

DSS DISTANCE TABULATION

EDGE OF ROAD TO DSS 1	440'
EDGE OF ROAD TO DSS 2	50'
EDGE OF ROAD TO DSS 3	50'
EDGE OF ROAD TO DSS 4	366'
EDGE OF ROAD TO DSS 5	440'

- NOTES:**
1. CIC MAIN (AC2) WARNING TIME 25 SECONDS AT 10 M.P.H.
  2. CIC MAIN (AC1) AND CIC SIDE TRACK WARNING TIME 30 SECONDS AT 10 M.P.H.
  3. SIGNAL 2 TO HAVE BELL.
  4. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
  5. INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND/OR RAILROAD STANDARDS.

NOT TO SCALE

REVISIONS					

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



**CEDAR RAPIDS & IOWA CITY RAILWAY CO.**

DRAWN: J.G.C.	TRACK LAYOUT	DRAWING NO.
DESIGNED: J.A.W.	KIRKWOOD AVENUE	T-????
CHECKED: J.A.W.	IOWA CITY, IOWA	SHEET 1 OF 9
DATE: 05-01-23	DOT *607307S MILEPOST *27.84	

**NOTES:**

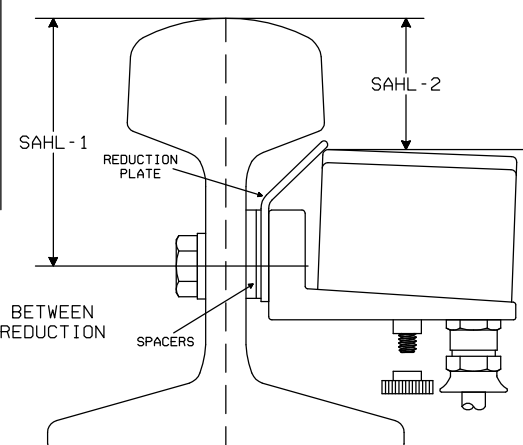
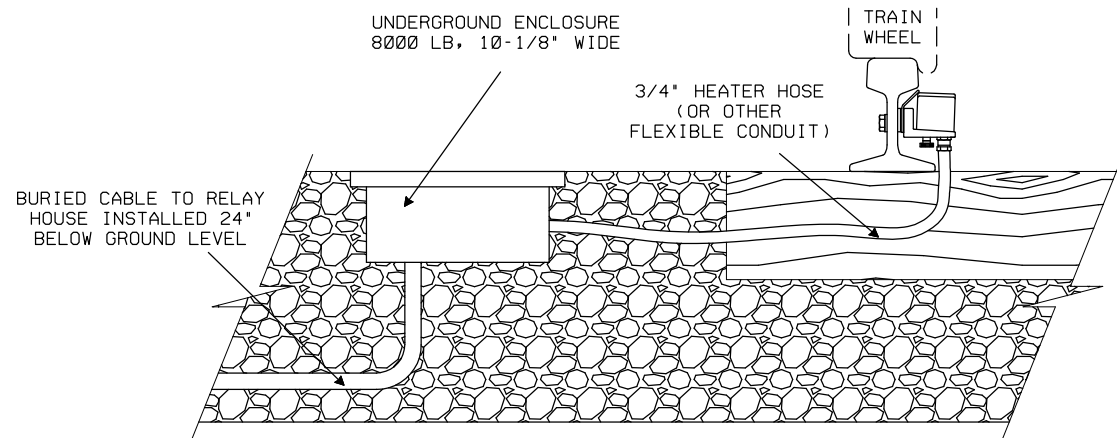
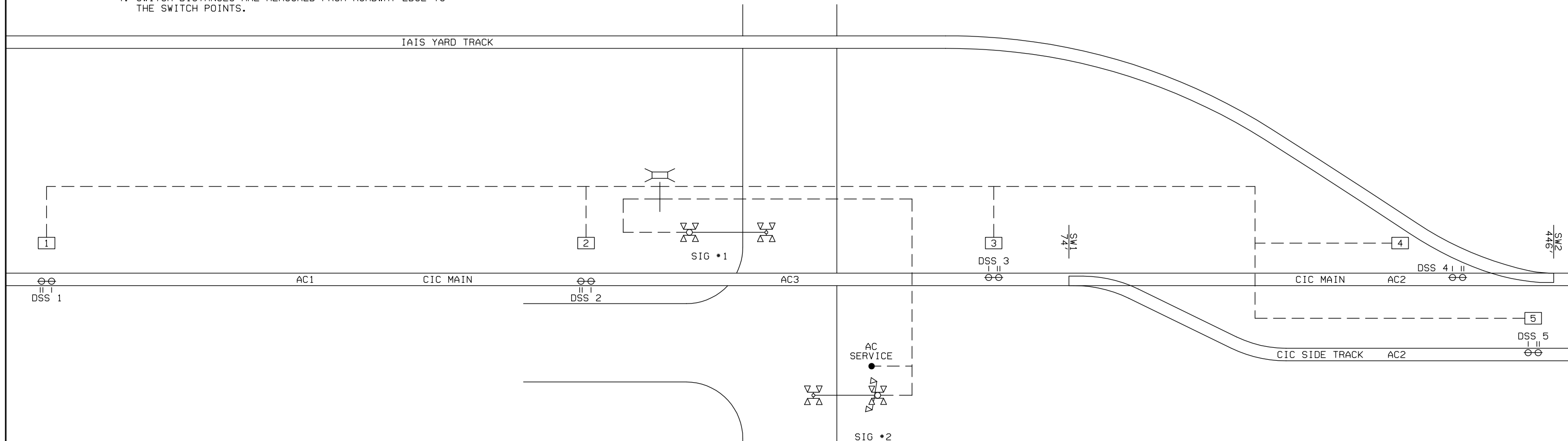
1. OVERALL CABLE/CONDUIT DEPTH 24 INCHES OR GREATER.
2. CABLE DEPTH BETWEEN TIES SHOULD BE 14 INCHES IN DEPTH. THIS WILL PROVIDE 4 INCHES OF PROTECTION UNDER TIES.
3. RECOMMENDED CABLE IS OKONITE TYPE SP-OS, 18-GAUGE. EACH SENSOR REQUIRES MINIMUM TWO PAIR, WITH TWIST, INDIVIDUAL SHIELD AND DRAIN WIRE.
4. SWITCH DISTANCES ARE MEASURED FROM ROADWAY EDGE TO THE SWITCH POINTS.

