



WOODLAND FISH LIFT PASSAGE

WOODLAND PULP, LLC
BAILEYVILLE, MAINE

ISSUED FOR BID
09/03/2025

NOTE:

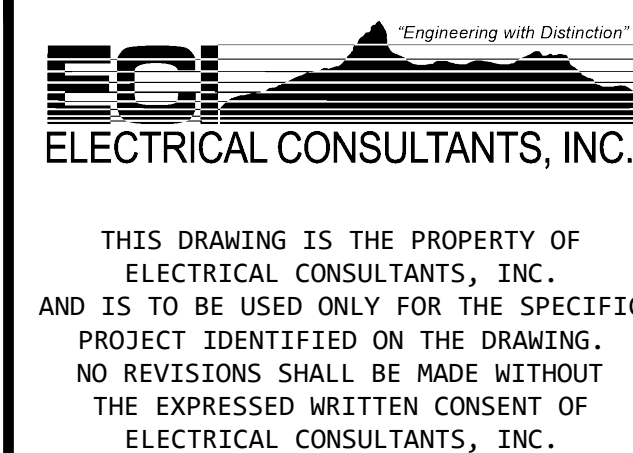
THIS ISSUED FOR BID (IFB) DRAWING PACKAGE SUPERCEDES THE ISSUED FOR CONSTRUCTION (IFC) DRAWING PACKAGE, DATED 03/28/2025.

THIS ISSUED FOR BID (IFB) DRAWING PACKAGE IS BASED ON THE ALDEN (A VERDANTAS COMPANY) IFB DRAWING PACKAGE, DATED 5/2/2025.

THIS ISSUED FOR BID (IFB) DRAWING PACKAGE IDENTIFIES EQUIPMENT AND DEVICES THAT ARE "NOT IN CONTRACT" (NIC) OR THOSE THAT WILL BE INCLUDED IN A BID SUPPLEMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID
NOT FOR
CONSTRUCTION
SEPTEMBER 3, 2025



DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE			
CHECKED BY	DATE	COVER SHEET FISH LIFT PASSAGE			
APPROVED BY	DATE	TECHNOLOGY		DRAWING CATEGORY	
CMH	02/22/2024	HYDRO		GENERAL	
SCALE	DATE	PROJECT NO.	DWG	REV	
NONE		ARL-007	EE-AA-001	1	

</

GENERAL SYMBOLS:

- 1

KEYED NOTE
- LCU1

EQUIPMENT ID OR LOCATION TAG
- 21

BOM IDENTIFIER
- D

EQUIPMENT LOCATED IN DOOR

ONE-LINE DIAGRAM SYMBOLS:

- CIRCUIT BREAKER
- MOTOR OVERLOAD
- CONTACTOR
- CURRENT TRANSFORMER (CT)
- POTENTIAL TRANSFORMER (PT)
- FUSE
- MOTOR LOAD
- NON-MOTOR LOAD

THREE-LINE DIAGRAM SYMBOLS:

- 2-POLE CIRCUIT BREAKER
- 3-POLE CIRCUIT BREAKER
- 3-POLE CIRCUIT BREAKER
WITH STATUS CONTACT
- 3-POLE MOTOR OVERLOAD
- 3-POLE CONTACTOR
- TRANSFORMER
- 3-POLE MAIN FUSE DISCONNECT BLOCK
- 3-POLE DISCONNECT SWITCH

WIRING DIAGRAM SYMBOLS:

- DOUBLE DECK TB'S

7-A

7-B

8-A

8-B

HORIZONTAL JUMPER -
CONNECT ADJACENT TERMINALS

VERTICAL JUMPER -
CONNECT DOUBLE STACKED TERMINALS

WIRE JUMPER -
CONNECT TERMINALS USING
A PHYSICAL PIECE OF WIRE

WHIP JUMPER -
CONNECT TERMINALS USING
A WHIP STYLE JUMPER IN JUMPER PORTS

TERMINAL A - TOP
TERMINAL B - BOTTOM

TRIPLE DECK TB'S

7-A

7-B

7-C

8-A

8-B

8-C

HORIZONTAL JUMPER -
CONNECT ADJACENT TERMINALS

VERTICAL JUMPER -
CONNECT TRIPLE STACKED TERMINALS

WIRE JUMPER -
CONNECT TERMINALS USING
A PHYSICAL PIECE OF WIRE

WHIP JUMPER -
CONNECT TERMINALS USING
A WHIP STYLE JUMPER IN JUMPER PORTS

TERMINAL A - TOP
TERMINAL B - MIDDLE
TERMINAL C - BOTTOM

COMMON NODE TB'S

A

C

27

28

B

D

HORIZONTAL JUMPER -
CONNECT ADJACENT TERMINALS

TERMINAL A - LEFT TOP
TERMINAL B - RIGHT TOP
TERMINAL C - LEFT BOTTOM
TERMINAL D - RIGHT BOTTOM

SCHEMATIC DIAGRAM SYMBOLS:

RESISTOR

CAPACITOR

BATTERY

DIODE

DIODE BRIDGE

FUSE

FUSE LINK

HEATER ELEMENT

QUICK DISCONNECT DEVICE

NORMALLY CLOSED (NC) CONTACT

NORMALLY OPEN (NO) CONTACT

RELAY COIL

FLOW SWITCH (FS)

LEVEL SWITCH (LS)

PRESSURE SWITCH (PS)

TEMPERATURE SWITCH (TS)

VIBRATION SWITCH (VS)

TERMINAL BLOCK SYMBOLS:

FLCP - FISH LIFT CONTROL PANEL

PLC - PLC MODULE

GATE ACTUATOR OR CONTROLLER (FIELD)

GATE ACTUATOR OR CONTROLLER (INTERNAL)

VALVE ACTUATOR OR CONTROLLER

MOTOR STARTER (LOCATED IN MCC)

VF DRIVE (LOCATED IN MCC)

UPPER/LOWER HOIST CONTROL STATION

SKID OR MISC. CONTROL STATION

DEVICE TERMINAL

GROUND TERMINAL

WIRING & CABLE LEGEND:

FIBER OPTIC CABLE

CAT6 CABLE

LOCAL WIRING

FIELD WIRING

PLUG IN JUMPER

GENERAL ABBREVIATIONS:

AC

ALTERNATING CURRENT

BOF

BOTTOM OF FIXTURE

BOT

BOTTOM OF (CABLE) TRAY

CB

CIRCUIT BREAKER

CC

CONFORMALLY COATED

CPU

CENTRAL PROCESSING UNIT

CT

CURRENT TRANSFORMER

DC

DIRECT CURRENT

DCS

DIGITAL CONTROL SYSTEM

EST

ESTIMATE / ESTIMATED

HMI

HUMAN MACHINE INTERFACE

NF

NON-FUSED (DISCONNECT)

OIT

OPERATOR INTERFACE TERMINAL

PLC

PROGRAMMABLE LOGIC CONTROLLER

PS

POWER SUPPLY

PT

POTENTIAL TRANSFORMER

STD

STANDARD

SH

SHIELD

SP

SPARE

TC

TRAY CABLE

T/C

THERMOCOUPLE

PR

PAIR (2 CONDUCTOR)

TR

TRIAD (3 CONDUCTOR)

QD

QUAD (4 CONDUCTOR)

3C

THREE CONDUCTOR CABLE

3-1C

THREE - ONE CONDUCTOR CABLES

EMT

ELECTRICAL METALLIC TUBING

RGS

RIGID GALVANIZED STEEL

FR

FIELD RUN

FWE

FURNISHED WITH EQUIPMENT

NIC

NOT IN CONTRACT

TBD

TO BE DETERMINED

UNO

UNLESS NOTED OTHERWISE

VSC

VENDOR SUPPLIED CABLE

L OR L1

LINE (HOT)

N

NEUTRAL

GND

GROUND

XFMR

TRANSFORMER

PROJECT ABBREVIATIONS:

AWS

ATTRACTION WATER SUPPLY

US

UPSTREAM

DS

DOWNSTREAM

P&W

POOL AND WEIR (FISH LADDER)

TOB

TOP OF BEAM

TOC

TOP OF CONCRETE

TOG

TOP OF GRATE

TOS

TOP OF STEEL

TOW

TOP OF WALL

WIRE COLOR CODES:

(ONE LETTER CODE, IF USED)

B

BLACK

W

WHITE

R

RED

G

GREEN

U

BLUE

P

PINK

O

ORANGE

Y

YELLOW

N

BROWN

R/B

RED WITH BLACK TRACER

U/B

BLUE WITH BLACK TRACER

O/B

ORANGE WITH BLACK TRACER

Y/B

YELLOW WITH BLACK TRACER

N/B

BROWN WITH BLACK TRACER

WIRE COLOR CODES:

(TWO LETTER CODE, IF USED)

BK

BLACK

WH

WHITE

RD

RED

GN

GREEN

BU

BLUE

GY

GRAY

OR

ORANGE

PK

PINK

YL

YELLOW

PU

PURPLE

BN

BROWN

STANDARD SYMBOLS AND ABBREVIATIONS:

FOR STANDARD WIRING DIAGRAM AND SCHEMATIC DRAWING ELECTRICAL SYMBOLS THAT ARE USED BUT NOT SHOWN ON THIS LEGEND, REFER TO ANSI/IEEE STD 315-1975 - STANDARD FOR GRAPHIC SYMBOLS FOR ELECTRICAL AND ELECTRONICS DIAGRAMS.

FOR PROTECTIVE DEVICE NUMBERING, REFER TO ANSI/IEEE C37.2- ELECTRICAL POWER SYSTEMS DEVICE FUNCTION NUMBERS, ACRONYMS AND CONTACT DESIGNATIONS.

CABLE IDENTIFICATION:

Diagram illustrating Cable Identification with labels: CABLE DESCRIPTION, NUMBER OF PAIRS IN CABLE (LEAVE BLANK IF NONE), SHIELD, INDIVIDUAL WIRE COLOR SEE WIRE COLOR CODES, NO. OF SPARE CONDUCTORS, CABLE DESIGNATION. SEE CABLE SCHEDULE. (SOURCE-DESTINATION-VOLTAGE CLASS)

WIRE LABELS:

1. SHALL BE HEAT SHRINK TYPE.

2. SHALL BE THE SAME ON EACH END OF A SINGLE CONDUCTOR OR CABLE

3. SHALL CONSIST OF TWO LINES:

LINE 1:

SHALL BE THE SOURCE EQUIPMENT NUMBER AND TERMINAL POINT FOLLOWED BY A SPACE AND A FORWARD SLASH CHARACTER.

LINE 2:

SHALL BE THE DESTINATION EQUIPMENT NUMBER AND TERMINAL POINT OR THE DESTINATION DEVICE TAG AND TERMINAL POINT, AS APPROPRIATE.

EXAMPLE:
FLCP LC-1 /
IG1 TB-5

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REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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CONSTRUCTION
SEPTEMBER 3, 2025

ECI

Engineering with Distinction

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	SYMBOL LEGEND AND NOTES FISH LIFT PASSAGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	GENERAL	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-AD-001	1	

EQUIPMENT LIST																
LINE	EQUIPMENT ID	EQUIPMENT NAME	FOUND ON DRAWING	ELECTRICAL DATA						FEEDER		CONTROLLER				COMMENTS
				HP	kw	FLA	VOLTAGE (AC UNO)	PHASE	WIRE	TYPE	LOCATION	TYPE	MANUFACTURER	MODEL	CONTROL	
ELECTRICAL EQUIPMENT																
1	EGREC	EMERGENCY GENERATOR RECEPTACLE	EE-BA-001				480	3	3	GENERATOR	TBD					
2	EGDS	EMERGENCY GENERATOR DISCONNECT SWITCH	EE-BA-001				480	3	3	TBD	EGREC					
3	MTS1	MANUAL TRANSFER SWITCH No.1	EE-BA-001				480	3	3	800A CB (N)	C17-2					
4	MTS2	MANUAL TRANSFER SWITCH No.2	EE-BA-001				480	3	3	400A MTS (L)	MTS1					
5	FLMCC	FISH LIFT MOTOR CONTROL CENTER	EE-BA-001				480	3	3	400A MTS (L)	MTS2					
6	FLPT	FISH LIFT POWER TRANSFORMER	EE-BA-001				480	3	3	70A CB	FLMCC					
7	FLPP	FISH LIFT POWER PANEL	EE-BA-002				208/120	3	4	SECONDARY	FLPT					
8	FLCP	FISH LIFT CONTROL PANEL	EE-DC-001				120	1	2	30A CB	FLPP					
9	FLFPP	FISH LIFT FIBER PATCH PANEL	EE-BB-001													
10																
11	LHCS	LOWER HOPPER HOIST CONTROL STATION	EE-CE-003				24VDC		2							
12	UHCS	UPPER HOPPER HOIST CONTROL STATION	EE-CE-003				24VDC		2							
13																
14																
15	MFHCS1	MOVING FLOOR HOIST CONTROL STATION No.1	EE-CE-004				208	2	2							
16	MFHCS2	MOVING FLOOR HOIST CONTROL STATION No.2	EE-CE-004				208	2	2							
17																
18																
19																
20	GBAR	FISH LIFT CONTROL BUILDING GROUND BAR	EE-CA-008													EE-CG-011, DET.2, GND BAR DETAIL "GB".
MECHANICAL EQUIPMENT																
21	IG1	FISH LIFT ENTRANCE ISOLATION GATE	EE-GK-001	7.5			480	3	3	25A CB	FLMCC	ACTUATOR	ROTORK	IQ35	OPEN/CLOSE	M-001, M-002, M-100
22	EG2	FISH LIFT ENTRANCE GATE	EE-GK-002	1			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ19	OPEN/CLOSE	M-001, M-002, M-101
23	VG3A	FISH LIFT V-GATE A	EE-GK-003 SH1	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQT1000	MODULATING	M-001, M-002, M-102
24	VG3B	FISH LIFT V-GATE B	EE-GK-003 SH2	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQT1000	OPEN/CLOSE	M-001, M-002, M-102
25	HH4	HOPPER HOIST AND CONTROL PANEL	EE-GK-004	60			480	3	3	150A CB	FLMCC	CONTROL PANEL	MAGNETIC			
26	IG6	EXIT FLUME ISOLATION GATE	EE-GK-006	5			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ25	MODULATING	M-001, M-002, M-120
27	AWSS7	AWS UPSTREAM ISOLATION VALVE	EE-GK-007	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	MODULATING	C-301
28	AWSS8	DS PASSAGE AWS ISOLATION VALVE	EE-GK-008	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	MODULATING	C-302
29	AWSS9	AWS DOWNSTREAM ISOLATION VALVE	EE-GK-009	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	MODULATING	C-303
30	IG10	EXIT FLUME DS BYPASS ISOLATION GATE	EE-GK-010	1.5			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ20	OPEN/CLOSE	M-001, M-002, M-131
31	OWG11	FISH LADDER ENTRANCE OVERSHOT WEIR GATE	EE-GK-011	3/4			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	OPEN/CLOSE	M-001, M-002, M-141
32	IG12	FISH LADDER ENTRANCE ISOLATION GATE	EE-GK-012	3			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ20	MODULATING	M-001, M-002, M-140
33	OWG13	FISH LADDER EXIT OVERSHOT WEIR GATE	EE-GK-013	3/4			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	OPEN/CLOSE	M-001, M-002, M-142
34	DSG14	DS BYPASS SLIDE GATE	EE-GK-014	3/4			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	MODULATING	M-001, M-002, M-160
35	DSG15	DS BYPASS SLIDE GATE	EE-GK-015	3/4			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ12	MODULATING	M-001, M-002, M-160
36	IG16	DS BYPASS ISOLATION GATE	EE-GK-016	5			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ25	MODULATING	M-001, M-002, M-163
37	IG17	FISH LADDER EXIT ISOLATION GATE	EE-GK-017	3			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQ20	MODULATING	M-001, M-002, M-143
38	TG18	EXIT FLUME TRAP GATE	EE-GK-018	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQT1000	MODULATING	M-001, M-002, M-124
39	TG19	EXIT FLUME TRAP GATE	EE-GK-019	1/2			480	3	3	20A CB	FLMCC	ACTUATOR	ROTORK	IQT1000	MODULATING	M-001, M-002, M-124
40																
41	CH1	EXIT FLUME MOVING FLOOR HOIST	EE-DK-021	1.2			208	2	2	20A CB	FLPP	CONTROL STATION	HARRINGTON	SEE M001	UP/DOWN	S-126
42																
43	JH21	UPSTREAM SCREEN PANEL JIB HOIST (1/2 TON)	EE-BA-001	1.5			480	3	3	20A CB	FLMCC	PENDANT CORD	TBD		UP/DOWN	
44	JH22	STATIONARY V-GATE PANEL JIB HOIST (1/2 TON)	EE-BA-001	1.5			480	3	3	20A CB	FLMCC	PENDANT CORD	TBD		UP/DOWN	
45																
46																
47																
48																
49	HVAC	FISH LIFT CONTROL BUILDING PACKAGED HVAC UNIT	EE-BA-001	TBD			480	3	3	30A CB	FLMCC	TBD	TBD			
50																
51	ABSC	AWS SCREEN AIR BURST SYSTEM COMPRESSOR	EE-BA-001	TBD			480	3	3	60A CB	FLMCC	TBD	TBD			
52	ABSCP	AWS SCREEN AIR BURST SYSTEM CONTROL PANEL	EE-BA-002	TBD			120	1	2	20A CB	FLPP	CONTROL PANEL	TBD			
53	ABSR	AWS SCREEN AIR BURST SYSTEM RECEIVER	EE-CA-008	TBD									TBD			
54																
55																
56																
57																

LEGEND:

RED = NOT IN CONTRACT (NIC)

BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION

REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY

SAM

DATE

05/02/2025

CHECKED BY

CMM

DATE

05/02/2025

APPROVED BY

CMH

DATE

05/02/2025

SCALE

NONE

WOODLAND PULP, LLC

WOODLAND FISH LIFT PASSAGE

EQUIPMENT LIST

FISH LIFT PASSAGE

TECHNOLOGY

HYDRO

DRAWING CATEGORY

GENERAL

PROJECT NO.

ARL-007

DWG

EE-AE-001

REV

1

RACEWAY AND CABLE SCHEDULE - POWER CABLES													
LINE	REV	CABLE No. SOURCE-DESTINATION-TYPE	CABLE TYPE	SOURCE			VIA RACEWAY	DESTINATION			VOLTAGE	LENGTH	COMMENTS
				DRAWING	EQUIP. No.	DESCRIPTION		DRAWING	EQUIP. No.	DESCRIPTION			
FISH LIFT SERVICE													
1	0	C172 - MTS1 - P	(2) SETS OF: 3C #4/0 W/GND	EE-BA-001	C172	ER37 BREAKER C-17-2	TBD, TRAY, 2-3" RGS	EE-BA-001	MTS1	MANUAL TRANSFER SWITCH No.1	480VAC		PRIMARY MILL SOURCE
2	0	B86 - MTS1 - P	(2) SETS OF: 3C #4/0 W/GND	EE-BA-001	B86	BUS B MCC BUCKET B8-6	TBD, TRAY, 2-3" RGS	EE-BA-001	MTS1	MANUAL TRANSFER SWITCH No.1	480VAC		ALTERNATE MILL SOURCE
3	0	MTS1 - MTS2 - P	(2) SETS OF: 3C #4/0 W/GND	EE-BA-001	MTS1	MANUAL TRANSFER SWITCH No.1	2-3" RGS	EE-BA-001	MTS2	MANUAL TRANSFER SWITCH No.2	480VAC		
4	0	EGREC - EGDS - P	(2) SETS OF: 3C #4/0 W/GND	EE-BA-001	EGREC	EMERGENCY GENERATOR RECEPTACLE	2-3" RGS	EE-BA-001	EGDS	EMERGENCY GENERATOR DISCONNECT SWITCH	480VAC		EMERGENCY/BACKUP SOURCE
5	0	EGDS - MTS2 - P	(2) SETS OF: 3C #4/0 W/GND	EE-BA-001	EGDS	EMERGENCY GENERATOR DISC. SWITCH	2-3" RGS	EE-BA-001	MTS2	MANUAL TRANSFER SWITCH No.2	480VAC		
6	0	MTS2 - FLMCC - P	(2) SETS OF: 3C #4/0 W/GND	EE-BA-001	MTS2	MANUAL TRANSFER SWITCH No.2	2-3" RGS	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	480VAC		
7	0												
8	0												
9	0												
10	0												
FISH LIFT MOTOR CONTROL CENTER (FLMCC)													
11	0	FLMCC - IG1 - P	3C #10 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-001	IG1	FISH LIFT ENTRANCE ISOLATION GATE	480VAC		
12	0	FLMCC - EG2 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-002	EG2	FISH LIFT ENTRANCE GATE	480VAC		
13	0	FLMCC - VG3A - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-003 SH1	VG3A	FISH LIFT V-GATE A	480VAC		
14	0	FLMCC - VG3B - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-003 SH2	VG3B	FISH LIFT V-GATE B	480VAC		
15	0	FLMCC - HH4CP - P	3C #2 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-004	HH4CP	HOPPER HOIST CONTROL PANEL	480VAC		
16	0	HH4CP - HH4 - P	3C #2 W/GND W/SHLD	EE-BA-001	HH4CP	FISH LIFT MOTOR CONTROL CENTER	RGS FR	EE-GK-004	HH4	HOPPER HOIST	480VAC		VFD CABLE
17	0	FLMCC - IG6 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-006	IG6	EXIT FLUME ISOLATION GATE	480VAC		
18	0	FLMCC - AWSS7 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-007	AWSS7	AWS US ISOLATION VALVE	480VAC		
NIC → 19	1	FLMCC - AWSS8 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-008	AWSS8	DS PASSAGE AWS ISOLATION VALVE	480VAC		
20	0	FLMCC - AWSS9 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-009	AWSS9	AWS DS ISOLATION VALVE	480VAC		
21	0	FLMCC - IG10 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-010	IG10	EXIT FLUME DS PASSAGE ISOLATION GATE	480VAC		
NIC → 22	1	FLMCC - OWG11 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-011	OWG11	FISH LADDER ENTRANCE OVERSHOT WEIR GATE	480VAC		
NIC → 23	1	FLMCC - IG12 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-012	IG12	FISH LADDER ENTRANCE ISOLATION GATE	480VAC		
NIC → 24	1	FLMCC - OWG13 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-013	OWG13	FISH LADDER EXIT OVERSHOT WEIR GATE	480VAC		
FBS → 25	1	FLMCC - DSG14 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-014	DSG14	DS BYPASS KNIFE GATE VALVE	480VAC		
FBS → 26	1	FLMCC - DSG15 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-015	DSG15	DS BYPASS KNIFE GATE VALVE	480VAC		
NIC → 27	1	FLMCC - IG16 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-016	IG16	DS BYPASS ISOLATION GATE	480VAC		
NIC → 28	1	FLMCC - IG17 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-017	IG17	FISH LADDER EXIT ISOLATION GATE	480VAC		
29	0	FLMCC - TG18 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-018	TG18	TRAP GATE	480VAC		
30	0	FLMCC - TG19 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-GK-019	TG19	TRAP GATE	480VAC		
31	0	FLMCC - JH21 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-BA-001	JH21	UPSTREAM SCREEN PANEL JIB HOIST	480VAC		
32	0	FLMCC - JH22 - P	3C #12 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-BA-001	JH22	STATIONARY V-GATE PANEL JIB HOIST	480VAC		
33	0												
34	0												
35	0												
36	0												
37	0												
38	0												
39	0												
40	0												
41	0	FLMCC - ABS50 - P	3C #6 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-BA-001	ABS50	AWS SCREEN AIR BURST SYSTEM COMPRESSOR	480VAC		
42	0	FLMCC - HVAC - P	3C #10 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, RGS FR	EE-BA-001	HVAC	FL CONTROL BUILDING PACKAGED HVAC UNIT	480VAC		
43	0												
44	0												
45	0												
46	0												
47	0												
48	0												
49	0	FLMCC - FLPT - P	3C #4 W/GND	EE-BA-001	FLMCC	FISH LIFT MOTOR CONTROL CENTER	4" RGS, TRAY, 2 1/2" RGS	EE-BA-001	FLPT	FISH LIFT POWER TRANSFORMER	480VAC		
50	0	FLPT - FLPP - P	4C #2/0 W/GND	EE-BA-001	FLPT	FISH LIFT POWER TRANSFORMER	2 1/2" RGS, TRAY, 2" RGS	EE-BA-002	FLPP	FISH LIFT POWER PANEL	208/120VAC		

POWER CABLE IDENTIFICATION:

Z

115KV CLASS

Y

35KV CLASS

K

15KV CLASS

H

5KV CLASS

P

600V CLASS

G

GROUNDING SYSTEM

LEGEND:

RED

 = NOT IN CONTRACT (NIC)

BLUE

 = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:

1. ALL 600V POWER CABLES SHALL BE TYPE MC, ALUMINUM INTERLOCKED ARMOR, BLACK IN COLOR, AND HAVE WIRE INSULATION OF XHHW/XLP, UNLESS NOTED OTHERWISE.

KEYED NOTES:

1

 INDICATES POWER CABLES THAT RUN TO THE DISCONNECT SWITCH FOR THAT EQUIPMENT. SEE GK SERIES DWGS FOR MORE DETAILS.

REVISION

REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

SEPTEMBER 3, 2025

ECI

ELECTRICAL CONSULTANTS, INC.

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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	CABLE SCHEDULE		
CMM	08/22/2024	480VAC POWER CABLES		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	GENERAL	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-AJ-001	1	

	1	2	3	4	5	6	7	8						
A	RACEWAY AND CABLE SCHEDULE - POWER CABLES													A
	LINE	REV	CABLE No. SOURCE-DESTINATION-TYPE	CABLE TYPE	SOURCE			VIA RACEWAY	DESTINATION			VOLTAGE	LENGTH	COMMENTS
					DRAWING	EQUIP. No.	DESCRIPTION		DRAWING	EQUIP. No.	DESCRIPTION			
	FISH LIFT POWER PANEL (FLPP)													
	1	0	FLPP - CKT1 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-008	CKT1	LIGHTING - FISH LIFT CONTROL BUILDING	120VAC		INTERIOR LIGHTING
	2	0	FLPP - CKT3 - P	2C #10 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-008	CKT3	LIGHTING - FISH LIFT AREA - GRADE LEVEL	120VAC		EXTERIOR LIGHTING
	3	0	FLPP - CKT5 - P	2C #10 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-010	CKT5	LIGHTING - FISH LIFT TOWER	120VAC		EXTERIOR LIGHTING
	4	0	FLPP - CKT7 - P	2C #10 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-002	CKT7	LIGHTING - EXIT FLUME	120VAC		EXTERIOR LIGHTING
NIC →	5	1	FLPP - CKT9 - P	2C #10 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-004	CKT9	LIGHTING - FISH LADDER	120VAC		EXTERIOR LIGHTING
FBS →	6	1	FLPP - CKT11 - P	2C #10 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-003	CKT11	LIGHTING - DOWNSTREAM FISH BYPASS	120VAC		EXTERIOR LIGHTING
	7	0	FLPP - CKT13 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-007	CKT13	LIGHTING - FISH LADDER VIEWING BUILDING	120VAC		INTERIOR LIGHTING
	8	0	FLPP - CKT15 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT15				SPARE
	9	0	FLPP - CKT17 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT17				SPARE
	10	0	FLPP - CKT19 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT19				SPARE
	11	0	FLPP - ABSCP - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, 2" RGS		ABSCP	AIR BURST SYSTEM CONTROL PANEL	120VAC		CONTROL POWER
	12	0	FLPP - FLCF - P	2C #10 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, 3" RGS	EE-DC-002	FLCF	FISH LIFT CONTROL PANEL	120VAC		CONTROL POWER
	13	0	FLPP - CKT25 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT25				SPARE
	14	0	FLPP - CKT27 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT25				SPARE
	15	0	FLPP - CKT29 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT27				SPARE
	16	0	FLPP-CKT31,33- P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT29				SPARE
	17	0	FLPP-CKT35,37- P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT31,33				SPARE
	18	0	FLPP-CKT39,41- P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT33,37				SPARE
	19	0								CKT39,41				SPARE
	20	0												
	21	0												
	22	0	FLPP - CKT2 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-008	CKT2	RECEPTACLES - FISH LIFT CONTROL BUILDING	120VAC		INTERIOR RECEPTACLES
	23	0	FLPP - CKT4 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-008	CKT4	RECEPTACLES - FISH LIFT CONTROL BUILDING	120VAC		INTERIOR RECEPTACLES
	24	0	FLPP - CKT6 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-008	CKT6	RECEPTACLES - FISH LIFT CONTROL BUILDING	120VAC		EXTERIOR RECEPTACLES
	25	0	FLPP - CKT8 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-010	CKT8	RECEPTACLES - FISH LIFT TOWER COLUMN A2	120VAC		EXTERIOR RECEPTACLES
	26	0	FLPP - CKT10 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-010	CKT10	RECEPTACLES - FISH LIFT TOWER COLUMN B3	120VAC		EXTERIOR RECEPTACLES
	27	0	FLPP - CKT12 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-010	CKT12	RECEPTACLES - FISH LIFT TOWER COLUMN C1	120VAC		EXTERIOR RECEPTACLES
	28	0	FLPP - CKT14 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-010	CKT14	RECEPTACLES - FISH LIFT TOWER COLUMN E2	120VAC		EXTERIOR RECEPTACLES
	29	0	FLPP - CKT16 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-004	CKT16	RECEPTACLES - EXIT FLUME AREA	120VAC		EXTERIOR RECEPTACLES
FBS →	30	1	FLPP - CKT18 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-003	CKT18	RECEPTACLES - DOWNSTREAM BYPASS AREA	120VAC		EXTERIOR RECEPTACLES
	31	0	FLPP - CKT20 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-007	CKT20	RECEPTACLES - FISH LADDER VIEWING BLDG	120VAC		INTERIOR RECEPTACLES
NIC →	32	1	FLPP - CKT22 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-004	CKT22	RECEPTACLES - FISH LADDER (WEST)	120VAC		EXTERIOR RECEPTACLES
NIC →	33	1	FLPP - CKT24 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-005	CKT24	RECEPTACLES - FISH LADDER (EAST)	120VAC		EXTERIOR RECEPTACLES
	34	0	FLPP - CKT26 - P	2C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CB-010	CKT26	RECEPTACLES - FISH LIFT ENTR. GATE AREA	120VAC		EXTERIOR RECEPTACLES
	35	0	FLPP - CKT28 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT28				SPARE
	36	0	FLPP - CKT30 - P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT30				SPARE
	37	0	FLPP-CKT32,34- P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT32,34				SPARE
	38	0	FLPP-CKT36,38- P		EE-BA-002	FLPP	FISH LIFT POWER PANEL			CKT36,38				SPARE
	39	0	FLPP - MFHCS1- P	3C #12 W/GND	EE-BA-002	FLPP	FISH LIFT POWER PANEL	3" RGS, TRAY, RGS FR	EE-CE-004	MFHCS1	MOVING FLOOR HOIST CONTROL STATION No.1	240VAC		SEE EE-DK-021
	40	0	MFHCS1 -MFHCS2- P	12C #14	EE-CE-004	MFHCS1	MOVING FLOOR HOIST CONTROL STATION No.1	RGS FR	EE-CE-004	MFHCS2	MOVING FLOOR HOIST CONTROL STATION No.2	240VAC		
	41	0	MFHCS2 -CH1 - P	9C #14	EE-CE-004	MFHCS2	MOVING FLOOR HOIST CONTROL STATION No.2	RGS FR	EE-CE-004	CH1	EXIT FLUME MOVING FLOOR HOIST	240VAC		
	42	0	MFHCS2 -ZSLCH1- P	3C #14	EE-CE-004	MFHCS2	MOVING FLOOR HOIST CONTROL STATION No.2	RGS FR	EE-CE-004	ZSLCH1	MOVING FLOOR HOIST LOWER LIMIT SWITCH	240VAC		
	43	0	MFHCS2 -ZSUCH1- P	3C #14	EE-CE-004	MFHCS2	MOVING FLOOR HOIST CONTROL STATION No.2	RGS FR	EE-CE-004	ZSUCH1	MOVING FLOOR HOIST UPPER LIMIT SWITCH	240VAC		
	44	0	FLCF -MFHCS2- P	5C #14	EE-ED-007	FLCF	FISH LIFT CONTROL PANEL	RGS FR	EE-CE-004	MFHCS1	MOVING FLOOR HOIST CONTROL STATION No.2	240VAC		
	45	0												
	46	0												
	47	0												
	48	0												
	49	0												
	50	0												
	POWER CABLE IDENTIFICATION:													
	-Z 115kv CLASS													
	-Y 35kv CLASS													
	-K 15kv CLASS													
	-H 5kv CLASS													
	-P 600V CLASS													
	-G GROUNDING SYSTEM													
	KEYED NOTES:													
1	ALL HOME RUN CABLES FOR EXTERIOR LIGHTING CIRCUITS (THE CABLE BETWEEN THE POWER PANEL AND THE SWITCH) SHALL BE #10 AWG. ALL CABLES BEYOND THE SWITCH SHALL BE #12 AWG, UNLESS NOTED OTHERWISE.													
	LEGEND:													
	RED = NOT IN CONTRACT (NIC)													
	BLUE = FUTURE BID SUPPLEMENT (FBS)													
	GENERAL NOTES:													
	1. ALL 600V POWER CABLES SHALL BE TYPE MC, ALUMINUM INTERLOCKED ARMOR, BLACK IN COLOR, AND HAVE WIRE INSULATION OF XHHW/XLP, UNLESS NOTED OTHERWISE.													
	REVISION													
	REV	DATE	DR	CK	AP	DESCRIPTION								
	0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID								
	1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID								
	ISSUED FOR BID													
	NOT FOR CONSTRUCTION													
	SEPTEMBER 3, 2025													
	ECI ELECTRICAL CONSULTANTS, INC.													
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	DRAWN BY		DATE		WOODLAND PULP, LLC									
	SAM		08/22/2024		WOODLAND FISH LIFT PASSAGE									
	CHECKED BY		DATE		CABLE SCHEDULE									
	CMM		08/22/2024		208/120VAC POWER CABLES									
	APPROVED BY		DATE		TECHNOLOGY					DRAWING CATEGORY				
	CMH		08/22/2024		HYDRO					GENERAL				
	SCALE		PROJECT NO.		DWG		REV							
	NONE		ARL-007		EE-AJ-002		1							
	1	2	3	4	5	6	7	8						

RACEWAY AND CABLE SCHEDULE - DIGITAL CONTROL CABLES														
LINE	REV	CABLE No. SOURCE-DESTINATION-TYPE	CABLE TYPE	SOURCE			VIA RACEWAY	DESTINATION			VOLTAGE	LENGTH	COMMENTS	
				DRAWING	EQUIP. No.	DESCRIPTION		DRAWING	EQUIP. No.	DESCRIPTION				
FISH LIFT CONTROL PANEL (FLCP)														
1	0	FLCP - IG1 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-001	IG1	FISH LIFT ENTRANCE ISOLATION GATE	24VDC		TO RC/LS	
2	0	FLCP - IG1 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-001	IG1	FISH LIFT ENTRANCE ISOLATION GATE	24VDC		TO RH	
3	0	FLCP - EG2 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-002	EG2	FISH LIFT ENTRANCE GATE	24VDC		TO RF/LS	
4	0	FLCP - EG2 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-002	EG2	FISH LIFT ENTRANCE GATE	24VDC		TO RH	
5	0	FLCP - VG3A - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-003 SH1	VG3A	V-GATE A	24VDC		TO RF/LS	
6	0	FLCP - VG3A - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-003 SH1	VG3A	V-GATE A	24VDC		TO RH	
7	0	FLCP - VG3B - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-003 SH2	VG3B	V-GATE B	24VDC		TO RF/LS	
8	0	FLCP - VG3B - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-003 SH2	VG3B	V-GATE B	24VDC		TO RH	
9	0	FLCP - VG3JB - C	5C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-016	VG3JB	V-GATE LIMIT SWITCH JUNCTION BOX	24VDC		TO RH JUNCTION BOX BY CONTRACTOR	
10	0	FLCP - ES4 - C	5C #14	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR		ES4	E-STOP No.4	24VDC		TO LJ/LS	
11	0	FLCP - HH4CP - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-004	HH4CP	HOPPER HOIST CONTROL PANEL	24VDC		TO RE/LS	
12	0	FLCP - HH4CP - C2	7C #14	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-004	HH4CP	HOPPER HOIST CONTROL PANEL	24VDC		TO LK	
13	0	FLCP - HH4CP - C3	7C #14	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-004	HH4CP	HOPPER HOIST CONTROL PANEL	24VDC		TO LK	
14	0	FLCP - HH4DS - C	5C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-004	HH4DS	HOPPER HOIST DISCONNECT SWITCH	24VDC		TO RL	
15	0	FLCP - LHCS - C	12C #14	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-CE-003	LHCS	LOWER HOIST CONTROL STATION	24VDC		TO LJ	
16	0	FLCP - UHCS - C	12C #14	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-CE-003	UHCS	UPPER HOIST CONTROL STATION	24VDC		TO LJ	
17	0	FLCP - HG5ZS - C	5C #14	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-008	HG5ZS	HOPPER GATE LIMIT SWITCH	24VDC		TO LK	
18	0	FLCP - IG6 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-006	IG6	EXIT FLUME ISOLATION GATE	24VDC		TO RC/LS	
19	0	FLCP - IG6 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-006	IG6	EXIT FLUME ISOLATION GATE	24VDC		TO RJ	
20	0	FLCP - AWS57 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-007	AWSS7	AWS US ISOLATION VALVE	24VDC		TO RF/LS	
21	0	FLCP - AWS57 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-007	AWSS7	AWS US ISOLATION VALVE	24VDC		TO RJ	
NIC →	22	1 FLCP - AWS58 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-008	AWSS8	DS PASSAGE AWS ISOLATION VALVE	24VDC		TO RF/LS	
NIC →	23	1 FLCP - AWS58 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-008	AWSS8	DS PASSAGE AWS ISOLATION VALVE	24VDC		TO RJ	
	24	0	FLCP - AWS59 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-009	AWSS9	AWS DS ISOLATION VALVE	24VDC		TO RF/LS
	25	0	FLCP - AWS59 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-009	AWSS9	AWS DS ISOLATION VALVE	24VDC		TO RJ
	26	0	FLCP - IG10 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-010	IG10	EXIT FLUME DS BYPASS ISOLATION GATE	24VDC		TO RC/LS
	27	0	FLCP - IG10 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-010	IG10	EXIT FLUME DS BYPASS ISOLATION GATE	24VDC		TO RK
NIC →	28	1 FLCP - OWG11 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-011	OWG11	P&W ENTRANCE OVERSHOT WEIR GATE	24VDC		TO RF/LS	
NIC →	29	1 FLCP - OWG11 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-011	OWG11	P&W ENTRANCE OVERSHOT WEIR GATE	24VDC		TO RK	
NIC →	30	1 FLCP - IG12 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-012	IG12	P&W ENTRANCE ISOLATION GATE	24VDC		TO RC/LS	
NIC →	31	1 FLCP - IG12 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-012	IG12	P&W ENTRANCE ISOLATION GATE	24VDC		TO RK	
NIC →	32	1 FLCP - OWG13 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-013	OWG13	P&W EXIT OVERSHOT WEIR GATE	24VDC		TO RF/LS	
NIC →	33	1 FLCP - OWG13 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-013	OWG13	P&W EXIT OVERSHOT WEIR GATE	24VDC		TO RK	
FBS →	34	1 FLCP - DSG14 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-014	DSG14	DS BYPASS KNIFE GATE VALVE	24VDC		TO RD/LS	
FBS →	35	1 FLCP - DSG14 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-014	DSG14	DS BYPASS KNIFE GATE VALVE	24VDC		TO RK	
FBS →	36	1 FLCP - DSG15 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-015	DSG15	DS BYPASS KNIFE GATE VALVE	24VDC		TO RD/LS	
FBS →	37	1 FLCP - DSG15 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-015	DSG15	DS BYPASS KNIFE GATE VALVE	24VDC		TO RL	
NIC →	38	1 FLCP - IG16 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-016	IG16	DS BYPASS ISOLATION GATE	24VDC		TO RD/LS	
NIC →	39	1 FLCP - IG16 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-016	IG16	DS BYPASS ISOLATION GATE	24VDC		TO RL	
NIC →	40	1 FLCP - IG17 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-017	IG17	P&W EXIT ISOLATION GATE	24VDC		TO RD/LS	
NIC →	41	1 FLCP - IG17 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-017	IG17	P&W EXIT ISOLATION GATE	24VDC		TO RL	
	42	0	FLCP - TG18 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-018	TG18	TRAP GATE	24VDC		TO RF/LS
	43	0	FLCP - TG18 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-018	TG18	TRAP GATE	24VDC		TO RL
	44	0	FLCP - TG19 - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-019	TG19	TRAP GATE	24VDC		TO RF/LS
	45	0	FLCP - TG19 - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-019	TG19	TRAP GATE	24VDC		TO RL
	46	0												
	47	0												
	48	0												
	49	0	FLCP - ABSCP - C1	7C #14	EE-ED-009	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-014	ABSCP	AIR BURST SYSTEM CONTROL PANEL	24VDC		TO RF
	50	0	FLCP - ABSCP - C2	7C #14	EE-ED-010	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-017	ABSCP	AIR BURST SYSTEM CONTROL PANEL	24VDC		TO RJ

CONTROL CABLE IDENTIFICATION:

LEGEND:

RED = NOT IN CONTRACT (NIC)

BLUE = FUTURE BID SUPPLEMENT (FBS)

-C DIGITAL CONTROL (24VDC, 125VDC & 120VAC)

-X ANALOG CONTROL (<50V, 4-20mA, RTD, ETC.)

-F FIBER OPTIC

-Z COMMUNICATION (ETHERNET, PROFIBUS, ETC.)

-CT CURRENT TRANSFORMER

-PT POTENTIAL TRANSFORMER

REVISION						ISSUED FOR BID NOT FOR CONSTRUCTION SEPTEMBER 3, 2025	ECI Engineering with Distinction ELECTRICAL CONSULTANTS, INC. THIS DRAWING IS THE PROPERTY OF ELECTRICAL CONSULTANTS, INC. AND IS TO BE USED ONLY FOR THE SPECIFIC PROJECT IDENTIFIED ON THE DRAWING. NO REVISIONS SHALL BE MADE WITHOUT THE EXPRESSED WRITTEN CONSENT OF ELECTRICAL CONSULTANTS, INC.	DRAWN BY		DATE		WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE			
REV	DATE	DR	CK	AP	DESCRIPTION			SAM	08/22/2024	CHECKED BY		DATE		CABLE SCHEDULE DIGITAL CONTROL CABLES	
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID					CMM		08/22/2024			
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID					APPROVED BY		DATE		TECHNOLOGY	
										CMH		08/22/2024		HYDRO	
										SCALE		NONE		DRAWING CATEGORY	
								PROJECT NO.		DWG		GENERAL			
								ARL-007		EE-AJ-003		REV			
												1			

	1	2	3	4	5	6	7	8							
A	RACEWAY AND CABLE SCHEDULE - ANALOG CONTROL AND COMMUNICATION CABLES														
	LINE	REV	CABLE No. SOURCE-DESTINATION-TYPE	CABLE TYPE	SOURCE			VIA RACEWAY	DESTINATION			VOLTAGE	LENGTH	COMMENTS	
					DRAWING	EQUIP. No.	DESCRIPTION		DRAWING	EQUIP. No.	DESCRIPTION				
	FISH LIFT CONTROL PANEL (FLCP)														
	1	0	FLCP - IG1 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-001	IG1	FISH LIFT ENTRANCE ISOLATION GATE	24VDC		TO LE	
	2	0	FLCP - EG2 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-002	EG2	FISH LIFT ENTRANCE GATE	24VDC		TO LE/LG	
	3	0	FLCP - VG3A - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-003 SH1	VG3A	V-GATE A	24VDC		TO LE/LG	
	4	0	FLCP - VG3B - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-003 SH2	VG3B	V-GATE B	24VDC		TO LE/LG	
	5	0	FLCP - HH4CP - X	1TR #18 SHLD	EE-ED-007	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-004	HH4CP	HOPPER HOIST CONTROL PANEL	24VDC		TO LL	
	B	6	0	HH4CP - ENC4 - X	6C #20 SHLD	EE-GK-004	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-004	ENC4	HOPPER HOIST HIGH SPEED ENCODER	24VDC		
7		0	FLCP - IG6 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-006	IG6	EXIT FLUME ISOLATION GATE	24VDC		TO LE	
8		0	FLCP - AWSS7 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-007	AWSS7	AWS US ISOLATION VALVE	24VDC		TO LE/LG	
NIC →		9	1	FLCP - AWSS8 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-008	AWSS8	DS PASSAGE AWS ISOLATION VALVE	24VDC		TO LE/LG
10		0	FLCP - AWSS9 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-009	AWSS9	AWS DS ISOLATION VALVE	24VDC		TO LE/LG	
11		0	FLCP - IG10 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-010	IG10	EXIT FLUME DS BYPASS ISOLATION GATE	24VDC		TO LE	
NIC →		12	1	FLCP - OWG11 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-011	OWG11	P&W ENTRANCE OVERSHOT WEIR GATE	24VDC		TO LE/LG
NIC →		13	1	FLCP - IG12 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-012	IG12	P&W ENTRANCE ISOLATION GATE	24VDC		TO LE
NIC →		14	1	FLCP - OWG13 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-013	OWG13	P&W EXIT OVERSHOT WEIR GATE	24VDC		TO LE/LG
FBS →		15	1	FLCP - DSG14 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-014	DSG14	DS BYPASS KNIFE GATE VALVE	24VDC		TO LE
C	FBS →	16	1	FLCP - DSG15 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-015	DSG15	DS BYPASS KNIFE GATE VALVE	24VDC		TO LE
	NIC →	17	1	FLCP - IG16 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-016	IG16	DS BYPASS ISOLATION GATE	24VDC		TO LF
	NIC →	18	1	FLCP - IG17 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-017	IG17	P&W EXIT ISOLATION GATE	24VDC		TO LF
	19	0	FLCP - TG18 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-018	TG18	TRAP GATE	24VDC		TO LF/LH	
	20	0	FLCP - TG19 - X	2PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-GK-019	TG19	TRAP GATE	24VDC		TO LF/LH	
	21	0													
	22	0													
	23	0													
	24	0													
	25	0													
D	26	0													
	27	0													
	28	0													
	29	0													
	30	0													
	31	0	FLCP - WLS1 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS1	LIFT TAILTRACE WATER LEVEL SENSOR	24VDC		TO LF	
	32	0	FLCP - WLS2 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS2	LIFT ENTRANCE CHANNEL WATER LEVEL SENSOR	24VDC		TO LF	
	33	0	FLCP - WLS3 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS3	LIFT US WEIR WATER LEVEL SENSOR	24VDC		TO LF	
	NIC →	34	1	FLCP - WLS4 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS4	P&W TAIL WATER ENTRANCE WATER LS	24VDC		TO LF
	NIC →	35	1	FLCP - WLS5 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS5	P&W INSIDE ENTRANCE WATER LEVEL SENSOR	24VDC		TO LF
NIC →	36	1	FLCP - WLS6 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS6	P&W INSIDE EXIT WATER LEVEL SENSOR	24VDC		TO LF	
37	0	FLCP - WLS7 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS7	INSIDE EXIT FLUME ENTRANCE WATER LS	24VDC		TO LF		
NIC →	38	1	FLCP - WLS8 - X	1PR #18 SHLD	EE-ED-006	FLCP	FISH LIFT CONTROL PANEL	4" RGS, TRAY, RGS FR	EE-DD-004 SH2	WLS8	INSIDE EXIT FLUME WATER LEVEL SENSOR	24VDC		TO LF	
39	0														
40	0														
E	41	0	FLCP - HH4CP - Z	CAT6	EE-BB-001	FLCP	FISH LIFT CONTROL PANEL	1" RGS	EE-GK-004	HH4CP	HOPPER HOIST CONTROL PANEL	NA			
	42	0	FLCP - WMILL - Z	CAT6	EE-BB-001	FLCP	FISH LIFT CONTROL PANEL	1" RGS	EE-BB-001	TBD	REMOTE ACCESS	NA		DETERMINED BY MILL	
	43	0	FLCP - FLFPP - Z	MULTIMODE FIBER OPTIC	EE-BB-001	FLCP	FISH LIFT CONTROL PANEL	1" RGS	EE-BB-001	FLCP	FISH LIFT FIBER PATCH PANEL	NA			
	44	0	FLFPP - WMILL - Z	MULTIMODE FIBER OPTIC	EE-BB-001	FLFPP	FISH LIFT FIBER PATCH PANEL	1" RGS	EE-BB-001	TBD	EXISTING NETWORK SWITCH	NA		DETERMINED BY MILL	
	45	0													
	46	0													
	47	0													
	48	0													
	49	0													
	50	0													
CONTROL CABLE IDENTIFICATION:															
-C DIGITAL CONTROL (24VDC, 125VDC & 120VAC)															
-X ANALOG CONTROL (<50V, 4-20mA, RTD, ETC.)															
-F FIBER OPTIC															
-Z COMMUNICATION (ETHERNET, PROFIBUS, ETC.)															
-CT CURRENT TRANSFORMER															
-PT POTENTIAL TRANSFORMER															
LEGEND:															
RED = NOT IN CONTRACT (NIC)															
BLUE = FUTURE BID SUPPLEMENT (FBS)															
REVISION															
REV	DATE	DR	CK	AP	DESCRIPTION										
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID										
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID										
ISSUED FOR BID						NOT FOR CONSTRUCTION		SEPTEMBER 3, 2025		ECI ELECTRICAL CONSULTANTS, INC.		DRAWN BY SAM DATE 08/22/2024			
										CHECKED BY CMM DATE 08/22/2024		WOODLAND PULP, LLC			
										APPROVED BY CMH DATE 08/22/2024		WOODLAND FISH LIFT PASSAGE			
										SCALE NONE		CABLE SCHEDULE			
										PROJECT NO. ARL-007		ANALOG CONTROL AND COMMUNICATION CABLES			
										DRAWING CATEGORY GENERAL		REV 1			

RACEWAY AND CABLE SCHEDULE - MISCELLANEOUS CABLES													
LINE	REV	CABLE No. SOURCE-DESTINATION-TYPE	CABLE TYPE	SOURCE			VIA RACEWAY	DESTINATION			VOLTAGE	LENGTH	COMMENTS
				DRAWING	EQUIP. No.	DESCRIPTION		DRAWING	EQUIP. No.	DESCRIPTION			
TEMPERATURE CONTROL CABLES													
												HOLD	
1	0	IG1 - TS1 - C	2C #14	EE-GK-001	IG1	GATE ACTUATOR - IG1	RGS FR	EE-GK-001	TSIG1	TEMPERATURE SWITCH - IG1	TBD	VSC?	
2	0	EG2 - TS2 - C	2C #14	EE-GK-002	EG2	GATE ACTUATOR - EG2	RGS FR	EE-GK-002	TSEG2	TEMPERATURE SWITCH - EG2	TBD	VSC?	
3	0	VG3A - TS3A - C	2C #14	EE-GK-003 SH1	VG3A	GATE ACTUATOR - VG3A	RGS FR	EE-GK-003 SH1	TSVG3A	TEMPERATURE SWITCH - VG3A	TBD	VSC?	
4	0	VG3B - TS3B - C	2C #14	EE-GK-003 SH2	VG3B	GATE ACTUATOR - VG3B	RGS FR	EE-GK-003 SH2	TSVG3B	TEMPERATURE SWITCH - VG3B	TBD	VSC?	
5	0												
6	0	IG6 - TS6 - C	2C #14	EE-GK-006	IG6	GATE ACTUATOR - IG6	RGS FR	EE-GK-006	TSIG6	TEMPERATURE SWITCH - IG6	TBD	VSC?	
7	0	AWSS7 - TS7 - C	2C #14	EE-GK-007	AWSS7	VALVE ACTUATOR - AWSS7	RGS FR	EE-GK-007	TSAWSS7	TEMPERATURE SWITCH - AWSS7	TBD	VSC?	
8	1	AWSS8 - TS8 - C	2C #14	EE-GK-008	AWSS8	VALVE ACTUATOR - AWSS8	RGS FR	EE-GK-008	TSAWSS8	TEMPERATURE SWITCH - AWSS8	TBD	VSC?	
9	0	AWSS9 - TS9 - C	2C #14	EE-GK-009	AWSS9	VALVE ACTUATOR - AWSS9	RGS FR	EE-GK-009	TSAWSS9	TEMPERATURE SWITCH - AWSS9	TBD	VSC?	
10	0	IG10 - TS10 - C	2C #14	EE-GK-010	IG10	GATE ACTUATOR - IG10	RGS FR	EE-GK-010	TSIG10	TEMPERATURE SWITCH - IG10	TBD	VSC?	
11	1	OWG11 - TS11 - C	2C #14	EE-GK-011	OWG11	GATE ACTUATOR - OWG11	RGS FR	EE-GK-011	TSOWG11	TEMPERATURE SWITCH - OWG11	TBD	VSC?	
12	1	IG12 - TS12 - C	2C #14	EE-GK-012	IG12	GATE ACTUATOR - IG12	RGS FR	EE-GK-012	TSIG12	TEMPERATURE SWITCH - IG12	TBD	VSC?	
13	1	OWG13 - TS13 - C	2C #14	EE-GK-013	OWG13	GATE ACTUATOR - OWG13	RGS FR	EE-GK-013	TSOWG13	TEMPERATURE SWITCH - OWG13	TBD	VSC?	
14	1	DSG14 - TS14 - C	2C #14	EE-GK-014	DSG14	VALVE ACTUATOR - DSG14	RGS FR	EE-GK-014	TSDSG14	TEMPERATURE SWITCH - DSG14	TBD	VSC?	
15	1	DSG15 - TS15 - C	2C #14	EE-GK-015	DSG15	VALVE ACTUATOR - DSG15	RGS FR	EE-GK-015	TSDSG15	TEMPERATURE SWITCH - DSG15	TBD	VSC?	
16	1	IG16 - TS16 - C	2C #14	EE-GK-016	IG16	GATE ACTUATOR - IG16	RGS FR	EE-GK-016	TSIG16	TEMPERATURE SWITCH - IG16	TBD	VSC?	
17	1	IG17 - TS17 - C	2C #14	EE-GK-017	IG17	GATE ACTUATOR - IG17	RGS FR	EE-GK-017	TSIG17	TEMPERATURE SWITCH - IG17	TBD	VSC?	
18	0	TG18 - TS18 - C	2C #14	EE-GK-018	TG18	GATE ACTUATOR - TG18	RGS FR	EE-GK-018	TSTG18	TEMPERATURE SWITCH - TG18	TBD	VSC?	
19	0	TG19 - TS19 - C	2C #14	EE-GK-019	TG19	GATE ACTUATOR - TG19	RGS FR	EE-GK-019	TSTG19	TEMPERATURE SWITCH - TG19	TBD	VSC?	
20	0												
21	0												
22	0												
23	0												
24	0												
25	0												
26	0												
27	0												
28	0												
29	0												
30	0												
31	0												
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35	0												
36	0												
37	0												
38	0												
39	0												
40	0												
41	0												
42	0												
43	0												
44	0												
45	0												
46	0												
47	0												
48	0												
49	0												
50	0												

CONTROL CABLE IDENTIFICATION:

-C

DIGITAL CONTROL (24VDC, 125VDC & 120VAC)

-X

ANALOG CONTROL (<50V, 4-20mA, RTD, ETC.)

-F

FIBER OPTIC

-Z

COMMUNICATION (ETHERNET, PROFIBUS, ETC.)

-CT

CURRENT TRANSFORMER

-PT

POTENTIAL TRANSFORMER

LEGEND:

RED = NOT IN CONTRACT (NIC)

BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION

REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

SEPTEMBER 3, 2025

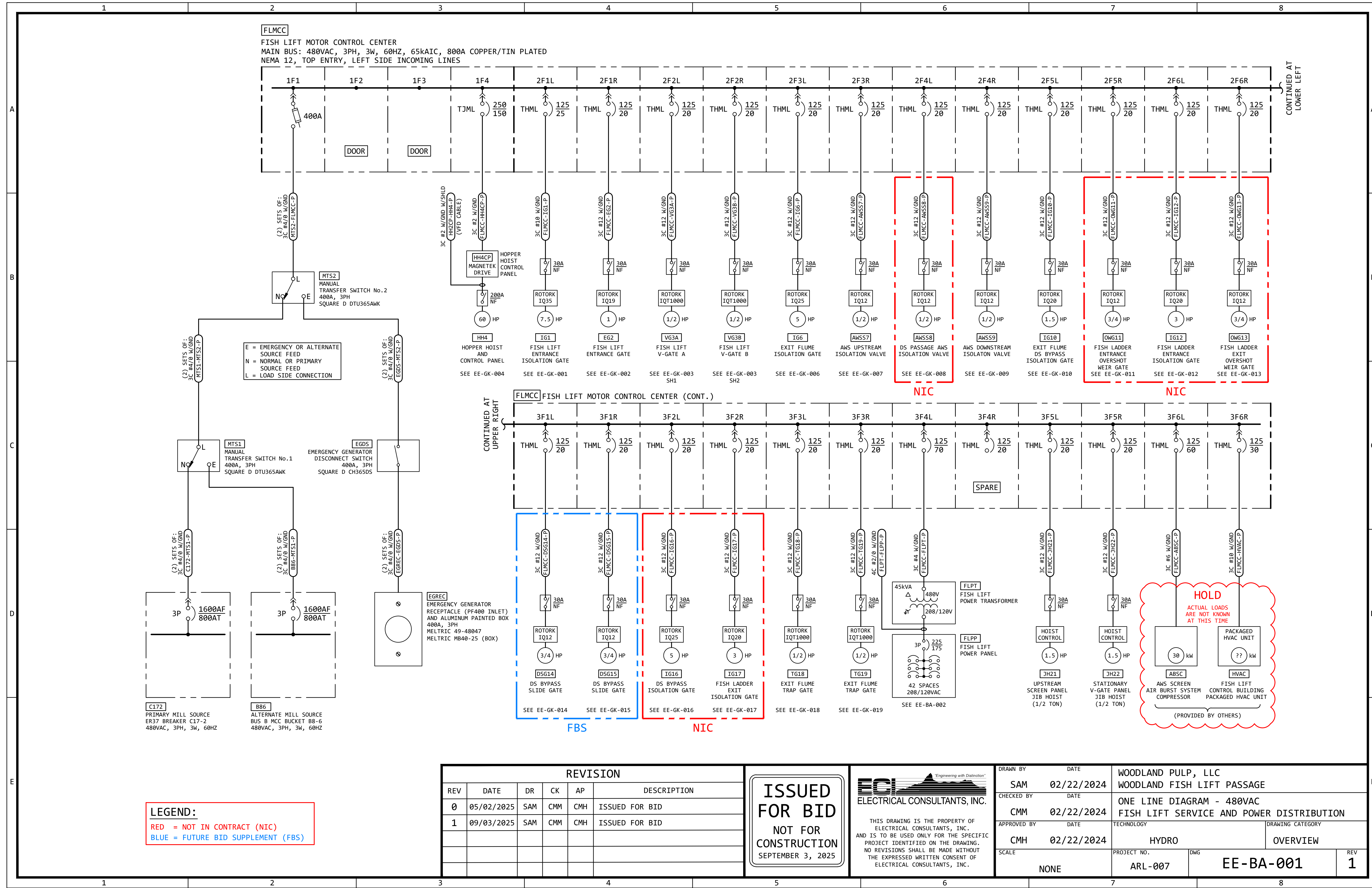
ECI

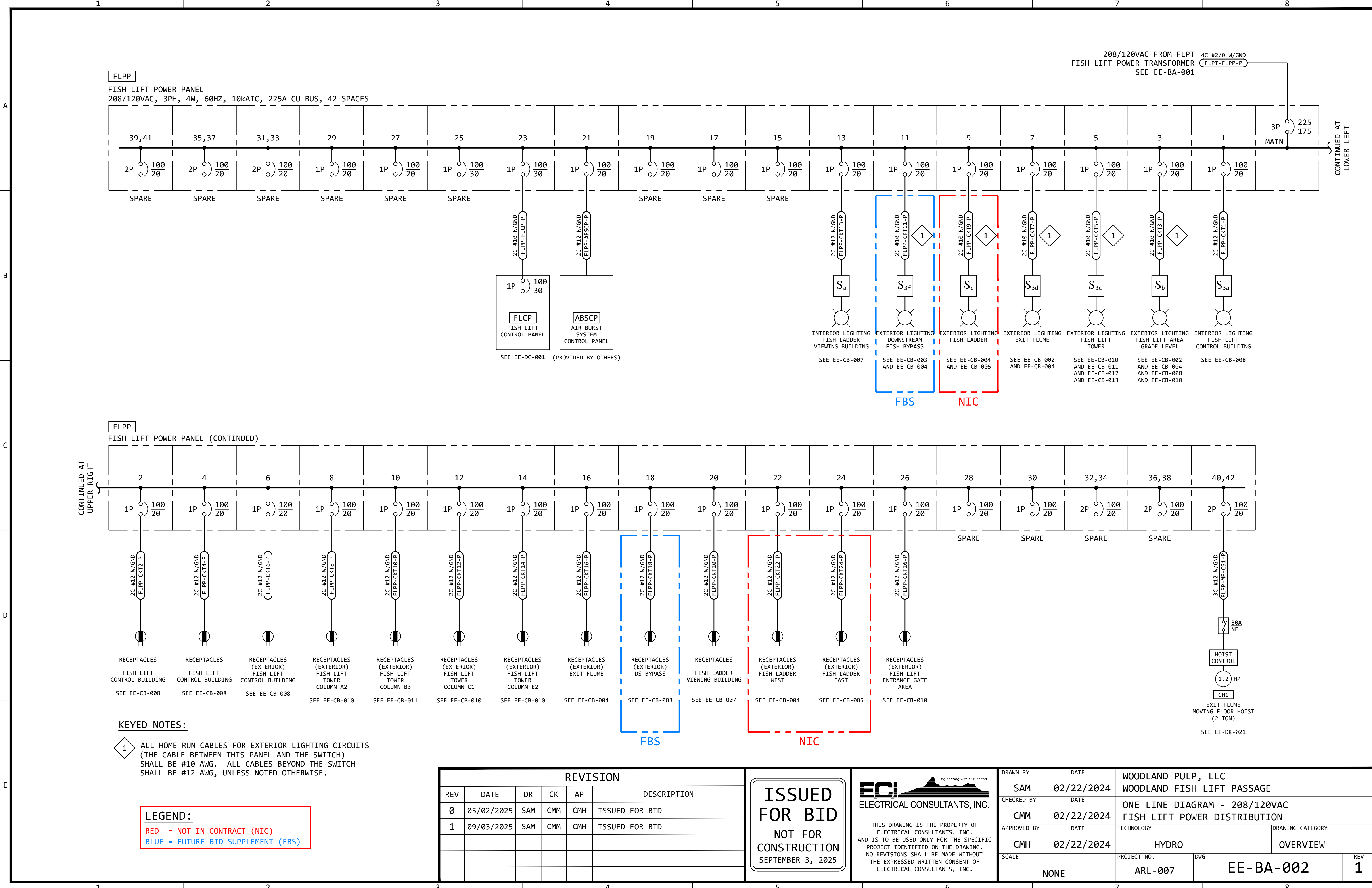
Electrical Consultants, Inc.

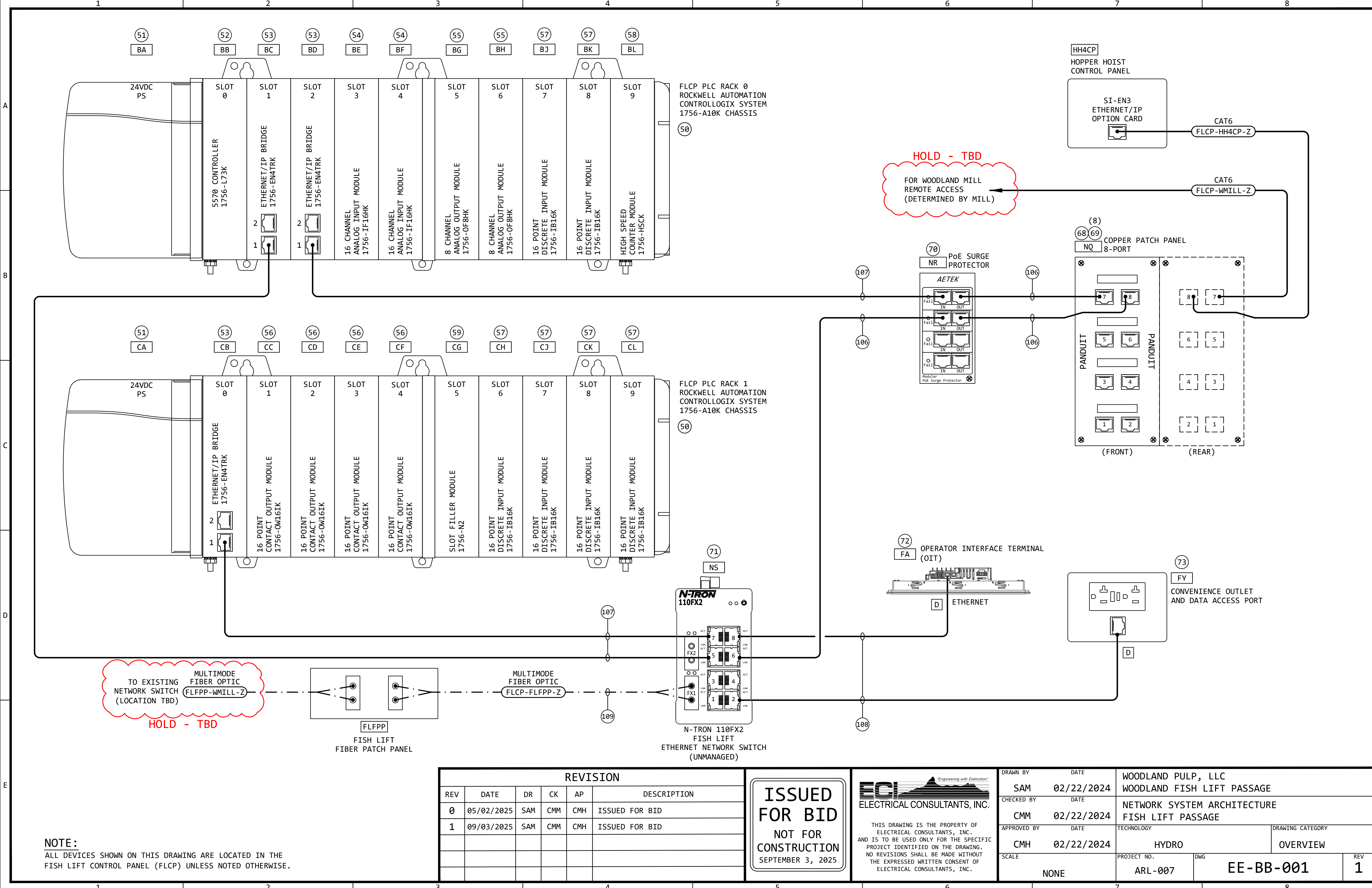
Engineering with Distinction

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	CABLE SCHEDULE MISCELLANEOUS CABLES	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	08/22/2024	HYDRO	GENERAL
SCALE	PROJECT NO.	DWG	REV
NONE	ARL-007	EE-AJ-005	1







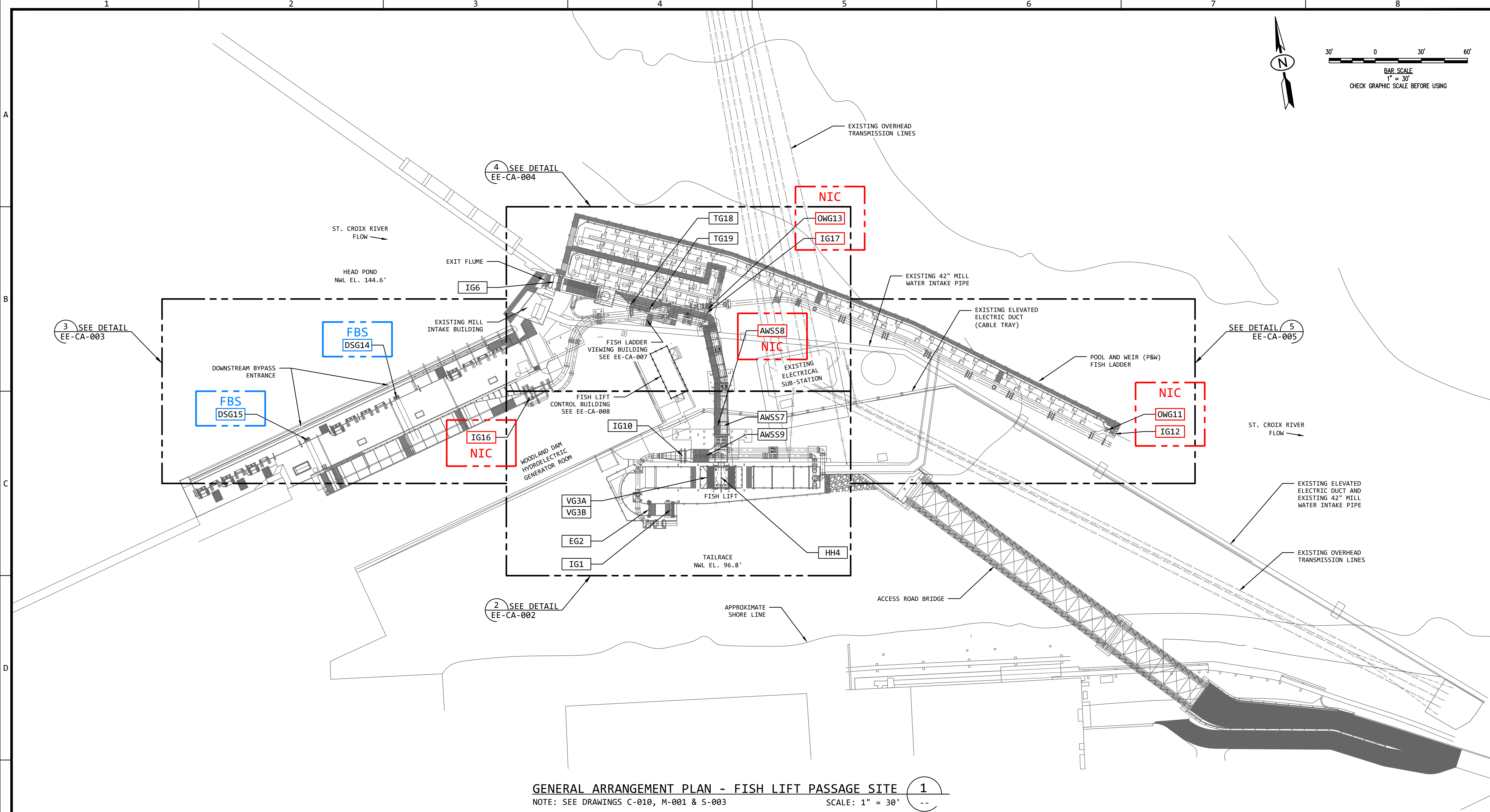
NOTE:
ALL DEVICES SHOWN ON THIS DRAWING ARE LOCATED IN THE FISH LIFT CONTROL PANEL (FLCP) UNLESS NOTED OTHERWISE.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID
NOT FOR CONSTRUCTION
SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	NETWORK SYSTEM ARCHITECTURE FISH LIFT PASSAGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	OVERVIEW	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-BB-001	1	



GENERAL ARRANGEMENT PLAN - FISH LIFT PASSAGE SITE 1
NOTE: SEE DRAWINGS C-010, M-001 & S-003
SCALE: 1" = 30'

LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

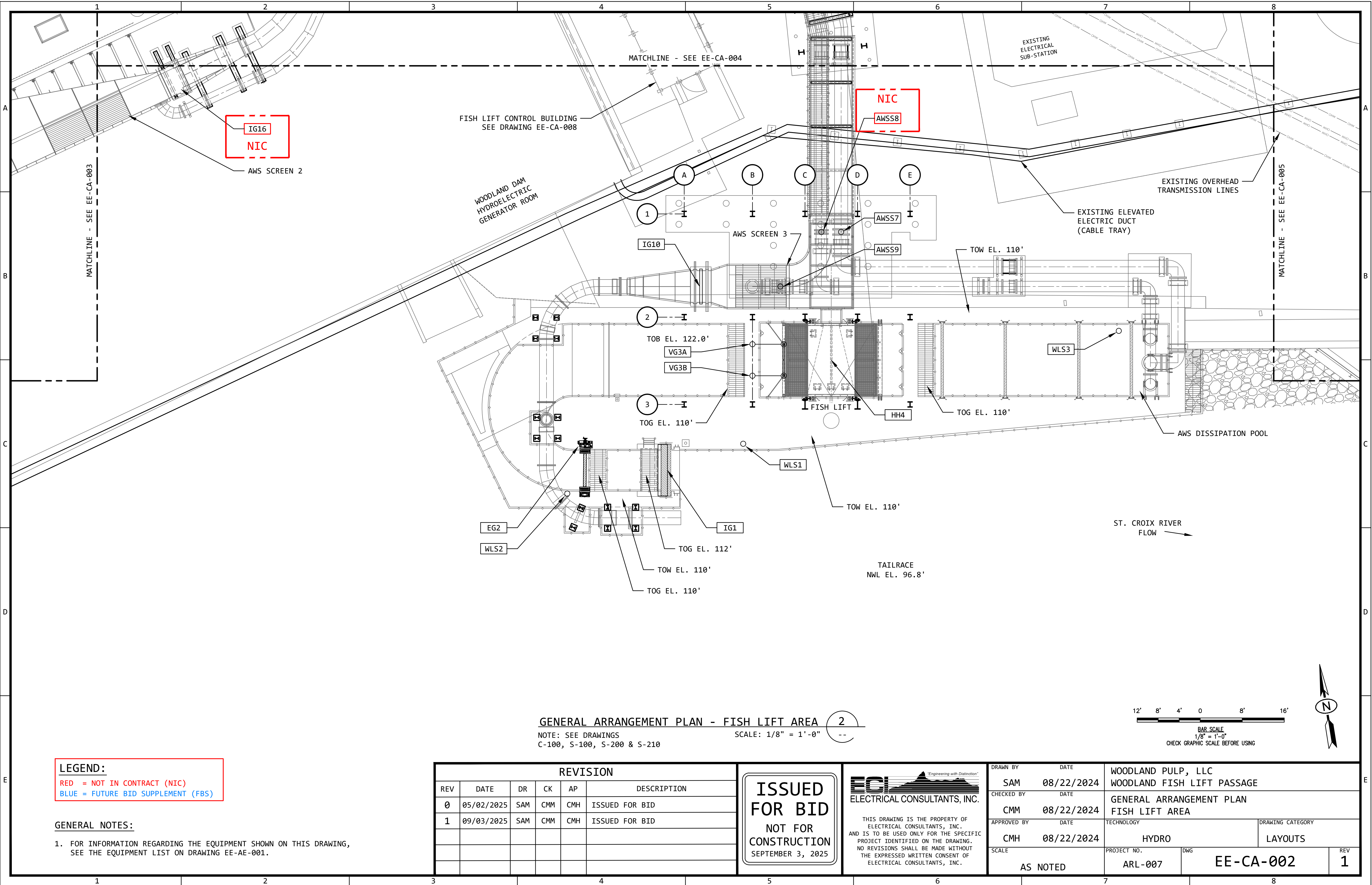
GENERAL NOTES:
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID
NOT FOR
CONSTRUCTION
SEPTEMBER 3, 2025

ECI
ELECTRICAL CONSULTANTS, INC.
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN FISH LIFT PASSAGE SITE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CA-001	1	



LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:
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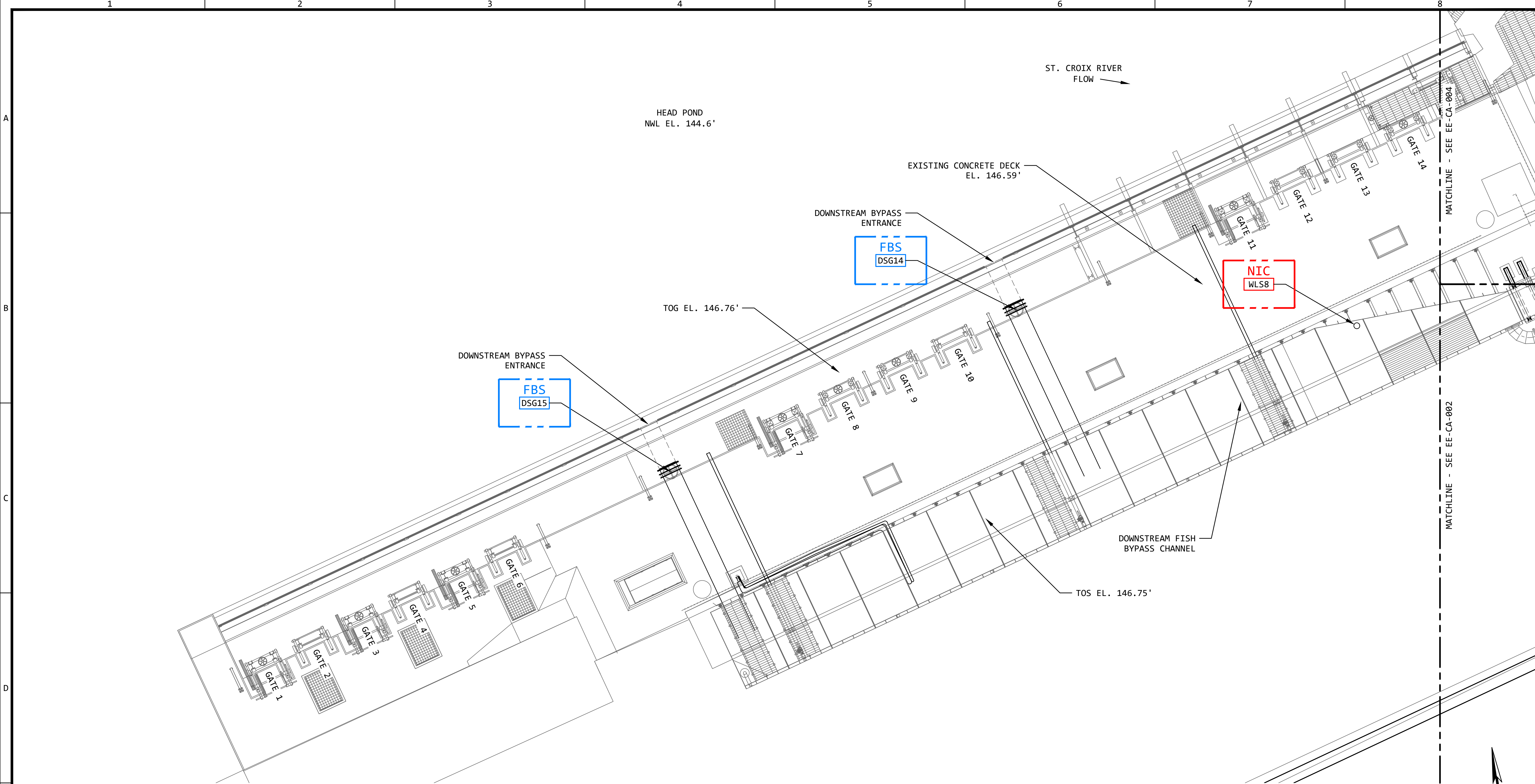
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025



