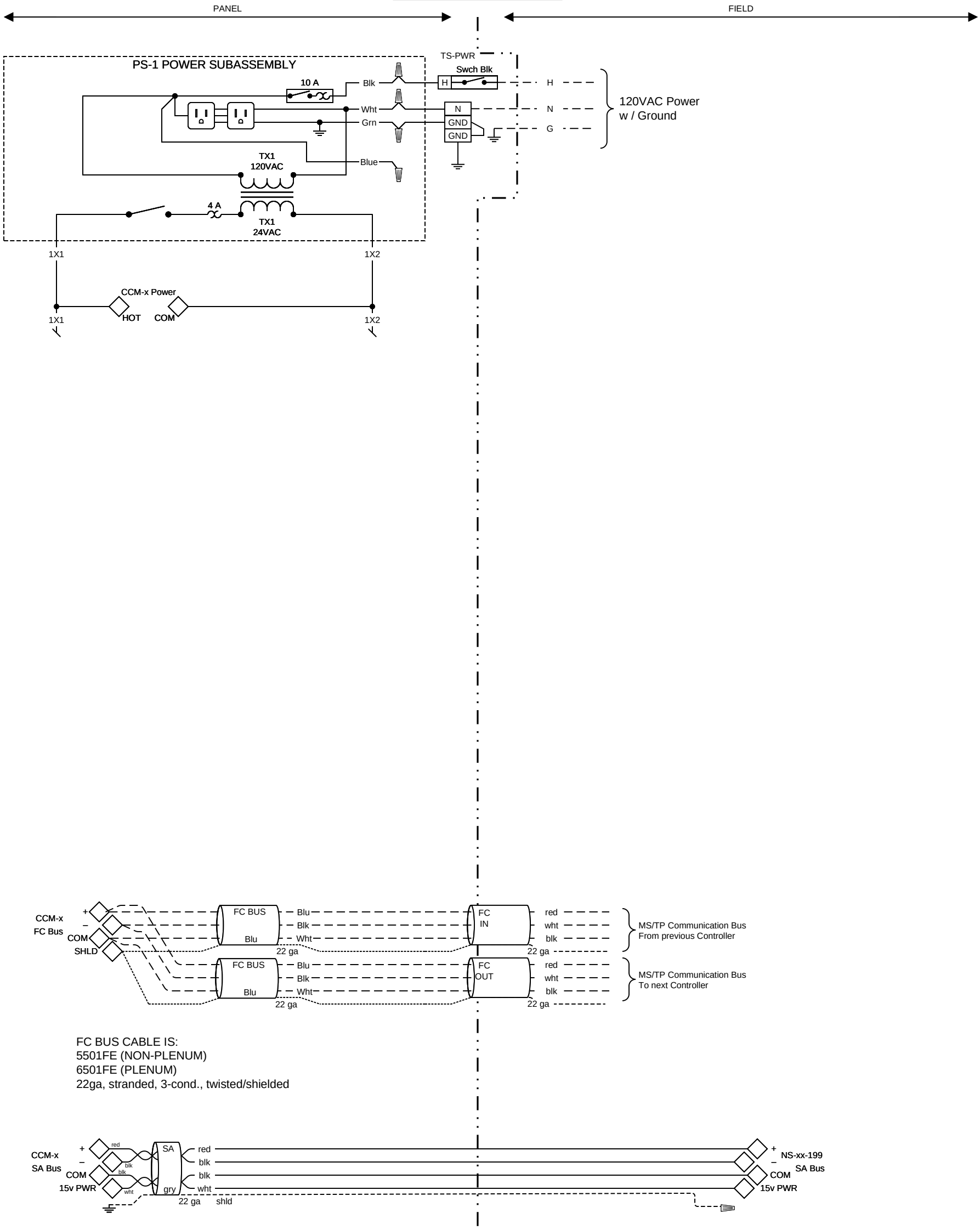
Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/13/2025	BY DATE

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
3.4

WIRING DETAILS



DRAWING NUMBER **3.4**

CONTRACT NUMBER **5N20-0379**

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DRAWING TITLE
Lab Space Type 3 Control Power Wiring Details

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY / DATE
4.5 LAB SPACE TYPE 4 - POWER WIRING DETAILS.VSDX	07/10/25 3:29 PM		JG	BS	DG	DRG 3/13/2025

PROJECT NAME
IU Indianapolis LD and SL Lab Design

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BRANCH INFORMATION
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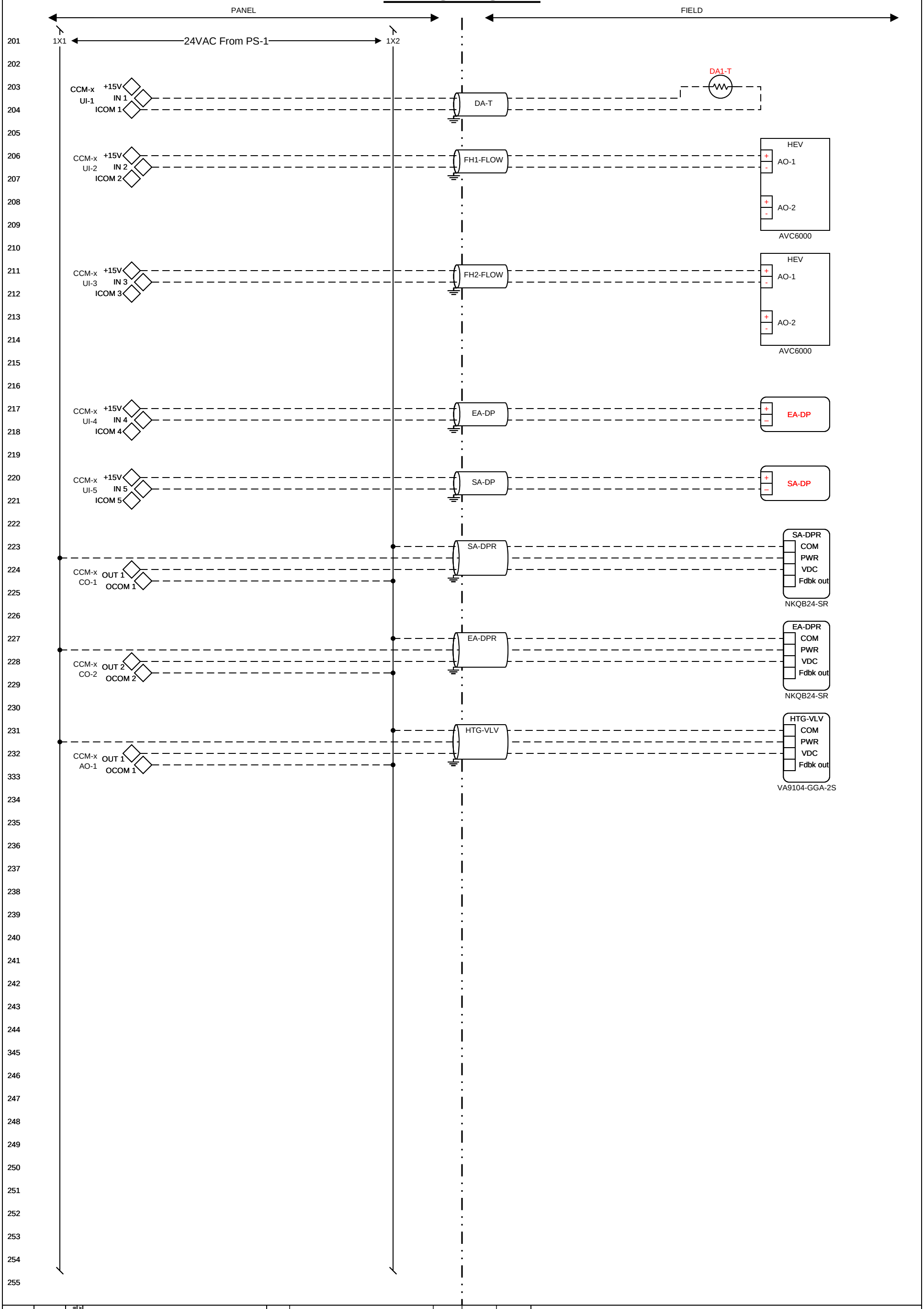
Wiring Notes

- nn — Terminal in DDC controller. nn indicates terminal number.
- nn — Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
- nn — Cable-no shield. nn indicates cable number (labeled at both ends of cable).
- — —nnn — · — Indicates field-installed wiring. nnn indicates wire number (labeled at both ends of wire).
- ——nnn—— Indicates factory wiring. nnn indicates wire number (labeled at both ends of wire).
- [nnn] Terminal in JCI panel. nnn indicates terminal number.

WIRING DIAGRAM



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- nnn — Terminal in JCI panel. nnn indicates terminal number.

DRAWING NUMBER 3.6

CONTRACT NUMBER 5N20-0379

APPROVED BY / DATE

DRAWING TITLE
Lab Space Type 3 Control Wiring Details 2

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY	DRAWN DATE
4.6 LAB SPACE TYPE 4 - WIRING DETAILS 2.VSDX	07/10/25 3:30 PM	0000040	JG	BS	DG	DRG	3/12/2025

PROJECT NAME
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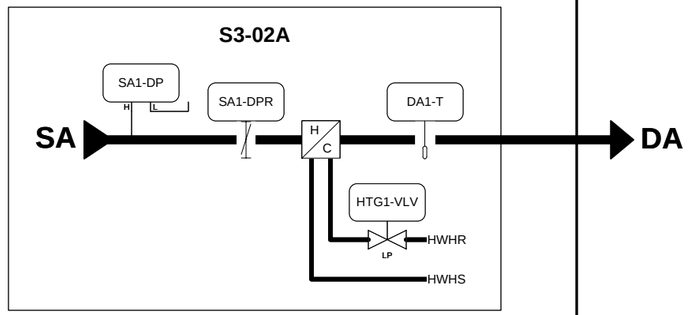
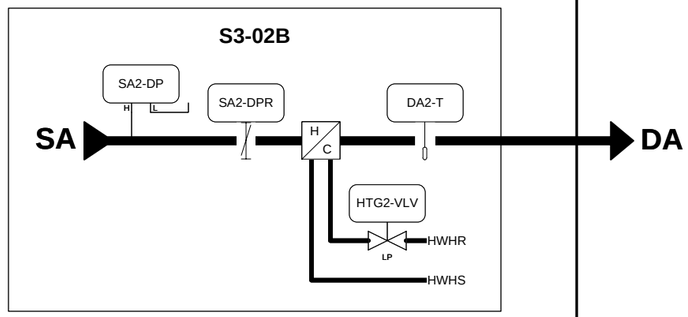
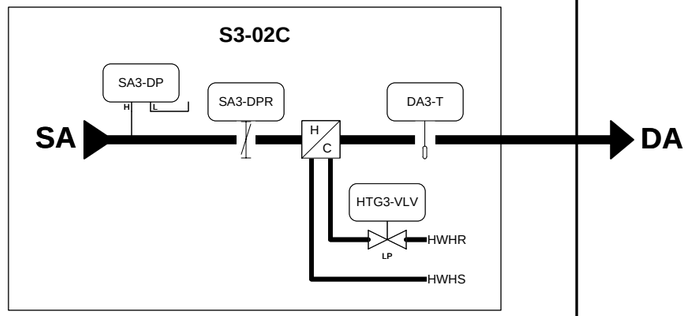
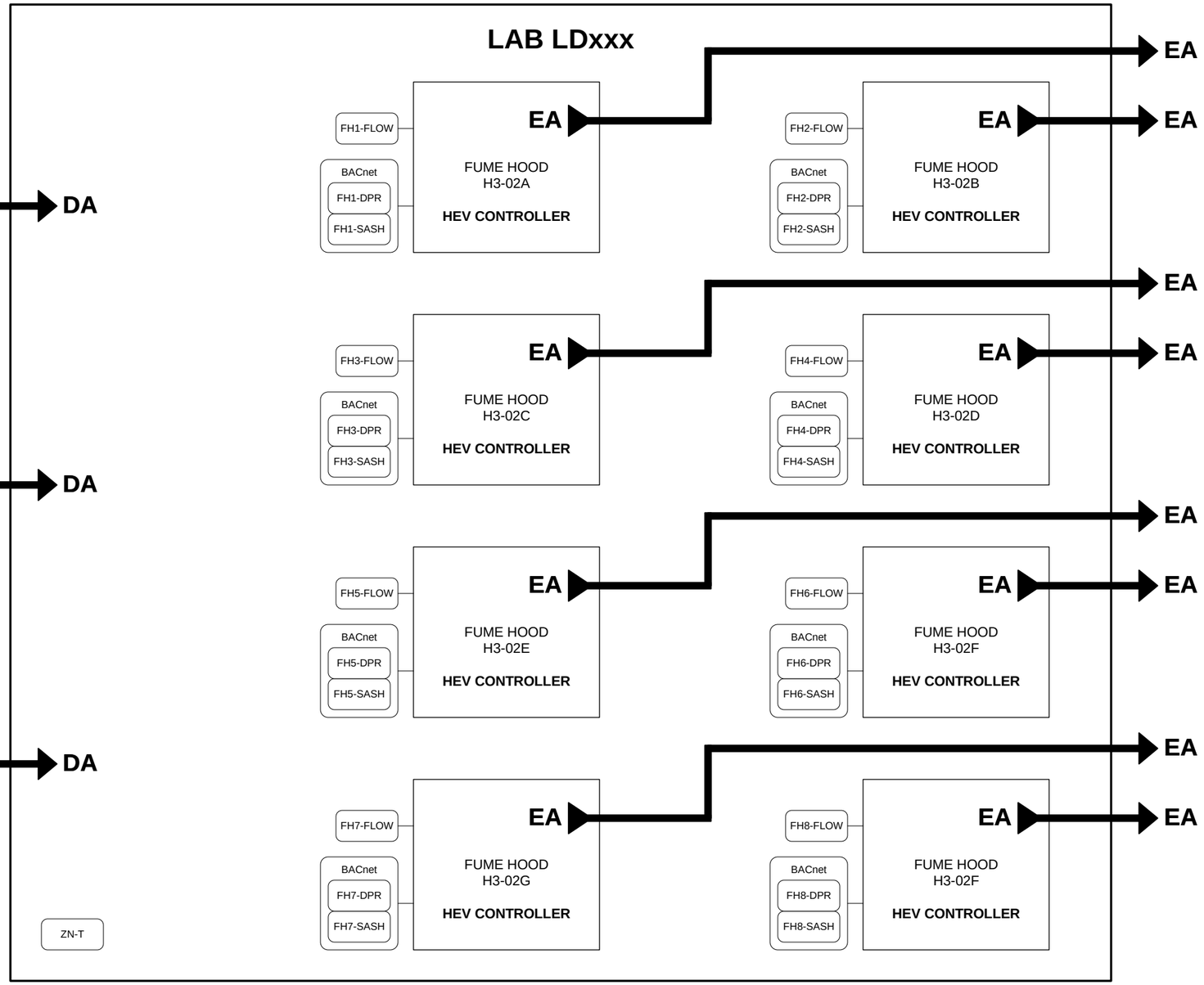
LAB SPACE CONTROL TYPE 4 - FLOW LAYOUT

SERVING LAB LD312









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Drawing Title

Lab Space Type 4 Control Flow Layout

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

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5920 Castleway West Dr,
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CONTRACT NUMBER

5N20-0379

DRAWING NUMBER

4.1

SEQUENCE OF OPERATION

LAB SPACE TEMPERATURE CONTROL:
When the zone temperature (ZN-T) is between the heating (EFFHTG-SP) and cooling (EFFCLG-SP) setpoints (inside of the bias), the supply air dampers (SAx-DPR) will be at the minimum CFM (SA-F) and there will be no mechanical heating. On a rise in zone temperature (ZN-T) above the cooling setpoint (EFFCLG-SP), the supply air dampers (SAx-DPR) will modulate between the minimum and maximum CFM setpoints (SAF-MIN, SAF-MAX) to increase the CFM (SA-F) and there will be no mechanical heating. On a drop in zone temperature below the heating setpoint (EFFHTG-SP), heating mode is enabled. When in heating mode, the reheat coil (HTG-VLV) will modulate to maintain the discharge air temperature (DA-T) to its setpoint. If the reheat coil (HTG-VLV) is 100% open, upon a continued call for heating, the supply air dampers (SAx-DPR) will modulate to increase the CFM (SA-F). When the reheat coil (HTG-VLV) drops below 90% open, the supply air dampers (SAx-DPR) will reset back down to its minimum CFM.

FUME HOOD EXHAUST CONTROL:
Values for fume hood sash positions (FHx-SASH) and damper positions (FHx-DPR) will be shared with BAS over BACnet. Fume hood airflow (FHx-FLOW) will be hardwired to DDC controller. When the hood sash is proven open for one or more fume hoods (FHx-SASH), the associated fume hood exhaust valve controller will modulate to maintain constant fume hood face velocity of 80 FPM. When any hood sash is proven closed (FHx-SASH), the airflow for the associated exhaust valve will be at a minimum.

GENERAL EXHAUST CONTROL:
BAS will sum all room supply and exhaust flows and damper actuators will be modulated to maintain constant total supply / total exhaust airflow offset in order to maintain room pressure.

BILL OF MATERIAL

DESIGNATION	QTY.	CODE NUMBER.	DESCRIPTION
FIELD MOUNTED	19		
DAx-T	3	TE-635GV-2	DUCT PROBE TEMPERATURE SENSOR, 1K PLATINUM SENSOR 4 IN. PROBE
HTGx-VLV	3	VALVE	SEE VALVE SCHEDULE
SAx-DPR	3	NKQB24-SR	BELIMO FAST ACTING ACTUATOR
SAx-DP	3	DP140001B21F	BIDIRECTIONAL + OR -1IN. W.C. 24 VDC / 4 TO 20 MA
	3	A-302-K	1/4 INCH BARBED STATIC PRESSURE TIP
	3	RPS	STAINLESS STEEL ROOM PRESSURE SENSOR WITH 1/4 INCH BARB FITTING
ZN-T	1	NSB8BTN040-0	NETWORK SENSOR, 3"X4.5" MS/TP, TEMP, WHITE, LOGO

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Drawing Title
Lab Space Type 4 Control
BOM and Sequence

Project Title
IU Indianapolis LD and SL
Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
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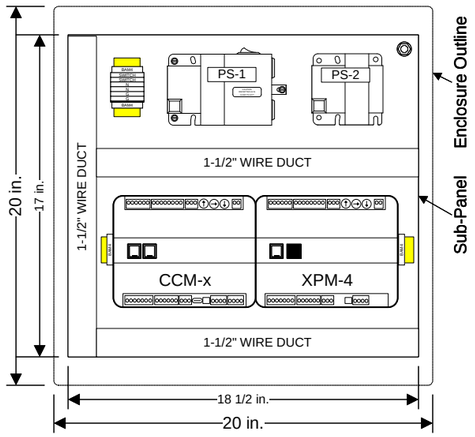
DRAWING NUMBER
4.2

BILL OF MATERIALS

Designation	Qty	Part Number	Description
ENCLOSURE	1	PAN-ENA2020WD	ASSEMBLY, ENCLOSURE 20.0
	1	PAN-ENA2020PSP	SUB PANEL FOR 20.0 X 20.
CCM-x	1	M4-CCM09090-0	18 PT CRITICAL CNTL, 7 UI, 2 BI, 4 CO, 2 AO, 3 BO, MSTP
XPM-4	1	M4-XPM09090-0	18 PT INPUT/OUTPUT EXPANSION MODULE, 7 UI, 2 BI, 4 CO, 2 AO, 3 BO
PS-x	1	PAN-PWRSP	SWITCH AND TWO 120 VAC OUTLETS PANEL POWER SUPPLY 96VA 120/24VAC POWER SWITCH 120VAC OUTLETSPOWER
	1	PAN-96VAXFR-0	PANEL, 96VA TRANSFORMER K
TERM BLK	4	BAM4	END STOP, TERM BLK
	1	DIN-3F	DIN RAIL
	1	FEM6	END SECTION, TERM BLK
	2	M4/6	DIN RAIL TERM BLK, 6mm, GRAY
	2	M4/6.P	GROUNDING LUG GREEN/YELLOW, 6mm,
	2	M4/6SNBT	120V BLADE SWITCH
WIRE DUCT	1	T1-1530G	WIRE DUCT, 1.5" W x 3" H x 6.5FT, GRAY

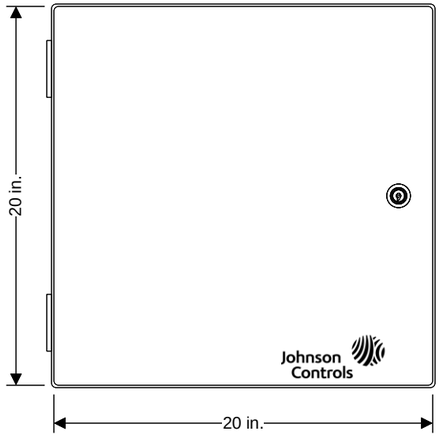
PANEL LAYOUT

SCALE: 1/8" = 1"



FACE LAYOUT

SCALE: 1/8" = 1"



Drawing Title

Lab Space Type 4 Control Panel Layout

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Project Title

IU Indianapolis LD and SL Lab Design

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Phone: 3176387611

CONTRACT NUMBER

5N20-0379

DRAWING NUMBER

4.3

LAB SPACE TYPE 4 - POINT SCHEDULE

SERVING LAB LD312

Electrician/Fitter		Point Information			Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		IN072-AHU7-VAV58			CCM09090											Power to Controller
		IN072-AHU7-VAV58			CCM09090	MS/TP	1	58								BacNet FC Bus
	UI IN-1	S3-02A	DA1-T	Discharge Air Temp (S3-02A)	CCM09090	MS/TP	1	58	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	F131	
	UI IN-2	S3-02B	DA2-T	Discharge Air Temp (S3-02B)	CCM09090	MS/TP	1	58	UI IN-2		IN2, ICOM2	2/22	2-Wire	TE	F131	
	UI IN-3	S3-02C	DA3-T	Discharge Air Temp (S3-02C)	CCM09090	MS/TP	1	58	UI IN-3		IN3, ICOM3	2/22	2-Wire	TE	F131	
	UI IN-4	S3-02A	SA1-DP	Supply Air Diff Pressure (S3-02A)	CCM09090	MS/TP	1	58	UI IN-4		IN4, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-5	S3-02B	SA2-DP	Supply Air Diff Pressure (S3-02B)	CCM09090	MS/TP	1	58	UI IN-5		IN5, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-6	S3-02C	SA3-DP	Supply Air Diff Pressure (S3-02C)	CCM09090	MS/TP	1	58	UI IN-6		IN6, +15V	2/22	-, +	DPT2xxx (mA)	F106	
	UI IN-7	H3-02A	FH1-FLOW	Exhaust Airflow (H3-02A)	CCM09090	MS/TP	1	58	UI IN-7		IN7, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	BI IN-1	IN072-AHU7-VAV58			CCM09090	MS/TP	1	58	BI IN-1							
	BI IN-2	IN072-AHU7-VAV58			CCM09090	MS/TP	1	58	BI IN-2							
	BO OUT-1	IN072-AHU7-VAV58			CCM09090	MS/TP	1	58	BO OUT-1							
	BO OUT-2	IN072-AHU7-VAV58			CCM09090	MS/TP	1	58	BO OUT-2							
	BO OUT-3	IN072-AHU7-VAV58			CCM09090	MS/TP	1	58	BO OUT-3							
	CO OUT-1	S3-02A	SA1-DPR	Supply Air Damper Output (SA1-DPR)	CCM09090	MS/TP	1	58	CO OUT-1		OUT1, OCOM1	2/22	See wiring detail	Belimo	Y202	
	CO OUT-2	S3-02B	SA2-DPR	Supply Air Damper Output (SA2-DPR)	CCM09090	MS/TP	1	58	CO OUT-2		OUT2, OCOM2	2/22	See wiring detail	Belimo	Y202	
	CO OUT-3	S3-02C	SA3-DPR	Supply Air Damper Output (SA3-DPR)	CCM09090	MS/TP	1	58	CO OUT-3		OUT3, OCOM3	2/22	See wiring detail	Belimo	Y202	
	CO OUT-4	S3-02A	HTG1-VLV	Heating Valve Output (HTG1-VLV)	CCM09090	MS/TP	1	58	CO OUT-4		OUT4, OCOM4,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	F250	
	AO OUT-1	S3-02B	HTG2-VLV	Heating Valve Output (HTG2-VLV)	CCM09090	MS/TP	1	58	AO OUT-1		OUT1, OCOM1,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	F250	
	AO OUT-2	S3-02C	HTG3-VLV	Heating Valve Output (HTG3-VLV)	CCM09090	MS/TP	1	58	AO OUT-2		OUT2, OCOM2,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	F250	
		IN072-AHU7-VAV58			XPM09090											Power to Controller
		IN072-AHU7-VAV58			XPM09090	MS/TP	1	4								BacNet FC Bus
	UI IN-1	H3-02B	FH2-FLOW	Exhaust Airflow (H3-02B)	XPM09090	MS/TP	1	4	UI IN-1		IN1, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-2	H3-02C	FH3-FLOW	Exhaust Airflow (H3-02C)	XPM09090	MS/TP	1	4	UI IN-2		IN2, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-3	H3-02D	FH4-FLOW	Exhaust Airflow (H3-02D)	XPM09090	MS/TP	1	4	UI IN-3		IN3, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-4	H3-02E	FH5-FLOW	Exhaust Airflow (H3-02E)	XPM09090	MS/TP	1	4	UI IN-4		IN4, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-5	H3-02F	FH6-FLOW	Exhaust Airflow (H3-02F)	XPM09090	MS/TP	1	4	UI IN-5		IN5, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-6	H3-02G	FH7-FLOW	Exhaust Airflow (H3-02G)	XPM09090	MS/TP	1	4	UI IN-6		IN6, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	UI IN-7	H3-02H	FH8-FLOW	Exhaust Airflow (H3-02H)	XPM09090	MS/TP	1	4	UI IN-7		IN7, +15V	2/22	See wiring detail	Current Input (2 Wire)	F106	
	BI IN-1	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	BI IN-1							
	BI IN-2	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	BI IN-2							
	BO OUT-1	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	BO OUT-1							
	BO OUT-2	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	BO OUT-2							
	BO OUT-3	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	BO OUT-3							
	CO OUT-1	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	CO OUT-1							
	CO OUT-2	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	CO OUT-2							
	CO OUT-3	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	CO OUT-3							
	CO OUT-4	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	CO OUT-4							
	AO OUT-1	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	AO OUT-1							
	AO OUT-2	IN072-AHU7-VAV58			XPM09090	MS/TP	1	4	AO OUT-2							
		IN072-AHU7-VAV58			NET STAT											
		IN072-AHU7-VAV58			NET STAT	SA Bus	1	199								BacNet SA Bus
	STAT	IN072-AHU7-VAV58	ZN-T	Zone Temperature	NET STAT	SA Bus	1	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title

Lab Space Type 4 Control Point Schedule

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/13/2025	BY DATE

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Phone: 3176387611

CONTRACT NUMBER
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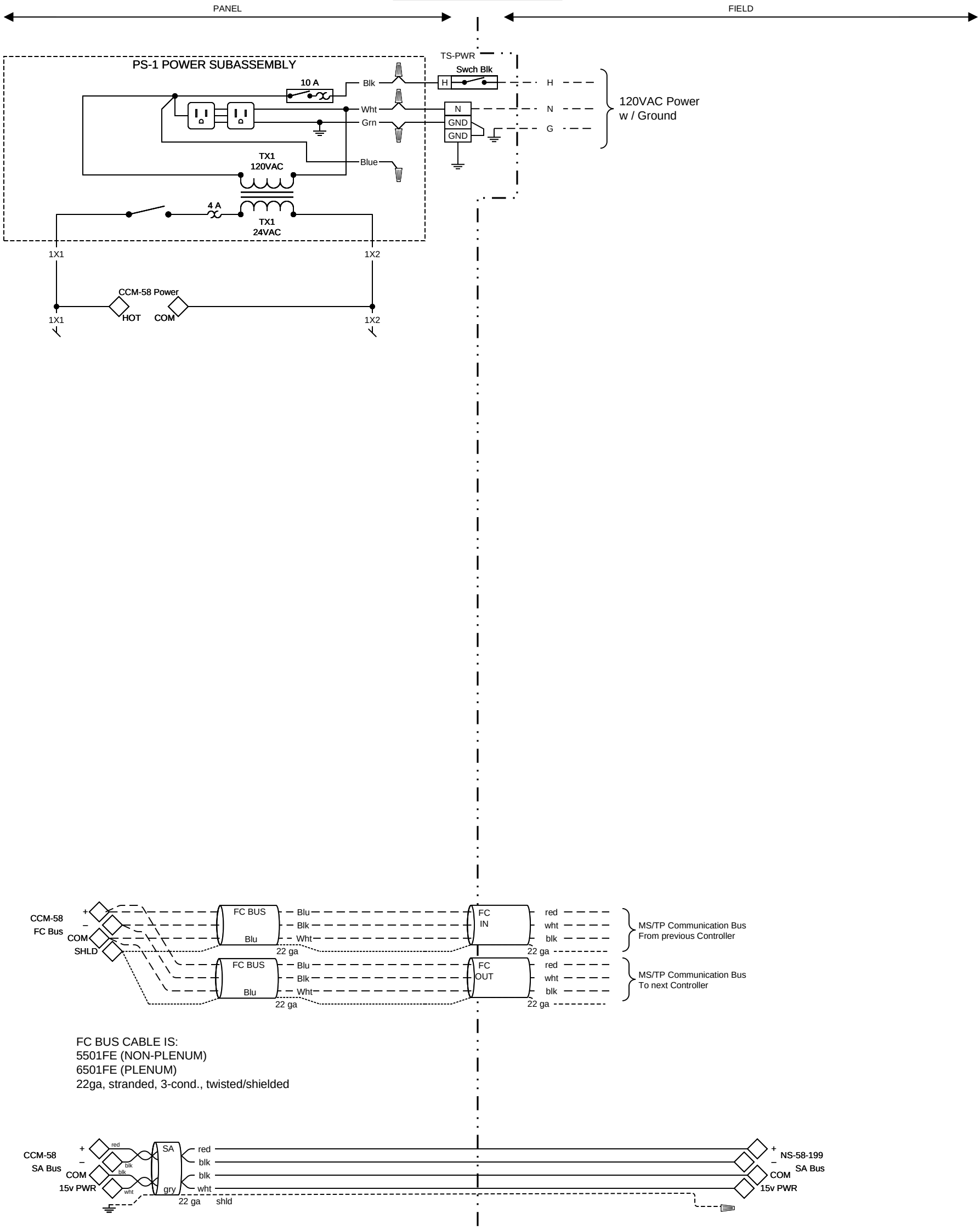
DRAWING NUMBER
4.4

WIRING DETAILS



FC BUS CABLE IS:
5501FE (NON-PLENUM)
6501FE (PLENUM)
22ga, stranded, 3-cond., twisted/shielded

SA BUS CABLE IS:
5541FE (NON-PLENUM)
6541FE (PLENUM)
22ga, stranded, (2) twisted pairs, shielded

DRAWING NUMBER **4.5**

CONTRACT NUMBER **5N20-0379**

APPROVED BY / DATE

DRAWING TITLE
Lab Space Type 4 Control Power Wiring Details

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY / DATE
5.5 LAB SPACE TYPE 5 - POWER WIRING DETAILS.VSDX	07/10/25 3:30 PM		JG	BS	DG	DRG 3/13/2025

PROJECT NAME
IU Indianapolis LD and SL Lab Design

Johnson Controls

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5920 Castleway West Dr,
Indianapolis, Indiana 46250
Phone: 3176387611

Wiring Notes

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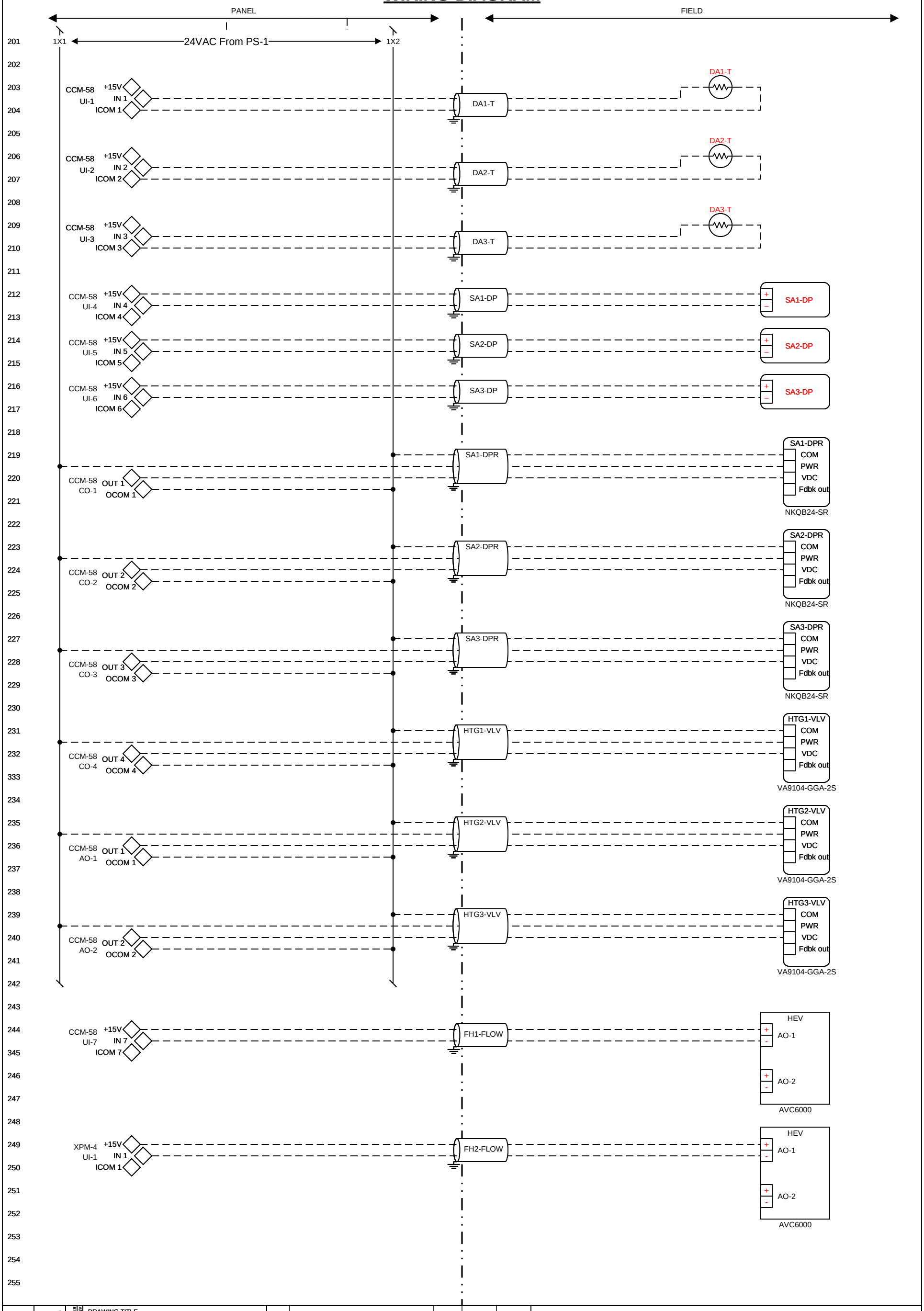
- [nnn] Terminal in JCI panel. nnn indicates terminal number.

WIRING DIAGRAM



Wiring Notes

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- nn — Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
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- nnn — Terminal in JCI panel. nnn indicates terminal number.

DRAWING NUMBER 4.6

CONTRACT NUMBER 5N20-0379

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DRAWING TITLE
Lab Space Type 4 Control Wiring Details 2

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY	DRAWN DATE
5.6 LAB SPACE TYPE 5 - WIRING DETAILS 2.VSDX	07/10/25 3:31 PM	0000040	JG	BS	DG	DRG	3/13/2025

PROJECT NAME
IU Indianapolis LD and SL Lab Design

Johnson Controls

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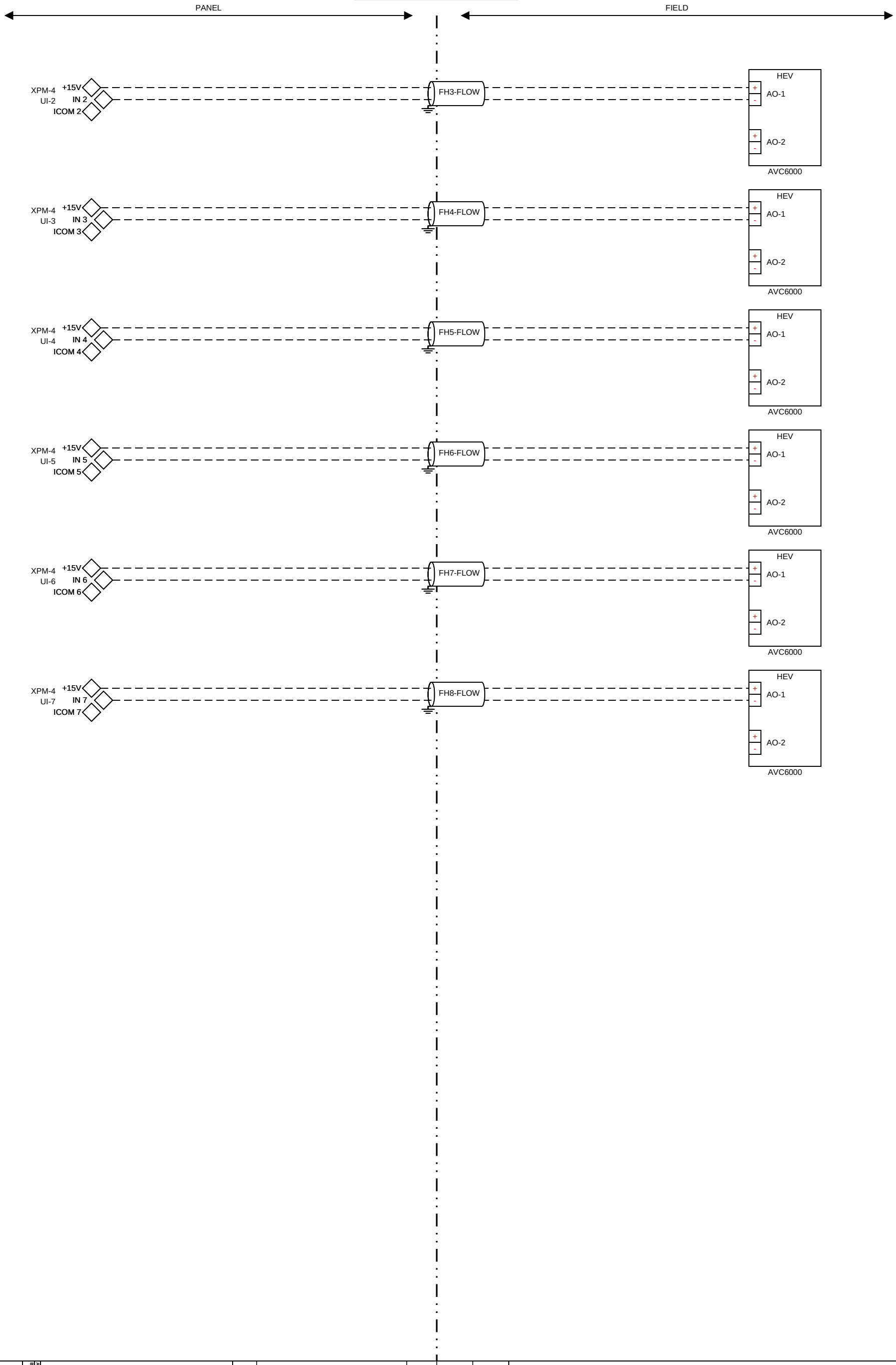
Phone: 3176387611

WIRING DIAGRAM



DRAWING NUMBER **4.7**

CONTRACT NUMBER **5N20-0379**

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DRAWING TITLE
Lab Space Type 4 Control Wiring Details 3

NO.	REVISION-LOCATION	ECN	DATE	BY

FILENAME	REVISION DATE/TIME	SLW	SALES ENGINEER	PROJECT MANAGER	APPLICATION ENGINEER	DRAWN BY	DRAWN DATE
5.7 LAB SPACE TYPE 5 - WIRING DETAILS 3.VSDX	07/10/25 3:31 PM	0000040	JG	BS	DG	DRG	3/13/2025

PROJECT NAME
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5920 Castleway West Dr,
Indianapolis, Indiana 46250
Phone: 3176387611

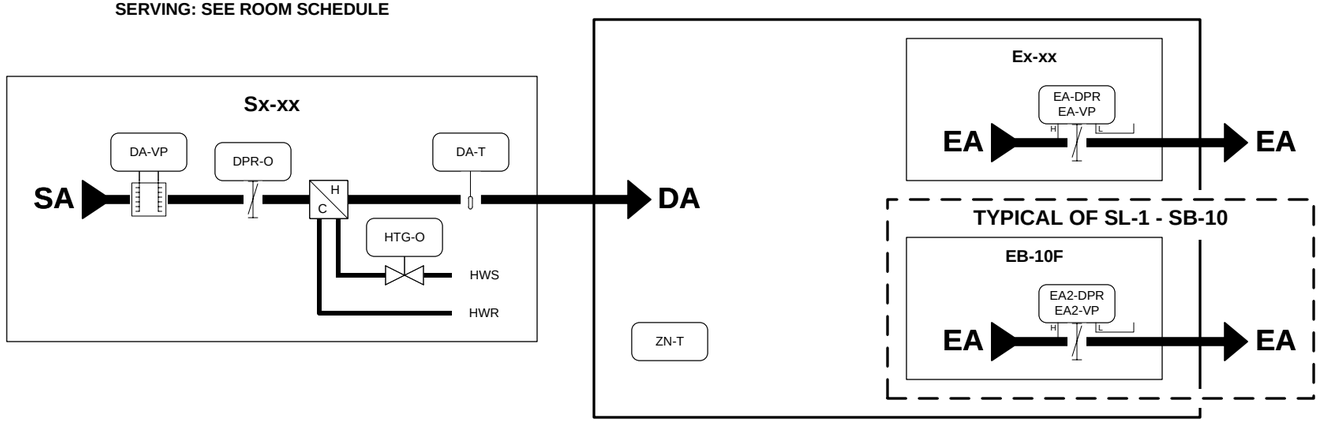
Wiring Notes

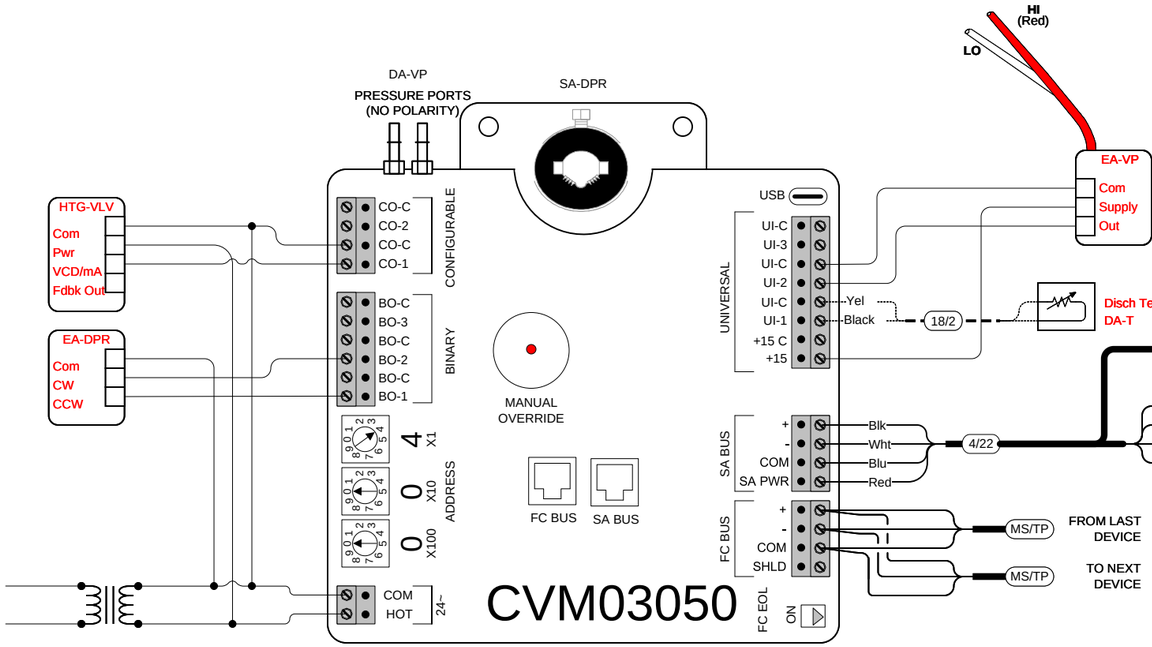
- nn — Terminal in DDC controller. nn indicates terminal number.
- nn — Shielded cable. Terminate & ground shield within 2 inches of entry into enclosure. Continue shield to last device and tape back. nn indicates cable number (labeled at both ends of cable).
- nn — Cable-no shield. nn indicates cable number (labeled at both ends of cable).
- — —nnn— — - Indicates field-installed wiring. nnn indicates wire number (labeled at both ends of wire).
- ——nnn—— Indicates factory wiring. nnn indicates wire number (labeled at both ends of wire).
- nnn — Terminal in JCI panel. nnn indicates terminal number.

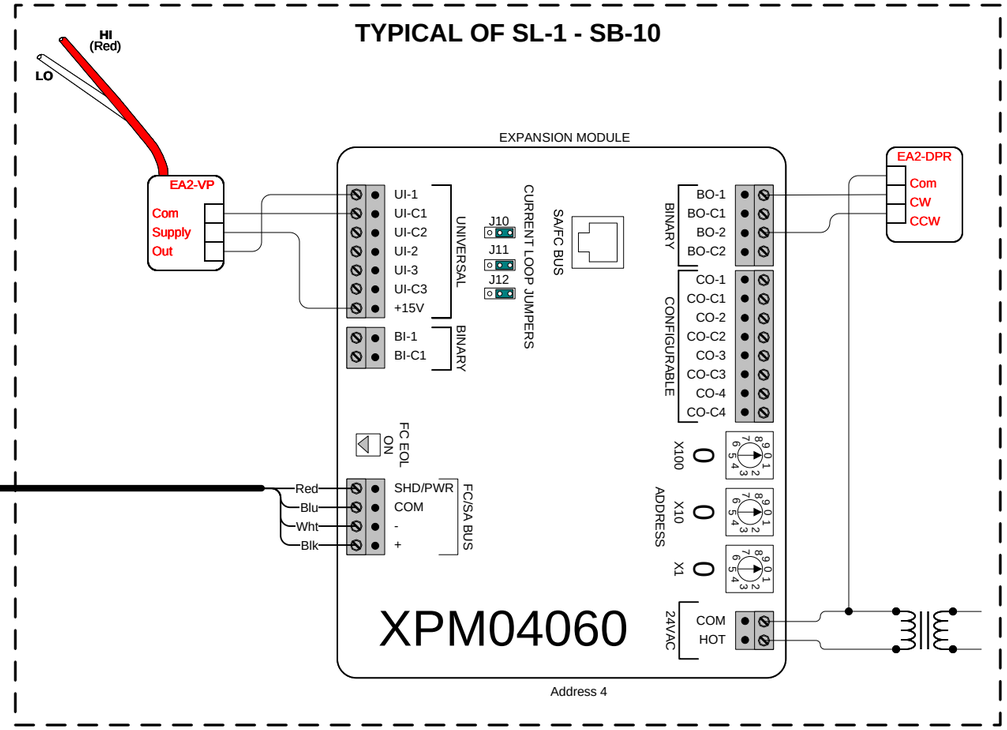
VAV/GEV FLOW LAYOUT

TYPICAL OF (16)
SERVING: SEE ROOM SCHEDULE

VAV/GEV - Room Serving		
VAV Tag	**GEV Tag**	**Room**
Area - SL-1		
SB-10	EB-09F	Room SL058A
	EB-10B	
SB-11	EB-11	Room SL058B
S3-01	E3-01	Room SL337
S3-02	E3-02	Room SL339A
S3-03	E3-03	TC SL340
S3-04	E3-04	Flex SL338
S3-05	E3-05	Room SL341
S3-06	E3-06	Room SL343
S3-07	E3-07	Insectary SL351A
S3-08	E3-08	Room SL351
S3-09	E3-09	Room SL347
Area - LD-2		
SB-02	EB-02	Room LD055B
SB-03	EB-03	Darkroom LD055A
SB-04	EB-04	Room LD059
SB-05	EB-05	Room LD063
S2-07	E2-07	Room 220E







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Drawing Title
VAV/GEV - Flow Layout
Typical of 16

Project Title
IU Indianapolis LD and SL
Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Johnson Controls

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Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
5.1

SEQUENCE OF OPERATION

VAV CONTROL SEQUENCE:

OCCUPIED MODE:
The occupancy mode will be controlled via a network input (OCC-SCHEDULE), based on an operator defined occupancy schedule. In addition, the occupancy sensors connected with the lighting controls can be used to override the occupancy mode when the room is temporarily occupied. When the zone temperature (ZN-T) is between the occupied heating (EFFHTG-SP) and cooling (EFFCLG-SP) setpoints (inside of the bias), the supply air damper (SA-DPR) will be at the minimum CFM (SA-F) and there will be no mechanical heating. On a rise in zone temperature (ZN-T) above the cooling setpoint (EFFCLG-SP), the supply air damper (SA-DPR) will increase the CFM (SA-F) and there will be no mechanical heating. On a drop in zone temperature (ZN-T) below the heating setpoint (EFFHTG-SP), heating mode is enabled.

UNOCCUPIED MODE:
When in this mode, while the zone temperature (ZN-T) is between the unoccupied heating (EFFHTG-SP) and cooling (EFFCLG-SP) setpoints (inside of the bias), the supply air damper (SA-DPR) will be at the minimum CFM (SA-F) and there will be no mechanical heating. On a rise in zone temperature (ZN-T) above the unoccupied cooling setpoint (EFFCLG-SP), the primary air damper (DPR-O) will increase the CFM (SA-F) (if available) and there will be no mechanical heating. On a drop in zone temperature (ZN-T) below the unoccupied heating setpoint (EFFHTG-SP), heating mode is enabled.

HEATING MODE:
When in heating mode, the reheat coil will be used to modulate to maintain the discharge air temperature (DA-T) to its setpoint and the damper will be at a minimum CFM (DPR-O). If the discharge air temperature (DA-T) is at setpoint and the zone temperature is below the heating setpoint (EFFHTG-SP), the discharge air temperature setpoint (DAT-SP) will be increased by 2 deg F every 5 minutes up to a high limit (DAT-HI) until the zone temperature (ZN-T) is at setpoint. Upon a continued call for heating, if the discharge air temperature setpoint (DAT-SP) is at its high limit or the heating valve (HTG-VLV) is 100% open, then the damper (DPR-O) will modulate to increase the CFM (SA-F) up to its high limit setpoint (SAF-HI). When the zone temperature setpoint is reached, the damper (DPR-O) will modulate back down to its minimum value, and the discharge air temperature setpoint (DAT-SP) will be linearly reset to its default value.

DISCHARGE AIR TEMP SENSOR:
A discharge air temp (DA-T) sensor is provided on each box for monitoring purposes.

UNIT ENABLE:
A network unit enable (UNITEN-MODE) signal will control the mode of the box.

NETWORK WARMUP-COOLDOWN:
Warm-up and Cooldown modes will be activated by a network command (WC-C). When the zone temperature (ZN-T) is below the effective heating setpoint (EFFHTG-SP), the box damper will be modulated to allow warm air flow, then reheat coil to maintain the zone temperature (ZN-T). When the box effective heating setpoint is satisfied the flow will remain at the warm-up minimum position until the warm command has been removed.

GENERAL EXHAUST CONTROL SEQUENCE:

SINGLE GEV CONTROL (Typical of 15):
The general exhaust damper (EA-DPR) will modulate to maintain exhaust airflow setpoint. BAS will sum all room supply and exhaust flows and damper actuators will be modulated to maintain constant total supply / total exhaust airflow offset.

DUAL GEV CONTROL (Typical of SL-1 - SB-10 ONLY):
The general exhaust dampers (EA1-DPR, EA2-DPR) will modulate to maintain exhaust airflow setpoint. BAS will sum all room supply and exhaust flows and damper actuators will be modulated to maintain constant total supply / total exhaust airflow offset.

BILL OF MATERIAL

DESIGNATION	QTY.	CODE NUMBER.	DESCRIPTION
CONTROLLER	16	M4-CVM03050-0	8PT CNTL VAV W/ ACT and DPT, MSTP, B-AAC, RTC, 3 UI, 2 CO, 3 BO
XPM-4	1	M4-XPM04060-0	10 PT INPUT/OUTPUT EXPANSION MODULE, 3 UI, 1 BI, 4 CO, 2 BO
DA-T	16	TE-635GV-2	DUCT PROBE TEMPERATURE SENSOR, 1K PLATINUM SENSOR 4 IN. PROBE
HTG-VLV	16	VALVE	SEE VALVE SCHEDULE
ZN-T	16	NSB8BTN040-0	NETWORK SENSOR, 3"X4.5" MS/TP, TEMP, WHITE, LOGO
EAx-DP/EAx-DPR	17	M9104-AGP-2S	ACTUATOR, ROTARY, FLOATING

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Drawing Title
VAV/GEV - BOM and Sequence

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Project Title
IU Indianapolis LD and SL Lab Design

Johnson Controls

Branch Information
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Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
5.2

VAV-GEV - POINT SCHEDULE 1

TYPICAL OF (15)
SERVING: SEE ROOM SCHEDULE

Electrician/Fitter		Point Information			Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		Sx-xx			CVM03050											Power to Controller
		Sx-xx			CVM03050	MS/TP	x	x								BacNet FC Bus
	UI IN-1	Sx-xx	DA-T	Discharge Air Temperature	CVM03050	MS/TP	x	x	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	V131	
	UI IN-2	Ex-xx	EA-VP	Exhaust Air Velocity Pressure	CVM03050	MS/TP	x	x	UI IN-2		IN2, ICOM2, +15V	3/22	Blue, Black, Red	DPT-2015	V114	
	UI IN-3	Sx-xx			CVM03050	MS/TP	x	x	UI IN-3							
	BO OUT-1	Ex-xx	EA-DPR (cw)	Exhaust Air Damper Output 1	CVM03050	MS/TP	x	x	BO OUT-1		OCOM-b,OCOM-a,24V HOT	3/18	ORG, RED, BLK	M910x-AGx-2S (Incr) (Sw Low, INT S	V759	
	BO OUT-2	Ex-xx	EA-DPR (ccw)	Exhaust Air Damper Output 2	CVM03050	MS/TP	x	x	BO OUT-2		OCOM-b,OCOM-a,24V HOT	3/18	ORG, RED, BLK	M910x-AGx-2S (Incr) (Sw Low, INT S	V759	
	BO OUT-3	Sx-xx			CVM03050	MS/TP	x	x	BO OUT-3							
	CO OUT-1	Sx-xx	HTG-O	Heating Output	CVM03050	MS/TP	x	x	CO OUT-1		OUT1, OCOM1,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	V250	
	CO OUT-2	Sx-xx			CVM03050	MS/TP	x	x	CO OUT-2							
		Sx-xx			NET STAT											
		Sx-xx			NET STAT	SA Bus	x	199								BacNet SA Bus
	STAT	Sx-xx	ZN-T	Zone Temperature	NET STAT	SA Bus	x	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title

VAV - Point Schedule (Typical of 15)

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/13/2025	BY DATE

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CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
5.3

VAV-GEV - POINT SCHEDULE 2

TYPICAL OF SL-1 - SB-10
SERVING ROOM SL058A

Electrician/Fitter		Point Information			Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		SB-10			CVM03050											Power to Controller
		SB-10			CVM03050	MS/TP	2	54								BacNet FC Bus
	UI IN-1	SB-10	DA-T	Discharge Air Temperature	CVM03050	MS/TP	2	54	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	V131	
	UI IN-2	EB-09F	EA1-VP	Exhaust Air Velocity Pressure 1	CVM03050	MS/TP	2	54	UI IN-2		IN2, ICOM2, +15V	3/22	Blue, Black, Red	DPT-2015	V114	
	UI IN-3	SB-10			CVM03050	MS/TP	2	54	UI IN-3							
	BO OUT-1	EB-09F	EA1-DPR (cw)	Exhaust Air Damper 1 Output 1	CVM03050	MS/TP	2	54	BO OUT-1		OCOM-b,OCOM-a,24V HOT	3/18	ORG, RED, BLK	M910x-AGx-2S (Incr) (Sw Low, INT Source)	V759	
	BO OUT-2	EB-09F	EA1-DPR (ccw)	Exhaust Air Damper 1 Output 2	CVM03050	MS/TP	2	54	BO OUT-2		OCOM-b,OCOM-a,24V HOT	3/18	ORG, RED, BLK	M910x-AGx-2S (Incr) (Sw Low, INT Source)	V759	
	BO OUT-3	SB-10			CVM03050	MS/TP	2	54	BO OUT-3							
	CO OUT-1	SB-10	HTG-O	Heating Output	CVM03050	MS/TP	2	54	CO OUT-1		OUT1, OCOM1,24V HOT	3/18	GRY, BLK, RED	VA9104-GGA-2S (Vdc) (Int Source)	V250	
	CO OUT-2	SB-10			CVM03050	MS/TP	2	54	CO OUT-2							
		SB-10			XPM04060											Power to Controller
		SB-10			XPM04060	MS/TP	2	4								BacNet FC Bus
	UI IN-1	EB-10B	EA2-VP	Exhaust Air Velocity Pressure 2	XPM04060	MS/TP	2	4	UI IN-1		IN1, ICOM1, +15V	3/22	Blue, Black, Red	DPT-2015	F114	
	UI IN-2	SB-10			XPM04060	MS/TP	2	4	UI IN-2							
	UI IN-3	SB-10			XPM04060	MS/TP	2	4	UI IN-3							
	BI IN-1	SB-10			XPM04060	MS/TP	2	4	BI IN-1							
	BO OUT-1	EB-10B	EA2-DPR (cw)	Exhaust Air Damper 2 Output 1	XPM04060	MS/TP	2	4	BO OUT-1		OCOM-b,OCOM-a,24V HOT	3/18	ORG, RED, BLK	M910x-AGx-2S (Incr) (Sw Low, INT Source)	F759	
	BO OUT-2	EB-10B	EA2-DPR (ccw)	Exhaust Air Damper 2 Output 2	XPM04060	MS/TP	2	4	BO OUT-2		OCOM-b,OCOM-a,24V HOT	3/18	ORG, RED, BLK	M910x-AGx-2S (Incr) (Sw Low, INT Source)	F759	
	CO OUT-1	SB-10			XPM04060	MS/TP	2	4	CO OUT-1							
	CO OUT-2	SB-10			XPM04060	MS/TP	2	4	CO OUT-2							
	CO OUT-3	SB-10			XPM04060	MS/TP	2	4	CO OUT-3							
	CO OUT-4	SB-10			XPM04060	MS/TP	2	4	CO OUT-4							
		SB-10			NET STAT											
		SB-10			NET STAT	SA Bus	2	199								BacNet SA Bus
	STAT	SB-10	ZN-T	Zone Temperature	NET STAT	SA Bus	2	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title
VAV-GEV - Point Schedule-2

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/19/2025	BY DATE

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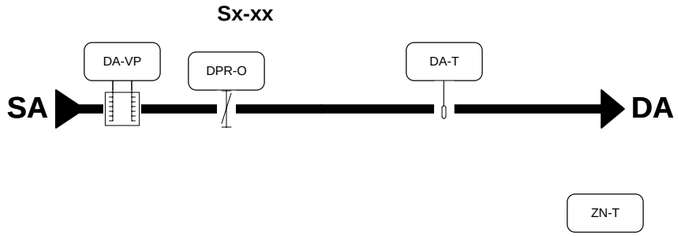
CONTRACT NUMBER
5N20-0379

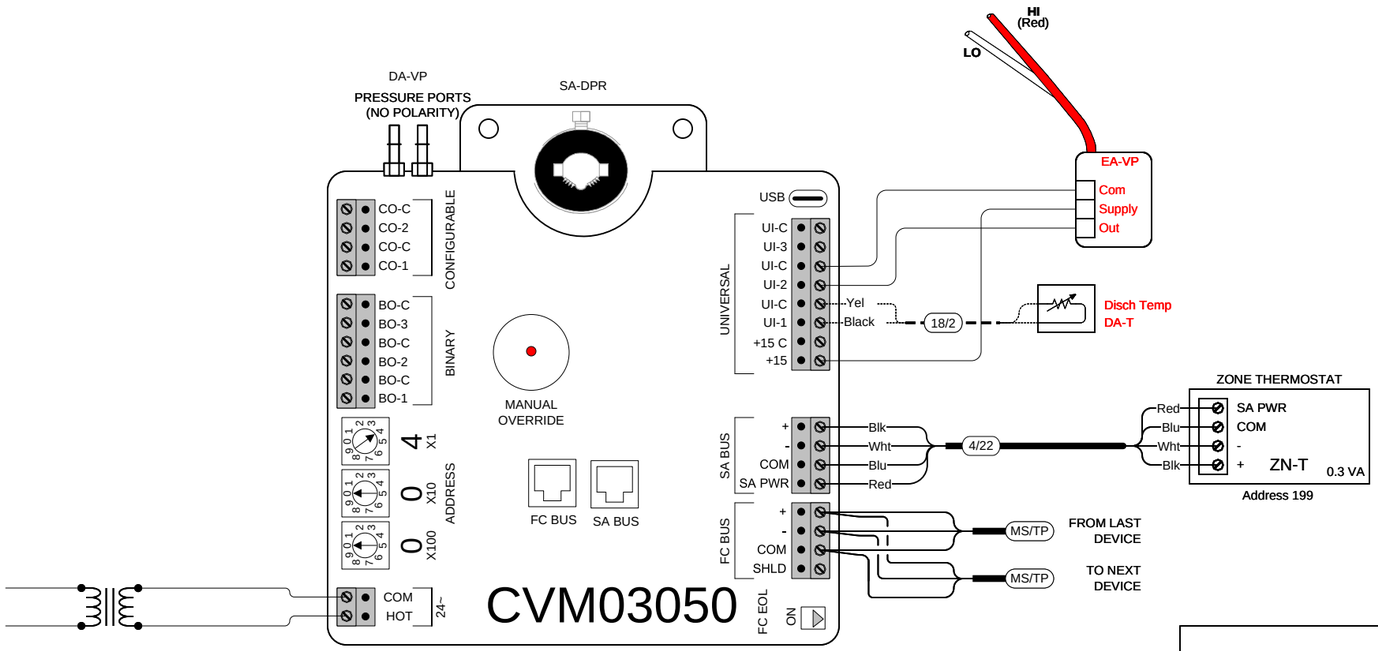
DRAWING NUMBER
5.4

VAV FLOW LAYOUT

TYPICAL OF (4)
SERVING: SEE ROOM SCHEDULE

VAV - Room Serving	
VAV Tag	**Room**
Area - LD-2	
S2-02	Teaching Lab LD202
S2-04	Room LD220B
S2-06	Room LD220D
S3-01	Room LD314





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Drawing Title

VAV no RH - Flow Layout
Typical of 4

Project Title

IU Indianapolis LD and SL
Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 7/10/2025	BY DATE

Johnson Controls

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Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
6.1

SEQUENCE OF OPERATION

VAV CONTROL SEQUENCE:

OCCUPIED MODE:
The occupancy mode will be controlled via a network input (OCC-SCHEDULE), based on an operator defined occupancy schedule. In addition, the occupancy sensors connected with the lighting controls can be used to override the occupancy mode when the room is temporarily occupied. When the zone temperature (ZN-T) is below the occupied cooling (EFFCLG-SP) setpoint (inside of the bias), the supply air damper (SA-DPR) will be at the minimum CFM (SA-F). On a rise in zone temperature (ZN-T) above the cooling setpoint (EFFCLG-SP), the supply air damper (SA-DPR) will increase the CFM (SA-F).

UNOCCUPIED MODE:
When in this mode, while the zone temperature (ZN-T) is below the unoccupied cooling (EFFCLG-SP) setpoint, the supply air damper (SA-DPR) will be at the minimum CFM (SA-F). On a rise in zone temperature (ZN-T) above the unoccupied cooling setpoint (EFFCLG-SP), the primary air damper (DPR-O) will increase the CFM (SA-F) (if available).

DISCHARGE AIR TEMP SENSOR:
A discharge air temp (DA-T) sensor is provided on each box for monitoring purposes.

UNIT ENABLE:
A network unit enable (UNITEN-MODE) signal will control the mode of the box.

