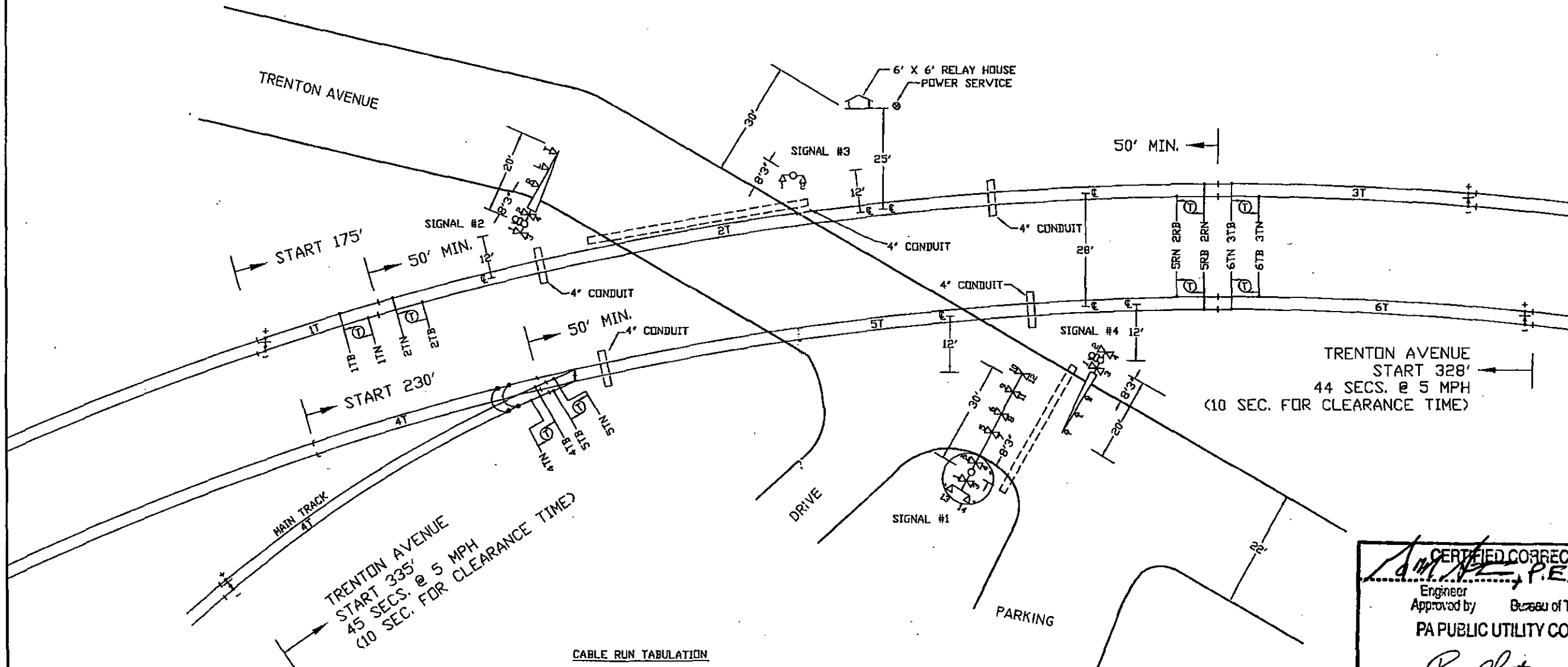


WEST

EAST

TRENTON AVENUE  
START 175'  
60 SECS. @ 2 MPH  
(10 SEC. FOR CLEARANCE TIME)

TRENTON AVENUE  
START 315'  
41 SECS. @ 5 MPH  
(10 SEC. FOR CLEARANCE TIME)



TRENTON AVENUE  
START 230'  
45 SECS. @ 5 MPH  
(10 SEC. FOR CLEARANCE TIME)

TRENTON AVENUE  
START 328'  
44 SECS. @ 5 MPH  
(10 SEC. FOR CLEARANCE TIME)

NOTES:

1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. FLASHLIGHT SIGNALS & GATE LIGHTS TO BE LIGHT EMITTING DIODE ASSEMBLIES, (LED).
4. (T) DENOTES TWIST PAIR.

CABLE RUN TABULATION

HOUSE TO SIGNAL #1	- 5/C #6 UG CABLE
	- 7/C #14 UG CABLE
HOUSE TO SIGNAL #2	- 5/C #6 UG CABLE
HOUSE TO SIGNAL #3	- 5/C #6 UG CABLE
HOUSE TO SIGNAL #4	- 5/C #6 UG CABLE
	- 7/C #14 UG CABLE
HOUSE TO AC SERVICE	- 3/C #9 UG CABLE
HOUSE TO 1TN & 1TB	- 2/C #6 TWISTED PAIR
HOUSE TO 2TN & 2TB	- 2/C #6 TWISTED PAIR
HOUSE TO 2RN & 2RB	- 2/C #6 TWISTED PAIR
HOUSE TO 3TN & 3TB	- 2/C #6 TWISTED PAIR
HOUSE TO 4TN & 4TB	- 2/C #6 TWISTED PAIR
HOUSE TO 5TN & 5TB	- 2/C #6 TWISTED PAIR
HOUSE TO 5RN & 5RB	- 2/C #6 TWISTED PAIR
HOUSE TO 6TN & 6TB	- 2/C #6 TWISTED PAIR

**CERTIFIED CORRECT PLANS**  
 P.E.  
 Engineer  
 Approved by Bureau of Technical Utility Services  
 PA PUBLIC UTILITY COMMISSION  
 ATTEST *Secretary*  
 Secretary

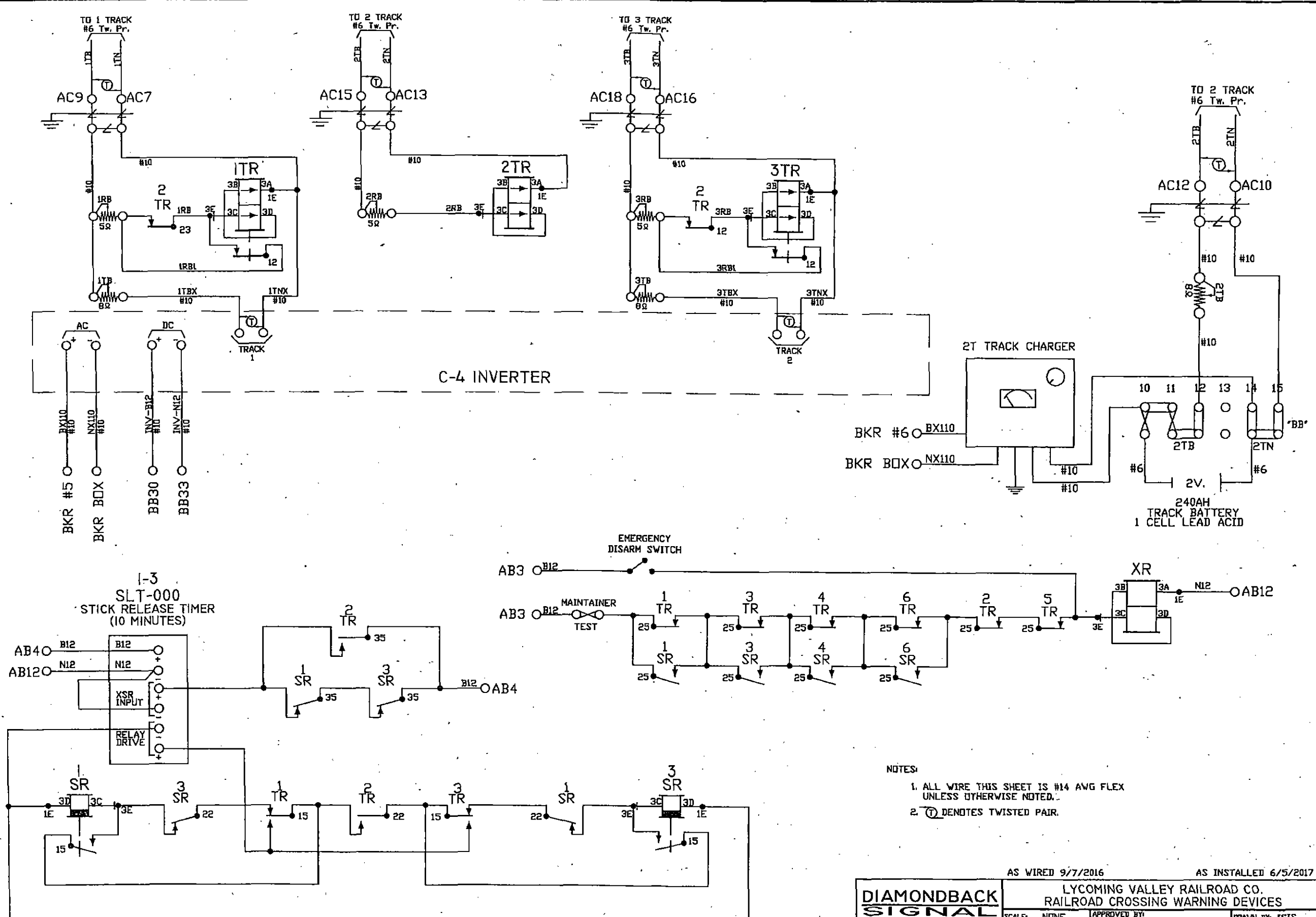
AS WIRED 9/7/2016 AS INSTALLED 6/5/2017

**DIAMONDBACK SIGNAL**  
 (410) 795-9601  
 5965 EXCHANGE DRIVE  
 SUITE "D"  
 SYKESVILLE, MD  
 21784

LYCOMING VALLEY RAILROAD CO.  
 RAILROAD CROSSING WARNING DEVICES

SCALE: NONE	APPROVED BY:	DRAWN BY: ISIS
DATE: 2/24/2016		REVISED: 7/6/2020
TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA		
TRACK & CABLE PLAN		DRAWING NUMBER 2269

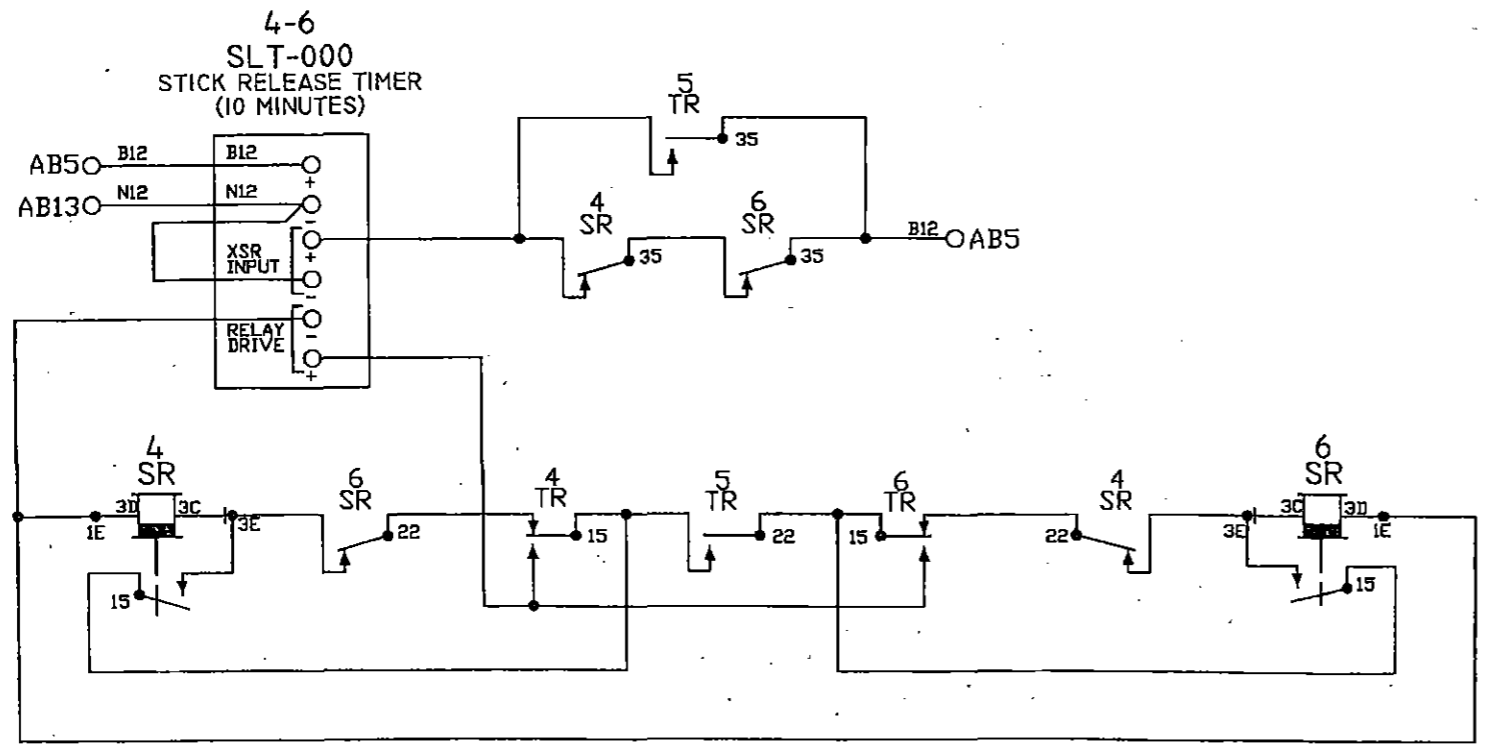
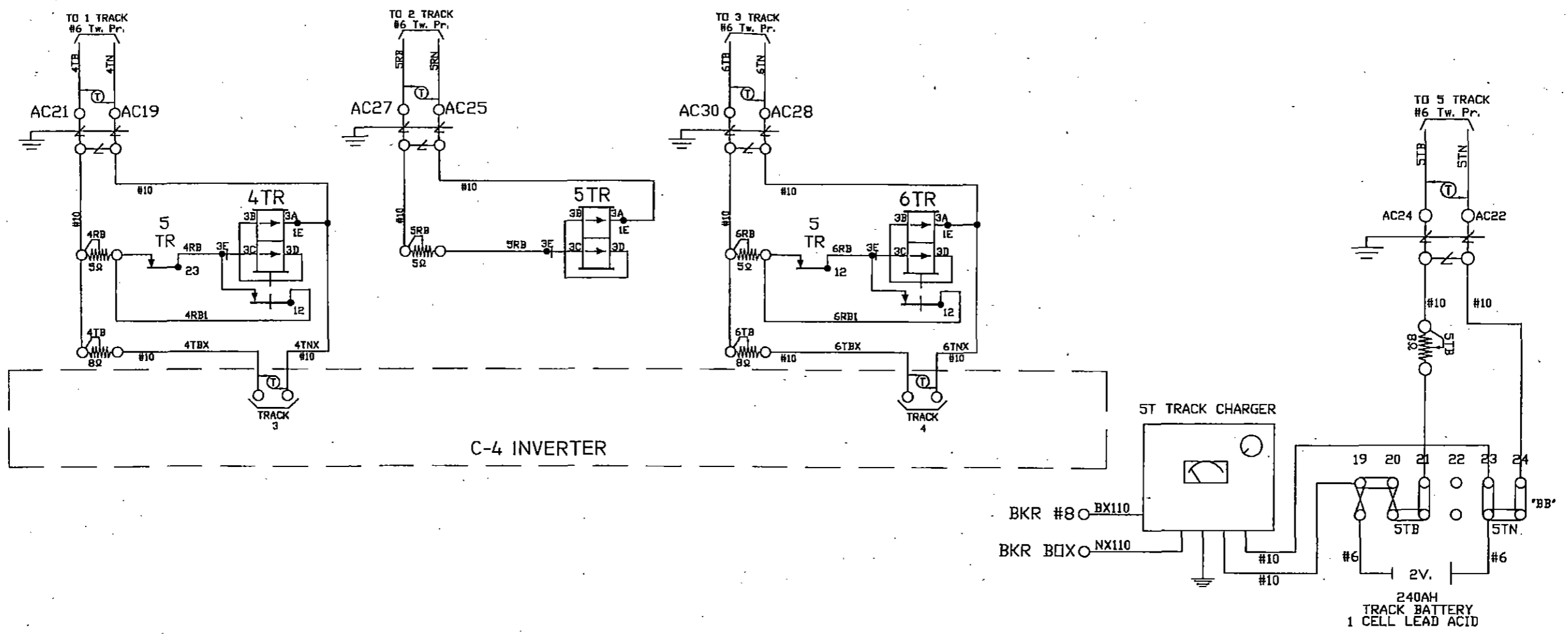
A-2020-3016318



- NOTES:
1. ALL WIRE THIS SHEET IS #14 AVG FLEX UNLESS OTHERWISE NOTED.
  2. (T) DENOTES TWISTED PAIR.

AS WIRED 9/7/2016 AS INSTALLED 6/5/2017

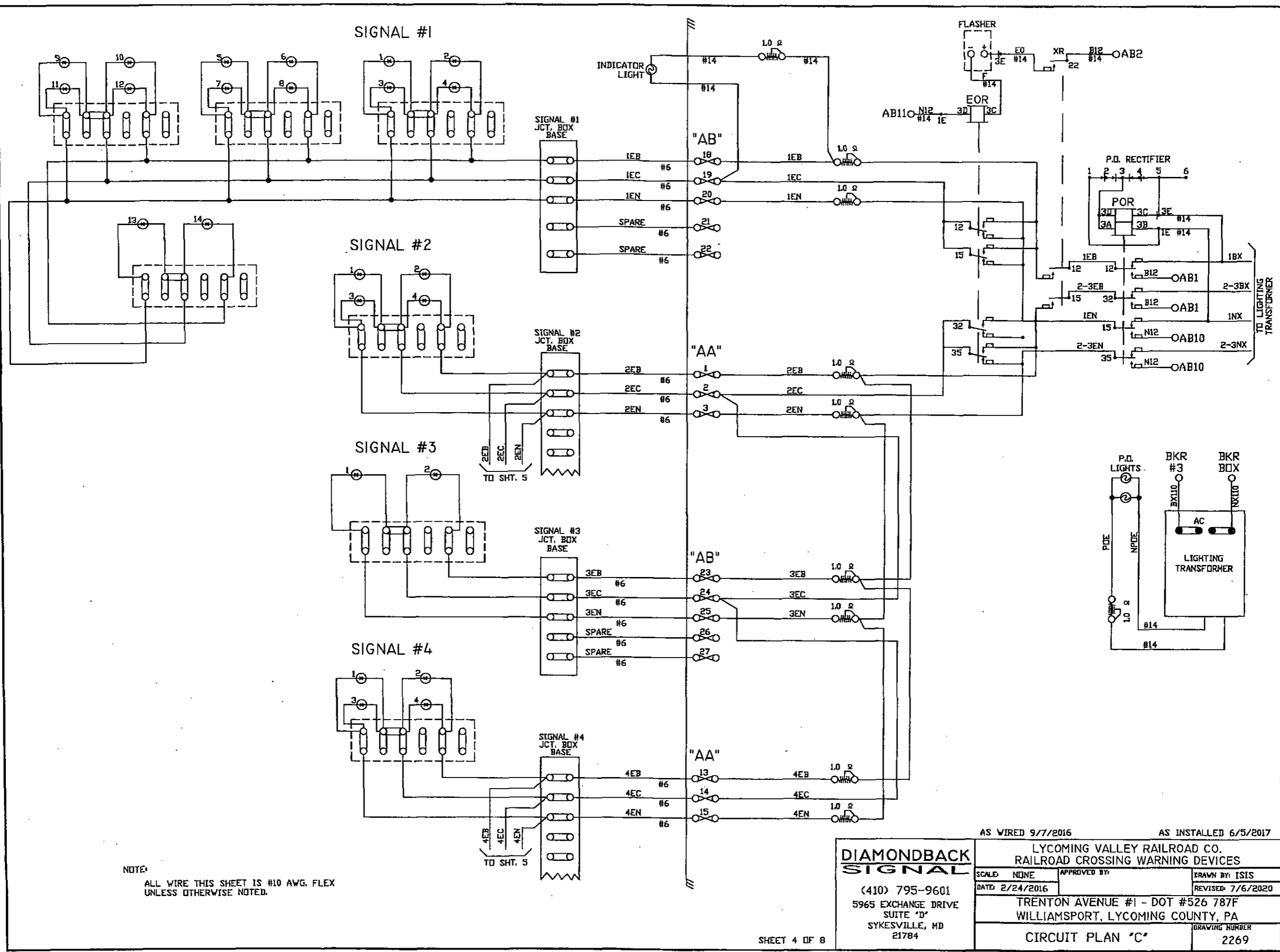
<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784		LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES	
		SCALE: NONE DATE: 2/24/2016	APPROVED BY:
		TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA	
		CIRCUIT PLAN 'A'	DRAWING NUMBER 2269



- NOTES:
1. ALL WIRE THIS SHEET IS #14 AWG FLEX UNLESS OTHERWISE NOTED.
  2. (T) DENOTES TWISTED PAIR.

