

BROADWIND HEAVY FABRICATIONS

L-70 PRESSURE REDUCTION SKID - CONTROL SYSTEM

BROADWIND HEAVY FABRICATIONS HIGH FLOW PRESSURE REDUCTION SKID COVER SHEET	MIDLAND, TEXAS RTS JOB NO.	ENGINEERING AND DESIGN TEXAS REGISTERED ENGINEERING FIRM #498	NO.	FILE
BROADWIND DWG.	HPF024-10-101 REV. 0 SCALE	 HPF CONSULTANTS, INC.	DRAWN BY:	
			NO.	
			0	ISSUE FOR CONSTRUCTION HPF #24279
			REVISION/ISSUE	
			BY	KDB
			CHK.	JLT
			REVIEW/APPR.	
			DATE	12/02/24
			DWG. NO.	
				REFERENCE DRAWINGS

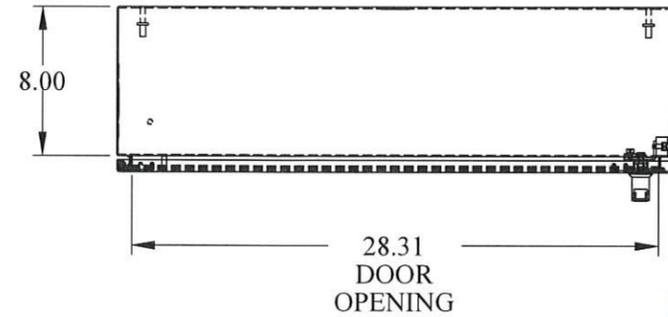
BROADWIND HEAVY FABRICATIONS

L-70 PRESSURE REDUCTION SKID - CONTROL SYSTEM

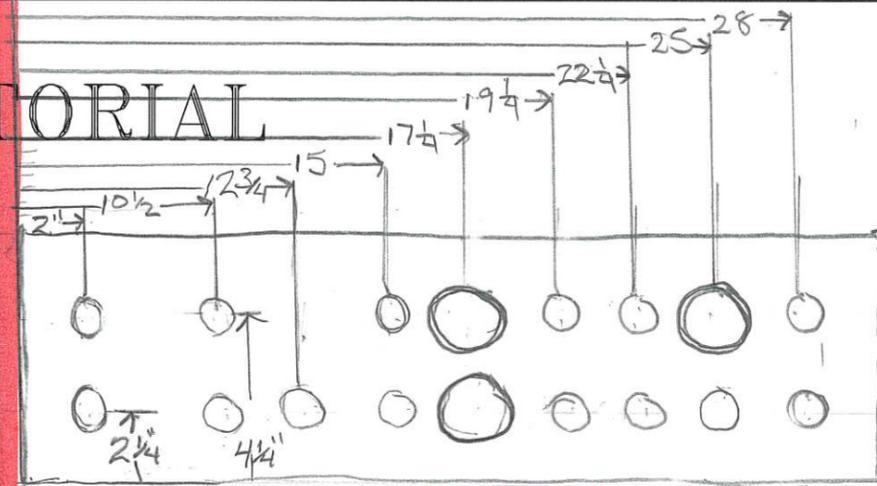
SYSTEM CABINET DRAWINGS	
ICS DWG NO	DESCRIPTION
HPF024-10-101	PROJECT COVER SHEET
HPF024-10-102	SYSTEM DRAWING LOG
HPF024-10-103	STANDARD SYMBOLS FOR FIELD WIRING
HPF024-10-104	SYSTEM CABINET PICTORIAL
HPF024-10-105	SYSTEM CABINET - SUB PANEL LAY - OUT
HPF024-10-106	PLC EQUIPMENT ARRANGEMENT (NETWORK)
HPF024-10-107	BILL OF MATERIAL
HPF024-10-108	COMPOSITE BILL OF MATERIAL - ROW 1
HPF024-10-109	COMPOSITE BILL OF MATERIAL - ROW 2
HPF024-10-110	COMPOSITE BILL OF MATERIAL - RAIL 1
HPF024-10-111	COMPOSITE BILL OF MATERIAL - RAIL 2
HPF024-10-112	COMPOSITE BILL OF MATERIAL - RAIL 3
HPF024-10-113	PRS - AC/DC POWER DISTRIBUTION DRAWING
HPF024-10-114	PRS - HARD WIRE ESD RELAY WIRING
HPF024-10-115	RAIL 1 WIRING
HPF024-10-116	RAIL 2 WIRING
HPF024-10-117	RAIL 3 WIRING
HPF024-10-118	OMRON-XN1P2 14CH - DISCRETE INPUT (TB-10-101)
HPF024-10-119	OMRIN-XN1P2 10CH - DISCRETE OUTPUT (TB-10-106)
HPF024-10-120	DIGITAL INPUT FIELD WIRING (RACK 1 - SLOT 2, TB-10-102)
HPF024-10-121	ANALOG INPUT FIELD WIRING (RACK 1 - SLOT 3, TB-10-103)
HPF024-10-122	ANALOG INPUT FIELD WIRING (RACK 1 - SLOT 4, TB-10-104)
HPF024-10-123	ANALOG OUTPUT FIELD WIRING (RACK 1 - SLOT 5, TB-10-105)
HPF024-10-124	DISCRETE OUTPUT FIELD WIRING (RACK 1 - SLOT 6, TB-10-107)

 <p style="font-size: 8px;">ENGINEERING AND DESIGN TEXAS REGISTERED ENGINEERING FIRM #4198</p>	<p style="font-size: 8px;">DRAWN BY: _____ FILE: _____</p>
<p style="font-size: 8px;">BROADWIND HEAVY FABRICATIONS SYSTEM DRAWING LOG</p>	<p style="font-size: 8px;">MIDLAND, TEXAS NTS</p>
<p style="font-size: 8px;">BROADWIND DWG. HPF024-10-102 REV. 0 SCALE</p>	<p style="font-size: 8px;">JOB NO. _____</p>
<p style="font-size: 8px;">0 ISSUED FOR CONSTRUCTION, HPF #24279</p>	<p style="font-size: 8px;">NO. _____</p>
<p style="font-size: 8px;">KDB</p>	<p style="font-size: 8px;">BY _____</p>
<p style="font-size: 8px;">JLT</p>	<p style="font-size: 8px;">CHK. REVIEW/APPR. _____</p>
<p style="font-size: 8px;">12/02/24</p>	<p style="font-size: 8px;">DATE _____</p>
<p style="font-size: 8px;">DWG. NO. _____</p>	<p style="font-size: 8px;">REFERENCE DRAWINGS _____</p>