**LEGEND:**

□ - JUNCTION BOX

**CABLE TABULATION**

HOUSE TO JCT BOX 1 (DSS 1)	NOTE 3	
HOUSE TO JCT BOX 2 (DSS 2)	"	
HOUSE TO JCT BOX 3 (DSS 3)	"	
HOUSE TO JCT BOX 4 (DSS 4)	"	
HOUSE TO JCT BOX 5 (DSS 5)	"	
HOUSE TO SIG *1	5C*6	
HOUSE TO SIG *2	5C*6	



**SPACER AND BOLT MOUNTING INFORMATION**

RAIL TYPE	SAHL -1	SAHL -2	POSITION	BOLT HOLES	SPACER
ASCE -80	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	WITHOUT NOT POSSIBLE
ASCE -90	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	WITHOUT NOT POSSIBLE
ASCE -100	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	WITHOUT NOT POSSIBLE
AREA-100	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	1.5MM BLUE NOT POSSIBLE
112-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	WITHOUT NOT POSSIBLE
115-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	WITHOUT NOT POSSIBLE
119-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	4.3MM RED NOT POSSIBLE
CB-122	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	WITHOUT WITHOUT
132-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	3.6MM GREEN WITHOUT
136-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	1.3MM GRAY+4.3MM RED 1.5MM BLUE
140-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	1.0MM RED+4.3MM RED 2.0MM BROWN
141-RE	>79MM <-79MM	>39MM <-39MM	UPPER LOWER	UPPER LOWER	1.0MM RED+4.3MM RED 4.3MM WHITE

- NOTE: SPACERS MOUNT BETWEEN RAIL WEB AND REDUCTION PLATE.
- DRAWING DIMENSIONS SHOWN ARE FOR EXAMPLE PURPOSES ONLY. SEE PINTSCH NORTH AMERICA INSTALLATION MANUAL FOR EXACT DIMENSIONS.
  - ONLY AUTHORIZED CEMBRE OR PINTSCH NORTH AMERICA DRILLING APPARATUS SHOULD BE USED.
  - PRECISION VERTICAL AND HORIZONTAL DRILLING TEMPLATES ARE REQUIRED TO ENSURE PROPER MOUNTING AND OPERATION.