BILL OF MATERIAL

DESIGNATION	QTY.	CODE NUMBER.	DESCRIPTION
CONTROLLER	4	M4-CVM03050-0	8PT CNTL VAV W/ ACT and DPT, MSTP, B-AAC, RTC, 3 UI, 2 CO, 3 BO
DA-T	4	TE-635GV-2	DUCT PROBE TEMPERATURE SENSOR, 1K PLATINUM SENSOR 4 IN. PROBE
ZN-T	4	NSB8BTN040-0	NETWORK SENSOR, 3"X4.5" MS/TP, TEMP, WHITE, LOGO

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Drawing Title
VAV no RH - BOM and Sequence

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 7/10/2025	BY DATE

Project Title
IU Indianapolis LD and SL Lab Design

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CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
6.2

VAV - POINT SCHEDULE

TYPICAL OF (4)
SERVING: SEE ROOM SCHEDULE

Electrician/Fitter	Point Information				Controller Information							Field Device				
Tag	Point Type	System Name	Object Name	Expanded ID	Controller Details	Trunk Type	Trunk Nbr	Trunk Addr.	Cable Destination Bay/Terminal	Module Type	Termination Out	Wiring /Tubing	Termination In	Device	Ref Detail Shape	Comment
		Sx-xx			CVM03050											Power to Controller
		Sx-xx			CVM03050	MS/TP	x	x								BacNet FC Bus
	UI IN-1	Sx-xx	DA-T	Discharge Air Temperature	CVM03050	MS/TP	x	x	UI IN-1		IN1, ICOM1	2/22	2-Wire	TE	V131	
	UI IN-2	Sx-xx			CVM03050	MS/TP	x	x	UI IN-2							
	UI IN-3	Sx-xx			CVM03050	MS/TP	x	x	UI IN-3							
	BO OUT-1	Sx-xx			CVM03050	MS/TP	x	x	BO OUT-1							
	BO OUT-2	Sx-xx			CVM03050	MS/TP	x	x	BO OUT-2							
	BO OUT-3	Sx-xx			CVM03050	MS/TP	x	x	BO OUT-3							
	CO OUT-1	Sx-xx			CVM03050	MS/TP	x	x	CO OUT-1							
	CO OUT-2	Sx-xx			CVM03050	MS/TP	x	x	CO OUT-2							
		Sx-xx			NET STAT											
		Sx-xx			NET STAT	SA Bus	x	199								BacNet SA Bus
	STAT	Sx-xx	ZN-T	Zone Temperature	NET STAT	SA Bus	x	199	STAT		Terminals	4/22	Terminals	NS8000 NetSensor Terminals	NS202	

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Drawing Title

VAV - Point Schedule (Typical of 4)

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 7/10/2025	BY DATE

Johnson Controls

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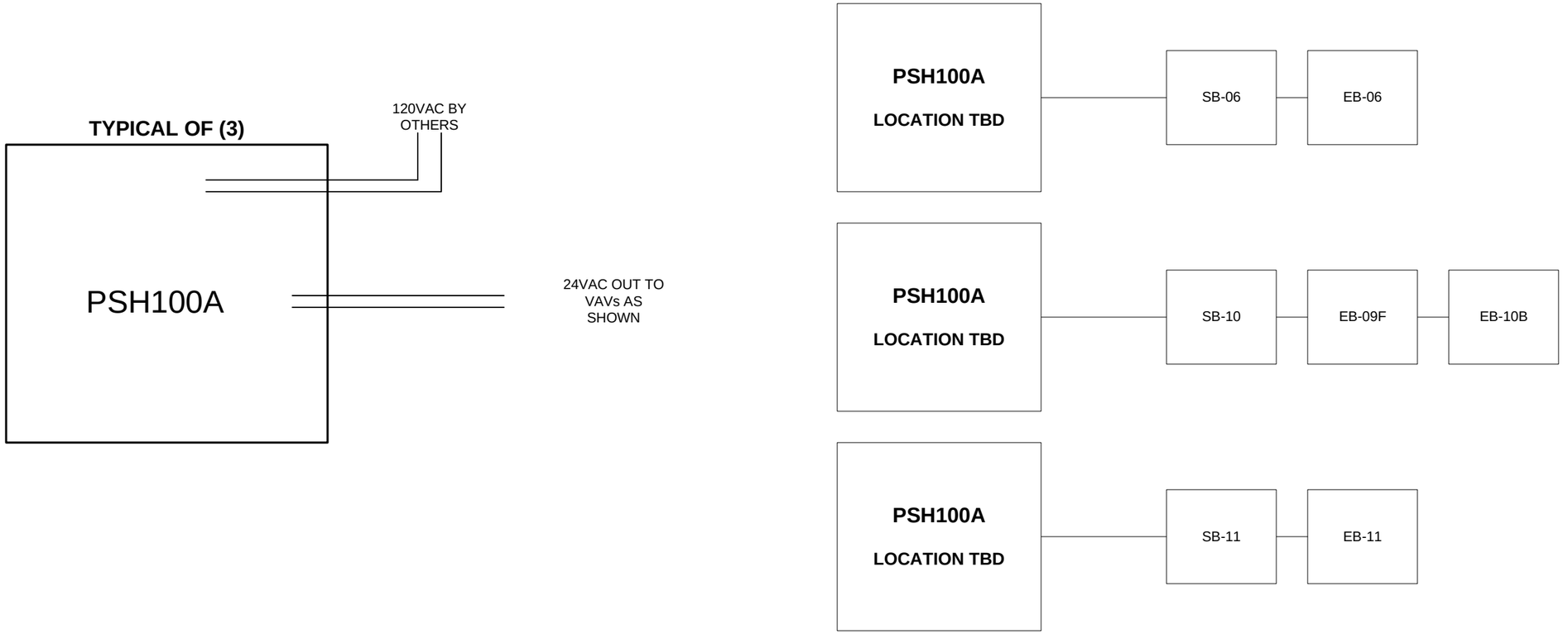
CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
6.3

SL-1 - VAV/GEV POWER LAYOUT 1

BILL OF MATERIALS

Designation	Qty	Part Number	Description
Field Devices:			
PWR	3	PSH100A	ENCLOSED SINGLE 100VA, 120 VAC TO 24 VAC, UL CLASS 2 POWER SUPPLY



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Drawing Title
VAV-GEV - Power Layout 1

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Johnson Controls

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Phone: 3176387611

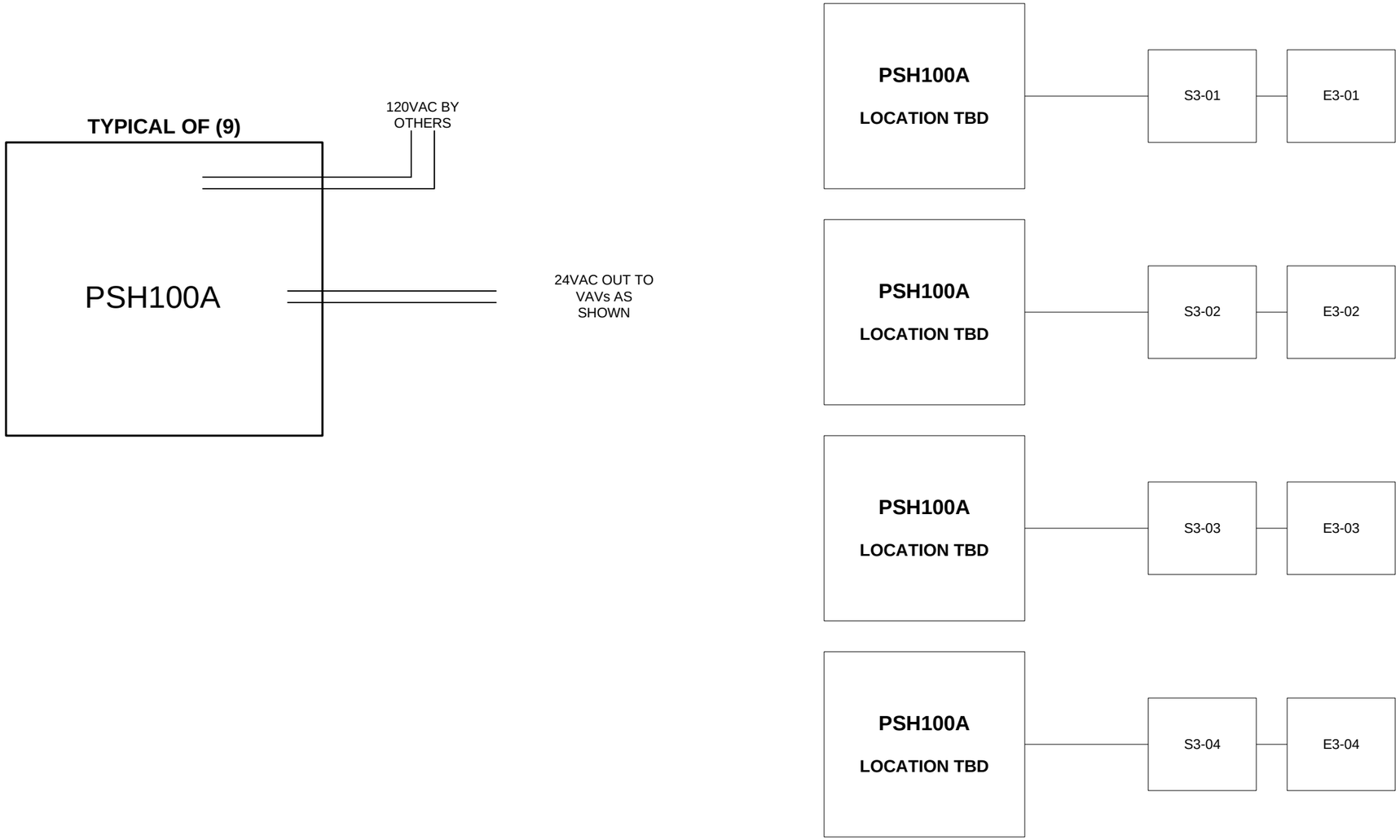
CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
7.1

SL-1 - VAV/GEV POWER LAYOUT 2-1

BILL OF MATERIALS

Designation	Qty	Part Number	Description
Field Devices:			
PWR	9	PSH100A	ENCLOSED SINGLE 100VA, 120 VAC TO 24 VAC, UL CLASS 2 POWER SUPPLY



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Drawing Title
VAV-GEV - Power Layout 2-1

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Johnson Controls

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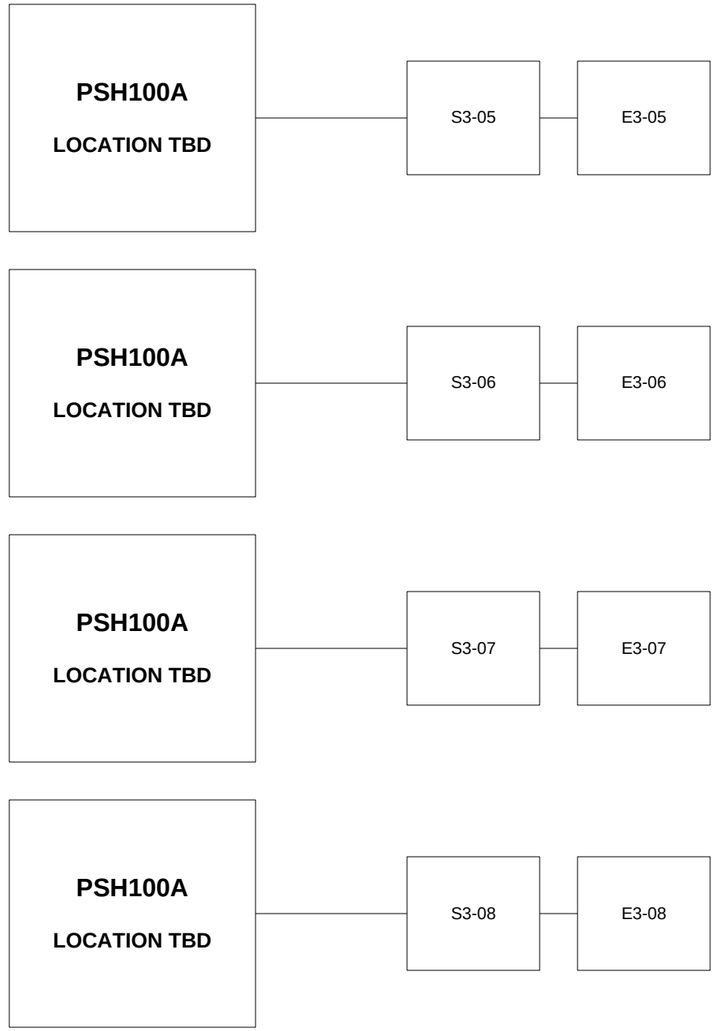
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
7.2

SL-1 - VAV/GEV POWER LAYOUT 2-2



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Drawing Title

VAV-GEV - Power Layout 2-2

Project Title

IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Johnson Controls

Branch Information

BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
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Phone: 3176387611

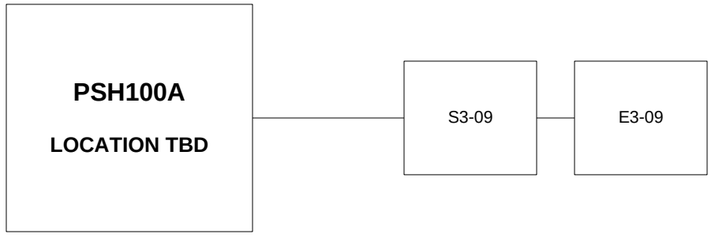
CONTRACT NUMBER

5N20-0379

DRAWING NUMBER

7.3

SL-1 - VAV/GEV POWER LAYOUT 2-3



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Drawing Title

VAV-GEV - Power Layout 2-3

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

Project Title

IU Indianapolis LD and SL Lab Design

Johnson Controls

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5920 Castleway West Dr,
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Phone: 3176387611

CONTRACT NUMBER

5N20-0379

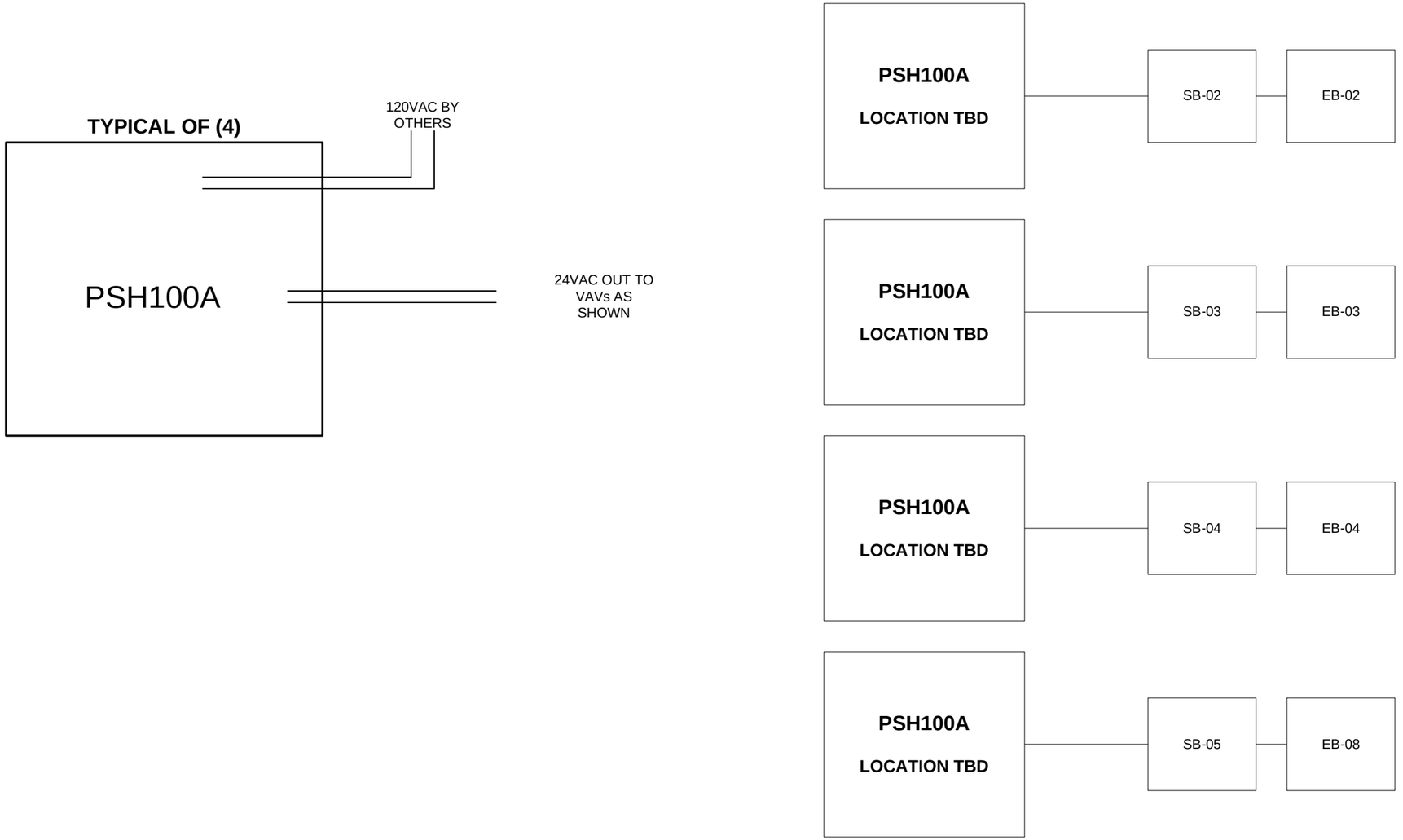
DRAWING NUMBER

7.4

LD-2 - VAV/GEV POWER LAYOUT 3

BILL OF MATERIALS

Designation	Qty	Part Number	Description
Field Devices:			
PWR	4	PSH100A	ENCLOSED SINGLE 100VA, 120 VAC TO 24 VAC, UL CLASS 2 POWER SUPPLY



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Drawing Title
VAV-GEV - Power Layout 3

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

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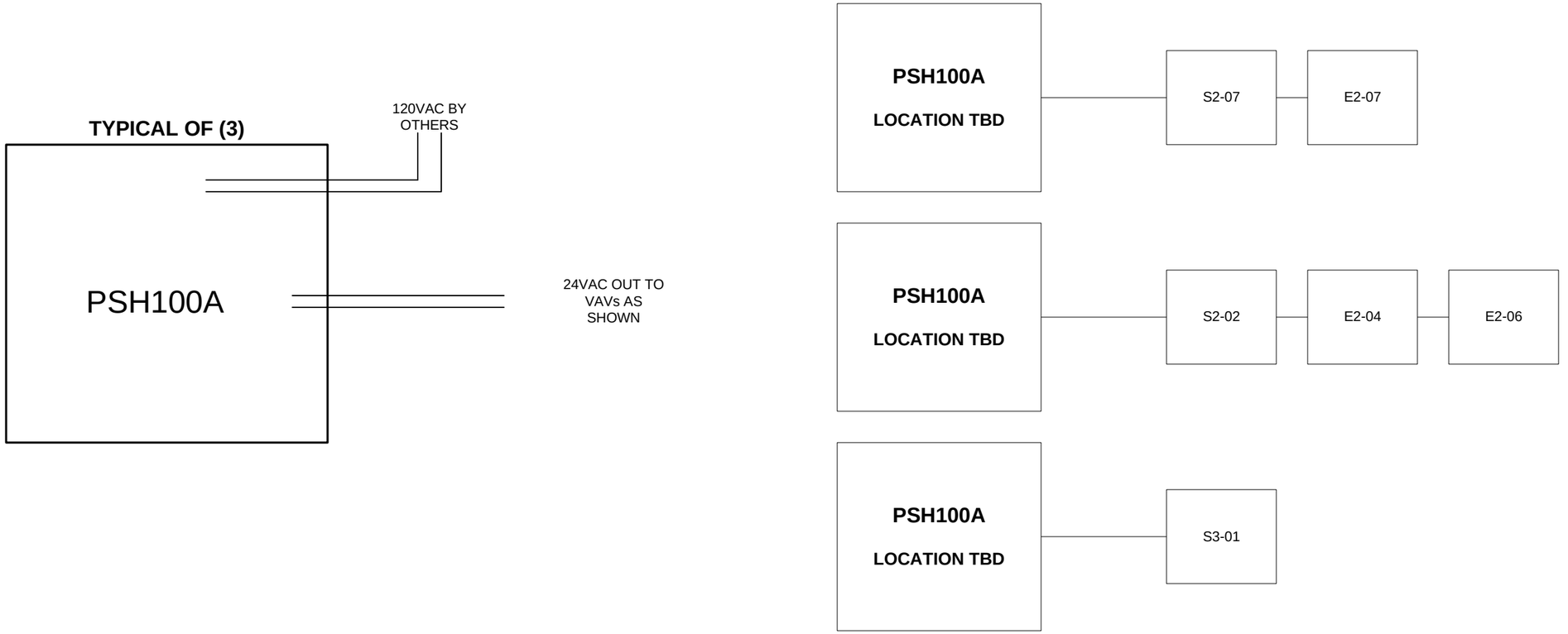
CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
7.5

LD-2 - VAV/GEV POWER LAYOUT 4

BILL OF MATERIALS

Designation	Qty	Part Number	Description
Field Devices:			
PWR	3	PSH100A	ENCLOSED SINGLE 100VA, 120 VAC TO 24 VAC, UL CLASS 2 POWER SUPPLY



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Drawing Title
VAV-GEV - Power Layout 4

Project Title
IU Indianapolis LD and SL Lab Design

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/12/2025	BY DATE

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CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
7.6

ROOM SCHEDULE

Box Location									Controller Information						Sensor	Box Information								
	Room		Help	Toggle Comments					Controller Required									Box Config Required						Required (N2)	
Bldg./Flr.	No.	Name	System Name	Mech. Dwg.	System Serving this Box	Box Mfgr.	Mfgr Box Type	JCI Ctrl Dwg No.	Controller Part No.	SNE / SNC / NAE Addr	Trunk ID	Device Addr	Standard Systems CSModel or Template	Code No.	Box Heat	Supplemental Heat	Config File Name	Inlet Size (Inches)	Inlet Area (Sq. Ft.)	K Factor	Clg Min Flow	Clg Max Flow	VMA Box Config	Comments
VAV Boxes																								
IN072 - SL-1 - BASEMENT	SL058	ROOM	SB-09	M1.410	IN072-AHU0E-VAV56	TITUS	DESV	2.1	M4-CCM09090-0	NAE-2 SL	FC-2	56	LAB	NSB8BTN040-0	Yes	No	LAB	14	1.07	2.02	1025	1625		
IN072 - SL-1 - BASEMENT	SL058A	ROOM	SB-10	M1.410		TITUS	DESV	5.1	M4-CVM03050-0	NAE-2 SL	FC-2	54	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	8	0.35	2.39	150	600		
IN072 - SL-1 - BASEMENT	SL058B	ROOM	SB-11	M1.410		TITUS	DESV	5.1	M4-CVM03050-0	NAE-2 SL	FC-2	55	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	150	290		
IN072 - SL-1 - THIRD FLOOR	SL337B	ROOM	S3-01	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	32	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	265	320		
IN072 - SL-1 - THIRD FLOOR	SL339	ROOM	S3-02	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	30	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	190	320		
IN072 - SL-1 - THIRD FLOOR	SL340	TC	S3-03	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	35	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	130	235		
IN072 - SL-1 - THIRD FLOOR	SL338	FLEX	S3-04	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	36	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	125	285		
IN072 - SL-1 - THIRD FLOOR	SL341	FLEX	S3-05	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	29	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	125	285		
IN072 - SL-1 - THIRD FLOOR	SL343	TC	S3-06	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	60	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	135	215		
IN072 - SL-1 - THIRD FLOOR	SL351A	INSECTARY	S3-07	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	46	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	155	360		
IN072 - SL-1 - THIRD FLOOR	SL351	INSECTARY	S3-08	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	61	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	12	0.79	2.76	540	1160		
IN072 - SL-1 - THIRD FLOOR	SL347	DARKROOM	S3-09	M1.413		TITUS	DESV	5.1	M4-CVM03050-0	NAE-27 SL	FC-2	37	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	55	250		
IN072 - SL-1 - THIRD FLOOR	SL342	EQUIPMENT CORE	S3-10	M1.413	IN072-AHU3E-VAV33	TITUS	DESV	1.1	M4-CCM09090-0	NAE-27 SL	FC-2	33	LAB	NSB8BTN040-0	Yes	No	LAB	16	1.40	1.12	1380	2100		
IN072 - SL-1 - THIRD FLOOR	SL369	FLEX LAB	S3-11	M1.413	IN072-AHU3E-VAV40	TITUS	DESV	1.1	M4-CCM09090-0	NAE-27 SL	FC-2	40	LAB	NSB8BTN040-0	Yes	No	LAB	24X16			1408	2240		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD055	ROOM	SB-01	M2.411	IN072-AHU2-VAV101	TITUS	DESV	3.1	M4-CCM09090-0	NAE-8 LD	FC-2	101	LAB	NSB8BTN040-0	Yes	No	LAB	24X16			710	2800		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD055B	ROOM	SB-02	M2.411		TITUS	DESV	5.1	M4-CVM03050-0	NAE-8 LD	FC-2	7	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	130	195		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD055A	DARKROOM	SB-03	M2.411		TITUS	DESV	5.1	M4-CVM03050-0	NAE-8 LD	FC-2	93	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	90	115		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD059	ROOM	SB-04	M2.411		TITUS	DESV	5.1	M4-CVM03050-0	NAE-8 LD	FC-2	95	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	10	0.55	2.31	405	705		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD063	ROOM	SB-05	M2.411		TITUS	DESV	5.1	M4-CVM03050-0	NAE-8 LD	FC-2	96	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	6	0.20	3.07	95	250		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD204	LAB	S2-01	M2.411	IN073-AHU6-VAV27	TITUS	DESV	3.1	M4-CCM09090-0	NAE-8 LD	FC-1	27	LAB	NSB8BTN040-0	Yes	No	LAB	24X16			1075	3630		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220A	LAB	S2-03	M2.411	IN073-AHU6-VAV29	TITUS	DESV	1.1	M4-CCM09090-0	NAE-8 LD	FC-1	29	LAB	NSB8BTN040-0	Yes	No	LAB	14	1.07	2.02	795	1225		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220C	LAB	S2-05	M2.411	IN073-AHU6-VAV28	TITUS	DESV	1.1	M4-CCM09090-0	NAE-8 LD	FC-1	28	LAB	NSB8BTN040-0	Yes	No	LAB	16	1.40	1.12	460	1985		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220E	ROOM	S2-07	M2.411		TITUS	DESV	5.1	M4-CVM03050-0	NAE-8 LD	FC-1	30	VAV-RH	NSB8BTN040-0	Yes	No	VAV-RH	8	0.35	2.39	45	425		
IN073 - LD-2 - THIRD FLOOR INTERSTITIAL	LD312	ROOM	S3-02A S3-02B S3-02C	M2.411	IN073-AHU7-VAV58	TITUS	DESV	4.1	M4-CGM09090-0	NAE-25 LD	FC-1	58	LAB	NSB8BTN040-0	Yes Yes Yes	No	LAB	16 14 14	1.40 1.07 1.07	1.12 2.02 2.02	935 935 935	1800 1750 1750		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD202	TEACHING LAB	S2-02	M2.601		TITUS	DESV	7.1	M4-CVM03050-0	NAE-8 LD	FC-2	102	VAV	NSB8BTN040-0	No	No	VAV	24X16				2485		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220B	ROOM	S2-04	M2.601		TITUS	DESV	7.1	M4-CVM03050-0	NAE-8 LD	FC-2	103	VAV	NSB8BTN040-0	No	No	VAV	6	0.20	3.07		225		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220D	ROOM	S2-06	M2.601		TITUS	DESV	7.1	M4-CVM03050-0	NAE-8 LD	FC-2	104	VAV	NSB8BTN040-0	No	No	VAV	10	0.55	2.31		665		
IN073 - LD-2 - THIRD FLOOR INTERSTITIAL	LD314	ROOM	S3-01	M2.601		TITUS	DESV	7.1	M4-CVM03050-0	NAE-25 LD	FC-1	59	VAV	NSB8BTN040-0	No	No	VAV	10	0.55	2.31		810		
GEVs																								
IN072 - SL-1 - BASEMENT	SL058	ROOM	EB-09A EB-09B	M1.410	IN072-AHU0E-VAV56	ANTEC ANTEC	VFX VFX	3.1	M4-CCM09090-0	NAE-2 SL	FC-2	56			No No	No No		8 10	0.35 0.55	2.24 1.96	400 0	400 600		
IN072 - SL-1 - BASEMENT	SL058A	ROOM	EB-09F EB-10B	M1.410 M1.410	SB-10	ANTEC ANTEC	VFX VFX	6.1	M4-CVM03050-0	NAE-2 SL	FC-2	54			No No	No No		6 8	0.20 0.35	2.8 2.24	100 50	100 500		
IN072 - SL-1 - BASEMENT	SL058B	ROOM	EB-11	M1.410	SB-11	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-2 SL	FC-2	55			No	No		8	0.35	2.24	150	290		
IN072 - SL-1 - THIRD FLOOR	SL337B	ROOM	E3-01	M1.413	S3-01	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	32			No	No		8	0.35	2.24	340	395		
IN072 - SL-1 - THIRD FLOOR	SL339	ROOM	E3-02	M1.413	S3-02	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	30			No	No		8	0.35	2.24	265	395		
IN072 - SL-1 - THIRD FLOOR	SL340	TC	E3-03	M1.413	S3-03	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	35			No	No		8	0.35	2.24	130	235		
IN072 - SL-1 - THIRD FLOOR	SL338	FLEX	E3-04	M1.413	S3-04	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	36			No	No		8	0.35	2.24	125	285		
IN072 - SL-1 - THIRD FLOOR	SL341	FLEX	E3-05	M1.413	S3-05	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	29			No	No		8	0.35	2.24	125	285		
IN072 - SL-1 - THIRD FLOOR	SL343	TC	E3-06	M1.413	S3-06	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	60			No	No		8	0.35	2.24	135	215		
IN072 - SL-1 - THIRD FLOOR	SL351A	INSECTARY	E3-07	M1.413	S3-07	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	46			No	No		8	0.35	2.24	155	360		
IN072 - SL-1 - THIRD FLOOR	SL351	INSECTARY	E3-08	M1.413	S3-08	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	61			No	No		10	0.55	1.96	540	1160		
IN072 - SL-1 - THIRD FLOOR	SL347	DARKROOM	E3-09	M1.413	S3-09	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-27 SL	FC-2	37			No	No		10	0.55	1.96	130	325		
IN072 - SL-1 - THIRD FLOOR	SL342	EQUIPMENT CORE	E3-10	M1.413	IN072-AHU3E-VAV33	ANTEC	VFX	1.1	M4-CCM09090-0	NAE-27 SL	FC-2	33			No	No		12	0.79	2.03	350	650		
IN072 - SL-1 - THIRD FLOOR	SL369	FLEX LAB	E3-11	M1.413	IN072-AHU3E-VAV40	ANTEC	VFX	1.1	M4-CCM09090-0	NAE-27 SL	FC-2	40			No	No		14	1.07	1.97	905	1665		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD055	ROOM	EB-01	M2.411	IN072-AHU2-VAV101	ANTEC	VFX	4.1	M4-CCM09090-0	NAE-8 LD	FC-2	101			No	No		14	1.07	1.97	0	2175		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD055B	ROOM	EB-02	M2.411	SB-02	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-8 LD	FC-2	7			No	No		8	0.35	2.24	130	195		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD055A	DARKROOM	EB-03	M2.411	SB-03	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-8 LD	FC-2	93			No	No		8	0.35	2.24	165	190		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD059	ROOM	EB-04	M2.411	SB-04	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-8 LD	FC-2	95			No	No		10	0.55	1.96	480	780		
IN073 - LD-2 - BASEMENT INTERSTITIAL	LD063	ROOM	EB-08	M2.411	SB-05	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-8 LD	FC-2	96			No	No		8	0.35	2.24	165	325		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD204	LAB	E2-01	M2.411	IN073-AHU6-VAV27	ANTEC	VFX	4.1	M4-CCM09090-0	NAE-8 LD	FC-1	27			No	No		12	0.79	2.03	0	3005		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220A	LAB	E2-03	M2.411	IN073-AHU6-VAV29	ANTEC	VFX	1.1	M4-CCM09090-0	NAE-8 LD	FC-1	29			No	No		12	0.79	2.03	220	650		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220C	LAB	E2-05	M2.411	IN073-AHU6-VAV28	ANTEC	VFX	1.1	M4-CCM09090-0	NAE-8 LD	FC-1	28			No	No		12	0.79	2.03	0	1710		
IN073 - LD-2 - SECOND FLOOR INTERSTITIAL	LD220E	ROOM	E2-07	M2.411	S2-07	ANTEC	VFX	6.1	M4-CVM03050-0	NAE-8 LD	FC-2	8			No	No		8	0.35	2.24	120	425		

Drawing Title						
Room Schedule						
REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY	
Sales Engineer: JG	Project Manager: BS	Application Engineer: DG	DRAWN BY DRG DATE 3/13/2025	APPROVED BY	DATE	
Project Title						
IU Indianapolis LD and SL Lab Design	Johnson Controls	Branch Information: BSNA - INDIANAPOLIS, IN 5920 Castleway West Dr, Indianapolis, Indiana 46250 Phone: 3176387611	CONTRACT NUMBER: **5N20-0379**	DRAWING NUMBER: **R.1**		

VALVE SCHEDULE

Tag					Valve Information																Actuator Information			
Item	System	Service	Qty	Ref. Dwg.	Code Number	Valve Family	Configuration	Fail Position	Inlet Pipe Size	Valve Size	Medium	Flow (gpm [US])	Design Delta P (psig)	Valve Delta P (psig)	Design Coefficient (Cv)	Valve Coefficient (Cv)	Design Close Off (psig)	Valve Close Off (psig)	Trim Material	Connection	Code Number	Actuator Control	Piping Detail	Comments
1	SB-09	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	7.80	5.00	2.75	3.49	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
2	SB-10	HTG-VLV	1		VG1245AE+9T4GGA	Ball Valve	2-Way	Last Position	1	1/2	Water	2.90	5.00	2.33	1.30	1.90	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
3	SB-11	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
4	S3-01	HTG-VLV	1		VG1245AC+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.30	5.00	2.64	0.58	0.80	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
5	S3-04	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
6	S3-02	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
7	S3-03	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
8	S3-05	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
9	S3-10	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	7.40	5.00	2.48	3.31	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
10	S3-06	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
11	S3-09	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
12	S3-08	HTG-VLV	1		VG1245AE+9T4GGA	Ball Valve	2-Way	Last Position	1	1/2	Water	2.80	5.00	2.17	1.25	1.90	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
13	S3-07	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
14	S3-11	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	7.90	5.00	2.83	3.53	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
15	SB-01	HTG-VLV	1		VG1245CL+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	1	Water	11.50	5.00	2.42	5.14	7.40	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
16	SB-03	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
17	SB-02	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
18	SB-04	HTG-VLV	1		VG1245AD+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	2.10	5.00	3.06	0.94	1.20	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
19	SB-05	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
20	S2-01	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	8.70	5.00	3.43	3.89	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
21	S2-03	HTG-VLV	1		VG1245AE+9T4GGA	Ball Valve	2-Way	Last Position	1	1/2	Water	3.10	5.00	2.66	1.39	1.90	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
22	S2-05	HTG-VLV	1		VG1245AF+9T4GGA	Ball Valve	2-Way	Last Position	1	1/2	Water	4.70	5.00	2.63	2.10	2.90	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
23	S2-07	HTG-VLV	1		VG1245AB+9T4GGA	Ball Valve	2-Way	Last Position	3/4	1/2	Water	1.00	5.00	4.00	0.45	0.50	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
24	S3-02A	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	8.60	5.00	3.35	3.85	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
25	S3-02B	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	8.40	5.00	3.19	3.76	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		
26	S3-02C	HTG-VLV	1		VG1245BG+9T4GGA	Ball Valve	2-Way	Last Position	1-1/2	3/4	Water	8.40	5.00	3.19	3.76	4.70	0.00	200.00	Stainless Steel	Threaded	VA9104-GGA-3S	0-10VDC PROP		

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Drawing Title

Valve Schedule

REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY

Sales Engineer	Project Manager	Application Engineer	DRAWN	APPROVED
JG	BS	DG	BY DRG DATE 3/13/2025	BY DATE

Project Title

IU Indianapolis LD and SL Lab Design

Johnson Controls

Branch Information
BSNA - INDIANAPOLIS, IN
5920 Castleway West Dr,
Indianapolis, Indiana
46250
Phone: 3176387611

CONTRACT NUMBER
5N20-0379

DRAWING NUMBER
V.1

SECTION 002113 - INSTRUCTIONS TO BIDDERS

1.1 INSTRUCTIONS TO BIDDERS

A. Reference INSTRUCTIONS TO BIDDERS document attached.

END OF DOCUMENT 002113

Indiana University Indianapolis

Science Laboratory Building

Instruction to Bidders

BID PACKAGE 5 – RENOVATIONS - REBID

Attached Documents:

Attachment 01 – TRADE SPECIFIC WORK SCOPES

Attachment 02 – TRADE SPECIFIC BID FORM(s)

Attachment 03 – ALTERNATES FORM

Attachment 04 – FORM 96 – CONTRACTORS BID FOR PUBLIC WORK

Attachment 05 – CONTRACTOR ASBESTOS CERTIFICATION

Attachment 06 – ASBESTOS PROTOCAL FOR CONTRACTORS

Attachment 07 – XBE PARTICIPATION PLAN

Attachment 08 – LOGISTICS PLAN

Attachment 09 – PROJECT SCHEDULE

Attachment 10 – CONTRACT DOCUMENT LOG

Attachment 11 – SAMPLE SHIEL SEXTON SUBCONTRACT AGREEMENT

~~Attachment 12 – BIM EXECUTION PLAN~~

Associated Separate Documents:

- None

Project Information

Name and Brief Summary:

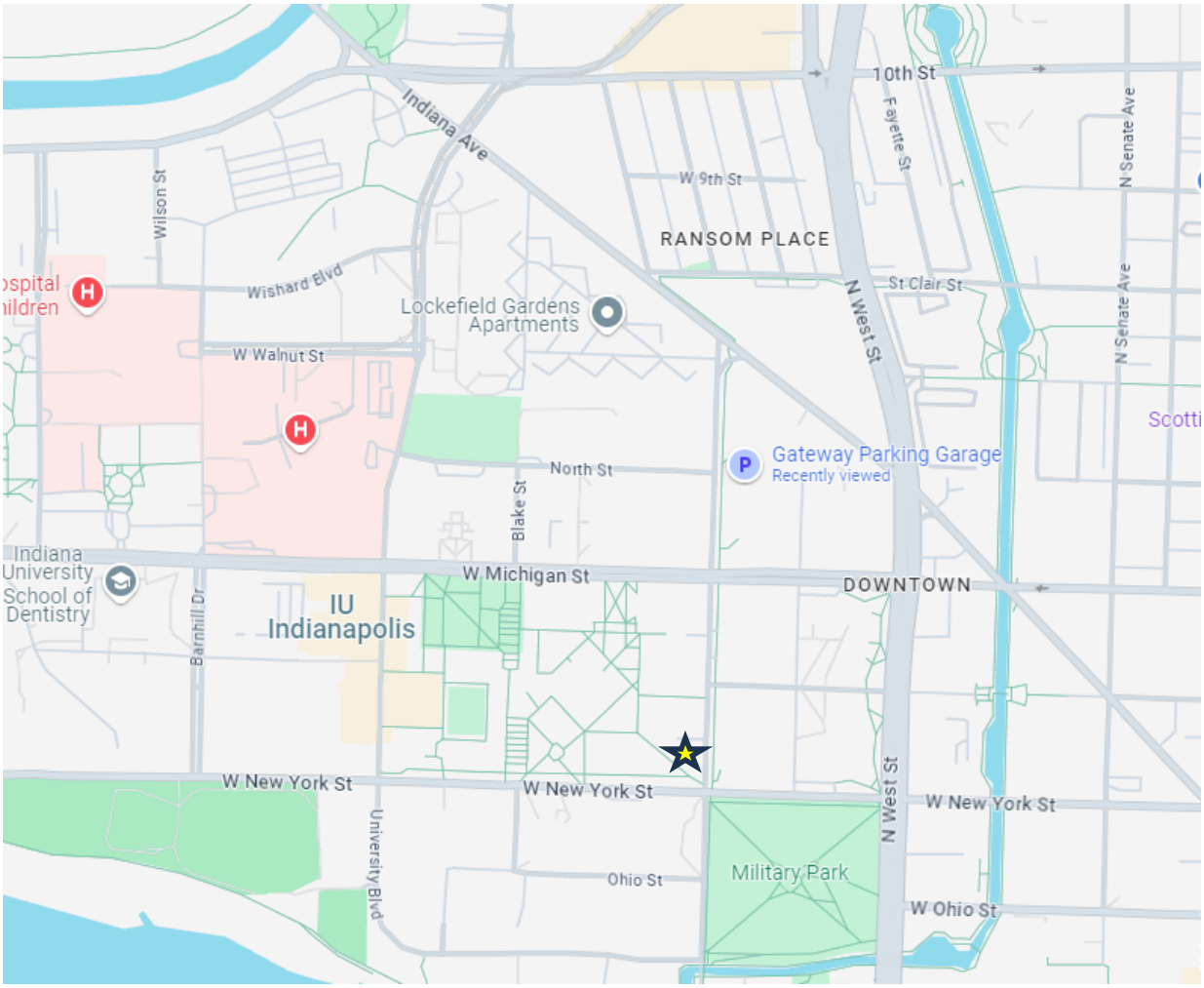
- IU Indianapolis - Science Renovations – Buildings SL, LD & EL (SELB)
  - Renovation of various locations in three existing multidisciplinary research facilities. The buildings contained in the renovation scope of work include the Science and Engineering Laboratory (EL), Science Building (LD), and Engineering and Science Technology (SL) buildings. The scope of work varies by floor and building and can include, but is not limited to, upgraded lab equipment, lab and general casework, plumbing fixtures, new flooring, MEP-F systems, ceiling replacement, lighting, and general finishes.

Address:

402 N. Blackford St., Indianapolis, IN 46202

Vicinity Map

Thoroughfare Map



Bid Information/Important Dates

Designer:

Architect – arcDESIGN

Design Architect - HOK

Structural Engineer – JPS Consulting Engineers

Structural Engineer – American Structurepoint

MEP Engineer – Heapy Engineering

Civil Engineer – VS Engineering

Landscape Architect – Context Design

Technology Consultant – KBSO Consulting

Construction Manager as Constructor:

Harmon Shiel Sexton Indy Science JV

Bid Manager – Chris Junken | cjunken@shielsexton.com| (317) 557-2915

Bid Schedule:

- Pre-Bid/XBE Outreach Meeting**: Thursday, June 26th, 2025 @ 10:00am (EST).**
  - Location: 902 N. Capitol Ave., Indianapolis, IN 46204
  - Shiel Sexton main office
- Site Walk: **Thursday, June 26th, 2025 @ 11:00pm (EST).**
  - Location: 402 N. Blackford St., Indianapolis, IN 46202
  - Recommended parking would be at the Gateway Parking Garage at 525 N. Blackford St. Indianapolis, IN. Project site will be at the SW corner of Michigan and Blackford. Attendees should gather at the project site at the designated time. Building signage at the corner will indicate "Engineering, Science & Technology Building".
- Questions Due: **Tuesday, July 8th, 2025 @ 1:00pm (EST).**
- Bids Due: **Tuesday, July 15th, 2025 @ 2:00pm (EST).**

How/Where to Submit your Bid:

- Bids will be received via electronic submission on www.iuplanroom.com. Bidders must be registered and signed into the planroom in order to submit a bid. Owner and Construction Manager will consider bids prepared in compliance with the Instructions to Bidders issued by Construction Manager, and delivered as follows:
    - Bid Date: Tuesday, July 15th, 2025
    - Bid Time: 2:00 pm local time. (EST)
    - Location: Electronic bids will be submitted at www.iuplanroom.com
    - Bid Opening: Bids will be opened via Zoom: https:///iu.zoom.us/j/82623978895
        - Meeting ID: 826 2397 8895
        - Join by telephone: 312-626-6799

Bid Questions:

Bid questions should be sent to cjunken@shielsexton.com

Bid Categories:

- Categories bidding in this package include;
    - 5.01 – Plumbing
    - 5.02 – Mechanical
    - 5.03 – Electrical
    - 5.04 – Emergency Power

Work Previously Bid

The following work scope was previously bid. Reference those bid scopes to understand what was purchased to understand how it relates to the scope of work you are bidding.

- Work outlined in **Bid Package 1** – **New Addition** included the following:
  - BP 1.01: Earthwork and Utilities
  - BP 1.02: Rammed Aggregate Piers
  - BP 1.03: Concrete and Structural Steel
  - BP 1.04: Glass and Glazing
  - BP 1.05: Roofing
  - BP 1.06: Metal Panels
  - BP 1.07: Flooring and Wall Tile
  - BP 1.08: Plumbing
  - BP 1.09: HVAC
  - BP 1.10: Fire Protection
  - BP 1.11: Electrical
  - BP 1.12: Elevator

- Work outlined in **Bid Package 2** – **New Addition** included the following:
  - BP 2.01: General Trades - **Rebidding**
  - BP 2.02: Terrazzo
  - BP 2.03: Lab Equipment Casework - **Rebidding**
  - BP 2.04: Site Improvements
  - BP 2.05: Masonry - **Rebidding**

- Work outlined in **Bid Package 3** – **Renovation** included the following:
  - BP 3.01: General Trades
  - BP 3.02: Lab Equipment Casework
  - BP 3.03: Fire Protection
  - BP 3.04: Plumbing - **Rebidding**
  - BP 3.05: Mechanical – **Rebidding**
  - BP 3.06: Electrical - **Rebidding**
  - BP 3.07: Emergency Power - **Rebidding**

- Work outlined in **Bid Package 4** – **New Addition** included the following:
  - BP 4.01: General Trades
  - BP 4.02: Framing/Drywall/Ceilings
  - BP 4.03: Lab Equipment Casework
  - BP 4.04: Masonry

Key Bid Requirements

1) Schedule: All bids shall include sufficient supervision and manpower to meet or improve upon the construction schedule. Bidders should note the schedule may require subcontractors to perform work in different areas of the building concurrently. Bidders shall assume reasonable adjustments to the schedule and be able to respond accordingly.
    a. Bidders shall review and understand the timing of their respective work scope in relation to the calendar year. Base bid shall include reasonable and customary weather delays as could be ascertained from local weather stations for what is normal for the project location.
2) Substitutes/Alternates/Value Engineering: This project DOES allow the submission of substitutes, voluntary alternates, and value engineering to be included with the bid.
    a. Base bid proposals MUST be made based on the specified products and/or manufactures included in the contract documents. Shall the bidder want to identify a substitution of a material of equal substance and function from those specified in the contract documents; this may be noted as an attachment to the Bid Form as a Voluntary Alternate. All voluntary alternates shall be stated as an ADJUSTED value from the base bid proposal to include all necessary changes to incorporate the alternate.
3) Taxes: This project is TAX EXEMPT. Shiel Sexton will provide this certificate.
4) Performance & Payment Bonds: Subcontractors shall furnish Performance and Payment Bonds, each in an amount at least equal to one-hundred (100%) of the contract price as security for the faithful performance and payment of all the subcontractor's obligations under the contract documents. These bonds shall remain in effect at least until two (2) years after the date when final payment becomes due, except as otherwise provided by law or regulation or by the contract documents. All bonds shall be in the forms prescribed by law, regulation, and the contract documents and be executed by such sureties as (i) are licensed to conduct business in the State of Indiana, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the power of attorney or other instrument establishing the agent's authority.
5) Vendor Registration: Subcontractors will be required to complete Shiel Sexton Registration process post bid/pre award to verify safety, insurance, and financing.
6) XBE Requirements: This project DOES have established XBE requirements.
    a. Harmon Shiel Sexton has made commitments to Indiana University for significant overall participation. Bidders are also strongly encouraged to make significant commitments and will be required to demonstrate a good faith effort during the bid process.
    b. Overall project total should meet or exceed 20% XBE participation.

Provided by Owner/Harmon Shiel Sexton JV

This list is provided for your reference and understanding of those items provided by the Owner and Harmon Shiel Sexton. Bidder shall assume if it is not listed below it shall be included in the cost of their bid or bidder shall submit a question to clarify.

The following items are provided by the Owner for this project:

1. State Plan Release, Indianapolis Improvement Location Permit, and any required utility connection fees, storm water observation fees, and any site-related regulatory costs. All trade permits are the responsibility of that contractor requiring the permit.

The following items are provided by Shiel Sexton for this project:

1. Portable toilets
2. Dumpsters – Except as indicated in major demolition scopes and concrete washout
3. Third party testing – Exceptions are listed in Trade Scopes document
4. Construction utility consumption

Project/Owner Specific Requirements

1) This project will be a 100% tobacco free site unless otherwise noted. If tobacco is allowed, Shiel Sexton will designate a specific smoking area for the project.
    - Additionally no smoking "substitute" (including vaping) is allowed within the building.
2) No food or drinks will be allowed within the building except for drinking water. A designated lunch area will be provided as the project progresses.
3) No Subcontractor signs or advertising shall be allowed on the jobsite.
4) Contractors shall cooperate and follow all builders risk requirements. Including but not limited to site security protocols, hot work requirements, temporary bracing / shoring while under construction, and all CM safety programs. All contractors on site are responsible to secure all tools, equipment, and material on site after hours and when not in use. Failure to secure materials, tools, or equipment properly after hours may result in no coverage in the result of a claim. The site will be fully fenced and locked after hours until such time as the owner approves removal and the building is secure and locked. Any and all after-hours access shall be coordinated and approved by the construction manager. Construction manager and/or the owner reserve the right to full, recorded, site surveillance.
5) Buildings are occupied spaces and consideration will need to be given in terms of noisemaking activities and material movements. Construction Manager will coordinate with ownership on advance notices and disruptive work. Bidders must pay special care to cleanup and safety of building occupants.

Project Management

1) Shiel Sexton utilizes Lean Management Principles and philosophies to manage projects and provide a collaborative and respectful work environment with all subcontractors. This includes the following management practices to help everyone maintain better relationships, project workflow, and productivity to deliver a quality project.
   a. Visual Communication such as large planning boards, Takt plans, clear signage, and etc.. is utilized in the trailer and on site to assure everyone on the project understands the construction plan and how to work on this project.
   b. Daily Huddles are mandatory for all foreman/superintendents on site. These are very short and concise meetings to review the daily work plan and promote good communication and collaboration among all subcontractors. These meetings are 15-20 minutes daily and will eliminate confusion and one-off conversations throughout the day so your team can focus on production work.
   c. 2-week work plans. We focus on short term scheduling to assure all subcontractors are working to the plan and providing the correct manpower count to achieve your commitments to complete work.
   d. Pull planning will be utilized to find the most efficient path of construction for specific work milestones and or building areas. This is a simple tool to engage your foreman (the last planners) in coordinating the details of building the project. It is a requirement for the superintendent/foreman that will manage the work to attend these meetings. It is also essential that you make the assignment and allow time for your superintendent/foreman to plan and understand their work prior to the pull sessions. We will provide all tools and training to those attending these sessions. These will occur as needed, but typically only once every 8-12 weeks.
   e. Takt planning will be utilized to schedule and manage high production work such as unit rough-ins and finishes. This is a planning tool that focuses on rhythm and flow of the work. We will put a high degree of effort into the development of good workflow so you can maintain a steady crew size and know the path of construction.
   f. CPM Scheduling is still utilized throughout the course of the project to assure we all remain on task to deliver the project by the contractual deadlines.
   g. Fanatic roadblock removal. We utilize a large roadblock removal board to keep these items front and center and fanatically work to remove these roadblocks so you can remain productive on site.
   h. Product tracking boards are utilized to identify the most pressing long lead materials.
   i. Material delivery boards will be posted in the trailer to allow your team to identify upcoming deliveries on a weekly basis.

2) Shiel Sexton will maintain a zero-tolerance policy on the following items for this project:
   a. Safety
   b. Quality
   c. Daily Clean-up
   d. Organization
   e. Material Deliveries

   We respect you and the workers you bring to this jobsite and part of the respect is providing you a clean, safe, and organized environment to perform productive, high quality, work where everyone goes home safely every day. We don't achieve this on our own and rely on you and your workers to arrive on site focused and ready to work with an understanding of the construction path as well as treating the project site with respect.

   We take the enforcement of zero tolerance items seriously and our response to infractions will depend upon the severity of the infraction. We will treat everyone fairly and consistently and all violations will be tracked. Some examples of enforcement:

a. Major violations that put anyone's life in danger and/or could have killed someone will result in immediate removal from the site and they will not be allowed to return.
b. Minor violations will result in the worker being asked to leave for the day and take time to focus, re-train, and or better plan their work, their manager will be notified, and they will be allowed return to work the following day after attending project orientation again.
    1. A second violation by the same person will result in removal from the site and they will not be allowed to return to this project.
c. Un-scheduled/Un-planned deliveries will be turned away.
d. Deliveries arriving without anyone from your company on site to take delivery, inventory, and off load the delivery will be turned away to return at a time you can be on site to manage the delivery.
e. Failure to maintain daily clean-up will result in stopping all of your work so your workers can perform clean up and organization of your work areas.
f. Failure to provide quality installations will result in stopping work to re-evaluate your work plan and come up with a new work plan that meets the requirements of a quality installation.

3) Lower Tier Subcontracts: It is understood each Subcontractor may require the use of a Lower Tier Subcontractor to complete their assigned work scope. Shiel Sexton requires the Prime Subcontractor to provide full time and on site management and coordination of all lower tier subcontractors within the Prime Subcontract. It is not acceptable for a lower tier Subcontractor to work on site without direct supervision from the Prime Subcontractor. The cost of this field supervision shall be included in the cost of work. Failure to provide this supervision for the duration of work completed by a lower tier Subcontractor may result in Shiel Sexton stopping work and/or providing a Shiel Sexton Superintendent to manage this lower tier Subcontractor. You will be provided written notice of failure to coordinate and manage lower tier subcontractors and will be given 48 hours to correct the situation. Shiel Sexton will provide full time coordination and supervision of the lower tier Subcontractor if the situation is not corrected at a cost of $100/Hour to be backcharged to the Prime Subcontractor that is failing to provide adequate management of lower tier Subcontractors.

4) Shiel Sexton utilizes Procore for all project documentation and management such as drawings, specifications, submittals, RFI's, daily reports, and etc... Procore shall serve as the single source of all record documents, changes, RFI's, Submittals, Meeting minutes and etc... Each Subcontractor is required to have access and provide access to field and office personnel managing the construction of the work which includes providing them with current hardware and internet/cellular data to efficiently utilize Procore.

   Hard copies of documents will not be provided. Should you need hard copies for your field workers it is your responsibility to provide hard copies as well as maintain current copies on site to assure you are working with the most current information including all changes by RFI's, Submittals, and etc..

5) All documents requiring subcontractor signature (Change Orders, Contracts, ect) will be sent and will need to be signed electronically via DocuSign. This is a web based service and will be at no additional cost to the subcontractor.

6) Shiel Sexton manages Time and Material (T&M) & Not-to-Exceed (NTE) change orders as follows:
    a. Shiel Sexton may direct your company, in writing, to complete work on a T&M basis. This direction shall only be provided by the Project Superintendent and/or Project Manager.

    b. Shiel Sexton may request a Not-to-exceed amount for each T&M change. This amount is the Subcontractor's guaranteed maximum price to complete the work. Shiel Sexton's Project Manager and/or Project Superintendent

shall be notified in writing if the NTE value will be exceeded. Subcontractor must provide an updated NTE value and obtain written approval prior to commencing work over the original agreed upon NTE value. Failure to notify Shiel Sexton in advance will result in non-payment of any amounts over the originally agreed upon amount.

c. T & M work sheets shall be turned in the day the work is completed and shall clearly describe the work performed and identify all labor, material, and equipment utilized. The T&M sheet must be signed by the Project Superintendent and/or Project Manager within 24 hours of the work being completed to be valid.

d. Invoices for T&M work without a signed T&M work sheet as backup will not be paid.

e. The start of T&M is allowed only after the subcontractor has demonstrated they have pre-planned the work to ensure all material, manpower and supervision is on site and ready to complete the work.

f. If Time & Material work is intended to become a backcharge to another trade/subcontractor for trade damage, the T&M ticket shall be accompanied with adequate backup to support the backcharge, including before and after photos that support the other trades involvement.

g. Backcharge work shall be agreed by all parties (Shiel Sexton, Company being backcharged, and Company doing the work) in writing prior to commencement of the work. This includes agreement to the NTE pricing and/or the plan to complete the work and the labor and equipment rates that will be utilized.

h. Shiel Sexton does not accept T&M sheets accumulated over the course of the project and presented at the end of your work. Changes shall be discussed and accepted or declined as the work commences. It is each Subcontractor's responsibility to manage work on site and be aware of any/all extra work being performed/requested to avoid accumulation of unauthorized extra work.

7) Testing: Shiel Sexton and/or the Owner will provide third-party testing as defined in the section above labeled "Provided by Owner/Shiel Sexton". All other third-party testing shall be included by the Subcontractor assigned to the specification.
   a. Subcontractor shall notify Shiel Sexton and the testing agency a minimum of 48 hours prior to the required test.
   b. Should the initial test fail, all costs of subsequent tests required to obtain a passing score shall be paid by the Subcontractor.
   c. Failure to notify Shiel Sexton and the testing agency prior to covering work that requires inspection will require the subcontractor to remove such material (and other affected material) that should have been tested and replace such material at their own expense. Subcontractor shall continue to remove and replace such material until all required testing can be performed and a passing result is achieved.

8) Inspections: This Subcontractor will include calling for, coordinating and attending all State, City or County Building Department inspections with all affected related trades and notify Shiel Sexton of pending inspections and their results post inspection.

9) Permitting and Fees: Include all permitting and regulatory fees specific to your trade. Each subcontractor shall participate in permitting process as needed and pull any permits required to be pulled by the subcontractor. Bid shall include the cost of permits required for the subcontractor. ONLY those permits listed in the section above labeled "Provided by Owner/Shiel Sexton" are provided for you.

Contract Requirements

1) Sample Subcontract: Contractor shall review and understand the Shiel Sexton Subcontract provided as an attachment to this document.
   a. Changes requested to the Subcontract shall be included with your bid/proposal. Failure to submit proposed changes is an indication of your acceptance of the contract as written.
   b. Should your company have a standard modification to the Shiel Sexton agreement it shall be provided with your bid/proposal.

2) Owner – Contractor Agreement: A copy of the Owner-Contractor Agreement is included for all bidders to review and familiarize themselves with the terms and applicable requirements that are material to their scope of work.

Quality Requirements

Job Specific Quality Plan: Prior to starting work, each Subcontractor shall provide the following documents to Shiel Sexton (SSC). It is critical that these documents are furnished promptly so that the start of your work is not delayed.

1) Job Specific Quality Plan (JSQP) (See the following for detail).

Contractual requirements of this project require each Subcontractor and their Sub-subcontractors to provide SSC a copy of a written Job Specific Quality Plan (JSQP). This plan must provide responses to the following 12 points. Subcontractors are responsible for ensuring that their Sub-subcontractors each submit a plan individually to SSC.

a) Does your company have a written quality program? If so, please provide a copy.

b) Please describe the methods that will be used to ensure that all Subcontract Documents, Specifications and Drawings are met on this project?

c) The name & contact information of the person who is responsible for the day-to-day implementation of this plan and what role this person will play during the project? This person must be on site daily.

d) The name & contact info of the person who is corporately (at your office) responsible for quality?

e) Please identify how you will control construction and quality documents and who is responsible?

f) Quality inspections shall be completed per the contract documents and as defined during the DFOW Meeting (see below). Name the person or persons that will perform the inspections. Please also include the documentation methods for these inspections (i.e. forms, distribution, etc.). Copy SSC on all inspections weekly at a minimum.

g) Please describe any unique quality obstacles your organization foresees on this Project. i.e. material storage, complexity, familiarity with a new products or methods, constructability, new supplier or subcontractor, working environment, lighting needs, layout, control lines, etc.

h) Please attach copies of all certifications (if required) as described in the specifications (i.e. welding certifications.). Note as “N/A” if not required.

i) Please list (if required per Subcontract) the testing agencies you intend to use, credentials, contact information, and how the results will be reported to Shiel Sexton. Note as “N/A” if not required.

j) Deviation reporting (quality accidents or mistakes). Please communicate how your company will communicate all Subcontractor’s deviations from plans and specifications to Shiel Sexton. Shiel Sexton expects a timely report for all such instances.

k) Detail how your company will communicate the quality plan to the field forces.

Quality Meetings: All subcontractors awarded work will need to partake in the following (4) meetings. In parenthesis are the subcontractor’s team members that must be in attendance.

1) Buyout Meeting (Contract Signer, Job Project Manager, Estimator)
2) Pre-Mobilization Meeting (Contract Signer, Project Manager, Superintendent)
3) Pre-Install Meeting (Superintendent, Foreman, Manufacturers rep (if required), 2nd Tier Subs or Foreman)
4) Definable Features of Work Meeting (Superintendent, Foreman, Manufacturers rep (required), 2nd Tier Subs, Project Manager)

Definable Features of Work (DFOW): Shiel Sexton will monitor the quality of work daily, but an emphasis will be put on specific definable features of work that will be reviewed in detail prior to the start of and during construction.

This will involve a detailed meeting (DFOW Meeting) separate from the pre-construction meeting that requires the product manufacturers and your company's superintendent/project manager to be in attendance. Any subcontractor with work integral to or attached to one of the items below will be required to attend the DFOW meeting. All details will be reviewed and agreements made for any changes to the contract documents. This meeting will occur at least 3-4 weeks prior to the start of work to allow for any changes to be made. Shop drawings will need to be approved prior to this meeting.

A separate field pre-installation meeting will be held on site just prior to the start of work. This meeting will require the attendance of the assigned project foreman/superintendent that will be on site for the work. This meeting will summarize the meeting above and cover site logistics, safety, work hours, and etc…

Execution of Work Requirements

1) **Standard Jobsite Hours**: The standard working hours for this project is eight (8) hours per day, Monday through Friday with Saturday as a make-up day unless specifically noted otherwise in your work scope and/or the project schedule. Starting/stopping times will be coordinated throughout the year by the Project Superintendent.
   a. Each time a subcontractor desires to work during non-standard hours, they must notify Shiel Sexton twenty-four (24) hours in advance and shall not work non-standard hours unless given specific written permission by the Project Manager OR Project Superintendent.

2) **Premium Time Work:** Any subcontractor requesting premium time work must have written approval from Shiel Sexton (48) hours prior to starting work. Shiel Sexton must have personnel on-site while work is being completed. Shiel Sexton's hourly rate as stated in the Owner Agreement for the additional personnel required for premium time coverage may be requested to be reimbursed by the subcontractor requesting the premium time work.

3) **Cost of Supervision:** In the event after hours, Overtime, Saturday, or Sunday work is required due to the failure of the Subcontractor to maintain the project schedule the Subcontractor shall reimburse the Owner for the cost of Shiel Sexton supervision per the hourly rates established in the Owner Agreement with Shiel Sexton. This clause does not apply if Shiel Sexton specifically requests work be performed outside the normal operating hours.

4) **Progress Meetings:** Subcontractors shall have representation at all required project meetings, including weekly jobsite meetings. Subcontractor representative shall be empowered to make decisions regarding financial and schedule coordination. Failure to attend these meetings does not relieve you from the requirement to understand the current project status and requirements for your company. A fee of $1,000 per missed meeting may be back-charged to your company if attendance continues to be an issue and it is affecting your company's ability to collaborate and effectively manage and construct your work in a coordinated manner with other trades.

5) **Schedule:**
   a. Time is of the essence. Submittal of a bid is evidence the required qualified manpower, skilled field supervision, materials and equipment are available for this Subcontractor to execute and complete the work in accordance with the project schedule.

   b. The Subcontractor shall work with and provide Shiel Sexton with a listing of activities, crew day durations and activity costs to supplement the current construction schedule. Included in the listing of activities, but not limited to, shall be shop drawings, submittals, fabrication, delivery time, order placement and any other activity which will assure completion of the work within the specified time. Shiel Sexton will then update the construction schedule from the information supplied. The final construction schedule will show updated start/finish dates for each activity of the entire project with the final completion date for the project to remain the same or become earlier than the original schedule.

      1. The Subcontractor's schedule of values and first payment will not be reviewed or considered until this initial submission of schedule input and the schedule of submittals is submitted and reviewed by Shiel Sexton.

   c. During the progress of work, Shiel Sexton will update the master schedule in coordination with information obtained from your weekly work plans and on-site communication and coordination with your last planners. An updated master schedule will be issued bi-weekly via Procore. It is your responsibility to seek out and review this updated schedule and respond within 5 days if you disagree with any new information.

d. The Subcontractor shall coordinate his work with and cooperate with all other subcontractors so as to facilitate the general progress of the work. As a material consideration of this award, the subcontractor guarantees to staff the project sufficiently to keep pace with the ongoing construction.

6) **Weekly Work Planning:** Contractors shall submit a 2 week look-ahead schedule weekly to the Shiel Sexton Superintendent and shall participate in daily huddles and completion of the 2-week planning board.

7) **Hot Work:** All hot work must be approved by Shiel Sexton. Requirements of the fire watch will be set based upon each individual request.

8) **Punch Lists:** Subcontractors shall complete in a timely manner all issued action item lists or "rolling" punch lists. Subcontractors shall add dedicated tradesmen to the site to complete such work within the timeframes stated by Shiel Sexton. The typical turnaround time for a punch list item shall be three (3) days unless agreed upon otherwise in writing or as noted on the punch list. Failure to complete the punch list in a timely fashion will result in a written 48- hour notice of non-compliance followed by Shiel Sexton completing the work on the Contractor's behalf and at the Contractor's expense.

9) **Clean-up:** Subcontractor will be responsible for moving their own trash/debris DAILY to the dumpsters provided by Shiel Sexton. All subcontractors are responsible for clean-up of debris resulting from the Subcontractor's work on a daily basis in order to keep the project clean, orderly and hazard free.

10) **Delivery Timing:** All deliveries shall be made during normal hours of the project; scheduled and coordinated with Shiel Sexton's on-site supervision prior to delivery.

11) **Material Storage:** Due to the location of this project site there will not be sufficient space for storage on site beyond the material buffer needed to maintain work progress. All excess materials shall be planned to be stored off site for just-in-time delivery to maintain your material buffer on site. Should there be a time when arrangements can be made for onsite storage facilities or offices, subcontractors shall make arrangement for the location of job offices and storage yards with the Shiel Sexton Superintendent. The Subcontractor will be responsible for erection, dismantling, and maintenance, of their facilities. All yard fencing and material storage facilities which the Subcontractor deems necessary for the protection of his offices, equipment and material shall be provided at the Subcontractor's expense.

12) **Project Offices:** Due to site constraints a contractor project office location will need to be requested from the Project Superintendent for feasibility. Not all requests will be approved due to space limitations. All costs associated with a project office shall be borne by each Subcontractor including connection/disconnection and etc…

13) **Protection of Work:** All Subcontractors are responsible for protecting personnel, property, and the work of other trades in carrying out their own work. Subcontractors who damage the work of other trades shall bear the cost for replacement and / or repair of the damaged work.

Subcontractors are required to assess each work area for damage by other trades prior to starting work in that area. Starting work in the area indicates your company's acceptance of the conditions in that area and that it was turned over to you in good condition without prior damage and acceptable to begin work. Should damage be observed it shall be documented in writing and via photos and the Project Superintendent shall be notified immediately to assess the damage.

Additional care must be taken when using manlifts or scissor lifts in areas where damage could occur to ensure no damage is done.

The Subcontractor is responsible for ensuring work completed by other trades in your immediate work area are protected and kept in good condition until the completion of your work in this area. Notify the Project Superintendent of any damage done by your workers.

The Subcontractor shall be responsible for the protection of the existing or adjacent landscape, utilities, and structures from defacement or damage by construction equipment, vehicles or employees. The Subcontractor shall accept, as a condition of their Subcontract, the responsibility for preventing operation of equipment beyond the limits of the project for any reason. The Subcontractor shall be responsible for repair, at their own expense, any damage to the site or adjacent structures, landscape, or utilities by their operations or employees. If the specific cause of damage cannot be identified, costs for repairs shall be uniformly distributed to all Subcontractors working in the area during the time of the incident.

14) **Existing Conditions:** The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work. Before construction, verify the location and points of connection of utility services.

    The Subcontractor is obligated and required to thoroughly understand the project conditions, including existing conditions in and around the project site prior to starting work.

    If at any time hazardous materials are identified or suspected, then immediate notification should be sent to Shiel Sexton. Subcontractor should not attempt to remove or abate any hazardous materials.

15) **Existing Utilities/Utility Locates:** The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Location and protection of existing and/or previously installed utilities will be the responsibility of each subcontractor. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction affecting the Work before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services. This includes all public and private utilities without exception. Subcontractors shall make all calls to 811 for their own work and require the same of any sub-subcontractors.

16) **Geotechnical Conditions:** See Geotechnical Report included in the bid package for information concerning subsurface exploration. Any information or interpretation gained from this report is to be used at the risk of the Subcontractor. Shiel Sexton is not responsible for the contents of the Geotechnical report. No additional financial compensation will be awarded for the removal of rock or unsuitable soil that was indicated by the soils report.

17) **Acceptance of Conditions:** Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations in writing and via photos.
    a. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:

i. Description of the work.
ii. List of detrimental conditions, including substrates.
iii. List of unacceptable installation tolerances.
iv. Recommended corrections

b. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
c. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
d. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
e. Proceed with installation only after unsatisfactory conditions have been corrected.
f. Proceeding with the Work indicates acceptance of surfaces and conditions.

