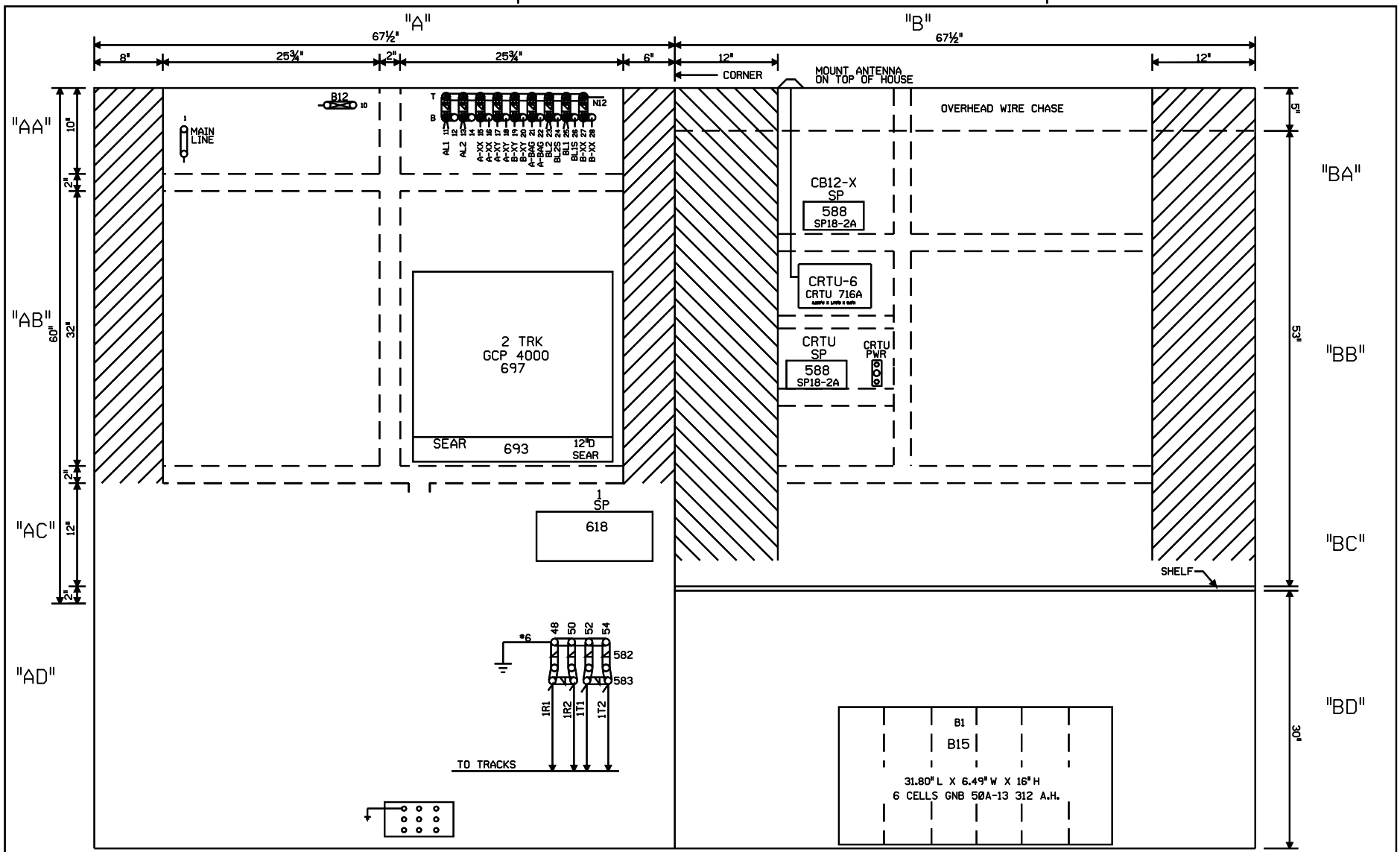


NOTE: ALL DIMENSIONS SHOWN ARE APPROXIMATE.

