

TPC

Telemetry and Process Controls, Inc.

7250 Hudson Blvd. Suite 160 ~ Oakdale, Minnesota 55128 ~ Tel. 651-430-0435 ~ Fax 651-430-0783

Project name: Longboat lift Station

Customer: Sanders

Project number: J2362-02

Contact: TPC Service Dept. PH: 651-430-0435

Serial number: 006861

Drawing #: J2362-200

Q.A./Q.C. Checklist

	YES	NO	N/A
1.) Has the enclosure been inspected for scratches/dents?	<u>DIR</u>		
2.) Are all parts installed and mounted correctly?	<u>DIR</u>		
3.) Are all components labeled per drawing?	<u>DIR</u>		
4.) Are legends installed and verified per drawing?	<u>DIR</u>		
5.) Are all jumpers, fuses, and accessories installed per drawing?	<u>DIR</u>		
6.) Are all coil voltages correct per drawing?	<u>DIR</u>		
7.) Are all fuse amperages correct?	<u>DIR</u>		
8.) Are all circuit breaker amperages correct?	<u>DIR</u>		
9.) Are all overload amperages set?	<u>DIR</u>		
10.) Is grounding washer & stud installed?			<u>DIR</u>
11.) Is Incoming ground connection installed?	<u>DIR</u>		
12.) Is all proper labeling completed?			
a. Main voltage	<u>SWR</u>		
b. Terminal Torque	<u>SWR</u>		
c. Ground	<u>SWR</u>		
d. "Danger" arc flash	<u>SWR</u>		
e. "Warning" multiple power sources			<u>SWR</u>
f. "Warning" re-torque connections	<u>SWR</u>		
g. Fuse replacement	<u>SWR</u>		
h. Electrical information (green label)	<u>SWR</u>		
i. U.L. # <u>C09100937</u>	<u>SWR</u>		
j. U.L. environmental	<u>SWR</u>		
k. Fuse chart	<u>SWR</u>		
l. Overload protection (orange label)	<u>SWR</u>		
13.) Has wire gauge and color been verified?	<u>DIR</u>		
14.) Has loose and/or frayed wires been checked?	<u>DIR</u>		
15.) Have communication cables been installed?	<u>DIR</u>		
16.) Has a point-to-point continuity check been completed?	<u>DIR</u>		

4.0
3.0
2.2
STOP

	YES	NO	N/A
17.) Are all wires and/or cables labeled per drawing?	DR		
18.) Has panel been cleaned and free from debris?	DR		
19.) Does the disconnect work properly?	DR		
20.) Has power been applied? (check voltage)	DR		
a. 480/460VAC			DR
b. 380/400V			DR
c. 240/230VAC			DR
d. 208VAC	DR		
e. 120/115VAC			SWR
f. 24VDC			DR
21.) Check what has been verified upon power up:			
a. Circuit Breaker(s)	DR		
b. Transformer(s)			DR
c. Power Supply(s)	DR		
d. Fuse (s)	DR		
e. Relay(s) / Timer(s)	DR		
f. Motor Starter(s), Overload(s)	DR		
g. PLC	DR		
h. Operators (switches, lights, push buttons) AC Units & Cooling Fans	DR		
i. VFD(s)			DR
j. Display touchscreen(s)			DR
22.) Have pneumatic air lines been checked for leaks?			DR
23.) Have detailed pictures been taken?	SWR		
24.) Have all loose parts shipped with project?	See Notes		
25.) Have documentation shipped with project?			SWR
26.) Are all NCR's, ECO's, and/or CAR's closed out?			SWR
27.) All Circuits over 120VAC have been Torqued and Marked	DR		

Notes

OIT 229 Fridge Installed
 BAT211 Will Ship Loose
 Vent Drain 304SS will Ship Loose

Inspected By:

Scott W. Robertson

Date:

