



FILE Norfolk Southern Corporation
Communications and Signal Department
1200 Peachtree Street, N.E., Box 123
Atlanta, Georgia 30309

B. L. Sykes
Chief Engineer
C&S Engineering
404/529-2105

March 13, 2007
061-10.1044

Ms. Susan Kirkland
Ohio DOT
1980 W. Broad St.
Columbus, OH 43223

06-1326-RR-FED

RE: In the Matter of the Implementation of the Norfolk Southern Corridor Safety Project
"CJ" Line from Columbus, OH to Cincinnati, OH

Dear Ms. Kirkland:

Per the ORDC letter dated November 1, 2007, regarding the above case for the upgrade of automatic grade crossing warning devices at Shaffer Street in Springfield, Clark County, Ohio, DOT: 523 498U, Milepost CJ-184.01.

Although we cannot give you an exact date of installation at this time we can provide our average installation time, which is 9.1 months after authorization from the state. After this project is authorized, we will order material and schedule for installation once we have received approvals from ODOT's district office.

An extra copy of this letter is included with the enclosures. Please date stamp this extra copy and forward to Mr. R. S. Noe, Assistant General Attorney, Norfolk Southern Corporation, Three Commercial Place, Norfolk, Virginia, 23510.

Upon receipt of this revised material, please initial, date and confirm via fax to 404-527-2901.

Sincerely,

B. L. Sykes
B. L. Sykes

Enclosure(s)

BLS/rhr/cp/rjs

Cc: Mr. R. S. Noe, NS Corporation, Norfolk, VA
Ms. Bonnie Johrendt, PUCO (w/plans, estimate and material list)
Mr. Tim Perkins (w/plans, estimate and material list)
Docketing Division (w/plans, estimate and material list) ✓
Ms. P. A. Gray, NS Corporation, Roanoke, VA (w/estimate)

PUCO

2007 MAR 19 AM 9:25

RECEIVED-DOCKETING DIV



12-Mar-07

Detailed Estimate for Grade Crossing Warning Devices

City/State: SPRINGFIELD, OH

Road: SHAFFER ST.

MilePost: CJ-184.01

DOT/AAR: 523498U

State Proj. No.:

County: CLARK

S&E Proj. No.: 10.0998

AFE: F10123

Man Days: 136

File Number: 061-10.1044

Purchases - Others	
Meals and Lodging:	\$12,796.19
Rental of Equipment:	\$27,975.20
(2 Trucks, 1 Backhoe w/ Trailer and 1 Pipe-Pusher for 34 Days)	
Construction Supervision Vehicle:	\$2,238.02
Purchases - Other Total:	\$43,009.41
Material And Additives	
Material Cost:	\$107,062.00
Sales and Use Tax:	\$0.00
Material Handling Freight:	\$5,353.11
Material Total:	\$112,415.11
Labor And Additives	
Labor Cost:	\$32,912.00
(4 man crew at \$968.00 a day for: 34 days)	
Payroll Tax & Overheads:	\$32,467.69
Preliminary Engineering:	\$12,317.72
Construction Supervision:	\$9,291.06
Labor Total:	\$86,988.47
Project Cost:	\$242,412.99
Scrap / Salvage Credit:	\$0.00
Project Total:	\$242,412.99

Estimated on: 12-Mar-07

Estimated by: ndr3j

Estimate valid for 1 year from date of estimate



Norfolk Southern Railway

Highway Crossing Signalization Program - Material List

Do not substitute items without permission from S & E Engineering

City:	SPRINGFIELD
Road:	SHAFFER ST.
Mile Post:	CJ-184.01
Drawing Number:	82111840
State ProjectNumber:	
County:	CLARK
A A R Number:	523498U
Project Number:	10.0998
File Number:	061-10.1044
New File Number:	
A F E Number:	F10123
Store Number:	07860
Supervisor:	D.M. FRANCIS
Tax Code:	3500
Vendor to supply the following copies after pricing: 1 Set - Material Management with original Invoice 2 Sets - with plans shipped in car with material 1 Set - S&E Gen. Supt. Construction w/copy of invoice	

Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed Date Quan.	Quantity Returned (Credit)	Special Instructions
3	670-360693-4	EA	\$5.04	\$15.12	AAR/DOT NUMBER PLATE/DECAL, ORDER 3 PER PROJECT. 60 DAY LEAD TIME. SUPPLIED BY S'STRAN.				
1	165-006505-4	EA	\$1,051.54	\$1,051.54	AC SERVICE, COMPLETE LESS METER BASE, ASSEMBLED ON 30' POLE				
8	670-119241-4	EA	\$32.80	\$262.40	ARRESTOR, LIGHTNING HEAVY DUTY CLEAR VIEW SAFETRAN 022585-1X				
13	105-871901-4	EA	\$161.57	\$2,100.41	BATTERY, GNB 265AH MODEL 50A11 SINGLE CELL 2.25 VOLTS				
4	670-005125-4	EA	\$2.54	\$10.16	BLOCK, TERMINAL BAKELITE FOR MOUNTING LIGHTING ARRESTOR EQUALIZER OR RESISTANCE UNIT				
2	670-012675-4	EA	\$67.10	\$134.20	BRACKET CASTING, BREAKAWAY FOR ALUM/FIB ARM. NEG 385102ADP/6. GOES WITH 670-012659-4 FOR GATES >28'				
2	670-980689-4	EA	\$71.71	\$143.42	BRACKET HIGH WIND, (RIGID 3'), WIG- 191036, WALRUS TUSK TYPE				
2	670-012659-4	EA	\$134.14	\$268.28	BRACKET, ALSO ORDER 670-012675-4 NEG 385102-175 FIB.- ALUM. GATE ARM CONVER. ASSM INC. ADAPT. CASTING. FOR GATES > 28'.				
1	670-356949-4	EA	\$97.00	\$97.00	CABLE, 10' GENERATOR HOOK UP, SERRMI P/N 40524. FEMALE CONNECTOR				
400	465-292862-4	LF	\$1.04	\$416.00	CABLE, U-2-6 TWISTED, S-23 OKONITE 113-12-3933 SOLID TINNED CONDUCTOR				
400	465-292929-4	LF	\$3.05	\$1,220.00	CABLE, U.G. 5 COND. NO. 6 AWG SOLID COPPER CABLE TO MEET NS CORP. SPEC. FOR SIGNAL				
1500	465-939422-4	LF	\$2.55	\$3,825.00	CABLE, UG 12 CONDUCTOR NO 14 AWG SOLID EACH CONDUCTOR WITH 5/64 IN INSULATION 10 MIL				
300	465-791835-4	FT	\$2.22	\$666.00	CABLE, UG AC ENTRANCE 3C#6-7X OKONITE FMPE-L 094-078 TR W/G 1 X 8 7X W010 BRZ TAPE 600V PRODUCT CODE 206-11-6070				
2	670-070249-4	EA	\$3,746.04	\$7,492.08	CANTILEVER, WT/F ARM 24' WWALKWAY KIT SAFETRAN #071274-24NS2				
160	165-544477-4	FT	\$2.55	\$408.00	CONDUIT, 4"x10" PVC, SCHEDULE 80 BELL CONNECTOR AT ONE END, 1/2 PT. GLUE IN KIT 670-123298-4				
2	670-090450-4	EA	\$50.38	\$100.76	CONNECTOR, WELDED FAR RAIL HARMON A1000-2W				
2	670-486646-4	EA	\$41.62	\$83.24	CONNECTOR, WELDED NEAR RAIL HARMON A1000-1W				

APPROVED BY STATE	APPROVED BY RAILROAD	CAR NUMBER	SEAL NUMBER
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Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed Date	Quantity Returned (Credit)	Special Instructions
2	670-315874-4	EA	\$1,309.95	\$2,619.90	COUNTERWEIGHT, KIT 25'-32" STAINLESS FOR S-MECH ON GATE/CANT COMBOS W/ARMS AND HUBS SAFETRAN 070755-2532AX				
9	670-760012-4	EA	\$40.02	\$360.18	COVER, FOR 1 WAY FLASHING LIGHT ASSY. 18 OZ. BLACK VINYL COATED NYLON. === TO COVER 2 LAMPS ===				
1	670-986650-4	EA	\$375.69	\$375.69	DISPOSAL, CONSTRUCTION DEBRIS AND CLEANING X'ING EQUIPMENT CONTAINER				
1	670-000004-4	EA	\$700.00	\$700.00	FCC LICENSE FOR MONITOR/RADIO				
5	670-000003-4	EA	\$255.85	\$1,279.25	FILL/STONE #57, QUANTITY IS BASED ON TRUCK LOAD PLUS DELIVERY COST				
2	670-744631-4	EA	\$2,706.00	\$5,412.00	FOUNDATION, CFLS FOR SAFETRAN MODEL "WT/F" ARMS 12' TO 30' SINGLE MAST, DIXIE# S-10-3WS-C, 5'10" CR 02-205902				
2	670-263738-4	EA	\$331.87	\$663.74	GATE, ARM FIBERGLASS-ALUMINUM 25-31 FT. INCLUDES GATE GUARD FOR GATE LIGHT CABLE, 076600-320017, NEG P/N 8002-4NFS/CG				
1	670-722298-4	EA	\$43.57	\$43.57	INDUCTOR, SIMULATED TRACK SAFETRAN 8V617-1500				
1	670-477991-4	EA	\$317.90	\$317.90	KIT, GROUNDING ASSY FOR AL I/S INCLUDES 8 GRO RDS, 200#4WIRE, 12 4 WIRE ONE SHOTS, ERICO SBK206				
2	670-123298-4	EA	\$256.93	\$513.86	KIT, HARDWARE SUPPLIES REQUIRED X'ING P'CKAGES. WEB CONNECTORS FOR SHUNT(8EA) TAPE, AMPS, P'GUM PAINT, SLEEVES, TAGS, GLUE, 100 EA WHITE TAGS, JNE CAN BLUE MARKING PAINT ETC...				
2	670-142763-4	EA	\$849.42	\$1,698.84	LAMP ASSY, 12" LIGHT, 2 WAY IND. FOR MTG ON THE TIP OF WT/F CANTILEVER ARM, SAFETRAN P/N 042003-488XNS				
1	670-745798-4	EA	\$533.19	\$533.19	LAMP ASSY, 4" GRD. MAST MTG. 1W IND. 20" BKGRD, FLX-12 W/BULB S'TRAN #042003-484XNS				
2	670-816589-4	EA	\$551.10	\$1,102.20	LAMP ASSY, 5" MAST MTG. 1W IND. 20" BKGRD, (BACK) LTS.FLX -12W/BULB S'TRAN # 042003-001493				
2	670-167654-4	EA	\$716.73	\$1,433.46	LAMP ASSY, FLX 12" LIGHT UNIT, USE WITH W & WT/F MAST, 1W (FRONT) INDICATION FOR WT/F CANTILEVER MAIN MAST, SAFETRAN P/N 042003-489XNS				
6	165-643547-4	EA	\$4.30	\$25.80	LAMP, 18 WATT 10 VOLT S-11 SC BAY 18S11/1SC CLEAR RWY SIGNAL UJ-71463 GE				

APPROVED BY STATE _____ APPROVED BY RAILROAD _____ CAR NUMBER _____ SEAL NUMBER _____

Location: SPRINGFIELD OH S&E Proj. No.: 10.0998 AFE No.: F10123 Drawing No.: 82111840
Store No.: 07860 P.O. Number: Date Required: Date Shipped: Vendor: SW Signal Engineering Company