AS WIRED 9/7/2016		AS INSTALLED 6/5/2017	
<b>DIAMONDBACK SIGNAL</b>			
LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES			
SCALE: NONE	APPROVED BY:	DRAWN BY: ISIS	
DATE: 2/24/2016		REVISED: 7/6/2020	
TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA			
CIRCUIT PLAN "B"			DRAWING NUMBER 2269

(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD  
21784

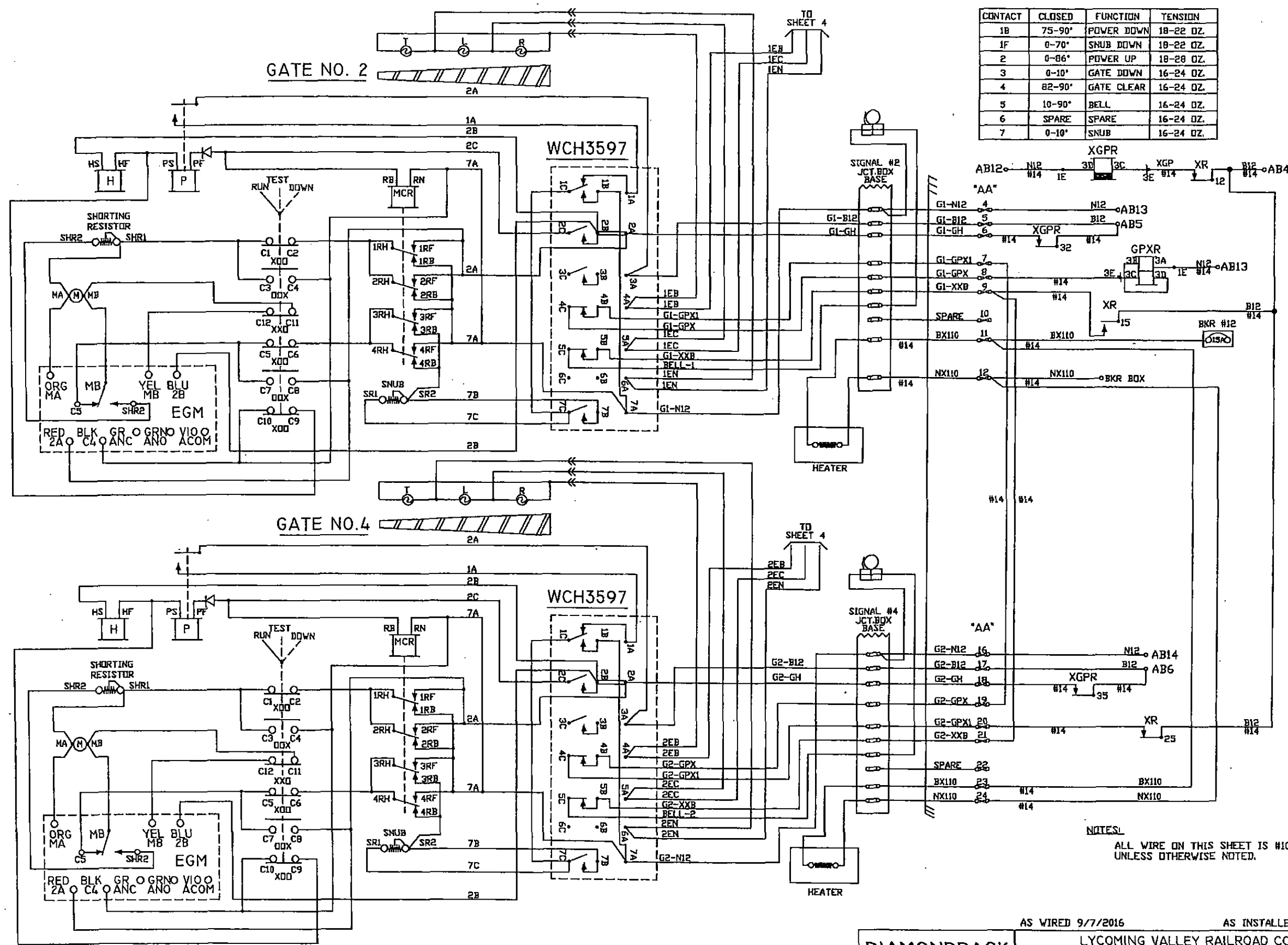


NOTE:  
ALL WIRE THIS SHEET IS #10 AWG. FLEX  
UNLESS OTHERWISE NOTED.

AS WIRED 9/7/2016 AS INSTALLED 6/5/2017

**DIAMONDBACK SIGNAL**  
(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD  
21784

LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES		APPROVED BY:	DRAWN BY: ISIS
SCALE: NONE	DATE: 2/24/2016		REVISED: 7/6/2020
TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA			DRAWING NUMBER
CIRCUIT PLAN "C"			2269



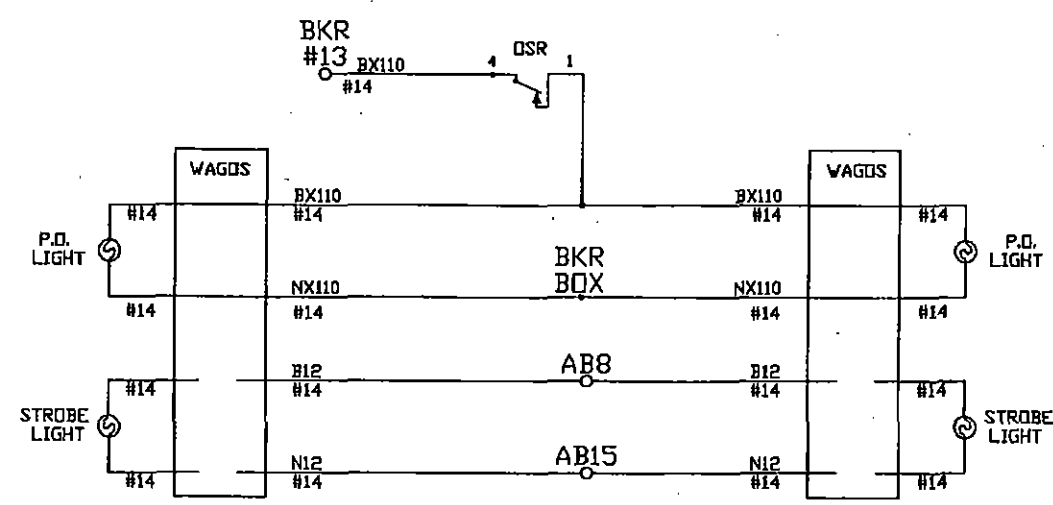
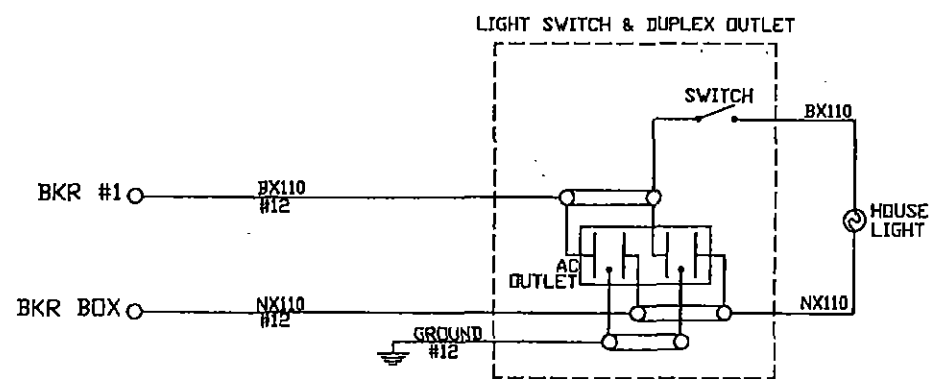
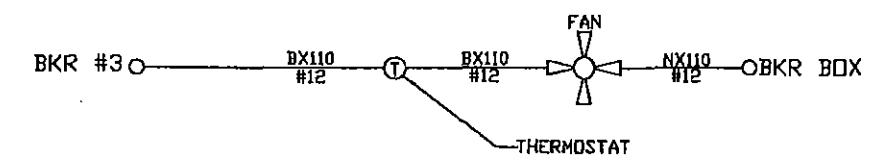
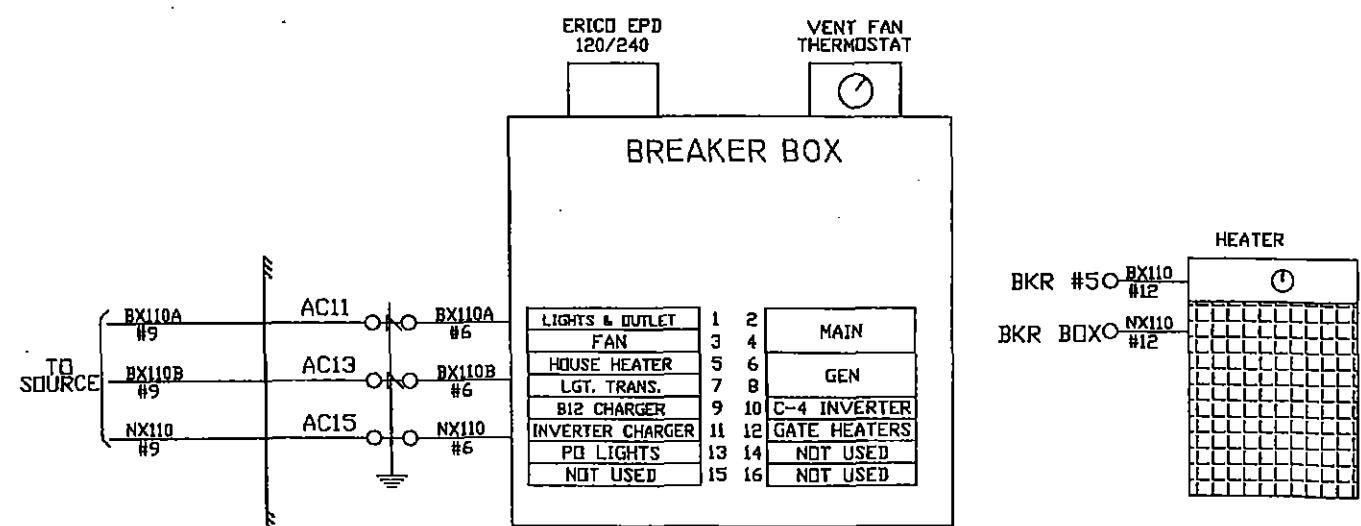
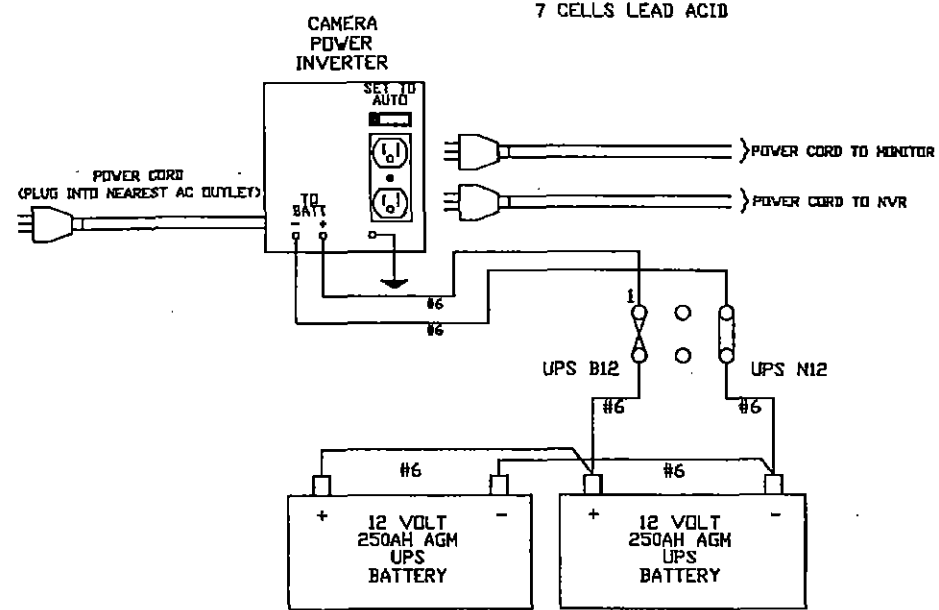
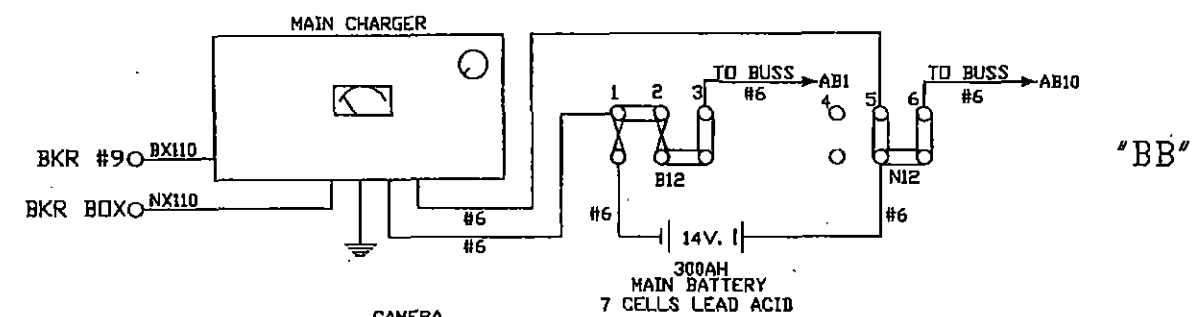
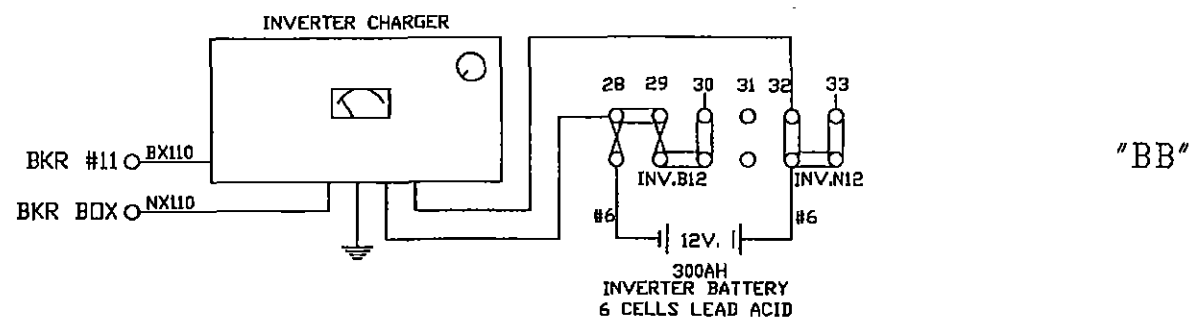
CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90°	POWER DOWN	18-22 OZ.
1F	0-70°	SNUB DOWN	18-22 OZ.
2	0-86°	POWER UP	18-28 OZ.
3	0-10°	GATE DOWN	16-24 OZ.
4	82-90°	GATE CLEAR	16-24 OZ.
5	10-90°	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-10°	SNUB	16-24 OZ.

NOTES:  
ALL WIRE ON THIS SHEET IS #10AWG UNLESS OTHERWISE NOTED.

AS WIRED 9/7/2016 AS INSTALLED 6/5/2017

**DIAMONDBACK SIGNAL**  
(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD 21784

LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES		DRAWN BY: ISIS
SCALE: NONE	APPROVED BY:	REVISED: 7/6/2020
DATE: 2/24/2016	TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA	
CIRCUIT PLAN "D"		DRAWING NUMBER 2269



NOTE:  
ALL WIRE THIS SHEET IS #10 AWG FLEX  
UNLESS OTHERWISE NOTED.

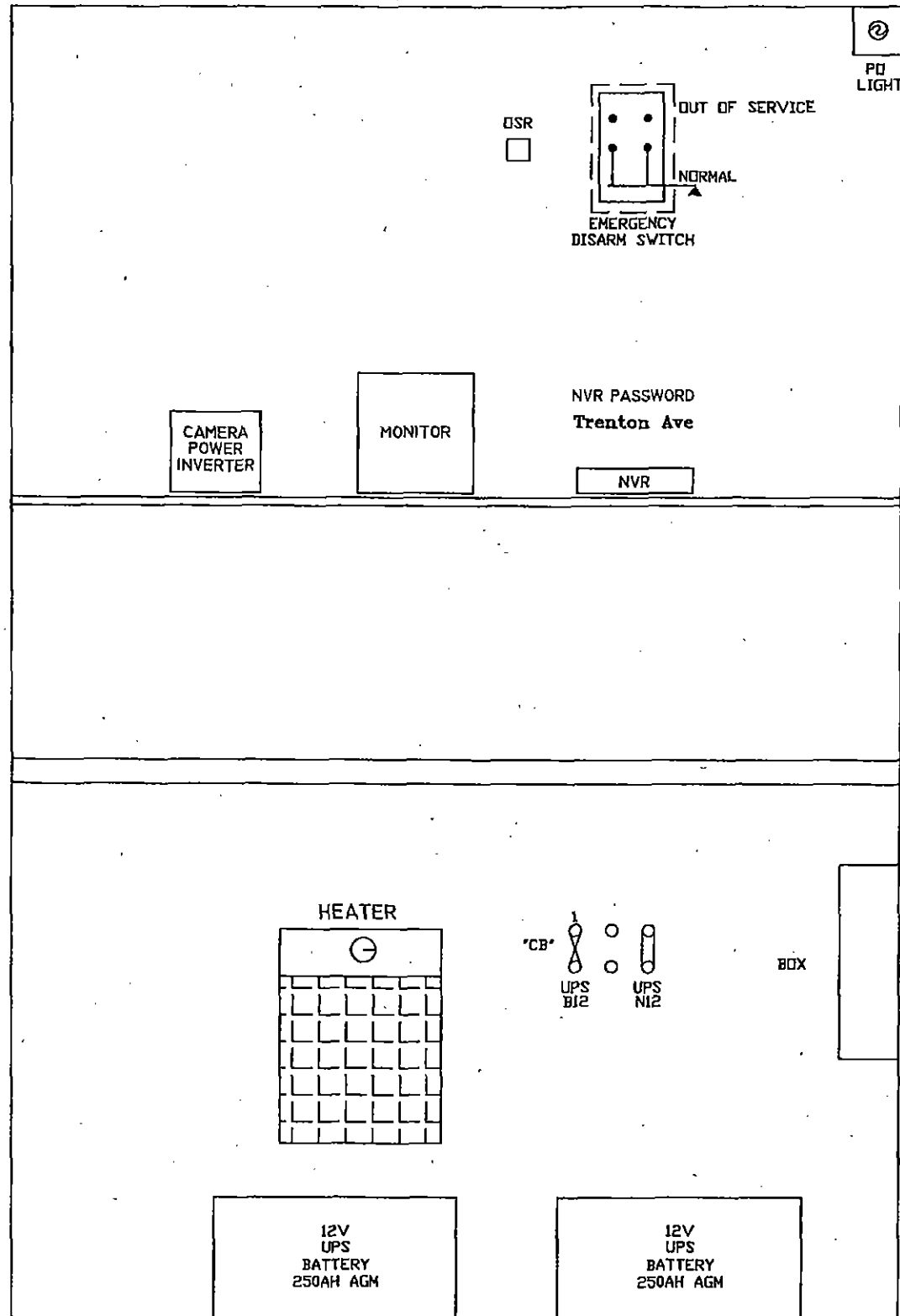
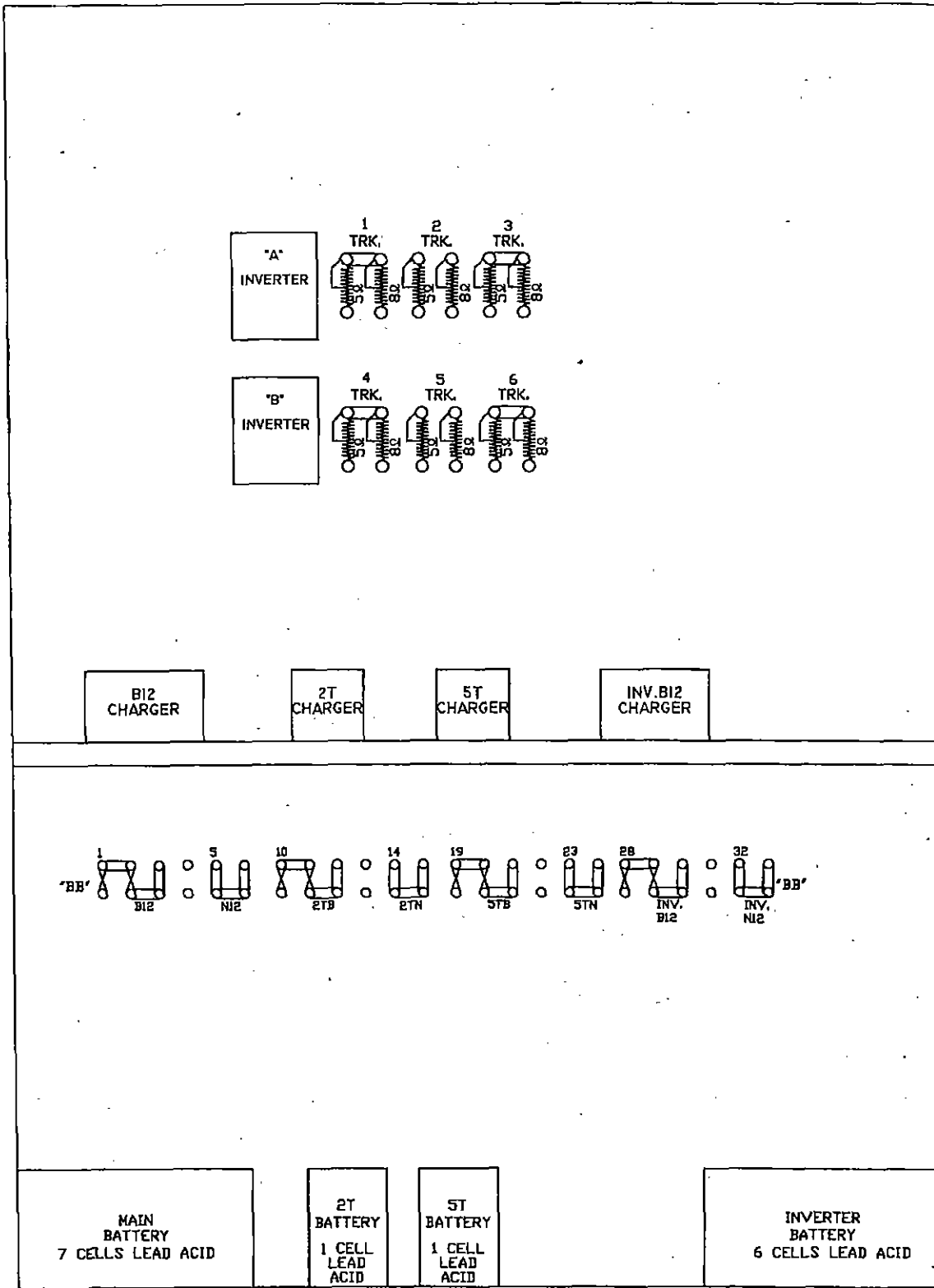
AS WIRED 9/7/2016 AS INSTALLED 6/5/2017