5/8/2018

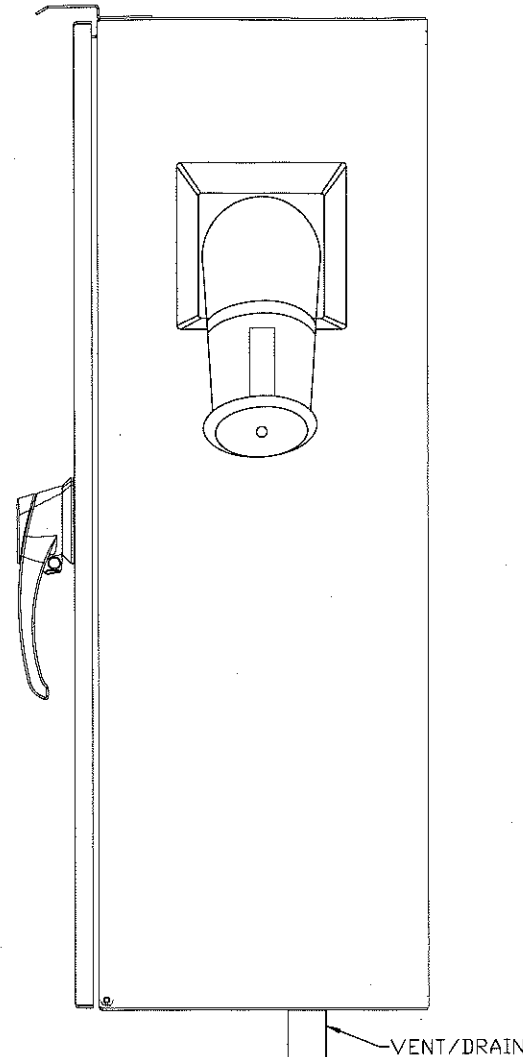
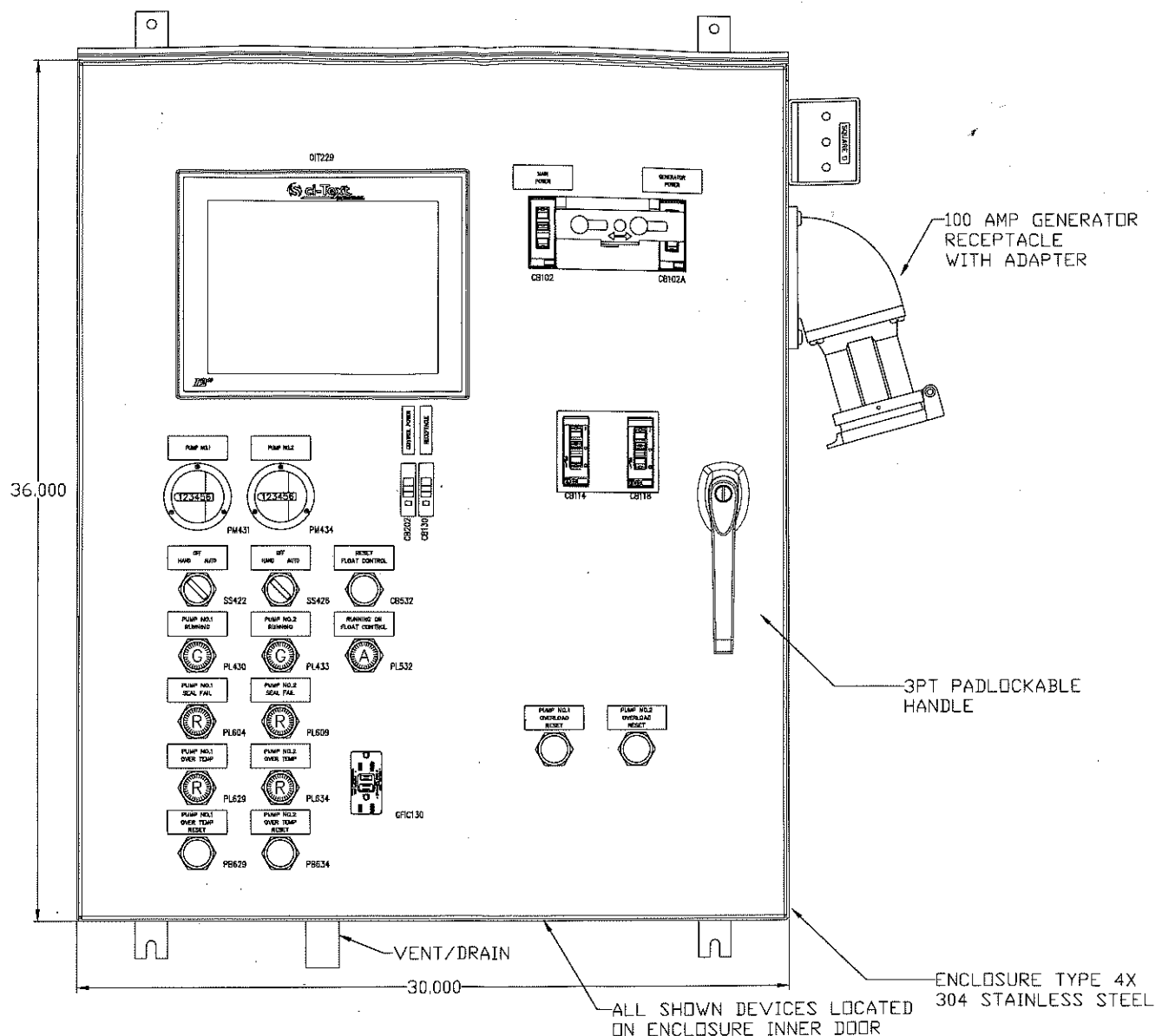
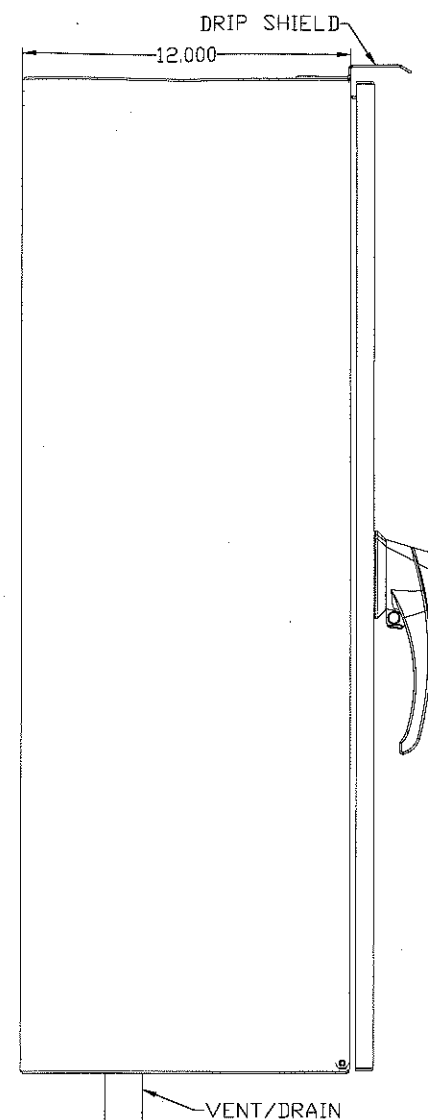
Verified by:

[Signature]

Date:

5-8-2018

3D



Rev	Description	Date
A	AS-BUILT	5/07/2018

SANDERS
COMPANY, INC.
STUART, FLORIDA
(712) 220-2900 (800) 247-0880
LONGBOAT KEY, FL.
LIFT STATION 12D
CONTROL PANEL

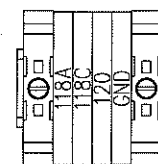
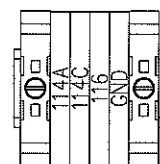
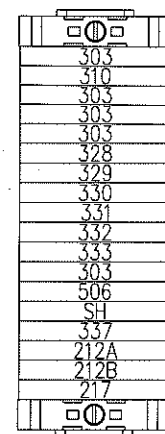
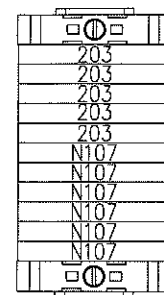
Drawing Title:
ENCLOSURE DETAIL

Designed by:	AJH	Date:	10/4/2017
Dwn by:	SMM	Chk by:	JC
Project No.		J2362-02	
Drawing Number: J2362-200			

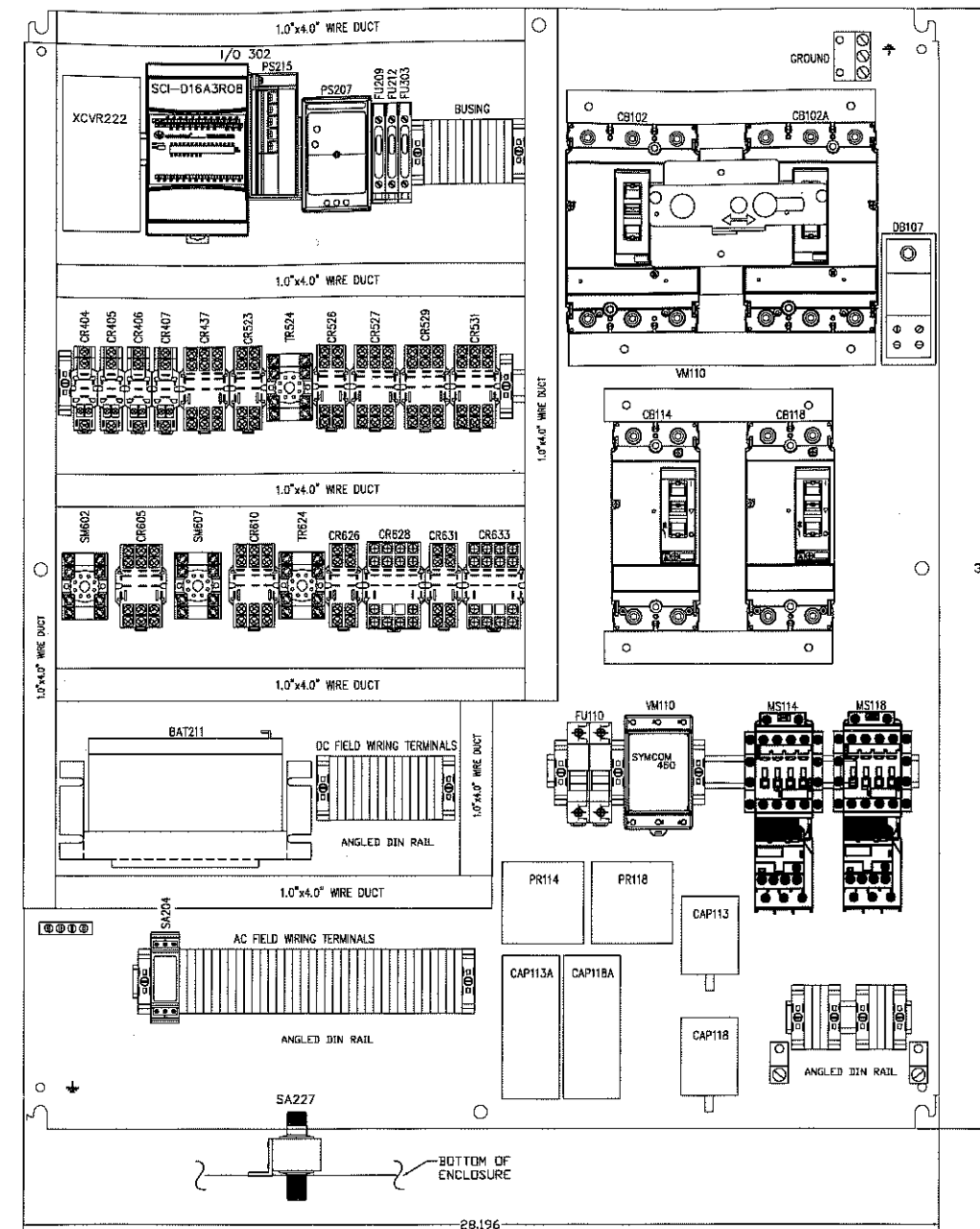
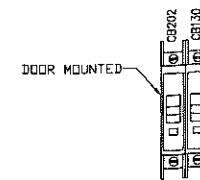
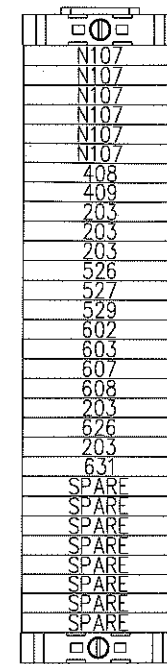
BUSSING
WIRING TERMINALS