NOT TO SCALE

**REVISIONS**

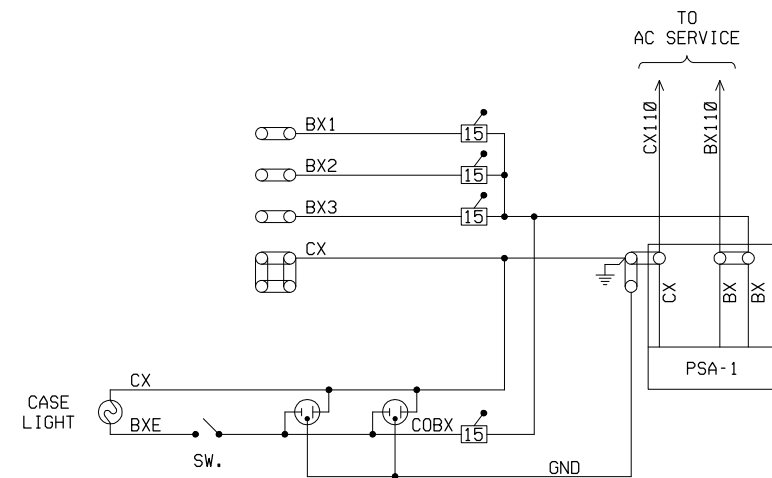
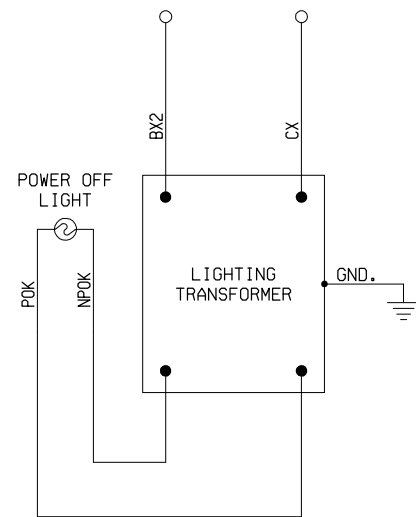
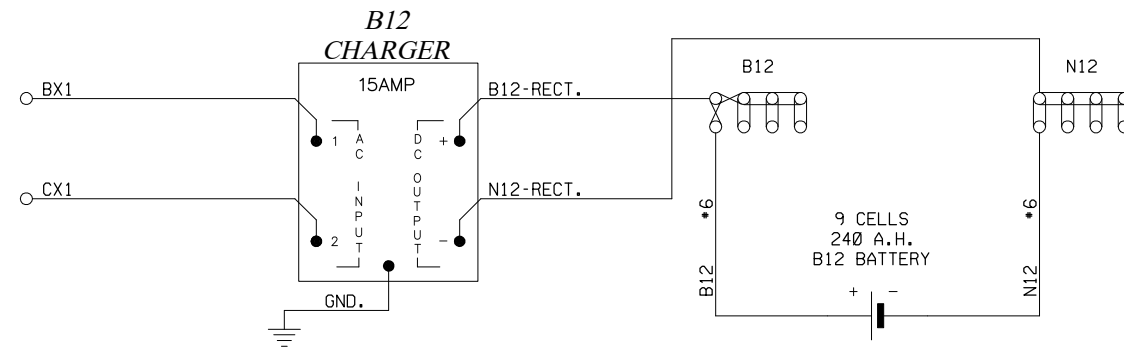
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THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.

**PINTSCH**  
Safety for Rail  
Pintsch North America  
810 Skyline Drive  
Marion, Illinois 62959  
618-993-8513

**CEDAR RAPIDS & IOWA CITY RAILWAY CO.**

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DESIGNED: J.A.W.	KIRKWOOD AVENUE	T-????
CHECKED: J.A.W.	IOWA CITY, IOWA	SHEET 2 OF 9
DATE: 05-01-23	DOT *607307S MILEPOST *27.84	