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES	
	SCALE: NONE DATE: 2/24/2016	APPROVED BY:
TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA		
CIRCUIT PLAN "E"		DRAWING NUMBER 2269



SIDE "B"

SIDE "C"



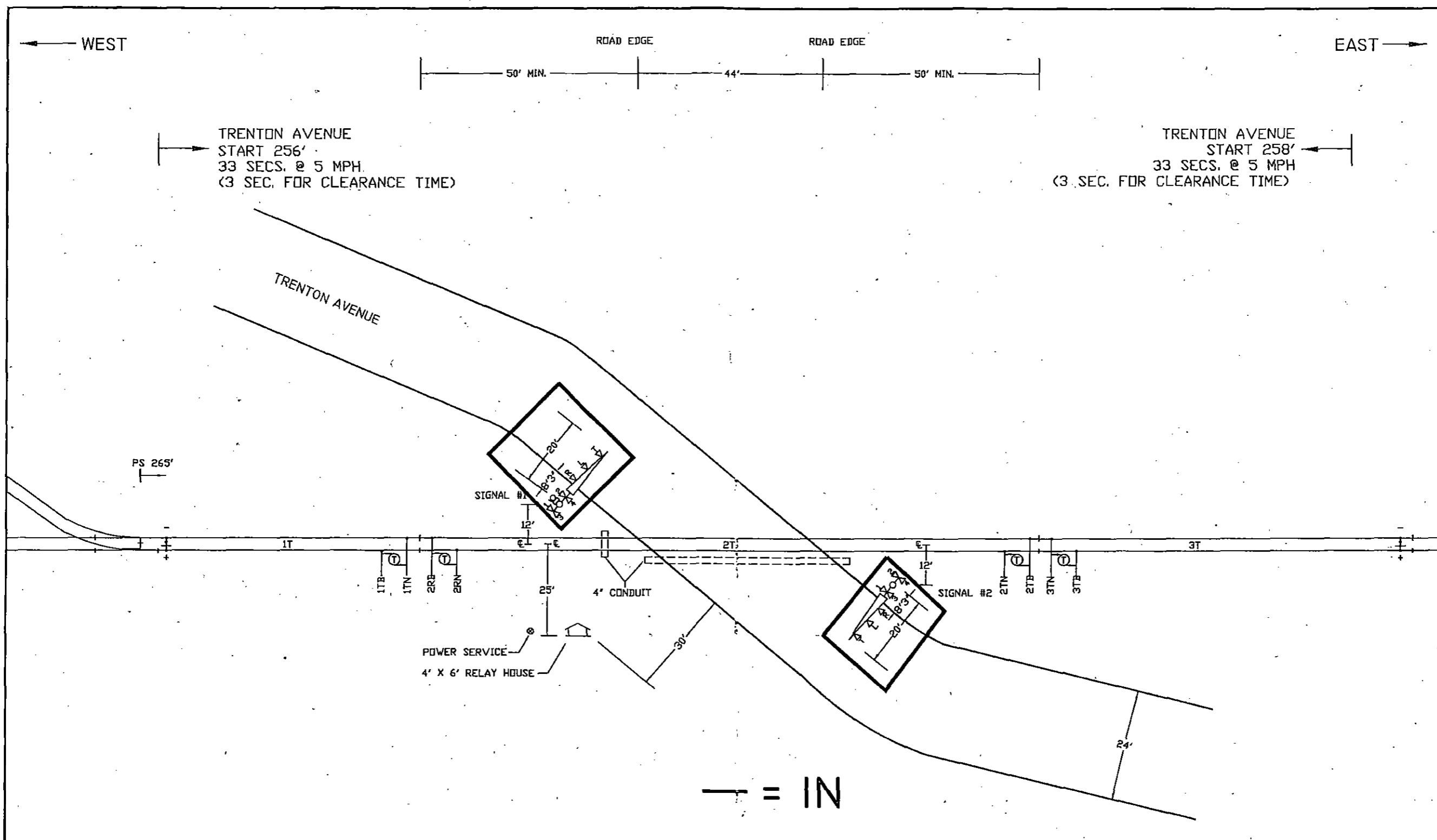
AS WIRED 9/7/2016

AS INSTALLED 6/5/2017

**DIAMONDBACK SIGNAL**

(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD  
21784

LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES	
SCALE: NONE	APPROVED BY:
DATE: 2/24/2016	DRAWN BY: ISIS
REVISID: 7/6/2020	
TRENTON AVENUE #1 - DOT #526 787F WILLIAMSPORT, LYCOMING COUNTY, PA	
RELAY HOUSE LAYOUT	DRAWING NUMBER 2269



**NOTES:**

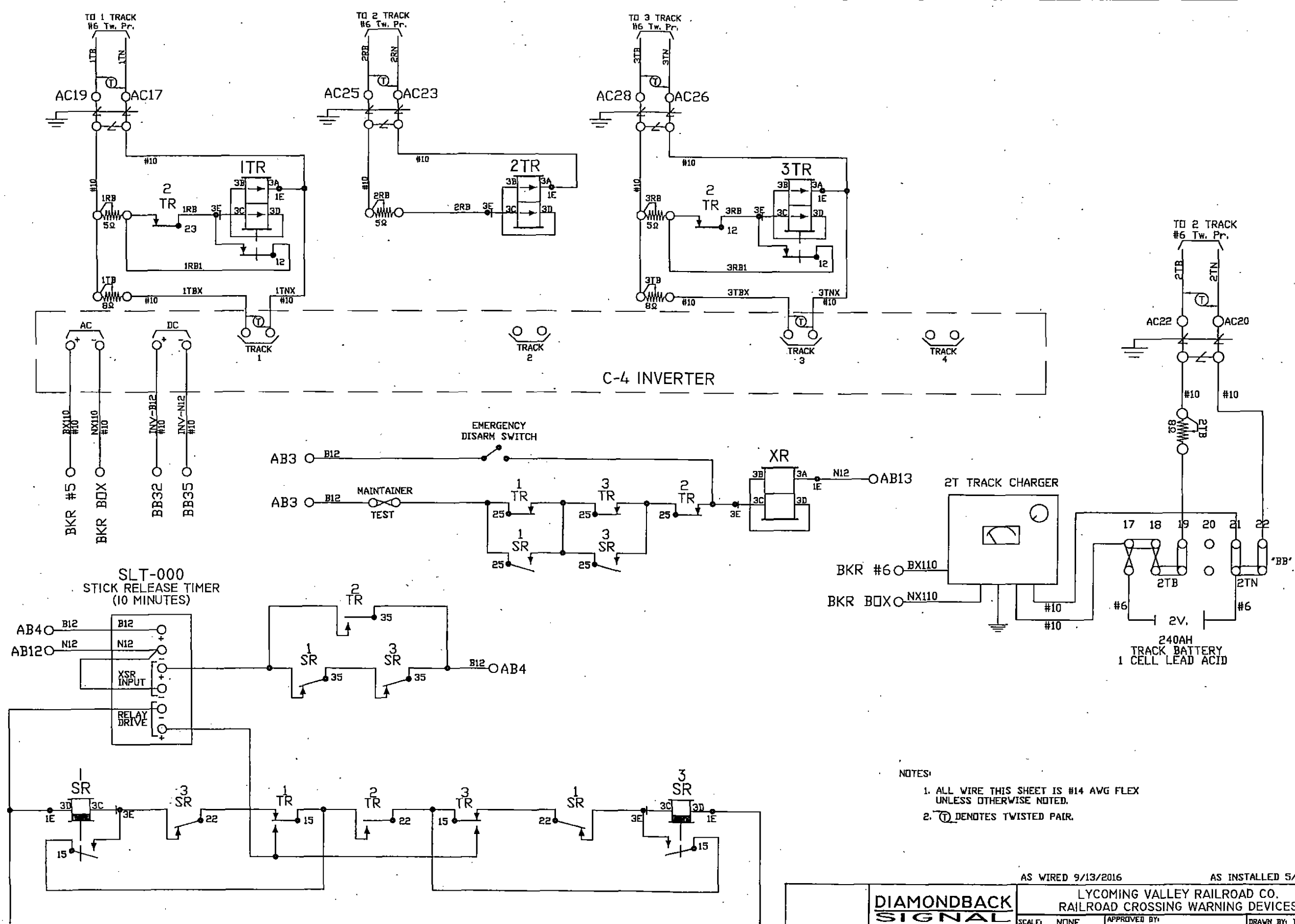
1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. FLASHLIGHT SIGNALS & GATE LIGHTS TO BE LIGHT EMITTING DIODE ASSEMBLIES, (LED).
4. (T) DENOTES TWIST PAIR.

**CABLE RUN TABULATION**

HOUSE TO SIGNAL #1	- 5/C #6 UG CABLE
	- 7/C #14 UG CABLE
HOUSE TO SIGNAL #2	- 5/C #6 UG CABLE
	- 7/C #14 UG CABLE
HOUSE TO AC SERVICE	- 3/C #9 UG CABLE
HOUSE TO 1TN & 1TB	- 2/C #6 TWISTED PAIR
HOUSE TO 2TN & 2TB	- 2/C #6 TWISTED PAIR
HOUSE TO 2RN & 2RB	- 2/C #6 TWISTED PAIR
HOUSE TO 3TN & 3TB	- 2/C #6 TWISTED PAIR


	<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	AS WIRED 9/13/2016	AS INSTALLED 5/30/2017
		LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES	
		SCALE: NONE	APPROVED BY:
		DATE: 2/26/2016	REVISION:
		TRENTON AVENUE #2 - DOT #526 786Y WILLIAMSPORT, LYCOMING COUNTY, PA	
		TRACK & CABLE PLAN	DRAWING NUMBER 2270

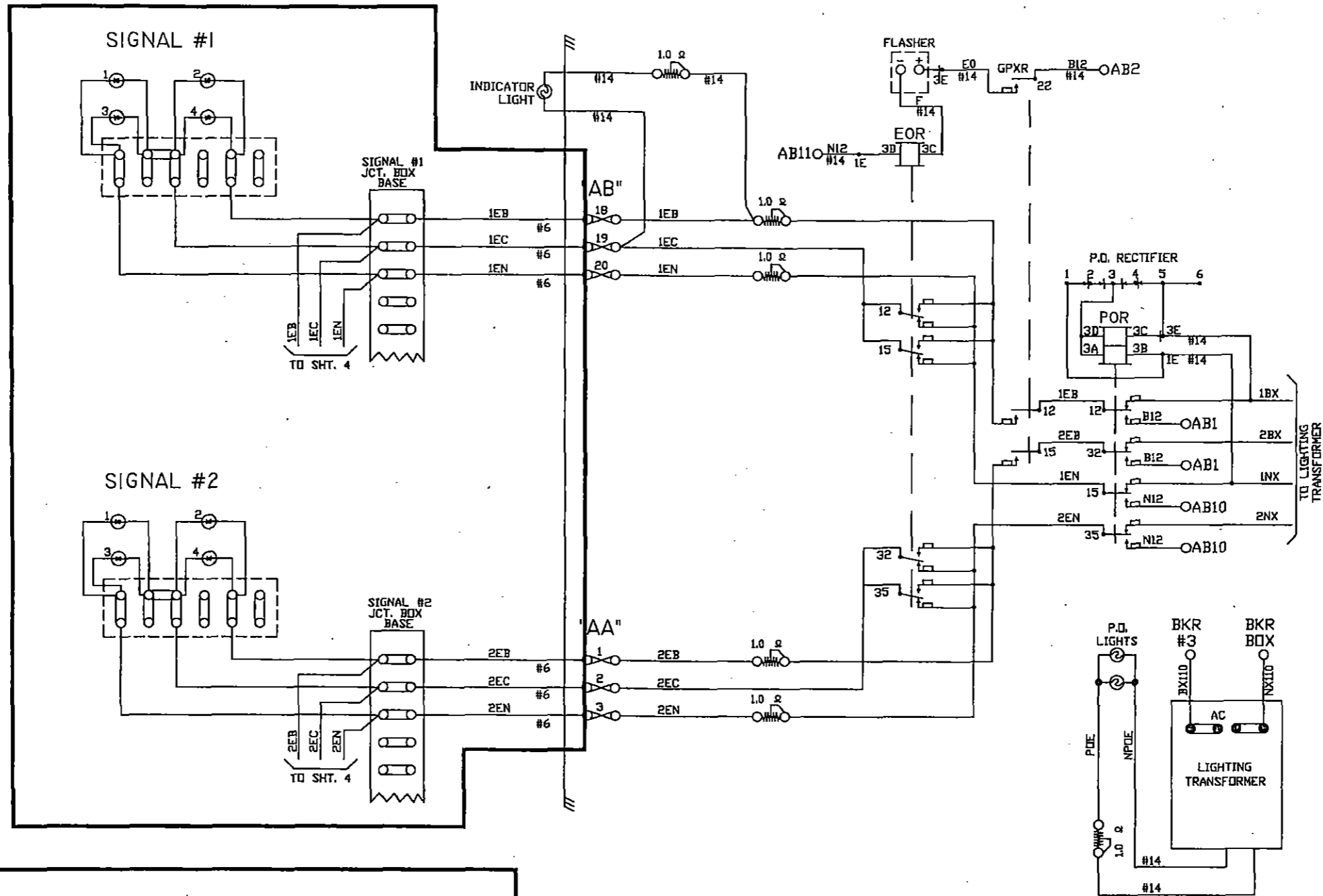
A-2020-3016318



- NOTES:
1. ALL WIRE THIS SHEET IS #14 AVG FLEX UNLESS OTHERWISE NOTED.
  2. (T) DENOTES TWISTED PAIR.

AS WIRED 9/13/2016 AS INSTALLED 5/30/2017

 <b>ISIS, LLC</b>	<b>DIAMONDBACK SIGNAL</b>		LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES	
	SCALE: NONE	APPROVED BY:	DRAWN BY: ISIS	
	DATE: 2/26/2016		REVISED:	
	(410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784		TRENTON AVENUE #2 - DOT #526 786Y WILLIAMSPORT, LYCOMING COUNTY, PA	
CIRCUIT PLAN "A"			DRAWING NUMBER 2270	



**NEW SHEET**

— = IN

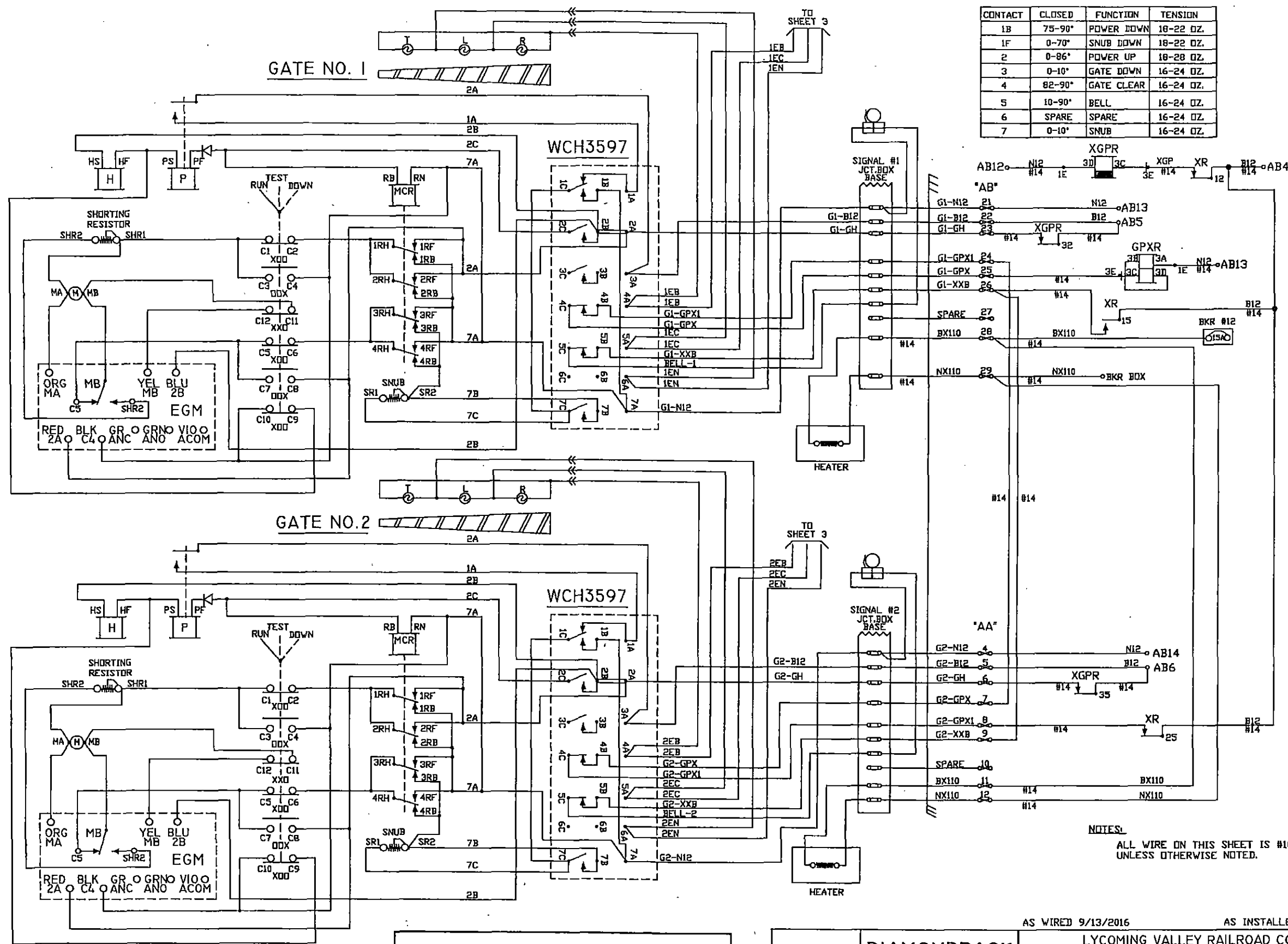
NOTE:  
ALL WIRE THIS SHEET IS #10 AWG. FLEX  
UNLESS OTHERWISE NOTED.

**DIAMONDBACK SIGNAL**  
 (410) 795-9601  
 5965 EXCHANGE DRIVE  
 SUITE 'D'  
 SYKESVILLE, MD 21784

SHEET 3 OF 6



AS WIRED 9/13/2016		AS INSTALLED 5/30/2017	
LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES			
SCALE: NONE	APPROVED BY:	DRAWN BY: ISIS	
DATE: 2/26/2016		REVISED:	
TRENTON AVENUE #2 - DOT #526 786Y WILLIAMSPORT, LYCOMING COUNTY, PA			
CIRCUIT PLAN 'B'			DRAWING NUMBER 2270



CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90°	POWER DOWN	18-22 OZ.
1F	0-70°	SNUB DOWN	18-22 OZ.
2	0-86°	POWER UP	18-28 OZ.
3	0-10°	GATE DOWN	16-24 OZ.
4	82-90°	GATE CLEAR	16-24 OZ.
5	10-90°	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-10°	SNUB	16-24 OZ.

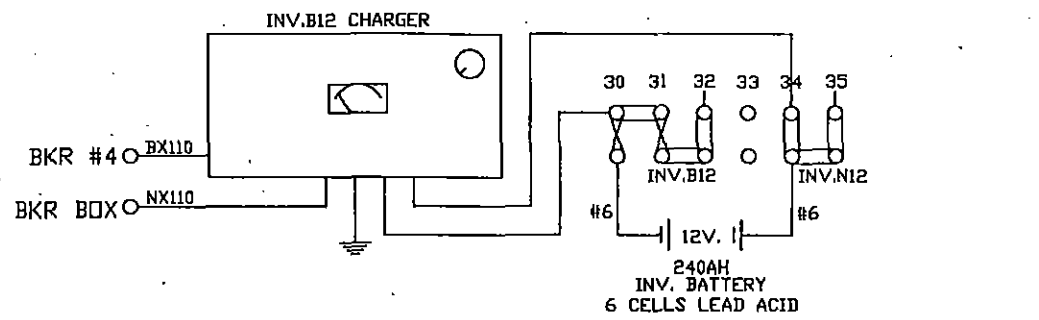
NOTES:  
ALL WIRE ON THIS SHEET IS #10AWG UNLESS OTHERWISE NOTED.