DC FIELD
WIRING TERMINALS

AC FIELD
WIRING TERMINALS



MOTOR TERMINALS



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LONGBOAT KEY, FL.
LIFT STATION 12D
CONTROL PANEL

Drawing Title:

TERMINAL BLOCK LAYOUT
ENCLOSURE INNER SUB PANEL LAYOUT

Designed by:

AJH

Date:

9/29/2017

Dwn by:

SMM

Chk by:

JC

Project No.

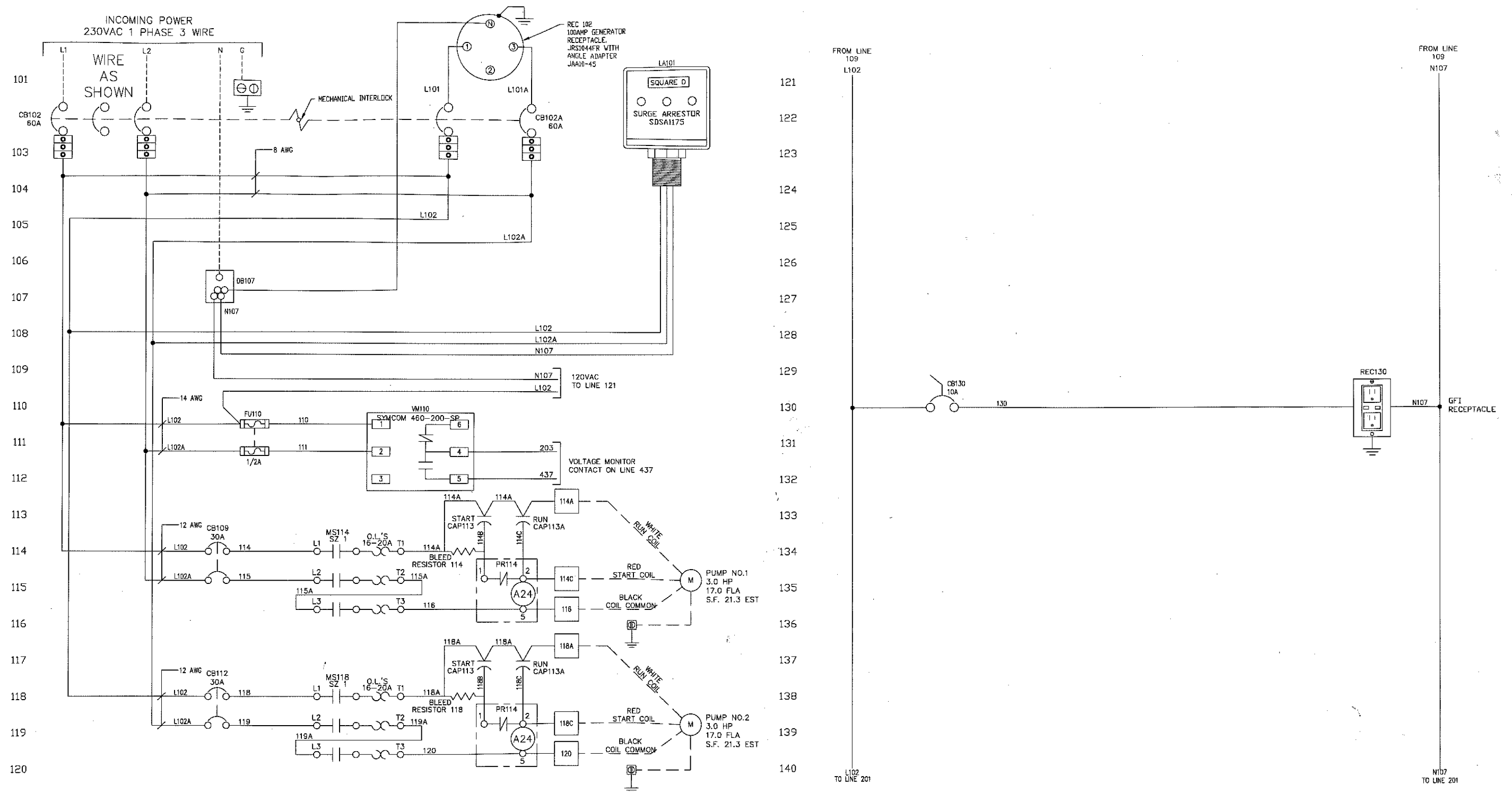
J2362-02

Drawing Number:

J2362-201

Sheet 2 of 9

Rev	Description	Date
A	AS-BUILT	5/07/2018



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A	AS-BUILT	5/07/2018

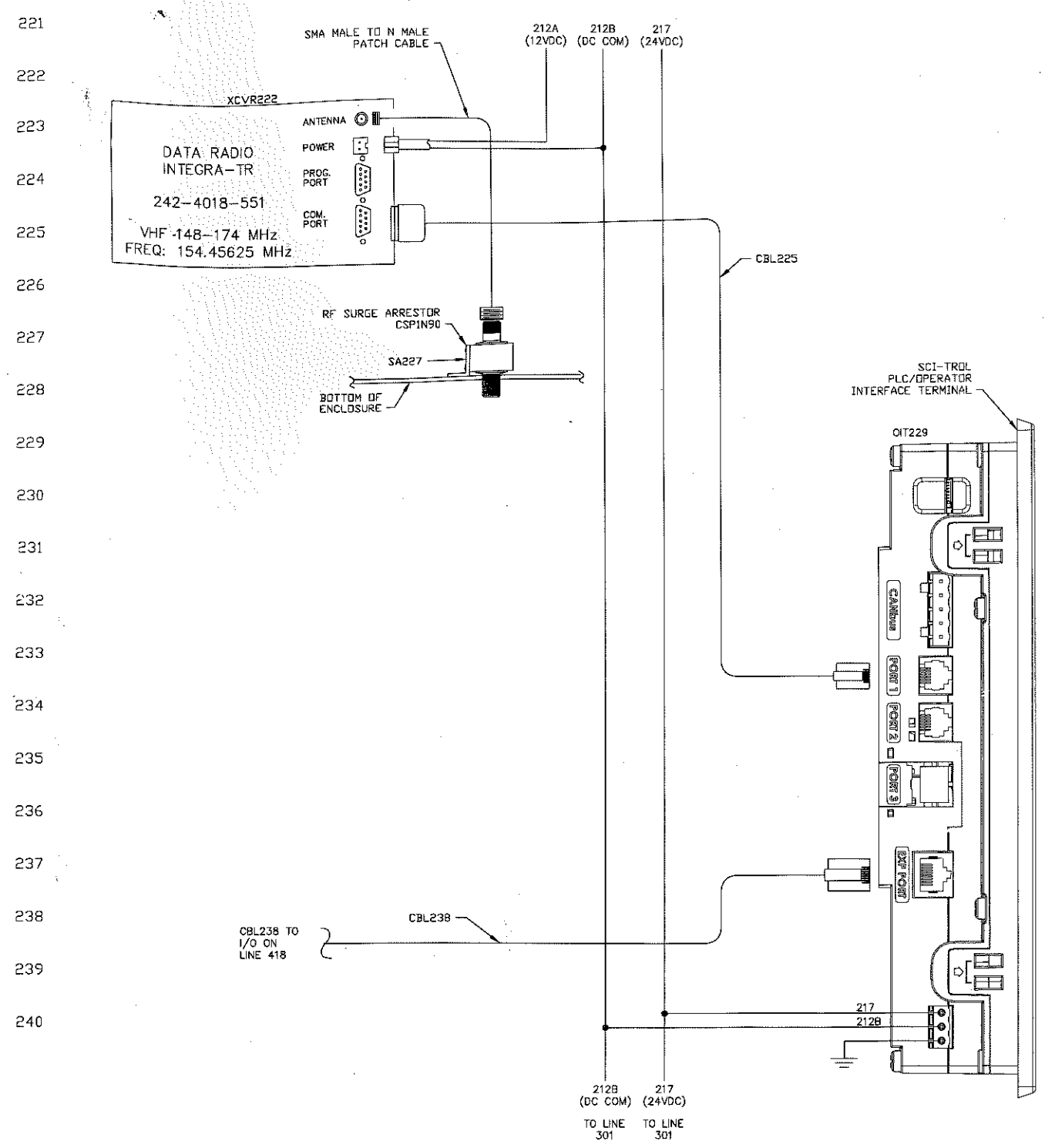
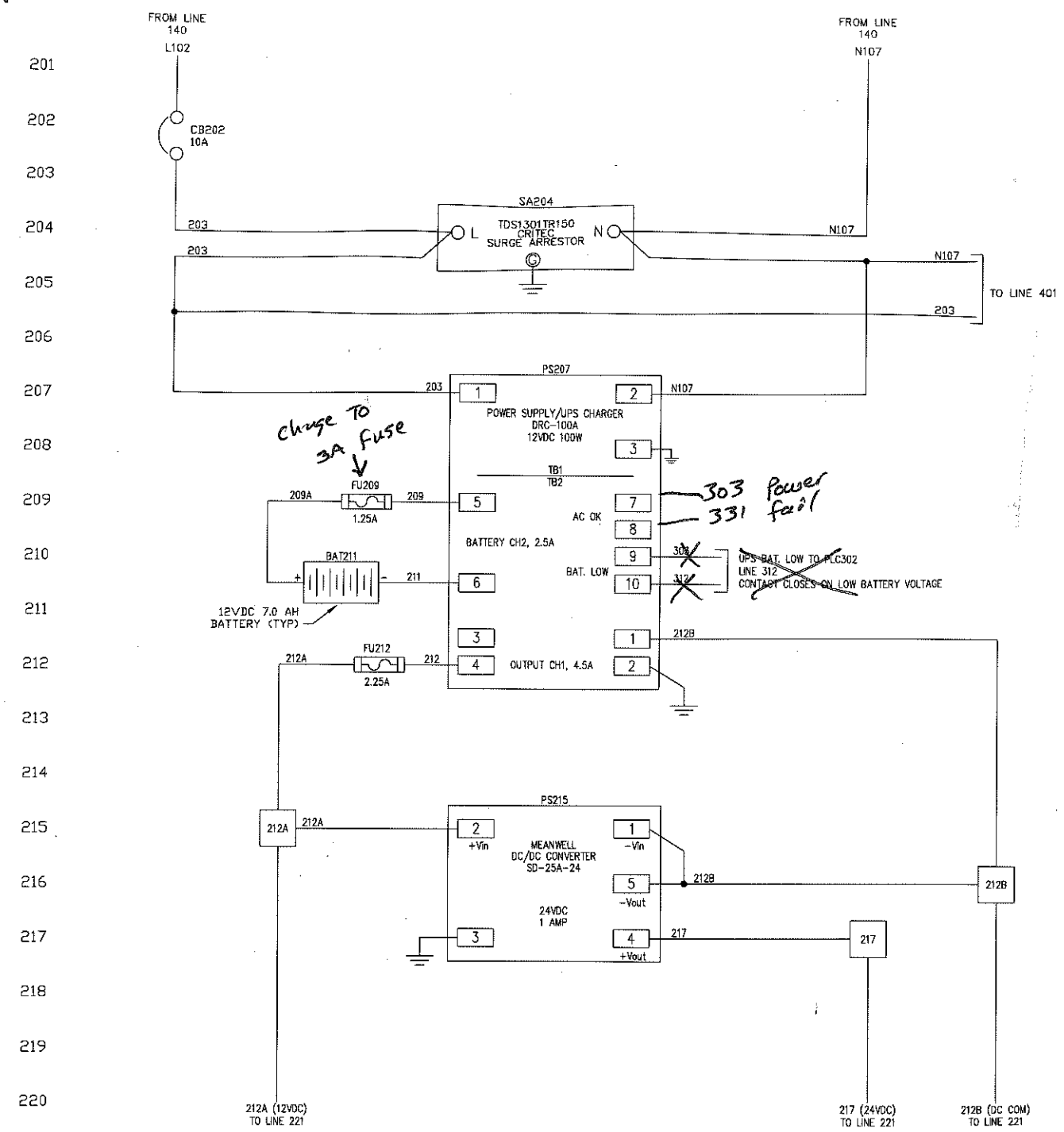
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LONGBOAT KEY, FL.
LIFT STATION 12D
CONTROL PANEL

Drawing Title:
INCOMING & CONTROL POWER
WIRING DETAIL

Designed by: AJH	Date: 9/29/2017
Dwn by: SMM	Chk by: JC
Project No. J2362-02	
Drawing Number: J2362-202	