0 1 2 3 4 FEET

SCALE: 1.5 INCHES = 1 FOOT

LOOGOOTEE, ILLINOIS
MAIN STREET
M.P. 233.06
SALEM SUBDIVISION
D.O.T.#167 909R

NEW SHEET

06-28-07
INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06

AFE 84426 JTB
SSC/JJF

MODIFICATION LEVEL	
Q. A. LAST LEVEL CHECKED	DP
LAST LEVEL MOD THIS TYPICAL	DP
LAST LEVEL BY DESIGNER	DP
CHANGED FROM TYPICAL?	Y

mp 02.26.07 4K 4TKGFC.8

UNION PACIFIC
QUALITY PRODUCTIVITY SAFETY
SIGNAL DESIGN

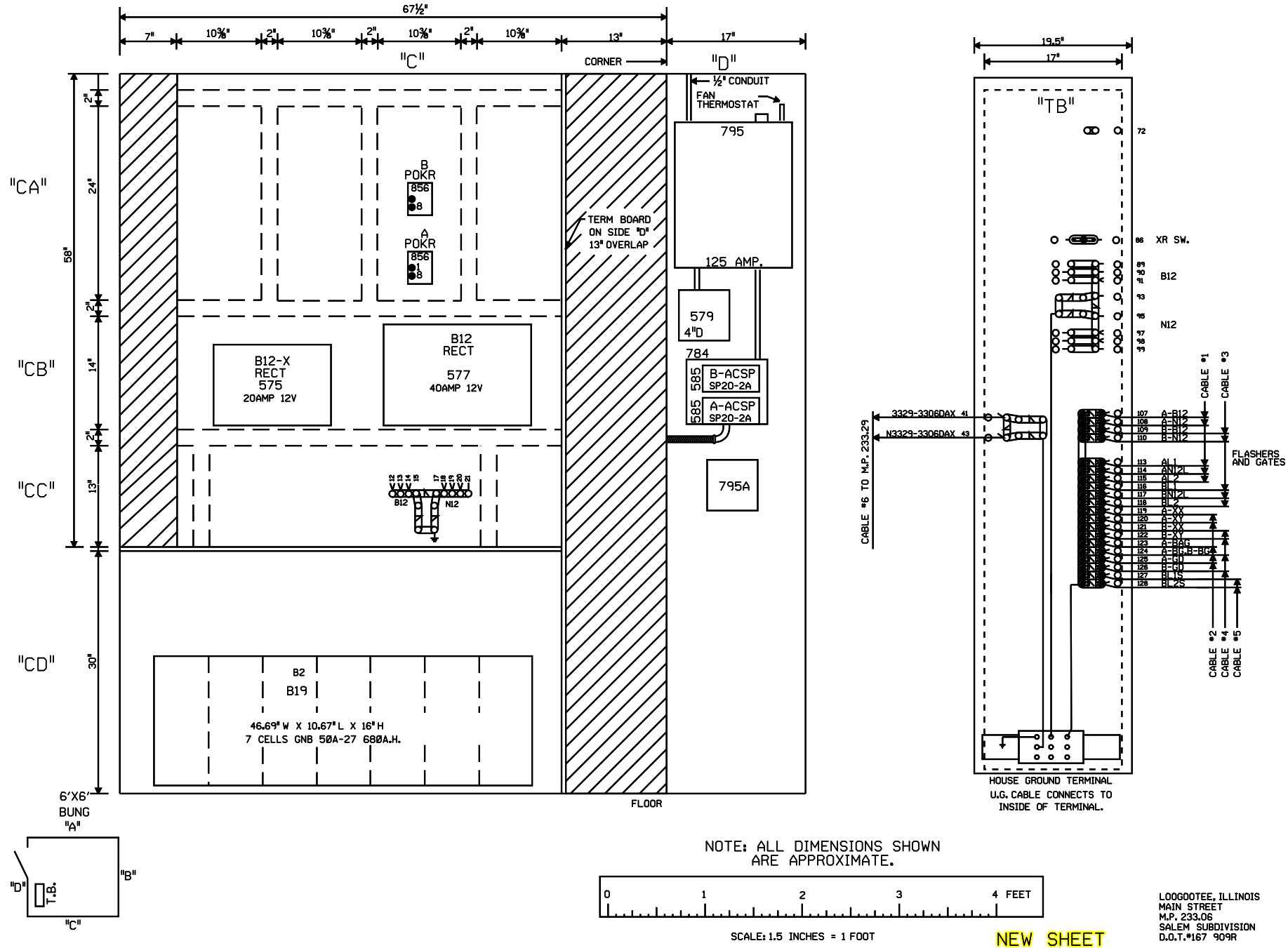
DES: SSC
DIG: SSC
CHK: JTB
A.F.E. 84426
ID= 030123306.8X

UNION PACIFIC RAILROAD

FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS

Office of AVP Engineering - Design Omaha, Nebraska

DATE 6-28-07
SHEET 8
DWG 233.06
S-301



NOTE: ALL DIMENSIONS SHOWN ARE APPROXIMATE.