**NEW SHEET**

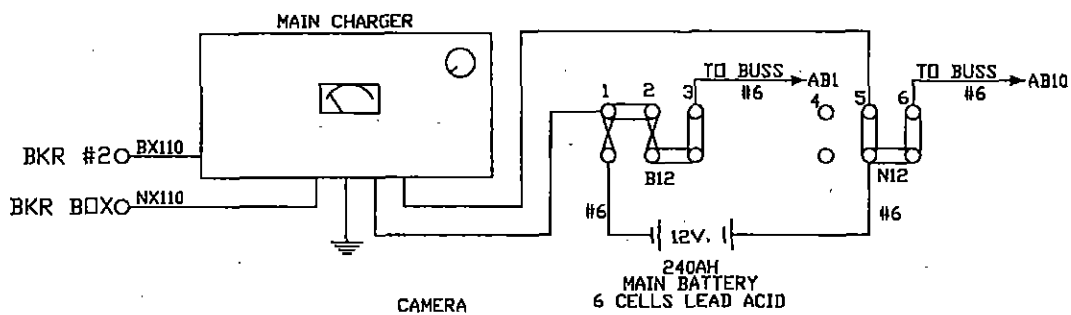


**DIAMONDBACK SIGNAL**  
(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD 21784

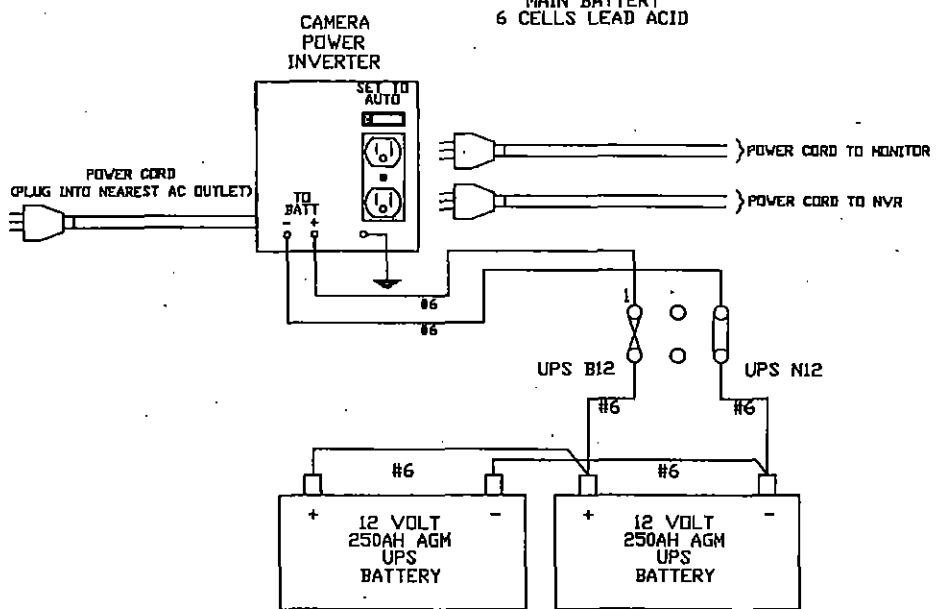
AS WIRED 9/13/2016		AS INSTALLED 5/30/2017	
LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES			
SCALE: NONE	APPROVED BY:	DRAWN BY: ISIS	
DATE: 2/26/2016		REVISED:	
TRENTON AVENUE #2 - DOT #526 786Y WILLIAMSPORT, LYCOMING COUNTY, PA			
CIRCUIT PLAN "C"			DRAWING NUMBER 2270



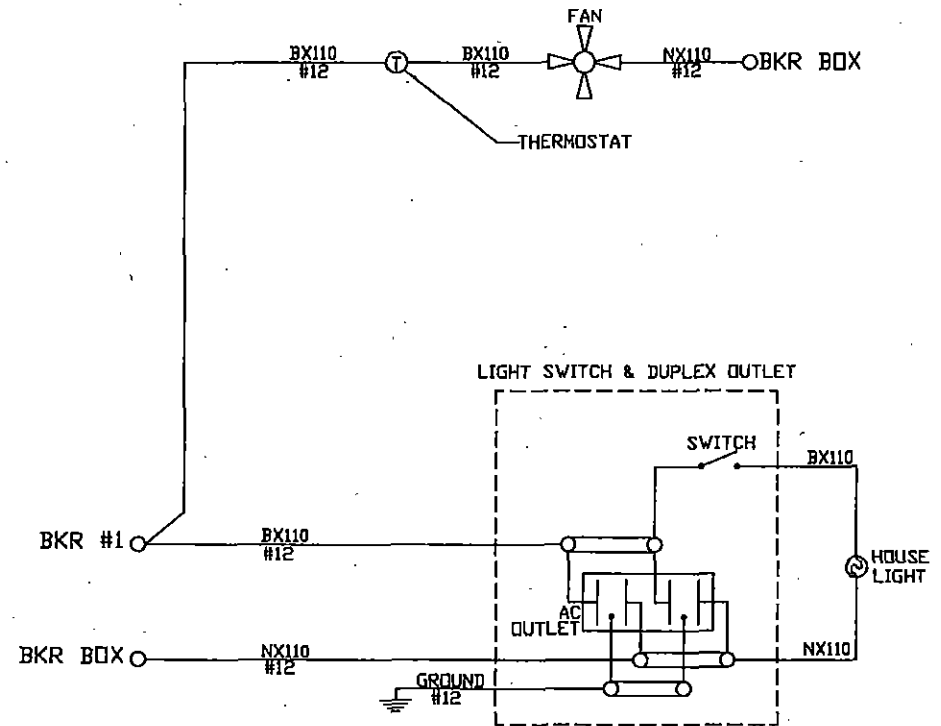
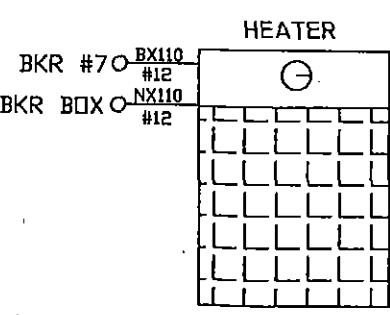
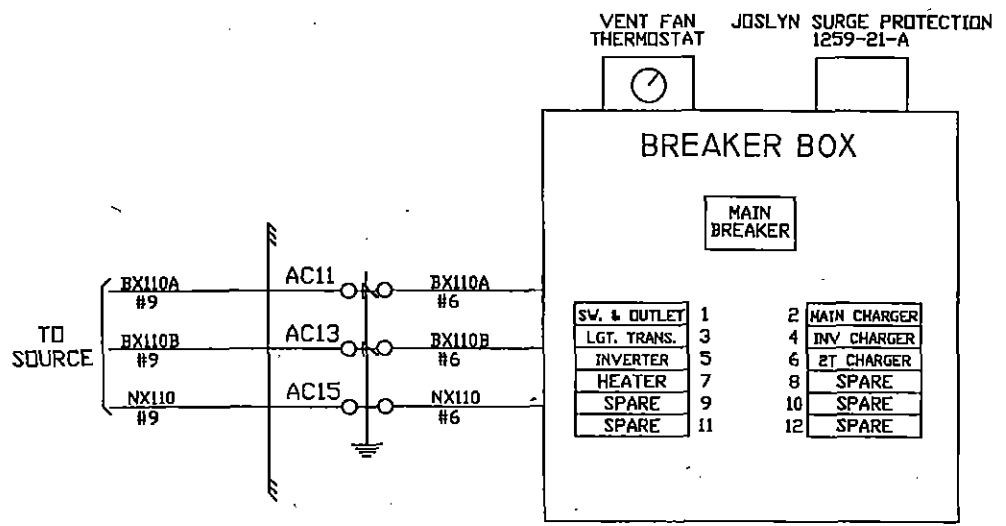
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"BB"




"CB"

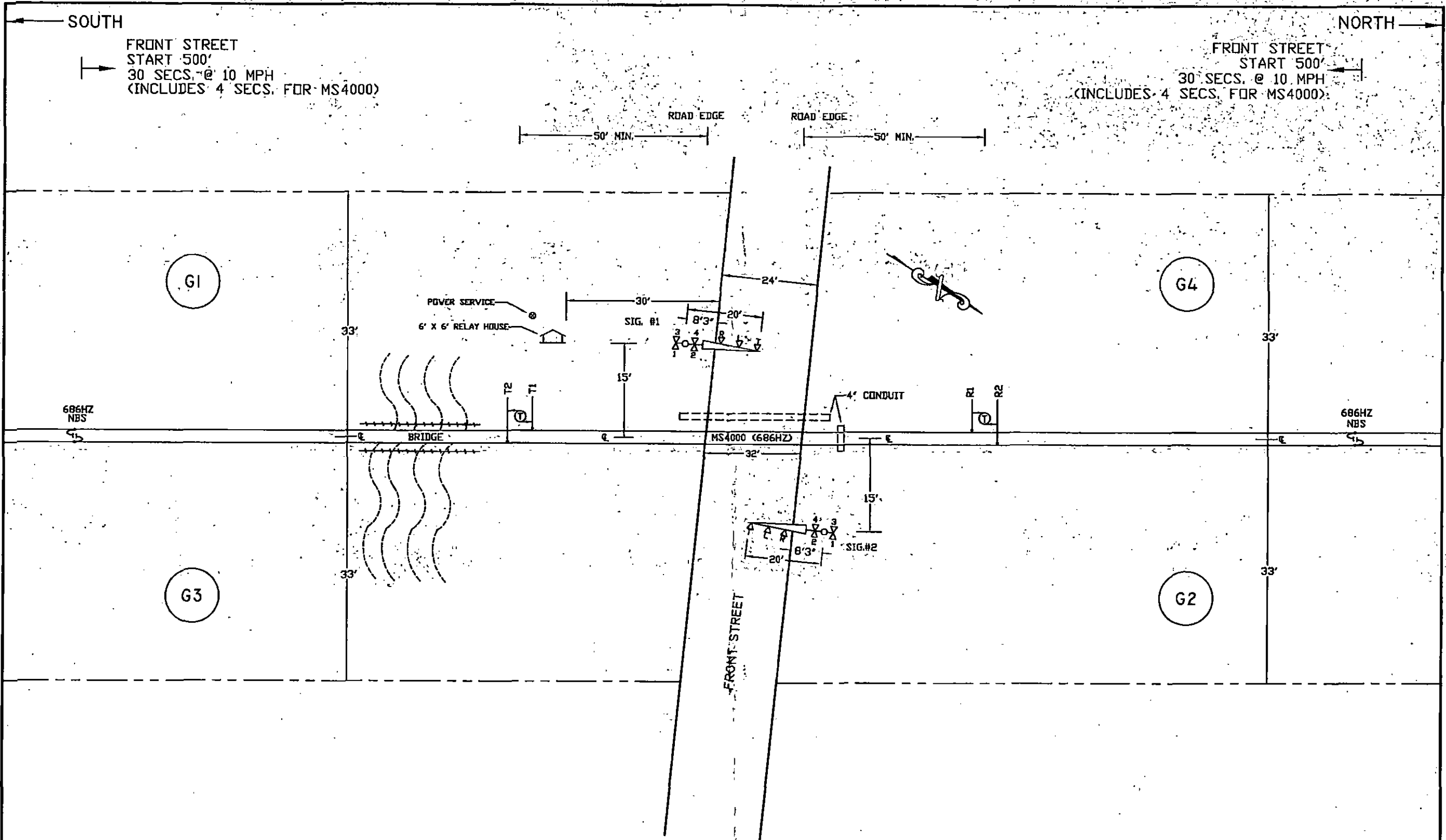


NOTE:  
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UNLESS OTHERWISE NOTED.

AS WIRED 9/13/2016 AS INSTALLED 5/30/2017

	<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	LYCOMING VALLEY RAILROAD CO. RAILROAD CROSSING WARNING DEVICES	
	SCALE: NONE DATE: 2/26/2016	APPROVED BY:	DRAWN BY: ISIS REVISED:
	TRENTON AVENUE #2 - DOT #526 786Y WILLIAMSPORT, LYCOMING COUNTY, PA		
	CIRCUIT PLAN "D"		DRAWING NUMBER 2270





**NOTES:**

1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. EQUIPMENT TO BE PLACED TO ALLOW FOR FUTURE GATES.
4. DENOTES TWIST PAIR.

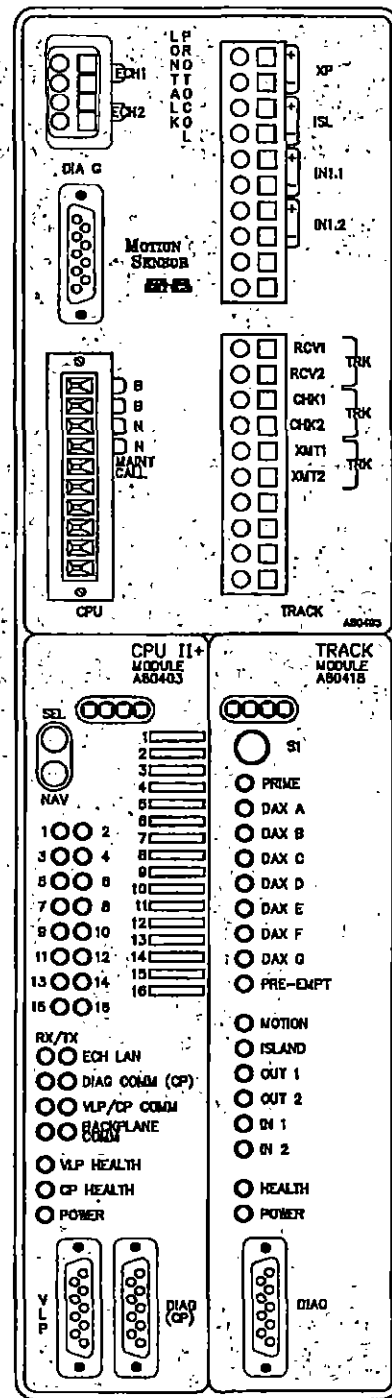
**CABLE RUN TABULATION**

HOUSE TO SIGNAL #1	- 5/Q #6 UG CABLE
	- 7/C #14 UG CABLE
HOUSE TO SIGNAL #2	- 5/Q #6 UG CABLE
	- 7/C #14 UG CABLE
HOUSE TO POWER SERVICE	- 3/C #9 UG CABLE
HOUSE TO T1 & T2	- #6 TW. PAIR UG CABLE
HOUSE TO R1 & R2	- #6 TW. PAIR UG CABLE

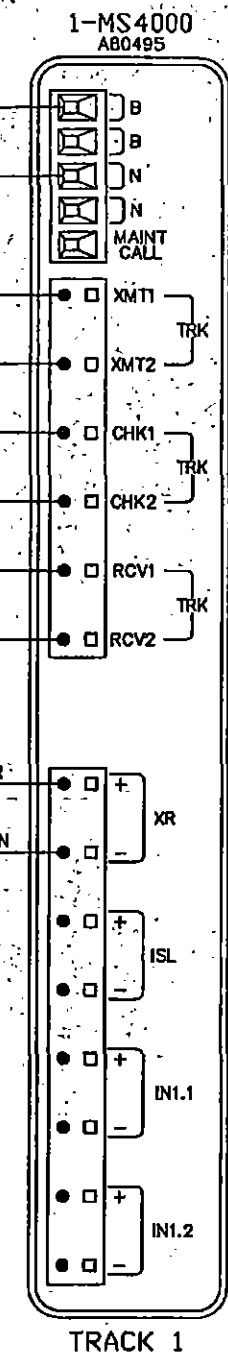
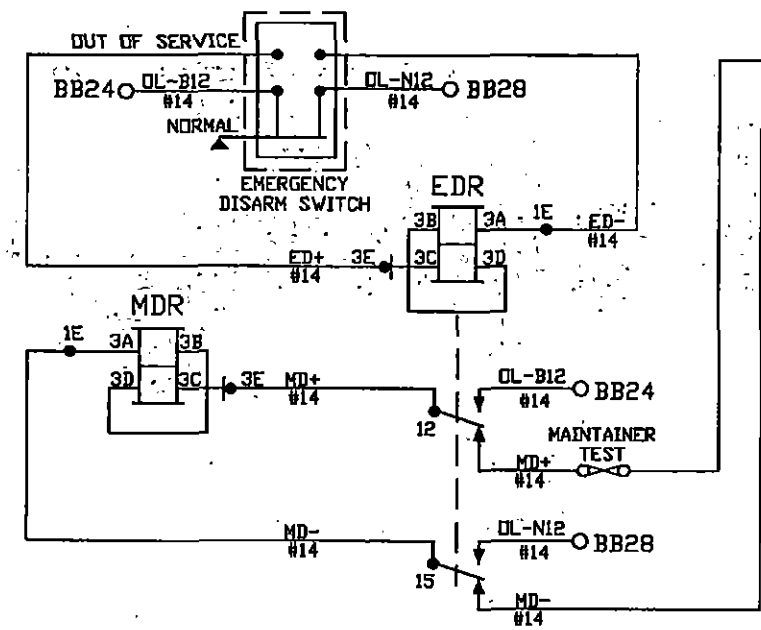
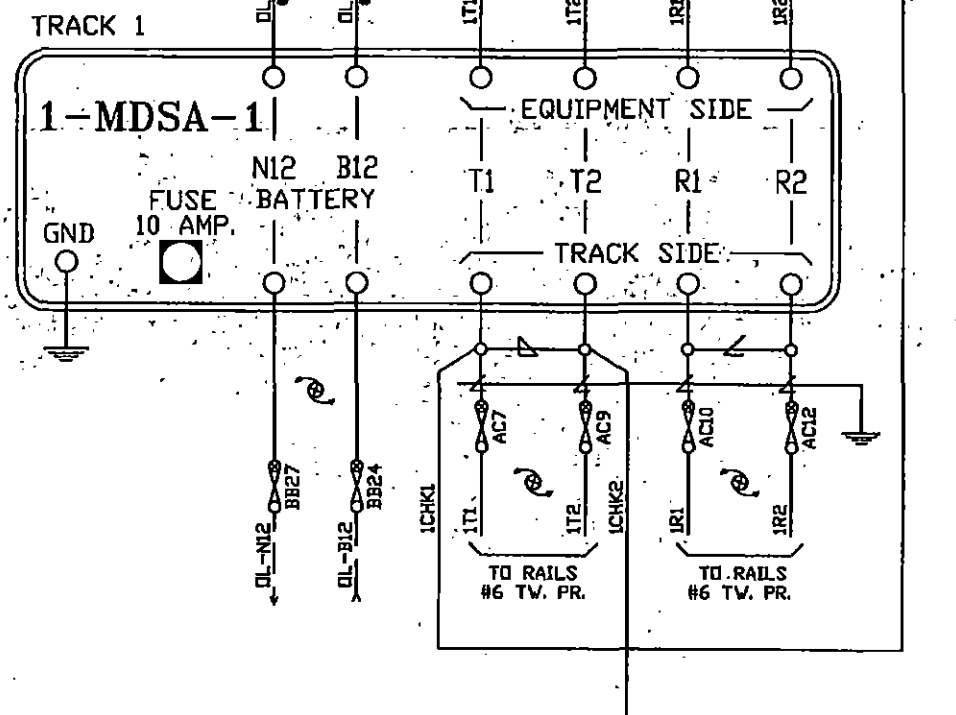
**DIAMONDBACK SIGNAL**  
 (410) 795-9601  
 5965 EXCHANGE DRIVE  
 SUITE 'D'  
 SYKESVILLE, MD  
 21784

AS WIRED		AS INSTALLED	
NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES			
SCALE: NONE	DATE: 07/08/2020		DRAWN BY: KDL
FRONT STREET DOT #506 199T - M.P. 0031.21 MILESBERG, CENTRE COUNTY, PA			REVISED:
TRACK & CABLE PLAN			DRAWING NUMBER: 0031.21

A-2020-3016318



MS4000  
BI-DIRECTIONAL  
686HZ



- NOTES:
- ALL WIRING THIS SHEET TO BE #14 AWG. UNLESS OTHERWISE NOTED.
  - = TWISTED WIRE - 2 TURNS PER FOOT.