PLC CABINET PICTORIAL

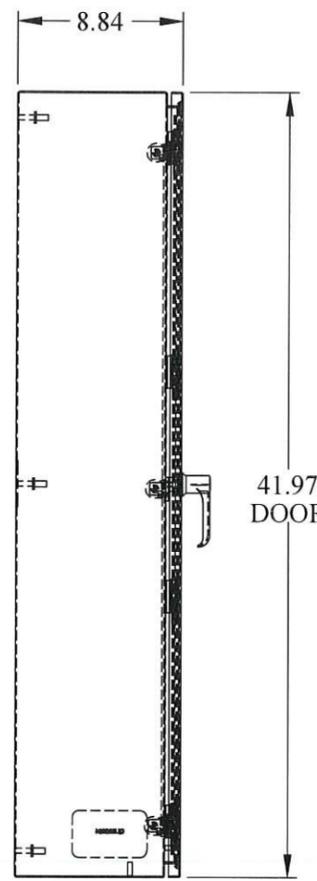


TOP VIEW

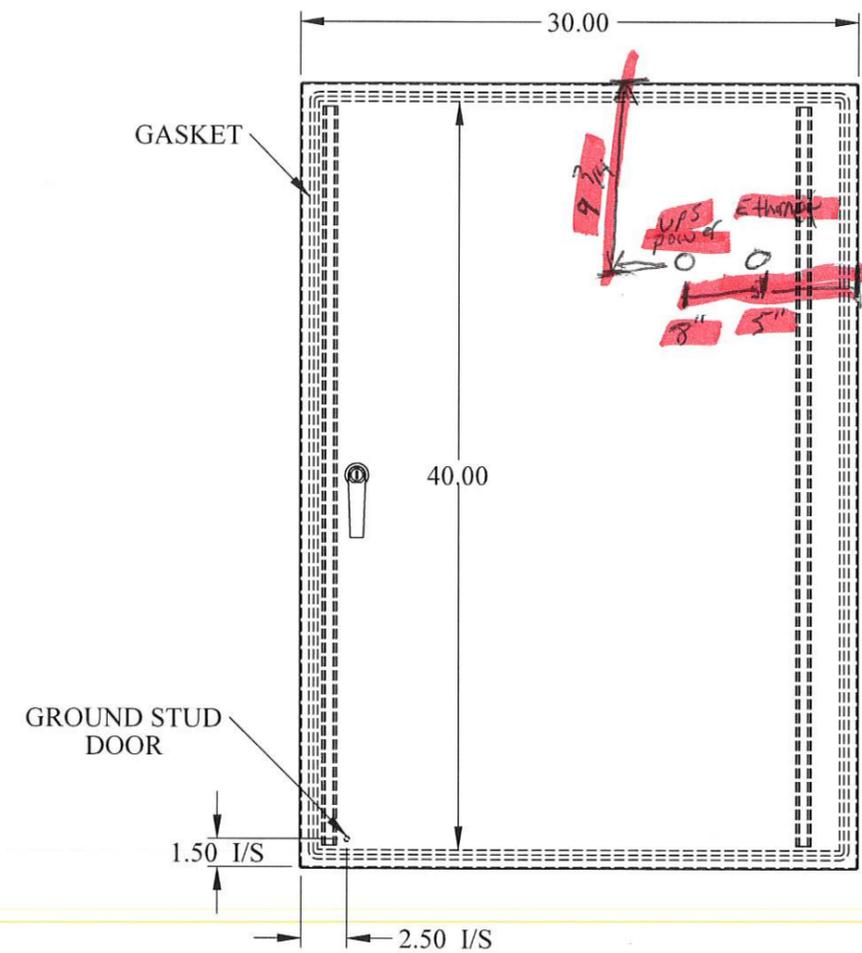


Bottom view

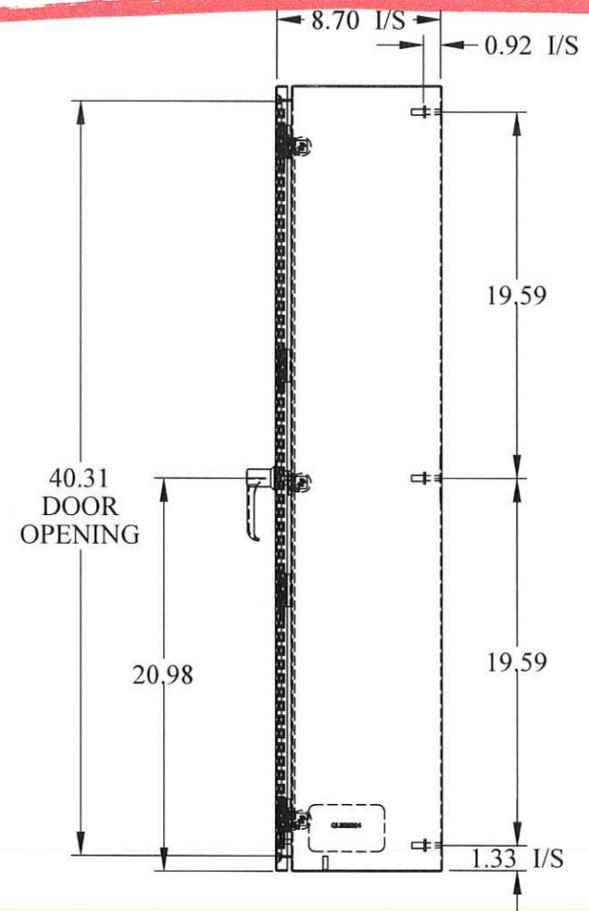
3 large holes 3/4" knockout
14 small holes 1/2" knockout



SIDE VIEW



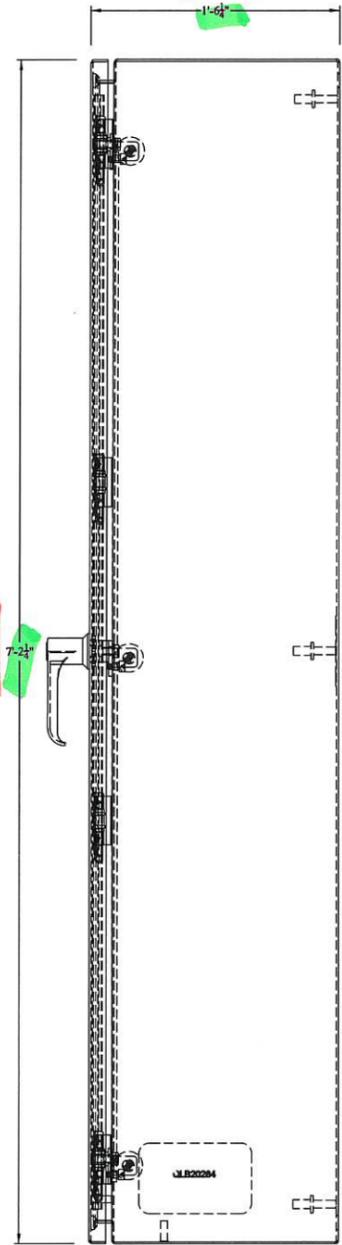
FRONT VIEW



SIDE VIEW

BROADWIND HEAVY FABRICATIONS		ENGINEERING AND DESIGN		REFERENCE DRAWINGS	
PLC CABINET PICTORIAL		TEXAS REGISTERED		DWG. NO.	
MIDLAND, TEXAS		ENGINEERING FIRM #098		DATE	
NTS		HPF		12/02/24	
REV. 0 ISCALE		ISSUED FOR CONSTRUCTION HPF #24279		BY CHK. REVIEW APPR.	
JOB NO.		NO.		DATE	
DRAWN BY:		REVISION/ISSUE		JOB. JLT	
FILE:		NO.		12/02/24	
DWG. HFF02-10-104		NO.		12/02/24	