Qty.	Class-Item-CD	Uf	Price per item	Total Price	Item Description	Quantity Shipped	Quantity Installed Date Quan.	Quantity Returned (Credit)	Special Instructions
12	670-440826-4	EA	\$1.01	\$12.12	LINK, SAFETRAN 024620-1X INSL TESTING COMP 1 IN CENTER SIGNAL CIRCUITS CR 02-286662				
5	255-590880-4	EA	\$16.12	\$80.60	LOCK, AMERICAN LOCK MODEL H-10KA KEYPED ALIKE TO PRIVATE KEYWAY D456 AND STAMPED "NS SIG"				
2	670-512140-4	EA	\$6,985.00	\$13,970.00	MAST CANTILEVER 12", WT/F GATE COMBO, 21'-30" ARM, W/LADDER KIT W/RIGHT HAND OFFSET SAFETRAN P/N 071272-30NS				
1	670-339854-4	EA	\$295.57	\$295.57	MAST, (WT/F), SIDELIGHT BRACKET FOR WT/F CANTILEVER, SAFETRAN 041442-1031X,				
2	670-850933-4	EA	\$3,352.66	\$6,705.30	MECHANISM, GATE MODEL S-60, WITH DEFROSTER AND MINI TRACKSIDE SENSOR STRAN # 0740007-X002B3				
1	000-000000-4	EA	\$5,000.00	\$5,000.00	MIS. UNDERGROUND BORING				
4	670-000001-4	EA	\$316.23	\$1,264.92	MISC. MATERIAL				
2	670-051028-4	EA	\$102.25	\$204.50	PACKAGE, BRACKET & BOLTS FOR MTG. X-BUCK OR TRK. SIGN TO WNS 12" CANTILEVER MAST 670-289773, 670-293664 SAFETRAN# 035025-20 X				
1	255-646807-4	EA	\$10.38	\$10.38	PADLOCK, SAFETRAN PART NO. 030399-29X SCREW TYPE FOR CIR CONTROLLER AND BTY. BOX				
2	670-514605-4	EA	\$8.45	\$16.90	PINNACLE, W-C SECT 1-11, 4"x 5" REF K1 110-8 OR SAFETRAN NO. @035045-503X				
2	670-555609-4	EA	\$45.12	\$90.24	PLUGBOARD, TYPE B-1 GRS A62-506 OR HARMON @7062-506 OR				
1	670-427136-4	EA	\$93.49	\$93.49	POWER OFF LAMP INDICATOR FOR SHELTER, SAFETRAN P/N 051958-5				
1	165-902002-4	EA	\$308.00	\$308.00	PROTECTOR, SURGE 120/240VAC, ERICO P/N EPD120/240TDFL				
5	465-002899-4	EA	\$22.06	\$110.30	REEL, CABLE DISPOSABLE FOR CROSSING SIGNAL PACKAGES				
1	670-742096-4	EA	\$41.80	\$41.80	RELAY INTERFACE PROBE, ULTRATECH PN 16031-00				
2	670-707995-4	EA	\$313.67	\$627.34	RELAY, TYPE B1, NEV LINE, 900 OHMS,.008 AMPERES GRS A62-308 OR SAFETRAN @400003				
2	435-805560-4	EA	\$6.25	\$12.50	SAND, 25LB BAG FOR CABLE ENTRANCE INTO THE SHELTER				

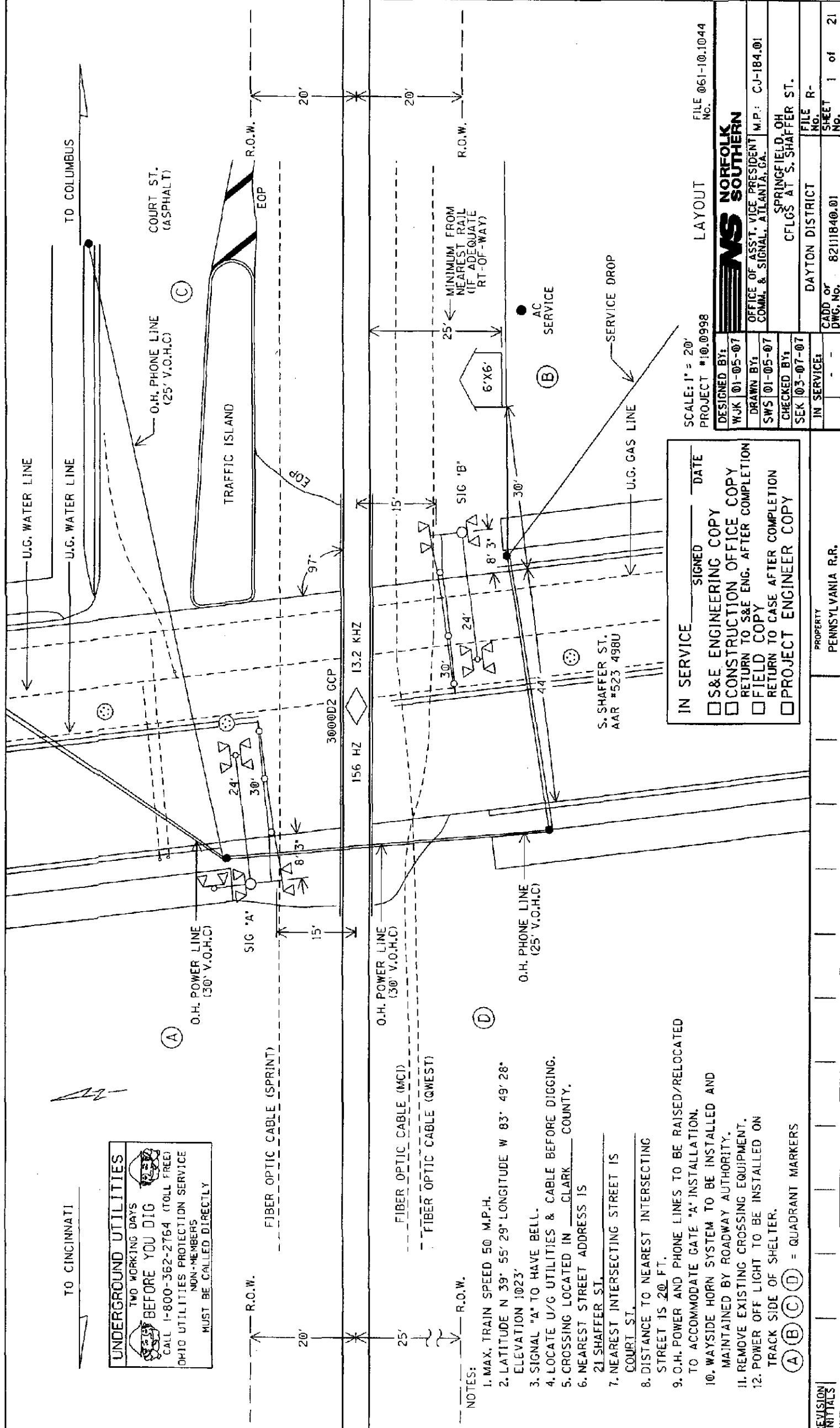
APPROVED BY STATE APPROVED BY RAILROAD CAR NUMBER SEAL NUMBER

Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed Date Quan.	Quantity Returned (Credit)	Special Instructions
1	670-816502-4	EA	\$4,903.75	\$4,903.75	SEARII AUTOMATED INSPECTOR SYSTEM KIT, w/ 1-LOD, 1- eBELL, 2-GTS, WITHOUT MTSS, 1-GFT, 1-VHFC, 2- RECORDER INTERFACE MODULE, 1-ECHOLON CONNECTOR				
1	670-085658-4	EA	\$373.00	\$373.00	SEARII, (ILOD) - INTELLIGENT LAMP OUT DETECTOR, SAFETRAN P/N A80271, 1 / 20 AMP SSCC, 2 / 40 AMP SSCC				
1	670-281280-4	EA	\$7,006.00	\$7,006.00	SHELTER BARE 6X6, ALUMN, FARADAY, W/CABLE CHUTES BEHIND TERMINAL BOARD, W/GEN. CONN. W/ADJUSTABLE PIERS, SAFETRAN P/N 058400-66-78A				
2	670-586967-4	EA	\$37.68	\$75.36	SHUNT COVER W/LAG SCREWS, 19"X19", SERRMI #40271, ORDER 1 PER SHUNT				
2	670-776912-4	EA	\$572.18	\$1,144.36	SHUNT, MULTI-FREQ. #62780-8621 SAFETRAN NARROW BAND-LOW LOADING				
2	670-397239-4	EA	\$40.23	\$80.46	SIGN CROSSING MALFUNCTION ASSEMBLY FOR 12" MAST, SAFETRAN #17216				
2	670-806648-4	EA	\$56.42	\$112.84	SIGN, X-BUCK, LESS HARDWARE, SAFETRAN 035200-X CR 02-490546				
2	670-330382-4	RL	\$15.68	\$31.36	TAPE, THOR 3" DURATEC, ORANGE 1000' LENGTHS. "WARNING STOP DIGGING"				
23	670-478560-4	EA	\$19.47	\$447.81	TERMINAL BLOCK, ERICO 4 POST P/N B2700A2C1WH W/HARDWARE LESS LIGHTNING ARRESTOR				
2	165-917984-4	EA	\$4.84	\$9.68	TERMINAL, TEST, TYPE B GRS A62-515 OR HARMON @32118-001 OR				
2	610-065626-4	EA	\$17.55	\$35.10	ULTRA-TECH 15206-01 CONNECTIVITY BLOCK FOR GRS B1 RELAY				
7	670-007238-4	EA	\$129.46	\$906.22	UNIT, THE INSTALLATION AND WIRING OF A DEVICE WHICH REQUIRE A MINIMUM OF FOUR WIRE CONNECT.				
1	670-255408-4	EA	\$27,694.19	\$27,694.19	WIRED RACK, 6X6 FARADAY, 40AMP SINGLE TRK SSCCIIIA, GCP 3000D2, 2 CRAGG CHARGER, 2 RELAY RACKS, SAFTRAN P/N 40A 1TRK, USE WITH I/S 670-281280-4 W/CABLE CHUTES BEHIND THE FARADAY SHIELD				
1	450-986008-4	EA	\$24.84	\$24.84	WRENCH, TEST POST TYPE B DWG 55393-3, GR.1				

Total Material: \$107,062.12

APPROVED BY STATE	APPROVED BY RAILROAD	CAR NUMBER	SEAL NUMBER
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UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY



IN SERVICE _____ SIGNED _____ DATE _____

☐ S&E ENGINEERING COPY

☐ CONSTRUCTION OFFICE COPY
RETURN TO S&E ENG. AFTER COMPLETION

☐ FIELD COPY
RETURN TO CASE AFTER COMPLETION

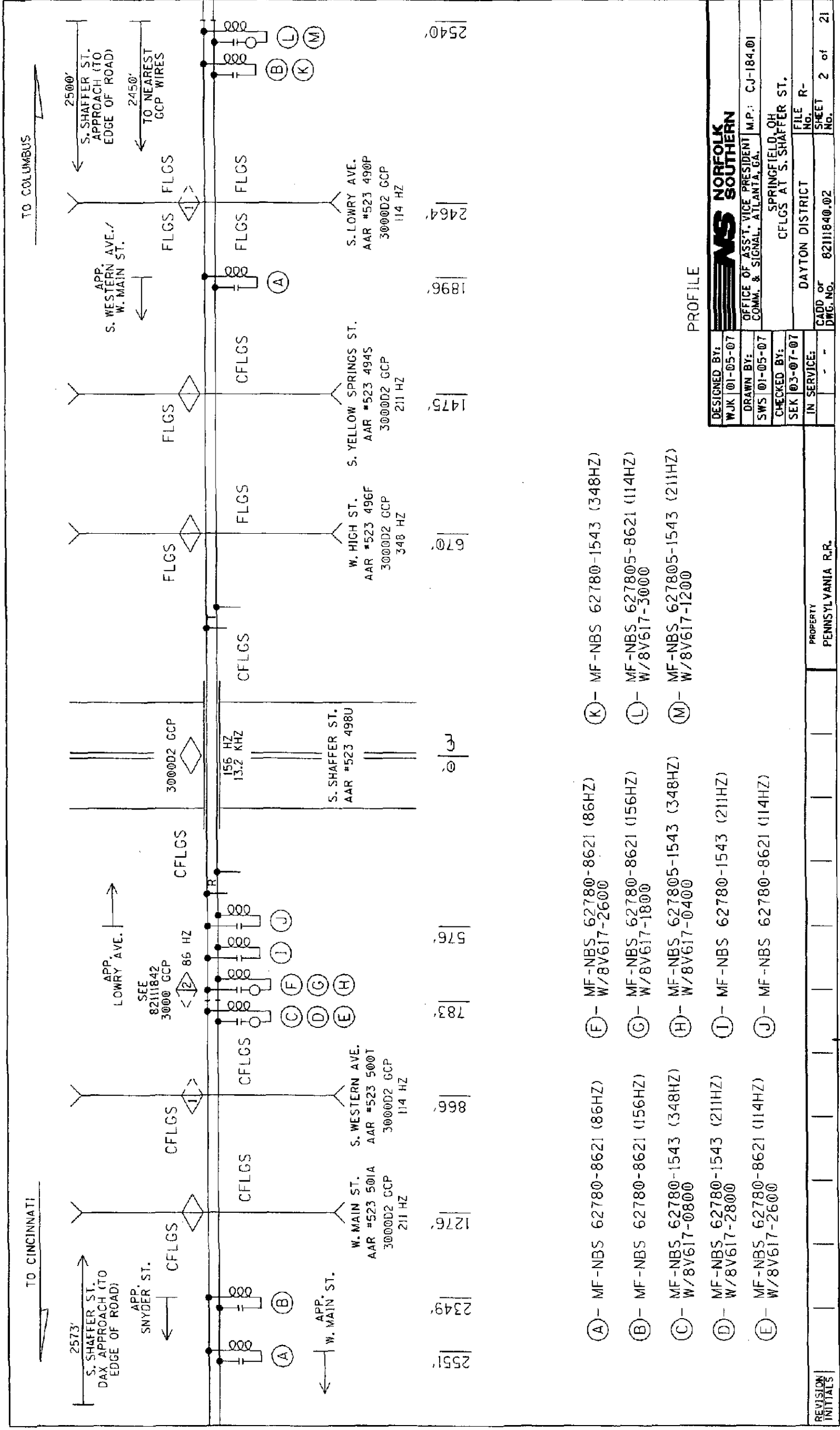
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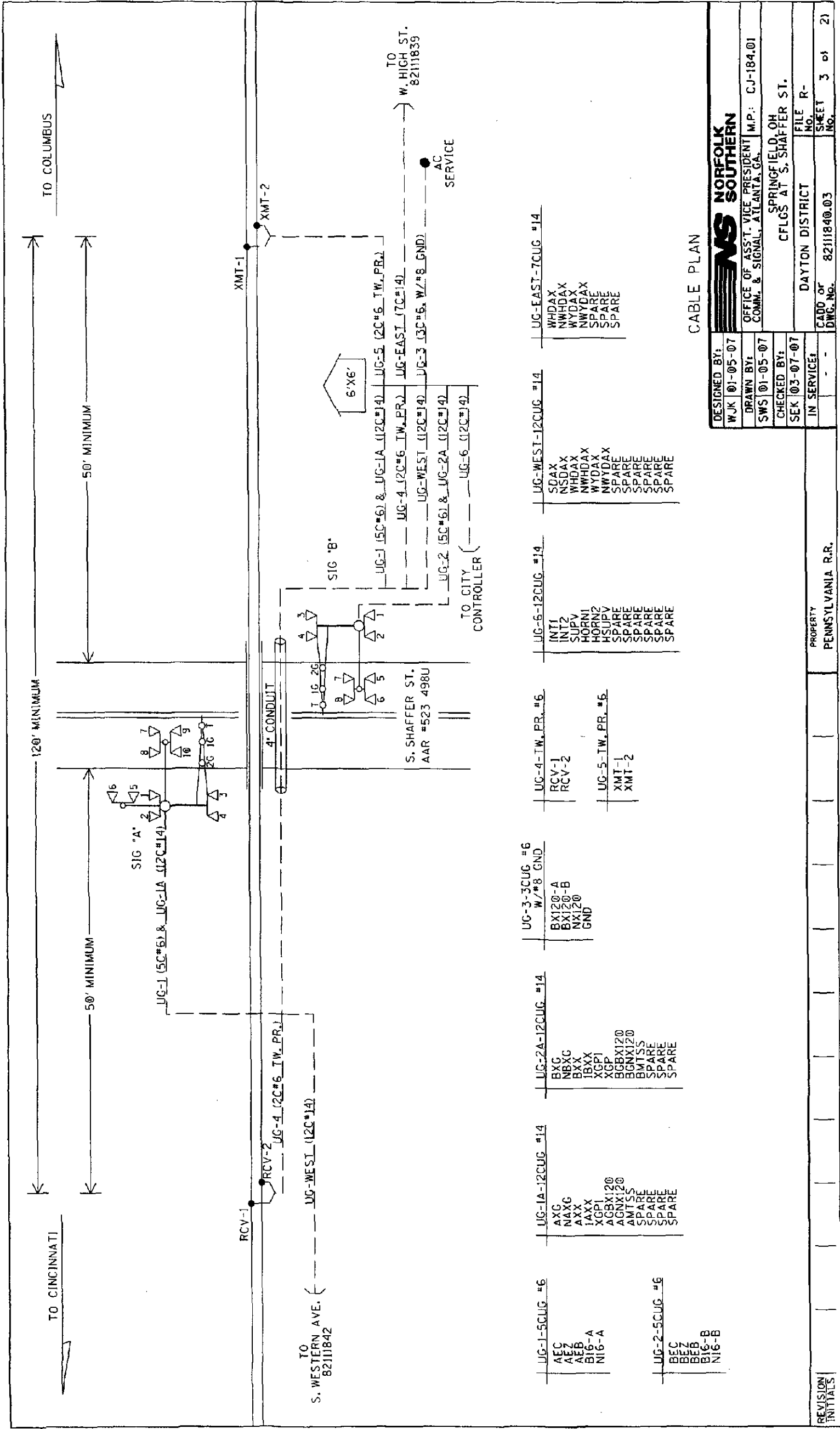
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PROJECT #10.0998
LAYOUT
FILE 061-10.1044
NO.

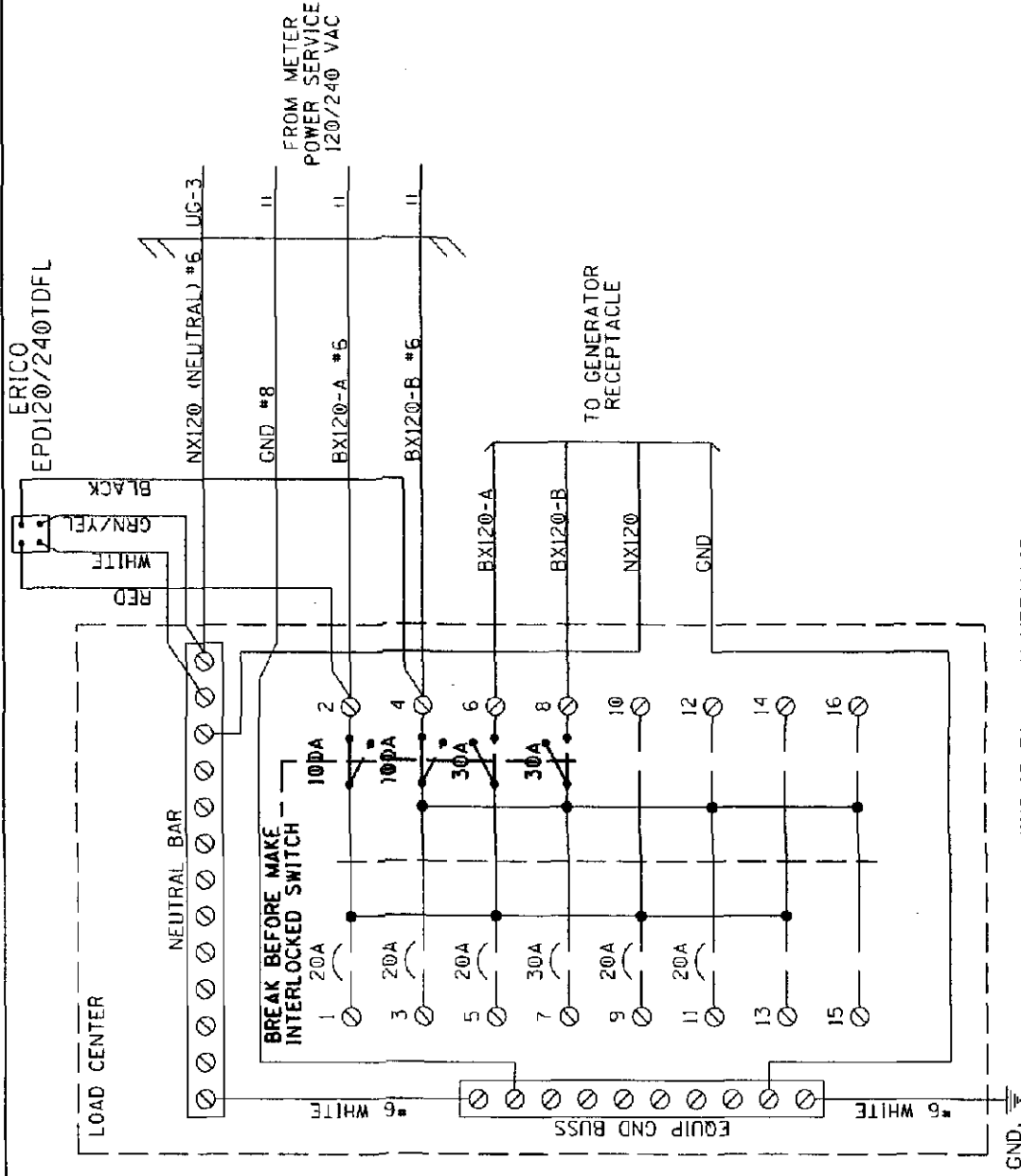
**NORFOLK
SOUTHERN**

DRAWN BY:	SWS	01-05-07	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: CJ-184.01
CHECKED BY:	SEK	03-07-07	SPRINGFIELD, OH CFLOS AT S. SHAFER ST.	
IN SERVICE:	-	-	DAYTON DISTRICT	FILE R-
CADD OR DWG. No.	-	-	82111840.01	SHEET 1 of 21