18) **General Installation Instructions:** Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
a. Make vertical work plumb and make horizontal work level.
b. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement. Where conditions do not allow for maintenance access or required clearances Shiel Sexton shall be notified immediately and given the opportunity to review the situation with the Owner to determine the best possible installation. Additional compensation will not be granted for the reinstallation of a component requiring maintenance access when Shiel Sexton is not given the opportunity to coordinate with the Owner and the Owner requests the item be relocated.
c. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
d. Maintain minimum headroom clearance of 8 feet above finished floor/work surface (2.4 m) in spaces without a suspended ceiling.
e. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
f. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
g. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
h. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
i. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
j. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect of Record in writing. Subcontractor will not be reimbursed where assumptions of mounting heights are made.
k. Allow for building movement, including thermal expansion and contraction.
l. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated but are required, submit a written plan for the joints for approval by the Architect or Record. Fit exposed connections together to form hairline joints. Subcontractor will not be reimbursed for re-work where assumptions of joint layouts are made.
m. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

19) **Clarifications After Award:** Any question or problems involving the contract specifications or drawings should be brought to Shiel Sexton's attention immediately and followed up in writing, with a date specified by which you need an answer so as not to delay the construction schedule. Written questions will be forwarded to the Architect of Record for response. If a meeting is necessary to resolve any of these questions, Shiel Sexton will arrange a conference

between the Architect Consultants, Subcontractor's representative and Shiel Sexton. This procedure is mandatory in order for all parties concerned to have a full understanding of the disposition of questions raised. Direct contact with the Architect or Owner is not allowed. Any changes in the scope of your work must be approved in writing by Shiel Sexton.

a. RFI's shall be written clearly and concisely to fully explain the issue and provide a suggested solution. Subcontractor shall include sketches, photos, specification sections, and/or drawing sheets required to fully explain the issue. Subcontractor shall also clearly state if the RFI will have cost or schedule impact (Should these spaces be left blank or not included it is understood the RFI does not have cost and/or schedule impact to the Subcontractor).

20) **Harmonious Work Clause:** The Subcontractor acknowledges its understanding that Shiel Sexton and other Subcontractors may employ personnel who are not represented by labor union(s) to perform work on the jobs described and identified in the Subcontract Agreement. Shiel Sexton has no right or control over the Subcontractor's personnel or its labor relationship policies nor any right to direct work of the Subcontractor's personnel and Shiel Sexton does not seek such right of control. The Subcontractor shall notify in writing, and assign its employees, visitors, and suppliers to such gates or entrances as may be established for and used by Shiel Sexton and in accordance with such conditions and at such times as may be imposed by Shiel Sexton. Strict compliance with Shiel Sexton's gate usage procedures shall be required by the Subcontractor who shall be responsible for such gate usage by its employees, visitors, suppliers, and sub-subcontractors (and their material supplies).

21) **Telephone, E-mail, and Internet Service:** Each Subcontractor will be responsible for providing their own telephone and internet service for performing the work under their respective Subcontract. Shiel Sexton will not provide temporary utilities to project trailers.

The Subcontractor's assigned foreman/superintendent is required to have a cell phone, individual e-mail, and access to the internet so they can effectively be involved in electronic project communication and have access to all online project information.

22) **Cutting & Patching, Backfill:** All Subcontractors shall perform cutting, patching, excavation, backfill, offsite disposal and compaction as required to complete the work within the scope of their respective Subcontracts. All trench backfill must be performed in engineered lifts in accordance with compaction requirements as detailed in the Contract Documents. Water consolidation is not an acceptable method of compaction.

All cutting, patching, and backfill shall be done per the requirements of the Authority having Jurisdiction and/or as stated in the project specifications. The greater quantity/greater quality (more expensive) method shall be utilized and included in the base bid.

23) **Noise Control:** Comply and abide by local requirements for noise control and/or as directed by Shiel Sexton.

24) **Weekly Toolbox Talks:** Subcontractors are required to complete weekly Toolbox Talks with their workers. These shall be submitted to the Shiel Sexton Superintendent weekly.

25) **Daily Reports:** All subcontractors are required to submit a Subcontractor Daily Report for each day that work is performed on the project via electronic PDF format. This subcontractor will be required to fill out and turn in a daily report form every day detailing the activities for that day. This can be your own form or Shiel Sexton can provide one.

This daily report form MUST be filled out completely and diligently by means of indicating material quantities installed/placed, materials and deliveries received, a detailed list of manpower by trade and classification on site and a thorough written description of the activities for each day any work is performed, regardless of magnitude and any delays or interruptions whatsoever. Shiel Sexton may withhold or the whole or part of any application for payment for failure or refusal of the subcontractor to turn in daily reports on a daily basis. Your foreman/Superintendent may be removed from the project if they continually fail to submit daily reports.

26) **Removal of Safety Cable:** Removal and disposal of perimeter safety cables and other protective covers or systems shall be by the subcontractor whose work requires their removal to complete their work. Replace as necessary throughout the course of the work to maintain safe working conditions.

27) **Vehicles:** Each subcontractor is required to clean tires on their vehicles prior to entering public roads. Street sweeping/cleaning for materials/debris tracked onto public roads is included.

28) **Scissor Lifts:** Understand the use of scissor lifts will be at the discretion of Shiel Sexton supervision. Damage to wall and ceiling framing, floor systems and underground utilities will be charged to all subcontractors using lifts in the area. Once certain finishes are complete in the area Shiel Sexton may choose to no longer allow Scissor Lifts. NOTE – the floor slabs may or may not allow for all scissor lifts. If this is a concern please confirm the proposed lift weight prior to the bid via a Bid Question. No additional costs will be considered after bid time if a lift is deemed too heavy.

SHIEL SEXTON

HARMON CONSTRUCTION, INC.

JOINT VENTURE PARTNERSHIP

Indiana University Indianapolis

Science Laboratory Building

Attachment – 01

Trade Specific Work Scopes

Bid Package 5 - Renovation

Definitions

1) **General Requirements:** The following “General Requirements” provides instructions to define and clarify common work elements that every subcontractor shall include.

2) **Specific Requirements:** The following "Specific Requirements" provide instructions to define and/or clarify the work scope each subcontractor is to include in their specific bid category. Note however, the absence of any specific reference in this document to work shown in, or required by, the Contract Documents, shall not be used as a basis for excluding said work.

3) **All Inclusive Work Scope:** All subcontractors are required to review all contract documents to assure they are bidding a complete work scope. It is not acceptable to claim additional cost for items missed during the bid that may not be indicated in what is considered a “typical location”. Bidder is responsible for all work indicated to be covered in their respective work scope regardless of the drawing or specification section on/in which it is included.

4) **PROVIDE: The word “provide” when used in these inclusions, specific requirements or instructions, general items, acknowledgements and/or clarifications is intended to be inclusive to furnish, fabricate, deliver, receive, unload, store, install, hoist, erect, prepare substrate, protect, start-up, test, clean, etc. such that the material and/or system is complete and operational and in its permanent location ready to be accepted and used by the Owner unless specifically identified otherwise.**

5) **Furnish:** Items specifically indicated with this word are to be provided to the project site or another mutually agreed upon delivery location such as a storage warehouse of the installation subcontractor’s shop. Installation is not included.

6) **Install:** Items specifically indicated with this word are provided to you by Shiel Sexton, the Owner, or another Subcontractor or vendor for installation by your company. This includes unloading the delivery, handling it to its designated storage and installation location(s), inventory of the delivered materials to confirm all quantities are correct, and installation of the product such that it is complete and operational.

General Requirements of ALL trades

The following requirements apply to all contractors without exception.

1) **Site Considerations:** Coordination of work will provide as little disruption as possible to neighboring properties. Site Logistics plans shall be reviewed, understood, and incorporated into the cost of the work**.** Activities that cause excessive vibration must be coordinated and scheduled with the SSC team two weeks prior to that work starting. During the task's duration, the work may need to be stopped if the excessive vibration causes a disruption to the adjacent building's activities.

2) **Engineering/Layout:** Provide all associated engineering, layout and surveying as required for a comprehensive scope of work per the Contract Documents. All layout shall be by each Subcontractor for their own work. Vertical and horizontal control will be established by the Concrete contractor.

3) **Parking:** Shiel Sexton will not provide on-site parking for trades. Subcontractors are responsible for providing parking for their workers. Public parking garages are available near the job site. An on campus public shuttle service is available for this project's use. Schedules and monthly pass information are available online at **https://parking.indianapolis.iu.edu/index.html .** Trade parking will be limited to deliveries, worker drop-off and pickup, and site visitors.

4) **Permits and Fees:** Include all permit and regulatory fees specific to your trade. Each subcontractor shall participate in the permitting process as needed and pull any permits required to be pulled by the subcontractor. Bid includes the permit cost required for the subcontractor not listed below.

5) **Spoils haul off:** All spoils not utilized for backfill shall be hauled off site. The subcontractor that excavates the soil shall be responsible for the haul off, unless noted otherwise.

6) **Backfill:** The Subcontractor that excavates the soil shall be responsible for backfill and compaction, unless noted otherwise. Compaction shall be done per the requirements of the contract documents. Compaction that requires vibration may need to be coordinated with the adjacent building's activities. Pre-planning with the Shiel Sexton team will be required before compaction tasks commence.

7) **Traffic Control:** Provide all on and offsite traffic control as may be required for this scope of work. All deliveries and/or trucks that impact traffic flow shall require traffic control. Extended lane closures or blocking are not permitted during deliveries. Stage delivery trucks to limit traffic disruptions.

8) **Hoisting/Material Movement:** All hoisting and material movement is the sole responsibility of each subcontractor unless specifically identified otherwise in the specific work scopes. All equipment necessary for this work shall be provided by the subcontractor. Shiel Sexton does not provide any equipment for this project. Only certified operators will be allowed to work on this site. Operator's certifications will need to be provided to the Shiel Sexton team prior to beginning work. Stage materials in a manner which does not block other trades from accessing their scheduled tasks. Move materials as needed to provide a clear path.

9) **Cranes:** Shiel Sexton is not providing any crane services for this project. All hoisting requiring the use of a crane shall be included by each Subcontractor. Provide a plan for all critical lifting tasks five working days prior to the scheduled lift

date. This plan would be provided by the crane company and would include the operator's certifications, crane inspections, and load calculations.

10) **Street Cleaning:** Protect public and private roads / walkways from dirt and debris during this scope of work. If streets or walkways are soiled by this contractor, they will be required to be cleaned immediately. Furthermore, all local environmental requirements, codes, etc. shall be observed when hauling materials.

11) **Safety / PPE:** Include all personal protective equipment and stand-by fire extinguishers necessary to perform this scope of work. Maintain barricades and signage necessary for each scope of work. Coordinate **fall protection** with the building leading edge conditions. If barriers need to be removed to install new work, then the contractor is responsible for making it safe. T**oolbox talks** will need to be completed and turned into the Shiel Sexton team on a weekly basis. **Hot work permits** will need to be filled out each day, and for each area that hot work needs to occur.

12) **Dewatering:** Include all dewatering required to complete each scope of work separately. Each Subcontractor will be responsible for maintaining their excavations after a rain event. Drain water to areas specified on the local SWPPP plan. General dewatering for ground water is not anticipated.

13) **Existing Utilities:** Each subcontractor is responsible for locating, on an ongoing basis, all existing public and private utilities prior to performing their work. This includes hiring an independent utility locating service as deemed necessary. This subcontractor shall provide all protection as necessary of existing utilities and work. Damage caused by this subcontractor to existing work shall be remedied at this subcontractor's expense.

14) **Schedule & Mobilizations:** All subcontractors shall anticipate multiple mobilizations for this work. Multiple crews shall be provided where activities are stacked on the project schedule. It is the subcontractor's responsibility to bid the project with the manpower/crews necessary to meet the durations in the bid schedule. Overtime shall be included as necessary to meet bid schedule.

15) **Safety:** Comply with all OSHA and Shiel Sexton requirements applicable to subcontractor's work scope.

16) **Regulatory Documentation:** Contractor shall be aware of and provide all regulatory documentation, submittals, drawings, testing, etc. required by the authorities having jurisdiction for their work scope. Coordinate and document all testing and commissioning with the Shiel Sexton team.

17) **Task Lighting:** Electrical subcontractor will provide general lighting. Each subcontractor shall provide task lighting as needed for their work scope.

18) **Equipment:** Include all equipment necessary to complete your work scope. Shiel Sexton does not provide any equipment for this project.

19) **Scaffolds/Work platforms:** Include all scaffolding and/or work platforms necessary to complete your work scope. Shiel Sexton is not providing scaffolds, ladders, work platforms, hoisting, lifts, or any other equipment for the project. The subcontractor is responsible for all equipment necessary to complete their work scope.

20) **Housekeeping:** Provide DAILY organization of materials and equipment, waste cleanup, and recycling for each scope of work. Trash and debris will be disposed of in containers provided by each subcontractor. No trash will hit the ground. Any contractor not providing the required clean-up shall be given 24-hour notice to complete it. After 24 hours Shiel Sexton will provide clean up at the contractor's expense. If daily cleanup and organization is not performed then work will be stopped until the condition is made satisfactory.

21) **Material Storage / Handling:** All materials must be stored on pallets or wheeled carts so that they can be moved when needed. Materials will be stored in assigned lay-down areas assigned by the general contractor. Include all necessary costs associated with material handling and movement as required by the project workflow.

22) **Allowances:** Allowance dollars, if applicable, are included in the base bid amount and are to be used only per the direction of Shiel Sexton Co., Inc. Allowance dollars include all labor, material, equipment, hauling / handling, and storage. Overhead and profit for allowances is included in base bid amount. All allowance dollars not used will be deducted from the contract amount. Allowance money will not be used for work previously scoped and only to be used for added scope or unforeseen.

23) **Daily Reports:** Provide a formal daily report in Procore for each day of work that is performed on the project. This report would include but would not be limited to, a description of work activities, list of manpower by trade classification, and deliveries received.

24) **Site Orientation:** All workers, including vendors, will need to attend the Shiel Sexton site specific orientation before they are allowed on site. A completion sticker will be provided and will need to be worn on all workers' hard hats.

25) **PROCORE:** Trade foremen will be given limited access to Procore and will need to have an iPad or similar device to access the drawings and the daily report module.

Warranty Requirements of ALL Trades

1) Warranties shall be a minimum of 2 year workmanship and manufacturers standard warranties for all equipment:
   a. All warranties shall start at the substantial completion of the entire project.

2) Owner will take over all MEP systems and Owner warranties shall begin at Substantial Completion.

3) Provide special or extended warranties as outlined in project documents.

BC 5.01 – PLUMBING

Specification Sections: This category's subcontractor is the owner of the following specification sections and should include all items outlined therein.

DIVISION 00-01 – IU CPF PROCUREMENT DIVISIONS
DIVISION 00 – PROCUREMENT & CONTRACTING REQUIREMENTS
DIVISION 01 – GENERAL REQUIREMENTS
078413 – PENETRATION FIRESTOPPING
083113 – ACCESS DOORS AND FRAMES
220501 – BASIC PLUMBING REQUIREMENTS
220502 – AGREEMENT AND WAIVER FOR THE USE OF ELECTRONIC FILES
220502A – ELECTRONIC FILES – HEAPY RELEASE FORM TO CONTRACTORS
220504 – BASIC PLUMBING MATERIALS AND METHODS
220507 – PIPING MATERIALS AND METHODS
220513 – ELECTRICAL REQUIREMENTS FOR PLUMBING EQUIPMENT
220519 – METERS AND GAUGES FOR PLUMBING PIPING
220523 – GENERAL-DUTY VALVES FOR PLUMBING PIPING
220529 – HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT
220530 – BASES AND SUPPORTS FOR PLUMBING EQUIPMENT
220549 – VIBRATION CONTROL FOR PLUMBING
220553 – IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT
220719 – PLUMBING PIPING INSULATION
220800 – PLUMBING COMMISSIONING REQUIREMENTS
221116 – DOMESTIC WATER PIPING
221119 – DOMESTIC WATER PIPING SPECIALTIES
221316 – INTERIOR DRAINAGE AND VENT SYSTEMS
221319 – DRAINAGE SYSTEMS SPECIALTIES
223116 – COMMERCAIL DOMESTIC WATER SOFTENERS
223228B – PURE WATER SYSTEM – PRE-PACKAGED
224200 – PLUMBING FIXTURES
226219 – MEDICAL LABORATORY GAS AND VACUUM SYSTEMS

This category's subcontractor is a shared owner of all project specifications as it relates to this work scope.

Inclusions and Clarifications:

1) **Plumbing systems:** Provide all plumbing systems per plans and specifications including, but not limited to domestic water, condensate drainage, sanitary, and specialty systems. Includes all equipment, piping, insulation, valving, gauges, sleeves, labeling, supports, hangers, testing, inspections, permitting, appurtenances, and accessories for a complete and operable system.

a. Demolition of existing plumbing equipment, fixtures, piping and other components indicated on "P" series sheets is included.
b. In locations where ceilings are not called to be removed, this contractor is responsible for accessing their work by removing and reinstalling ceilings or accessing this work from the interstitial space above.

2) **Fixtures:** Fixtures are listed as by "LEC", Laboratory Equipment Contractor. Final connections are by this contract.

3) **Equipment:** Provide all plumbing equipment for complete and operational systems. Include all equipment as specified and/or indicated in contract documents.

4) **Layout and Coordination:** Include layout for rough openings in floor and wall surfaces provided by others.

5) **Plumbing Specialties:** Provide and install all required plumbing specialties. This includes, but is not limited to, all cleanouts, carriers, trap seals, backflow preventers (and certification), water hammer arrestors, water filters, mixing valves per plans and specifications.

6) **Insulation:** Furnish and install all insulation where required or as specified.

7) **Coring and Drilling:** All coring and drilling in floors and walls after installation shall be included in base bid.
   a. Work is being conducted in existing and occupied spaces therefore coordination with owner and CM will need to considered.

8) **Access Panels:** Furnish, and provide layout for access panels as required for proper access through drywall ceilings and partitions for valves and other devices to the drywall subcontractor for their installation.

9) **Fire Stopping:** Provide all fire stopping for this scope of work by a certified contractor.

10) **Supports:** All structural and miscellaneous steel to support plumbing equipment and/or piping, except as shown on the structural drawings, is a part of this Subcontract Agreement. Provide all necessary wall cuts in a neat manner to allow patching by others. Provide layout information for masonry and concrete penetrations prior to installation of these structures for coordination purposes.

11) **Accessories:** Provide and install all necessary hangers, supports, bracing, anchors, curbs at penetrations, vibration isolation bases and springs, etc., per plans and specifications and in accordance with all seismic requirements, as well as engineer of record and jurisdiction having authority. Include all clips, hangers, supports, sleeves and other attachments prior to application of fireproofing materials**.** This Subcontractor shall bear the cost for repairing fireproofing damaged by its work force.

12) **Final Clean:** All equipment shall be thoroughly cleaned and made ready for final inspection. All labels shall be removed by this subcontractor and glue residue removed.

13) **Electrical:** Coordinate connection of equipment with electrical subcontractor.

14) **Floor penetrations protection:** Provide cover protection for all your floor penetrations and trenches, etc., greater than 2" in diameter as approved by OSHA and as directed by Shiel Sexton personnel.

15) **Labeling:** Provide all identification, stenciling, color coding, labeling, valve tags, decals and/or nameplates as required for this section.

16) **Inspections & Coordination:** Include calling for and coordinating all Building Department inspections and third party inspections with all affected related trades and notify all affected trades and Shiel Sexton of the results of all inspections in order to maintain the current schedule.

17) **Testing and Balancing:** Provide all testing, adjusting and balancing work indicated by the Contract Documents for the systems installed by this subcontractor. The work consists of setting speed and volume (flow) adjusting facilities provided for systems, recording data, conducting tests, preparing and submitting reports and recommending modifications to work as required by the Contract Documents. Work scope includes, but is not limited to, testing and adjusting of Piping system and related equipment.

18) **Start-up:** Provide all labor and material to pre-check each device/component prior to the system/equipment start-up. This process is intended to positively demonstrate that each device, component or point will function properly when the start-up phase begins. Documentation recording these pre-start-up activities is the responsibility of this subcontractor.

19) **Bid Requirements:** Include all requirements in the instructions to bidders.

20) **Allowances:** Bidder should include the following allowances in bid sum.
    a. None

Exclusions:

1) None.

BC 5.02 – HVAC

Specification Sections: This category's subcontractor is the owner of the following specification sections and should include all items outlined therein.

DIVISION 00-01 – IU CPF PROCUREMENT DIVISIONS
DIVISION 00 – PROCUREMENT & CONTRACTING REQUIREMENTS
DIVISION 01 – GENERAL REQUIREMENTS
078413 – PENETRATION FIRESTOPPING (PARTIAL)
083113 – ACCESS DOORS AND FRAMES (PARTIAL)
230501 – BASIC HVAC REQUIREMENTS
230502 – AGREEMENT AND WAIVER FOR USE OF ELECTRONIC FILES
230502A – ELECTRONIC FILES – HEAPY RELEASE FORM TO CONTRACTORS
230504 – BASIC HVAC MATERIALS AND METHODS
230507 – PIPING MATERIALS AND METHODS
230513 – ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT
230523 – GENERAL DUTY VALVES FOR HVAC PIPING
230529 – HANGERS AND SUPPORTS FOR HVAC PIPING
230530 – BASES AND SUPPORTS FOR HVAC EQUIPMENT
230531 – HVAC EQUIPMENT DRIVES
230549 – VIBRATION CONTROL FOR HVAC
230550 – FLEXIBLE HVAC PIPE CONNECTIONS
230553 – IDENTIFICATION OF HVAC PIPING AND EQUIPMENT
230593 – TESTING, ADJUSTING AND BALANCING FOR HVAC
230713 – DUCT INSULATION
230716 – HVAC EQUIPMENT INSULATION
230719 – HVAC PIPE INSULATION
230800 – COMMISSIONING OF HVAC SYSTEMS
230900 – HVAC INSTRUMENTATION AND CONTROLS
232113 – HYDRONIC PIPING
232117 – GLYCOL SOLUTION SYSTEMS
233113 – HVAC DUCTWORK
233300 – AIR DUCT ACCESSORIES
233616 – AIR TERMINAL
233624 – AIRFLOW CONTROL VALVES
233700 – AIR OUTLETS AND INLETS
233813 – EXHAUST HOOD

This category's subcontractor is a shared owner of all project specifications as it relates to this work scope.

Inclusions and Clarifications:

1) **HVAC systems:** Provide complete HVAC systems as required by the contract documents including but not limited to air control and distribution devices indicated on documents. Note that some control units are provided by this contract and some are owner provided, refer to schedules.
    a. **Demolition:** Provide demolition of existing mechanical equipment, devices, piping and other components indicated on "M" series sheets is included.
    b. **Ceilings**: In locations where ceilings are not called to be removed, this contractor is responsible for accessing their work by removing and reinstalling ceilings or accessing this work from the interstitial space above.
    b. **Mechanical Piping:** Provide all mechanical piping with all fittings, valves, etc. including cleaning and flushing of systems.
    c. **Condensate Piping:** This subcontractor shall provide condensate piping from the HVAC equipment to the condensate riser location.
    d. **HVAC devices**: Provide all dampers, diffusers, registers and grilles as indicated or required to include fire dampers, smoke dampers, fire/smoke dampers, automatic and manual volume dampers and control dampers.
    e. **Ductwork:** Provide all duct work, including a complete supply, return and exhaust air distribution system, flashings, etc. Provide duct work type (rigid, flexible, etc.) as noted on the contract documents.
    f. **Insulation**: Provide all insulation for piping, equipment and ductwork, as required by the contract documents.
    g. **Lab Equipment**: Provide final connections to all lab equipment.

2) **Temperature controls/automation:** Provide building/temperature controls system as indicated and specified. Owner to furnish components that will be installed by this contract. Programming will be by Owners vendor.

3) **Coring and Drilling:** All coring and drilling in floors and walls shall be included in base bid.

4) **Access Panels:** Furnish, and provide layout for access panels as required for proper access through drywall ceilings and partitions for valves and other devices to the drywall subcontractor for their installation.

5) **Fire Stopping:** Provide all fire stopping for this scope of work by a certified contractor.

6) **Accessories:** Provide and install all necessary hangers, supports, bracing, anchors, curbs at penetrations, vibration isolation bases and springs, etc., per plans and specifications and in accordance with all seismic requirements, as well as engineer of record and jurisdiction having authority. Include all clips, hangers, supports, sleeves and other attachments prior to application of fireproofing materials**.** This Subcontractor shall bear the cost for repairing fireproofing damaged by its work force.

7) **Labeling:** Provide all identification, stenciling, color coding, labeling, valve tags, decals and/or nameplates as required for this section.

8) **Inspections & Coordination:** Include calling for and coordinating all Building Department inspections and third party inspections with all affected related trades and notify all affected trades and Shiel Sexton of the results of all inspections in order to maintain the current schedule.

9) **Electrical Requirements:** Mechanical and plumbing disciplines to provide a responsibility matrix or equipment list to the electrical contractor indicating all electrical requirements and the associated peripheral equipment requiring electrical terminations.

10) **Motors and Starters:** Provide all motor starters included as an integral part of the mechanical equipment and HVAC systems.

11) **Final Clean:** All equipment shall be thoroughly cleaned and made ready for final inspection.

12) **Sealing:** This Subcontractor shall include all duct sealing and cleaning requirements as indicated in the specifications. This Subcontractor must also seal (shrink wrap) all duct ends immediately after fabrication. Duct ends shall remain sealed during storage and shipping activities. All duct ends shall be sealed daily during construction.

13) **Testing and Balancing:** Provide all testing, adjusting and balancing required for work. Provide a preliminary and final balance of applicable mechanical systems per plans and specifications. System shall be balanced to the satisfaction of the Engineer of Record.

14) **Start-up/Commissioning:** Provide all labor and material to inspect each device/component prior to the system/equipment start-up. This start-up process is intended to positively demonstrate that each device, component or point will function properly when the start-up phase begins. Documentation recording these activities is the responsibility of this trade Subcontractor. Provide system start-up and functional performance tests as described in the plans and specifications.
    a. **Start-up Plan:** Provide Harmon/Shiel Sexton with a written plan for start-up in advance. This plan shall include a list of each piece of equipment, indicating affected areas of operation; scheduled time/duration of tests and personnel required. Startup should be closely coordinated with schedule to allow for adequate TaB and commissioning. Equipment usage during construction should be expected to include filter changes by this contract. At turnover a complete filter change out is required.

15) **Bid Requirements:** Include all requirements in the instructions to bidders.

16) **Allowances:** Bidder should include the following allowances in bid sum.
    a. Temporary Services $10,000

Exclusions:

1) None.

BC 5.03 – ELECTRICAL

Specification Sections: This category's subcontractor is the owner of the following specification sections and should include all items outlined therein.

DIVISION 00-01 – IU CPF PROCUREMENT DIVISIONS
DIVISION 00 – PROCUREMENT & CONTRACTING REQUIREMENTS
DIVISION 01 – GENERAL REQUIREMENTS
078413 – PENETRATION FIRESTOPPING (PARTIAL)
078446 – FIRE-RESISTIVE JOINT SYSTEMS (PARTIAL)
083113 – ACCESS DOORS AND FRAMES (PARTIAL)
260501 – BASIC ELECTRICAL REQUIREMENTS
260502 – AGREEMENT AND WAIVER FOR USE OF ELECTRONIC FILES
260502A – ELECTRONIC FILES – HEAPY RELEASE FORM TO CONTRACTORS
260504 – BASIC ELECTRICAL MATERIALS AND METHODS
260505 – FIRESTOPPING
260519 – LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS - COPPER
260526 – GROUNDING & BONDING FOR ELECTRICAL SYSTEMS
260533 – RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
260553 – IDENTIFICATION FOR ELECTRICAL SYSTEMS
260565 – SPECIFIC WIRING APPLICATIONS
260573 – OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY
260923 – LIGHTING CONTROLS
262213 – DISTRIBTUION TRANSFORMERS – STANDARD TYPE
262416 – PANELBOARDS
262726 – WIRING DEVICES AND COVERPLATES
262816 – DISCONNECT SWITCHES
262913 – MOTOR CONTROLLERS
264313 – SURGE PROTECTION DEVICES FOR LOW VOLTAGE ELECTRICAL POWER CIRCUITS
265100 – INTERIOR LIGHTING
265613 – EMERGENCY AND EXIT LIGHTING
270000 - COMMUNICATIONS
280513 – CONDUCTORS AND CABLES FOR ELECTRONIC SAFETY AND SECURITY
283100 – FIRE DETECTION AND ALARM (ADDRESSABLE)

This category's subcontractor is a shared owner of all project specifications as it relates to this work scope.

Inclusions and Clarifications:

1) **Complete Electrical System:** Provide a complete and permanent fully functional electrical distribution system as required. Provide all panel boards, transformers, branch circuit breakers, fusible switches, and safety switches/ disconnects, grounding, GFI breakers, shunt trip breakers, ceiling panels, devices, trim,

etc., normal power branch and feeder wiring. Provide all seismic supports, brackets, backing, anchors and all associated means and methods for an approved installation.

a. **Lab Equipment**: Provide final connections to all lab equipment.
b. **Demolition/Make Safe:** Provide make safe activities for existing electrical components and lighting called to be demolished or salvaged. Provide demolition of existing electrical equipment, devices, pathways and other components indicated on "E" & "T" series sheets is included
c. **Generator Work:** New generator is not included as part of this bid package. Generator and associated equipment, pathways, cabling etc. is all included in category 3.07 – Emergency Power.
d. **One Line Notes:** The following notes are a general guide to delineating packages "5.03 – Electrical" from "5.04 – Emergency Power".
    i. E1.400 – All work associated with this sheet is included in this package.
    ii. E1.401 – All work associated with this sheet is included in this package.
    iii. E2.400 – All work associated with this sheet is included in this package.
    iv. E3.401 – All work on this sheet is by package 5.04. No work anticipated by this package.
    v. E3.402 - All work on this sheet is by package 5.04. No work anticipated by this package.

2) **Complete Fire Alarm System:** Provide a complete and fully functional fire alarm system as required. Include all necessary connections to the fire protection systems, and the HVAC systems.

3) **Building Interior Lighting:** Provide a complete and permanent fully functional lighting system as required. Provide all necessary lighting controls and occupancy sensors meeting the intent of the design. In addition, provide all required and compliant exit lighting fixtures.

4) **Wiring & Raceway:** Provide all raceways for wiring as indicated in specifications and drawings.

5) **Seismic Requirements:** Provide all seismic supports, brackets, backing, fasteners, anchors, fixture wires and all associated means and methods for an approved installation.

6) **Connections:** Provide and complete all mechanical, plumbing and HVAC power connections for all motors, VFD's, starters, safety switches, pad-mount equipment, VAV boxes, dampers, controllers, DDC monitors, line voltage thermostats, pumps, BMS system, fan coil units, exhaust fans, radiant heat system, fire dampers, motorized dampers and all other associated equipment. Provide disconnects for all equipment noted on the contract documents.

7) **Grounding:** Provide all building grounding work as specified and detailed.

8) **Access Doors:** Furnish all access doors or special doors required for access to work installed in this bid category. Doors will be installed by the General Trades contractor.

9) **Firestopping:** Provide all firestopping and fire sealants at penetrations for this scope where required by a certified contractor.

10) **Final Clean:** All equipment and fixtures shall be thoroughly cleaned and made ready for final inspection. Remove all labels and glue residue.

11) **All power included:** All power line voltage is inclusive, whether or not shown or identified on the electrical drawings. It is the responsibility of this contractor to review and coordinate all components and Contract Drawings for the project and meeting the intent of all designs.

12) **Testing:** Provide all labor and material to test each device, system or component prior to the system/equipment start-up. Such checkout is intended to positively demonstrate that each device, system or component functions properly when the start-up phase begins. Documentation recording these testing activities is the responsibility of this trade contractor.

13) **Owner Training:** Be responsible for the instruction and training of owner designated representatives/personnel for formal equipment and systems start-ups, all training and coordinate a turnover program with Shiel Sexton and the Owner. Provide all training manuals, videos or DVD of training session.

14) **Temporary Protection:** Provide all protection of electrical equipment and systems until acceptance by the Owner.

15) **Labels:** Provide all labels, tags, nameplates, etc. for all electrically connected equipment, etc. Include circuit number labeling by sticker on inside of faceplate.

16) **Accessories:** Provide and install all necessary hangers, supports, bracing, anchors, etc., per plans and specifications and in accordance with all seismic requirements, as well as engineer of record and jurisdiction having authority. Include all clips, hangers, supports, sleeves and other attachments prior to application of fireproofing materials**.** This Subcontractor shall bear the cost for repairing fireproofing damaged by its work force.

17) **Construction Temporary Electrical and Lighting:** This subcontractor to furnish, install, secure, maintain and remove all transformers, panels, disconnects, distribution boxes, lighting fixtures, lighting strings, cabling, conduit and wire and other appurtenances necessary for a complete and reliable temporary power and lighting system which fulfills the requirements as follows:

    a. **Temporary Power:** Existing building power may be utilized throughout construction. This contract to ensure access to existing power within each space is maintained for use during construction.

    b. **Temporary Lighting:** Provide the temporary minimum lighting levels as outlined in the General Requirements above and in conjunction with the OSHA regulations. Every room shall receive temporary lighting. The minimum acceptable lighting levels will meet OSHA regulations in all areas throughout the construction project. This subcontractor is ultimately responsible for all temporary power and lighting installations and in maintaining said system to all governing authorities having jurisdiction for inspections, Harmon/Shiel Sexton, Owner's representative and the Owner. The subcontractor, at all times throughout the project duration, is fully compliant with OSHA's regulations and requirements.

    c. **Task lighting:** Each subcontractor shall provide their own task lighting.

d. **Removal of temporary systems:** Include removal of all temporary power and lighting systems.

e. **Temporary Power Relocation:** Relocate, modify or reinstall all temporary power installations as required to facilitate the permanent constructability process for the duration of the project. Provide, maintain and inspect the temporary power installation systems. Provide all materials necessary in meeting the intent for a fully working and compliant temporary power system.

18) **Complete Telecommunication System:**
    a. Provide telecommunications package as indicated per the project telecom bid documents. Provide all conduit, wiring, seismic supports, brackets, backing, anchors and all associated means and methods for an approved installation.

19) **Complete Electronic Safety and Security:**
    a. Provide a complete and fully functional safety and security package per the project bid documents. Includes but not limited to rough-in, conduits and wiring for access control as shown on documents, power to door hardware, cameras.

25) **Bid Requirements:** Include all requirements in the instructions to bidders.

26) **Allowances:** Bidder should include the following allowances in bid sum.
    a. None

Exclusions:

1) None

BC 5.04 – EMERGENCY POWER

Specification Sections: This category's subcontractor is the owner of the following specification sections and should include all items outlined therein.

DIVISION 00-01 – IU CPF PROCUREMENT DIVISIONS
DIVISION 00 – PROCUREMENT & CONTRACTING REQUIREMENTS
DIVISION 01 – GENERAL REQUIREMENTS
260501 – BASIC ELECTRICAL REQUIREMENTS
260502 – AGREEMENT AND WAIVER FOR USE OF ELECTRONIC FILES
260502A – ELECTRONIC FILES – HEAPY RELEASE FORM TO CONTRACTORS
260504 – BASIC ELECTRICAL MATERIALS AND METHODS
260505 – FIRESTOPPING
260509 – EXCAVATION, BACKFILL AND SURFACE RESTORATION
260519 – LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS - COPPER
260526 – GROUNDING & BONDING FOR ELECTRICAL SYSTEMS
260533 – RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
260553 – IDENTIFICATION FOR ELECTRICAL SYSTEMS
262213 – DISTRIBTUION TRANSFORMERS – STANDARD TYPE
262416 – PANELBOARDS
262816 – DISCONNECT SWITCHES
263213 – DIESEL ENGINE DRIVE GENERATOR SETS
263623 – AUTOMATIC TRANSFER SWITCHES – ASCO SERIES 7000

This category's subcontractor is a shared owner of all project specifications as it relates to this work scope.

Inclusions and Clarifications:

1) **Complete Emergency Power System:** Provide a complete and permanent fully functional emergency power distribution system as required. Provide all switchboards, docking stations, distribution boards, panel boards, transformers, branch circuit breakers, fusible switches, and safety switches/ disconnects, grounding, lightning protection, shunt trip breakers, devices, trim, etc., feeder wiring, all connections and terminations. Provide all seismic supports, brackets, backing, anchors and all associated means and methods for an approved installation. This package to include generator set as indicated.
    a. **Demolition/Make Safe:** Provide make safe activities for existing electrical components to be demolished or salvaged.

2) **Generator Work:** As indicated on E3.402 an existing 600KW generator has been relocated 100' to the north adjacent to the SELB building as part of a previous bid package. This packages responsibility will be to move this existing generator back onto the new pad in its original spot, make final connections as indicated and then remove the pad and return the area to an undisturbed condition.
    a. **One Line Notes:** The following notes are a general guide to delineating packages "5.03 – Electrical" from "5.04 – Emergency Power".

i. E2.002 – No work anticipated by this package.
i. E1.400 – No work anticipated by this package.
ii. E1.401 – No work anticipated by this package.
iii. E2.400 – No work anticipated by this package.
iv. E3.401 – All new work on this sheet is base bid for this package.
v. E3.402 - All work on this sheet is by this package. Base bid is identified in general as relocating existing 600KW gen set to new pad, switchboard M1EHSB, docking station, the removal of the temp generator pad, restoration of area, and final connections to SELB and New Addition. Alternate work is identified via plan notes and Alternates Form.

3) **Wiring & Raceway:** Provide all raceways for wiring as indicated in specifications and drawings.

4) **Seismic Requirements:** Provide all seismic supports, brackets, backing, fasteners, anchors, fixture wires and all associated means and methods for an approved installation.

5) **Bid Requirements:** Include all requirements in the instructions to bidders.

6) **Allowances:** Bidder should include the following allowances in bid sum.
   a. None

Exclusions:

1) None

BID FORM

CONTRACT NO. 5.01 – PLUMBING

1.1 GENERAL INFORMATION

A. Bidder: _____.

B. Contact Name: _____.

C. Contact Email: _____.

D. Contact Phone: _____.

E. Project Name: IU Indianapolis – Science Building - Addition

F. Project Location: 310 N. Blackford St., Indianapolis, IN 46202

G. Owner: Trustees of Indiana University

H. Architect: arcDESIGN

I. Construction Manager: Harmon Shiel Sexton Indy Science JV

1.2 CERTIFICATIONS AND BASE BID

A. **Base Bid:** The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by the Architect of Record and their Consultants of Record, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and installation services, including all scheduled allowances, necessary to complete the construction of the Work for the contract for which a bid price is indicated for the above-named Project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

Base Bid Numerical: $_____

Base Bid Written: $_____

1.3 DOCUMENTS REQUIRED FOR BID & 48 HOUR ITEMS

A. The following documents are required for a complete bid and shall be attached hereto:

1. Bid Form
2. Form 96 – Contractors Bid for Public Work
3. Bid Bond/Bid Security
4. Drug Testing Program - In compliance with Indiana Code 4-13-18
5. Contractor Asbestos Certification
6. Asbestos Protocol for Contractors
7. MBE/WBE/VBE Participation Plan
8. Alternates Form

B. The following documents shall be submitted via email withing 48 hours of bid:

1. Schedule of Subcontractors, Manufacturers, and Products
2. Schedule of Values
3. Confirmation of Payment and Performance Bond

1.4 CONTRACT BID ITEMIZATION (for information only)

DESCRIPTION	QUANTITY	LABOR	MATERIAL	TOTAL
Mob/Demob		$	$	$
Demolition		$	$	$
Labor		$	$	$
Material		$	$	$
Payment & Perf. Bond		$	$	$
			TOTAL BASE BID (MUST MATCH 1.2A ABOVE)	$

1.5 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
   1. Addendum No. 1, dated _____.
   2. Addendum No. 2, dated _____.
   3. Addendum No. 3, dated _____.
   4. Addendum No. 4, dated _____.

1.6 ALTERNATES

A. See attached Alternates Form. **Indicate ADD or DEDUCT by circling the appropriate one.**
   1. Refer to Alternates Form – Attachment 3 for details.

1.7 MATERIAL/EQUIPMENT LEAD TIMES

A. Indicate any and all long lead time for material/equipment that could impact the schedule or are greater than 6 weeks.

1. Material/Equipment: _____
   a. _____ Weeks
2. Material/Equipment: _____
   a. _____ Weeks
3. Material/Equipment: _____
   a. _____ Weeks
4. Material/Equipment: _____
   a. _____ Weeks
5. Material/Equipment: _____
   a. _____ Weeks

1.8 COMPLETION DATE | SCHEDULE

A. The Bidder has reviewed the project schedule and acknowledges that bid has been prepared in such a manner that adequate manpower and equipment are accounted for.

1.9 ALLOWANCE

A. Allowance dollars, if applicable, are included in the base bid amount, as indicated in above Bid Itemization and are to be used only per the direction of Shiel Sexton Co., Inc. Allowance dollars include all labor, material, equipment, hauling / handling, and storage. Overhead and profit for allowances is included in base bid amount. All allowance dollars not used will be deducted from the contract amount. Allowance money will not be used for work previously scoped and only to be used for added scope.

1.10 TAX EXEMPTIONS

A. The undersigned Bidder has informed himself and all his prospective sub-contractors and suppliers that this project is TAX EXEMPT, and therefore, has NOT included these taxes in his Base Bid price.

1.11 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed Contractor, for the type of work proposed, in the State of Indiana, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12 PERFORMANCE AND PAYMENT BONDS

A. Subcontractors shall furnish Performance and Payment Bonds, each in an amount at least equal to one-hundred (100%) of the contract price as security for the faithful performance and payment of all the subcontractor's obligations under the contract documents. These bonds shall remain in effect at least until two (2) years after the date when final payment becomes due, except as otherwise provided by law or regulation or by the contract documents. All bonds shall be in the forms prescribed by law, regulation, and the contract documents and be executed by such sureties as (i) are licensed to conduct business in the State of Indiana, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the power of attorney or other instrument establishing the agent's authority.

1.13 BID GUARANTEE

A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety if requested within ten (10) days after a written Notice of Award, if offered within sixty (60) days after receipt of bids, and on failure to do so agrees to forfeit to Construction Manager the bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Total Base Bid amount above:

1. _____Dollars ($_____)

2. Bid Bond to be made out to Harmon Shiel Sexton Indy Science JV.

1.14 SUBMISSION OF BID

Respectfully submitted this ____ day of _____, 2024.

Submitted By: _____
(Name of bidding firm or corporation)

Authorized Signature: _____
(Handwritten signature)

Signed By: _____
(Type or print name)

Title: _____
(Owner/Partner/President/Vice President)

END OF DOCUMENT

BID FORM

CONTRACT NO. 5.02 - MECHANICAL

1.1 GENERAL INFORMATION

A. Bidder: _____.

B. Contact Name: _____.

C. Contact Email: _____.

D. Contact Phone: _____.

E. Project Name: IU Indianapolis – Science Building - Addition

F. Project Location: 310 N. Blackford St., Indianapolis, IN 46202

G. Owner: Trustees of Indiana University

H. Architect: arcDESIGN

I. Construction Manager: Harmon Shiel Sexton Indy Science JV

1.2 CERTIFICATIONS AND BASE BID

A. **Base Bid:** The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by the Architect of Record and their Consultants of Record, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and installation services, including all scheduled allowances, necessary to complete the construction of the Work for the contract for which a bid price is indicated for the above-named Project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

Base Bid Numerical: $_____

Base Bid Written: $_____

1.3 DOCUMENTS REQUIRED FOR BID & 48 HOUR ITEMS

A. The following documents are required for a complete bid and shall be attached hereto:

1. Bid Form
2. Form 96 – Contractors Bid for Public Work
3. Bid Bond/Bid Security
4. Drug Testing Program - In compliance with Indiana Code 4-13-18
5. Contractor Asbestos Certification
6. Asbestos Protocol for Contractors
7. MBE/WBE/VBE Participation Plan
8. Alternates Form

B. The following documents shall be submitted via email withing 48 hours of bid:

1. Schedule of Subcontractors, Manufacturers, and Products
2. Schedule of Values
3. Confirmation of Payment and Performance Bond

1.4 CONTRACT BID ITEMIZATION (for information only)

DESCRIPTION	QUANTITY	LABOR	MATERIAL	TOTAL
Mob/Demob		$	$	$
Demolition		$	$	$
Ductwork		$	$	$
Hydronic Piping		$	$	$
Equipment		$	$	$
Payment & Perf. Bond		$	$	$
ALLOWANCE – Temporary Services		$	$	$10,000
			TOTAL BASE BID (MUST MATCH 1.2A ABOVE)	$

1.5 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
   1. Addendum No. 1, dated _____.
   2. Addendum No. 2, dated _____.
   3. Addendum No. 3, dated _____.
   4. Addendum No. 4, dated _____.

1.6 ALTERNATES

A. See attached Alternates Form. **Indicate ADD or DEDUCT by circling the appropriate one.**
   1. Refer to Alternates Form – Attachment 3 for details.

1.7 MATERIAL/EQUIPMENT LEAD TIMES

A. Indicate any and all long lead time for material/equipment that could impact the schedule or are greater than 6 weeks.

1. Material/Equipment: _____
   a. _____ Weeks
2. Material/Equipment: _____
   a. _____ Weeks
3. Material/Equipment: _____
   a. _____ Weeks
4. Material/Equipment: _____
   a. _____ Weeks
5. Material/Equipment: _____
   a. _____ Weeks

1.8 COMPLETION DATE | SCHEDULE

A. The Bidder has reviewed the project schedule and acknowledges that bid has been prepared in such a manner that adequate manpower and equipment are accounted for.

1.9 ALLOWANCE

A. Allowance dollars, if applicable, are included in the base bid amount, as indicated in above Bid Itemization and are to be used only per the direction of Shiel Sexton Co., Inc. Allowance dollars include all labor, material, equipment, hauling / handling, and storage. Overhead and profit for allowances is included in base bid amount. All allowance dollars not used will be deducted from the contract amount. Allowance money will not be used for work previously scoped and only to be used for added scope.

1.10 TAX EXEMPTIONS

A. The undersigned Bidder has informed himself and all his prospective sub-contractors and suppliers that this project is TAX EXEMPT, and therefore, has NOT included these taxes in his Base Bid price.

1.11 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed Contractor, for the type of work proposed, in the State of Indiana, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12 PERFORMANCE AND PAYMENT BONDS

A. Subcontractors shall furnish Performance and Payment Bonds, each in an amount at least equal to one-hundred (100%) of the contract price as security for the faithful performance and payment of all the subcontractor's obligations under the contract documents. These bonds shall remain in effect at least until two (2) years after the date when final payment becomes due, except as otherwise provided by law or regulation or by the contract documents. All bonds shall be in the forms prescribed by law, regulation, and the contract documents and be executed by such sureties as (i) are licensed to conduct business in the State of Indiana, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the power of attorney or other instrument establishing the agent's authority.

1.13 BID GUARANTEE

A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety if requested within ten (10) days after a written Notice of Award, if offered within sixty (60) days after receipt of bids, and on failure to do so agrees to forfeit to Construction Manager the bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Total Base Bid amount above:

1. _____Dollars ($_____)

2. Bid Bond to be made out to Harmon Shiel Sexton Indy Science JV.

1.14 SUBMISSION OF BID

Respectfully submitted this ____ day of _____, 2024.

Submitted By: _____
(Name of bidding firm or corporation)

Authorized Signature: _____
(Handwritten signature)

Signed By: _____
(Type or print name)

Title: _____
(Owner/Partner/President/Vice President)

END OF DOCUMENT

BID FORM

CONTRACT NO. 5.03 - ELECTRICAL

1.1 GENERAL INFORMATION

A. Bidder: _____.

B. Contact Name: _____.

C. Contact Email: _____.

D. Contact Phone: _____.

E. Project Name: IU Indianapolis – Science Building - Addition

F. Project Location: 310 N. Blackford St., Indianapolis, IN 46202

G. Owner: Trustees of Indiana University

H. Architect: arcDESIGN

I. Construction Manager: Harmon Shiel Sexton Indy Science JV

1.2 CERTIFICATIONS AND BASE BID

A. **Base Bid:** The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by the Architect of Record and their Consultants of Record, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and installation services, including all scheduled allowances, necessary to complete the construction of the Work for the contract for which a bid price is indicated for the above-named Project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

Base Bid Numerical: $_____

Base Bid Written: $_____

1.3 DOCUMENTS REQUIRED FOR BID & 48 HOUR ITEMS

A. The following documents are required for a complete bid and shall be attached hereto:

1. Bid Form
2. Form 96 – Contractors Bid for Public Work
3. Bid Bond/Bid Security
4. Drug Testing Program - In compliance with Indiana Code 4-13-18
5. Contractor Asbestos Certification
6. Asbestos Protocol for Contractors
7. MBE/WBE/VBE Participation Plan
8. Alternates Form

B. The following documents shall be submitted via email withing 48 hours of bid:

1. Schedule of Subcontractors, Manufacturers, and Products
2. Schedule of Values
3. Confirmation of Payment and Performance Bond

1.4 CONTRACT BID ITEMIZATION (for information only)

DESCRIPTION	QUANTITY	LABOR	MATERIAL	TOTAL
Demolition		$	$	$
General Power		$	$	$
Fire Alarm		$	$	$
Security/Telecom		$	$	$
Lighting		$	$	$
Payment & Perf. Bond		$	$	$
			TOTAL BASE BID (MUST MATCH 1.2A ABOVE)	$

1.5 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
   1. Addendum No. 1, dated _____.
   2. Addendum No. 2, dated _____.
   3. Addendum No. 3, dated _____.
   4. Addendum No. 4, dated _____.

1.6 ALTERNATES

A. See attached Alternates Form. **Indicate ADD or DEDUCT by circling the appropriate one.**
   1. Refer to Alternates Form – Attachment 3 for details.

1.7 MATERIAL/EQUIPMENT LEAD TIMES

A. Indicate any and all long lead time for material/equipment that could impact the schedule or are greater than 6 weeks.

1. Material/Equipment: _____
   a. _____ Weeks
2. Material/Equipment: _____
   a. _____ Weeks
3. Material/Equipment: _____
   a. _____ Weeks
4. Material/Equipment: _____
   a. _____ Weeks
5. Material/Equipment: _____
   a. _____ Weeks

1.8 COMPLETION DATE | SCHEDULE

A. The Bidder has reviewed the project schedule and acknowledges that bid has been prepared in such a manner that adequate manpower and equipment are accounted for.

1.9 ALLOWANCE

A. Allowance dollars, if applicable, are included in the base bid amount, as indicated in above Bid Itemization and are to be used only per the direction of Shiel Sexton Co., Inc. Allowance dollars include all labor, material, equipment, hauling / handling, and storage. Overhead and profit for allowances is included in base bid amount. All allowance dollars not used will be deducted from the contract amount. Allowance money will not be used for work previously scoped and only to be used for added scope.

1.10 TAX EXEMPTIONS

A. The undersigned Bidder has informed himself and all his prospective sub-contractors and suppliers that this project is TAX EXEMPT, and therefore, has NOT included these taxes in his Base Bid price.

1.11 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed Contractor, for the type of work proposed, in the State of Indiana, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12 PERFORMANCE AND PAYMENT BONDS

A. Subcontractors shall furnish Performance and Payment Bonds, each in an amount at least equal to one-hundred (100%) of the contract price as security for the faithful performance and payment of all the subcontractor's obligations under the contract documents. These bonds shall remain in effect at least until two (2) years after the date when final payment becomes due, except as otherwise provided by law or regulation or by the contract documents. All bonds shall be in the forms prescribed by law, regulation, and the contract documents and be executed by such sureties as (i) are licensed to conduct business in the State of Indiana, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the power of attorney or other instrument establishing the agent's authority.

1.13 BID GUARANTEE

A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety if requested within ten (10) days after a written Notice of Award, if offered within sixty (60) days after receipt of bids, and on failure to do so agrees to forfeit to Construction Manager the bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Total Base Bid amount above:

1. _____Dollars ($_____)

2. Bid Bond to be made out to Harmon Shiel Sexton Indy Science JV.

1.14 SUBMISSION OF BID

Respectfully submitted this ____ day of _____, 2024.

Submitted By: _____
(Name of bidding firm or corporation)

Authorized Signature: _____
(Handwritten signature)

Signed By: _____
(Type or print name)

Title: _____
(Owner/Partner/President/Vice President)

END OF DOCUMENT

BID FORM

CONTRACT NO. 5.04 – EMERGENCY POWER

1.1 GENERAL INFORMATION

A. Bidder: _____.

B. Contact Name: _____.

C. Contact Email: _____.

D. Contact Phone: _____.

E. Project Name: IU Indianapolis – Science Building - Addition

F. Project Location: 310 N. Blackford St., Indianapolis, IN 46202

G. Owner: Trustees of Indiana University

H. Architect: arcDESIGN

I. Construction Manager: Harmon Shiel Sexton Indy Science JV

1.2 CERTIFICATIONS AND BASE BID

A. **Base Bid:** The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by the Architect of Record and their Consultants of Record, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and installation services, including all scheduled allowances, necessary to complete the construction of the Work for the contract for which a bid price is indicated for the above-named Project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

Base Bid Numerical: $_____

Base Bid Written: $_____

1.3 DOCUMENTS REQUIRED FOR BID & 48 HOUR ITEMS

A. The following documents are required for a complete bid and shall be attached hereto:

1. Bid Form
2. Form 96 – Contractors Bid for Public Work
3. Bid Bond/Bid Security
4. Drug Testing Program - In compliance with Indiana Code 4-13-18
5. Contractor Asbestos Certification
6. Asbestos Protocol for Contractors
7. MBE/WBE/VBE Participation Plan
8. Alternates Form

B. The following documents shall be submitted via email withing 48 hours of bid:

1. Schedule of Subcontractors, Manufacturers, and Products
2. Schedule of Values
3. Confirmation of Payment and Performance Bond

1.4 CONTRACT BID ITEMIZATION (for information only)

DESCRIPTION	QUANTITY	LABOR	MATERIAL	TOTAL
Reset of Existing Gen Set		$	$	$
Labor		$	$	$
Feeders/Conductors		$	$	$
Other Equipment		$	$	$
Payment & Perf. Bond		$	$	$
			TOTAL BASE BID (MUST MATCH 1.2A ABOVE)	$

1.5 ACKNOWLEDGEMENT OF ADDENDA

A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
   1. Addendum No. 1, dated _____.
   2. Addendum No. 2, dated _____.
   3. Addendum No. 3, dated _____.
   4. Addendum No. 4, dated _____.

1.6 ALTERNATES

A. See attached Alternates Form. **Indicate ADD or DEDUCT by circling the appropriate one.**
   1. Refer to Alternates Form – Attachment 3 for details.

1.7 MATERIAL/EQUIPMENT LEAD TIMES

A. Indicate any and all long lead time for material/equipment that could impact the schedule or are greater than 6 weeks.

1. Material/Equipment: _____
   a. _____ Weeks
2. Material/Equipment: _____
   a. _____ Weeks
3. Material/Equipment: _____
   a. _____ Weeks
4. Material/Equipment: _____
   a. _____ Weeks
5. Material/Equipment: _____
   a. _____ Weeks

1.8 COMPLETION DATE | SCHEDULE

A. The Bidder has reviewed the project schedule and acknowledges that bid has been prepared in such a manner that adequate manpower and equipment are accounted for.

1.9 ALLOWANCE

A. Allowance dollars, if applicable, are included in the base bid amount, as indicated in above Bid Itemization and are to be used only per the direction of Shiel Sexton Co., Inc. Allowance dollars include all labor, material, equipment, hauling / handling, and storage. Overhead and profit for allowances is included in base bid amount. All allowance dollars not used will be deducted from the contract amount. Allowance money will not be used for work previously scoped and only to be used for added scope.

1.10 TAX EXEMPTIONS

A. The undersigned Bidder has informed himself and all his prospective sub-contractors and suppliers that this project is TAX EXEMPT, and therefore, has NOT included these taxes in his Base Bid price.

1.11 CONTRACTOR'S LICENSE

A. The undersigned further states that it is a duly licensed Contractor, for the type of work proposed, in the State of Indiana, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12 PERFORMANCE AND PAYMENT BONDS

A. Subcontractors shall furnish Performance and Payment Bonds, each in an amount at least equal to one-hundred (100%) of the contract price as security for the faithful performance and payment of all the subcontractor's obligations under the contract documents. These bonds shall remain in effect at least until two (2) years after the date when final payment becomes due, except as otherwise provided by law or regulation or by the contract documents. All bonds shall be in the forms prescribed by law, regulation, and the contract documents and be executed by such sureties as (i) are licensed to conduct business in the State of Indiana, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Government Financial Operations, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the power of attorney or other instrument establishing the agent's authority.

1.13 BID GUARANTEE

A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety if requested within ten (10) days after a written Notice of Award, if offered within sixty (60) days after receipt of bids, and on failure to do so agrees to forfeit to Construction Manager the bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Total Base Bid amount above:

1. _____Dollars ($_____)

2. Bid Bond to be made out to Harmon Shiel Sexton Indy Science JV.

1.14 SUBMISSION OF BID

Respectfully submitted this ____ day of _____, 2024.

Submitted By: _____
(Name of bidding firm or corporation)

Authorized Signature: _____
(Handwritten signature)

Signed By: _____
(Type or print name)

Title: _____
(Owner/Partner/President/Vice President)

END OF DOCUMENT

ALTERNATES BID FORM
Attachment 03

SUMMARY

Section includes administrative and procedural requirements for alternates.

Utilize this form for submission of alternates pricing.

DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

PROCEDURES

A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Execute accepted alternates under the same conditions as other work of the Contract.

SCHEDULE OF ALTERNATES (BID FORM) – BID PACKAGE 5 - RENOVATION

C. Alternate #01 – Generator

1. Base Bid: Reinstall relocated 600KW generator from its temporary location adjacent to SELB building to newly constructed pad to the south. Provide all wiring and terminations for a complete and functional system.
2. Alternate: Provide and install a **new 1.75 MW** generator set per specifications. Include any modifications to generator pad and pathways necessary for larger unit. Additionally, include costs to decommission relocated 600KW and transport offsite. Return area to undisturbed condition.

ADD / DEDUCT $_____
(CIRCLE CORRECT OPTION)

D. Alternate #02 – Generator

1. Base Bid: Reinstall relocated 600KW generator from its temporary location adjacent to SELB building to newly constructed pad to the south. Provide all wiring and terminations for a complete and functional system.
2. Alternate: Provide pricing for a **new 750 KW** generator set per specifications. Include any modifications to generator pad and pathways necessary for larger unit. Additionally, include costs to decommission relocated 600KW and transport offsite. Return area to undisturbed condition.

ADD / DEDUCT $_____
(CIRCLE CORRECT OPTION)

E. Alt Reno #03 – LD Building – Glycol Makeup and Refilling Loop (renovation)

1. Base Bid: No work.
2. Alternate: Provide the makeup unit as shown on the Drawings. Provide 550 gallons of 40% Propylene Glycol Dowfrost by Dow Chemical.

UNIT PRICE; 50 Gallons of Gylcol $_____

ADD / DEDUCT $_____
(CIRCLE CORRECT OPTION)

F. Alt Reno #04 – LD Building – New Controls and Balancing of Existing AHUs (renovation)

1. Base Bid: No work.
2. Alternate: Controls and balancing as shown on the Documents.

ADD / DEDUCT $_____
(CIRCLE CORRECT OPTION)

G. Alt Reno #05 – Arc Flash Studies – MANDATORY ALTERNATE

1. Base Bid: No work.
2. Alternate: Provide arc flash studies as shown on the Documents.

ADD / DEDUCT $_____
(CIRCLE CORRECT OPTION)

H. Alt Reno #06 – SL Building – SL 344 Storage Room

1. Base Bid: No work.
2. Alternate: Provide buildout of storage space in SL 344 as shown on the Documents.

ADD / DEDUCT $_____
(CIRCLE CORRECT OPTION)

ATTACHMENT 04 - FORM 96

CONTRACTOR'S BID FOR PUBLIC WORK - FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)
Prescribed by State Board of Accounts

PART I
(To be completed for all bids. Please type or print)

Date *(month, day, year):*_____

1. Governmental Unit (Owner):_____
2. County :_____
3. Bidder (Firm):_____

   Address:_____

   City/State/ZIPcode:_____
4. Telephone Number:_____
5. Agent of Bidder *(if applicable):*_____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of _____

(Governmental Unit) in accordance with plans and specifications prepared by _____

_____ and dated _____ for the sum of

_____ $_____

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this _____ day of _____, _____, subject to the following conditions: _____

_____

Contracting Authority Members:

_____ _____

_____ _____

_____ _____

PART II

(For projects of $150,000 or more – IC 36-1-12-4)

Governmental Unit: _____

Bidder (Firm) _____

Date *(month, day, year):* _____

These statements to be submitted under oath by each bidder with and as a part of his bid. Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you? _____ If so, where and why?

_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

_____

_____

_____

_____

_____

2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

_____

_____

_____

_____

_____

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

_____

_____

_____

_____

_____

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

_____

_____

_____

_____

_____

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

_____

_____

_____

_____

_____

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV CONTRACTOR'S NON – COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated at _____ this _____ day of _____, _____

_____
(Name of Organization)

By_____

_____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) ss
COUNTY OF_____)

Before me, a Notary Public, personally appeared the above-named _____ and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____, _____.

_____
Notary Public

My Commission Expires:_____

County of Residence:_____

BID OF

_____
(Contractor)

_____
(Address)

_____

FOR

PUBLIC WORKS PROJECTS

OF

_____

_____

_____

Filed _____, _____

Action taken _____

_____

ATTACHMENT 05 - CONTRACTOR ASBESTOS CERTIFICATION

CONTRACTOR ASBESTOS CERTIFICATION

TO: INDIANA UNIVERSITY

The Contractor certifies that:

No asbestos containing material was selected as a building material for this project. For all materials used on the project which were marked on the material or on the packaging the following or similar wording "May contain mineral fibers" the contractor will have on file, with copies provided to the owner, either of the following – (1) The manufacturer's certification that the material does not contain asbestos or (2) Laboratory results from an EPA accredited laboratory indicating the material does not contain asbestos in accordance with EPA and OSHA requirements.

IU Project Name and Number: _____

Contractor Firm: _____

Contractor Name: _____

Contractor Signature: _____ Date _____

Asbestos Protocol for Contractors
Communication of Hazards

Asbestos-containing materials (ACM) exist in many buildings constructed prior to January 1, 1981. Pursuant to the OSHA Construction Industry Asbestos Standard 29 CFR 1926.1101, "Communication of Hazards," a building owner is required to inform contractors doing demolition or renovation of the presence, location and quantity of ACM found at the work sites in its buildings. The IU Environmental Health and Safety Department (EHS) performs the asbestos inspection of buildings on the IU campuses and, if necessary, will conduct or oversee the safe removal of all known and accessible ACM prior to renovation or demolition work.

EHS generates a post-inspection Asbestos Notice of each work site, which identifies building materials that are visible or otherwise known to be present at the site at the time of inspection as being "Non-ACM" or "ACM."

The inspection, and therefore the information contained in the notice, is limited to what is visible to the inspector at the time of the inspection. This means that during the course of construction work, it is possible to encounter ACM that was not identified on the notice because of the physical limitations on the Asbestos Inspector's ability to see and identify ACM at the time of the inspection. Contractors are expected to have knowledge of the types and likely locations of ACM generally found in building materials and to be able to make visual identification of ACM and must provide documentation that each employee has attended Asbestos Awareness Training within the last calendar year.

Under no circumstances are contractors permitted to disturb ACM. Contractors are required to stop work immediately upon discovering suspected ACM and to make a report to the owner's Project Manager. The Project Manager may direct the contractor to the EHS office if a disturbance has occurred and/or to coordinate additional surveying.

<u>For the Contractor</u>

I understand and agree that the employees and agents of my company and/or the employees and agents of my company's subcontractor(s) are prohibited from disturbing ACM.

I understand and agree that, upon the discovery of ACM or suspected ACM at the worksite, work shall be stopped immediately and a report of the discovery made to the owner's Project Manager. I agree that my employees, agents and/or the employees and agents of my subcontractor(s) will comply with the directions of the Owner's Project Manager with regard to responding to the discovery or disturbance of ACT.

I understand and agree that failure on the part of my employees and agents and/or the employees and agents of my subcontractor(s) to comply with the above requirements may result in fines being imposed against my company or the owner, or both, by the Indiana Department of Environmental Management (IDEM), or by other federal, state, county or municipal authorities. I agree I will reimburse the owner for any costs incurred by the owner based on violations of this protocol by my employees or agents and/or the employees or agents of my subcontractor(s), including but not limited to fines, penalties, attorneys fees and/or court costs.

I have read and understand these requirements:

Contractor Signature	Date	IU Project Number
Printed Name		IU Project Title

MINORITY, WOMEN'S AND VETERAN'S BUSINESS ENTERPRISE PARTICIPATION PLAN

The Bidder/Firm must submit with its bid/proposal a Minority, Women's and Veteran's Business Enterprise Participation Plan. Minority Business Enterprise (MBE), Women's Business Enterprise (WBE) and Veteran's Business Enterprise (VBE) are defined below. In this Plan, the Bidder/Firm must show that there are certified by the State of Indiana (see below) MBE/WBE/VBE(s) participating in the project. Participation may be as a subcontractor or second tier participation with common suppliers. The Bidder/Firm must indicate the name of the MBE/WBE/VBE(s) with which it will work; the contact name and phone number of the MBE/WBE/VBE(s); the service supplied by the MBE/WBE/VBE(s); and the specific dollar amount from the project that will be directed toward each MBE/WBE/VBE. Please note: If the Trade is an overhead item for your entire business, please calculate the proportion of the business that will actually apply to the project in question.

Documentation of the Bidder's/Firm's good faith effort to meet the participation goal must be submitted at bid time; see Page 3 of this form.

Contractors will find a listing of all MBE/WBE/VBE suppliers certified by the State of Indiana at the following website: www.in.gov/idoa/mwbe/2743.htm

Failure to provide a completed Plan at the time of bid/proposal submission will result in the rejection of the bid/proposal. A completed plan shall include evidence of the good faith efforts of the Bidder/Firm to include Minority, Women's and Veteran's Business Enterprises in the project. Indiana University reserves the right to verify all information included in the Minority, Women's and Veteran's Business Enterprise Participation Plan before making final determination of the Bidder's/Firm's responsiveness and responsibility.
By submission of the bid/proposal, the Bidder/Firm thereby acknowledges and agrees to be bound by the IU Business Diversity Initiative. Questions involving the Minority, Women's and Veteran's Business Enterprise Participation Plan should be directed to the IU Supplier Diversity Department at 317/278-5384.

Definitions:

a. "Minority-owned Business Enterprise" (MBE) means an individual, partnership, corporation, limited liability company, or joint venture of any kind that is owned and controlled by (1) or more persons who are (a) United States citizens; and (b) members of a racial minority group: African American, American Indians, Hispanics, Asian Americans or other similar minority group as defined by 13 CFR 124.103

b. "Woman-owned Business Enterprise" (WBE) means an individual, partnership, corporation, limited liability company, or joint venture of any kind that is owned and controlled by (1) or more persons who are (a) United States citizens; and (b) whose gender is female.

c. "Veteran-owned Business Enterprise" (VBE) means an Indiana firm with its principal place of business located in Indiana and is currently certified by the Department of Veterans Affairs as a veteran-owned business.

MBE/WBE/VBE PARTICIPATION PLAN

PROJECT #_____ BID/PROPOSAL DUE DATE _____

PROJECT NAME _____

BIDDER/FIRM _____

ADDRESS _____

CITY/STATE/ZIP _____

PHONE: ( ) _____

EMAIL: _____

URL: _____

MBE, WBE, VBE Participation Plan

BIDDER/FIRM_____ PROJECT # _____

PROJECT NAME _____

The following certified minority, women and/or veteran -owned firms will be participating in the project according to the following schedule. Indicate whether each firm is an MBE, WBE or VBE by selecting the MBE, WBE or VBE box below.