Door



SIDE VIEW

Run wireway to edge of backplate from top to bottom

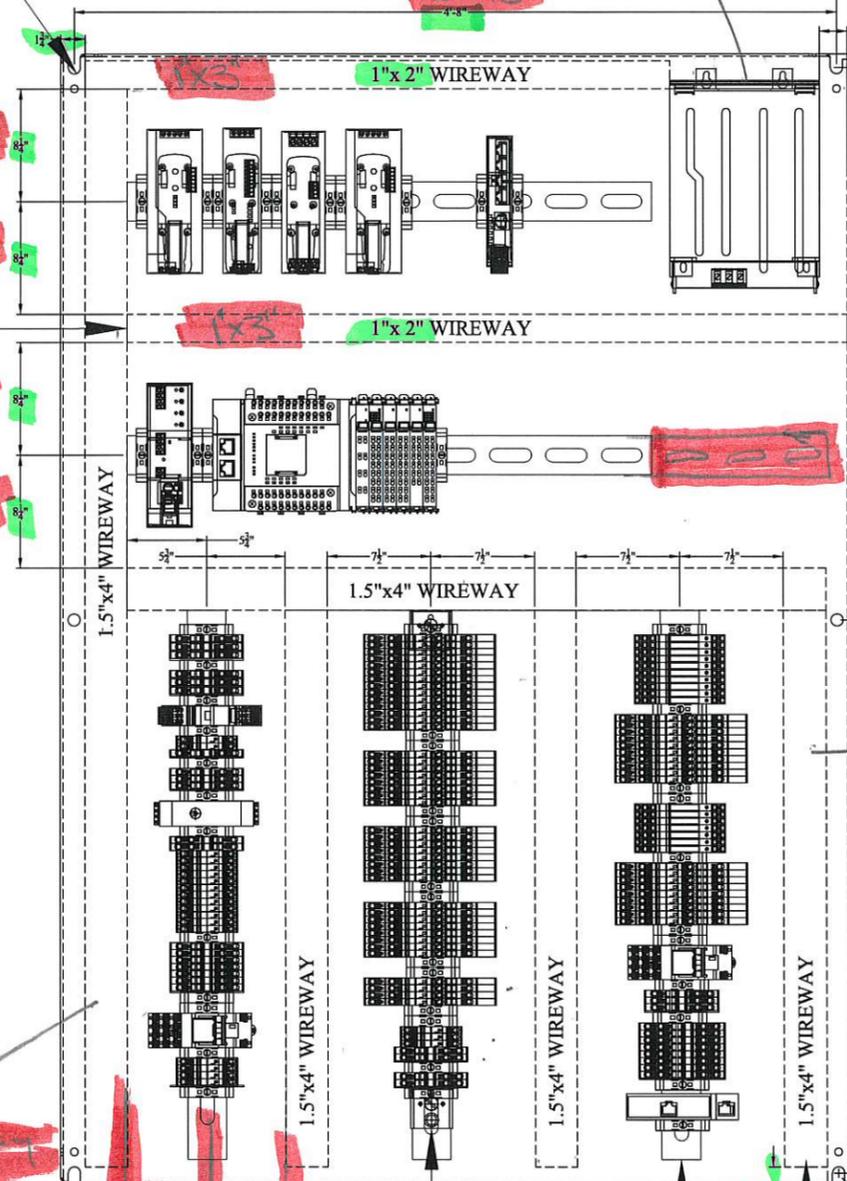
2

43
TYP.

3 1/2"

3 1/2"

5 1/2"



FRONT VIEW

32

39
TYP.

42
TYP.

3 1/2" TYP.

7" TYP.

1

1 1/2"

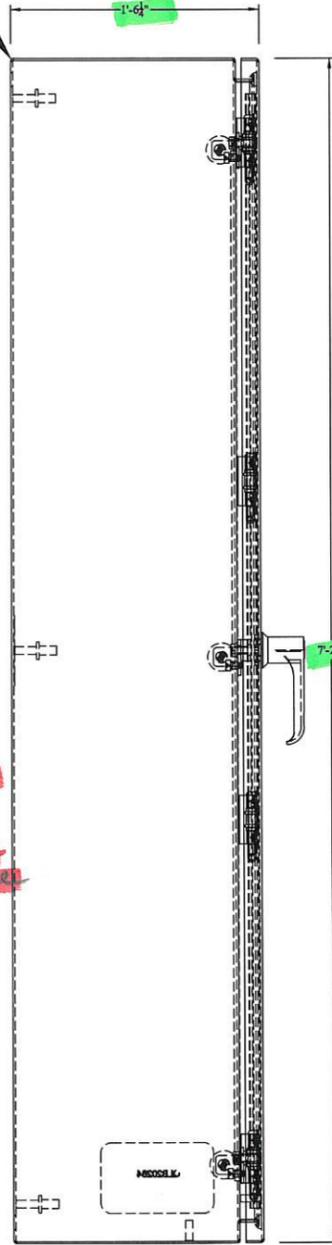
1 1/2"

19 1/2"

19 1/2"

Run wireway to the edge of backplate

0 1/2" TYP.



SIDE VIEW

BROADWIND HEAVY FABRICATIONS
SUB-PANEL LAYOUT

ENGINEERING AND DESIGN
TEXAS REGISTERED
ENGINEERING FIRM 498



MIDLAND, TEXAS
DWG. HFF024-10-105 REV. 0 SCALE 1-1/2"=10"

JOB NO.

DRAWN BY: FILE:

NO.