0 1 2 3 4 FEET

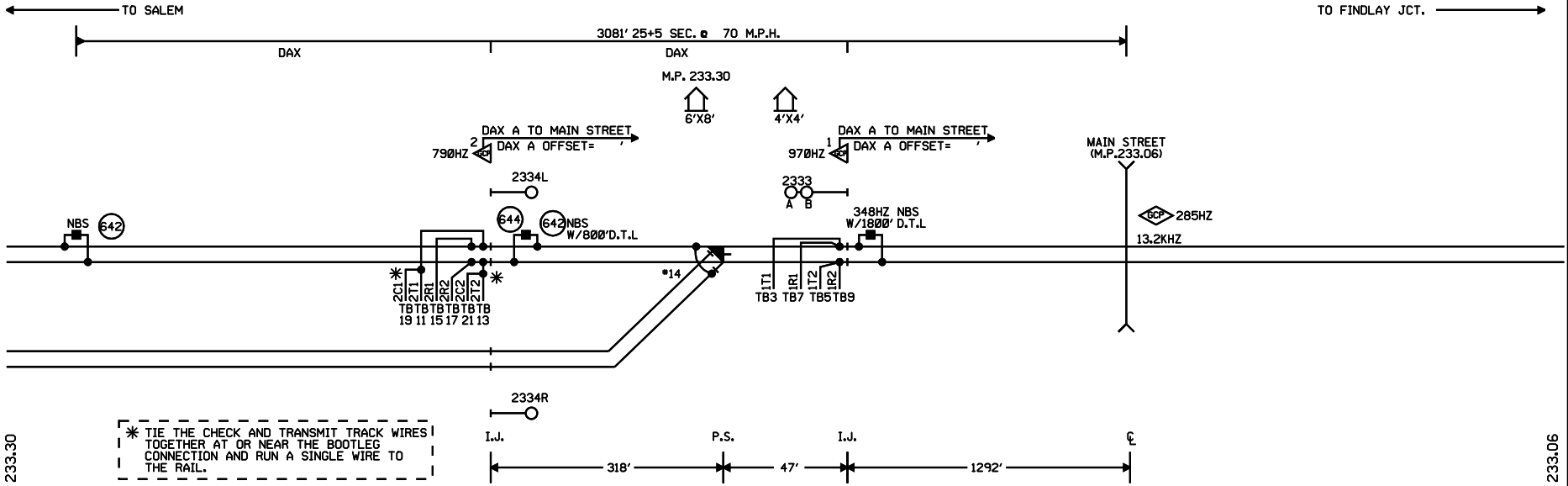
SCALE: 1.5 INCHES = 1 FOOT

NEW SHEET

LOOGOOTEE, ILLINOIS
MAIN STREET
M.P. 233.06
SALEM SUBDIVISION
D.O.T.#167 909R

06-28-07 INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06 AFE 84426 JTB SSC/JJF	MODIFICATION LEVEL		UNION PACIFIC SIGNAL DESIGN	DES: SSC	UNION PACIFIC RAILROAD
	Q. A. LAST LEVEL CHECKED	DP		DIG: SSC	FINDLAY JCT., ILLINOIS TO SALEM, ILLINOIS C.T.C. CIRCUITS
	LAST LEVEL MOD THIS TYPICAL	DP		CHK: JTB	
	LAST LEVEL BY DESIGNER	DP		A.F.E. 84426	
	CHANGED FROM TYPICAL?	Y		ID= 030123306.9X	Office of AVP Engineering - Design Omaha, Nebraska
	mv 02.26.07 4K GFC.9				

DATE 6-28-07
SHEET 9
DWG 233.06
S-301



CONNECTS TO DRAWING 233.30

CONNECTS TO DRAWING 233.06

* TIE THE CHECK AND TRANSMIT TRACK WIRES TOGETHER AT OR NEAR THE BOOTLEG CONNECTION AND RUN A SINGLE WIRE TO THE RAIL.

CONSTRUCTION NOTE:

1.) THIS WORK TO BE DONE IN CONJUNCTION WITH CROSSING WORK AT M.P.233.06

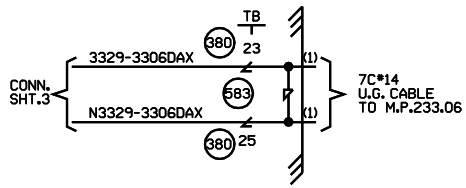
NOTES:

⊗ = TWISTED WIRES
ALL TRACK WIRES 2C. #6
INSULATED 1 TWIST PER FT.

TRANSMITTER AND RECEIVER LEADS TO BE SEPARATED BY AT LEAST 12" IN TRENCH. LENGTHS SHOULD NOT EXCEED MANUFACTURES RECOMMENDATION.

ALL BUNGALOW WIRING TO BE #16 AWG FLEX UNLESS OTHERWISE SPECIFIED EXCEPT ALL GROUND WIRE TO BE #6 AWG FLEX OR LARGER.