PROPERTY
PENNSYLVANIA R.R.REVISION
INITIALS





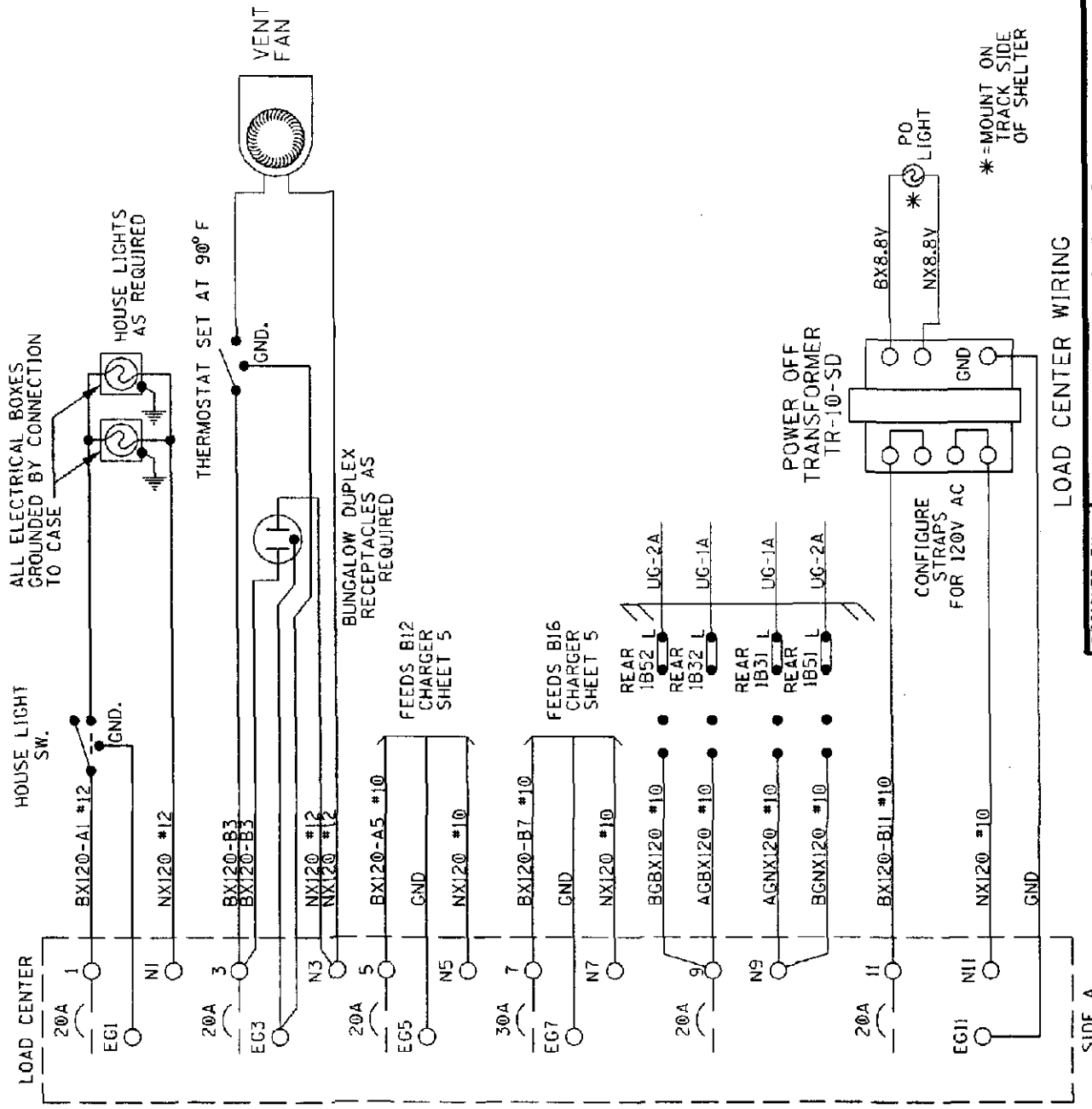


NOTE: ALL AC WIRING IS TO BE IN METALLIC CONDUIT WITH NO EXPOSED TERMINALS. ALL AC 120V AND 240V EQUIPMENT IS TO BE PROPERLY GROUNDED.

SQUARE "D" PART NUMBERS:

LOAD CENTER — Q0116L125G
 10A 1P CIR BKR — Q0110
 20A 1P CIR BKR — Q0120
 30A 1P CIR BKR — Q0130
 30A 2P CIR BKR — Q0230
 60A 2P CIR BKR — Q0260
 100A 2P CIR BKR — Q02100
 MECH INTERLOCK — PK4DTIM4LA

GENERATOR RECEPTACLE:
 MALE CONNECTOR - NEMA L1430-F1



LOAD CENTER WIRING

DESIGNED BY:	WJK 01-05-07
DRAWN BY:	SWS 01-05-07
CHECKED BY:	SEK 03-07-07
IN SERVICE:	-
SAFETY OF	82111840.04
FILE NO.	DAYTON DISTRICT
FILE R-	CFLGS AT S. SHAFFER ST.
SHEET NO.	4 of 21

NORFOLK SOUTHERN

OFFICE OF ASST. VICE PRESIDENT
 COMM. & SIGNAL, ATLANTA, GA. M.P.: CJ-184.01

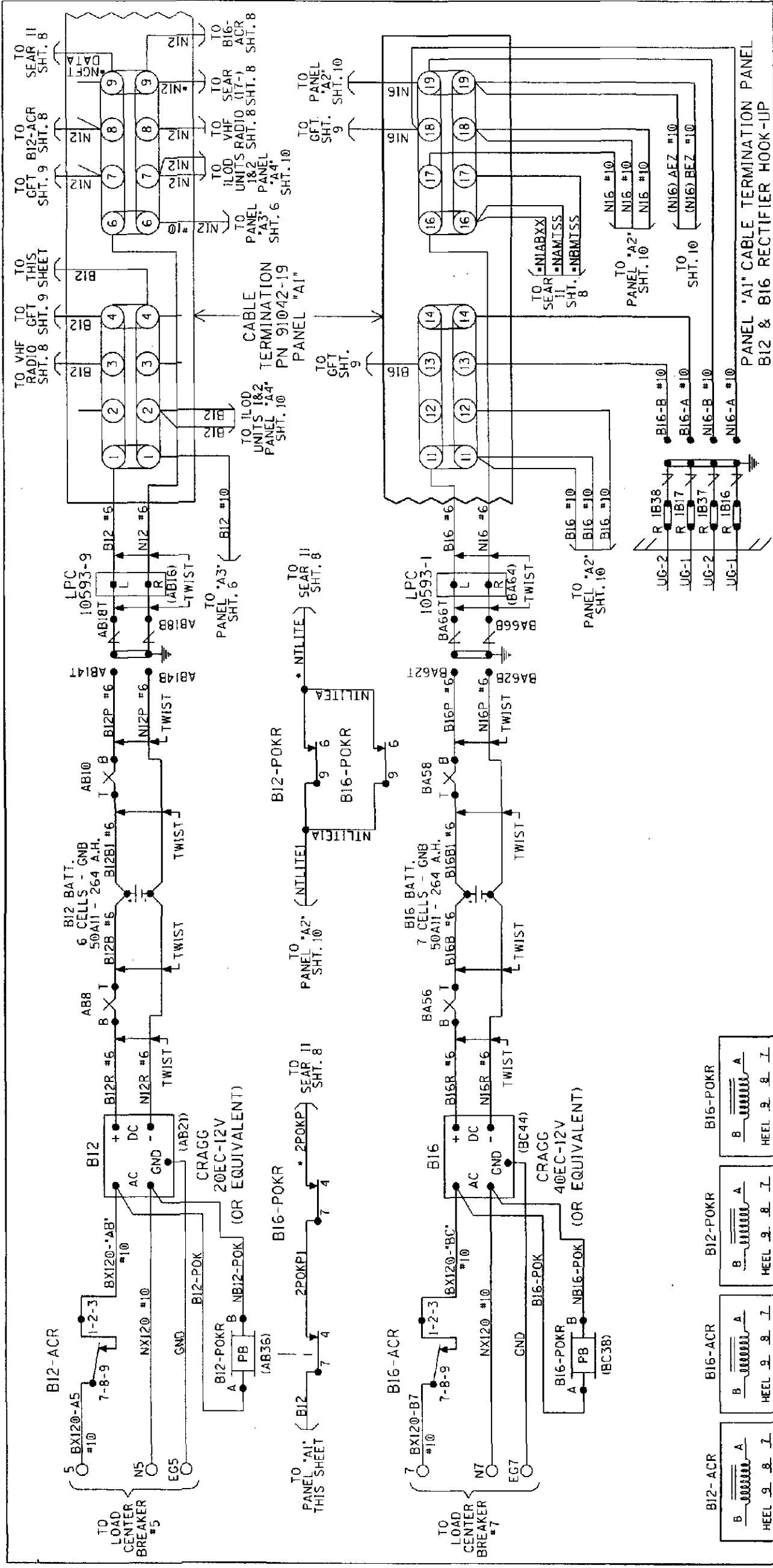
SPRINGFIELD, OH
 DAYTON DISTRICT

FILE NO.

SAFETY OF 82111840.04

PROPERTY
 PENNSYLVANIA R.R.

REVISION
 INITIALS



DESIGNED BY:
WJK 01-05-07

DRAWN BY:
SWS 01-05-07

CHECKED BY:
SEK 03-07-07

IN SERVICE:
-

NORFOLK SOUTHERN

OFFICE OF ASST. VICE PRESIDENT
COMM. & SIGNAL, ATLANTA, GA.

CFLGS AT S. SHAFFER ST.
SPRINGFIELD, OH

DAYTON DISTRICT

CADD or
DWG. No.

8211840.05

SHEET
No.

5 of 21

NOTES:
ALL WIRING TO BE #16AWG
UNLESS NOTED OTHERWISE.
* = CABLE PROVIDED WITH SEAR II

REVISION
INITIALS

PROPERTY
PENNSYLVANIA R.R.

B12-ACR

B16-ACR

B12-PKR

B16-PKR

B
HEEL 9 8 7
FRONT 6 5 4
BACK 3 2 1

POTTER BRUMFIELD
RELAY
(REAR VIEW)
KUMP-14018-12

B
HEEL 9 8 7
FRONT 6 5 4
BACK 3 2 1

POTTER BRUMFIELD
RELAY
(REAR VIEW)
KUMP-14018-12

B
HEEL 9 8 7
FRONT 6 5 4
BACK 3 2 1

POTTER BRUMFIELD
RELAY
(REAR VIEW)
KUMP-14018-12

B
HEEL 9 8 7
FRONT 6 5 4
BACK 3 2 1

POTTER BRUMFIELD
RELAY
(REAR VIEW)
KUMP-14018-12

EXPANDED PROGRAMMING

3000D2 PROGRAMMING CHART (LEVEL: J)	
NUMBER OF TRACK TRANSCEIVERS	1
T1: FREQUENCY	15Hz
T2: FREQUENCY	---Hz
T1: UNIDIRECTIONAL/BIDIRECTIONAL	BI
T2: UNIDIRECTIONAL/BIDIRECTIONAL	---
T1: XMIT LEVEL (MAX/MED)	MAX
T2: XMIT LEVEL (MAX/MED)	---
T1: PREDICTOR/MOTION SENSOR	PRED
T2: PREDICTOR/MOTION SENSOR	---
T1: WARNING TIME	30 Sec
T2: WARNING TIME	-- Sec
T1: APPROACH DISTANCE	2450 Ft
T2: APPROACH DISTANCE	---- Ft
UAX1 PICKUP DELAY (UAX) (0 = OFF)	25 Sec
ENA/UAX2 DELAY (0 = ENA)	-- Sec
T1: ISLAND DISTANCE	180 Ft
T2: ISLAND DISTANCE	--- Ft
NUMBER OF DAX'S	0 EG
DAX A TRACK ASSIGNMENT (T1/T2)	---
DAX A DISTANCE (0 = PREEMPT)	Ft
DAX A WARNING TIME	Sec
DAX B TRACK ASSIGNMENT (T1/T2)	---
DAX B DISTANCE (0 = PREEMPT)	Ft
DAX B WARNING TIME	Sec
DAX C TRACK ASSIGNMENT (T1/T2)	---
DAX C DISTANCE (0 = PREEMPT)	Ft
DAX C WARNING TIME	Sec
DAX D TRACK ASSIGNMENT (T1/T2)	---
DAX D DISTANCE (0 = PREEMPT)	Ft
DAX D WARNING TIME	Sec
SLAVING (MASTER/SLAVE)	MASTER
PASSWORD ENABLED	NO
RECORDER INSTALLED	NO

3000D2 PROGRAMMING NOTES:

- 1) AVAILABLE WHEN "TRANSFER DELAY MS TO GCP" AND "PRIME PREDICTION OFFSET" IS ON
- 2) AVAILABLE WHEN "TRANSFER DELAY MS TO GCP" AND DAX DISTANCE IS GREATER THAN ZERO
- 3) AVAILABLE WHEN "ENHANCED DETECTION" IS ON
- 4) AVAILABLE WHEN "LOW EZ DETECTION" IS ON
- 5) AVAILABLE WHEN "POSITIVE START" IS ON

T1: SWITCH TO MS (ENTER EZ VALUE)	10 %
T2: SWITCH TO MS (ENTER EZ VALUE)	-- %
T1: TRANSFER DELAY MS TO GCP (0 = OFF)	0 Sec
T2: TRANSFER DELAY MS TO GCP (0 = OFF)	-- Sec
T1: TRANSFER MS TO GCP PRIME (ON/OFF)	---
T2: TRANSFER MS TO GCP PRIME (ON/OFF)	---
T1: TRANSFER MS TO GCP DAX A (ON/OFF)	---
T2: TRANSFER MS TO GCP DAX A (ON/OFF)	---
T1: TRANSFER MS TO GCP DAX B (ON/OFF)	---
T2: TRANSFER MS TO GCP DAX B (ON/OFF)	---
T1: TRANSFER MS TO GCP DAX C (ON/OFF)	---
T2: TRANSFER MS TO GCP DAX C (ON/OFF)	---
T1: TRANSFER MS TO GCP DAX D (ON/OFF)	---
T2: TRANSFER MS TO GCP DAX D (ON/OFF)	---
T1: PRIME PREDICTION OFFSET (0 = OFF)	0 Ft
T2: PRIME PREDICTION OFFSET (0 = OFF)	-- Ft
PICKUP DELAY PRIME	15 Sec
PICKUP DELAY DAX A	-- Sec
PICKUP DELAY DAX B	-- Sec
PICKUP DELAY DAX C	-- Sec
PICKUP DELAY DAX D	-- Sec
T1: ENHANCED DETECTION (ON/OFF)	OFF
T2: ENHANCED DETECTION (ON/OFF)	---
BACK-TO-BACK T1 AND T2 (NO/YES)	---
T1: STATION STOP TIMER	-- Sec
T2: STATION STOP TIMER	-- Sec
T1: NUMBER OF TRACK WIRES (4/6)	4
T2: NUMBER OF TRACK WIRES (4/6)	-
T1: LOW EX ADJUSTMENT	0
T2: LOW EX ADJUSTMENT	---
T1: LOW EZ DETECTION	OFF
T2: LOW EZ DETECTION	---
T1: LOW EZ DETECTION TIMER (ON/OFF)	-- Min
T2: LOW EZ DETECTION TIMER (ON/OFF)	-- Min
T1: POSITIVE START (EZ LEVEL) (0 = OFF)	0
T2: POSITIVE START (EZ LEVEL) (0 = OFF)	---
T1: POSITIVE START TIMEOUT (0 = NONE)	-- Min
T2: POSITIVE START TIMEOUT (0 = NONE)	-- Min
SET AT OPERATION (NORMAL/DIAGNOSTIC)	NORMAL
DIAGNOSTIC MESSAGES (ON/OFF)	ON
DAX MESSAGES (ON/OFF)	ON
ADVANCE PREEMPT TIMER (0 = OFF)	0
T1: MOTION SENSING LEVEL (0 = NORMAL)	0 %
T2: MOTION SENSING LEVEL (0 = NORMAL)	-- %

- (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (3) (3) (3) (4) (4) (5) (5)

* = 1ST SLOT AT LEFT END OF BAY

MODEL 3000D2 GCP MODULE ASSEMBLIES															
UPPER BAY								LOWER BAY							
MODULES POSITION	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15
MODULE NUMBERS	80211-(1)* ISL	80211-(12) ISL	80012 T/R 1	80012 T/R 2	80013 RLY DRV	80214 PROCS	80255 REC-INTF	80016 (1) DAX	80016 (2) DAX	80020 +80017	80211-(1)* ISL	80211-(12) ISL	80012 T/R 1	80012 T/R 2	80013 RLY DRV
	80028 XFRTMR	80020 +80017	80016 (2) DAX	80016 (1) DAX	80214 PROCS	80255 REC-INTF	80013 RLY DRV	80012 T/R 2	80012 T/R 1	80013 RLY DRV	80214 PROCS	80255 REC-INTF	80016 (1) DAX	80016 (2) DAX	80020 +80017
	80028 XFRTMR	80020 +80017	80016 (2) DAX	80016 (1) DAX	80214 PROCS	80255 REC-INTF	80013 RLY DRV	80012 T/R 2	80012 T/R 1	80013 RLY DRV	80214 PROCS	80255 REC-INTF	80016 (1) DAX	80016 (2) DAX	80020 +80017
	80028 XFRTMR	80020 +80017	80016 (2) DAX	80016 (1) DAX	80214 PROCS	80255 REC-INTF	80013 RLY DRV	80012 T/R 2	80012 T/R 1	80013 RLY DRV	80214 PROCS	80255 REC-INTF	80016 (1) DAX	80016 (2) DAX	80020 +80017
MODULES USED	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

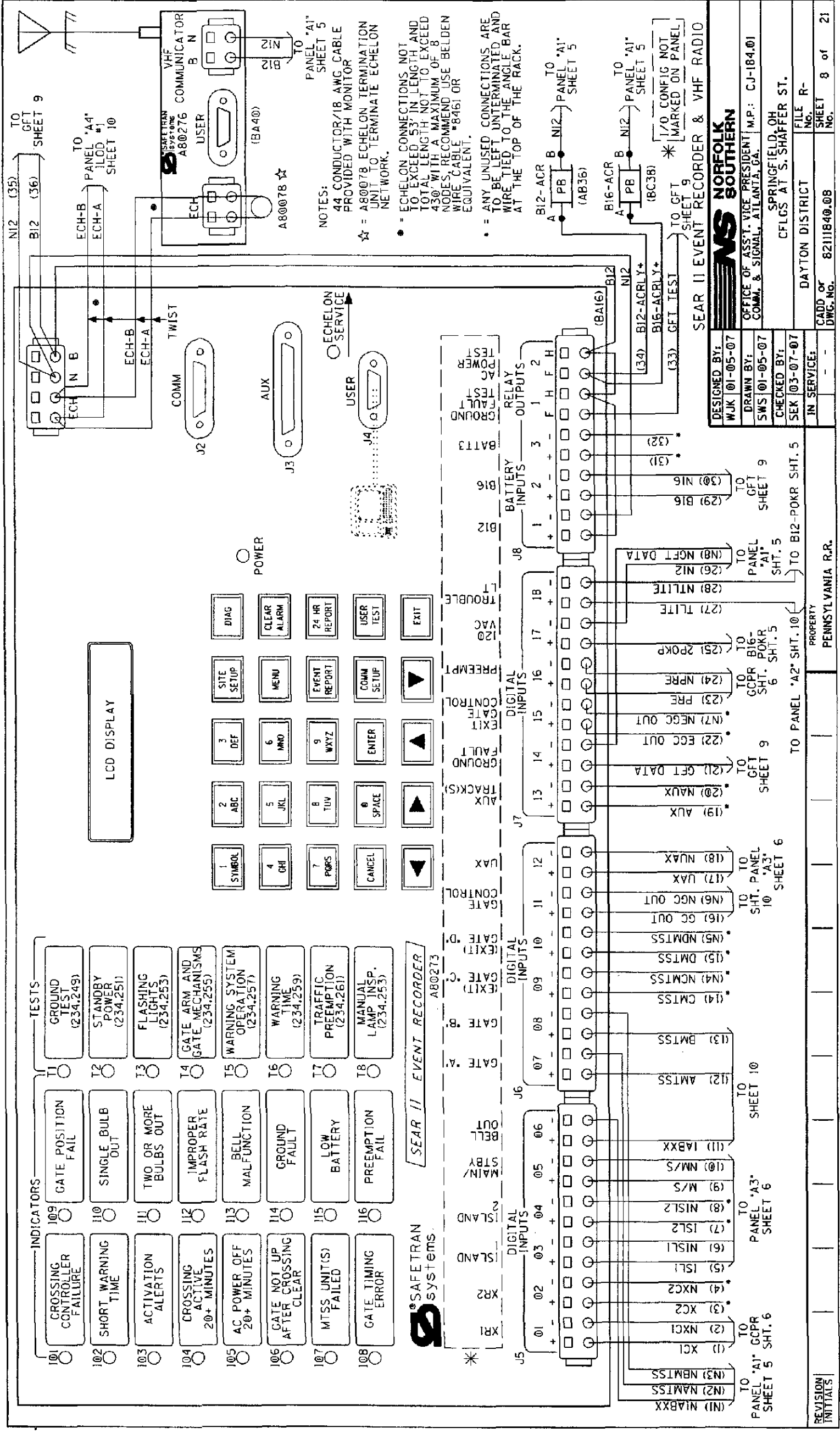
NOTES:

- 1 - SEE IPI INSTRUCTION AND INSTALLATION MANUAL FOR 80211 ISLAND CALIBRATION PROCEDURE.
 - 2 - TOGGLE SWITCH ON MOTHER BOARD:
UP = DUAL FREQ.
DOWN = SINGLE FREQ.
- ** = 80214 & 80255 (WITH JUMPER) CARDS AND E-LEVEL OR LATER SOFTWARE NEEDED FOR SEAR II / ECHELON CAPABILITIES.

PANEL "A3" 3000D2 GCP SET-UP

DESIGNED BY:	WJK 01-05-07	MS NORFOLK SOUTHERN	
DRAWN BY:	SWS 01-05-07	OFFICE OF ASST. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	
CHECKED BY:	SEK 03-07-07	SPRINGFIELD, OH	
IN SERVICE:	-	CFLGS AT S. SHAFFER ST.	
FILE NO.	DAYTON DISTRICT	FILE R-	
CADD OF DWG. No.	8211840-07	SHEET 7 of 21	

PROPERTY
PENNSYLVANIA R.R.



NOTES:

- 44 CONDUCTOR/18 AWC. CABLE PROVIDED WITH MONITOR
- ☆ = A80078 ECHOLON TERMINATION UNIT TO TERMINATE ECHOLON NETWORK.
- = ECHOLON CONNECTIONS NOT TO EXCEED 53' IN LENGTH AND TOTAL LENGTH NOT TO EXCEED 450' WITH A MAXIMUM OF 8 NODES. RECOMMEND USE BELDEN WIRE CABLE #8461 OR EQUIVALENT.
- = ANY UNUSED CONNECTIONS ARE TO BE LEFT UNTERMINATED AND WIRE TIED TO THE ANGLE BAR AT THE TOP OF THE RACK.

DESIGNED BY: WJK 01-05-07

DRAWN BY: SWS 01-05-07

CHECKED BY: SEK 03-07-07

IN SERVICE: -

PROPERTY: PENNSYLVANIA R.R.

REVISION INITIALS

FILE NO.: 8211840.08

SHEET 8 of 21

DAYTON DISTRICT

FILE R-

SPRINGFIELD, OH

CFLGS AT S. SHAFFER ST.

OFFICE OF ASS'T. VICE PRESIDENT

COMM. & SIGNAL, ATLANTA, GA.