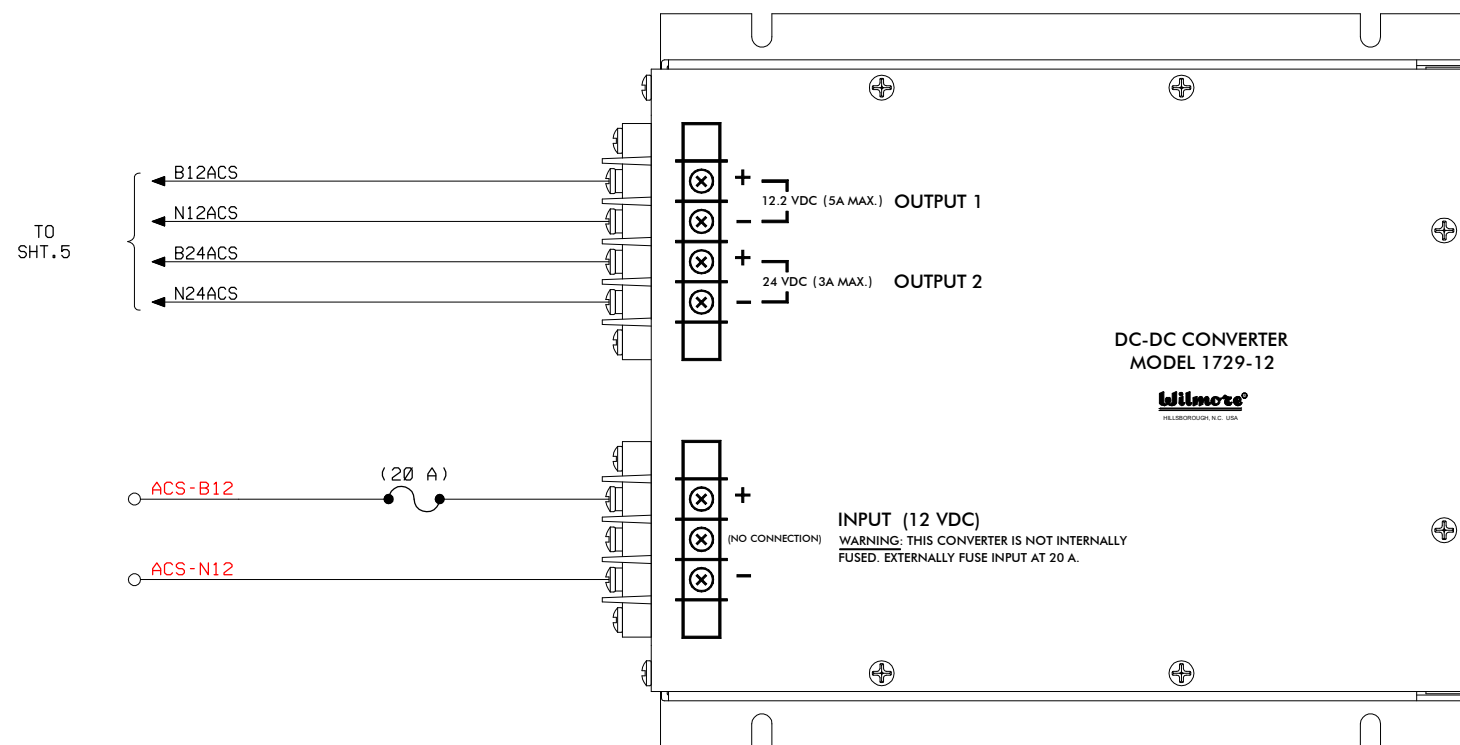
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DRAWN: J.G.C.	POWER DISTRIBUTION	DRAWING NO.
DESIGNED: J.A.W.	KIRKWOOD AVENUE	T-????
CHECKED: J.A.W.	IOWA CITY, IOWA	SHEET 3 OF 9
DATE: 05-01-23	DOT *607307S MILEPOST *27.84	



**NOTES:**

1. ALL WIRING TO BE #16 AWG UNLESS NOTED OTHERWISE.
2. CONVERTER B12 INPUT TO BE EXTERNALLY FUSED AT 20 AMPS.

**REVISIONS**

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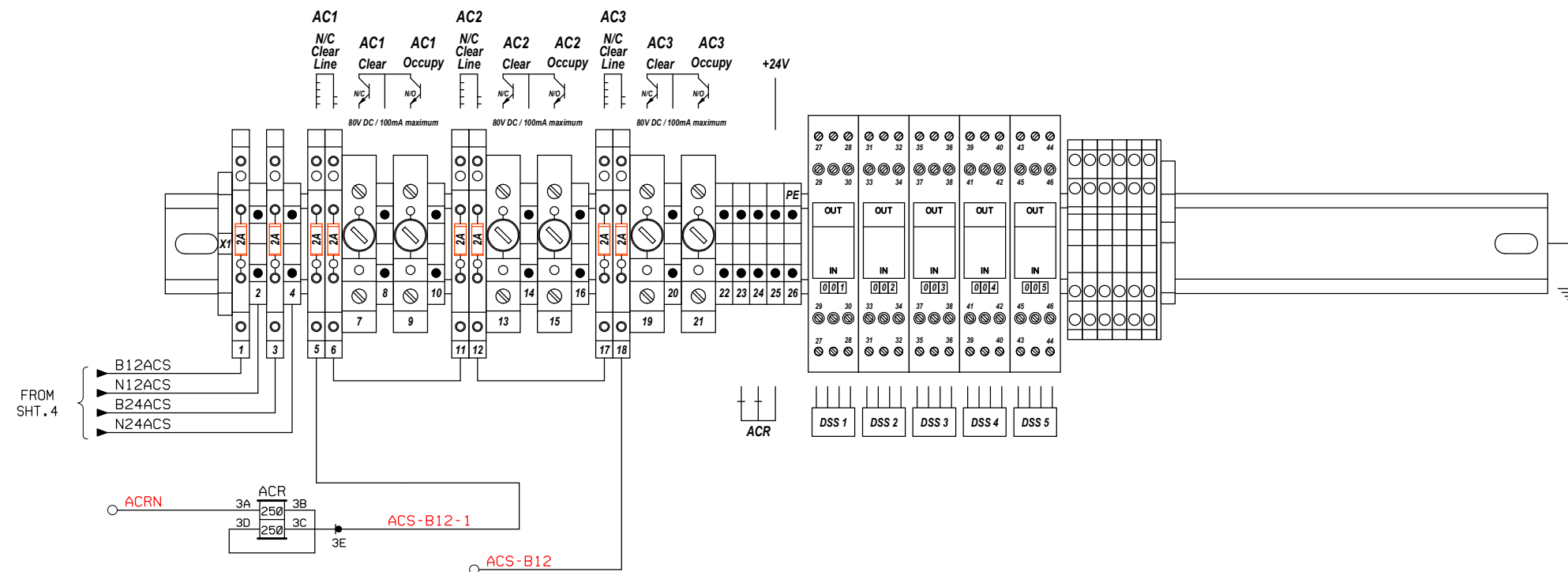