REFER TO UP STANDARD DWG. FOR BUNGALOW GROUNDING.



S ←—○—→ N

CABLE TABULATION

CABLE #1 7C#14 U.G.B.T. HOUSE TO MP. 233.06

NEW SHEET

LOOGOOTEE, ILLINOIS
REMOTE LOCATION
M.P. 233.29
SALEM SUBDIVISION
4' X 4' HOUSE

06-28-07	INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06
AFE 84426	JTB SSC/JJF

MODIFICATION LEVEL	
Q.A. LAST LEVEL CHECKED	DP
LAST LEVEL MOD THIS TYPICAL	DP
LAST LEVEL BY DESIGNER	DP
CHANGED FROM TYPICAL?	Y
mv 02.28.07 4K REMOTE.1	

UNION PACIFIC
QUALITY PRODUCTIVITY SAFETY
SIGNAL DESIGN

DES:	SSC
DIG:	SSC
CHK:	GRK
A.F.E.	84426
ID= 030123329.1X	

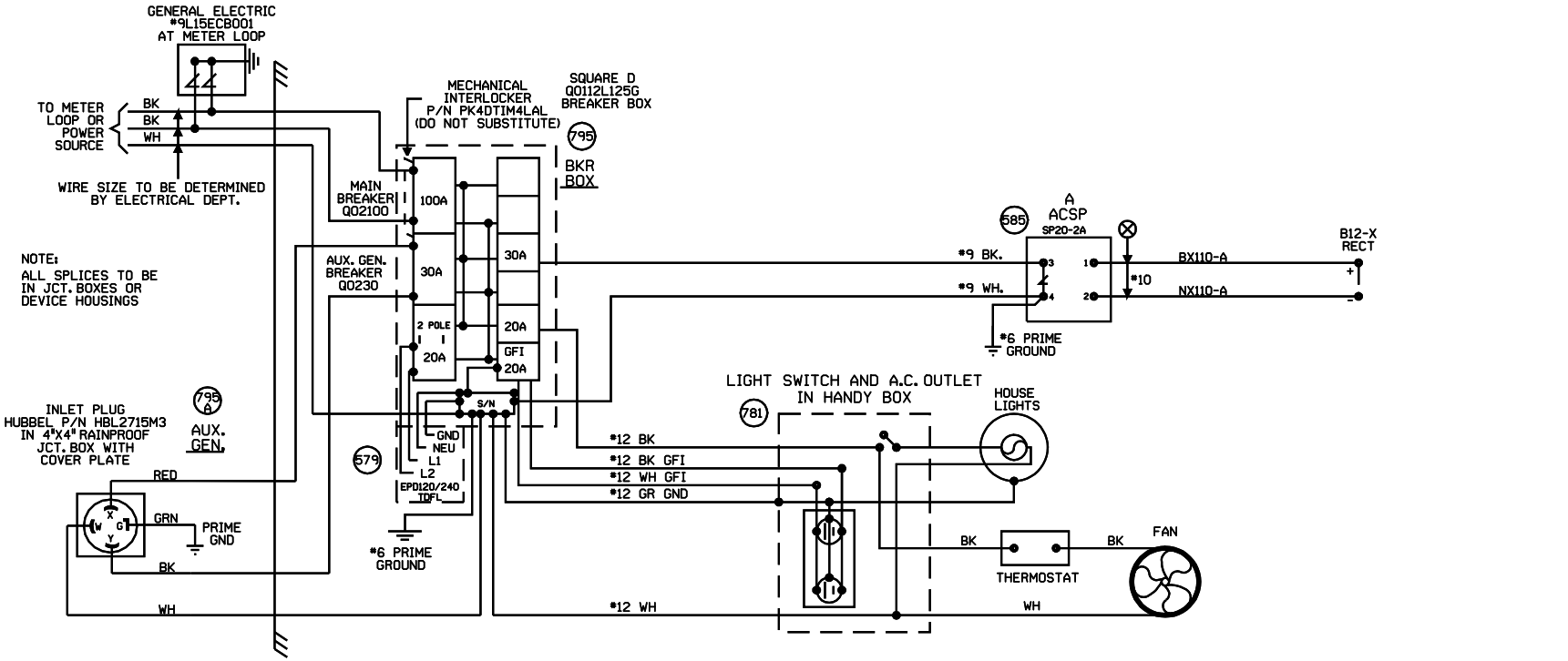
UNION PACIFIC RAILROAD

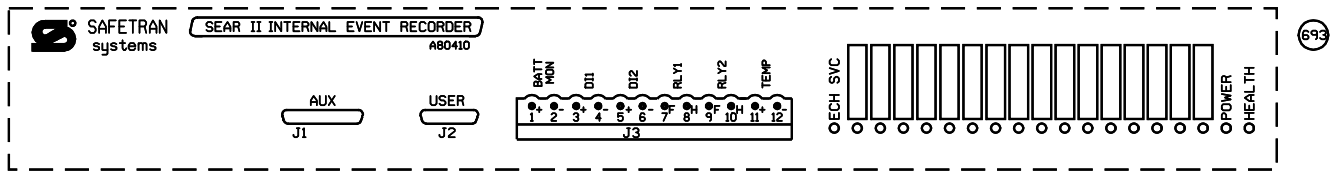
FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS

Office of AVP Engineering - Design Omaha, Nebraska

DATE	6-28-07
SHEET	1
DWG	233.29

S-301





LOOGOOTEE, ILLINOIS
REMOTE LOCATION
M.P. 233.29
SALEM SUBDIVISION
4' X 4' HOUSE

NEW SHEET

06-28-07 INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06	
AFE 84426	JTB SSC/JJF

MODIFICATION LEVEL	
Q.A. LAST LEVEL CHECKED	DP
LAST LEVEL MOD THIS TYPICAL	DP
LAST LEVEL BY DESIGNER	DP
CHANGED FROM TYPICAL?	Y
mv 02.28.07 4K SEARAC.2	

UNION PACIFIC
QUALITY PRODUCTIVITY SAFETY
SIGNAL DESIGN

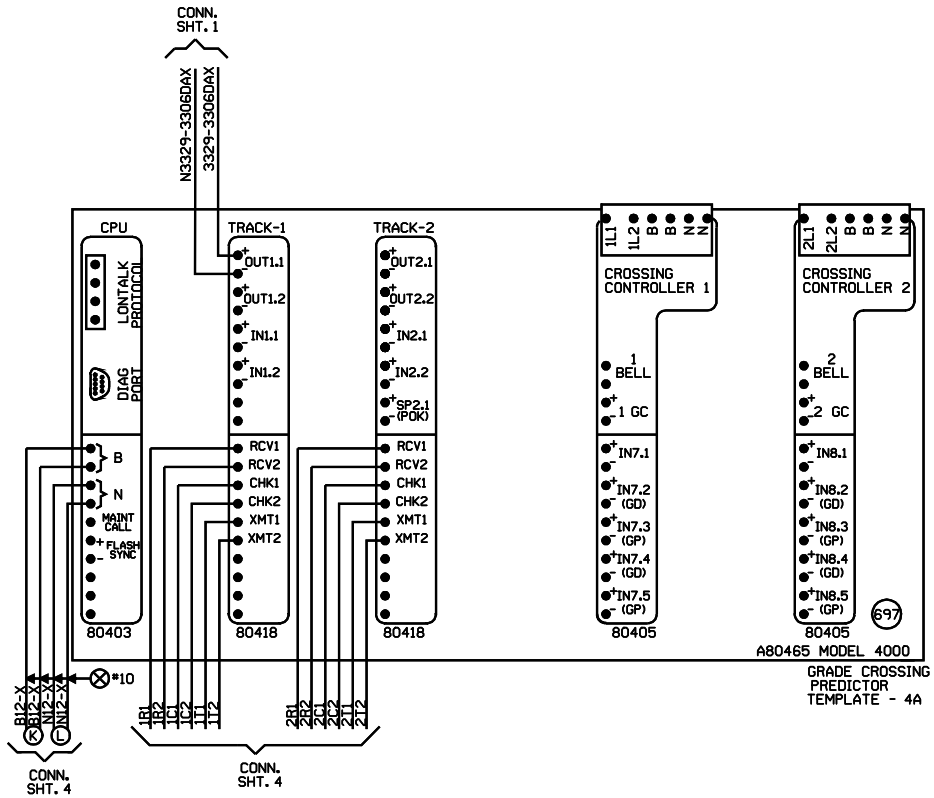
DES:	SSC
DIG:	SSC
CHK:	JTB
A.F.E.	84426
ID= 030123329.2X	