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE DATE: 07/08/2020	DRAWN BY: KDL REVISED:	
	FRONT STREET DOT #506 199T - M.P. 0031.21 MILESBURG, CENTRE COUNTY, PA		DRAWING NUMBER 0031.21

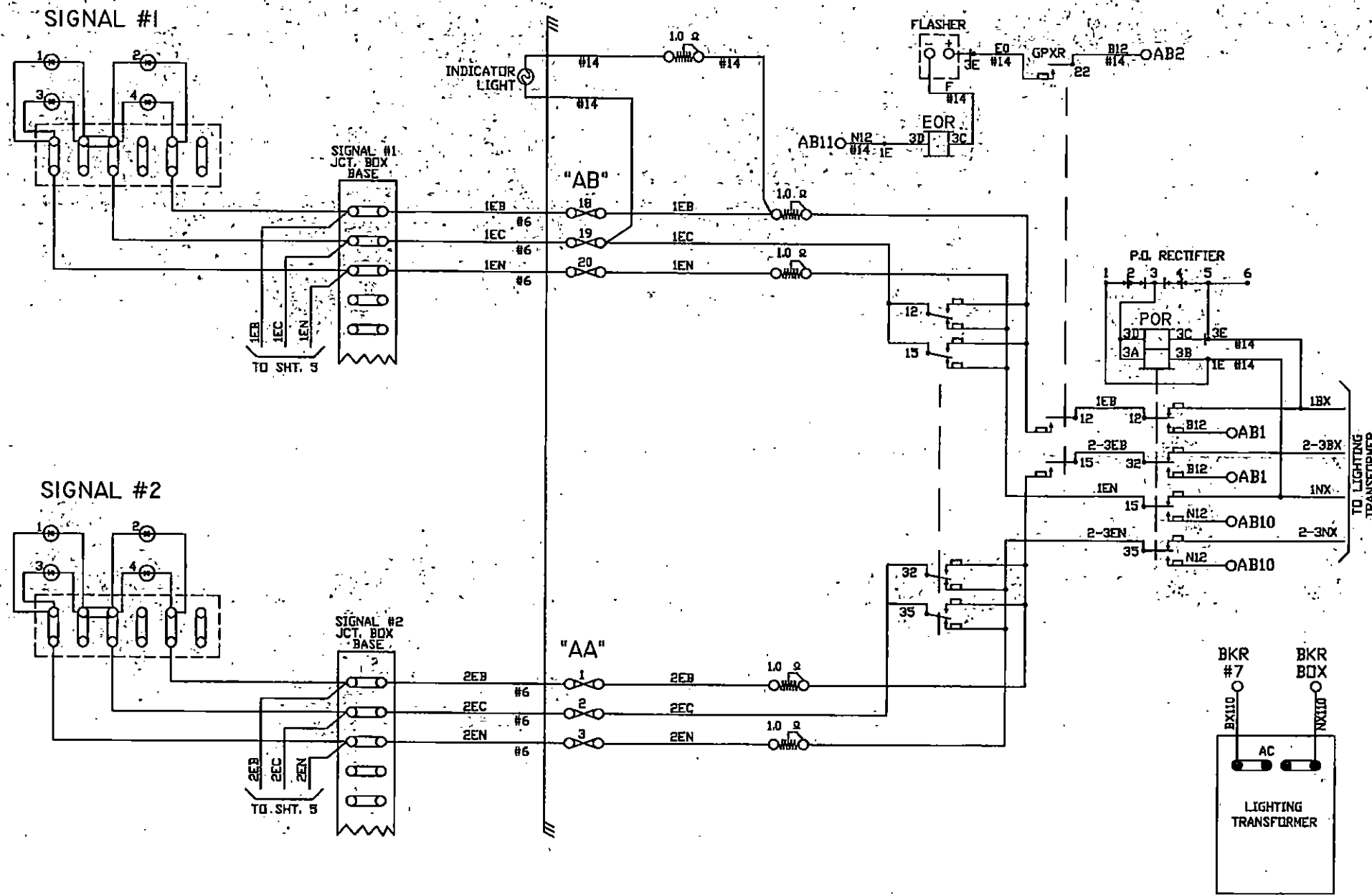
**PROGRAM INFORMATION  
MS4000**

Parameter Name	Track 1			
Track Frequency	686HZ			
Directionally, to include directionality of wiring (DIRN)	BI			
Transmit Level (TLVL)	MED (DL)			
Pickup Delay (APKU)	15 SEC (DL)			
Upstream Adjacent Crossing (UAX) Time	NOT USED			
Island Frequency (ISL)	4 KHZ			
Island Pickup Delay (IPKU) (Internal Island Selected)	2 SEC			
Island Pickup Delay (IPKU) (External Island Selected)	N/A			
IN1	N/A			
IN2	N/A			
Positive Start EX Value (PSTR)	OFF (DL)			
Positive Start Time (PTIM)	0 MIN (DL)			
Sudden Shunt Level (SHNT)	OFF (DL)			
Low EZ Level (LWEZ)	OFF (DL)			
Low EZ Time (LTIM)	2 MIN (DL)			
Low EX Level (LWEX)	39 (DL)			
Compensation Value (COMP)	1300 (DL)			
Predictor Used (PRED)	N6 (DL)			
Warning Time (WTIM)	30 SEC			

**NOTES:**

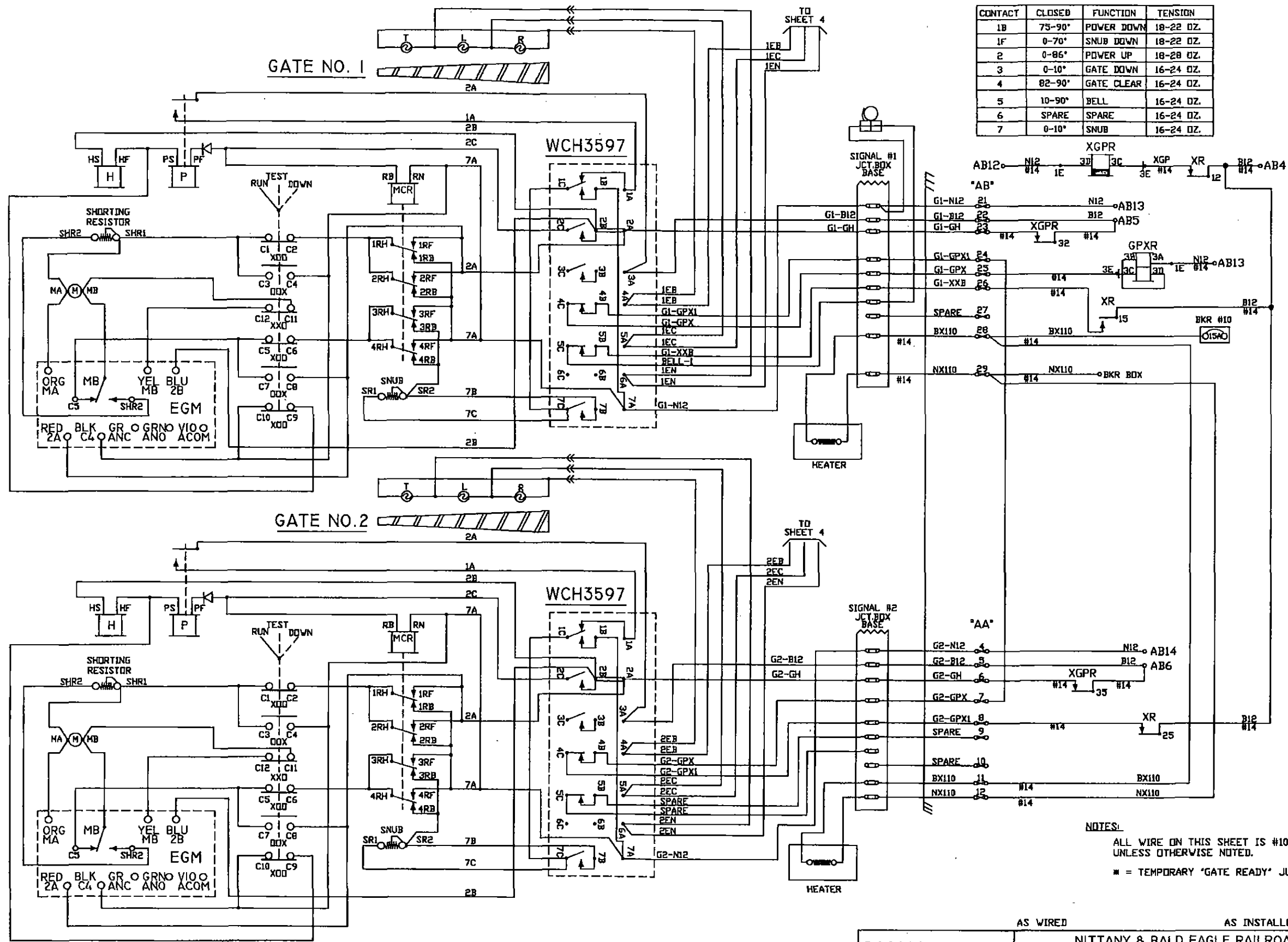
- 1.) FOR ISLAND DISTANCE MEASURE THE DISTANCE BETWEEN THE TRANSMITTER AND RECEIVER LEADS AND ENTER ON CHART - MUST BE 120' MINIMUM.
- 2.) DL = Default Setting  
N/A = Non Applicable

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE NONE DATE 07/08/2020	DRAWN BY: KDL REVISED:	
	FRONT STREET DOT #506 199T - M.P. 0031.21 MILESBURG, CENTRE COUNTY, PA		DRAWING NUMBER 0031.21



NOTE:  
ALL WIRE THIS SHEET IS #10 AWG. FLEX  
UNLESS OTHERWISE NOTED.

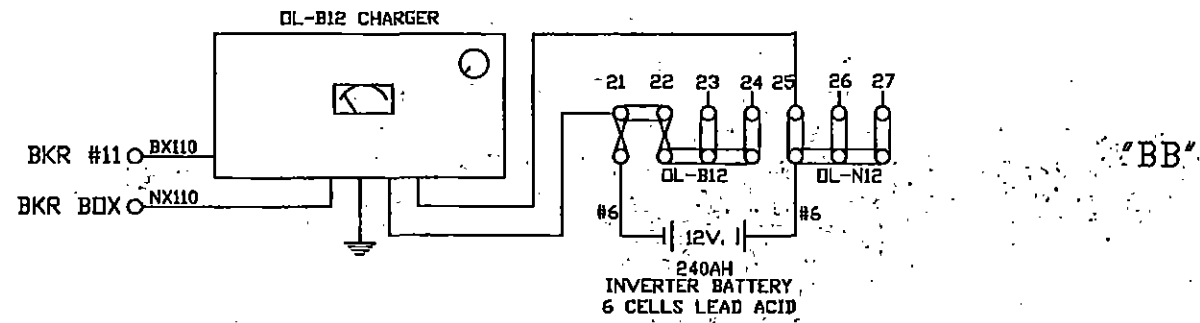
<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES	
	SCALE: NONE	DRAWN BY: KDL
	DATE: 07/08/2020	REVISED:
FRONT STREET DOT #506 199T - M.P. 0031.21 MILESBURG, CENTRE COUNTY, PA		DRAWING NUMBER: 0031.21
CIRCUIT PLAN 'C'		



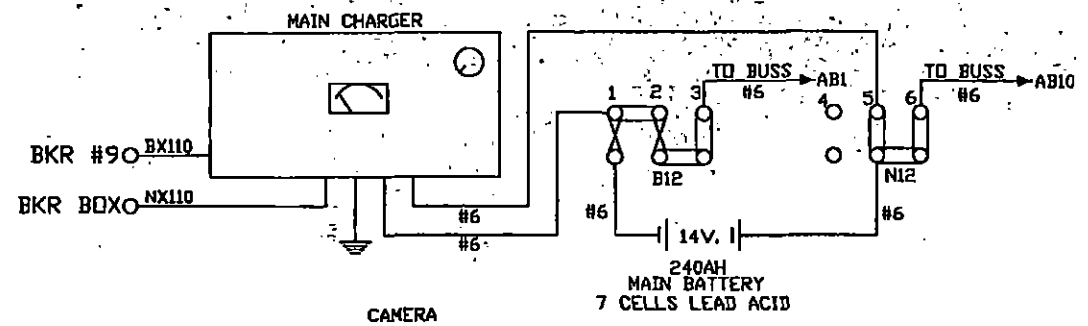
CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90°	POWER DOWN	18-22 OZ.
1F	0-70°	SNUB DOWN	18-22 OZ.
2	0-86°	POWER UP	18-28 OZ.
3	0-10°	GATE DOWN	16-24 OZ.
4	82-90°	GATE CLEAR	16-24 OZ.
5	10-90°	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-10°	SNUB	16-24 OZ.

NOTES:  
 ALL WIRE ON THIS SHEET IS #10AWG UNLESS OTHERWISE NOTED.  
 \* = TEMPORARY 'GATE READY' JUMPER.

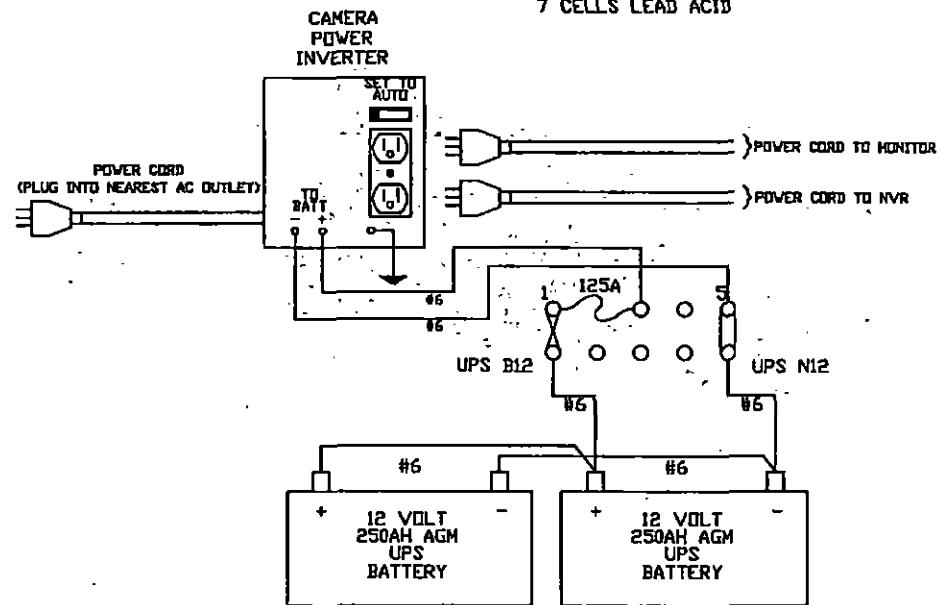
<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE DATE: 07/08/2020	DRAWN BY: KDL REVISED:	
	FRONT STREET DOT #506 199T - M.P. 0031.21 MILESBURG, CENTRE COUNTY, PA		
CIRCUIT PLAN "D"		DRAWING NUMBER 0031.21	



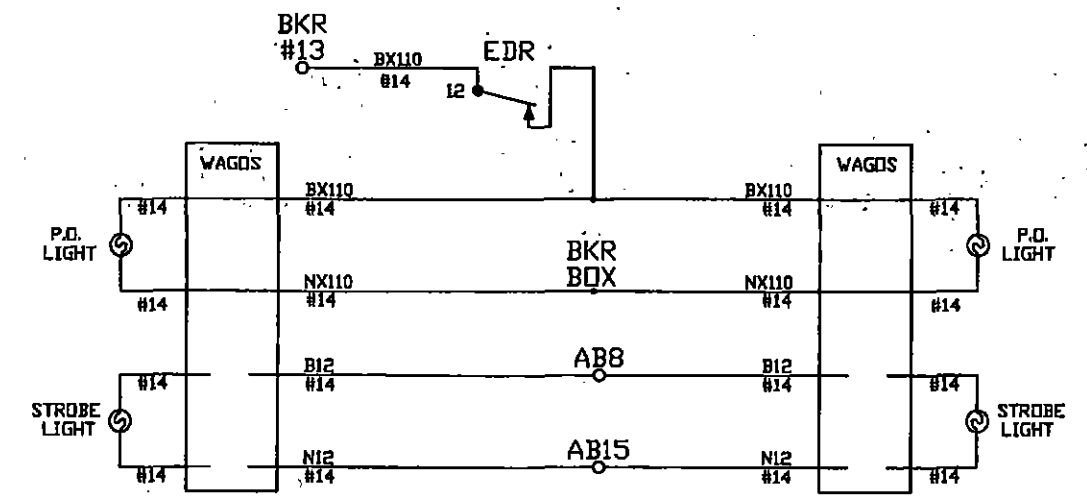
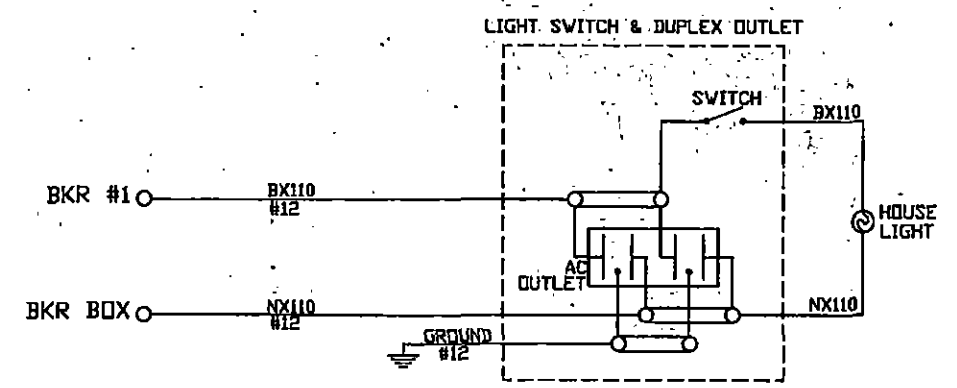
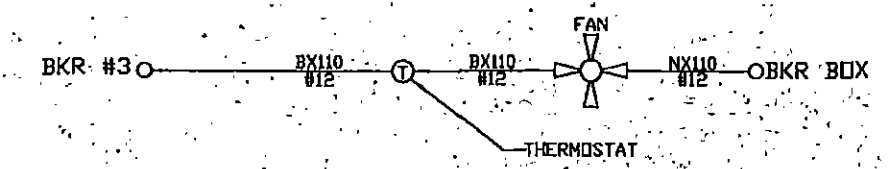
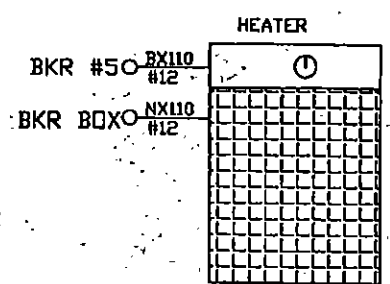
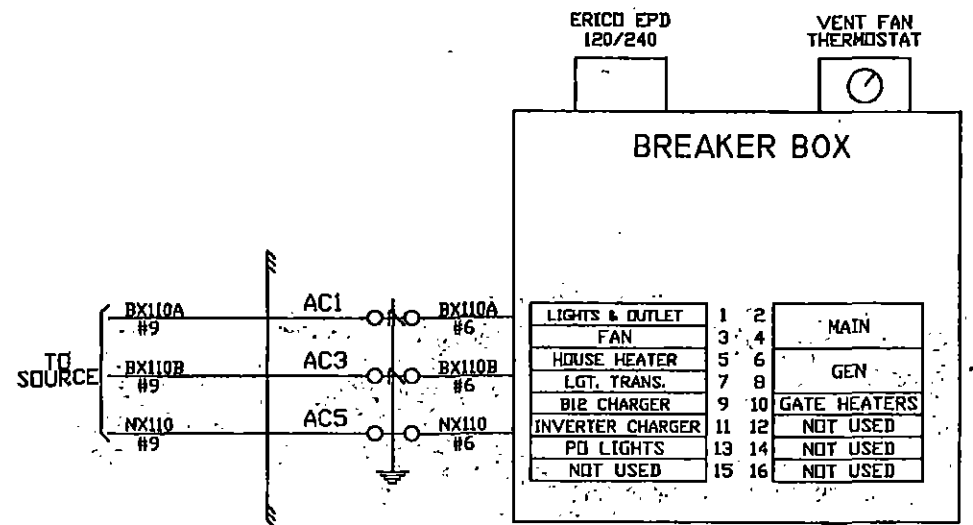
"BB"



"BB"



"CB"



NOTE:  
ALL WIRE THIS SHEET IS #10 AWG FLEX  
UNLESS OTHERWISE NOTED.

AS WIRED AS INSTALLED

**DIAMONDBACK SIGNAL**

(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE 'D'  
SYKESVILLE, MD 21784

NITTANY & BALD EAGLE RAILROAD  
RAILROAD CROSSING WARNING DEVICES

SCALE: NONE  
DATE: 07/08/2020  
DRAWN BY: KDL  
REVISED:

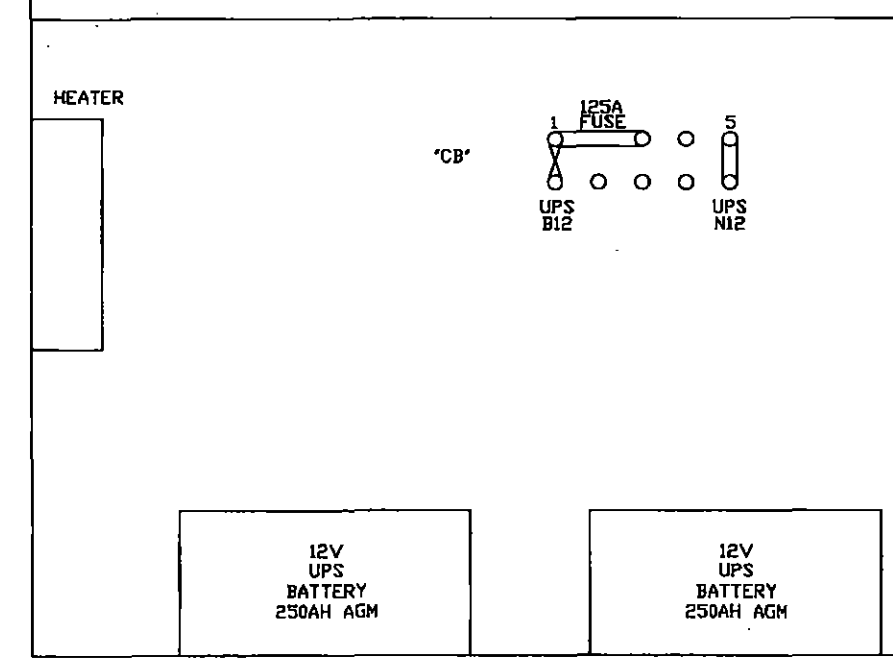
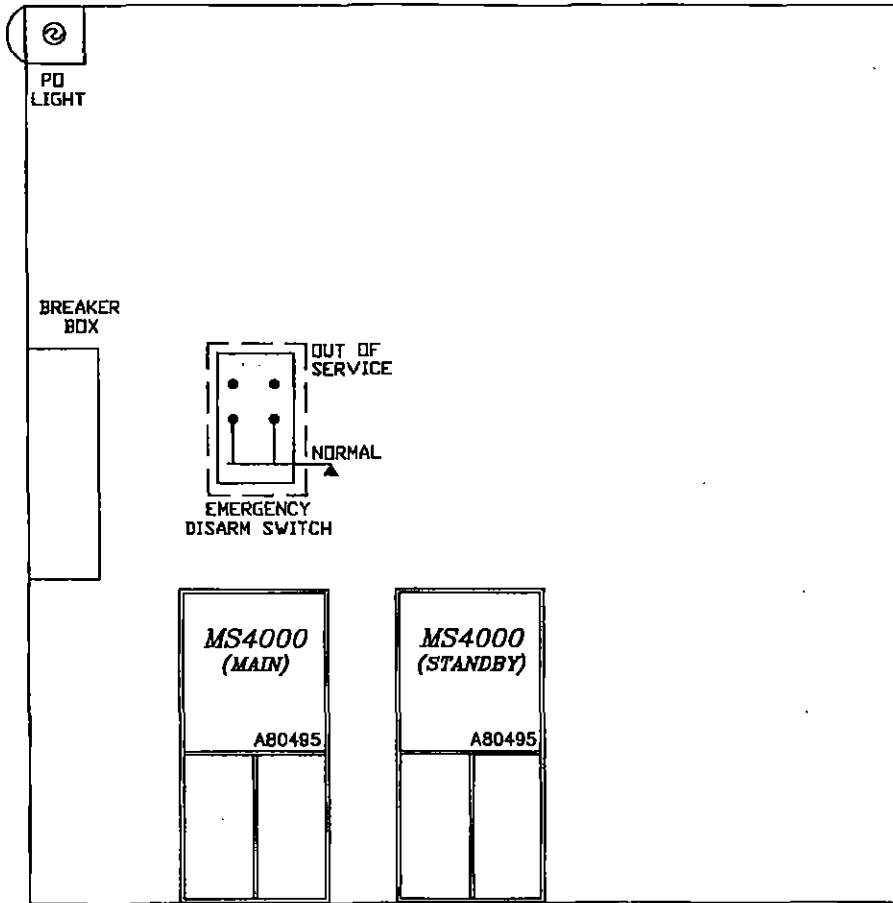
FRONT STREET DOT #506 199T - M.P. 0031.21  
MILESBURG, CENTRE COUNTY, PA