**CEDAR RAPIDS & IOWA CITY RAILWAY CO.**

DRAWN: J.G.C.  
DESIGNED: J.A.W.  
CHECKED: J.A.W.  
DATE: 05-01-23

DC-DC CONVERTER  
KIRKWOOD AVENUE  
IOWA CITY, IOWA  
DOT #607307S MILEPOST #27.84

DRAWING NO.  
**T-????**  
SHEET 4 OF 9



**NOTES:**

1. ALL WIRING TO BE #16 AWG UNLESS NOTED OTHERWISE.
2. GROUND SHIELDS/DRAIN WIRES AT RELAY CASE.
3. SHIELDS/DRAIN WIRES MUST FLOAT AT SENSOR JUNCTION BOX.
4. IF SHIELDS PASS THROUGH INTERMEDIATE JUNCTION BOX, DO NOT GROUND.
5. DSS COLOR CODE TO CABLE PAIRS:

DSS	PAIR	COLOR
BROWN	1	WHITE
YELLOW	1	BLACK
GREEN	2	WHITE
WHITE	2	BLACK
	ETC.	

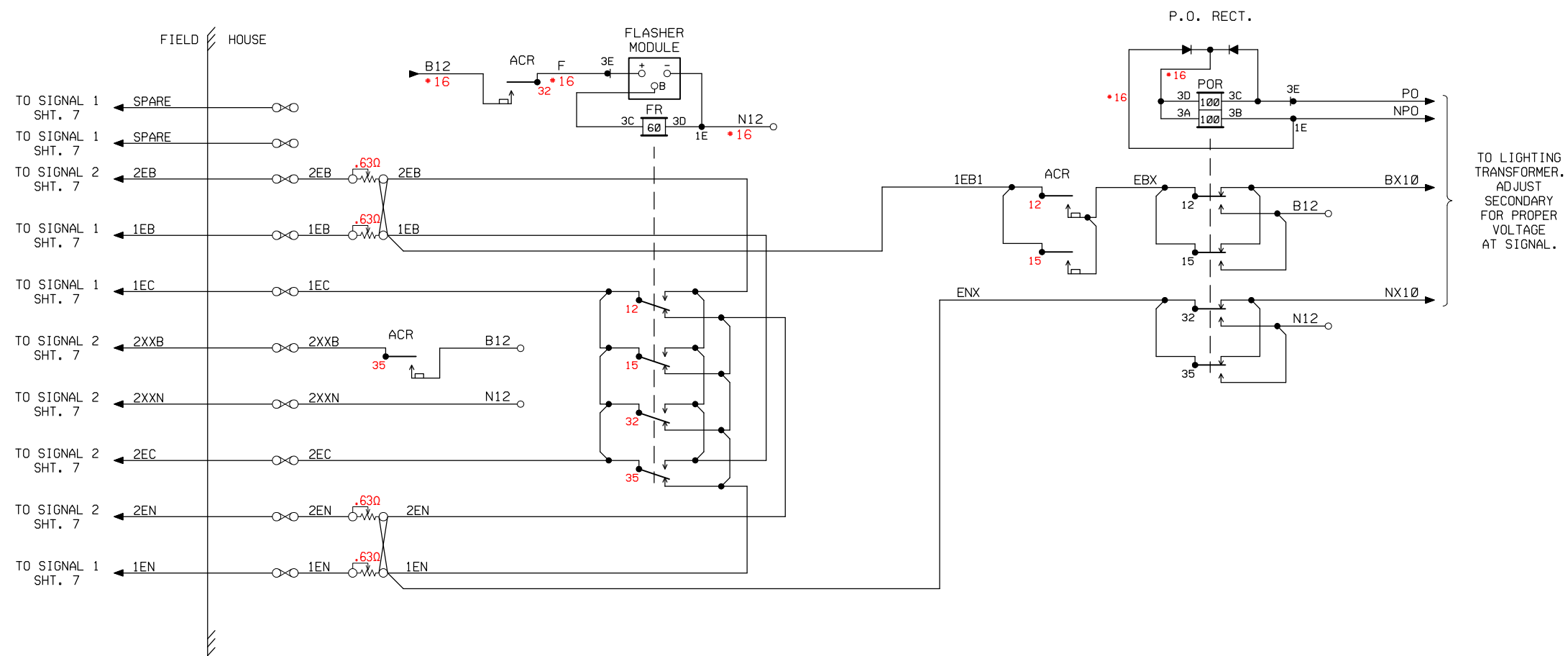
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**CEDAR RAPIDS & IOWA CITY RAILWAY CO.**