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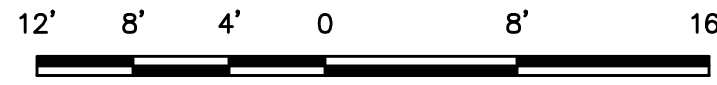
DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN		
CMM	08/22/2024	FISH LIFT AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CA-002	1	



GENERAL ARRANGEMENT PLAN - DOWNSTREAM FISH BYPASS AREA

NOTE: SEE DRAWINGS C-160 & S-160

SCALE: 1/8" = 1'-0"



BAR SCALE
1/8" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING



LEGEND:

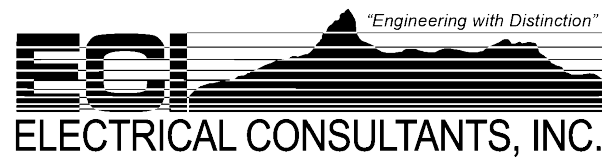
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

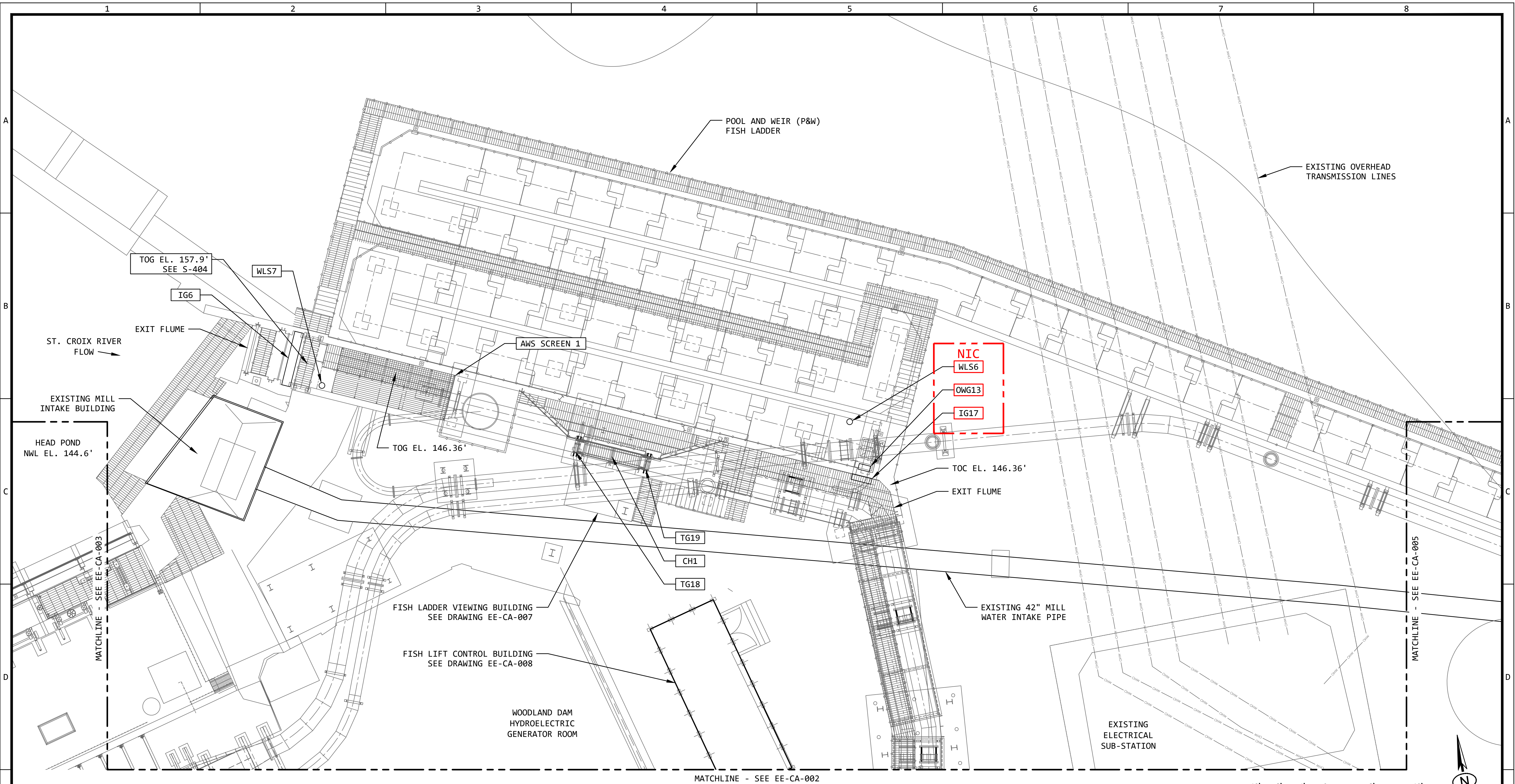
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN DOWNSTREAM FISH BYPASS AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CA-003	1	



GENERAL ARRANGEMENT PLAN - EXIT FLUME AND FISH LADDER AREAS 4

NOTE: SEE DRAWINGS C-120, C-140, S-120 & S-140

SCALE: 1/8" = 1'-0"

LEGEND:

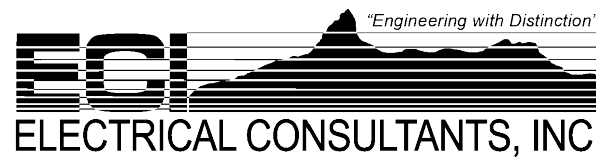
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

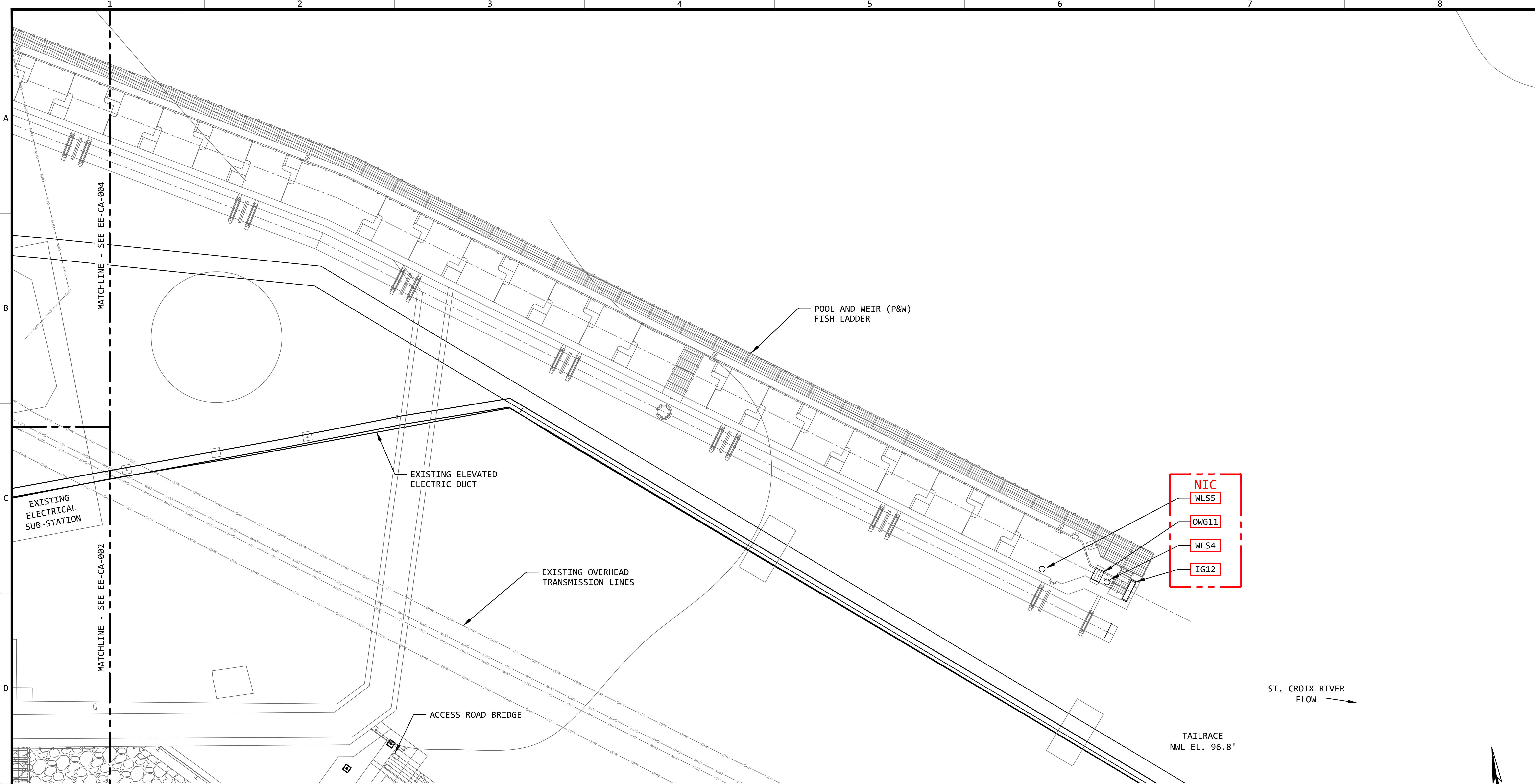
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
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SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN EXIT FLUME AND FISH LADDER AREAS		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CA-004	1	



GENERAL ARRANGEMENT PLAN - FISH LADDER AREA 5
NOTE: SEE DRAWINGS C-140 & S-140 SCALE: 1/8" = 1'-0" --

LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

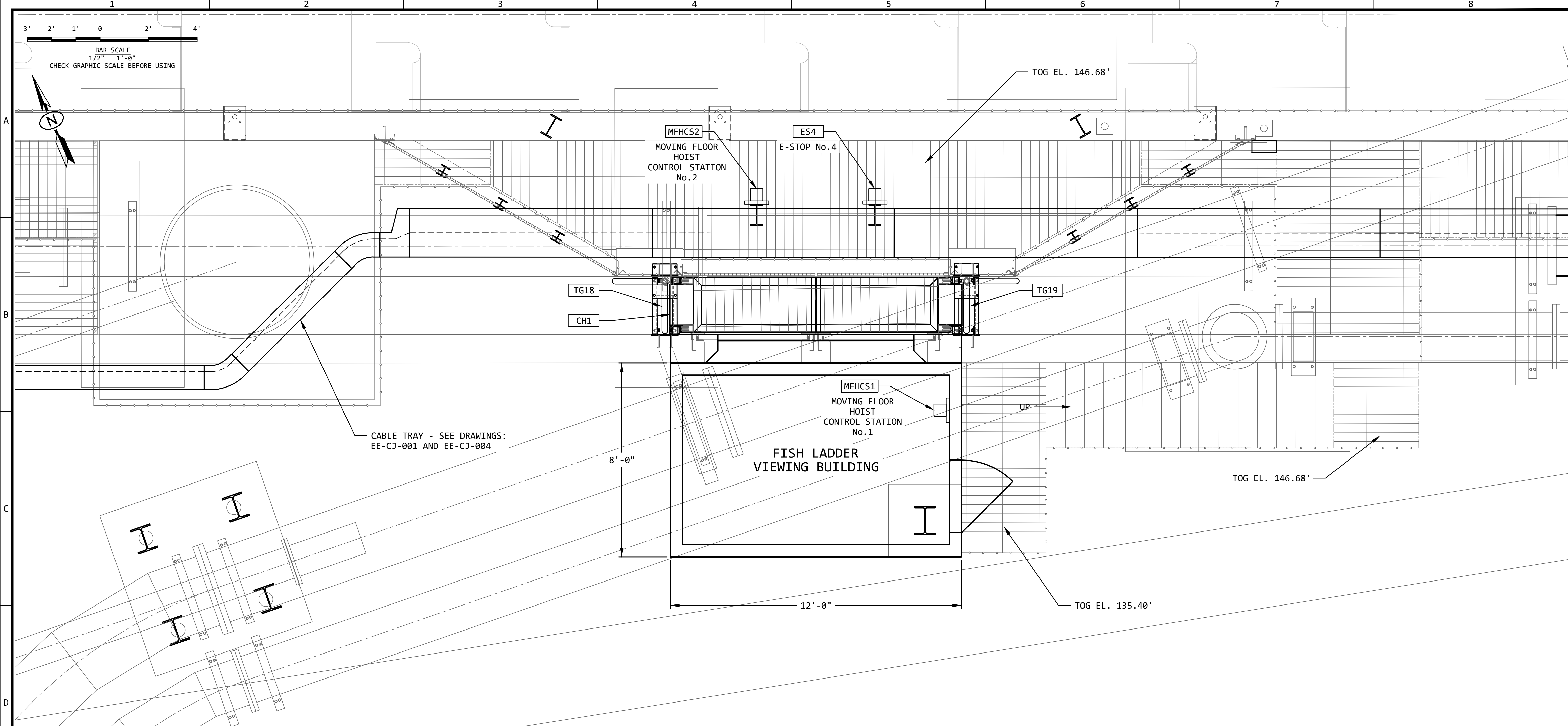
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN		
CMM	08/22/2024	FISH LADDER AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	AS NOTED	PROJECT NO.	DWG	REV
		ARL-007	EE-CA-005	1



GENERAL ARRANGEMENT PLAN - FISH Ladder VIEWING BUILDING 7
NOTE: SEE DRAWING C-123 & S-120 SCALE: 1/2" = 1'-0" --

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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CONSTRUCTION
SEPTEMBER 3, 2025



Electrical Consultants, Inc.

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN FISH LADDER VIEWING BUILDING		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CA-007	1	

KEYED NOTES:

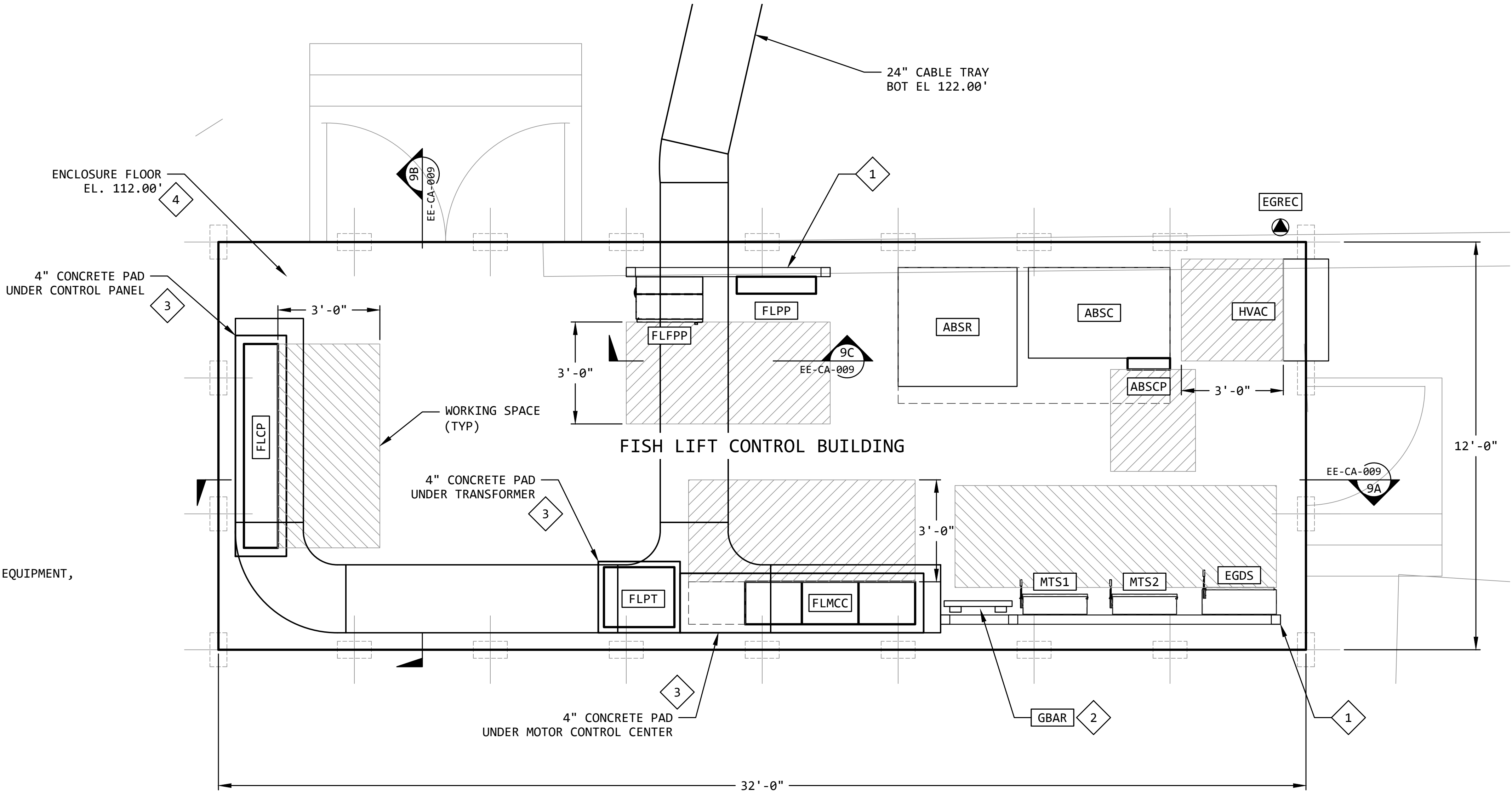
- 1 THE CONTRACTOR SHALL PROVIDE FLOOR MOUNTED UNISTRUT STRUCTURES FOR ALL NON-FLOOR MOUNTED EQUIPMENT AND/OR PANELS LOCATED IN THE FISH LIFT CONTROL BUILDING. DO NOT ATTACH ANY EQUIPMENT, INCLUDING THE UNISTRUT STRUCTURES, TO THE WALL.
- 2 THE GROUND BAR SHALL BE MOUNTED 9' AFF, AS REQUIRED. CONNECT TO THE PIGTAIL RESERVED FOR THIS PURPOSE. SEE EE-CG-008 FOR DETAILS.
- 3 THE CONTRACTOR SHALL PROVIDE CONCRETE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT INSTALLED. THE HOUSEKEEPING PADS SHALL BE A MINIMUM OF 4" THICK, UNLESS NOTED OTHERWISE. THE FACE OF THE PAD SHALL EXTEND 2" BEYOND THE FACE OF THE EQUIPMENT. PROVIDE A 3/4" CHAMFERED EDGE.
- 4 THE FISH LIFT CONTROL BUILDING FLOOR ELEVATION IS APPROXIMATE. THE FINAL FLOOR ELEVATION SHALL BE DETERMINED BY THE BUILDING MANUFACTURER. SEE S-190.

ELECTRICAL EQUIPMENT SPECIFICATION:

- EGDS** EMERGENCY GENERATOR DISCONNECT SWITCH
400A, 600VAC/VDC, 3POLE, 350HP, NEMA 4
SAFETY SWITCH, HEAVY DUTY, FUSIBLE.
SQUARE D CAT. No. CH365DS
- EGREC** EMERGENCY GENERATOR RECEPTACLE
400A, 277/480VAC, 3P+N+G, +4AUX CONTACTS
WITH GRAY PAINTED ALUMINUM BOX, 2 1/2" NPT FITTING.
MELTRIC 49-48047 PF400 INLET, WITH MB40-25 BOX
- FLCP** FISH LIFT CONTROL PANEL
HOFFMAN NEMA 12 ENCLOSURE, FLOOR MOUNT
SEE EE-CE-002 (ALL SHEETS)
- FLFPP** FISH LIFT FIBER PATCH PANEL
DOUBLE-HINGED NEMA 12 ENCLOSURE, FOR 19" RACK MOUNTED EQUIPMENT,
WALL MOUNTED, PAINTED STEEL WITH LOCKABLE WING KNOB
HOFFMAN PROTEK PTHS162415G4, OR APPROVED EQUAL.
SEE EE-BB-001
- FLMCC** FISH LIFT MOTOR CONTROL CENTER
800A, 480VAC, 3PH, 3W, 60HZ
ROCKWELL AUTOMATION CENTERLINE 2100
SEE EE-BA-001
- FLPT** FISH LIFT POWER TRANSFORMER
45kVA, 480VAC-208/120VAC, 3PH, 4W, 60HZ
DRY-TYPE VENTILATED, CLASS AA, NEMA 2 ENCLOSURE
SEE EATON DRAWINGS FR940 AND 280B
- FLPP** FISH LIFT POWER PANEL
225A, 42 CIRCUIT, 208/120VAC, 3PH, 4W, 60HZ
SEE EE-BA-002
- GBAR** FISH LIFT CONTROL BUILDING GROUND BAR
1/4" x 4" x 24" SOLID COPPER GROUND BAR WITH INSULATORS
SEE EE-CG-011, DETAIL 2, GROUND BAR DETAIL "GB".
- MTS1** MANUAL TRANSFER SWITCH No.1
400A, 600VAC/250VDC, 3POLE, 350HP, NEMA 1
SAFETY SWITCH, DOUBLE THROW, NON-FUSIBLE.
SQUARE D CAT. No. DTU365AWK
- MTS2** MANUAL TRANSFER SWITCH No.2
400A, 600VAC/250VDC, 3POLE, 350HP, NEMA 1
SAFETY SWITCH, DOUBLE THROW, NON-FUSIBLE.
SQUARE D CAT. No. DTU365AWK

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.



GENERAL ARRANGEMENT PLAN - FISH LIFT CONTROL BUILDING

NOTE: SEE DRAWING S-190

SCALE: 1/2" = 1'-0"

8

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GENERAL ARRANGEMENT PLAN FISH LIFT CONTROL BUILDING		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	AS NOTED	PROJECT NO.	DWG	REV
		ARL-007	EE-CA-008	1

KEYED NOTES:

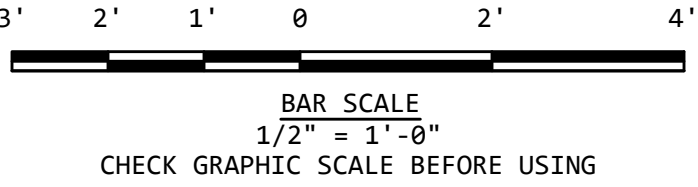
- 1

THE CONTRACTOR SHALL PROVIDE FLOOR MOUNTED UNISTRUT STRUCTURES FOR ALL NON-FLOOR MOUNTED EQUIPMENT AND/OR PANELS LOCATED IN THE FISH LIFT CONTROL BUILDING. DO NOT ATTACH ANY EQUIPMENT, INCLUDING THE UNISTRUT STRUCTURES, TO THE WALL.
- 2

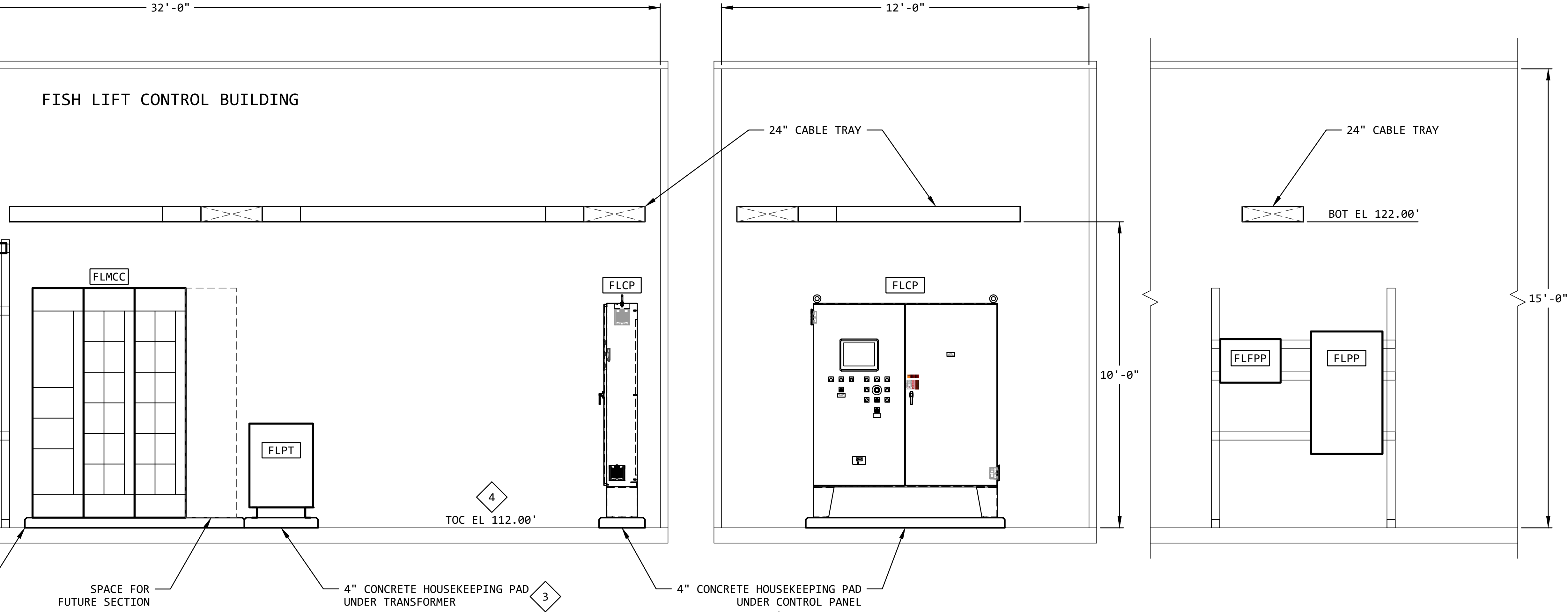
THE GROUND BAR SHALL BE MOUNTED 9' AFF, AS REQUIRED. CONNECT TO THE PIGTAIL RESERVED FOR THIS PURPOSE. SEE EE-CG-008 FOR DETAILS.
- 3

THE CONTRACTOR SHALL PROVIDE CONCRETE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT INSTALLED. THE HOUSEKEEPING PADS SHALL BE A MINIMUM OF 4" THICK, UNLESS NOTED OTHERWISE. THE FACE OF THE PAD SHALL EXTEND 2" BEYOND THE FACE OF THE EQUIPMENT. PROVIDE A 3/4" CHAMFERED EDGE.
- 4

THE FISH LIFT CONTROL BUILDING FLOOR ELEVATION IS APPROXIMATE. THE FINAL FLOOR ELEVATION SHALL BE DETERMINED BY THE BUILDING MANUFACTURER. SEE S-190.



FISH LIFT CONTROL BUILDING



ELEVATION - INSIDE WEST WALL 9A
SCALE: 1/2" = 1'-0" EE-CA-008

ELEVATION - INSIDE NORTH WALL 9B
SCALE: 1/2" = 1'-0" EE-CA-008

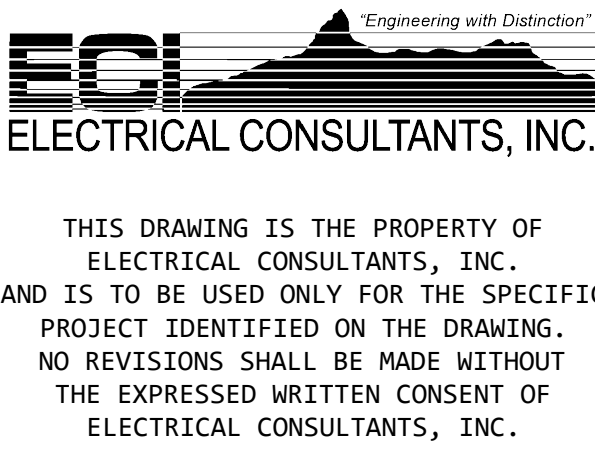
ELEVATION - INSIDE EAST WALL 9C
SCALE: 1/2" = 1'-0" EE-CA-008

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE EE-CA-008 AND THE EQUIPMENT LIST ON DRAWING EE-AE-001.

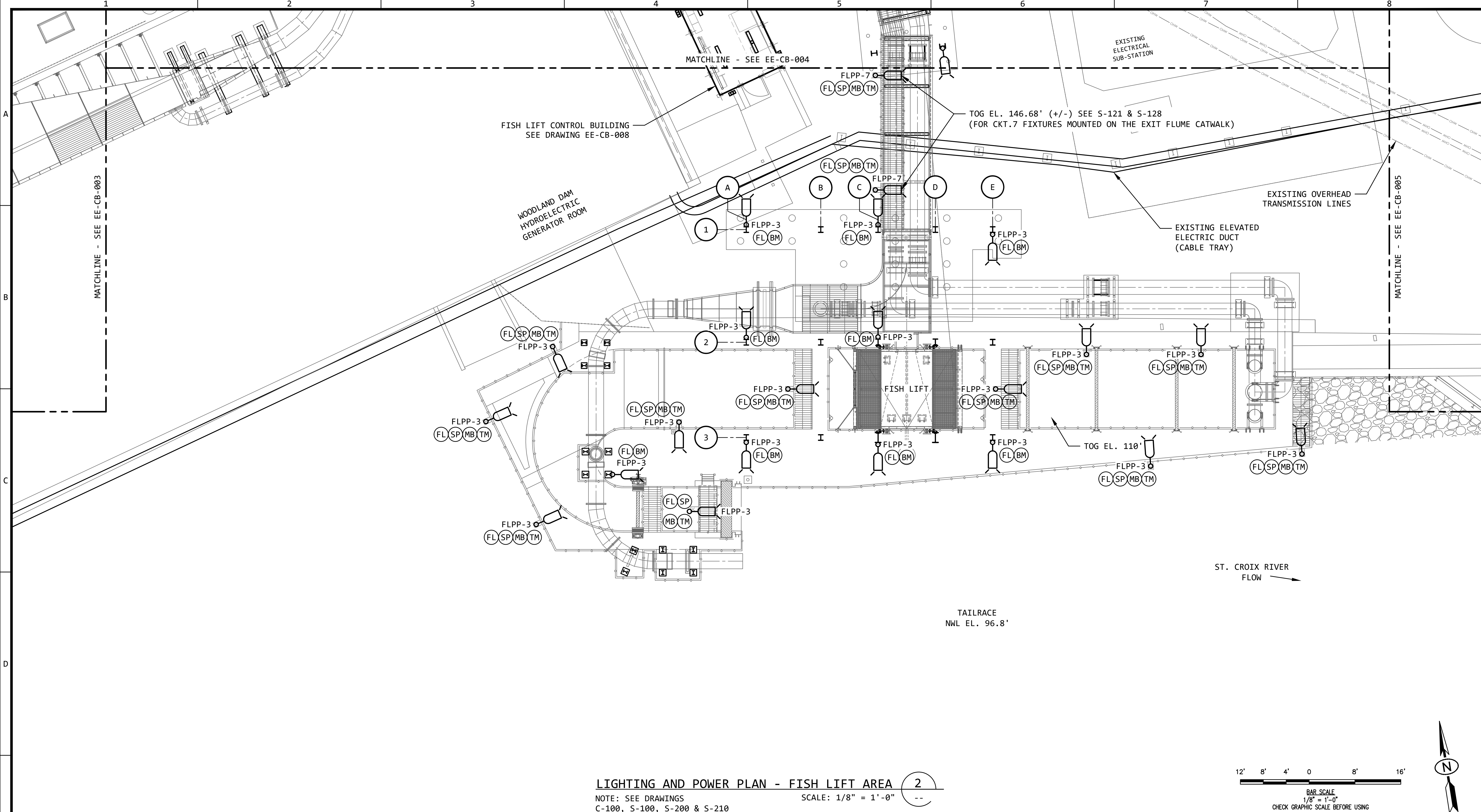
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REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID
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CONSTRUCTION
SEPTEMBER 3, 2025



DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEVATION PLAN FISH LIFT CONTROL BUILDING		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CA-009	1	

	1	2	3	4	5	6	7	8																																																																																																																																												
A	<table><tr><th colspan="10">LIGHTING FIXTURE SCHEDULE</th></tr><tr><th>TYPE</th><th>DESCRIPTION</th><th>MANUFACTURER</th><th>CATALOG No.</th><th>LAMP TYPE OR SELECTION</th><th>FIXTURE LUMENS</th><th>FIXTURE WATTS</th><th>VOLTAGE</th><th>MOUNTING</th><th>COMMENTS</th></tr><tr><td>FL</td><td>LED FLOOD LIGHT, MEDIUM DISTRIBUTION</td><td>HALCO</td><td>SFLD1-LS-CS-U-BZ-PC</td><td>4000K LED</td><td>4050-4350</td><td>30</td><td>120VAC</td><td>VARIES</td><td>UNIVERSAL INPUT VOLTAGE CS: COLOR SELECTABLE</td></tr><tr><td>LS</td><td>LED LINEAR STRIP, 4 FT, GASKETED</td><td>HALCO</td><td>LS4/36U40</td><td>4000K LED</td><td>4903</td><td>36</td><td>120VAC</td><td>BOF 9'-6" AFF</td><td>UNIVERSAL INPUT VOLTAGE</td></tr><tr><td>WP</td><td>LED WALL PACK, LOW PROFILE, BRONZE, ALUMINUM HOUSING, GLASS PRISMATIC LENS</td><td>HALCO</td><td>LPWP-2-HLS-CS-U-BZ</td><td>4000K LED</td><td>9800</td><td>70</td><td>120VAC</td><td>BOF 10'-0" AFF</td><td>UNIVERSAL INPUT VOLTAGE CS: COLOR SELECTABLE</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><th colspan="10">LIGHTING FIXTURE ACCESSORIES</th></tr><tr><td>SP</td><td>SWIVELPOLE, 10', BASE MOUNTED, 316 STAINLESS STEEL</td><td>SWIVELPOLE</td><td>ST7-M2-2400-T-NCT-SS</td><td></td><td></td><td></td><td></td><td>SURFACE OR BRACKET</td><td>STRUCTURE MOUNTED, INDEPENDENT OF GUARDRAIL.</td></tr><tr><td>MB</td><td>MOUNTING BRACKET FOR SWIVELPOLE</td><td>SWIVELPOLE</td><td>MBK9-002-HG</td><td></td><td></td><td></td><td></td><td>SWIVELPOLE BASE</td><td></td></tr><tr><td>TM</td><td>ROUND POLE MOUNT TENON FOR SWIVELPOLE, 1/2" KNUCKLE SLIPFITTER, , DARK BRONZE</td><td>LBS LIGHTING</td><td>WSD-TAD2.5-1/2-D</td><td></td><td></td><td></td><td></td><td>TOP OF SWIVELPOLE</td><td>TENON MOUNT FOR USE WITH TYPE FL FLOODLIGHT</td></tr><tr><td>BM</td><td>WEATHERPROOF BOX WITH 1/2" THREADED HOLE(S) FOR KNUCKLE MOUNTED FIXTURE</td><td>BY CONTRACTOR</td><td>TBD</td><td></td><td></td><td></td><td></td><td>BOF 10'-0" AFF</td><td>BOX MOUNT FOR USE WITH TYPE FL FLOODLIGHT</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>								LIGHTING FIXTURE SCHEDULE										TYPE	DESCRIPTION	MANUFACTURER	CATALOG No.	LAMP TYPE OR SELECTION	FIXTURE LUMENS	FIXTURE WATTS	VOLTAGE	MOUNTING	COMMENTS	FL	LED FLOOD LIGHT, MEDIUM DISTRIBUTION	HALCO	SFLD1-LS-CS-U-BZ-PC	4000K LED	4050-4350	30	120VAC	VARIES	UNIVERSAL INPUT VOLTAGE CS: COLOR SELECTABLE	LS	LED LINEAR STRIP, 4 FT, GASKETED	HALCO	LS4/36U40	4000K LED	4903	36	120VAC	BOF 9'-6" AFF	UNIVERSAL INPUT VOLTAGE	WP	LED WALL PACK, LOW PROFILE, BRONZE, ALUMINUM HOUSING, GLASS PRISMATIC LENS	HALCO	LPWP-2-HLS-CS-U-BZ	4000K LED	9800	70	120VAC	BOF 10'-0" AFF	UNIVERSAL INPUT VOLTAGE CS: COLOR SELECTABLE																					LIGHTING FIXTURE ACCESSORIES										SP	SWIVELPOLE, 10', BASE MOUNTED, 316 STAINLESS STEEL	SWIVELPOLE	ST7-M2-2400-T-NCT-SS					SURFACE OR BRACKET	STRUCTURE MOUNTED, INDEPENDENT OF GUARDRAIL.	MB	MOUNTING BRACKET FOR SWIVELPOLE	SWIVELPOLE	MBK9-002-HG					SWIVELPOLE BASE		TM	ROUND POLE MOUNT TENON FOR SWIVELPOLE, 1/2" KNUCKLE SLIPFITTER, , DARK BRONZE	LBS LIGHTING	WSD-TAD2.5-1/2-D					TOP OF SWIVELPOLE	TENON MOUNT FOR USE WITH TYPE FL FLOODLIGHT	BM	WEATHERPROOF BOX WITH 1/2" THREADED HOLE(S) FOR KNUCKLE MOUNTED FIXTURE	BY CONTRACTOR	TBD					BOF 10'-0" AFF	BOX MOUNT FOR USE WITH TYPE FL FLOODLIGHT																				
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SP	SWIVELPOLE, 10', BASE MOUNTED, 316 STAINLESS STEEL	SWIVELPOLE	ST7-M2-2400-T-NCT-SS					SURFACE OR BRACKET	STRUCTURE MOUNTED, INDEPENDENT OF GUARDRAIL.																																																																																																																																											
MB	MOUNTING BRACKET FOR SWIVELPOLE	SWIVELPOLE	MBK9-002-HG					SWIVELPOLE BASE																																																																																																																																												
TM	ROUND POLE MOUNT TENON FOR SWIVELPOLE, 1/2" KNUCKLE SLIPFITTER, , DARK BRONZE	LBS LIGHTING	WSD-TAD2.5-1/2-D					TOP OF SWIVELPOLE	TENON MOUNT FOR USE WITH TYPE FL FLOODLIGHT																																																																																																																																											
BM	WEATHERPROOF BOX WITH 1/2" THREADED HOLE(S) FOR KNUCKLE MOUNTED FIXTURE	BY CONTRACTOR	TBD					BOF 10'-0" AFF	BOX MOUNT FOR USE WITH TYPE FL FLOODLIGHT																																																																																																																																											
B																																																																																																																																																				
C	LIGHTING AND POWER PLAN SYMBOLS LIGHTING FIXTURES: LS a O 4' LED LINEAR STRIP 4L b O 2'x4' LED LIGHT FIXTURE DL C d DOWN LIGHT FIXTURE FL e f FLOOD LIGHT FIXTURE PL a POLE MOUNTED LIGHT FIXTURE WP b WALLPACK LIGHT FIXTURE NOTE: UPPER CASE LETTERS (LS, FL, WP) INDICATES FIXTURE TYPE. (SEE LIGHTING FIXTURE SCHEDULE) LOWER CASE LETTER (a, b) INDICATES SWITCHING CIRCUIT. SWITCHES: S_b S S₂ S₃ S₄ S_D S_{HR} S_K S_{LV} S_{OS} S_P S_{WP} S_{XP} TOGGLE SWITCH - AS SPECIFIED: LOWER CASE LETTER INDICATES SWITCHING CIRCUIT BLANK SINGLE POLE SWITCH 2 DOUBLE POLE SWITCH 3 3-WAY SWITCH 4 4-WAY SWITCH D DIMMER SWITCH HR HORSEPOWER RATED SWITCH K KEY OPERATED SWITCH LV LOW VOLTAGE SWITCH OS OCCUPANCY SWITCH P SINGLE POLE SWITCH WITH PILOT LAMP WP WEATHER PROOF SWITCH XP EXPLOSION PROOF SWITCH PC CONTROL DEVICE OR EQUIPMENT LC LIGHTING CONTACTOR PC PHOTOCELL EXIT AND EMERGENCY LIGHTING: EXIT SIGN CEILING, UNIT OR WALL MOUNTED, AS REQUIRED. ARROW(S) INDICATES EGRESS DIRECTION. SHADED AREA INDICATES SIGN FACE. TANDEM EMERGENCY LIGHT BATTERY PACK AND EXIT SIGN ARROW(S) INDICATES EGRESS DIRECTION. SHADED AREA INDICATES SIGN FACE. ROMAN NUMERALS FOR REMOTE HEAD REFERENCE. EMERGENCY LIGHT BATTERY PACK ROMAN NUMERALS FOR REMOTE HEAD REFERENCE REMOTE EMERGENCY LIGHTING HEAD ROMAN NUMERALS FOR BATTERY PACK POWER REFERENCE RECEPTACLES: SINGLE RECEPTACLE. NEMA 5-20R DUPLEX RECEPTACLE. NEMA 5-20R QUAD RECEPTACLE. NEMA 5-20R DUPLEX GFCI RECEPTACLE. NEMA 5-20R QUAD GFCI RECEPTACLE. NEMA 5-20R DUPLEX RECEPTACLE. NEMA 5-20R FLUSH FLOOR MOUNTED QUAD RECEPTACLE. NEMA 5-20R FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE. NEMA 5-20R FLUSH FLOOR MOUNTED WITH PROVISIONS FOR DATA SPECIAL RECEPTACLE. NEMA CONFIGURATION AS REQUIRED. RECEPTACLE - AS SPECIFIED: WP WEATHER PROOF XP EXPLOSION PROOF EM EMERGENCY CIRCUIT MISC. POWER MOTOR, # HORSEPOWER RATING ELECTRICAL POWER PANELBOARD, SURFACE MOUNTED ELECTRICAL POWER PANELBOARD, FLUSH MOUNTED DISCONNECT SWITCH (NF = NON-FUSED) MAGNETIC MOTOR STARTER COMBINATION MAGNETIC MOTOR STARTER/DISCONNECT MANUAL MOTOR STARTER WIRELESS ACCESS POINT GENERAL NOTES: 1. THE MINIMUM SIZE LIGHTING AND POWER WIRING SHALL BE #12 AWG. 2. ALL INTERIOR DISTRIBUTION AND BRANCH WIRING SHALL BE 600V, COPPER WITH THHN/THWN INSULATION, UNLESS STATED OTHERWISE. ALL EXTERIOR DISTRIBUTION AND BRANCH WIRING SHALL BE 600V, COPPER WITH XHHW INSULATION, UNLESS STATED OTHERWISE. 3. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH EVERY FEEDER AND BRANCH CIRCUIT. 4. THE NON-HOMERUN CABLES IN A CIRCUIT SHALL MATCH THE SIZE OF THE HOMERUN CABLE FOR THAT CIRCUIT, UNLESS NOTED OTHERWISE. REFER TO THE PANEL SCHEDULES FOR ALL HOMERUN CABLE REQUIREMENTS. 5. ALL CABLES SHALL BE SUPPORTED BY CONDUIT, CABLE TRAY, OR A COMBINATION OF RACEWAYS, FOR THEIR ENTIRE LENGTH. CONDUIT MAY BE USED AS A RACEWAY FOR ANY GROUP OF SINGLE CONDUCTORS OR ANY MULTICONDUCTOR CABLE. 6. ALL LIGHTING TOGGLE SWITCHES SHALL BE COMMERCIAL SPECIFICATION GRADE 277/120V, SIDE WIRED AND PROVIDED WITH GROUNDING SCREW. LEVITON, PASS AND SEYMOUR OR APPROVED EQUAL. 7. ALL CONENIENCE RECEPTACLES SHALL BE INDUSTRIAL GRADE GROUNDING TYPE NEMA 5-20R, SIDE WIRED. LEVITON, PASS AND SEYMOUR OR APPROVED EQUAL. ALL CONVENIENCE RECEPTACLES TO BE INSTALLED ON THE PLANT FLOOR, IN ELECTRICAL ROOMS OR ON AUXILIARY STRUCTURES ON THE SITE SHALL BE GFCI PROTECTED. 8. ALL CONVENIENCE RECEPTACLES SHALL BE MOUNTED 18" AFF, ALL LAVATORY GFCI RECEPTACLES SHALL BE MOUNTED AT 48" AFF, ALL LIGHTING TOGGLE SWITCHES SHALL BE MOUNTED AT 48" AFF AND ALL TEL/DATA SYSTEM OUTLETS SHALL BE MOUNTED AT 18" AFF, UNLESS STATED OTHERWISE. 9. COORDINATE THE COLOR OF ALL WIRING DEVICES WITH THE OWNER. PROVIDE MATCHING WALL PLATES FOR ALL WIRING DEVICES IN FINISHED AREAS. PROVIDE STAINLESS STEEL WALL PLATES FOR ALL WIRING DEVICES IN UNFINISHED AREAS. 10. THE MOUNTING HEIGHTS INDICATED FOR ALL LIGHTING FIXTURES SHALL BE TO THE BOTTOM OF FIXTURE (BOF), UNLESS STATED OTHERWISE. 11. ACTUAL LIGHTING FIXTURE LOCATIONS AND MOUNTING HEIGHTS MAY BE ADJUSTED IN THE FIELD TO AVOID PIPING, HANGERS AND OTHER ARCHITECTURAL APPURTENANCES. 12. THE CONTRACTOR SHALL PROVIDE ALL MOUNTING APPURTENANCES AS REQUIRED FOR A COMPLETE INSTALLATION. 13. ALL EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS SHALL BE FED FROM THE UNSWITCHED HOT LEG OF THE ROOM OR AREA LIGHTING CIRCUIT. 14. SEE GENERAL NOTES ON DRAWING EE-CJ-009 FOR MORE INFORMATION.																																																																																																																																																			
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LIGHTING AND POWER PLAN - FISH LIFT AREA 2

NOTE: SEE DRAWINGS C-100, S-100, S-200 & S-210

SCALE: 1/8" = 1'-0"

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN FISH LIFT AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-002	1	

KEYED NOTES:

1 THE LOCATION FOR THE SWITCH FOR LIGHTING CIRCUIT 11 IS YET TO BE DETERMINED.

HEAD POND
NWL EL. 144.6'

ST. CROIX RIVER
FLOW

EXISTING CONCRETE DECK
EL. 146.59'

DOWNSTREAM BYPASS
ENTRANCE

20'-0"
(MAXIMUM)

LOG EL. 146.76'

DOWNSTREAM BYPASS
ENTRANCE

DOWNSTREAM FISH
BYPASS CHANNEL

FUTURE BID SUPPLEMENT

LIGHTING AND POWER PLAN - DOWNSTREAM FISH BYPASS AREA

NOTE: SEE DRAWINGS C-160 & S-160

SCALE: 1/8" = 1'-0"

12' 8' 4' 0' 8' 16'

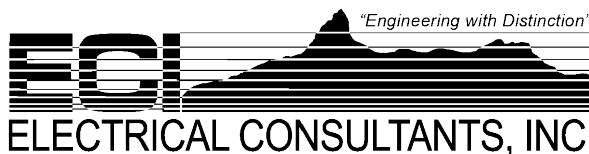
BAR SCALE
1/8" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

LEGEND:

RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025

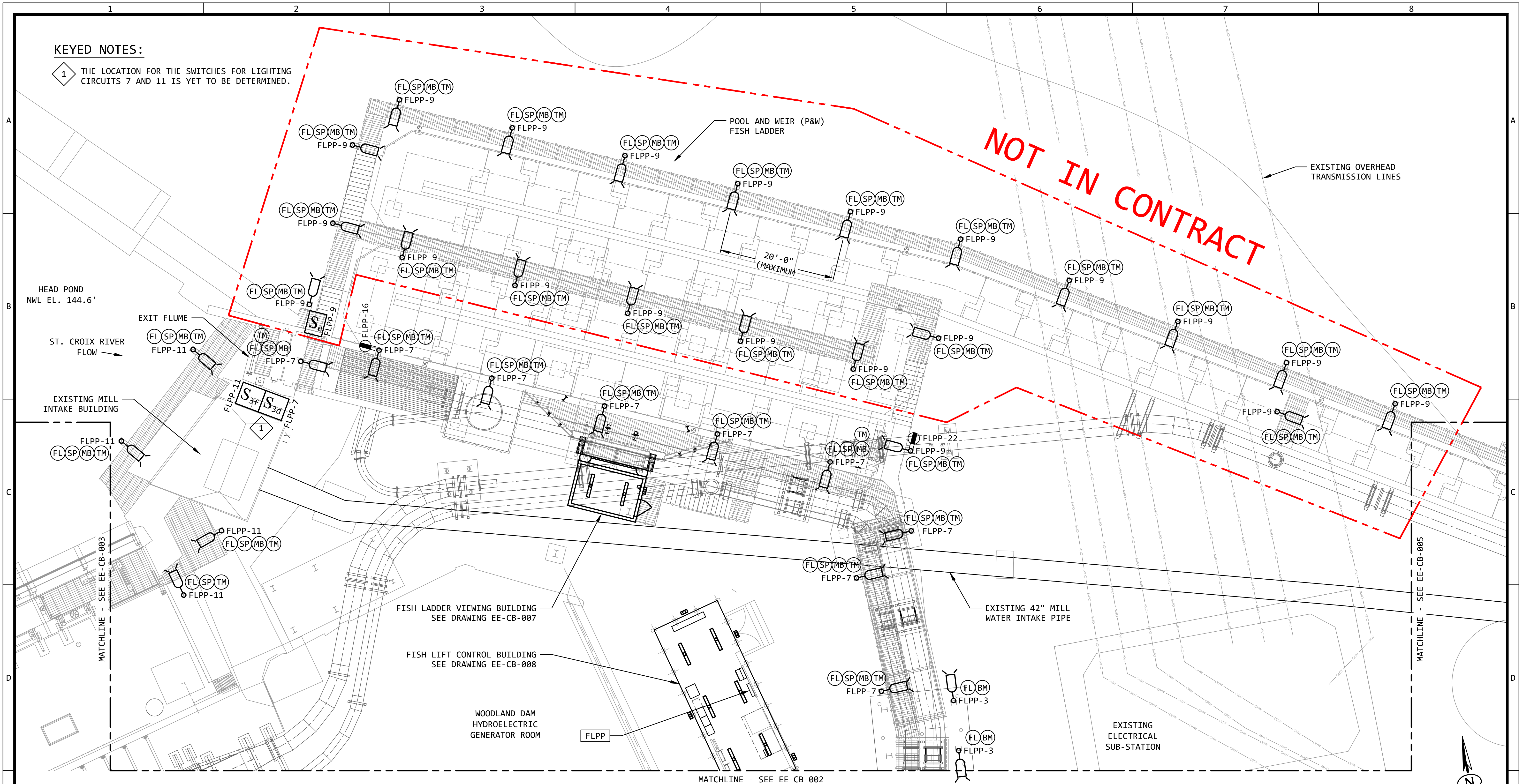


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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN DOWNSTREAM FISH BYPASS AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-003	1	

KEYED NOTES:

1 THE LOCATION FOR THE SWITCHES FOR LIGHTING CIRCUITS 7 AND 11 IS YET TO BE DETERMINED.



LIGHTING AND POWER PLAN - EXIT FLUME AND FISH LADDER AREAS 4
NOTE: SEE DRAWINGS C-120, C-140, S-120 & S-140
SCALE: 1/8" = 1'-0"

LEGEND:

RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

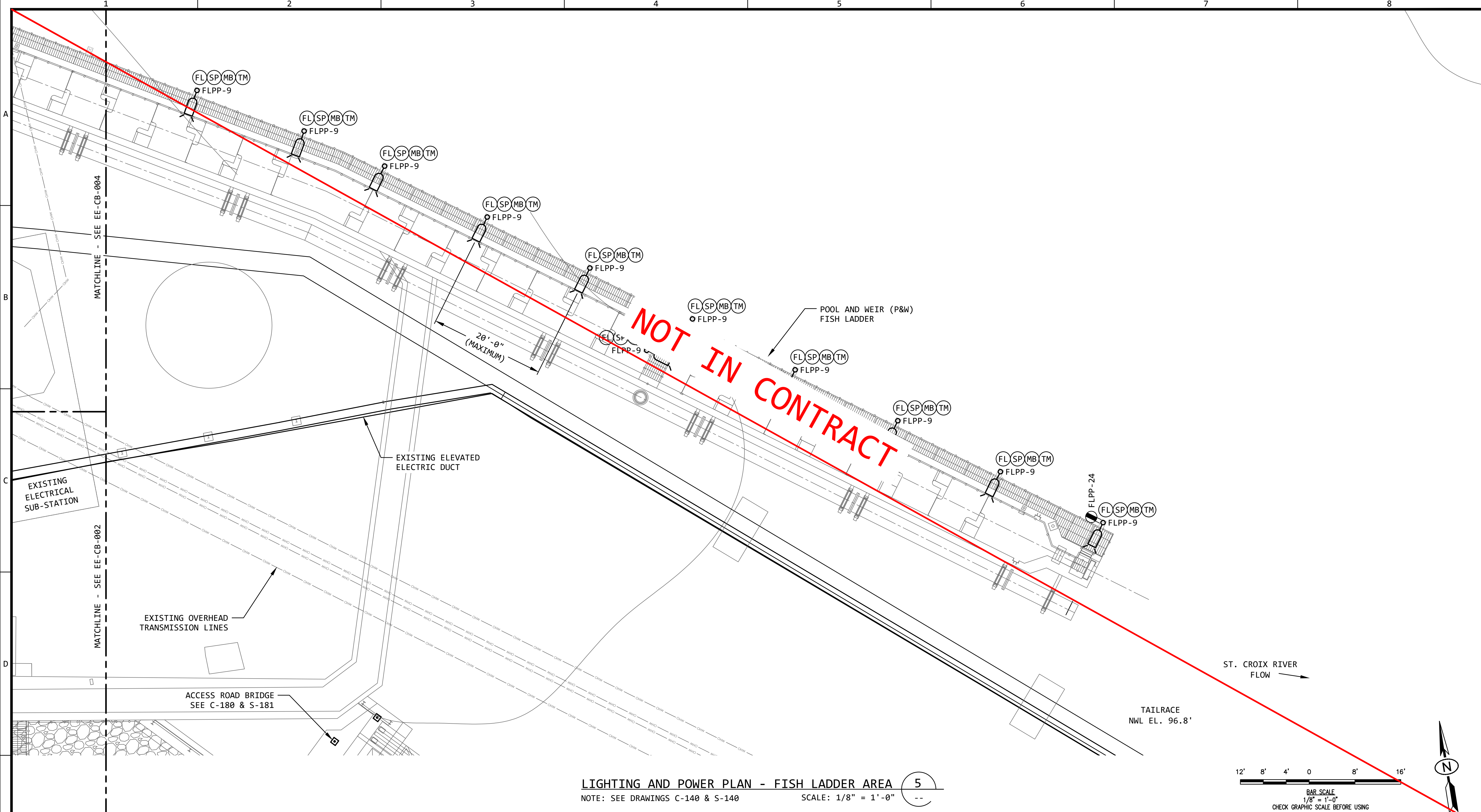
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REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN EXIT FLUME AND FISH LADDER AREAS		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-004	1	



LIGHTING AND POWER PLAN - FISH LADDER AREA 5
NOTE: SEE DRAWINGS C-140 & S-140 SCALE: 1/8" = 1'-0"

LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

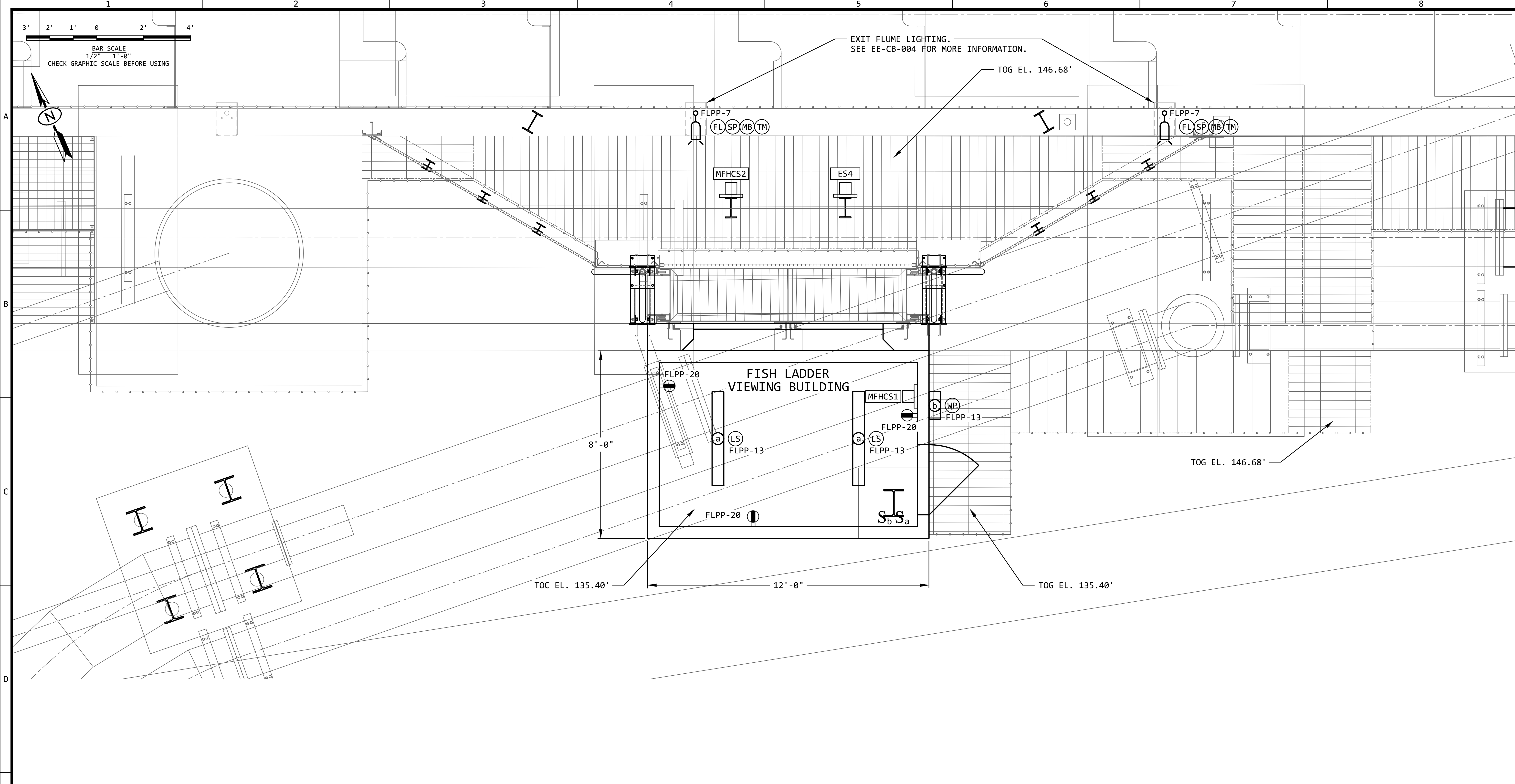
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REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN FISH LADDER AREA (EAST)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-005	1	



LIGHTING AND POWER PLAN - FISH LADDER VIEWING BUILDING 7
NOTE: SEE DRAWING C-123 & S-120 SCALE: 1/2" = 1'-0" --

GENERAL NOTES:

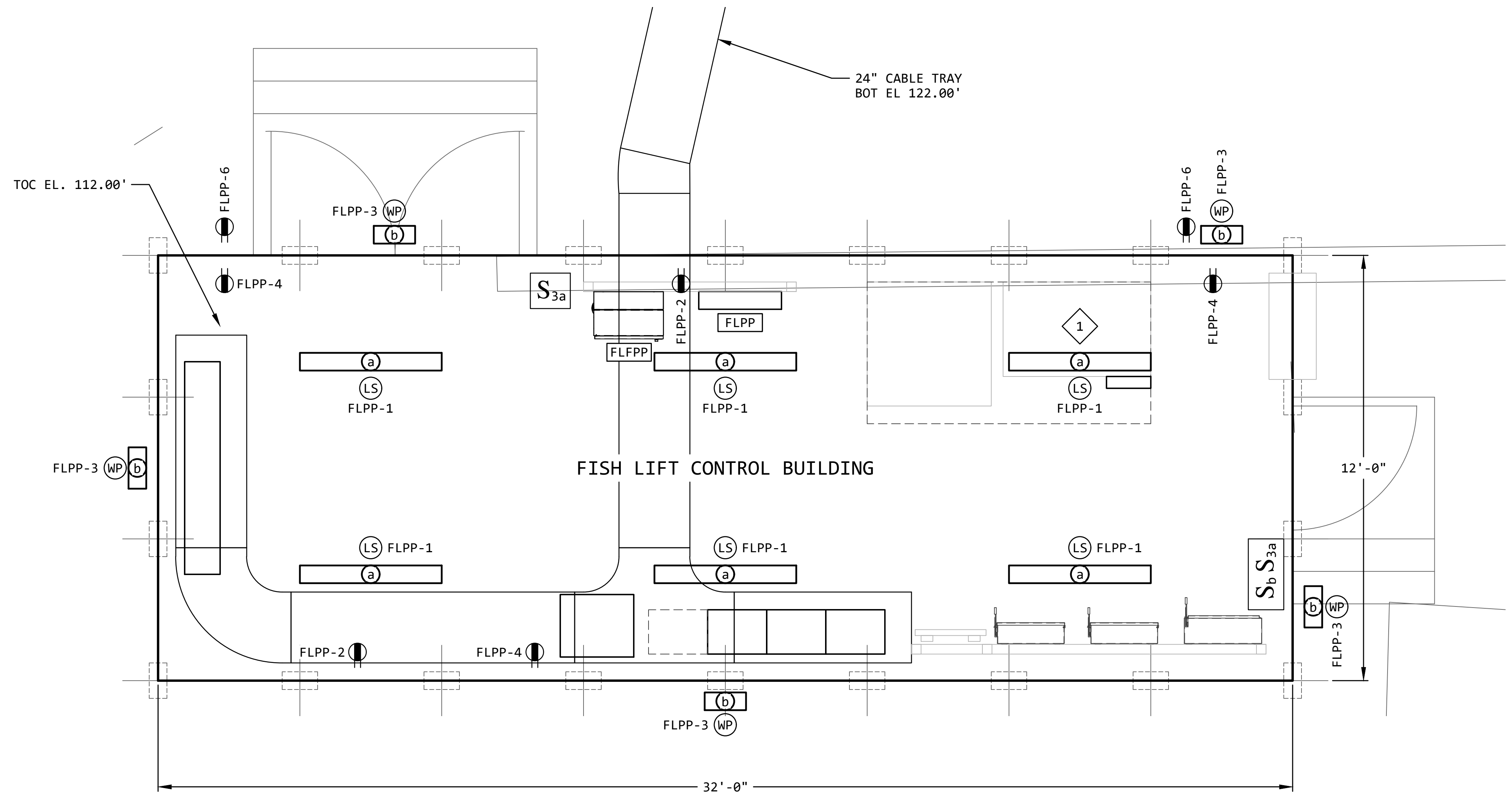
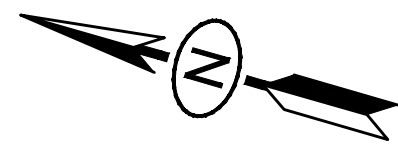
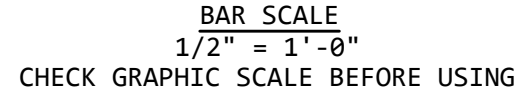
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN FISH LADDER VIEWING BUILDING		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-007	1	



8

SCALE: $1/2" = 1'-0"$

1

GENERAL NOTES:

- REVISION

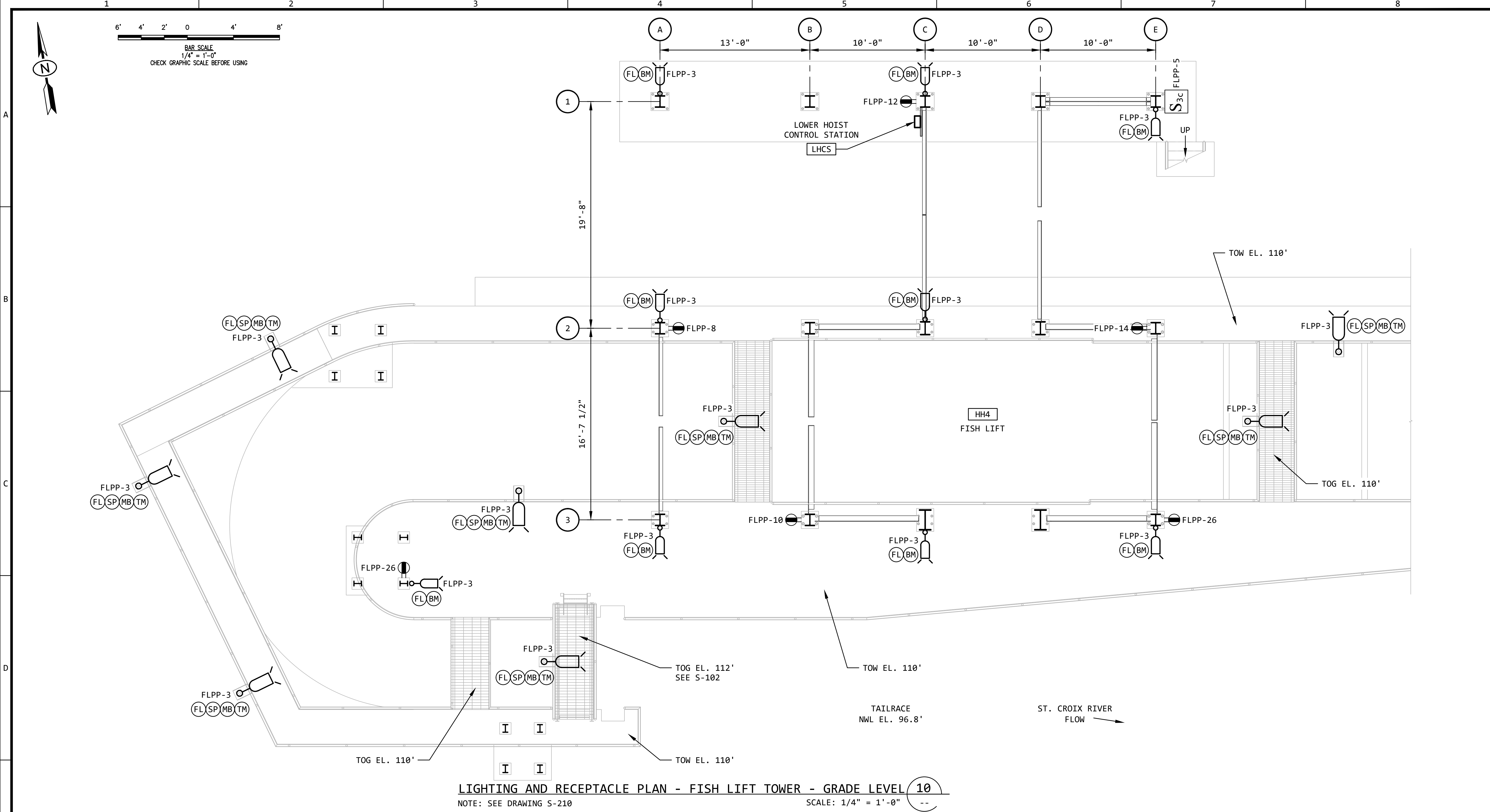
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY		DATE		WOODLAND PULP, LLC	
SAM		08/22/2024		WOODLAND FISH LIFT PASSAGE	
CHECKED BY		DATE		LIGHTING AND POWER PLAN	
CMM		08/22/2024		FISH LIFT CONTROL BUILDING	
APPROVED BY		DATE		TECHNOLOGY	DRAWING CATEGORY
CMH		08/22/2024		HYDRO	LAYOUTS
SCALE		PROJECT NO.		DWG	REV
AS NOTED		ARL-007		EE-CB-008	1



LIGHTING AND RECEPTACLE PLAN - FISH LIFT TOWER - GRADE LEVEL 10
NOTE: SEE DRAWING S-210 SCALE: 1/4" = 1'-0" --

GENERAL NOTES:
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID

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CONSTRUCTION

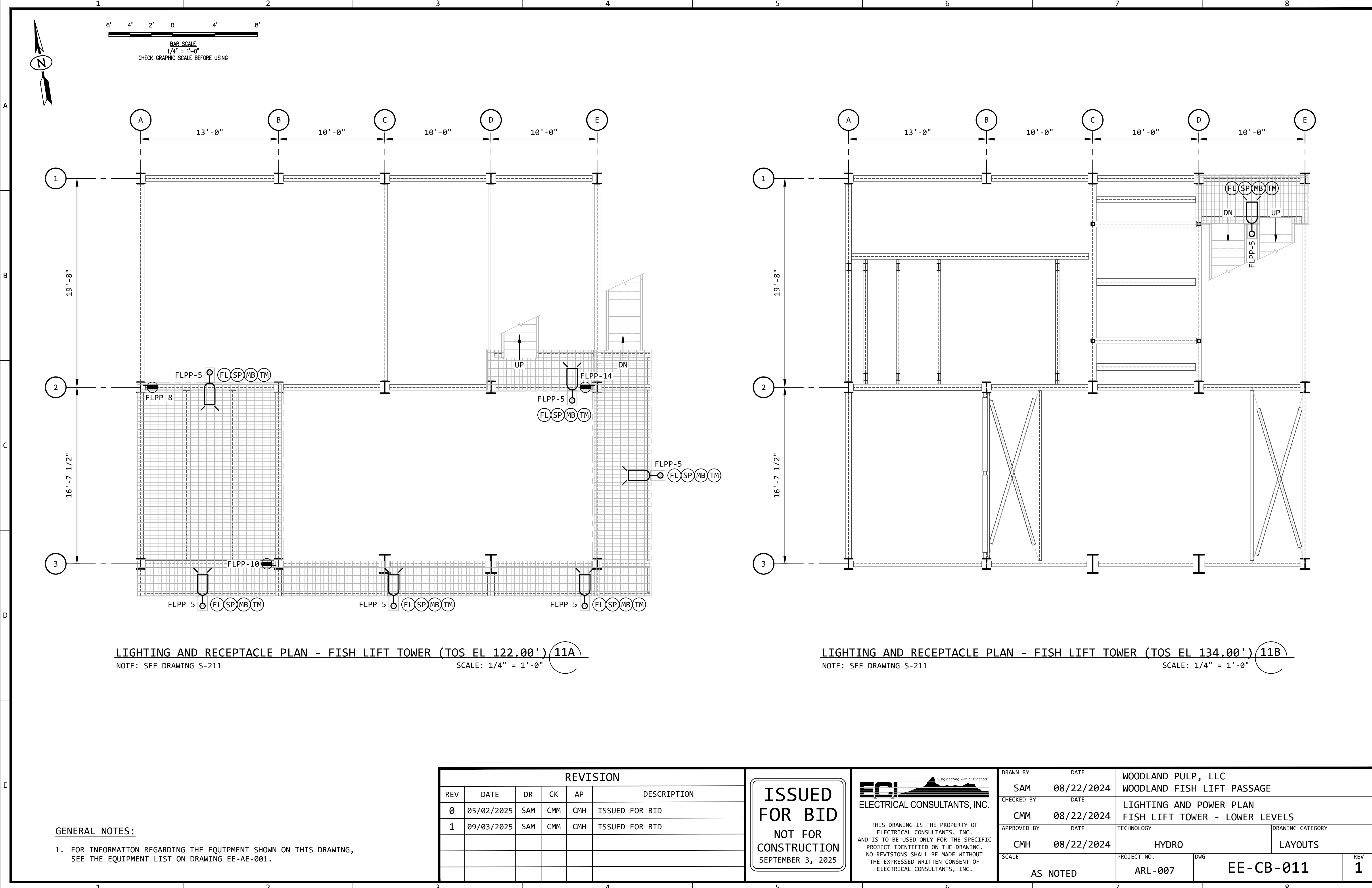
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN FISH LIFT TOWER - GRADE LEVEL		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-010	1	



LIGHTING AND RECEPTACLE PLAN - FISH LIFT TOWER (TOS EL 122.00') (11A)
NOTE: SEE DRAWING S-211
SCALE: 1/4" = 1'-0"

LIGHTING AND RECEPTACLE PLAN - FISH LIFT TOWER (TOS EL 134.00') (11B)
NOTE: SEE DRAWING S-211
SCALE: 1/4" = 1'-0"

GENERAL NOTES:
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

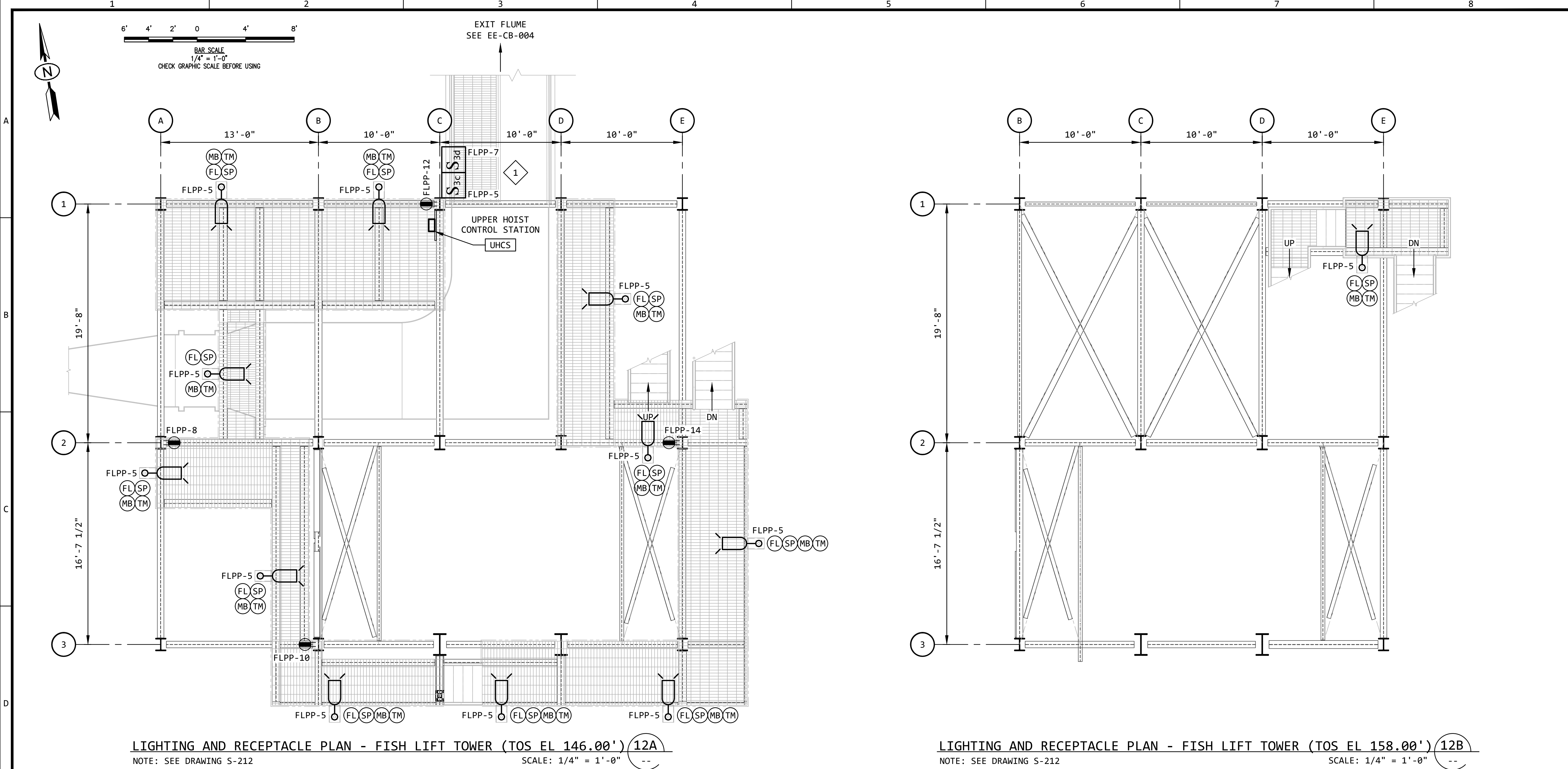
ISSUED
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN FISH LIFT TOWER - LOWER LEVELS		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-011	1	



KEYED NOTES:

1 THE LOCATION FOR THE SWITCHES FOR LIGHTING CIRCUITS 5 AND 7 IS YET TO BE DETERMINED.

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

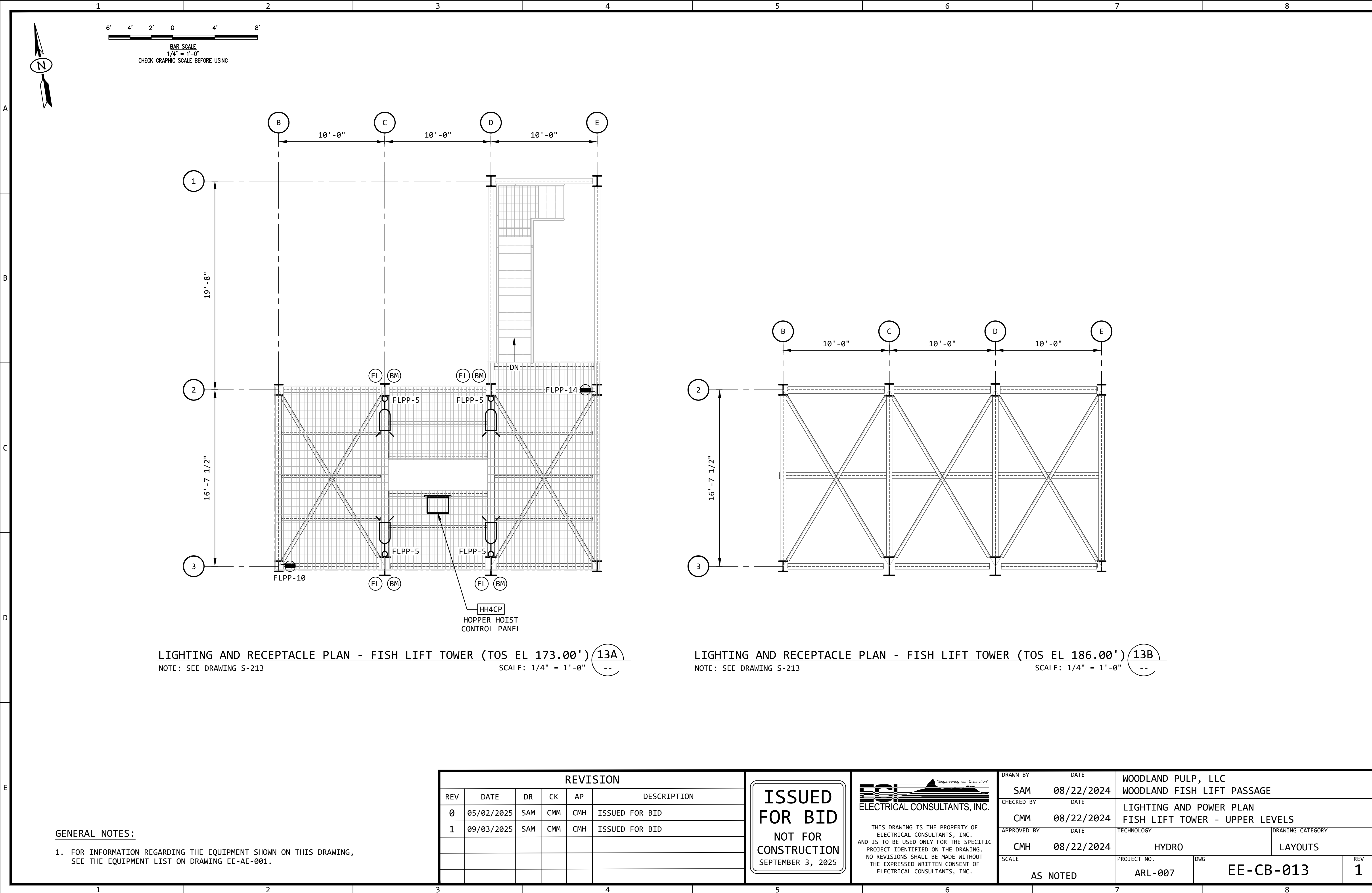
SEPTEMBER 3, 2025

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DRAWN BY		DATE		WOODLAND PULP, LLC	
SAM		08/22/2024		WOODLAND FISH LIFT PASSAGE	
CHECKED BY		DATE		LIGHTING AND POWER PLAN	
CMM		08/22/2024		FISH LIFT TOWER - MIDDLE LEVELS	
APPROVED BY		DATE		TECHNOLOGY	
CMH		08/22/2024		HYDRO	
SCALE		PROJECT NO.		DRAWING CATEGORY	
AS NOTED		ARL-007		LAYOUTS	
		DWG		REV	
		EE-CB-012		1	