CIRCUIT PLAN "E"  
DRAWING NUMBER 0031.21

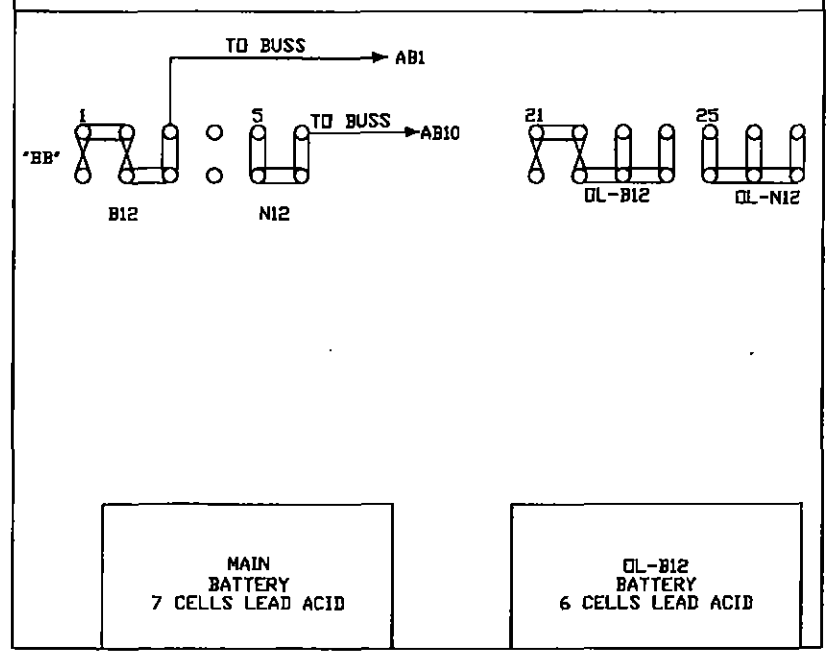
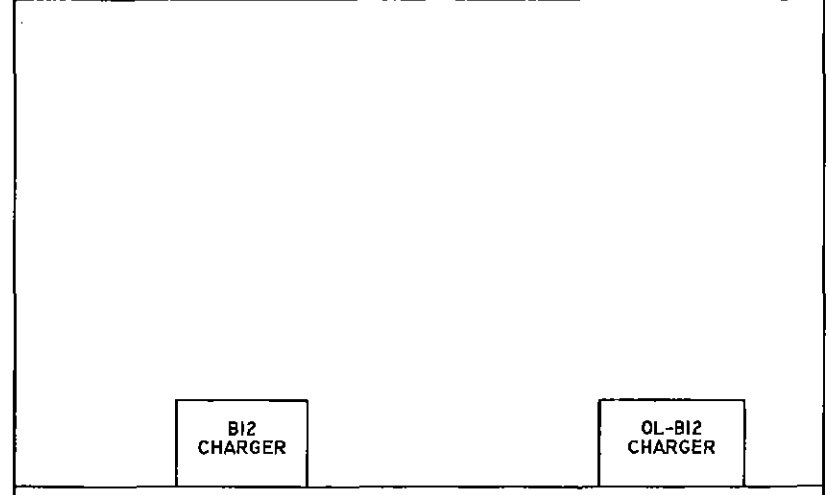
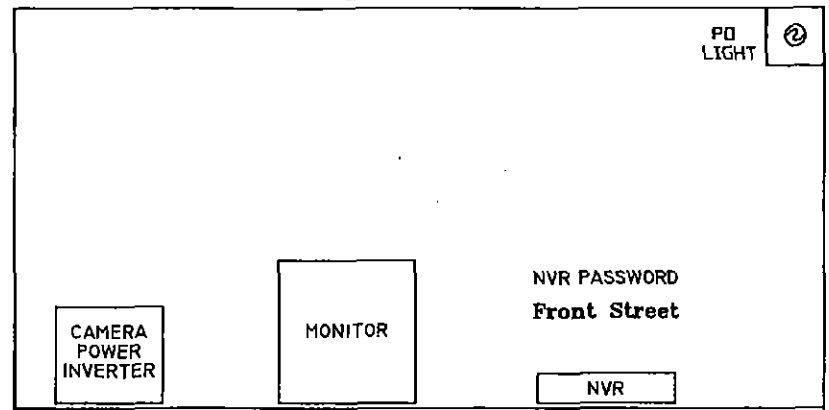
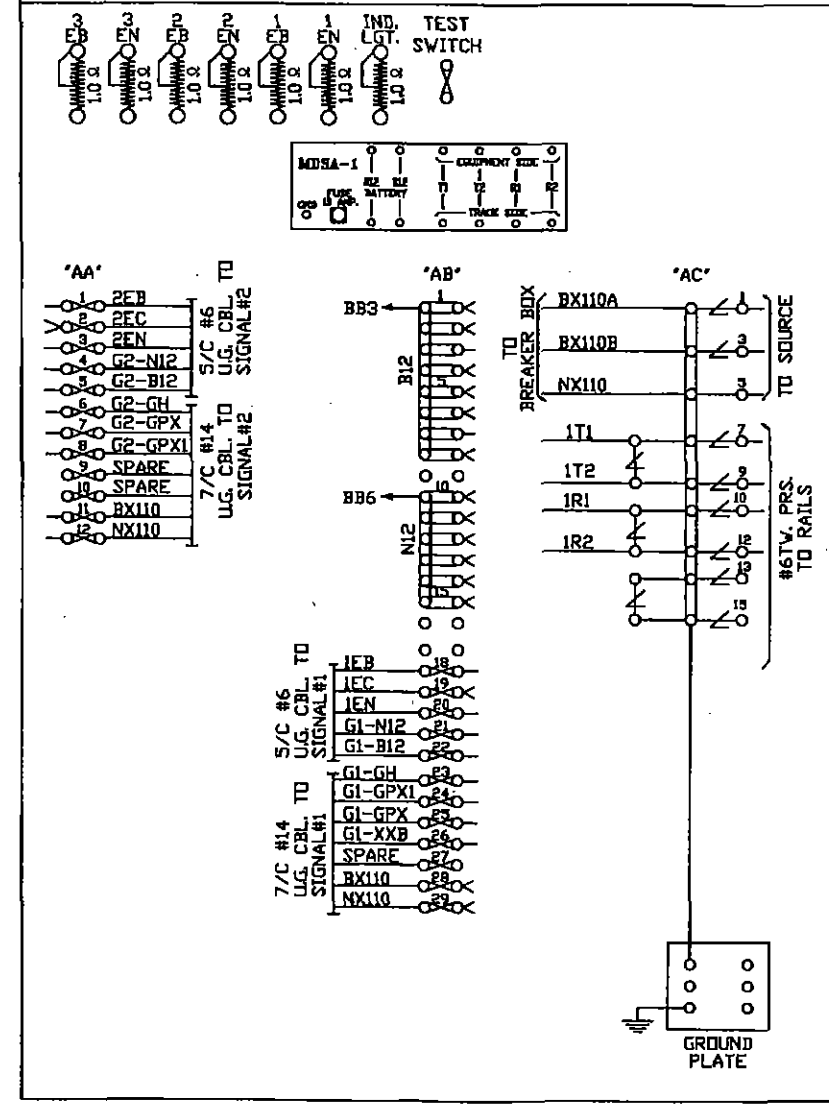
SIDE "C"

SIDE "A"

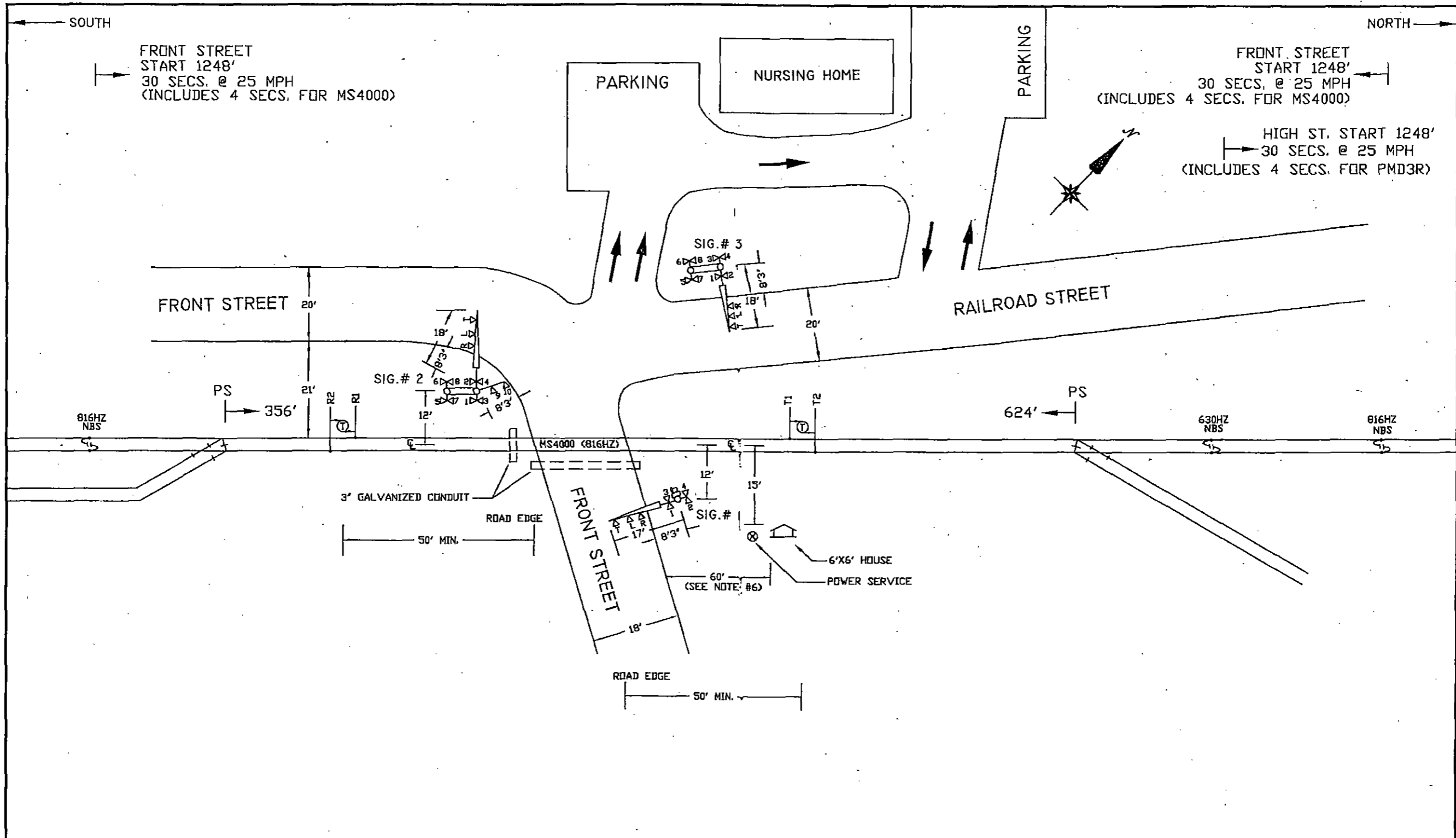
SIDE "B"



LIGHT TRANS.	POR	EOR	GPXR	MDR	XGPR	EDR
	12 FB	12 FB	12 B	12	12	12 B
	15 FB	15 FB	15 B	15	15	15
	22	32 FB	22 B	22	32 F	22
	25	35 FB	23	25 F	35 F	25 F
	32 FB		25	32		32
	35 FB		32	35		35
			35			
	A62-406	A62-673	A62-310	A62-262	A62-360	A62-262
	400800	400700	400020	400000	400200	400000



<p><b>DIAMONDBACK SIGNAL</b></p> <p>(410) 795-9601</p> <p>5965 EXCHANGE DRIVE</p> <p>SUITE 'D'</p> <p>SYKESVILLE, MD 21784</p>	AS WIRED	AS INSTALLED
	<p>NITTANY &amp; BALD EAGLE RAILROAD</p> <p>RAILROAD CROSSING WARNING DEVICES</p>	
	<p>SCALE: NONE</p> <p>DATE: 07/08/2020</p>	<p>DRAWN BY: KDL</p> <p>REVISED:</p>
	<p>FRONT STREET DOT #506 199T - M.P. 0031.21</p> <p>MILESBURG, CENTRE COUNTY, PA</p>	
<p>RELAY HOUSE LAYOUT</p>		<p>DRAWING NUMBER</p> <p>0031.21</p>



**NOTES:**

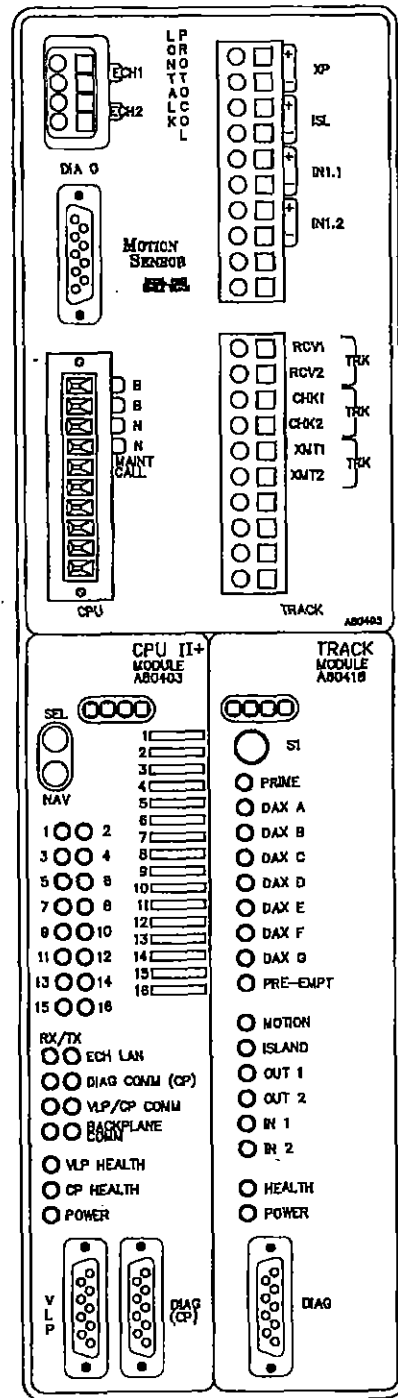
1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. ALL FLASHING LIGHT SIGNALS TO BE LIGHT EMITTING DIODE (LED) ASSEMBLIES.
4.  $\text{\textcircled{T}}$  DENOTES TWIST PAIR.
5. NBS = NARROW BAND SHUNT.
6. 6X6 HOUSE TO BE LOCATED 60 FEET FROM THE EDGE OF THE PAVED ROADWAY SURFACE, MEASURED AT A POINT 15 FEET FROM THE CENTERLINE OF TRACK.

**CABLE RUN TABULATION**

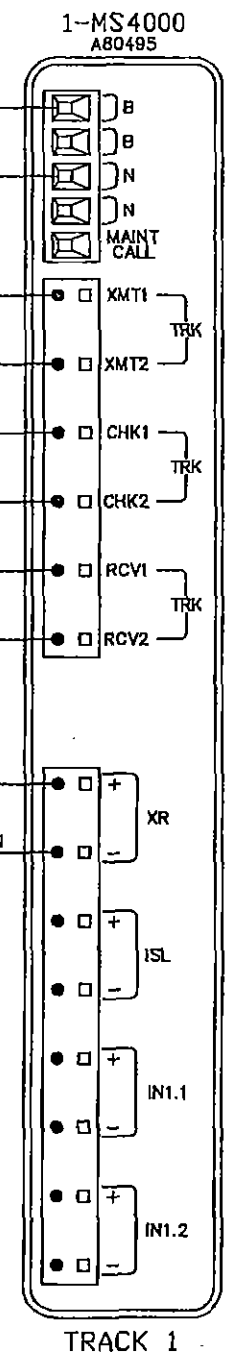
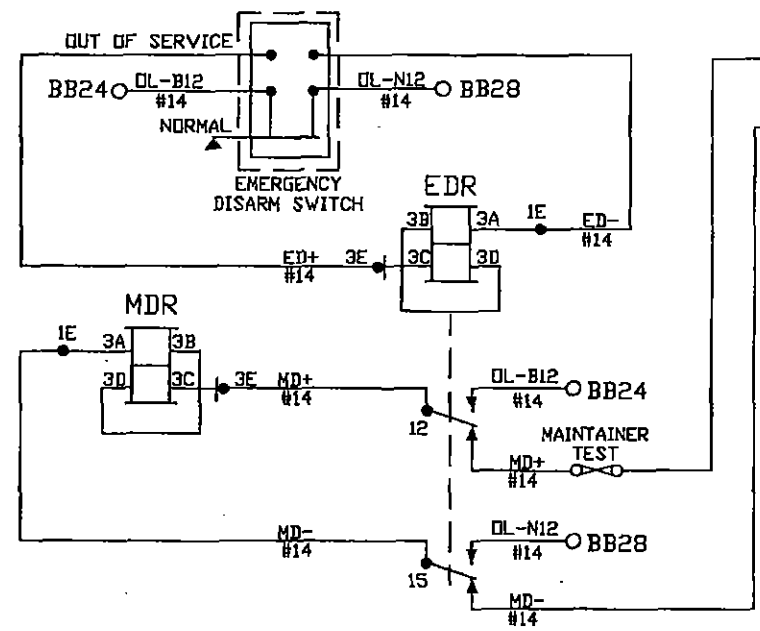
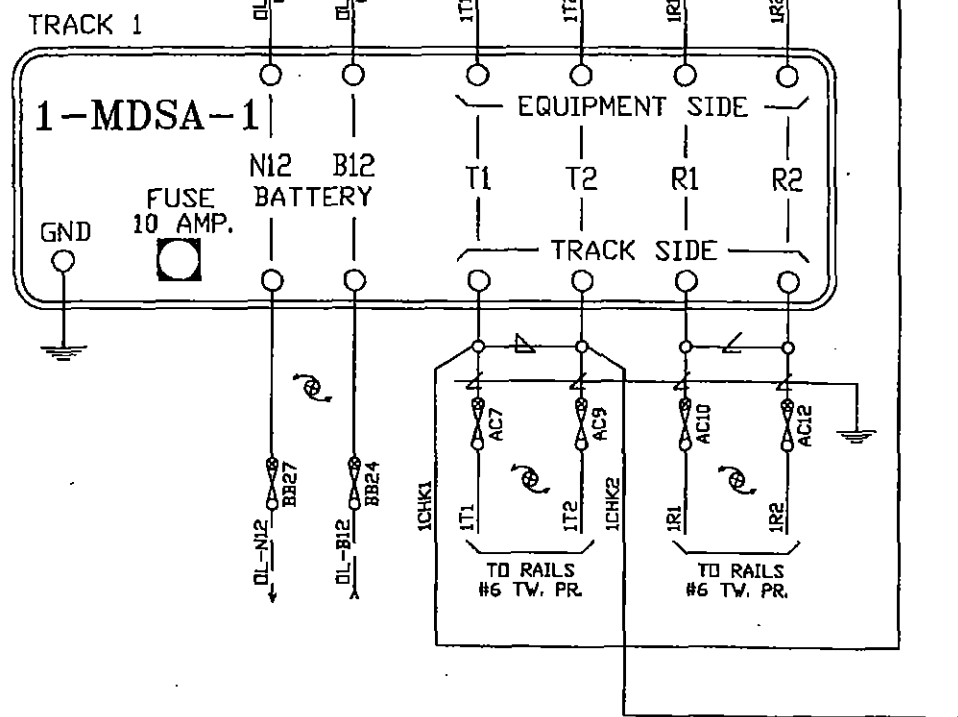
- HOUSE TO SIGNAL # 1 - 5/C #9 UG CABLE
- HOUSE TO SIGNAL # 1 - 7/C #14 UG CABLE
- HOUSE TO SIGNAL # 2 - 5/C #9 UG CABLE
- HOUSE TO SIGNAL # 2 - 7/C #14 UG CABLE
- HOUSE TO SIGNAL # 3 - 5/C #9 UG CABLE
- HOUSE TO SIGNAL # 3 - 7/C #14 UG CABLE
- HOUSE TO POWER SERVICE - 3/C #9 UG CABLE
- HOUSE TO T1 & T2 - #6 TW. PAIR UG CABLE
- HOUSE TO R1 & R2 - #6 TW. PAIR UG CABLE

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE	DRAWN BY: KDL	
	DATE: 07/08/2020	REVISED:	
FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA			
<b>TRACK &amp; CABLE PLAN</b>		DRAWING NUMBER 0030.67	

A-2020-301631B



MS4000  
BI -DIRECTIONAL  
816HZ



- NOTES:
- ALL WIRING THIS SHEET TO BE #14 AWG. UNLESS OTHERWISE NOTED.
  - = TWISTED WIRE - 2 TURNS PER FOOT.