RUNG NUMBER 1
Sheet 3 of 9



Rev	Description	Date
A	AS-BUILT	5/07/2018

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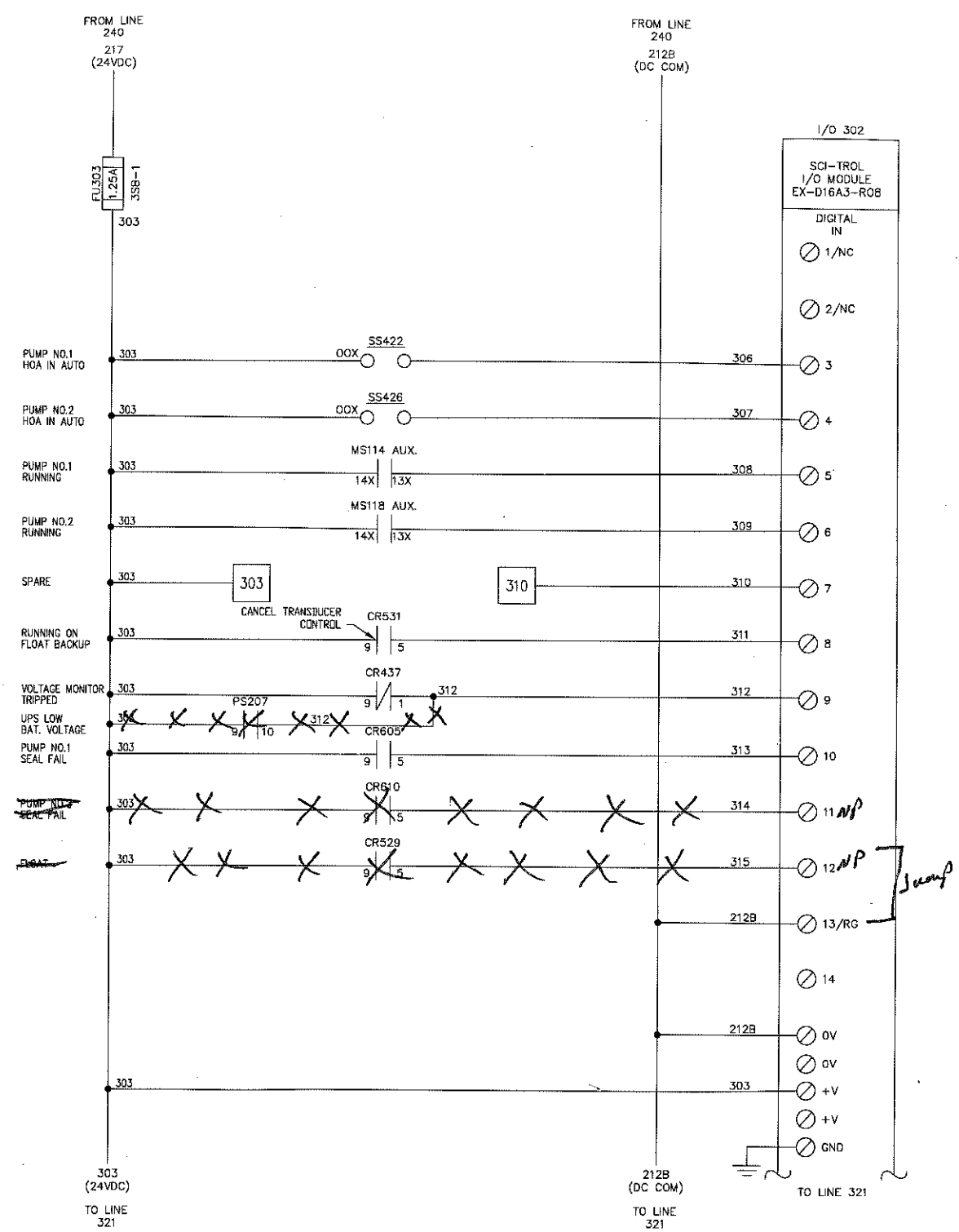
LONGBOAT KEY, FL.
 LIFT STATION 12D
 CONTROL PANEL

Drawing Title:
 DC POWER, RADIO MODEM
 HMI/OIT WIRING DIAGRAM

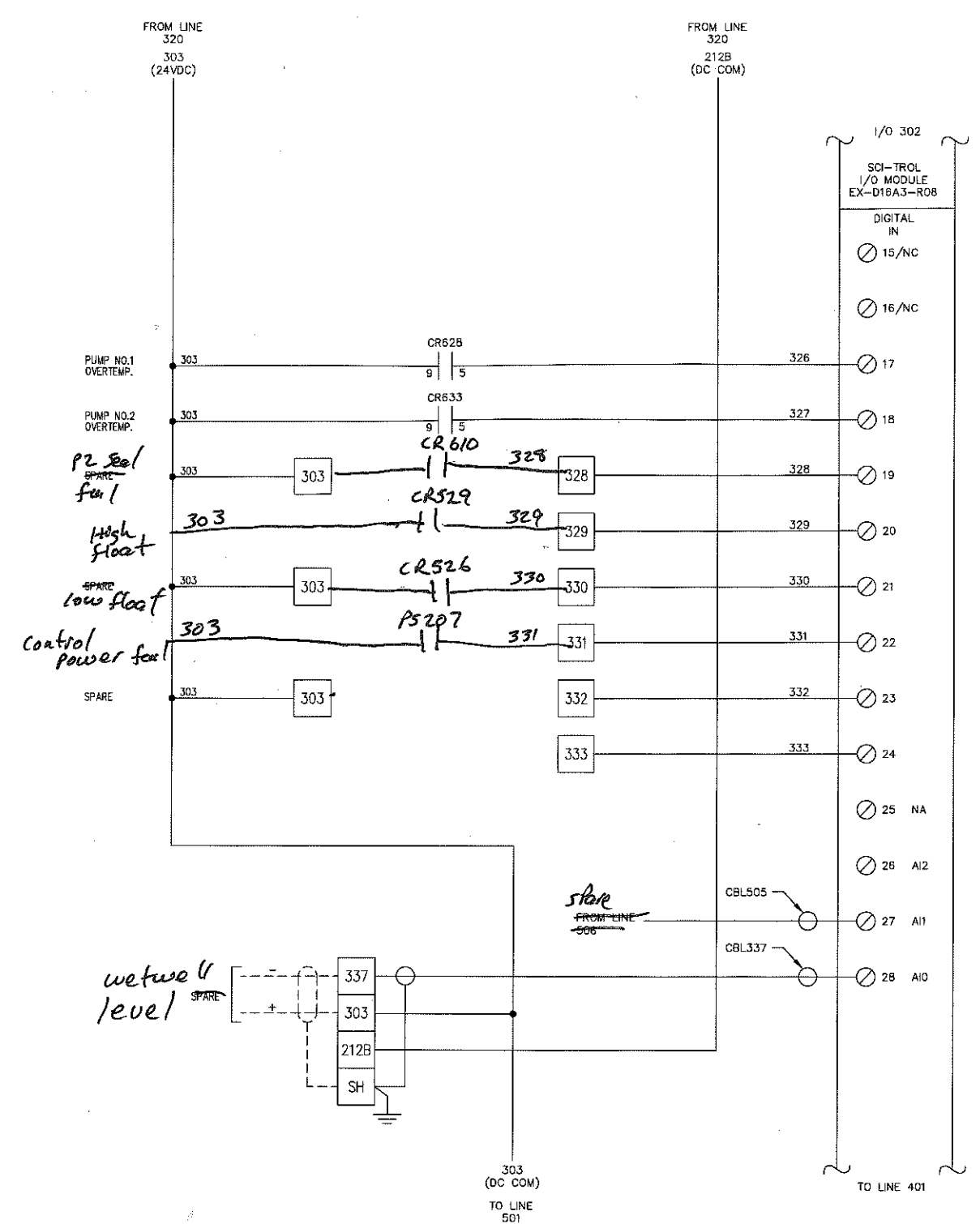
Designed by: AJH Date: 9/29/2017
 Dwn by: SMM Chk by: JC Project No: J2362-02
 Drawing Number: J2362-203