ISSUED FOR CONSTRUCTION, HFF #24279

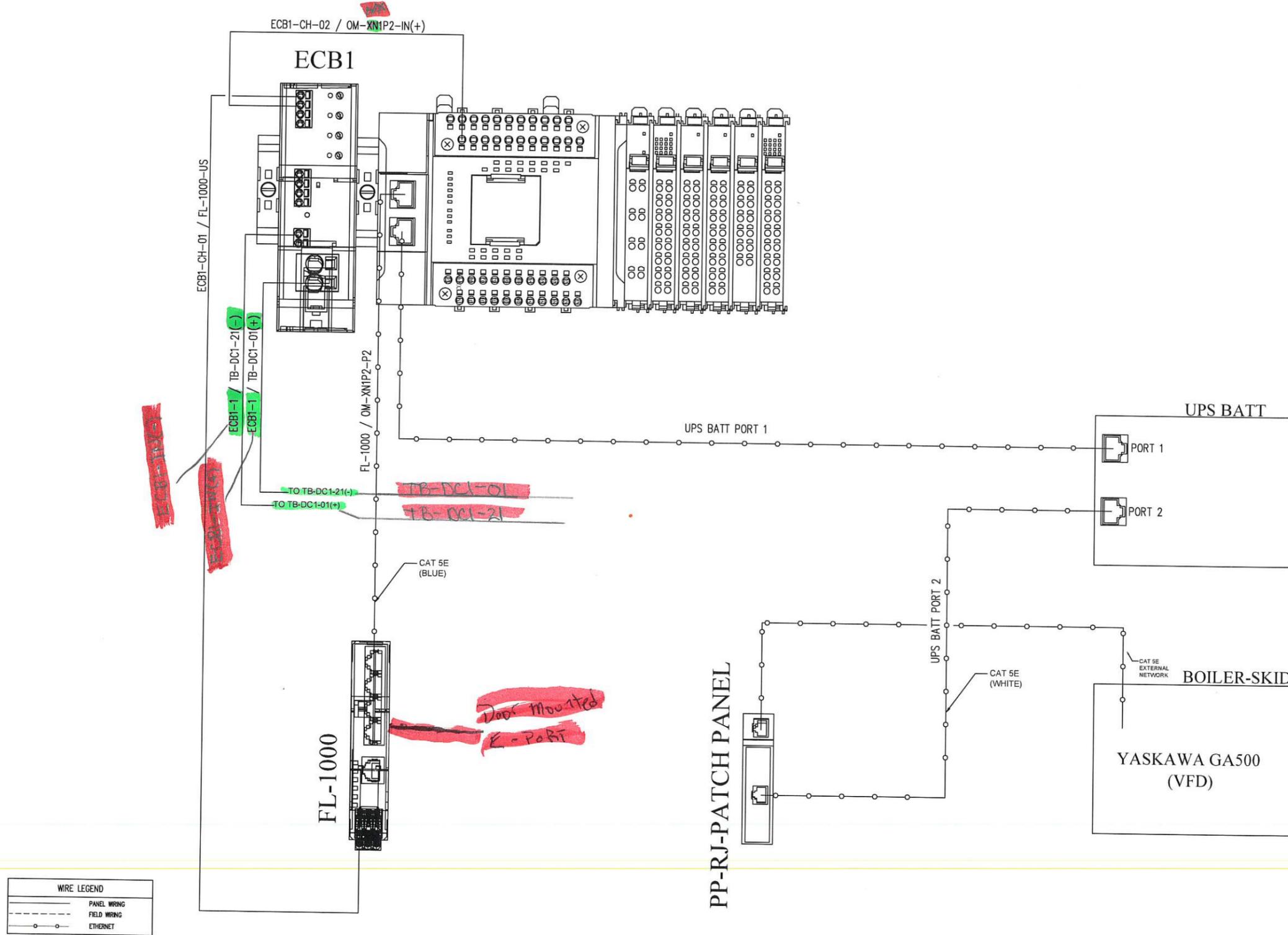
BY: KDB

CHK REVIEW/APPR: DATE

DWG. NO.

REFERENCE DRAWINGS

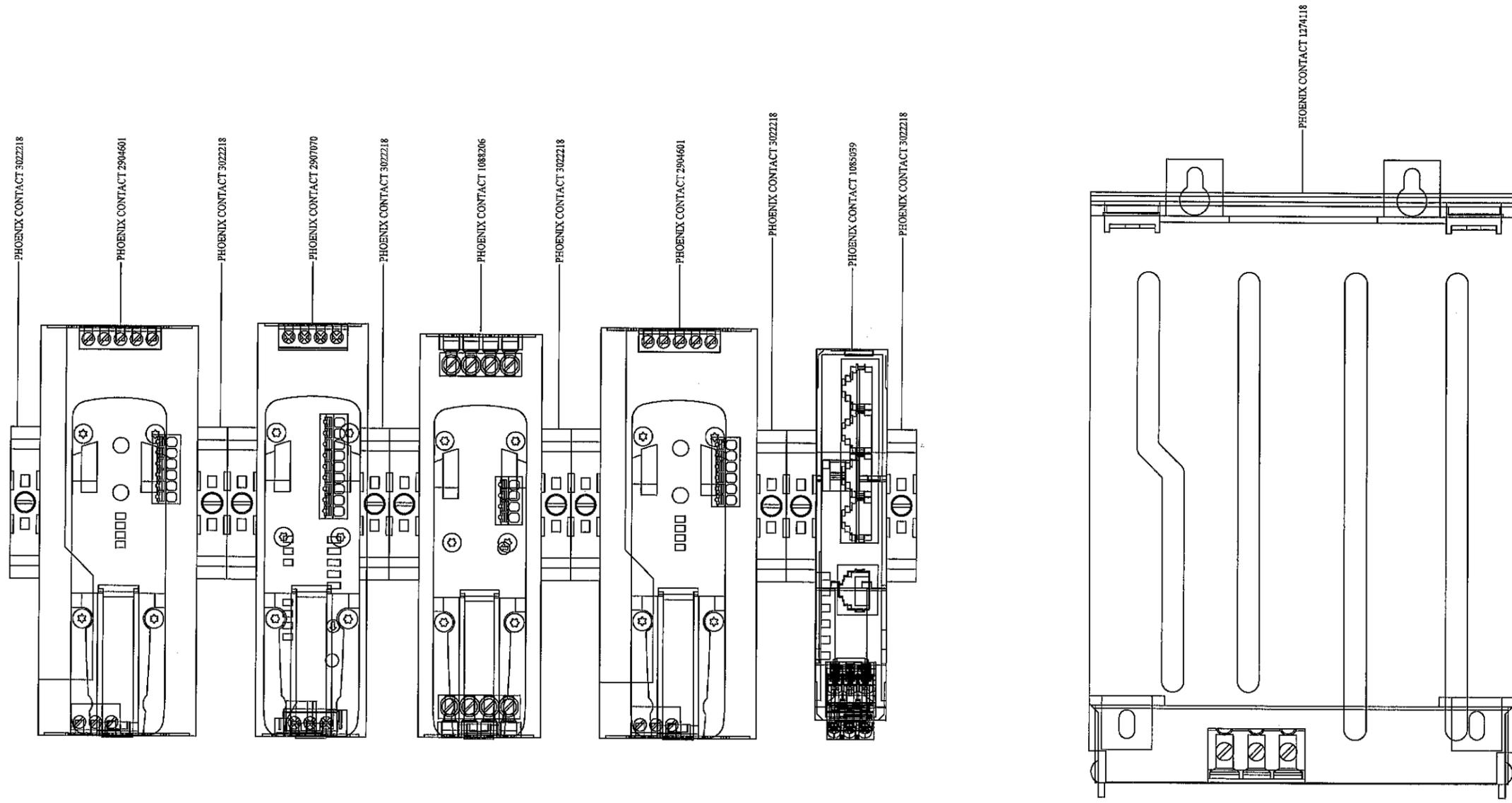
PLC EQUIPMENT ARRANGEMENT (NETWORK)