E-mail each firm's certification document, within 48 hours post-bid, to the Owner @ bidtab@indiana.edu.

1.	Firm:	Trade:	Amount:
	MBE ☐ WBE ☐ VBE ☐	Contact:	
	Phone:	E-mail:	
2.	Firm:	Trade:	Amount:
	MBE ☐ WBE ☐ VBE ☐	Contact:	
	Phone:	E-mail:	
3.	Firm:	Trade:	Amount:
	MBE ☐ WBE ☐ VBE ☐	Contact:	
	Phone:	E-mail:	
4.	Firm:	Trade:	Amount:
	MBE ☐ WBE ☐ VBE ☐	Contact:	
	Phone:	E-mail:	

If additional room is necessary, please attach a separate page.

By my signature, I certify that the above statements are true and accurate, all as of the date below. I also understand that any changes to this plan must be approved by Indiana University and documented by Construction Change Directive.

_____
Agent of Bidder

_____
Date

MBE, WBE, VBE Participation Plan

BIDDER/FIRM_____ PROJECT # _____

PROJECT NAME _____

Describe below your good faith efforts to obtain certified minority, women's and veteran's business enterprise participation for this project. Be sure to attach a copy of all solicitation efforts, e.g., ads that were published or networking events, etc.

_____

_____

_____

_____

As part of the Bidder/Firm's good faith efforts, list below the MBE/WBE/VBE contractors you individually contacted, requesting a quote for this project. Please ensure that reasonable time and information is provided to the potential MBE/WBE/VBE contractors to allow for a response.

Check all that apply:

MBE, WBE, VBE firms contacted (company name and commodity)	Method of contact (i.e. phone or fax number, e-mail or mailing address AND contact name)	MBE	WBE	VBE	Quote Received Not Low	No Response
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐

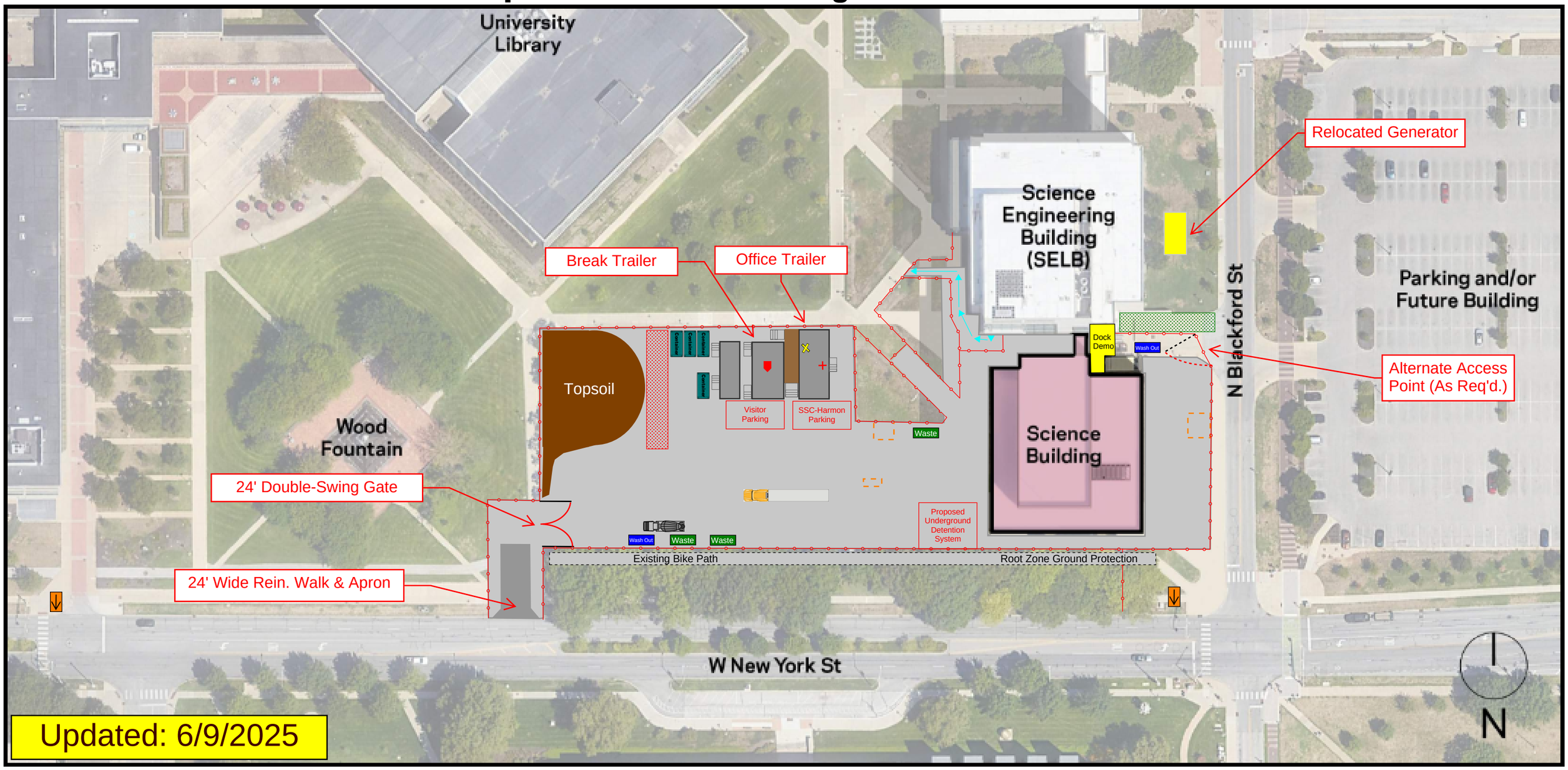
If extra space is necessary, please attach additional pages.

PAGES 1, 2, AND 3 OF THIS DOCUMENT MUST BE SUBMITTED WITH THE BID

ATTACHMENT 08 - LOGISTICS

Logistics Plan

IU Indianapolis STEM Lab Building Addition and Renovation



Updated: 6/9/2025

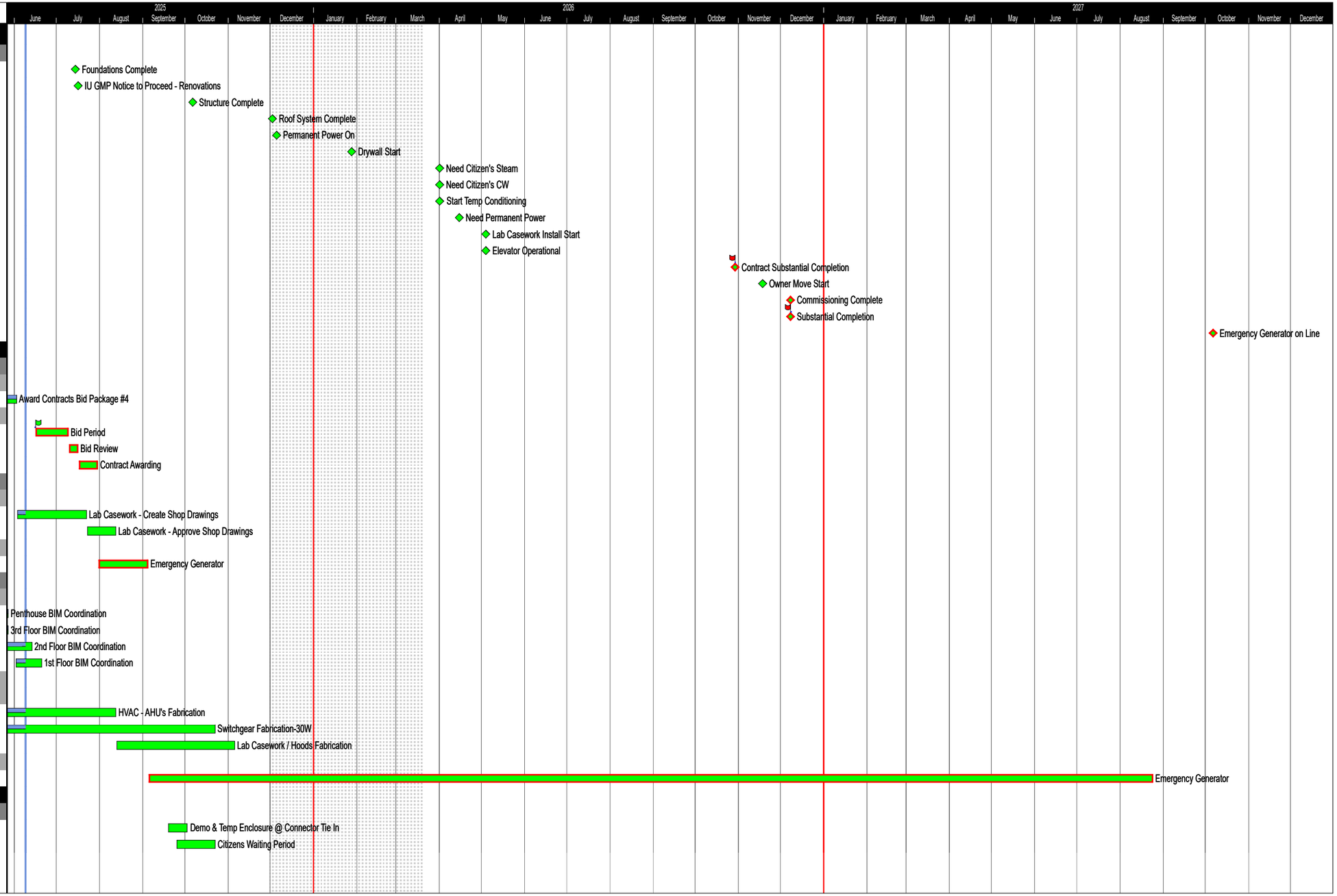
SHIEL SEXTON

HC HARMON CONSTRUCTION, INC.

JOINT VENTURE PARTNERSHIP

- Construction Fence
- Snow fence
- Emergency Egress Rotue
- Pedestrian Detour Sign
- Construction Waste
- Concrete Wash Out
- Loading Dock Access
- Restricted to Semi Turnaround
- First Aid Station & AED
- Emergency Rally Point / Shelter
- Contractor/Visitor Check In

Line	Act. ID	Activity Name	Dur.	Dur. Rem.	Start	Finish	Contractors
1	**Project Milestones**						
2	**Building Addition**						
3	1571	Foundations Complete	0d	0d	14Jul25	14Jul25	
4	4250	IU GMP Notice to Proceed - Renovations	0d	0d	16Jul25	16Jul25	
5	1581	Structure Complete	0d	0d	06Oct25	06Oct25	
6	2760	Roof System Complete	0d	0d	02Dec25	02Dec25	
7	1582	Permanent Power On	0d	0d	05Dec25	05Dec25	
8	1591	Drywall Start	0d	0d	28Jan26	28Jan26	
9	4210	Need Citizen's Steam	0d	0d	01Apr26	01Apr26	
10	4220	Need Citizen's CW	0d	0d	01Apr26	01Apr26	
11	1592	Start Temp Conditioning	0d	0d	01Apr26	01Apr26	
12	1602	Need Permanent Power	0d	0d	15Apr26	15Apr26	
13	1601	Lab Casework Install Start	0d	0d	04May26	04May26	
14	3190	Elevator Operational	0d	0d	04May26	04May26	
15	1593	Contract Substantial Completion	0d	0d	29Oct26	29Oct26	
16	2720	Owner Move Start	0d	0d	18Nov26	18Nov26	
17	1583	Commissioning Complete	0d	0d	08Dec26	08Dec26	
18	1611	Substantial Completion	0d	0d	08Dec26	08Dec26	
19	1584	Emergency Generator on Line	0d	0d	06Oct27	06Oct27	
20	**Pre Construction**						
21	**Contract Awarding**						
22	**Bid package #4**						
23	4680	Award Contracts Bid Package #4	32d	0d	17Apr25	02Jun25	
24	**Bid Package #5**						
25	5740	Bid Period	17d	17d	16Jun25	09Jul25	
26	5850	Bid Review	5d	5d	10Jul25	16Jul25	
27	5860	Contract Awarding	10d	10d	17Jul25	30Jul25	
28	**Submittals & Approvals**						
29	**Building Addition - Long Lead**						
30	3150	Lab Casework - Create Shop Drawings	35d	31d	03Jun25	22Jul25	
31	3200	Lab Casework - Approve Shop Drawings	15d	15d	23Jul25	12Aug25	
32	**Building Renovations - Long Lead**						
33	4280	Emergency Generator	25d	25d	31Jul25	04Sep25	
34	**Fabrication**						
35	**BIM Coordination**						
36	1261	Penthouse BIM Coordination	75d	0d	11Feb25	27May25	
37	1251	3rd Floor BIM Coordination	60d	0d	04Mar25	27May25	
38	1241	2nd Floor BIM Coordination	30d	5d	02May25	13Jun25	
39	1231	1st Floor BIM Coordination	13d	8d	02Jun25	20Jun25	
40	**Site Enabling & Utility Relocations**						
41	**Building Addition - Long Lead**						
42	2950	HVAC - AHU's Fabrication	140d	46d	27Jan25	12Aug25	
43	1860	Switchgear Fabrication-30W	150d	96d	24Mar25	22Oct25	
44	3160	Lab Casework / Hoods Fabrication	60d	60d	13Aug25	05Nov25	
45	**Building Renovations - Long Lead**						
46	4310	Emergency Generator	500d	500d	05Sep25	24Aug27	
47	**Construction**						
48	**Site Enabling & Utility Relocations**						
49	1692	Demo & Temp Enclosure @ Connector Tie In	10d	10d	19Sep25	02Oct25	Weddle
50	2840	Citizens Waiting Period	20d	20d	25Sep25	22Oct25	SSC



Science Building Addition & Renovation

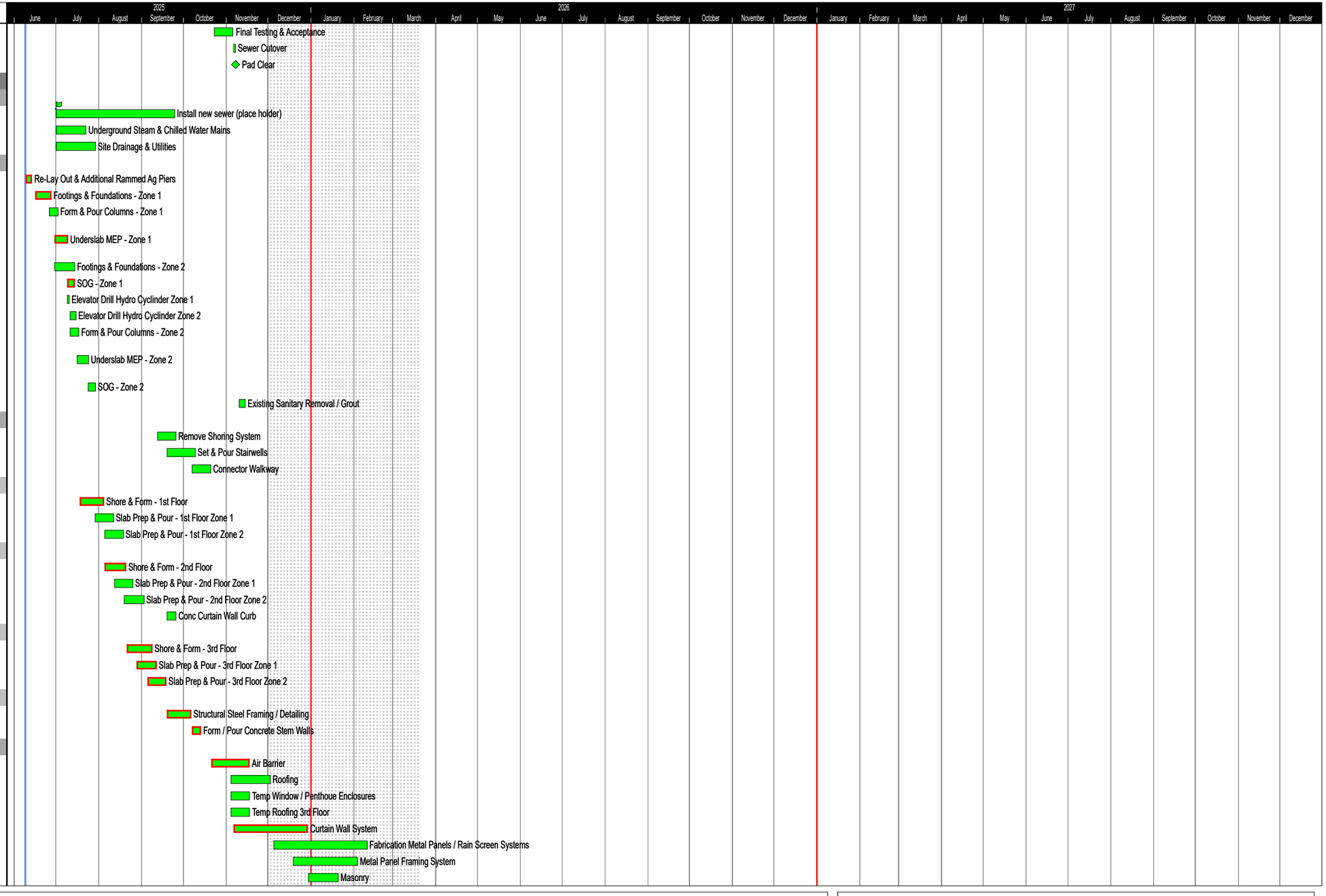
Indiana University

Project Schedule

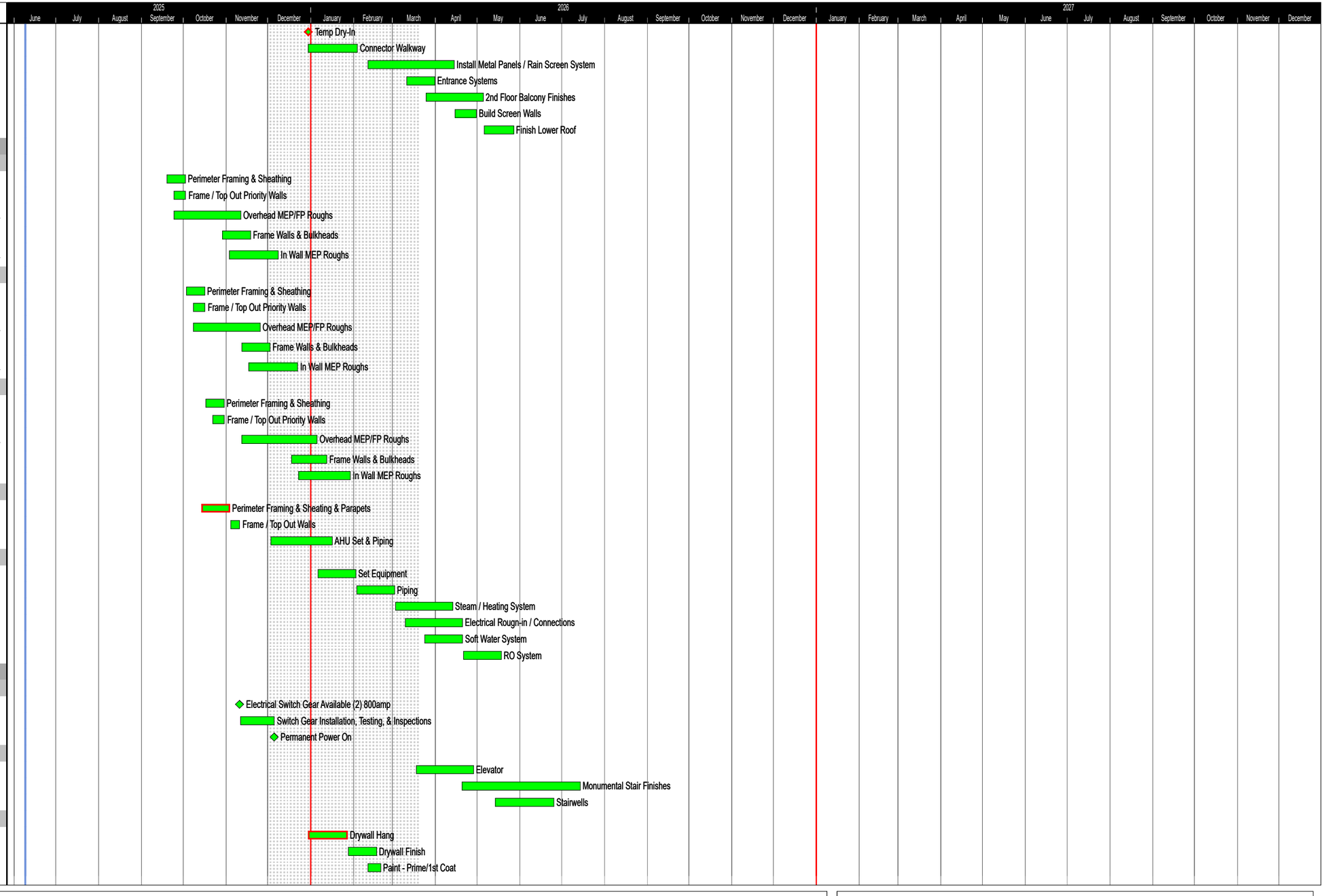
Run Date: 6/9/2025
Progress Date: 6/9/2025

ATTACHMENT 09 - SCHEDULE

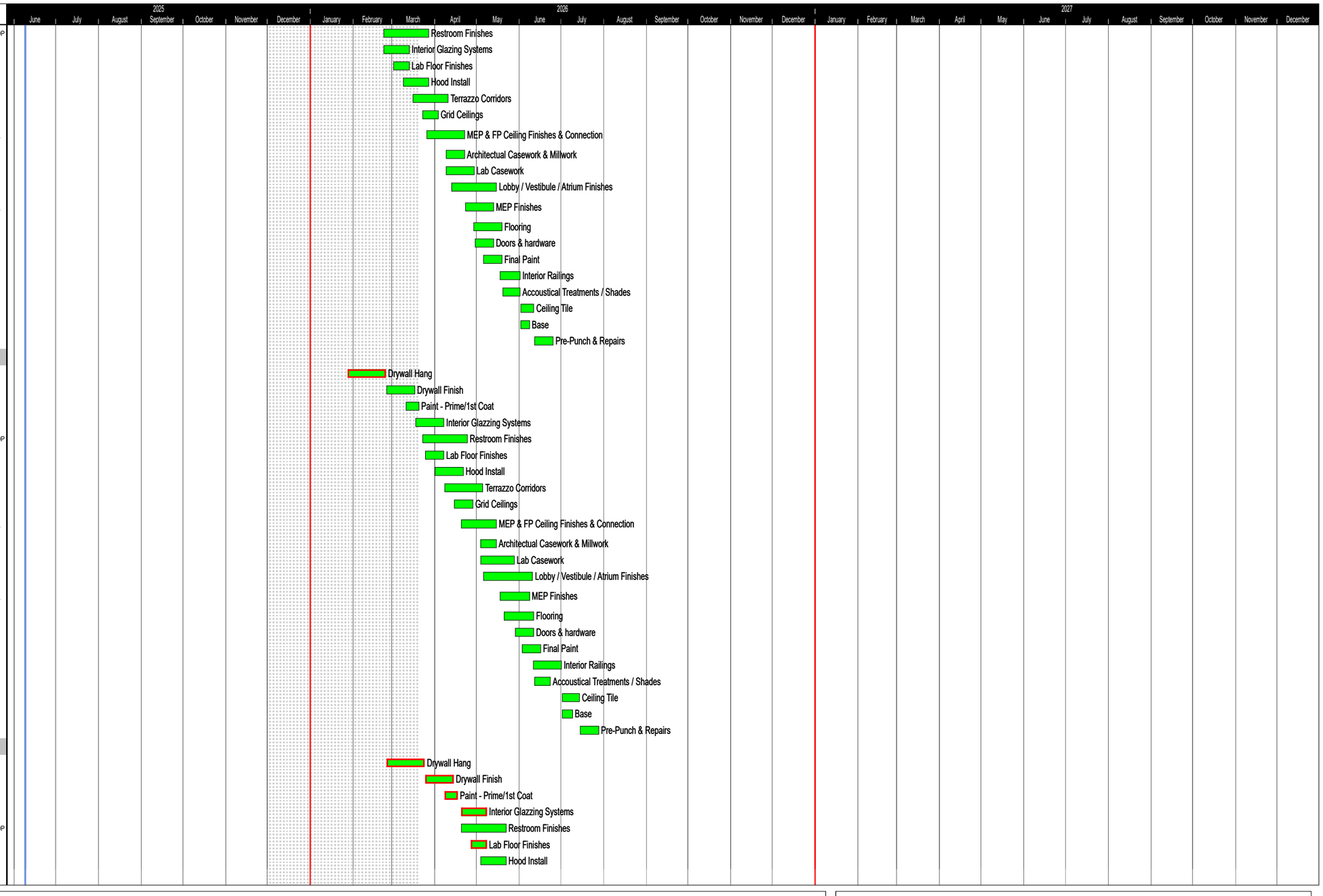
Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
51	2850	Final Testing & Acceptance	10d	10d	23Oct25	05Nov25	SSC
52	2860	Sewer Cutover	2d	2d	06Nov25	07Nov25	Millenium
53	2851	Pad Clear	0d	0d	07Nov25	07Nov25	
54	**Building Addition**						
55	**Sitework**						
56	3240	Install new sewer (place holder)	60d	60d	01Jul25	24Sep25	Millenium
57	3280	Underground Steam & Chilled Water Mains	15d	15d	01Jul25	22Jul25	Sexson,Millenium
58	1871	Site Drainage & Utilities	20d	20d	01Jul25	29Jul25	Millenium
59	**Sub Structure**						
60	1711	Re-Lay Out & Additional Rammed Ag Piers	5d	5d	09Jun25	13Jun25	
61	1900	Footings & Foundations - Zone 1	10d	10d	16Jun25	27Jun25	Weddle
62	1911	Form & Pour Columns - Zone 1	5d	5d	26Jun25	02Jul25	Weddle
63	1910	Underslab MEP - Zone 1	7d	7d	30Jun25	09Jul25	Facility Solutions,AA Huber Mech,Sexson Plumbing
64	3250	Footings & Foundations - Zone 2	10d	10d	30Jun25	14Jul25	Weddle
65	1920	SOG - Zone 1	4d	4d	09Jul25	14Jul25	Weddle
66	5110	Elevator Drill Hydro Cyclinder Zone 1	2d	2d	09Jul25	10Jul25	American Elevator
67	5120	Elevator Drill Hydro Cyclinder Zone 2	3d	3d	11Jul25	15Jul25	American Elevator
68	1921	Form & Pour Columns - Zone 2	5d	5d	11Jul25	17Jul25	Weddle
69	3270	Underslab MEP - Zone 2	7d	7d	16Jul25	24Jul25	Facility Solutions,AA Huber Mech,Sexson Plumbing
70	3230	SOG - Zone 2	4d	4d	24Jul25	29Jul25	Weddle
71	2870	Existing Sanitary Removal / Grout	5d	5d	10Nov25	14Nov25	Weddle,Millenium
72	**Structure**						
73	3291	Remove Shoring System	10d	10d	12Sep25	25Sep25	Weddle
74	3300	Set & Pour Stairwells	15d	15d	19Sep25	09Oct25	Weddle
75	3310	Connector Walkway	10d	10d	07Oct25	20Oct25	Weddle
76	**1st Floor**						
77	1930	Shore & Form - 1st Floor	12d	12d	18Jul25	04Aug25	Weddle
78	3320	Slab Prep & Pour - 1st Floor Zone 1	10d	10d	29Jul25	11Aug25	Weddle
79	3330	Slab Prep & Pour - 1st Floor Zone 2	10d	10d	05Aug25	18Aug25	Weddle
80	**2nd Floor**						
81	3350	Shore & Form - 2nd Floor	12d	12d	05Aug25	20Aug25	Weddle
82	3360	Slab Prep & Pour - 2nd Floor Zone 1	10d	10d	12Aug25	25Aug25	Weddle
83	3390	Slab Prep & Pour - 2nd Floor Zone 2	10d	10d	19Aug25	02Sep25	Weddle
84	3361	Conc Curtain Wall Curb	5d	5d	19Sep25	25Sep25	Weddle
85	**3rd Floor**						
86	3410	Shore & Form - 3rd Floor	12d	12d	21Aug25	08Sep25	Weddle
87	3420	Slab Prep & Pour - 3rd Floor Zone 1	10d	10d	28Aug25	11Sep25	Weddle
88	3460	Slab Prep & Pour - 3rd Floor Zone 2	10d	10d	05Sep25	18Sep25	Weddle
89	**Penthouse**						
90	3290	Structural Steel Framing / Detailing	12d	12d	19Sep25	06Oct25	Weddle
91	4030	Form / Pour Concrete Stem Walls	5d	5d	07Oct25	13Oct25	Weddle
92	**Exterior Enclosure**						
93	3980	Air Barrier	20d	20d	21Oct25	17Nov25	Weddle
94	1731	Roofing	20d	20d	04Nov25	02Dec25	Skyline
95	3480	Temp Window / Penthoue Enclosures	10d	10d	04Nov25	17Nov25	Weddle
96	3990	Temp Roofing 3rd Floor	10d	10d	04Nov25	17Nov25	Weddle
97	1940	Curtain Wall System	35d	35d	06Nov25	29Dec25	Delaware Glass
98	1950	Fabrication Metal Panels / Rain Screen Systems	45d	45d	05Dec25	10Feb26	Engineered Facades
99	4040	Metal Panel Framing System	30d	30d	19Dec25	03Feb26	Engineered Facades
100	1951	Masonry	15d	15d	30Dec25	20Jan26	BMI



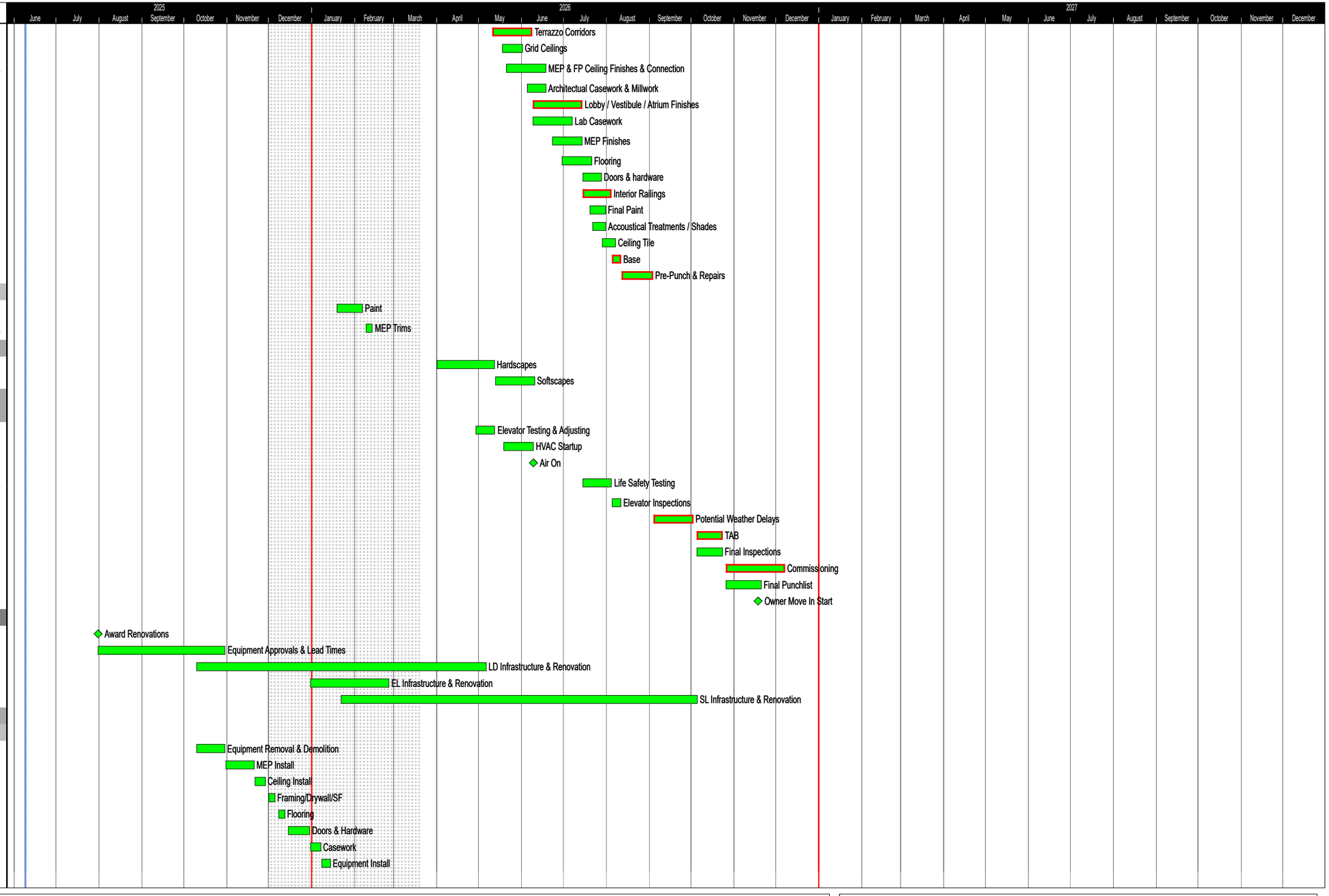
Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
101	4000	Temp Dry-In	0d	0d	30Dec25	30Dec25	Weddle
102	2020	Connector Walkway	25d	25d	30Dec25	03Feb26	Weddle
103	1960	Install Metal Panels / Rain Screen System	45d	45d	11Feb26	14Apr26	Engineered Facades
104	1970	Entrance Systems	15d	15d	11Mar26	31Mar26	Weddle
105	1961	2nd Floor Balcony Finishes	30d	30d	25Mar26	05May26	Weddle
106	4060	Build Screen Walls	12d	12d	15Apr26	30Apr26	Weddle
107	4050	Finish Lower Roof	15d	15d	06May26	27May26	Skyline
108		**Framing & Rough Ins**					
109		**1st Floor**					
110	1981	Perimeter Framing & Sheathing	10d	10d	19Sep25	02Oct25	Weddle
111	1982	Frame / Top Out Priority Walls	7d	7d	24Sep25	02Oct25	Weddle
112	2060	Overhead MEP/FP Roughs	35d	35d	24Sep25	11Nov25	Weddle, Facility Sol., Sexson, Vulcan & Huber
113	2051	Frame Walls & Bulkheads	15d	15d	29Oct25	18Nov25	Weddle
114	2050	In Wall MEP Roughs	25d	25d	03Nov25	08Dec25	Weddle, Facility Sol., Sexson, Vulcan & Huber
115		**2nd Floor**					
116	3110	Perimeter Framing & Sheathing	10d	10d	03Oct25	16Oct25	ADP
117	3490	Frame / Top Out Priority Walls	7d	7d	08Oct25	16Oct25	ADP
118	2090	Overhead MEP/FP Roughs	35d	35d	08Oct25	25Nov25	Weddle, Facility Sol., Sexson, Vulcan & Huber
119	2071	Frame Walls & Bulkheads	14d	14d	12Nov25	02Dec25	ADP
120	2080	In Wall MEP Roughs	25d	25d	17Nov25	22Dec25	Weddle, Facility Sol., Sexson, Vulcan & Huber
121		**3rd Floor**					
122	3120	Perimeter Framing & Sheathing	10d	10d	17Oct25	30Oct25	ADP
123	3500	Frame / Top Out Priority Walls	7d	7d	22Oct25	30Oct25	ADP
124	2120	Overhead MEP/FP Roughs	35d	35d	12Nov25	05Jan26	Weddle, Facility Sol., Sexson, Vulcan & Huber
125	2100	Frame Walls & Bulkheads	15d	15d	18Dec25	12Jan26	ADP
126	2110	In Wall MEP Roughs	25d	25d	23Dec25	29Jan26	Weddle, Facility Sol., Sexson
127		**Penthouse**					
128	2011	Perimeter Framing & Sheating & Parapets	15d	15d	14Oct25	03Nov25	ADP
129	2012	Frame / Top Out Walls	5d	5d	04Nov25	10Nov25	ADP
130	2130	AHU Set & Piping	30d	30d	03Dec25	16Jan26	AA Huber Mech
131		**1st Floor Mechanical Room**					
132	3930	Set Equipment	20d	20d	06Jan26	02Feb26	AA Huber Mech
133	3940	Piping	20d	20d	03Feb26	02Mar26	AA Huber Mech
134	3910	Steam / Heating System	30d	30d	03Mar26	13Apr26	AA Huber Mech
135	3970	Electrical Rougn-in / Connections	30d	30d	10Mar26	20Apr26	AA Huber Mech
136	3960	Soft Water System	20d	20d	24Mar26	20Apr26	AA Huber Mech
137	3950	RO System	20d	20d	21Apr26	18May26	AA Huber Mech
138		**Finishes**					
139		**Electrical**					
140	2940	Electrical Switch Gear Available (2) 800amp	0d	0d	10Nov25	10Nov25	Facility Solutions
141	2970	Switch Gear Installation, Testing, & Inspections	18d	18d	11Nov25	05Dec25	Facility Solutions
142	2980	Permanent Power On	0d	0d	05Dec25	05Dec25	Facility Solutions
143		**Vertical Conveyance**					
144	1771	Elevator	30d	30d	18Mar26	28Apr26	American Elevator
145	1762	Monumental Stair Finishes	60d	60d	20Apr26	14Jul26	Weddle
146	1761	Stairwells	30d	30d	14May26	25Jun26	Weddle
147		**1st Floor**					
148	2180	Drywall Hang	20d	20d	30Dec25	27Jan26	ADP
149	2190	Drywall Finish	15d	15d	28Jan26	17Feb26	ADP
150	2200	Paint - Prime/1st Coat	8d	8d	11Feb26	20Feb26	ADP



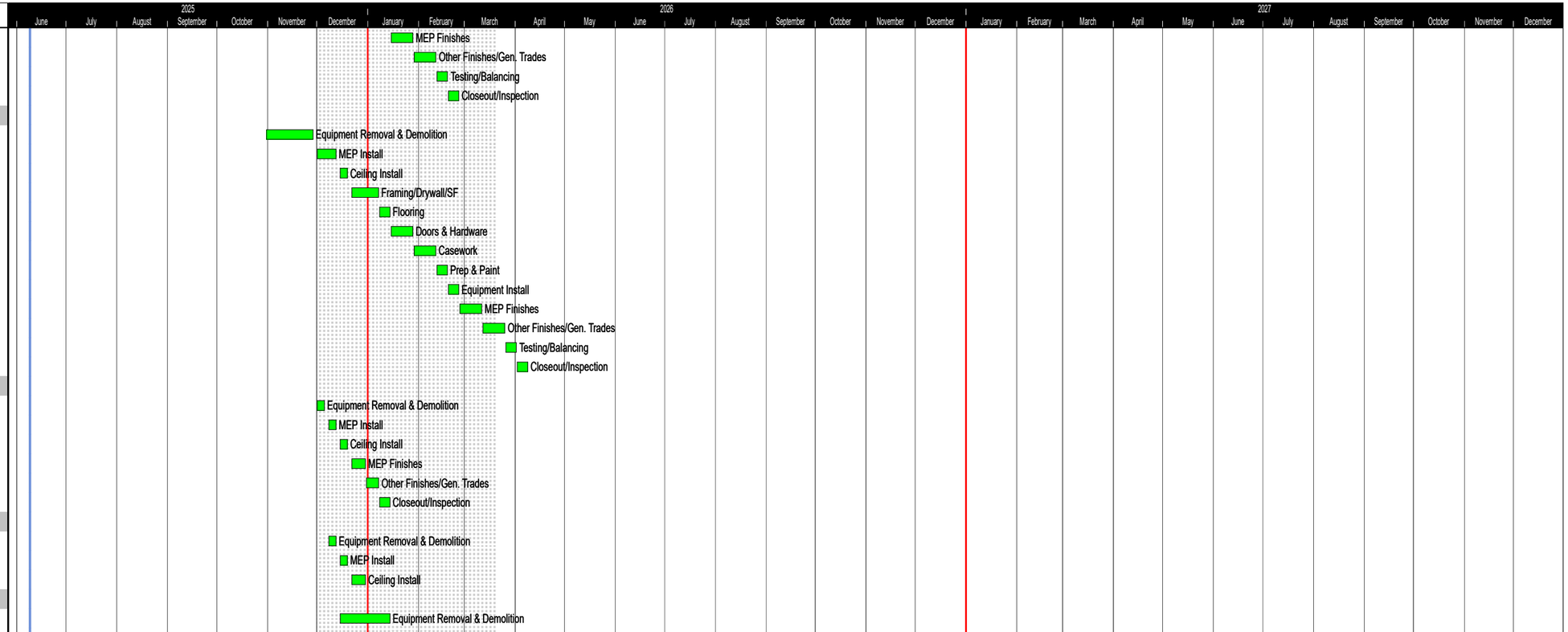
Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
151	2240	Restroom Finishes	25d	25d	23Feb26	27Mar26	Weddle,Sexson,ADP,ADP
152	4160	Interior Glazing Systems	15d	15d	23Feb26	13Mar26	Delaware Glass
153	3510	Lab Floor Finishes	10d	10d	02Mar26	13Mar26	Jack Laurie
154	2211	Hood Install	15d	15d	09Mar26	27Mar26	RJE
155	2191	Terrazzo Corridors	20d	20d	16Mar26	10Apr26	Santarossa
156	2210	Grid Ceilings	10d	10d	23Mar26	03Apr26	Weddle
157	2220	MEP & FP Ceiling Finishes & Connection	20d	20d	26Mar26	22Apr26	Weddle, Facility Sol., Sexson, Vulcan & Huber
158	2271	Architectual Casework & Millwork	10d	10d	09Apr26	22Apr26	RJE
159	2250	Lab Casework	15d	15d	09Apr26	29Apr26	RJE
160	4070	Lobby / Vestibule / Atrium Finishes	25d	25d	13Apr26	15May26	Weddle,ADP
161	2290	MEP Finishes	15d	15d	23Apr26	13May26	Weddle, Facility Sol., Sexson, Vulcan & Huber
162	2260	Flooring	15d	15d	29Apr26	19May26	Jack Laurie
163	2231	Doors & hardware	10d	10d	30Apr26	13May26	Weddle
164	4110	Final Paint	10d	10d	06May26	19May26	ADP
165	2261	Interior Railings	10d	10d	18May26	01Jun26	Weddle
166	4190	Accoustical Treatments / Shades	8d	8d	20May26	01Jun26	Weddle
167	2230	Ceiling Tile	8d	8d	02Jun26	11Jun26	ADP
168	2280	Base	5d	5d	02Jun26	08Jun26	Jack Laurie
169	2660	Pre-Punch & Repairs	10d	10d	12Jun26	25Jun26	
170	**2nd Floor**						
171	3520	Drywall Hang	20d	20d	28Jan26	24Feb26	ADP
172	3530	Drywall Finish	15d	15d	25Feb26	17Mar26	ADP
173	3550	Paint - Prime/1st Coat	8d	8d	11Mar26	20Mar26	ADP
174	4150	Interior Glazing Systems	15d	15d	18Mar26	07Apr26	Delaware Glass
175	3620	Restroom Finishes	25d	25d	23Mar26	24Apr26	Weddle,Sexson,ADP,ADP
176	3570	Lab Floor Finishes	10d	10d	25Mar26	07Apr26	Jack Laurie
177	3610	Hood Install	15d	15d	01Apr26	21Apr26	RJE
178	3540	Terrazzo Corridors	20d	20d	08Apr26	05May26	Santarossa
179	3560	Grid Ceilings	10d	10d	15Apr26	28Apr26	Weddle
180	3580	MEP & FP Ceiling Finishes & Connection	20d	20d	20Apr26	15May26	Weddle, Facility Sol., Sexson, Vulcan & Huber
181	3590	Architectual Casework & Millwork	10d	10d	04May26	15May26	RJE
182	3630	Lab Casework	18d	18d	04May26	28May26	RJE
183	4090	Lobby / Vestibule / Atrium Finishes	25d	25d	06May26	10Jun26	Weddle,ADP
184	3680	MEP Finishes	15d	15d	18May26	08Jun26	Weddle, Facility Sol., Sexson, Vulcan & Huber
185	3640	Flooring	15d	15d	21May26	11Jun26	Jack Laurie
186	3700	Doors & hardware	10d	10d	29May26	11Jun26	Weddle
187	4120	Final Paint	10d	10d	03Jun26	16Jun26	ADP
188	3650	Interior Railings	15d	15d	11Jun26	01Jul26	Weddle
189	4180	Accoustical Treatments / Shades	8d	8d	12Jun26	23Jun26	Weddle
190	3600	Ceiling Tile	8d	8d	02Jul26	14Jul26	Weddle
191	3670	Base	5d	5d	02Jul26	09Jul26	Jack Laurie
192	3690	Pre-Punch & Repairs	10d	10d	15Jul26	28Jul26	
193	**3rd Floor**						
194	3710	Drywall Hang	20d	20d	25Feb26	24Mar26	ADP
195	3720	Drywall Finish	15d	15d	25Mar26	14Apr26	ADP
196	3740	Paint - Prime/1st Coat	8d	8d	08Apr26	17Apr26	ADP
197	4140	Interior Glazing Systems	15d	15d	20Apr26	08May26	Delaware Glass
198	3810	Restroom Finishes	25d	25d	20Apr26	22May26	Weddle,Sexson,ADP,ADP
199	3760	Lab Floor Finishes	10d	10d	27Apr26	08May26	Jack Laurie
200	3800	Hood Install	15d	15d	04May26	22May26	RJE



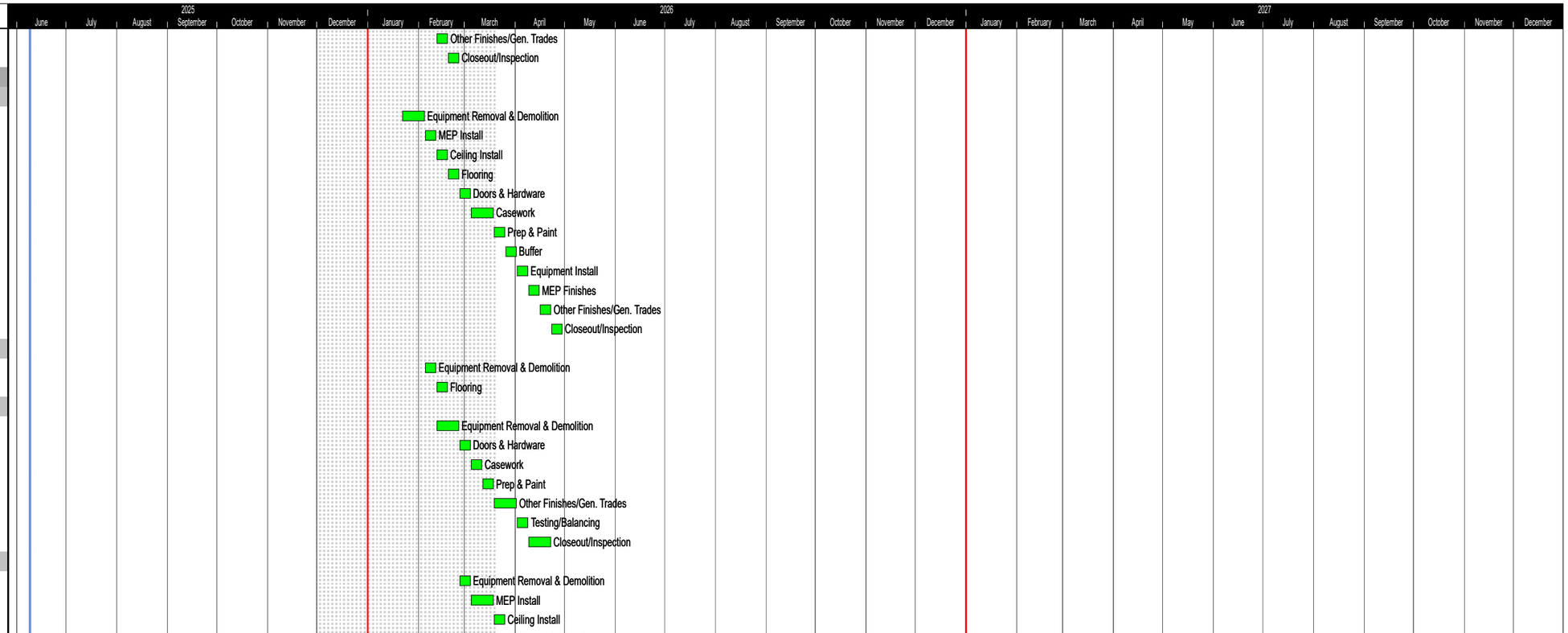
Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
201	3730	Terrazzo Corridors	20d	20d	11May26	08Jun26	Santarossa
202	3750	Grid Ceilings	10d	10d	18May26	01Jun26	Weddle
203	3770	MEP & FP Ceiling Finishes & Connection	20d	20d	21May26	18Jun26	Weddle, Facility Sol., Sexson, Vulcan & Huber
204	3780	Architectual Casework & Millwork	10d	10d	05Jun26	18Jun26	RJE
205	4100	Lobby / Vestibule / Atrium Finishes	25d	25d	09Jun26	14Jul26	Weddle,ADP
206	3820	Lab Casework	20d	20d	09Jun26	07Jul26	RJE
207	3870	MEP Finishes	15d	15d	23Jun26	14Jul26	Weddle, Facility Sol., Sexson, Vulcan & Huber
208	3830	Flooring	15d	15d	30Jun26	21Jul26	Jack Laurie
209	3890	Doors & hardware	10d	10d	15Jul26	28Jul26	Weddle
210	3840	Interior Railings	15d	15d	15Jul26	04Aug26	Weddle
211	4130	Final Paint	10d	10d	20Jul26	31Jul26	ADP
212	4170	Accoustical Treatments / Shades	8d	8d	22Jul26	31Jul26	Weddle
213	3790	Ceiling Tile	8d	8d	29Jul26	07Aug26	ADP
214	3860	Base	5d	5d	05Aug26	11Aug26	Weddle
215	3880	Pre-Punch & Repairs	17d	17d	12Aug26	03Sep26	
216	**Penthouse**						
217	2580	Paint	15d	15d	19Jan26	06Feb26	ADP
218	2590	MEP Trims	5d	5d	09Feb26	13Feb26	Weddle, Facility Sol., Sexson, Vulcan & Huber
219	**Site Finishes**						
220	2600	Hardscapes	30d	30d	01Apr26	12May26	SSC Concrete
221	2610	Softscapes	20d	20d	13May26	10Jun26	
222	**Siemens**						
223	**Project Closeout**						
224	2631	Elevator Testing & Adjusting	10d	10d	29Apr26	12May26	American Elevator
225	2630	HVAC Startup	15d	15d	19May26	09Jun26	AA Huber Mech
226	2640	Air On	0d	0d	09Jun26	09Jun26	AA Huber Mech
227	2651	Life Safety Testing	15d	15d	15Jul26	04Aug26	Weddle, Facility Sol., Sexson, Vulcan & Huber
228	2632	Elevator Inspections	5d	5d	05Aug26	11Aug26	American Elevator
229	2641	Potential Weather Delays	20d	20d	04Sep26	02Oct26	
230	2650	TAB	15d	15d	05Oct26	23Oct26	AA Huber Mech
231	2690	Final Inspections	15d	15d	05Oct26	23Oct26	
232	2700	Commissioning	30d	30d	26Oct26	07Dec26	
233	2691	Final Punchlist	20d	20d	26Oct26	20Nov26	
234	2710	Owner Move In Start	0d	0d	18Nov26	18Nov26	
235	**Renovations**						
236	0070	Award Renovations	0d	0d	31Jul25	31Jul25	
237	0080	Equipment Approvals & Lead Times	65d	65d	31Jul25	30Oct25	
238	2780	LD Infrastructure & Renovation	145d	145d	10Oct25	06May26	
239	0090	EL Infrastructure & Renovation	40d	40d	31Dec25	25Feb26	
240	2770	SL Infrastructure & Renovation	180d	180d	22Jan26	05Oct26	
241	**Building LD**						
242	**Zone 7 - Room - LD 204**						
243	4880	Equipment Removal & Demolition	15d	15d	10Oct25	30Oct25	
244	4881	MEP Install	15d	15d	31Oct25	20Nov25	
245	4882	Ceiling Install	5d	5d	21Nov25	28Nov25	
246	4890	Framing/Drywall/SF	5d	5d	01Dec25	05Dec25	
247	4900	Flooring	5d	5d	08Dec25	12Dec25	
248	4910	Doors & Hardware	10d	10d	15Dec25	30Dec25	
249	4911	Casework	5d	5d	31Dec25	07Jan26	
250	4913	Equipment Install	5d	5d	08Jan26	14Jan26	



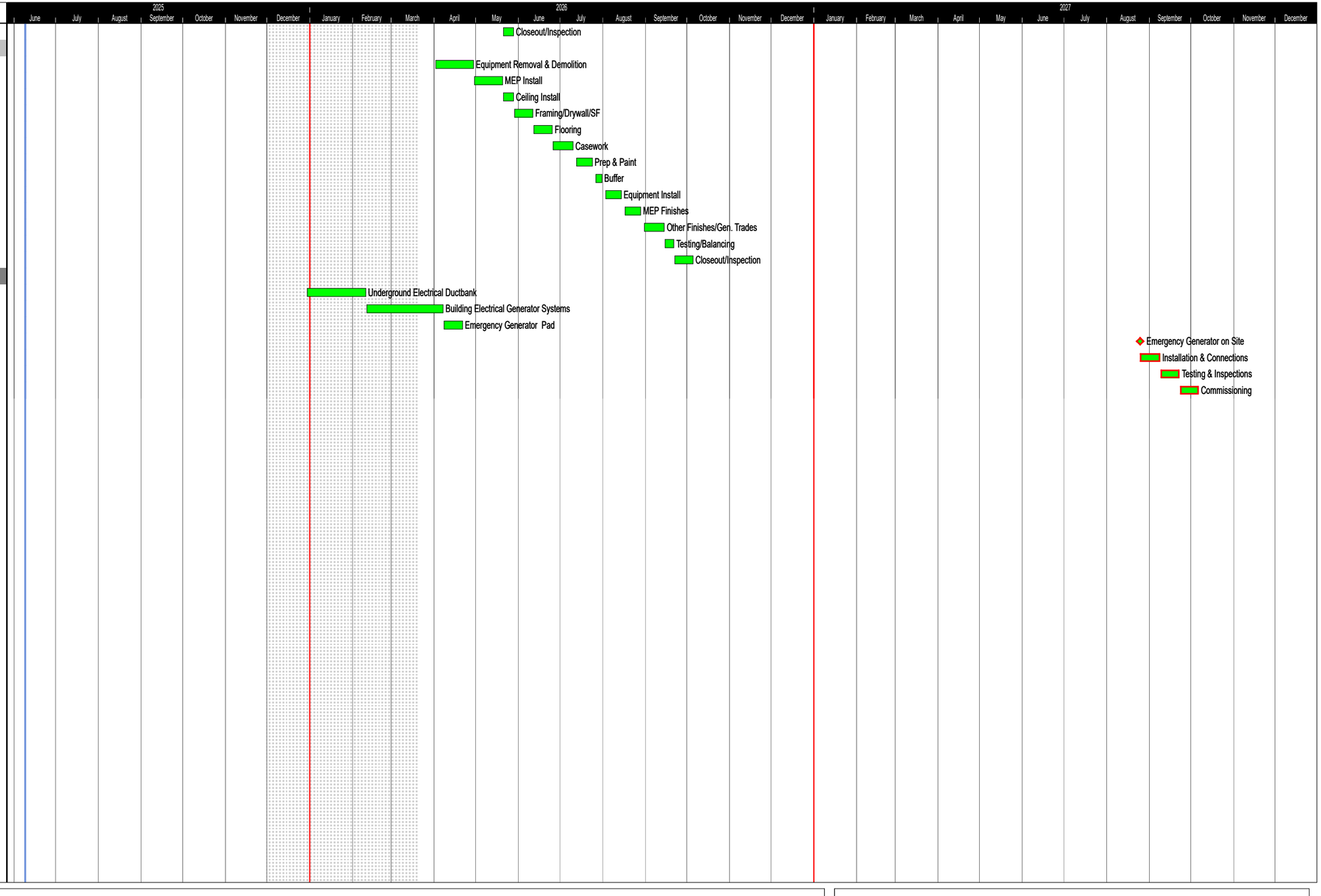
Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
251	4914	MEP Finishes	10d	10d	15Jan26	28Jan26	
252	4920	Other Finishes/Gen. Trades	10d	10d	29Jan26	11Feb26	
253	4930	Testing/Balancing	5d	5d	12Feb26	18Feb26	
254	4940	Closeout/Inspection	5d	5d	19Feb26	25Feb26	
255	**Zone 8 - Rooms LD 308,312,314**						
256	4950	Equipment Removal & Demolition	20d	20d	31Oct25	28Nov25	
257	4960	MEP Install	10d	10d	01Dec25	12Dec25	
258	4970	Ceiling Install	5d	5d	15Dec25	19Dec25	
259	4980	Framing/Drywall/SF	10d	10d	22Dec25	07Jan26	
260	4990	Flooring	5d	5d	08Jan26	14Jan26	
261	5000	Doors & Hardware	10d	10d	15Jan26	28Jan26	
262	5010	Casework	10d	10d	29Jan26	11Feb26	
263	5020	Prep & Paint	5d	5d	12Feb26	18Feb26	
264	5030	Equipment Install	5d	5d	19Feb26	25Feb26	
265	5040	MEP Finishes	10d	10d	26Feb26	11Mar26	
266	5050	Other Finishes/Gen. Trades	10d	10d	12Mar26	25Mar26	
267	5060	Testing/Balancing	5d	5d	26Mar26	01Apr26	
268	5070	Closeout/Inspection	5d	5d	02Apr26	08Apr26	
269	**Zone 6 - Rooms LD 220C , LD 220A**						
270	5080	Equipment Removal & Demolition	5d	5d	01Dec25	05Dec25	
271	5090	MEP Install	5d	5d	08Dec25	12Dec25	
272	5100	Ceiling Install	5d	5d	15Dec25	19Dec25	
273	5170	MEP Finishes	5d	5d	22Dec25	30Dec25	
274	5180	Other Finishes/Gen. Trades	5d	5d	31Dec25	07Jan26	
275	5200	Closeout/Inspection	5d	5d	08Jan26	14Jan26	
276	**Zone 6-A - Room LD206**						
277	5210	Equipment Removal & Demolition	5d	5d	08Dec25	12Dec25	
278	5220	MEP Install	5d	5d	15Dec25	19Dec25	
279	5230	Ceiling Install	5d	5d	22Dec25	30Dec25	
280	**Zone 5 - Rooms LD 055 , LD059**						
281	4790	Equipment Removal & Demolition	20d	20d	15Dec25	14Jan26	
282	5340	MEP Install	10d	10d	15Jan26	28Jan26	
283	5350	Ceiling Install	5d	5d	29Jan26	04Feb26	
284	5370	Flooring	5d	5d	05Feb26	11Feb26	
285	5380	Doors & Hardware	5d	5d	12Feb26	18Feb26	
286	5390	Casework	10d	10d	19Feb26	04Mar26	
287	5410	Equipment Install	10d	10d	05Mar26	18Mar26	
288	5420	MEP Finishes	10d	10d	19Mar26	01Apr26	
289	5430	Other Finishes/Gen. Trades	10d	10d	02Apr26	15Apr26	
290	5440	Testing/Balancing	5d	5d	16Apr26	22Apr26	
291	5450	Closeout/Inspection	10d	10d	23Apr26	06May26	
292	**Building EL**						
293	**Zone 9 - EL 121C, 121B, 121A, 123, 127B, 127A, 135B, 135A**						
294	5510	Doors & Hardware	10d	10d	31Dec25	14Jan26	
295	5570	Testing/Balancing	5d	5d	15Jan26	21Jan26	
296	**Zone 10 - Rooms- EL 209**						
297	5590	Equipment Removal & Demolition	5d	5d	15Jan26	21Jan26	
298	5600	MEP Install	5d	5d	22Jan26	28Jan26	
299	5610	Ceiling Install	5d	5d	29Jan26	04Feb26	
300	5660	Prep & Paint	5d	5d	05Feb26	11Feb26	



Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
301	5690	Other Finishes/Gen. Trades	5d	5d	12Feb26	18Feb26	
302	5710	Closeout/Inspection	5d	5d	19Feb26	25Feb26	
303	**Building SL**						
304	**Zone 4-B - Rooms SL 335, 337, 339**						
305	4730	Equipment Removal & Demolition	10d	10d	22Jan26	04Feb26	
306	5720	MEP Install	5d	5d	05Feb26	11Feb26	
307	5730	Ceiling Install	5d	5d	12Feb26	18Feb26	
308	5750	Flooring	5d	5d	19Feb26	25Feb26	
309	5760	Doors & Hardware	5d	5d	26Feb26	04Mar26	
310	5770	Casework	10d	10d	05Mar26	18Mar26	
311	5780	Prep & Paint	5d	5d	19Mar26	25Mar26	
312	5781	Buffer	5d	5d	26Mar26	01Apr26	
313	5790	Equipment Install	5d	5d	02Apr26	08Apr26	
314	5800	MEP Finishes	5d	5d	09Apr26	15Apr26	
315	5810	Other Finishes/Gen. Trades	5d	5d	16Apr26	22Apr26	
316	5830	Closeout/Inspection	5d	5d	23Apr26	29Apr26	
317	**Zone 4-C - Room SL 333**						
318	5840	Equipment Removal & Demolition	5d	5d	05Feb26	11Feb26	
319	5880	Flooring	5d	5d	12Feb26	18Feb26	
320	**Zone 1 - Rooms - SL018, 020, 022, 030, 032, 048**						
321	5970	Equipment Removal & Demolition	10d	10d	12Feb26	25Feb26	
322	6020	Doors & Hardware	5d	5d	26Feb26	04Mar26	
323	6030	Casework	5d	5d	05Mar26	11Mar26	
324	6040	Prep & Paint	5d	5d	12Mar26	18Mar26	
325	6070	Other Finishes/Gen. Trades	10d	10d	19Mar26	01Apr26	
326	6080	Testing/Balancing	5d	5d	02Apr26	08Apr26	
327	6090	Closeout/Inspection	10d	10d	09Apr26	22Apr26	
328	**Zone 2-B - Rooms - SL029, 033, 037**						
329	6100	Equipment Removal & Demolition	5d	5d	26Feb26	04Mar26	
330	6110	MEP Install	10d	10d	05Mar26	18Mar26	
331	6120	Ceiling Install	5d	5d	19Mar26	25Mar26	
332	6220	Closeout/Inspection	5d	5d	26Mar26	01Apr26	
333	**Zone 2-A - Room SL058**						
334	6230	Equipment Removal & Demolition	15d	15d	05Mar26	25Mar26	
335	6240	MEP Install	15d	15d	26Mar26	15Apr26	
336	6280	Doors & Hardware	5d	5d	16Apr26	22Apr26	
337	6290	Casework	10d	10d	23Apr26	06May26	
338	6300	Prep & Paint	5d	5d	07May26	13May26	
339	6301	Buffer	5d	5d	14May26	20May26	
340	6330	Other Finishes/Gen. Trades	10d	10d	21May26	04Jun26	
341	6340	Testing/Balancing	5d	5d	05Jun26	11Jun26	
342	6350	Closeout/Inspection	10d	10d	12Jun26	25Jun26	
343	**Zone 3 - Rooms SL 310, 320,324, 328, 332, 336, 360, 368, 380**						
344	6360	Equipment Removal & Demolition	5d	5d	26Mar26	01Apr26	
345	6410	Doors & Hardware	5d	5d	02Apr26	08Apr26	
346	6430	Prep & Paint	5d	5d	09Apr26	15Apr26	
347	6440	Equipment Install	5d	5d	16Apr26	22Apr26	
348	6450	MEP Finishes	10d	10d	23Apr26	06May26	
349	6460	Other Finishes/Gen. Trades	5d	5d	07May26	13May26	
350	6470	Testing/Balancing	5d	5d	14May26	20May26	



Line	Act. ID	Activity Name	Dur	Dur. Rem.	Start	Finish	Contractors
351	6480	Closeout/Inspection	5d	5d	21May26	28May26	
352	**Zone 4-A - Rooms SL338, 340,342, 351, 369**						
353	6490	Equipment Removal & Demolition	20d	20d	02Apr26	29Apr26	
354	6500	MEP Install	15d	15d	30Apr26	20May26	
355	6510	Ceiling Install	5d	5d	21May26	28May26	
356	6520	Framing/Drywall/SF	10d	10d	29May26	11Jun26	
357	6530	Flooring	10d	10d	12Jun26	25Jun26	
358	6550	Casework	10d	10d	26Jun26	10Jul26	
359	6560	Prep & Paint	10d	10d	13Jul26	24Jul26	
360	6561	Buffer	5d	5d	27Jul26	31Jul26	
361	6570	Equipment Install	10d	10d	03Aug26	14Aug26	
362	6580	MEP Finishes	10d	10d	17Aug26	28Aug26	
363	6590	Other Finishes/Gen. Trades	10d	10d	31Aug26	14Sep26	
364	6600	Testing/Balancing	5d	5d	15Sep26	21Sep26	
365	6610	Closeout/Inspection	10d	10d	22Sep26	05Oct26	
366	**Emergency Generator**						
367	4430	Underground Electrical Ductbank	30d	30d	30Dec25	10Feb26	
368	4431	Building Electrical Generator Systems	40d	40d	11Feb26	07Apr26	
369	4440	Emergency Generator Pad	10d	10d	08Apr26	21Apr26	
370	4410	Emergency Generator on Site	0d	0d	25Aug27	25Aug27	
371	4390	Installation & Connections	10d	10d	25Aug27	08Sep27	
372	4400	Testing & Inspections	10d	10d	09Sep27	22Sep27	
373	4420	Commissioning	10d	10d	23Sep27	06Oct27	



Phase Legend	
1	Equipment Removal & Demolition
2	MEP Install
3	Ceiling Install
4	Framing/Drywall/SF
5	Flooring
6	Doors & Hardware
7	Casework
8	Prep & Paint
9	Equipment Install
10	MEP Finishes
11	Other Finishes/Gen. Trades
12	Testing/Balancing
13	Closeout/Inspection
14	
15	
16	
17	
18	

2025: March (3, 10, 17, 24, 31) · April (7, 14, 21, 28) · May (5, 12, 19, 26) · June (2, 9, 16, 23, 30) · July (7, 14, 21, 28) · August (4, 11, 18, 25) · September (1, 8, 15, 22, 29) · October (6, 13, 20, 27) · November (3, 10, 17, 24) · December (1, 8, 15, 22, 29)

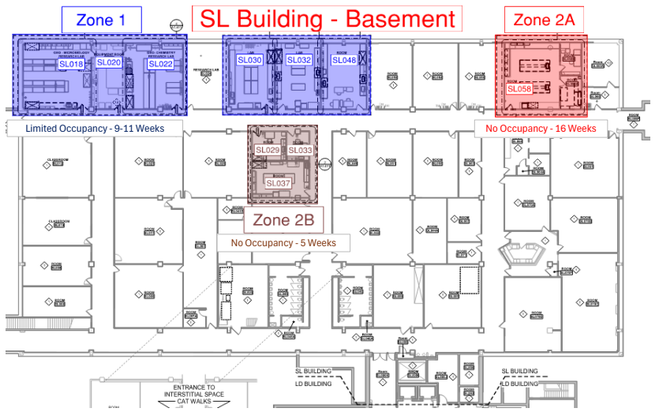
2026: January (5, 12, 19, 26) · February (2, 9, 16, 23) · March (2, 9, 16, 23, 30) · April (6, 13, 20, 27) · May (4, 11, 18, 25) · June (1, 8, 15, 22, 29) · July (6, 13, 20, 27) · August (3, 10, 17, 24, 31) · September (7, 14, 21, 28) · October (5, 12, 19, 26) · November (2, 9, 16, 23, 30) · December (7, 14, 21, 28)

Bid Package Prep
BD
Bid Review
CA
Document review / Pre-con phase
Submittal review/approval
Mobilize

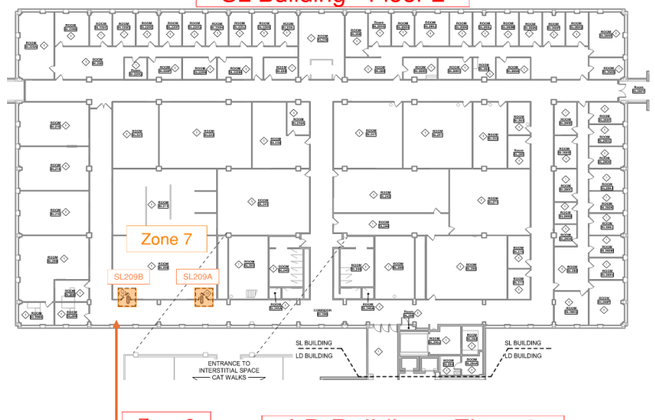
Building LD	
Zone 7	1 1 1 2 2 2 3 4 5 6 6 7 9 10 10 11 11 12 13
Zone 8	1 1 1 1 2 2 3 4 4 5 6 6 7 7 8 9 10 10 11 11 12 13
Zone 6	1 2 3 10 11 13
Zone 5	1 1 1 1 2 2 3 5 6 7 7 9 9 10 10 11 11 12 13 13
Building EL	
Zone 9	6 6 12
Zone 10	1 2 3 8 11 13
Building SL	
Zone 4-B	1 1 2 3 5 6 7 7 8 8 9 10 11 13
Zone 4-C	1 5 8
Zone 1	1 1 6 7 8 11 11 12 13 13
Zone 2-B	1 2 2 3 13
Zone 2-A	1 1 1 2 2 2 6 7 7 8 B 11 11 12 13 13
Zone 3	1 6 8 9 10 10 11 12 13
Zone 4-A	1 1 1 1 2 2 2 3 4 4 5 5 7 7 8 8 B 9 9 10 10 11 11 12 13 13

Start first
Start early if possible
Start last
Anytime

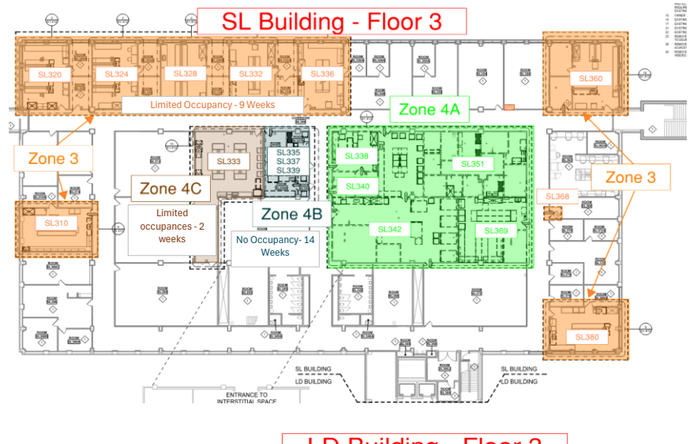
SL Building - Basement



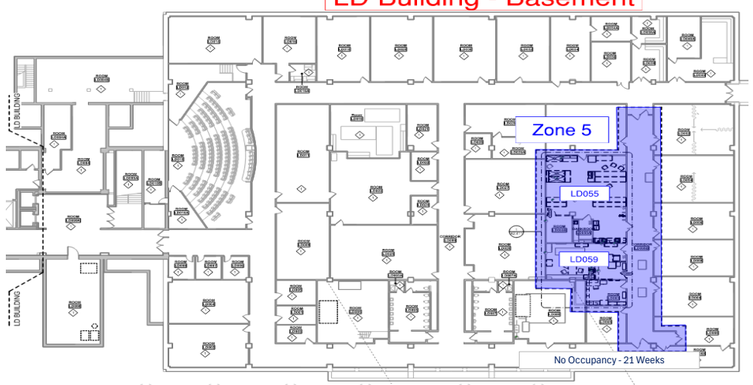
SL Building - Floor 2



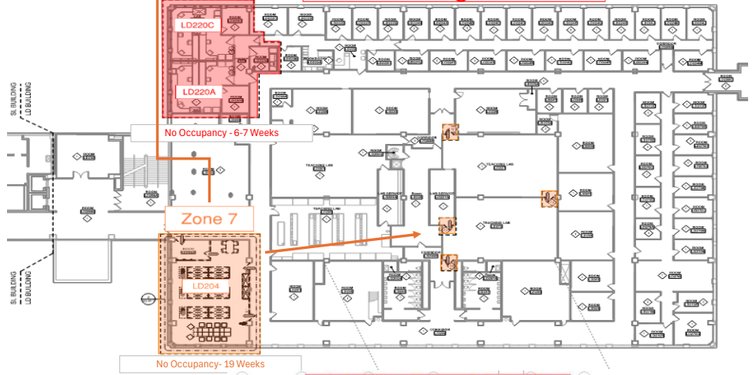
SL Building - Floor 3



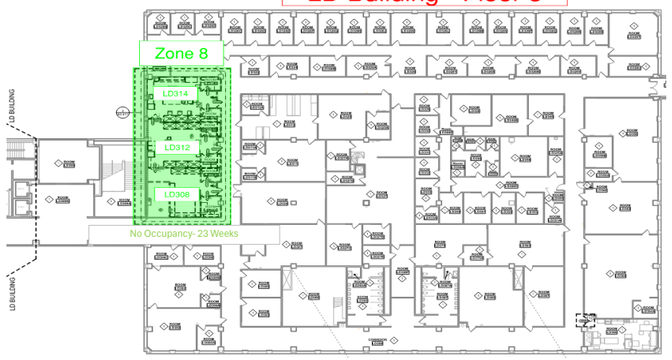
LD Building - Basement



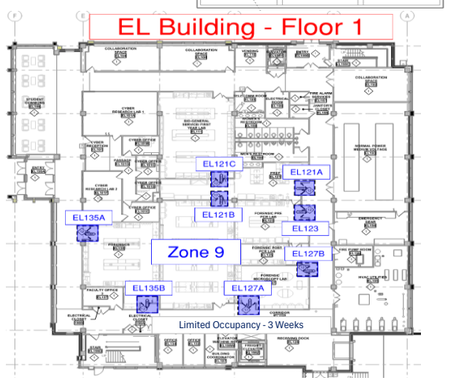
LD Building - Floor 2



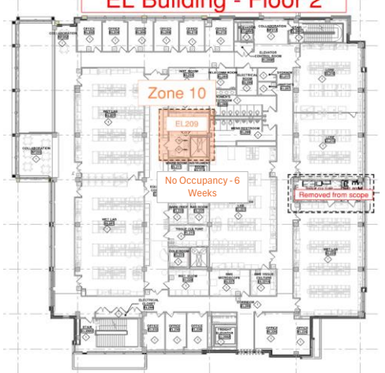
LD Building - Floor 3



EL Building - Floor 1



EL Building - Floor 2



ATTACHMENT 10 - DOCUMENTS LOG

Printed on Wed Jun 11, 2025 at 11:05 am EDT

Job #: 24063 IU Indy Science Building Expansion & Renovation
310 N. Blackford Street
Indianapolis, Indiana 46202-3115

Shiel Sexton Company, Inc.