LIGHTING AND RECEPTACLE PLAN - FISH LIFT TOWER (TOS EL 173.00') 13A
NOTE: SEE DRAWING S-213
SCALE: 1/4" = 1'-0"

LIGHTING AND RECEPTACLE PLAN - FISH LIFT TOWER (TOS EL 186.00') 13B
NOTE: SEE DRAWING S-213
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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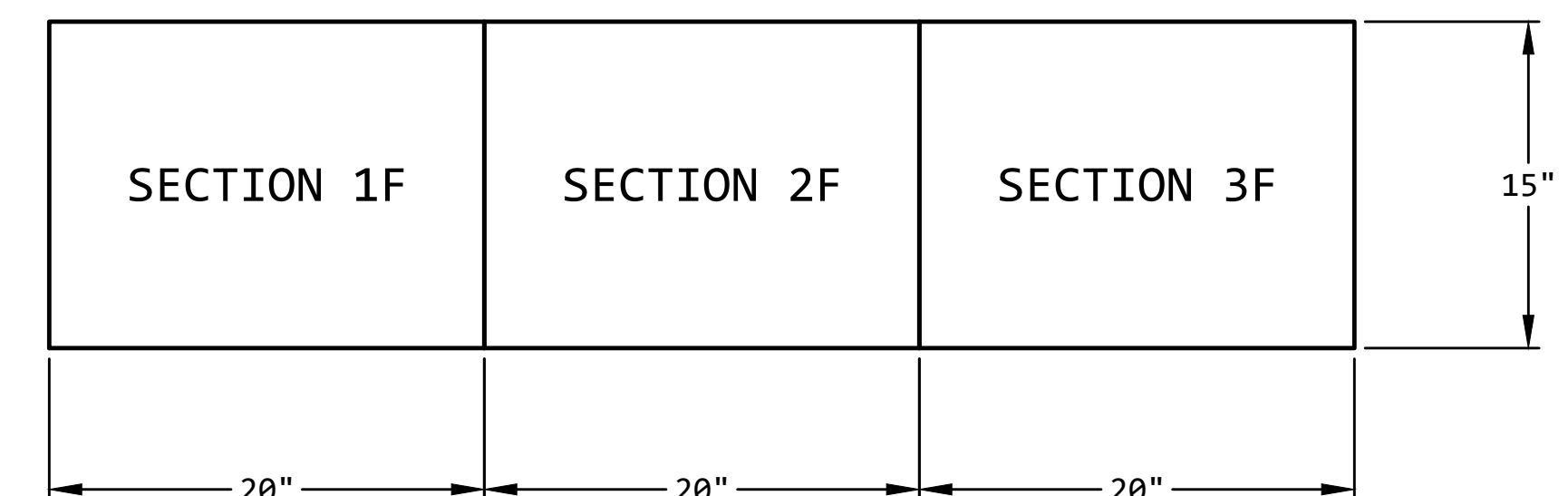
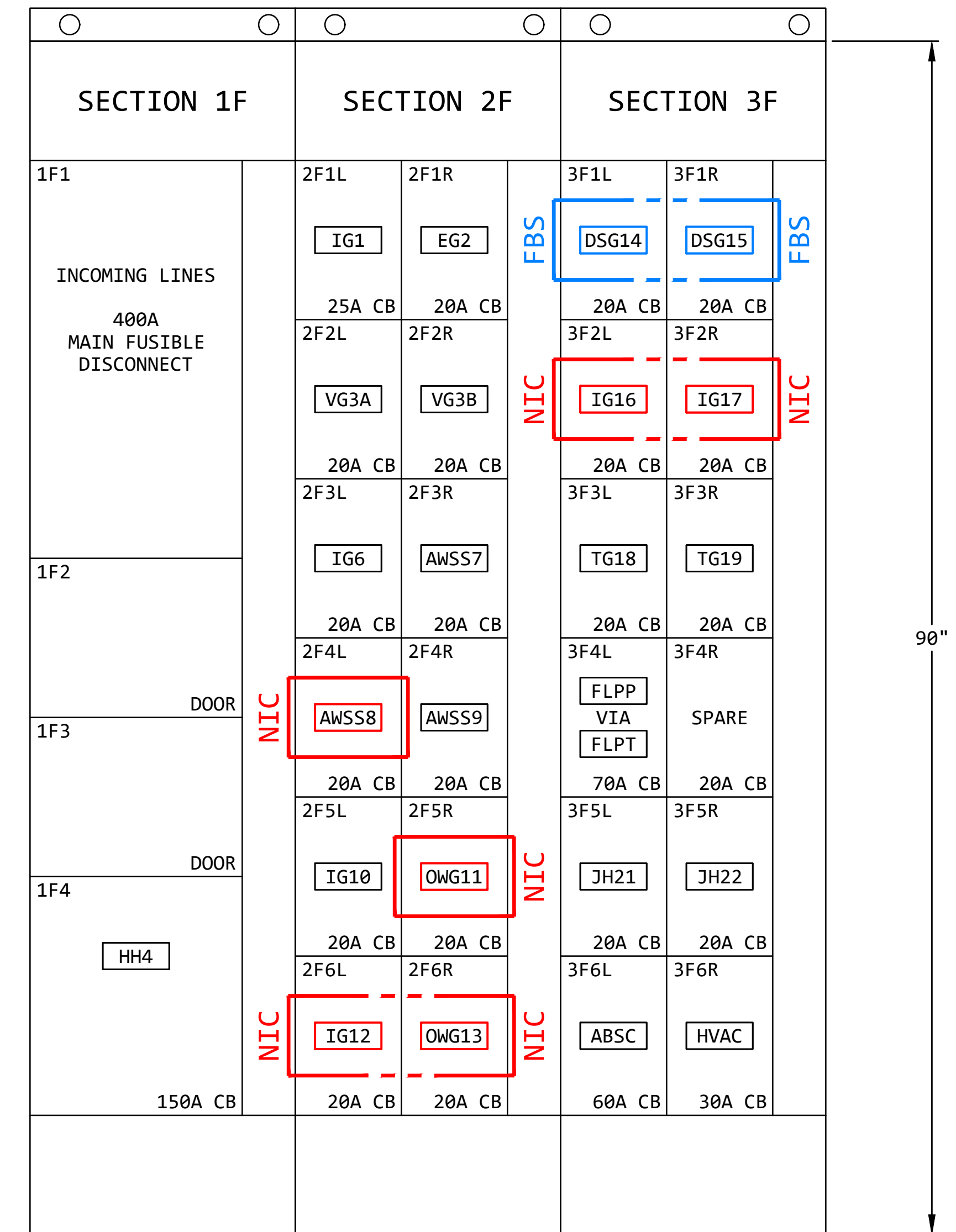
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTING AND POWER PLAN FISH LIFT TOWER - UPPER LEVELS		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CB-013	1	

MCC EQUIPMENT LIST		
LINE	EQUIPMENT ID	EQUIPMENT NAME
1	IG1	FISH LIFT ENTRANCE ISOLATION GATE
2	EG2	FISH LIFT ENTRANCE GATE
3	VG3A	FISH LIFT V-GATE A
4	VG3B	FISH LIFT V-GATE B
5	HH4	HOPPER HOIST AND CONTROL PANEL
6	IG6	EXIT FLUME ISOLATION GATE
7	AWSS7	AWS UPSTREAM ISOLATION VALVE
8	AWSS8	DS PASSAGE AWS ISOLATION VALVE
9	AWSS9	AWS DOWNSTREAM ISOLATION VALVE
10	IG10	EXIT FLUME DS BYPASS ISOLATION GATE
11	OWG11	FISH LADDER ENTRANCE OVERSHOT WEIR GATE
12	IG12	FISH LADDER ENTRANCE ISOLATION GATE
13	OWG13	FISH LADDER EXIT OVERSHOT WEIR GATE
14	DSG14	DS BYPASS SLIDE GATE
15	DSG15	DS BYPASS SLIDE GATE
16	IG16	DS BYPASS ISOLATION GATE
17	IG17	FISH LADDER EXIT ISOLATION GATE
18	TG18	EXIT FLUME TRAP GATE
19	TG19	EXIT FLUME TRAP GATE
20		
21	JH21	UPSTREAM SCREEN PANEL JIB HOIST (1/2 TON)
22	JH22	STATIONARY V-GATE PANEL JIB HOIST (1/2 TON)
23		
24		
25	ABSC	AWS SCREEN AIR BURST SYSTEM COMPRESSOR
26	HVAC	FISH LIFT CONTROL BUILDING PACKAGED HVAC UNIT
27		
28		
29		
30		
31	FLPT	FISH LIFT POWER TRANSFORMER
32	FLPP	FISH LIFT POWER PANEL
33		
34		
35		
36		
37		
38		
39		
40		

GENERAL NOTES:

1. FOR MORE INFORMATION REGARDING THE EQUIPMENT SHOWN HERE,
SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.



LEGEND:

RED = NOT IN CONTRACT (NIC)

BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
Ø	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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CONSTRUCTION

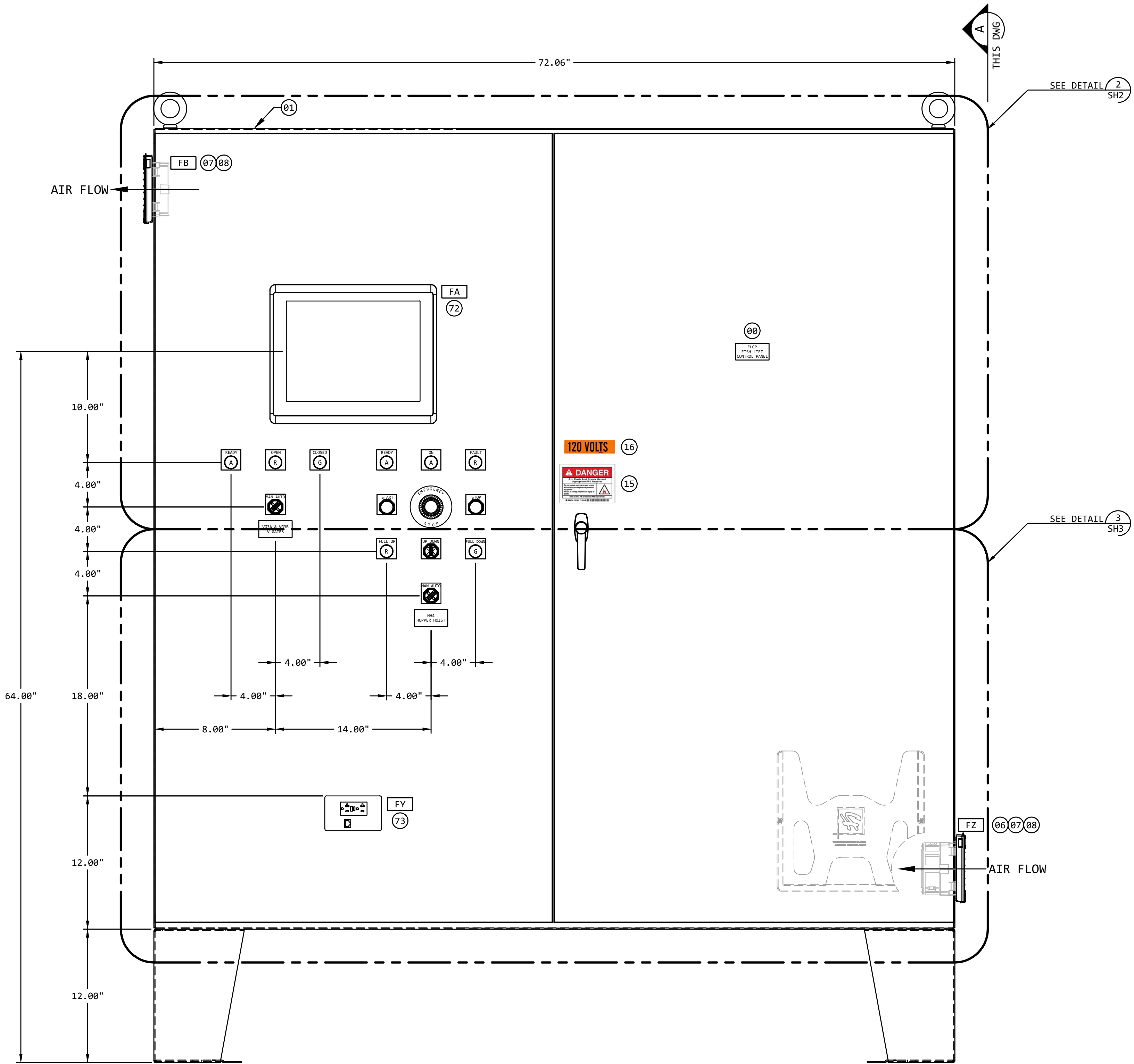
SEPTEMBER 3, 2025

ECI

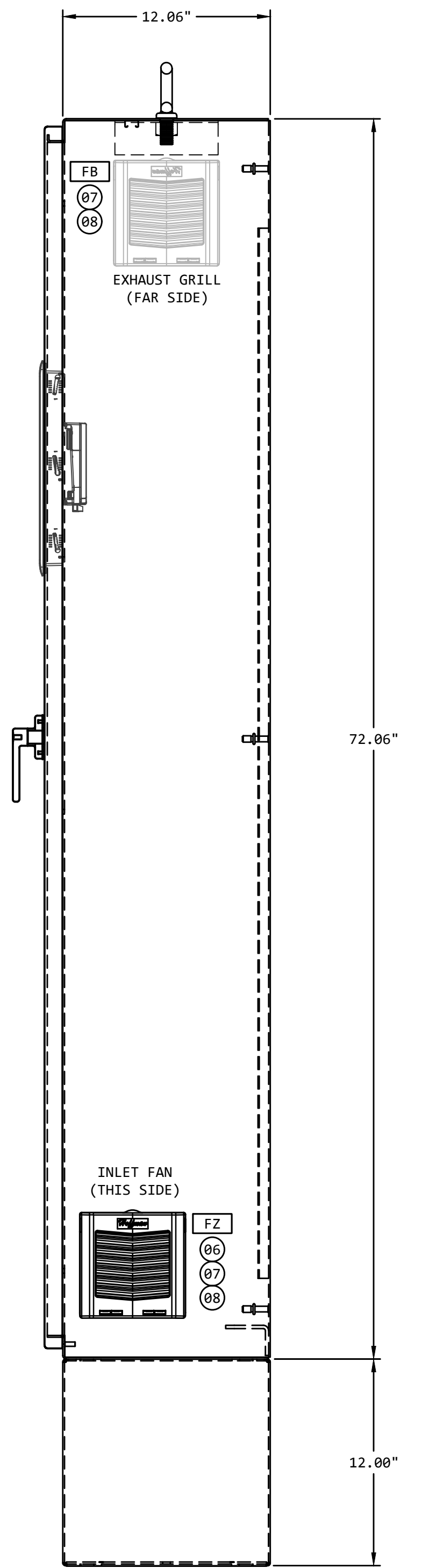
Electrical Consultants, Inc.

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DRAWN BY		DATE		WOODLAND PULP, LLC	
SAM		02/22/2024		WOODLAND FISH LIFT PASSAGE	
CHECKED BY		DATE		EQUIPMENT LAYOUT PLAN - FRONT ELEVATION 480V FISH LIFT MOTOR CONTROL CENTER (FLMCC)	
CMM		02/22/2024			
APPROVED BY		DATE		TECHNOLOGY	
CMH		02/22/2024		HYDRO	
SCALE		NONE		PROJECT NO.	
				ARL-007	
				DWG	
				EE-CE-001	
				REV	
				1	



FLCP EXTERIOR ELEVATION DETAIL 1
NO SCALE



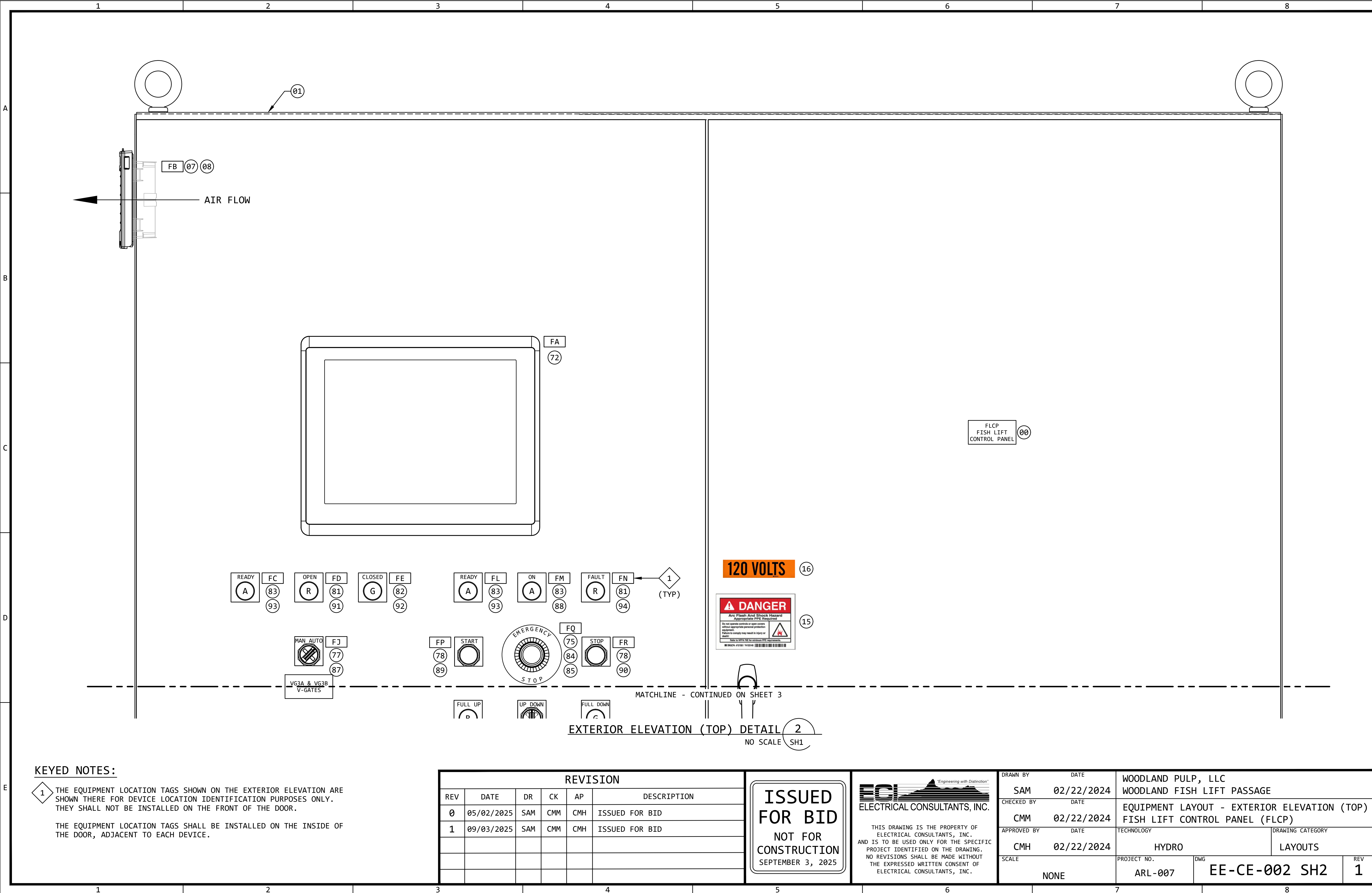
RIGHT SIDE VIEW A
NO SCALE

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	02/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	EQUIPMENT LAYOUT - EXTERIOR ELEVATION		
CMM	02/22/2024	FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CE-002 SH1	1	



KEYED NOTES:

- 1 THE EQUIPMENT LOCATION TAGS SHOWN ON THE EXTERIOR ELEVATION ARE SHOWN THERE FOR DEVICE LOCATION IDENTIFICATION PURPOSES ONLY. THEY SHALL NOT BE INSTALLED ON THE FRONT OF THE DOOR.
- THE EQUIPMENT LOCATION TAGS SHALL BE INSTALLED ON THE INSIDE OF THE DOOR, ADJACENT TO EACH DEVICE.

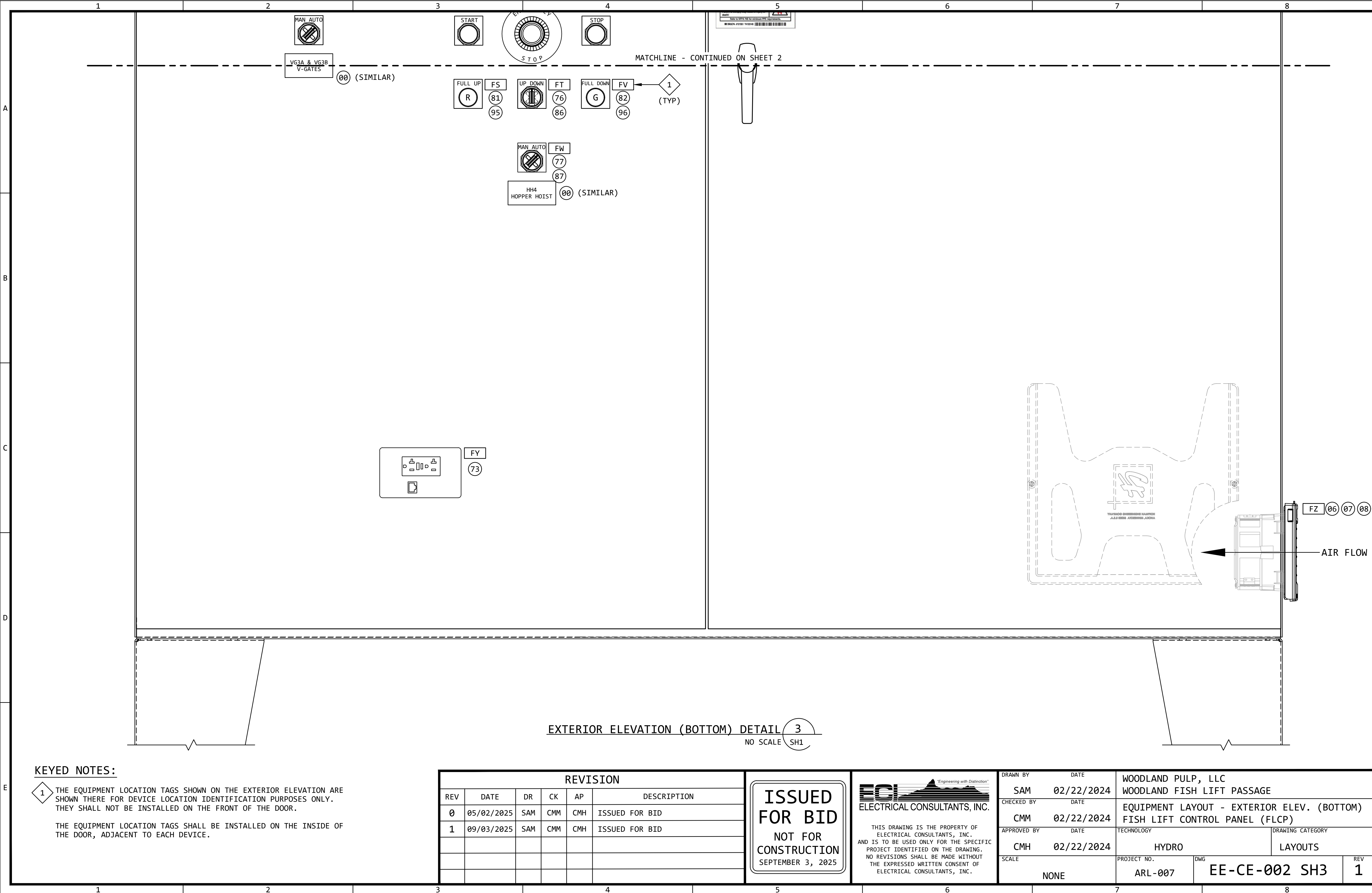
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	EQUIPMENT LAYOUT - EXTERIOR ELEVATION (TOP) FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	NONE	PROJECT NO.	DWG	REV
		ARL-007	EE-CE-002 SH2	1



KEYED NOTES:

- 1 THE EQUIPMENT LOCATION TAGS SHOWN ON THE EXTERIOR ELEVATION ARE SHOWN THERE FOR DEVICE LOCATION IDENTIFICATION PURPOSES ONLY. THEY SHALL NOT BE INSTALLED ON THE FRONT OF THE DOOR.
- THE EQUIPMENT LOCATION TAGS SHALL BE INSTALLED ON THE INSIDE OF THE DOOR, ADJACENT TO EACH DEVICE.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	EQUIPMENT LAYOUT - EXTERIOR ELEV. (BOTTOM) FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CE-002 SH3	1	

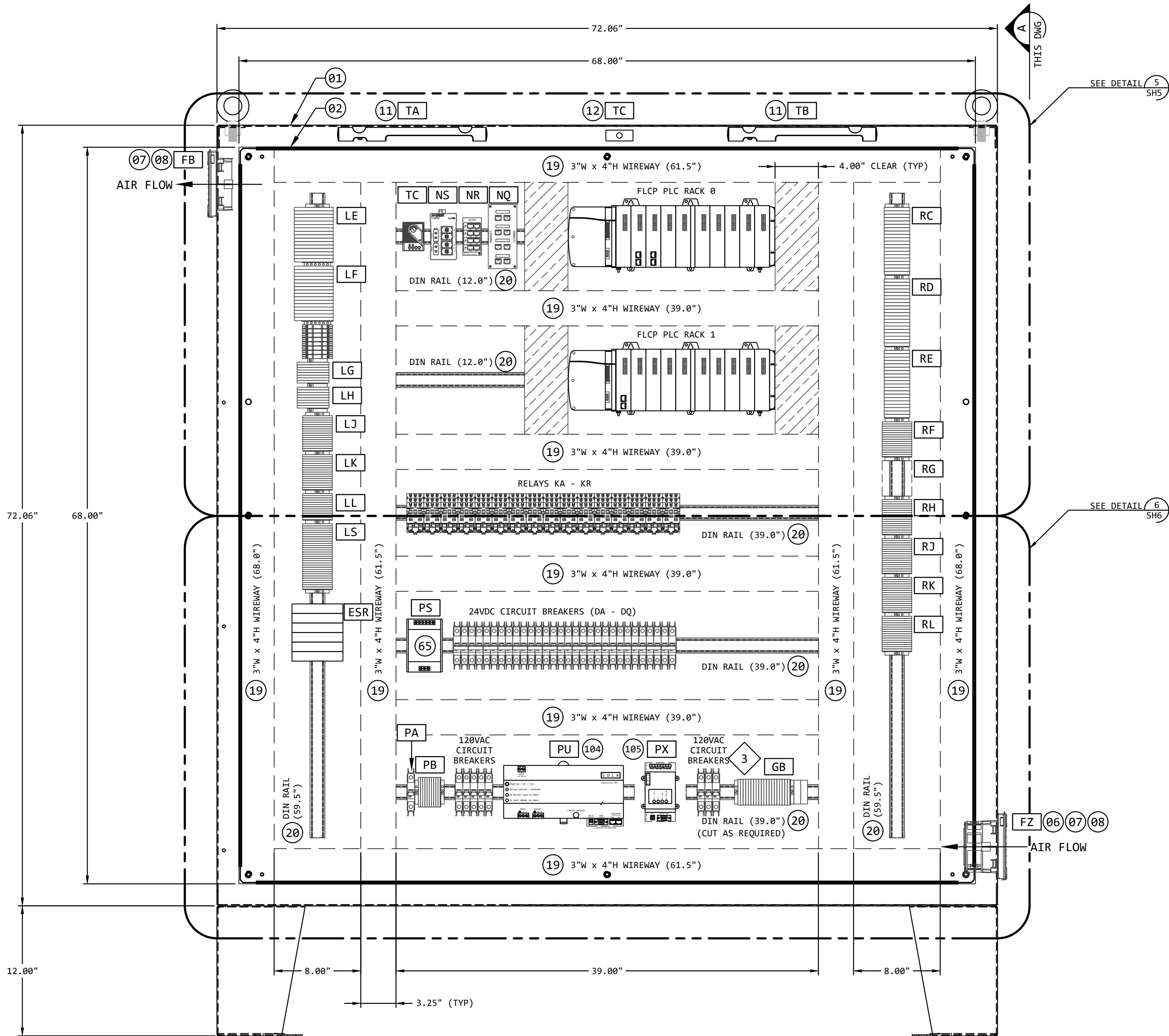
KEYED NOTES:

- 1

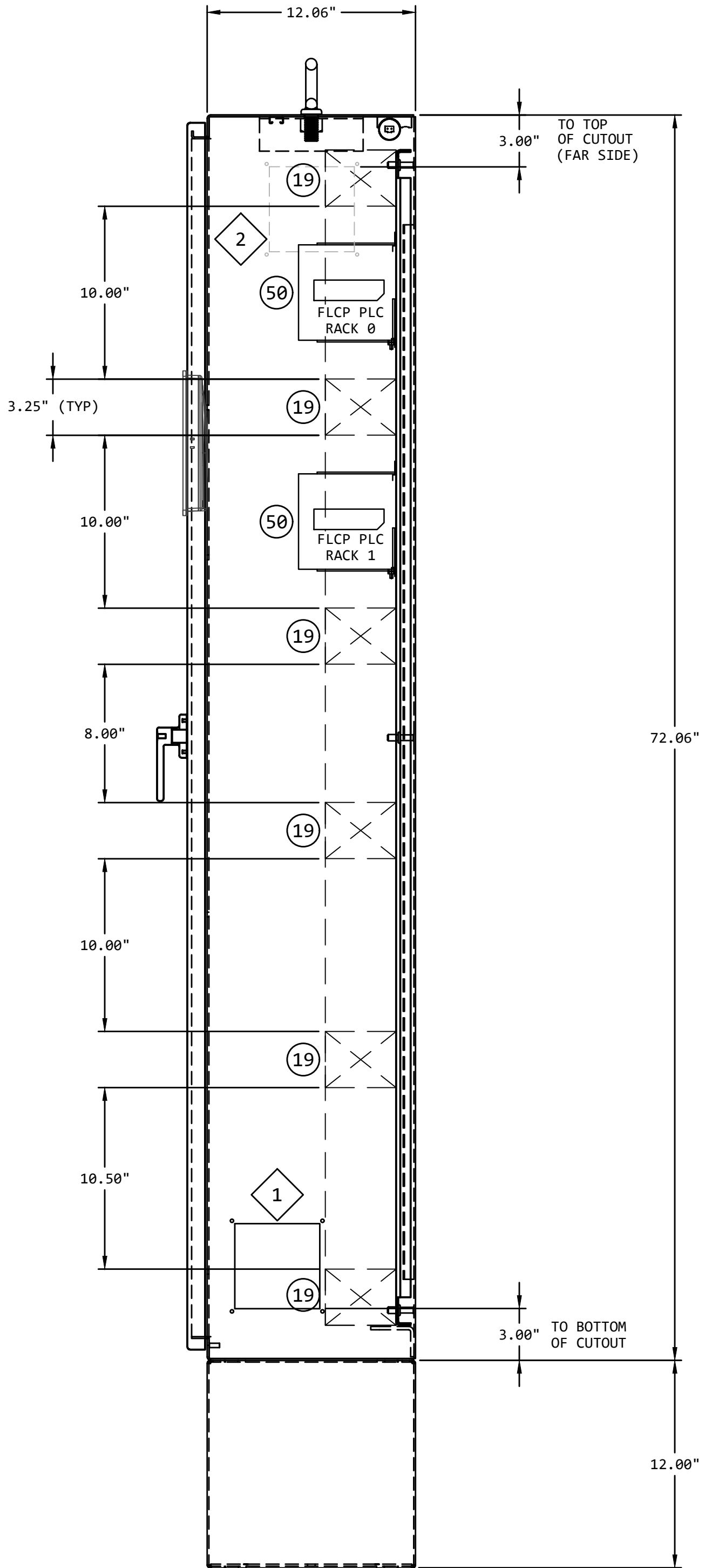
INLET FAN FAN CUTOUT AND MOUNTING HOLES.
(THIS SIDE)
VERIFY ACTUAL DIMENSIONS FROM VENDOR DOCUMENTATION
PRIOR TO ANY CUTTING OR DRILLING. IN ADDITION,
VERIFY CLEARANCE WITH ALL EQUIPMENT AND DEVICES
LOCATED INSIDE THE PANEL (ie: WIREWAY)
- 2

EXHAUST GRILL GRILL CUTOUT AND MOUNTING HOLES.
(FAR SIDE)
VERIFY ACTUAL DIMENSIONS FROM VENDOR DOCUMENTATION
PRIOR TO ANY CUTTING OR DRILLING.
- 3

TIE ALL PANEL AND BACK PANEL GROUNDS TO THE GROUND
BUS (TERMINAL BLOCK GB).



FLCP INTERIOR ELEVATION DETAIL 4
NO SCALE --



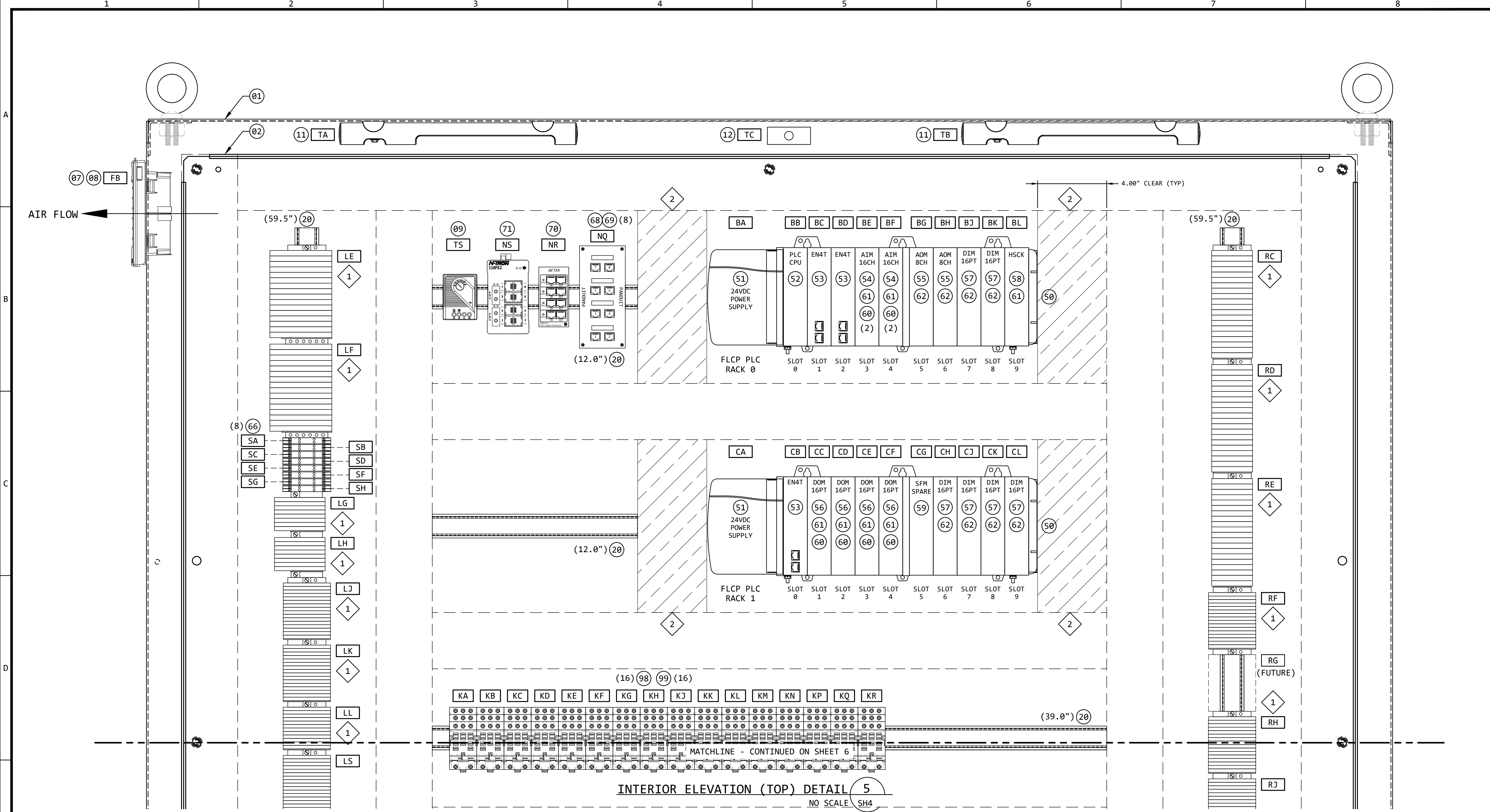
RIGHT SIDE VIEW A
NO SCALE THIS DWG

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	EQUIPMENT LAYOUT - INTERIOR ELEVATION FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CE-002 SH4	1	



KEYED NOTES:

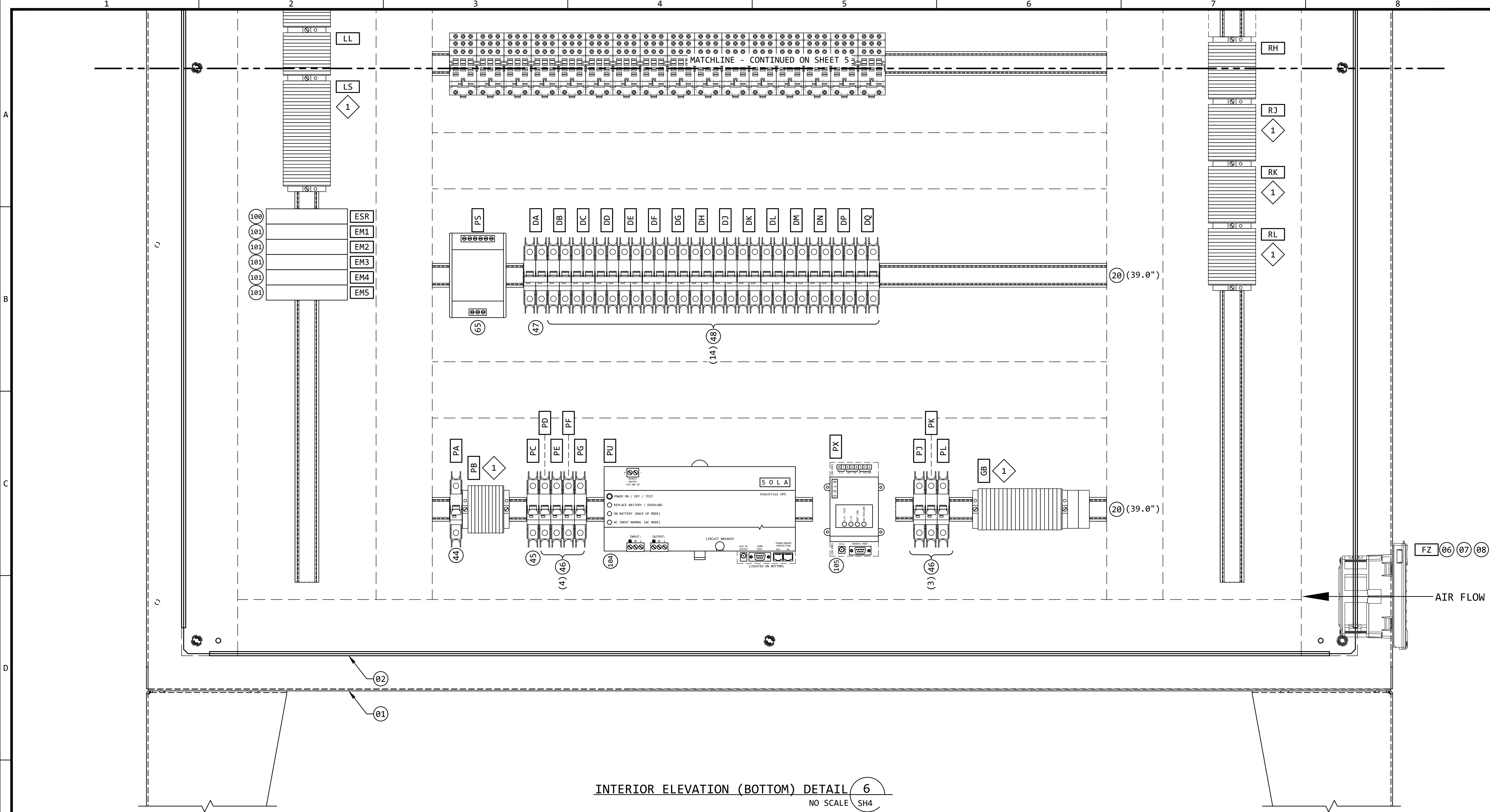
- 1 SEE DRAWINGS EE-CK-001, 002 & 003 (TERMINAL BLOCK DEVELOPMENT) FOR ALL DETAILS FOR TERMINAL BLOCKS, END BARRIERS, END BRACKETS AND JUMPERS.
- 2 THE HATCH PATTERN INDICATES THE CLEARANCE REQUIRED BY THE PLC POWER SUPPLY AND THE CONTROLLOGIX CHASSIS.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	EQUIPMENT LAYOUT - INTERIOR ELEVATION (TOP) FISH LIFT CONTROL PANEL (FLCP)	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	02/22/2024	HYDRO	LAYOUTS
SCALE	NONE	PROJECT NO.	DWG
		ARL-007	EE-CE-002 SH5
			REV
			1



KEYED NOTES:

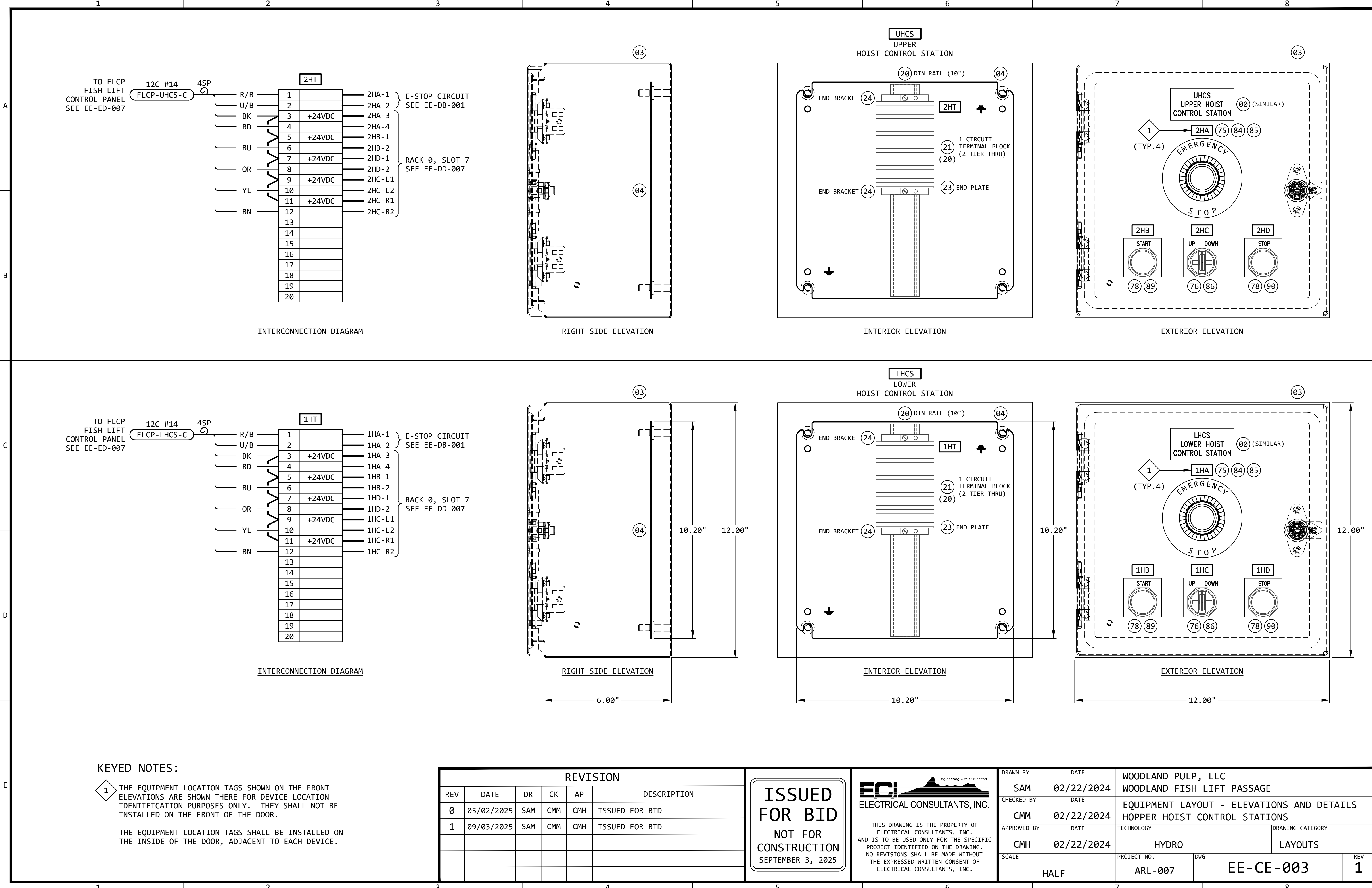
- 1 SEE DRAWINGS EE-CK-001, 002 & 003 (TERMINAL BLOCK DEVELOPMENT) FOR ALL DETAILS FOR TERMINAL BLOCKS, END BARRIERS, END BRACKETS AND JUMPERS.

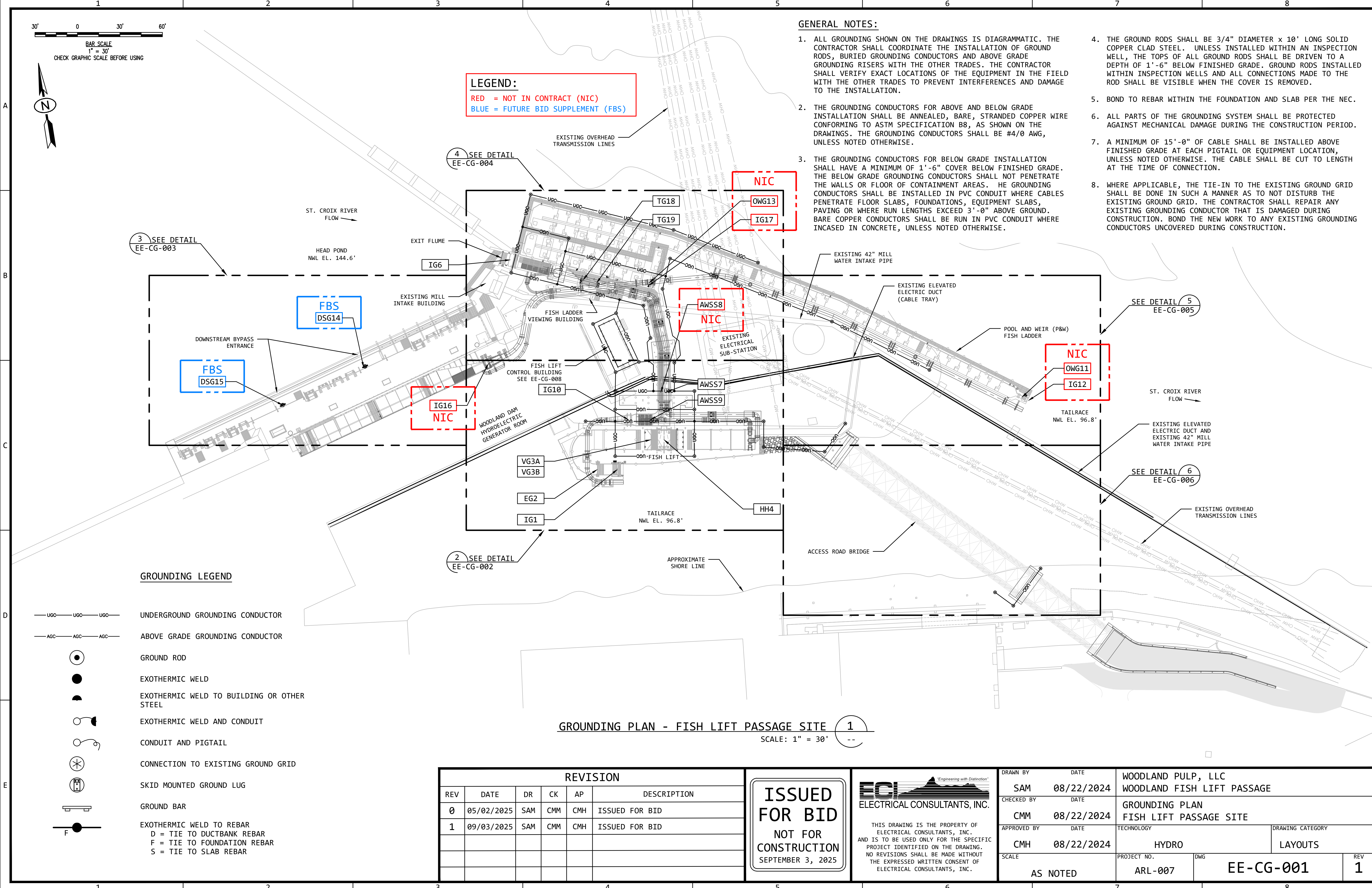
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	EQUIPMENT LAYOUT - INTERIOR ELEV. (BOTTOM) FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CE-002 SH6	1	





GENERAL NOTES:

1. ALL GROUNDING SHOWN ON THE DRAWINGS IS DIAGRAMMATIC. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF GROUND RODS, BURIED GROUNDING CONDUCTORS AND ABOVE GRADE GROUNDING RISERS WITH THE OTHER TRADES. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF THE EQUIPMENT IN THE FIELD WITH THE OTHER TRADES TO PREVENT INTERFERENCES AND DAMAGE TO THE INSTALLATION.
2. THE GROUNDING CONDUCTORS FOR ABOVE AND BELOW GRADE INSTALLATION SHALL BE ANNEALED, BARE, STRANDED COPPER WIRE CONFORMING TO ASTM SPECIFICATION B8, AS SHOWN ON THE DRAWINGS. THE GROUNDING CONDUCTORS SHALL BE #4/0 AWG, UNLESS NOTED OTHERWISE.
3. THE GROUNDING CONDUCTORS FOR BELOW GRADE INSTALLATION SHALL HAVE A MINIMUM OF 1'-6" COVER BELOW FINISHED GRADE. THE BELOW GRADE GROUNDING CONDUCTORS SHALL NOT PENETRATE THE WALLS OR FLOOR OF CONTAINMENT AREAS. THE GROUNDING CONDUCTORS SHALL BE INSTALLED IN PVC CONDUIT WHERE CABLES PENETRATE FLOOR SLABS, FOUNDATIONS, EQUIPMENT SLABS, PAVING OR WHERE RUN LENGTHS EXCEED 3'-0" ABOVE GROUND. BARE COPPER CONDUCTORS SHALL BE RUN IN PVC CONDUIT WHERE INCASED IN CONCRETE, UNLESS NOTED OTHERWISE.
4. THE GROUND RODS SHALL BE 3/4" DIAMETER x 10' LONG SOLID COPPER CLAD STEEL. UNLESS INSTALLED WITHIN AN INSPECTION WELL, THE TOPS OF ALL GROUND RODS SHALL BE DRIVEN TO A DEPTH OF 1'-6" BELOW FINISHED GRADE. GROUND RODS INSTALLED WITHIN INSPECTION WELLS AND ALL CONNECTIONS MADE TO THE ROD SHALL BE VISIBLE WHEN THE COVER IS REMOVED.
5. BOND TO REBAR WITHIN THE FOUNDATION AND SLAB PER THE NEC.
6. ALL PARTS OF THE GROUNDING SYSTEM SHALL BE PROTECTED AGAINST MECHANICAL DAMAGE DURING THE CONSTRUCTION PERIOD.
7. A MINIMUM OF 15'-0" OF CABLE SHALL BE INSTALLED ABOVE FINISHED GRADE AT EACH PIGTAIL OR EQUIPMENT LOCATION, UNLESS NOTED OTHERWISE. THE CABLE SHALL BE CUT TO LENGTH AT THE TIME OF CONNECTION.
8. WHERE APPLICABLE, THE TIE-IN TO THE EXISTING GROUND GRID SHALL BE DONE IN SUCH A MANNER AS TO NOT DISTURB THE EXISTING GROUND GRID. THE CONTRACTOR SHALL REPAIR ANY EXISTING GROUNDING CONDUCTOR THAT IS DAMAGED DURING CONSTRUCTION. BOND THE NEW WORK TO ANY EXISTING GROUNDING CONDUCTORS UNCOVERED DURING CONSTRUCTION.

LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GROUNDING LEGEND

- UGC UNDERGROUND GROUNDING CONDUCTOR
- AGC ABOVE GRADE GROUNDING CONDUCTOR
- GROUND ROD
- EXOTHERMIC WELD
- EXOTHERMIC WELD TO BUILDING OR OTHER STEEL
- EXOTHERMIC WELD AND CONDUIT
- CONDUIT AND PIGTAIL
- CONNECTION TO EXISTING GROUND GRID
- SKID MOUNTED GROUND LUG
- GROUND BAR
- EXOTHERMIC WELD TO REBAR
D = TIE TO DUCTBANK REBAR
F = TIE TO FOUNDATION REBAR
S = TIE TO SLAB REBAR

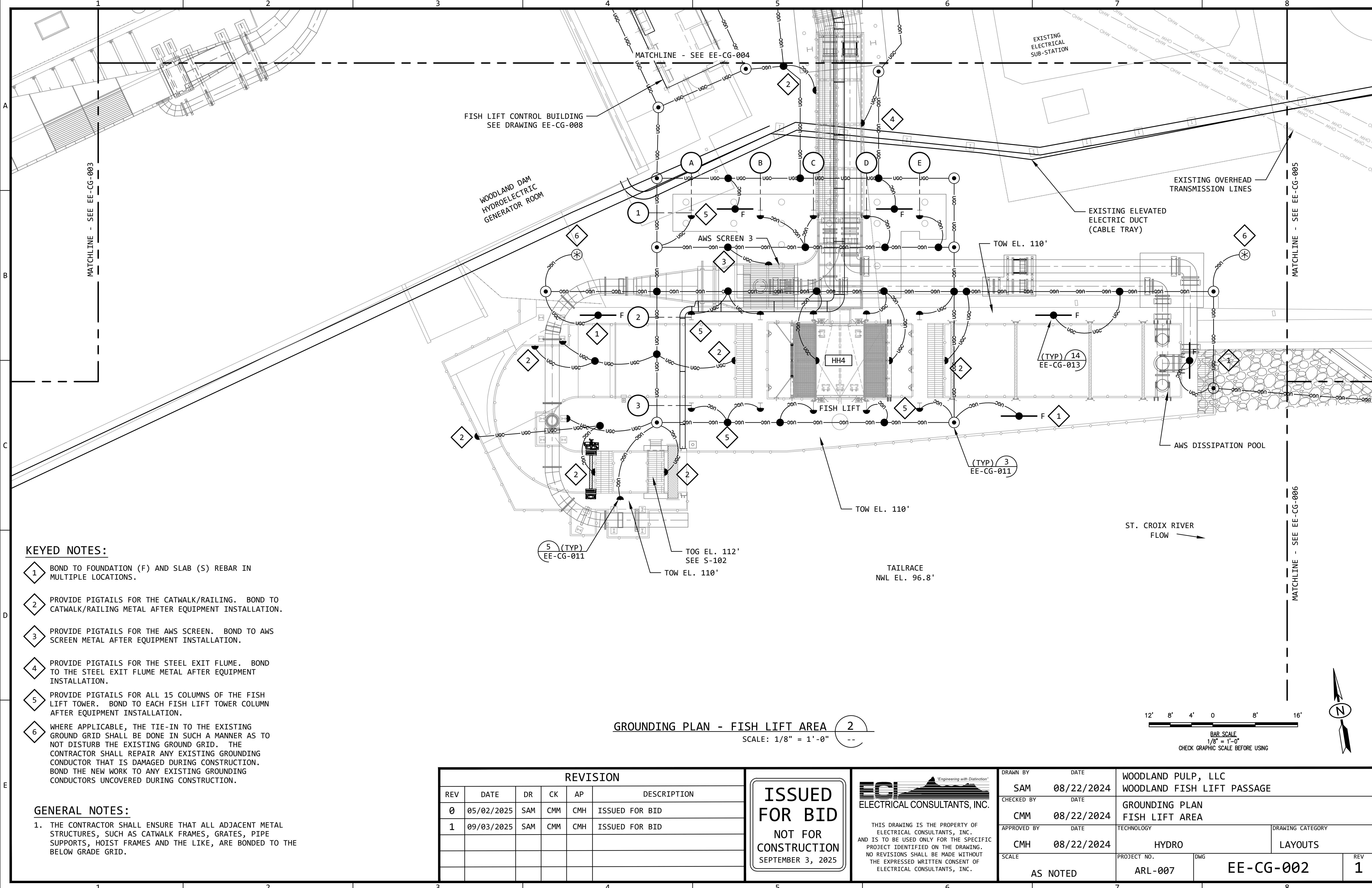
GROUNDING PLAN - FISH LIFT PASSAGE SITE 1
SCALE: 1" = 30'

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN FISH LIFT PASSAGE SITE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CG-001	1	



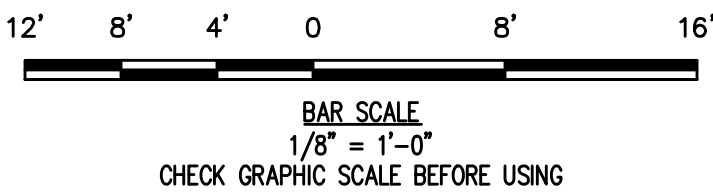
KEYED NOTES:

- 1 BOND TO FOUNDATION (F) AND SLAB (S) REBAR IN MULTIPLE LOCATIONS.
- 2 PROVIDE PIGTAILS FOR THE CATWALK/RAILING. BOND TO CATWALK/RAILING METAL AFTER EQUIPMENT INSTALLATION.
- 3 PROVIDE PIGTAILS FOR THE AWS SCREEN. BOND TO AWS SCREEN METAL AFTER EQUIPMENT INSTALLATION.
- 4 PROVIDE PIGTAILS FOR THE STEEL EXIT FLUME. BOND TO THE STEEL EXIT FLUME METAL AFTER EQUIPMENT INSTALLATION.
- 5 PROVIDE PIGTAILS FOR ALL 15 COLUMNS OF THE FISH LIFT TOWER. BOND TO EACH FISH LIFT TOWER COLUMN AFTER EQUIPMENT INSTALLATION.
- 6 WHERE APPLICABLE, THE TIE-IN TO THE EXISTING GROUND GRID SHALL BE DONE IN SUCH A MANNER AS TO NOT DISTURB THE EXISTING GROUND GRID. THE CONTRACTOR SHALL REPAIR ANY EXISTING GROUNDING CONDUCTOR THAT IS DAMAGED DURING CONSTRUCTION. BOND THE NEW WORK TO ANY EXISTING GROUNDING CONDUCTORS UNCOVERED DURING CONSTRUCTION.

GENERAL NOTES:

- THE CONTRACTOR SHALL ENSURE THAT ALL ADJACENT METAL STRUCTURES, SUCH AS CATWALK FRAMES, GRATES, PIPE SUPPORTS, HOIST FRAMES AND THE LIKE, ARE BONDED TO THE BELOW GRADE GRID.

GROUNDING PLAN - FISH LIFT AREA 2
SCALE: 1/8" = 1'-0"

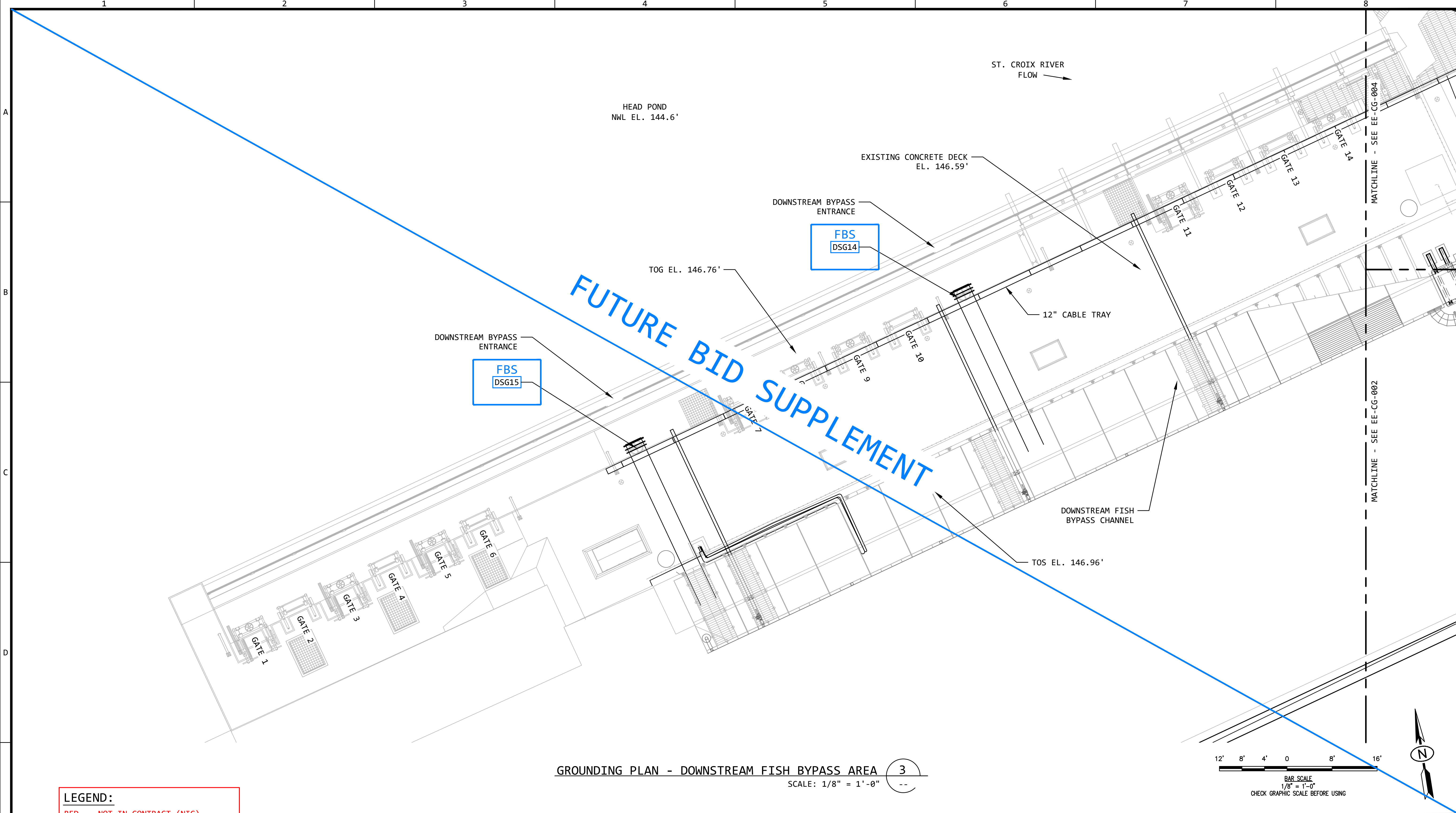


REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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CONSTRUCTION
SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN FISH LIFT AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CG-002	1	



LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:
1. THE BELOW GRADE GROUND GRID IS NOT AVAILABLE IN THIS AREA. ALL REQUIRED GROUNDING FOR THE DSG14/DSG15 INSTALLATION MAY BE ACCOMPLISHED BY USING THE #2/0 BARE GROUNDING CONDUCTOR PROVIDED WITH THE CABLE TRAY.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

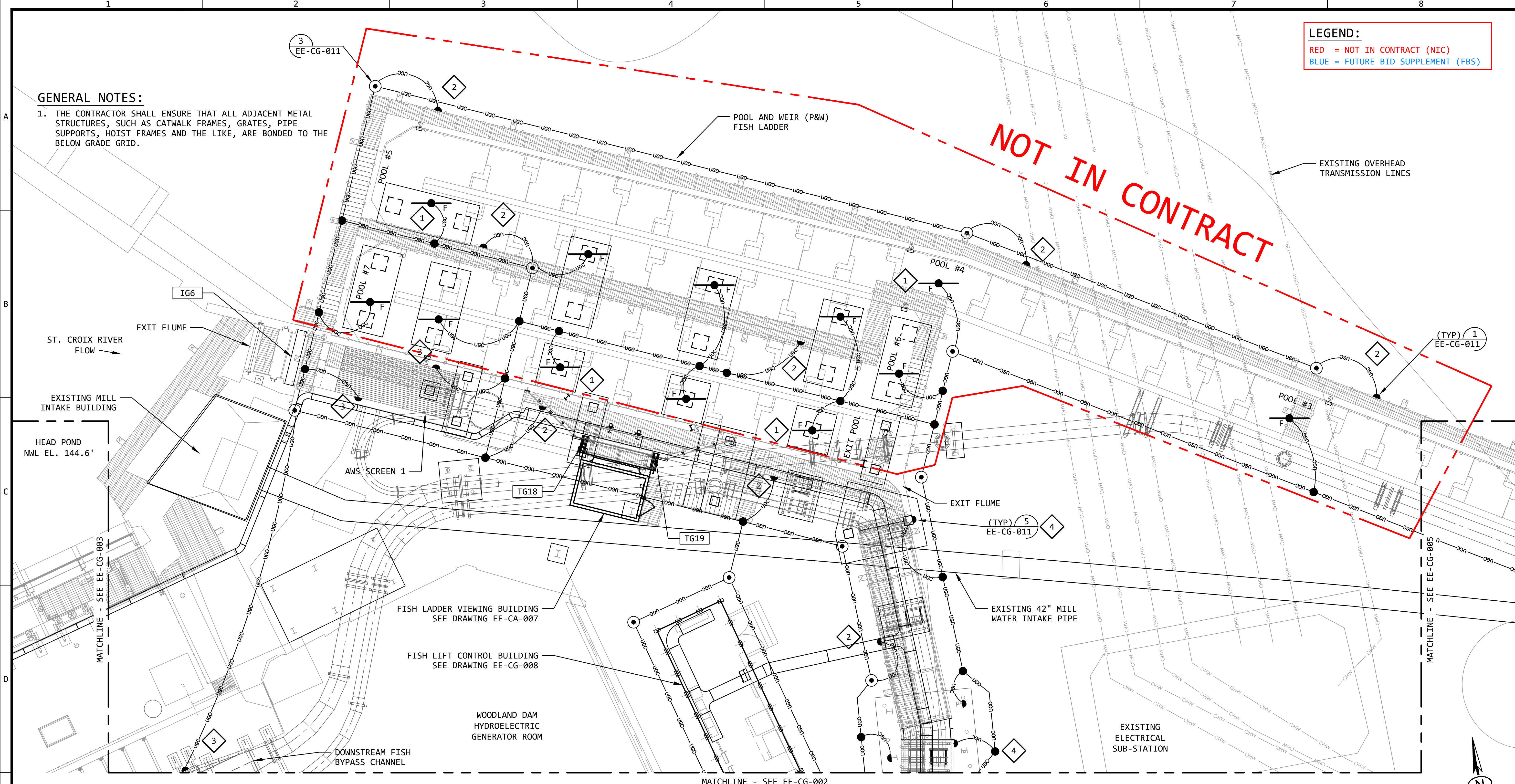
ISSUED FOR BID
NOT FOR CONSTRUCTION
SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN		
CMM	08/22/2024	DOWNSTREAM FISH BYPASS AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CG-003	1	



GENERAL NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADJACENT METAL STRUCTURES, SUCH AS CATWALK FRAMES, GRATES, PIPE SUPPORTS, HOIST FRAMES AND THE LIKE, ARE BONDED TO THE BELOW GRADE GRID.

LEGEND:

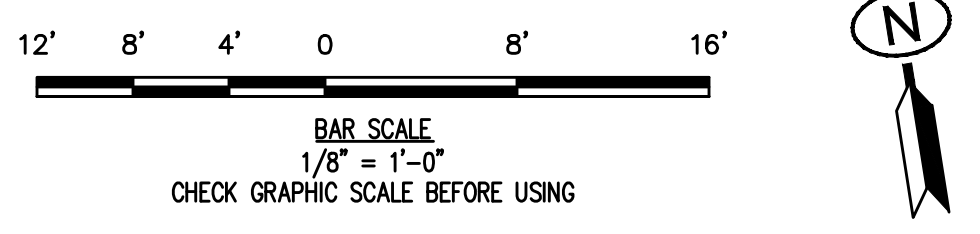
RED = NOT IN CONTRACT (NIC)

BLUE = FUTURE BID SUPPLEMENT (FBS)

- KEYED NOTES:**
- 1 BOND TO FOUNDATION (F) AND SLAB (S) REBAR IN MULTIPLE LOCATIONS.
 - 2 PROVIDE PIGTAILS FOR THE CATWALK/RAILING. BOND TO CATWALK/RAILING METAL AFTER EQUIPMENT INSTALLATION.
 - 3 PROVIDE PIGTAILS FOR THE AWS SCREENS. BOND TO AWS SCREEN METAL AFTER EQUIPMENT INSTALLATION.
 - 4 PROVIDE PIGTAILS FOR THE STEEL EXIT FLUME. BOND TO THE STEEL EXIT FLUME METAL AFTER EQUIPMENT INSTALLATION.

GROUNDING PLAN - EXIT FLUME AND FISH LADDER AREAS

SCALE: 1/8" = 1'-0"



REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

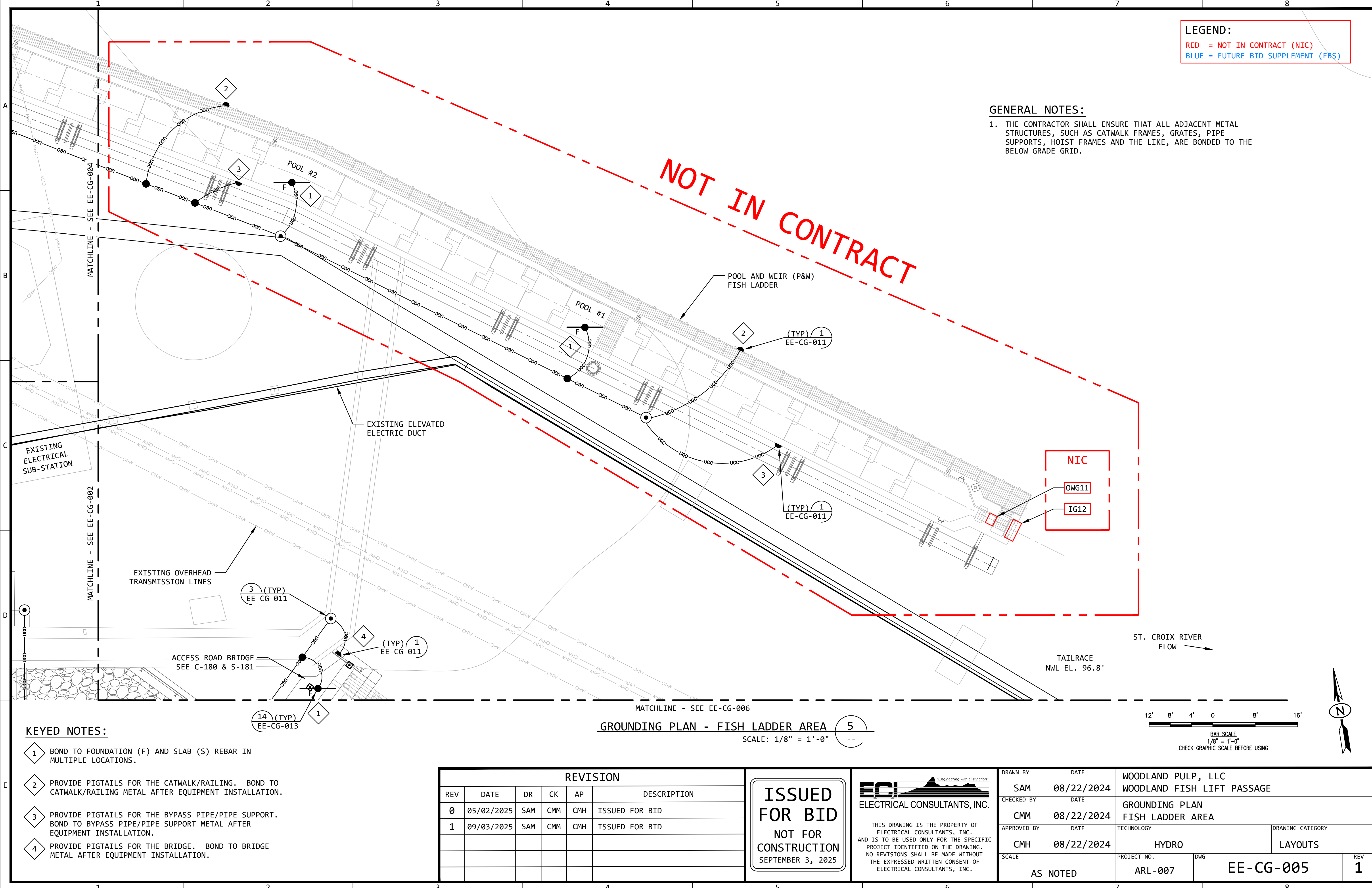
SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN		
CMM	08/22/2024	EXIT FLUME AND FISH LADDER AREAS		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	AS NOTED	PROJECT NO.	DWG	REV
		ARL-007	EE-CG-004	1

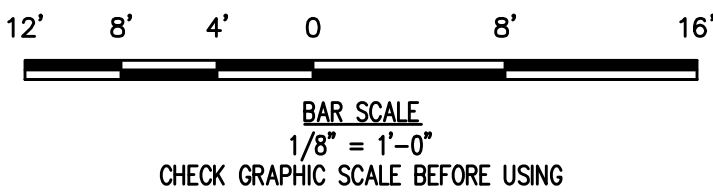


LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

GENERAL NOTES:
1. THE CONTRACTOR SHALL ENSURE THAT ALL ADJACENT METAL STRUCTURES, SUCH AS CATWALK FRAMES, GRATES, PIPE SUPPORTS, HOIST FRAMES AND THE LIKE, ARE BONDED TO THE BELOW GRADE GRID.

- KEYED NOTES:
- 1 BOND TO FOUNDATION (F) AND SLAB (S) REBAR IN MULTIPLE LOCATIONS.
 - 2 PROVIDE PIGTAILS FOR THE CATWALK/RAILING. BOND TO CATWALK/RAILING METAL AFTER EQUIPMENT INSTALLATION.
 - 3 PROVIDE PIGTAILS FOR THE BYPASS PIPE/PIPE SUPPORT. BOND TO BYPASS PIPE/PIPE SUPPORT METAL AFTER EQUIPMENT INSTALLATION.
 - 4 PROVIDE PIGTAILS FOR THE BRIDGE. BOND TO BRIDGE METAL AFTER EQUIPMENT INSTALLATION.

GROUNDING PLAN - FISH LADDER AREA 5
SCALE: 1/8" = 1'-0"

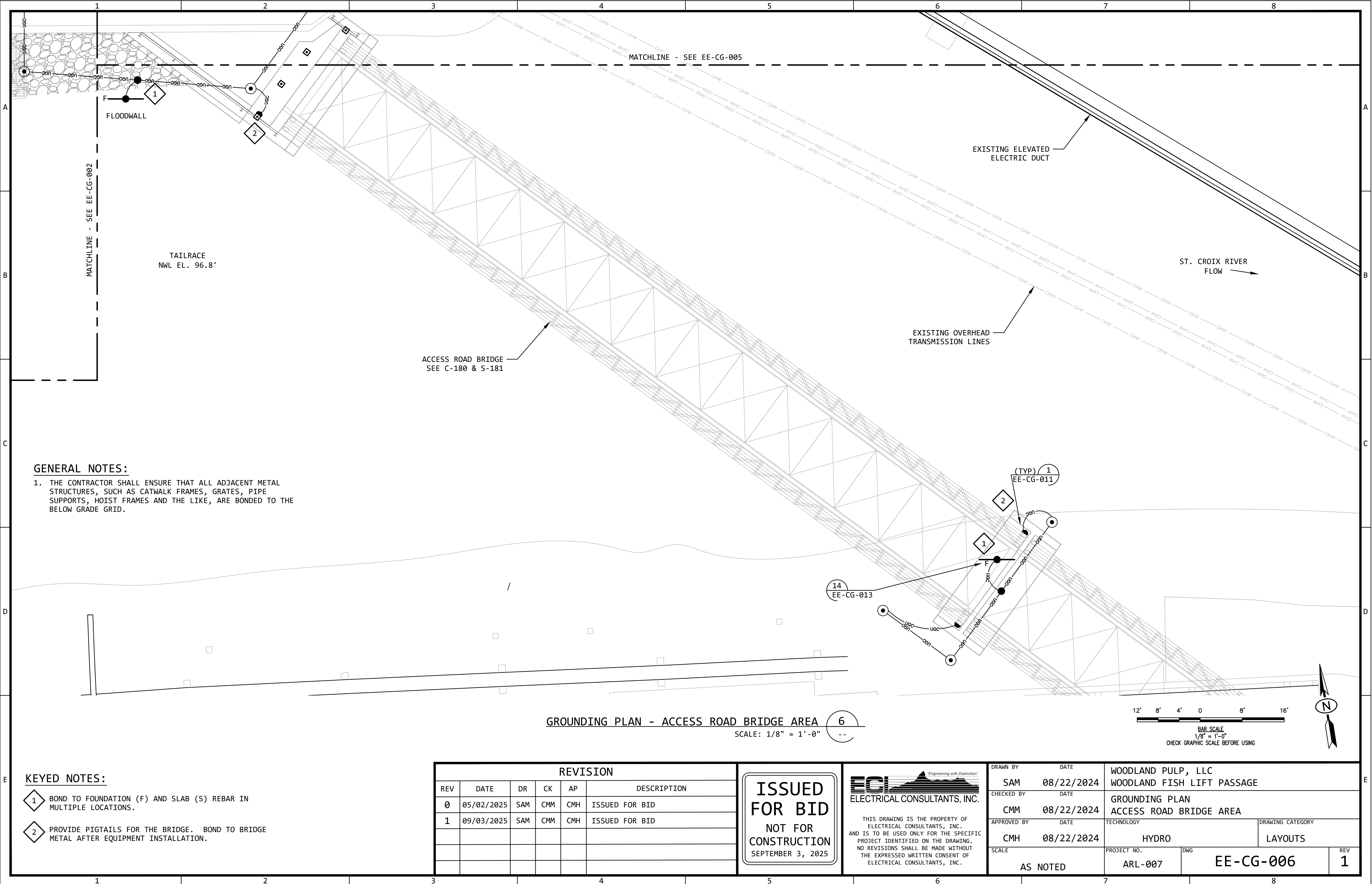


REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN FISH LADDER AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CG-005	1	



GENERAL NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADJACENT METAL STRUCTURES, SUCH AS CATWALK FRAMES, GRATES, PIPE SUPPORTS, HOIST FRAMES AND THE LIKE, ARE BONDED TO THE BELOW GRADE GRID.