BROADWIND HEAVY FABRICATIONS		ENGINEERING AND DESIGN	
PLC EQUIPMENT ARRANGEMENT (NETWORK)		TEXAS REGISTERED ENGINEERING FIRM 4198	
MIDLAND, TEXAS		HIT CONSULTING, INC.	
3" = 1'-0"		DRAWN BY:	
REV. 0		FILE:	
JOB NO.		NO.	
ISSUED FOR CONSTRUCTION, HPF #24279		REVISION/ISSUE	
BY: KOB		JLT	
DATE: 12/02/24		DATE: 12/02/24	
DWS. NO.		DWS. NO.	
REFERENCE DRAWINGS			

COMPOSITE BILL OF MATERIAL ROW 1

ROW 1



BROADWIND HEAVY FABRICATIONS
 COMPOSITE BILL OF MATERIAL
 ROW 1
 HRF024-0-108 REV. 0 | SCALE 3" = 1'-0" | JOB NO.

HRF
 CONSULTANTS, INC.
 ENGINEERING AND DESIGN
 TEXAS REGISTERED
 ENGINEERING FIRM 4198

0 | ISSUED FOR CONSTRUCTION: HFF #24278
 REVISIONS
 NO. | DATE | BY | CHK | REVIEW/APPR | DATE

DWG. NO. 120224
 REFERENCE DRAWINGS

BROADWIND
 DWG.

MIDLAND, TEXAS
 8" = 1'-0"