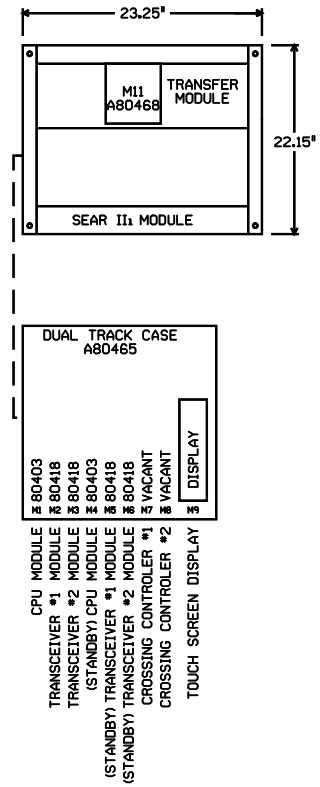
UNION PACIFIC RAILROAD

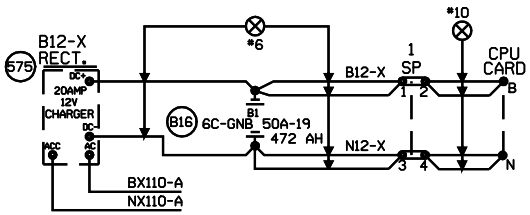
FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS

Office of AVP Engineering - Design Omaha, Nebraska

DATE	6-28-07
SHEET	2
DWG	233.29
	S-301







"Mf" FREQUENCY (HZ)	MAXIMUM TRANSMIT WIRE LENGTH (FEET)
86	100
114	125
156	150
211	200
285-970	250

NOTE:
EACH TRANSMITTER TO RAIL WIRE FROM XMT1 AND XMT2 MUST NOT EXCEED THE MAXIMUM LENGTH SPECIFIED IN THE TABLE SHOWN. THE RECEIVER WIRE LENGTH IS NOT CRITICAL. DOES NOT APPLY TO 6 TRACK WIRE APPLICATION.

NEW SHEET

LOOGOOTEE, ILLINOIS
REMOTE LOCATION
M.P. 233.29
SALEM SUBDIVISION
4' X 4' HOUSE

06-28-07
INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06
AFE 84426 JTB SSC/JJF

MODIFICATION LEVEL	
Q.A. LAST LEVEL CHECKED	DP
LAST LEVEL MOD THIS TYPICAL	DP
LAST LEVEL BY DESIGNER	DP
CHANGED FROM TYPICAL?	Y

UNION PACIFIC QUALITY PRODUCTIVITY SAFETY SIGNAL DESIGN

DES: SSC
DIG: SSC
CHK: JTB
A.F.E. 84426
ID= 030123329.3X

UNION PACIFIC RAILROAD
FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS
Office of AVP Engineering - Design Omaha, Nebraska

DATE 6-28-07
SHEET 3
DWG 233.29
S-301

```
Minimum Program Steps Report
----------------------------

Location and SIN
----------------
DOT Number: 000000R
Milepost Number: 233.29
Site Name: LOOGOOTEE, IL

SIN: 762010010016 *

* Parameter is part of office check number calculation.

MCF and Template Selection
--------------------------
MCF Name: GCP-T6X-01-2.mcf
MCF Revision: 012
MCFCRC: 0DFE7A0C

Template = 4A:6 Remotes *

* Parameter is part of office check number calculation.

Minimum Program Steps
---------------------
TEMPLATE:  module configuration
Track 2/RIO 1 Slot = Track *

TEMPLATE:  track 1-Remote Dax
Track 1 : GCP Frequency = 970 Hz
Track 1 : Approach Distance = 365 ft See Plans
Track 1 : Dax A Warning Time = 25 sec *
Track 1 : Dax A Offset Distance = 1232 ft Verify in Field
Track 1 : GCP Transmit Level = Medium Set in Field

TEMPLATE:  track 2-Remote Dax
Track 2 : GCP Frequency = 790 Hz
Track 2 : Approach Distance = 1484 ft See Plans
Track 2 : Dax A Warning Time = 25 sec *
Track 2 : Dax A Offset Distance = 1597 ft Verify in Field
Track 2 : GCP Transmit Level = Medium Set in Field

TEMPLATE:  OP assignment 1
OUT 1.1 = AND 1 XR *

* Parameter is part of office check number calculation.

Check Numbers
-------------
Office Check Number: 6FAF62D1
Config. Check Number: 176DAB7D
(Based on MCF Revision 012)

Parameters not part of office check number calculation:

Track 1 : GCP Frequency = 970 Hz
Track 1 : Approach Distance = 365 ft See Plans
Track 1 : Dax A Offset Distance = 1232 ft Verify in Field
Track 1 : GCP Transmit Level = Medium Set in Field
Track 2 : GCP Frequency = 790 Hz
Track 2 : Approach Distance = 1484 ft See Plans
Track 2 : Dax A Offset Distance = 1597 ft Verify in Field
Track 2 : GCP Transmit Level = Medium Set in Field

Comments
--------
<none>

Configuration Package File
--------------------------
Filename: 030123329 000000R.pac
Path: O:\UPRR\JXXD00206\documents\gcp program\
Date/Time: 11:09 AM 10/5/2007
```

LOOGOOTEE, ILLINOIS
REMOTE LOCATION
M.P. 233.29
SALEM SUBDIVISION
4' X 4' HOUSE

NEW SHEET

06-28-07
INSTALL FLASHERS
AND GATES WITH
CWT AT M.P. 233.06

AFE 84426 JTB
SSC/JJF

NOTE: Actual OFFSET and ISLAND distances must be entered by field personnel.