Current Drawings

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
Add - General					
G000	VOL. 1 COVER SHEET	2	01/31/2025	02/20/2025	100% BID SET 2 ADDENDUM 01 (02/20/25)
G001	VOL. 2 COVER SHEET	2	01/31/2025	02/20/2025	100% BID SET 2 ADDENDUM 01 (02/20/25)
G002	GENERAL NOTES & ABBREVIATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
G120	CODE SUMMARY REPORT	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
G121	LIFE SAFETY-LEVEL 1	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
G122	LIFE SAFETY-LEVEL 2	2	03/31/2025	04/16/2025	ASI 004 (03/31/25)
G123	LIFE SAFETY-LEVEL 3	2	03/31/2025	04/16/2025	ASI 004 (03/31/25)
G124	LIFE SAFETY-LEVEL PENTHOUSE	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Civil					
C000	SITE CIVIL COVER SHEET	1	05/08/2025	05/08/2025	PR 03 (05/08/25)
C100	SURVEY SHEET	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C101	SURVEY SHEET	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C400	SWPPP	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C401	SOILS MAP	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C402	FIRM MAP	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C403	WETLANDS MAP	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C404	EROSION CONTROL SPECIFICATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C405	CONSTRUCTION EROSION CONTROL PLAN	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C406	POST - CONSTRUCTION EROSION CONTROL PLAN	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C407	EROSION CONTROL DETAILS	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C600	OVERALL STORMWATER AND UTILITY LAYOUT	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C600a	STORMWATER AND UTILITY LAYOUT - DATUM REFERENCED	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C601	STORM SEWER PLAN & PROFILE	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C601a	STORM SEWER PLAN & PROFILE	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C602	STORM SEWER PLAN & PROFILE	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C603	STORM SEWER PLAN & PROFILE	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C604	SANITARY SEWER PLAN & PROFILE	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C605	WATER PLAN & PROFILE	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C606	PIPE AND STRUCTURE DATA TABLES	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C607	MAINTENANCE OF TRAFFIC	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C608	STORM SEWER DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C609	STORM SEWER DETAILS	3	05/08/2025	05/08/2025	PR 03 (05/08/25)

Job #: 24063 IU Indy Science Building Expansion & Renovation
310 N. Blackford Street
Indianapolis, Indiana 46202-3115

Shiel Sexton Company, Inc.

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
C610	OUTLET CONTROL STRUCTURE DETAILS	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C610a	STORM WATER QUALITY CONTROL STRUCTURE DETAILS	0	05/08/2025	05/08/2025	PR 03 (05/08/25)
C611	STORM AND SANITARY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C612	SANITARY SEWER DETAILS	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
C613	ADS UNDERGROUND DETENTION DETAILS	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C614	ADS UNDERGROUND DETENTION DETAILS	3	05/08/2025	05/08/2025	PR 03 (05/08/25)
C615	MAINTENANCE OF TRAFFIC DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
C616	WATER DETAILS	2	05/08/2025	05/08/2025	PR 03 (05/08/25)
Add - Landscape					
L010	TREE PRESERVATION PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L011	TREE PRESERVATION PLAN	0	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
L020	SITE DEMOLITION PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L100	SITE MATERIALS PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L101	SITE MATERIALS PLAN	0	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
L110	LAYOUT PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L111	LAYOUT PLAN	0	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
L120	GRADING PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L121	GRADING PLAN	0	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
L130	PLANTING PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L131	PLANTING DETAILS	3	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
L140	IRRIGATION PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L150	SITE DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
L151	SITE DETAILS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Structural					
S001	ABBREVIATIONS AND SYMBOLS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S002	GENERAL NOTES	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S003	GENERAL NOTES	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S004	SPECIAL INSPECTION REQUIREMENTS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S005	LOAD MAPS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S006	WIND LOAD ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S007	AXONOMETRICS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S101	FOUNDATION AND SLAB ON GRADE PLAN	2	05/08/2025	05/08/2025	PR 05 (05/08/25)
S102	SECOND FLOOR FRAMING PLAN	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
S103	THIRD FLOOR FRAMING PLAN	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
S104	PENTHOUSE FLOOR AND LOW ROOF FRAMING PLAN	5	03/31/2025	04/16/2025	ASI 004 (03/31/25)
S105	HIGH ROOF FRAMING PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S201	ENLARGED PLANS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S211	BUILDING SECTIONS AND DETAILS AT CONNECTOR	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S301	FOUNDATION SCHEDULES, SECTIONS, AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S302	FOUNDATION SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S303	FOUNDATION SECTIONS AND DETAILS	2	05/08/2025	05/08/2025	PR 05 (05/08/25)
S304	FOUNDATION SECTIONS AND DETAILS	2	05/08/2025	05/08/2025	PR 05 (05/08/25)
S311	CONCRETE COLUMN SCHEDULES, SECTIONS, AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S312	CONCRETE COLUMN SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S321	CONCRETE BEAM SCHEDULE	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S322	CONCRETE BEAM SCHEDULE	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S323	CONCRETE BEAM SCHEDULE	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S324	CONCRETE BEAM SCHEDULE	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S325	CONCRETE BEAM SCHEDULE	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S326	CONCRETE BEAM SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S331	CONCRETE SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S332	CONCRETE SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S333	CONCRETE SECTIONS AND DETAILS	2	03/20/2025	03/24/2025	ASI 003 (03/20/25)
S401	CMU SCHEDULES, SECTIONS, AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S501	STEEL SCHEDULES, SECTIONS, AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S502	STEEL SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S503	STEEL SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S504	STEEL SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S511	STEEL COLUMN SCHEDULES, SECTIONS, AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
S521	STEEL FRAME ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Architectural					
A001	SITE PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A010	WALL TYPES - EXTERIOR	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A011	WALL TYPES - INTERIOR GWB PARTITIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A012	TYP DETAILS FOR GWB PARTITIONS & SHAFTS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A013	TYP DETAILS FOR GWB PARTITIONS & SHAFTS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A014	TYP DETAILS FOR INTERIOR GWB PARTITION BLOCKING	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A015	WALL TYPES - MASONRY	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A020	TYPICAL DEVICE MOUNTING DIAGRAMS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A030	ACCESSIBILITY DIAGRAMS FOR RESTROOMS & SHOWERS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A031	ACCESSIBILITY DIAGRAMS FOR ELEVATORS & STAIRS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A101	DEMOLITION PLAN - LEVEL 1	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)

Job #: 24063 IU Indy Science Building Expansion & Renovation
310 N. Blackford Street
Indianapolis, Indiana 46202-3115

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
A102	DEMOLITION PLAN - LEVEL 2	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A105	DEMOLITION ELEVATION - SELB	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A121	FLOOR PLAN - LEVEL 1	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A122	FLOOR PLAN - LEVEL 2	5	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A123	FLOOR PLAN - LEVEL 3	2	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A124	FLOOR AND ROOF PLAN - PENTHOUSE	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A141	CEILING PLAN-LEVEL 1	3	02/25/2025	02/25/2025	100% BID SET 2 ADDENDUM 02 (02/25/25)
A142	CEILING PLAN-LEVEL 2	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A143	CEILING PLAN-LEVEL 3	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A150	INTERIOR FINISH SCHEDULE AND LEGEND	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A151	INTERIOR FINISH PLAN-LEVEL 1	3	02/25/2025	02/25/2025	100% BID SET 2 ADDENDUM 02 (02/25/25)
A152	INTERIOR FINISH PLAN-LEVEL 2	3	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A153	INTERIOR FINISH PLAN-LEVEL 3	3	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A161	INTERIOR FFE LOCATION PLAN-LEVEL 1	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A162	INTERIOR FFE LOCATION PLAN-LEVEL 2	2	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A163	INTERIOR FFE LOCATION PLAN-LEVEL 3	2	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A200	EXTERIOR ELEVATIONS - NORTH & EAST	3	05/28/2025	05/28/2025	ASI 007 (05/28/25)
A201	EXTERIOR ELEVATIONS - SOUTH AND WEST	3	05/28/2025	05/28/2025	ASI 007 (05/28/25)
A202	EXTERIOR ELEVATIONS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A300	BUILDING SECTIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A310	WALL SECTIONS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A311	WALL SECTIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A312	WALL SECTIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A313	WALL SECTIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A320	ENLARGED VIEWS - CONNECTOR	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A321	EXTERIOR ENLARGED VIEWS - TERRACE AND SW CORNER	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A350	EXTERIOR PLAN DETAILS	2	05/28/2025	05/28/2025	ASI 007 (05/28/25)
A351	EXTERIOR PLAN DETAILS	2	05/28/2025	05/28/2025	ASI 007 (05/28/25)
A352	EXTERIOR PLAN DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A353	EXTERIOR PLAN DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A360	EXTERIOR SECTION DETAILS	2	05/28/2025	05/28/2025	ASI 007 (05/28/25)
A361	EXTERIOR SECTION DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A362	EXTERIOR SECTION DETAILS	2	05/28/2025	05/28/2025	ASI 007 (05/28/25)
A363	EXTERIOR SECTION DETAILS - ROOF	2	03/20/2025	03/24/2025	ASI 003 (03/20/25)
A364	EXTERIOR ENLARGED VIEWS - CONNECTOR DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A365	EXTERIOR SECTION DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
A370	EXTERIOR ROOFING DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A400	ENLARGED PLAN AND ELEV - RESTROOMS	3	03/31/2025	04/16/2025	ASI 004 (03/31/25)
A401	ENLARGED PLAN AND ELEV - BREAKROOM	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A402	ENLARGED PLAN AND ELEV - BENCH	0	10/25/2024	10/25/2024	100% BID SET (10/25/24)
A450	INTERIOR ELEVATIONS - LOBBY	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A451	INTERIOR ELEVATIONS AND DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A452	INTERIOR ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A453	INTERIOR ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A460	INTERIOR WALL SECTIONS AND DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A470	INTERIOR VESTIBULE & GLASS RAILING DETAILS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A500	ENLARGED PLANS & SECTIONS - NORTH STAIR	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A501	ENLARGED PLANS & SECTIONS - NORTH ELEVATOR	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A502	ENLARGED PLANS & SECTIONS - SOUTH STAIR	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A503	ENLARGED PLANS & SECTIONS - SOUTH ELEVATOR	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A510	EXIT STAIR - TYP REFERENCE DIAGRAMS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A511	NORTH STAIR DETAILS - CONCRETE FILLED METAL PAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A512	SOUTH STAIR DETAILS - STEEL PAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A550	GWB CEILING DETAILS FOR SEISMIC DESIGN CATEGORY A-B	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A551	ACOUSTIC CEILING DETAILS FOR SEISMIC DESIGN CATEGORY A-B	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A555	FLOOR TRANSITIONS DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A570	FIXED LADDER & ELEVATOR DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A600	DOOR & FRAME TYPE DIAGRAMS & SCHEDULES	3	04/15/2025	04/15/2025	100% BID SET 4 ADDENDUM 02 (04/15/25)
A601	DOOR DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A603	MILLWORK DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
A900	3D VIEWS FOR REFERENCE	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Lab					
QL001	LABORATORY GENERAL NOTES, LEGENDS, & ABBREVIATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL002	CIP, SINK, & FIXTURE SCHEDULES, CIP DETAILS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL003	SCHEDULES, COLD ROOM DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL101	OVERALL LABORATORY FLOOR PLAN - LEVEL 01	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL102	OVERALL LABORATORY FLOOR PLAN - LEVEL 02	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL103	OVERALL LABORATORY FLOOR PLAN - LEVEL 03	2	03/28/2025	03/28/2025	ASI 005 (03/28/25)
QL401A	ENLARGED LABORATORY FLOOR PLAN - LEVEL 01, NORTH	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL401B	ENLARGED LABORATORY FLOOR PLAN - LEVEL 01, SOUTH	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL402A	ENLARGED LABORATORY FLOOR PLAN - LEVEL 02, NORTH	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL402B	ENLARGED LABORATORY FLOOR PLAN - LEVEL 02, SOUTH	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL403A	ENLARGED LABORATORY FLOOR PLAN - LEVEL 03, NORTH	2	03/28/2025	03/28/2025	ASI 005 (03/28/25)

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QL403B	ENLARGED LABORATORY FLOOR PLAN - LEVEL 03, SOUTH	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL601	LABORATORY ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL602	LABORATORY ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL603	LABORATORY ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL604	LABORATORY ELEVATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL901	LABORATORY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL902	LABORATORY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
QL903	LABORATORY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Mechanical					
M001	MECHANICAL LEGEND, NOTES, AND INDEX OF DRAWINGS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M121	FIRST FLOOR MECHANICAL DUCTWORK PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M122	SECOND FLOOR MECHANICAL DUCTWORK PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M123	THIRD FLOOR MECHANICAL DUCTWORK PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M124	PENTHOUSE AND ROOF FLOOR MECHANICAL DUCTWORK PLAN	4	03/20/2025	03/24/2025	ASI 003 (03/20/25)
M221	FIRST FLOOR MECHANICAL PIPING PLAN	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
M222	SECOND FLOOR MECHANICAL PIPING PLAN	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
M223	THIRD FLOOR MECHANICAL PIPING PLAN	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
M224	PENTHOUSE AND ROOF MECHANICAL PIPING PLAN	4	03/31/2025	04/16/2025	ASI 004 (03/31/25)
M401	FIRST AND SECOND FLOOR MECHANICAL AIRFLOW DIAGRAM	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M402	THIRD AND FOURTH FLOOR MECHANICAL AIRFLOW DIAGRAM	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M403	ENLARGED MECHANICAL PLANS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M404	ENLARGED MECHANICAL PLANS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M500	MECHANICAL DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M501	MECHANICAL DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M502	MECHANICAL DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M503	MECHANICAL DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M504	MECHANICAL DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M505	MECHANICAL DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M506	MECHANICAL DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M507	MECHANICAL DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M508	MECHANICAL DETAILS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M601	MECHANICAL SCHEDULES	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M602	MECHANICAL SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M603	MECHANICAL SCHEDULES	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M604	MECHANICAL SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M605	MECHANICAL SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M701	MECHANICAL CONTROL SCHEMATICS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M702	MECHANICAL CONTROL SCHEMATICS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)

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M703	MECHANICAL CONTROL SCHEMATICS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M704	MECHANICAL CONTROL SCHEMATICS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M705	MECHANICAL CONTROL SCHEMATICS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M706	MECHANICAL CONTROL SCHEMATICS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M707	MECHANICAL CONTROL SCHEMATICS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M708	MECHANICAL CONTROL SCHEMATICS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
M709	MECHANICAL CONTROL SCHEMATICS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Plumbing					
P001	PLUMBING LEGEND, NOTES, AND INDEX OF DRAWINGS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P120	FIRST FLOOR BELOW FLOOR PLUMBING SUPPLY PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P121	FIRST FLOOR ABOVE FLOOR PLUMBING SUPPLY PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P122	SECOND FLOOR PLUMBING SUPPLY PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P123	THIRD FLOOR PLUMBING SUPPLY PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P124	PENTHOUSE AND ROOF PLUMBING SUPPLY PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P220	FIRST FLOOR BELOW FLOOR PLUMBING DRAINAGE PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P221	FIRST FLOOR ABOVE FLOOR PLUMBING DRAINAGE PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P222	SECOND FLOOR PLUMBING DRAINAGE PLAN	4	03/28/2025	03/28/2025	ASI 005 (03/28/25)
P223	THIRD FLOOR PLUMBING DRAINAGE PLAN	4	03/28/2025	03/28/2025	ASI 005 (03/28/25)
P224	PENTHOUSE AND ROOF PLUMBING DRAINAGE PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P401	ENLARGED PLUMBING PLANS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P501	PLUMBING DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P502	PLUMBING DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P503	PLUMBING SANITARY VENT STACK	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P504	PLUMBING RISER DIAGRAMS - LAB GAS	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P505	PLUMBING RISER DIAGRAMS - LAB GAS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P506	PLUMBING RISER DIAGRAMS - STORM	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P507	PLUMBING RISER DIAGRAMS - STORM	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P508	PLUMBING RISER DIAGRAMS - WATER DISTRIBUTION	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
P509	PLUMBING RISER DIAGRAMS - WATER DISTRIBUTION	2	05/21/2025	05/21/2025	ASI 009 (05/21/25)
P601	PLUMBING SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Fire Suppression					
FS001	FIRE SUPPRESSION LEGEND, NOTES, AND INDEX OF DRAWINGS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
FS120	SELB PIPING PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
FS121	FIRST FLOOR FIRE SUPPRESSION PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
FS122	SECOND FLOOR FIRE SUPPRESSION PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
FS123	THIRD FLOOR FIRE SUPPRESSION PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
FS124	PENTHOUSE AND ROOF FIRE SUPPRESSION PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
FS501	FIRE SUPPRESSION SCHEDULES AND DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
FS502	FIRE SUPPRESSION RISER DIAGRAM	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Electrical					
E001	ELECTRICAL LEGEND, NOTES, AND INDEX OF DRAWINGS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E002	ELECTRICAL SITE POWER PLAN	4	03/31/2025	03/31/2025	ASI 002 (03/31/25)
E120	EXISTING SELB CONDUIT PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E121	FIRST FLOOR CONDUIT PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E122	SECOND FLOOR CONDUIT PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E123	THIRD FLOOR CONDUIT PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E124	PENTHOUSE AND ROOF CONDUIT PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E221	FIRST FLOOR ELECTRICAL POWER PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E222	SECOND FLOOR ELECTRICAL POWER PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E223	THIRD FLOOR ELECTRICAL POWER PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E224	PENTHOUSE AND ROOF ELECTRICAL POWER PLAN	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E321	FIRST FLOOR FIRE ALARM PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E322	SECOND FLOOR FIRE ALARM PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E323	THIRD FLOOR FIRE ALARM PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E324	PENTHOUSE AND ROOF FIRE ALARM PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E401	ENLARGED ELECTRICAL PLANS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E501	SINGLE LINE DIAGRAM –NORMAL POWER – NEW WORK	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E502	SINGLE LINE DIAGRAM – EMERGENCY POWER – NEW WORK	4	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E503	METERING	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E504	GROUNDING PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E505	LIGHTNING PROTECTION PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E506	ELECTRICAL DIAGRAMS	3	03/31/2025	03/31/2025	ASI 002 (03/31/25)
E601	ELECTRICAL SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E701	PANEL SCHEDULES	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E702	PANEL SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E703	PANEL SCHEDULES	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
E704	PANEL SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Lighting					
EL001	SITE LIGHTING DEMOLITION PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL002	SITE LIGHTING PLAN	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL121	LIGHTING PLAN - LEVEL 1	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL122	LIGHTING PLAN - LEVEL 2	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL123	LIGHTING PLAN - LEVEL 3	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL124	LIGHTING PLAN - PENTHOUSE	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL501	LIGHTING DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL502	LIGHTING DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
EL601	LIGHTING SCHEDULES	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
EL602	LIGHTING PANELBOARD SCHEDULES	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
Add - Technology					
T000	SYMBOLS AND ABBREVIATIONS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T002	TECHNOLOGY SITE PLAN	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T121	TECHNOLOGY PLAN -LEVEL 1	3	05/30/2025	06/02/2025	ASI 008 (06/05/25)
T122	TECHNOLOGY PLAN -LEVEL 2	3	05/30/2025	06/02/2025	ASI 008 (06/05/25)
T123	TECHNOLOGY PLAN -LEVEL 3	3	05/30/2025	06/02/2025	ASI 008 (06/05/25)
T124	TECHNOLOGY PLAN -LEVEL 4	2	05/30/2025	06/02/2025	ASI 008 (06/05/25)
T201	OVERALL TECHNOLOGY PLAN - LEVEL 1	3	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T202	OVERALL TECHNOLOGY PLAN - LEVEL 2	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T203	OVERALL TECHNOLOGY PLAN -LEVEL 3	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T401	TECHNOLOGY ENLARGED PLANS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T402	TECHNOLOGY ENLARGED PLANS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T403	TECHNOLOGY ENLARGED PLANS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T501	TECHNOLOGY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T502	TECHNOLOGY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T503	TECHNOLOGY DETAILS	1	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T504	TECHNOLOGY DETAILS	2	01/31/2025	01/31/2025	100% BID SET 2 (01/31/25)
T601	TECHNOLOGY SCHEDULES	3	05/30/2025	06/02/2025	ASI 008 (06/05/25)
Reno - All Buildings					
A0.000	COVER SHEET	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A0.001	ARCHITECTURAL GENERAL NOTES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A0.011	WALL TYPES - INTERIOR GWB PARTITIONS	2	03/21/2025	03/21/2025	100% BID SET 3 ADDENDUM 01 (03/21/25)
A0.014	TYP DETAILS FOR INTERIOR GWB PARTITION BLOCKING	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A0.601	OPENING TYPES AND SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A0.650	DETAILS & SCHEDULES	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
EL0.001	LIGHTING SYMBOLS, ABBREVIATIONS AND SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
G0.000	Cover Sheet	1	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
G0.120	CONTRACTOR ACCESS PLAN - SITE PLAN	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
G1.101	LIFE SAFETY PLAN -SL BUILDING	1	03/21/2025	03/21/2025	100% BID SET 3 ADDENDUM 01 (03/21/25)
G1.121	CONTRACTOR ACCESS PLAN - SL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
G2.102	LIFE SAFETY PLAN - LD BUILDING	1	03/21/2025	03/21/2025	100% BID SET 3 ADDENDUM 01 (03/21/25)
G2.122	CONTRACTOR ACCESS PLAN - LD	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
G3.123	CONTRACTOR ACCESS PLAN - EL	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
QL0.001	LABORATORY GENERAL NOTES, LEGENDS, & ABBRIEVIATIONS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL0.002	SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL0.003	LABORATORY EQUIPMENT SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL0.004	CEILING INTERFACE PANEL SCHEDULE AND DETAILS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL0.910	LABORATORY DETAILS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL0.911	LABORATORY DETAILS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL0.912	LABORATORY DETAILS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
S1.001	GENERAL NOTES AND TYPICAL DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T0.000	SYMBOLS AND ABBREVIATIONS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T0.501	TECHNOLOGY DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T0.502	TECHNOLOGY DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
Reno - EL Building					
A3.101	DEMOLITION PLAN -FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.102	DEMOLITION PLAN - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A3.103	DEMOLITION PLAN -THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.104	DEMOLITION PLAN - PENTHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.110	DEMO REFLECTED CEILING PLANS - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.111	DEMO REFLECTED CEILING PLANS - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A3.112	DEMO REFLECTED CEILING PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.121	FLOOR PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.122	FLOOR PLAN - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A3.123	FLOOR PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.124	FLOOR PLAN - PENTHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.141	REFLECTED CEILING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.142	REFLECTED CEILING PLAN - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A3.143	REFLECTED CEILING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.411	ENLARGED DEMO PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A3.421	ENLARGED PLANS	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
E3.001	ELECTRICAL LEGENDS, ABBREVATIONS & SHEET INDEX	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.101	ELECTRICAL DEMOLITION PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.102	ELECTRICAL DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.103	ELECTRICAL DEMOLITION PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.104	ELECTRICAL DEMOLITION PLAN - PENTHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
E3.221	POWER & SYSTEMS PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.222	POWER & SYSTEMS PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.223	POWER & SYSTEMS PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.224	POWER & SYSTEMS PLAN - PENTHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.300	ENLARGED PLANS	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
E3.400	NORMAL POWER SINGLE LINE DIAGRAM	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
E3.401	EMERGENCY POWER SINGLE LINE DIAGRAM	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E3.402	GENERATOR POWER SINGLE LINE DIAGRAM	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL3.102	DEMOLITION LIGHTING PLAN - SECOND FLOOR	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL3.122	LIGHTING PLAN - SECOND FLOOR	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL3.411	ENLARGED LIGHTING DEMOLITION PLANS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL3.421	ENLARGED LIGHTING PLANS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M3.001	MECHANICAL LEGENDS, ABBREVIATIONS, & SHEET INDEX	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M3.102	MECHANICAL DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M3.122	MECHANICAL PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M3.601	MECHANICAL SCHEDULES	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M5.001	MECHANICAL DETAILS	2	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M6.001	MECHANICAL SCHEDULES	2	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
P3.001	PLUMBING LEGENDS, ABBREVIATIONS, AND SHEET INDEX	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
P3.102	PLUMBING DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P3.202	PLUMBING PLAN -SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
P3.302	ENLARGED PLUMBING PLANS - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
QL3.421	ENLARGED PLAN AND ELEVEATIONS - EL SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T3.102	DEMOLITION TECHNOLOGY PLAN - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
T3.121	TECHNOLOGY PLAN -FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T3.122	TECHNOLOGY PLAN - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
T3.123	TECHNOLOGY PLAN -THIRD FLOOR	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T3.411	TECHNOLOGY ENLARGED DEMO PLANS	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
T3.421	TECHNOLOGY ENLARGED PLANS	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
T3.601	TECHNOLOGY SCHEDULES	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
Reno - LD Building					
A2.100	DEMOLITION PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
A2.101	DEMOLITION PLAN -FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.102	DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.103	DEMOLITION PLAN -THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.104	DEMOLITION PLAN - GREENHOUSE	0	10/03/2024	11/22/2024	Reno 90% CD (11/22/24)
A2.110	DEMO REFLECTED CEILING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.111	DEMO REFLECTED CEILING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.112	DEMO REFLECTED CEILING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.113	DEMO REFLECTED CEILING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.120	FLOOR PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.121	FLOOR PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.122	FLOOR PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.123	FLOOR PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.124	FLOOR PLAN - GREENHOUSE	0	10/03/2024	11/22/2024	Reno 90% CD (11/22/24)
A2.140	REFLECTED CEILING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.141	REFLECTED CEILING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.142	REFLECTED CEILING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.143	REFLECTED CEILING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.144	REFLECTED CEILING PLAN - GREENHOUSE	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
A2.151	INTERIOR FINISH PLAN - BASEMENT	1	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A2.153	INTERIOR FINISH PLAN - SECOND FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A2.154	INTERIOR FINISH PLAN -THIRD FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A2.411	ENLARGED DEMOLITION PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.421	ENLARGED PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.422	ENLARGED PLANS	0	10/03/2024	11/22/2024	Reno 90% CD (11/22/24)
A2.460	STOREFRONT ELEVATIONS & DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A2.510	DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.001	ELECTRICAL LEGENDS, ABBREVATIONS & INDEX	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.002	ELECTRICAL SITE POWER PLAN	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
E2.100	ELECTRICAL DEMOLITION PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.101	ELECTRICAL DEMOLITION PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.102	ELECTRICAL DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.103	ELECTRICAL DEMOLITION PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.104	ELECTRICAL DEMOLITION PLAN - GREENHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.220	POWER & SYSTEMS PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.220i	ELECTRICAL INTERSTITIAL PLAN - BASEMENT	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
					31/25)
E2.221	POWER & SYSTEMS PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.221i	ELECTRICAL INTERSTITIAL PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.222	POWER & SYSTEMS PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.222i	ELECTRICAL INTERSTITIAL PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.223	POWER & SYSTEMS PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.223i	ELECTRICAL INTERSTITIAL PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.224	POWER & SYSTEMS PLAN - GREENHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.300	POWER & SYSTEMS DEMO & NEW PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.301	POWER & SYSTEMS DEMO & NEW PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.302	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.400	SINGLE LINE	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
E2.401	ELECTRICAL DETAILS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
E2.500	PANEL SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E2.501	PANEL SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.100	DEMOLITION LIGHTING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.102	DEMOLITION LIGHTING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.103	DEMOLITION LIGHTING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.120	LIGHTING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.122	LIGHTING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.123	LIGHTING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.411	LIGHTING ENLARGED DEMOLITION PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.412	LIGHTING ENLARGED DEMOLITION PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.421	LIGHTING ENLARGED PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL2.422	LIGHTING ENLARGED PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.001	MECHANICAL LEGENDS, ABBREVIATIONS & SHEET INDEX	3	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.001	MECHANICAL LEGENDS, ABBREVIATIONS, & SHEET INDEX	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.100i	MECHANICAL DEMOLITION PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.102i	MECHANICAL DEMOLITION PLAN - SECOND FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.103i	MECHANICAL DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.110	MECHANICAL ENLARGED AIR FLOW DETAILS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M2.111	MECHANICAL ENLARGED AIR FLOW DETAILS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M2.120i	MECHANICAL PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.122i	MECHANICAL PLAN - SECOND FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.123i	MECHANICAL PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.124	MECHANICAL ROOF PLAN - NEW	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.400	MECHANICAL ENLARGED DEMOLITION PLANS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
M2.401	MECHANICAL ENLARGED DEMOLITION PLANS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.411	MECHANICAL ENLARGED PLANS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.412	MECHANICAL ENLARGED PLANS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.501	MECHANICAL DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.502	MECHANICAL ENLARGED AIR FLOW DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.503	MECHANICAL ENLARGED AIR FLOW DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.601	MECHANICAL SCHEDULES	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.701	MECHANICAL CONTROL SCHEMATICS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M2.702	MECHANICAL CONTROL SCHEMATICS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M4.100	MECHANICAL ENLARGED DEMOLITION PLANS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M4.101	MECHANICAL ENLARGED DEMOLITION PLANS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M4.111	MECHANICAL ENLARGED PLANS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M4.112	MECHANICAL ENLARGED PLANS	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M7.001	MECHANICAL CONTROL SCHEMATICS	1	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M7.002	MECHANICAL CONTROL SCHEMATICS	1	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
P2.001	PLUMBING LEGENDS, ABBREVIATIONS, AND SHEET INDEX	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.100	PLUMBING DEMOLITION PLAN - UNDERSLAB	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.101	PLUMBING DEMOLITION PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.101i	PLUMBING DEMOLITION PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.102	PLUMBING DEMOLITION PLAN -FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.102i	PLUMBING DEMOLITION PLAN -FIRST FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.103	PLUMBING DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.103i	PLUMBING DEMOLITION PLAN - SECOND FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.104	PLUMBING DEMOLITION PLAN -THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.104i	PLUMBING DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.105	PLUMBING DEMOLITION PLAN - GREENHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.200	PLUMBING PLAN -UNDERSLAB	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.201	PLUMBING PLAN -BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.201i	PLUMBING PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.202	PLUMBING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.202i	PLUMBING PLAN - FIRST FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.203	PLUMBING PLAN -SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.203i	PLUMBING PLAN -SECOND FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.204	PLUMBING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.204i	PLUMBING PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.205	PLUMBING PLAN - GREENHOUSE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.300	ENLARGED PLUMBING PLANS - BASEMENT DEMOLITION	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.301	ENLARGED PLUMBING PLANS - BASEMENT NEW CONSTRUCTION	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
P2.302	ENLARGED PLUMBING PLANS - LEVEL 02 DEMOLITION	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.303	ENLARGED PLUMBING PLANS - LEVEL 02 NEW CONSTRUCTION	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.304	ENLARGED PLUMBING PLANS - LEVEL 03 DEMOLITION	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.305	ENLARGED PLUMBING PLANS - LEVEL 03 NEW CONSTRUCTION	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.400	SANITARY RISER DIAGRAM	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P2.500	PLUMBING SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL2.421	ENLARGED PLAN AND ELEVATIONS - LD BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL2.422	ENLARGED PLAN AND ELEVATIONS - LD SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL2.423	ENLARGED PLAN AND ELEVATIONS - LD THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.100	DEMOLITION TECHNOLOGY PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.102	DEMOLITION TECHNOLOGY PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.103	DEMOLITION TECHNOLOGY PLAN -THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.120	TECHNOLOGY PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.121	TECHNOLOGY PLAN -FIRST FLOOR	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.122	TECHNOLOGY PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.123	TECHNOLOGY PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.411	TECHNOLOGY ENLARGED DEMOLITION PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.421	TECHNOLOGY ENLARGED PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.422	TECHNOLOGY ENLARGED PLANS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T2.601	TECHNOLOGY SCHEDULES	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
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A1.100	DEMOLITION PLAN - BASEMENT FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.101	DEMOLITION PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.102	DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.103	DEMOLITION PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.110	DEMO REFLECTED CEILING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.111	DEMO REFLECTED CEILING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.112	DEMO REFLECTED CEILING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.113	DEMO REFLECTED CEILING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.120	FLOOR PLAN - BASEMENT FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.121	FLOOR PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.122	FLOOR PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.123	FLOOR PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.140	REFLECTED CEILING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.141	REFLECTED CEILING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.142	REFLECTED CEILING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.143	REFLECTED CEILING PLAN - THIRD FLOOR PLAN	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.150	INTERIOR FINISH PLAN - BASEMENT	1	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
					31/25)
A1.153	INTERIOR FINISH PLAN -THIRD FLOOR	2	03/31/2025	03/31/2025	100% BID SET 3 ADDENDUM 02 (03/31/25)
A1.411	ENLARGED DEMOLITION PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.412	ENLARGED DEMOLITION PLANS -THIRD FLOOR	2	03/21/2025	03/21/2025	100% BID SET 3 ADDENDUM 01 (03/21/25)
A1.421	ENLARGED PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.422	ENLARGED PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.423	ENLARGED PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.450	INTERIOR ELEVATIONS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
A1.510	SECTION DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.001	ELECTRICAL LEGENDS, ABBREVATIONS & SHEET INDEX	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.100	ELECTRICAL DEMOLITION PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.101	ELECTRICAL DEMOLITION PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.102	ELECTRICAL DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.103	ELECTRICAL DEMOLITION PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.220	POWER & SYSTEMS PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.220i	ELECTRICAL INTERSTITIAL PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.221	POWER & SYSTEMS PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.221i	ELECTRICAL INTERSTITIAL PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.222	POWER & SYSTEMS PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.222i	ELECTRICAL INTERSTITIAL PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.223	POWER & SYSTEMS PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.223i	ELECTRICAL INTERSTITIAL PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.300	POWER & SYSTEMS DEMO & NEW PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.301	POWER & SYSTEMS DEMO & NEW PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.302	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.303	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.304	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.400	SINGLE LINE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.401	SINGLE LINE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.500	PANEL SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
E1.501	PANEL SCHEDULES	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.100	DEMOLITION LIGHTING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.103	DEMOLITION LIGHTING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.120	LIGHTING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.123	LIGHTING PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.411	ENLARGED LIGHTING DEMOLITION PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
EL1.412	ENLARGED LIGHTING DEMOLITION PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.421	ENLARGED LIGHTING PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
EL1.422	ENLARGED LIGHTING PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.100i	MECHANICAL DEMOLITION PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.103i	MECHANICAL DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.120i	MECHANICAL PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.123i	MECHANICAL PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.400	MECHANICAL ENLARGED DEMOLITION PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.403	MECHANICAL ENLARGED DEMOLITION PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.410	MECHANICAL ENLARGED PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.411	MECHANICAL ENLARGED AIR FLOW DETAILS - BASEMENT	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M1.413	MECHANICAL ENLARGED PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.414	MECHANICAL ENLARGED AIR FLOW DETAILS - THIRD FLOOR	0	11/22/2024	11/22/2024	Reno 90% CD (11/22/24)
M1.501	MECHANICAL DETAILS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.502	MECHANICAL ENLARGED AIR FLOW DETAILS - BASEMENT	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.503	MECHANICAL ENLARGED AIR FLOW DETAILS - THIRD FLOOR	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.601	MECHANICAL SCHEDULES	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.701	MECHANICAL CONTROL SCHEMATICS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
M1.702	MECHANICAL CONTROL SCHEMATICS	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.001	PLUMBING LEGENDS, ABBREVIATIONS, AND SHEET INDEX	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.100	PLUMBING DEMOLITION PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.100i	PLUMBING DEMOLITION PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.101	PLUMBING DEMOLITION PLAN -FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.101i	PLUMBING DEMOLITION PLAN -FIRST FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.102	PLUMBING DEMOLITION PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.102i	PLUMBING DEMOLITION PLAN - SECOND FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.103	PLUMBING DEMOLITION PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.103i	PLUMBING DEMOLITION PLAN - THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.200	PLUMBING PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.200i	PLUMBING PLAN - BASEMENT INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.201	PLUMBING PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.201i	PLUMBING PLAN - FIRST FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.202	PLUMBING PLAN - SECOND FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.202i	PLUMBING PLAN -SECOND FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.203	PLUMBING PLAN -THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.203i	PLUMBING PLAN -THIRD FLOOR INTERSTITIAL	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.300	ENLARGED PLUMBING PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.301	ENLARGED PLUMBING PLAN - LEVEL 2 INTERSTITIAL DEMO	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
P1.302	ENLARGED PLUMBING PLAN - LEVEL 03 AREA 1	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.303	ENLARGED PLUMBING PLAN - LEVEL 03 AREA 1	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.304	ENLARGED PLUMBING PLAN - LEVEL 02 INTERSTITIAL NEW WORK	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.305	ENLARGED PLUMBING PLAN - LEVEL 03 AREA 1	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.306	ENLARGED PLUMBING PLAN - LEVEL 03 AREA 1	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.307	ENLARGED PLUMBING PLAN - LEVEL 02 AREA 2	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.308	ENLARGED PLUMBING PLAN - LEVEL 03 AREA 2	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.400	ISOMETRIC PLUMBING PLAN	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.401	ISOMETRIC PLUMBING PLAN	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
P1.500	PLUMBING SCHEDULES AND DETAILS	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL1.120	FLOOR PLAN - SL BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL1.123	FLOOR PLAN - SL THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL1.421	ENLARGED PLAN AND ELEVATIONS - SL BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL1.422	ENLARGED PLAN AND ELEVATIONS - SL LEVEL 03 BIOLOGY CORE	2	03/21/2025	03/21/2025	100% BID SET 3 ADDENDUM 01 (03/21/25)
QL1.423	ENLARGED PLAN AND ELEVATIONS - SL LEVEL 03 TISSUE CULTURE SUITE	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
QL1.901	ENVIRONMENTAL ROOM DETAILS AND SCHEDULE	2	03/21/2025	03/21/2025	100% BID SET 3 ADDENDUM 01 (03/21/25)
T1.100	DEMOLITION TECHNOLOGY PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.103	DEMOLITION TECHNOLOGY PLAN -THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.120	TECHNOLOGY PLAN - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.121	TECHNOLOGY PLAN - FIRST FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.122	TECHNOLOGY PLAN - SECOND FLOOR	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.123	TECHNOLOGY PLAN - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.411	ENLARGED TECHNOLOGY DEMOLITION PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.412	ENLARGED TECHNOLOGY DEMOLITION PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.421	ENLARGED TECHNOLOGY PLANS - BASEMENT	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.422	ENLARGED TECHNOLOGY PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.423	ENLARGED TECHNOLOGY PLANS - THIRD FLOOR	1	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)
T1.601	TECHNOLOGY SCHEDULES	0	02/28/2025	02/28/2025	Reno 100% BID SET (02/28/25)

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Current Specifications

Number	Description	Revision	Issued Date	Received Date	Set
00 - Procurement and Contracting Requirements					
00 01 10-1	ADDENDUM 01 BID SET 3	0	03/21/25	03/21/25	100% BID SET 3 ADDENDUM 01
00 01 10-2	ADDENDUM 02 BID SET 3	0	03/31/25	03/31/25	100% BID SET 3 ADDENDUM 02
00 01 10-3	ADDENDUM 02 BID SET 4	0	04/15/25	04/15/25	100% BID SET 4 ADDENDUM 02
00 11 16	INVITATION TO BID	1	01/31/25	01/31/25	100% BID SET 2
00 21 00	SUBCONTRACTORS AND PRODUCTS LIST	1	01/31/25	01/31/25	100% BID SET 2
00 21 13	INSTRUCTIONS TO BIDDERS	6	02/24/25	02/20/25	100% BID SET 2 ADDENDUM 01
00 31 32	GEOTECHNICAL DATA	2	01/31/25	01/31/25	100% BID SET 2
00 58 00	SUPPLEMENTARY PROJECT SITE REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
00 58 50	SUPPLEMENTARY SUSTAINABLE DESIGN REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
00-01 - IU CPF Procurement Divisions					
00 00 00	PROCUREMENT AND CONTRACTING REQUIREMENTS	0	10/25/24	10/25/24	Bid Set
00 01	NOTICE TO BIDDERS	1	01/31/25	01/31/25	100% BID SET 2
00 01 00	COVER PAGE	5	01/31/25	01/31/25	100% BID SET 2
00 01 07	SEALS PAGE	5	01/31/25	01/31/25	100% BID SET 2
00 01 10	TABLE OF CONTENTS	12	04/15/25	04/15/25	100% BID SET 4 ADDENDUM 02
00 11 13	ADVERTISEMENT FOR BIDS	1	01/31/25	01/31/25	100% BID SET 2
Appendix A	PROCUREMENT AND CONTRACTING REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
Appendix B	GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION	1	01/31/25	01/31/25	100% BID SET 2
Appendix C	INSURANCE REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
Appendix C-1	IU BIM GUIDELINES AND STANDARDS	0	10/25/24	10/25/24	Bid Set
01 - General Requirements					
01 00	TRADE SPECIFIC WORK SCOPES	0	10/25/24	10/25/24	Bid Set
01 00 00	GENERAL REQUIREMENTS	0	10/25/24	10/25/24	Bid Set
01 12 00	EXECUTION REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
01 23 00	ALTERNATES	2	03/21/25	03/21/25	100% BID SET 3 ADDENDUM 01
01 31 00	PROJECT MANAGEMENT AND COORDINATION	1	01/31/25	01/31/25	100% BID SET 2
01 32 00	ELECTRONIC FILE REQUEST AND LICENSE AGREEMENT	1	01/31/25	01/31/25	100% BID SET 2
01 32 33	PHOTOGRAPHIC DOCUMENTATION	1	01/31/25	01/31/25	100% BID SET 2
01 33 00	SUBMITTAL PROCEDURES	1	01/31/25	01/31/25	100% BID SET 2
01 40 00	QUALITY REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
01 42 00	REFERENCES	1	01/31/25	01/31/25	100% BID SET 2
01 55 26	TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC (MOT)	1	01/31/25	01/31/25	100% BID SET 2

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Number	Description	Revision	Issued Date	Received Date	Set
01 56 39	TREE PRESERVATION	1	01/31/25	01/31/25	100% BID SET 2
01 60 00	PRODUCT REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
01 73 00	EXECUTION	1	01/31/25	01/31/25	100% BID SET 2
01 73 29	CUTTING AND PATCHING	1	01/31/25	01/31/25	100% BID SET 2
01 74 19	CONSTRUCTION AND WASTE MANAGEMENT DISPOSAL	1	01/31/25	01/31/25	100% BID SET 2
01 81 13.20	SUSTAINABLE DESIGN REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
01 81 19	CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT	1	01/31/25	01/31/25	100% BID SET 2
01 91 13	GENERAL COMMISSIONING REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
02 - Existing Conditions					
02 10 00	SITE PREPARATION	1	01/31/25	01/31/25	100% BID SET 2
02 41 19	SELECTIVE DEMOLITION	1	01/31/25	01/31/25	100% BID SET 2
02 41 19.1	SELECTIVE STRUCTURE DEMOLITION - SITE	0	01/31/25	01/31/25	100% BID SET 2
02 41 91.1	SELECTIVE STRUCTURE DEMOLITION - SITE	0	10/25/24	10/25/24	Bid Set
03 - Concrete					
03 30 00	CAST-IN-PLACE CONCRETE	2	01/31/25	01/31/25	100% BID SET 2
03 30 01	SITE CIP CONCRETE	1	01/31/25	01/31/25	100% BID SET 2
03 33 00	ARCHITECTUAL CONCRETE	1	01/31/25	01/31/25	100% BID SET 2
03 35 43	POLISHED CONCRETE FINISHING	1	01/31/25	01/31/25	100% BID SET 2
03 45 00	PRECAST ARCHITECTURAL CONCRETE	1	01/31/25	01/31/25	100% BID SET 2
03 60 00	GROUTING	1	01/31/25	01/31/25	100% BID SET 2
04 - Masonry					
04 40 00	EXTERIOR DIMENSION STONEWORK	1	01/31/25	01/31/25	100% BID SET 2
04 42 00	EXTERIOR STONE CLADDING	1	01/31/25	01/31/25	100% BID SET 2
04 72 00	CAST STONE MASONRY	0	01/31/25	01/31/25	100% BID SET 2
05 - Metals					
05 12 00	STRUCTURAL STEEL	1	01/31/25	01/31/25	100% BID SET 2
05 31 00	STEEL DECKING	1	01/31/25	01/31/25	100% BID SET 2
05 40 00	COLD-FORMED METAL FRAMING	1	01/31/25	01/31/25	100% BID SET 2
05 50 00	METAL FABRICATION	1	01/31/25	01/31/25	100% BID SET 2
05 50 01	SITE MISC. METALS	1	01/31/25	01/31/25	100% BID SET 2
05 51 13	METAL PAN STAIRS	1	01/31/25	01/31/25	100% BID SET 2
05 52 13	PIPE AND TUBE RAILINGS	1	01/31/25	01/31/25	100% BID SET 2
05 73 13	GLAZED DECORATIVE METAL RAILINGS	3	01/31/25	01/31/25	100% BID SET 2
06 - Wood, Plastics, and Composites					
06 10 53	MISCELLANEOUS ROUGH CARPENTRY	1	01/31/25	01/31/25	100% BID SET 2
06 16 00	SHEATHING	1	01/31/25	01/31/25	100% BID SET 2
06 40 00	ARCHITECTURAL WOODWORK	4	01/31/25	01/31/25	100% BID SET 2

Number	Description	Revision	Issued Date	Received Date	Set
07 - Thermal and Moisture Protection					
07 13 26	SELF-ADHERING SHEET WATERPROOFING	1	01/31/25	01/31/25	100% BID SET 2
07 16 16	CRYSTALLINE WATERPROOFING	0	10/25/24	10/25/24	Bid Set
07 18 00	TRAFFIC COATINGS	1	01/31/25	01/31/25	100% BID SET 2
07 19 00	WATER REPELLENTS	0	01/31/25	01/31/25	100% BID SET 2
07 19 05	CONCRETE SEALER	1	01/31/25	01/31/25	100% BID SET 2
07 21 00	THERMAL INSULATION	1	01/31/25	01/31/25	100% BID SET 2
07 27 20	MEMBRANE AIR BARRIERS	0	01/31/25	01/31/25	100% BID SET 2
07 27 26	FLUID-APPLIED MEMBRANE AIR BARRIERS	0	10/25/24	10/25/24	Bid Set
07 42 16	METAL PLATE WALL PANELS	2	01/31/25	01/31/25	100% BID SET 2
07 54 23	THERMOPLASTIC-POLYOLEFIN (TPO) ROOFING	1	01/31/25	01/31/25	100% BID SET 2
07 62 00	SHEET METAL FLASHING AND TRIM	1	01/31/25	01/31/25	100% BID SET 2
07 71 00	ROOF SPECIALTIES	1	01/31/25	01/31/25	100% BID SET 2
07 72 00	ROOF ACCESSORIES	1	01/31/25	01/31/25	100% BID SET 2
07 84 13	PENETRATION FIRESTOPPING	1	01/31/25	01/31/25	100% BID SET 2
07 84 46	FIRE-RESISTIVE JOINT SYSTEMS	1	01/31/25	01/31/25	100% BID SET 2
07 92 00	JOINT SEALANTS	1	01/31/25	01/31/25	100% BID SET 2
07 95 13.13	INTERIOR EXPANSION JOINT COVER ASSEMBLIES	1	01/31/25	01/31/25	100% BID SET 2
07 95 13.16	EXTERIOR EXPANSION JOINT COVER ASSEMBLIES	1	01/31/25	01/31/25	100% BID SET 2
08 - Openings					
08 11 13	HOLLOW METAL DOORS AND FRAMES	1	01/31/25	01/31/25	100% BID SET 2
08 11 16	ALUMINUM FLUSH DOORS	1	01/31/25	01/31/25	100% BID SET 2
08 12 16	ALUMINUM DOORS AND FRAMES	2	01/31/25	01/31/25	100% BID SET 2
08 14 16	FLUSH WOOD DOORS	1	01/31/25	01/31/25	100% BID SET 2
08 31 13	ACCESS DOORS AND FRAMES	1	01/31/25	01/31/25	100% BID SET 2
08 41 13	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS	2	01/31/25	01/31/25	100% BID SET 2
08 41 28	INTERIOR ALL GLASS ENTRANCES	1	01/31/25	01/31/25	100% BID SET 2
08 44 23	STRUCTURAL SEALANT GLAZED CURTAIN WALLS	2	01/31/25	01/31/25	100% BID SET 2
08 71 00	DOOR HARDWARE	2	01/31/25	01/31/25	100% BID SET 2
08 80 00	GLAZING	1	01/31/25	01/31/25	100% BID SET 2
08 91 19	FIXED LOUVERS	2	01/31/25	01/31/25	100% BID SET 2
09 - Finishes					
09 05 61	MOISTURE VAPOR EMISSION CONTROL	2	01/31/25	01/31/25	100% BID SET 2
09 21 00	GYPSUM BOARD ASSEMBLIES	3	04/15/25	04/15/25	100% BID SET 4 ADDENDUM 02
09 30 00	TILING	1	01/31/25	01/31/25	100% BID SET 2
09 51 00	ACOUSTICAL PANEL CEILINGS	1	01/31/25	01/31/25	100% BID SET 2
09 65 00	RESILIENT FLOORING AND ACCESSORIES	1	01/31/25	01/31/25	100% BID SET 2

Shiel Sexton Company, Inc.

Number	Description	Revision	Issued Date	Received Date	Set
09 66 23	RESINOUS MATRIX TERRAZZO FLOORING	2	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
09 68 10	CARPETING	1	01/31/25	01/31/25	100% BID SET 2
09 72 00	WALL COVERINGS	1	01/31/25	01/31/25	100% BID SET 2
09 77 23	FABRIC-WRAPPED PANELS	0	10/25/24	10/25/24	Bid Set
09 91 00	PAINTING	1	01/31/25	01/31/25	100% BID SET 2
09 96 11	HIGH-PERFORMANCE COATINGS	2	01/31/25	01/31/25	100% BID SET 2
10 - Specialties					
10 14 00	PANEL SIGNAGE	1	01/31/25	01/31/25	100% BID SET 2
10 14 53	TRAFFIC SIGNAGE	0	01/31/25	01/31/25	100% BID SET 2
10 21 13	TOILET COMPARTMENTS	2	02/24/25	02/20/25	100% BID SET 2 ADDENDUM 01
10 26 00	WALL AND DOOR PROTECTION	1	01/31/25	01/31/25	100% BID SET 2
10 28 00	TOILET, BATH, AND LAUNDRY ACCESSORIES	1	01/31/25	01/31/25	100% BID SET 2
10 28 19	TUB AND SHOWER ENCLOSURES	2	01/31/25	01/31/25	100% BID SET 2
10 44 13	FIRE PROTECTION CABINETS	1	01/31/25	01/31/25	100% BID SET 2
10 44 16	FIRE EXTINGUISHERS	1	01/31/25	01/31/25	100% BID SET 2
11 - Equipment					
11 24 23	FALL ARREST SYSTEM	1	01/31/25	01/31/25	100% BID SET 2
11 53 00	LABORATORY EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
11 53 13	FUME HOODS AND EXHAUST DEVICES	1	01/31/25	01/31/25	100% BID SET 2
11 53 19	LABORATORY STERILIZERS	1	01/31/25	01/31/25	100% BID SET 2
11 53 33	LASER SAFETY EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
11 53 43	LABORATORY SERVICE FITTINGS AND FIXTURES	2	01/31/25	01/31/25	100% BID SET 2
12 - Furnishings					
12 24 13	ROLLER WINDOW SHADES	1	01/31/25	01/31/25	100% BID SET 2
12 35 53	LABORATORY CASEWORK AND OTHER FURNISHINGS	1	01/31/25	01/31/25	100% BID SET 2
12 78 00	BANQUETTE SEATING	0	10/25/24	10/25/24	Bid Set
13 - Special Construction					
13 21 14	CONTROLLED ENVIRONMENTAL ROOMS	1	01/31/25	01/31/25	100% BID SET 2
14 - Conveying Equipment					
14 24 00	HYDRAULIC ELEVATOR	1	01/31/25	01/31/25	100% BID SET 2
21 - Fire Suppression					
21 05 01	BASIC FIRE SUPPRESSION REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
21 05 02	AGREEMENT AND WAIVER FOR THE USE OF ELECTRONIC FILES & HEAPY RELEASE FORM TO CONTRACTORS	1	01/31/25	01/31/25	100% BID SET 2
21 05 04	BASIC FIRE SUPPRESSION MATERIALS AND METHODS	1	01/31/25	01/31/25	100% BID SET 2
21 05 05	FIRESTOPPING	1	01/31/25	01/31/25	100% BID SET 2
21 05 07	PIPING MATERIALS AND METHODS FOR FIRE SUPPRESSION	1	01/31/25	01/31/25	100% BID SET 2
21 05 13	ELECTRICAL REQUIREMENTS FOR FIRE SUPPRESSION EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2

Number	Description	Revision	Issued Date	Received Date	Set
21 05 19	GAUGES FOR FIRE SUPPRESSION PIPING	1	01/31/25	01/31/25	100% BID SET 2
21 05 29	HANGERS AND SUPPORTS FOR FIRE SUPPRESSION PIPING	1	01/31/25	01/31/25	100% BID SET 2
21 05 53	IDENTIFICATION OF FIRE SUPPRESSION PIPING AND EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
21 13 12	FIRE SUPPRESSION PIPING	1	01/31/25	01/31/25	100% BID SET 2
21 13 13	FIRE SUPPRESSION SPRINKLER SYSTEM	1	01/31/25	01/31/25	100% BID SET 2
21 13 14	FIRE SUPPRESSION STANDPIPE SYSTEM	0	10/25/24	10/25/24	Bid Set
21 13 15	FIRE SUPPRESSION EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
22 - Plumbing					
22 05 01	BASIC PLUMBING REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
22 05 02	AGREEMENT AND WAIVER FOR THE USE OF ELECTRONIC FILES & HEAPY RELEASE FOR TO CONTRACTORS	1	01/31/25	01/31/25	100% BID SET 2
22 05 04	BASIC PLUMBING MATERIALS AND METHODS	1	01/31/25	01/31/25	100% BID SET 2
22 05 07	PIPING MATERIALS AND METHODS	1	01/31/25	01/31/25	100% BID SET 2
22 05 09	EXCAVATION, BACKFILL AND SURFACE RESTORATION	1	02/24/25	02/20/25	100% BID SET 2 ADDENDUM 01
22 05 13	ELECTRICAL REQUIREMENTS FOR PLUMBING EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
22 05 19	METERS AND GAUGES FOR PLUMBING PIPING	1	01/31/25	01/31/25	100% BID SET 2
22 05 23	GENERAL DUTY VALVES FOR PLUMBING PIPING	1	01/31/25	01/31/25	100% BID SET 2
22 05 29	HANGERS AND SUPPORTS FOR PLUMBING PIPING	1	01/31/25	01/31/25	100% BID SET 2
22 05 30	BASES AND SUPPORTS FOR PLUMBING EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
22 05 49	VIBRATION CONTROL FOR PLUMBING	1	01/31/25	01/31/25	100% BID SET 2
22 05 53	IDENTIFICATION OF PLUMBING PIPING AND EQUIPMENT	3	02/24/25	02/20/25	100% BID SET 2 ADDENDUM 01
22 07 19	PLUMBING PIPING INSULATION	1	01/31/25	01/31/25	100% BID SET 2
22 08 00	PLUMBING COMMISSIONING REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
22 11 16	INTERIOR DOMESTIC WATER PIPING	1	01/31/25	01/31/25	100% BID SET 2
22 11 19	INTERIOR DOMESTIC WATER PIPING SPECIALTIES	3	02/24/25	02/20/25	100% BID SET 2 ADDENDUM 01
22 11 23	WATER PRESSURE BOOSTER PUMPING SYSTEM – VARIABLE SPEED	1	01/31/25	01/31/25	100% BID SET 2
22 13 14	FIRE SUPPRESSION STANDPIPE SYSTEM	0	01/31/25	01/31/25	100% BID SET 2
22 13 16	INTERIOR DRAINAGE AND VENT SYSTEMS	3	02/24/25	02/20/25	100% BID SET 2 ADDENDUM 01
22 13 19	DRAINAGE SYSTEMS SPECIALTIES	1	01/31/25	01/31/25	100% BID SET 2
22 31 16	COMMERCIAL DOMESTIC WATER SOFTENERS	1	01/31/25	01/31/25	100% BID SET 2
22 32 28	PURE WATER SYSTEM - PRE-PACKAGED	1	01/31/25	01/31/25	100% BID SET 2
22 33 00	DOMESTIC WATER HEATERS SEMI-INSTANTANEOUS	1	01/31/25	01/31/25	100% BID SET 2
22 42 00	PLUMBING FIXTURES	1	01/31/25	01/31/25	100% BID SET 2
22 62 19	MEDICAL LABORATORY GAS AND VACUUM SYSTEMS (NON-FLAMMABLE)	1	01/31/25	01/31/25	100% BID SET 2
23 - Heating, Ventilating, and Air Conditioning (HVAC)					
23 05 01	BASIC HVAC REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
23 05 02	AGREEMENT AND WAIVER FOR THE USE OF ELECTRONIC FILES & HEAPY RELEASE FORM TO CONTRACTORS	1	01/31/25	01/31/25	100% BID SET 2
23 05 04	BASIC HVAC MATERIALS AND METHODS	1	01/31/25	01/31/25	100% BID SET 2

Shiel Sexton Company, Inc.

Number	Description	Revision	Issued Date	Received Date	Set
23 05 07	PIPING MATERIALS AND METHODS	1	01/31/25	01/31/25	100% BID SET 2
23 05 13	ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
23 05 14	ADJUSTABLE FREQUENCY MOTOR CONTROLLER	1	01/31/25	01/31/25	100% BID SET 2
23 05 19	GAUGES AND MAKE UP METERS FOR HVAC PIPING	1	01/31/25	01/31/25	100% BID SET 2
23 05 21	FLOW AND ENERGY METERS	1	01/31/25	01/31/25	100% BID SET 2
23 05 23	GENERAL DUTY VALVES FOR HVAC PIPING	1	01/31/25	01/31/25	100% BID SET 2
23 05 29	HANGERS AND SUPPORTS FOR HVAC PIPING	1	01/31/25	01/31/25	100% BID SET 2
23 05 30	BASES AND SUPPORTS FOR HVAC EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
23 05 31	HVAC EQUIPMENT DRIVES	1	01/31/25	01/31/25	100% BID SET 2
23 05 49	VIBRATION CONTROL FOR HVAC	1	01/31/25	01/31/25	100% BID SET 2
23 05 50	FLEXIBLE HVAC PIPE CONNECTORS	1	01/31/25	01/31/25	100% BID SET 2
23 05 53	IDENTIFICATION OF HVAC PIPING AND EQUIPMENT	1	01/31/25	01/31/25	100% BID SET 2
23 05 93	TESTING, ADJUSTING AND BALANCING FOR HVAC	1	01/31/25	01/31/25	100% BID SET 2
23 07 13	DUCT INSULATION	1	01/31/25	01/31/25	100% BID SET 2
23 07 14	FIRE BARRIER WRAP	01	01/31/25	01/31/25	100% BID SET 2
23 07 16	HVAC EQUIPMENT INSULATION	1	01/31/25	01/31/25	100% BID SET 2
23 07 19	HVAC PIPE INSULATION	1	01/31/25	01/31/25	100% BID SET 2
23 08 00	COMMISSIONING OF HVAC SYSTEMS	1	01/31/25	01/31/25	100% BID SET 2
23 09 00	HVAC INSTRUMENTATION AND CONTROLS	1	01/31/25	01/31/25	100% BID SET 2
23 21 13	HYDRONIC PIPING	1	01/31/25	01/31/25	100% BID SET 2
23 21 14	EXPANSION TANKS	1	01/31/25	01/31/25	100% BID SET 2
23 21 17	GLYCOL SOLUTION SYSTEMS	1	01/31/25	01/31/25	100% BID SET 2
23 21 23	HYDRONIC PUMPS	1	01/31/25	01/31/25	100% BID SET 2
23 22 13	STEAM AND CONDENSATE PIPING SYSTEM	1	01/31/25	01/31/25	100% BID SET 2
23 22 23	STEAM CONDENSATE PUMPING UNITS	1	01/31/25	01/31/25	100% BID SET 2
23 25 00	WATER TREATMENT SYSTEMS	1	01/31/25	01/31/25	100% BID SET 2
23 31 13	HVAC DUCTWORK	2	01/31/25	01/31/25	100% BID SET 2
23 31 19	AIR PLENUM CASINGS	1	01/31/25	01/31/25	100% BID SET 2
23 33 00	AIR DUCT ACCESSORIES	1	01/31/25	01/31/25	100% BID SET 2
23 35 00	SPECIAL EXHAUST SYSTEMS	2	01/31/25	01/31/25	100% BID SET 2
23 36 16	AIR TERMINAL	1	01/31/25	01/31/25	100% BID SET 2
23 36 24	AIRFLOW CONTROL VALVES	1	01/31/25	01/31/25	100% BID SET 2
23 37 00	AIR OUTLETS AND INLETS	1	01/31/25	01/31/25	100% BID SET 2
23 38 13	EXHAUST HOOD	1	01/31/25	01/31/25	100% BID SET 2
23 41 00	AIR FILTERS	1	01/31/25	01/31/25	100% BID SET 2
23 41 33	FAN FILTER CEILING MODULES	1	01/31/25	01/31/25	100% BID SET 2
23 57 00	HEAT EXCHANGERS	2	01/31/25	01/31/25	100% BID SET 2

Shiel Sexton Company, Inc.