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE	DRAWN BY: KDL	
	DATE: 07/08/2020	REVISED:	
FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA			
CIRCUIT PLAN "A"		DRAWING NUMBER 0030.67	

**PROGRAM INFORMATION  
MS4000**

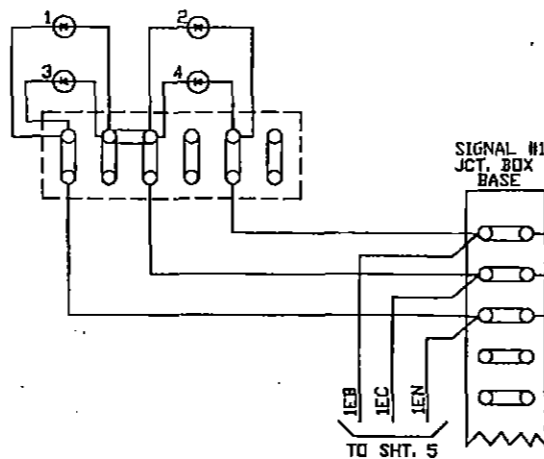
Parameter Name	Track 1			
Track Frequency	816HZ			
Directionally, to include directionality of wiring (DIRN)	BI			
Transmit Level (TLVL)	MED (DL)			
Pickup Delay (APKU)	15 SEC (DL)			
Upstream Adjacent Crossing (UAX) Time	NOT USED			
Island Frequency (ISL)	4 KHZ			
Island Pickup Delay (IPKU) (Internal Island Selected)	2 SEC			
Island Pickup Delay (IPKU) (External Island Selected)	N/A			
IN1	N/A			
IN2	N/A			
Positive Start EX Value (PSTR)	OFF (DL)			
Positive Start Time (PTIM)	0 MIN (DL)			
Sudden Shunt Level (SHNT)	OFF (DL)			
Low EZ Level (LWEZ)	OFF (DL)			
Low EZ Time (LTIM)	2 MIN (DL)			
Low EX Level (LWEX)	39 (DL)			
Compensation Value (COMP)	1300 (DL)			
Predictor Used (PRED)	No (DL)			
Warning Time (WTIM)	30 SEC			

**NOTES:**

- 1.) FOR ISLAND DISTANCE MEASURE THE DISTANCE BETWEEN THE TRANSMITTER AND RECEIVER LEADS AND ENTER ON CHART - MUST BE 120' MINIMUM.
- 2.) DL = Default Setting  
N/A = Non Applicable

<b>DIAMONDBACK SIGNAL</b>		AS WIRED	AS INSTALLED
(410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784		NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES	
SCALE: NONE	DATE: 07/08/2020	DRAWN BY: KDL	REVISED:
		FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA	
		CIRCUIT PLAN 'B'	DRAWING NUMBER 0030.67

SIGNAL #1



INDICATOR LIGHT

"AB"

FLASHER

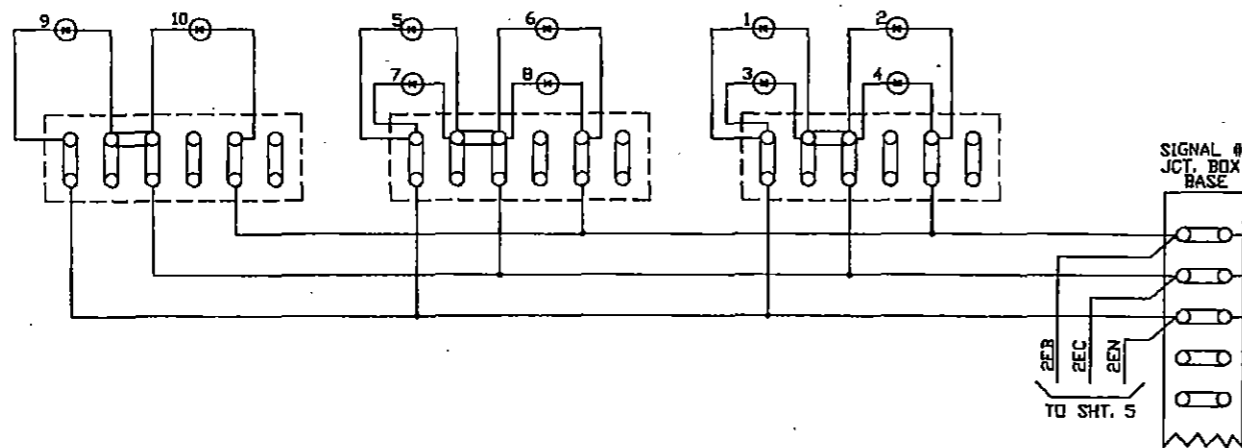
AB11

EOR

P.D. RECTIFIER

POR

SIGNAL #2



"AA"

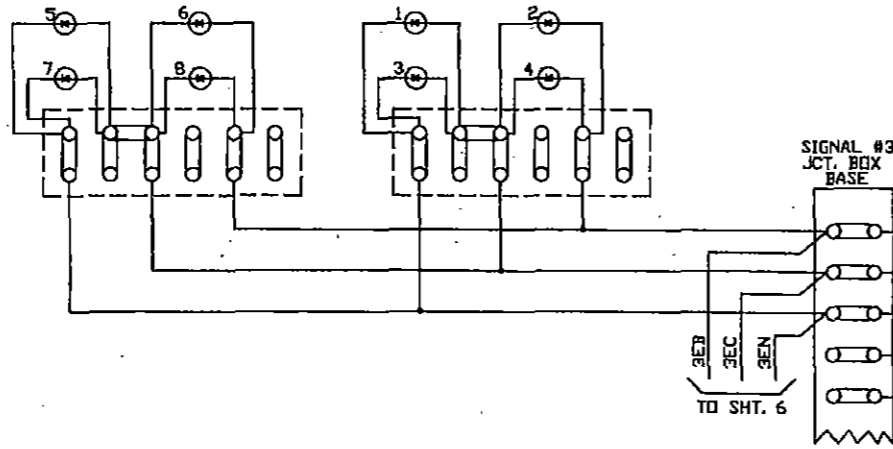
BKR #7

BKR BOX

AC

LIGHTING TRANSFORMER

SIGNAL #3



"AA"

NOTE:

ALL WIRE THIS SHEET IS #10 AWG. FLEX UNLESS OTHERWISE NOTED.

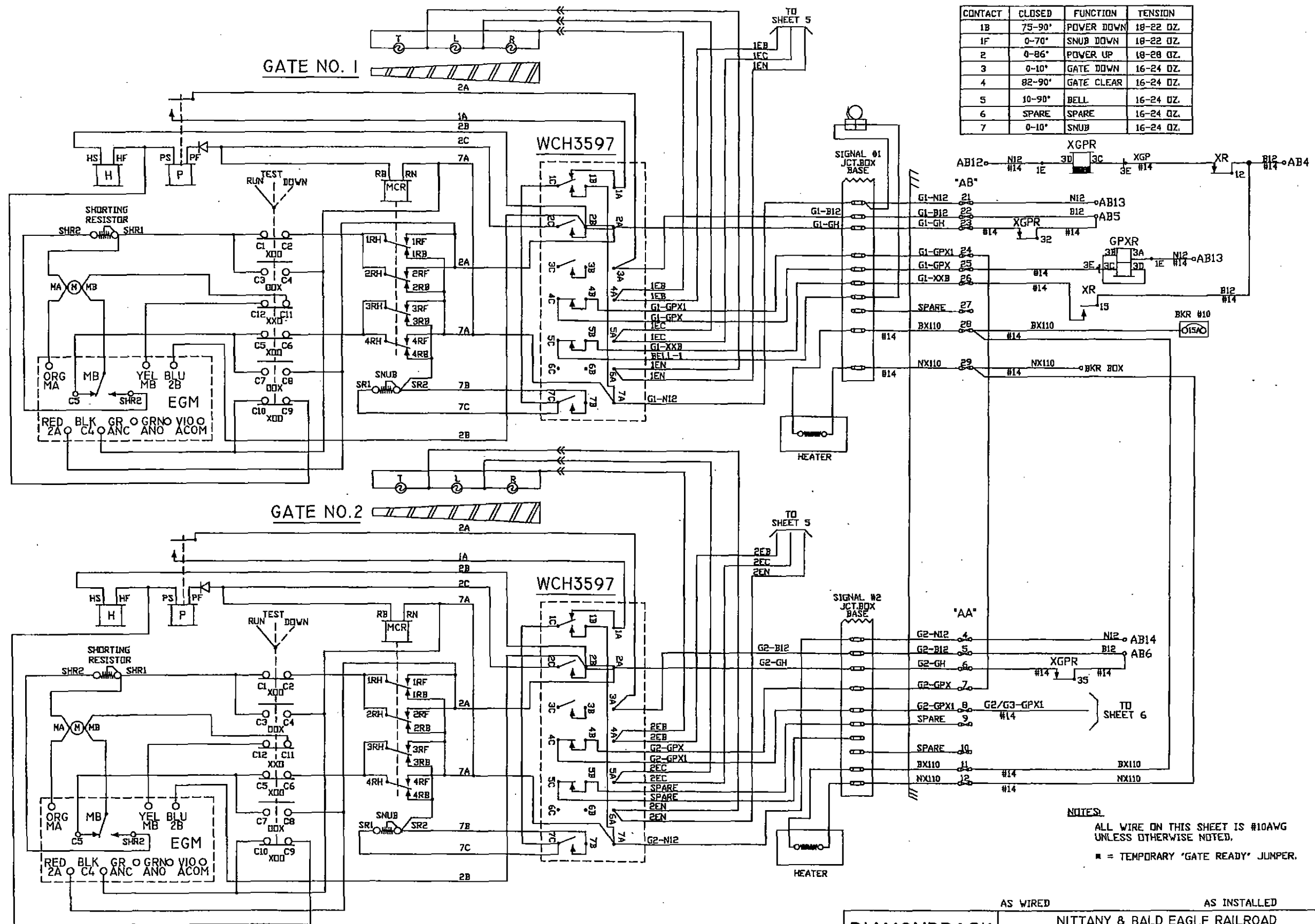
AS WIRED

AS INSTALLED

**DIAMONDBACK SIGNAL**

(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD 21784

NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		DRAWN BY: KDL
SCALE: NONE	DATE: 07/08/2020	REVISED:
FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA		DRAWING NUMBER: 0030.67
CIRCUIT PLAN "C"		

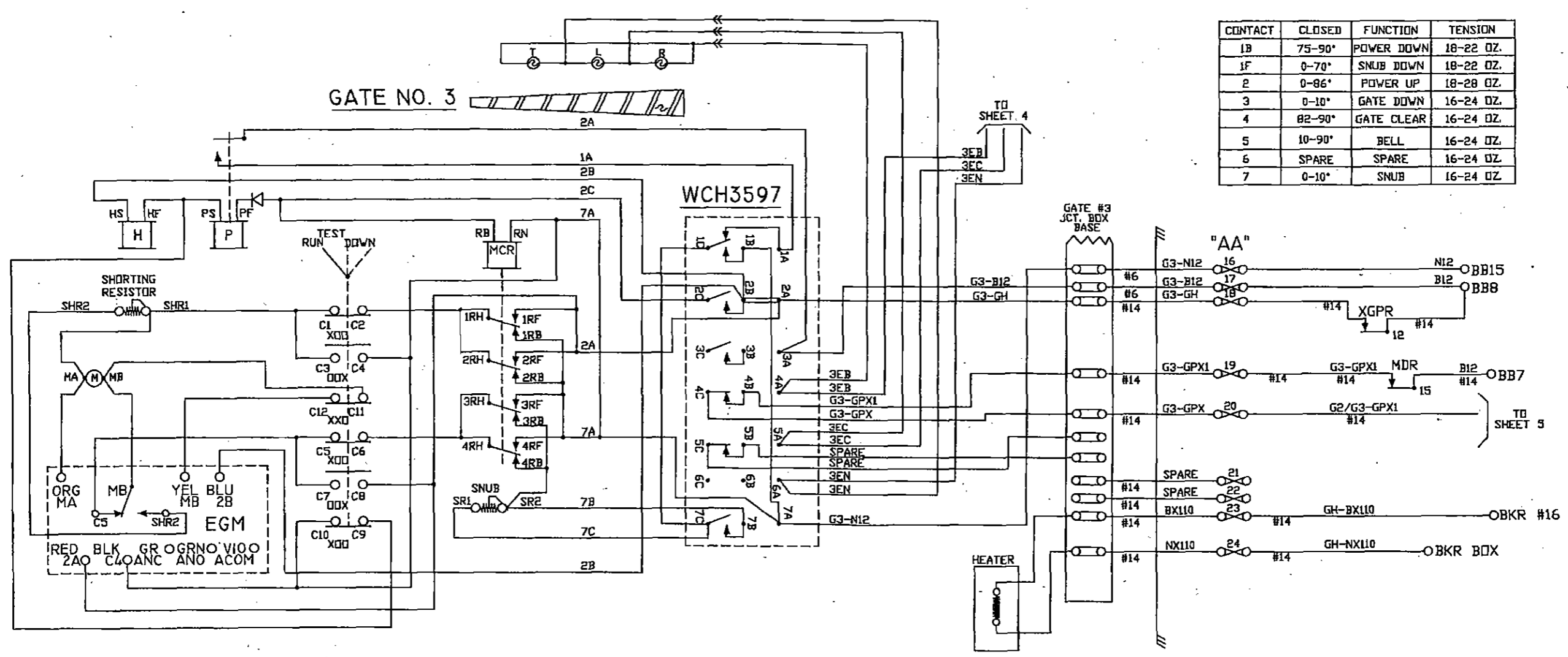


CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90°	POWER DOWN	18-22 OZ.
1F	0-70°	SNUB DOWN	18-22 OZ.
2	0-86°	POWER UP	18-28 OZ.
3	0-10°	GATE DOWN	16-24 OZ.
4	82-90°	GATE CLEAR	16-24 OZ.
5	10-90°	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-10°	SNUB	16-24 OZ.

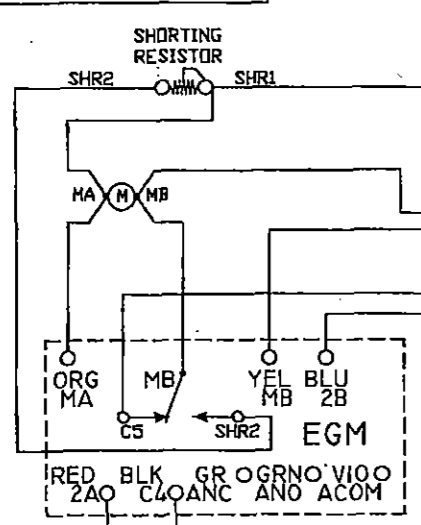
NOTES:  
 ALL WIRE ON THIS SHEET IS #10AWG UNLESS OTHERWISE NOTED.  
 ■ = TEMPORARY 'GATE READY' JUMPER.

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALED NONE DATE 07/08/2020	DRAWN BY: KDL REVISED:	
	FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA		DRAWING NUMBER 0030.67

GATE NO. 3

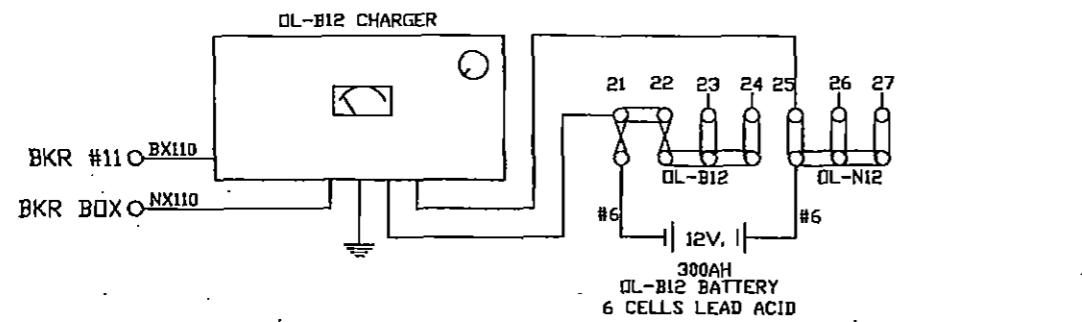


CONTACT	CLOSED	FUNCTION	TENSION
1B	75-90°	POWER DOWN	18-22 OZ.
1F	0-70°	SNUB DOWN	18-22 OZ.
2	0-86°	POWER UP	18-28 OZ.
3	0-10°	GATE DOWN	16-24 OZ.
4	82-90°	GATE CLEAR	16-24 OZ.
5	10-90°	BELL	16-24 OZ.
6	SPARE	SPARE	16-24 OZ.
7	0-10°	SNUB	16-24 OZ.

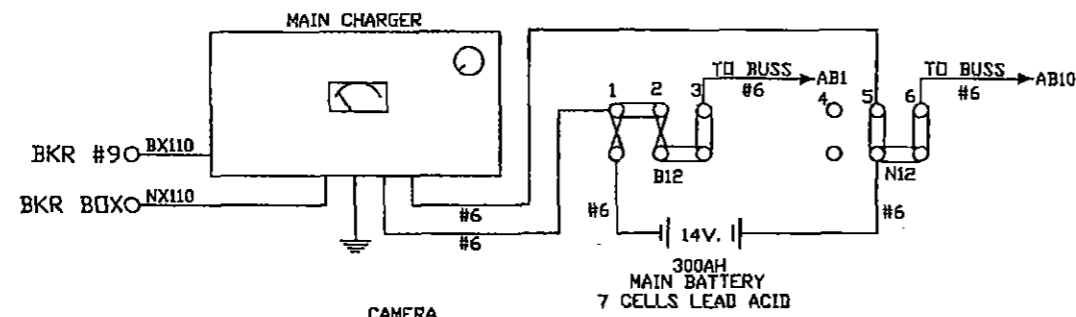


NOTE: ALL WIRE ON THIS SHEET IS #10 AWG UNLESS OTHERWISE NOTED.

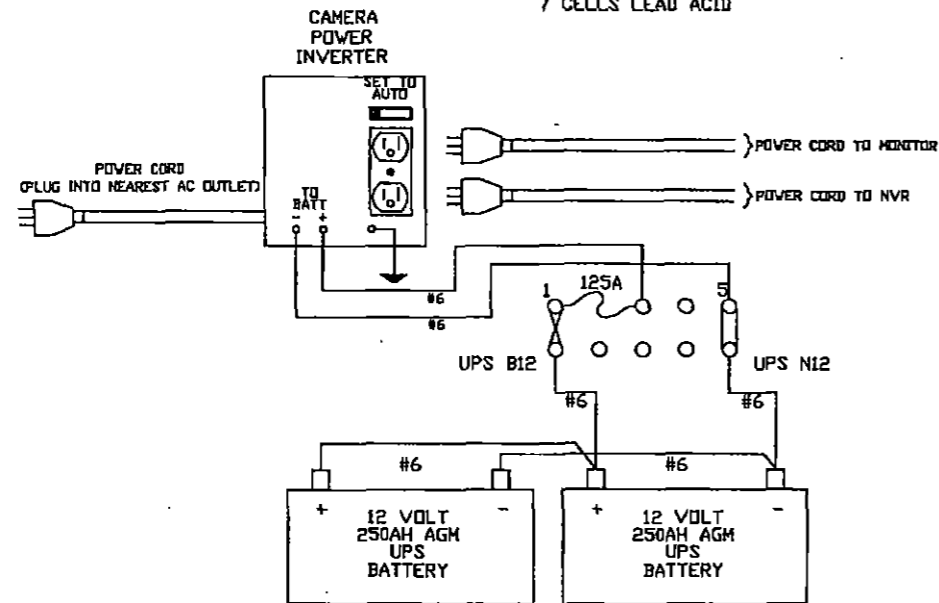
<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE	DRAWN BY: KDL	
	DATE: 07/08/2020	REVISED:	
FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA			
CIRCUIT PLAN 'E'		DRAWING NUMBER 0030.67	



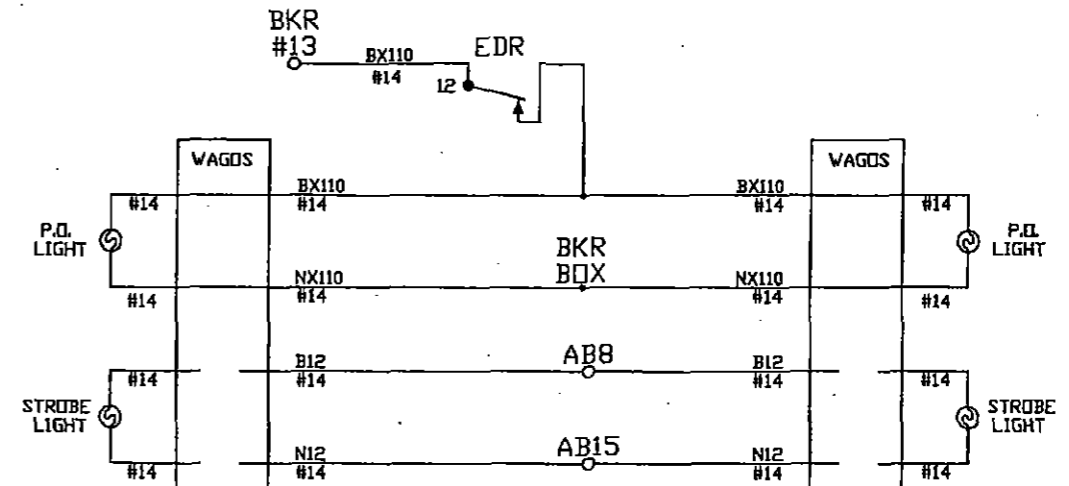
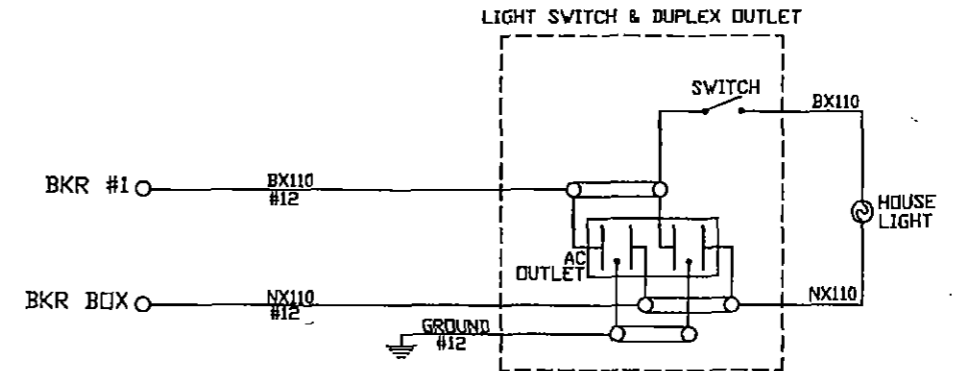
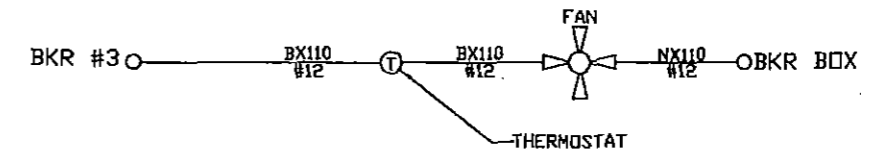
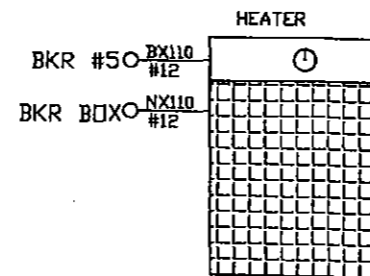
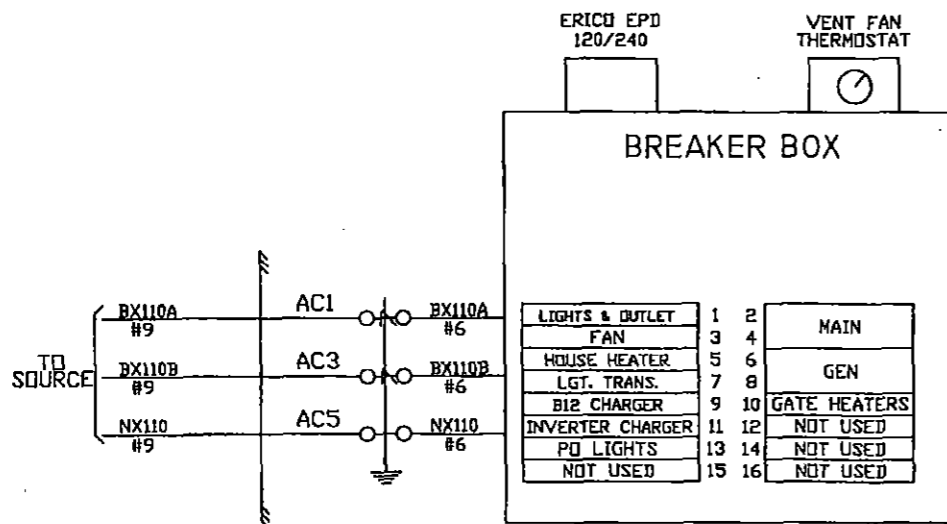
"BB"



"BB"



"CB"



NOTE:  
ALL WIRE THIS SHEET IS #10 AWG FLEX  
UNLESS OTHERWISE NOTED.