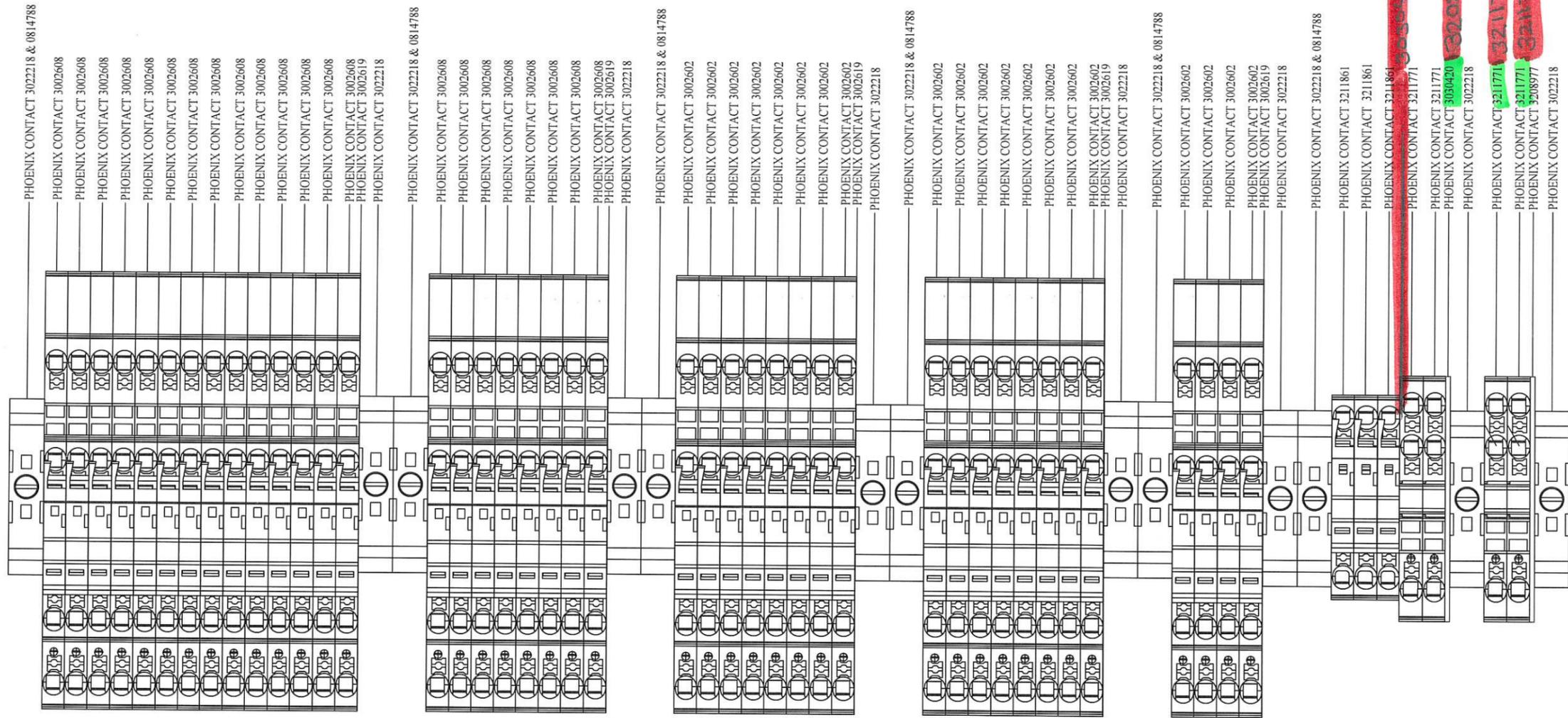
DRAWN BY: FILE

NO. | DATE | BY | CHK | REVIEW/APPR | DATE

DWG. NO. 120224
 REFERENCE DRAWINGS

COMPOSITE BILL OF MATERIAL - RAIL 2

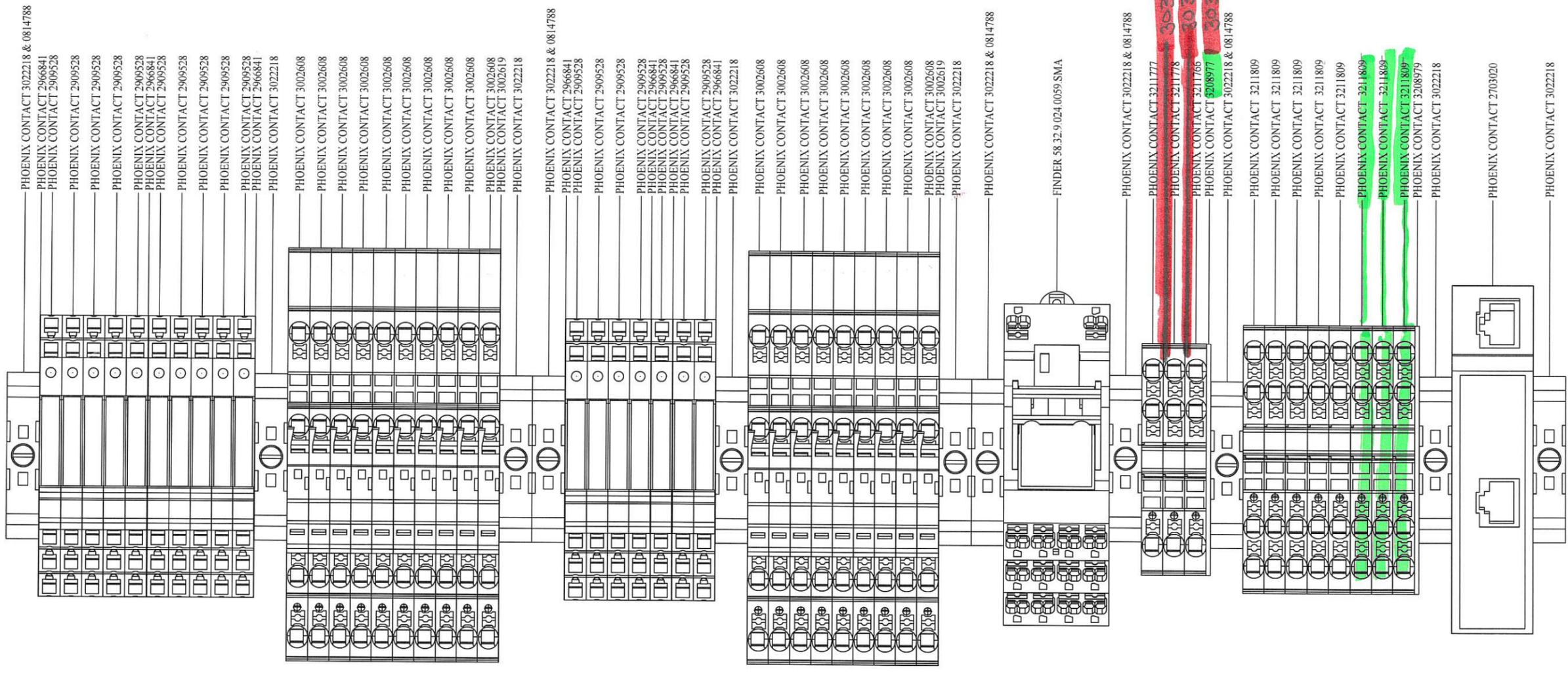
TB2



BROADWIND HEAVY FABRICATIONS COMPOSITE BILL OF MATERIAL - RAIL 2		ENGINEERING AND DESIGN TEXAS REGISTERED ENGINEERING FIRM #198	
BROADWIND DWS.	MIDLAND, TEXAS 1-1/2" = 1'-0"	NO. _____	FILE: _____
HPF UTILITIES, INC.	ISSUED FOR CONSTRUCTION, HPF #2479	NO. _____	REVISION/ISSUE
REV. 0	SCALE	BY: KOB	CHK: JLT
		DATE: 12/02/24	DATE: 12/02/24
		REVISION/ISSUE	DATE
		NO.	DWG. NO.
			REFERENCE DRAWINGS