KEYED NOTES:

- 1 BOND TO FOUNDATION (F) AND SLAB (S) REBAR IN MULTIPLE LOCATIONS.
- 2 PROVIDE PIGTAILS FOR THE BRIDGE. BOND TO BRIDGE METAL AFTER EQUIPMENT INSTALLATION.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

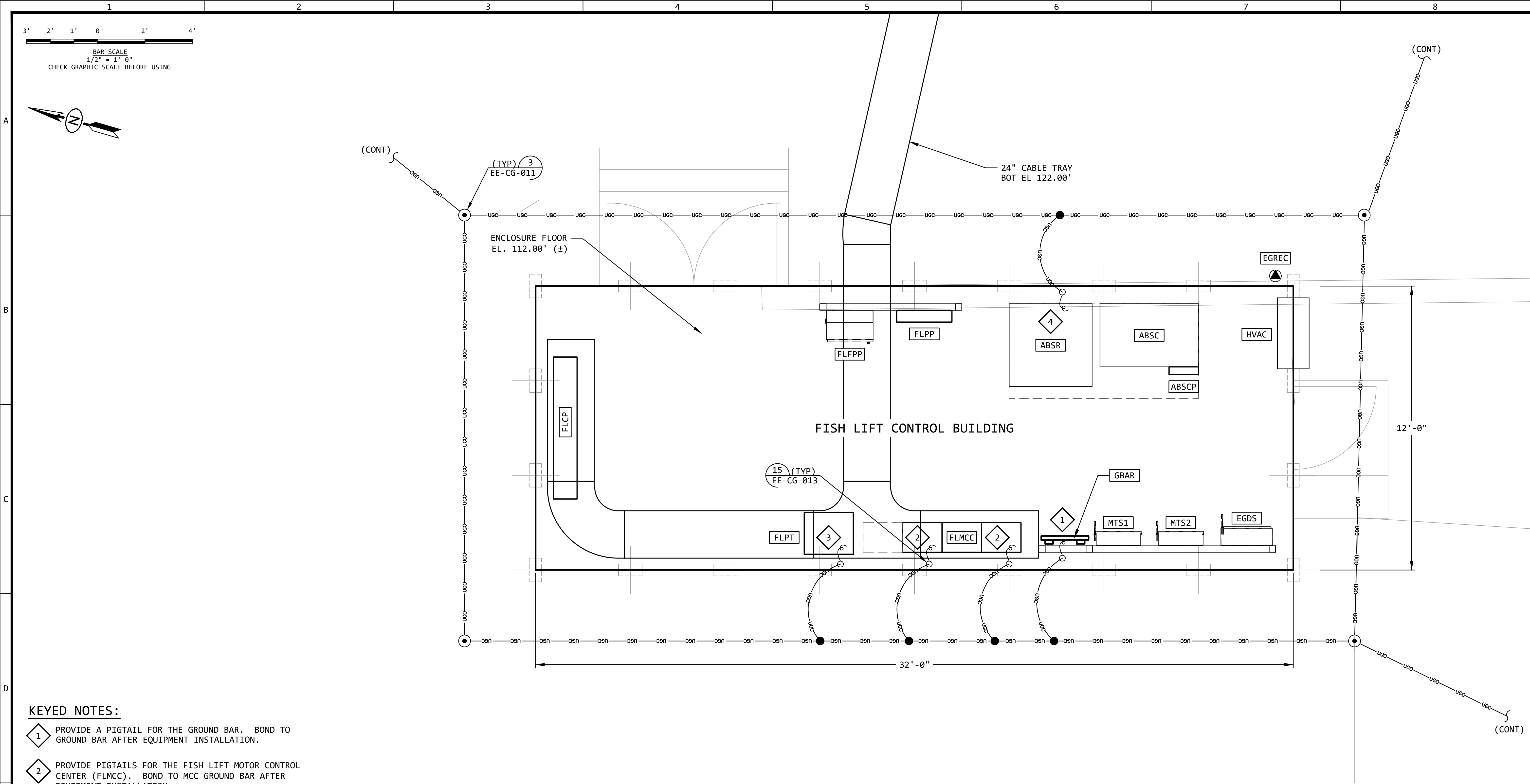
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN ACCESS ROAD BRIDGE AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CG-006	1	



KEYED NOTES:

- 1 PROVIDE A PIGTAIL FOR THE GROUND BAR. BOND TO GROUND BAR AFTER EQUIPMENT INSTALLATION.
- 2 PROVIDE PIGTAILS FOR THE FISH LIFT MOTOR CONTROL CENTER (FLMCC). BOND TO MCC GROUND BAR AFTER EQUIPMENT INSTALLATION.
- 3 PROVIDE PIGTAILS FOR THE FISH LIFT POWER TRANSFORMER (FLPT). BOND TO TRANSFORMER GROUND TERMINAL AFTER EQUIPMENT INSTALLATION.
- 4 PROVIDE A PIGTAIL FOR THE AIR BURST SYSTEM SKID. BOND TO THE SKID GROUND BAR, AS REQUIRED, AFTER EQUIPMENT INSTALLATION.

GENERAL NOTES:

- THE CONTRACTOR SHALL ENSURE THAT ALL ADJACENT METAL STRUCTURES, SUCH AS CATWALK FRAMES, GRATES, PIPE SUPPORTS, HOIST FRAMES AND THE LIKE, ARE BONDED TO THE BELOW GRADE GRID.

GROUNDING PLAN - FISH LIFT CONTROL BUILDING 8
SCALE: 1/2" = 1'-0"

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

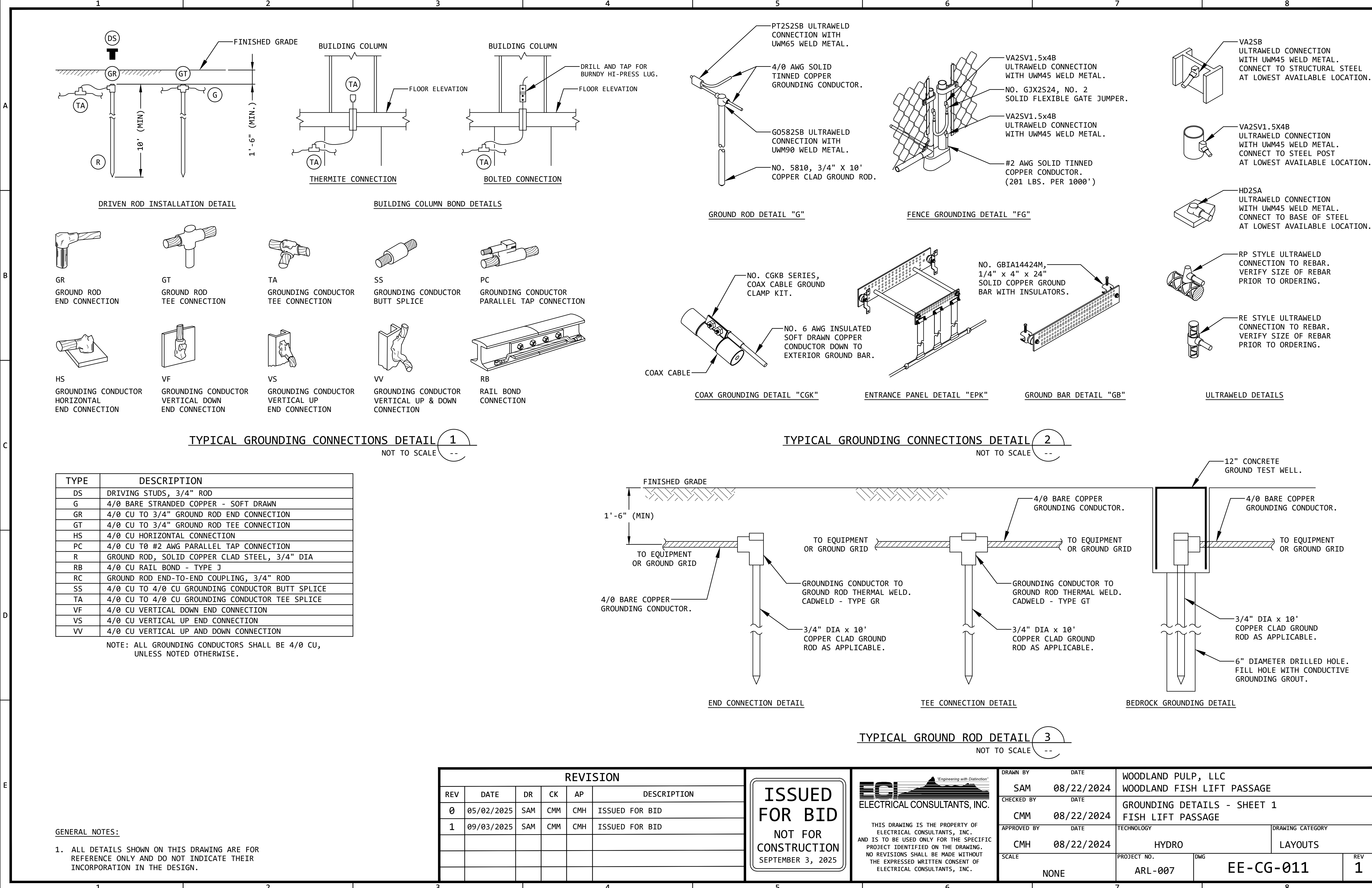
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING PLAN FISH LIFT CONTROL BUILDING		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CG-008	1	



DRIVEN ROD INSTALLATION DETAIL

BUILDING COLUMN BOND DETAILS

GROUND ROD DETAIL "G"

FENCE GROUNDING DETAIL "FG"

COAX GROUNDING DETAIL "CGK"

ENTRANCE PANEL DETAIL "EPK"

GROUND BAR DETAIL "GB"

ULTRAWELD DETAILS

TYPICAL GROUNDING CONNECTIONS DETAIL 1

NOT TO SCALE

TYPICAL GROUNDING CONNECTIONS DETAIL 2

NOT TO SCALE

TYPE	DESCRIPTION
DS	DRIVING STUDS, 3/4" ROD
G	4/0 BARE STRANDED COPPER - SOFT DRAWN
GR	4/0 CU TO 3/4" GROUND ROD END CONNECTION
GT	4/0 CU TO 3/4" GROUND ROD TEE CONNECTION
HS	4/0 CU HORIZONTAL CONNECTION
PC	4/0 CU TO #2 AWG PARALLEL TAP CONNECTION
R	GROUND ROD, SOLID COPPER CLAD STEEL, 3/4" DIA
RB	4/0 CU RAIL BOND - TYPE J
RC	GROUND ROD END-TO-END COUPLING, 3/4" ROD
SS	4/0 CU TO 4/0 CU GROUNDING CONDUCTOR BUTT SPLICE
TA	4/0 CU TO 4/0 CU GROUNDING CONDUCTOR TEE SPLICE
VF	4/0 CU VERTICAL DOWN END CONNECTION
VS	4/0 CU VERTICAL UP END CONNECTION
VV	4/0 CU VERTICAL UP AND DOWN CONNECTION

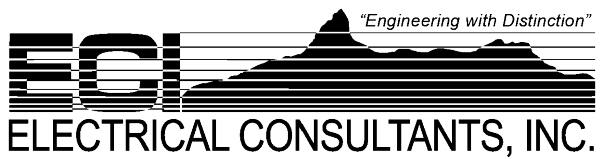
NOTE: ALL GROUNDING CONDUCTORS SHALL BE 4/0 CU, UNLESS NOTED OTHERWISE.

GENERAL NOTES:

1. ALL DETAILS SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION IN THE DESIGN.

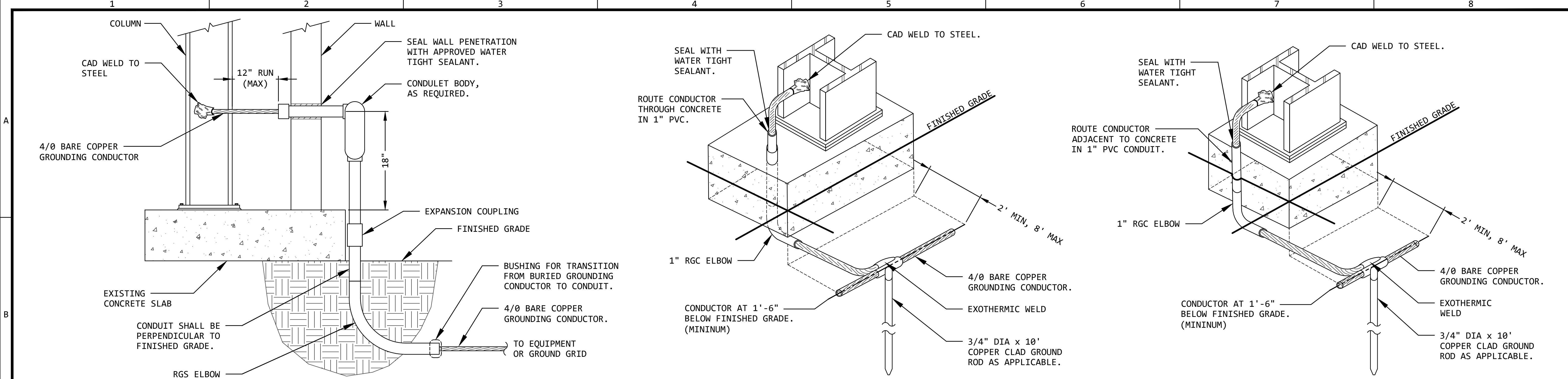
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REV	DATE	DR	CK	AP	DESCRIPTION
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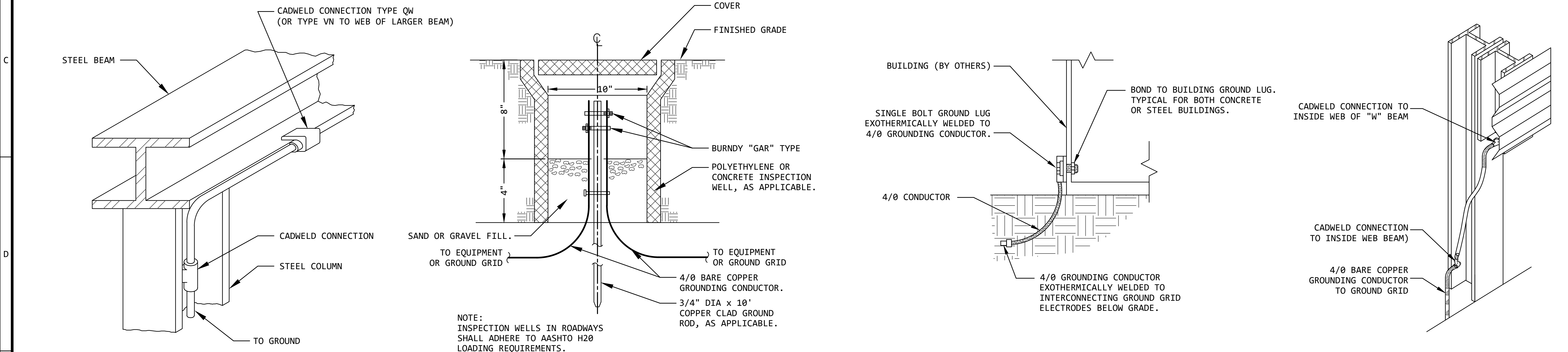
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CHECKED BY	DATE	GROUNDING DETAILS - SHEET 1 FISH LIFT PASSAGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CG-011	1	



TYPICAL THRU-WALL COLUMN GROUNDING DETAIL 4
NOTE: FOR EXISTING BUILDINGS ONLY NOT TO SCALE

TYPICAL COLUMN GROUNDING DETAIL 5
NOT TO SCALE

TYPICAL EXISTING PIER GROUNDING DETAIL 6
NOT TO SCALE



TYPICAL BUILDING STEEL GROUNDING DETAIL 7
NOT TO SCALE

TYPICAL INSPECTION WELL DETAIL 8
NOT TO SCALE

TYPICAL BUILDING GROUND DETAIL 9
NOT TO SCALE

TYPICAL GUARD RAIL GROUND DETAIL 10
NOT TO SCALE

GENERAL NOTES:
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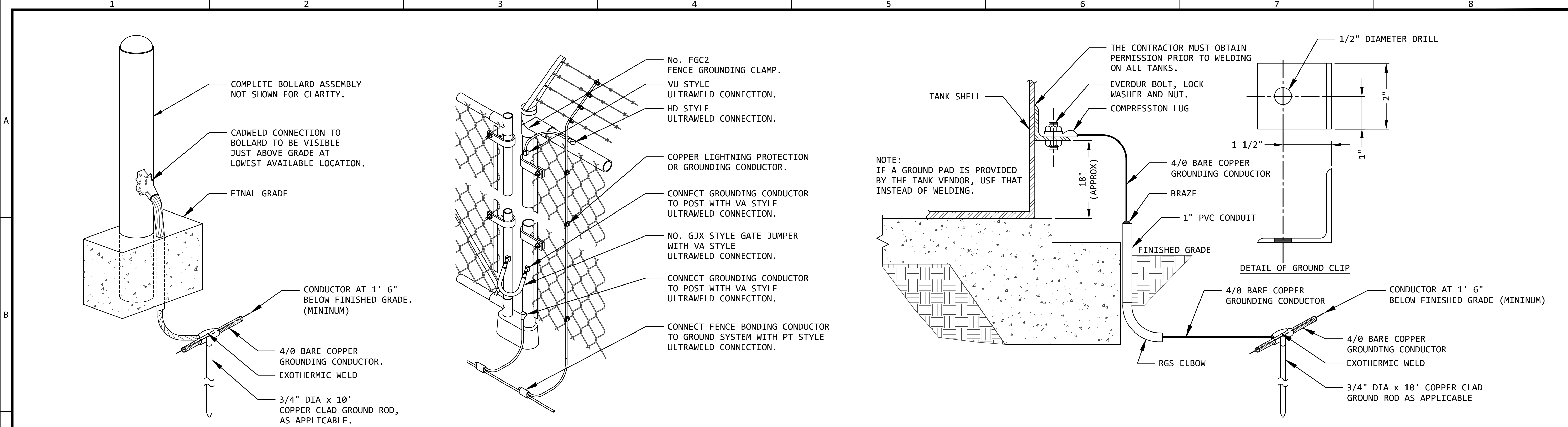
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REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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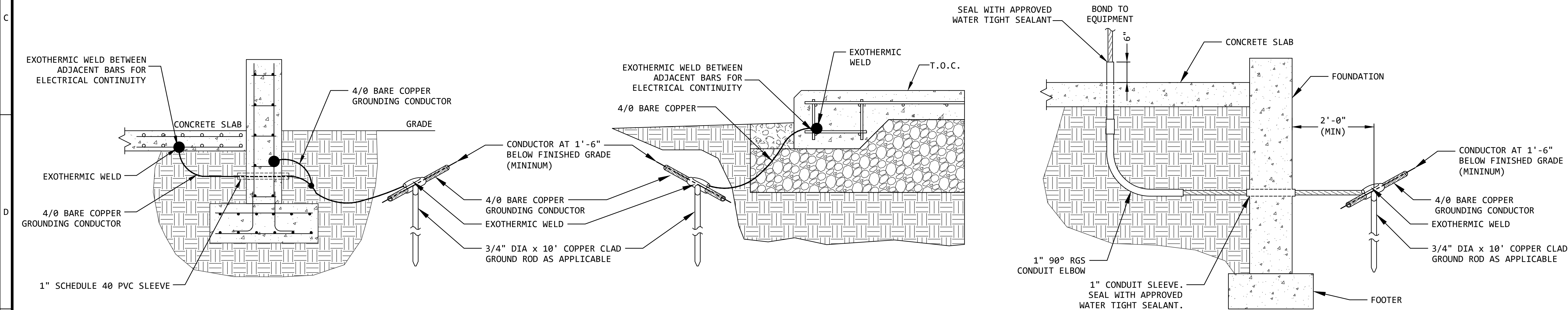
DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING DETAILS - SHEET 2 FISH LIFT PASSAGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CG-012	1	



TYPICAL BOLLARD GROUNDING DETAIL 11 NOT TO SCALE --

TYPICAL FENCE/GATE GROUNDING DETAIL 12 NOT TO SCALE --

TYPICAL TANK GROUNDING DETAIL 13 NOT TO SCALE --



TYPICAL SLAB AND FOUNDATION GROUNDING DETAIL 14 NOT TO SCALE --

TYPICAL SLAB OR PAD GROUNDING DETAIL 15 NOT TO SCALE --

TYPICAL THROUGH SLAB/FOUNDATION GROUNDING DETAIL 16 NOT TO SCALE --

GENERAL NOTES:

1. ALL DETAILS SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION IN THE DESIGN.

REVISION					
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0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

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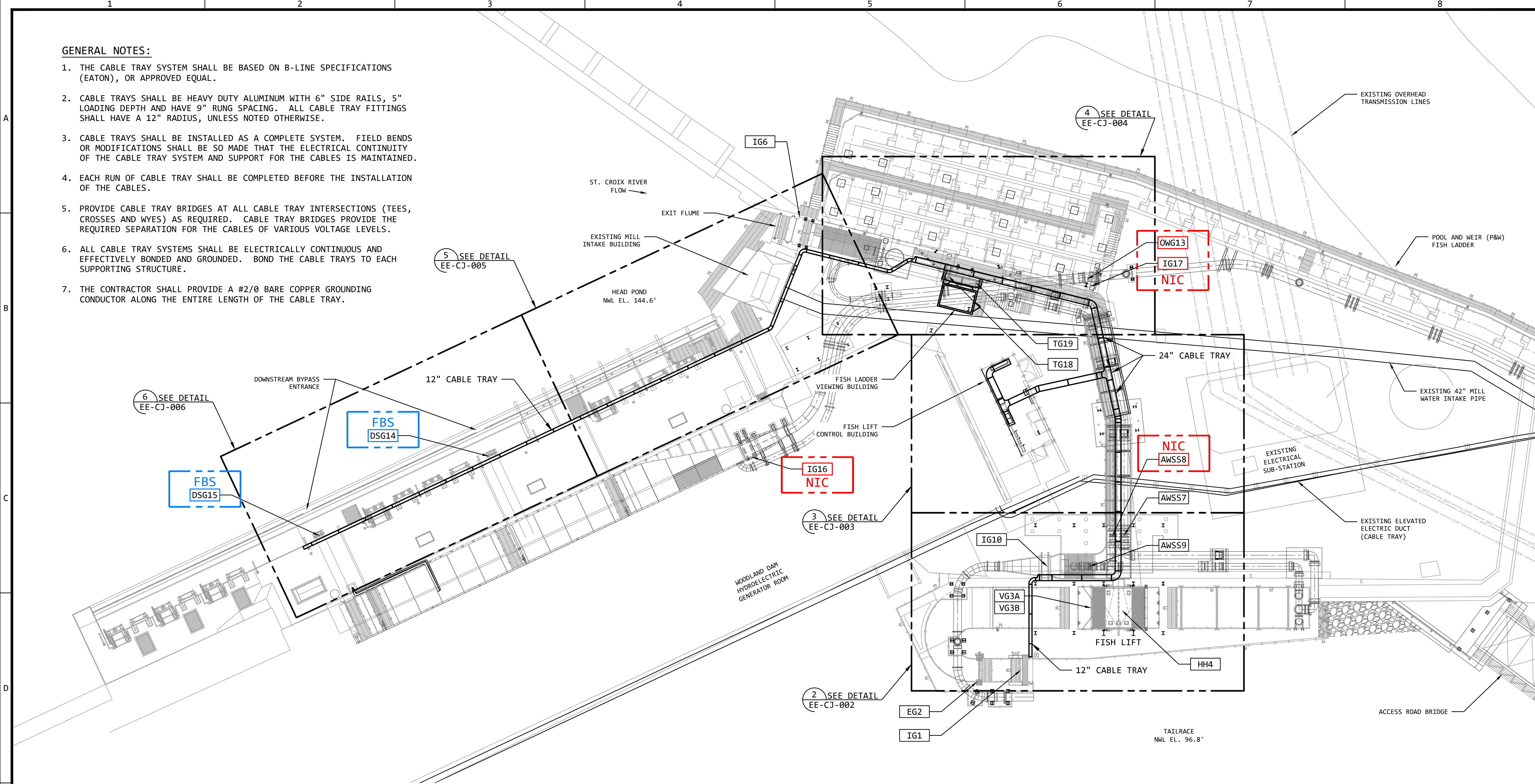
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	GROUNDING DETAILS - SHEET 3 FISH LIFT PASSAGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CG-013	1	

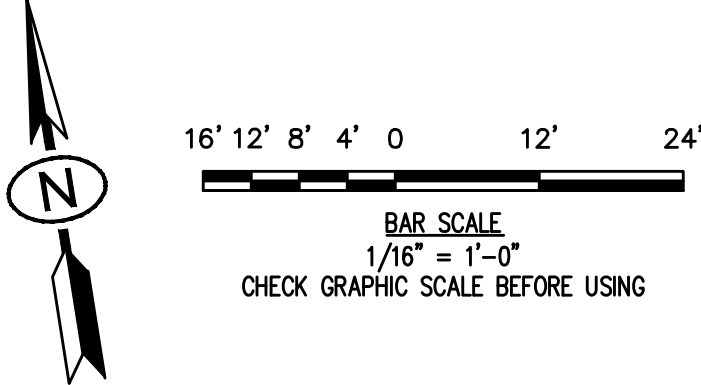
GENERAL NOTES:

1. THE CABLE TRAY SYSTEM SHALL BE BASED ON B-LINE SPECIFICATIONS (EATON), OR APPROVED EQUAL.
2. CABLE TRAYS SHALL BE HEAVY DUTY ALUMINUM WITH 6" SIDE RAILS, 5" LOADING DEPTH AND HAVE 9" RUNG SPACING. ALL CABLE TRAY FITTINGS SHALL HAVE A 12" RADIUS, UNLESS NOTED OTHERWISE.
3. CABLE TRAYS SHALL BE INSTALLED AS A COMPLETE SYSTEM. FIELD BENDS OR MODIFICATIONS SHALL BE SO MADE THAT THE ELECTRICAL CONTINUITY OF THE CABLE TRAY SYSTEM AND SUPPORT FOR THE CABLES IS MAINTAINED.
4. EACH RUN OF CABLE TRAY SHALL BE COMPLETED BEFORE THE INSTALLATION OF THE CABLES.
5. PROVIDE CABLE TRAY BRIDGES AT ALL CABLE TRAY INTERSECTIONS (TEES, CROSSES AND WYES) AS REQUIRED. CABLE TRAY BRIDGES PROVIDE THE REQUIRED SEPARATION FOR THE CABLES OF VARIOUS VOLTAGE LEVELS.
6. ALL CABLE TRAY SYSTEMS SHALL BE ELECTRICALLY CONTINUOUS AND EFFECTIVELY BONDED AND GROUNDED. BOND THE CABLE TRAYS TO EACH SUPPORTING STRUCTURE.
7. THE CONTRACTOR SHALL PROVIDE A #2/0 BARE COPPER GROUNDING CONDUCTOR ALONG THE ENTIRE LENGTH OF THE CABLE TRAY.



ABOVE GRADE RACEWAY PLAN - FISH LIFT PASSAGE SITE 1
SCALE: 1/16" = 1'-0"

LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)



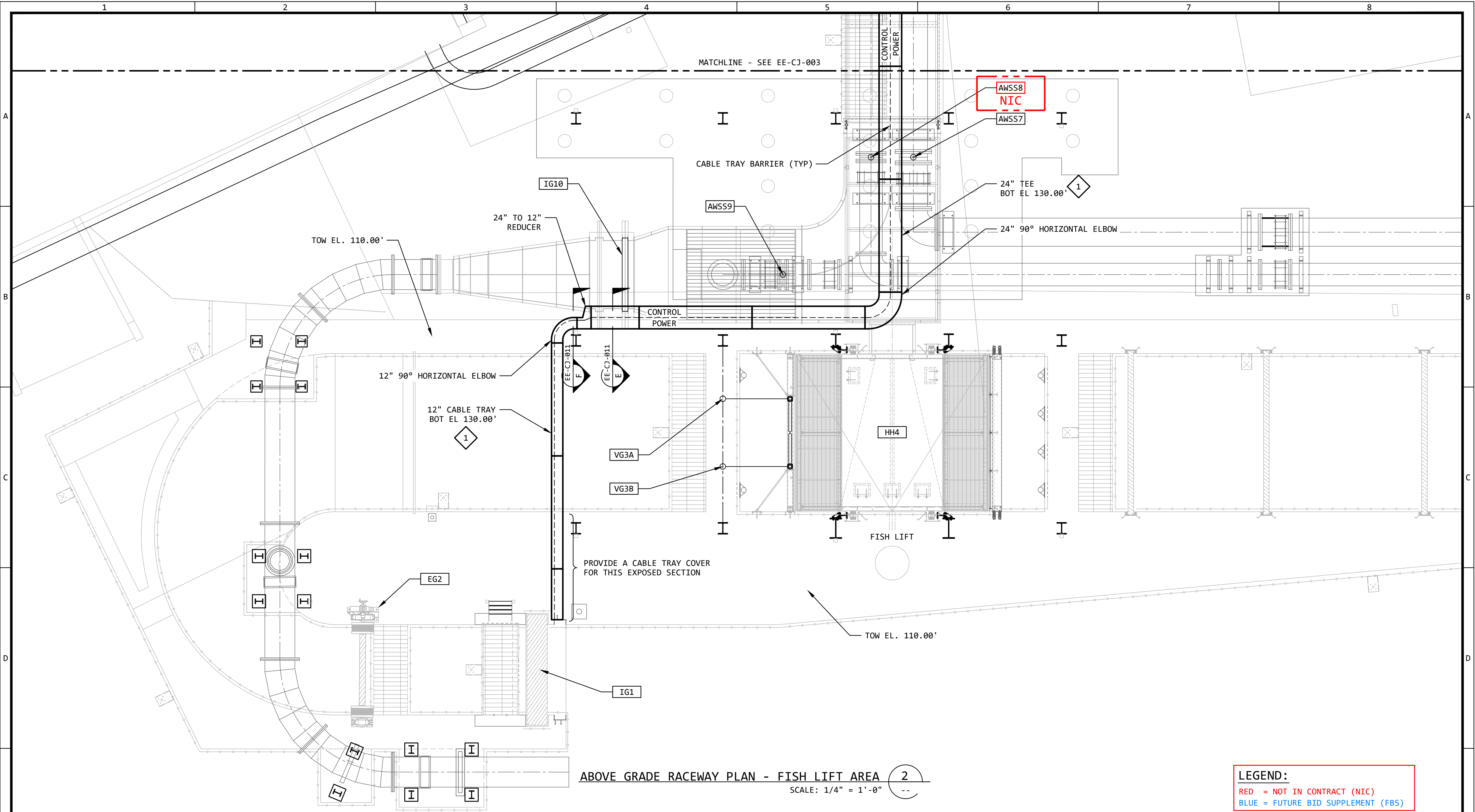
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REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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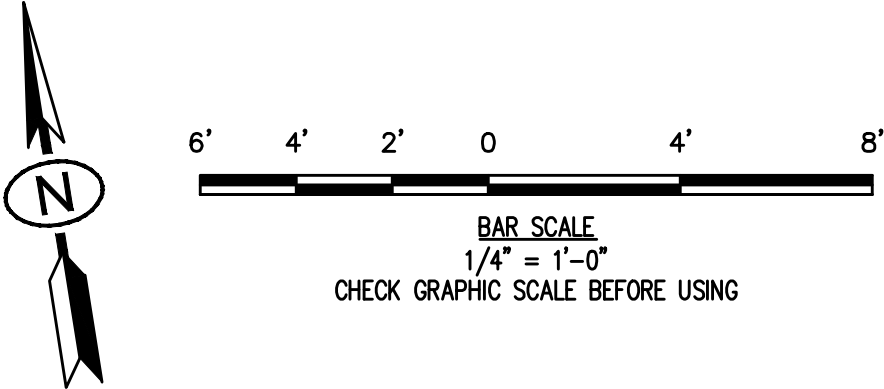
DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ABOVE GRADE RACEWAY PLAN FISH LIFT PASSAGE SITE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CJ-001	1	



LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

KEYED NOTES:

1 THE ELEVATIONS OF THE CABLE TRAY IS YET TO BE DETERMINED. THE ELEVATIONS SHOWN (BOT EL) ARE APPROXIMATE, AND HELP TO IDENTIFY THE TOTAL SCOPE OF THE DESIGN.



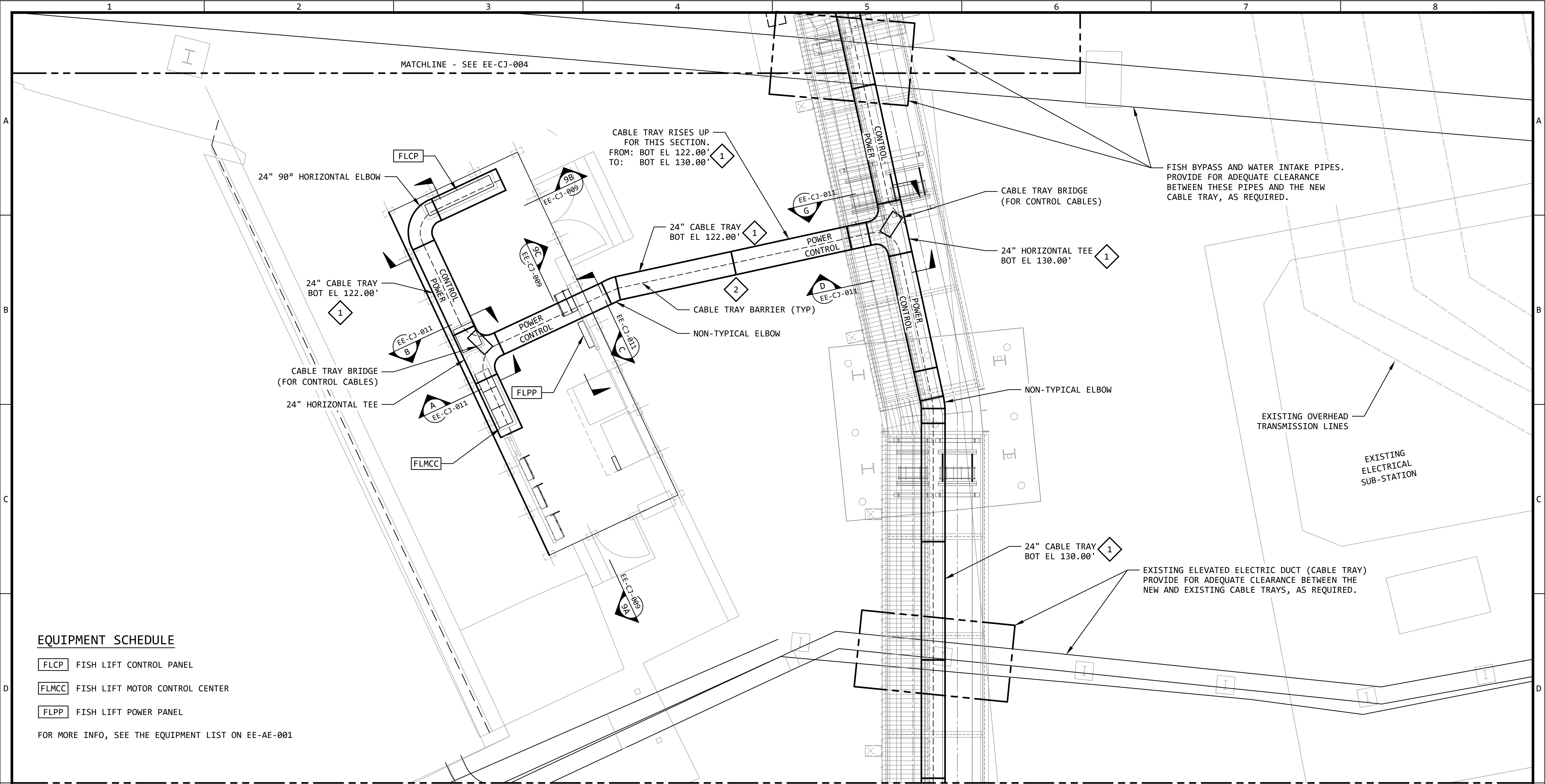
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
SAM	08/22/2024			
CHECKED BY	DATE	ABOVE GRADE RACEWAY PLAN FISH LIFT AREA		
CMM	08/22/2024			
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	AS NOTED	PROJECT NO.	DWG	REV
		ARL-007	EE-CJ-002	1



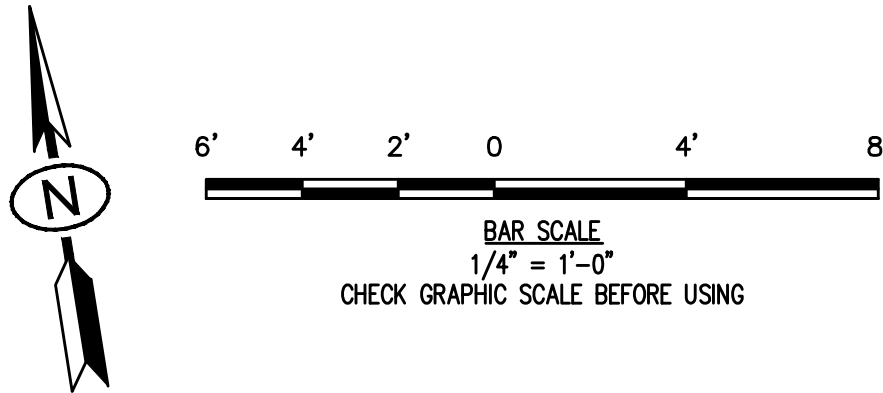
EQUIPMENT SCHEDULE

- FLCP** FISH LIFT CONTROL PANEL
- FLMCC** FISH LIFT MOTOR CONTROL CENTER
- FLPP** FISH LIFT POWER PANEL

FOR MORE INFO, SEE THE EQUIPMENT LIST ON EE-AE-001

KEYED NOTES:

- 1** THE ELEVATIONS OF THE CABLE TRAY IS YET TO BE DETERMINED. THE ELEVATIONS SHOWN (BOT EL) ARE APPROXIMATE, AND HELP TO IDENTIFY THE TOTAL SCOPE OF THE DESIGN.
- 2** PROVIDE A CABLE TRAY COVER FOR THIS EXPOSED SECTION, BETWEEN THE CONTROL BUILDING AND THE FIRST CABLE TRAY TEE FITTING.



ABOVE GRADE RACEWAY PLAN - FISH LIFT CONTROL BUILDING 3
SCALE: 1/4" = 1'-0"

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

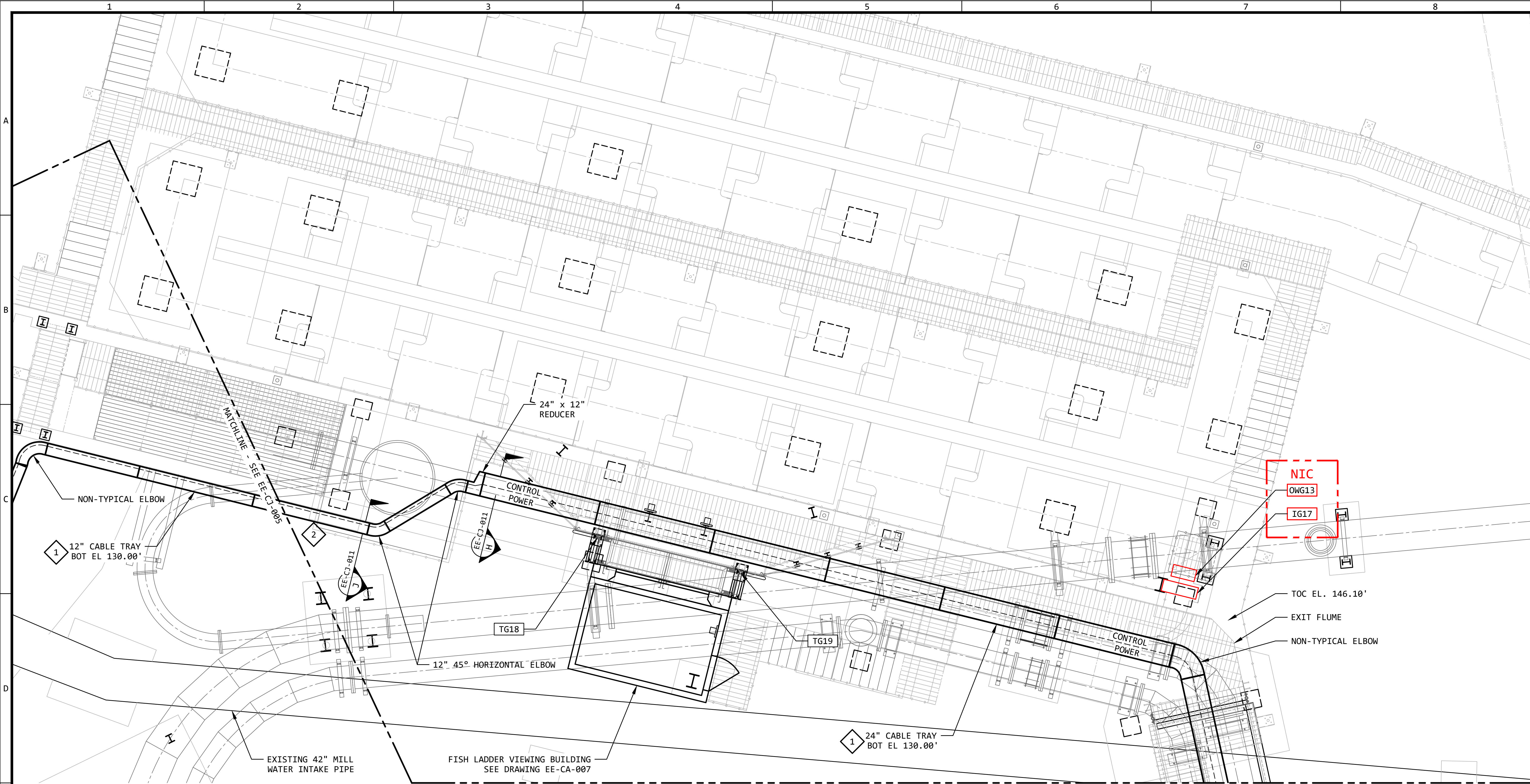
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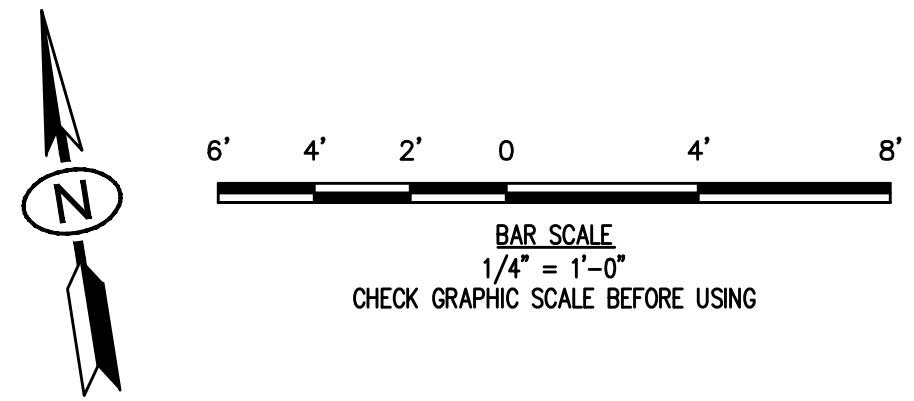
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ABOVE GRADE RACEWAY PLAN FISH LIFT CONTROL BUILDING AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CJ-003	1	



KEYED NOTES:

- 1 THE ELEVATIONS OF THE CABLE TRAY IS YET TO BE DETERMINED. THE ELEVATIONS SHOWN (BOT EL) ARE APPROXIMATE, AND HELP TO IDENTIFY THE TOTAL SCOPE OF THE DESIGN.
- 2 PROVIDE A CABLE TRAY COVER FOR THIS EXPOSED SECTION, FROM WHERE IT KICKS OUT FROM UNDER THE FLUME, ALL THE WAY TO THE END OF TRAY.



ABOVE GRADE RACEWAY PLAN - EXIT FLUME AREA 4
SCALE: 1/4" = 1'-0"

LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

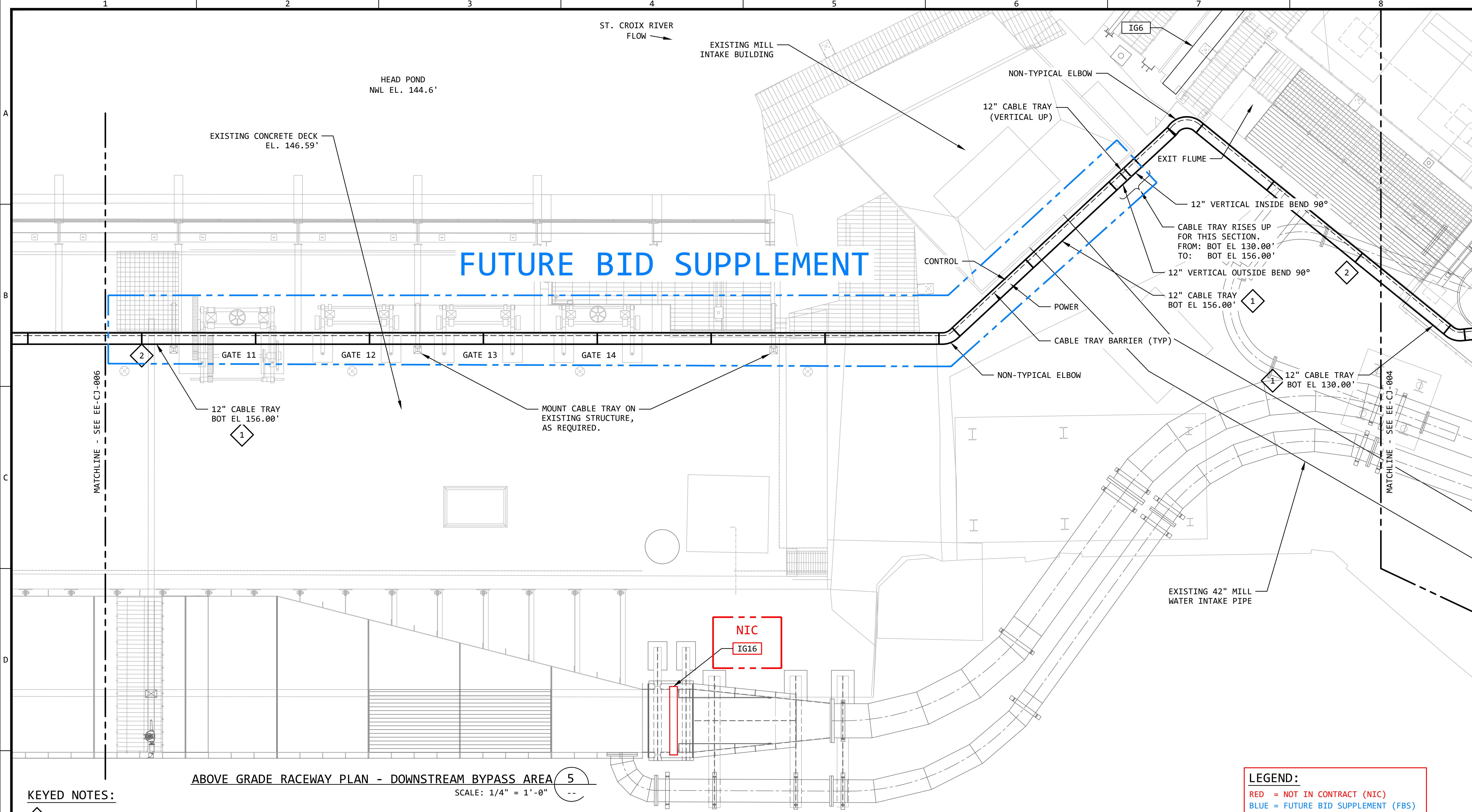
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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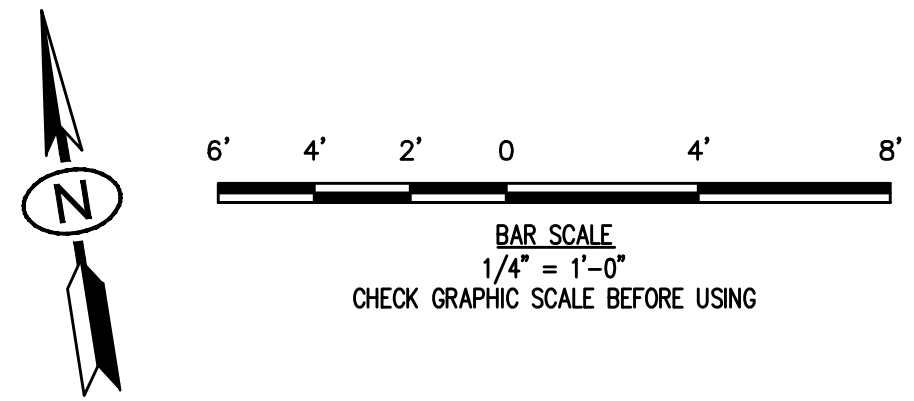
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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ABOVE GRADE RACEWAY PLAN		
CMM	08/22/2024	EXIT FLUME AREA		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CJ-004	1	



KEYED NOTES:

- 1 THE ELEVATIONS OF THE CABLE TRAY IS YET TO BE DETERMINED. THE ELEVATIONS SHOWN (BOT EL) ARE APPROXIMATE, AND HELP TO IDENTIFY THE TOTAL SCOPE OF THE DESIGN.
- 2 PROVIDE A CABLE TRAY COVER FOR THIS EXPOSED SECTION, FROM WHERE IT KICKS OUT FROM UNDER THE FLUME, ALL THE WAY TO THE END OF TRAY.



ABOVE GRADE RACEWAY PLAN - DOWNSTREAM BYPASS AREA 5
SCALE: 1/4" = 1'-0"

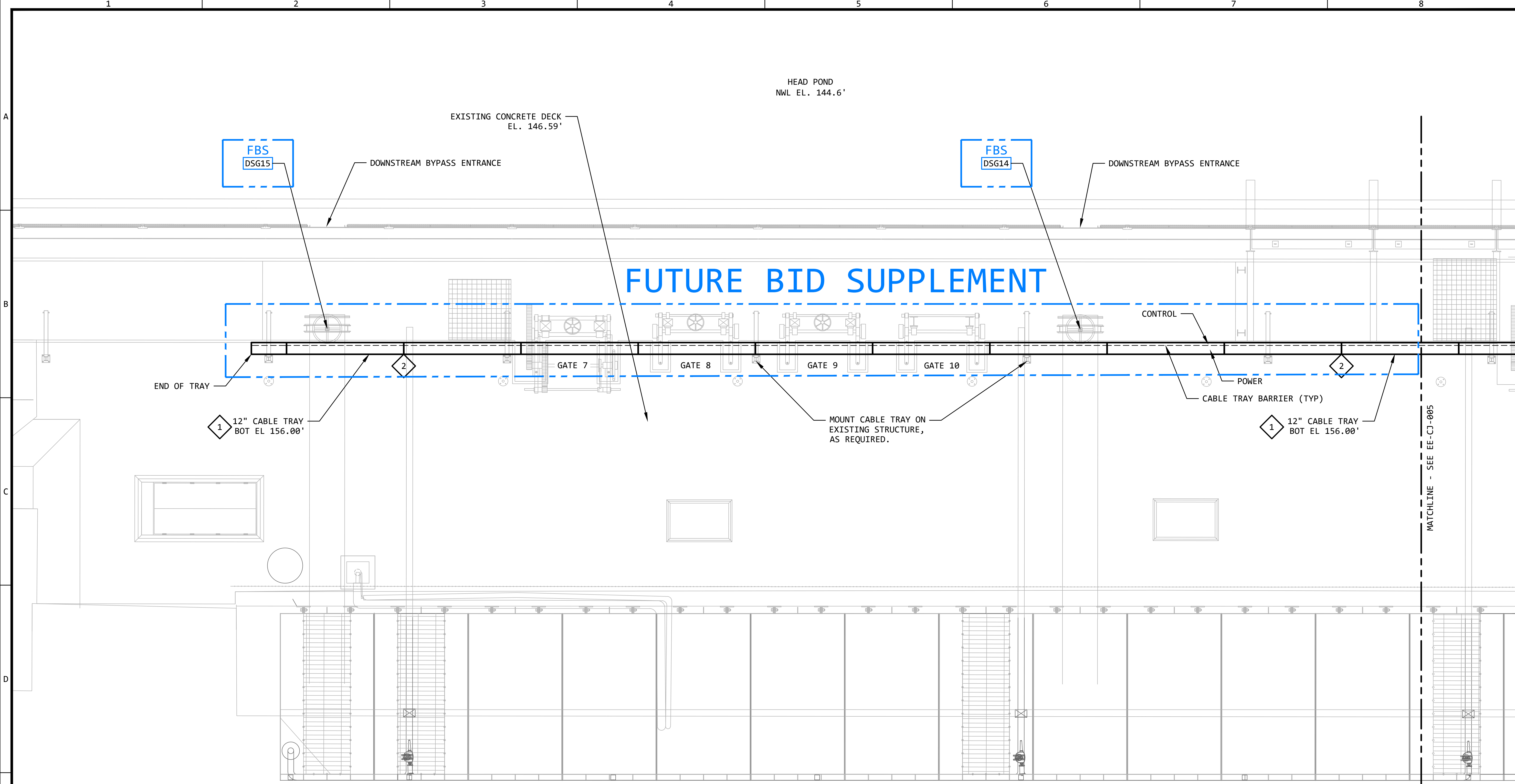
LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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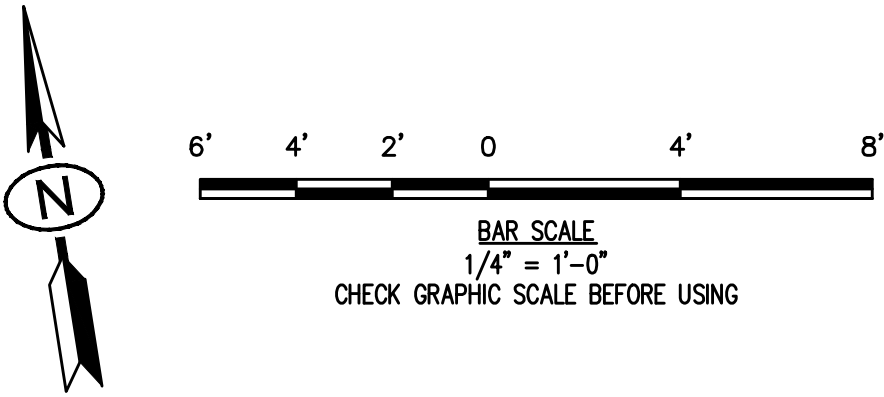
DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ABOVE GRADE RACEWAY PLAN		
CMM	08/22/2024	DOWNSTREAM BYPASS AREA - SHEET 1		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CJ-005	1	



ABOVE GRADE RACEWAY PLAN - DOWNSTREAM BYPASS AREA 6
SCALE: 1/4" = 1'-0"

KEYED NOTES:

- 1 THE ELEVATIONS OF THE CABLE TRAY IS YET TO BE DETERMINED. THE ELEVATIONS SHOWN (BOT EL) ARE APPROXIMATE, AND HELP TO IDENTIFY THE TOTAL SCOPE OF THE DESIGN.
- 2 PROVIDE A CABLE TRAY COVER FOR THIS EXPOSED SECTION, FROM WHERE IT KICKS OUT FROM UNDER THE FLUME, ALL THE WAY TO THE END OF TRAY.



LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

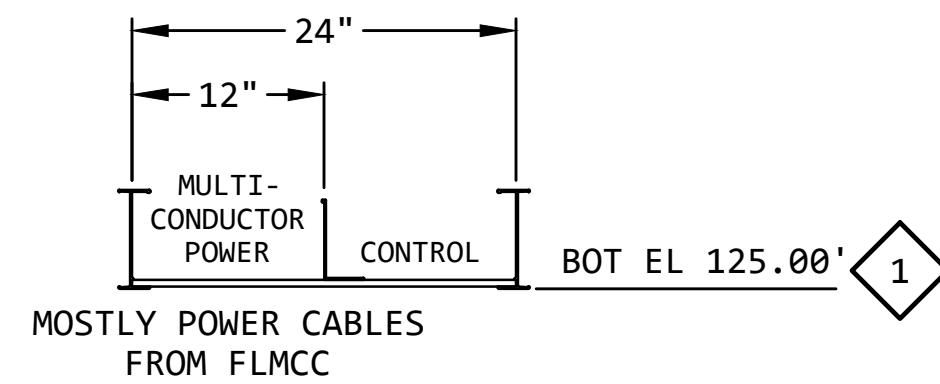
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID
NOT FOR
CONSTRUCTION
SEPTEMBER 3, 2025



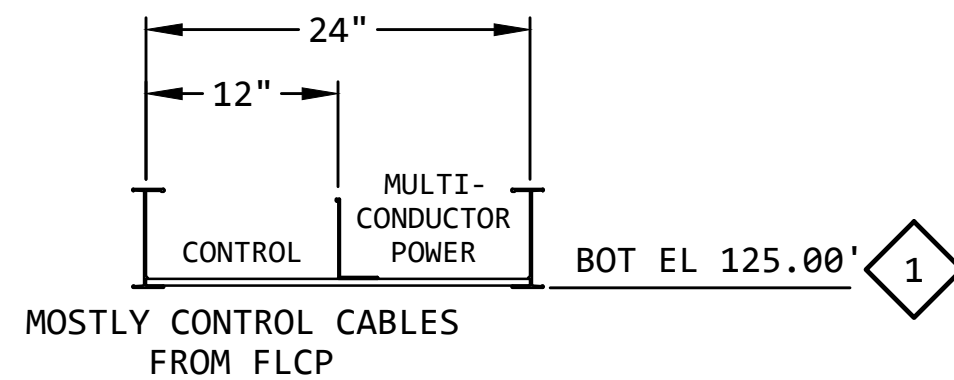
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DRAWN BY	DATE	WOODLAND PULP, LLC		
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ABOVE GRADE RACEWAY PLAN		
CMM	08/22/2024	DOWNSTREAM BYPASS AREA - SHEET 2		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
AS NOTED	ARL-007	EE-CJ-006	1	

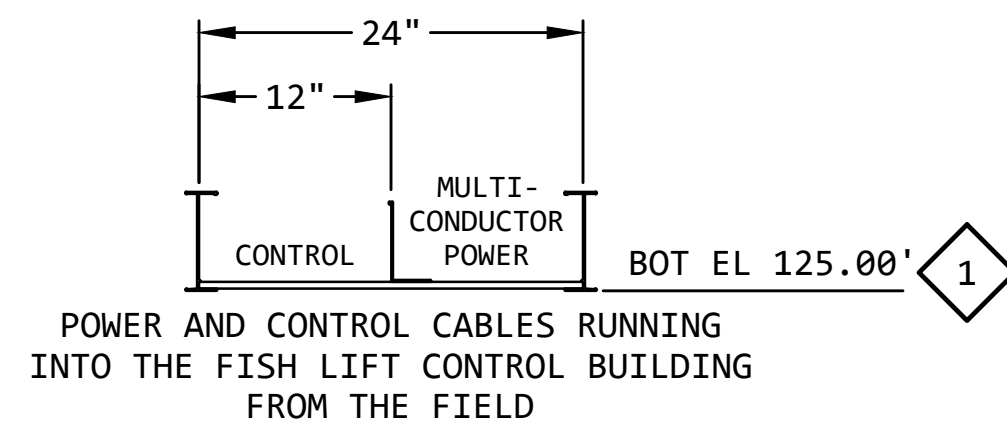


CABLE TRAY SECTION  A

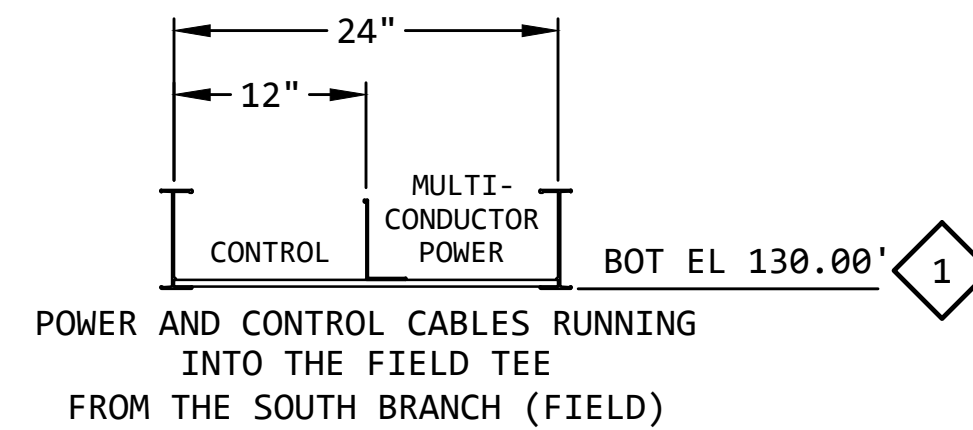
NO SCALE  EE-CJ-003



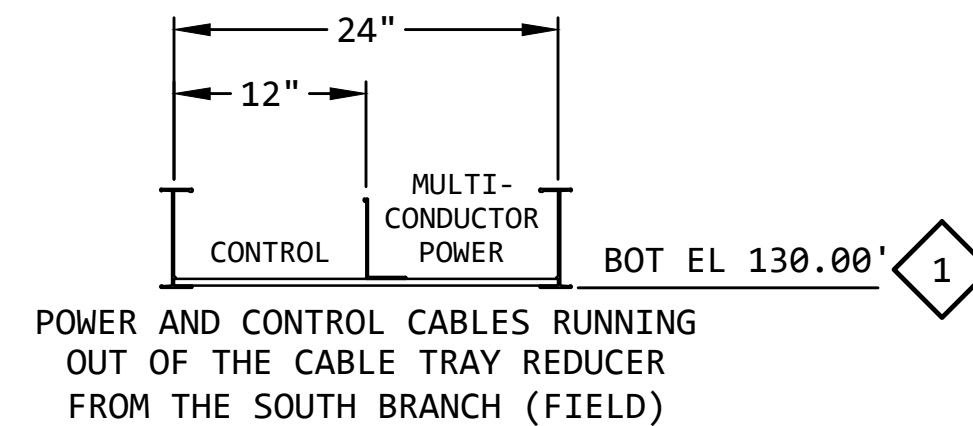
CABLE TRAY SECTION 
NO SCALE  EE-CJ-003



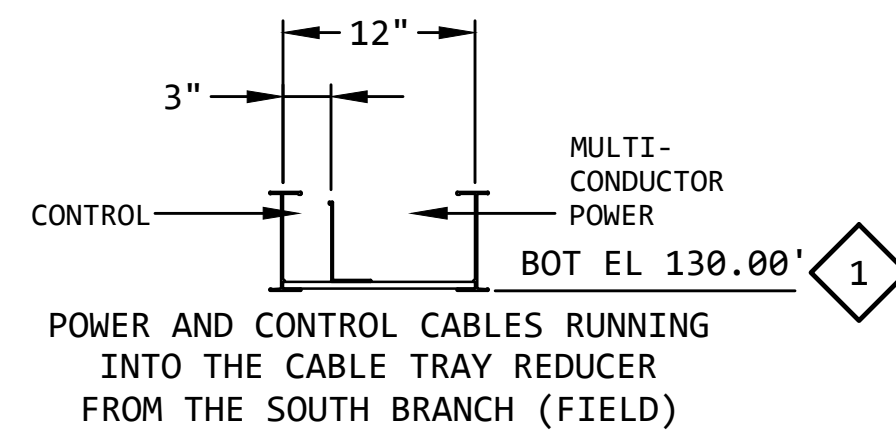
CABLE TRAY SECTION  C
NO SCALE EE-CJ-003



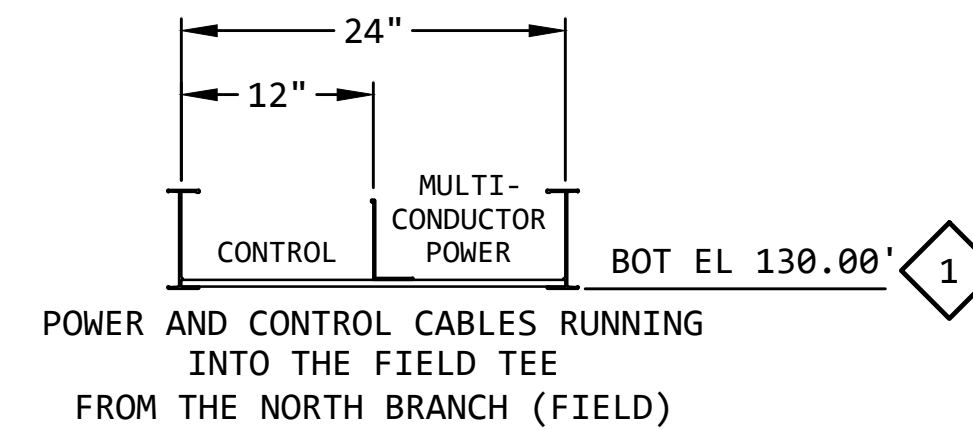
CABLE TRAY SECTION  D
NO SCALE EE-CJ-003



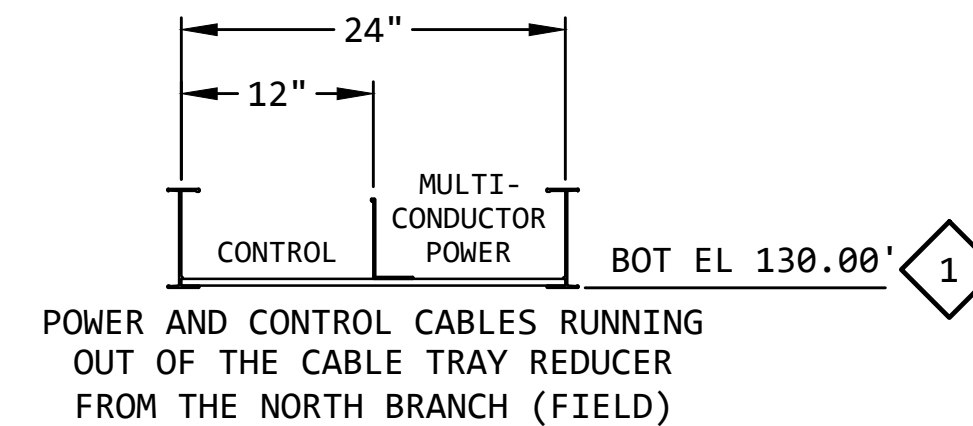
CABLE TRAY SECTION 
NO SCALE EE-CJ-002



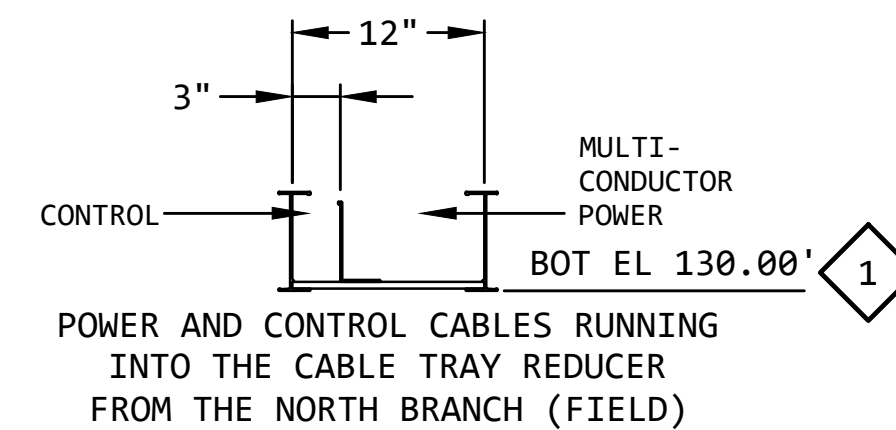
CABLE TRAY SECTION  F
NO SCALE  EE-CJ-002



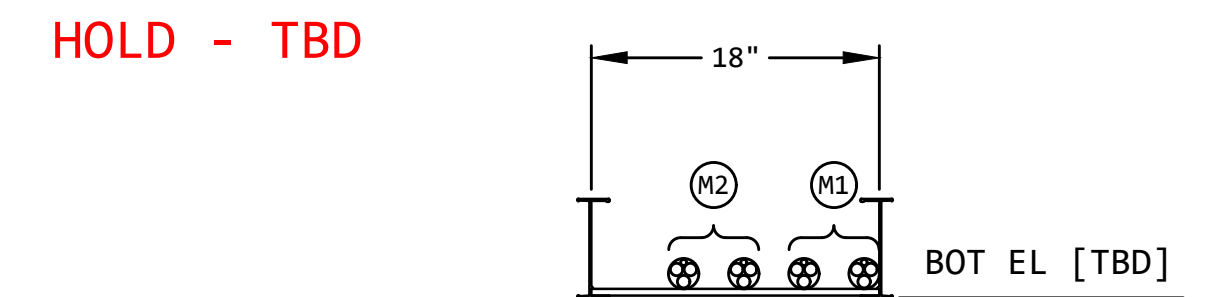
CABLE TRAY SECTION  G
NO SCALE EE-CJ-003



CABLE TRAY SECTION  H
NO SCALE EE-CJ-004



CABLE TRAY SECTION  J
NO SCALE EE-CJ-004



CABLE TRAY SECTION

NO SCALE

M
TBD

LARGE CABLE IDENTIFICATION - CABLE TRAY SECTION "M"				
CABLE ID	CABLE No.	SIZE AND TYPE	SERVICE	COMMENTS
Ⓜ2	C1721-MTS1-P	(2) SETS OF: 3C #4/0 W/GND	MTS1 MANUAL TRANSFER SWITCH No. 1	PRIMARY MILL SOURCE
Ⓜ2	TBDA-MTS1-P	(2) SETS OF: 3C #4/0 W/GND	MTS1 MANUAL TRANSFER SWITCH No. 1	ALTERNATE MILL SOURCE

KEYED NOTES:

- 1 THE ELEVATIONS OF THE CABLE TRAY ARE YET TO BE DETERMINED. THE ELEVATIONS SHOWN (BOT EL) ARE APPROXIMATE, AND HELP TO IDENTIFY THE TOTAL SCOPE OF THE DESIGN.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

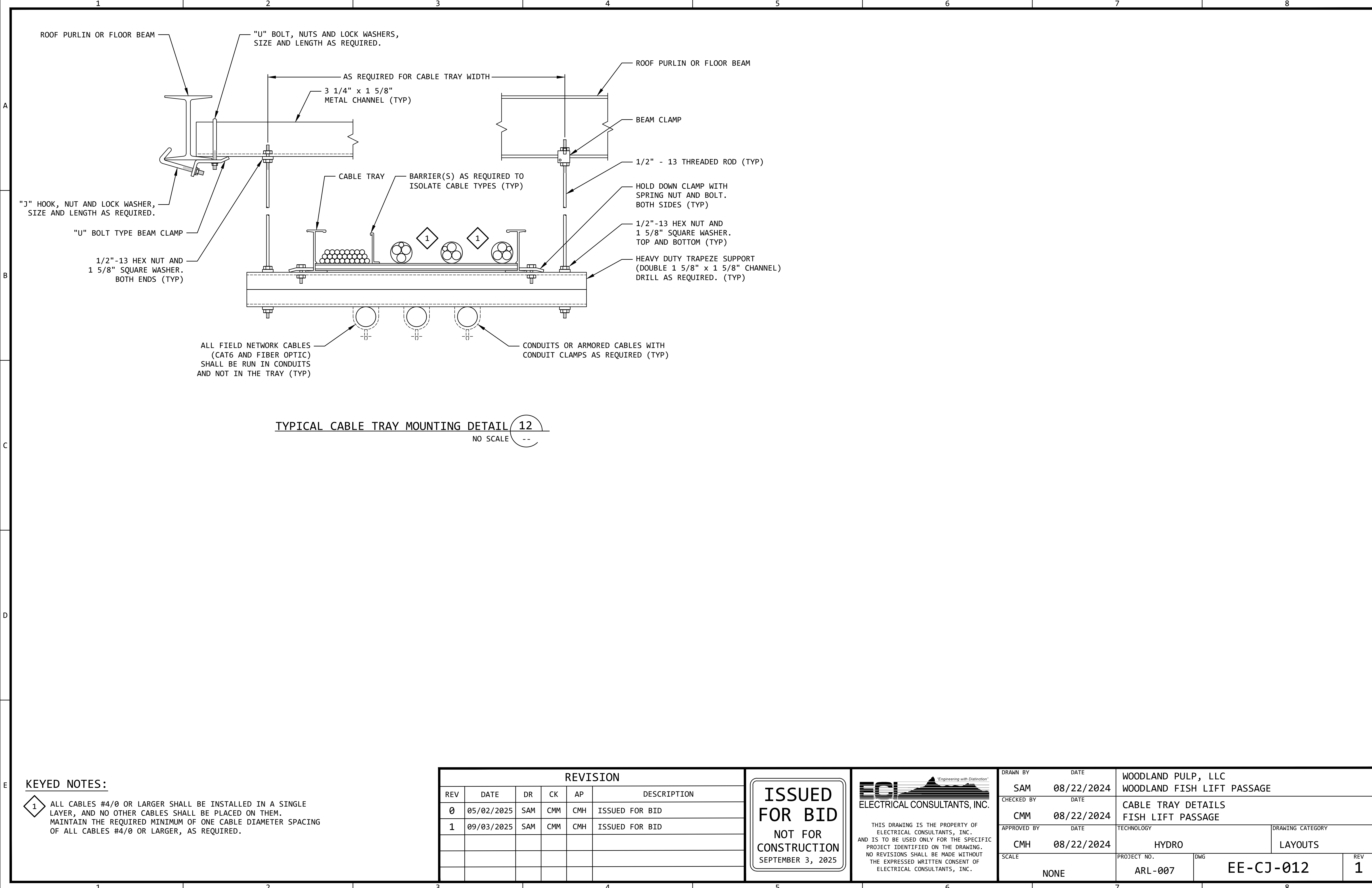
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DRAWN BY SAM	DATE 08/22/2024	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY CMM	DATE 08/22/2024	CABLE TRAY SECTIONS FISH LIFT PASSAGE		
APPROVED BY CMH	DATE 08/22/2024	TECHNOLOGY HYDRO		DRAWING CATEGORY LAYOUTS
SCALE NONE	PROJECT NO. ARL-007	DWG EE-CJ-011	REV 1	



TYPICAL CABLE TRAY MOUNTING DETAIL 12
NO SCALE --

KEYED NOTES:

1 ALL CABLES #4/0 OR LARGER SHALL BE INSTALLED IN A SINGLE LAYER, AND NO OTHER CABLES SHALL BE PLACED ON THEM. MAINTAIN THE REQUIRED MINIMUM OF ONE CABLE DIAMETER SPACING OF ALL CABLES #4/0 OR LARGER, AS REQUIRED.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID

NOT FOR
CONSTRUCTION

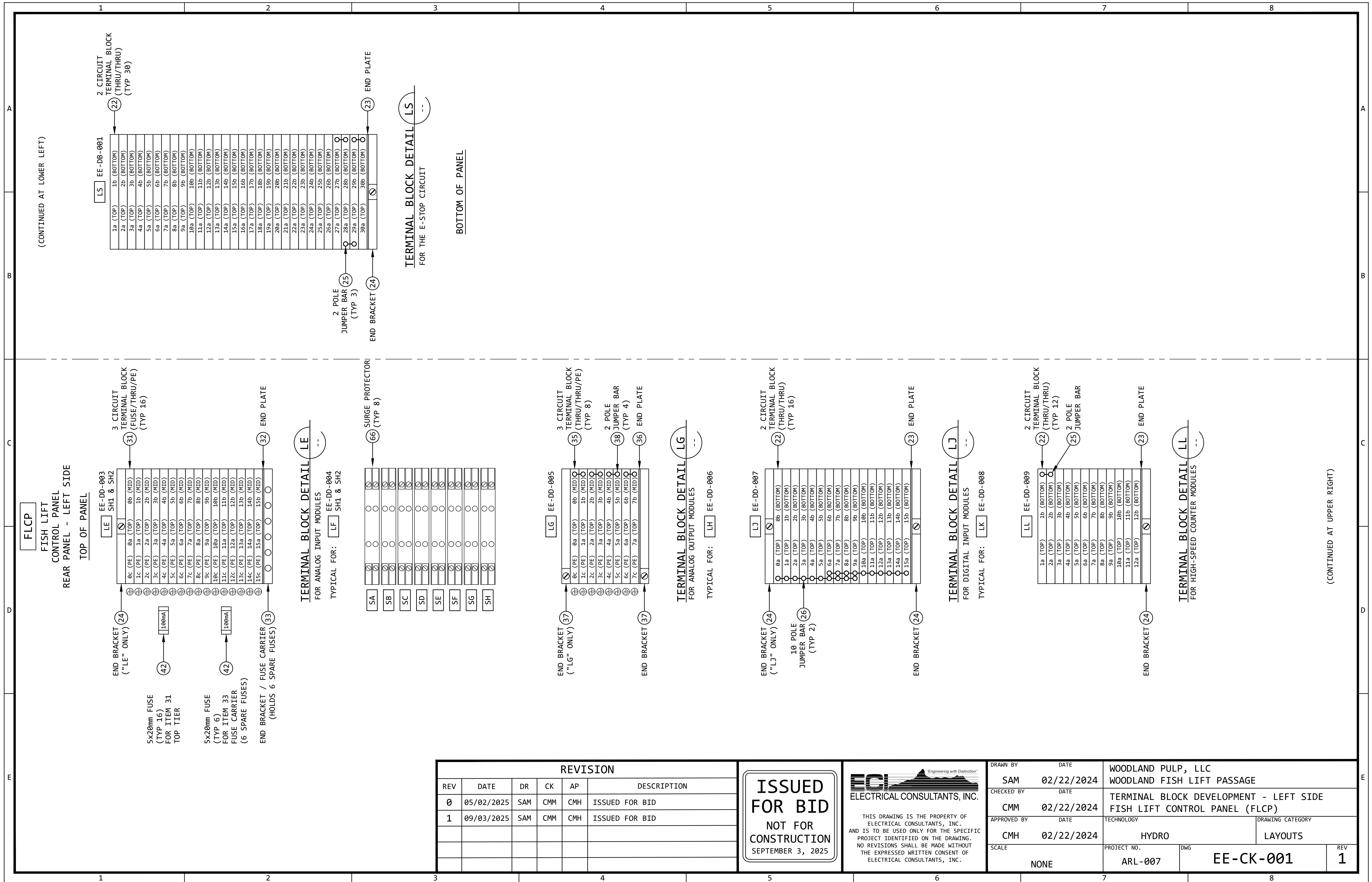
SEPTEMBER 3, 2025

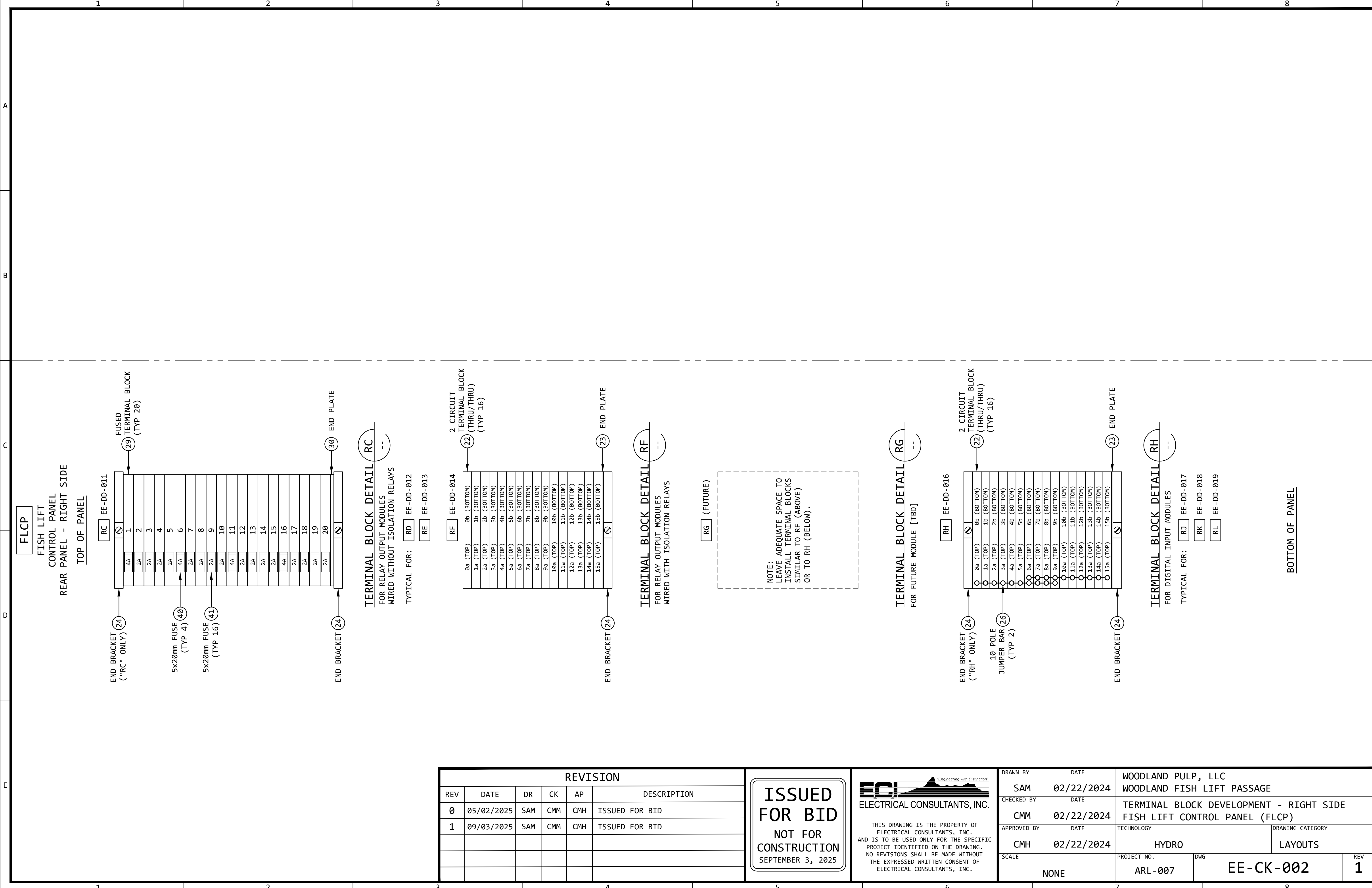


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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	CABLE TRAY DETAILS FISH LIFT PASSAGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CJ-012	1	





REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID

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CONSTRUCTION

SEPTEMBER 3, 2025

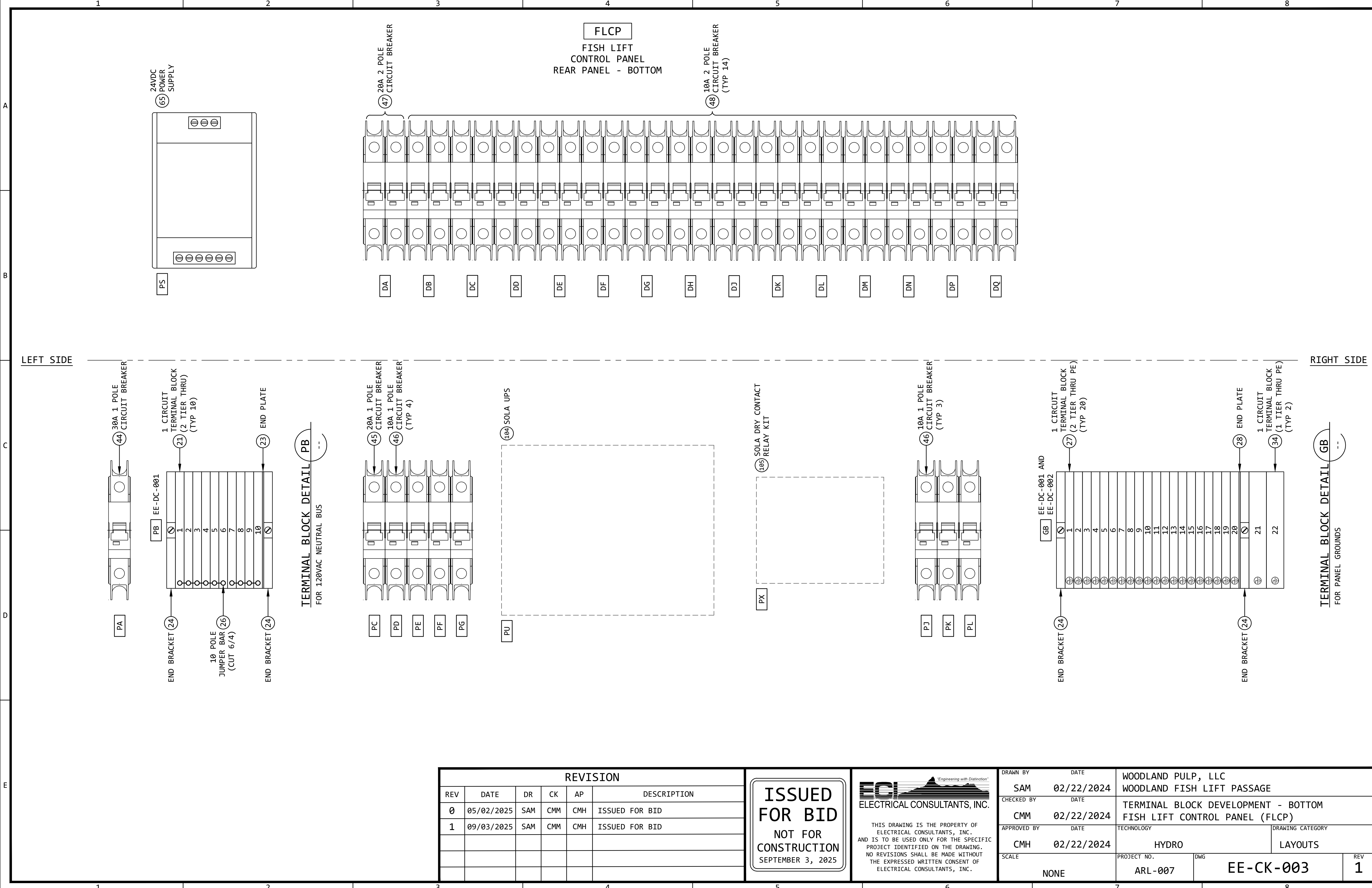
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	TERMINAL BLOCK DEVELOPMENT - RIGHT SIDE FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CK-002	1	



REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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NOT FOR CONSTRUCTION
SEPTEMBER 3, 2025



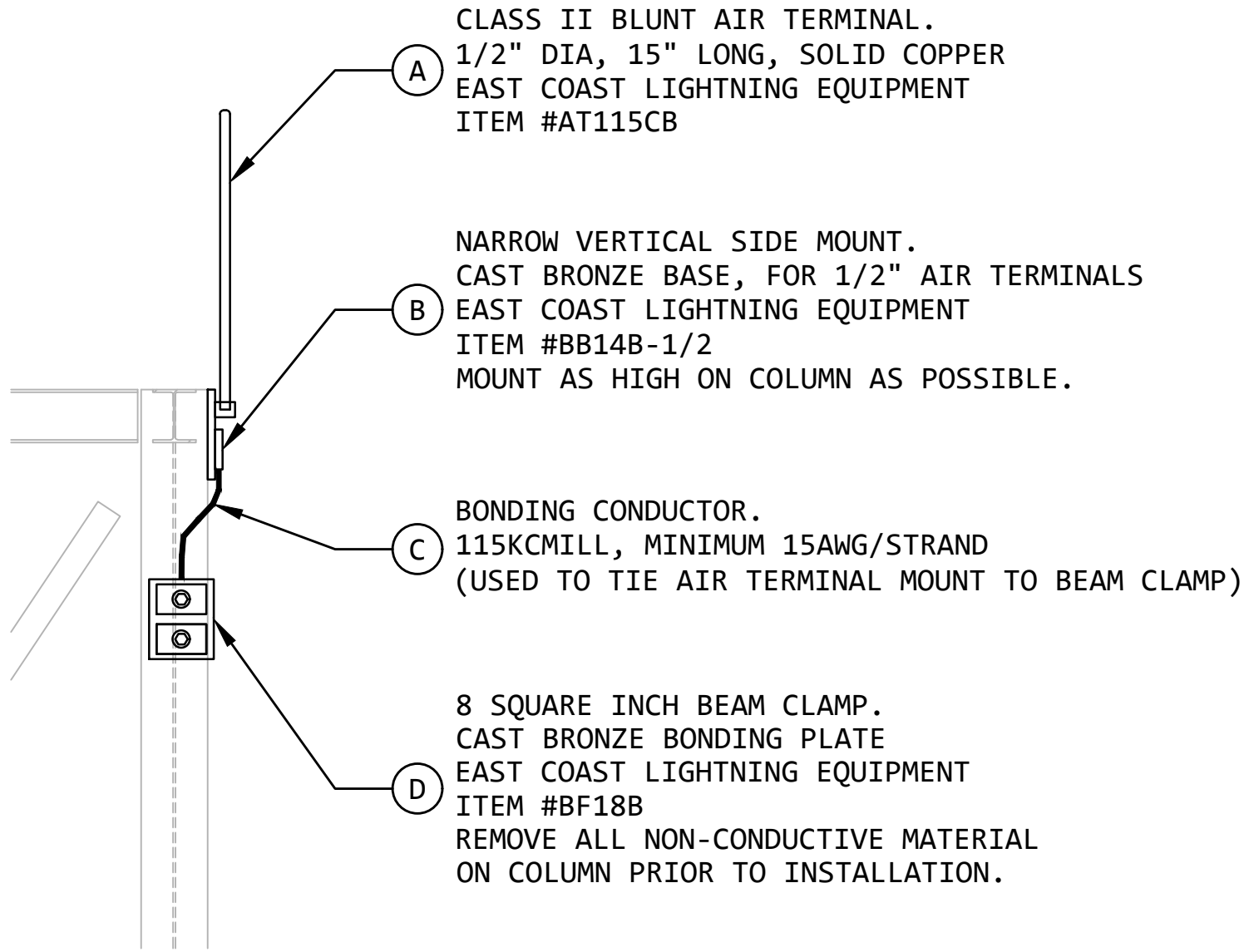
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	TERMINAL BLOCK DEVELOPMENT - BOTTOM FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CK-003	1	

GENERAL NOTES:

1. THE COMPLETED INSTALLATION SHALL MEET NFPA 780, STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS.
2. ALUMINUM LIGHTNING PROTECTION SYSTEM COMPONENTS SHALL NOT BE MOUNTED TO COPPER SURFACES. COPPER COMPONENTS SHALL BE USED TO AVOID ELECTROLYTIC CORROSION.
3. AIR TERMINALS ARE TO BE LOCATED AS SHOWN. THEY ARE TO BE A MAXIMUM OF 24" FROM THE ROOF EDGE AND PROJECT A MINIMUM OF 10" ABOVE THE PROTECTED EDGE. THE SPACING BETWEEN AIR TERMINALS ARE NOT TO EXCEED 20 FEET.
4. ALL LIGHTING CONDUCTORS ARE TO MAINTAIN A HORIZONTAL OR DOWNWARD PATH. ALL BENDS IN THE CONDUCTOR SHALL HAVE A RADIUS BEND OF 8 INCHES OR GREATER, AND SHALL HAVE AN ANGLE BEND OF 90 DEGREES OR GREATER.