M.P.: CJ-184.01

NORFOLK SOUTHERN

SEAR II EVENT RECORDER & VHF RADIO

SEAR II EVENT RECORDER

A80273

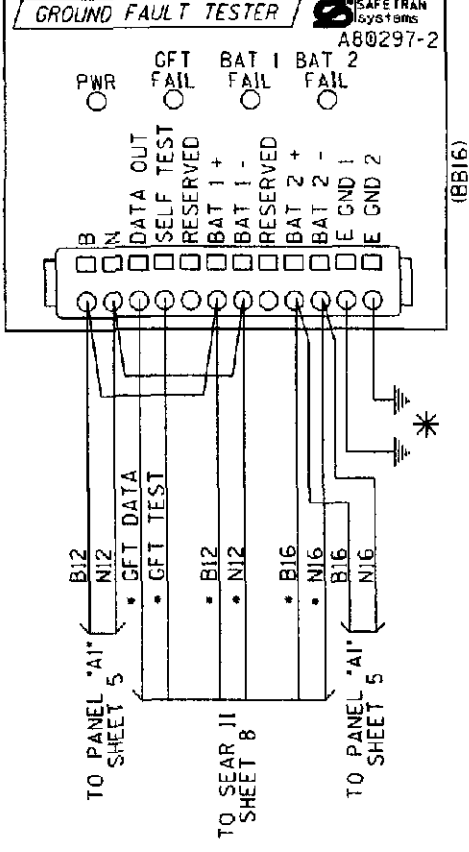
SAFETRAN systems

SITE SET UP PROCEDURE	
FUNCTION	LED DISPLAY
DATE	- -
TIME	:
DAYLIGHT SAVINGS TIME	YES
TIME ZONE	EST
SITE NAME	S. SHAFFER ST.
DOT NUMBER	523 498U
MILEPOST	CJ-184.01
TESTER TYPE	CROSSING
DATE FORMAT	MM-DD-YYYY
TEMP FORMAT	FAHRENHEIT
SITE TYPE	NO COMMUNICATION
SITE ATCS	7.RRR.LLL.CCG.03.01
OFFICE ATCS ADDRESS	2.550.01.9100
POLL ID	1
OFFICE F8/F9	YES
OFFICE COMM DEVICE	SPREAD SPECTRUM RADIO
DIAL MODEM PORT	AUX/COMM
PHONE NUMBER	(OFFICE NUMBER)
INIT STRING	(LEAVE BLANK)
BACKUP SITE ADDRESS 1	
BACKUP SITE ADDRESS 2	
FIELD COMM	
USER PORT	BAUD 57600, N, 8, 1, NONE
AUX PORT	BAUD 9600, N, 8, 1, NONE
COMM PORT	BAUD 9600, N, 8, 1, NONE

VERIFY NUMBER OF BULBS: SENSOR #1	
CURR 1: LAMP SET UP	7 BULBS
CURR 2: LAMP SET UP	7 BULBS

VERIFY NUMBER OF BULBS: SENSOR #2	
CURR 1: LAMP SET UP	6 BULBS
CURR 2: LAMP SET UP	6 BULBS

CONTROL SYSTEM CONFIGURATION MENU QUESTIONS		
THE QUESTION	SELECT FROM MENU OPTION	
RESET NAMES AND MODULES?	YES	
NUMBER OF TRACKS?	1	
NUMBER OF XR INPUTS?	1	
CONSTANT WARNING DEVICE	GCP	
CROSSING CONTROLLER?	SSCC III (A, PLUS)	
MAIN / STANDBY	YES	
AUXILIARY TRACKS?	0	
AUX TRACK	(SET IF AUX TRACKS = YES)	
GATES?	2	
EXIT GATES?	0	
UAX?	1	
BATTERY BANKS?	2	
PREEMPTION?	NORMAL	
ILOD MODULES?	2	
LAMP TYPE?	NORMAL	
AUTO INSPECTIONS?	YES	
BELL SENSOR?	** 1	
BELL SENSOR INPUT 7	** YES	
BELL SENSOR INPUT 8	** NO	
BELL SENSOR INPUT 9	** NO	
BELL SENSOR INPUT 10	** NO	
BELL ON?	GATES LOWERING	
GATE TIP SENSORS?	YES	
GROUND FAULT DETECTORS?	YES	
CHANNEL 1	161.475 MHZ	
CHANNEL 2	NONE	
FULL APPROACH MOVE ALARMS	ACTIVATE	
SSCC ATCS ADDRESS	7.RRR.LLL.CCG.07.01	



VERIFY THE BATTERY SUPPLY VOLTAGES	
B12 BATTERY VOLTAGE AT INPUT DC1	VOLT 1: -
B16 BATTERY VOLTAGE AT INPUT DC2	VOLT 2: -

NOTES:

- ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE
- * = CABLE PROVIDED WITH SEAR II
- ** = OPTIONS: IF BELL SENSOR = 0, THEN BELL FIELDS ARE NOT USED.
- *** = IF SITE TYPE = NO COMMUNICATION, THEN THESE OPTIONS ARE NOT DISPLAYED
- **** = THESE SETTINGS SHOULD BE LEFT AT THE DEFAULT SETTING.
- * = CONNECT "E GND 1" AND "E GND 2" TO INDEPENDENT GROUND POINTS ON SIDE A AND SIDE B.

SEAR II SET UP CHART
& GROUND FAULT TESTER

DESIGNED BY:	WJK 01-05-07	NORFOLK SOUTHERN OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: CJ-184.01
DRAWN BY:	SWS 01-05-07	
CHECKED BY:	SEK 03-07-07	
IN SERVICE:	- -	
DAYTON DISTRICT		FILE R-
CADD OF DWG. NO. 82111840.09		SHEET 9 of 21

PROGRAM	
FLASHER RATE	40
1 GC DELAY	4 SEC.
2 GC DELAY	4 SEC.
BELL-ON GATE RISING	OFF
MIN ACTIVATION TIME	0 SEC.
ENABLE INPUTS	1 THRU I
ENABLE OUTPUTS	A AND B
TIME	
DATE	
DAYLIGHT SAVINGS	ON
PASSWORD	DISABLED
SET TO DEFAULT	SKIP

SETUP LAMP VOLTAGE
SETUP OUTPUT 1L1 XX.X VOLTS
SETUP OUTPUT 1L2 XX.X VOLTS
SETUP OUTPUT 2L1 XX.X VOLTS
SETUP OUTPUT 2L2 XX.X VOLTS

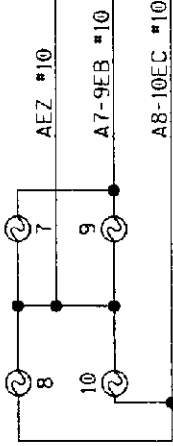
CONFIGURE	
LOS TIMERS	1: 0 SEC.
	2: 0 SEC.
	3: 0 SEC.
	4: 0 SEC.
	5: 0 SEC.
	6: 0 SEC.
	7: 0 SEC.
ATCS ADDRESS	7RRLLGGC07
LOW BATTERY	DISABLED
AUX I/O	NV OUTPUT

TEST CONFIGURE	
LAMP TEST CANCEL TIMER	5 MIN.
LAMP TEST DELAY TIMER	30 SEC.
LAMP TEST ON TIMER	15 SEC.

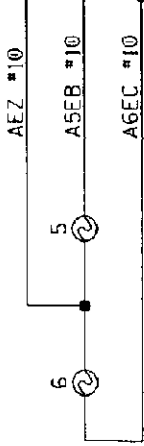
PANEL "A2" CROSSING CONTROLLER
SET-UP CHART

DESIGNED BY:	WJK 01-05-07	 NORFOLK SOUTHERN				
DRAWN BY:	SWS 01-05-07		OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: CJ-184.01		
CHECKED BY:	SEK 03-07-07		SPRINGFIELD, OH CFLGS AT S. SHAFFER ST.			
IN SERVICE:	- -		DAYTON DISTRICT	FILE R- No.		
REVISION INITIALS		PROPERTY PENNSYLVANIA R.R.	CADD or DWG. No.	82111840.11	SHEET No.	11 of 21

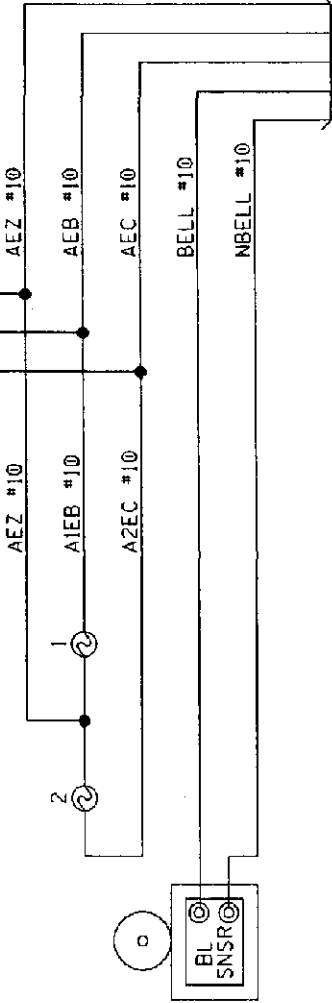
"A" TIP FLASHING LIGHTS



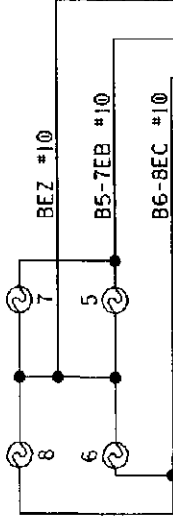
"A" CANTILEVER MAST FLASHING SIDELIGHTS



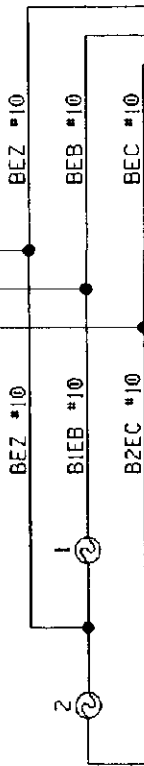
"A" CANTILEVER MAST FLASHING LIGHTS



"B" TIP FLASHING LIGHTS



"B" CANTILEVER MAST FLASHING LIGHTS



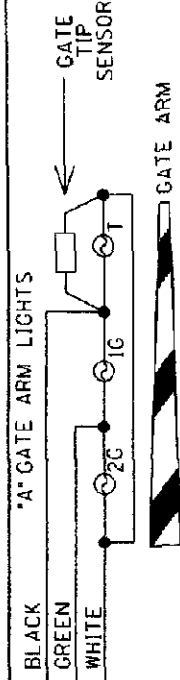
CANTILEVER FLASHER LIGHTS

DESIGNED BY:	WJK 01-05-07	NS NORFOLK SOUTHERN
DRAWN BY:	SWS 01-05-07	OFFICE OF ASST. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.
CHECKED BY:	SEK 03-07-07	SPRINGFIELD, OH CFLGS AT S. SHAFFER ST.
IN SERVICE:	- -	DAYTON DISTRICT FILE NO. R- SHEET 12 of 21