<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE DATE: 07/08/2020	DRAWN BY: KDL REVISED:	
	FRONT STREET DOT #506 288K - M.P. 0030.67 MILESBURG, CENTRE COUNTY, PA		DRAWING NUMBER 0030.67
CIRCUIT PLAN "F"			



SOUTH

NORTH

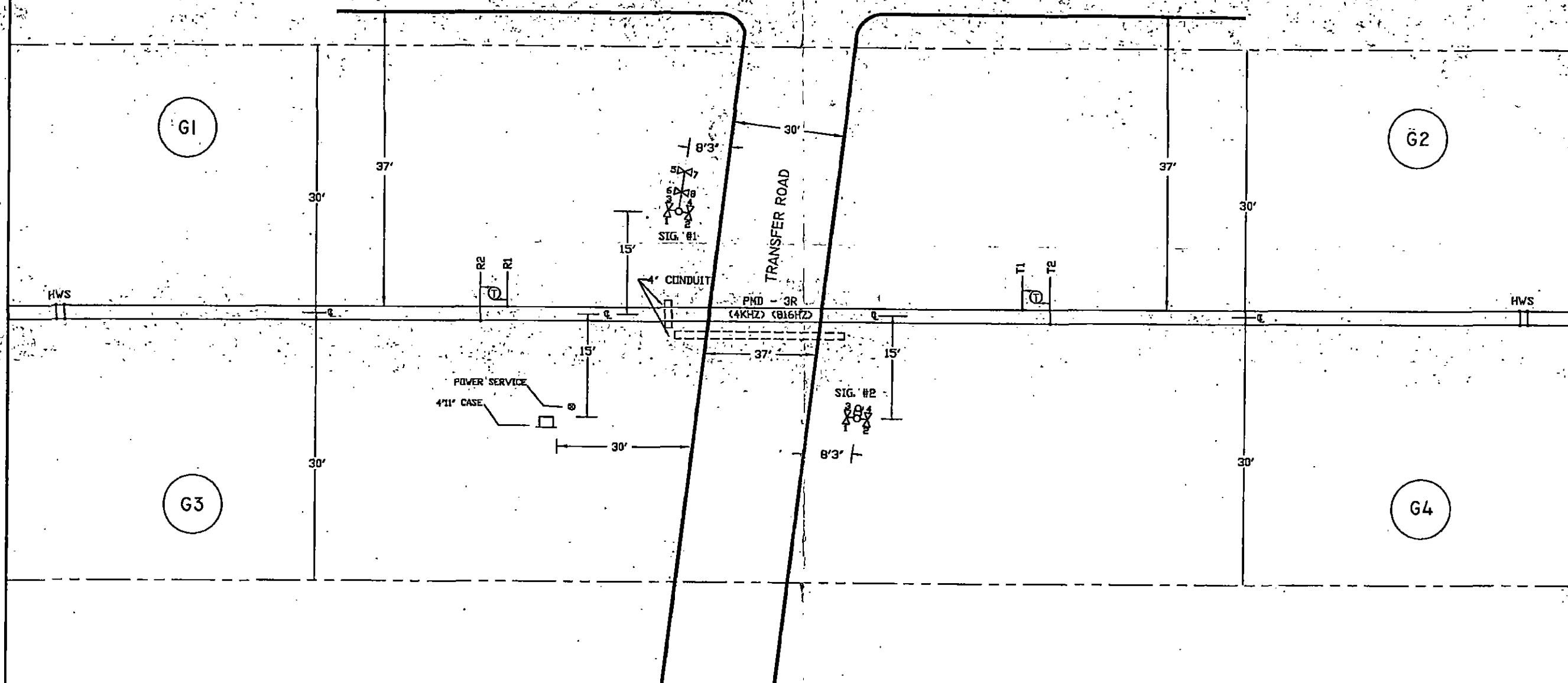
50' MIN.

50' MIN.

TRANSFER ROAD  
START 500'  
30 SECS. @ 10 MPH  
(INCLUDES 4 SECS. FOR PMD3R)

TRANSFER ROAD  
START 500'  
30 SECS. @ 10 MPH  
(INCLUDES 4 SECS. FOR PMD3R)

COLLEGE AVENUE



**NOTES:**

1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. ALL FLASHING LIGHT SIGNALS TO BE LIGHT EMITTING DIODE (LED) ASSEMBLIES.
4. (T) DENOTES TWIST PAIR.

**CABLE RUN TABULATION**

- |                       |                       |
|-----------------------|-----------------------|
| CASE TO SIGNAL # 1    | - 5/C #9 UG CABLE     |
| CASE TO SIGNAL # 2    | - 5/C #9 UG CABLE     |
| CASE TO POWER SERVICE | - 3/C #9 UG CABLE     |
| CASE TO T1 & T2       | - 2/C #6 TWISTED PAIR |
| CASE TO R1 & R2       | - 2/C #6 TWISTED PAIR |

**DIAMONDBACK SIGNAL**

(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE 'D'  
SYKESVILLE, MD  
21784

AS WIRED AS INSTALLED

NITTANY & BALD EAGLE RAILROAD  
RAILROAD CROSSING WARNING DEVICES

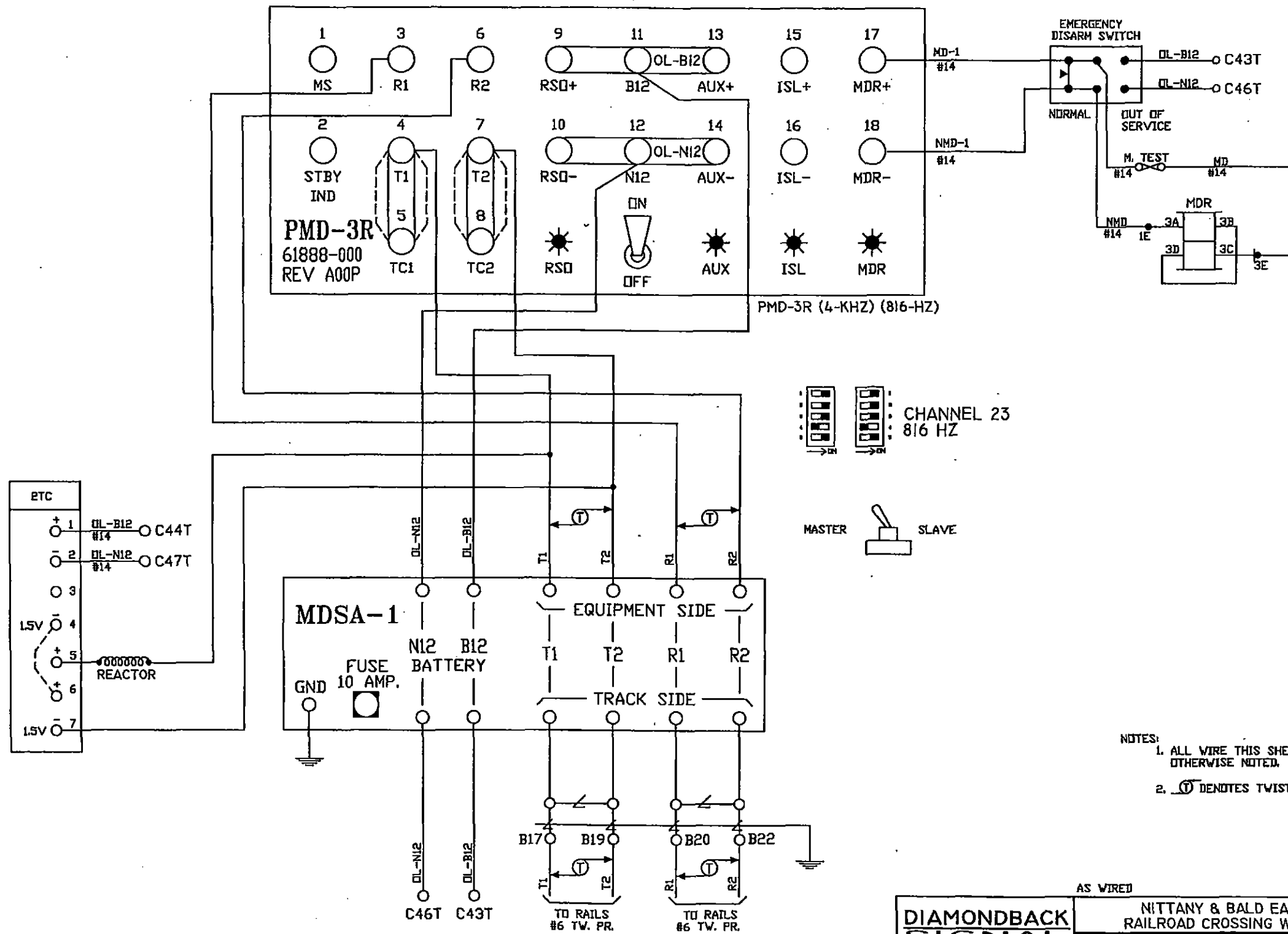
SCALE: NONE DRAWN BY: DBS

DATE: 10/28/2019 REVISED:

TRANSFER ROAD DOT #506.372T - M.P. 0040.12  
LEMONT, CENTRE COUNTY, PA

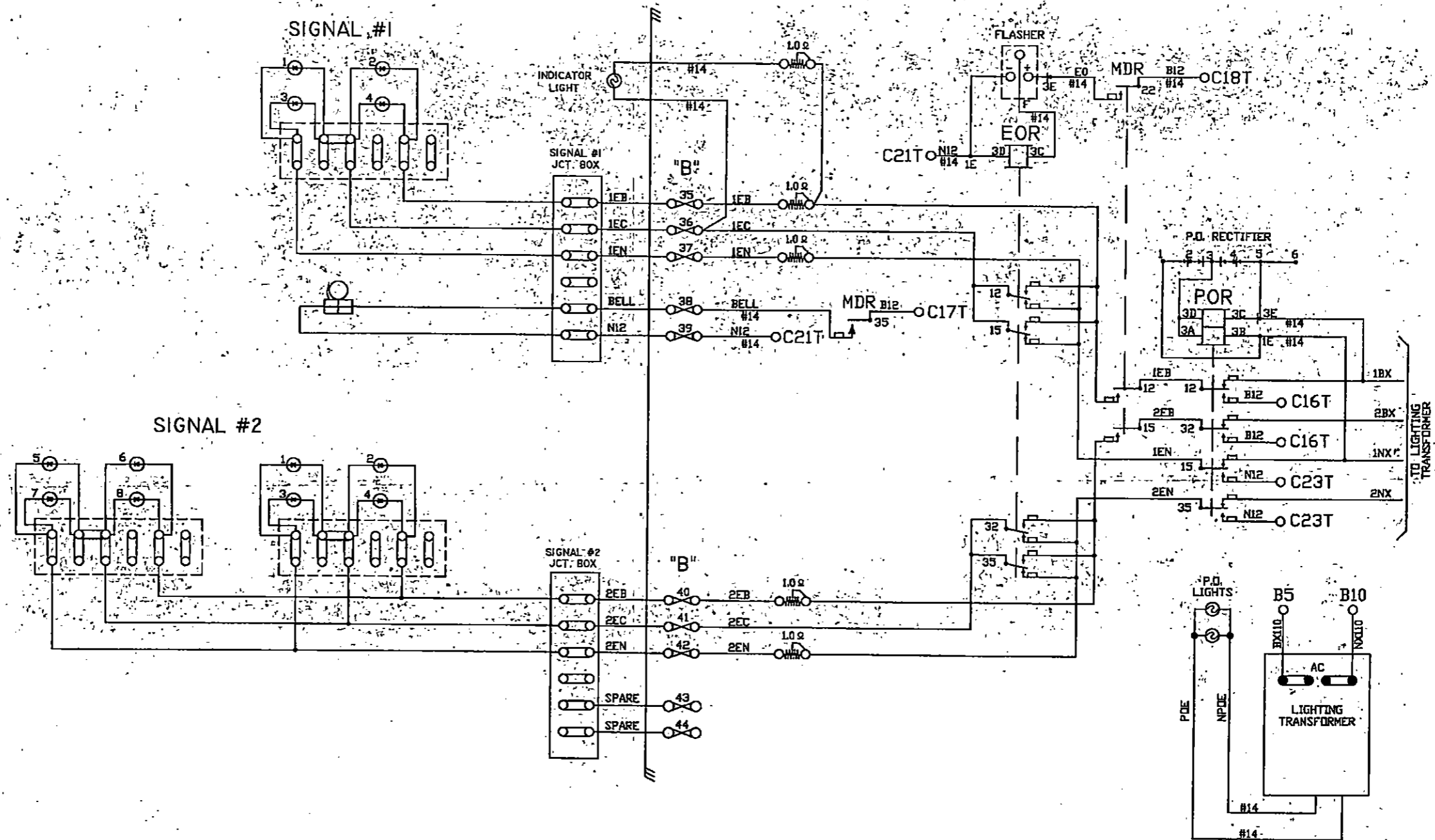
TRACK & CABLE PLAN DRAWING NUMBER: 0040.12

A-2020-3016318



- NOTES:
1. ALL WIRE THIS SHEET #10 UNLESS OTHERWISE NOTED.
  2. DENOTES TWISTED PAIR.

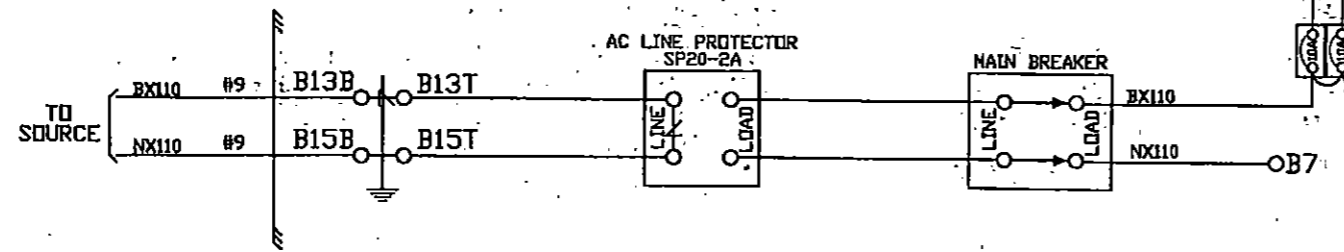
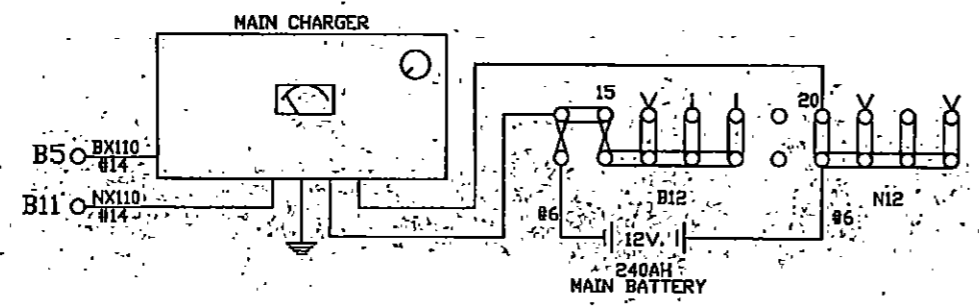
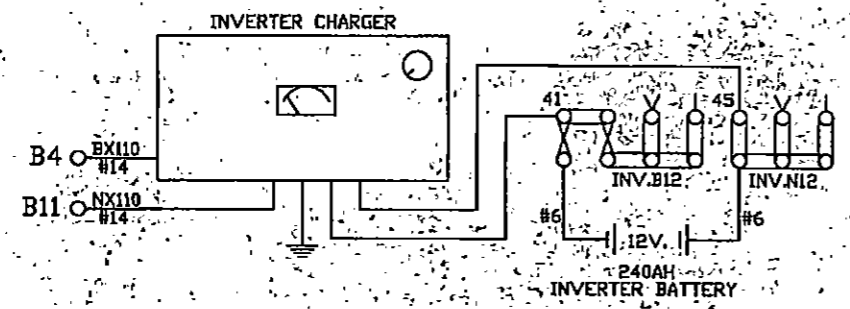
<b>DIAMONDBACK SIGNAL</b> (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	AS WIRED	AS INSTALLED	
	NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES		
	SCALE: NONE DATE: 07/09/2020	DRAWN BY: KDL REVISED:	
	TRANSFER ROAD DOT #506 372T - M.P. 0040.12 LEMONT, CENTRE COUNTY, PA		DRAWING NUMBER 0040.12
CIRCUIT PLAN "A"			



NOTE:  
ALL WIRE THIS SHEET IS #10 AVG. FLEX.  
UNLESS OTHERWISE NOTED.

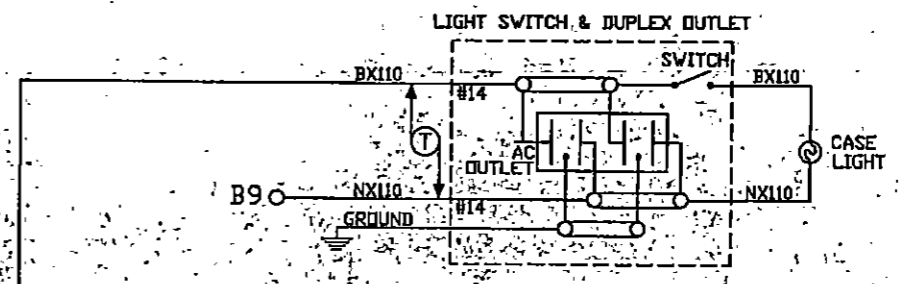
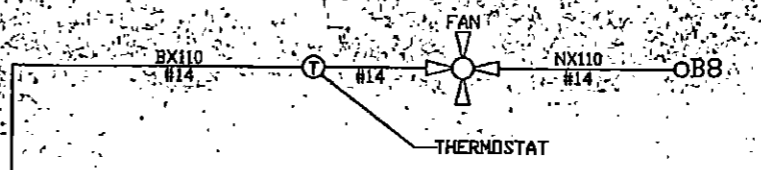
**DIAMONDBACK SIGNAL**  
(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE "D"  
SYKESVILLE, MD.  
21784

AS WIRED	AS INSTALLED
NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES	
SCALE: NONE	DRAWN BY: KDL
DATE: 07/09/2020	REVISED:
TRANSFER ROAD DOT #506 372T - M.P. 0040.12 LEMONT, CENTRE COUNTY, PA	
CIRCUIT PLAN "B"	DRAWING NUMBER 0040.12



"C"

"C"



NOTE:  
ALL WIRE THIS SHEET IS #10 AWG FLEX  
UNLESS OTHERWISE NOTED.

AS WIRED AS INSTALLED

**DIAMONDBACK SIGNAL**  
(410) 795-9601  
5965 EXCHANGE DRIVE  
SUITE 'D'  
SYKESVILLE, MD  
21784

NITTANY & BALD EAGLE RAILROAD RAILROAD CROSSING WARNING DEVICES	
SCALE: NONE	DRAWN BY: KDL
DATE: 07/09/2020	REVISED:
TRANSFER ROAD DOT #506 372T - M.P. 0040.12 LEMONT, CENTRE COUNTY, PA	
CIRCUIT PLAN "C"	DRAWING NUMBER 0040.12