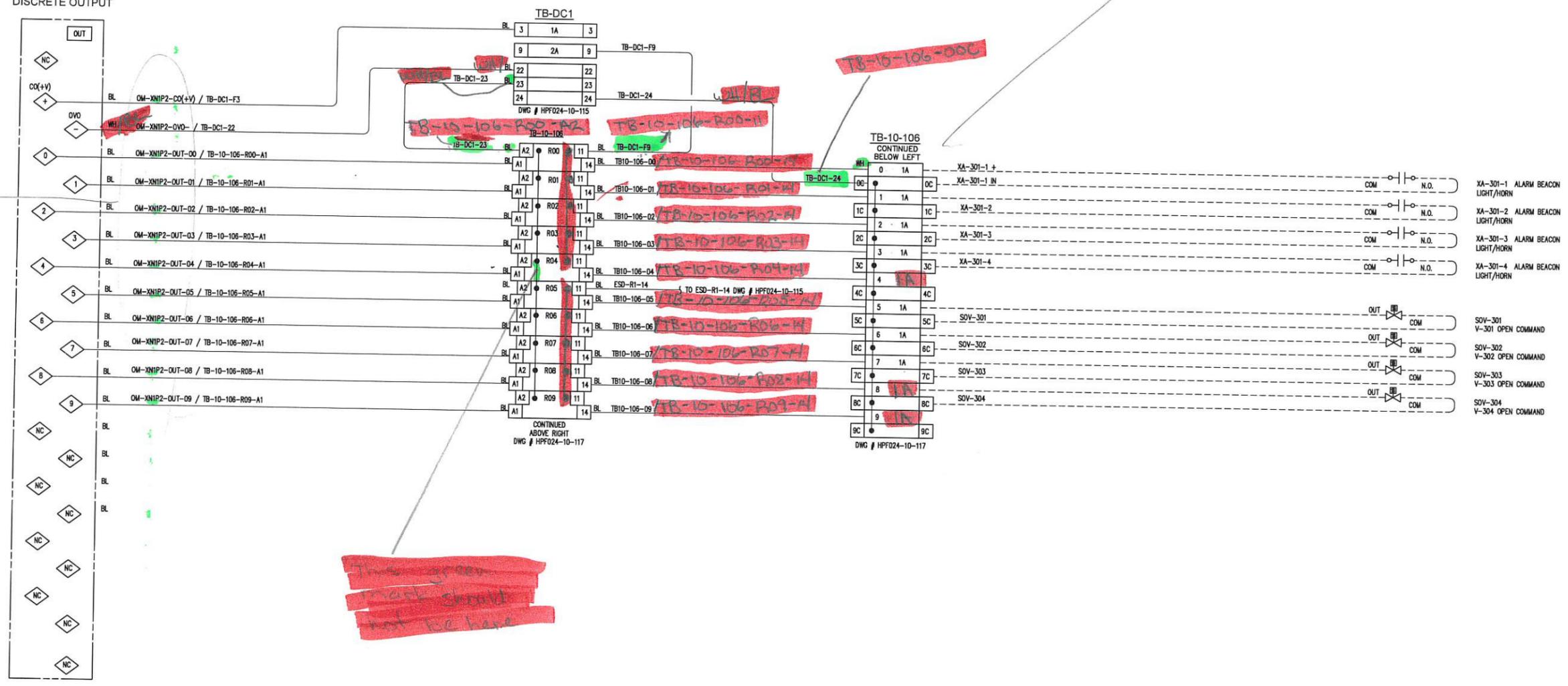
COMPOSITE BILL OF MATERIAL - RAIL 3

TB3



BROADWIND HEAVY FABRICATIONS COMPOSITE BILL OF MATERIAL - RAIL 3		ENGINEERING AND DESIGN TEXAS REGISTERED ENGINEERING FIRM #098	
BROADWIND DWG.	HPF024-10-112 REV. 0	MIDLAND, TEXAS 1-1/2" = 1'-0"	JOB NO.
0	ISSUED FOR CONSTRUCTION, HPF #2479	REVISION/ISSUE	NO.
KCB	JLT	DATE	DWG. NO.
BY	CHK	REVIEW/APPR.	DATE
			12/02/24
REFERENCE DRAWINGS			

OM-XN1P2
DISCRETE OUTPUT



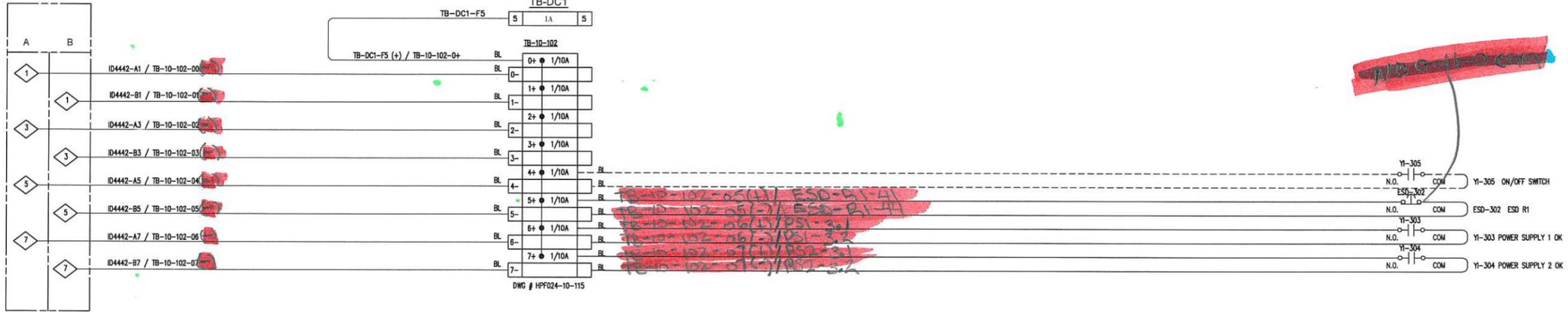
This green mark should not be here

12/02/24
12/02/24
09

DISCRETE OUTPUT FIELD WIRING		ENGINEERING AND DESIGN	
OMRON - XN1P2		TEXAS REGISTERED	
10 CH DISCRETE OUTPUT		ENGINEERING FIRM #1098	
BROADWIND	MIDLAND, TEXAS	DRAWN BY:	FILE:
DWG. HPF024-10-119	REV. 0 SCALE	NTS JOB NO.	
0	ISSUED FOR CONSTRUCTION HPF #24279	KOB	ALT
	REVISION/ISSUE	BY	CHK. REVIEW APPR.
			DATE
			DWG. NO.
			REFERENCE DRAWINGS

ID4442

DIGITAL INPUT

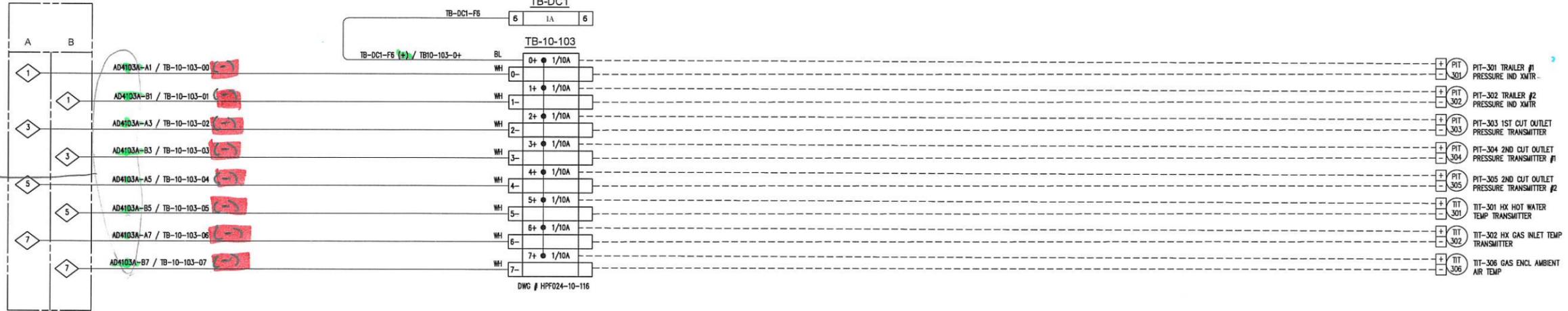


WIRE LEGEND	
—	PANEL WIRING
- - -	FIELD WIRING

DIGITAL INPUT FIELD WIRING		ENGINEERING AND DESIGN	
RACK-1, SLOT-2, TB-10-102		TEXAS REGISTERED	
MIDLAND, TEXAS		ENGINEERING FIRM 4198	
BROADBAND	HPF024-120	REV. 0	SCALE
DWG.	HPF024-120	NTS	JOB NO.
		DRAWN BY:	FILE:
		ISSUED FOR CONSTRUCTION, HPF #24279	NO.
		REVISION/ISSUE	
		BY:	
		CHK. REVIEW/APPR.	DATE
		KOB	JULI
		12/02/24	
		DWG. NO.	REFERENCE DRAWINGS

AD4203-A

ANALOG INPUT

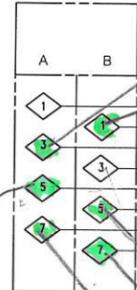


WIRE LEGEND	
—	PANEL WIRING
- - -	FIELD WIRING

ANALOG INPUT FIELD WIRING		ENGINEERING AND DESIGN	
RACK-1, SLOT-3, TB-10-103		TEXAS REGISTERED	
MIDLAND, TEXAS		ENGINEERING FIRM 4098	
DWG. HPF024-10-121 REV. 0 ISCALE		NO. FILE:	
NTS JOB NO.		DRAWN BY:	
NO. #24279		ISSUED FOR CONSTRUCTION, HPF	
NO. #24279		REVISION/ISSUE	
NO. #24279		KOB JLT	
NO. #24279		CHK. REVIEW APPR. DATE	
NO. #24279		12/02/24	
NO. #24279		DWG. NO.	
NO. #24279		REFERENCE DRAWINGS	

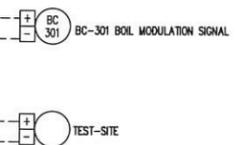
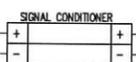
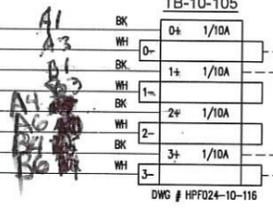
Note: This is how this module is wired according to the latest pictures available to me.