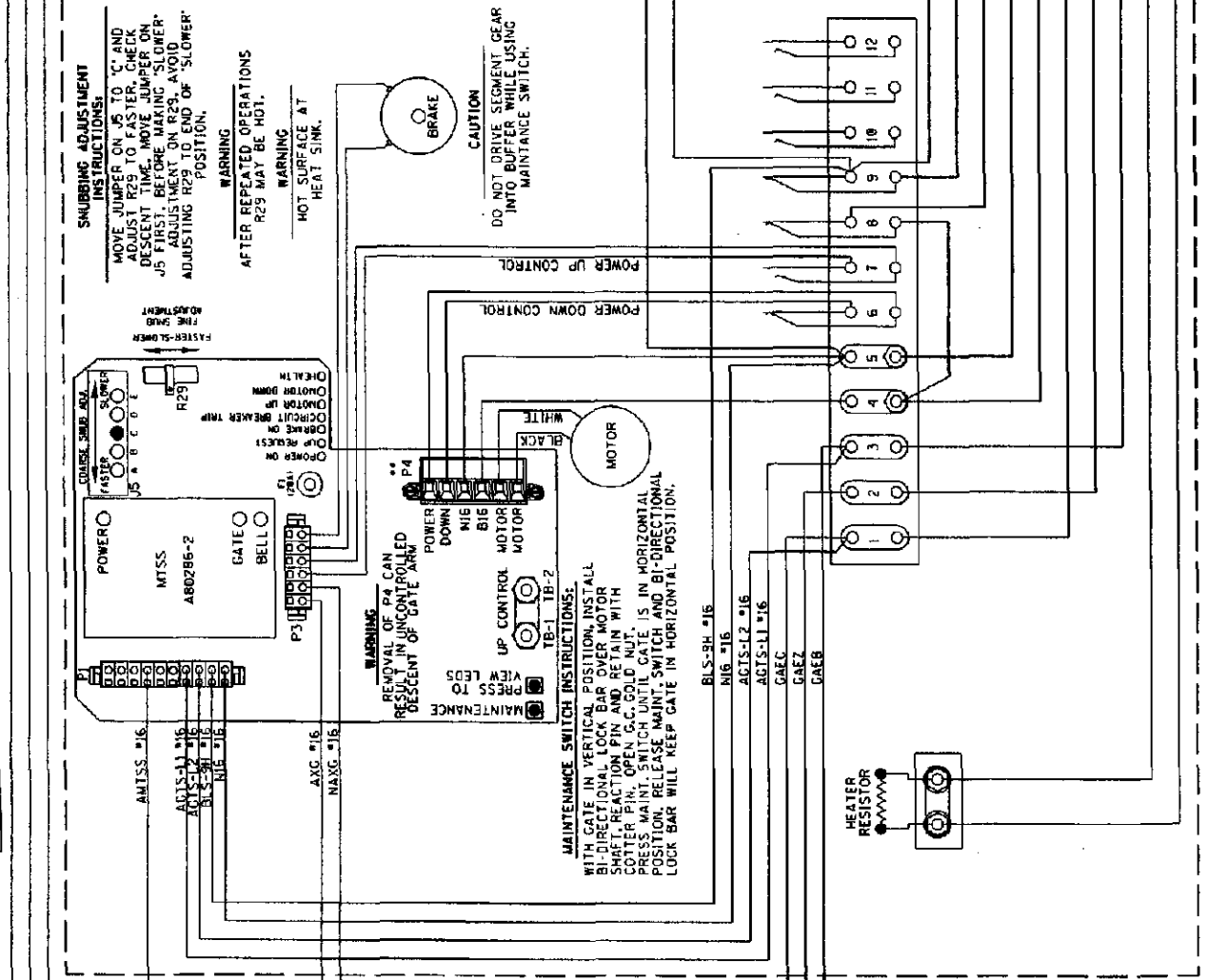
PROPERTY
PENNSYLVANIA R.R.

REVISION
INITIALS

BLACK
GREEN
WHITE



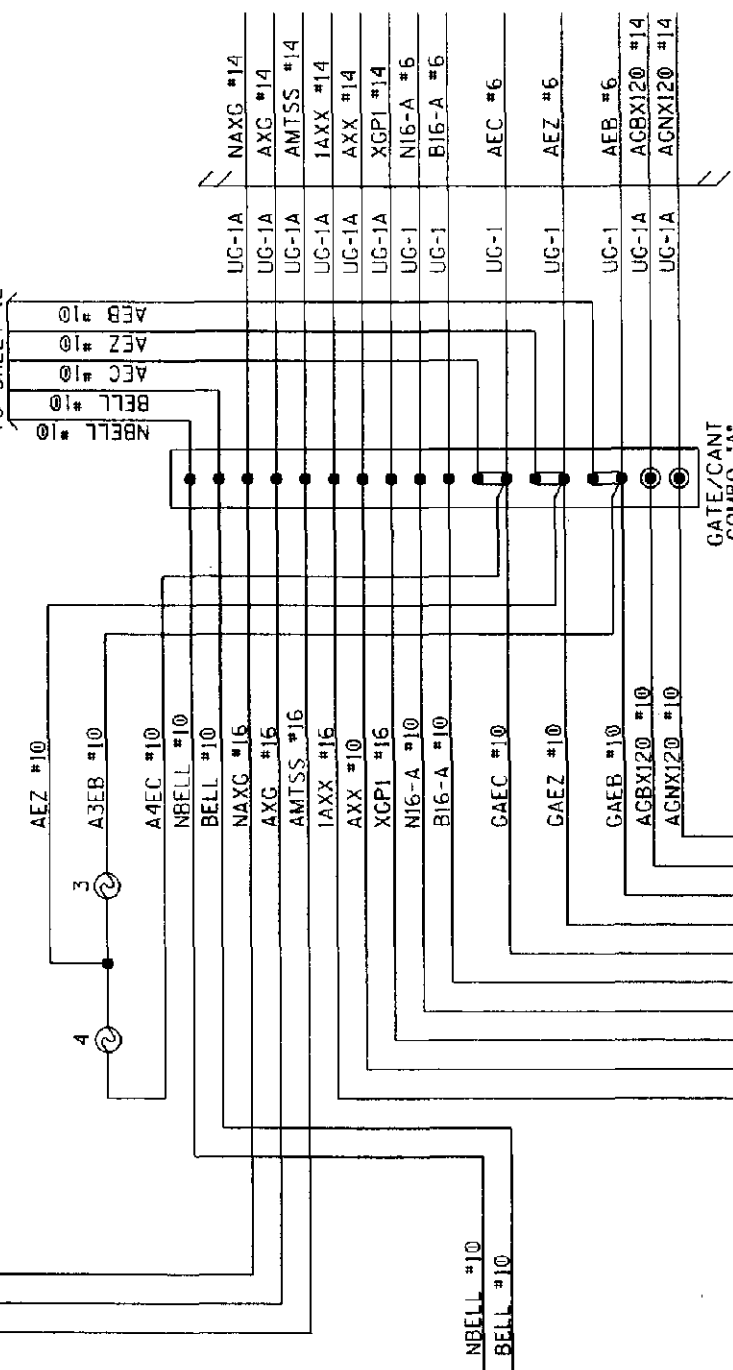
"A" GATE MECHANISM



SAFETRAN MODEL "S60" GATE

CONTACT SPACE	CONTACT CLOSED AT	FUNCTION OF CONTACT
6	70° - 90°	POWER DOWN CONTROL
7	0° - 89°	POWER UP CONTROL
8	83° - 90°	FLASHING LGT. CONTROL
9	5° - 90°	BELL CONTROL
10		SPARE
11		SPARE
12		SPARE

"A" GATE MAST FLASHING LIGHTS



GATE/CANT COMBO "A" JUNCTION BOX BASE

"A" FLASHER AND GATE LIGHTS WITH GATE TIP SENSOR & MODEL "S60" GATE MECHANISM WITH MINI TRACKSIDE SENSOR

DESIGNED BY:	WJK 01-05-07
DRAWN BY:	SWS 01-05-07
CHECKED BY:	SEK 03-07-07
IN SERVICE:	-

NORFOLK SOUTHERN
OFFICE OF ASS'T. VICE PRESIDENT
COMM. & SIGNAL, ATLANTA, GA.
M.P.: CJ-184.01
SPRINGFIELD, OH
CFLGS AT S. SHAFFER ST.
DAYTON DISTRICT
FILE NO. R-
CADD OR DWG. No. 8211840.13
SHEET 13 of 21

BLACK "B" GATE ARM LIGHTS

"B" GATE ARM LIGHTS

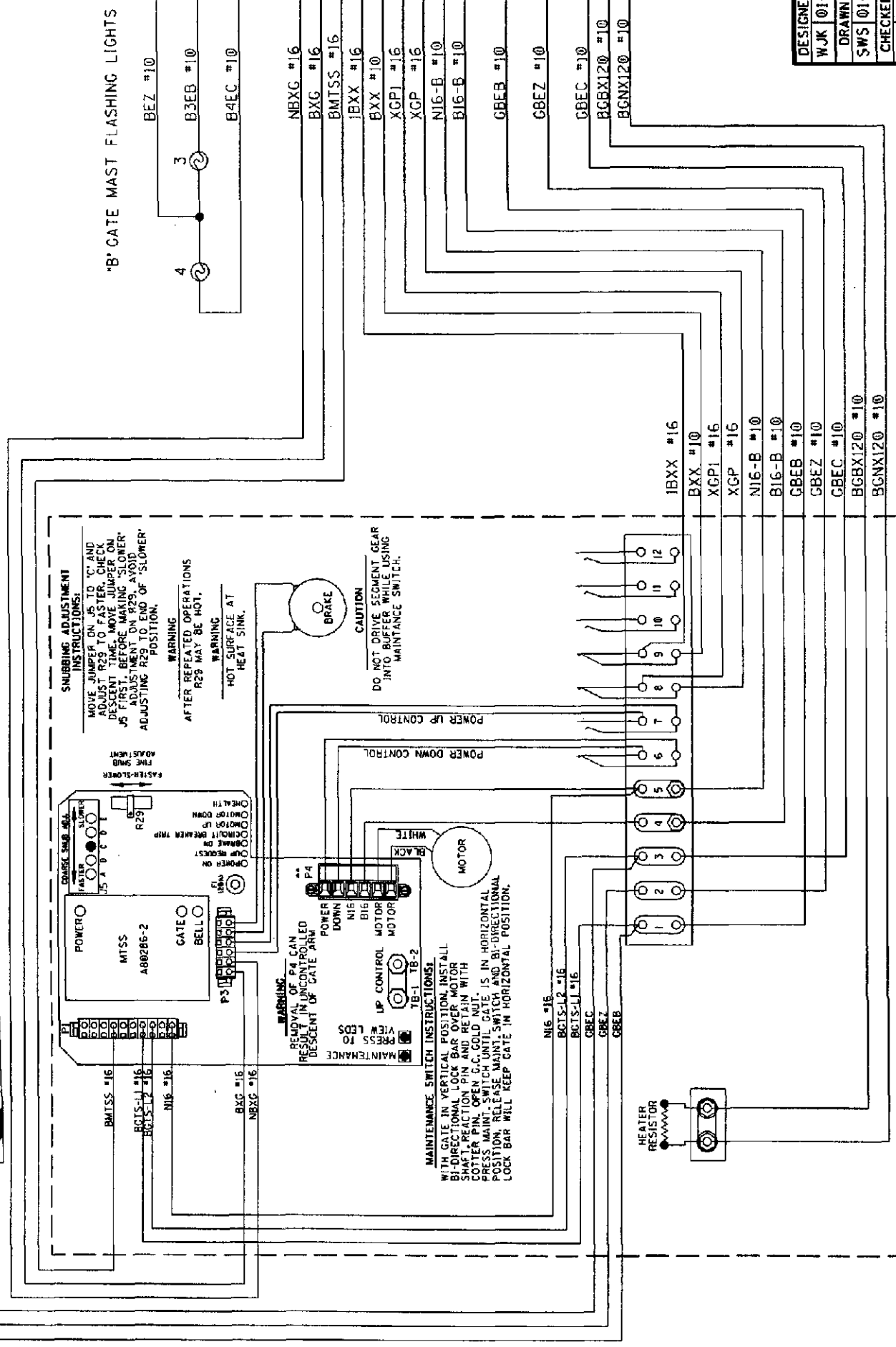
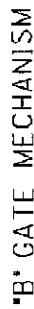
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SAFETRA

SAFETRAN MODEL "S60" GATE

CONTACT SPACE	CONTACT CLOSED AT	FUNCTION OF CONTACT
6	70°-90°	POWER DOWN CONTROL
7	0°-89°	POWER UP CONTROL
8	83°-90°	FLASHING LCT. CONTROL
9	5°-90°	BELL CONTROL
10		SPARE
11		SPARE
12		SPARE