LIGHTNING PROTECTION DETAIL 1A
SCALE: NONE

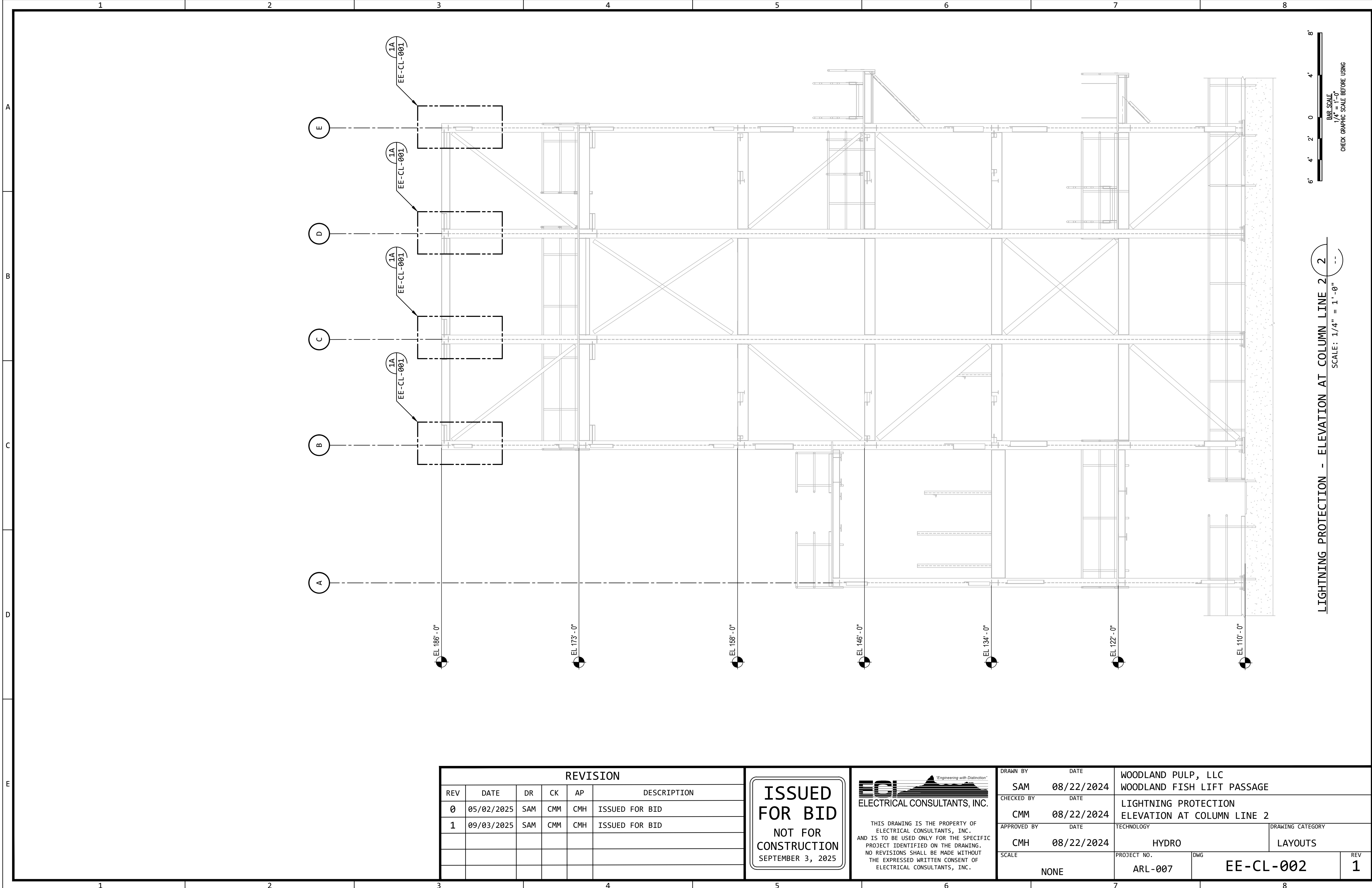
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

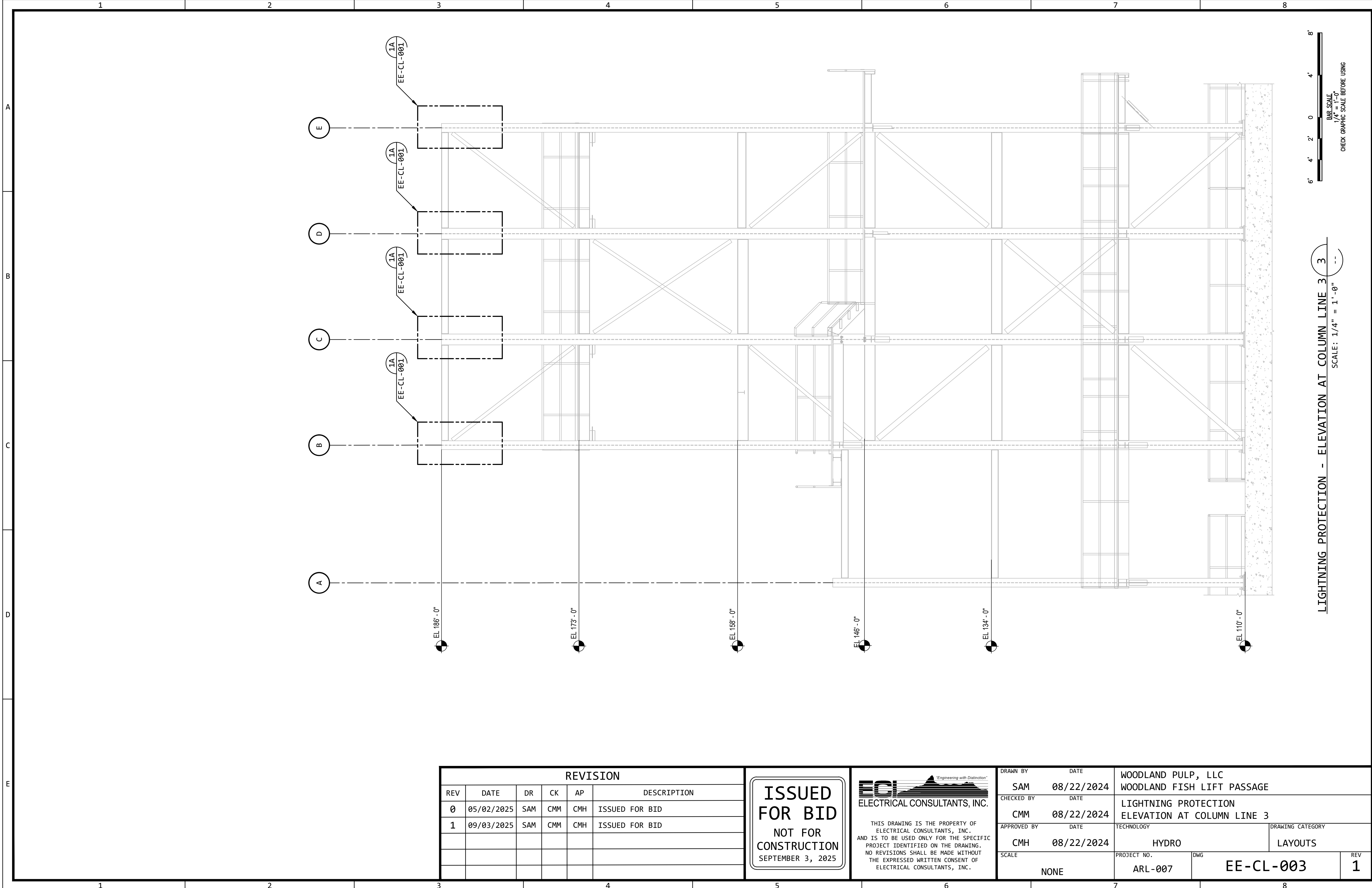
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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	LIGHTNING PROTECTION ELEVATION AT COLUMN LINE 1		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-CL-001	1	





REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID

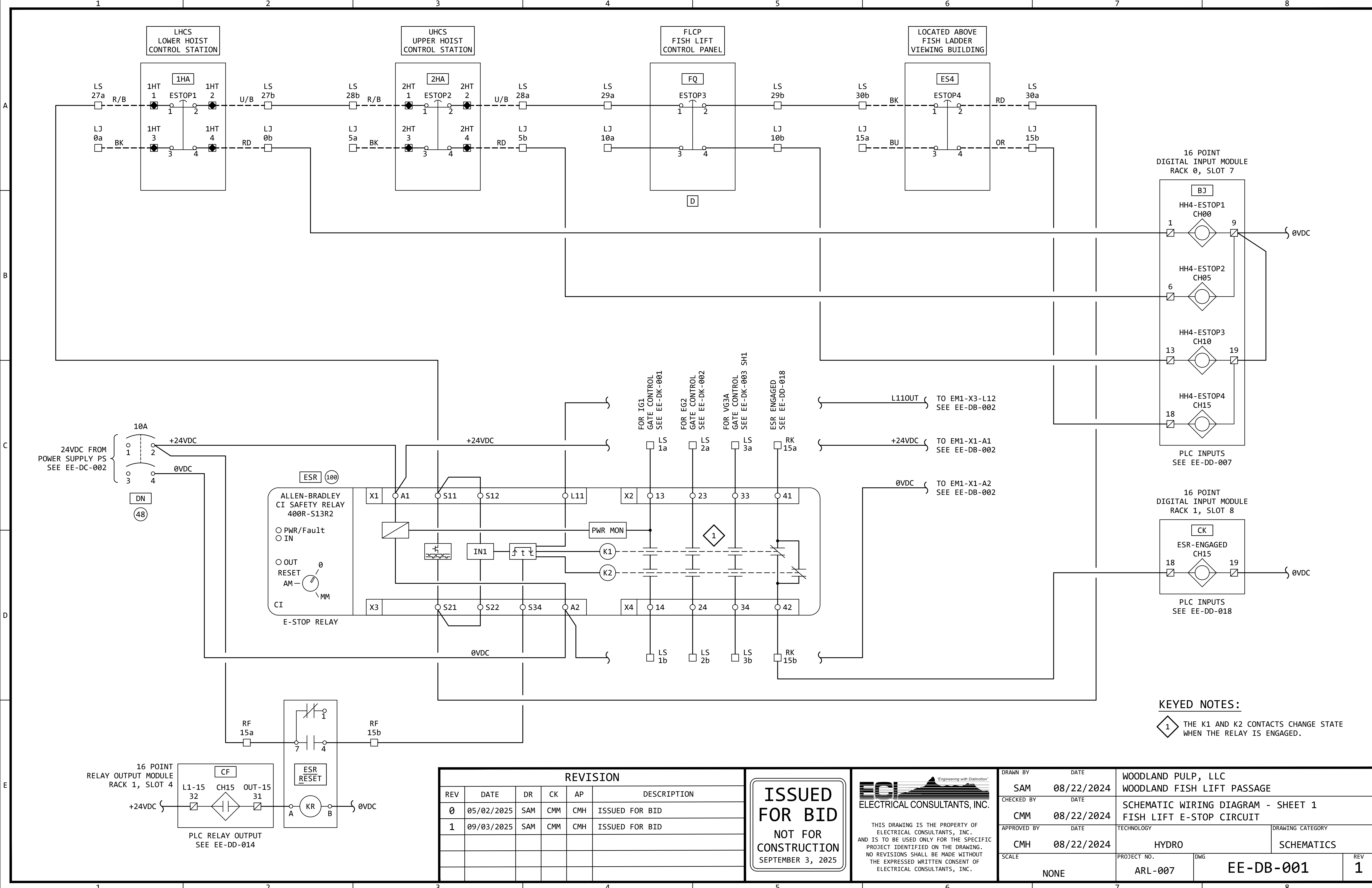
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
SAM	08/22/2024			
CHECKED BY	DATE	LIGHTNING PROTECTION ELEVATION AT COLUMN LINE 3		
CMM	08/22/2024			
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	LAYOUTS	
SCALE		PROJECT NO.	DWG	REV
NONE		ARL-007	EE-CL-003	1



KEYED NOTES:

1 THE K1 AND K2 CONTACTS CHANGE STATE WHEN THE RELAY IS ENGAGED.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID

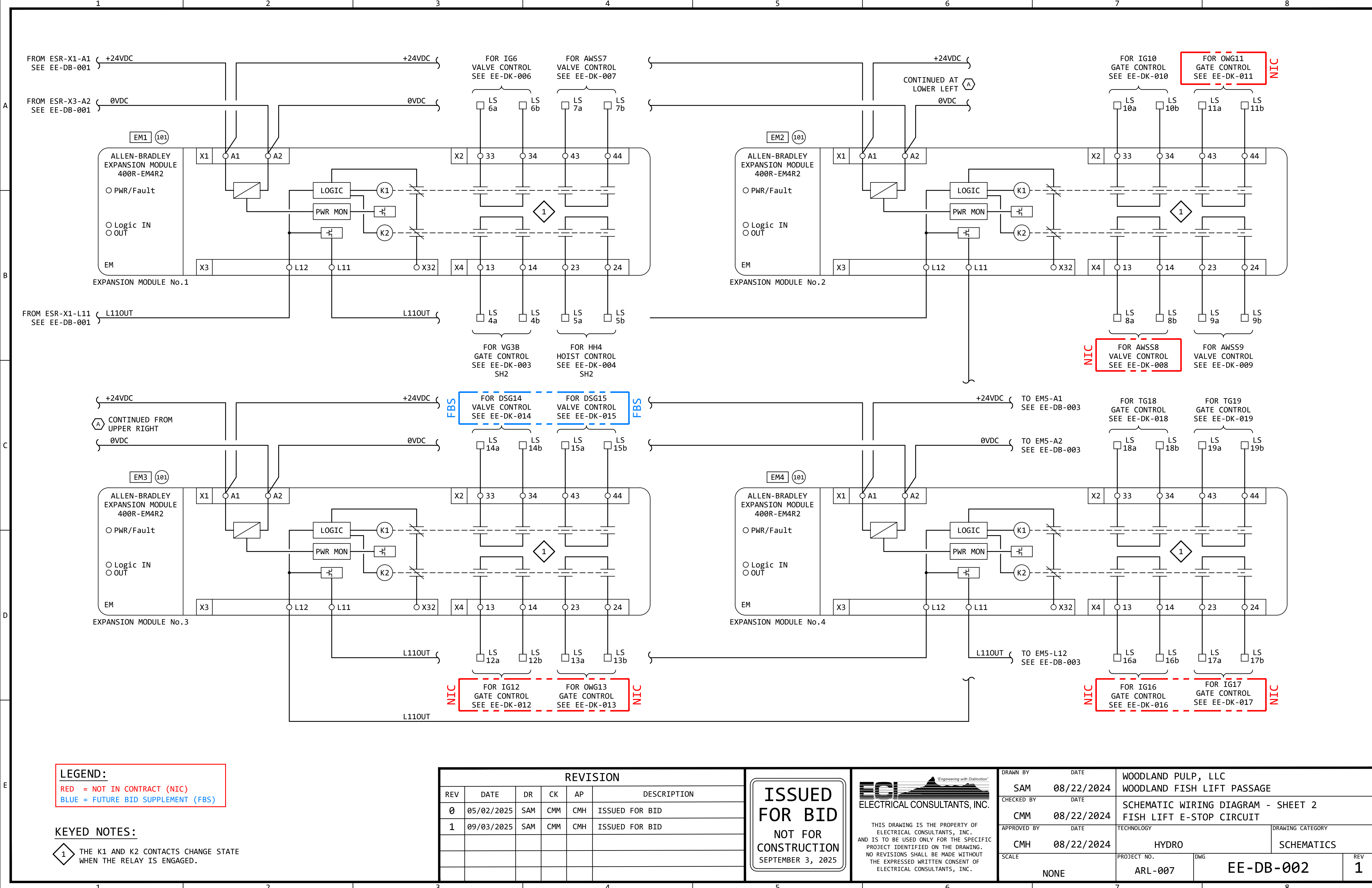
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	SCHEMATIC WIRING DIAGRAM - SHEET 1 FISH LIFT E-STOP CIRCUIT		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DB-001	1	



LEGEND:
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

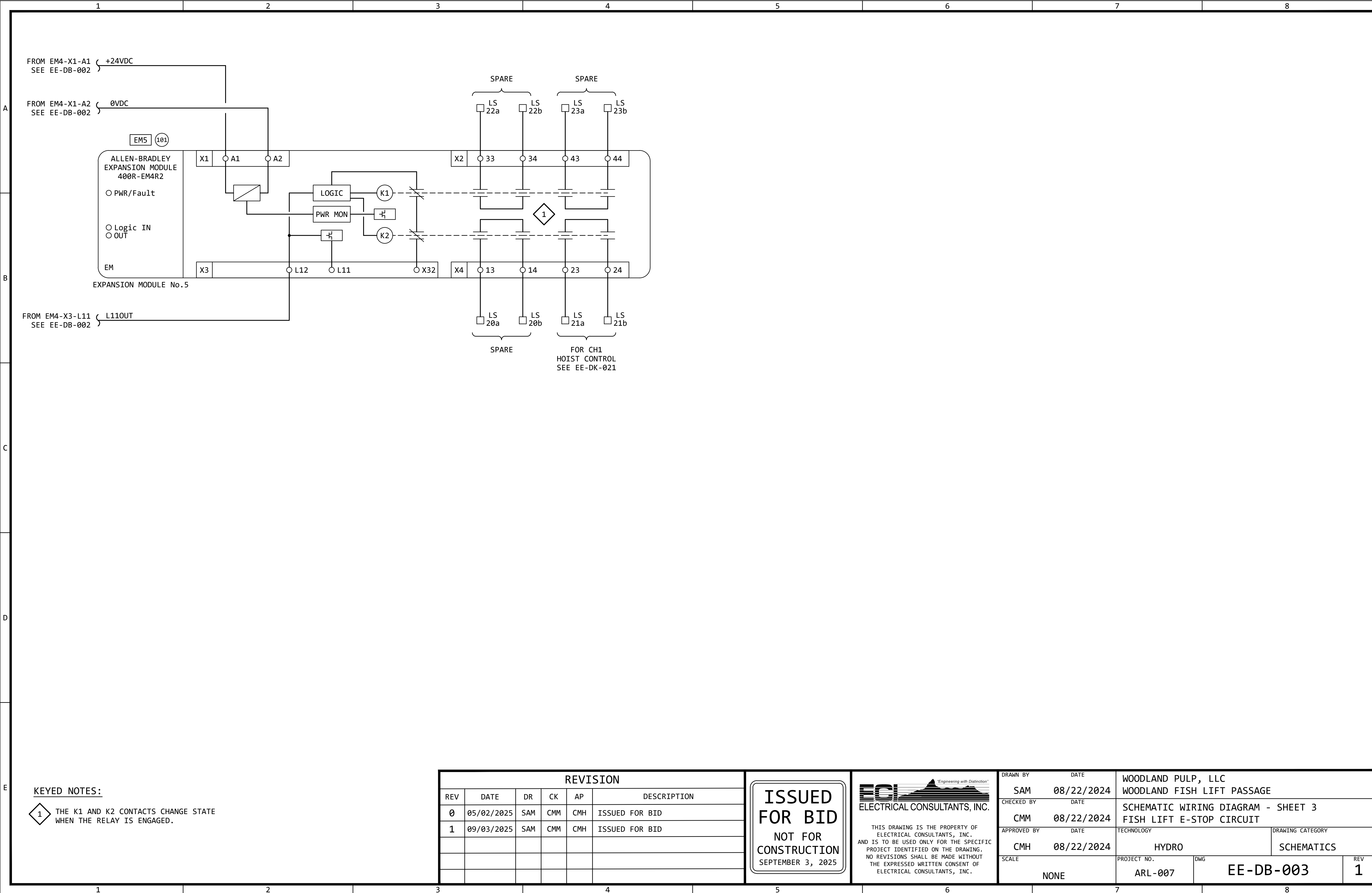
KEYED NOTES:
1 THE K1 AND K2 CONTACTS CHANGE STATE WHEN THE RELAY IS ENGAGED.

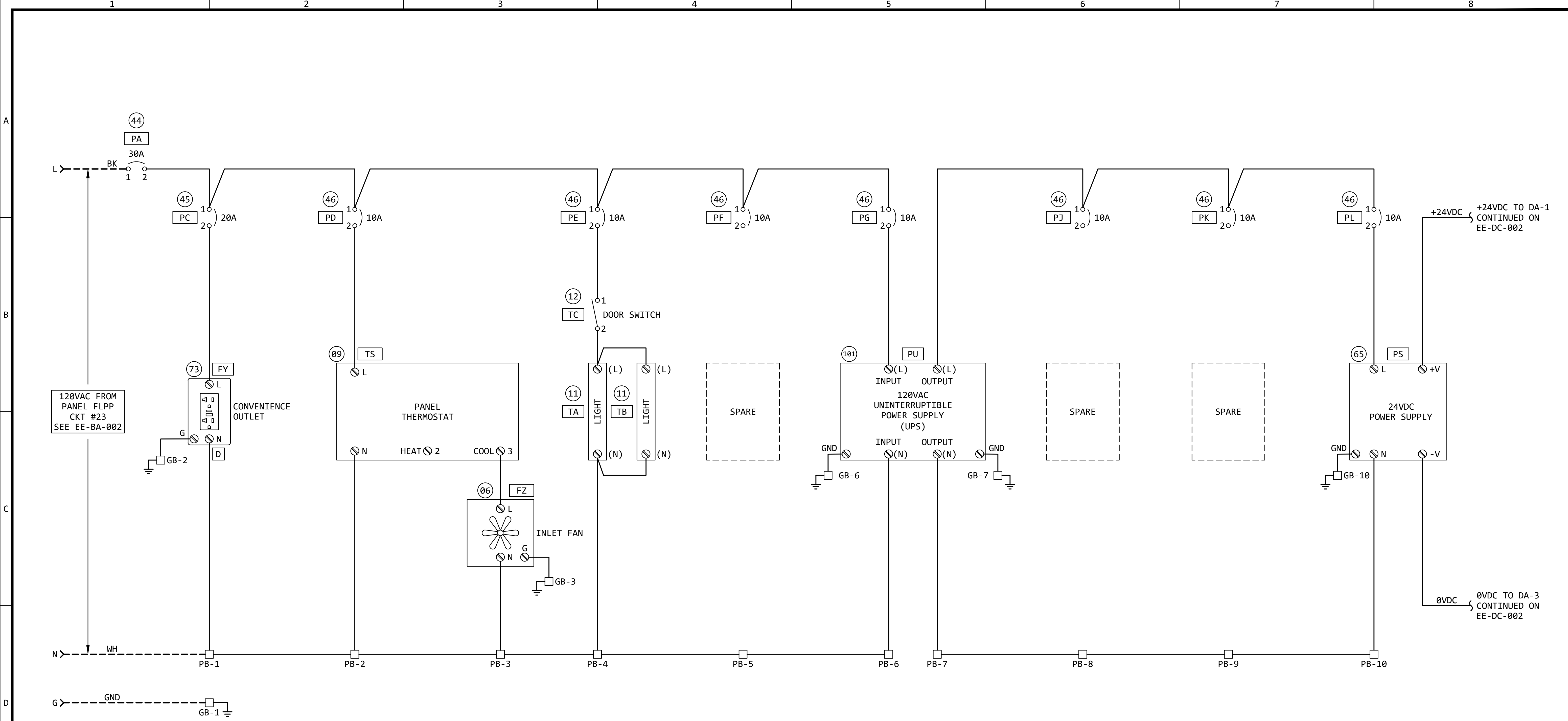
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REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	SCHEMATIC WIRING DIAGRAM - SHEET 2 FISH LIFT E-STOP CIRCUIT		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DB-002	1	





120VAC CONTROL POWER DISTRIBUTION - FISH LIFT CONTROL PANEL (FLCP)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

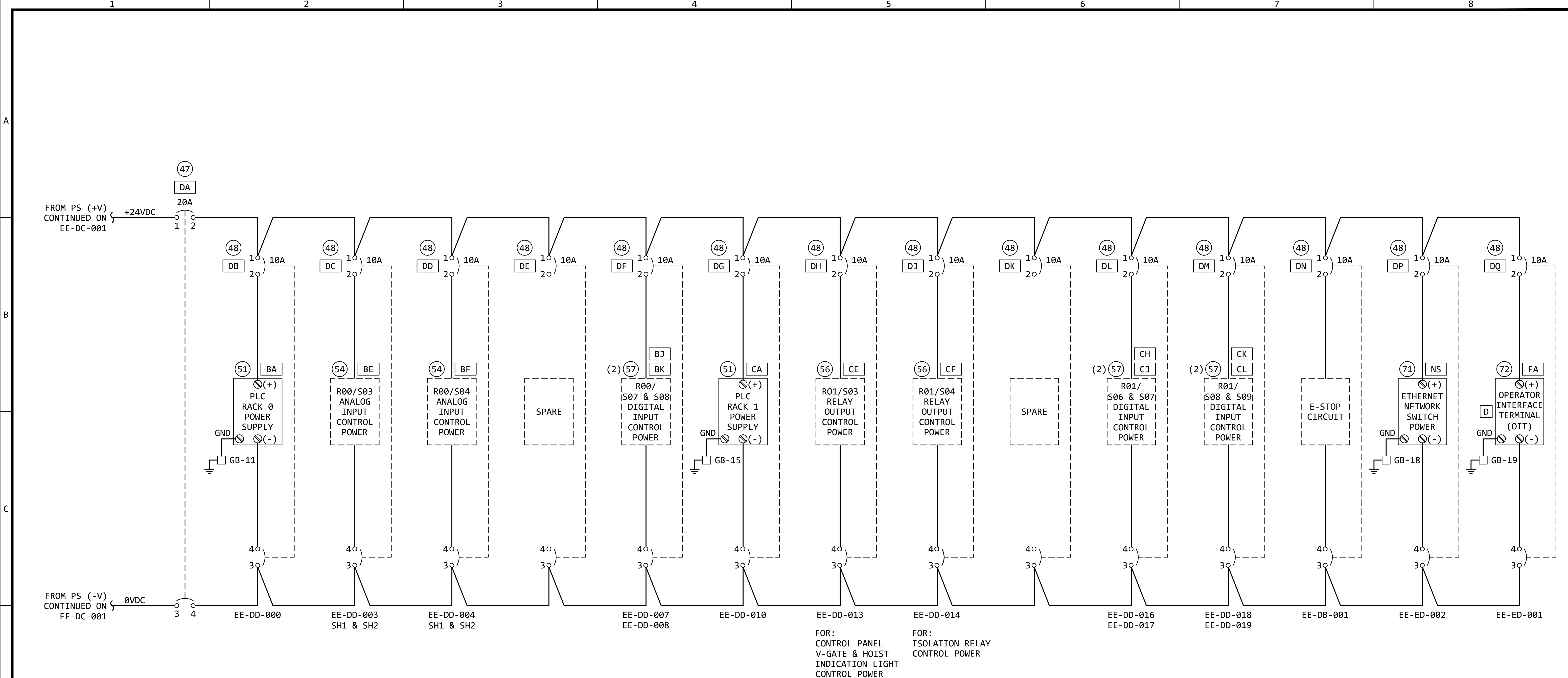
ISSUED
FOR BID
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SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	120VAC CONTROL POWER DISTRIBUTION FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DC-001	1	



24VDC POWER DISTRIBUTION - FISH LIFT CONTROL PANEL (FLCP)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

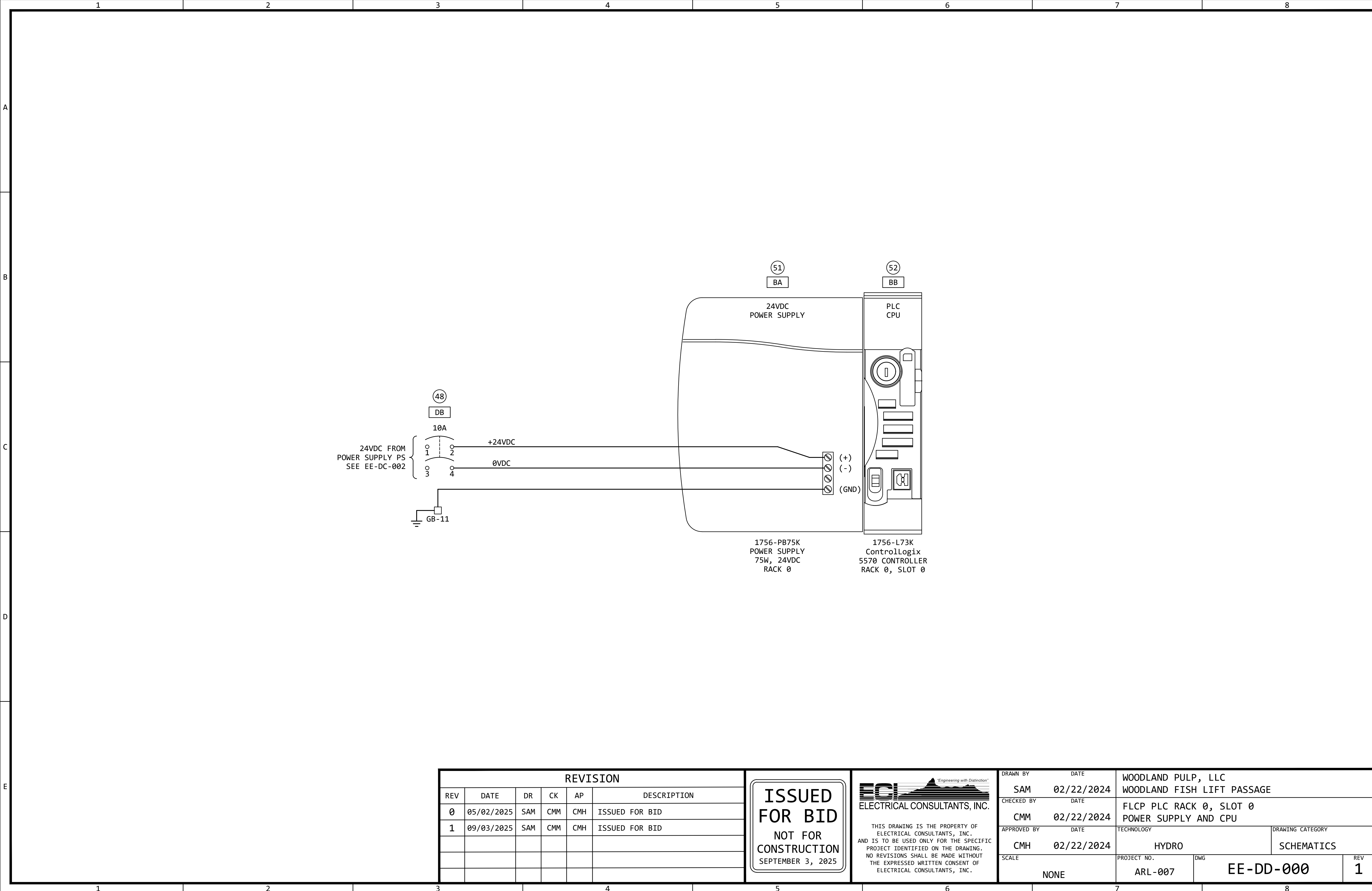
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	24VDC CONTROL POWER DISTRIBUTION FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DC-002	1	



REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID

NOT FOR
CONSTRUCTION

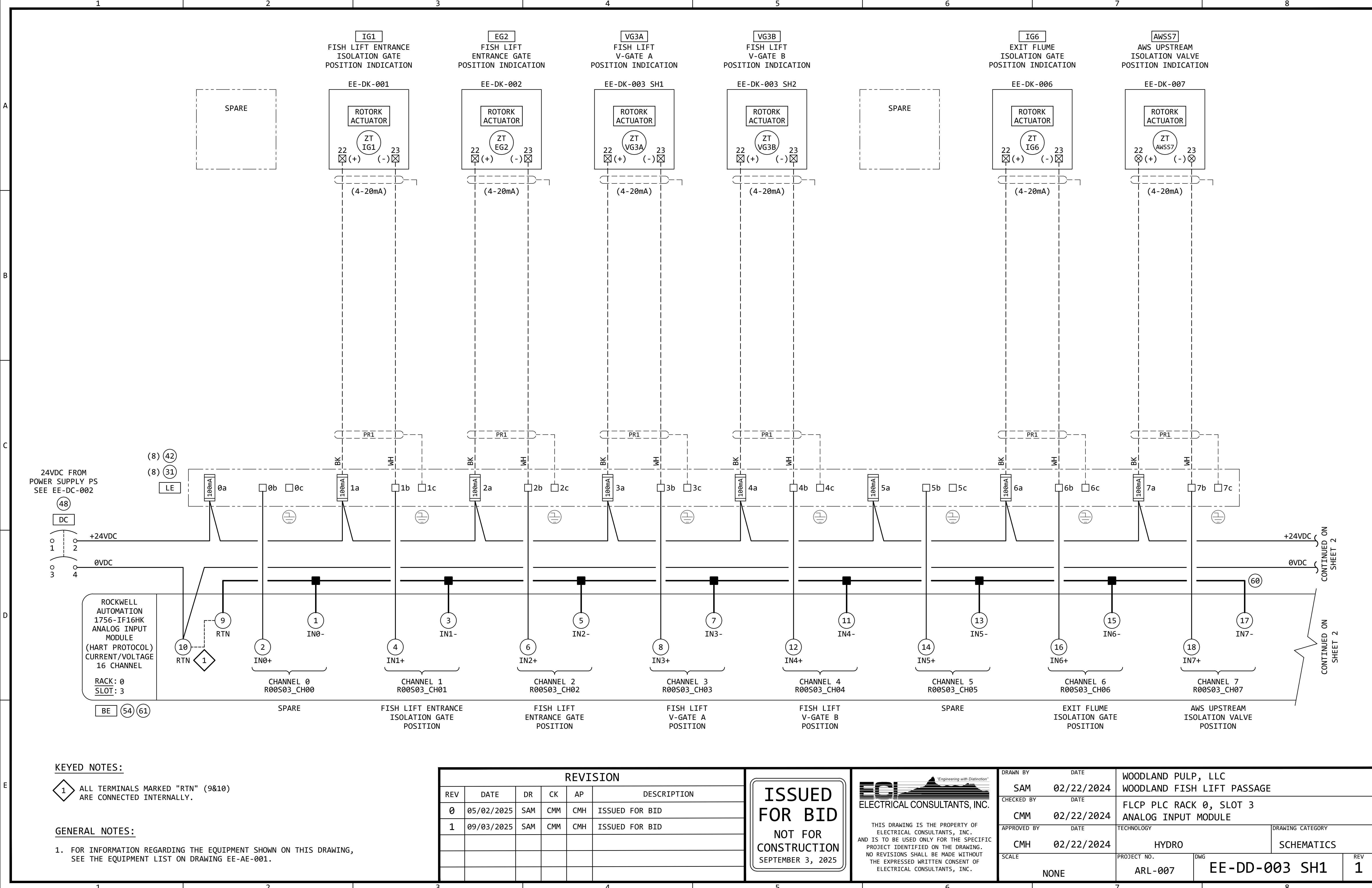
SEPTEMBER 3, 2025

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DRAWN BY		DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY		DATE	FLCP PLC RACK 0, SLOT 0 POWER SUPPLY AND CPU	
APPROVED BY		DATE	TECHNOLOGY	DRAWING CATEGORY
CMH		02/22/2024	HYDRO	SCHEMATICS
SCALE		PROJECT NO.	DWG	REV
NONE		ARL-007	EE-DD-000	1



KEYED NOTES:

1 ALL TERMINALS MARKED "RTN" (9&10) ARE CONNECTED INTERNALLY.

GENERAL NOTES:

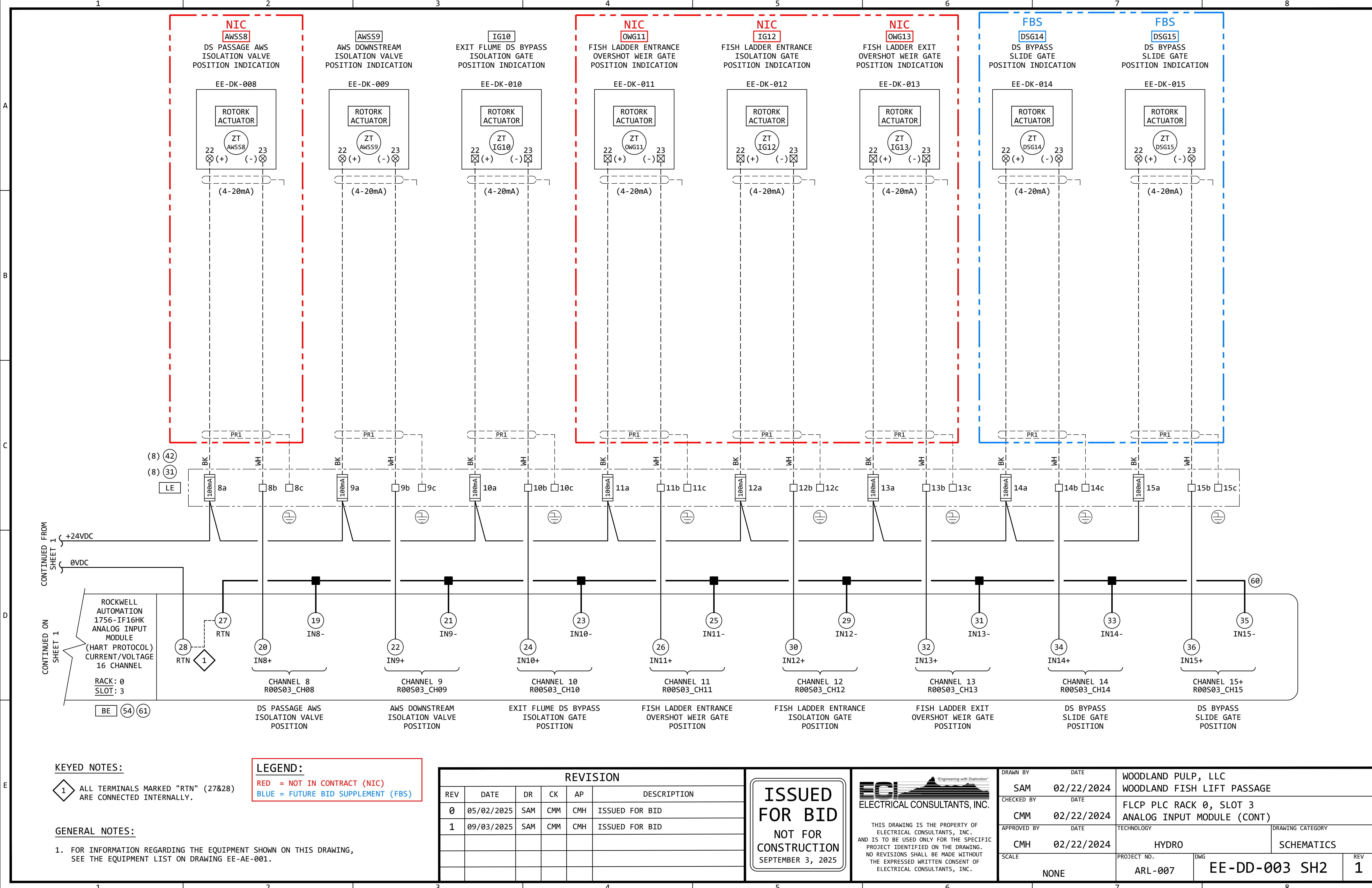
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 0, SLOT 3 ANALOG INPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-003 SH1	1	



KEYED NOTES:

1 ALL TERMINALS MARKED "RTN" (27&28) ARE CONNECTED INTERNALLY.

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

LEGEND:

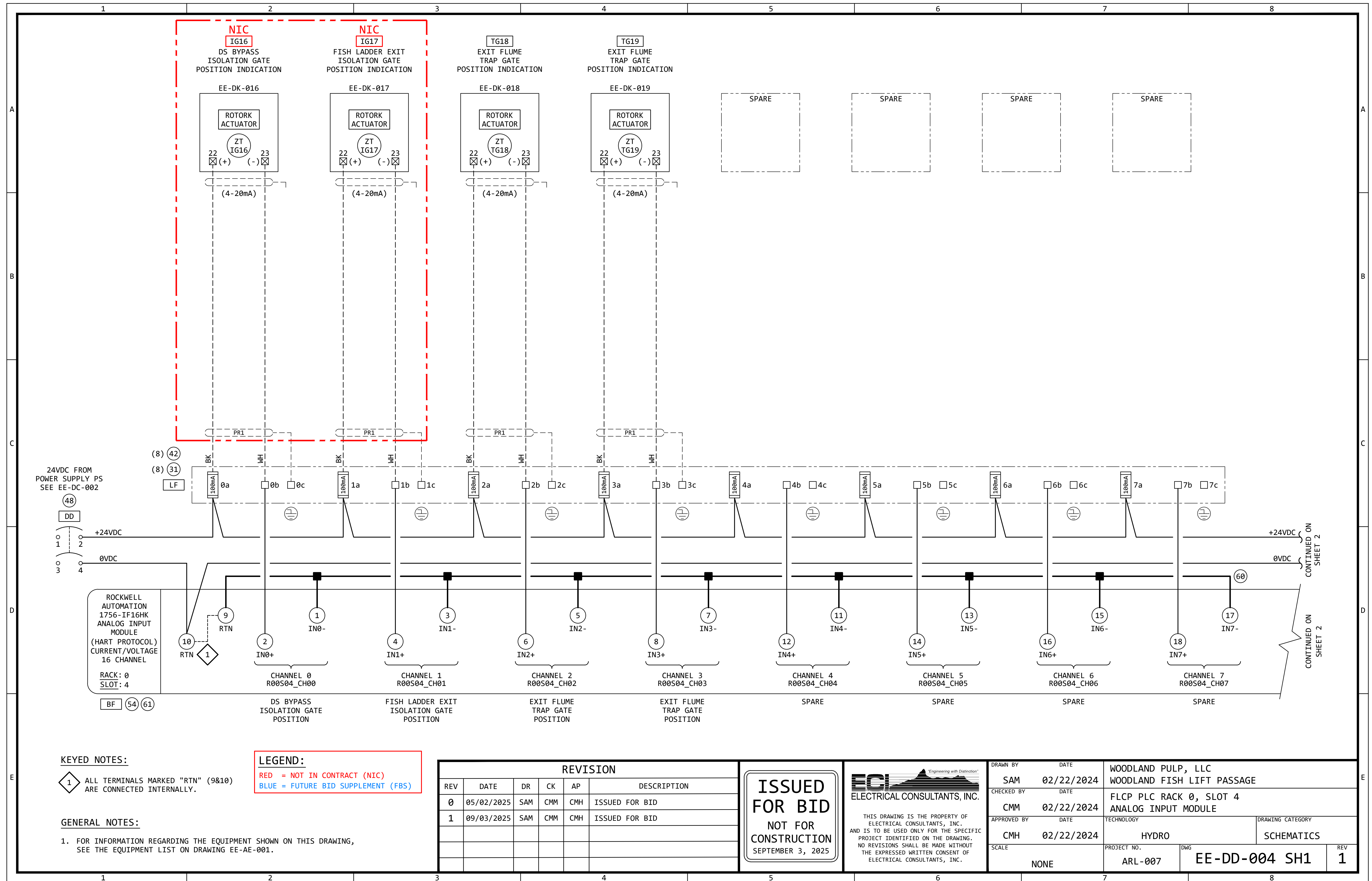
RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT (FBS)

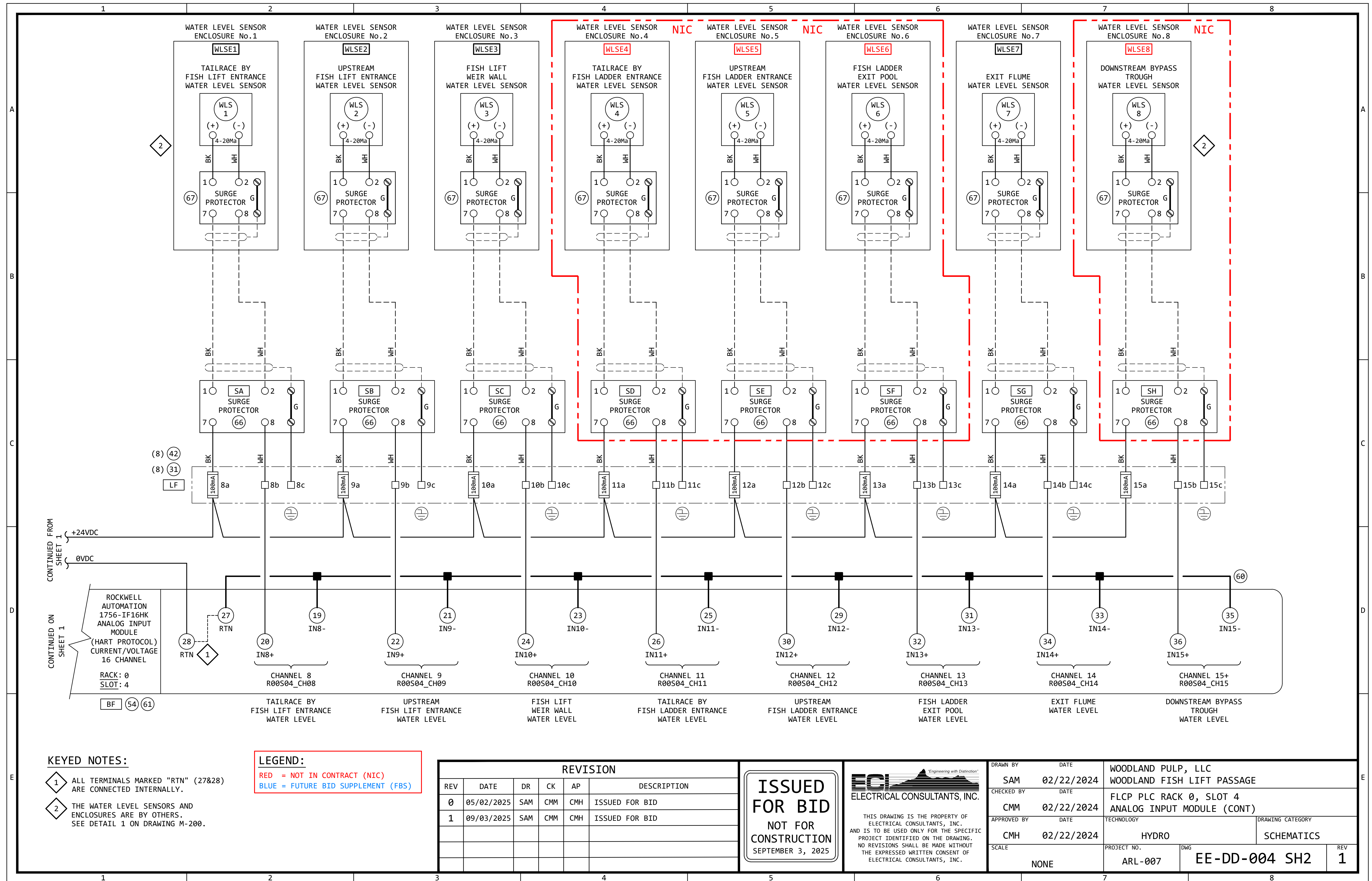
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

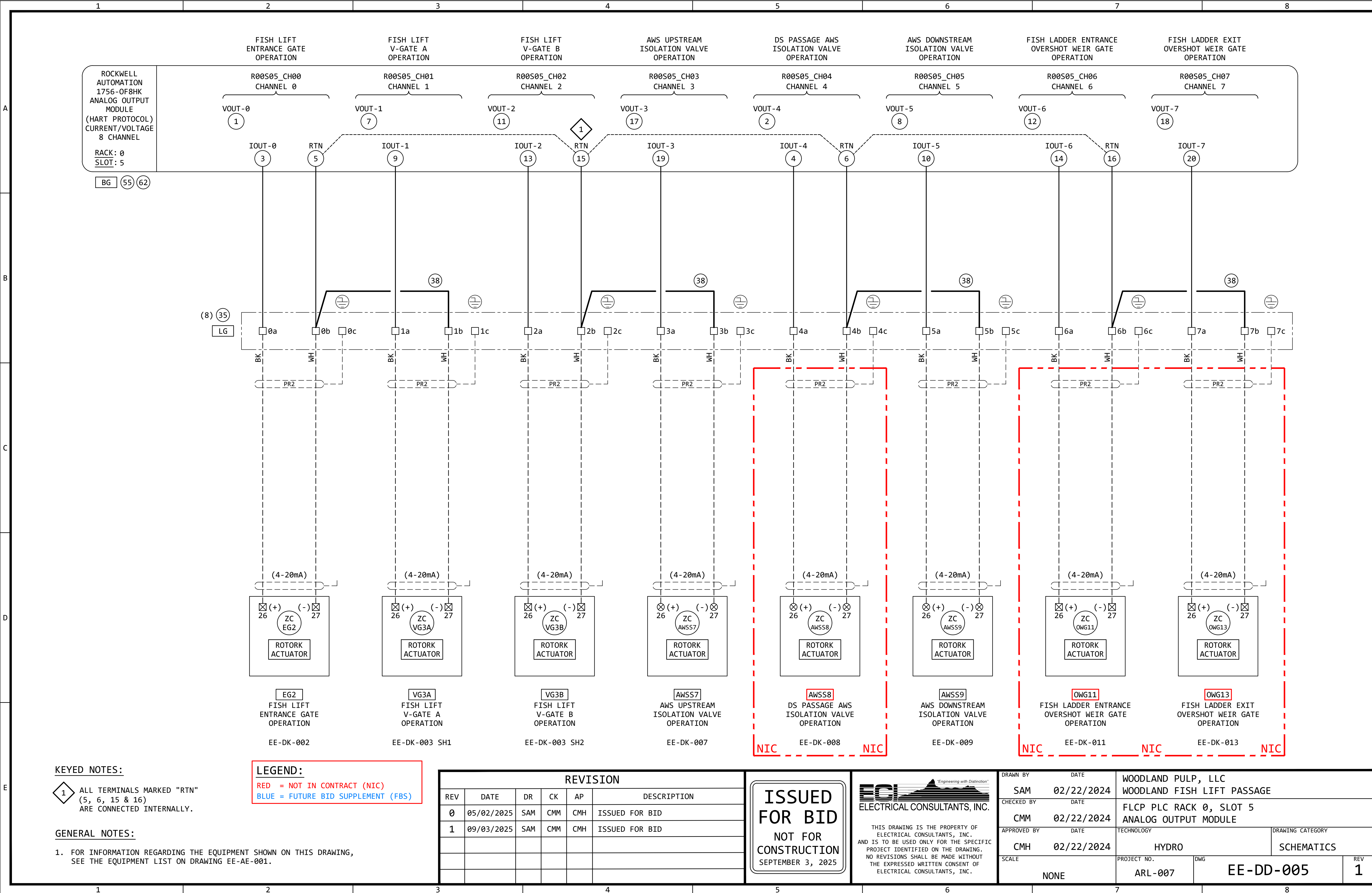
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SEPTEMBER 3, 2025

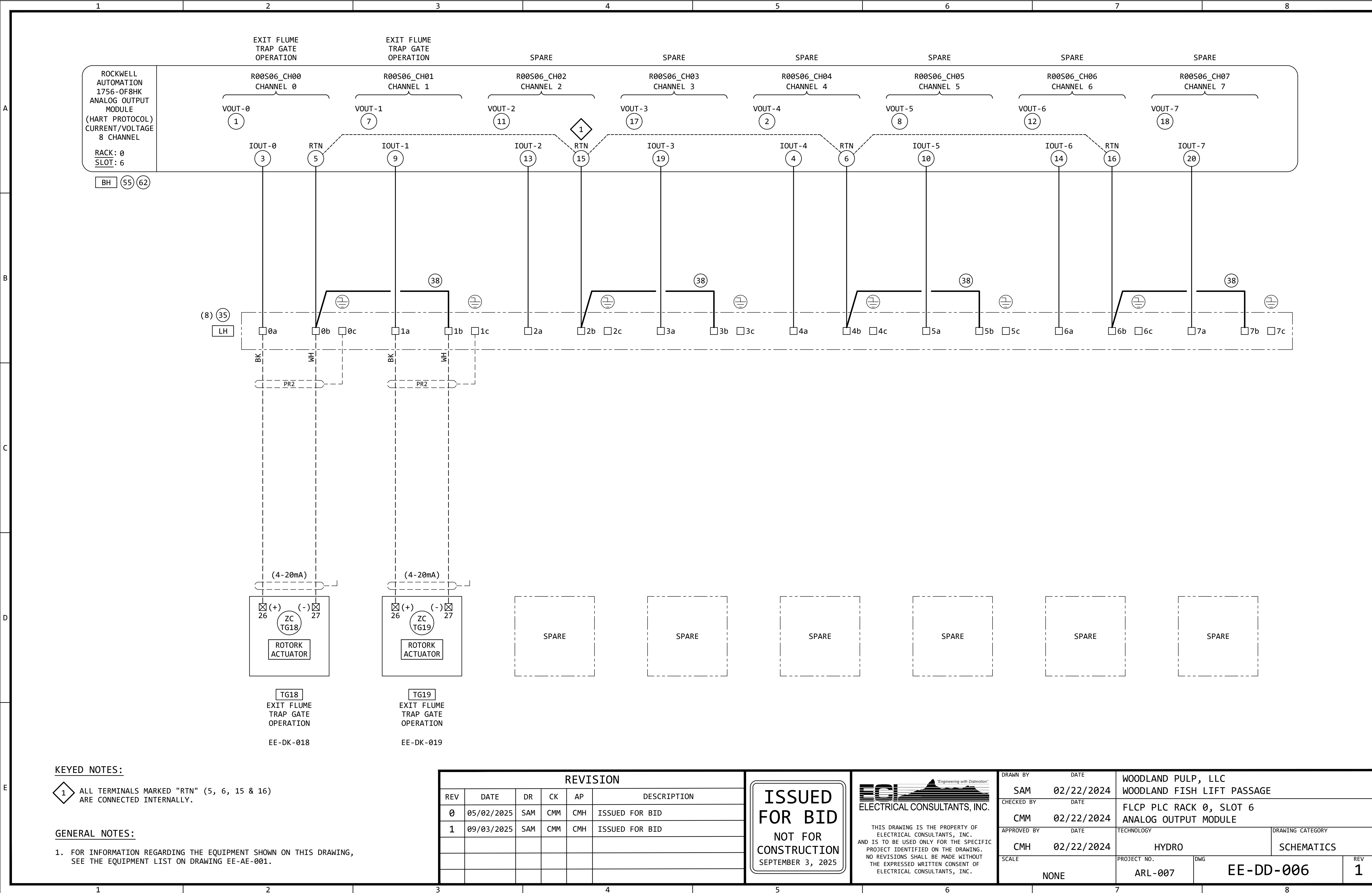
ECI
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	FLCP PLC RACK 0, SLOT 3 ANALOG INPUT MODULE (CONT)	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	02/22/2024	HYDRO	SCHEMATICS
SCALE	NONE	PROJECT NO.	REV
		ARL-007	EE-DD-003 SH2 1









KEYED NOTES:

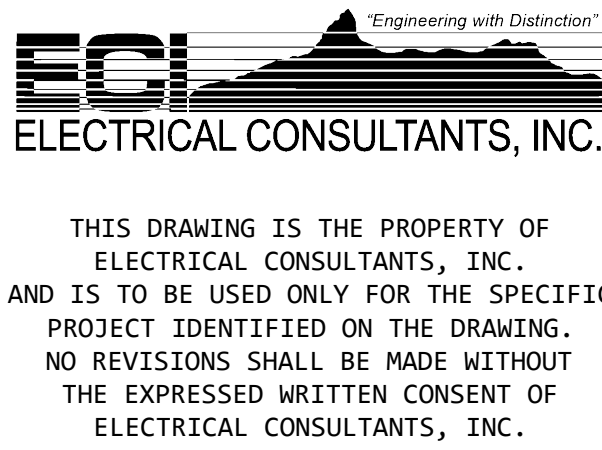
- 1 ALL TERMINALS MARKED "RTN" (5, 6, 15 & 16) ARE CONNECTED INTERNALLY.

GENERAL NOTES:

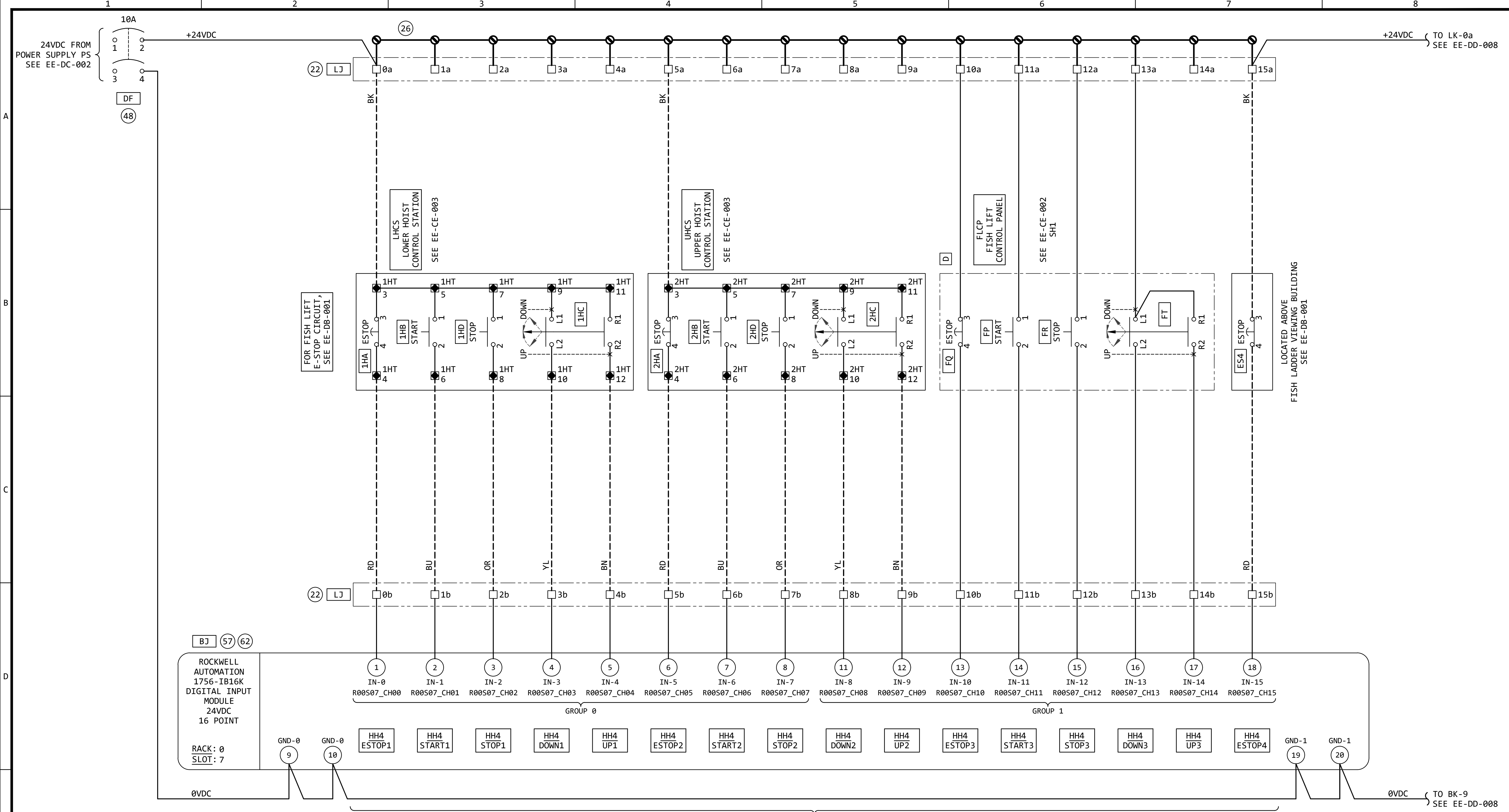
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025



DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 0, SLOT 6 ANALOG OUTPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-006	1	

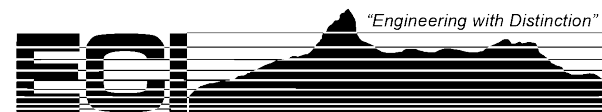


GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

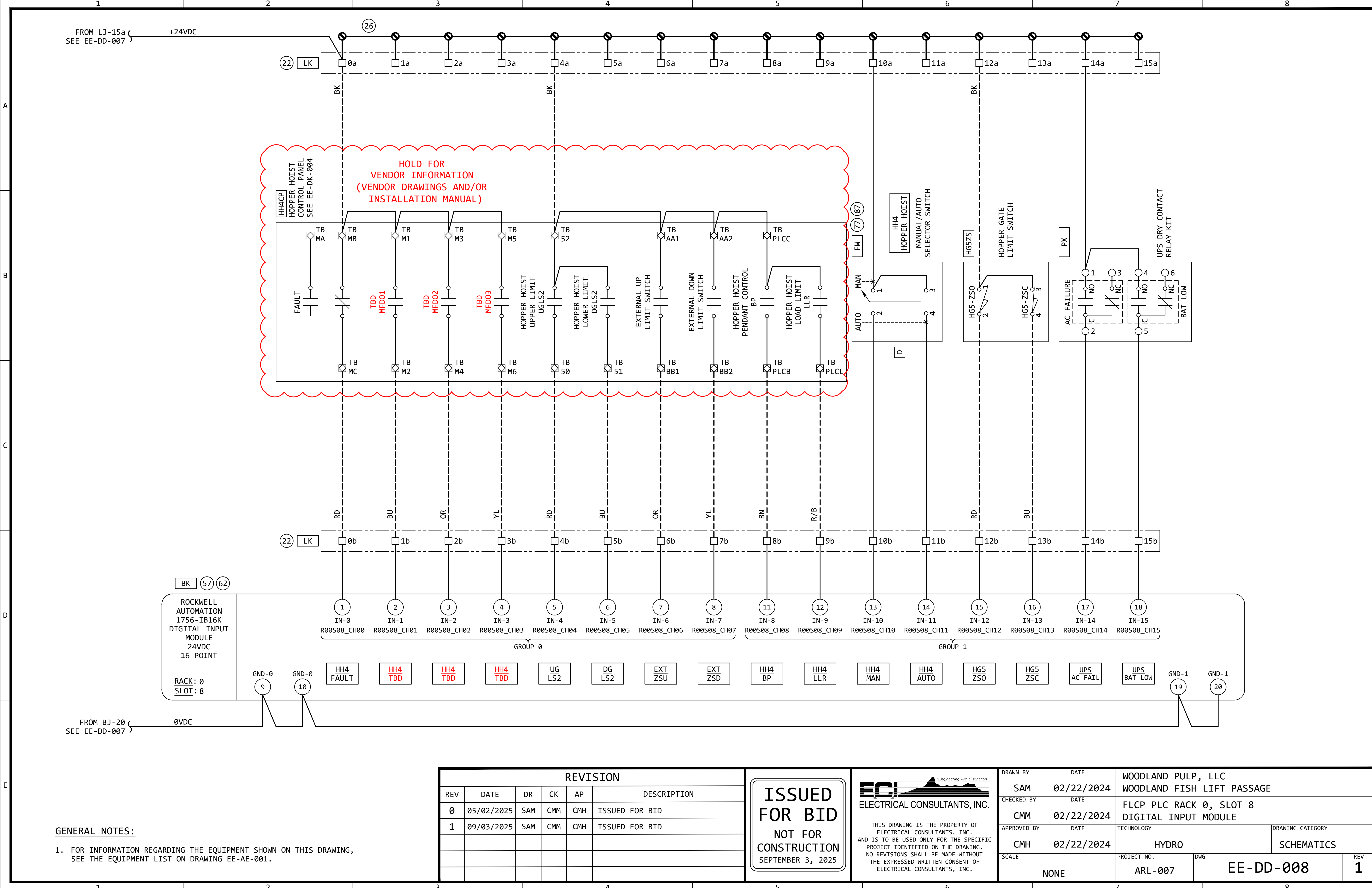
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SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 0, SLOT 7 DIGITAL INPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-007	1	



REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID

NOT FOR
CONSTRUCTION

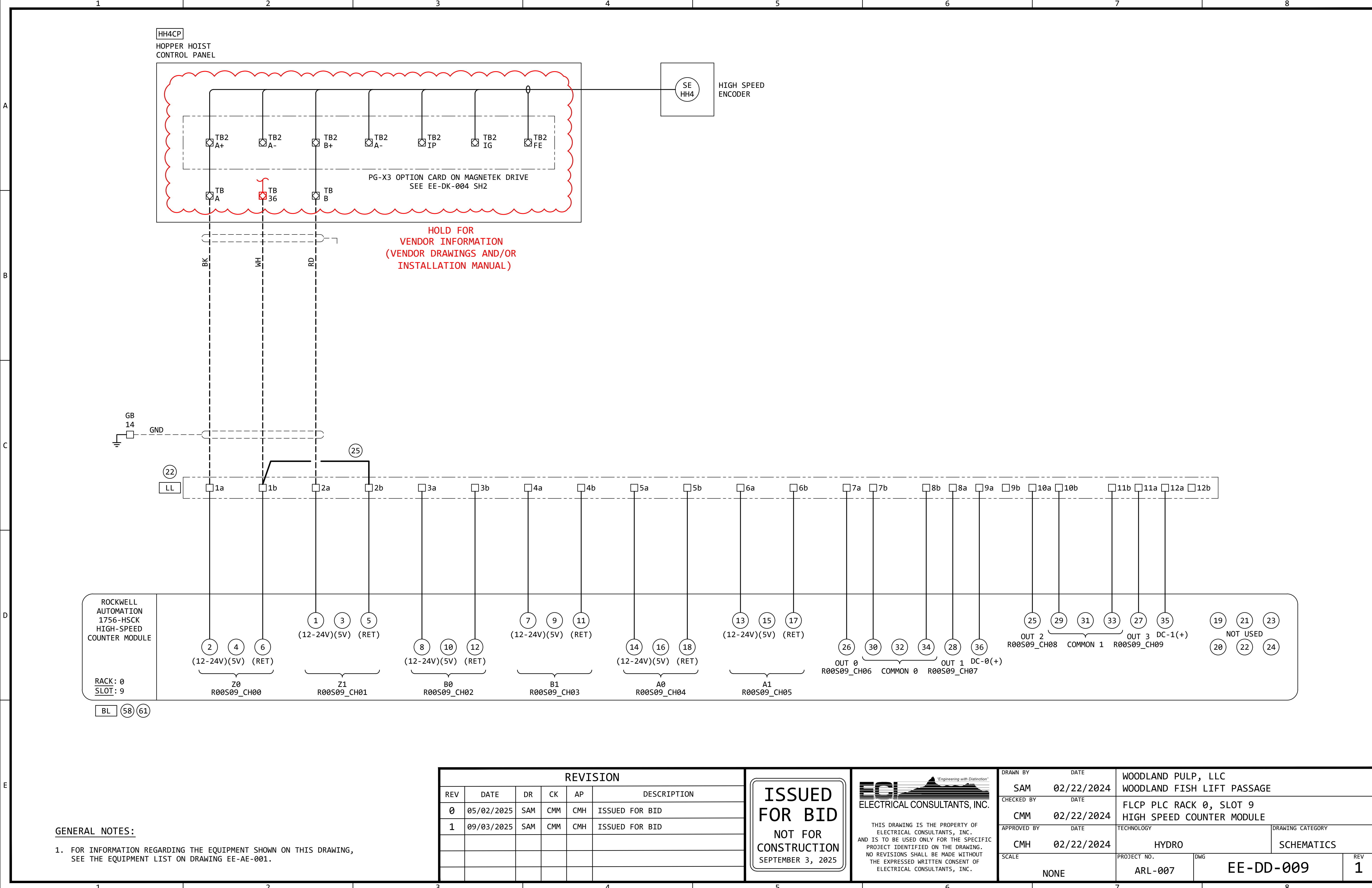
SEPTEMBER 3, 2025



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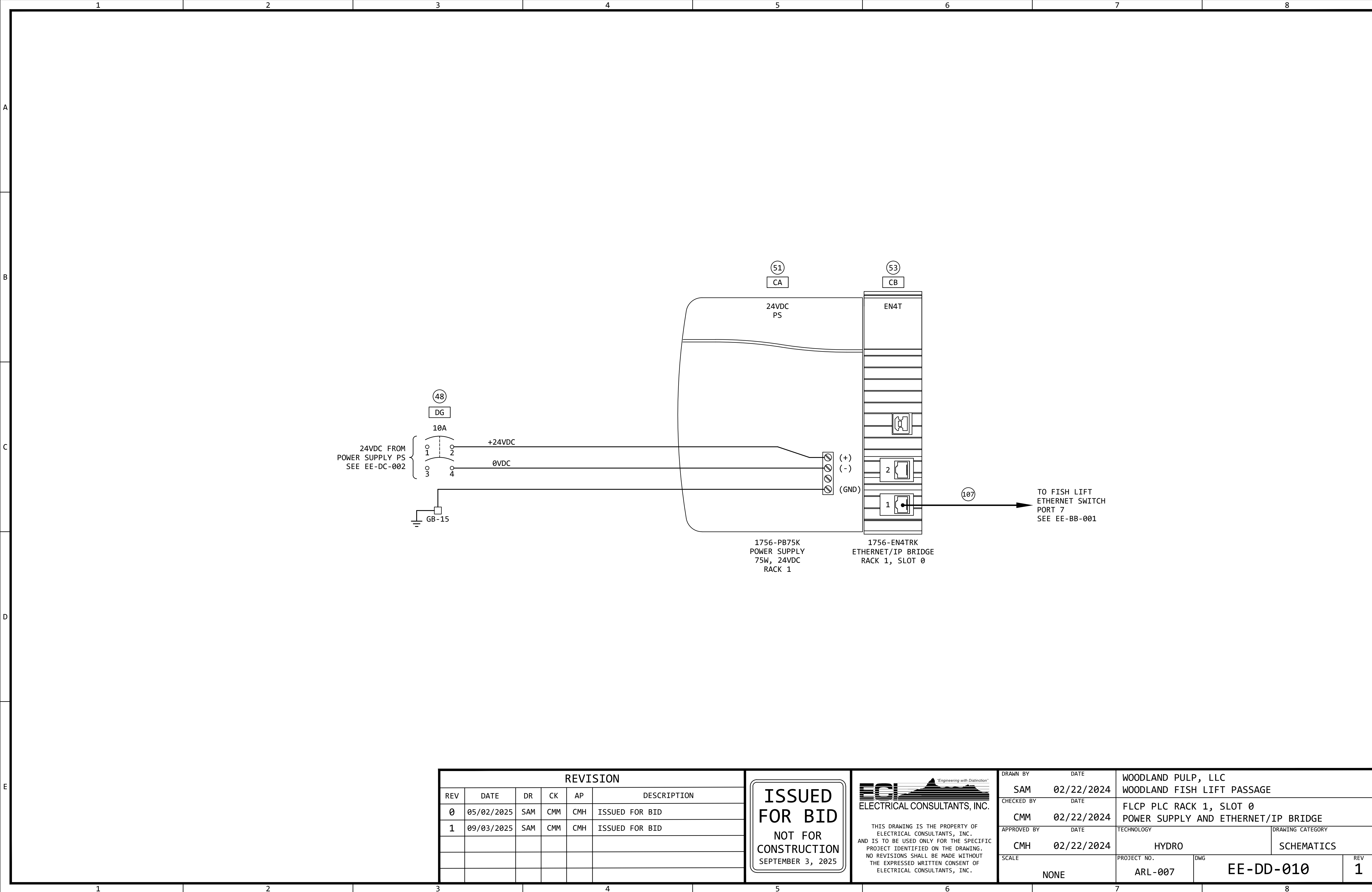
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	FLCP PLC RACK 0, SLOT 8 DIGITAL INPUT MODULE	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	02/22/2024	HYDRO	SCHEMATICS
SCALE	PROJECT NO.	DWG	REV
NONE	ARL-007	EE-DD-008	1



GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.