UNION PACIFIC
QUALITY PRODUCTIVITY SAFETY
SIGNAL DESIGN

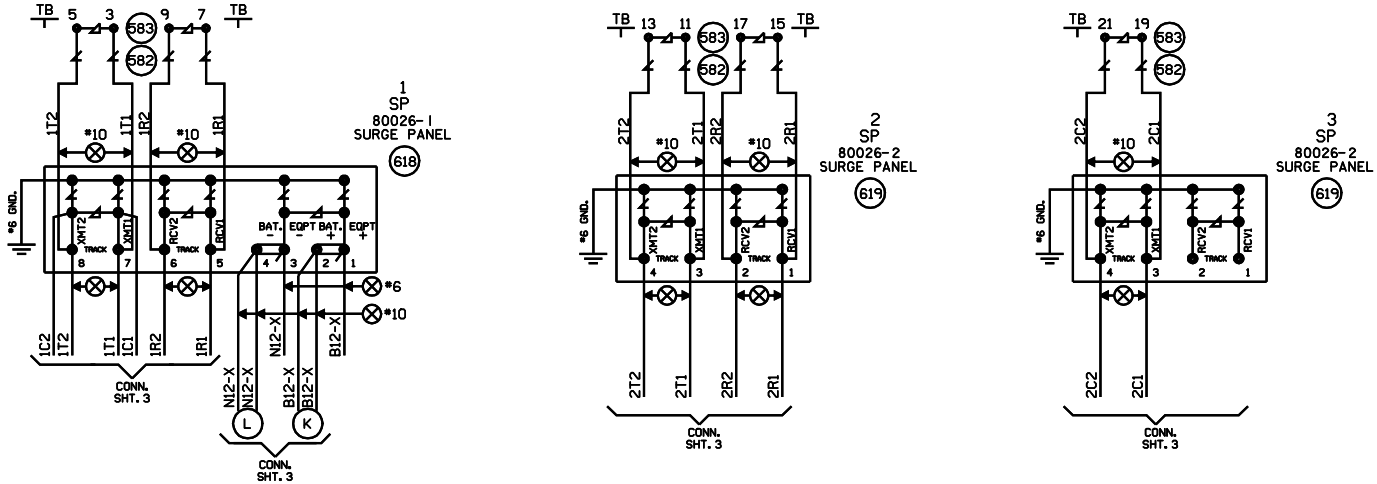
DES:	SSC
DIG:	SSC
CHK:	JTB
A.F.E.	84426
ID= 030123329.3AX	

UNION PACIFIC RAILROAD

FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS

Office of AVP Engineering - Design Omaha, Nebraska

DATE	6-28-07
SHEET	3A
DWG	233.29
	S-301



LOOGOOTEE, ILLINOIS
REMOTE LOCATION
M.P. 233.29
SALEM SUBDIVISION
4' X 4' HOUSE

NEW SHEET

06-28-07	INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06
AFE 84426	JTB SSC/JJF

MODIFICATION LEVEL	
Q.A. LAST LEVEL CHECKED	DP
LAST LEVEL MOD THIS TYPICAL	DP
LAST LEVEL BY DESIGNER	DP
CHANGED FROM TYPICAL?	Y
av 82.26.07 4K REMOTE.4	