Number	Description	Revision	Issued Date	Received Date	Set
23 73 23	CUSTOM AIR HANDLING UNITS	2	01/31/25	01/31/25	100% BID SET 2
23 82 16	DUCT HEATING COILS	2	01/31/25	01/31/25	100% BID SET 2
23 82 19	FAN-COIL UNITS	2	01/31/25	01/31/25	100% BID SET 2
23 82 39	UNIT HEATERS	1	01/31/25	01/31/25	100% BID SET 2
23 84 13	HUMIDIFIERS – DIRECT BUILDING STEAM TYPE	1	01/31/25	01/31/25	100% BID SET 2
23 84 15	HUMIDIFIERS – STEAM DISPERSION DEVICES & ACCESSORIES	1	01/31/25	01/31/25	100% BID SET 2
26 - Electrical					
26 05 01	BASIC ELECTRICAL REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
26 05 02	AGREEMENT AND WAIVER FOR THE USE OF ELECTRONIC FILES & HEAPY RELEASE FORM TO CONTRACTORS_26	1	01/31/25	01/31/25	100% BID SET 2
26 05 04	BASIC ELECTRICAL MATERIALS AND METHODS	1	01/31/25	01/31/25	100% BID SET 2
26 05 05	FIRESTOPPING	1	01/31/25	01/31/25	100% BID SET 2
26 05 09	EXCAVATION, BACKFILL AND SURFACE RESTORATION	1	01/31/25	01/31/25	100% BID SET 2
26 05 13	MEDIUM-VOLTAGE CABLES - SHIELDED JACKETED POWER CABLE	1	01/31/25	01/31/25	100% BID SET 2
26 05 19	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS - COPPER	1	01/31/25	01/31/25	100% BID SET 2
26 05 26	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	3	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 05 33	RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS	3	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 05 53	IDENTIFICATION FOR ELECTRICAL SYSTEMS	1	01/31/25	01/31/25	100% BID SET 2
26 05 65	SPECIFIC WIRING APPLICATIONS	1	01/31/25	01/31/25	100% BID SET 2
26 05 73	OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY	3	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 08 00	ELECTRICAL COMMISSIONING REQUIREMENTS	1	01/31/25	01/31/25	100% BID SET 2
26 09 23	LIGHTING CONTROL DEVICES	1	01/31/25	01/31/25	100% BID SET 2
26 13 19	MEDIUM-VOLTAGE VACUUM INTERRUPTER SWITCHGEAR	3	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 22 13	DISTRIBUTION TRANSFORMERS - STANDARD TYPE	1	01/31/25	01/31/25	100% BID SET 2
26 24 16	PANELBOARDS	3	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 27 26	WIRING DEVICES AND COVERPLATES	1	01/31/25	01/31/25	100% BID SET 2
26 27 39	ELEVATOR POWER MODULE AND WIRING	1	01/31/25	01/31/25	100% BID SET 2
26 28 16	DISCONNECT SWITCHES	1	01/31/25	01/31/25	100% BID SET 2
26 29 13	MOTOR CONTROLLERS	1	01/31/25	01/31/25	100% BID SET 2
26 32 13	DIESEL ENGING DRIVEN GENERATOR SETS WALK IN WEATHERPROOF HOUSING	0	10/25/24	10/25/24	Bid Set
26 32 13.A	DIESEL ENGING DRIVEN GENERATOR SETS - RELOCATION	2	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 32 13.B	DIESEL ENGING DRIVEN GENERATOR SETS WALK IN WEATHERPROOF HOUSING	2	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 36 23	AUTOMATIC TRANSFER SWITCHES	3	02/25/25	02/25/25	100% BID SET 2 ADDENDUM 02
26 41 00	FACILITY LIGHTNING PROTECTION SYSTEM - FOR BUILDING ADDITION	1	01/31/25	01/31/25	100% BID SET 2
26 43 13	SURGE PROTECTION DEVICES (SPD'S) FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS	1	01/31/25	01/31/25	100% BID SET 2
26 51 00	INTERIOR LIGHTING	1	01/31/25	01/31/25	100% BID SET 2
26 52 13	EMERGENCY AND EXIT LIGHTING	2	01/31/25	01/31/25	100% BID SET 2
26 56 19	EXTERIOR LIGHTING	2	01/31/25	01/31/25	100% BID SET 2

Job #: 24063 IU Indy Science Building Expansion & Renovation
310 N. Blackford Street
Indianapolis, Indiana 46202-3115

Shiel Sexton Company, Inc.

Number	Description	Revision	Issued Date	Received Date	Set
27 - Communications					
27 00 00	COMMUNICATIONS	2	01/31/25	01/31/25	100% BID SET 2
27 00 00.1	IU BUILDING TELECOMMUNICATIONS DESIGN GUIDELINES	1	01/31/25	01/31/25	100% BID SET 2
28 - Electronic Safety and Security					
28 31 00	FIRE DETECTION AND ALARM (ADDRESSABLE)	1	01/31/25	01/31/25	100% BID SET 2
31 - Earthwork					
31 10 00	SITE DEMOLITION	1	01/31/25	01/31/25	100% BID SET 2
31 11 00	SITE CLEARING	1	01/31/25	01/31/25	100% BID SET 2
31 20 00	EARTH MOVING	2	01/31/25	01/31/25	100% BID SET 2
31 23 17	TRENCHING	1	01/31/25	01/31/25	100% BID SET 2
31 23 19	DEWATERING	1	01/31/25	01/31/25	100% BID SET 2
31 23 24	FLOWABLE FILL	1	01/31/25	01/31/25	100% BID SET 2
31 25 13	EROSION CONTROLS	1	01/31/25	01/31/25	100% BID SET 2
31 66 13	AGGREGATE PIERS	1	01/31/25	01/31/25	100% BID SET 2
32 - Exterior Improvements					
32 05 13	SOIL MATERIALS	1	01/31/25	01/31/25	100% BID SET 2
32 05 16	AGGREGATE MATERIALS	1	01/31/25	01/31/25	100% BID SET 2
32 11 23	GRANULAR BASE	1	01/31/25	01/31/25	100% BID SET 2
32 13 13	CONCRETE PAVING	1	01/31/25	01/31/25	100% BID SET 2
32 13 73	PAVEMENT JOINT SEALANTS	1	01/31/25	01/31/25	100% BID SET 2
32 14 13.16	PAVING SLABS ON PEDESTALS	1	01/31/25	01/31/25	100% BID SET 2
32 15 40	AGGREGATE SURFACING	1	01/31/25	01/31/25	100% BID SET 2
32 17 00	DETECTABLE WARNING PLATES	1	01/31/25	01/31/25	100% BID SET 2
32 33 00	SITE FURNISHINGS	1	01/31/25	01/31/25	100% BID SET 2
32 84 00	IRRIGATION	1	01/31/25	01/31/25	100% BID SET 2
32 91 13	TOPSOIL PREPARATION	1	01/31/25	01/31/25	100% BID SET 2
32 91 14	BIOSOILS	1	01/31/25	01/31/25	100% BID SET 2
32 92 00	TURF AND GRASSES	1	01/31/25	01/31/25	100% BID SET 2
32 93 00	PLANTING	1	01/31/25	01/31/25	100% BID SET 2
33 - Utilities					
33 00 00.30	CEG 2024 Sanitary Systems Manual	1	01/31/25	01/31/25	100% BID SET 2
33 00 00.30-2	CEG 2024 Water Systems Manual	1	01/31/25	01/31/25	100% BID SET 2
33 05 14	PRECAST CONCRETE STRUCTURES	1	01/31/25	01/31/25	100% BID SET 2
33 41 00	STORM DRAINAGE PIPING	1	01/31/25	01/31/25	100% BID SET 2

Subcontract Agreement

10/14/24

Job No.:	XXXXX-
Commitment No.:	XXXXX-XXX

SUBCONTRACT AGREEMENT BETWEEN:

CONTRACTOR:	**SUBCONTRACTOR:**
	XXXXXXXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXXXXXX

PROJECT INFORMATION

OWNER:	XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXX	**DESIGNER:**	
PROJECT:	XXXXXXXXXXXXXXXXXXXXX	**LIQUIDATED DAMAGES:**	(Per calendar day) XX
PROJECT LOCATION:	XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX	**SUBCONTRACT SUM:**	**(includes all taxes)** $ 0.00 Includes MBE and WBE
COMMENCEMENT DATE: Refer to Attachment "B"		COMPLETION DATE: Refer to Attachment "B"	

This Subcontract Agreement DOES ☐ Or DOES NOT ☐ require Payment and Performance bonds.

Subcontractor agrees to furnish materials and services in accordance with all the terms of the Subcontract Agreement and the following documents attached hereto: Attachment A – Scope of Work, Attachment B – Schedule, Attachment C – Document Log, Attachment D – Billing Procedures, Attachment E – Safety Summary, and Attachment F – Quality Summary. Use the above referenced "Job.No." on all documentation regarding this Project.

CONTRACTOR: SHIEL SEXTON COMPANY		**SUBCONTRACTOR**: XXXXXXXXXXXXXXXXXXX	
Signed:	_____	Signed:	_____
Printed:	_____	Printed:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____

902 N. CAPITOL AVE. INDIANAPOLIS,IN 46204
(317) 423-6000(317) 423-6300

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902 N. CAPITOL AVE. INDIANAPOLIS,IN 46204
(317) 423-6000(317) 423-6300

Contractor and Subcontractor expressly desire to contract with respect to a specific portion of the Work for the construction of the Project and in consideration of the mutual promises herein and intending to be legally, Contractor and Subcontractor agree as follows:

ARTICLE 1 SUBCONTRACT DOCUMENTS

1.1 Subcontract Documents

The Subcontract Documents consist of (1) this Subcontract Agreement between Contractor and Subcontractor including Attachments A through F, (2) the Prime Contract between the Owner and Contractor and other documents enumerated therein (collectively referred to as "Contract Documents") and all change orders and modifications thereto , (3) the drawings, specifications, general conditions, special conditions, and addenda prepared by the Owner and/or Designer for the Project, (4) Exhibit 1 – State Specific Changes to the Subcontract Agreement, if any, and (5) other documents which are more specifically described and enumerated in Attachment C - Document Log. The Subcontract Agreement represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Subcontract Agreement can only be modified or amended in writing signed by both parties.

1.2 Availability of Subcontract Documents

The Subcontract Documents are available for examination by the Subcontractor at all reasonable times at the office of the Contractor. The Subcontractor may request copies of the Subcontract Documents, but Contractor may charge Subcontractor the cost of printing and reproduction.

1.3 Subcontract Documents are Complementary

This Subcontract Agreement and the Subcontract Documents are intended to supplement and complement each other and shall, where possible, be thus interpreted. In the case of conflict or inconsistency within, among, or between the Subcontract Documents, the provision granting greater rights or remedies to the Contractor, or imposing the greater duty, standard, responsibility or obligation on the Subcontractor shall govern. Unless clarified by a request for information made by the Subcontractor, in the case of a conflict or inconsistency with, and among the drawings and specification or applicable standard codes and ordinances or with a Contact Document not clarified by addendum, the better quality or greater quantity of work shall be provided in accordance with the Owner's or Contractor's interpretation. When the Prime Contract stipulates the interpretation of the Subcontract Documents is the responsibility of the Designer, the Subcontractor shall be bound by all such interpretations.

1.4 Examination of Subcontract Documents

The Subcontractor represents and agrees that it has carefully examined and understands this Subcontract Agreement and the Subcontract Documents, that it has investigated the nature, locality and site of the Work and the conditions and difficulties under which the Work will be performed, and that it enters this Subcontract Agreement on the basis of its own examination, investigation and evaluation and not in reliance upon any opinions or representations of the Contractor, the Owner, or Architect, or any if its respective employees unless specifically set forth herein. Neither Contractor nor the Owner shall be liable to Subcontractor for any claim for an adjustment to the Subcontract Sum or an extension of time if such claim directly or indirectly arises from Subcontractor's failure or refusal to investigate or familiarize itself with the conditions under which this Subcontract Agreement is to be performed.

ARTICLE 2 RIGHTS AND RESPONSIBILITIES

The Subcontractor shall assume toward the Contractor all obligations duties, procedures, requirements, and responsibilities which the Contractor, under the Prime Contract, assume toward the Owner. The Contractor shall have the benefit of all rights, remedies and redress against the Subcontractor that the Owner, under the Prime Contract, has against the Contractor. The terms and provisions of this Subcontract Agreement relating to the Subcontractor's Work are in addition to and not in substitution of any of the terms and conditions of the Prime Contract. If the Prime Contract requires that a specific provision or regulation (for example, Federal Acquisition Regulations) be expressly included in the Subcontract Agreement, such provision shall be deemed to be to be

incorporated into this Subcontract Agreement as if it were expressly written herein. Any sub-subcontractor shall be bound to Subcontractor, to the extent of the Work performed by the sub-subcontractor, to the same extent the Subcontractor is bound to Contractor, and by which the sub-subcontractor assumes all obligations and responsibilities that Subcontractor assumes under this Subcontract Agreement. The Subcontract Documents shall not be construed to create a contractual relationship with any entities or persons other than the Contractor and Subcontractor.

ARTICLE 3 SCOPE OF WORK

3.1 Subcontractor's Work

Subcontractor, as an independent contractor, shall perform the Work indicated in the Subcontract Documents in strict accordance with this Subcontract Agreement, the Project Schedule and applicable laws.

3.2 Scope of Work

The Subcontractor shall use its best skill, attention and judgment to execute the Work described in the Subcontract Documents, including, without limitation, all labor, supervision, materials, equipment, hoisting, shoring, bracing, work access, supplies, tools, fuel, transportation, parking, installation, temporary facilities, clean up, and all other items or services of any kind whatsoever necessary to fully perform and complete the Work. Subcontractor shall provide necessary precautions to protect properly the work of other subcontractors and entities engaged in the Project from damage caused by operations under this Subcontract Agreement. Subcontractor shall pay for all costs of the performance of its obligations under this Subcontract, even if those costs exceed the Subcontract Sum. Subject to the provisions of this Subcontract Agreement, Subcontractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under this Subcontract Agreement.

3.3 Performance Specifications

When the Subcontract Documents applicable to Subcontractor's Work contain Performance Specifications, the Subcontractor agrees and represents that the performance requirements are achievable by the Subcontractor, the Subcontract Sum includes the cost of all design services related to or required for the achievement of the Performance Specifications, and all design services shall be performed by qualified and licensed architects, engineers, and other professionals selected and paid by the Subcontractor. Subcontractor's design professionals shall maintain errors and omissions or professional liability insurance in the amounts and on the terms and conditions set forth in Article 9.

3.4 Familiarity of Conditions

The Subcontractor represents and agrees that it has (1) carefully examined this Subcontract Agreement and the Subcontract Documents and understands their respective provisions; (2) visited the jobsite and investigated and satisfied itself with the nature, locality, and physical conditions of the Project for layout, staging, material layout, hoisting, access, availability of utilities, and other conditions and difficulties under which the Work is to be performed; (3) investigated and satisfied itself with respect to the prevailing weather and climatologic conditions at the jobsite under which the Work is to be performed; (4) investigated and satisfied itself with the conformation and condition of the soil together with the quality and quantity of subsurface and surface materials or obstacles to be encountered insofar as such information is ascertainable from the Subcontract Documents, an inspection of the Project site or the results of exploratory work required by the Owner of the Contractor and hence the Subcontractor, or if none was required, then conducted by the Owner and included in the Subcontract Document; (5) reviewed all laws applicable to the Work; and (6) enters into this Subcontract Agreement on the basis of its own examination, investigation and evaluation of all such matters and not in reliance upon any opinions or representations of the Contractor, Owner, Designer or any of their respective agents or employees. Neither the Contractor nor the Owner shall be liable to the Subcontractor for any claim for an adjustment to the Subcontract Sum or an extension of the time if such claim arises from Subcontractor's failure or refusal to investigate or familiarize itself with the conditions under which this Subcontract Agreement is to be performed.

3.5 Design Deficiencies Notification

Subcontractor shall give Contractor written notice within three (3) days of discovering any condition or omission in the Subcontract Documents which Subcontractor believes is or may be a design error, inconsistency, or deficiency.

3.6 Subcontractor's Competency and Experience

The Subcontractor represents and warrants it has sufficient supervision, labor, and experience for performance of the type, quality and quantity of Work required for complete performance of this Subcontract Agreement. If requested, Subcontractor shall provide a copy of its license as evidence of its competency to perform the Work.

3.7 Tests and Inspections

The Subcontractor shall give timely and proper notice and coordinate with Contractor and independent testing agencies for all required tests and inspections of Subcontractor's Work as required by the Subcontract Documents so as to not delay the progress of the Work. Subcontractor shall be responsible for additional costs due to failure of tests and/or inspections or lack of coordination by Subcontractor.

ARTICLE 4 SUBCONTRACT SUM

4.1 Definition

The Subcontract Sum is set forth on page 1. The Subcontract Sum shall be subject to additions and deductions as provided in the Subcontract Documents and agreed in writing by the Contractor.

4.2 Binding Submission of Bid

In the event the Subcontractor has submitted a bid for the Subcontract Work, the Subcontractor agrees to be bound by the agreed amount of the Subcontract Sum, the Subcontract Time, and all other terms and provisions of the Subcontract Documents for a period of one hundred twenty (120) days after submission of the bid. In the event the Contractor enters into a Prime Contract with regard to the Project, the Subcontractor shall be bound by all the terms and provisions of the Subcontract Documents. In the event the Contractor does not enter into a Prime Contract for the Project, this Subcontract Agreement shall be terminated and neither party shall have any further liability thereunder. In the event the Contractor has entered into a Prime Contract but the Prime Contract is terminated prior to the Commencement Date as set forth in this Subcontract Agreement, the Subcontract shall be terminated and neither party shall have any further liability thereunder.

4.3 Escalation Included in Subcontract Sum

Escalation in costs, including but not limited to, material, labor, equipment, tools, delivery, surcharges, or fuel costs are included in the Subcontract Sum and shall not be a basis for increase in the Subcontract Sum.

4.4 Taxes Included in Subcontract Sum

The Subcontract Sum includes all Federal, State, County, Municipal, and Local tax requirements, social security acts, unemployment compensation acts, workers' compensation acts, and other taxes imposed by law and based upon labor, services, materials, equipment, or other items acquired, performed, furnished, or used for, or in connection with the Work, including but not limited to, sales, use, and personal property taxes payable by, or levied or assessed against the Owner, Contractor, or Subcontractor. If the law requires any such taxes to be stated and charged separately, the total price of all items plus the amount of such taxes shall not exceed the Subcontract Sum.

4.5 Allowances in Subcontract Sum

The Subcontract Sum may include specific allowances for Work as remunerated in the Prime Contract, Subcontract Documents, or Attachment A. Unless otherwise provided in the Subcontract Documents, allowances shall cover the complete cost to Subcontractor of the materials, labor, installation, equipment, taxes, handling, overhead, profit and other costs associated with the Work. Whenever the actual cost of the Work is less than the allowance, the Subcontract Sum shall be adjusted accordingly by a deductive change order so as to provide a credit to Contractor for the value of any unused portion of the Allowance. Unless noted otherwise in the Subcontract Documents, allowances shall be used by Subcontractor only upon the express written authorization of Contractor.

4.6 Subcontract Sum Includes "As Designed" Materials

The Subcontractor represents that it has based the Subcontract Sum on the exact materials specified in the Subcontract Documents. The Subcontract Sum is not contingent upon approval by the Contractor, the Owner, or the Designer of any submission by the Subcontractor of substitute "or equal" materials unless previously approved by an addendum issued by the Owner or Designer. Any Subcontractor proposed change of materials after the execution of this Subcontract Agreement shall be governed by the applicable provisions of the Subcontract Documents.

4.7 Manufacturer's Recommendations Included in Subcontract Sum

The Subcontractor warrants and represents that it shall comply with all manufacturers' recommendations related to the use of materials or equipment and/or related to the installation of any of its Work. Where Subcontractor's Work shall adhere or attach to existing conditions or the work of others, the Subcontractor shall ensure and warrant that the products used are compatible and installed in accordance with the manufacturer's recommendations.

4.8 Subcontract Sum as Full Payment

The Subcontractor accepts the Subcontract Sum as full and complete payment for the Subcontract Work. The Subcontract Sum includes Subcontractor's profit, overhead, and the entire Subcontractor cost of performing the Subcontractor's Work.

ARTICLE 5 PAYMENT

5.1 Schedule of Values

Within twenty-one (21) days prior to submitting its first pay application or earlier if requested by Contractor, the Subcontractor shall submit a schedule of values to the Contractor, for its review and approval. The schedule of values shall allocate the entire Subcontract Sum among the various parts of the Work of this Subcontract Agreement, aggregating the Subcontract Sum, and shall be made out in such detail and supported by such evidence as the Contractor may direct or as required by the Owner. The approved schedule of values shall be used as a basis for reviewing the Subcontractor's applications for payment.

5.2 Payment

Provided the Subcontractor's application for payment is received by the Contractor as described in this Article 5 and Attachment D, the Contractor shall include the Subcontractor's Work covered by that application in the next application for payment which the Contractor is entitled to submit to the Owner. Upon receipt of payment from the Owner on account of Subcontractor's portion of the Work, the Contractor shall pay the Subcontractor in current funds received from the Owner for the satisfactory performance and completion of the Work, and of all the duties, obligations, and responsibilities of the Subcontractor under this Subcontract Agreement. Contractor's receipt of payment from the Owner is a condition precedent to the corresponding payment by Contractor to Subcontractor for a progress payment or for final payment unless Owner's failure to make such payment is conclusively determined to be due to the sole fault of the Contractor. If Contractor has posted a payment bond for the Project, Contractor's receipt of payment from the Owner for Subcontractor's portion of the Work is a condition precedent to the Subcontractor's right to make any claim against Contractor's payment bond for the Project. Nothing contained in the Subcontract Agreement shall require payments received by Contractor from Owner to

be placed in a separate account and not commingled with other money of the Contractor, or shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust.

5.3 Lien Waivers

Subcontractor shall comply with all Owner lien waiver requirements. If none, Subcontractor shall comply with Contractor's lien waiver requirements and execute Contractor's form of lien waiver. If requested, Subcontractor shall provide lien waivers from each of its sub-subcontractors, vendors and suppliers. All payments will be withheld until receipt by Contractor of the required lien waiver(s). Acceptance of periodic progress payments by the Subcontractor shall constitute a waiver of any and all claims by the Subcontractor against the Contractor, the Owner, the Designer, the Surety, the premises or any payment bond unless such claims are expressly reserved on the face of the application for payment.

5.4 Progress Payment Application Submission Time

The payment period for each Subcontractor application for payment shall be from the 25th day of the previous month through the 24th day of the current month, unless an earlier date is required for timely submission of Contractor's application for payment to the Owner. All invoices, statements and applications for payment shall be received in the office of the Contractor, SHIEL SEXTON COMPANY, 902 N. CAPITOL AVE., INDIANAPOLIS, IN 46204, no later than 12:00 o'clock noon on the 24th day of each month, except in February, November and December in which such payment applications shall be received no later than noon on the 16th of said month, unless notified otherwise. All payment requests must show Contractor's job number, along with the Subcontract Number; if this information is omitted, the payment application will be returned. Each month's invoice shall be submitted on an AIA G702 or G703 format unless required otherwise. If the Subcontractor's application for payment is received by the Contractor after the application date fixed above, the Subcontractor's Work covered by it shall be included by the Contractor in the next month's application for payment submitted to the Owner.

5.5 Withholding Subcontractor Payment

The Contractor may withhold payment from the Subcontractor, in whole or in part, for any failure of the Subcontractor to perform in accordance with the terms and conditions of the Subcontract Documents or for the reasons and circumstances by which the Owner may withhold payment from the Contractor under the Prime Contract, regardless of whether or not the Owner has actually withheld payment from the Contractor, unless contrary to law. If there is any evidence of any lien or claim arising out of the Subcontractor's Work for which the Owner or Contractor may become liable, or if Subcontractor causes damage to work of others, Contractor may withhold payment in an amount sufficient to indemnify the Owner or Contractor for any loss or damage either may sustain in discharging such liens, claims or damage, including reasonable attorney's fees. If such lien, claim or damage arises after final payment to the Subcontractor, or if the amount due Subcontractor is insufficient to indemnify the Owner or Contractor, the Subcontractor, within seven (7) days of written demand by Contractor, shall reimburse Contractor for all costs incurred by the Owner or Contractor in discharging such lien or claim.

5.6 Backcharges

Contractor may deduct from any payment due Subcontractor any costs incurred by Contractor which are chargeable to Subcontractor.

5.7 Notice of Disapproval

Upon the partial or entire disapproval by the Contractor, Owner, or Designer of the Subcontractor's payment application, the Contractor shall provide reasonable notice to the Subcontractor. When the basis for the disapproval has been remedied, the Subcontractor shall be paid the amounts withheld, upon receipt of payment by the Contractor from Owner.

5.8 Payment Disbursement and Retainage

Each application for payment shall be based upon the most recent schedule of values submitted by the Subcontractor.

5.8.1 Subcontractor applications for payment shall indicate the percentage of completion of each portion of the Subcontractor's Work as of the end of the period covered by the application for payment.

5.8.2 Subject to the provisions of the Subcontract Documents, the amount of each progress payment shall be computed as set forth in the paragraphs below.

5.8.2.1 Take that portion of the Subcontract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Subcontractor's Work by the share of the total Subcontract Sum allocated to that portion of the Subcontractor's Work in the schedule of values, less 10.00% to be actually retained. The amount to be retained is not dependent upon the percentage retained from payments by the Owner, unless contrary to law. Pending final determination of cost to the Contractor of changes in the Work that have been properly authorized by the Contractor, amounts not in dispute shall be included to the same extent provided in the Prime Contract, even though the Subcontract Sum has not yet been adjusted;

5.8.2.2 Add that portion of the Subcontract Sum properly allocable to materials and equipment delivered and suitably stored at the site by the Subcontractor for subsequent incorporation in the Subcontractor's Work or, if approved by the Contractor and Owner, suitably stored off the site at a location agreed upon in writing, less the same percentage retainage required by the Prime Contract to be applied to such materials and equipment in the Contractor's application for payment;

5.8.2.3 Subtract the aggregate of previous payments made by the Contractor; and

5.8.2.4 Subtract amounts, if any, which are related to Work of the Subcontractor for which the Owner has withheld or nullified, in whole or in part, a certificate of payment for a cause that is the fault of the Subcontractor.

5.8.3 The Contractor shall pay the Subcontractor each progress payment within two (2) weeks after receipt by the Contractor of payment from the Owner or in the event Contractor is not paid due to reasons conclusively established to be the Contractor's sole fault, fifteen (15) days after issuance of the Certificate of Payment from the Owner approving the progress payment. In the event a prompt payment or other statute governs the time for making payments to subcontractors, payments shall be made in accordance with such statute.

5.8.4 The Subcontractor agrees to disperse payments in a timely manner to avoid non-payment claims by its sub-subcontractors, mechanics, journeymen, laborers, material vendors, lessors of tools or machinery, or any other party who may furnish work, materials, services, tool or machinery for construction. Contractor reserves the right in its sole judgment to make any progress payment, and the final payment, directly or by joint check, to Subcontractor and the party or parties who have supplied labor, materials or services which were included in the application for payment submitted by Subcontractor and approved for payment and deduct such payments from the Subcontract Sum. In no event shall any direct or joint payment be construed to create any contract between Contractor and sub-subcontractors of any tier, obligations to such sub-subcontractors, or rights in such sub-subcontractors against the Contractor.

5.8.5 If Subcontractor fails to promptly pay for all materials, equipment, labor, or services used or furnished in connection with the performance of its Work, Subcontractor, upon request, shall immediately provide Contractor with a listing of all unpaid amounts, listing the name and address of each payee, the amount due each payee, and the reason the amount was not paid.

5.9 Early Release of Retainage

If allowed under the Prime Contract and if approved by the Owner in writing, Contractor may approve an early release of retainage.

5.10 Subcontract Sum to Remain in Balance

At all times the Subcontract Sum shall remain in balance with the cost of the Work remaining to be completed, such that the undistributed sum including retainage, equal or exceed the amount necessary to pay for Work already completed but unpaid and all Work to be completed. If at any time, the Subcontract Sum becomes unbalanced, Contractor may order Subcontractor to continue its Work without further payments until the Subcontract Sum is in balance with the cost of the Work to be completed.

5.11 Substantial Completion

After the Owner's representative issues the certificate for payment, and within two (2) weeks of Contractor's receipt of payment from the Owner covering such substantially completed Work, the Contractor shall, to the full extent allowed in the Prime Contract, make payment to the Subcontractor, deducting any portion of the funds for the Subcontractor's Work withheld in accordance with the certificate to cover costs of items to be completed or corrected by the Subcontractor. Such payment to the Subcontractor shall be the entire unpaid balance of the Subcontract Sum less 10%. The Contractor may withhold additional sums due to: (1) the Subcontractor's failure to remedy defective work; (2) the filing or probability of filing of third party claims; (3) the failure of Subcontractor to make payments for labor, materials or equipment; (4) concern that the work cannot be completed for the unpaid balance of the contract; (5) damage to the Owner or another contractor; (6) concern that the work will not be completed on time and that the unpaid balance would be inadequate to cover actual or liquidated damages, if any, for the anticipated delay; and (7) the failure of the Subcontractor to carry out its work in accordance with the Subcontract Documents. Payment to the Contractor by Owner shall be a condition precedent to the Subcontractor to receive payment from the Contractor.

5.12 Payment not Evidence of Performance

No payment made to Subcontractor, whether it be a progress or final payment, shall be construed as evidence of Subcontractor's satisfactory performance or completion of the Work, either in whole or in part, or acceptance by Contractor or Owner of defective or faulty or improper Work or materials, nor shall it release Subcontractor from any obligations under the Subcontract Agreement.

5.13 Payment Interest

Payments due and unpaid by Owner to Contractor shall bear interest from the date payment is due at such rate as allowed by the Prime Contract. If no interest is allowed for in the Prime Contract, no interest shall be due under this Subcontract Agreement. Within two (2) weeks of Contractor's receipt of payment of interest from the Owner, such sums shall be paid to the Subcontractor.

5.14 Owner Title

Subcontractor warrants that title to all Work, materials, and equipment will pass to the Owner either by incorporation in the Project or upon receipt of payment by the Subcontractor for such Work, materials, and equipment whichever occurs first. Work, materials, and equipment including paid materials stored offsite with required Subcontractor insurance shall be free and clear of all liens, claims, security interests or encumbrances.

5.15 Payment for Stored Materials

If payment for materials stored offsite is allowed by the Prime Contract and is requested and made, title to such materials shall pass to the Contractor and through to the Owner as may be agreed between the Contractor and Owner, but the Subcontractor shall remain fully liable for all such materials not delivered to the job site and shall be responsible for providing insurance for such store materials as approved by Contractor and Owner. Subcontractor shall provide any documentation requested by Contractor supporting Subcontractor's request for payment of materials stored offsite.

5.16 Final Payment

Final payment, constituting the entire unpaid balance of the Subcontract Sum, shall be made by the Contractor to the Subcontractor when the Subcontractor's Work is fully performed in accordance with the requirements of the Subcontract Documents, the Owner's representative has issued a certificate for payment covering the Subcontractor's completed Work and the Contractor has received payment from

the Owner, the receipt of which is a condition precedent to the right of the Subcontractor to final payment from the Contractor. Final payment shall be made within two (2) weeks after receipt of final payment by the Contractor from the Owner unless a shorter time period is required by a prompt payment or other statute. Before issuance of the final payment, the Subcontractor, upon request, shall submit evidence satisfactory to the Contractor that all payrolls, bills for materials and equipment, and all known indebtedness connected with the Subcontractor's Work have been satisfied. Acceptance of final payment by the Subcontractor shall constitute a waiver of any and all claims by the Subcontractor against the Contractor, the Owner or the Architect. The Subcontractor shall furnish a final lien waiver and release of all claims acceptable to the Contractor and Owner.

ARTICLE 6 CONTRACT DELIVERABLES

With the execution of this Subcontract Agreement, the Subcontractor shall provide and deliver to the Contractor the following contract deliverable items which the Subcontractor certifies to the Contractor as being currently true, accurate, and correct with no material changes:

(1) A copy of Subcontractor's Certificate of Insurance in accordance with Article 9;
(2) A list of the Subcontractor's Project staff;
(3) A copy of Subcontractor's license, if required;
(4) A copy of Subcontractor's Sales Tax Registration Certificate;
(5) Subcontractor's payment and performance bonds, if required;
(6) A list of all tiers of sub-subcontractors and suppliers (including their addresses and the amounts due or to become due to each). The list shall be updated with each Progress Payment Application showing all additions, deletions, and substitutions to such list, the contract deliverables for each new sub-subcontractor, supplier of any tier, and revised amounts due or to become due;
(7) A copy of any certificate of qualification required by the Subcontract Documents or applicable law or regulation, including but not limited to, certification as a minority business enterprise or woman-owned business enterprise, Federal small business, or other status requiring certification;
(8) A copy of Subcontractor's Wage Scale Certification, if required;
(9) Subcontractor's schedule of values prior to first payment application pursuant to Article 5;
(10) Subcontractor's detailed work plan and schedule in accordance with Article 10;
(11) Subcontractor's detailed submittal log and schedule in accordance with Article 11;
(12) Subcontractor's Project Specific Safety Plan;
(13) Subcontractor's Project Specific Quality Plan;
(14) All other information required by this Subcontract Agreement to be submitted with the executed Agreement.

ARTICLE 7 SUBCONTRACTOR PROJECT STAFF

7.1 Project Staff Requirements

The Subcontractor shall staff the Project at all times with competent and adequate personnel for the proper management, administration, coordination, and supervision of Subcontractor's Work, and Subcontractor's compliance with all applicable laws. Subcontractor's Project staff shall be deemed acceptable by Contractor, unless Contractor objects within a reasonable time of Subcontractor providing its Project staff as required by this Subcontract Agreement. Subcontractor shall not change the approved staff without Contractor's written approval unless any such person ceases to be employed by Subcontractor, in which event such person shall be replaced with an individual whom Contractor has no reasonable objection.

7.2 Project Representative

The Subcontractor shall employ and assign a competent Project Representative who shall be in attendance at the Project site at all times during performance of the Work. The Project Representative shall represent the Subcontractor and receive communications from Contractor which shall be binding. The Project Representative shall have full authority to act on Subcontractor's behalf in all matters necessary for proper coordination, direction and technical administration of Subcontractor's Work and shall be responsible for inspection of portions of work already performed to determine that such portions are in proper condition to receive Subcontractor's subsequent Work. Subcontractor's Project Representative shall be the superintendent unless a different Project Representative is proposed and accepted pursuant to Paragraph 7.1.

ARTICLE 8 SUBCONTRACTOR BONDS

8.1 Bond Requirements

If Contractor requires Subcontractor to provide performance and payment bonds, Subcontractor shall obtain bonding from a commercial surety acceptable to the Contractor. Each bond shall be for a sum equal to the Subcontract Sum, and shall be in a form acceptable to the Contractor, and shall name, as co-obligee, the Contractor, and if requested, the Owner, lender, or other party, and shall be delivered to Contractor immediately upon execution of this Subcontract Agreement. Additions to or reductions from the Subcontract Sum or other modifications to the Subcontractor's Work shall not invalidate or impair any rights of Contractor under any bond furnished by Subcontractor.

8.2 Requirements in Absence of Bonds

If Contractor does not initially require Subcontractor to furnish bonds, but prior to or after commencement of Subcontractor's Work, Contractor may elect to require Subcontractor to submit a current audited financial statement, require the Subcontractor to provide bonds in the amount and form acceptable to Contractor, require the Subcontractor to provide an irrevocable letter of credit or other security acceptable to Contractor, require all sub-vendors to enter into joint check arrangements, and/or increase retainage to an amount sufficient to protect Contractor's interest.

8.3 Failure to Provide Bonds

In the event Subcontractor fails to provide bonds to Contractor in an acceptable form within the time specified in this Subcontract Agreement or if Subcontractor fails to comply with this Article, Contractor may, upon five (5) days written notice, terminate the Subcontractor in accordance with the provisions of this Subcontract Agreement.

ARTICLE 9 INSURANCE

9.1 Insurance Coverage

Unless additional coverage and/or limits are required of Subcontractor by the Prime Contract or by law, the Subcontractor shall purchase and maintain insurance of the following types of coverage and limits of liability as will protect the Subcontractor, Contractor and Owner from claims that may arise out of, or result from, the Subcontractor's operations and completed operations under the Subcontract Agreement whether such operations be by the Subcontractor or by any sub-subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

(1) claims under workers' compensation, disability benefit and other similar employee benefit laws that are applicable to the Work to be performed;
(2) claims for damages because of bodily injury, occupational sickness or disease, or death of the Subcontractor's employees;
(3) claims for damages because of bodily injury, sickness or disease, or death of persons other than the Subcontractor's employees;
(4) claims for damages covered by usual personal injury liability coverage which are sustained (a) by a person as a result of an offense directly or indirectly related to employment of such person by the Subcontractor or (b) by another person;
(5) claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and

(6) claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle.

Subcontractor must provide a certificate of insurance (either the ACCORD 25-S or the AIA G705) providing the coverage, limits of liability and endorsements listed below:

Contractor utilizes myCOI Central, a software management system used to track certificates of insurance and to track and verify insurance coverage. Upon Subcontractor's receipt of this Agreement, Subcontractor will receive an email from registration@myCOItracking.com. Subcontractor must follow the instructions contained in the e-mail and complete the online registration. Upon completion of registration, Contractor will request proof of insurance directly from Subcontractor's insurance agent(s). In addition to the other terms and conditions contained herein, Subcontractor may not commence Work and no payments will be made, until Subcontractor is registered in myCOI Central, and a compliant Certificate of Insurance has been received.

If coverage limits specified by the Owner are required of Subcontractor and if greater than the coverage limits reflected on the Certificates provided to Contractor, Subcontractor shall immediately obtain the required higher coverage limits and furnish Contractor with replacement Certificates showing proper coverage limits.

Commercial General Liability

Bodily Injury & Property Damage	Each Occurrence	$1,000,000
	General Aggregate	$1,000,000
	Products-Completed Operations Aggregate	$2,000,000
	Personal & Advertising Injury	$1,000,000
	Fire Damage	$ 100,000

*CGL policy shall include coverage for property damage for the X (explosion), C (collapse) and U (underground) hazards.
* Any Subcontractor performing operations that include EIFS services and/or products represents and warrants that Subcontractor's Commercial General Liability policy provides coverage for all EIFS related services and/or products. This shall be confirmed on Certificate of Insurance submitted by Subcontractor.

Automobile Liability

(Incl. Owned, hired & non-owned)

Bodily Injury & Property Damage Combined Single Limit	Each Accident	$1,000,000

Workers Compensation	Statutory	
Employers Liability	Each Accident	$1,0000,000
	Disease-Each Employee	$1,0000,000
	Policy Limit	$1,0000,000
Umbrella/Excess Liability	Each Occurrence	$5,000,000
	Retention	$10,000
	Annual Aggregate	$5,000,000

Contractor's Pollution Legal Liability (including coverage for asbestos abatement operations) shall be required of any subcontractor performing any abatement services.

Each Claim/Occurrence	$1,000,000
Mold/Fungi Bacteria	$1,000,000

Retention	$50,000
Annual Aggregate	$2,000,000

Insurance for the use or operation of manned or unmanned aircraft, if the Work requires such activities, with policy limits of not less than $5 Million per claim and $10 Million in the aggregate. Coverage must also include Aircraft Damage and Slung Cargo.

Additional Endorsements
The Subcontractor and its sub-subcontractor's insurance policies must provide the following endorsements for Contractor and his officers, agents, employees, successors, or assigns. Certificates of Insurance shall indicate that these endorsements in favor of the respective Certificate Holder are in effect:

(1) Commercial General Liability, Automobile Liability, and Excess Liability shall add Contractor and Owner as Additional Insured; Insurance Services Office (ISO) endorsement CG 2010 10 01 and CG 2037 or its equivalent shall be included in the Commercial General Liability policy;
(2) Commercial General Liability shall be endorsed to provide that General Aggregate applies separately to each Project; Insurance Services Office (ISO) endorsement CG 2503 or its equivalent;
(3) Commercial General Liability, Automobile Liability and Worker's Compensation shall be endorsed to provide Waiver of Subrogation in favor of SHIEL SEXTON COMPANY and Owner (when required by Prime Contract);
(4) Commercial General Liability, Automobile Liability and Worker's Compensation shall be endorsed to provide thirty (30) days Notice of Cancellation; and
(5) All policies, excluding Worker's Compensation) shall be endorsed to provide Primary and Non-contributory coverage with respect to any insurance maintained by Contractor, including any excess liability coverage maintained by Contractor. Subcontractor's Excess/Umbrella policies shall exhausted vertically above Subcontractor's primary Commercial General Liability policy.

Professional Errors and Omissions Liability
Professional Errors and Omissions Liability coverage is required by all Subcontractors performing any design/build work or any professional services.

Each Claim/Occur.	$2,000,000
Annual Aggregate	$4,000,000
Maximum Deductible/ Retention	$ 50,000

(1) Deductible/retention on the professional errors and omissions liability coverage in excess of $50,000 shall be disclosed to the Contractor prior to execution of this Subcontract Agreement;
(2) Professional Liability Coverage is to be maintained in effect for a period of three (3) years from Substantial Completion of the Project;
(3) Subcontractor's Professional Liability policy shall provide coverage for all design services provided by or on behalf of Subcontractor; and
(4) Subcontractor shall confirm that the full required professional liability limit is in effect for the Project. Subcontractor shall provide written notice to Contractor of any reduction in limits under the required Professional Liability Policy.

The insurance required by this Paragraph shall be written for not less than aforementioned specified limits of liability, as required by law, or the Prime Contract, whichever coverage is greater.

9.1.1 Coverages shall be written on an occurrence basis (pollution liability and professional errors and omissions may be written on a claims-made basis) and shall be maintained without interruption from the date of commencement of the Subcontractor's Work until the date of final payment or date of any coverage required to be maintained after final payment to the Subcontractor,

whichever is later. With respect to the Subcontractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Prime Contract.

9.1.2 If any of the foregoing insurance coverages are required to remain in force after final payment, an additional certificate evidencing continuation of such coverage shall be submitted with the final application for payment as required in this Subcontract Agreement. If any information concerning reduction of coverage is not furnished by the insurer, it shall be furnished by the Subcontractor with reasonable promptness according to the Subcontractor's information and belief.

9.1.3 The Subcontractor and all its sub-subcontractors in connection with the above mentioned Workers' Compensation and Occupational Disease Insurance, shall furnish to Contractor duly executed Certificate of Compliance forms as prescribed by the Indiana Workers' Compensation Bureau or governing agency in the State where the Project is located showing that such insurance is in full force and effect. If the Project is located in a State other than Indiana, Subcontractor shall provide duly executed Certificate of Compliance forms showing that the Subcontractor has complied with all Worker's Compensation Insurance requirements of the State of which the Project is located.

9.1.4 Additional Insured endorsement shall include: (1) coverage for claims caused in whole or in part by the Subcontractor's negligent acts or omissions during the Subcontractor's operations.

9.1.5 It is expressly agreed and understood by and between the Contractor and Subcontractor that all insurance, whether issued on a primary or excess basis, afforded the additional insureds shall be primary insurance to any other insurance available to Contractor and shall not contribute to Subcontractor's insurance. Subcontractor's Excess/Umbrella policies shall exhausted vertically above Subcontractor's primary Commercial General Liability policy Subcontractor's failure to provide the endorsement required by this Subcontract Agreement shall not affect Subcontractor's agreement hereunder.

9.2 Insurance in Force and Adequacy

Certificates of insurance acceptable to the Contractor shall be purchased and filed with the Contractor prior to commencement of the Subcontractor's Work. Policies shall be made available upon request. Contractor does not represent that the insurance coverage specified in Article 9, whether in scope of coverage or amount of coverage, are adequate to protect the obligations of Subcontractor under this Subcontract Agreement and Subcontractor shall be solely responsible for any deficiencies thereof. If Subcontractor determines for its own purposes that it requires insurance in excess of the coverage specified in Article 9, nothing in this Subcontract Agreement shall prevent Subcontractor, at its own expense, from purchasing insurance coverages in excess of the coverage required by this Subcontract Agreement. Nothing shall be deemed to limit Subcontractor's liability under this Subcontract Agreement.

9.3 Property Insurance

9.3.1 When requested in writing, the Contractor shall provide the Subcontractor with copies of the property and equipment policies in effect for the Project, if available from the Owner.

9.3.2 Property insurance for the Subcontractor's materials and equipment required for the Subcontractor's Work, stored off site or in transit, shall be paid for by the Subcontractor.

9.3.3 Subcontractor shall be responsible for payment of the deductible of the property insurance provided by the Owner or Contractor.

9.4 Waiver of Subrogation

The Contractor and Subcontractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Owner, the Designer, the Designer's consultants, separate contractors, and any of their subcontractors, sub-subcontractors,

agents and employees for damages caused by fire or other causes of loss to the extent covered by property insurance provided under the Prime Contractor other property insurance applicable to the Work, except such rights as they may have to proceeds of such insurance held by the Owner as a fiduciary. The Subcontractor shall require of the Subcontractor's Sub-subcontractors, agents and employees, by appropriate agreements, written where legally required for validity, similar waivers in favor of the parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

ARTICLE 10 SCHEDULE AND COORDINATION

10.1 Time is of the Essence

Time is of the essence in this Subcontract Agreement. Subcontractor recognizes that Contractor and/or Owner may sustain severe financial loss if the Project or any part of it is delayed because Subcontractor fails to perform any or all of its Work in accordance with the Subcontract Agreement, the Subcontract Documents, or the Project Schedule. The Subcontractor shall supervise and direct the Subcontractor's Work, and shall cooperate with the Contractor in scheduling and performing the Subcontractor's Work and shall diligently and continuously prosecute, perform and complete its Work to avoid conflict, delay, impedance, obstruction, hindrance, or interference to the commencement, progress, or completion of the whole or any part of the Work of the Contractor, other subcontractors, the Owner, or separate contractors.

10.2 Commencement of Work

The Subcontractor shall commence its Work when directed to do so by the Contractor.

10.3 Subcontract Time

Subcontract Time is defined as the period of time, inclusive of authorized adjustments, allotted in the Subcontract Documents for the Subcontractor's Work which shall be substantially completed by the completion date as set forth in the Subcontract Documents. By executing this Subcontract Agreement, the Subcontractor represents and warrants that the Subcontract Time is a reasonable period for performing the Work.

10.4 Subcontractor's Schedule and Plan

The Subcontractor shall participate and cooperate in the development of the Project Schedule and other efforts to achieve timely completion of the Project by providing detailed information for the scheduling of the times and sequence of Subcontractor's operations required for its Work to meet the Project Schedule. Subcontractor shall continuously monitor the Project Schedule so as to be fully familiar with the timing, phasing and sequence of operations of the Subcontractor's Work and of other work on the Project, and shall execute the Work in accordance with the requirements of the Project Schedule, including any revisions thereto, and shall meet all interim or final milestone dates included in the Project Schedule. Subcontractor shall submit within five (5) days after execution of this Subcontract Agreement, in a form prescribed by Contractor, for Contractor's approval, Subcontractor's detailed plan and schedule for performing and coordinating its Work in conformance with the Project Schedule and other work on the Project.

10.5 Work Priority

The Contractor, in order to respond to job conditions and/or achieve timely completion of the Project, shall have the right to modify the Project Schedule, to suspend, delay or accelerate, in whole or in part, the commencement or execution of the Subcontractor's Work or any portion thereof or to vary the sequence thereof, to reasonably decide the time, order and priority of the various portions of Subcontractor's Work, and all other matters relating to the scheduling and coordination of Subcontractor's Work with other work on the Project. Subcontractor shall not be entitled to additional compensation for

changes made by the Contractor pursuant to this Paragraph except as provided elsewhere in this Subcontract Agreement.

10.6 Coordination of Work

The Subcontractor shall cooperate and coordinate its Work or any portion thereof with the Contractor, other subcontractors, trades and other contractors working on the Project. The Subcontractor shall participate in coordination meetings and specifically notify the Contractor of potential conflicts of scheduling and/or contiguous work requirements before beginning its Work and during the duration of its Work. Failure of the Subcontractor to promptly report any conflict, defect, or uncompleted work by others shall constitute a waiver and estoppel of any claim by Subcontractor for any damage or for any claim for an extension of time arising from any such conflict, defect, or uncompleted work. In addition, Subcontractor shall be liable to Contractor for any damage caused Contractor by Subcontractor's failure to promptly report any such conflict, defect, or uncompleted work.

Once a week, at a minimum, Subcontractor shall record all changes it makes during construction on Contractor's as-built coordination drawings and specifications located at Contractor's Project site office. If requested by Contractor, Subcontractor shall maintain its own up-to-date as-built drawings and specifications.

10.7 Staging and Storage

Suitable areas for storage of the Subcontractor's material and equipment during the course of the Work shall be provided with the written approval of Contractor. Any materials and equipment stored onsite shall be organized in an orderly manner, on proper cribbing, protected from ongoing and future work, protected from weather, if necessary to prevent damage or deterioration, and secured by Subcontractor.

10.8 Reports

The Subcontractor shall furnish to the Contractor periodic progress reports on the Work of this Subcontract Agreement. At a minimum, the following items shall be supplied fully and accurately completed and signed by Subcontractor's Representative and delivered to Contractor:

(1) Daily reports (if requested, on Contractor's form) that include number of workers on site, hours worked, activities completed, equipment utilized, materials delivered and upcoming activities to be delivered by 9:00 a.m. the next working day;
(2) Daily production quantity sheets as required by Contractor to be delivered by 9:00 a.m. the next working day;
(3) Weekly four (4) week look-ahead schedule updates with durations to accomplish tasks necessary to meet the current Project Schedule to be delivered forty-eight (48) hours prior to Contractor's established subcontractor coordination meeting; and
(4) All required reports, shop drawings, samples, test reports, or other information promptly as required by this Subcontract Agreement, the Subcontract Documents, the Project Schedule or the Contractor.

10.9 Overtime and Additional Shifts

If Contractor deems it necessary, the Subcontractor may be ordered to work overtime, add additional manpower, and/or add additional shifts.

10.9.1 If Subcontractor is not behind schedule, Contractor will pay Subcontractor the actual additional premium portion of wages for overtime or additional shift work not then included in the Subcontract Sum, plus any applicable taxes on such additional wages, but no overhead, profit or loss productivity shall be claimed, asserted or reimbursed. Premium portions shall be documented by certified payroll if requested by Contractor. Subcontractor shall provide Contractor the estimated cost of said overtime or additional shift work prior to commencing such overtime or additional work or at time of directive, whichever is earlier.

10.9.2 If Subcontractor, through its own sole or partial fault or neglect, is behind schedule, Subcontractor shall, in addition to all of the obligations imposed by this Subcontract Agreement, at the Subcontractor's own cost, work such overtime, add manpower, and/or add additional shifts as may be necessary to expedite its Work to meet the Project Schedule. Should the Subcontractor fail to expedite the Work or make up for the time lost, Contractor shall have the right to supplement Subcontractor's Work by retaining others to work additional and/or overtime shifts, reducing Subcontractor's scope of Work and/or to take whatever other action it deems necessary to avoid delay in the completion of the Work and of the Project, and the cost of supplementing and/or such other action shall be borne by the Subcontractor

10.9.3 If Subcontractor loses time due to weather (provided that such weather conditions are not the basis of a claim for extension of time), Subcontractor shall make-up such lost time by working an extended week at no additional cost to Contractor.

ARTICLE 11 SHOP DRAWINGS AND SUBMITTALS

11.1 Submittals

The Subcontractor shall promptly submit for review and approval all shop drawings, samples, product data, manufacturers' literature and similar submittals required by the Subcontract Documents. The Subcontractor shall be responsible for the accuracy and conformity of its submittals to the Subcontract Documents.

11.2 Submission

Within five (5) days of the execution of this Subcontract Agreement, Subcontractor shall prepare and submit to Contractor a submittal log and schedule. On a weekly basis, Subcontractor shall update the log showing the status of all required shop drawings, product data, samples, and other required submittals. The Subcontractor shall promptly submit required submittals with reasonable promptness and in such sequence as to cause no delay in its own Work, the work of the Contractor, or any other subcontractors. Subcontractor shall make every reasonable effort to submit all required shop drawings and submittals in a complete and coordinated package. Submittal of partial packages shall be approved in advance by Contractor.

11.3 Review by Contractor

Contractor is not responsible for verifying dimensions or field conditions in reviewing Subcontractor's shop drawings and other submittals. Review by Contractor shall not be construed as a detailed examination of the shop drawings or other submittals and shall not relieve the Subcontractor, manufacturer, fabricator, or supplier from the responsibility for the proper matching and fitting of the Work with contiguous work and the coordination of the Work with other work being performed on the Project, which obligation and responsibility shall continue to be Subcontractors until completion and final acceptance of the Work.

ARTICLE 12 CONTIGUOUS WORK

Should the proper and accurate performance of the Subcontractor's Work depend upon the proper and accurate performance of other work not covered by this Subcontract Agreement, the Subcontractor shall carefully examine such other work, determine whether it is in fit, ready, and suitable condition for the proper and accurate performance of the Work of this Subcontract Agreement, and use all means necessary to discover any defects in such other work. Before proceeding with the Work, Subcontractor shall report promptly in writing any such improper conditions or deficiencies to Contractor and allow Contractor a reasonable time to have such improper conditions and defects remedied. Any unreported improper conditions or deficiencies shall be deemed accepted by the Subcontractor upon the commencement of the Subcontractor's Work and shall become the responsibility of the Subcontractor.

ARTICLE 13 DIMENSIONS AND ELEVATIONS

Notwithstanding the dimensions and elevations on the Subcontract Documents, the Subcontractor shall be responsible for verifying the dimensions and elevations of the Project prior to ordering materials or commencing the Subcontractor's Work. The Subcontractor is solely responsible for monitoring the progress of the Project and for coordinating and performing all field measurements in a timely manner sufficient to support the Project Schedule and to insure the proper matching and fitting of the Work covered by this Subcontract Agreement with contiguous work. If schedule constraints prohibit obtaining field measurements, Subcontractor is responsible for requesting Contractor guaranteed dimensions timely.

ARTICLE 14 CLEAN UP

14.1 Duty of Subcontractor

The Contractor takes pride in maintaining a clean jobsite for safety and efficient productivity. The Subcontractor shall, at all times and at its own expense, perform the following:

(1) Keep the premises and surrounding area free from accumulation of all dirt, debris, waste materials, packaging materials and other rubbish caused in connection with the execution of its Work by collecting and lawfully depositing said materials and rubbish in locations or containers as designated by Contractor;
(2) Organize stored materials and equipment in a neat and organized fashion;
(3) Clean and remove from its Work and from all contiguous work of others all dirt, soiling, stains, spillage, overspray, residue, protective coatings, and debris caused in connection with the execution of its Work and make good all defects resulting therefrom;
(4) Perform such cleaning as may be required to leave the area of Work "broom clean"; and
(5) At the entire completion of its Work, remove all of its tools, equipment, scaffolding, shanties, and surplus materials.

14.2 Contractor's Rights to Clean Up

If the Subcontractor fails to perform necessary or required clean up during the course of and at the completion of its Work, upon twenty-four (24) hours notice to Subcontractor, Contractor may provide such clean up on behalf of Subcontractor and charge Subcontractor for the costs incurred, plus ten percent (10%) for overhead and ten percent (10%) for profit. Contractor's right for clean up includes the right to provide cleanup during evening, night, and weekend hours, in which case shift differential or overtime premiums will be included in the charges assessed to Subcontractor. In addition to Contractor's other rights and remedies, if Subcontractor fails to perform its clean up obligations under this Subcontract Agreement, Contractor shall have the right to stop Subcontractor's Work until cleanup is achieved.

14.3 Cleaning Responsibility Disputes

In the event a dispute arises among the Subcontractor and other trades as to the responsibility for such cleanup, the Contractor may perform the cleanup and allocate costs among the responsible parties, as the Contractor determines in its reasonable discretion. The allocation made by the Contractor shall be binding on the Subcontractor.

ARTICLE 15 CONTRACTOR FURNISHED EQUIPMENT, LABOR OR MATERIALS

15.1 Responsibilities of Parties

In the event Contractor furnishes to Subcontractor for its use any materials, equipment, or temporary facilities, the Subcontractor shall at its own expense:

(1) Relocate as required, assume care, custody, and control of such material, equipment, or temporary facilities;
(2) Maintain, service, and repair such material, equipment, or temporary facilities;

(3) Use such material, equipment, or temporary facilities in strict compliance with this Subcontract Agreement, the Subcontract Documents, and all applicable laws;
(4) Provide and maintain such insurances as required by Contractor;
(5) Return such material, equipment, or temporary facilities to Contractor in the same condition Subcontractor received same to the initial location received or such other location as may be directed by Contractor; and
(6) Comply with all applicable laws.

15.2 "As is" Condition

Contractor furnished material, equipment, or temporary facilities are provided "as is". Whenever Subcontractor, or its sub-subcontractor, or any employees or agents of the same, uses the same, Subcontractor, its successors and assigns, shall defend, indemnify, and hold harmless Contractor, its agents and employees, from and against all liabilities, for injuries to persons, damage to property, and any and all costs and expenses, including reasonable attorneys' fees, resulting from any claims arising out of such use or occupancy by Subcontractor or its sub-subcontractor, or any of their respective employees and/or agents.

ARTICLE 16 DELAYS AND EXTENSIONS OF TIME

16.1 Delays Caused by Contractor, Owner, or Designer

No extension of time will be valid except as set forth below:

16.1.1 If for any reason beyond its control, Subcontractor is materially delayed, disrupted, or interfered with in the progress of its Work under such circumstances as would entitle Contractor to an extension of time under the Prime Contract and applicable law, or by an act or omission of the Owner or Designer or their respective contractors, agents and employees, provided Subcontractor shall have filed with Contractor a written claim for such extension that in accordance with Article 20, Contractor will cooperate with Subcontractor in submitting any just claim to the Owner. Subcontractor agrees to be bound by any and all determinations made under the Prime Contract by the party so authorized to make such determinations. Subcontractor shall reimburse Contractor for its reasonable costs and expenses incurred in submitting such claim on behalf of Subcontractor. Subcontractor shall not claim any extension of time, cost reimbursement, compensation or damage for delay, disruption or interference to the Work, except to the extent that Contractor is entitled to corresponding time extension, cost reimbursement, compensation or damages from the Owner under the Prime Contract. Subcontractor's recovery will be limited to the time extension and/or amount, if any, which Contractor actually receives for the Owner on account of such claim.

16.1.2 If Subcontractor's Work is delayed, disrupted or interfered with solely by Contractor, then the time for completion of the Subcontract Work shall be extended for a period equal to the reasonably estimated period of delay as reasonably determined by Contractor. No extension of time shall be granted unless a written claim therefore shall be presented to Contractor within five (5) days after commencement of the delaying event or condition. The time extensions granted to Subcontractor shall be the sole remedy and relief available to Subcontractor in the event of a delay caused by Contractor. Subcontractor expressly waives any right to claim damages or entitlement for delay, home office expenses, additional compensation, direct or indirect, acceleration, extra work resulting from such delay, extended overhead, wage escalation, overtime wage provisions, lost productivity or lost opportunity, lost profit or financial impact on Subcontractor's other projects.

16.1.3 Subcontract Time extensions will be granted only to extend the time required by the Subcontractor to perform and complete critical work elements and activities. The Subcontract Time shall not be extended for delays to parts of the Subcontract Work, whether or not changed by any Change Order, that are not on the critical path of the current Project Schedule. Concurrent Subcontract Work activities which are not critical to Subcontract Completion shall not be the subject of

additional time extensions if those work activities were performed, or could be performed, within a movable time frame concurrent with a critical path activity.

16.1.4 Failure to provide such written claims within the prescribed time period shall result in an irrevocable waiver of any such claim. No extension of time will be valid without the Contractor's written consent.

16.2 Limitations on Subcontractor

Notwithstanding the foregoing, in no event shall Subcontractor be entitled to any extension of time or any damages for any delays, disruptions, or inferences caused or contributed to in any way by Subcontractor.

16.3 Delay Caused by Subcontractor

Subcontractor shall be liable for all damages, including liquidated damages if made part of this Subcontract Agreement, payable by Contractor to the Owner for delays caused in whole or in part by the Subcontractor, or Subcontractor's employees, agents, sub-subcontractors, material suppliers or any other person or entity for whose acts Subcontractor may be liable. In addition, Subcontractor shall be liable for all actual damages incurred by Contractor for delays caused in whole or in part by the Subcontractor, or Subcontractor's employees, agents, sub-subcontractors, material suppliers or any other person or entity for whose acts Subcontractor may be liable. In the event that a delay is caused by Subcontractor and another entity(s) for whose acts Subcontractor is not liable, Contractor shall have the right to reasonably apportion said damages among the responsible parties and said apportionment shall be binding on the Subcontractor.

ARTICLE 17 CHANGES TO THE WORK

17.1 Contractor Right to Make Changes

Contractor reserves the right to, at any time, make changes, additions, and/or deletions, including those required by modifications to the Prime Contract issued subsequent to the execution of this Subcontract Agreement in the Work as it may deem necessary. Any adjustment in the Subcontract Sum or the Subcontract Time shall be made by Change Order. If the Subcontractor proceeds with changed or revised Work without a fully executed Change Order, the Subcontractor does so at its own risk.

17.1.1 An adjustment in the Subcontract Sum may be established by one of the following methods:

(1) Mutual acceptance of a complete itemized lump sum;
(2) Time and materials records and a mutually acceptable fixed or percentage fee;
(3) Unit prices as indicated in the Subcontract Documents or as subsequently agreed to;
(4) Costs determined in a manner acceptable to the parties and a mutually acceptable fixed or percentage fee; or
(5) Another method provided in the Subcontract Documents.

If the parties cannot reach an agreement as to the proper method of adjustment, the Contractor may determine the method of adjustment based upon reasonable expenditures and savings.

17.1.2 An adjustment in the Subcontract Sum for overhead and profit shall be determined by the following descending order of priority:

(1) Established rates in the Prime Contract between Owner and Contractor;
(2) Established rates in the Subcontract Documents;
(3) Agreed upon rates between Contractor and Subcontractor as described in Attachment A – Scope of Work;
(4) If no rates are established, then 10% markup on Subcontractor's direct labor and 5% on materials and equipment, or 5% on sub-subcontractor's cost of work.

17.2 Change Requests

Upon receipt of an instrument to change the Work issued by the Owner, Designer, or the Contractor, Subcontractor shall review each instrument and provide to Contractor, in writing, within the time requested by Contractor, but in no event later than ten (10) days of receipt of the change instrument, a specific analysis as to the impact, if any, on the Subcontractor's Work, including any adjustment to Subcontract Time or Subcontract Sum. In support of each analysis and in order to facilitate checking the validity of the impact, Subcontractor shall submit a complete itemization of costs including labor, materials, equipment, and sub-subcontracts. Sub-Subcontractors shall provide the same supporting data and itemization as that of the Subcontractor. If requested by the Contractor, Subcontractor shall furnish further detailed records in a form satisfactory to Contractor. Failure to provide a detailed analysis of a change request within the specified time period shall constitute a waiver of Subcontractor's right to assert a subsequent claim. A change request may originate from instruments such as: Requests for Information (RFI), Architectural Supplemental Instructions (ASI), Proposal Requests (PR), Change Directives (CD or CCD), Requests for Proposal (RFP), Bulletins, and other types of instruments. In the event the Subcontract Documents provide for Construction Change Directives or similar mechanisms for changes in the Work, Subcontract shall comply with the Subcontract Documents with respect thereto.

17.3 Validity by Written Change Order

The Subcontract Sum and/or Subcontract Time may only be changed by the written Change Order from Contractor. An executed change order shall constitute a settlement and release of all claims, costs, and expenses of Subcontractor related to such change orders, including, but not limited to, all direct and indirect costs, the Project Schedule, and any and all claims as of the date of the change order. The Subcontract Sum and/or Subcontract Time adjustment shall not be included in Subcontractor's payment application until a written change order has been fully executed by both the Subcontractor and Contractor. A final Change Order shall constitute a settlement and release of all claims, known and unknown, of Subcontractor related to the Project.

17.4 Claim for Lost Profit

If any change reduces the quantity of the Subcontractor's Work, including pursuant to Article 29 or 30, Subcontractor shall not make any claim for loss of anticipated profit.

17.5 Substantiation of Adjustment

At the Contractor's request, the Subcontractor shall maintain throughout the Project for the Contractor's review and approval an appropriately itemized and substantiated accounting of the following items attributable to the Work:

(1) Labor costs, including Social Security, health, welfare, retirement and other fringe benefits and compensation as normally required and state workers' compensation insurance;
(2) Costs of materials, supplies and equipment, whether incorporated in the Subcontract Work or consumed, including transportation costs;
(3) Costs of renting machinery and equipment other than hand tools;
(4) Costs of bonds and insurance premiums, permit fees and taxes attributable to the change; and
(5) Costs of additional supervision and field office personnel services necessitated by the change.

17.6 Change Dispute

If, with respect to any change in Subcontractor's Work, Contractor and Subcontractor cannot agree upon an adjustment in Subcontract Sum or Subcontract Time, Contractor shall have the right to order the Subcontractor to proceed with the change in accordance with Contractor instructions and Subcontractor shall so proceed to carry out the changed Work and prepare and submit records to Contractor for review on a daily basis, to describe in detail all such work performed and with such detailed data as may be required by the Contractor. Any claim for adjustment to the Subcontract Sum or Subcontract Time shall be submitted in accordance with Article 20. Failure to proceed shall constitute a material breach of contract, regardless of the ultimate decision on the dispute; it being understood and agreed that any controversy between the parties shall not be deemed a basis for delay or suspension of the Work.

17.7 Contractor Signed Time and Material Record

Signature of Contractor's representatives upon any time and/or material record prepared by Subcontractor shall only signify Contractor's receipt or review of such record and shall not constitute Contractor's agreement that Subcontractor is entitled to any additional payment for such work. Subcontractor submitted time records must be accompanied by Subcontractor's actual daily time sheets signed by the Contractor's representative or the same shall be rejected.