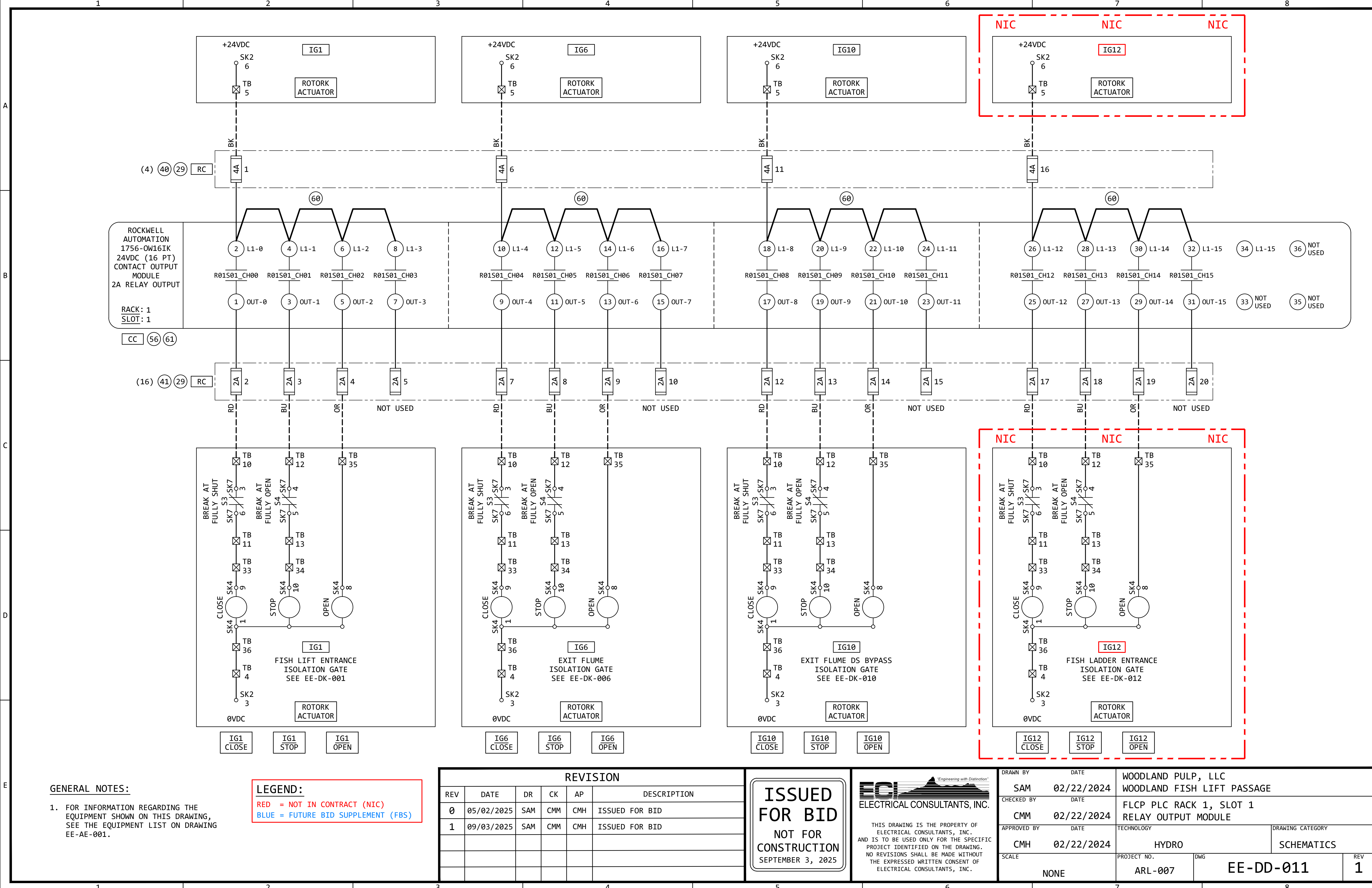
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REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

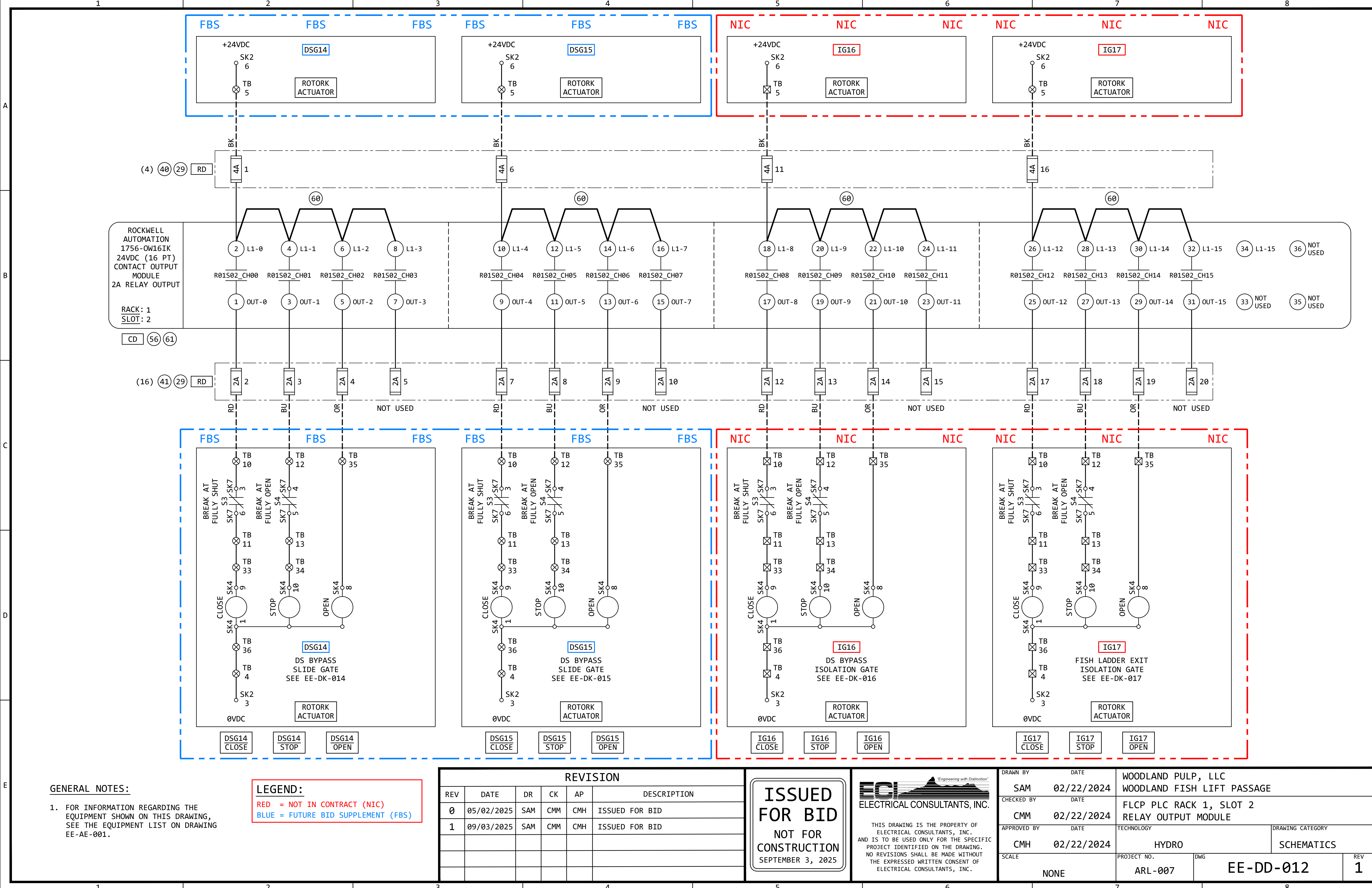
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 1, SLOT 0 POWER SUPPLY AND ETHERNET/IP BRIDGE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-010	1	





GENERAL NOTES:

- 1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

LEGEND:

- RED = NOT IN CONTRACT (NIC)
- BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID

NOT FOR
CONSTRUCTION

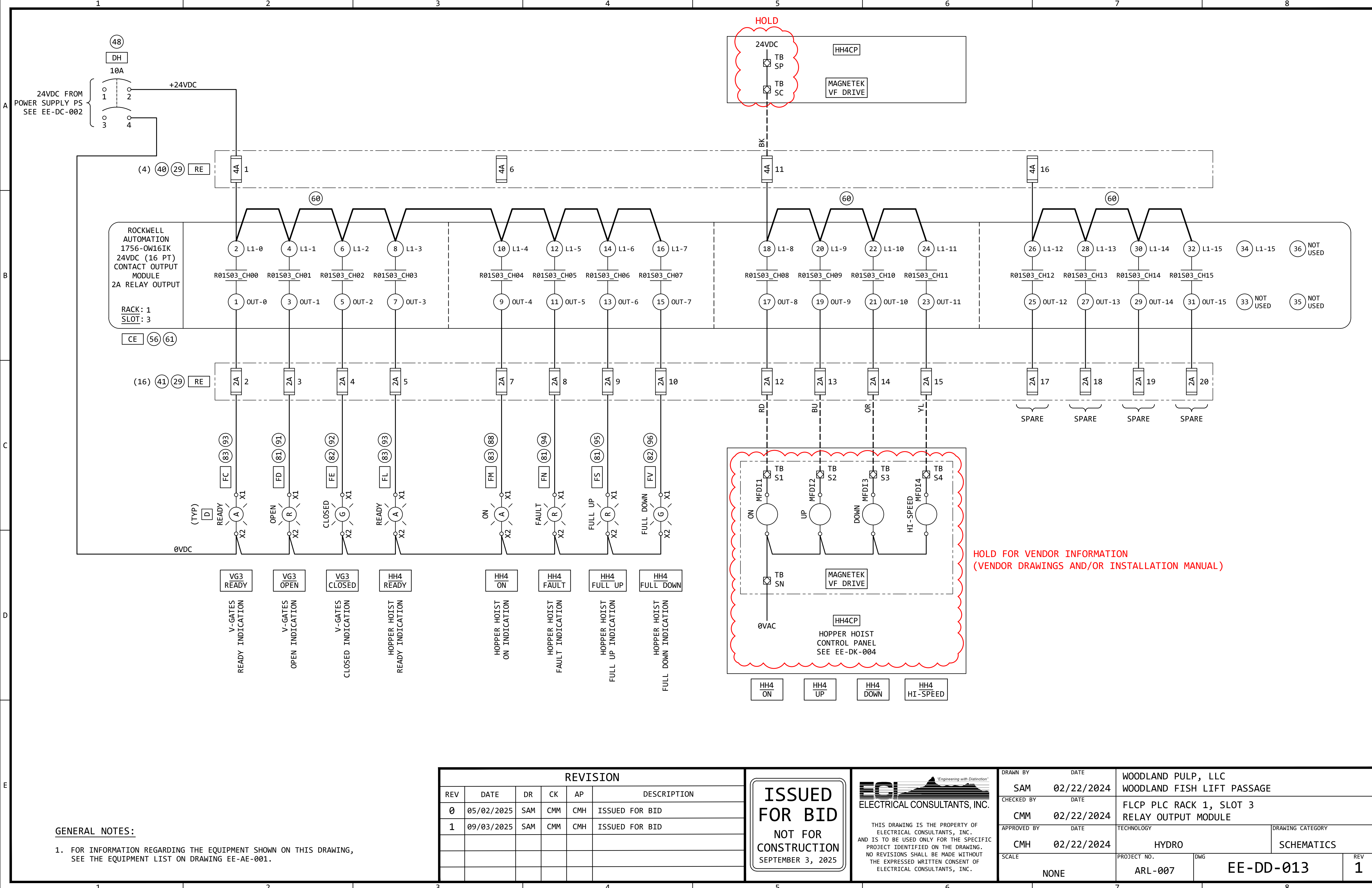
SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 1, SLOT 2 RELAY OUTPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-012	1	



GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

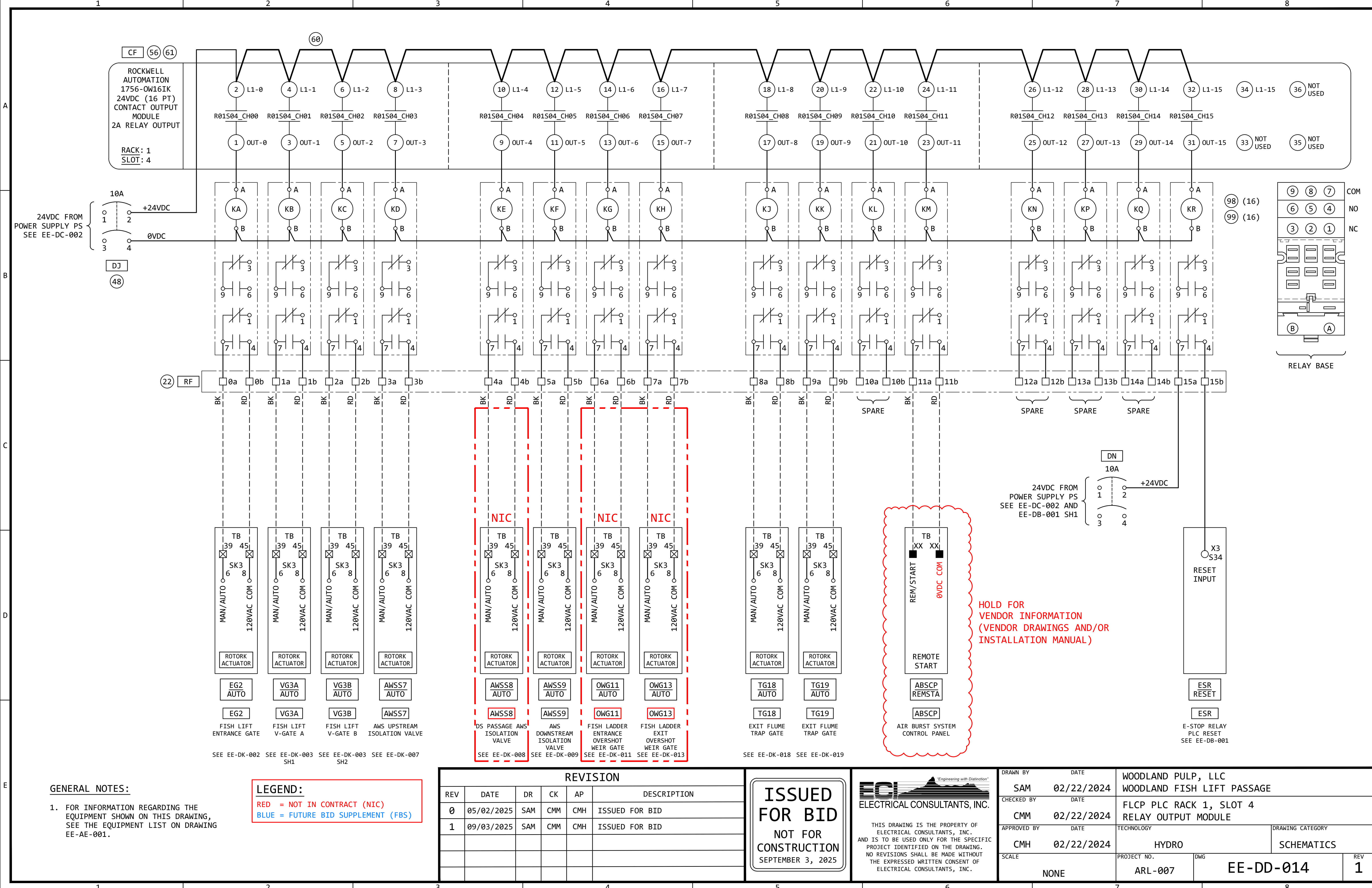
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 1, SLOT 3 RELAY OUTPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-013	1	



GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

LEGEND:

- RED = NOT IN CONTRACT (NIC)
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REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

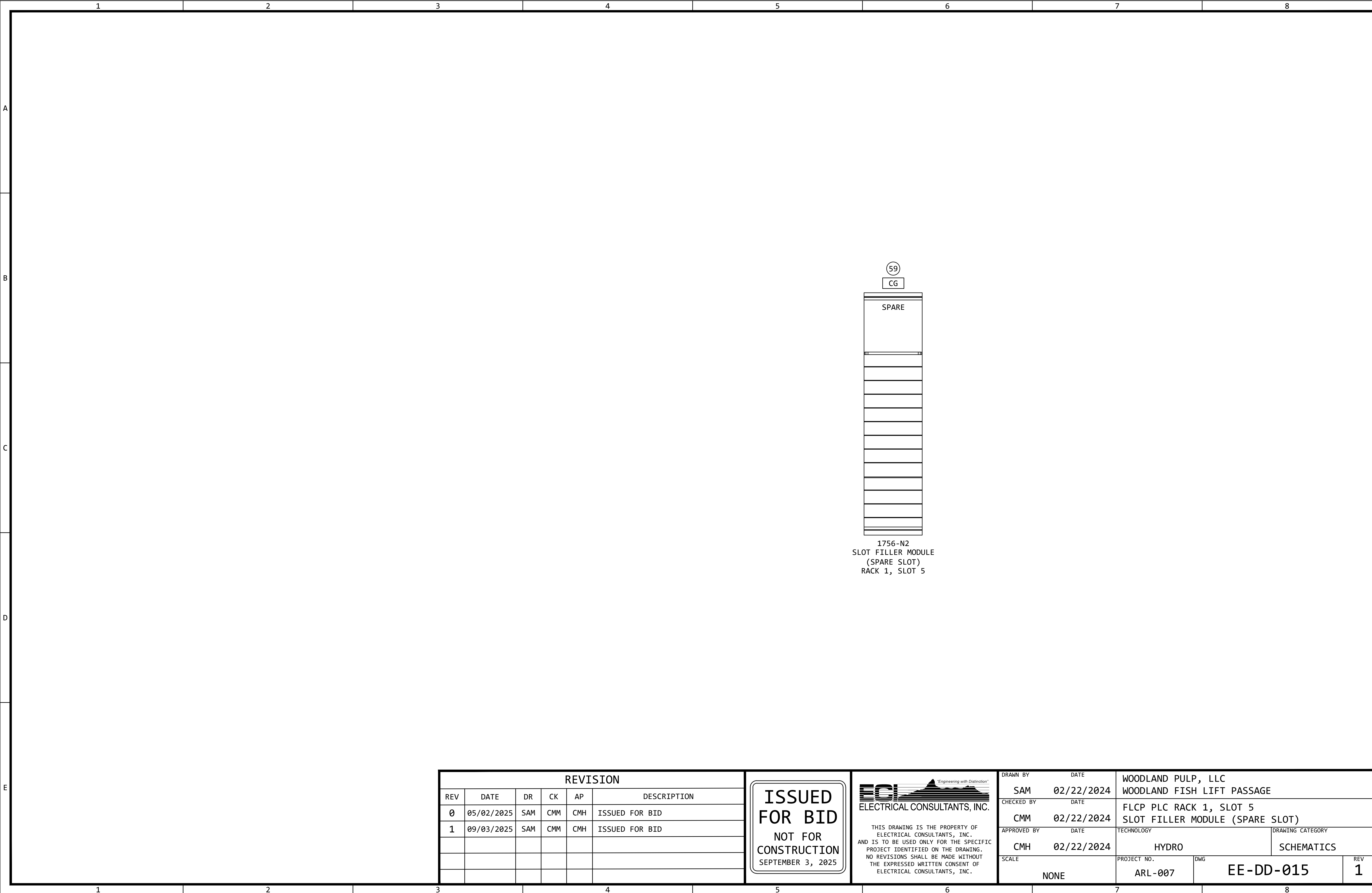
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SEPTEMBER 3, 2025

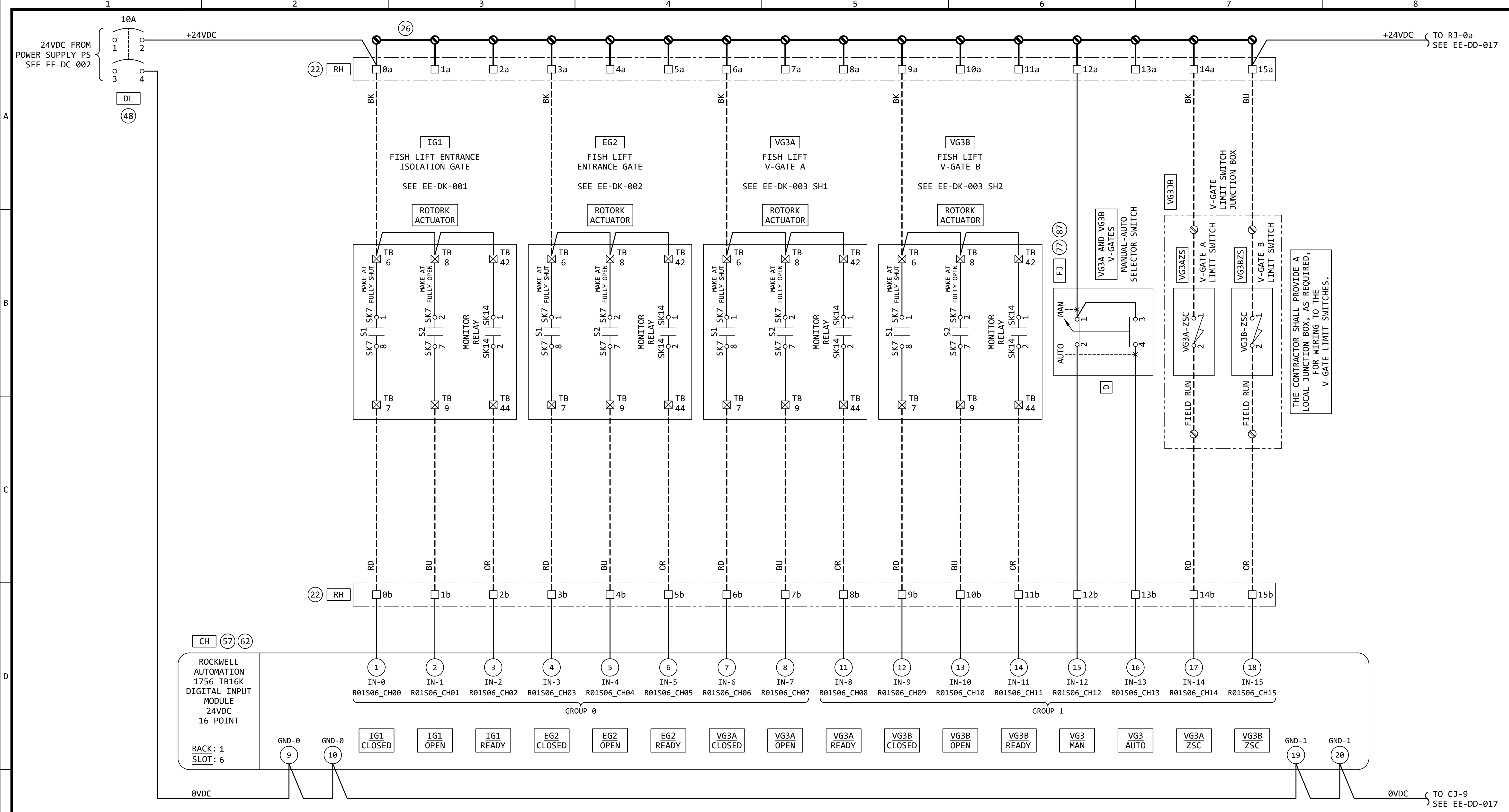


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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
SAM	02/22/2024			
CHECKED BY	DATE	FLCP PLC RACK 1, SLOT 4 RELAY OUTPUT MODULE		
CMM	02/22/2024			
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE		PROJECT NO.	DWG	REV
NONE		ARL-007	EE-DD-014	1



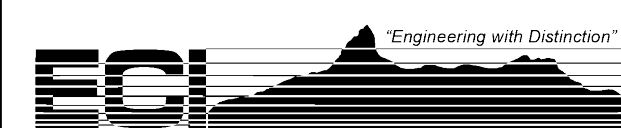


GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

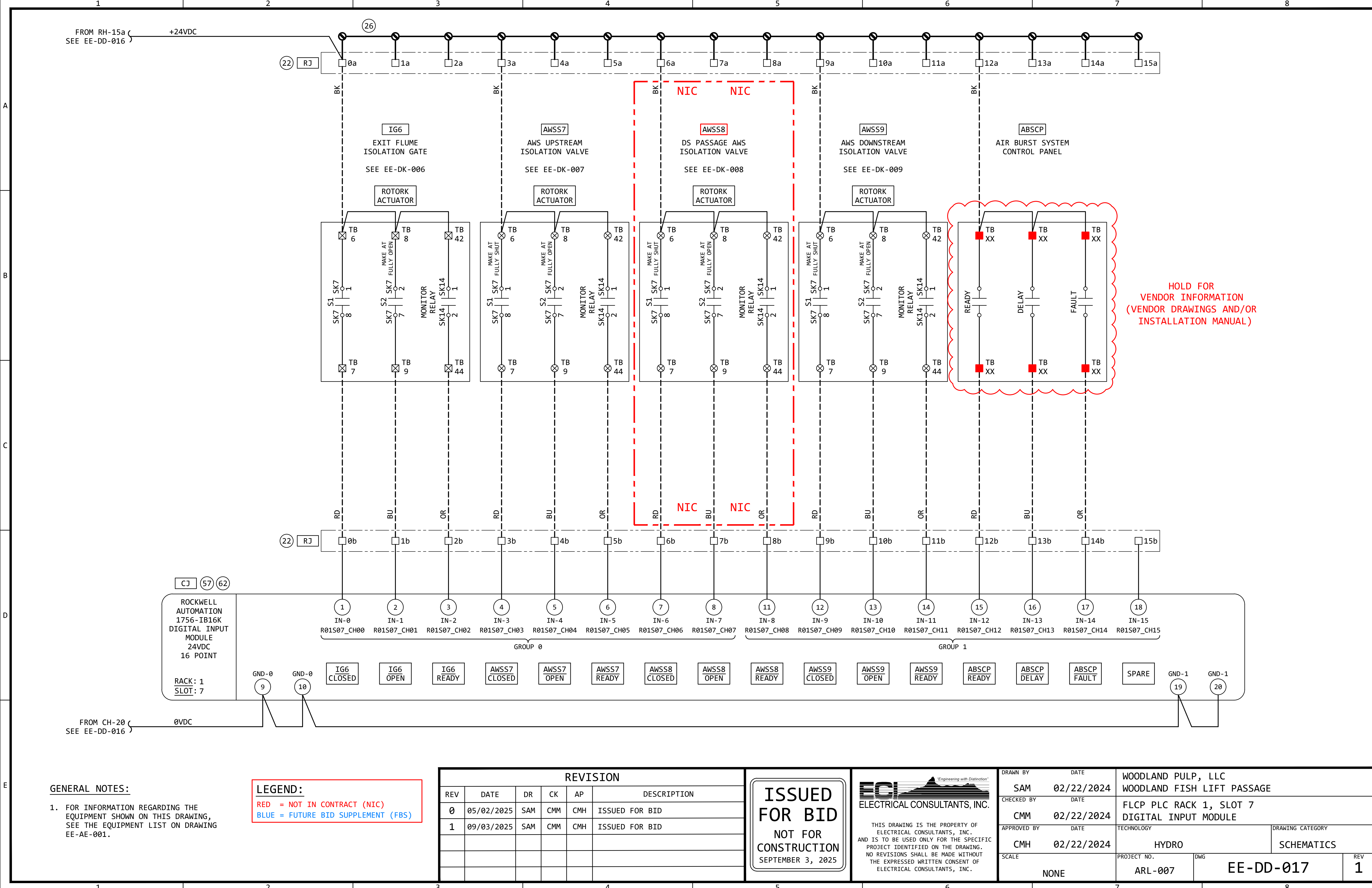
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 1, SLOT 6 DIGITAL INPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-016	1	



GENERAL NOTES:

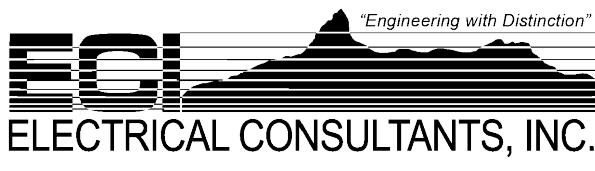
1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

LEGEND:

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BLUE = FUTURE BID SUPPLEMENT (FBS)

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

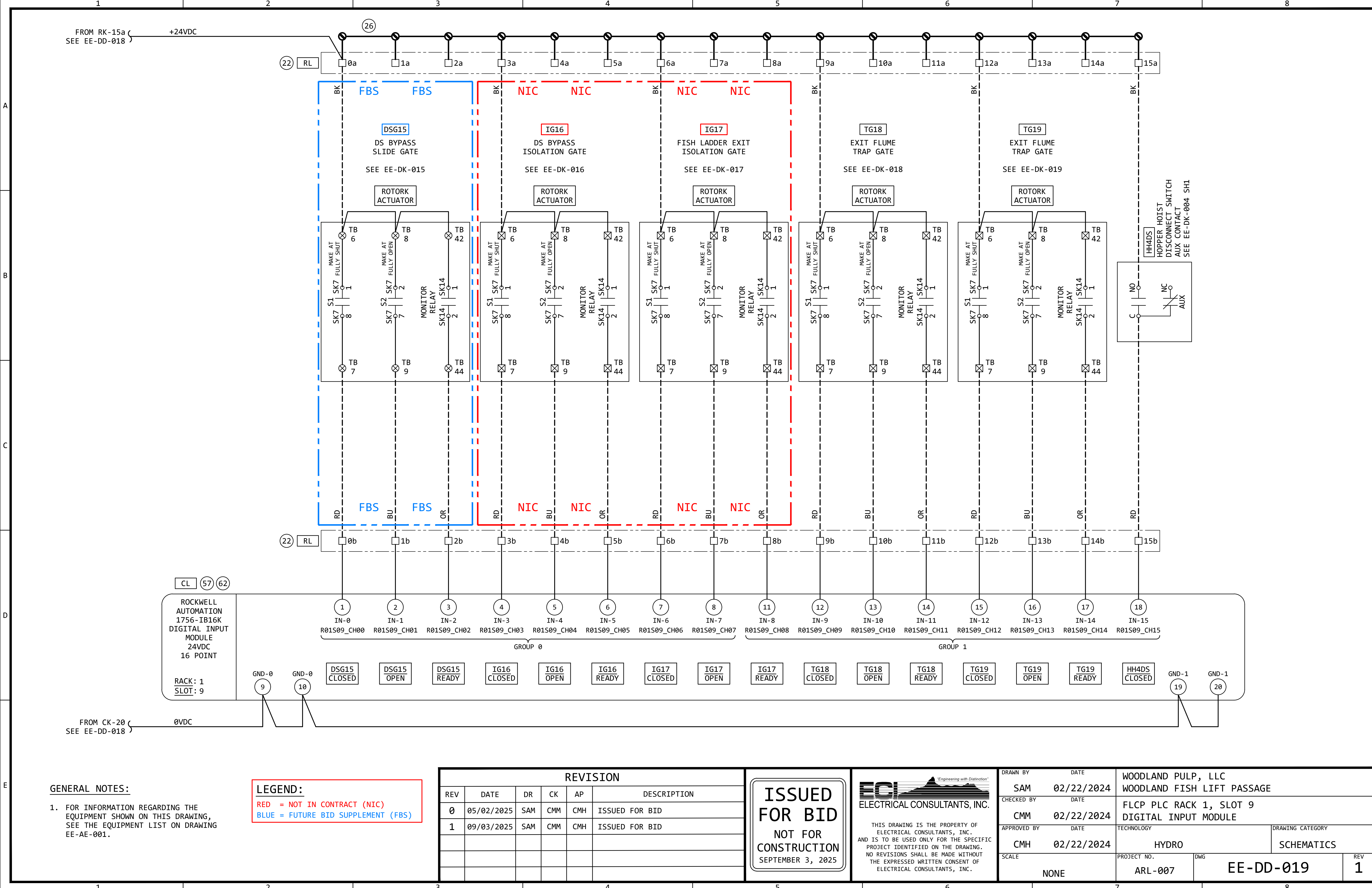
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SEPTEMBER 3, 2025



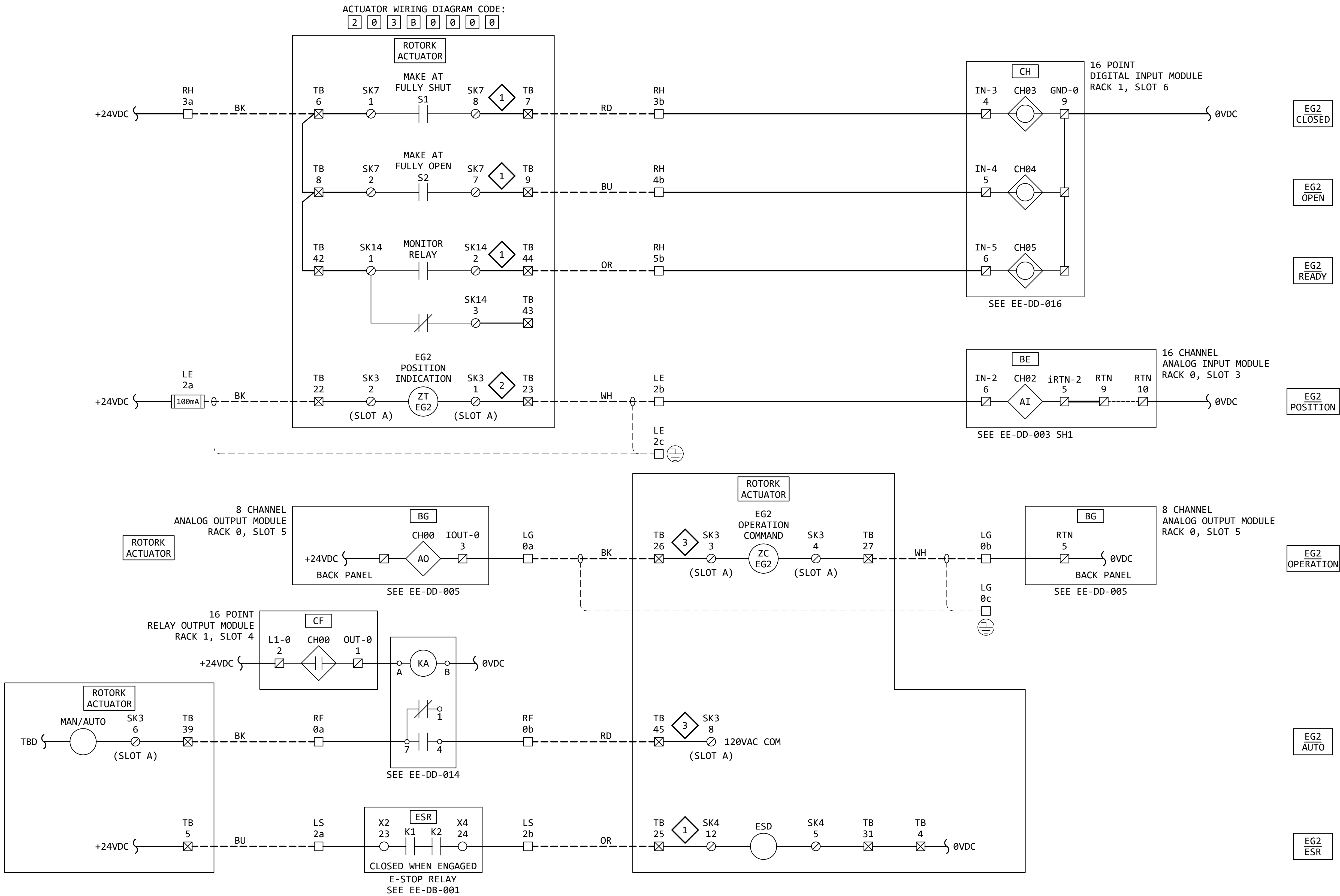
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	FLCP PLC RACK 1, SLOT 7 DIGITAL INPUT MODULE		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DD-017	1	



EG2
FISH LIFT
ENTRANCE GATE



KEYED NOTES:

- ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)
- ACTUATOR WIRING - OPTIONAL:
REQUIRES "ANALOGUE POSITION CONTROL
FOLOMATIC" OPTION.
(PUB002-041-00, PAGE 13)

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING,
SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

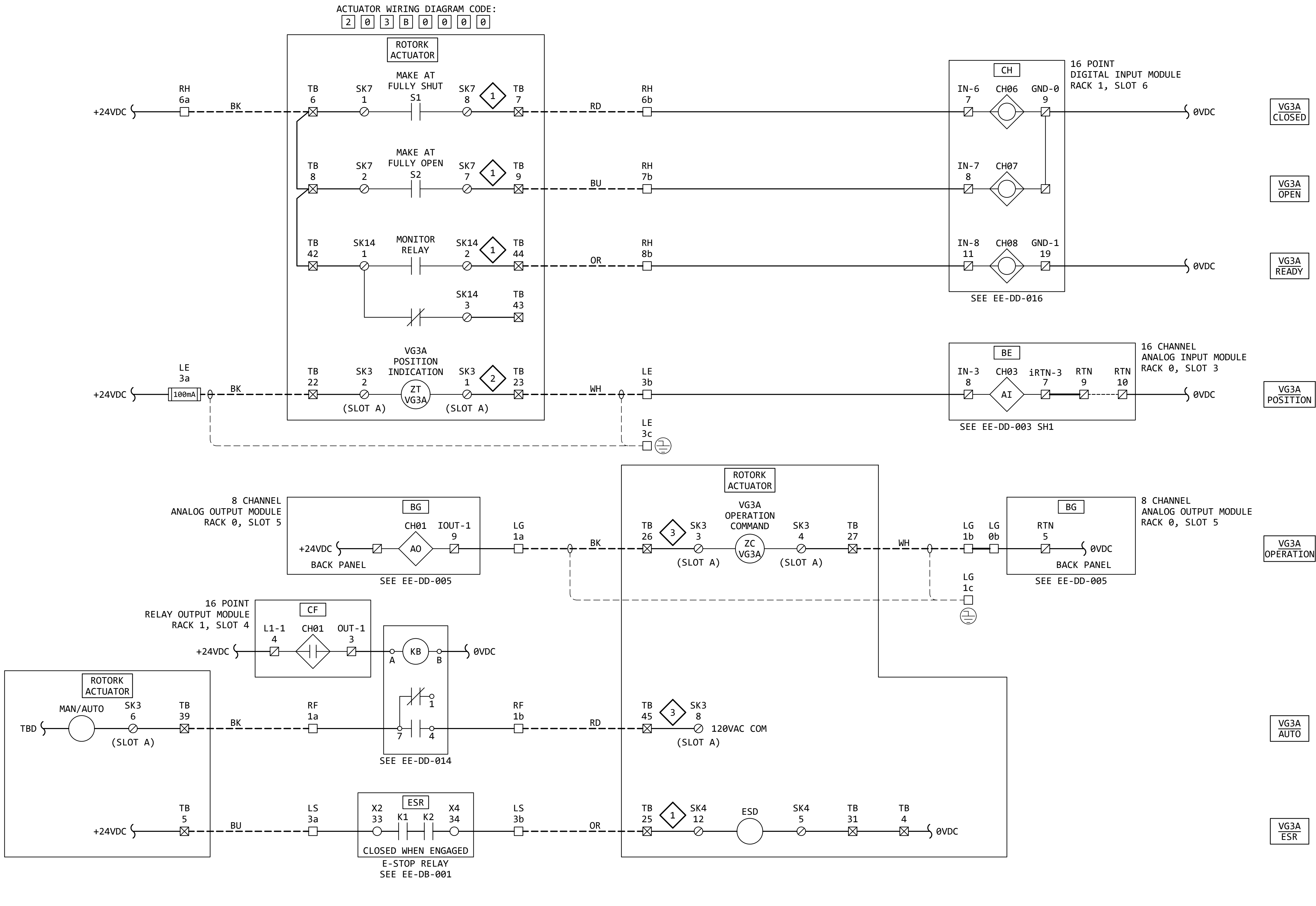
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM FISH LIFT ENTRANCE GATE (EG2)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	NONE	PROJECT NO.	DWG	REV
		ARL-007	EE-DK-002	1

VG3A
FISH LIFT
V-GATE A



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)
- 3 ACTUATOR WIRING - OPTIONAL:
REQUIRES "ANALOGUE POSITION CONTROL
FOLOMATIC" OPTION.
(PUB002-041-00, PAGE 13)

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING,
SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

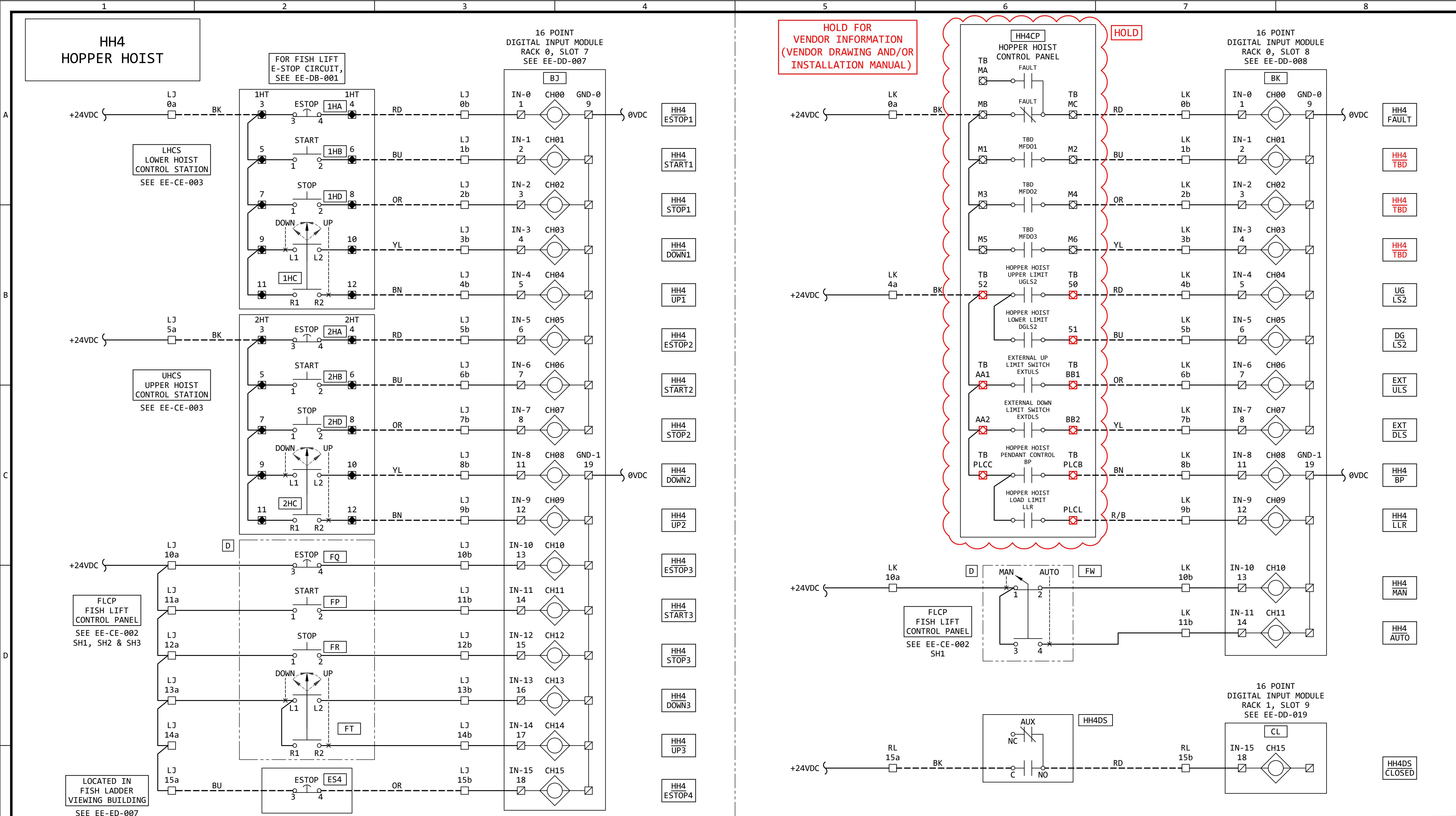
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SEPTEMBER 3, 2025

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ELECTRICAL CONSULTANTS, INC.

DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM FISH LIFT V-GATE A (VG3A)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-003 SH1	1	

DRAWN BY SAM		DATE 02/22/2024		WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY CMM		DATE 02/22/2024		ELEMENTARY WIRING DIAGRAM V-GATE B (VG3B)	
APPROVED BY CMH		DATE 02/22/2024		TECHNOLOGY HYDRO	
				DRAWING CATEGORY SCHEMATICS	
SCALE NONE		PROJECT NO. ARL-007		DWG EE-DK-003 SH2	
				REV 1	

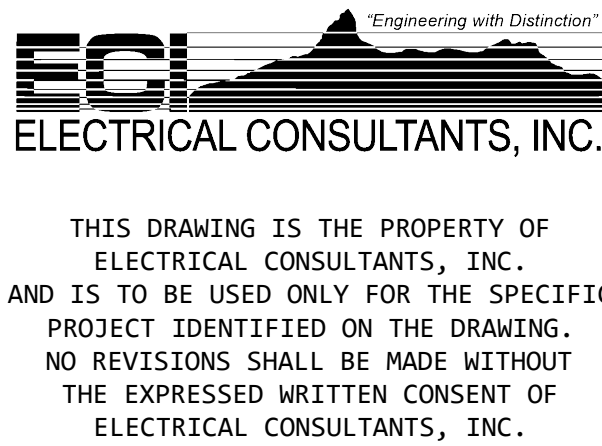


GENERAL NOTES:

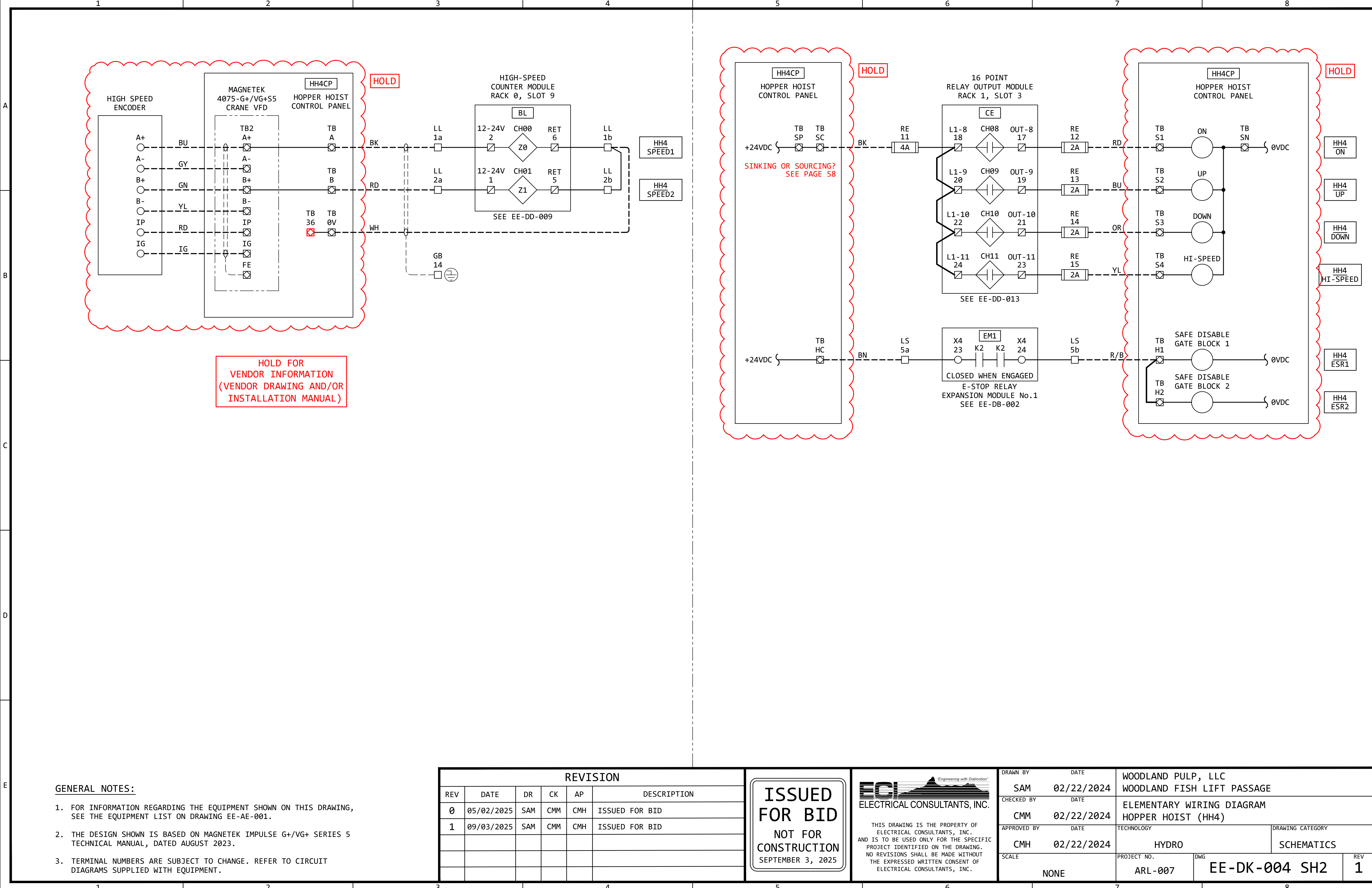
- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON MAGNETEK IMPULSE G+/VG+ SERIES 5 TECHNICAL MANUAL, DATED AUGUST 2023.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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CONSTRUCTION
SEPTEMBER 3, 2025



DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
SAM	02/22/2024	ELEMENTARY WIRING DIAGRAM HOPPER HOIST (HH4)		
CHECKED BY	DATE	E		
CMM	02/22/2024	E		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	SCHEMATICS	
SCALE	NONE	PROJECT NO.	DWG	REV
		ARL-007	EE-DK-004 SH1	1



GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON MAGNETEK IMPULSE G+/VG+ SERIES 5 TECHNICAL MANUAL, DATED AUGUST 2023.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

SEPTEMBER 3, 2025

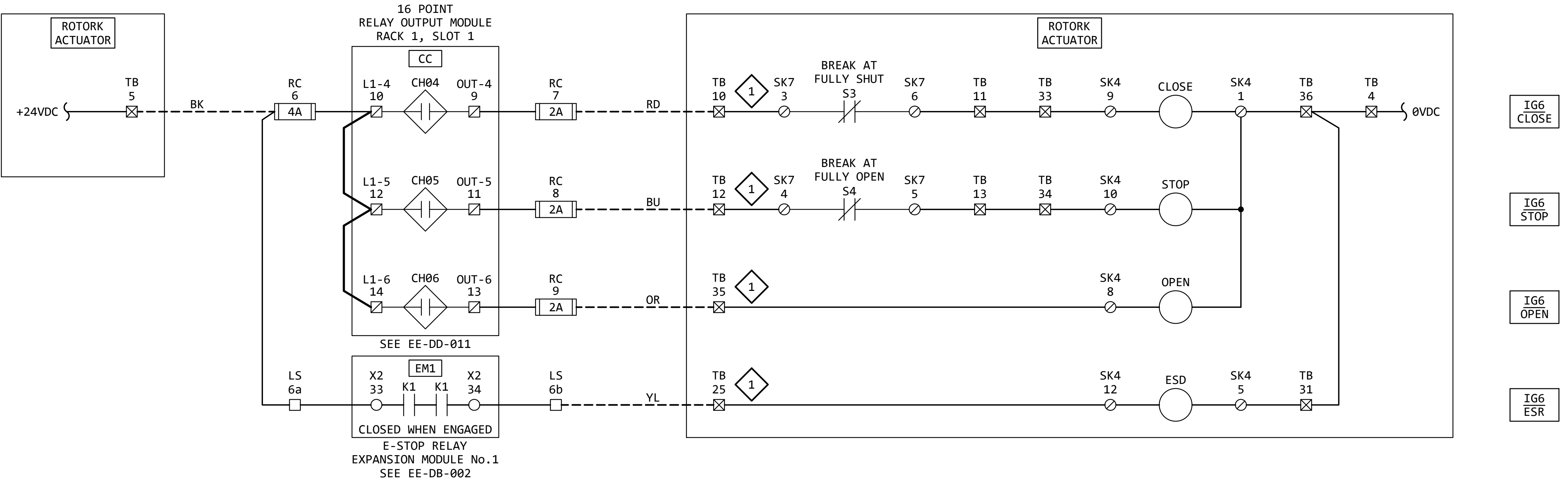
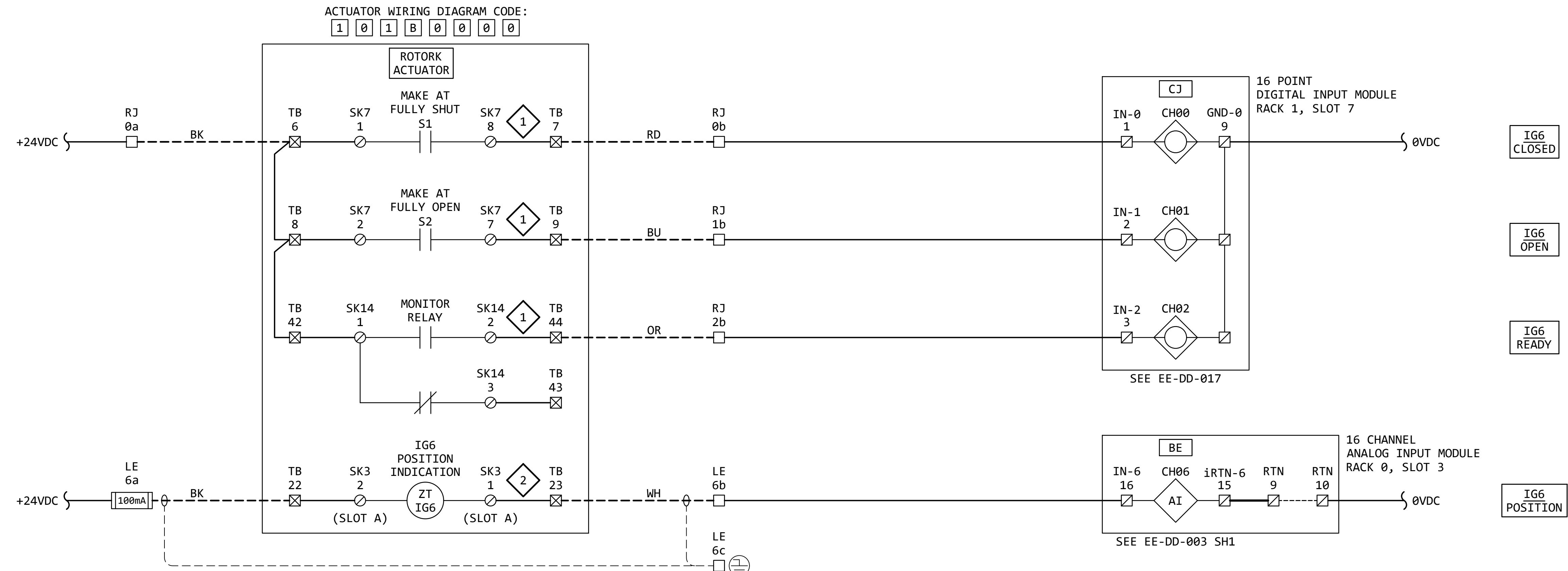
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DRAWN BY		DATE	WOODLAND PULP, LLC	
SAM		02/22/2024	WOODLAND FISH LIFT PASSAGE	
CHECKED BY		DATE	ELEMENTARY WIRING DIAGRAM	
CMM		02/22/2024	HOPPER HOIST (HH4)	
APPROVED BY		DATE	TECHNOLOGY	DRAWING CATEGORY
CMH		02/22/2024	HYDRO	SCHEMATICS
SCALE		PROJECT NO.	DWG	REV
NONE		ARL-007	EE-DK-004 SH2	1

IG6
EXIT FLUME
ISOLATION GATE



KEYED NOTES:

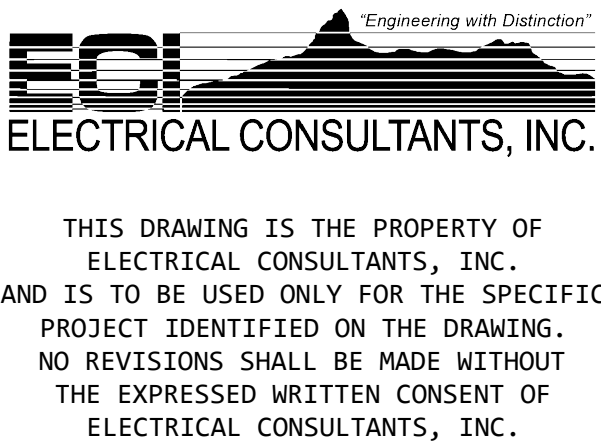
- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING,
SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

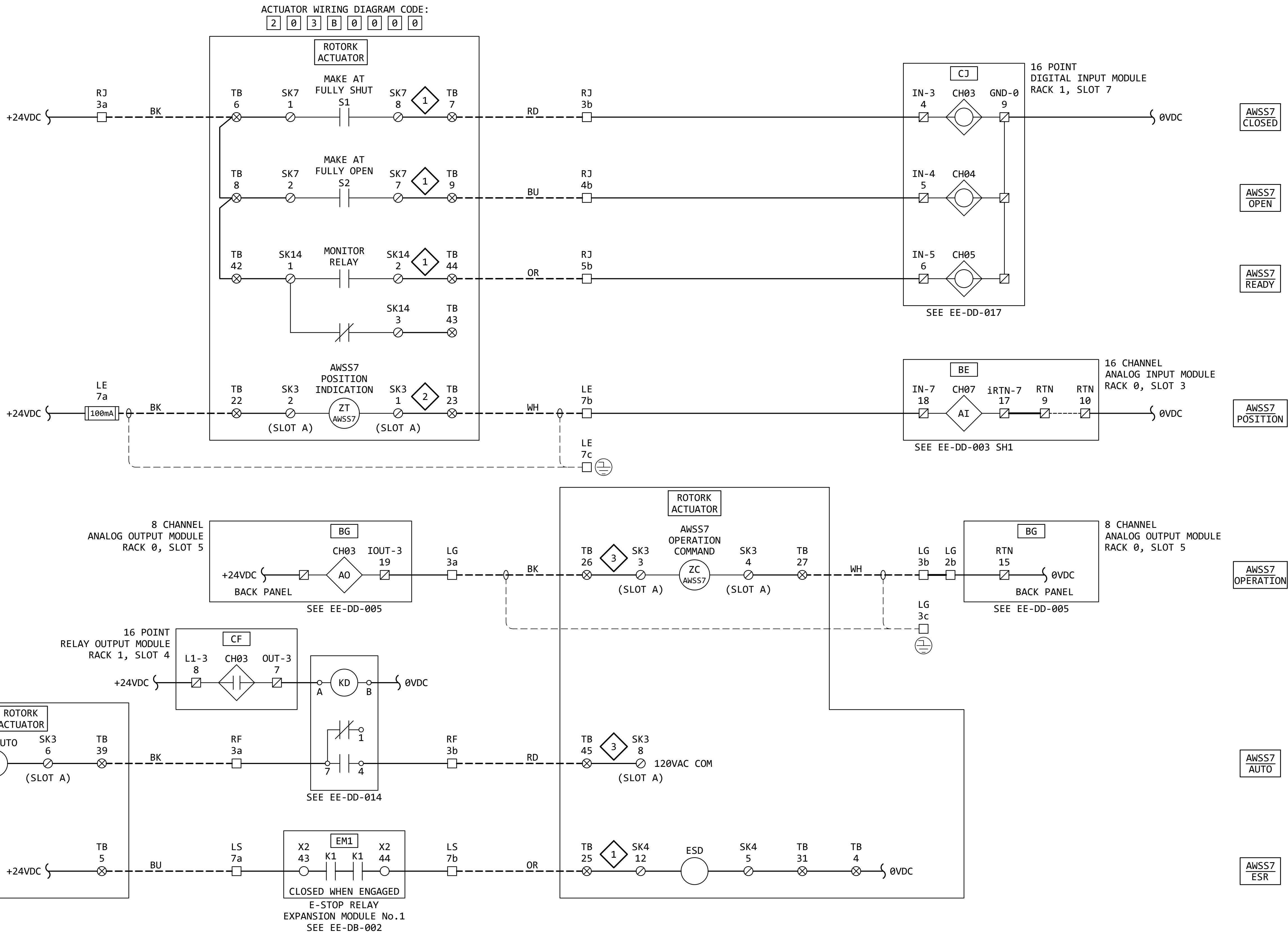
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID
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SEPTEMBER 3, 2025



DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM EXIT FLUME ISOLATION GATE (IG6)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-006	1	

AWSS7
AWS UPSTREAM
ISOLATION VALVE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)
- 3 ACTUATOR WIRING - OPTIONAL:
REQUIRES "ANALOGUE POSITION CONTROL
FOLOMATIC" OPTION.
(PUB002-041-00, PAGE 13)

GENERAL NOTES:

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2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

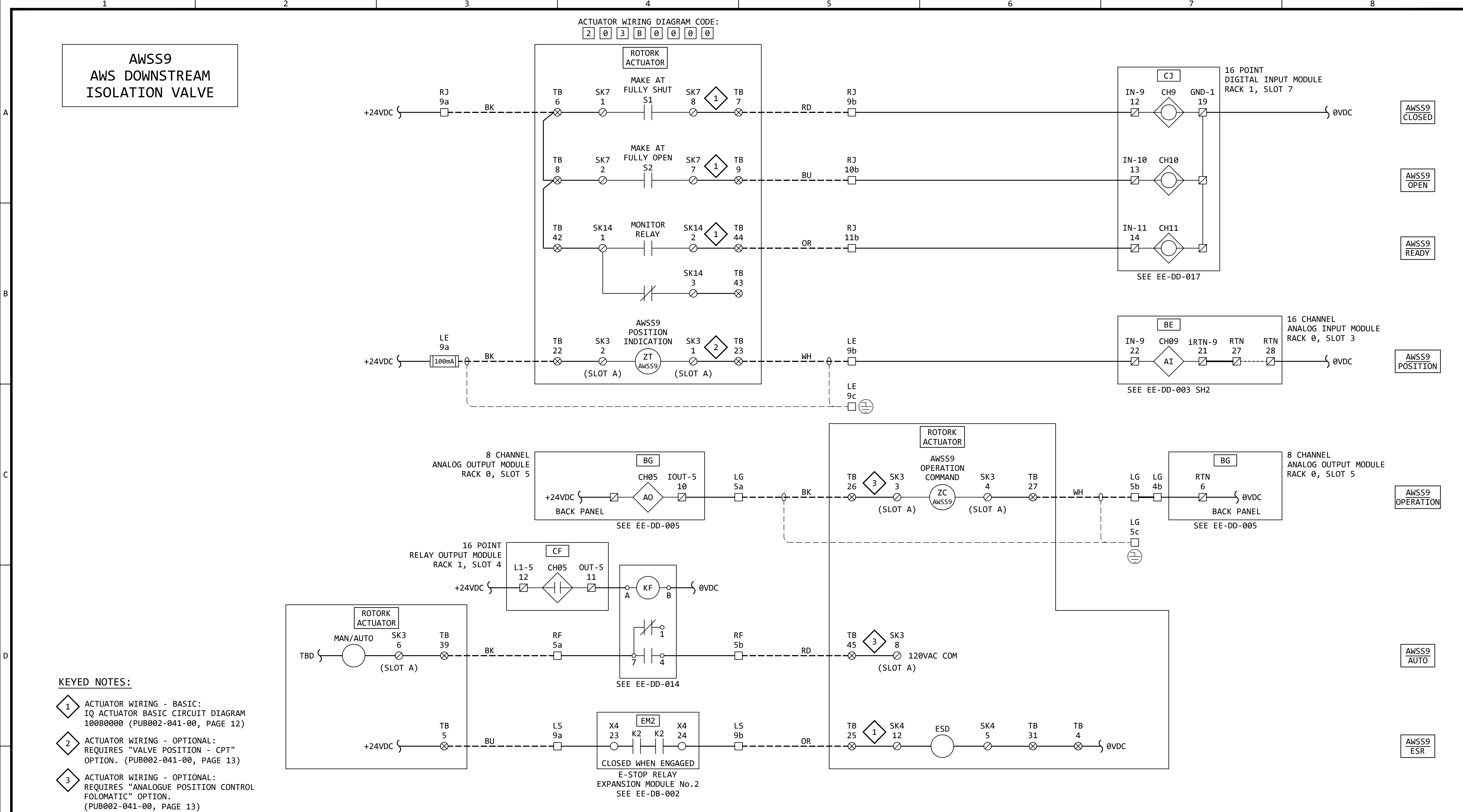
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM AWS UPSTREAM ISOLATION VALVE (AWSS7)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-007	1	

AWSS9
AWS DOWNSTREAM
ISOLATION VALVE

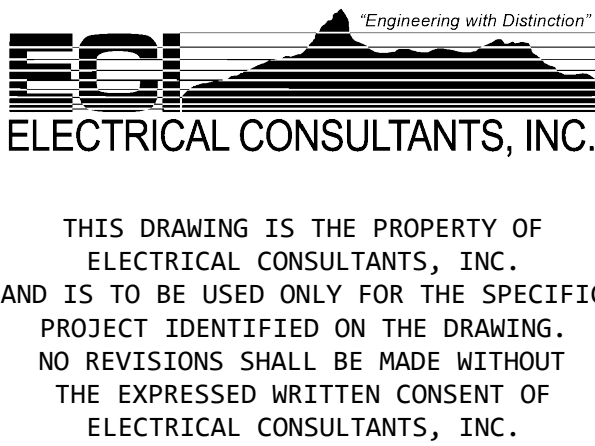


GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00, ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

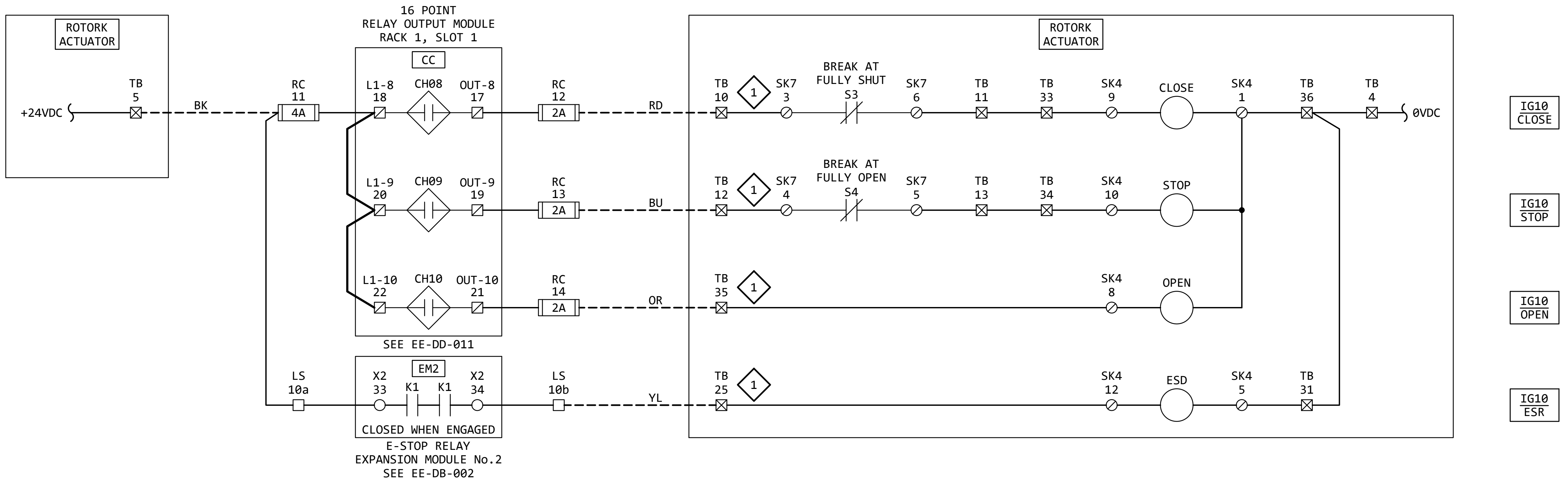
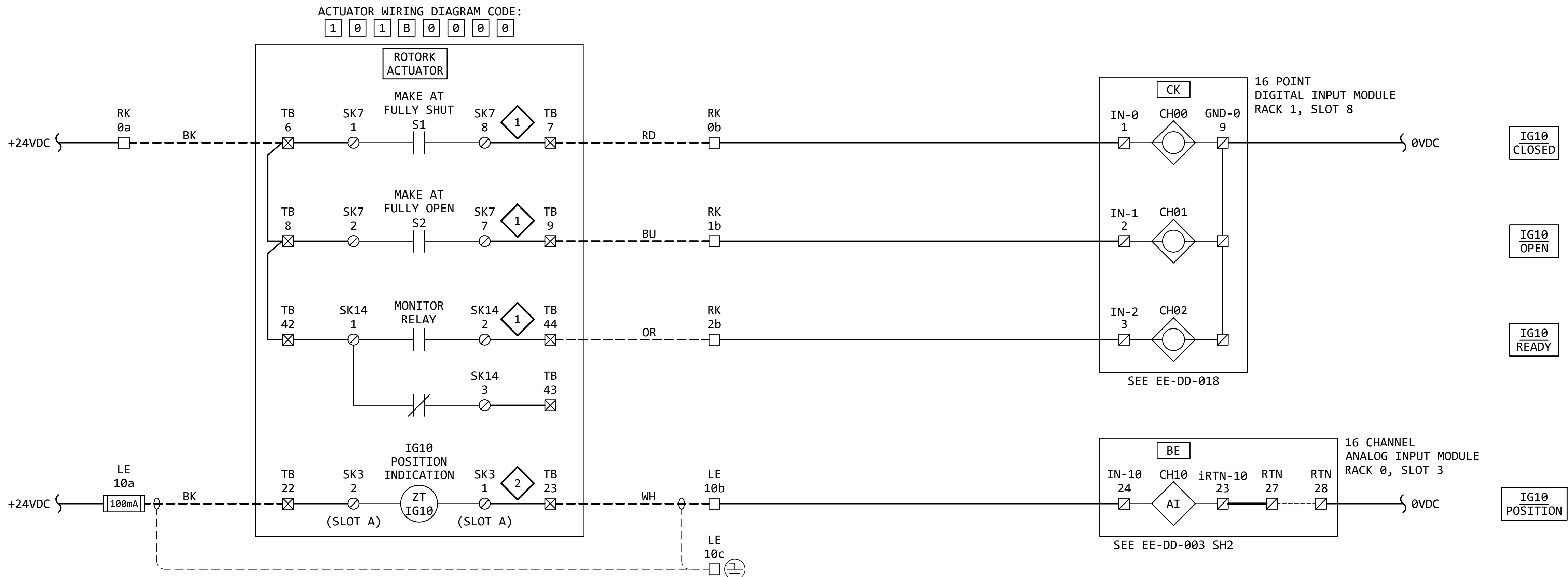
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025



DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM AWS DOWNSTREAM ISOLATION VALVE (AWSS9)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-009	1	

IG10
EXIT FLUME
DS BYPASS
ISOLATION GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)

GENERAL NOTES:

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ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

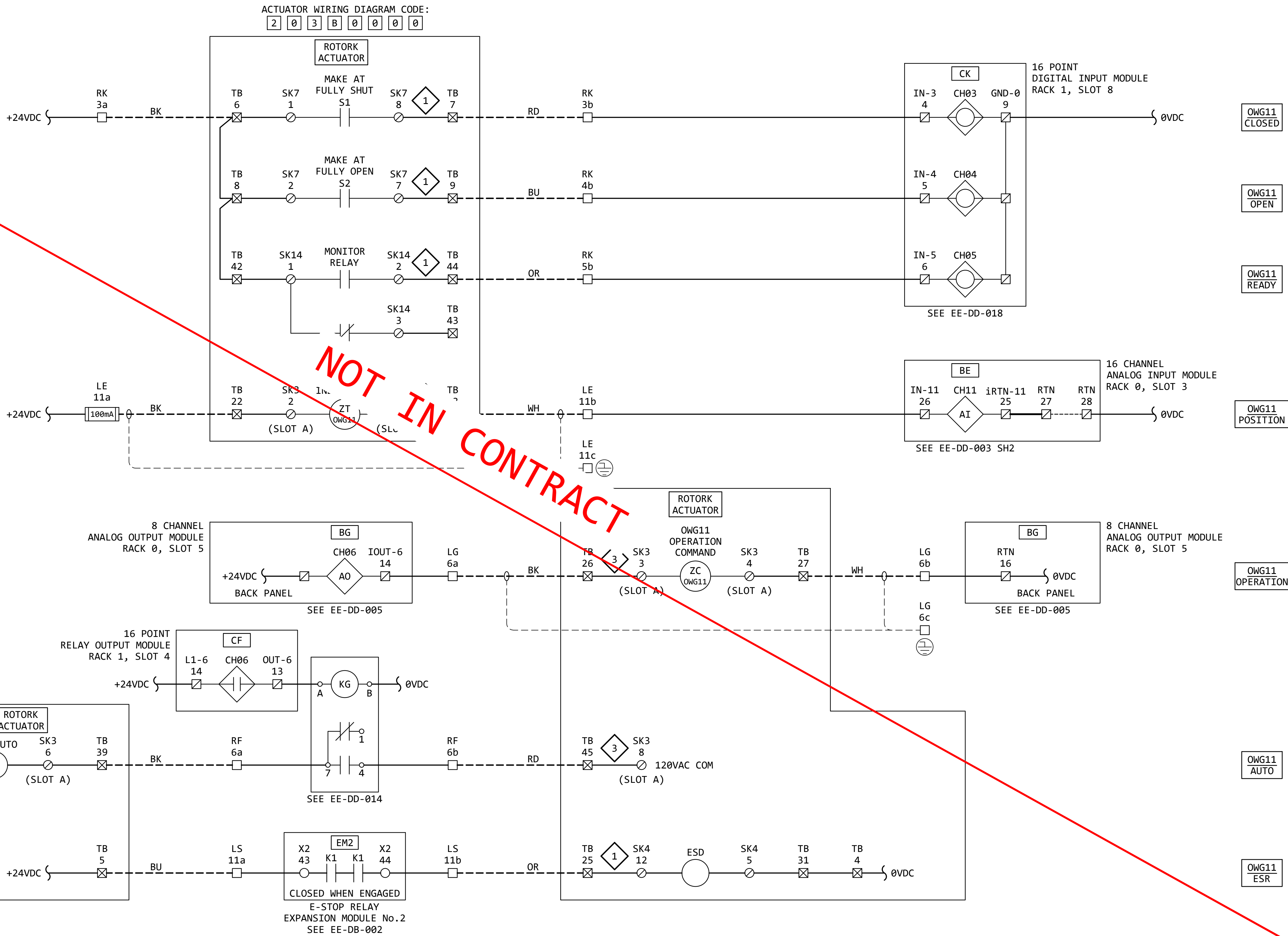
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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM EXIT FLUME DS BYPASS ISOLATION GATE (IG10)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-010	1	

OWG11
FISH LADDER
ENTRANCE
OVERSHOT WEIR GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)
- 3 ACTUATOR WIRING - OPTIONAL:
REQUIRES "ANALOGUE POSITION CONTROL
FOLOMATIC" OPTION.
(PUB002-041-00, PAGE 13)

GENERAL NOTES:

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2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