RUNG NUMBER
 2
 Sheet 4 of 9

301
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Rev	Description	Date
A	AS-BUILT	5/07/2018

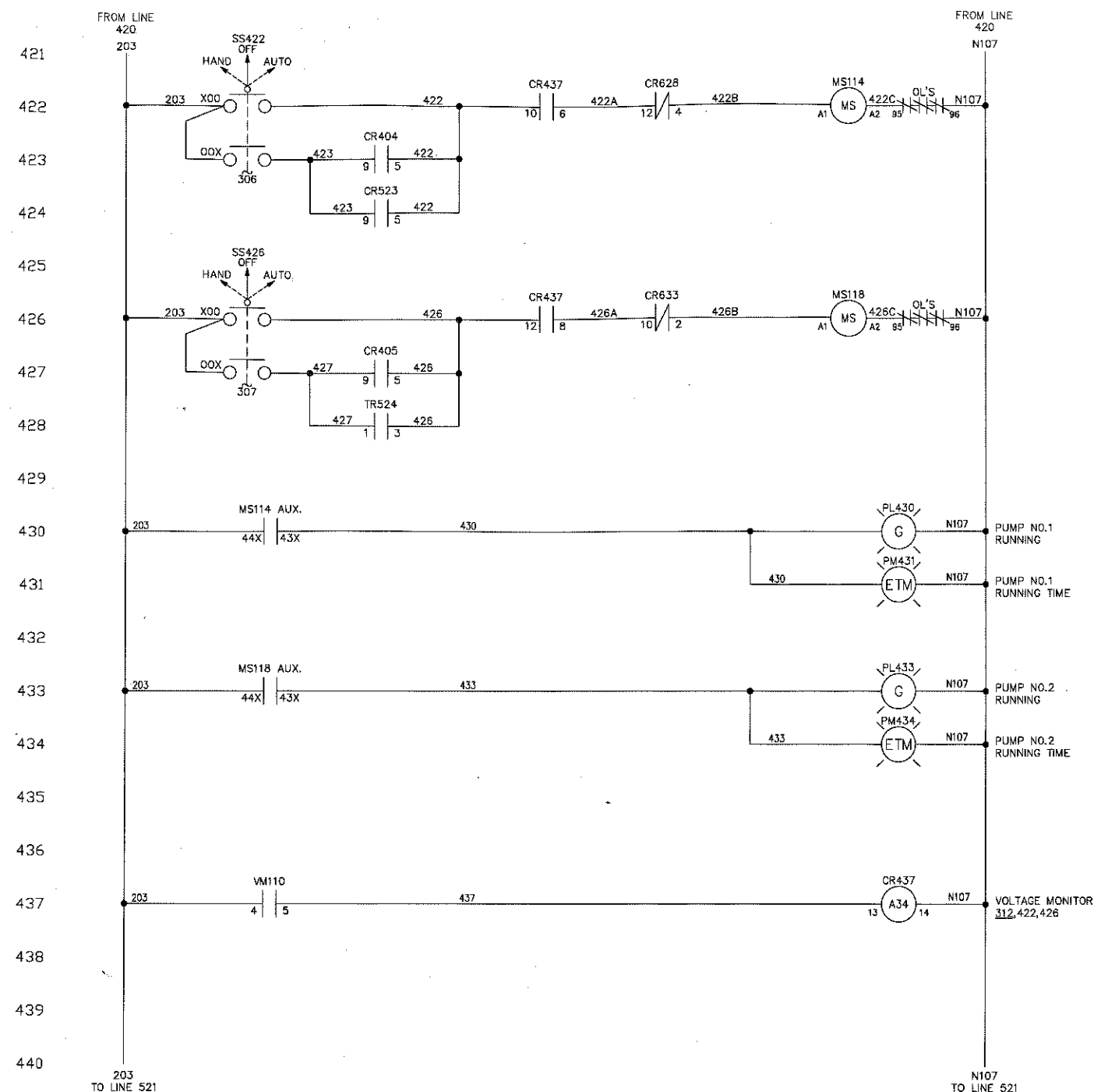
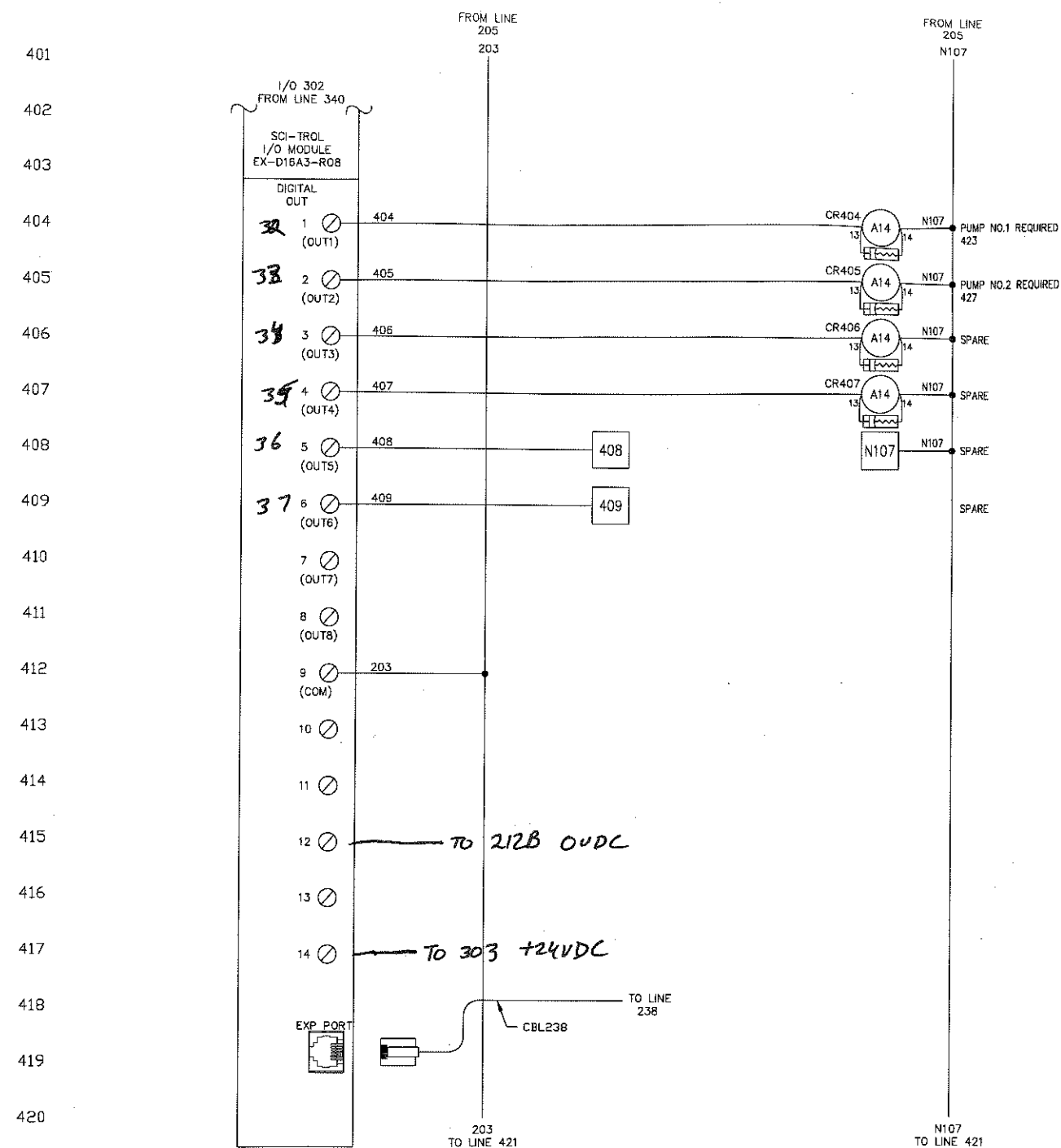
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LONGBOAT KEY, FL.
LIFT STATION 12D
CONTROL PANEL