ARTICLE 18 LOSS OR DAMAGE TO WORK

Contractor shall not be responsible for any loss or damage to Subcontractor's Work, supplies, materials, tools, equipment, appliances, or personal property, owned, rented, or used, however caused. Subcontractor assumes all risk of loss for its Work, regardless of whether Subcontractor has been paid for such Work. Unless otherwise specifically provided in this Subcontract Agreement, Contractor is not responsible for providing any protection of Subcontractor's Work or any protective service for Subcontractor's benefit.

ARTICLE 19 MECHANIC'S LIENS

Subcontractor's Duty to Discharge Liens or Claims

Provided Subcontractor is paid in accordance with the Subcontract Agreement, if any sub-subcontractor, laborer, materialmen or supplier of Subcontractor any other person directly or indirectly acting for, through or under it or any of them files or maintains a lien, stop notice, or claim against the Project or premises of the Project or any part thereof or any interests therein or any improvements thereon or against any monies due or to become due from the Owner to Contractor or from Owner to Subcontractor, for or on account of any work, labor, services, materials, supplies, equipment or other items performed or furnished for in connection with the Project, Subcontractor shall cause such liens and claims to be satisfied, removed or discharged at its own expense by bond, payment or otherwise within ten (10) days from the date of the filing of such liens or claims. Upon its failure to do so, Contractor shall have the right, in addition to all other rights and remedies provided under this Subcontract Agreement and the Subcontract Documents, or by law, to cause such liens or claims to be satisfied, removed or discharged by whatever means the Owner or Contractor chooses at the entire cost and expense of Subcontractor (such cost and expense to include attorney's fees and disbursements). The Contractor shall be entitled to withhold funds on any other project to satisfy lien or claims in the event the funds retained or withheld on this Project are insufficient to satisfy lien claims for which the Subcontractor is responsible under this Article. Subcontractor shall defend, indemnify, protect and hold harmless the Owner or Contractor from and against any and all such liens and claims and actions brought or judgments rendered thereon, and from and against any and all loss, damages, liability, costs and expenses, including reasonable attorney's fees and disbursements, which Contractor and/or Owner may sustain or incur in connection therewith.

ARTICLE 20 CLAIMS

20.1 Obligation to Continue Work

Regardless of any claims or disputes, or any action taken or to be taken under this Subcontract Agreement with respect to such claims or disputes, whether for an extension of time or for additional compensation or otherwise, Subcontractor at all times shall proceed diligently with the prosecution of its Work.

20.2 Condition Precedent to Subcontractor's Right to Submit a Claim

Subcontractor's shall be in complete compliance with its Subcontract Agreement obligations, including but not limited to, the Subcontract Documents, schedule, billing, quality, safety, contract documentation, as a condition precedent to Subcontractor's right to submit a claim, whether of an extension of time or for additional compensation or otherwise. Upon receipt of a claim, Contractor shall promptly notify Subcontractor if, in Contractor's reasonable discretion, Subcontractor is not in compliance with its Subcontract Agreement. If Subcontractor is not in compliance with its Subcontract Agreement obligations, Contractor shall have no obligation to review, consider or submit a claim until Subcontractor remedies all issues set forth in Contractor's notification to Subcontractor.

20.3 When Contractor Can Seek Recovery from the Owner

If Subcontractor asserts a claim for damages under circumstances that entitle Contractor to make a claim for damages against the Owner under the Prime Contract, Subcontractor shall file with Contractor a written claim that meets the requirements of this Article 20 and is in the form required by the Prime Contract for claims by Contractor against Owner no later than five (5) days prior to the time when Contractor is required to file such claim with the Owner. If no specific deadline for claims is contained in the Prime Contract, the Subcontractor shall submit such claim within fourteen (14) days of the commencement of the event allegedly giving rise to the claim.

20.4 When Contractor Cannot Seek Recovery from Owner

If Subcontractor asserts a claim for alleged damages which is prohibited by the Subcontract Documents, or asserts such claim under circumstances that do not entitle Contractor to make a claim for such damages against the Owner under the Prime Contract, upon written notice from Contractor, Subcontractor shall withdraw the claim.

20.5 Preparation of Claims

With respect to any claim submitted by Subcontractor, Subcontractor shall prepare the claim in writing and in a format acceptable to Contractor. At a minimum, the claim shall include detailed information concerning the alleged claim-causing event, Subcontractor's damages which allegedly resulted from the event, how the event allegedly caused such damages, and steps allegedly taken by Subcontractor to mitigate the extent of its alleged damages. The claim shall separately list each type of damage allegedly incurred (but in no event damages barred or waived by the Subcontract Documents or this Subcontract Agreement) and give the most accurate estimate possible of the amount for each type of alleged damage. Upon request by Contractor, Subcontractor shall provide any other information concerning the claim. By submitting a claim, Subcontractor grants Contractor the right to examine or audit all of Subcontractor's accounting records, job records, payroll records and other records and documents which may have any bearing on the claim.

20.6 Waiver of Claims

Failure by Subcontractor to deliver a claim for alleged damages to Contractor within the time limits set forth in this Article 20 and/or to provide the required damage amounts and other specific information and supporting documentation as determined by Contractor, shall constitute a waiver and estoppel of Subcontractor's rights with respect to such claim for alleged damages.

20.7 Subcontractor Cooperation

Subcontractor shall cooperate in the prosecution of claims filed by Subcontractor, and shall reimburse Contractor for all expenses and costs incurred by Contractor in connection with the preparation and prosecution of such claims against Owner or others who may be responsible, including without limitation, costs of litigation, arbitration or alternative dispute resolution proceedings and reasonable attorney's fees and disbursements. Nothing in this Article shall require Contractor to assert any claim against the Owner on Subcontractor's behalf which, in Contractor's reasonable judgment, is fraudulent, contrary to law, barred by the Subcontract Agreement, the Subcontract Documents or the Prime Contract or made by Subcontractor in bad faith.

20.8 Claims Against Contractor Arising from Subcontractor's Work

If the Owner or a third party brings a claim against Contractor and such claim arises directly, or indirectly, in whole or in part from Subcontractor's Work or other involvement in the Project, Subcontractor shall cooperate with Contractor and its counsel in the defense of such claim; provide, at Subcontractor's expense, all witnesses, expert testimony, documents and other assistance Contractor reasonably believes necessary for such defense; and indemnify and hold Contractor harmless from the cost of any judgment or settlement of such claim, Contractor's reasonable costs in responding to the claim, and Contractor's reasonable attorneys' fees and disbursements.

20.9 Subcontractor Bound by Claims Procedures

Subcontractor expressly consents to be bound to Contractor to the same degree and manner that Contractor is bound to the Owner by all decisions and determinations made in accordance with any procedure for the resolution of claims provided in the Prime Contract. The provisions of this Article shall be binding upon Subcontractor, whether or not Subcontractor records or files a mechanic's lien, stop work notice, action against any bond posted by Contractor, or files suit thereon. Subcontractor acknowledges that this Article waives or limits rights it otherwise would have in connection with such liens, stop notices or bonds.

20.10 Waiver of Consequential Damages

The Contractor and Subcontractor waive claims against each other for consequential damages arising out of or relating to this Subcontract Agreement, including without limitation, any consequential damages arising or relating to this Subcontract Agreement. In the event the Prime Contract does not contain a waiver of consequential damages, then Contractor may make a claim against Subcontractor, but only to the extent a claim is made against Contractor for Owner's damages.

ARTICLE 21 PERMITS AND COMPLIANCE WITH LAWS

The Subcontractor shall give notices and comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on performance of the Work of this Subcontract Agreement. Unless specifically excluded in Attachment A – Scope of Work, the Subcontractor shall secure and pay for permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Subcontractor's Work whether or not specifically mentioned or provided by this Subcontract Agreement or the Subcontract Documents without additional charge or expense to the Contractor. The Subcontractor shall be responsible for, and correct, at its own cost and expense, any violations thereof resulting from or in connection with the performance of its Work. The Subcontractor shall at any time, upon demand, furnish such proof as the Contractor may require showing such compliance and/or the correction of such violations. The Subcontractor shall defend, hold harmless and indemnify Contractor from and against any and all loss, injury, claims, actions, proceedings, liability, damages, fines, penalties, costs and expenses, including legal fees and disbursements, caused or occasioned directly or indirectly by the Subcontractor's failure to comply with any of said laws, statutes, ordinances, codes, rules and regulations, and orders or to correct such violations.

ARTICLE 22 LABOR RELATIONS

22.1 Jurisdictional Disputes

If any item of the Subcontract Work becomes the subject of a jurisdictional dispute as to the employees or craft used for such Work, Subcontractor shall lawfully resolve such dispute and if arbitrated, abide by the decision, holding the Contractor and Owner free of involvement in the dispute, and if time is lost by the dispute, an extension of time shall be considered only pursuant to this Subcontract Agreement, but only to the extent allowed by the Owner under the Prime Contract, provided a claim is submitted in accordance with Article 20 of this Subcontract Agreement.

22.2 Wage Scale Determinations

Subcontractor will pay not less than the wage scale and fringe benefits, if any, required by the Subcontract Documents or, if applicable, prevailing wage or common wage determinations, Federal Davis Bacon wage determinations, or collective bargaining agreements to which Subcontractor is signatory. Subcontractor will comply with all applicable wage laws, statutes and regulations. On projects with wage scale requirements or if requested by Contractor, Subcontractor shall submit certified copies of payrolls with each payment application or more frequent as requested by Contractor.

22.3 Control of Employees

Subcontractor shall maintain control over all its employees, sub-subcontractors, suppliers and others for whom Subcontractor is responsible. Subcontractor shall remove or cause to be removed from the Project any person or entity for whom Subcontractor is responsible who is determined by the Owner, Designer, or Contractor to be detrimental to the Project. Subcontractor shall not employ any person who wrongfully

causes, or who is likely to wrongfully cause, strikes, work stoppages or other actions detrimental to the Project.

22.4 Strike

In the event of a strike, picketing or other action resulting from Subcontractor's Work, after forty-eight (48) hours notice to Subcontractor, Contractor may take any lawful steps necessary to complete Subcontractor's Work. Subcontractor shall take all necessary action to ensure harmonious labor relations, including compliance of all labor agreements and jurisdictional decisions. If Contractor establishes a gate for use by Subcontractor, its employees, sub-subcontractors, materialman, suppliers, and agents of Subcontractor shall use such gate until further notice from Contractor.

22.5 Failure to Comply

If Subcontractor fails to comply with this Article, upon written notice of such non-compliance from Contractor, Subcontractor shall commence to cure such non-compliance within twenty-four (24) hours, and shall achieve compliance within three (3) days of receipt of written notice. Any failure by Subcontractor to do so after receipt of written notice to comply shall constitute a material breach of this Subcontract Agreement and Contractor shall have the right to terminate this Subcontract Agreement for cause.

ARTICLE 23 EQUAL OPPORTUNITY, AFFIRMATIVE ACTION, AND ADA

23.1 Non Discrimination

Subcontractor at its own expense, shall conform to the nondiscrimination and affirmative active policies and plans required by this Subcontract Agreement, the Subcontract Documents and with all laws applicable to the Project.

23.2 Federal Law

Subcontractor shall, at its own expense, conform and comply with all Federal laws which apply to the Project, including but not limited to and unless exempted, Equal Employment Opportunity Clause, the Civil Rights Act of 1991, the American with Disabilities Act and affirmative action requirements, and Federal Acquisition Regulation.

23.3 Immigration Law

Subcontractor hereby represents warrants and covenants that Subcontractor has:

(1) Complied, and shall at all times during performance of this Subcontract Agreement, comply in all respects with all applicable immigration laws, statutes, rules, codes, orders and regulations, including, but not limited to, the Immigration Reform Control Act of 1986, as amended, and the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, as amended, and any successor statutes thereto;

(2) Properly maintained, and shall at all times during performance of this Subcontract Agreement properly maintain, all records required by the Department of Homeland Security (the "DHS"), including, but not limited to, the completion and maintenance of the Form I-9 for each of Subcontractor's employees; and

(3) Responded, and shall at all time during performance of this Agreement respond, in a timely fashion to any inspection requests related to such I-9 Forms. During performance of this Agreement, Subcontractor shall, and shall cause its directors, officers, managers, agents and employees to, fully cooperate in all respects with any audit, inquiry, inspection or investigation that may be conducted by the DHS of Subcontractor or any of its employees.

23.4 Reporting

Subcontractor shall furnish all information and reports required by this Subcontract Agreement, the Subcontract Documents, and applicable laws. Subcontractor shall permit access to records and accounts for the purpose of investigation to ascertain such compliance. Unless exempted by law, Subcontractor will include the requirements of this Article in every sub-subcontract or purchase order so that it is binding upon each sub-subcontractor or supplier.

23.5 ADA Compliance

In the event the Subcontractor believes it necessary to modify its sequence of Work, the work environment, or means and methods to comply with the applicable requirements of the Americans With Disabilities Act (ADA), the Subcontractor shall notify Contractor in writing of proposed modifications and allow Contractor a reasonable time to review the request and seek written approval of the Owner and/or Designer. All costs of the proposed modifications shall be borne by the Subcontractor, including impact costs to other subcontractors or other parts of the Project. No modifications shall be made until the Contractor has consented in writing. Nothing herein shall be construed to make Contractor or Subcontractor responsible for conformance of the Designer's Design to ADA requirements.

23.6 Failure to Comply

If Subcontractor, its employees, sub-subcontractors, suppliers or any other person or entity responsible to Subcontractor fails to comply with any applicable law or requirement of this Subcontract Agreement or the Subcontract Documents, upon written notice of such non-compliance from Contractor, Subcontractor shall commence to cure such non-compliance within twenty-four (24) hours, and shall achieve compliance within three (3) days of receipt of written notice. Any failure by Subcontractor to do so after receipt of written notice to comply shall constitute a material breach of this Subcontract Agreement and Contractor shall have the right to terminate this Subcontract Agreement for cause.

ARTICLE 24 SAFETY

24.1 Conformance

Subcontractor shall at its own expense, comply with all manufacturer's literature, safety signage and laws, statutes, codes, rules and regulations, lawful orders and/or ordinances promulgated by any governmental authority, including without limitation, the applicable requirements of the Occupational Safety and Health Act of 1970, and the Construction Safety Act of 1969. Subcontractor shall take all precautions which are necessary to protect against any conditions created during or caused by its Work which will involve any risk of bodily harm to persons or risk of damage to any property. Subcontractor shall continuously inspect its Work and the materials and equipment which Subcontractor brings on the Project site to discover and determine any such conditions which affect the safety and health of employees. Subcontractor shall be solely responsible for discovering and correcting any conditions.

24.2 Use of Power-operated Equipment for Hoisting

Subcontractor and any of its sub-subcontractors, vendors, suppliers utilizing power-operated equipment that can hoist, lower and horizontally move a suspended load, as set forth in 29 C.F.R. 1926.1400 shall comply with OSHA Crane and Derricks Subpart CC. In addition, Subcontractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery and other services necessary to comply with 29 C.F.R. 1926.1402 relating to ground conditions and supporting material. The subcontractor shall be deemed the Controlling Entity as that term is defined in 29 C.F.R 1926.1401.

24.3 Project Site Rules and Regulations

Subcontractor hereby acknowledges that at all times during the term of this Subcontract Agreement; it shall comply with the safety policy and the jobsite rules and regulations of the Contractor, which may be modified from time to time. Subcontractor shall take all necessary steps toward compliance and shall have sole responsibility for the safety of its employees and agents. Subcontractor shall be liable for each hazardous condition which Subcontractor either creates or controls, whether or not the persons exposed to the hazard are Subcontractor's employees or agents. Subcontractor is responsible for providing its employees and agents appropriate personnel protective equipment (PPE) for the activity being performed; at a minimum hard hats and appropriate clothing for the Project as required by Contractor.

24.4 Controlling Contractor

Subcontractor shall at all times be the controlling employer responsible for the safety programs and precautions applicable to its Work. Subcontractor shall control the activities of its employees and any other person or entity for which Subcontractor is responsible. Subcontractor shall be liable for each

hazardous condition which Subcontractor either creates or controls. Subcontractor shall also be responsible for preventing its employees and persons or entities for which it is responsible from being exposed to any hazardous or dangerous condition. In the event an action is undertaken against Contractor for violations of law as a result of conditions allegedly created or controlled by Subcontractor or its sub-subcontractors, or any other person or entity for which Subcontractor is responsible, Subcontractor shall indemnify and hold Contractor harmless from all costs and/or damages which may be assessed as the result of such action, including reasonable attorney's fees and disbursements incurred in the defense of such action.

24.5 Accident and Injury Reporting

Subcontractor shall immediately report to the Contractor any injury or near miss to an employee or agent of the Subcontractor which occurred at the Project site. Subcontractor shall deliver copies of all accident and injury reports to Contractor and any other person or entity entitled thereto by applicable law, this Subcontract Agreement or the Subcontract Documents within twenty-four (24) hours of occurrence unless any law or requirement of the Subcontract Documents requires earlier notice.

24.6 Safety Representative

Subcontractor and sub-subcontractors shall have on the Project site a designated, qualified and competent Safety Representative empowered to act on behalf of Subcontractor in all matters pertaining to safety at all times while Subcontractor's Work is being performed. Before commencing its Work, Subcontractor shall furnish to Contractor written notice of the appointment of its Safety Representative or its Sub-subcontractor's Safety Representative. Appointed Safety Representative(s) shall not be changed without written approval of Contractor. Subcontractor and its sub-tier contractors shall conduct daily (or more frequently if Work activities change) safety inspections of their Work areas and take corrective measures as warranted. If circumstances warrant such action in the Contractor's reasonable discretion, Contractor shall have the right to demand that Subcontractor provide a fulltime safety professional as Subcontractor's Safety Representative, who sole responsibility shall be to monitor the safe performance of Subcontractor's Work and matters related thereto.

24.7 Drug Testing

If required by the Subcontract Documents, by law or at Contractor's request, Contractor shall have the right to require Subcontractor and all of its sub-subcontractors to prove that all of their employees working at the Project site have satisfactorily pass a drug screening test. All costs associated with administering the drug screening tests shall be borne by the Subcontractor.

24.8 Shoring and Bracing

It is the sole responsibility of Subcontractor to furnish and install all temporary bracing and shoring required to support the Subcontractor's Work and surrounding areas during erection, exacavtion and installation, including masonry, steel, earth work, and concrete, as the case may be. All temporary bracing shall be kept in place until the Subcontractor Work is permanently secure and all permanent attachments are in place. By executing this Subcontract Agreement, Subcontractor acknowledges that it has visited, inspected, and studied the existing conditions and is satisfied as to the physical conditions thereof, and all other factors relating to its performance of the Subcontractor's Work. In addition, Subcontractor acknowledges that it has visited and inspected the Project real estate and recognizes the job conditions, project layout, staging areas, hoisting requirements, etc. of the Project.

ARTICLE 25 HAZARDOUS AND OTHER REGULATED SUBSTANCES

25.1 Compliance with Laws

The Subcontractor shall comply with all Federal, State and local laws, rules, orders and regulations concerning health, safety and the environment, including but not limited to, those of the United States Environmental Protection Agency and the Indiana Department of Environmental Management or the state environmental agency in the State where the Work is being performed, if applicable. The Subcontractor shall not place or use at the site any hazardous chemicals, regulated substance, toxic waste or similar substances except those specified by the Designer or customarily used in the construction industry, and

only then in accordance with all applicable laws or regulations. Subcontractor shall not use asbestos or polychlorinated biphenyl or materials containing those substances in the performance of the Work except with the express written permission of the Contractor, Owner, and Designer

25.2 Conditions of Use

The Subcontractor hereby agrees to comply with the provisions of the Contractor's or Owner's hazard communication policy, to inform Subcontractor's employees, agents, Sub-subcontractors and invitees as to all hazards to which they may reasonably be exposed and require the utilization of appropriate precautions with respect to protecting such individuals from hazardous substances. Subcontractor agrees to provide a Material Safety Data Sheet, "Standards for Storage" or manufacturers "Disposition Instructions" for materials and equipment used in performance of Subcontractor's Work, including providing such information from its sub-subcontractors and vendors in sufficient detail and time to permit compliance with such laws by the Contractor, other subcontractors and other employers on the Project site. In addition,

(1) If Subcontractor foresees bringing hazardous chemicals onto the site, then Subcontractor shall provide a list of all such chemicals to the Contractor, and Subcontractor shall update such list as necessary.
(2) Subcontractor shall maintain and make available at the Project site, in the Subcontractor's project office, or in the Subcontractor's on-site vehicle, current Material Safety Data Sheets for each listed chemical.
(3) Subcontractor shall ensure that appropriate personal protective equipment is available for handling each listed chemical.
(4) Subcontractor shall ensure that appropriate warning labels are attached to all incoming containers of each listed chemical.
(5) Subcontractor shall handle each listed chemical in accordance with manufacturer's recommendations and all applicable local, state and federal regulations.

25.3 Regulated Substance Disposal

Subcontractor shall not dispose of a regulated substance on the Project site. Subcontractor shall provide separate disposal receptacles to be used exclusively for the storage or temporary disposal of regulated substances. Such separate disposal receptacles must be approved by law for the particular regulated substance that will be placed in them. When storing, treating or disposing of regulated substances, Subcontractor and Subcontractor's waste hauler shall comply with all applicable laws. Subcontractor shall identify its waste haulers and provide Contractor with a copy of each manifest or other document relating to the storage, transportation and disposal of a regulated substance from the Project site.

25.4 Indemnification by Subcontractor

The Subcontractor shall indemnify the Owner and Contractor for the cost and expense the Owner and Contractor incurs, including reasonable attorney's fees for (1) remediation of a regulated material or substance brought to the site and negligently handled or stored by the Subcontractor or (2) where the Subcontractor fails to perform its obligations under this Article except to the extent that the cost and expense are due to the Contractor's sole fault or negligence.

25.5 Discovery of Regulated Substances

If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a regulated substance, hazardous material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Subcontractor, the Subcontractor shall, upon recognizing the condition, immediately stop Work in the affected area and promptly report the condition to the Contractor in writing. When the material or substance has been rendered harmless, the Subcontractor's Work in the affected area shall resume upon written agreement of the Contractor and Subcontractor.

25.6 Claims because of Regulated Substances

If Subcontractor has claims resulting from delays, disruptions or interferences because of the discovery of asbestos, polychlorinated biphenyls (PCB's) or other regulated substances, Subcontractor shall submit such claims in accordance with this Subcontract Agreement.

ARTICLE 26 NOTICES

26.1 Notices to Contractor

All notices to the Contractor shall be in writing, addressed to Contractor's Authorized Representative and delivered to its address indicated on the signature page. A copy of any such notice shall also be delivered to Contractor's job site office. Contractor's Authorized Representative shall be the Project Manager, Group Manager or Vice President who executed this Agreement, unless Subcontractor is notified otherwise in writing or herein.

26.2 Notices to Subcontractor

Except in the case of an emergency, all notices to Subcontractor shall be in writing, addressed to Subcontractor's Authorized Representative. Subcontractor's Authorized Representative shall be the person who executed this Subcontract Agreement, and the address shall be that of the home or principal office, unless Contractor is notified otherwise in writing or herein.

26.3 Delivery and Effective Date of Notices

Delivery of notices may be by hand, facsimile, overnight express courier or U.S. Mail. Copies of notices may be delivered by email. Notices shall be effective immediately upon delivery to the party to whom it is addressed.

ARTICLE 27 CORRECTION OF DEFECTIVE WORK AND INSPECTION OF WORK

27.1 Correction of Work

The Subcontractor shall within three (3) days after receipt of written notice from the Contractor, proceed to take down all portions of the Work which Contractor, Owner, or Designer have determined to be unsound, defective, improper, or in any way failing to conform to this Subcontract Agreement or the Subcontract Documents and replace the same with proper and satisfactory work and materials and make good all work damaged, or destroyed thereby, including the work of others, or as a result of unsound, defective, improper or nonconforming work or material. If the Subcontractor fails to do so, Contractor may, without prejudice to any other remedy the Contractor may have, make good such deficiencies and may deduct the reasonable cost thereof from the payments then or thereafter due the Subcontractor. If the cost incurred by the Contractor exceeds the unpaid balance of the Subcontract Sum, the Subcontractor shall pay the difference to the Contractor within ten (10) days of demand.

27.2 Uncovering of Work

If requested in writing by the Contractor, the Subcontractor shall uncover any portion of the Subcontract Work which has been covered by the Subcontractor for inspection by the Contractor, Owner, or Designer to determine if Work is unsound, defective, improper, or in any way failing to conform to this Subcontract Agreement or the Subcontract Documents whether or not the Contractor, Owner, or Designer had requested to inspect the Subcontract Work prior to it being covered. If Subcontractor uncovers Work pursuant to a directive and such Work upon inspection is found to not comply with the Subcontract Documents, the Subcontractor shall be responsible for all costs and time of uncovering, correcting, and restoring the Work so to make it conform to the Subcontract Documents. If such Work upon inspection does comply with the Subcontract Documents, the Contractor shall adjust the Subcontractor Sum by change order for the costs and time of uncovering and recovering the Work.

ARTICLE 28 WARRANTY

The Subcontractor warrants to the Contractor and Owner that materials and equipment furnished under this Subcontract Agreement will be of good quality and new unless the Subcontract Documents require or permit otherwise. The Subcontractor further warrants that the Work will conform to the requirements of the Subcontract Documents and be free from defects, except for those inherent in the quality of Work the Subcontract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Subcontractor's warranty excludes remedy for damage or defect caused by abuse, alternations to the Work not executed by the Subcontractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Contractor or Owner, the Subcontractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

28.1 Unless a later date is required by the Prime Contract, the warranty period shall commence upon the Contractor's Substantial Completion of the Project, as certified by the Owner and Designer, and shall run for a period of one (1) year unless a special or extended warranty is required by the Subcontract Documents.

28.2 If required by the Contractor, Owner or Subcontract Documents, the Subcontractor shall furnish separate guarantees for the Work or portions thereof.

28.3 Subcontractor, at its sole cost and expense, agrees to make good, to the reasonable satisfaction of the Owner, any portion of the Work which proves defective or to repair any damage to other work caused by the defect or repair thereof. If Subcontractor fails to perform in accordance with this Article within the time directed by Owner or Contractor, Contractor may perform such Work and Subcontractor agrees to reimburse Contractor its reasonable costs upon demand including ten percent (10%) for overhead and ten percent (10%) for profit.

ARTICLE 29 TERMINATION FOR CAUSE

29.1 Termination for Cause

If at any time Subcontractor:

(1) fails or refuses to supply sufficient labor, materials, tools, equipment or supervision;
(2) fails or refuses to perform the Work promptly and diligently;
(3) fails to meet the Project Schedule;
(4) causes delay, interference or stops the work of Contractor or any its subcontractors;
(5) fails or refuses to perform any of its obligations under this Subcontract Agreement or the Subcontract Documents;
(6) is in material breach of any provision of the Subcontract Agreement; or
(7) files bankruptcy or becomes insolvent or goes into liquidation (either voluntarily or under an order of a court of competent jurisdiction), or makes a general assignment for the benefit of creditors, or otherwise evidences financial incapacity;

then in any such event, each of which shall constitute a material default under this Subcontract Agreement, Contractor shall have the right, in addition to any other rights and remedies provided under this Subcontract Agreement, the Subcontract Documents or by law, after forty-eight (48) hours written notice to the Subcontractor to terminate all or any portion of Subcontractor's right to proceed under the Subcontract Agreement and to enter upon the premises and take possession, for the purpose of completing that portion of the Work affected by such termination, of all Subcontractor's records, materials, tools and equipment and all other items relating to that subject portion of Subcontractor's Work on the Project, including materials stored off-site for use in completing Subcontractor's Work.

29.1.1 In case of such termination of the Subcontractor, the Contractor may finish the Subcontractor's Work by whatever method the Contractor may deem expedient. If the unpaid balance of the Subcontract Sum exceeds the expense of finishing the Subcontractor's Work and other damages

incurred by the Contractor and not expressly waived, such excess shall be paid to the Subcontractor. If such expense and damages exceed such unpaid balance, the Subcontractor shall pay the difference to the Contractor.

29.1.2 In addition to the costs specified above, Contractor may deduct from the Subcontract Sum and/or otherwise recover from Subcontractor an amount sufficient to indemnify Contractor and hold Contractor harmless from any loss or liability arising out of Subcontractor's Work or other involvement in the Project, including, but not limited to, the costs of any claims by others resulting from Subcontractor's acts or omissions including an judgment or award to or settlement with the claiming party and reasonable attorneys' fees and disbursements incurred defending or resolving such claims

29.2 Termination of Owner by Contractor

In the event the Contractor terminates the Prime Contract with the Owner due to default on the part of the Owner, Subcontractor shall not be entitled to recover from Contractor more than the sum actually received by Contractor from Owner for work performed and materials, supplies and equipment furnished by Subcontractor pursuant to this Subcontract Agreement. The rights and remedies of Contractor, other subcontractors and third parties shall be taken into consideration in Contractor's determination of Subcontractor's pro rata share of any payments received by Contractor from the Owner.

29.3 Termination of Contractor by Owner

In the event the Owner terminates the Prime Contract with the Contractor, Contractor may deliver a termination notice to Subcontractor, whereupon Subcontractor shall follow Contractor's directions, including, but not limited to, a direction to stop work and Contractor's termination of Subcontractor's Work pursuant to Article 30. If Owner elects to assume Contractor's rights and obligations under this Subcontract Agreement, Subcontractor shall perform the remainder of its duties under this Subcontract Agreement and Subcontract Documents for the Owner, and will look solely to the Owner for further payments and performance of all outstanding obligations which Contractor would have owed to Subcontractor under this Subcontract Agreement.

29.4 Receipt of Payment

The right of Subcontractor to payment from Contractor for any termination shall be subject to the provisions of this Subcontract Agreement and the Subcontract Documents. In no event shall Subcontractor be entitled to recover unexpended overhead, unearned profit or damages as the result of any such termination. Settlement of termination costs shall constitute a settlement and release of any and all claims, known or unknown, of the Subcontractor arising as a result of any such termination.

ARTICLE 30 TERMINATION FOR CONVENIENCE

30.1 Contractor Right to Terminate

The performance of the Work may be terminated at any time in whole, or from time to time in part, by Contractor for its convenience. Any such termination shall be effected by delivery to Subcontractor of a written notice of termination specifying the extent to which performance of the work is terminated and the date upon which termination becomes effective.

30.2 Subcontractor's Obligations

After receipt of a notice of termination, whether for cause or convenience, and except as otherwise directed by Contractor, Subcontractor shall, in good faith, and to the best of its ability, do all things necessary, in the light of such notice and of such requests in implementation thereof as Contractor may make, to assure the efficient, proper closeout of the terminated work (including the protection of Owner's property). Among other things, the Subcontractor shall:

(1) cease operations as directed by the Contractor in the notice;
(2) take actions necessary, or that the Contractor may direct, for the protection and preservation of the Work; and

(3) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing sub-subcontracts and purchase orders and enter into no further sub-subcontracts and purchase orders;
(4) as directed by the Contractor, transfer title and deliver to the Contractor any fabricated or unfabricated parts, work in progress, completed work, supplies or other material produced or acquired for the Subcontract Work terminated and completed or partially completed plans, drawings, information, and other property the, if the Subcontract Agreement had been completed, the Subcontractor would have been required to furnish to the Contractor;
(5) with the approval of Contractor, settle all outstanding liabilities and all claims arising out of such termination or orders and subcontracts; and
(6) take any other reasonable action as directed by the Contractor.

30.3 Equitable Adjustment

In the event of such termination, there shall be an equitable reduction of the Subcontract Sum to reflect the reduction in the Work, and no cost incurred after the effective date of the notice of termination shall be reimbursable unless it relates to carrying out the un-terminated portion of the Work, or taking required closeout measures.

30.4 Right to Convert to Termination for Convenience

In the event any termination of Subcontractor for cause under this Subcontract Agreement is later determined to have been improper, the termination shall be automatically converted to a termination for convenience, and the Subcontractor shall be limited in its recovery strictly to the compensation provided for in this Article.

ARTICLE 31 INDEMNIFICATION

31.1 Indemnification Obligations

To the fullest extent permitted by law of the State where the Project is located, the Subcontractor shall defend, indemnify and hold harmless the Owner, Contractor, Designer, and their respective agents and employees ("Indemnified Parties") of any of them from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Subcontractor's Work under this Subcontract Agreement, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Article. Subcontractor shall not be required to indemnify Contractor for its sole negligence.

31.1.1 In claims against any person or entity indemnified under this Article, by an employee of the Subcontractor, the Subcontractor's sub-subcontractors, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Article shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the Subcontractor or the Subcontractor's sub-subcontractors under workers' compensation acts, disability benefit acts or other employee benefit acts.

31.1.2 The obligations for defense and indemnification herein required are severable. In the event the laws (whether by statute or court decision) of the State where the Project is located provide that contracts or provisions for indemnification of a party's own negligence are against public policy or are otherwise void and unenforceable, the obligation for Subcontractor to defend, indemnify and hold harmless the Indemnified Parties against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the Subcontractor's Work and due or alleged to be due by the negligent acts or omissions of the Subcontractor, sub-subcontractor, anyone employed by them or anyone for whose acts they may be liable, will be deemed to be a severable distinct obligation.

31.2 Condition Precedent to Payment

The full and faithful performance of Subcontractor's defense and indemnification obligations is a condition precedent to Subcontractor's right to receive payment under this Subcontract Agreement.

ARTICLE 32 CHOICE OF LAW AND DISPUTE RESOLUTION

32.1 Choice of Law

This Subcontract Agreement shall be governed by and construed in accordance with the laws of the place of the Project.

32.2 Dispute Resolution

If Subcontractor has a dispute or claim against regarding the interpretation or application of any provision of this Subcontract Agreement or the breach thereof, Subcontractor shall, within seven (7) days after such dispute arises, submit its claim, in writing, to Contractor, attaching all supporting documentation. Subcontractor shall provide such additional documents or information as requested by Contactor. Contractor shall respond within a reasonable time period, not to exceed thirty (30) days after receipt of Subcontractor's written claim and additionally requested supporting documentation or information, if any. In the event Subcontractor objects or does not agree to Contractor's response, the parties shall meet promptly and attempt to resolve the dispute. If the Contractor and Subcontractor are unable to thereby resolve the dispute, the parties shall mediate the dispute as set forth below. As a condition precedent to any party initiating mediation, the Subcontractor must first comply fully with the provisions set forth herein. Nothing in this paragraph 32.2 shall be construed to change or extend any time period set forth in this Subcontract Agreement in which Subcontractor is seeking an adjustment in the Subcontract Sum or Subcontract Time.

32.3 Mediation

32.3.1 - Any claim arising out of or related to this Subcontract Agreement, except those waived in this Subcontract Agreement, shall be subject to mediation as a condition precedent to binding dispute resolution.

32.3.2 - The parties shall endeavor to resolve their claims by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the Indiana Rules for Alternative Dispute Resolution in effect on the date of the Agreement. For work performed outside of Indiana, mediation shall be in accordance with the Construction Industry Mediation Procedure of the American Arbitration Association. A request for mediation shall be made in writing, delivered to the other party to this Subcontract Agreement.

32.3.3 - The parties shall share the mediator's fee equally. Each party shall pay its own attorney's fees associated with mediation. The mediation shall be held in Indianapolis, Indiana or in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

32.4 Dispute Resolution with the Owner

In the event that 1) Subcontractor requests that Contractor to pursue a claim pursuant to Paragraphs 20.2 – 20.8 against the Owner for any claim that is rejected by the Owner or otherwise deemed unacceptable by Subcontractor and Contractor consents to pursue such claim on Subcontractor's behalf or 2) Owner asserts a claim against Contractor in which Subcontractor's Work is at issue, Subcontractor shall be bound by the dispute resolution procedures in the Prime Contract and Contractor may join Subcontractor into any such proceeding. The Subcontractor shall furnish all notices and information within the time required under the Prime Contract to enable the Contractor to timely assert a claim or defense of the Subcontractor. Subcontractor shall be bound by the outcome of the dispute resolution procedure.

Contractor shall pay the Subcontractor its proportionate share of any recovery due the Subcontractor on the basis of the ratio of the Subcontractor' claims to other claims that are asserted, less the expenses

and attorney's fees of the procedure. Receipt by Contractor of a payment from the Owner or other responsible party shall be a condition precedent to the obligation of the Contractor to pay the Subcontractor for any work, claim or damage. The Subcontractor shall pay the Contractor its proportionate share of any recovery by the Owner against the Contractor involving the Subcontractor's Work or materials and pay the Contractor its proportionate share of the expenses and attorney's fees incurred in defending such Owner's claim against the Contractor.

If the Prime Contract does not provide for a dispute resolution procedure, or if, in the sole judgment of the Contractor, the controversy, dispute or claim is principally between the Contractor and Subcontractor, then the claim shall be determined in accordance with Paragraphs 32.2, 32.3 and 32.5, provided however, in the event of a dispute between the Owner and Contractor, or Contractor and any other person or entity in which Subcontractor's Work is at issue, Contractor may instead join Subcontractor into any such proceeding in which the dispute is pending.

The Subcontractor agrees to continue performance of the Subcontract Work and shall proceed in accordance with the directives of the Contractor in the event of any dispute or claim, regardless as to whether or not a claim has been asserted in accordance with Article 32. Failure to so proceed shall constitute a material breach of contract, regardless of the ultimate decision on the dispute. It being understood and agreed that any controversy between the parties shall not be deemed a basis to delay or suspend the Work, unless directed otherwise by the Contractor.

The Subcontractor agrees to indemnify the Contractor for any and all costs, including attorney's fees, of defending a claim by the Owner or any other party in the dispute resolution procedure if such claim relates to or arises out of the Subcontract Agreement, the Subcontractor's Work or from the Subcontractor's failure to prosecute its work.

32.5 Arbitration

Any claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered privately in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Subcontract Agreement, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all claims then known to that party on which arbitration is permitted to be demanded.

The parties agree that any arbitration shall be held in Indianapolis, Indiana, or the place of the Project, unless an alternative location is mutually agreed upon. The parties shall share the arbitrator's fees and other costs associated with the arbitration unless otherwise determined by the arbitrators in accordance with this Subcontract Agreement.

Any dispute involving more than $500,000 shall be heard by an arbitrator panel consisting of three (3) arbitrators, at least one of whom shall be an attorney. Each party shall select one arbitrator and the third shall be selected by the arbitrators selected by the parties.

The parties shall exchange documents and be permitted to take not more than three (3) depositions, unless the parties mutually agree otherwise.

A demand for arbitration shall not be made after the date when the institution of legal or equitable proceedings based on the claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the claim.

Either party may consolidate an arbitration conducted under this Subcontract Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of

law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

Either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a claim not described in the written consent.

The Contractor and Subcontractor grant to any person or entity made a party to an arbitration conducted under this Subcontract Agreement, whether by joinder or consolidation, the same rights of joinder and consolidation as the Contractor and Subcontractor under this Subcontract Agreement.

This agreement to arbitrate and any other written agreement to arbitrate with an additional person or persons referred to herein shall be specifically enforceable under applicable law in any court having jurisdiction thereof. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

The parties shall be bound to and responsible for the award for interest, arbitration fees, costs and attorney's fees, as determined by the arbitrators.

ARTICLE 33 MISCELLANEOUS PROVISIONS

33.1 Invalidity of Any Provision

If any part of the Subcontract Agreement is declared invalid by a court of competent jurisdiction or by a valid arbitration proceeding, the part held invalid shall not in any matter affect the validity of the remaining parts of the Subcontract Agreement and all such remaining parts shall be held to be the full agreement of the parties.

33.2 Neutral Interpretation

The form of Subcontract Agreement has been prepared initially by Contractor. However, in the event of any dispute over its meaning or application, the Subcontract Agreement shall be interpreted fairly and reasonably and neither more strongly for, nor more strongly against, either party.

33.3 Relationships

Except as expressly provided herein, nothing contained in this Subcontract Agreement shall create any contractual or third party beneficiary relationship between any parties other than Contractor and Subcontractor.

33.4 Attorney's Fee

If a claim between Contractor or Subcontractor is arbitrated or litigated, the arbitrator(s) or court shall award to the prevailing party all of its reasonable attorney's fees and costs or arbitration or litigation ("costs"). The prevailing party is the party prosecuting a claim if it receives as an award or judgment ("award") that is more than fifty percent (50%) of its claim as that claim is stated at the commencement of the arbitration hearing or litigation trial ("total claim"). If the prosecuting party receives an award that is fifty percent (50%) or less of it total claim, it is not the prevailing party and shall not be awarded any attorney fees or costs. If the prosecuting party receives no award, then the defending party is the prevailing party and shall be awarded its attorney fees and costs. If counterclaims are arbitrated or litigated, the same definition of prevailing party shall apply to award on the counterclaim. However, if both parties meet the definition of prevailing party as to their respective claim or counterclaim prior to offsetting the respective awards against one another, then the respective awards will be offset against one another leaving a positive balance as to the larger award. If that positive balance is more than fifty percent (50%) of the total claim of the party receiving the larger award, then that party shall be the prevailing party and be awarded its attorney fees and costs.

The Contractor and Subcontractor agree that, other than that an attorney's fee clause is included in the Subcontract Agreement, this attorney fee clause is strictly confidential and shall be redacted from any copies of the Subcontract Agreement provided to the arbitrator(s) or court and not disclosed to the arbitrator(s) or court until after an award is entered and then only for the purpose of a determination of attorney fees and costs as a bifurcated issue. If a party discloses the terms of this Paragraph to the arbitrator(s) or court prior to a the entry of an award, then the disclosing party shall forfeit all right to attorney fees and costs even if it is a prevailing party and the non-disclosing party shall be awarded one half of its attorneys fees it if is not the prevailing party and all if its attorneys fees if it is a prevailing party.

33.5 Assignment by the Subcontractor

Without the Contractor's written consent, Subcontractor shall not assign the Work of this Subcontract Agreement, sub-subcontract the whole of this Subcontract Agreement, or assign any right to payment. In the event Subcontractor seeks to further assign this Subcontract Agreement, it shall adhere to the following:

For Work where the Contractor has agreed to accept a Contingent Assignment, Subcontractor shall enter into written agreements by which the Subcontractor, sub-subcontractor, supplier, vendor, lessor, or materialman (collectively known as "sub-vendors") are mutually bound, to the extent of the Work to be performed, assuming toward each other all obligations and responsibilities that the Contractor and Subcontractor assume toward each other and having the benefit of all rights, remedies and redress against the other that the Contractor and Subcontractor have by virtue of the provisions of this Subcontract Agreement. The following items shall apply to each sub-vendor executing the Contingent Assignment:

(1) Each sub-vendor shall execute the Contingent Assignment form agreeing that it will continue and complete the performance of its contractual obligations on behalf of the Contractor at no additional cost to the Contractor beyond the cost stated in its contract with the Subcontractor;
(2) Upon written notice by Contractor to any sub-vendor, of an occurrence of default by Subcontractor under this Subcontract Agreement, the Contingent Assignment to Contractor shall become effective and the appropriate party shall immediately undertake to continue performance as directed by the Contractor;
(3) All prior payments paid to sub-vendor or to the Subcontractor for the Work of a sub-vendor shall be credited toward any sums due pursuant to the terms of the Contingent Assignment. Contractor shall not be obligated to perform or discharge any past obligation, duty or liability of Subcontractor under any contract or agreement, by reason of existence of or exercise of the Contingent Assignment; and
(4) Subcontractor shall include this provision of this Subcontract Agreement in all its sub-subcontracts, purchase orders and other contracts and agreements relative to Subcontractor's Work.

The form of Subcontract Agreement has been prepared initially by Contractor. However, in the event of any dispute over its meaning or application, the Subcontract Agreement shall be interpreted fairly and reasonably and neither more strongly for, nor more strongly against, either party.

33.6 No Oral Modifications

This Subcontract Agreement may be amended only by a written document signed on behalf of Contractor and Subcontractor.

33.7 Paragraph Headings

The paragraph headings used in this Subcontract Agreement are inserted for reference and convenience only and in no way limit or define any provision herein.

33.8 Merger of Previous Proposals

All previous proposals, promises and understandings relating to the subject matter of this Subcontract Agreement, whether written or oral, are null and void and have been replaced by the terms and conditions contained in this Subcontract Agreement.

33.9 Waiver

The waiver by Contractor of any breach or default of this Subcontract Agreement by Subcontractor shall not be construed as a waiver of any other breach or default of the same or any other terms or conditions of this Subcontract Agreement. Forbearance from demanding strict compliance with any term or provision of this Subcontract Agreement shall not operate as a waiver and shall not prevent Contractor from subsequently demanding strict compliance therewith.

[END OF SUBCONTRACT – ATTACHMENTS TO FOLLOW]

SHIEL SEXTON

Subcontract
Attachment A
Scope of Work

Subcontractor Name: XXXXXXXXXXXXXXXXXXX

Project Name: XXXXXXXXXXXXX

Scope of Work (The intent of listing scope items is for ease of major scope identification and is NOT intended to limit the requirements of the Subcontract Documents or to be a complete listing of all items to complete the Subcontract Work or for complete systems):

Contractor ***(Initials and Date)*** _____

Subcontractor ***(Initials and Date)*** _____

902 N. CAPITOL AVE. INDIANAPOLIS,IN 46204
(317) 423-6000(317) 423-6300

SHIEL SEXTON

Subcontract
Attachment B
Schedule

See attached Project Schedule

902 N. CAPITOL AVE. INDIANAPOLIS,IN 46204
(317) 423-6000(317) 423-6300

SHIEL SEXTON

Subcontract
Attachment C
Document Log

See attached Document Log

902 N. CAPITOL AVE. INDIANAPOLIS,IN 46204
(317) 423-6000(317) 423-6300

SHIEL SEXTON

Subcontract
Attachment D
Billing Procedures

The following is a summary of billings procedures to ensure Subcontractor's prompt payment:

- This Project is titled: XXXXXXXXX and the SHIEL SEXTON COMPANY Project Number is: XXXXX-**.**
- Subcontractor Pay Applications must be invoiced on an AIA document (AIA G702 & G703)
- A completed lien waiver must accompany every Pay Application (See Lien Waiver Attachment D.1 and D.2).
- At no time should Subcontractor invoice for change orders unless Subcontractor is in receipt of a fully executed Change Order from SHIEL SEXTON COMPANY. Assorted invoices for extra work, which are not incorporated in an executed Change Order, will not be processed. Fax or email all assorted change requests and detailed pricing to the Project Manager for review and consideration. Individual executed Change Orders must be listed item-by- item on the AIA G703 and not indicated as one lump sum.
- All executed Subcontract Agreements and Change Orders must be signed and returned to SHIEL SEXTON COMPANY prior to any payments being released.
- Subcontractor's legal company name, address, and Project Number shall be listed on the G702 & G703 of the AIA document.
- Email to XXXXXXXXX@shielsexton.com a "Pencil Copy" of the Pay Application to the Project Manager by the 20th of each month if required. The Project Manager will review and notify Subcontractor of any requested revisions. Email, fax, or mail approved Pay Application to Accounting by noon on the 24th of the month.
- Attach a summary of the total man-hours worked on the project for the pay period.
- All Pay Applications must be received by the SHIEL SEXTON COMPANY Accounting Department by **NOON on the 24th** of the month. Any Pay Applications received after this date and time will be considered late and will not be processed until the following month.
- If the 24th falls on a Saturday then the pay requests are due at Noon on the 23rd. If the 24th falls on a Sunday then the pay request are due at Noon on the 25th.
- There are early cut off dates in November, December and February. A letter will be issued prior to those dates informing you of the requirement.
- Some contract scopes may be eligible for payment of materials store off the project site when allowed by the Owner and agreed to by the Shiel Sexton Project Manager. Subcontractors who are preapproved for payment of materials stored offsite, should use Attachment D.3

Please **DO NOT** turn in any Pay Applications to the Project Manager or Superintendent at the job site.

Please **DO** call with any questions you may have. Contact phone number as follows: (317) 423-6000

Send only one original Pay Application by either mail to the address below or emailed to sscap@shielsexton.com

SHIEL SEXTON COMPANY
ATTN: Accounting - XXXXXX
902 N. Capitol Ave.
Indianapolis, IN 46204

Attachment D.1
SHIEL SEXTON COMPANY
SUBCONTRACTOR CONDITIONAL INTERIM WAIVER AND RELEASE OF LIENS AND CLAIMS

Whereas, XXXXXXXXXXXXXXXXXXXXXXX ("Subcontractor") who has furnished certain materials, equipment, services, and/or labor pursuant to a subcontract agreement or purchase order with SHIEL SEXTON COMPANY ("Contractor") for the project known as XXXXXXXXXXXXXXXXXXXXXXX ("Project"), which is located at XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX (collectively referred to as the "Property"), and is owned by XXXXXXXXXXXXXXXXXXXXXXXXXXX ("Owner").

Upon receipt of the sum of $_____ [insert sum requested in current pay application] ("**Current Payment**"), the Subcontractor waives and releases any and all liens or claims of liens and all claims, demands, actions, causes of action or other rights against the Contractor, Owner and the Property or any right against any labor and/or material payment bond it has or may have through the date of _____ ,20____, [insert **last date** of work performed that corresponds to **Current Payment**] ("**Current Date**") and reserving those rights and liens that the Subcontractor might have in any retainage on account of materials, equipment, services and/or labor furnished by the undersigned to or on account of the Contractor. Further, the Subcontractor covenants and agrees to apply sums received as the Current Payment first, and in no event later than 7 days after the receipt of the Current Payment, to pay all employees, laborers, materialmen, sub-subcontractors and sub-subconsultants employed by the undersigned in connection with the Project and all bills or indebtedness incurred through the Current Date for materials, equipment, services, and/or labor, benefit funds, trade unions, and taxes, furnished by such parties to the undersigned in connection with the execution of the Subcontractor's work on the Project (collectively referred to as "Lower Tier Payment Obligations").

The Subcontractor further represents that all Lower Tier Payment Obligations incurred through the date of _____, 20___, [insert 1) the **last date** of work performed that corresponds to the **last** pay application **or** 2) the **Current Date** if Subcontractor has paid all Lower Tier Payment Obligations through the Current Date] have been fully paid and that no obligation, legal, equitable or otherwise, are owed by the Subcontractor to such parties. Subcontractor further agrees to indemnify, defend and hold harmless the Owner and the Contractor for and against any and all liabilities, losses, costs, expenses and fees, including reasonable attorney's fees and court costs by reason of claims or liens for any labor, materials or services furnished for the Project.

The Subcontractor acknowledges that this Waiver and Release is given to induce the payment recited above, and that this Waiver and Release is in substantial conformance with the requirements of applicable law.

The undersigned executing this Waiver and Release hereby represents and warrants that he/she has full power and authority to bind the Subcontractor to the terms hereof and affirms that the foregoing is true and correct as of the date of the undersigned signature.

Applicable to Payment Request(s) No._____

(or) Invoice(s) No._____

Company XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Signed_____(SEAL)

By:_____

Title_____

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 20__.

My commission expires _____.

_____
Notary Public

SHIEL SEXTON COMPANY

FINAL WAIVER AND RELEASE OF LIENS AND CLAIMS

STATE OF _____
COUNTY OF _____

Whereas, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ("Subcontractor") who has furnished certain materials, equipment, services, and/or labor pursuant to a subcontract agreement or purchase order with SHIEL SEXTON COMPANY ("Contractor") for the project known as XXXXXXXXXXXXXXXXXXXXX ("Project"), which is located at XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX (collectively referred to as the "Property"), and is owned by XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ("Owner").

Upon receipt of the sum of $_____ ("Final Payment"), the Subcontractor waives and releases any and all liens or claims of liens and all claims, demands, actions, causes of action or other rights against the Contractor, Owner and the Property or any right against any labor and/or material payment bond it has or may have through the date of _____, 20__ ("Current Date"). Further, the Subcontractor covenants and agrees to apply sums received as the Final Payment first, and in no event later than 15 days after the receipt of the Final Payment, to pay all employees, laborers, materialmen, sub-subcontractors and sub-subconsultants employed by the undersigned in connection with the Project and all bills or indebtedness incurred through the Current Date for materials, equipment, services, and/or labor and taxes, furnished by such parties to the undersigned in connection with the execution of the Subcontractor's work on the Project. Subcontractor further agrees to indemnify, defend and hold harmless the Owner and the Contractor for and against any and all liabilities, losses, costs, expenses and fees, including reasonable attorney's fees and court costs by reason of claims or liens for any labor, materials or services furnished for the Project.

Upon consideration of the sum of $_____ ("Total Contract Amount"), the Company waives and releases any and all claims, demands, actions, causes of action or other rights against the Contractor, Owner and the Property, at law, under a contract, in tort, equity or otherwise, and any and all liens or claims of liens or any right against any labor and/or material payment bond it has, may have had or may have in the future upon the foregoing described Property or in relation to the Subcontractor's performance of work on or the furnishing of equipment, services, and/or labor for the Project.

This Waiver and Release applies to all facts, acts, events, circumstances, changes, constructive or actual delays, accelerations, extra work, disruptions, interferences and the like which have occurred, or may be claimed to have occurred prior to the date of this Waiver and Release, whether or not known to the Subcontractor at the time of execution of this Waiver and Release.

The Subcontractor acknowledges that this Waiver and Release is in substantial conformity with the requirements of applicable law and shall be binding and conclusive against the Subcontractor for all purposes, subject only to payment in full of the amount set forth above.

The undersigned executing this Waiver and Release hereby represents and warrants that he/she has full power and authority to bind the Subcontractor to the terms hereof.

Given under hand and seal this _____ day of _____, 20___.

Company XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Signed_____(SEAL)

By:_____

Title_____

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 20__.

My commission expires _____.

_____
Notary Public

902 N. CAPITOL AVE. INDIANAPOLIS,IN 46204
(317) 423-6000(317) 423-6300

SHIEL SEXTON COMPANY

PROCEDURE FOR OBTAINING PAYMENT FOR MATERIALS NOT STORED AT THE SITE OF THE WORK

Subcontractor Name: XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Project Name: XXXXXXXXXXXXXXXXXX

Shiel Sexton Project Representative: XXXXXXXXXXXX

Materials: _____
and/or those as described in the Material Bill of Sale attached hereto as Exhibit A

Off Site Storage Agreement

Due to the limited amount of space available for the storage of materials at the site and/or to allow for Subcontractor flexibility to handle their risk of material price fluctuations, Shiel Sexton Company, Inc. ('Shiel Sexton) will, under the following conditions, approve partial payments for certain materials stored off the premises. On projects where the Owner has its own procedure or forms, such procedure and forms shall take precedence over this Agreement.

1. **Prior Approval** - The Subcontractor shall obtain the approval of Shiel Sexton before making an application for payment for materials stored off the site. Materials must be suitable for storage and must be properly packaged.

2. **Storage Site** - The Subcontractor shall furnish and maintain a suitable storage site and proper storage conditions, which must be approved in advance by Shiel Sexton's Project Representative. The site must be located within the state where the Project is located.

   When materials are not stored at Subcontractor's owned facility, Subcontractor will provide a fully executed warehouse receipt regarding the storage of the off-site store materials using the form attached hereto Exhibit B.

3. **Storage Conditions** - The material covered in an application for payment must be stored above grade and must be properly protected at all times against weather, heat, cold, moisture and other hazards as the material may require. All protection must be provided by the Subcontractor at its own expense and must be maintained throughout the storage period. Materials in storage are stored at Subcontractor's risk and Subcontractor must provide appropriate insurance coverage for said materials.

   Material must not be co-mingled with other similar material but must be stored by itself and must be plainly labeled "Property of Shiel Sexton Company, Inc. and/or Owner, along with the full Project name and address].

   It must be stored so that it can be readily inspected, measured, and counted at any time by Shiel Sexton's Project Representative.

4. **Bill of Sale** - Request for partial payment for materials stored under the above conditions must be accompanied by a Material Bill of Sale in the form attached hereto, properly identifying the material, and transferring ownership of the materials to Owner and Shiel Sexton. The Bill of Sale must be accompanied by an inventory of the stored material together with a description of the storage site by street number and City, or by legal description of the premises.

5. **Insurance** – Subcontractor shall provide certificates of insurance to Shiel Sexton's Project Representative prior to storing any materials showing coverage for the warehouse or other off storage facility, the off-site stored materials, and in-transit coverage of the materials being delivered to the Project site. Such certificates shall name Shiel Sexton and Owner as additional insured and by tendering same, Subcontractor agrees to be responsible for all deductibles.

6. **Responsibility** - The Subcontractor agrees that in accepting partial payment for the stored materials it is in no way relieved of responsibility for the safe storage of the material and its safe transportation to and installation in the Work, or for furnishing and installing the material in strict accordance with Contract Documents.

   The Subcontractor also agrees that acceptance by Shiel Sexton of a Bill of Sale for the material does not imply acceptance of the material, which shall be subject to final acceptance or rejection up to the time the Subcontractor's Work is completed and finally accepted.

The Subcontractor also agrees that any warranty, guarantee or other contractual obligation covering its Work under the Contract Documents and Subcontract Agreement are in no way impaired as a result of the partial payment and/or the acceptance of the Bill of Sale. A progress payment for materials stored in accordance with this Agreement shall not constitute acceptance of materials or work not in accordance with the Contract Documents.

Shiel Sexton accepts no responsibility in connection with the material.

7. **Photos of Stored Materials** - Subcontractor shall submit photos of all stored materials with appropriate project identification shown on the stored materials or their packaging along with a signed and of this Agreement with any Application for Payment that includes a request for payment for materials stored offsite. Subcontractor shall submit updated photos upon request.

8. Unless otherwise defined in this Agreement, capitalized terms used herein shall have the meanings ascribed to them in the Subcontract between the parties."

9. **Acceptance** - The Subcontractor shall indicate its acceptance of the above conditions by signing and returning one copy of this Off-Site Storage Agreement.

ACCEPTED

_____
(Subcontractor Company Name)

_____
(Name of Authorized Representative)

_____
(Signature of Authorized Representative)

_____
Date

STORAGE CONDITIONS APPROVED

Shiel Sexton Company, Inc

_____
(Name of Shiel Sexton Project Manager)

_____
(Signature of Shiel Sexton Project Manager)

_____
Date
XXXXXXXXXXXXXXXXXX

SHIEL SEXTON

Subcontract
Attachment E
Safety Summary

Prior to the start of Subcontractor's Work, Subcontractor and their sub-subcontractors shall provide the following documents to SHIEL SEXTON COMPANY:

- Project Specific Safety Plan (See the following for detail).
- Hazard Communication Program & MSDS book (submit in a binder with index)
- Contractor Safety Information form (fill out attached form E.1)
- Documentation of training and applicable training certifications

It is critical that these documents are furnished in a timely manner or the start of the Subcontractor's work could be delayed.

Project Specific Safety Plan

Subcontractor and their sub-subcontractors shall provide SHIEL SEXTON COMPANY a copy of a written **Project Specific Safety Plan**. This plan must provide responses to the following 11 points listed below. Please refer to the specific point (i.e., 1, 2, 3, etc.) being addressed in the plan. Subcontractors will be responsible for ensuring that their sub-subcontractors comply with this requirement, and must provide all plans to SHIEL SEXTON COMPANY prior to the start of Work.

(1) The name of the Safety Representative who is responsible for the day-to-day implementation of Subcontractor company's and this project's safety plan and rules. This Safety Representative must be on site daily.

(2) Provisions for documented safety inspection on this Project. Note in your response the frequency of inspections, names and positions of inspectors, any special circumstances that would necessitate additional inspections and the documentation methods for these inspections (i.e. forms, distribution, etc.). All inspections will be copied to SHIEL SEXTON COMPANY on-site management staff.

(3) Please provide training records specific to the tasks that are going to be performed on this Project that includes but is not limited to the following:

- Management personnel and safety inspectors
- Competent person trainings i.e. scaffolding, steel erection, fall protection, excavations, rigging etc.
- Forklift, Boom lift, scissor lift, etc. (must have wallet card and provide copy)

These individuals will be held accountable as the competent or trained person for the areas that are identified, so please list the specific employees.

(4) The interval for job site safety meetings (tool box talks) (documented). Tool box talks are required to be completed by all Subcontractors and returned to the SHIEL SEXTON COMPANY on-site office listing the topic, instructor, and attendees.

(5) What specific fall hazards will Subcontractor encounter on this project? What are these locations? How will you eliminate or control each hazard specifically.

(6) What are Subcontractor's PPE requirements for this project? Please be specific to any unique tools or activities.

(7) Describe any remaining hazards that are involved with the Subcontract Work to be performed and explain (in detail) how these hazards will be eliminated or controlled. DO NOT PROVIDE A COPY OF YOUR SAFETY PROGRAM OR STATE IT IS INCLUDED IN YOUR PROGRAM AS COMPLETION OF THIS SECTION – be specific to this Project.

(8) Please detail your Company substance abuse policy. If no policy exists, note as such.

(9) Describe the accident reporting, first aid, and emergency procedures for this Project. Note all first aid and any accidents must be reported to SHIEL SEXTON COMPANY. Indicate the procedures taken in the event of an accident, i.e. clinic location and transportation policy. Also note who will report this accident and/or first aid event to SHIEL SEXTON COMPANY and what method they will use to do so.

(10) Provide the procedure for ensuring that the details of this Project Specific Safety Plan will be communicated to your organization, employees, and subcontractors?

(11) Spanish Language Protocols must be incorporated into the plan. If you have no non-English speaking employees please note as such.

SHIEL SEXTON COMPANY
SUBCONTRACTOR SAFETY INFORMATION FORM

COMPANY NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

PERSON COMPLETING FORM: _____

COMPANY ADDRESS: XXXXXXXXXXXXXXXXXXXXXXXXXX

SIGNATURE: _____ **DATE COMPLETED:** _____

(1) List your firm's experience modification rate (EMR) for the three most recent years

2023 _____ 2022 _____ 2021 _____

(2) Please use your OSHA 200 and 300A logs to complete this section (please attach most recent year and note the references to the OSHA columns below):

Number of injuries and illnesses	2023	2022	2021
Number of lost workday cases including restricted days (Columns H and I)	_____	_____	_____
Number of OSHA recordables (Columns H,I, and J)	_____	_____	_____
Number of fatalities (Column G)	_____	_____	_____

(3) Total employee hours worked: _____ _____ _____

(4) Do you have a written safety program which includes hazardous communication? Yes ☐ No ☐

(5) Do you have a mandatory substance abuse program? Yes ☐ No ☐

(6) Do you have a light duty/restricted work policy? Yes ☐ No ☐

(7) Do all new employees complete safety orientation prior to performing any work activities? Yes ☐ No ☐

(8) Do you conduct jobsite safety inspections? Yes ☐ No ☐

At what interval? _____

(9) Do you require the OSHA 10-hour course for all supervisors? Yes ☐ No ☐

(10) Do you conduct documented post-accident investigations? Yes ☐ No ☐

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SHIEL SEXTON

Subcontract
Attachment F
Quality Summary

Prior to starting Subcontractor's Work, Subcontractor shall provide the following documents to SHIEL SEXTON COMPANY:

- Job Specific Quality Plan* (JSQP) (See the following for detail)
- Applicable Certifications*

*It is critical these documents are furnished promptly to not delay the start of Subcontractor's Work

Subcontractor and their sub-subcontractors shall provide SHIEL SEXTON COMPANY a copy of a written Job Specific Quality Plan (JSQP). This plan must provide responses to the following 14 points below. Subcontractors are responsible for ensuring that their sub-subcontractors each submit a plan individually to SHIEL SEXTON COMPANY.

(1) Does your company have a written quality program? If so, please provide a copy.

(2) Please describe the methods that will be used to ensure that all Subcontract Documents, Specifications and Drawings are met on this project?

(3) The name & contact information of the person who is responsible for the day-to-day implementation of this plan and what role this person will play during the project? This person must be on site daily.

(4) The name & contact info of the person who is corporately (at your office) responsible for quality?

(5) Please identify how you will control construction and quality documents and who is responsible?

(6) List the provisions for documented quality inspections. Note the frequency of inspections and the person or persons that will perform the inspections. Please also include the documentation methods for these inspections (i.e. forms, distribution, etc.). Copy SHIEL SEXTON COMPANY on all inspections.

(7) Please describe any unique quality obstacles your organization foresees on this Project. i.e. material storage, complexity, familiarity with a new products or methods, constructability, new supplier or subcontractor, working environment, lighting needs, layout, control lines, etc.

(8) Please attach copies of all certifications (if required) as described in the specifications (i.e. welding certifications.). Note as "N/A" if not required.

(9) Please list (if required per Subcontract) the testing agencies you intend to use, credentials, contact information, and how the results will be reported to SHIEL SEXTON COMPANY. Note as "N/A" if not required.

(10) Deviation reporting (quality accidents or mistakes). Please communicate how your company will communicate all Subcontractor's deviations from plans and specifications to SHIEL SEXTON COMPANY. SHIEL SEXTON COMPANY expects a timely report for all such instances.

(11) Detail how your company will communicate the quality plan to the field forces.

(12) Provide designated personnel for Punch item management.

(13) Indicate who is responsible for Punch list supervision and completion.

(14) Provide key personnel and companies associated with Commissioning and Functional testing.

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SECTION 01 23 00 – ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each Alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. New Addition Alternates

B. Alternate #1: Air Handling Unit – MANDATORY ALTERNATE
1. Base Bid: No work.
2. Alternate: New air handling units to be installed per Drawings and Specifications. Provide breakdown pricing per manufacturer:
1a – Haakon
1b – Air Enterprises
1c – Air Flow Equipment
1d – Ingenia

C. Alternate #2 – Generator (renovation) – MANDATORY ALTERNATE
1. Base Bid: No work.
2. Alternate: New emergency power generator to be installed per Drawings and Specifications. Provide breakdown pricing per manufacturer:
2a – Caterpillar
2b – Cummins
2c – Kohler
2d – Tognum America (MTU Detroit Diesel)

D. Alternate #3 – Landscape Maintenance Plan (renovation) – MANDATORY ALTERNATE
1. Base Bid: No landscape maintenance plan.
2. Alternate: Provide a (2) year landscape maintenance plan as described in the Drawings and Specifications.

E. Alternate #4 – New Building – Roof Drain Pipes
1. Base Bid: Provide a combined overflow and main pipe roof drain leader system, in lieu of the indicated separate system.
2. Alternate: Provide all work as indicated in the Drawings and Specifications pertaining to the new roof drain leaders, including but not limited to separate overflow pipes and insulation.

F. RENOVATION ALTERNATES

G. Alt Reno #01 – Generator
1. Base Bid: Reinstall relocated 600KW generator from its temporary location adjacent to SELB building to newly constructed pad to the south. Provide all wiring and terminations for a complete and functional system.
2. Alternate: Provide and install a **new 1.75 MW** generator set per specifications. Include any modifications to generator pad and pathways necessary for larger unit. Additionally, include costs to decommission relocated 600KW and transport offsite. Return area to undisturbed condition.

H. Alt Reno #02 – Generator
1. Base Bid: Reinstall relocated 600KW generator from its temporary location adjacent to SELB building to newly constructed pad to the south. Provide all wiring and terminations for a complete and functional system.

2. Alternate: Provide pricing for a **new 750 KW** generator set per specifications. Include any modifications to generator pad and pathways necessary for larger unit. Additionally, include costs to decommission relocated 600KW and transport offsite. Return area to undisturbed condition.

I. Alt Reno #03 – LD Building – Glycol Makeup and Refilling Loop (renovation)
1. Base Bid: No work.
2. Alternate: Provide the makeup unit as shown on the Drawings. Provide 550 gallons of 40% Propylene Glycol Dowfrost by Dow Chemical.
3. UNIT PRICE; 50 Gallons of Glycol.