UNION PACIFIC
QUALITY PRODUCTIVITY SAFETY
SIGNAL DESIGN

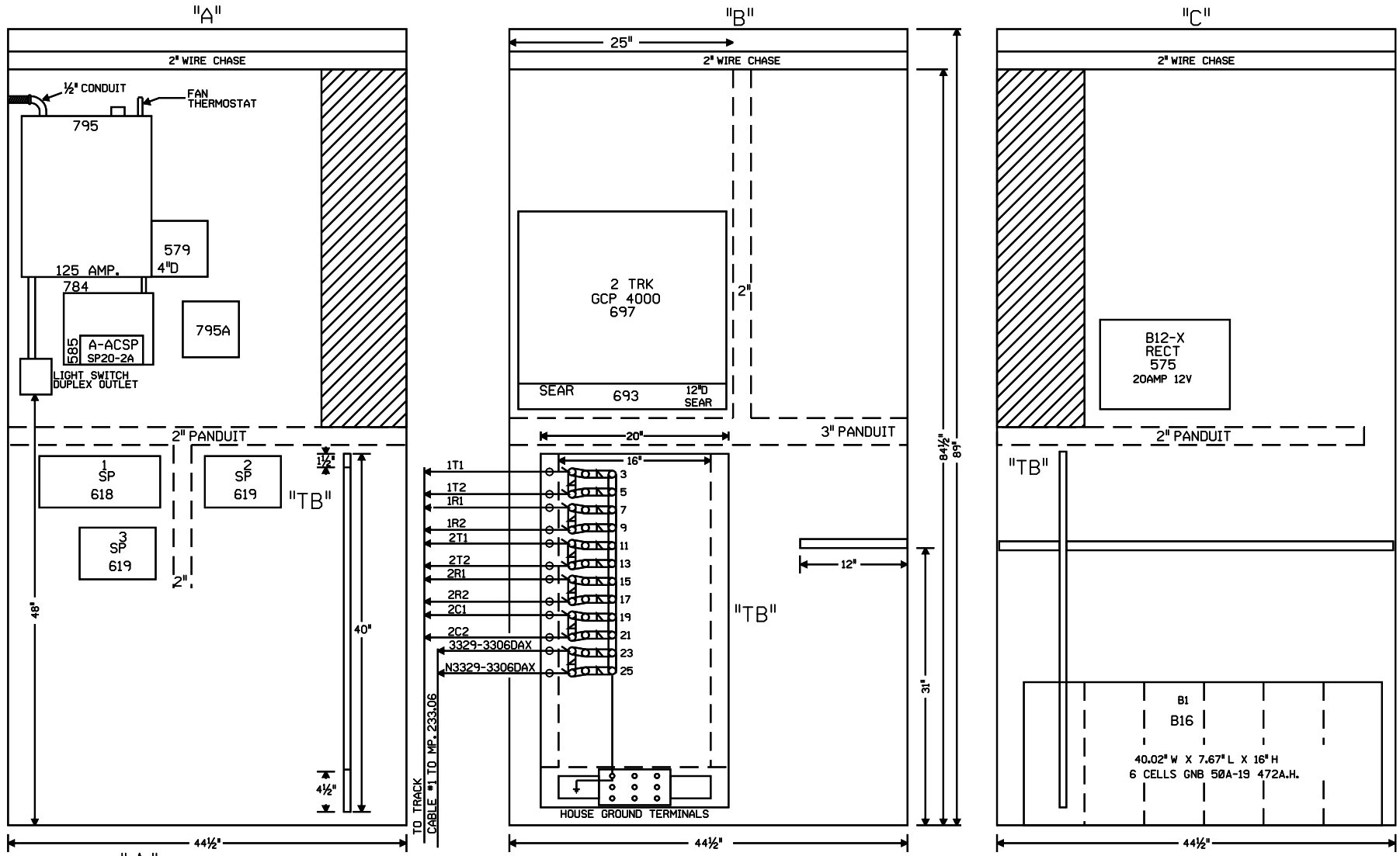
DES:	SSC
DIG:	SSC
CHK:	JTB
A.F.E.	84426
ID= 030123329.4X	

UNION PACIFIC RAILROAD

FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS

Office of AVP Engineering - Design Omaha, Nebraska

DATE	6-28-07
SHEET	4
DWG	233.29
	S-301



NOTE: ALL DIMENSIONS SHOWN ARE APPROXIMATE.

0 1 2 3 4 FEET

SCALE: 1.5 INCHES = 1 FOOT

NEW SHEET

LOOGOOTEE, ILLINOIS
REMOTE LOCATION
M.P. 233.29
SALEM SUBDIVISION
4' X 4' HOUSE

06-28-07
INSTALL FLASHERS AND GATES WITH CWT AT M.P. 233.06

AFE 84426 JTB
SSC/JJF

MODIFICATION LEVEL	
Q. A. LAST LEVEL CHECKED	DP
LAST LEVEL MOD THIS TYPICAL	DP
LAST LEVEL BY DESIGNER	DP
CHANGED FROM TYPICAL?	Y

ap 02.26.07 4K REMOTE.5

UNION PACIFIC
QUALITY PRODUCTIVITY SAFETY
SIGNAL DESIGN

DES: SSC
DIG: SSC
CHK: JTB
A.F.E. 84426
ID= 030123329.5X

UNION PACIFIC RAILROAD

FINDLAY JCT., ILLINOIS
TO SALEM, ILLINOIS
C.T.C. CIRCUITS

Office of AVP Engineering - Design Omaha, Nebraska

DATE 6-28-07
SHEET 5
DWG 233.29
S-301