Drawing Title:
PLC DIGITAL INPUTS & ANALOG INPUTS
WIRING DETAIL

Designed by:	AJH	Date:	9/29/2017
Dwn by:	SMM	Chk by:	JC
Project No.		J236-02	
Drawing Number: J2362-204			

RUNG
NUMBER
3
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Rev	Description	Date

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LONGBOAT KEY, FL.
LIFT STATION 12D
CONTROL PANEL

Drawing Title:

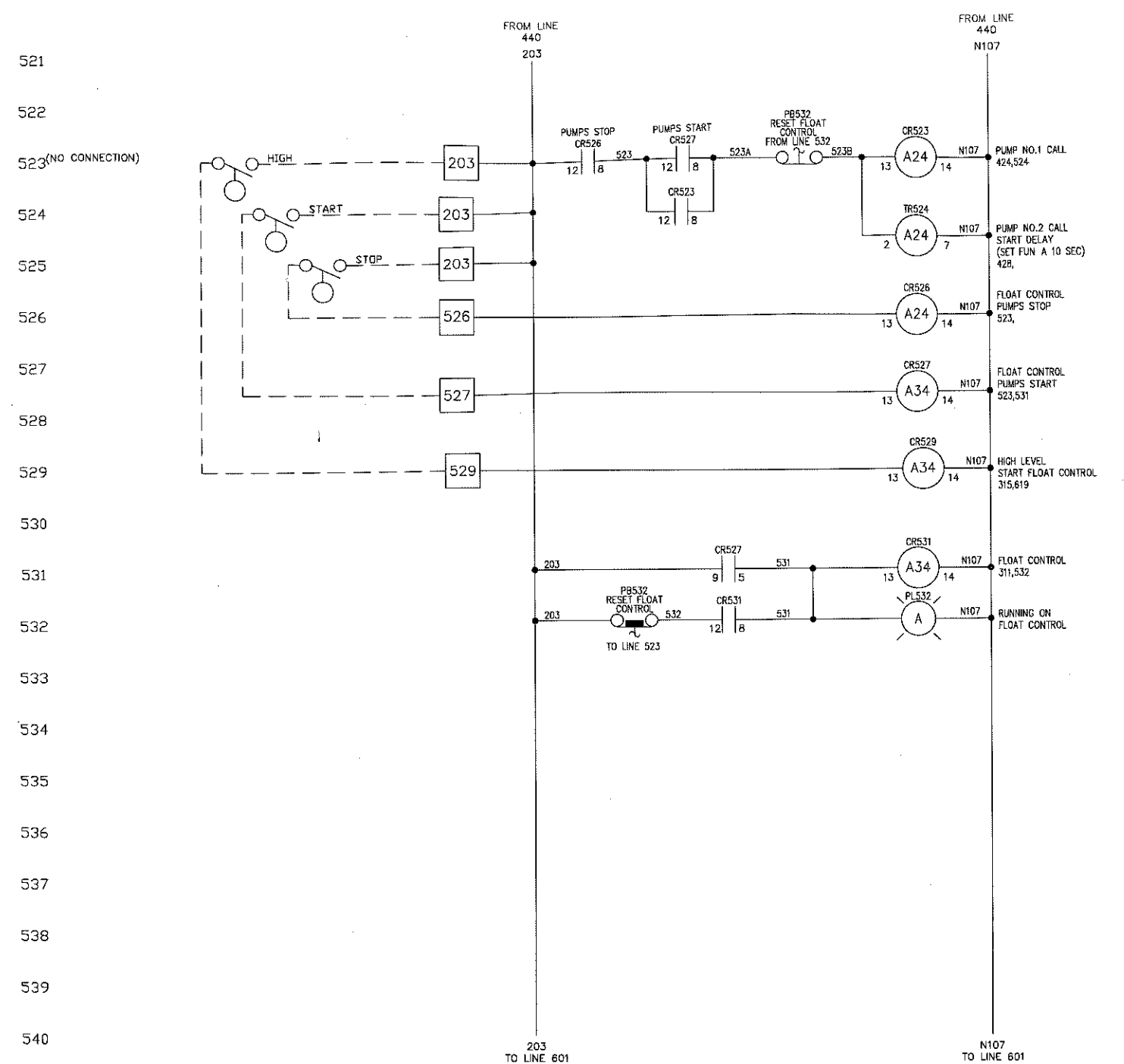
PLC DIGITAL OUTPUT & CONTROL CIRCUIT
WIRING DETAIL

Designed by: AJH		Date: 9/29/2017
Drawn by: SMM	Chk by: JC	Project No. J2362-02
Drawing Number: J2362-205		

RUNG
NUMBER

4

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A	AS-BUILT	5/07/2018
Rev	Description	Date

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LONGBOAT KEY, FL.
LIFT STATION 12D
CONTROL PANEL

Drawing Title:

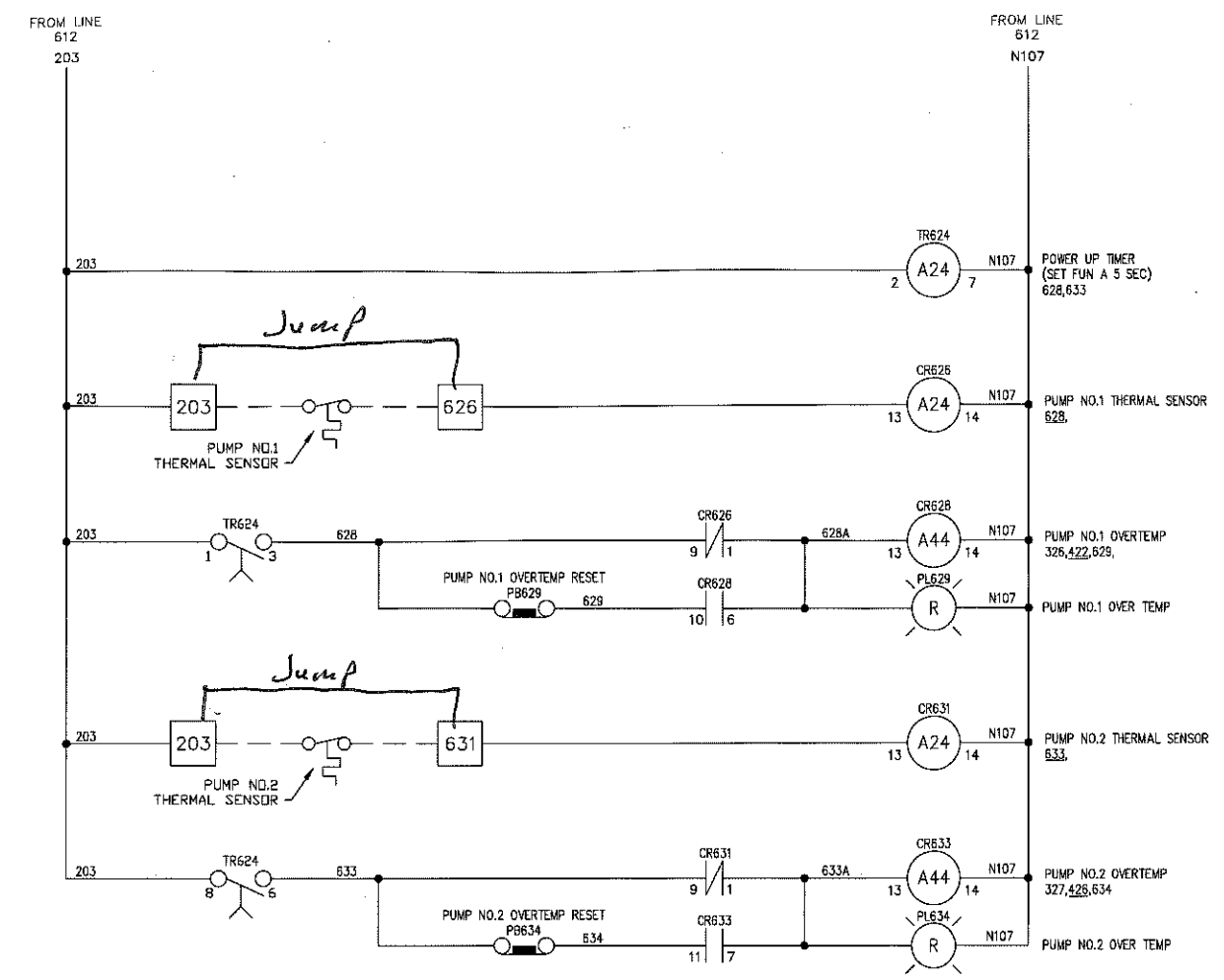
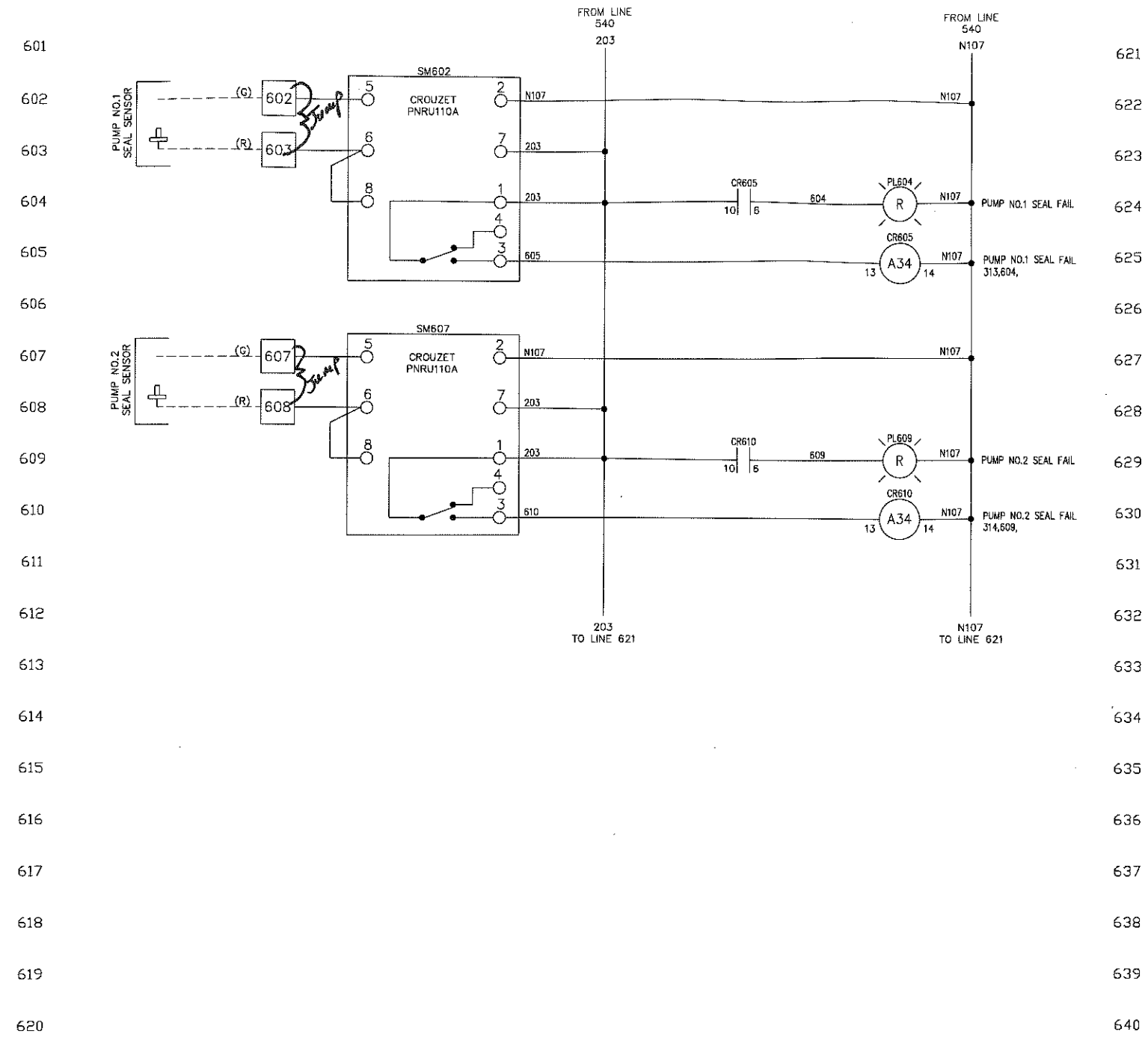
LEVEL TRANSDUCER &
FLOAT BACKUP CIRCUIT

Designed by: AJH		Date: 9/29/2017
Drawn by: SMM	Chk by: JC	Project No. J2362-02
Drawing Number: J2362-206		

RUNG
NUMBER

5

Sheet 7 of 9



Rev	Description	Date
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 LIFT STATION 12D
 CONTROL PANEL

Drawing Title:
 SEAL FAIL & OVER TEMP CIRCUIT

Designed by:	AJH	Date:	9/29/2017
Dwn by:	SMM	Chk by:	JC
Project No.		J2362-02	
Drawing Number:			
J2362-207			

RUNG
 NUMBER
 6
 Sheet 8 of 9