J. Alt Reno #04 – LD Building – New Controls and Balancing of Existing AHUs (renovation)
1. Base Bid: No work.
2. Alternate: Controls and balancing as shown on the Documents.

K. Alt Reno #05 – Arc Flash Studies – MANDATORY ALTERNATE
1. Base Bid: No work.
2. Alternate: Provide arc flash studies as shown on the Documents.

L. Alt Reno #06 – SL Building – SL Core Lab Suite, storage room SL344
1. Base Bid: No work.
2. Alternate: provide buildout of storage space in SL344 as shown on the Documents.

END OF SECTION 01 23 00

INDIANA UNIVERSITY INDIANAPOLIS

20230276 - IN069 - IU INDIANAPOLIS SCIENCE LABORATORY BUILDING

310 N. BLACKFORD ST.
INDIANAPOLIS, IN 46202-3115

VOLUME: 3

BID SET 5 - 06.16.2025

SHEET NAMING CONVENTION

A | 1. | 1 | 2 | 1

DISCIPLINE

A=ARCHITECTURAL
C=CIVIL
E=ELECTRICAL
FS=FIRE SUPPRESSION
G=GENERAL
L=LANSCAPE
M=MECHANICAL
P=PLUMBING
QL=LABORATORY
S=STRUCTURAL
T=TECHNOLOGY/DATA

SHEET NUMBER

BUILDING IDENTIFIER

0=ALL RENO BUILDINGS (SL,LD,EL)
1=SL BUILDING
2=LD BUILDING
3=EL BUILDING

DRAWING LIST VOL. 3

Sheet Number	Sheet Name
00 - ALL BUILDINGS	
G0.000	COVER
G0.120	CONTRACTOR ACCESS PLAN - SITE PLAN
G1.101	LIFE SAFETY PLAN - SL BUILDING
G1.121	CONTRACTOR ACCESS PLAN - SL
G2.102	LIFE SAFETY PLAN - LD BUILDING
G2.122	CONTRACTOR ACCESS PLAN - LD
G3.123	CONTRACTOR ACCESS PLAN - EL
A0.001	ARCHITECTURAL GENERAL NOTES
A0.011	WALL TYPES - INTERIOR GWB PARTITIONS
A0.014	TYP DETAILS FOR INTERIOR GWB PARTITION BLOCKING
A0.601	OPENING TYPES AND SCHEDULES
A0.650	INTERIOR FINISH SCHEDULE & LEGEND
QL0.001	LABORATORY GENERAL NOTES, LEGENDS, & ABBREVIATIONS
QL0.002	SCHEDULES
QL0.003	LABORATORY EQUIPMENT SCHEDULES
QL0.004	CEILING INTERFACE PANEL SCHEDULE AND DETAILS
QL0.910	TYPICAL LABORATORY DETAILS
QL0.911	LABORATORY DETAILS
QL0.912	LABORATORY DETAILS
EL0.001	LIGHTING SYMBOLS, ABBREVIATIONS AND SCHEDULES
T0.501	TECHNOLOGY DETAILS
T0.502	TECHNOLOGY DETAILS
01 - SL BUILDING	
S1.001	GENERAL NOTES AND TYPICAL DETAILS
A1.100	DEMOLITION PLAN - BASEMENT FLOOR
A1.101	DEMOLITION PLAN - FIRST FLOOR
A1.102	DEMOLITION PLAN - SECOND FLOOR
A1.103	DEMOLITION PLAN - THIRD FLOOR
A1.110	DEMO REFLECTED CEILING PLAN - BASEMENT
A1.111	DEMO REFLECTED CEILING PLAN - FIRST FLOOR
A1.112	DEMO REFLECTED CEILING PLAN - SECOND FLOOR
A1.113	DEMO REFLECTED CEILING PLAN - THIRD FLOOR
A1.120	FLOOR PLAN - BASEMENT FLOOR
A1.121	FLOOR PLAN - FIRST FLOOR
A1.122	FLOOR PLAN - SECOND FLOOR
A1.123	FLOOR PLAN - THIRD FLOOR
A1.140	REFLECTED CEILING PLAN - BASEMENT
A1.141	REFLECTED CEILING PLAN - FIRST FLOOR
A1.142	REFLECTED CEILING PLAN - SECOND FLOOR
A1.143	REFLECTED CEILING PLAN - THIRD FLOOR PLAN
A1.150	INTERIOR FINISH PLAN - BASEMENT
A1.153	INTERIOR FINISH PLAN - THIRD FLOOR
A1.411	ENLARGED DEMOLITION PLANS - BASEMENT
A1.412	ENLARGED DEMOLITION PLANS -THIRD FLOOR
A1.421	ENLARGED PLANS - BASEMENT
A1.422	ENLARGED PLANS - THIRD FLOOR
A1.423	ENLARGED PLANS - THIRD FLOOR
A1.450	INTERIOR ELEVATIONS
A1.510	SECTION DETAILS
QL1.120	FLOOR PLAN - SL BASEMENT
QL1.123	FLOOR PLAN - SL THIRD FLOOR
QL1.421	ENLARGED PLAN AND ELEVATIONS - SL BASEMENT
QL1.422	ENLARGED PLAN AND ELEVATIONS - SL LEVEL 03 BIOLOGY CORE
QL1.423	ENLARGED PLAN AND ELEVATIONS - SL LEVEL 03 TISSUE CULTURE SUITE
QL1.901	ENVIRONMENTAL ROOM DETAILS AND SCHEDULE
M1.001	MECHANICAL LEGENDS, ABBREVATIONS & SHEET INDEX
M1.100i	MECHANICAL DEMOLITION PLAN -BASEMENTINTERSTITIAL
M1.103i	MECHANICAL DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL
M1.120i	MECHANICAL PLAN -BASEMENTINTERSTITIAL
M1.123i	MECHANICAL PLAN -THIRD FLOOR INTERSTITIAL

DRAWING LIST VOL. 3

Sheet Number	Sheet Name
M1.400	MECHANICAL ENLARGED DEMOLITION PLANS -BASEMENT
M1.403	MECHANICAL ENLARGED DEMOLITION PLANS -THIRD FLOOR
M1.410	MECHANICAL ENLARGED PLANS -BASEMENT
M1.413	MECHANICAL ENLARGED PLANS -THIRD FLOOR
M1.501	MECHANICAL DETAILS
M1.502	MECHANICAL ENLARGED AIR FLOW DETAILS -BASEMENT
M1.503	MECHANICAL ENLARGED AIR FLOW DETAILS -THIRD FLOOR
M1.601	MECHANICAL SCHEDULES
M1.701	MECHANICAL CONTROL SCHEMATICS
M1.702	MECHANICAL CONTROL SCHEMATICS
P1.001	PLUMBING LEGENDS, ABBREVIATIONS, AND SHEET INDEX
P1.100	PLUMBING DEMOLITION PLAN -BASEMENT
P1.100i	PLUMBING DEMOLITION PLAN -BASEMENTINTERSTITIAL
P1.101	PLUMBING DEMOLITION PLAN -FIRST FLOOR
P1.101i	PLUMBING DEMOLITION PLAN -FIRST FLOOR INTERSTITIAL
P1.102	PLUMBING DEMOLITION PLAN -SECOND FLOOR
P1.102i	PLUMBING DEMOLITION PLAN -SECOND FLOOR INTERSTITIAL
P1.103	PLUMBING DEMOLITION PLAN -THIRD FLOOR
P1.103i	PLUMBING DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL
P1.200	PLUMBING PLAN -BASEMENT
P1.200i	PLUMBING PLAN -BASEMENT INTERSTITIAL
P1.201	PLUMBING PLAN -FIRST FLOOR
P1.201i	PLUMBING PLAN -FIRST FLOOR INTERSTITIAL
P1.202	PLUMBING PLAN -SECOND FLOOR
P1.202i	PLUMBING PLAN -SECOND FLOOR INTERSTITIAL
P1.203	PLUMBING PLAN -THIRD FLOOR
P1.203i	PLUMBING PLAN -THIRD FLOOR INTERSTITIAL
P1.300	ENLARGED PLUMBING PLANS -BASEMENT
P1.301	ENLARGED PLUMBING PLAN -LEVEL 2 INTERSTITIAL DEMO
P1.302	ENLARGED PLUMBING PLAN -LEVEL 03 AREA 1
P1.303	ENLARGED PLUMBING PLAN -LEVEL 03 AREA 1
P1.304	ENLARGED PLUMBING PLAN -LEVEL 02 INTERSTITIAL NEW WORK
P1.305	ENLARGED PLUMBING PLAN -LEVEL 03 AREA 1
P1.306	ENLARGED PLUMBING PLAN -LEVEL 03 AREA 1
P1.307	ENLARGED PLUMBING PLAN -LEVEL 02 AREA 2
P1.308	ENLARGED PLUMBING PLAN -LEVEL 03 AREA 2
P1.400	ISOMETRIC PLUMBING PLAN
P1.401	ISOMETRIC PLUMBING PLAN
P1.500	PLUMBING SCHEDULES
E1.001	ELECTRICAL LEGENDS, ABBREVATIONS & SHEET INDEX
E1.100	ELECTRICAL DEMOLITION PLAN - BASEMENT
E1.101	ELECTRICAL DEMOLITION PLAN - FIRST FLOOR
E1.102	ELECTRICAL DEMOLITION PLAN - SECOND FLOOR
E1.103	ELECTRICAL DEMOLITION PLAN - THIRD FLOOR
E1.220	POWER & SYSTEMS PLAN - BASEMENT
E1.220i	ELECTRICAL INTERSTITIAL PLAN - BASEMENT
E1.221	POWER & SYSTEMS PLAN - FIRST FLOOR
E1.221i	ELECTRICAL INTERSTITIAL PLAN - FIRST FLOOR
E1.222	POWER & SYSTEMS PLAN - SECOND FLOOR
E1.222i	ELECTRICAL INTERSTITIAL PLAN - SECOND FLOOR
E1.223	POWER & SYSTEMS PLAN - THIRD FLOOR
E1.223i	ELECTRICAL INTERSTITIAL PLAN - THIRD FLOOR
E1.300	POWER & SYSTEMS DEMO & NEW PLAN - BASEMENT
E1.301	POWER & SYSTEMS DEMO & NEW PLAN - BASEMENT
E1.302	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR
E1.303	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR
E1.304	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR
E1.400	SINGLE LINE
E1.401	SINGLE LINE
E1.500	PANEL SCHEDULES
E1.501	PANEL SCHEDULES
EL1.100	DEMOLITION ELECTRICAL PLAN - BASEMENT

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Sheet Number	Sheet Name
EL1.103	DEMOLITION ELECTRICAL PLAN - THIRD FLOOR
EL1.120	LIGHTING PLAN - BASEMENT
EL1.123	LIGHTING PLAN - THIRD FLOOR
EL1.411	ENLARGED LIGHTING DEMOLITION PLANS - BASEMENT
EL1.412	ENLARGED LIGHTING DEMOLITION PLANS - THIRD FLOOR
EL1.421	ENLARGED LIGHTING PLANS - BASEMENT
EL1.422	ENLARGED LIGHTING PLANS - THIRD FLOOR
T1.100	DEMOLITION TECHNOLOGY PLAN - BASEMENT
T1.103	DEMOLITION TECHNOLOGY PLAN - THIRD FLOOR
T1.120	TECHNOLOGY PLAN - BASEMENT
T1.121	TECHNOLOGY PLAN - FIRST FLOOR
T1.122	TECHNOLOGY PLAN -SECOND FLOOR
T1.123	TECHNOLOGY PLAN - THIRD FLOOR
T1.411	ENLARGED TECHNOLOGY DEMOLITION PLANS - BASEMENT
T1.412	ENLARGED TECHNOLOGY DEMOLITION PLANS - THIRD FLOOR
T1.421	ENLARGED TECHNOLOGY PLANS - BASEMENT
T1.422	ENLARGED TECHNOLOGY PLANS - THIRD FLOOR
T1.423	ENLARGED TECHNOLOGY PLANS - THIRD FLOOR
T1 601	TECHNOLOGY SCHEDULES
02 - LD BUILDING	
A2.100	DEMOLITION PLAN - BASEMENT
A2.101	DEMOLITION PLAN - FIRST FLOOR
A2.102	DEMOLITION PLAN - SECOND FLOOR
A2.103	DEMOLITION PLAN - THIRD FLOOR
A2.110	DEMO REFLECTED CEILING PLAN - BASEMENT
A2.111	DEMO REFLECTED CEILING PLAN - FIRST FLOOR
A2.112	DEMO REFLECTED CEILING PLAN - SECOND FLOOR
A2.113	DEMO REFLECTED CEILING PLAN - THIRD FLOOR
A2.120	FLOOR PLAN - BASEMENT
A2.121	FLOOR PLAN - FIRST FLOOR
A2.122	FLOOR PLAN - SECOND FLOOR
A2.123	FLOOR PLAN - THIRD FLOOR
A2.140	REFLECTED CEILING PLAN - BASEMENT
A2.141	REFLECTED CEILING PLAN - FIRST FLOOR
A2.142	REFLECTED CEILING PLAN - SECOND FLOOR
A2.143	REFLECTED CEILING PLAN - THIRD FLOOR
A2.151	INTERIOR FINISH PLAN - BASEMENT
A2.153	INTERIOR FINISH PLAN - SECOND FLOOR
A2.154	INTERIOR FINISH PLAN - THIRD FLOOR
A2.411	ENLARGED DEMOLITION PLANS
A2.421	ENLARGED PLANS
A2.460	STOREFRONT ELEVATIONS & DETAILS
A2.510	DETAILS
QL2.421	ENLARGED PLAN AND ELEVATIONS - LD BASEMENT
QL2.422	ENLARGED PLAN AND ELEVATIONS - LD SECOND FLOOR
QL2.423	ENLARGED PLAN AND ELEVATIONS - LD THIRD FLOOR
M2.001	MECHANICAL LEGENDS, ABBREVATIONS & SHEET INDEX
M2.100i	MECHANICAL DEMOLITION PLAN -BASEMENTINTERSTITIAL
M2.102i	MECHANICAL DEMOLITION PLAN -SECOND FLOOR INTERSTITIAL
M2.103i	MECHANICAL DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL
M2.120i	MECHANICAL PLAN -BASEMENTINTERSTITIAL
M2.122i	MECHANICAL PLAN -SECOND FLOOR INTERSTITIAL
M2.123i	MECHANICAL PLAN -THIRD FLOOR INTERSTITIAL
M2.124	MECHANICAL ROOF PLAN -NEW
M2.400	MECHANICAL ENLARGED DEMOLITION PLANS
M2.401	MECHANICAL ENLARGED DEMOLITION PLANS
M2.411	MECHANICAL ENLARGED PLANS
M2.412	MECHANICAL ENLARGED PLANS
M2.501	MECHANICAL DETAILS
M2.502	MECHANICAL ENLARGED AIR FLOW DETAILS
M2.503	MECHANICAL ENLARGED AIR FLOW DETAILS
M2.601	MECHANICAL SCHEDULES

DRAWING LIST VOL. 3

Sheet Number	Sheet Name
M2.701	MECHANICAL CONTROL SCHEMATICS
M2.702	MECHANICAL CONTROL SCHEMATICS
P2.001	PLUMBING LEGENDS, ABBREVIATIONS, AND SHEET INDEX
P2.100	PLUMBING DEMOLITION PLAN -UNDERSLAB
P2.101	PLUMBING DEMOLITION PLAN -BASEMENT
P2.101i	PLUMBING DEMOLITION PLAN -BASEMENTINTERSTITIAL
P2.102	PLUMBING DEMOLITION PLAN -FIRST FLOOR
P2.102i	PLUMBING DEMOLITION PLAN -FIRST FLOOR INTERSTITIAL
P2.103	PLUMBING DEMOLITION PLAN -SECOND FLOOR
P2.103i	PLUMBING DEMOLITION PLAN -SECOND FLOOR INTERSTITIAL
P2.104	P2.104 - PLUMBING DEMOLITION PLAN -THIRD FLOOR
P2.104i	PLUMBING DEMOLITION PLAN -THIRD FLOOR INTERSTITIAL
P2.105	PLUMBING DEMOLITION PLAN -GREENHOUSE
P2.200	PLUMBING PLAN -UNDERSLAB
P2.201	PLUMBING PLAN -BASEMENT
P2.201i	PLUMBING PLAN -BASEMENT INTERSTITIAL
P2.202	PLUMBING PLAN -FIRST FLOOR
P2.202i	PLUMBING PLAN -FIRST FLOOR INTERSTITIAL
P2.203	PLUMBING PLAN -SECOND FLOOR
P2.203i	PLUMBING PLAN -SECOND FLOOR INTERSTITIAL
P2.204	PLUMBING PLAN -THIRD FLOOR
P2.204i	PLUMBING PLAN -THIRD FLOOR INTERSTITIAL
P2.205	PLUMBING PLAN -GREENHOUSE
P2.300	ENLARGED PLUMBING PLANS -BASEMENT DEMOLITION
P2.301	ENLARGED PLUMBING PLANS -BASEMENT NEW WORK
P2.302	ENLARGED PLUMBING PLANS -LEVEL 02 DEMO
P2.303	ENLARGED PLUMBING PLANS -LEVEL 02 NEW WORK
P2.304	ENLARGED PLUMBING PLANS -LEVEL 03 DEMO
P2.305	ENLARGED PLUMBING PLANS -LEVEL 03 NEW WORK
P2.400	SANITARY RISER DIAGRAM
P2.500	PLUMBING SCHEDULES
E2.001	ELECTRICAL LEGENDS, ABBREVATIONS & INDEX
E2.100	ELECTRICAL DEMOLITION PLAN - BASEMENT
E2.101	ELECTRICAL DEMOLITION PLAN - FIRST FLOOR
E2.102	ELECTRICAL DEMOLITION PLAN - SECOND FLOOR
E2.103	ELECTRICAL DEMOLITION PLAN - THIRD FLOOR
E2.104	ELECTRICAL DEMOLITION PLAN - GREENHOUSE
E2.220	POWER & SYSTEMS PLAN - BASEMENT
E2.220i	ELECTRICAL INTERSTITIAL PLAN - BASEMENT
E2.221	POWER & SYSTEMS PLAN - FIRST FLOOR
E2.221i	ELECTRICAL INTERSTITIAL PLAN - FIRST FLOOR
E2.222	POWER & SYSTEMS PLAN - SECOND FLOOR
E2.222i	ELECTRICAL INTERSTITIAL PLAN - SECOND FLOOR
E2.223	POWER & SYSTEMS PLAN - THIRD FLOOR
E2.223i	ELECTRICAL INTERSTITIAL PLAN - THIRD FLOOR
E2.224	POWER & SYSTEMS PLAN - GREENHOUSE
E2.300	POWER & SYSTEMS DEMO & NEW PLAN - BASEMENT
E2.301	POWER & SYSTEMS DEMO & NEW PLAN - SECOND FLOOR
E2.302	POWER & SYSTEMS DEMO & NEW PLAN - THIRD FLOOR
E2.400	SINGLE LINE
E2.500	PANEL SCHEDULES
E2.501	PANEL SCHEDULES
EL2.100	DEMOLITION LIGHTING PLAN - BASEMENT
EL2.102	DEMOLITION LIGHTING PLAN - SECOND FLOOR
EL2.103	DEMOLITION LIGHTING PLAN - THIRD FLOOR
EL2.120	LIGHTING PLAN - BASEMENT
EL2.122	LIGHTING PLAN - SECOND FLOOR
EL2.123	LIGHTING PLAN - THIRD FLOOR
EL2.411	LIGHTING ENLARGED DEMOLITION PLANS
EL2.412	LIGHTING ENLARGED DEMOLITION PLANS
EL2.421	LIGHTING ENLARGED PLANS

DRAWING LIST VOL. 3

Sheet Number	Sheet Name
EL2.422	LIGHTING ENLARGED PLANS
T2.100	DEMOLITION TECHNOLOGY PLAN - BASEMENT
T2.102	DEMOLITION TECHNOLOGY PLAN - SECOND FLOOR
T2.103	DEMOLITION TECHNOLOGY PLAN - THIRD FLOOR
T2.120	TECHNOLOGY PLAN - BASEMENT
T2.121	TECHNOLOGY PLAN -FIRST FLOOR
T2.122	TECHNOLOGY PLAN - SECOND FLOOR
T2.123	TECHNOLOGY PLAN - THIRD FLOOR
T2.411	TECHNOLOGY ENLARGED DEMOLITION PLANS
T2.421	TECHNOLOGY ENLARGED PLANS
T2.422	TECHNOLOGY ENLARGED PLANS
T2.601	TECHNOLOGY SCHEDULES
03 - EL BUILDING	
A3.101	DEMOLITION PLAN - FIRST FLOOR
A3.102	DEMOLITION PLAN - SECOND FLOOR
A3.103	DEMOLITION PLAN - THIRD FLOOR
A3.104	DEMOLITION PLAN - PENTHOUSE
A3.110	DEMO REFLECTED CEILING PLANS - FIRST FLOOR
A3.111	DEMO REFLECTED CEILING PLANS - SECOND FLOOR
A3.112	DEMO REFLECTED CEILING PLANS - THIRD FLOOR
A3.121	FLOOR PLAN - FIRST FLOOR
A3.122	FLOOR PLAN - SECOND FLOOR
A3.123	FLOOR PLAN - THIRD FLOOR
A3.124	FLOOR PLAN - PENTHOUSE
A3.141	REFLECTED CEILING PLAN - FIRST FLOOR
A3.142	REFLECTED CEILING PLAN - SECOND FLOOR
A3.143	REFLECTED CEILING PLAN - THIRD FLOOR
A3.421	ENLARGED PLANS
M3.001	MECHANICAL LEGENDS, ABBREVATIONS & SHEET INDEX
M3.102	MECHANICAL DEMOLITION PLAN -SECOND FLOOR
M3.122	MECHANICAL PLAN -SECOND FLOOR
M3.601	MECHANICAL SCHEDULES
E3.001	ELECTRICAL LEGENDS, ABBREVATIONS & SHEET INDEX
E3.101	ELECTRICAL DEMOLITION PLAN - FIRST FLOOR
E3.102	ELECTRICAL DEMOLITION PLAN - SECOND FLOOR
E3.103	ELECTRICAL DEMOLITION PLAN - THIRD FLOOR
E3.104	ELECTRICAL DEMOLITION PLAN - PENTHOUSE
E3.221	POWER & SYSTEMS PLAN - FIRST FLOOR
E3.222	POWER & SYSTEMS PLAN - SECOND FLOOR
E3.223	POWER & SYSTEMS PLAN - THIRD FLOOR
E3.224	POWER & SYSTEMS PLAN - PENTHOUSE
E3.300	ENLARGED PLANS
E3.400	NORMAL POWER SINGLE LINE DIAGRAM
E3.401	EMERGENCY POWER SINGLE LINE DIAGRAM
E3.402	GENERATOR POWER SINGLE LINE DIAGRAM
EL3.102	DEMOLITION LIGHTING PLAN -SECOND FLOOR
EL3.122	LIGHTING PLAN -SECOND FLOOR
EL3.411	ENLARGED LIGHTING DEMOLITION PLANS
EL3.421	ENLARGED LIGHTING PLANS
T3.102	DEMOLITION TECHNOLOGY PLAN - SECOND FLOOR
T3.121	TECHNOLOGY PLAN - FIRST FLOOR
T3.122	TECHNOLOGY PLAN - SECOND FLOOR
T3.123	TECHNOLOGY PLAN -THIRD FLOOR
T3.411	TECHNOLOGY ENLARGED DEMO PLANS
T3.421	TECHNOLOGY ENLARGED PLANS
T3.601	TECHNOLOGY SCHEDULES
FURNITURE PLANS	
A1.600	FURNITURE PLAN - BASEMENT FLOOR
A1.603	FLOOR PLAN - THIRD FLOOR

ALTERNATES

ALTERNATE #1: AIR HANDLING UNIT – MANDATORY ALTERNATE
BASE BID: NO WORK.
ALTERNATE: NEW AIR HANDLING UNITS TO BE INSTALLED PER DRAWINGS AND SPECIFICATIONS. PROVIDE BREAKDOWN PRICING PER MANUFACTURER:
1A – HAAKON
1B – AIR ENTERPRISES
1C – AIR FLOW EQUIPMENT
1D – INGENIA

ALTERNATE #2 – GENERATOR – (RENOVATION) MANDATORY ALTERNATE
BASE BID: NO WORK.
ALTERNATE: NEW EMERGENCY POWER GENERATOR TO BE INSTALLED PER DRAWINGS AND SPECIFICATIONS. PROVIDE BREAKDOWN PRICING PER MANUFACTURER:
2A – CATERPILLAR
2B – CUMMINS
2C – KOHLER
2D – TOGNUM AMERICA (MTU DETROIT DIESEL)

ALTERNATE #3 – LANDSCAPE MAINTENANCE PLAN - (RENOVATION) MANDATORY ALTERNATE
BASE BID: NO LANDSCAPE MAINTENANCE PLAN.
ALTERNATE: PROVIDE A (2) YEAR LANDSCAPE MAINTENANCE PLAN AS DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS.

ALTERNATE #4 – NEW BUILDING – ROOF DRAIN PIPES
BASE BID: PROVIDE A COMBINED OVERFLOW AND MAIN PIPE ROOF DRAIN LEADER SYSTEM, IN LIEU OF THE INDICATED SEPARATE SYSTEM.
ALTERNATE: PROVIDE ALL WORK AS INDICATED IN THE DRAWINGS AND SPECIFICATIONS PERTAINING TO THE NEW ROOF DRAIN LEADERS, INCLUDING BUT NOT LIMITED TO SEPARATE OVERFLOW PIPES AND INSULATION.

ALTERNATE RENO #01 – GENERATOR
BASE BID: REINSTALL RELOCATED 600KW GENERATOR FROM ITS TEMPORARY LOCATION ADJACENT TO SELB BUILDING TO NEWLY CONSTRUCTED PAD TO THE SOUTH. PROVIDE ALL WIRING AND TERMINATIONS FOR A COMPLETE AND FUNCTIONAL SYSTEM.
ALTERNATE: PROVIDE AND INSTALL A **NEW 1.75 MW** GENERATOR SET PER SPECIFICATIONS. INCLUDE ANY MODIFICATIONS TO GENERATOR PAD AND PATHWAYS NECESSARY FOR LARGER UNIT. ADDITIONALLY, INCLUDE COSTS TO DECOMMISSION RELOCATED 600KW AND TRANSPORT OFFSITE. RETURN AREA TO UNDISTURBED CONDITION.

ALTERNATE RENO #02 – GENERATOR
BASE BID: REINSTALL RELOCATED 600KW GENERATOR FROM ITS TEMPORARY LOCATION ADJACENT TO SELB BUILDING TO NEWLY CONSTRUCTED PAD TO THE SOUTH. PROVIDE ALL WIRING AND TERMINATIONS FOR A COMPLETE AND FUNCTIONAL SYSTEM.
ALTERNATE: PROVIDE PRICING FOR A **NEW 750 KW** GENERATOR SET PER SPECIFICATIONS. INCLUDE ANY MODIFICATIONS TO GENERATOR PAD AND PATHWAYS NECESSARY FOR LARGER UNIT. ADDITIONALLY, INCLUDE COSTS TO DECOMMISSION RELOCATED 600KW AND TRANSPORT OFFSITE. RETURN AREA TO UNDISTURBED CONDITION.

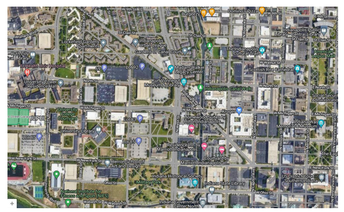
ALTERNATE RENO #03 – LD BUILDING – GLYCOL MAKEUP AND REFILLING LOOP (RENOVATION)
BASE BID: NO WORK.
ALTERNATE: PROVIDE THE MAKEUP UNIT AS SHOWN ON THE DRAWINGS. PROVIDE 550 GALLONS OF 40% PROPYLENE GLYCOL DOWFROST BY DOW CHEMICAL.
UNIT PRICE: 50 GALLONS OF GLYCOL.

ALTERNATE RENO #04 – LD BUILDING – NEW CONTROLS AND BALANCING OF EXISTING AHUS (RENOVATION)
BASE BID: NO WORK.
ALTERNATE: CONTROLS AND BALANCING AS SHOWN ON THE DOCUMENTS.

ALTERNATE RENO #05 – ARC FLASH STUDIES – MANDATORY ALTERNATE
BASE BID: NO WORK.
ALTERNATE: PROVIDE ARC FLASH STUDIES AS SHOWN ON THE DOCUMENTS.

ALTERNATE RENO #06 – SL BUILDING – SL CORE LAB SUITE, STORAGE ROOM SL344
BASE BID: NO WORK.
ALTERNATE: PROVIDE BUILDOUT OF STORAGE SPACE IN SL344 AS SHOWN ON THE DOCUMENTS.

VICINITY MAP



LOCATION MAP

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LIGHTING FIXTURE SCHEDULE - INTERIOR

NOTES:

1. LIGHTING SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS: NATIONAL ELECTRICAL CODE (NEC), NFPA 70, ILLUMINATING ENGINEERING SOCIETY (IES), INTERNATIONAL BUILDING CODE (IBC), ASHRAE 90.1-2010, LEED V4, IU CPF STANDARDS.
2. MANUFACTURER TO PROVIDE ALL NECESSARY POWER SUPPLIES, MOUNTING HARDWARE AND COMPONENTS FOR LIGHT FIXTURES TO OPERATE AS INTENDED.
3. COLOR AND FINISH OF LIGHT FIXTURES TO BE SELECTED/CONFIRMED BY ARCHITECT.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHTS.
5. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT OF SUSPENDED AND WALL MOUNTED LIGHT FIXTURES.
6. ALL LIGHT FIXTURES SHALL BE UL LISTED.

IMAGE	UNIT ID	BASE MANUFACTURER	EQUAL MANUFACTURER	LAMP	VOLTS	WATTS	UNITS	LUMENS	UNITS	CCT	LOCATION(S)	MOUNT	DESCRIPTION
	H1	COLUMBIA: MPS4-40HL-CW-EDU-CSHC	METALUX LITHONIA WILLIAMS 'FS' SERIES	LED	120 V	42 W	/FIXTURE	5800 LM	/FIXTURE	3500K	SHELL SPACE	SURFACE/SUSPENDED	4'L STRIP FIXTURE WITH FROSTED CURVED ACRYLIC LENS AND WIDE DISTRIBUTION. 0-10V DIM. PROVIDE CHAIN HANGER ASSEMBLY FOR SUSPENSION MOUNTING.
	L10	FINELITE: HPR-LED-A-2X2-H-835-DCO-120-SC-FC-10%-CX	FOCAL POINT PINNACLE WILLIAMS 'AT3' SERIES	LED	120 V	43 W	/FIXTURE	4942 LM	/FIXTURE	3500K	LABS/LAB SUPPORT	RECESSED	2' X 2' RECESSED ARCHITECTURAL TROFFER WITH COLD ROLLED STEEL HOUSING AND ANGLED DIFFUSED CENTER OPTICS. 0-10V DIM.
	L10E	FINELITE: HPR-LED-A-2X2-H-835-DCO-120-SC-FC-10%-CX	FOCAL POINT PINNACLE WILLIAMS 'AT3' SERIES	LED	120 V	43 W	/FIXTURE	4942 LM	/FIXTURE	3500K	LABS/LAB SUPPORT	RECESSED	SAME AS TYPE L10 WITH INTEGRAL EMERGENCY BATTERY BACKUP.
	L12	NEW STAR: SC-R-22-HP/OP-R2W4-35-2C-A-12-DM1-90C	LC DOANE KENALL WILLIAMS 'MCT' SERIES	LED	120 V	50 W	/FIXTURE	5000 LM	/FT		INSECTARY	RECESSED	2' X 2' RECESSED 'VIVARIUM' FIXTURE WITH (2) RED ROWS OF LED AND (4) WHITE ROWS OF LED. RED AND WHITE LEDS TO BE CONTROLLED SEPARATELY. 0-10V DIM TO 1%.
	L13	KURTZON: DKS-F/G-2-1X2-RED-WHT-UNV-FROST	LC DOANE KENALL COLE 'PH610' SERIES	LED	120 V	30 W	/FIXTURE	3000 LM	/FIXTURE		DARK ROOM	RECESSED	1' X 2' RECESSED 2 COMPARTMENT DARKROOM SAFELIGHT WITH SMOOTH DIFFUSED LENS. PROVIDE RED (660nM) LED SOURCE IN COMPARTMENT 1 AND WHITE LED SOURCE IN COMPARTMENT 2. COMPARTMENTS TO BE SWITCHED SEPARATELY.
	W3	DUAL-LITE: SE-S-X-X-SW5	SURE-LITES: "CAX" SERIES LITHONIA: "LRE" SERIES COLE: "SL290" SERIES	LED	120 V	2 W	/FIXTURE		/FIXTURE		DARK ROOM	WALL	WALL MOUNT IN-USE SIGN WITH DIE-CAST ALUMINUM HOUSING AND SPECIAL WORDING TO READ "DARK ROOM IN USE". ARCHITECT TO SELECT FINISH AND LETTERING COLOR.
	X1	DUAL-LITE: SE-S-R-WN-1	SURE-LITES: "CAX" SERIES LITHONIA: "LRE" SERIES WILLIAMS: "CA" SERIES	LED	120 V	2 W	/FIXTURE				EGRESS PATH	CEILING	CEILING MOUNT SINGLE FACE EXIT SIGN WITH DIE-CAST ALUMINUM HOUSING WITH WHITE BRUSHED ALUMINUM FINISH AND RED LETTERS AND ARROWS.
	X3	DUAL-LITE: SE-S-R-WN-1	SURE-LITES: "CAX" SERIES LITHONIA: "LRE" SERIES WILLIAMS: "CA" SERIES	LED	120 V	2 W	/FIXTURE				EGRESS PATH	WALL	WALL MOUNT EXIT SIGN WITH DIE-CAST ALUMINUM HOUSING WITH WHITE BRUSHED ALUMINUM FINISH AND RED LETTERS AND ARROWS.

2/1

SWITCH IDENTITY SYMBOLS

S	SINGLE POLE SWITCH
S_a	"a" INDICATES SWITCH LEG
S_3	SWITCH 3-WAY
S_4	SWITCH 4-WAY
D	DIMMER SWITCH
	DUAL TECHNOLOGY OCCUPANCY SENSOR, WALL MOUNTED WITH OFF-AUTO OVERRIDE SWITCH
	DUAL TECHNOLOGY OCCUPANCY SENSOR, CEILING MOUNTED

CIRCUITING INFO

1AH1-42 — BREAKER PANEL
CIRCUIT NO. PARTS

1AH1-42
ROOM CIRCUIT NO.

1AH1-42 — CIRCUIT NO.
TYPICAL HOMERUN
PHASE
NEUTRAL
GROUND
HOMERUN PARTS

LINETYPE DESIGNATIONS

DEMOLITION	- - - - - - - - - - - - - - - -
EXISTING	———————————
NEW WORK	———————————

LIGHTING IDENTITY SYMBOLS

	SURFACE MOUNTED TROFFER/FLAT PANEL (2'x4' SHOWN)
	RECESSED TROFFER/FLAT PANEL (2'x4' SHOWN)
	RECESSED ARCHITECTURAL TROFFER (2'x4' SHOWN)
	LINEAR RECESSED (4'Wx4'L SHOWN)
	SURFACE MOUNTED FIXTURE
	RECESSED MOUNTED FIXTURE
	SUSPENDED OR CHAIN HUNG STRIP FIXTURE
	SUSPENDED DECORATIVE FIXTURE
	WALL MOUNTED SCONCE OR WALL PACK FIXTURE
	WALL MOUNTED SCONCE OR WALL BRACKET (4' SHOWN)
	CEILING OR STEM MOUNTED EXIT SIGN (ONE FACE)
	CEILING OR STEM MOUNTED EXIT SIGN (TWO FACE)
	WALL MOUNTED EXIT SIGN (ONE FACE)
	WALL END MOUNTED EXIT SIGN (TWO FACE)
	ARROWS/CHEVRONS AS INDICATED ON DRAWINGS.
	POLE MOUNTED SINGLE PATHWAY LIGHT

L1
NL a

LIGHTING FIXTURE LEGEND:

"L1" - DESIGNATES LIGHT FIXTURE TYPE, REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
"a" - DESIGNATES SWITCH LEG
"NL" - DESIGNATES NIGHT LIGHT, FIXTURE TO BE CONNECTED AHEAD OF CONTROLS

LIGHT FIXTURE TYPE MODIFIERS:

"E" - AT THE END OF LIGHT FIXTURE TYPE DESIGNATES A FIXTURE WITH AN EMERGENCY BATTERY BACKUP.
"X" - AT THE END OF THE LIGHT FIXTURE TYPE DESIGNATES A FIXTURE WITH AN EMERGENCY TRANSFER DEVICE.

NOTE: NOT ALL SYMBOLOGY MAY BE SHOWN. REFER TO LIGHT FIXTURE SCHEDULE FOR DESCRIPTION.

REFERENCE SYMBOLS

SECTION INDICATOR:	REFERENCE SECTION LOCATION THROUGH AN AREA FOR ADDITIONAL INFORMATION.
SECTION LOCATION IN DRAWING MODULE; BEYOND AREA EXTENSION; PLAN; SECTION LOCATION AT SUBSET SHEET	
KEYNOTE INDICATOR:	REFERENCE SHEET KEYNOTE LOCATION FOR ADDITIONAL INFORMATION.
KEYNOTE INDICATORS; NUMERIC CHARACTER RELATES TO ITEM; POINT LEADER; AREA LEADER; LINE LEADER	
DETAIL INDICATOR:	REFERENCE DETAIL LOCATION FOR ADDITIONAL INFORMATION.
LARGE SCALE VIEW LOCATION IN DRAWING MODULE; DETAIL LOCATION IN DRAWING MODULE; LARGE SCALE VIEW LOCATION AT SUBSET SHEET; DETAIL LOCATION AT SUBSET SHEET	
DRAWING BLOCK TITLE INDICATOR:	REFERENCE DRAWING MODULE LOCATION FOR ADDITIONAL INFORMATION.
DRAWING MODULE LOCATION (IDENTIFYING LOWER LEFT OF MULTIPLE MODULES); N; DRAWING BLOCK TITLE; SCALE: 1/8" = 1'-0"; NORTH ARROW; NUMERIC SCALE	
MATCH LINE INDICATOR:	REFERENCE SHEET LOCATION FOR ADDITIONAL INFORMATION.
FLOOR PLAN OVERLAP; BEYOND AREA EXTENSION; SEE P-102; REFER TO ADDITIONAL SHEET FOR CONTINUATION; PLAN	
REVISION INDICATOR:	REFERENCE TITLE BLOCK LOCATION FOR ADDITIONAL INFORMATION.
REVISION INDICATOR; REVISION CLOUD	

NOT ALL NOTES, DESIGNATORS, SYMBOLS OR ABBREVIATIONS MAY APPLY TO THIS PROJECT

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27 ADDENDUM 2 07.11.2025

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06.16.2025
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CLIENT PROJECT NUMBER:
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DRAWN BY:
KJE

DRAWING TITLE:
LIGHTING SYMBOLS, ABBREVIATIONS AND SCHEDULES

DRAWING NUMBER:
EL0.001
RENOVATION

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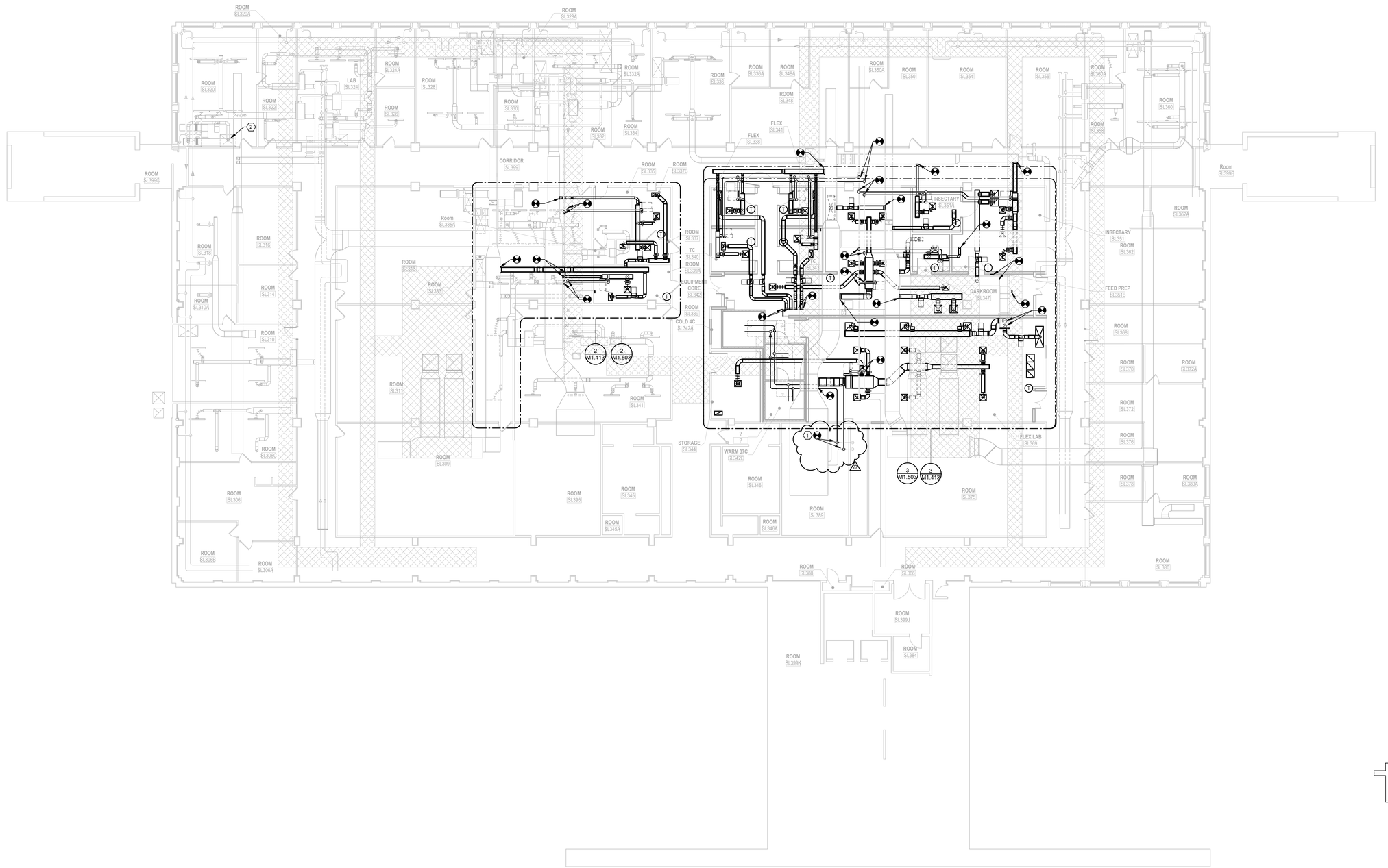
GENERAL NOTES

1. DUCTWORK AND PIPING ROUTED OVER ABOVE CEILING CATWALK SHALL PROVIDE MINIMUM CLEARANCE ABOVE CATWALK OF 30" TO PERMIT ACCESS EXCEPT WHERE APPROVED BY THE OWNER.
2. DUCTWORK AND PIPING SHALL BE ROUTED PERPENDICULAR TO CATWALK BUT NOT PARALLEL TO CATWALK EXCEPT WHERE APPROVED BY THE OWNER.

PLAN NOTES

1. 4" CHILLED WATER CONNECTION TO EXISTING 6" CHILLED WATER PIPING IN MECHANICAL ROOM.
2. RECONNECT EXISTING AIR CONTROL VALVE DUCTWORK TO NEW FUME HOOD. PROVIDE NEW FUME HOOD CONTROLLER AND TIE TO EXISTING AIR CONTROL VALVE.



1 **HVAC DUCTWORK 03 - SL 3RD FLOOR**
SCALE: 3/32" = 1'-0"

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DRAWN BY:
JPF

DRAWING TITLE:
MECHANICAL PLAN - THIRD FLOOR INTERSTITIAL

TRUE NORTH

DRAWING NUMBER:
M1.123i

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DUCT CONSTRUCTION, SEALING, AND INSULATION

GENERAL NOTES:
A. REFER TO SPECIFICATIONS FOR DUCT CONSTRUCTION: SHEET METAL DUCT; INTERIOR LINING; EXTERIOR INSULATION; FIBERGLASS DUCTBOARD; ETC.
B. DUCT CONSTRUCTION AND SEALING SHALL BE PER LATEST S.M.A.C.N.A. STANDARDS.

NOTES:
1. ROUND SHEET METAL RUN-OUTS TO AIR DEVICES DOWNSTREAM OF VAV BOXES SHALL BE EXTERNALLY INSULATED.
2. PVC COATED DUCTWORK.

	S.M.A.C.N.A. CLASS.								
			LEAKAGE CLASS						
DUCT SYSTEM	S.P. CON-STRUCT.	SEAL CLASS	RECT	RND	INTERNALLY LINED	EXTERNAL INSULATION	DOUBLE WALL INSULATED	NOT INSULATED	SEE NOTE
SUPPLY DUCTWORK UPSTREAM OF VAV BOXES	+4"	A	8	4	-	●	-	-	-
SUPPLY DUCTWORK DOWNSTREAM OF VAV BOXES	+1"	A	16	8	-	●	-	-	1
EXHAUST DUCTWORK DOWNSTREAM OF AIR CONTROL VALVES	-6"	A	4	2	-	-	-	●	2
EXHAUST DUCTWORK UPSTREAM OF AIR CONTROL VALVES	-1"	A	4	2	-	-	-	●	2

HVAC DESIGN DATA

GENERAL NOTES:
A. OUTDOOR DESIGN CONDITIONS:
92°F DB SUMMER
74°F WB SUMMER
1°F DB WINTER
B. DESIGN ALTITUDE: 850 FT.

NOTES:
1. LISTED RH IS MAXIMUM ANTICIPATED AT LISTED DB TEMPERATURE.
2. REFER TO IUI STANDARDS FOR ACTUAL ROOM SETPOINTS.
3. "FLOATING" MEANS THERE IS NO ACTIVE CONTROL.
4. BASED ON SUPPLY CFM.

	INTERIOR DESIGN DATA					
	SUMMER		WINTER			
SPACE NAME / TYPE	°F DB	% RH (NOTE 1,3)	°F DB	% RH (NOTE 1,3)	MINIMUM TOTAL AIR CHANGES (NOTE 4)	SEE NOTE
LABS	68	50	68	FLOATING	6	2
OFFICES	74	55	72	FLOATING	-	2
ALL OTHER SPACES	74	55	72	FLOATING	-	2
-	-	-	-	-	-	-

AIR CONTROL UNITS

GENERAL NOTES:
A. TYPES: "ACV" - AIR CONTROL VALVE;
"HAVAV" - HIGH ACCURACY VARIABLE VOLUME REHEAT;
"VAV" - VARIABLE VOLUME REHEAT.
B. 0.35" MAX. S.P. DROP THRU UNIT & COIL AT MAX. CFM.
C. HOT WATER REHEAT COIL CAPACITIES BASED ON 50°F ENT. AIR & 140°F ENT. WATER, AND MAX 10 FT. HD. W.P.D.
D. AUTO VALVES SHALL BE 2-WAY TYPE UNLESS NOTED OTHERWISE.
E. WHEN PICV IS INDICATED, MINIMUM REQUIRED INLET PRESSURE SHALL NOT EXCEED 5 PSIG.
F. IF REHEAT COIL IS FURNISHED SEPARATELY FROM TERMINAL UNIT, PROVIDE DUCT TRANSTION AS REQUIRED BETWEEN TERMINAL UNIT AND COIL.
G. REFER TO BALANCING SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
H. THE AIRFLOW VALUES LISTED AIRE DESIGN VALUES. THE AIR CONTROL UNITS SUPPLIER SHALL PROVIDE A "SPACE VERIFICATION TABLE" (ROOM BALANCE SHEET) THAT CONFIRMS OR REVISES THE VALUES BASED ON THEIR PRODUCT PERFORMANCE OR RECOMMENDATIONS. THE TABLE SHALL BE SUBMITTED WITH SHOP DRAWINGS, AND THAT APPROVED SUBMITTAL SHALL BE THE BASIS BY WHICH THE AIR BALANCE IS PERFORMED.
I. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR SEISMIC RESTRAINT REQUIREMENTS.
J. ZONE PRESSURE NOMENCLATURE:
"POS" - POSITIVE
"NEG" - NEGATIVE
"NTRL" - NEUTRAL

NOTES:
1. UNIT IS AN AIR TERMINAL UNIT VAV REHEAT BOX, REFER TO SPEC SECTION 23 36 16.
2. AIR CONTROL VALVE FURNISHED BY OWNER.
3. UNIT IS A HIGH ACCURACY VARIABLE AIR VOLUME (HAVAV) AIR CONTROL VALVE. REFER TO SPEC SECTION 23 36 24.
4. MINIMUM ROOM SUPPLY SHALL BE THE SCHEDULED "OCCUPIED" MINIMUM AS NOTED.
5. AIR VALVE SHALL BE ENABLED BY "SASH SENSOR" ON HOOD.
6. MINIMUM ROOM EXHAUST SHALL BE THE SCHEDULED TOTAL ROOM EXHAUST "OCCUPIED" MINIMUM AS NOTED.
7. AIR VALVE SHALL BE "CLASS B" TO RESIST CORROSION. PROVIDE WITH HIGH SPEED ACTUATOR.
8. PROVIDE WITH HIGH SPEED ACTUATOR.

AIR CONTROL UNIT																							REHEAT COIL																		SEISMIC RESTRAINTS		
			DUTY							MINIMUM DUCT CONNECTION INLET SIZE			OCCUPIED CFM				BASIS OF DESIGN			ELECTRIC										HOT WATER				AUTO CONTROL VALVE								
																						ELECTRICAL SERVICE																				
ZONE OFFSET CFM	ZONE PRESSURE (NOTE J)	MARK	ROOM SUPPLY	ROOM RETURN	ROOM EXHAUST	HOOD EXHAUST	EQUIPMENT EXHAUST	TYPE	AIR VALVE QUANTITY	AIR VALVE DIAMETER (EACH)	DIAMETER	WIDTH	HEIGHT	MAXIMUM	MINIMUM	UNOCCUPIED SETBACK MIN. CFM	MANUFACTURER	MODEL	REHEAT MAXIMUM CFM	KW	STAGES	SCR CONTROL	VOLTAGE - PHASE	FULL LOAD AMPS (FLA)	MIN CURRENT AMPS (MCA)	MAX OVER CURRENT PROTECTION (MOCP)	MINIMUM SCCR (AMPS)	MBH	GPM	PIPE RUNOUT SIZE	PRESSURE DEPENDENT	PRESSURE DEPENDENT CV	PRESSURE INDEPENDENT (PICV)	REQUIRED	IMPORTANCE FACTOR	SEE NOTE
LD055 ROOM																																											
75	NEG	SB-01	●	-	-	-	-	VAV	1	0"		24"	16"	2,800	710		TITUS	DESV	2400									114.6	11.5	1.5"	●	5.4	-	-	-	1,4,8
		EB-01	-	-	●	-	-	HAVAV	1	14"	14"			2,175	0		ANTEC	VFX										0.0	0"	●		-	-	-		3,6,8
		HB-01A	-	-	-	●	-	HAVAV	1	10"	10"			1,200	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		HB-01B	-	-	-	●	-	HAVAV	1	10"	10"			1,200	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
LD055A DARKROOM																																											
75	NEG	SB-03	●	-	-	-	-	VAV	1	6"	6"			115	90		TITUS	DESV	90									4.3	0.4	0.75"	●	0.2	-	-	-	1,4
		EB-03	-	-	●	-	-	HAVAV	1	8"	8"			190	165		ANTEC	VFX										0.0	0"	●		-	-	-		3,6
LD055B ROOM																																											
0	NTRL	SB-02	●	-	-	-	-	VAV	1	6"	6"			195	130		TITUS	DESV	130									6.2	0.6	0.75"	●	0.3	-	-	-	1,4
		EB-02	-	-	●	-	-	HAVAV	1	8"	8"			195	130		ANTEC	VFX										0.0	0"	●		-	-	-		3,6
LD059 ROOM																																											
75	NEG	SB-04	●	-	-	-	-	VAV	1	10"	10"			705	405		TITUS	DESV	450									21.5	2.1	0.75"	●	1.0	-	-	-	1,4
		EB-04	-	-	●	-	-	HAVAV	1	10"	10"			780	480		ANTEC	VFX										0.0	0"	●		-	-	-		3,6
LD063 ROOM																																											
75	NEG	SB-05	●	-	-	-	-	VAV	1	6"	6"			250	95		TITUS	DESV	165									7.9	0.8	0.75"	●	0.4	-	-	-	1,4
		EB-08	-	-	●	-	-	HAVAV	1	8"	8"			325	165		ANTEC	VFX										0.0	0"	●		-	-	-		3,6
LD204 LAB																																											
75	NEG	S2-01	●	-	-	-	-	VAV	1	0"		24"	16"	3,630	1,075		TITUS	DESV	1815									86.6	8.7	1.25"	●	4.1	-	-	-	1,4,8
		E2-01	-	-	●	-	-	HAVAV	1	12"		24"	12"	3,005	0		ANTEC	VFX										0.0	0"	●		-	-	-		3,6,8
		H2-01A	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H2-01B	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
LD220A LAB																																											
75	NEG	S2-03	●	-	-	-	-	VAV	1	14"	14"			1,225	795		TITUS	DESV	650									31.0	3.1	1"	●	1.5	-	-	-	1,4,8
		E2-03	-	-	●	-	-	HAVAV	1	12"	12"			650	220		ANTEC	VFX										0.0	0"	●		-	-	-		3,6,8
		H2-03	-	-	-	●	-	HAVAV	1	12"	12"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
LD220C LAB																																											
75	NEG	S2-05	●	-	-	-	-	VAV	1	16"	16"			1,985	460		TITUS	DESV	990									47.3	4.7	1"	●	2.2	-	-	-	1,4,8
		E2-05	-	-	●	-	-	HAVAV	1	12"	12"			1,710	0		ANTEC	VFX										0.0	0"	●		-	-	-		3,6,8
		H2-05	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
LD220E ROOM																																											
75	NEG	S2-07	●	-	-	-	-	VAV	1	8"	8"			425	45		TITUS	DESV	175									8.4	0.8	0.75"	●	0.4	-	-	-	1,4
		E2-07	-	-	●	-	-	HAVAV	1	8"	8"			425	120		ANTEC	VFX										0.0	0"	●		-	-	-		3,6
LD312 ROOM																																											
150	NEG	S3-02A	●	-	-	-	-	VAV	1	16"	16"			1,800	935		TITUS	DESV	1800									85.9	8.6	1.25"	●	4.1	-	-	-	1,4,8
		S3-02B	●	-	-	-	-	VAV	1	14"	14"			1,750	935		TITUS	DESV	1750									83.5	8.4	1.25"	●	3.9	-	-	-	1,4,8
		S3-02C	●	-	-	-	-	VAV	1	14"	14"			1,750	935		TITUS	DESV	1750									83.5	8.4	1.25"	●	3.9	-	-	-	1,4,8
		H3-02A	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02B	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02C	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02D	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02E	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02F	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02G	-	-	-	●	-	HAVAV	1	10"	10"			650	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7
		H3-02H	-	-	-	●	-	HAVAV	1	12"	12"			900	350		ACCUTROL	AVC										0.0	0"	●		-	-	-		2,3,5,7

AIR DISTRIBUTION DEVICES

GENERAL NOTES:
A. ALL LAY-IN AIR DEVICES SHALL FIT IN 24"X24" LAY-IN CLG SYSTEM. VERIFY GRID TYPE AND COORDINATE AIR DEVICE COMPATIBILITY.
B. FINISH KEY: "W.B.E." - WHITE BAKED ENAMEL;
"E.C.L." - ETCHED CLEAR LACQUER OR ANODIZED;
"C.C.B.A." - CUSTOM COLOR SELECTED BY ARCHITECT.
C. SUPPLY AIR DIFFUSERS SHALL BE 4-WAY BLOW, UNLESS INDICATED OTHERWISE ON DRAWINGS.
D. PROVIDE AUX. FRAMES FOR AIR DEVICES IN PLASTER, GYPSUM BOARD, TILE OR OTHER HARD SURFACES.

NOTES:
1. INSIDE OF PLENUM SHALL BE PAINTED BLACK BY HC.
2. 48" LENGTH.
3. 72" LENGTH.

		MOUNTING TYPE						MATERIAL		FINISH					BASIS OF DESIGN		
MARK	DESCRIPTION	LAY-IN	SURFACE	DUCT	SPLINE	SNAP-IN	STEEL	ALUMINUM	STAINLESS STEEL	W.B.E.	E.C.L.	C.C.B.A.	OPPOSED BLADE DAMPER	SQ-TO-RD NECK ADAPTOR	MANUFACTURER	MODEL	SEE NOTE
K10	EGGCRATE CEILING GRILLE, EXHAUST	●						●		●					TITUS	50F	
P10	PERFORATED FACE CRITICAL ENVIRONMENT RADIAL AIR PATTERN DIFFUSER	●						●		●					TITUS	TRITEC	
S10	LINEAR SLOT DIFFUSER, SUPPLY	●						●		●					TITUS	FL-30-JT-1 3"SLOT	1,2
S20	LINEAR SLOT DIFFUSER, SUPPLY	●						●		●					TITUS	FL-30-JT-1 3"SLOT	1,3
T10	CEILING GRILLE, RETURN	●						●		●					TITUS	350FL	

AIR TERMINAL UNITS - HOT WATER HEAT

GENERAL NOTES:
A. TYPES: "V.V." - VARIABLE VOLUME;
"V.V.R." - VARIABLE VOLUME REHEAT;
"C.V.R." - CONSTANT VOLUME REHEAT;
"V.V.E." - VARIABLE VOLUME EXHAUST;
"C.V.E." - CONSTANT VOLUME EXHAUST.
B. 0.35" MAX. S.P. DROP THRU UNIT & COIL AT MAX. CFM.
C. REHEAT COIL CAPACITIES BASED ON HEATING MAX. CFM, 50°F ENT. AIR & 140°F ENT. WATER, AND MAX. 10 FT. HD. W.P.D.
D. AUTO VALVES SHALL BE 2-WAY TYPE UNLESS NOTED OTHERWISE.
E. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR SEISMIC RESTRAINT REQUIREMENTS.
F. WHEN PICV IS INDICATED, MINIMUM REQUIRED INLET PRESSURE SHALL NOT EXCEED 5 PSIG.
G. IF REHEAT COIL IS FURNISHED SEPARATELY FROM TERMINAL UNIT, PROVIDE DUCT TRANSITION AS REQUIRED BETWEEN TERMINAL UNIT AND COIL.

NOTES: 2

		MINIMUM INLET SIZE			CFM				REHEAT COIL			AUTO CONTROL VALVE	SEISMIC RESTRAINTS		
MARK	TYPE	DIAMETER	WIDTH	HEIGHT	COOLING MAXIMUM	DEAD BAND MINIMUM	REHEAT MAXIMUM	HEATING MAXIMUM	MBH	GPM	PIPE RUNOUT SIZE	PRESSURE DEPENDENT	PRESSURE DEPENDENT CV	PRESSURE INDEPENDENT (PICV)	REQUIRED	IMPORTANCE FACTOR	REFER TO NOTE
S2-02	V.V.R		24"	16"	2,485	500	1,245	1,245	59.4	5.9	1"	●	2.8	-	-	-	
S2-04	V.V.R	6"			225	115	115	115	5.5	0.5	0.75"	●	0.3	-	-	-	
S2-06	V.V.R	10"			665	135	335	335	16.0	1.6	0.75"	●	0.8	-	-	-	
S3-01	V.V.R	10"			810	200	405	405	19.3	1.9	0.75"	●	0.9	-	-	-	

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HEAPY
PROJECT NO. 2023-06075

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PROFESSIONAL ENGINEER

INDIANA UNIVERSITY INDIANAPOLIS

20230276 -IN703 -IUI LAB INDIANAPOLIS SCIENCE LABORATORY BUILDING

310 N. BLACKFORD ST.
INDIANAPOLIS, IN 46202-3115

BID SET 5

△ REVISIONS:

27	ADDENDUM 2	07.11.2025

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06.16.2025
arcDESIGN PROJECT NUMBER:
23176
CLIENT PROJECT NUMBER:
20230276
DRAWN BY:
JPF

DRAWING TITLE:

MECHANICAL SCHEDULES

DRAWING NUMBER:
M2.601
LD BUILDING

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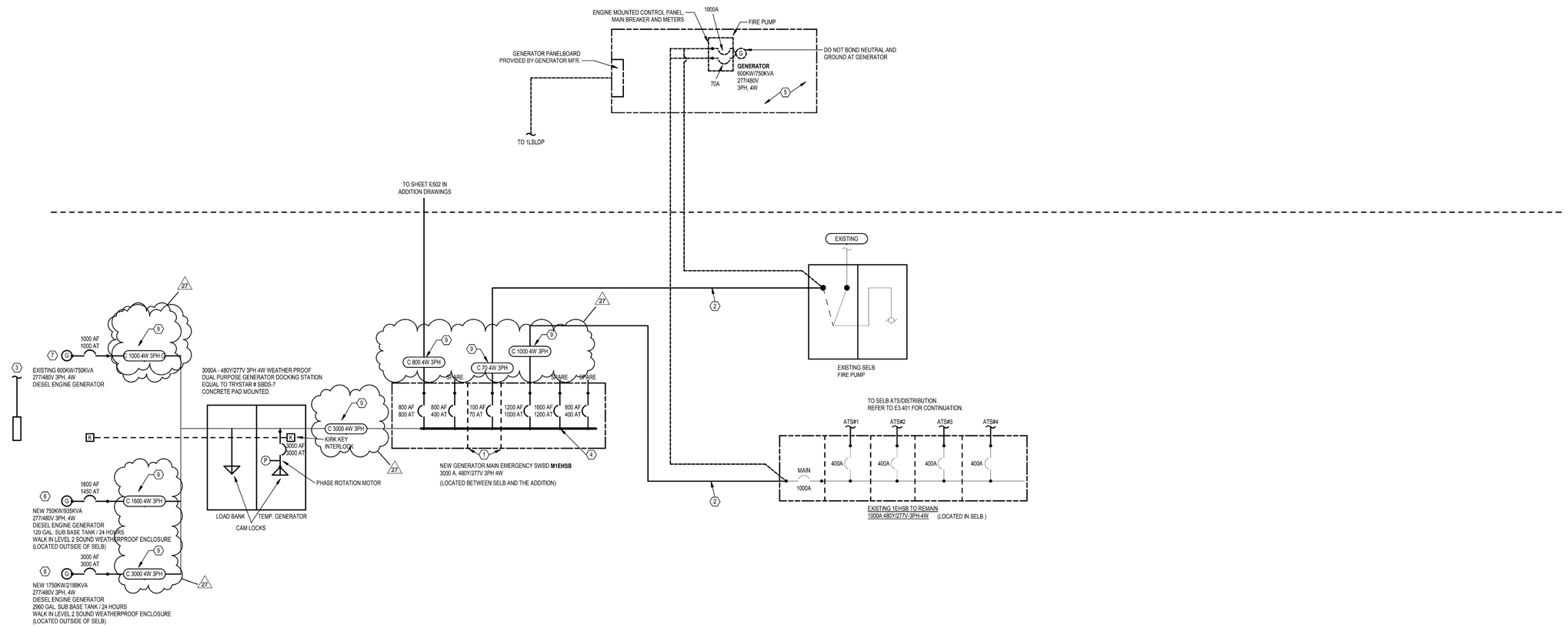
FEEDER SCHEDULE	
C-70-4W-3PH	3-4, 4 N, #8 G, 1.25"C
C-225-4W-3PH	3-4/0, 4/0 N, #4 G, 2.5"C
C-250-4W-3PH	3-250 kcmil, 250 kcmil, #4 G, 2.5"C
C-400-4W-3PH	3-600 kcmil, 600 kcmil N, #3 G, 4"C
C-600-4W-3PH	(2)3-350 kcmil, 350 kcmil N, #1/0 G, 4"C
C-800-4W-3PH	(2)3-600 kcmil, 600 kcmil N, 1/0 G, 4"C
C-1000-4W-3PH	(4)3-500 kcmil, 500 kcmil N, (2)2/0 G, 4"C
C-1000-4W-3PH-G	(3)3-500 kcmil, 500cmil N, 2/0 I/G 2/0 I/G, (6)4"C
C-1200-4W-3PH(2)	(5)3-600 kcmil, 600 kcmil N, 3/0 G, 4"C
C-1600-4W-3PH	(4)3-600 kcmil, 600 kcmil, 4/0 G, (8) 4"C
C-3000-4W-3PH	(8)3-500 kcmil, 500 kcmil N, 400 kcmil G, (8) 4"C

GENERAL NOTES:

A. PANELS AND FEEDERS INDICATED ON THIS SHEET ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE.

PLAN NOTES

1. PROVIDE SEPARATION BETWEEN SECTIONS OF SWITCHBOARD.
2. UTILIZE EXISTING PATHWAY INTO SELB TO CONTINUE FEEDER. PROVIDE NEW FEEDER ALL THE WAY INTO THE BUILDING, TO THE EXISTING SWITCHBOARD / FIRE PUMP.
3. CONNECT TO EXISTING GENERATOR PANEL FEED. EXTEND MATCHING WIRE SIZE FROM EXISTING AS INDICATED ON SINGLE LINE DRAWINGS.
4. PROVIDE CUSTOM LUGS TO ACCOMMODATE WIRE SIZE / QUANTITY.
5. EXISTING GENERATOR BEHIND SELB. GENERATOR RELOCATED UNDER ADDITION PROJECT. AT END OF PROJECT WHEN NEW GENERATOR IS UP AND RUNNING, REMOVE GENERATOR AND TURN OVER TO IU. DELIVER TO LOCATION OF IU CHOOSING ON THIS CAMPUS. COORDINATE REMOVAL WITH IU ENGINEERING GROUP.
6. NOTE EXTRA CONDUITS WITH FEEDER, EXTRA ARE PREP FOR FUTURE LARGER GENERATOR TO BE INSTALLED.
7. RELOCATE EXISTING GENERATOR BACK ONTO NEW PAD WITH EXTRA CONDUITS AS NOTED FOR FUTURE UPGRADE.
8. LARGER SIZE GENERATOR BEING BID AS AN ALTERNATE. REFER TO BID SHEET FOR ALTERNATE LANGUAGE.
9. PROVIDE FEEDER AS INDICATED. PATHWAY (UNDERGROUND CONDUIT) IS PROVIDED UNDER PREVIOUS BID PACKAGE.



1 GENERATOR POWER SINGLE LINE
SCALE: NONE

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HEAPY
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6/16/25

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BID SET 5

REVISIONS:

26	ADDENDUM 1	07.02.2025
27	ADDENDUM 2	07.11.2025

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06.16.25
arcDESIGN PROJECT NUMBER:
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CLIENT PROJECT NUMBER:
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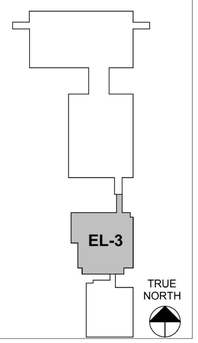
CRK

DRAWING TITLE:
GENERATOR POWER SINGLE LINE DIAGRAM



DRAWING NUMBER:
E3.402
EL BUILDING

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