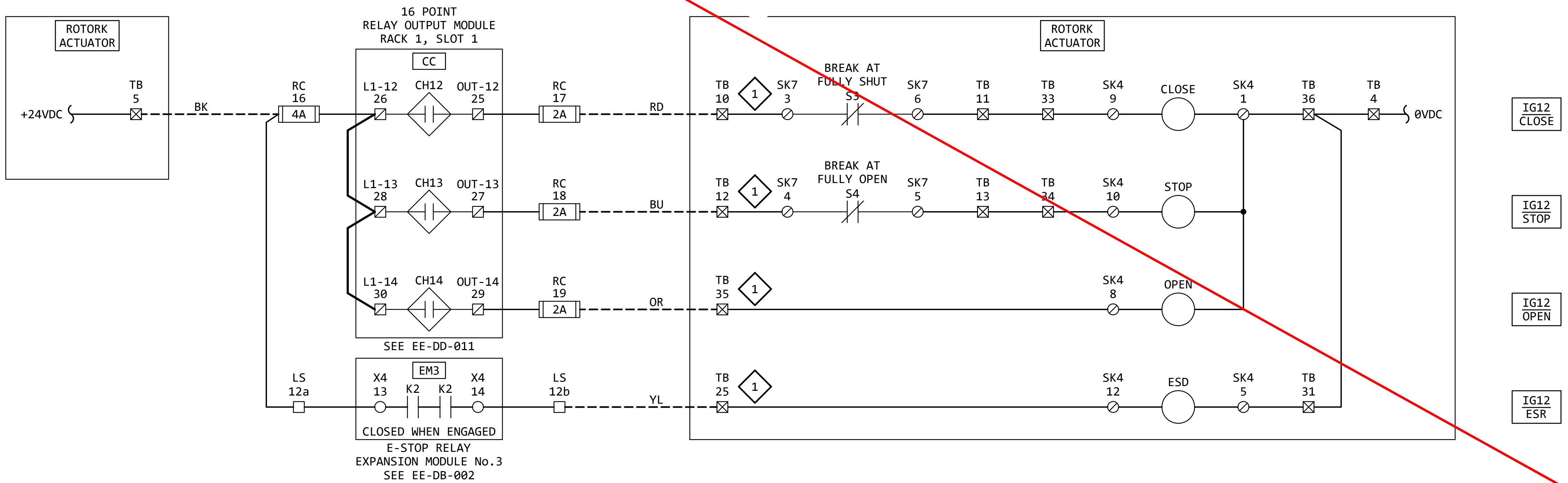
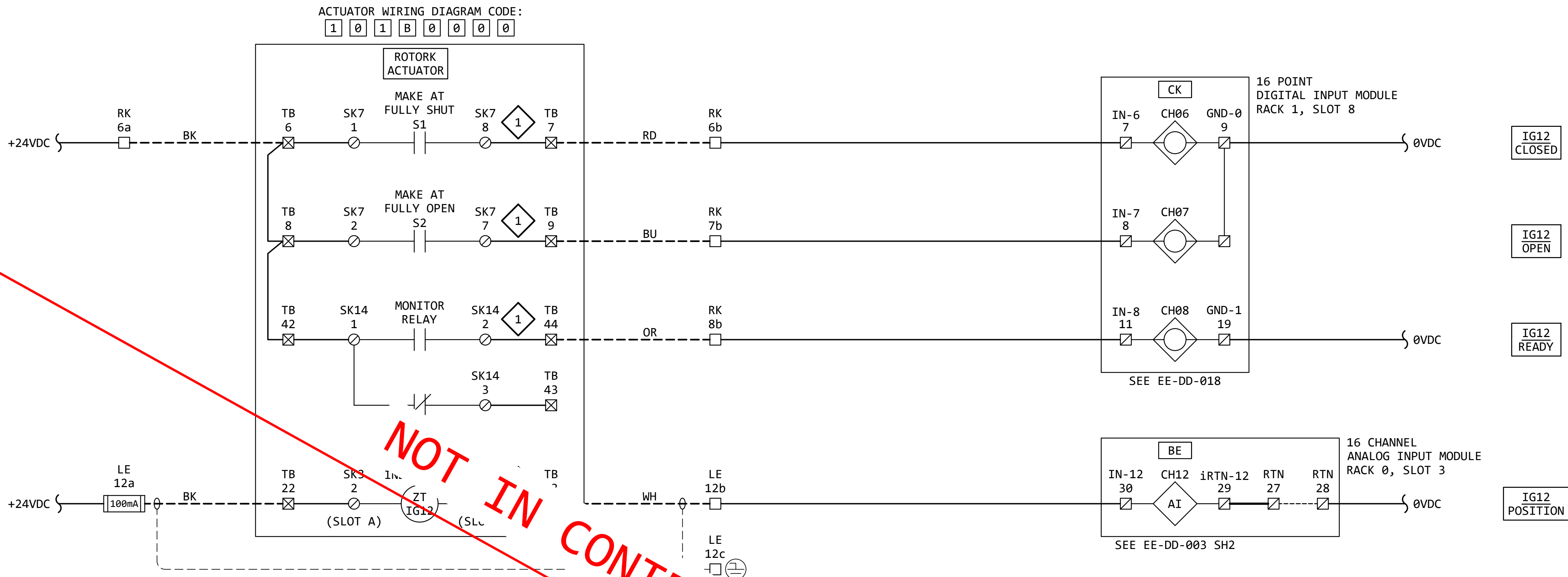
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM FISH LADDER ENTR. OVERSHOT WEIR GATE (OWG11)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-011	1	

IG12
FISH LADDER
ENTRANCE
ISOLATION GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING,
SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

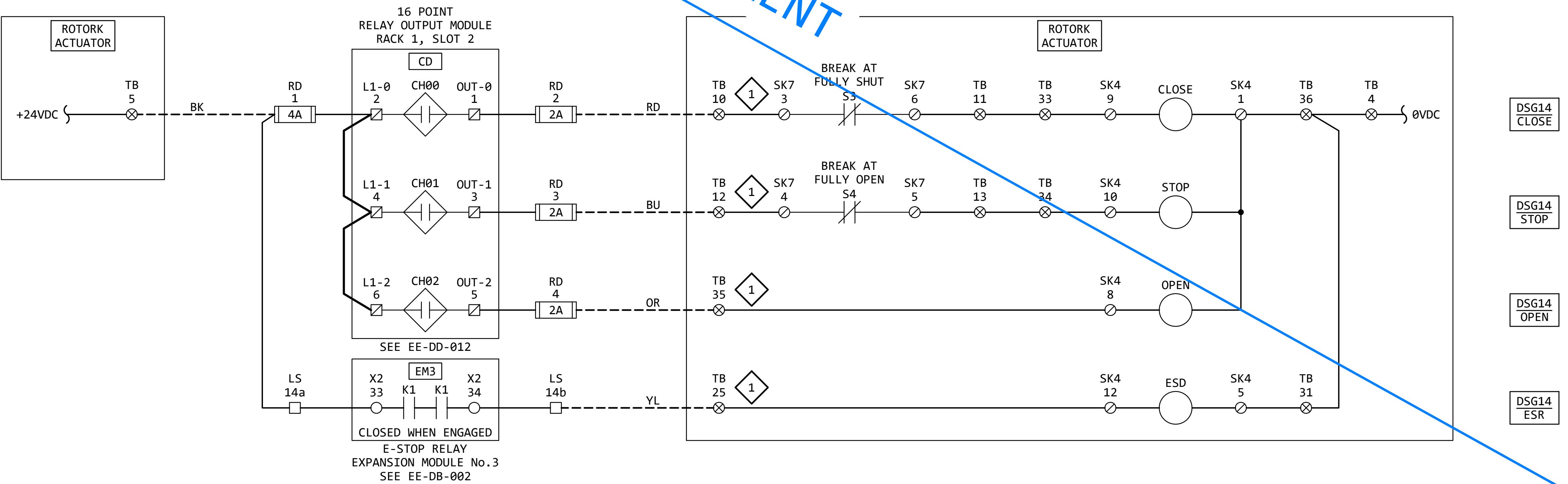
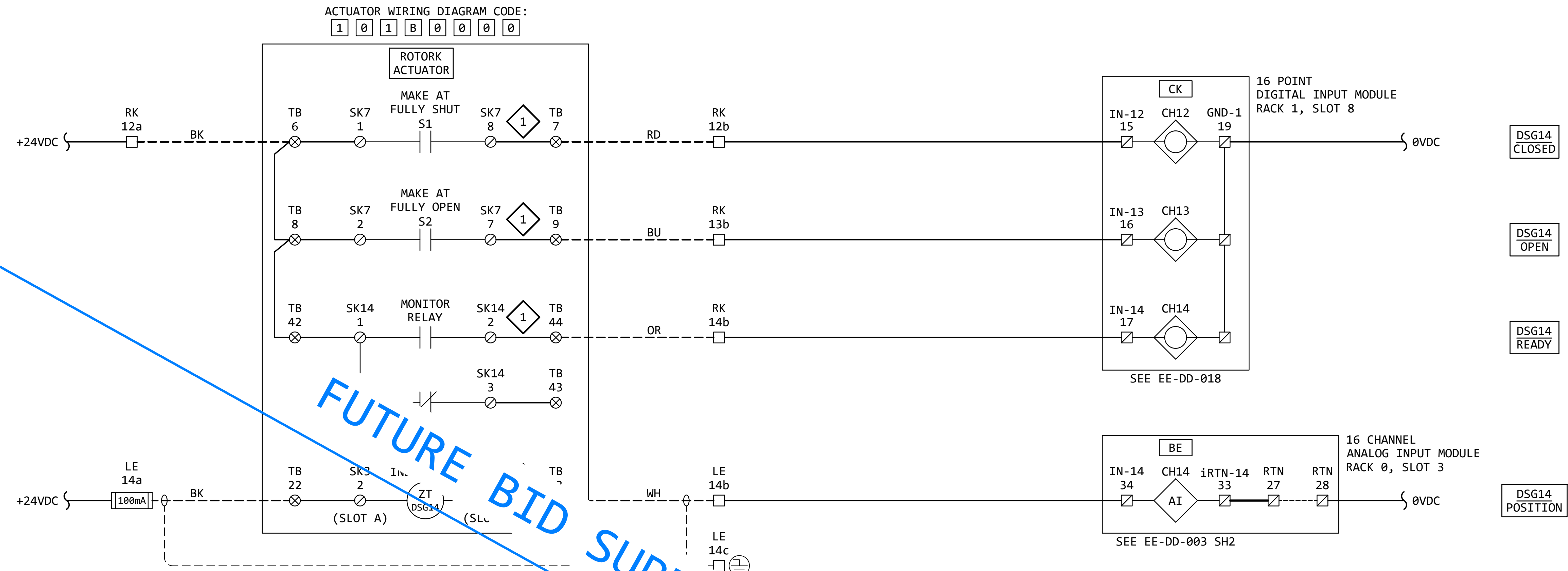
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM FISH LADDER ENTRANCE ISOLATION GATE (IG12)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-012	1	

DSG14
DS BYPASS
SLIDE GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)

GENERAL NOTES:

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2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

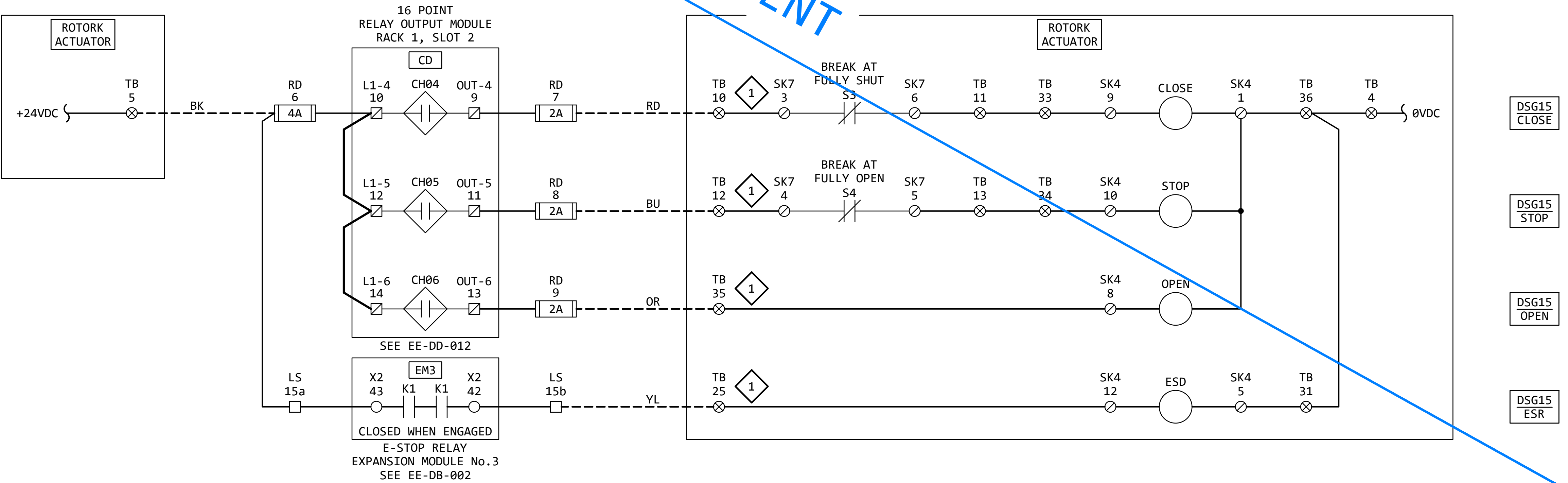
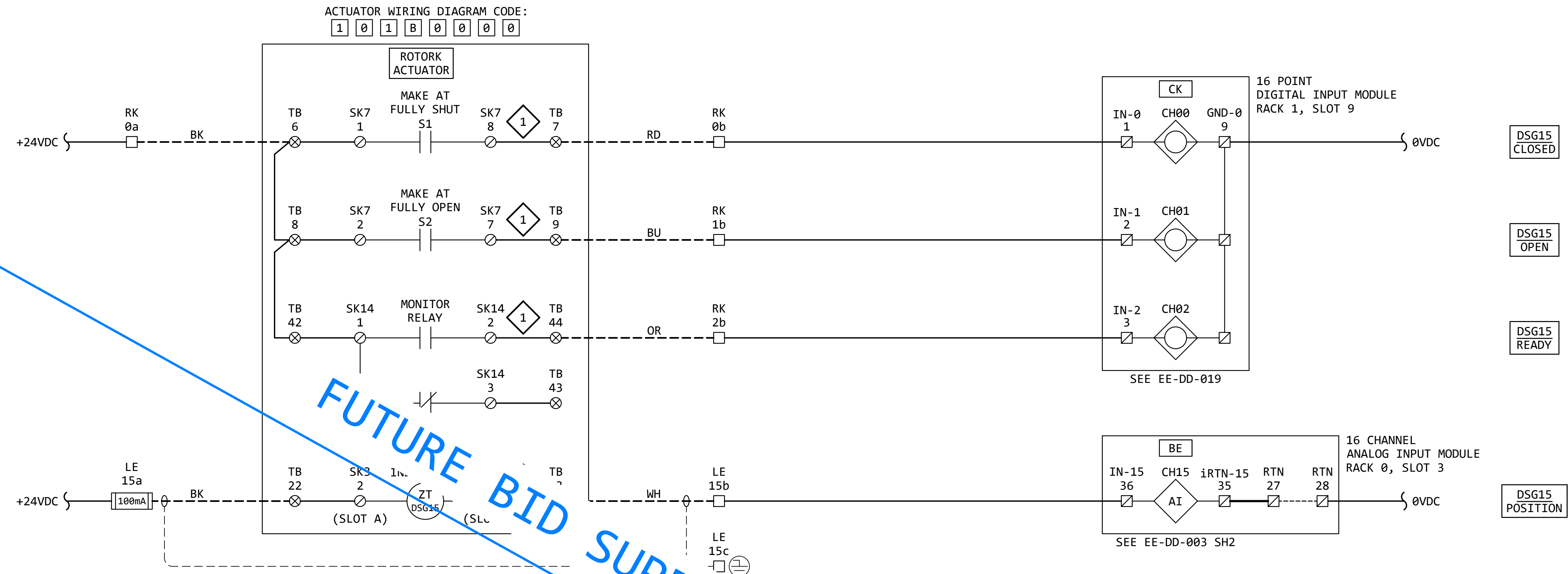
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM DS BYPASS SLIDE GATE (DSG14)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-014	1	

DSG15
DS BYPASS
SLIDE GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING,
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2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

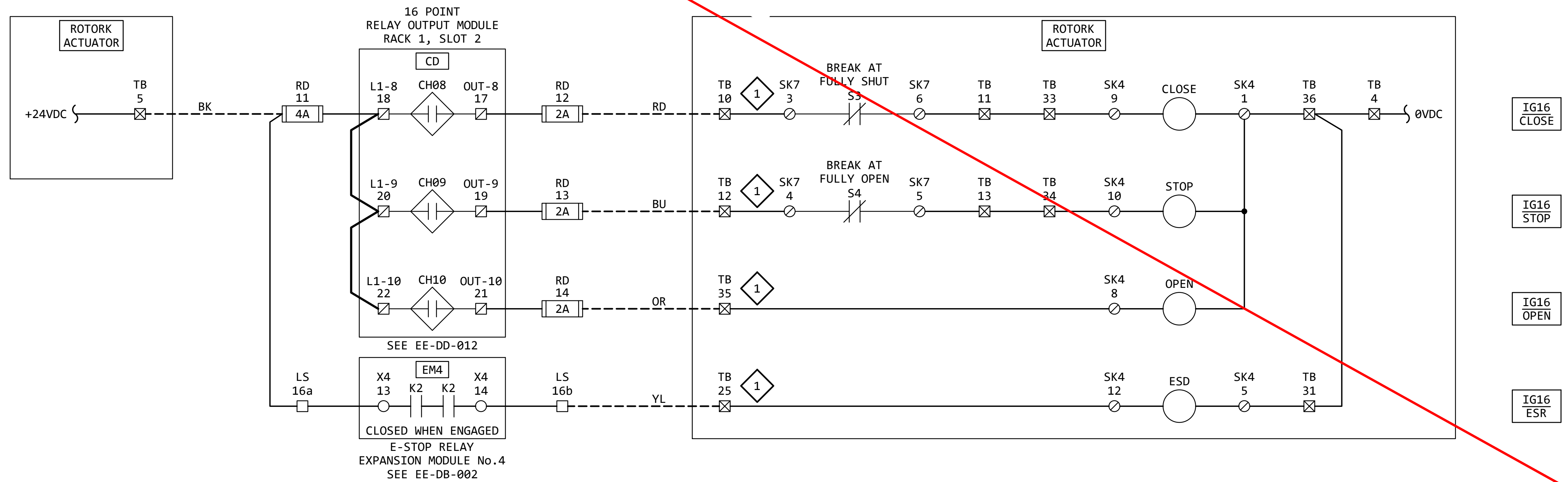
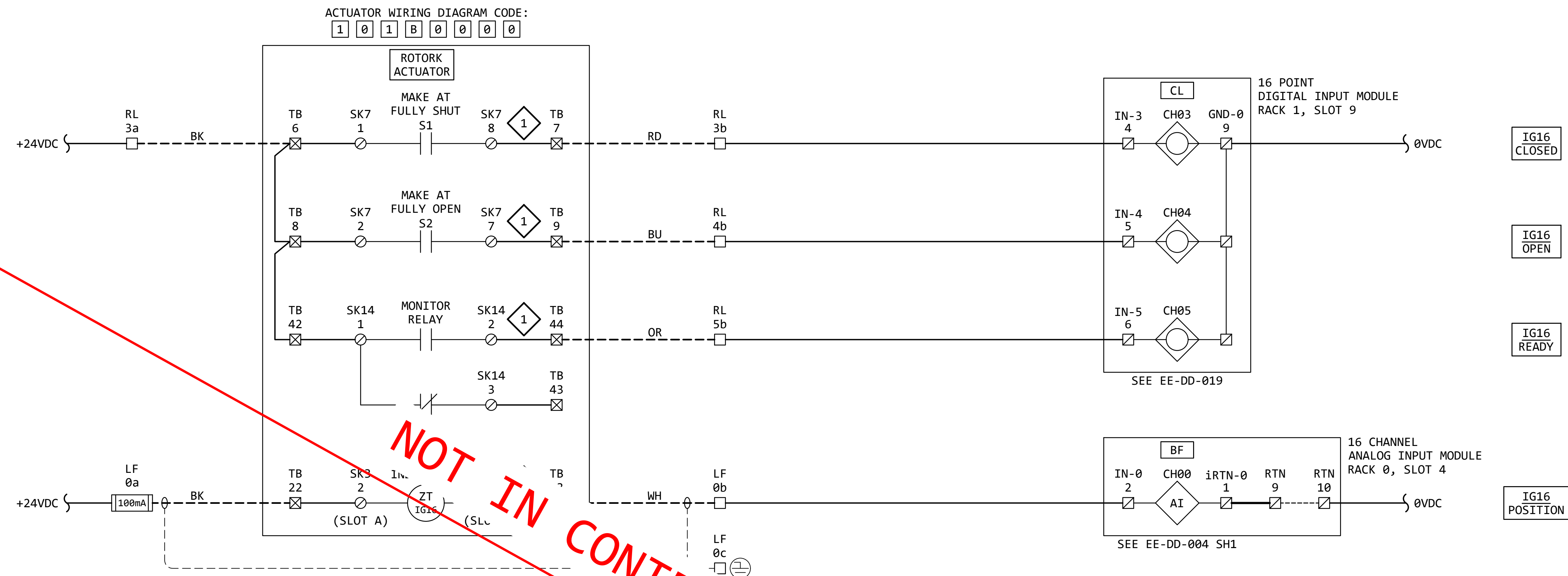
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM DS BYPASS SLIDE GATE (DSG15)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-015	1	

IG16
DS BYPASS
ISOLATION GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)

GENERAL NOTES:

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2. THE DESIGN SHOWN IS BASED ON ROTORK PUBLICATION PUB002-041-00,
ISSUE 02/23. SEE KEYED NOTES FOR FURTHER DETAILS.
3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT
DIAGRAMS SUPPLIED WITH EQUIPMENT.

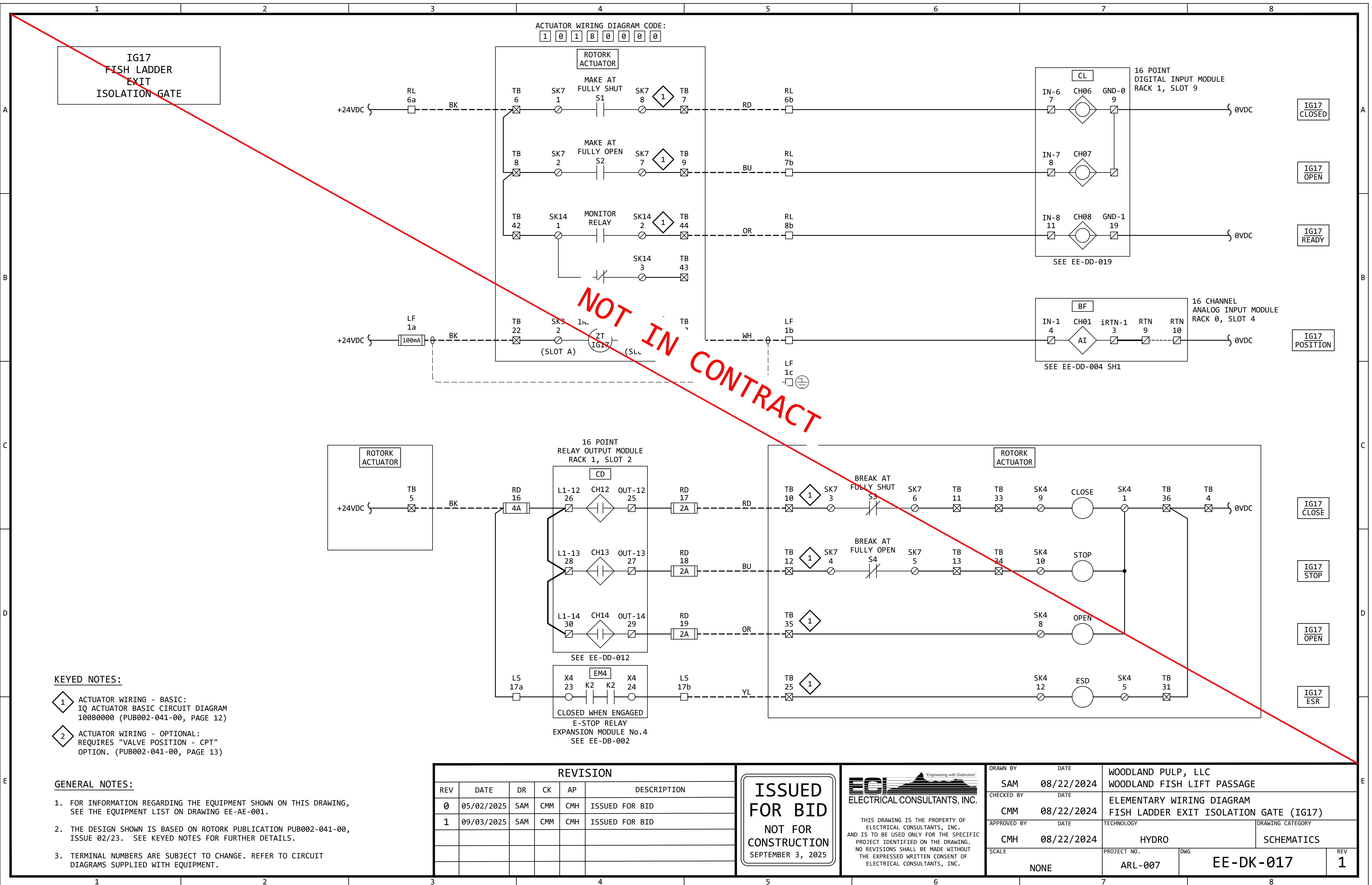
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REV	DATE	DR	CK	AP	DESCRIPTION
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FOR BID
NOT FOR
CONSTRUCTION
SEPTEMBER 3, 2025

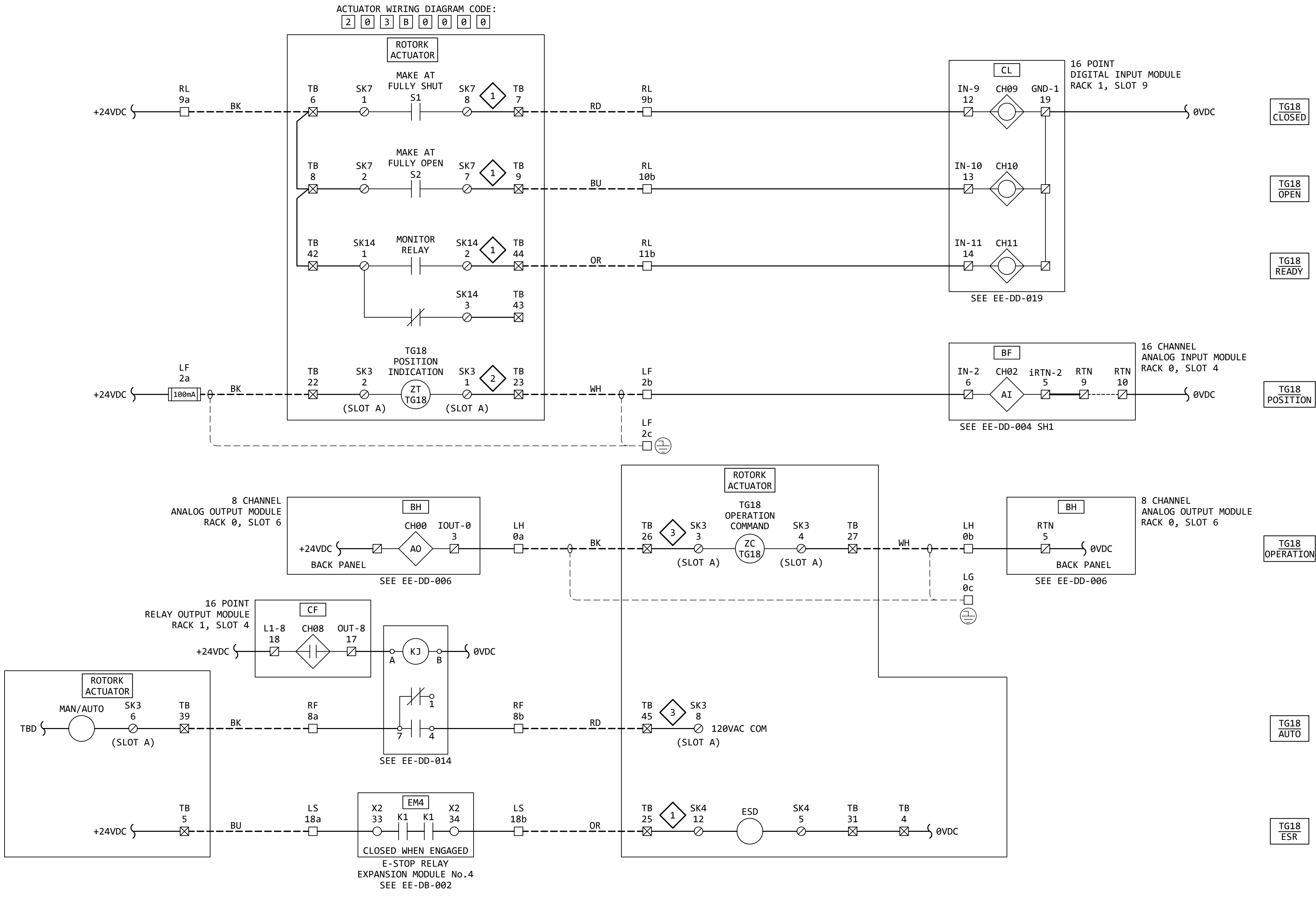
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM DS BYPASS ISOLATION GATE (IG16)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-016	1	



TG18
EXIT FLUME
TRAP GATE



KEYED NOTES:

- 1 ACTUATOR WIRING - BASIC:
IQ ACTUATOR BASIC CIRCUIT DIAGRAM
100B0000 (PUB002-041-00, PAGE 12)
- 2 ACTUATOR WIRING - OPTIONAL:
REQUIRES "VALVE POSITION - CPT"
OPTION. (PUB002-041-00, PAGE 13)
- 3 ACTUATOR WIRING - OPTIONAL:
REQUIRES "ANALOGUE POSITION CONTROL
FOLOMATIC" OPTION.
(PUB002-041-00, PAGE 13)

GENERAL NOTES:

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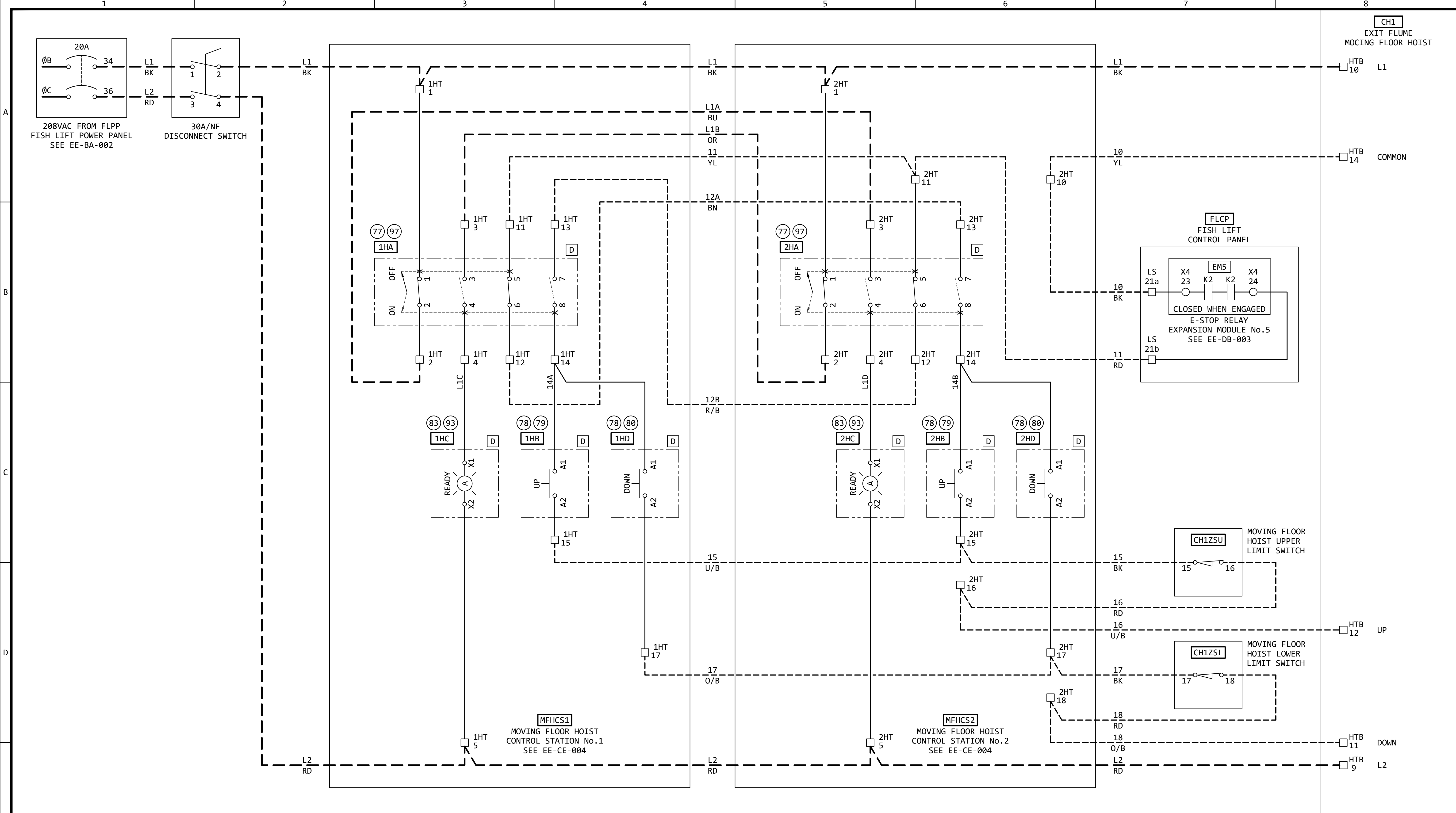
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM EXIT FLUME TRAP GATE (TG18)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-018	1	

DRAWN BY SAM		DATE 08/22/2024		WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY CMM		DATE 08/22/2024		ELEMENTARY WIRING DIAGRAM EXIT FLUME TRAP GATE (TG19)	
APPROVED BY CMH		DATE 08/22/2024		TECHNOLOGY HYDRO	DRAWING CATEGORY SCHEMATICS
SCALE NONE		PROJECT NO. ARL-007	DWG EE-DK-019	REV 1	



NOTE:
NEW WORK INCLUDES THE EXIT FLUME MOVING FLOOR HOIST POWER AND CONTROL DESIGN. SEE EE-AA-001 FOR MORE INFORMATION.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

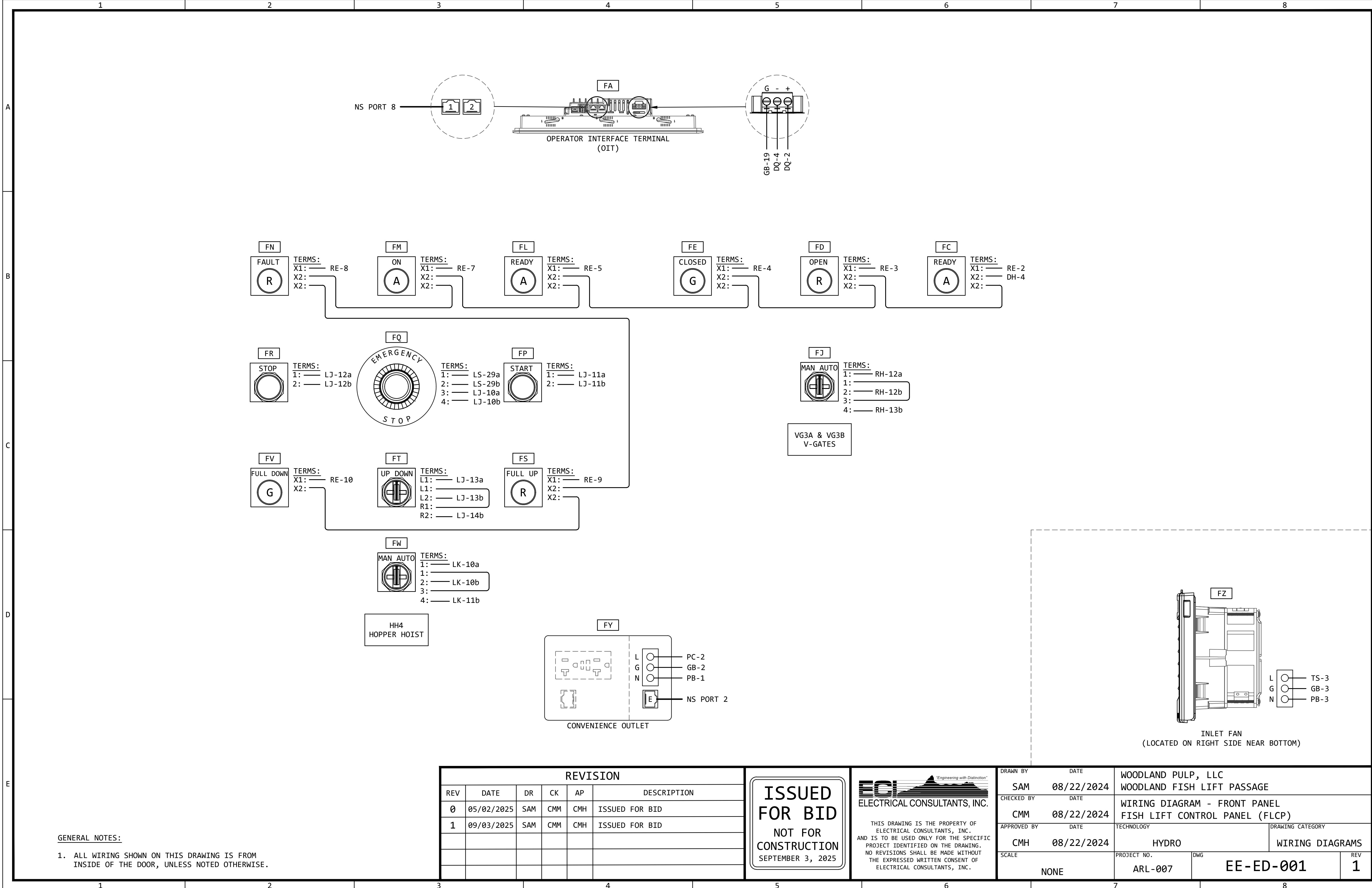
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	ELEMENTARY WIRING DIAGRAM EXIT FLUME MOVING FLOOR HOIST (CH1)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	05/02/2025	HYDRO	SCHEMATICS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-DK-021	1	



GENERAL NOTES:

1. ALL WIRING SHOWN ON THIS DRAWING IS FROM INSIDE OF THE DOOR, UNLESS NOTED OTHERWISE.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

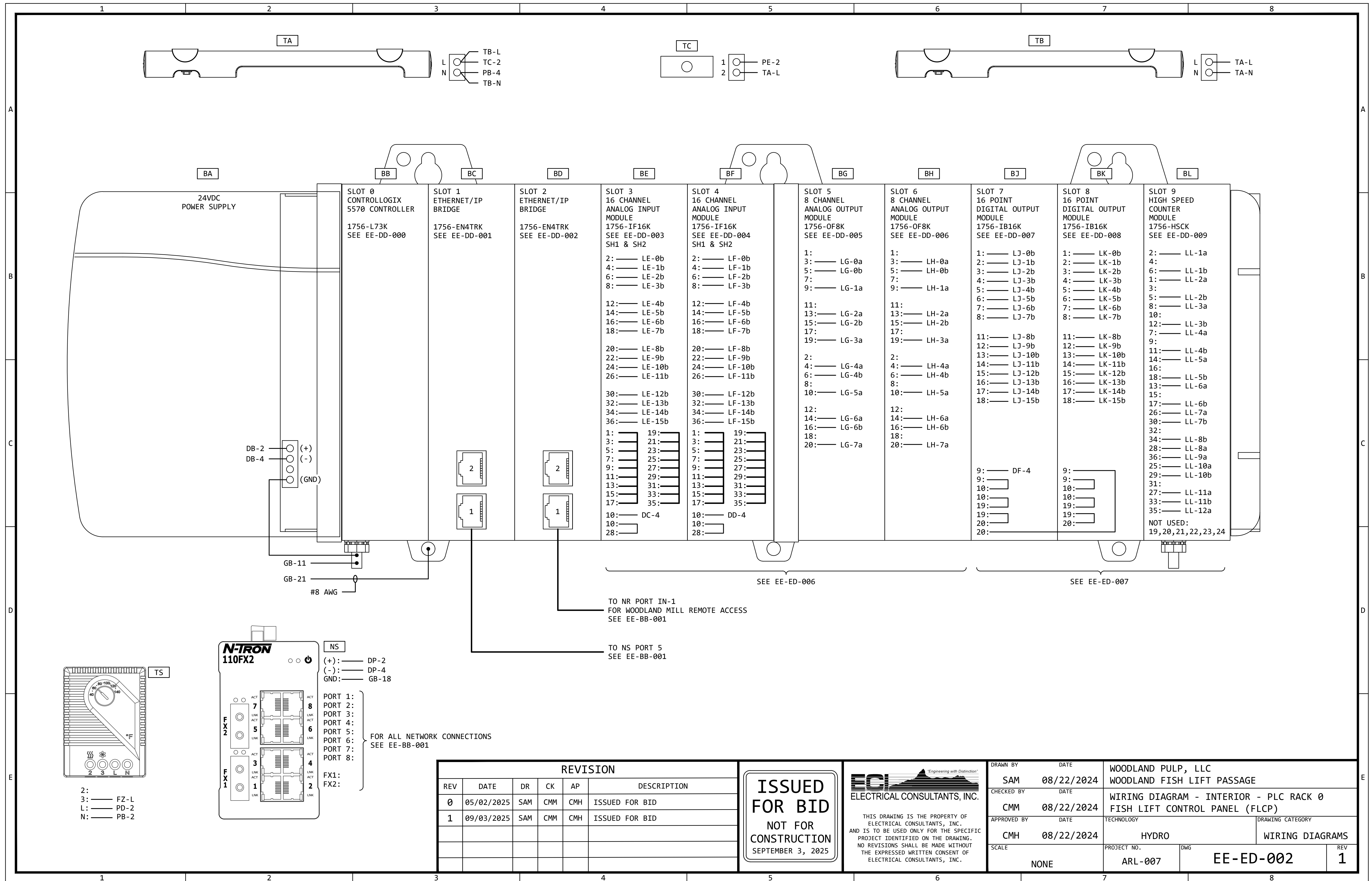
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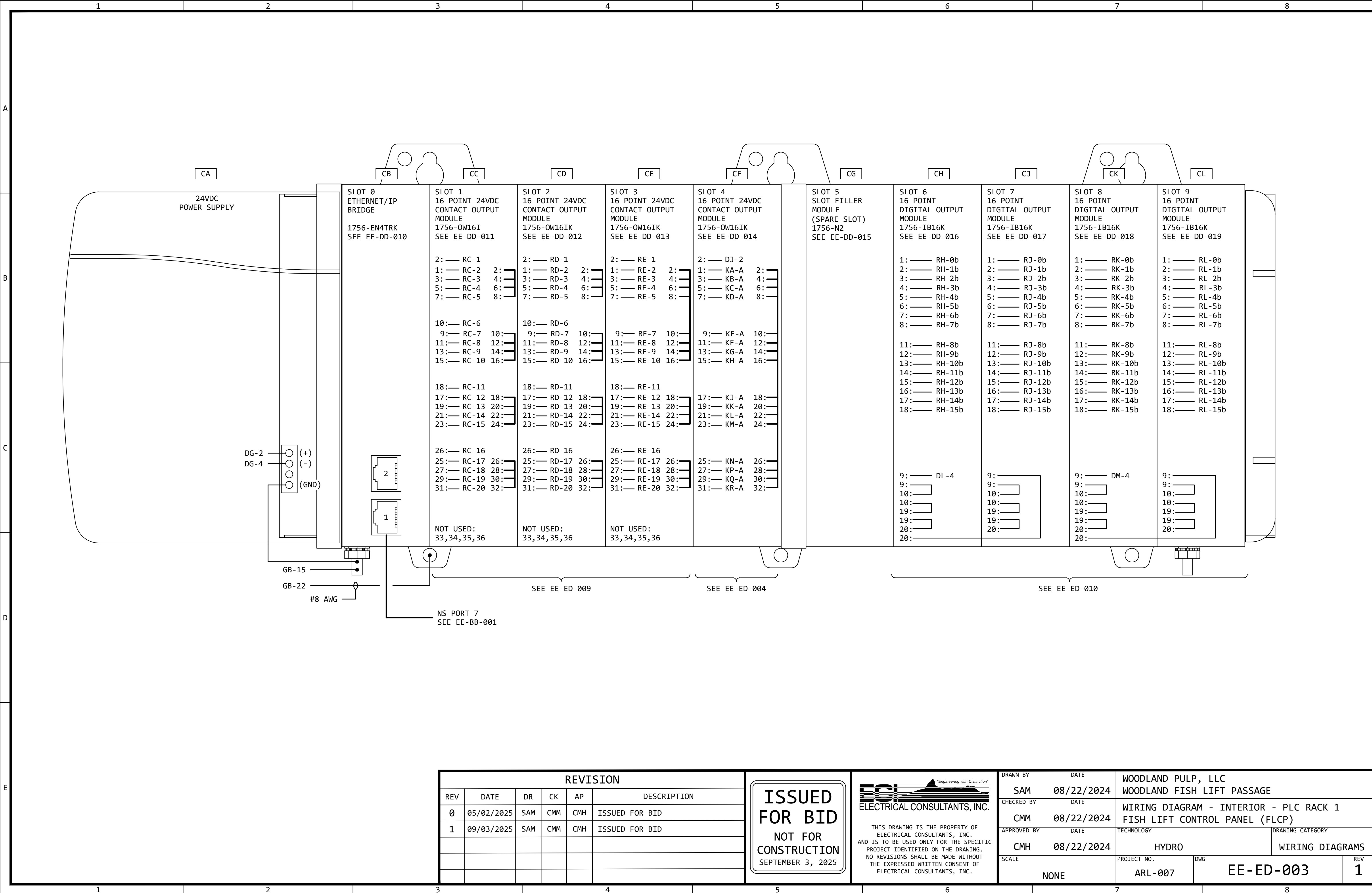
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	WIRING DIAGRAM - FRONT PANEL FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	WIRING DIAGRAMS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-ED-001	1	





REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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FOR BID

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CONSTRUCTION

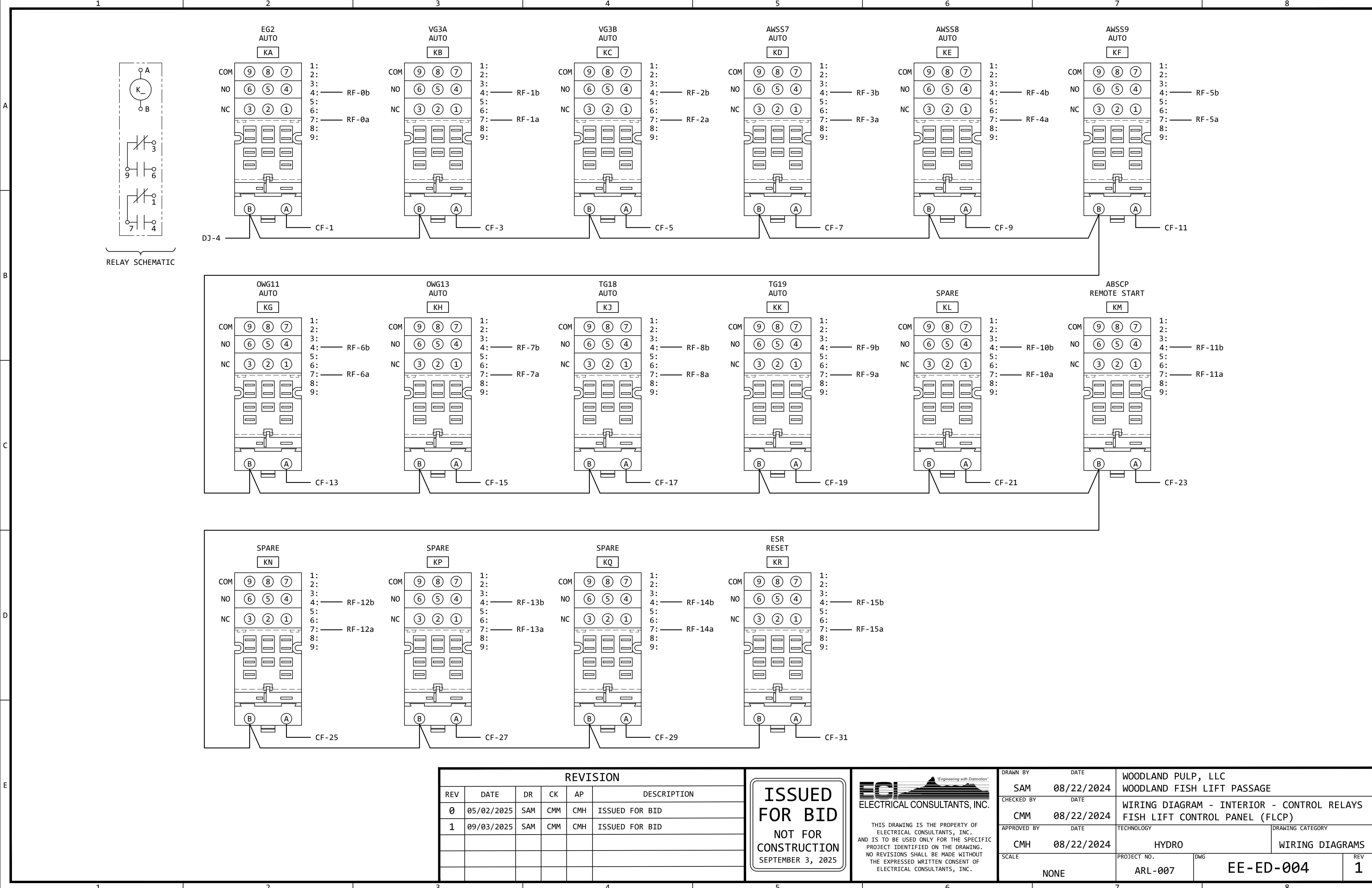
SEPTEMBER 3, 2025

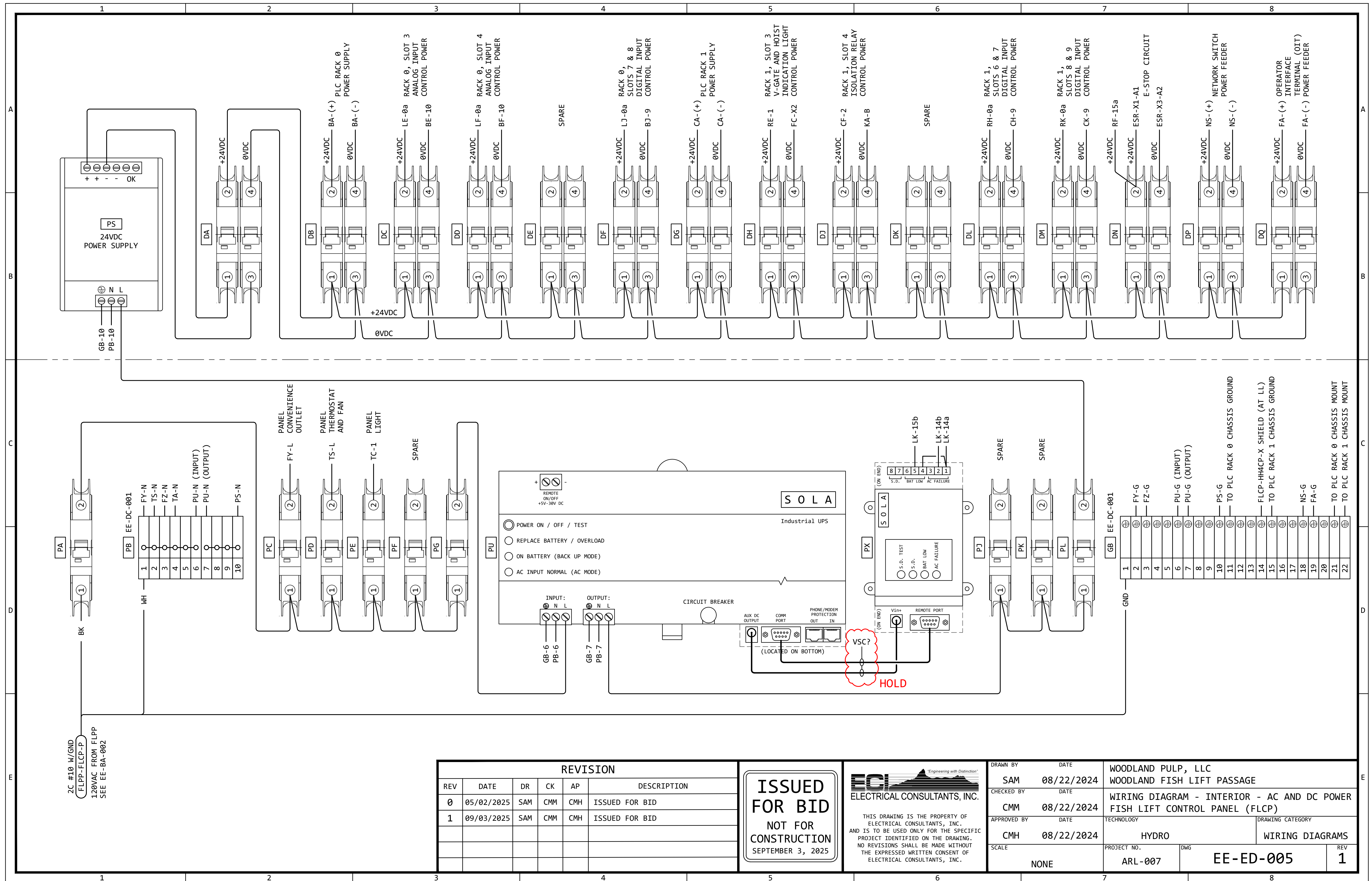
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	WIRING DIAGRAM - INTERIOR - PLC RACK 1 FISH LIFT CONTROL PANEL (FLCP)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	WIRING DIAGRAMS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-ED-003	1	







EXAMPLE: (FLCP-EG2-X)

FISH LIFT CONTROL PANEL
BACK PANEL - LEFT SIDE

EXAMPLE: (FLCP-EG2-X)



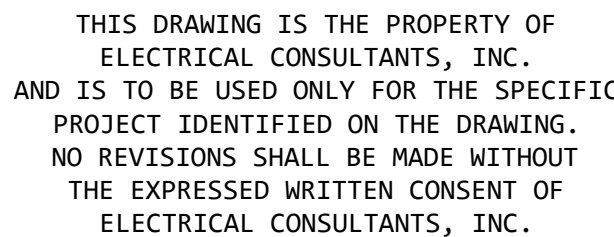
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RED = NOT IN CONTRACT (NIC)
BLUE = FUTURE BID SUPPLEMENT

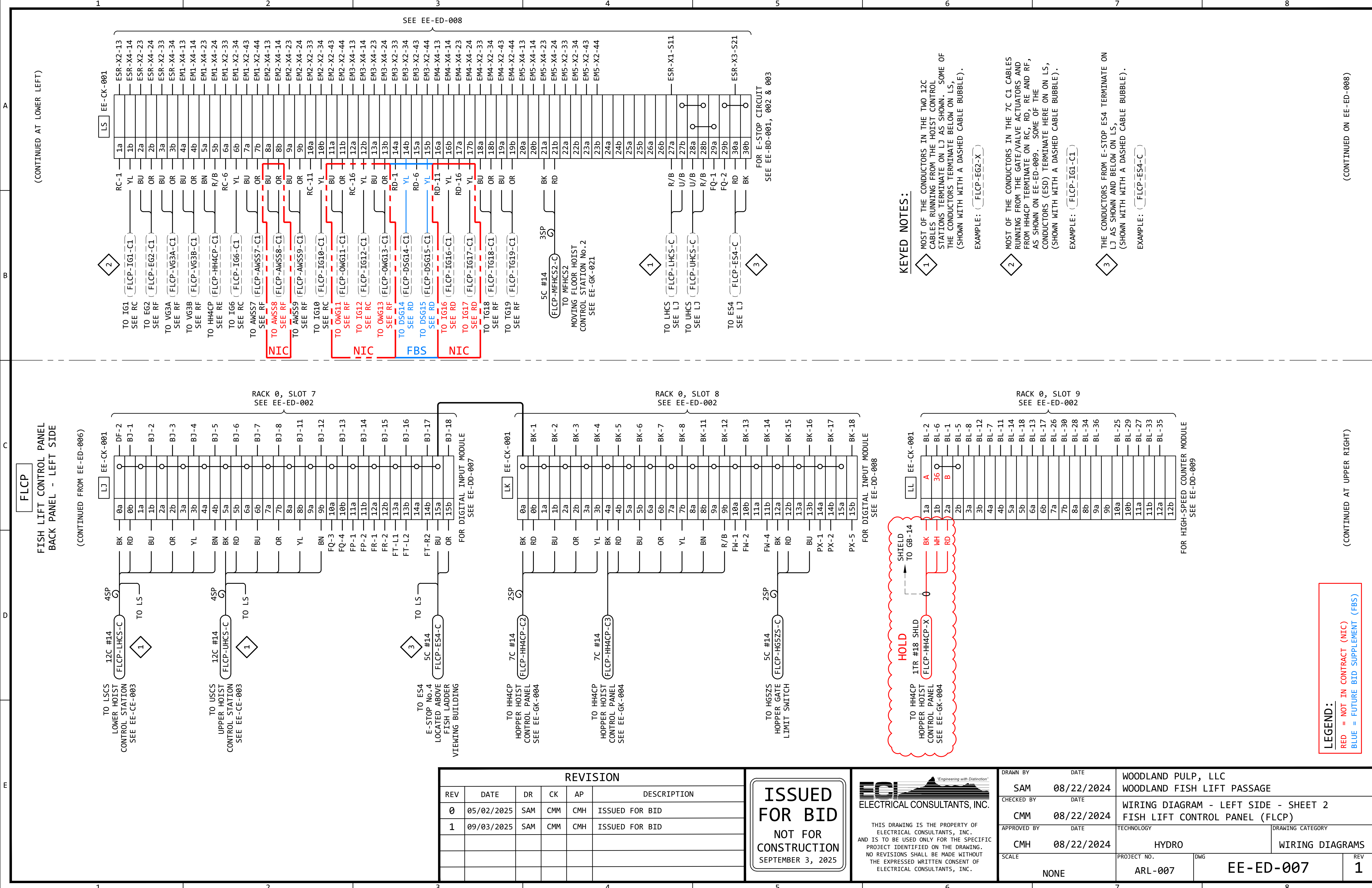
D

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DRAWN BY SAM		DATE 08/22/2024		WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY CMM		DATE 08/22/2024		WIRING DIAGRAM - LEFT SIDE - SHEET 1 FISH LIFT CONTROL PANEL (FLCP)	
APPROVED BY CMH		DATE 08/22/2024		TECHNOLOGY HYDRO	DRAWING CATEGORY WIRING DIAGRAMS
SCALE NONE		PROJECT NO. ARL-007	DWG EE-ED-006		
			REV 1		

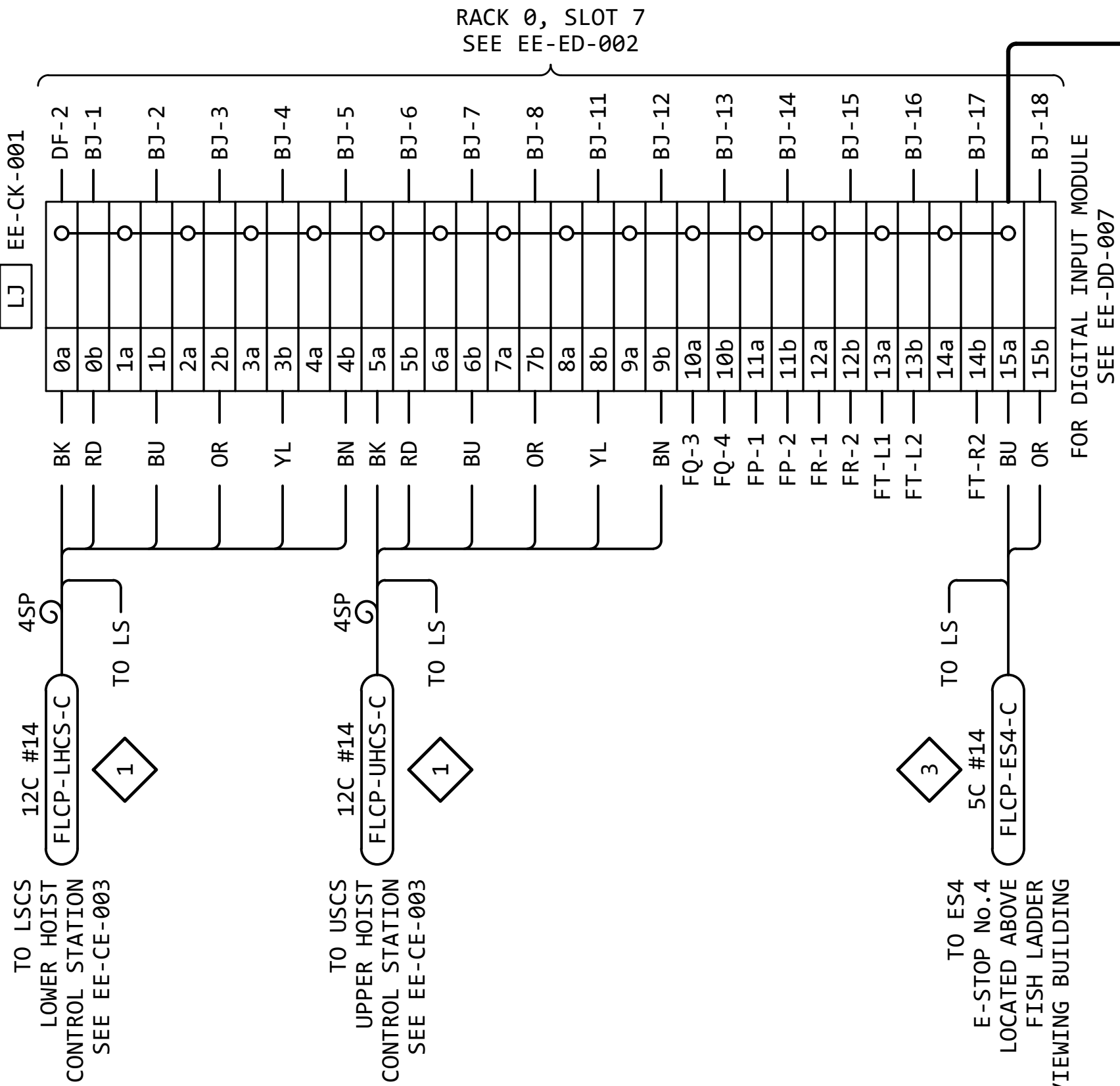
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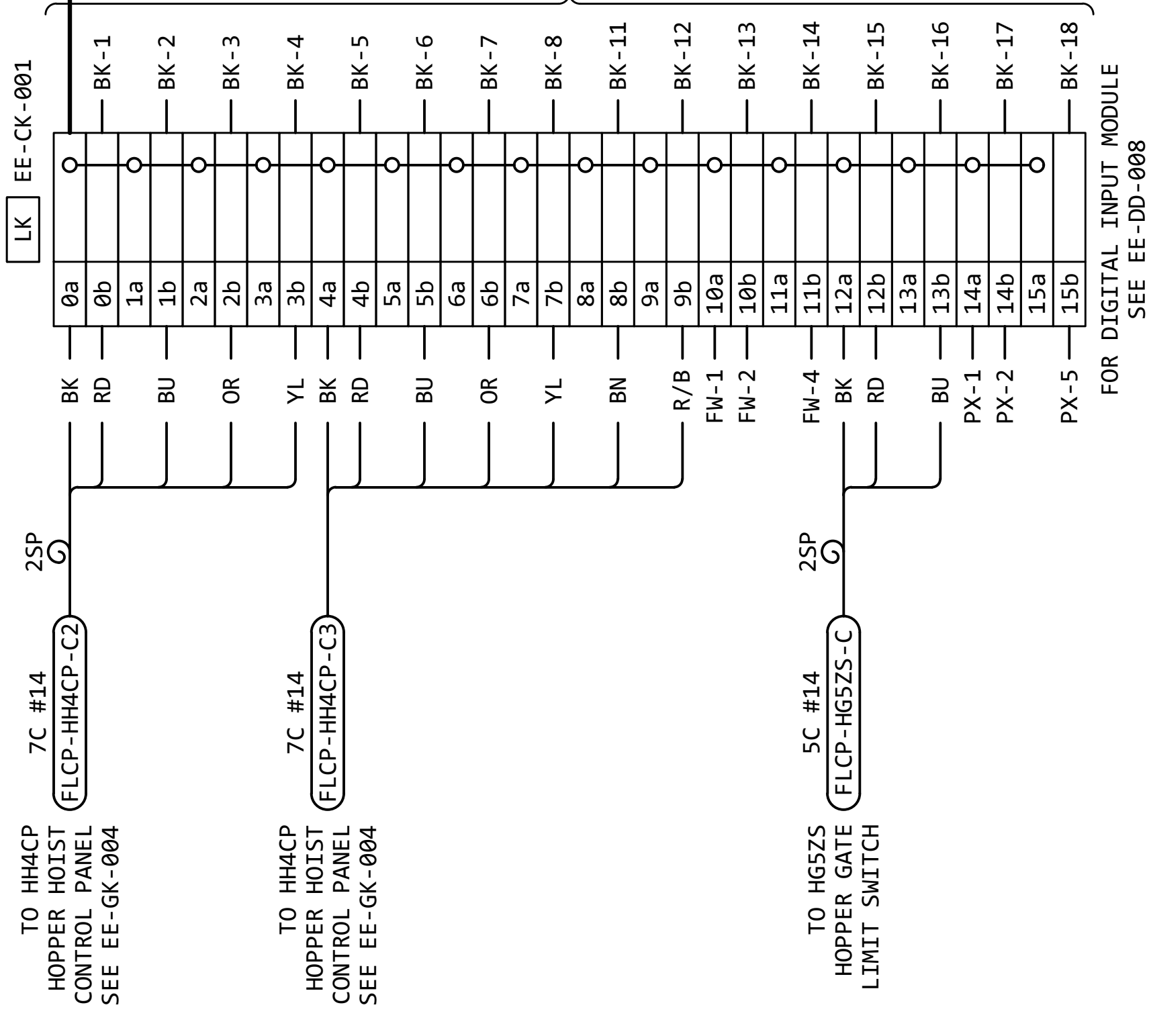
FISH LIFT CONTROL PANEL
BACK PANEL - LEFT SIDE

FLCP

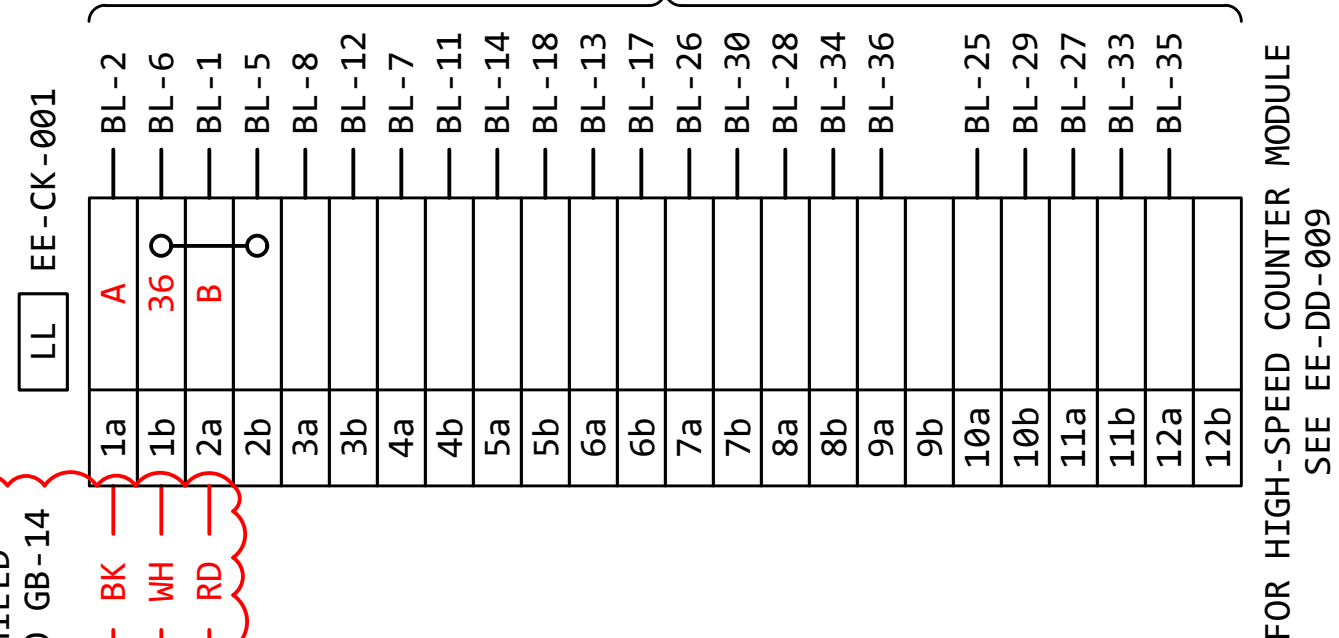
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RACK 0, SLOT 8
SEE EE-ED-002

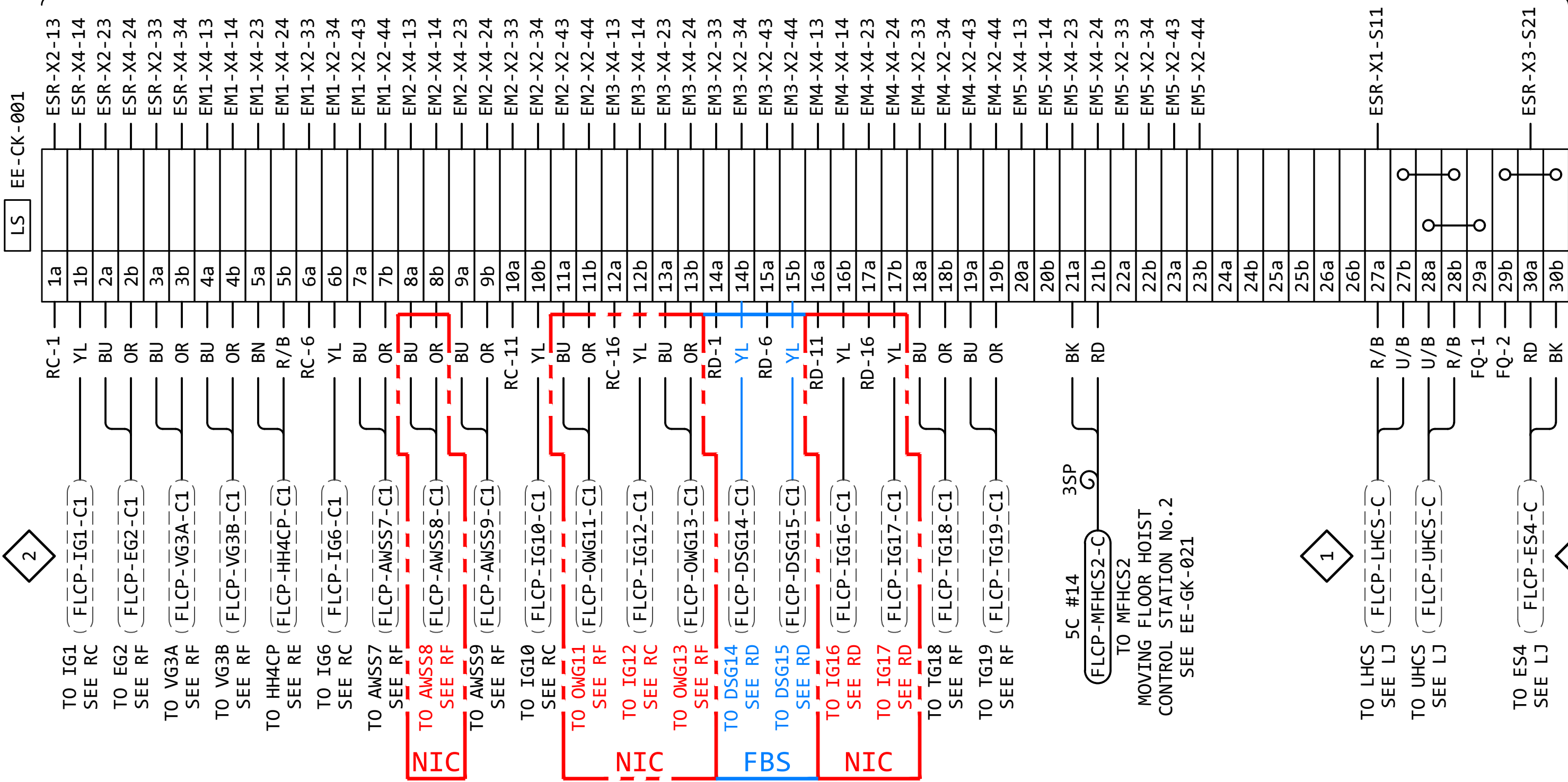


RACK 0, SLOT 9
SEE EE-ED-002



(CONTINUED AT UPPER RIGHT)

(CONTINUED AT LOWER LEFT)

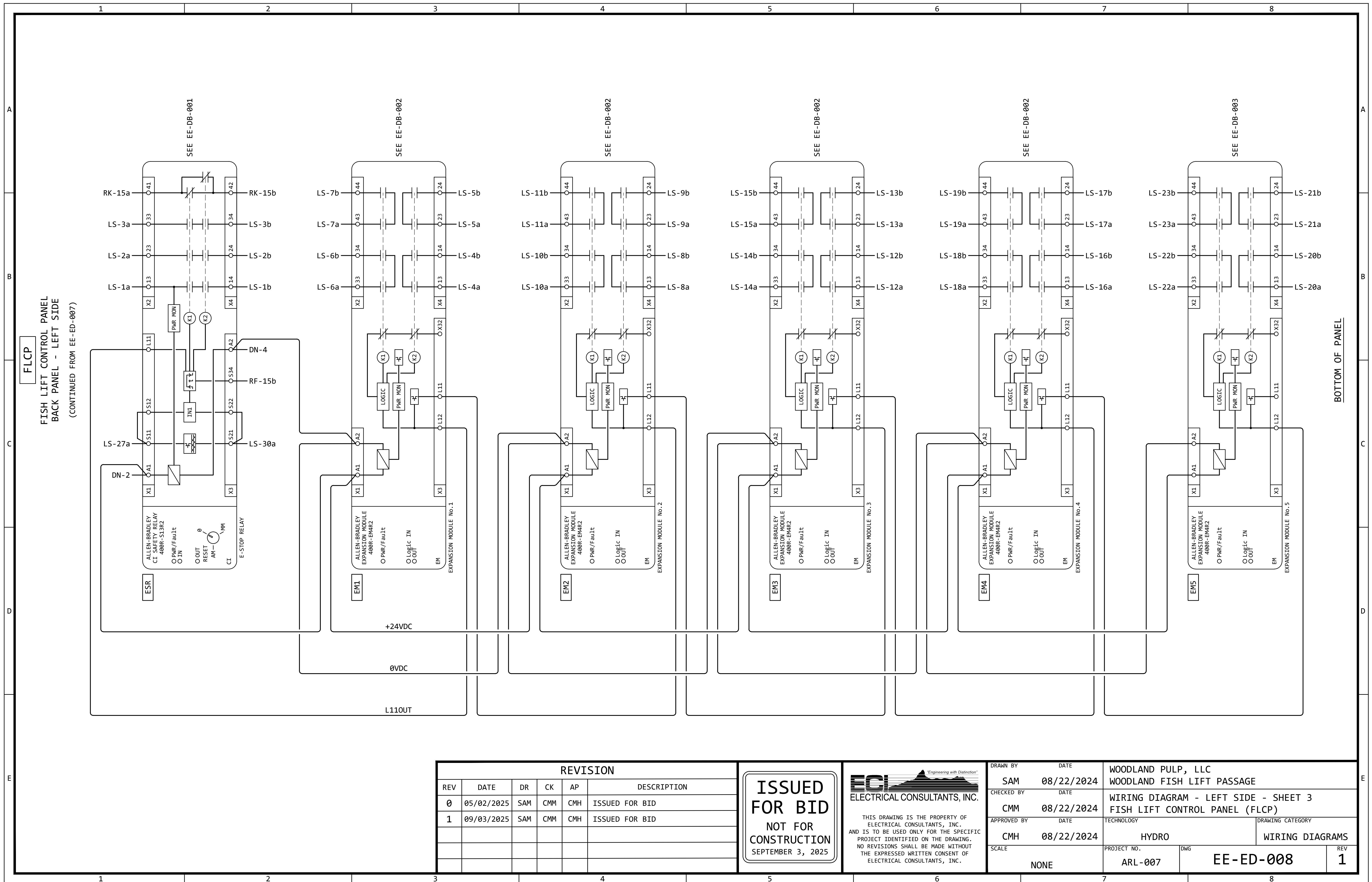


FOR E-STOP CIRCUIT
SEE EE-BD-001, 002 & 003

KEYED NOTES:

- 1 MOST OF THE CONDUCTORS IN THE TWO 12C CABLES RUNNING FROM THE HOIST CONTROL STATIONS TERMINATE ON LJ AS SHOWN. SOME OF THE CONDUCTORS TERMINATE BELOW ON LS, (SHOWN WITH WITH A DASHED CABLE BUBBLE).
EXAMPLE: (FLCP-EG2-X)
- 2 MOST OF THE CONDUCTORS IN THE 7C C1 CABLES RUNNING FROM THE GATE/VALVE ACTUATORS AND FROM HHACP TERMINATE ON RC, RD, RE AND RF, AS SHOWN ON EE-ED-009. SOME OF THE CONDUCTORS (ESD) TERMINATE HERE ON ON LS, (SHOWN WITH WITH A DASHED CABLE BUBBLE).
EXAMPLE: (FLCP-IG1-C1)
- 3 THE CONDUCTORS FROM E-STOP ES4 TERMINATE ON LJ AS SHOWN AND BELOW ON LS, (SHOWN WITH WITH A DASHED CABLE BUBBLE).
EXAMPLE: (FLCP-ES4-C)