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DESIGNED: J.A.W.	KIRKWOOD AVENUE	T-????
CHECKED: J.A.W.	IOWA CITY, IOWA	SHEET 5 OF 9
DATE: 05-01-23	DOT #607307S MILEPOST #27.84	



**NOTES:**

1. ALL WIRING TO BE #10 AWG UNLESS NOTED OTHERWISE.

**REVISIONS**

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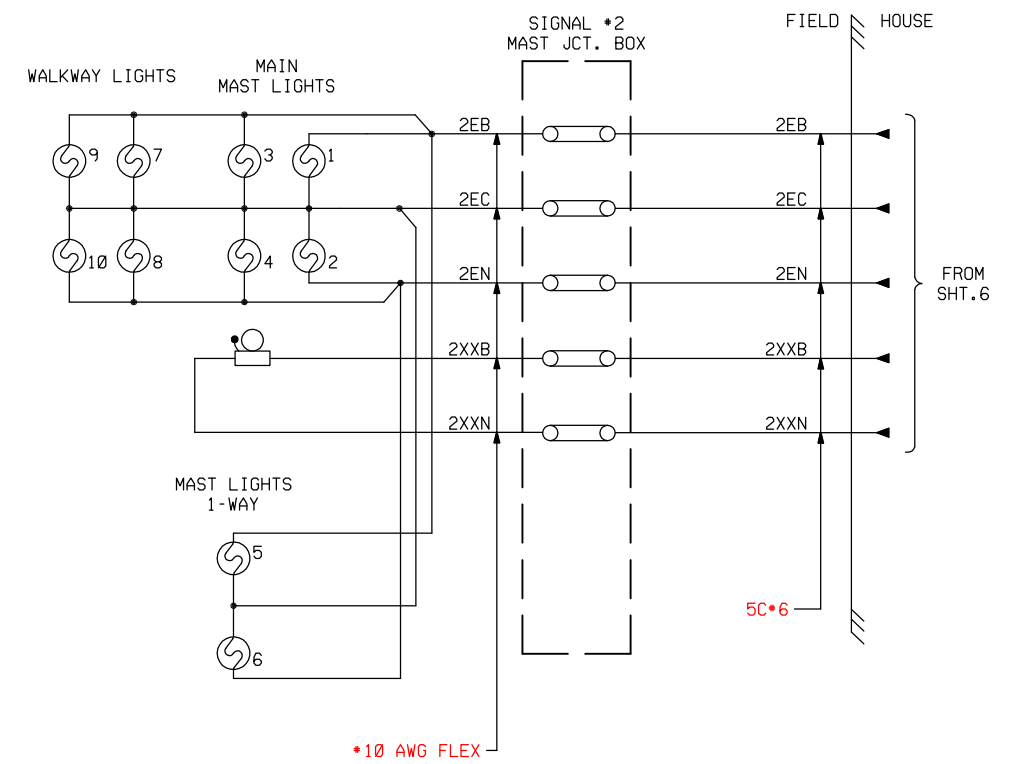
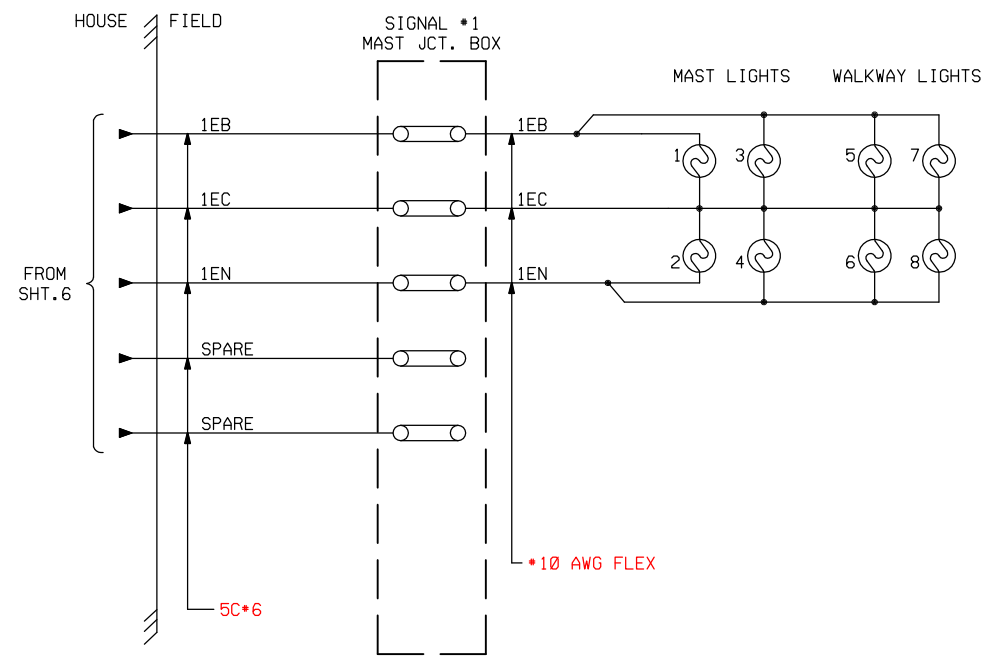
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**CEDAR RAPIDS & IOWA CITY RAILWAY CO.**