DA3203
ANALOG OUTPUT



BK DA3203-A1 / TB-10-105-00+
 WH DA3203-B1 / TB-10-105-00-
 BK DA3203-A3 / TB-10-105-01+
 WH DA3203-B3 / TB-10-105-01-
 BK DA3203-A5 / TB-10-105-02+
 WH DA3203-B5 / TB-10-105-02-
 BK DA3203-A7 / TB-10-105-03+
 WH DA3203-B7 / TB-10-105-03-

DA3203-A1
 DA3203-B1
 DA3203-A3
 DA3203-B3
 DA3203-A5
 DA3203-B5
 DA3203-A7
 DA3203-B7



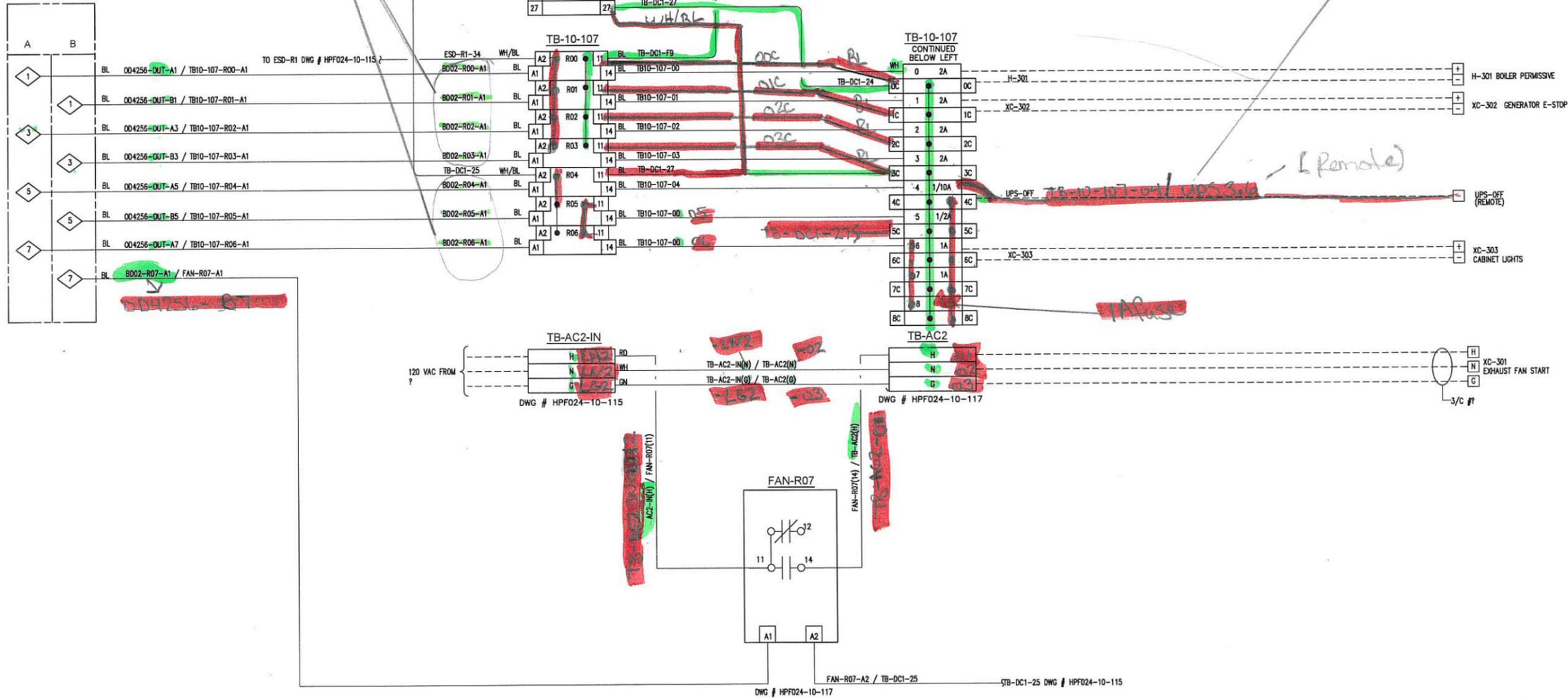
WIRE LEGEND	
—	PANEL WIRING
- - -	FIELD WIRING

A	B
① 00f BLK	① 01f BLK
③ 00- WH	③ 01- WH
④ 02+ BLK	④ 03+ BLK
⑥ 02- WH	⑥ 03- WH

ANALOG OUTPUT FIELD WIRING		ENGINEERING AND DESIGN	
RACK-1, SLOT-5, TB-10-105		TEXAS REGISTERED	
BROADWIND		ENGINEERING FIRM #198	
DWG. HPF024-10-123 REV. 0 ISCALE		MIDLAND, TEXAS	
NTS		JOB NO.	
DRAWN BY:		FILE:	
ISSUED FOR CONSTRUCTION, HPF #24279		NO.	
KOB JUL		DATE	
BY: CHK REVIEW APPR:		DWG. NO.	
12/02/24		REFERENCE DRAWINGS	

OD4256

DISCRETE OUTPUT



Remove these labels

Note: this is where this wire is going according to the panel pictures

NO.	DATE	BY	CHK	REVIEW	APPR.
0	12/02/24	KOB	JLT		
ISSUED FOR CONSTRUCTION, HPE #24279					
REVISION/ISSUE					
FILE:					
DRAWN BY:					
MIDLAND, TEXAS					
DISCRETE OUTPUT FIELD WIRING					
RACK-1, SLOT-6, TB-10-107					
DWG. # HPF024-10-124 REV. 0 SCALE					
MIS JOB NO.					
NYS JOB NO.					
DWG. NO.					
REFERENCE DRAWINGS					