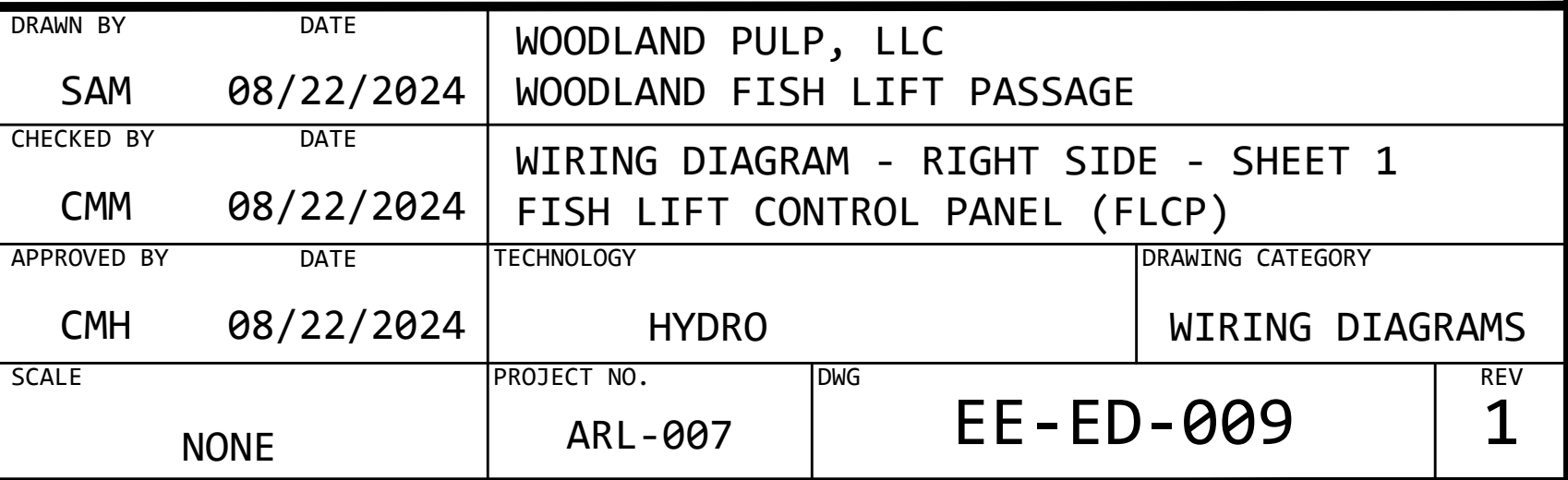
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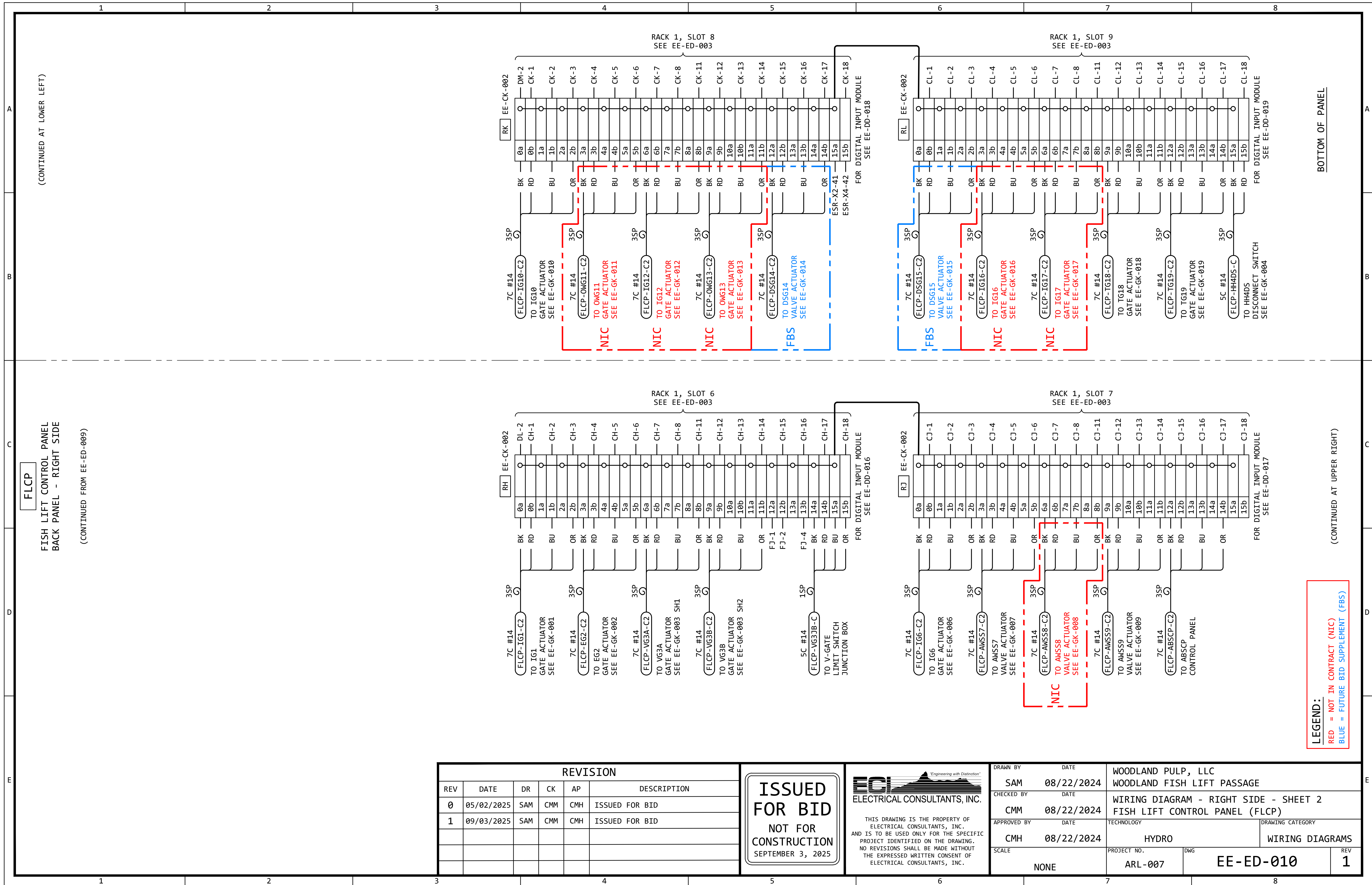


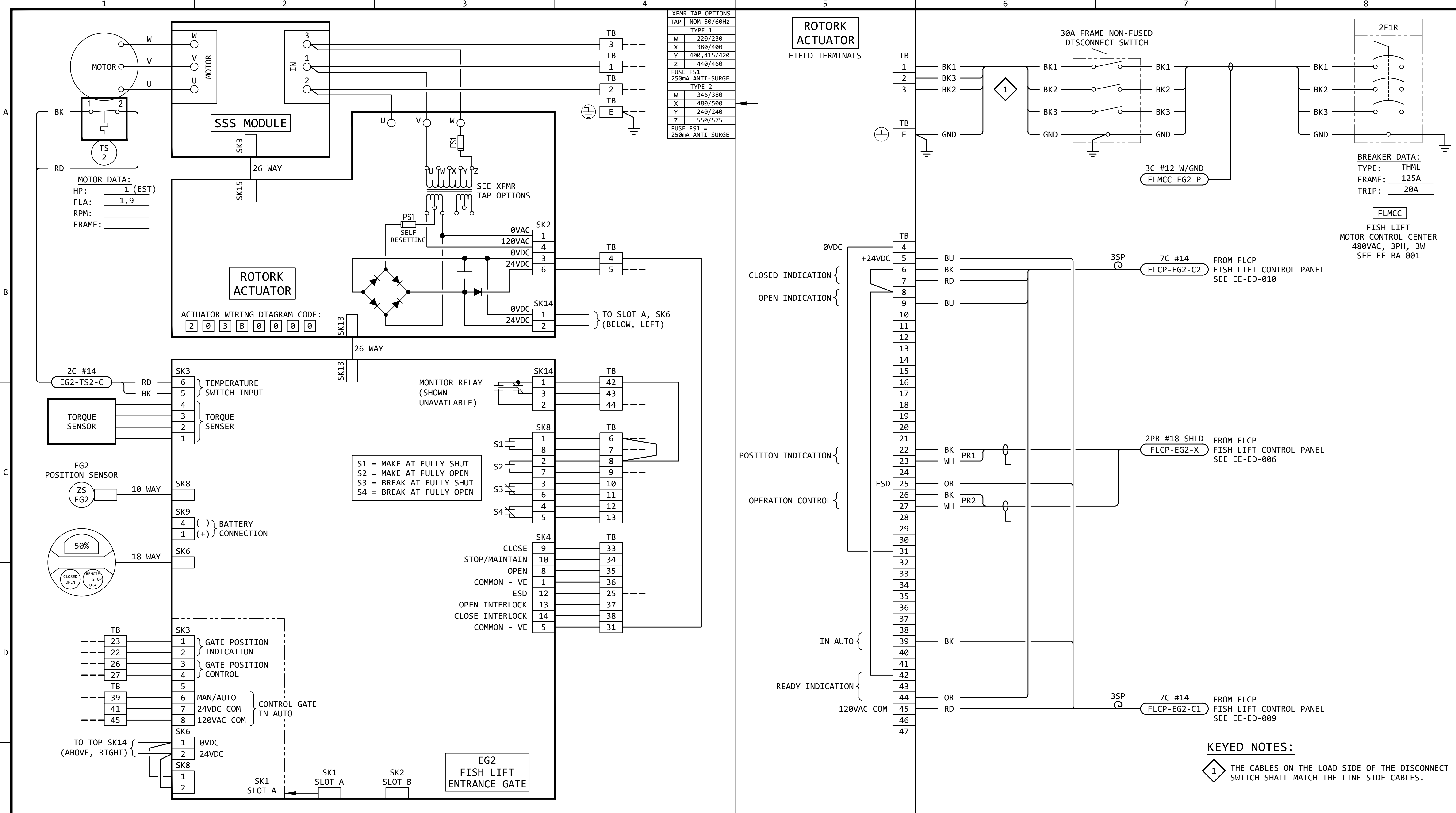
EXAMPLE: (FLCP-IG1-C1)



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GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-002 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

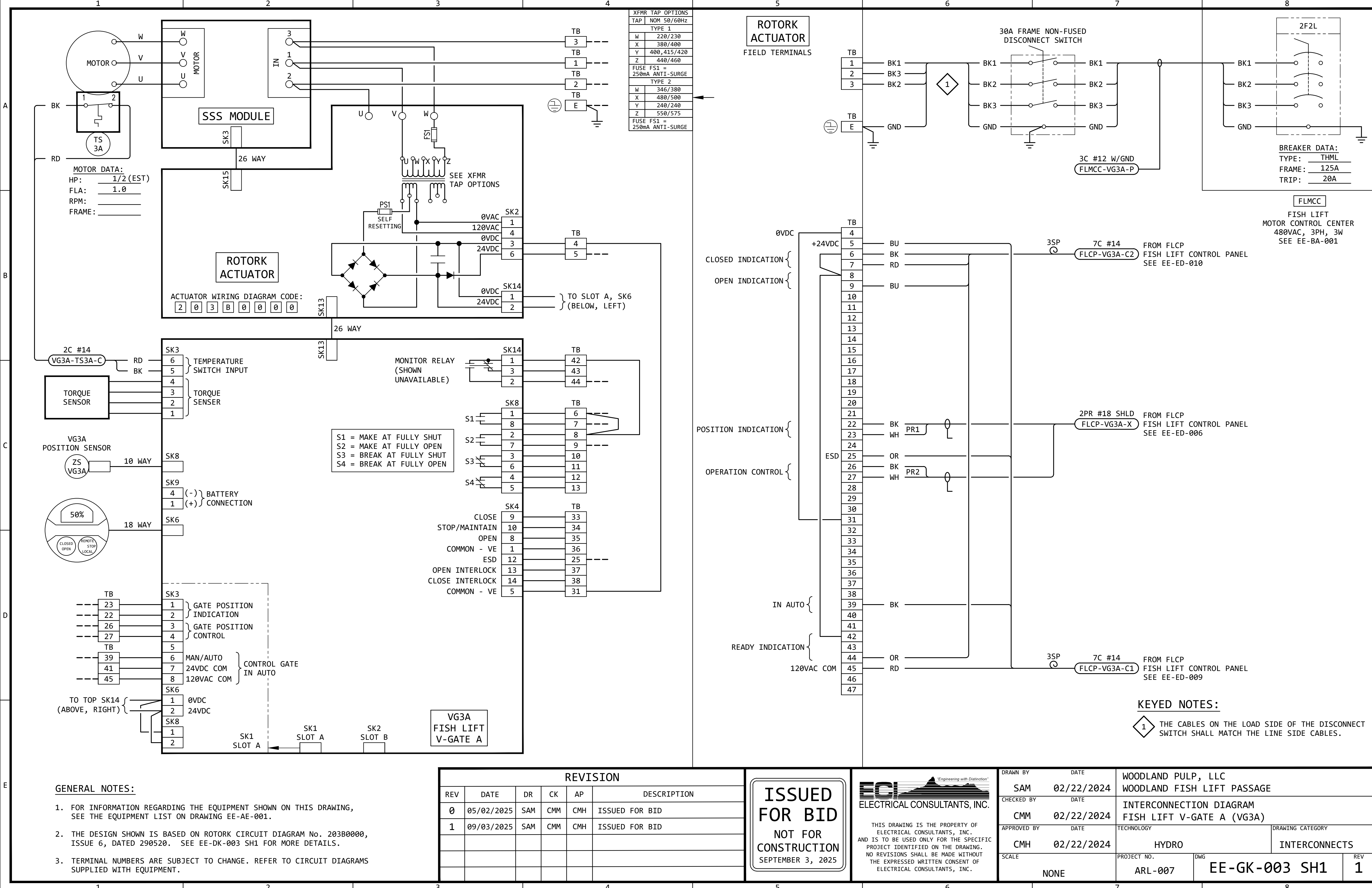
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LIFT ENTRANCE GATE (EG2)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-002	1	



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400,415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	

MOTOR DATA:
HP: 1/2 (EST)
FLA: 1.0
RPM:
FRAME:

ACTUATOR WIRING DIAGRAM CODE:
2 0 3 B 0 0 0 0

S1 = MAKE AT FULLY SHUT
S2 = MAKE AT FULLY OPEN
S3 = BREAK AT FULLY SHUT
S4 = BREAK AT FULLY OPEN

- GENERAL NOTES:
- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
 - THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-003 SH1 FOR MORE DETAILS.
 - TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

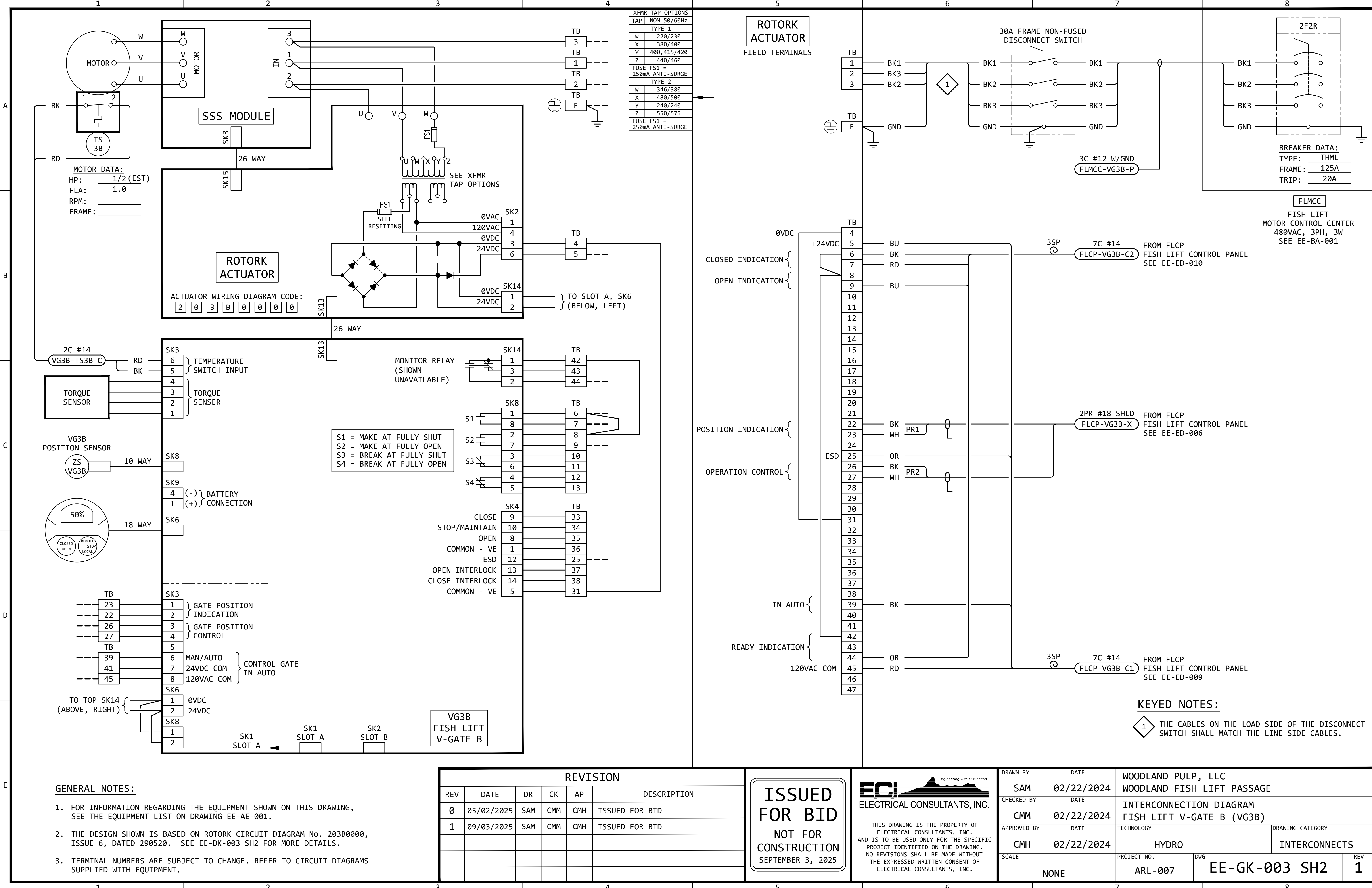
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LIFT V-GATE A (VG3A)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-003 SH1	1	



GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-003 SH2 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

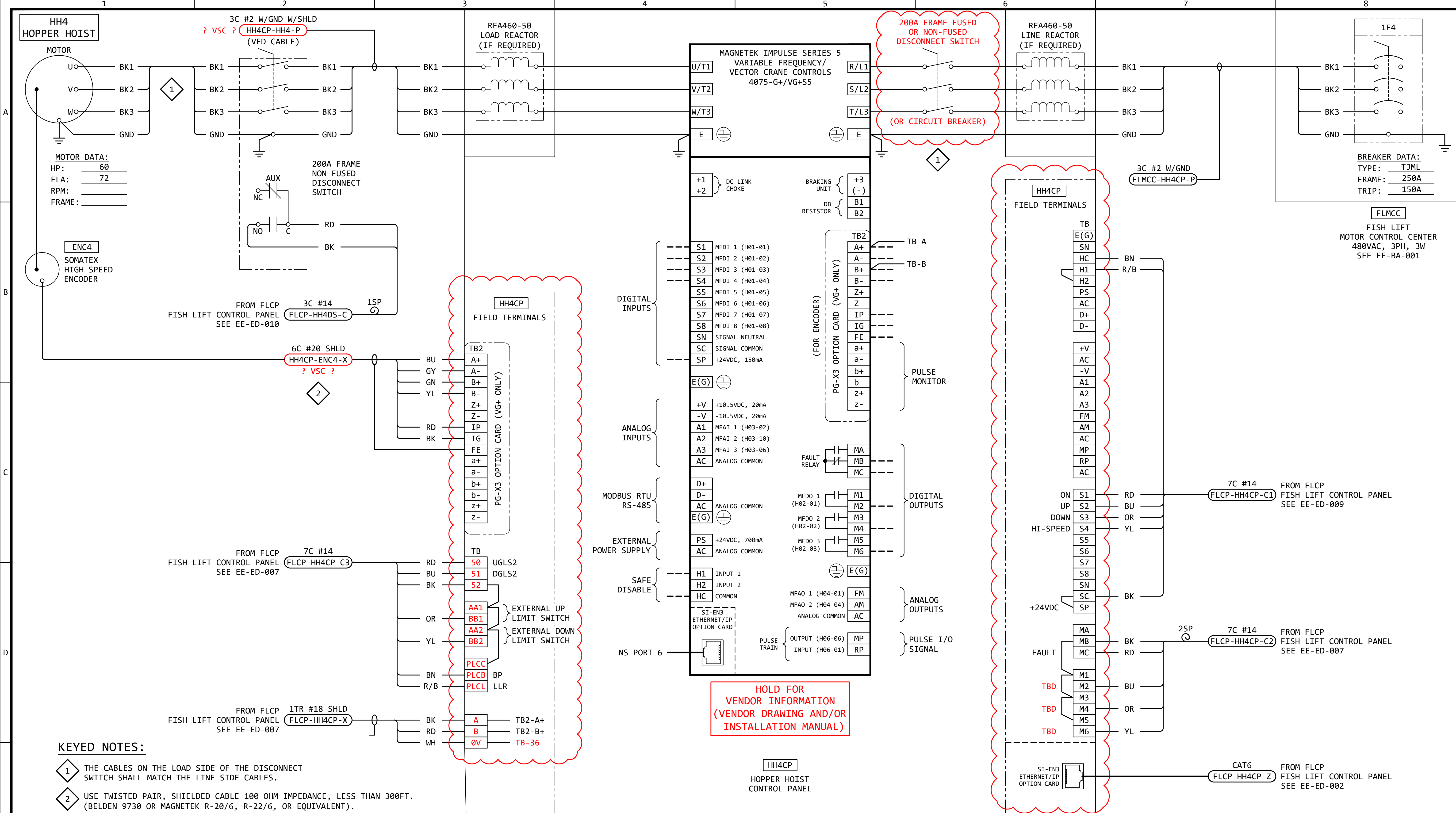
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LIFT V-GATE B (VG3B)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	02/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-003 SH2	1	



KEYED NOTES:

- 1 THE CABLES ON THE LOAD SIDE OF THE DISCONNECT SWITCH SHALL MATCH THE LINE SIDE CABLES.
- 2 USE TWISTED PAIR, SHIELDED CABLE 100 OHM IMPEDANCE, LESS THAN 300FT. (BELDEN 9730 OR MAGNETEK R-20/6, R-22/6, OR EQUIVALENT).

GENERAL NOTES:

- 1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- 2. THE DESIGN SHOWN IS BASED ON MAGNETEK IMPULSE G+/VG+ SERIES 5 TECHNICAL MANUAL, DATED AUGUST 2023. SEE EE-DK-004 FOR MORE DETAILS.
- 3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

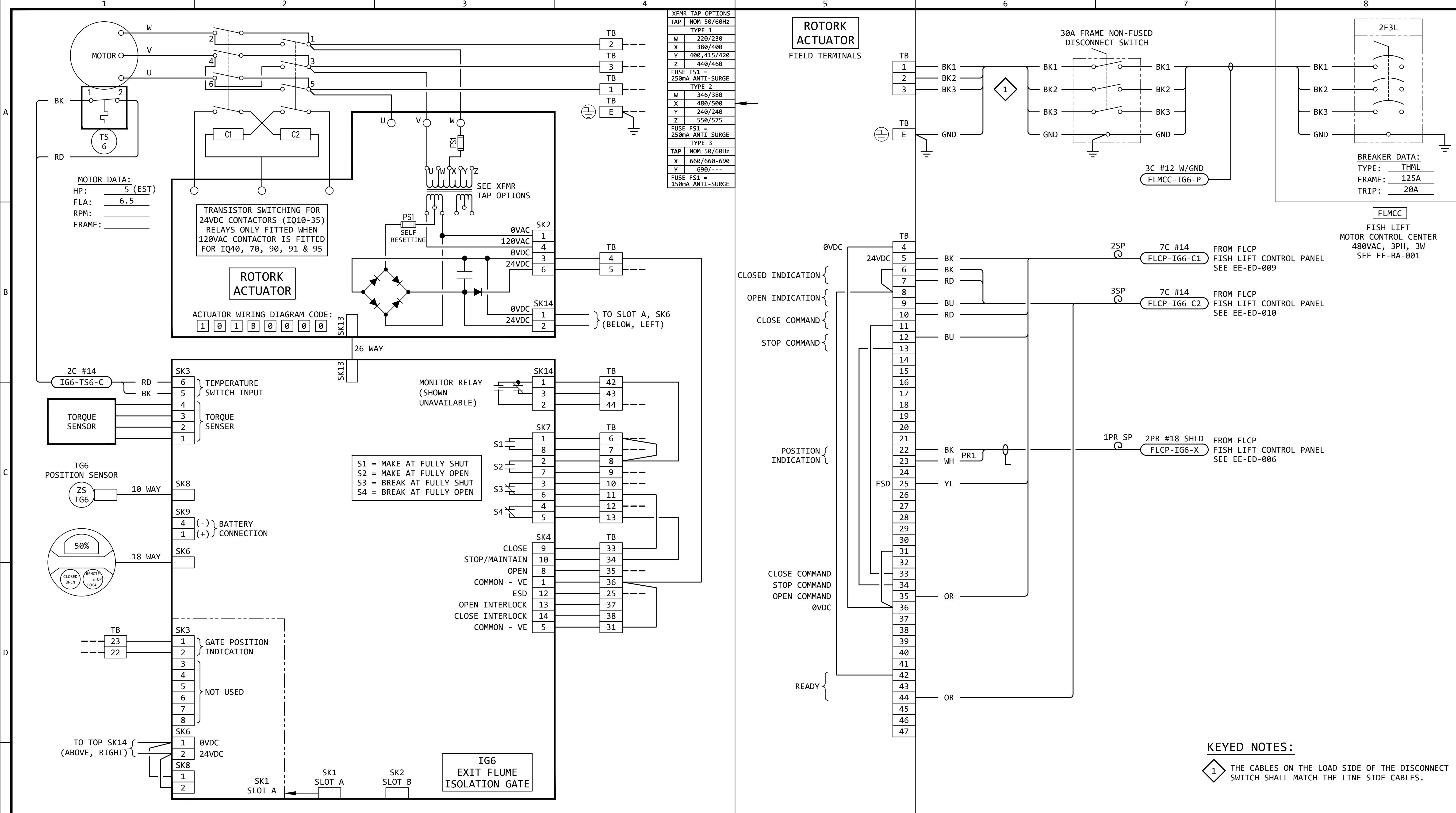
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM HOPPER HOIST (HH4)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	NONE	PROJECT NO.	DWG	REV
		ARL-007	EE-GK-004	1



GENERAL NOTES:

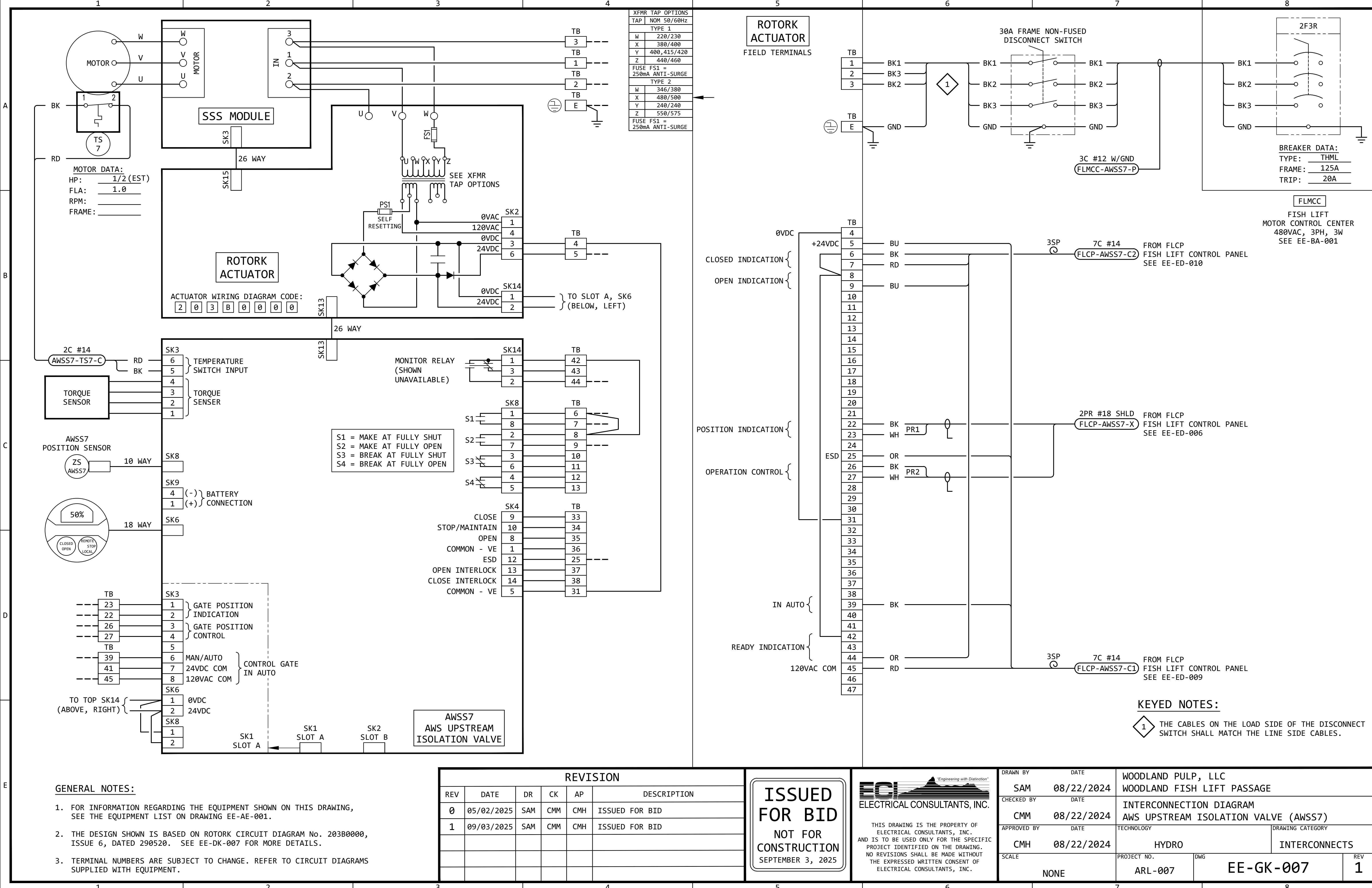
- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 101B0000, ISSUE 6, DATED 160614. SEE EE-DK-006 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM EXIT FLUME ISOLATION GATE (IG6)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-006	1	



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400, 415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	

ROTORK
ACTUATOR

FIELD TERMINALS

30A FRAME NON-FUSED
DISCONNECT SWITCH

2F3R

BREAKER DATA:
TYPE: THML
FRAME: 125A
TRIP: 20A

FLMCC

FISH LIFT
MOTOR CONTROL CENTER
480VAC, 3PH, 3W
SEE EE-BA-001

CLOSED INDICATION {
OPEN INDICATION {

POSITION INDICATION {
OPERATION CONTROL {

IN AUTO {

READY INDICATION {
120VAC COM

KEYED NOTES:

1 THE CABLES ON THE LOAD SIDE OF THE DISCONNECT SWITCH SHALL MATCH THE LINE SIDE CABLES.

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-007 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

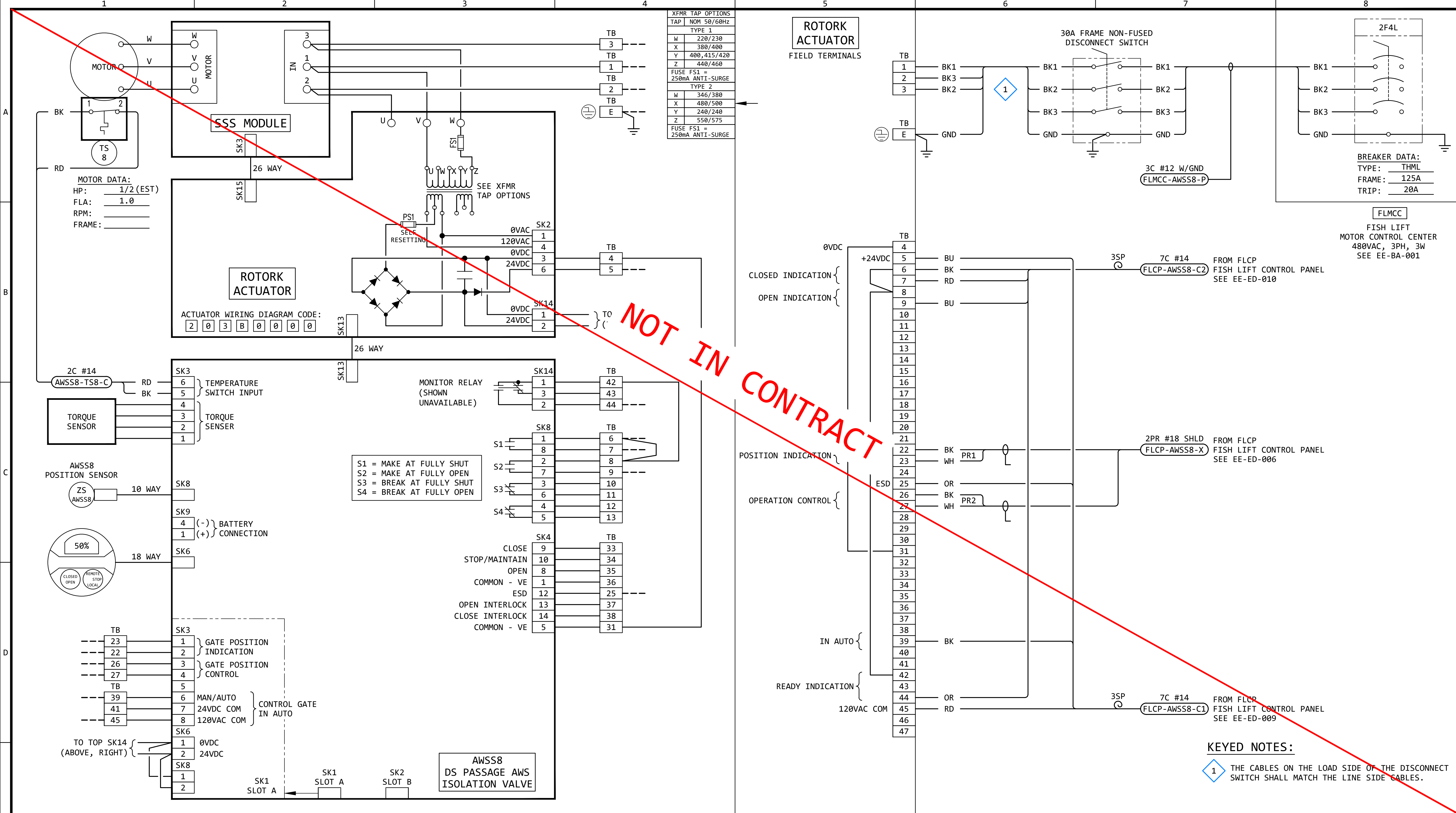
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	INTERCONNECTION DIAGRAM AWS UPSTREAM ISOLATION VALVE (AWSS7)	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	08/22/2024	HYDRO	INTERCONNECTS
SCALE	PROJECT NO.	DWG	REV
NONE	ARL-007	EE-GK-007	1



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400,415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-008 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

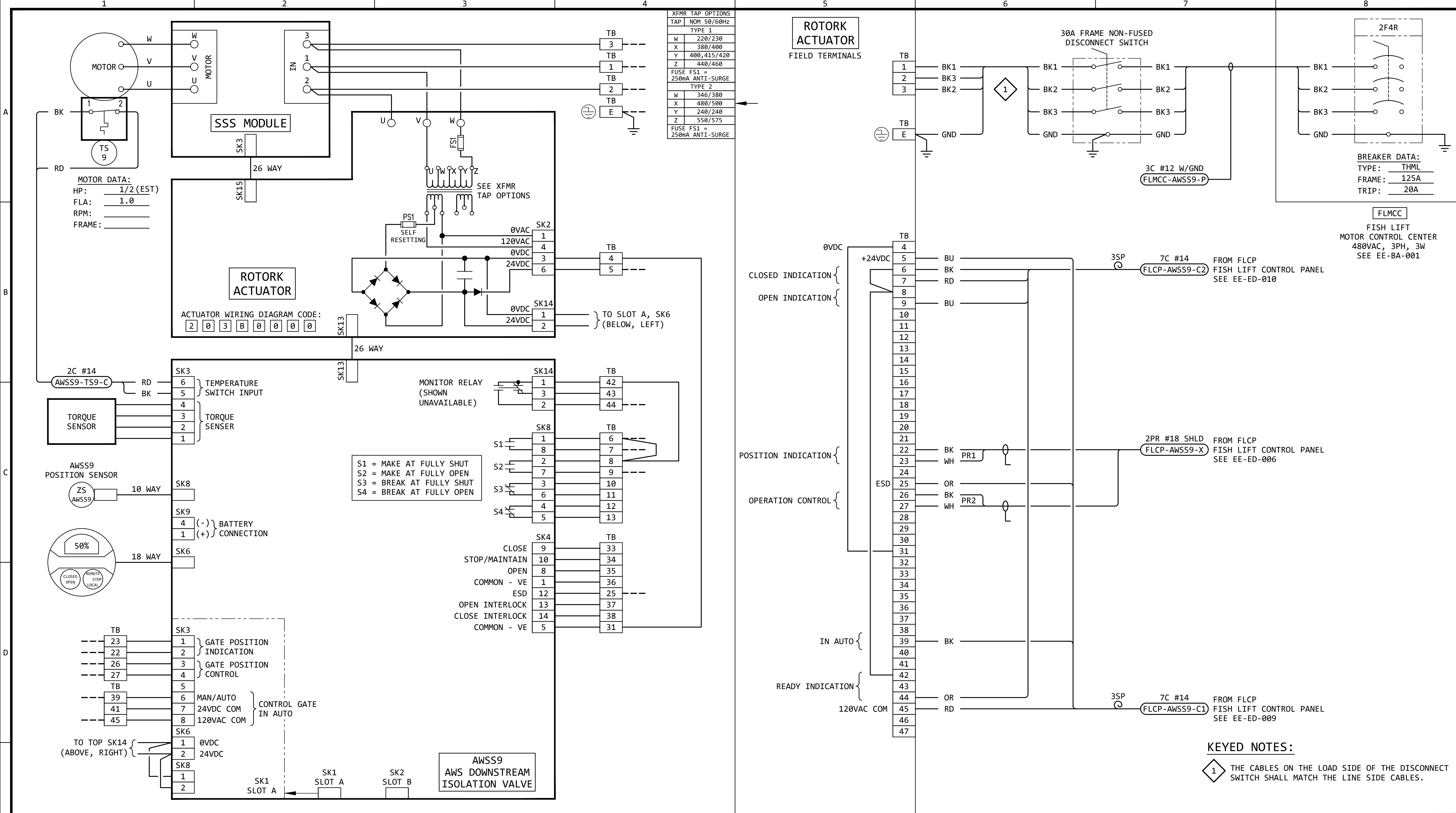
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM DS PASSAGE AWS ISOLATION VALVE (AWSS8)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-008	1	



GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-009 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
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1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

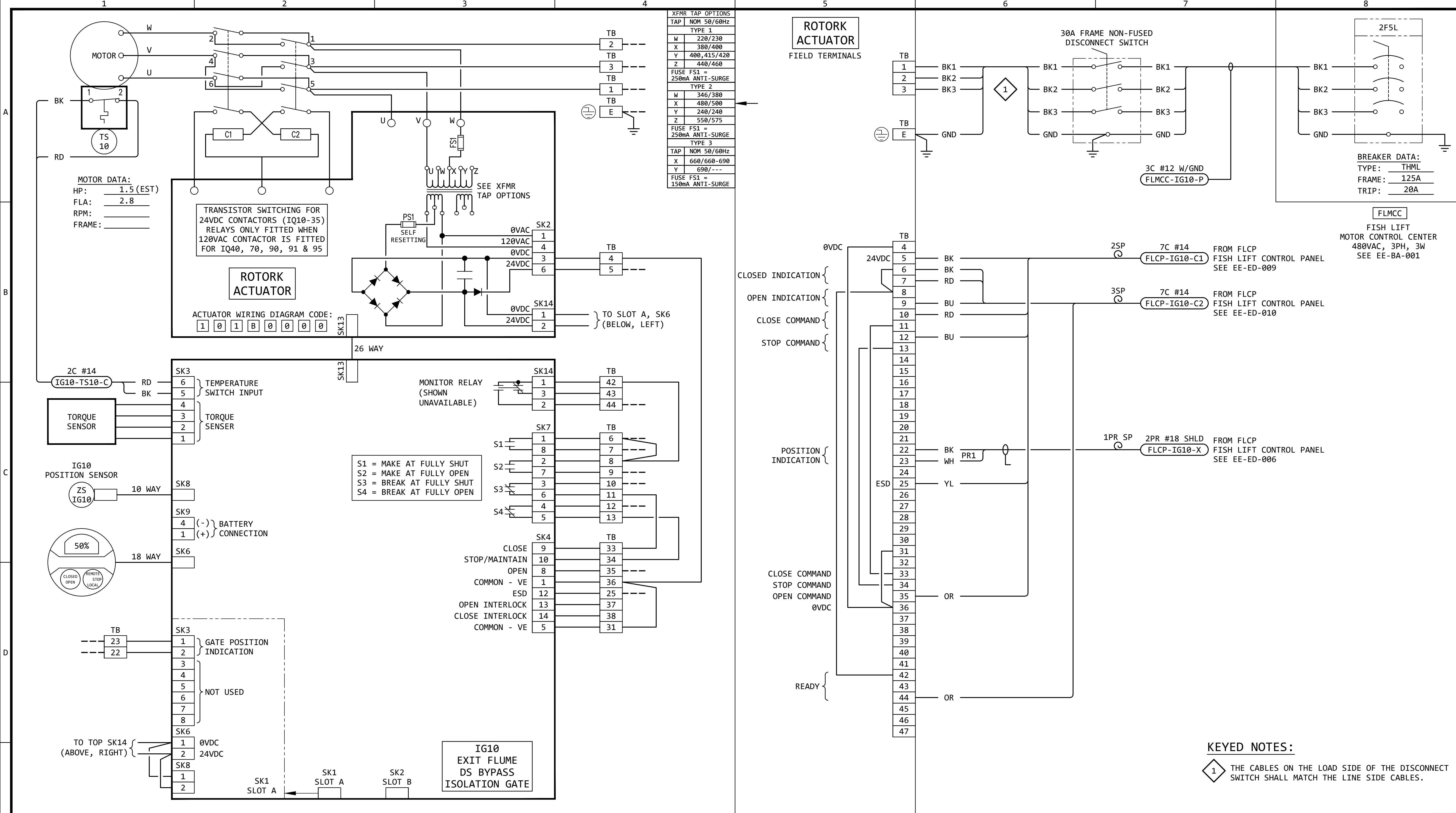
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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM AWS DOWNSTREAM ISOLATION VALVE (AWSS9)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-009	1	



GENERAL NOTES:

1.

FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.

2.

THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 101B0000, ISSUE 6, DATED 160614. SEE EE-DK-010 FOR MORE DETAILS.

3.

TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID

NOT FOR CONSTRUCTION

SEPTEMBER 3, 2025

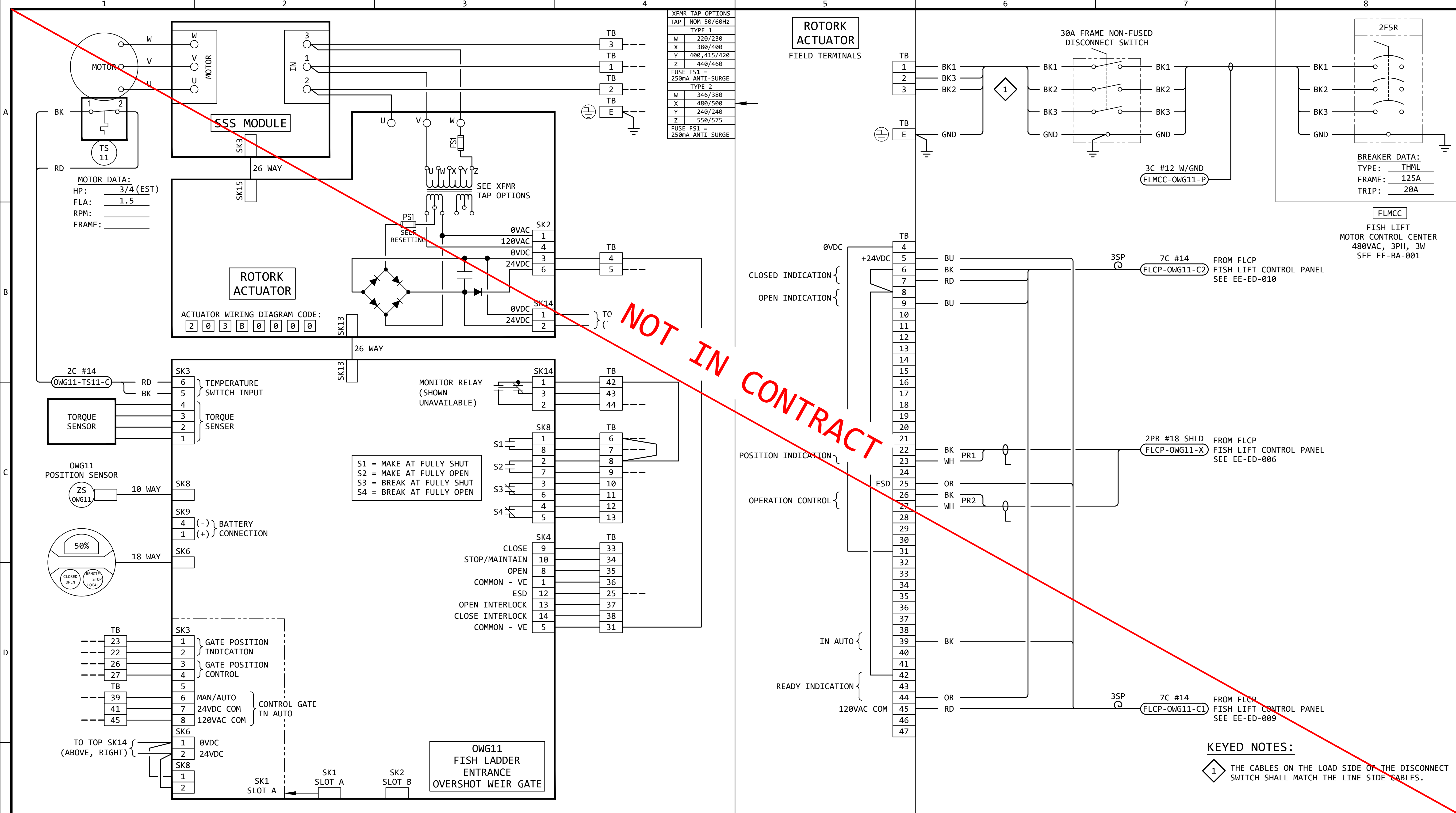
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DRAWN BY	DATE	WOODLAND PULP, LLC	
SAM	08/22/2024	WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	INTERCONNECTION DIAGRAM	
CMM	08/22/2024	EXIT FLUME DS BYPASS ISOLATION GATE (IG10)	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	08/22/2024	HYDRO	INTERCONNECTS
SCALE	PROJECT NO.	DWG	REV
NONE	ARL-007	EE-GK-010	1



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400,415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	

MOTOR DATA:
HP: 3/4 (EST)
FLA: 1.5
RPM: _____
FRAME: _____

ACTUATOR WIRING DIAGRAM CODE:
2 0 3 B 0 0 0 0

S1 = MAKE AT FULLY SHUT
S2 = MAKE AT FULLY OPEN
S3 = BREAK AT FULLY SHUT
S4 = BREAK AT FULLY OPEN

OWG11
FISH LADDER
ENTRANCE
OVERSHOT WEIR GATE

- GENERAL NOTES:
- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
 - THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-011 FOR MORE DETAILS.
 - TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

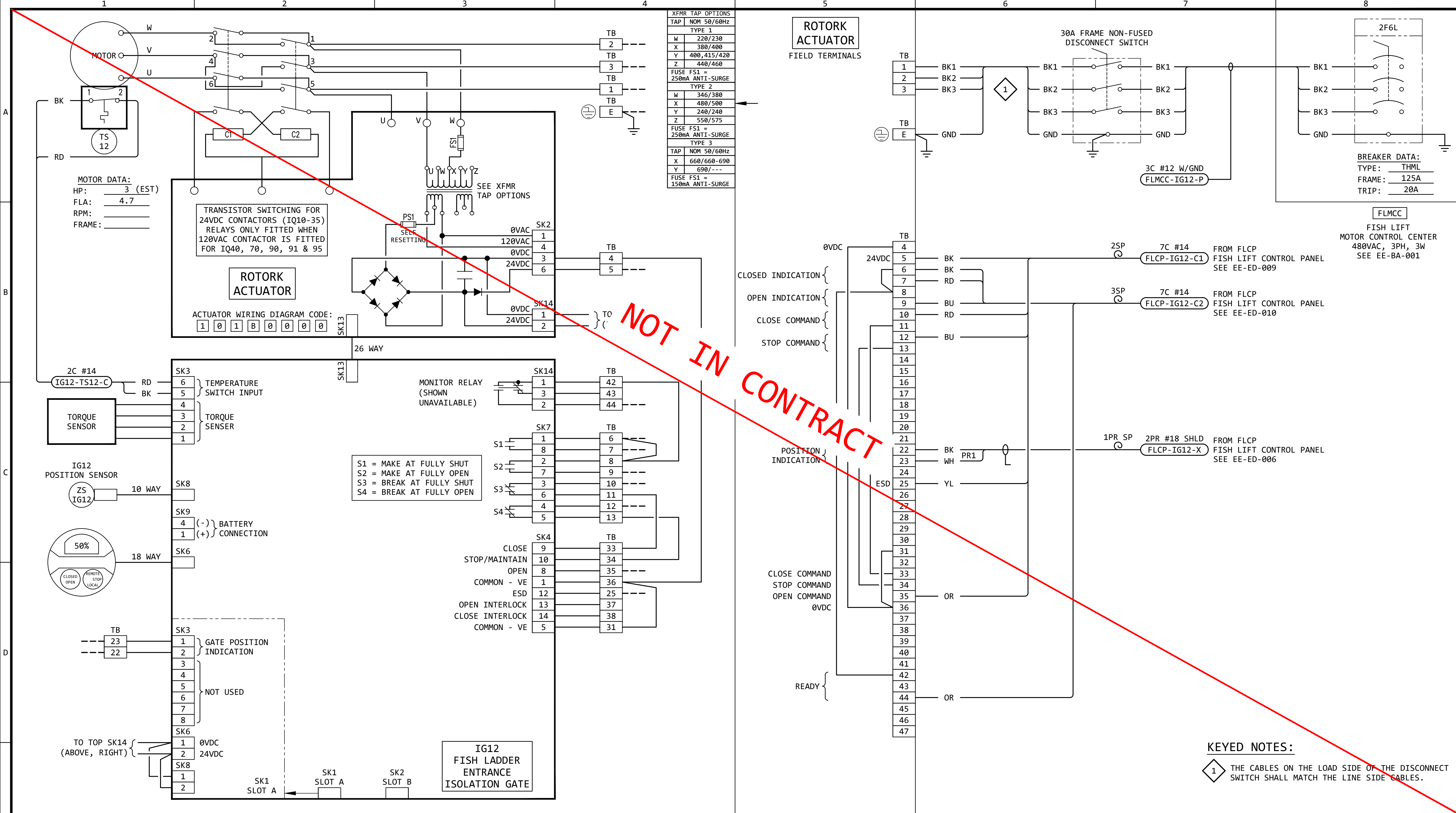
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
FOR BID
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CONSTRUCTION
SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LADDER ENTR. OVERSHOT WEIR GATE (OWG11)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-011	1	



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400/415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 3	
TAP	NOM 50/60Hz
X	660/660-690
Y	690/---
FUSE FS1 = 150mA ANTI-SURGE	

TRANSISTOR SWITCHING FOR 24VDC CONTACTORS (IQ10-35) RELAYS ONLY FITTED WHEN 120VAC CONTACTOR IS FITTED FOR IQ40, 70, 90, 91 & 95

ROTORK ACTUATOR

ACTUATOR WIRING DIAGRAM CODE:
1 0 1 B 0 0 0 0

MONITOR RELAY (SHOWN UNAVAILABLE)

S1 = MAKE AT FULLY SHUT
S2 = MAKE AT FULLY OPEN
S3 = BREAK AT FULLY SHUT
S4 = BREAK AT FULLY OPEN

IG12 FISH LADDER ENTRANCE ISOLATION GATE

ROTORK ACTUATOR

FIELD TERMINALS

30A FRAME NON-FUSED DISCONNECT SWITCH

BREAKER DATA:
TYPE: THML
FRAME: 125A
TRIP: 20A

FLMCC

FISH LIFT MOTOR CONTROL CENTER 480VAC, 3PH, 3W SEE EE-BA-001

KEYED NOTES:

1 THE CABLES ON THE LOAD SIDE OF THE DISCONNECT SWITCH SHALL MATCH THE LINE SIDE CABLES.

GENERAL NOTES:

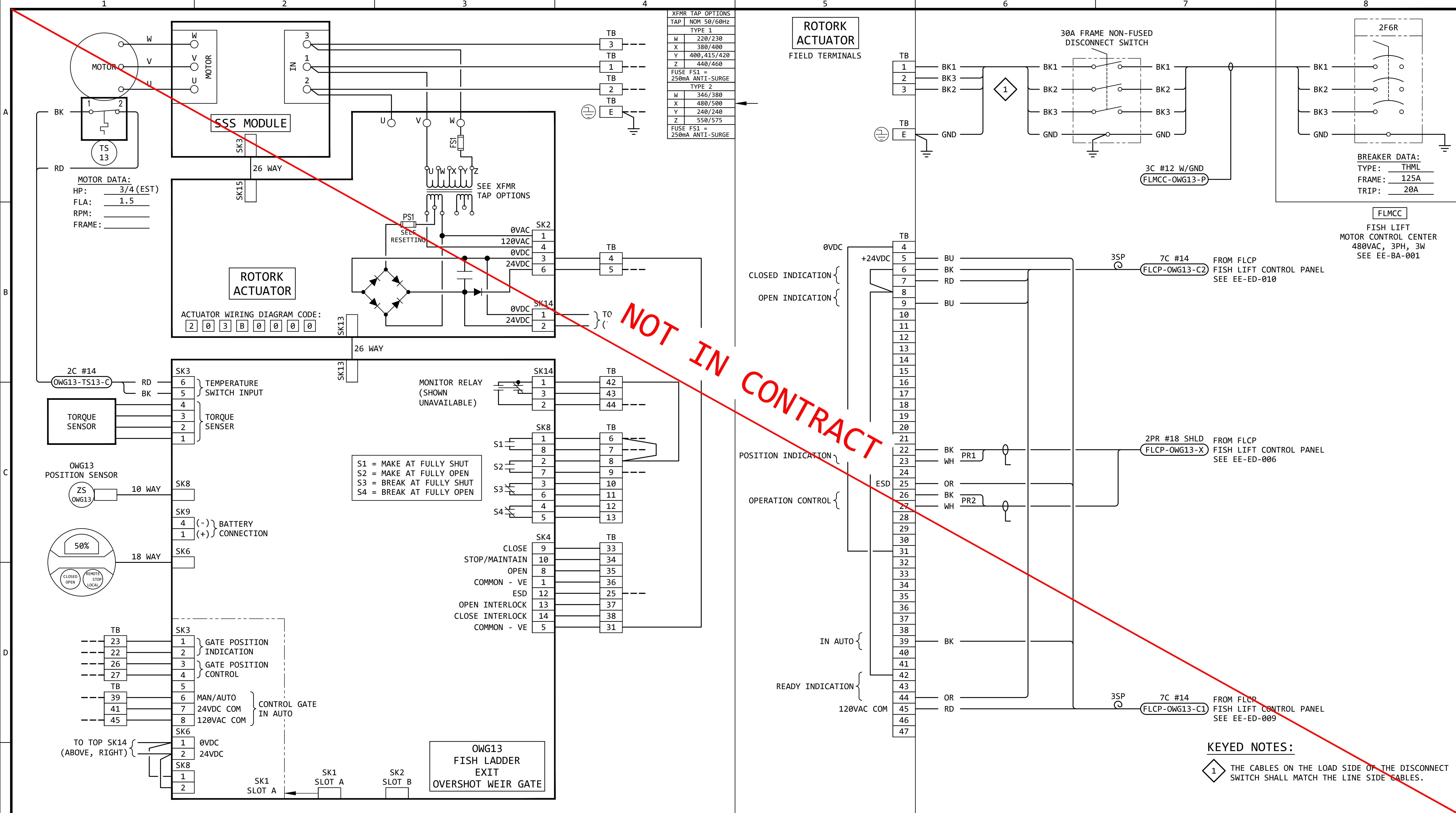
- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 101B0000, ISSUE 6, DATED 160614. SEE EE-DK-012 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LADDER ENTRANCE ISOLATION GATE (IG12)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-012	1	



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400,415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	

MOTOR DATA:
HP: 3/4 (EST)
FLA: 1.5
RPM: _____
FRAME: _____

ACTUATOR WIRING DIAGRAM CODE:
2 0 3 B 0 0 0 0

S1 = MAKE AT FULLY SHUT
S2 = MAKE AT FULLY OPEN
S3 = BREAK AT FULLY SHUT
S4 = BREAK AT FULLY OPEN

OWG13
FISH LADDER
EXIT
OVERSHOT WEIR GATE

KEYED NOTES:
1 THE CABLES ON THE LOAD SIDE OF THE DISCONNECT SWITCH SHALL MATCH THE LINE SIDE CABLES.

- GENERAL NOTES:
- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
 - THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-013 FOR MORE DETAILS.
 - TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

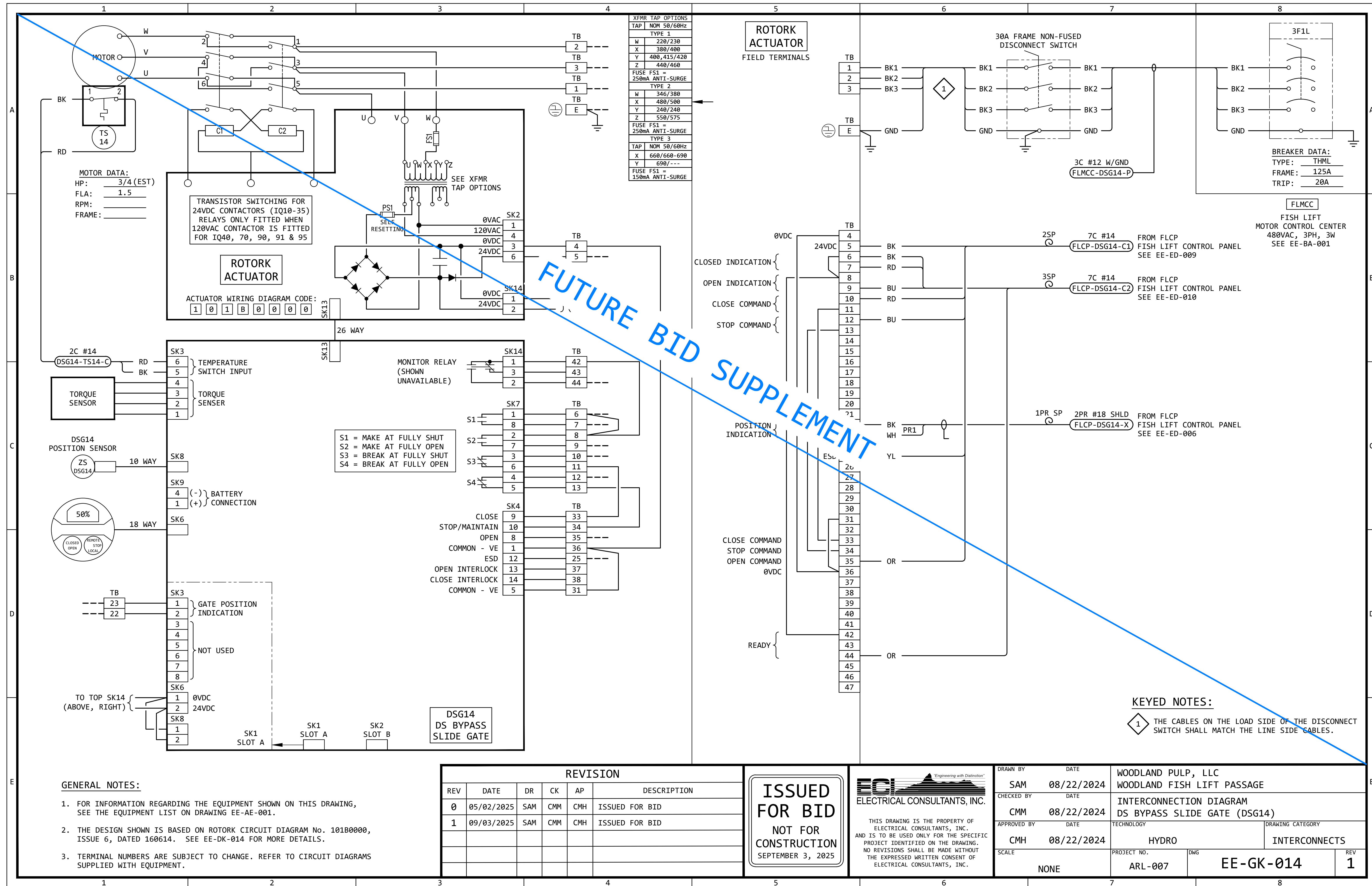
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

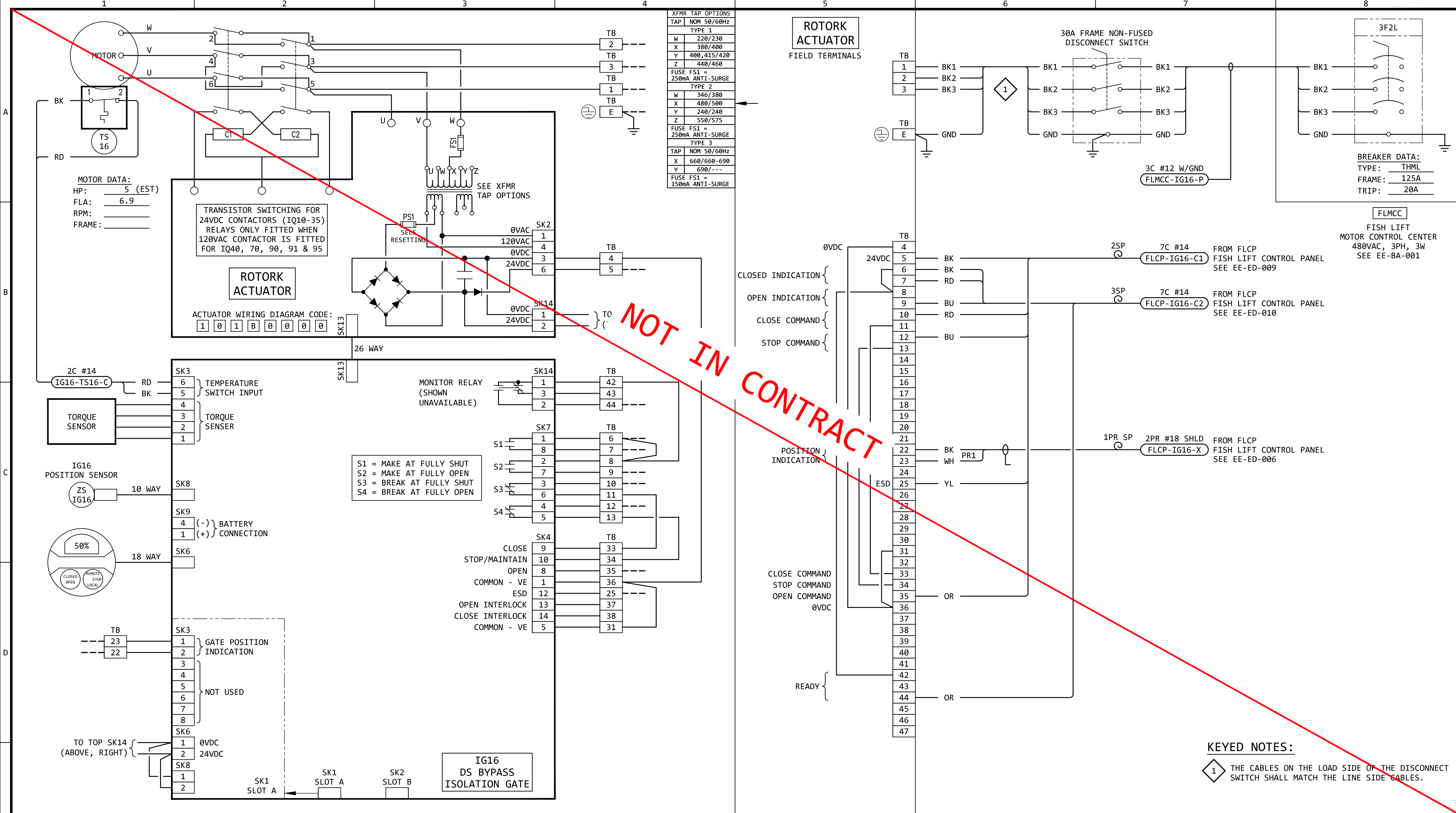
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FOR BID
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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE	
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LADDER EXIT OVERSHOT WEIR GATE (OWG13)	
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY
CMH	08/22/2024	HYDRO	INTERCONNECTS
SCALE	PROJECT NO.	DWG	REV
NONE	ARL-007	EE-GK-013	1





XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400, 415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 3	
TAP	NOM 50/60Hz
X	660/660-690
Y	690/---
FUSE FS1 = 150mA ANTI-SURGE	

MOTOR DATA:
HP: 5 (EST)
FLA: 6.9
RPM:
FRAME:

TRANSISTOR SWITCHING FOR 24VDC CONTACTORS (IQ10-35) RELAYS ONLY FITTED WHEN 120VAC CONTACTOR IS FITTED FOR IQ40, 70, 90, 91 & 95

ROTORK ACTUATOR

ACTUATOR WIRING DIAGRAM CODE:
1 0 1 B 0 0 0 0

S1 = MAKE AT FULLY SHUT
S2 = MAKE AT FULLY OPEN
S3 = BREAK AT FULLY SHUT
S4 = BREAK AT FULLY OPEN

IG16 DS BYPASS ISOLATION GATE

ROTORK ACTUATOR
FIELD TERMINALS

30A FRAME NON-FUSED DISCONNECT SWITCH

BREAKER DATA:
TYPE: THML
FRAME: 125A
TRIP: 20A

FLMCC

FISH LIFT MOTOR CONTROL CENTER
480VAC, 3PH, 3W
SEE EE-BA-001

CLOSED INDICATION
OPEN INDICATION
CLOSE COMMAND
STOP COMMAND

POSITION INDICATION

CLOSE COMMAND
STOP COMMAND
OPEN COMMAND
0VDC

READY

KEYED NOTES:

1 THE CABLES ON THE LOAD SIDE OF THE DISCONNECT SWITCH SHALL MATCH THE LINE SIDE CABLES.

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 101B0000, ISSUE 6, DATED 160614. SEE EE-DK-016 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

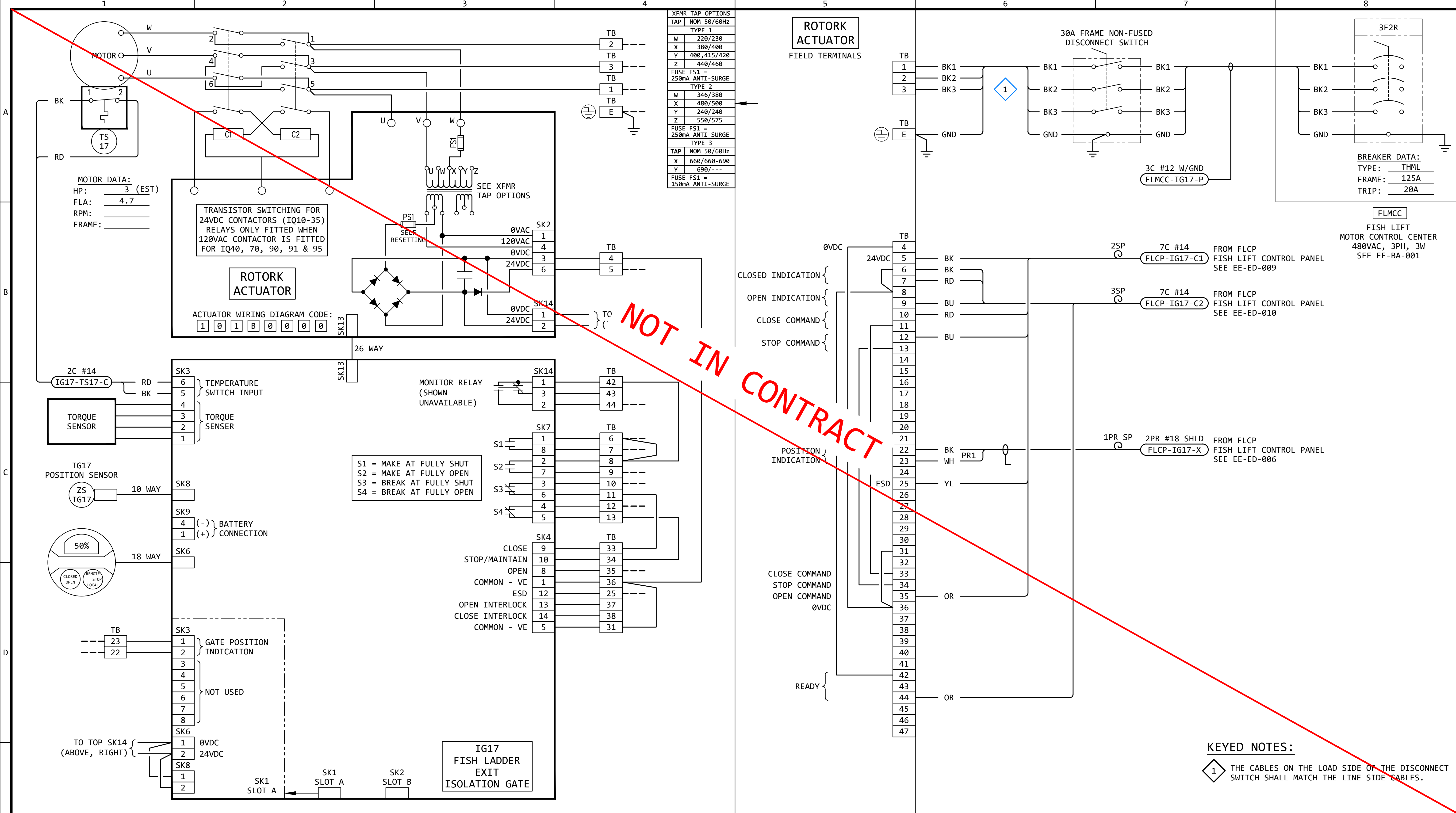
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED FOR BID
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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM DS BYPASS ISOLATION GATE (IG16)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-016	1	



- GENERAL NOTES:**
- 1. FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
 - 2. THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 101B0000, ISSUE 6, DATED 160614. SEE EE-DK-017 FOR MORE DETAILS.
 - 3. TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

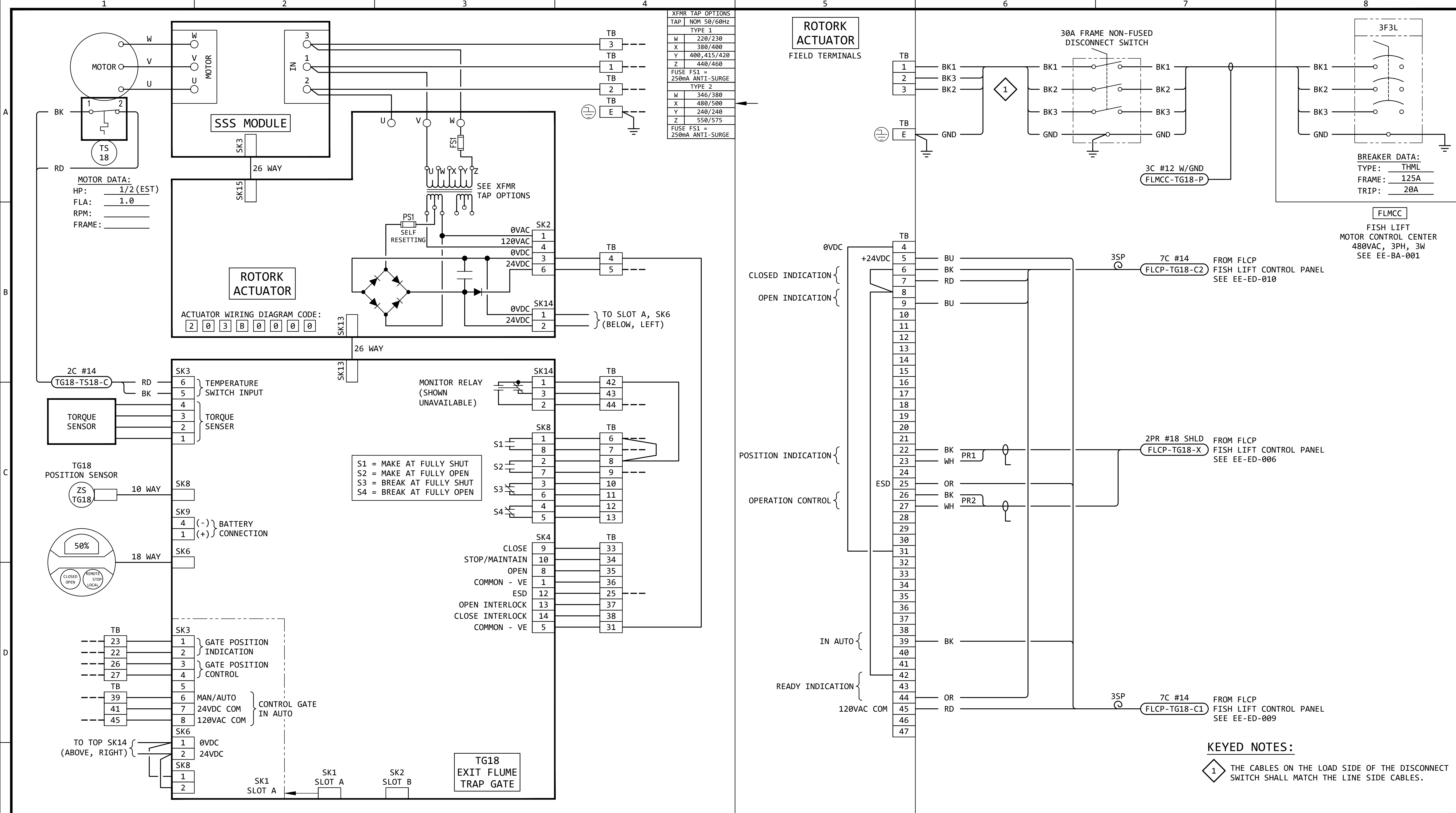
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SEPTEMBER 3, 2025



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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM FISH LADDER EXIT ISOLATION GATE (IG17)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-017	1	



GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-018 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

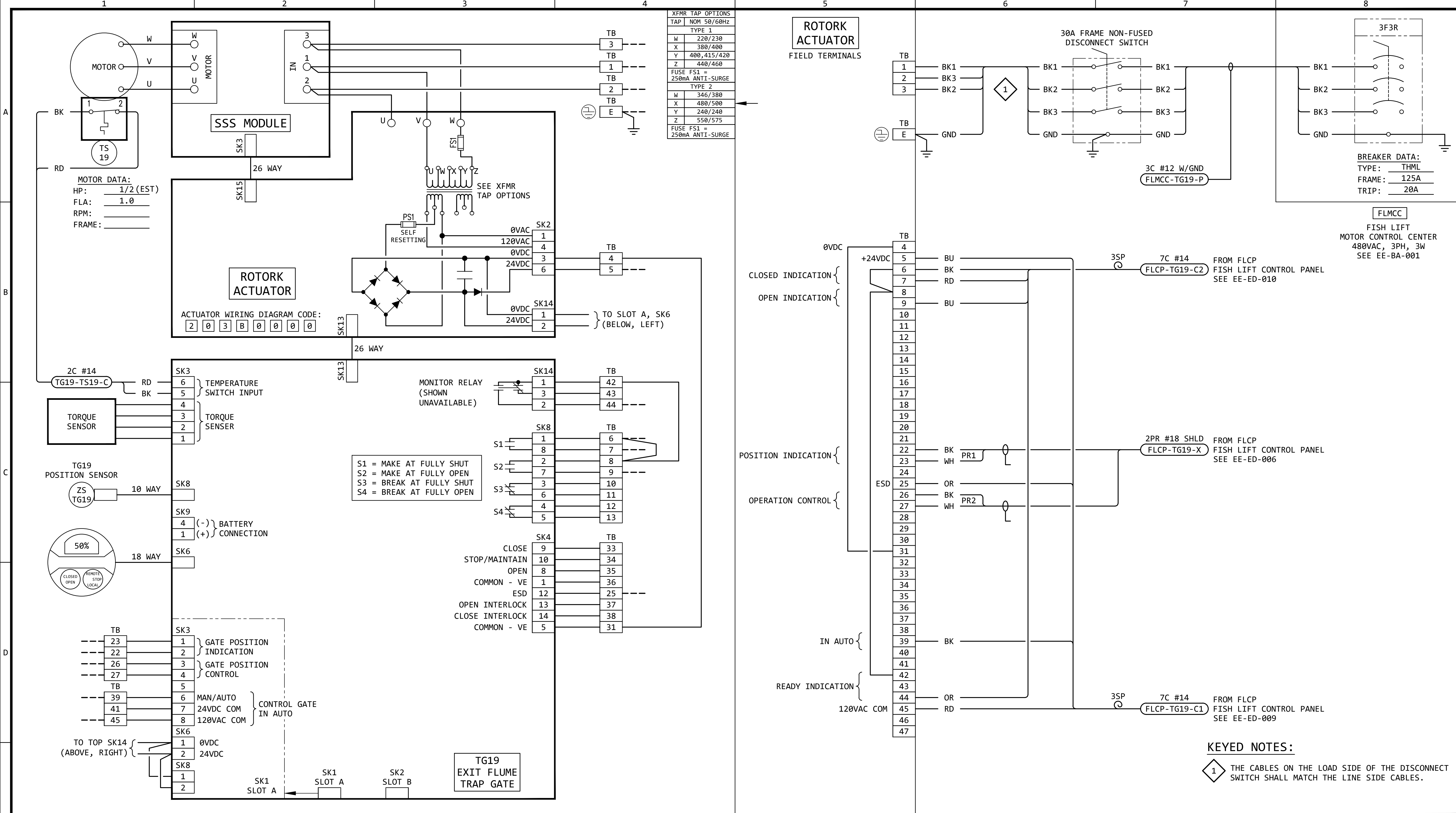
REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

ISSUED
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SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM EXIT FLUME TRAP GATE (TG18)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-018	1	



XFMR TAP OPTIONS	
TAP	NOM 50/60Hz
TYPE 1	
W	220/230
X	380/400
Y	400,415/420
Z	440/460
FUSE FS1 = 250mA ANTI-SURGE	
TYPE 2	
W	346/380
X	480/500
Y	240/240
Z	550/575
FUSE FS1 = 250mA ANTI-SURGE	

GENERAL NOTES:

- FOR INFORMATION REGARDING THE EQUIPMENT SHOWN ON THIS DRAWING, SEE THE EQUIPMENT LIST ON DRAWING EE-AE-001.
- THE DESIGN SHOWN IS BASED ON ROTORK CIRCUIT DIAGRAM No. 203B0000, ISSUE 6, DATED 290520. SEE EE-DK-019 FOR MORE DETAILS.
- TERMINAL NUMBERS ARE SUBJECT TO CHANGE. REFER TO CIRCUIT DIAGRAMS SUPPLIED WITH EQUIPMENT.

REVISION					
REV	DATE	DR	CK	AP	DESCRIPTION
0	05/02/2025	SAM	CMM	CMH	ISSUED FOR BID
1	09/03/2025	SAM	CMM	CMH	ISSUED FOR BID

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CONSTRUCTION
SEPTEMBER 3, 2025

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DRAWN BY	DATE	WOODLAND PULP, LLC WOODLAND FISH LIFT PASSAGE		
CHECKED BY	DATE	INTERCONNECTION DIAGRAM TRAP GATE (TG19)		
APPROVED BY	DATE	TECHNOLOGY	DRAWING CATEGORY	
CMH	08/22/2024	HYDRO	INTERCONNECTS	
SCALE	PROJECT NO.	DWG	REV	
NONE	ARL-007	EE-GK-019	1	