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DESIGNED: J.A.W.  
CHECKED: J.A.W.  
DATE: 05-01-23

LAMP CONTROL CIRCUITS  
KIRKWOOD AVENUE  
IOWA CITY, IOWA  
DOT #607307S MILEPOST #27.84

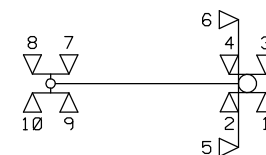
DRAWING NO.  
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SHEET 6 OF 9



SIG #1



SIG #2



REVISIONS

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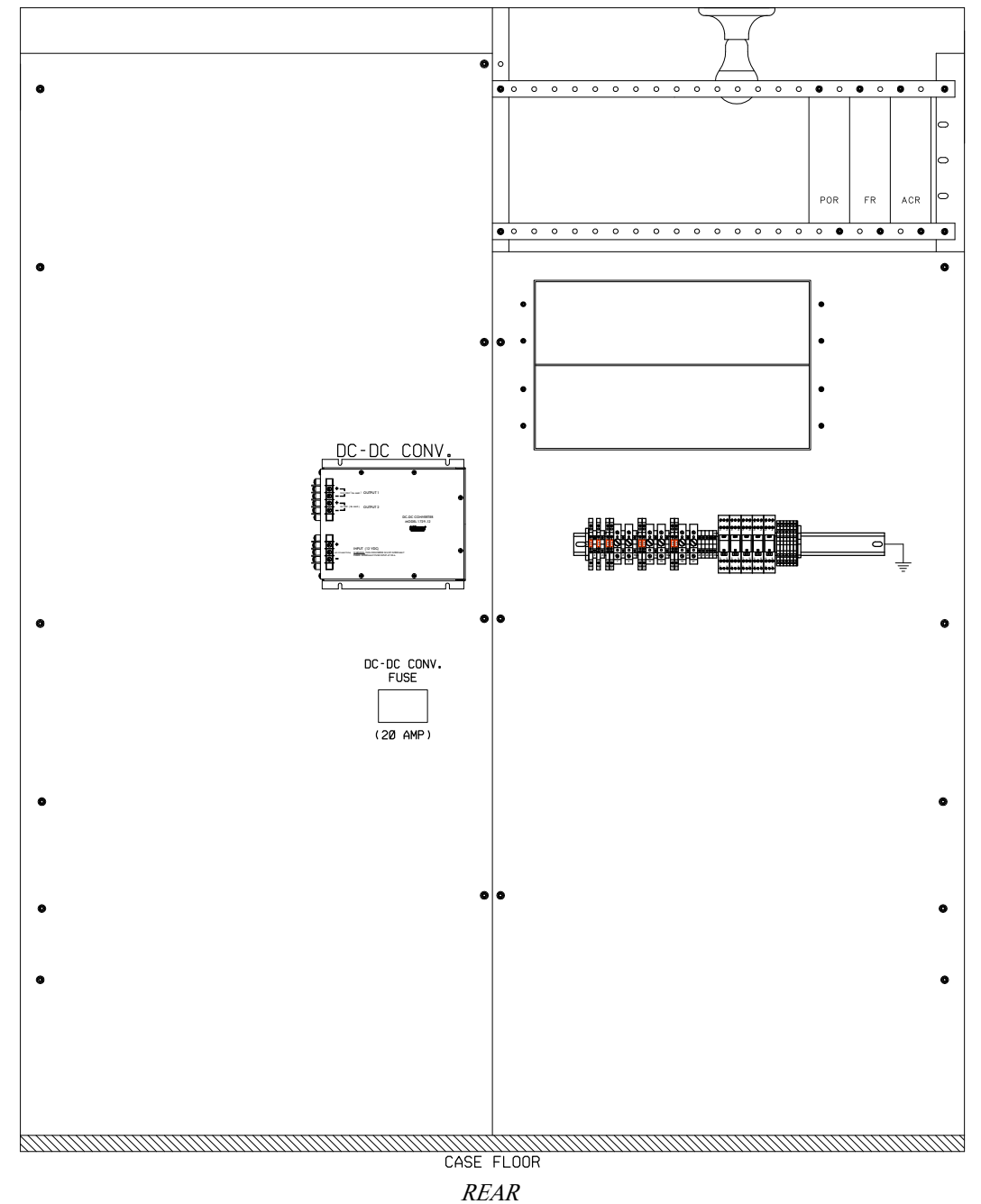
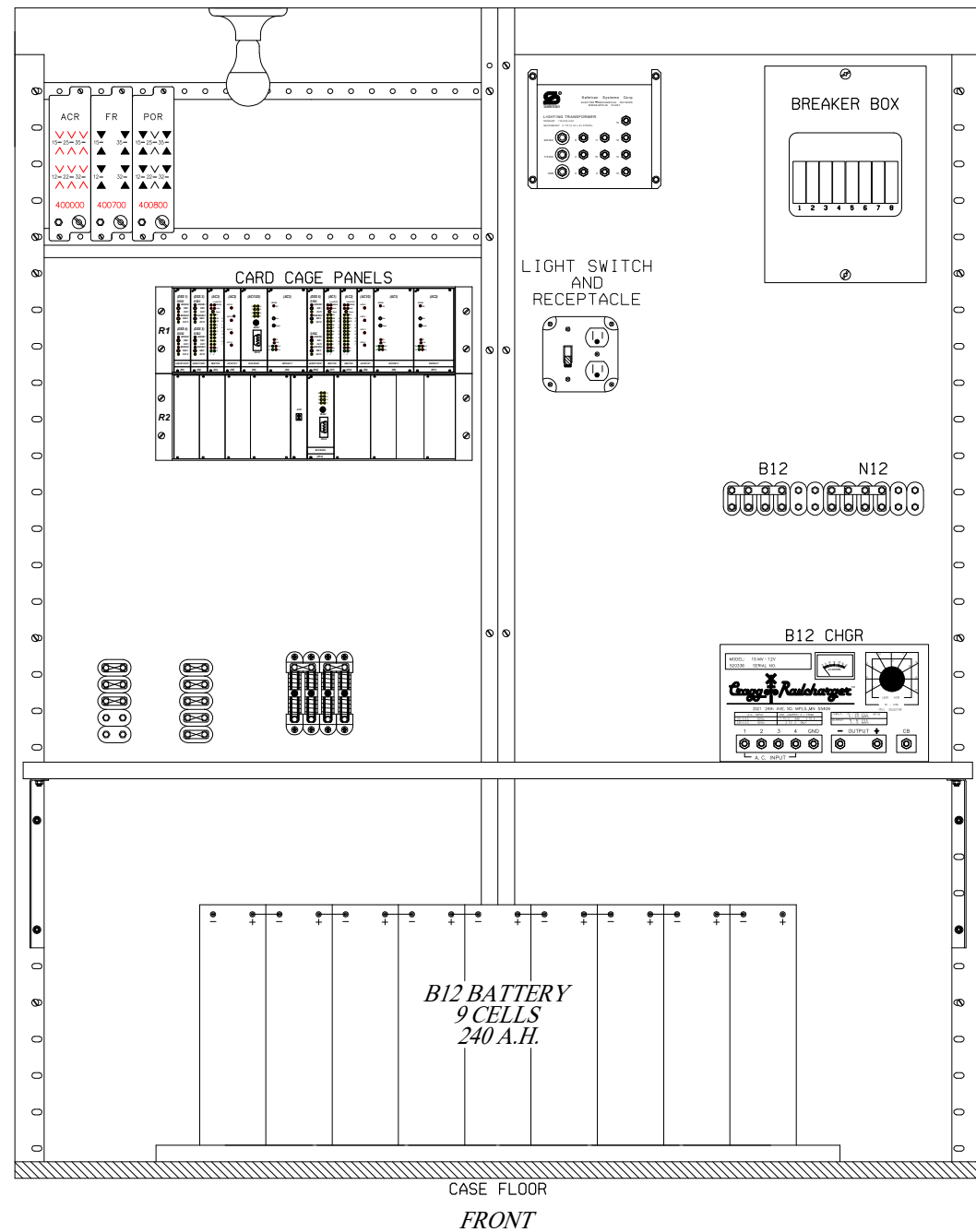


CEDAR RAPIDS & IOWA CITY RAILWAY CO.

DRAWN: J.G.C.  
DESIGNED: J.A.W.  
CHECKED: J.A.W.  
DATE: 05-01-23

SIGNAL 1 AND 2 LIGHTS  
KIRKWOOD AVENUE  
IOWA CITY, IOWA  
DOT #607307S MILEPOST #27.84

DRAWING NO.  
T-????  
SHEET 7 OF 9



REVISIONS

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CEDAR RAPIDS & IOWA CITY RAILWAY CO.

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DESIGNED: J.A.W.	DOT *607307S MILEPOST *27.84	SHEET 8 OF 9
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