"B" GATE MAST FLASHING LIGHTS

TO SHEET 12

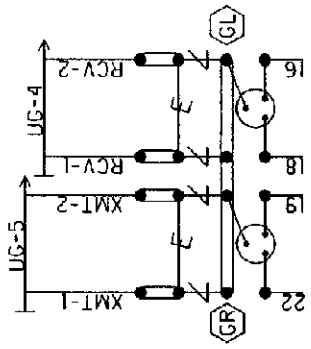
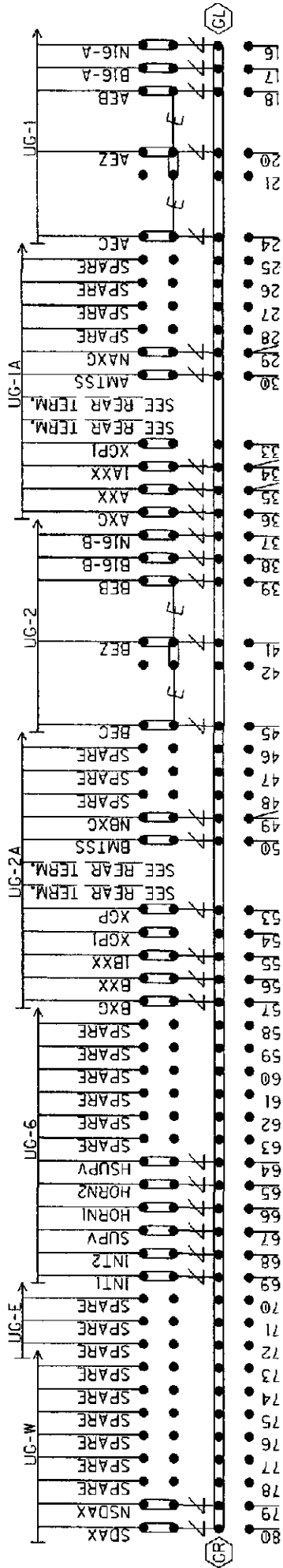
GATE/CANT
COMBO "B"
JUNCTION BOX

"B" FLASHER AND GATE LIGHTS WITH
GATE TIP SENSOR & MODEL "560"
GATE MECHANISM WITH MINI
TRACKSIDE SENSOR

DESIGNED BY:	MS NORFOLK SOUTHERN		
WJK 01-05-07			
DRAWN BY:	OFFICE OF ASST. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.		
SWS 01-05-07	M.P.: CJ-184.01		
CHECKED BY:	SPRINGFIELD, OH		
SEK 03-07-07	CFLGS AT S. SHAFFER ST.		
IN SERVICE:	DAYTON DISTRICT	FILE NO.	R-
	CADD OR DWG. No.	82111840.14	SHEET No. 14 of 21

[illegible]

(SEE NEXT SHEET FOR
OTHER WIRES IN CABLES)



NOTE: INSTALL TEST LINKS ON ALL TRACK
WIRES AND ON ALL LOW VOLTAGE
UNDERGROUND CABLE TERMINATIONS.

⚡ = Heavy Duty Equalizer
(022700-1X)
Clearview
⚡ = Lightning Arrestor
(022585-1X)
⚡ = LPC-10560-51

SEE FARADAY SHIELD DETAILS - 1A & 1B
FOR HOW THIS PORTION OF THE FARADAY
SHIELD IS PREDRILLED. ONLY INSTALL AND
USE THE TERMINALS NEEDED.

GR = TERMINALS GROUNDED TO SHIELD.
4 POST BLOCKS USE EITHER -
GR - SERMMI PART NO. 61278
GL - SERMMI PART NO. 61278-1.

BACKBOARD DETAIL - 1A & 1B

DESIGNED BY:	WJK 01-05-07
DRAWN BY:	SWS 01-05-07
CHECKED BY:	SEK 03-07-07
IN SERVICE:	- - -
FILE NO.	DAYTON DISTRICT
SHEET NO.	15 of 21
CADD or DWG. No.	82111840.15

**NORFOLK SOUTHERN**

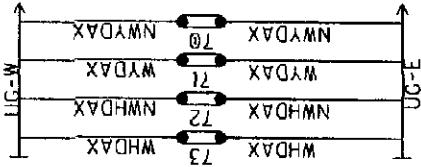
OFFICE OF ASS'T. VICE PRESIDENT
COMM. & SIGNAL, ATLANTA, GA.
M.P.: CJ-184,01

SPRINGFIELD, OH
CFLCS AT S. SHAFER ST.

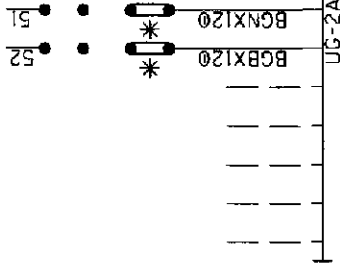
PROPERTY
PENNSYLVANIA R.R.

REVISION
INITIALS

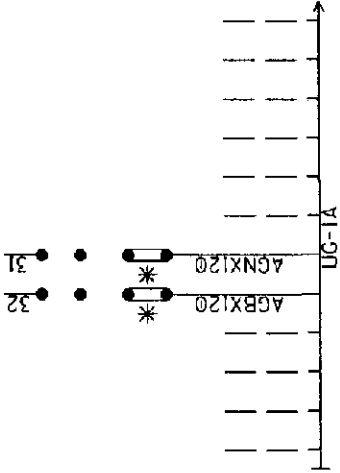
(SEE PREVIOUS SHEET FOR
OTHER WIRES IN CABLE)



(SEE PREVIOUS SHEET FOR
OTHER WIRES IN CABLE)



(SEE PREVIOUS SHEET FOR OTHER WIRES IN CABLE)



(SEE PREVIOUS SHEET FOR OTHER WIRES IN CABLE)

NOTE: ALL 120VAC AND ABOVE WILL BE WIRED
TO THE REAR OF FARADAY BACKBOARD.
INSULATED NUTS MUST BE USED ON ALL
TERMINALS.

* = CLOSED DURING WINTER MONTHS

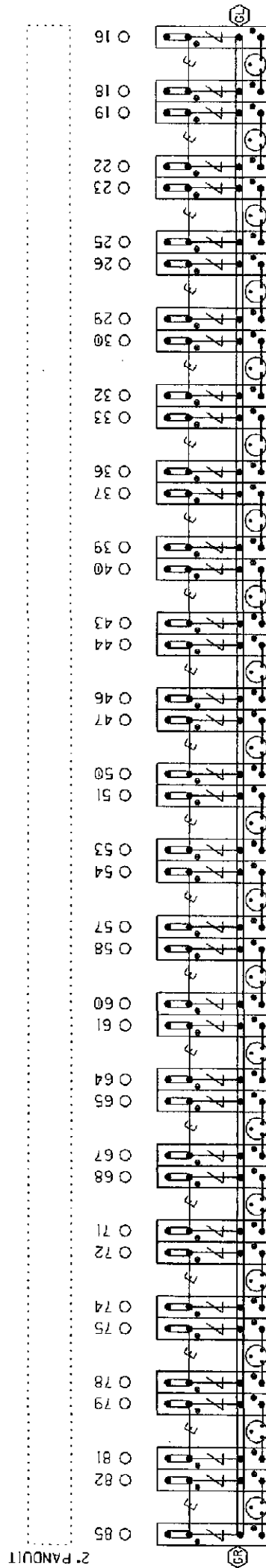
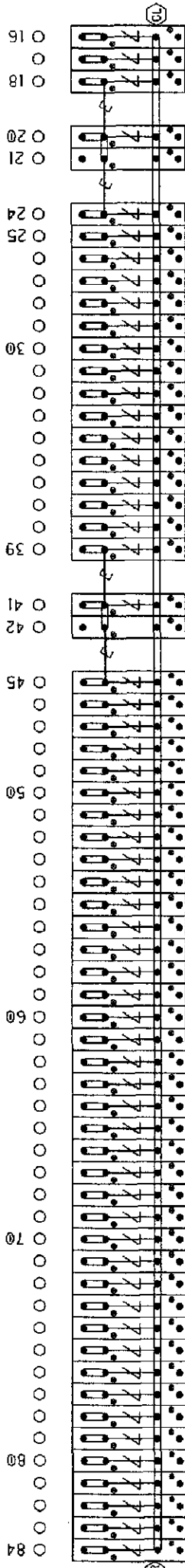
REAR OF FARADAY BACKBOARD
REAR BACKBOARD DETAIL - 1A & 1B

DESIGNED BY:	WJK 01-05-07	 NORFOLK SOUTHERN		
DRAWN BY:	SWS 01-05-07		OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: CJ-184.01
CHECKED BY:	SEK 03-07-07		SPRINGFIELD, OH CFLGS AT S. SHAFFER ST.	
IN SERVICE:	- -		DAYTON DISTRICT	FILE R- NO.
			CADD OF DWG. NO.	82111840.16 SHEET 16 of 21 NO.

PROPERTY
PENNSYLVANIA R.R.

NOTE: IF THE FARADAY SHIELD WOULD EVER NEED TO BE DRILLED IN THE FIELD, PROPER PRECAUTIONS MUST BE TAKEN TO INSURE METAL SHAVINGS DO NOT GET INTO EXISTING TERMINALS/WIRES.

AREA BELOW IS SCALED WITH AS=75



⌋ = Heavy Duty Equalizer
(@22700-IX)

⌋ = Lightning Arrestor
(@22585-IX)

⌋ = LPC-10560-51

THIS SHEET IS FOR REFERENCE ONLY.
TO REFLECT HOW THE FARADAY SHIELD
IS PREDRILLED, ONLY INSTALL AND USE
THE TERMINALS NEEDED.

INDICATES PLACEMENT
OF PANDUIT

TERMINAL BOARD 1
LEFT TWO ROWS

FARADAY SHIELD DETAIL - 1A & 1B

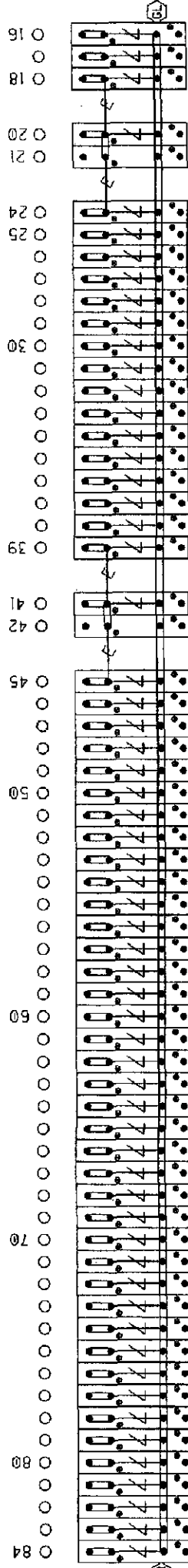
DESIGNED BY:	WJK 01-05-07	NORFOLK SOUTHERN
DRAWN BY:	SWS 01-05-07	
CHECKED BY:	SEK 03-07-07	
IN SERVICE:	-	
OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.		M.P.: CJ-184.01
SPRINGFIELD, OH		CFLGS AT S. SHAFFER ST.
DAYTON DISTRICT		FILE NO. R-
CADD or DWG. No. 8211840.17		SHEET 17 of 21

PROPERTY
PENNSYLVANIA R.R.

NOTE: IF THE FARADAY SHIELD WOULD EVER NEED TO BE DRILLED IN THE FIELD, PROPER PRECAUTIONS MUST BE TAKEN TO INSURE METAL SHAVINGS DO NOT GET INTO EXISTING TERMINALS/WIRES.

AREA BELOW IS SCALED WITH AS=75

TERMINAL BOARD 1
RIGHT HALF



Heavy Duty Equalizer
(022100-1X)

Clearview
Lightning Arrestor
(022585-1X)

LPC-10560-51

THIS SHEET IS FOR REFERENCE ONLY.
TO REFLECT HOW THE FARADAY SHIELD
IS PREDRILLED. ONLY INSTALL AND USE
THE TERMINALS NEEDED.

= INDICATES PLACEMENT
OF PANDUIT

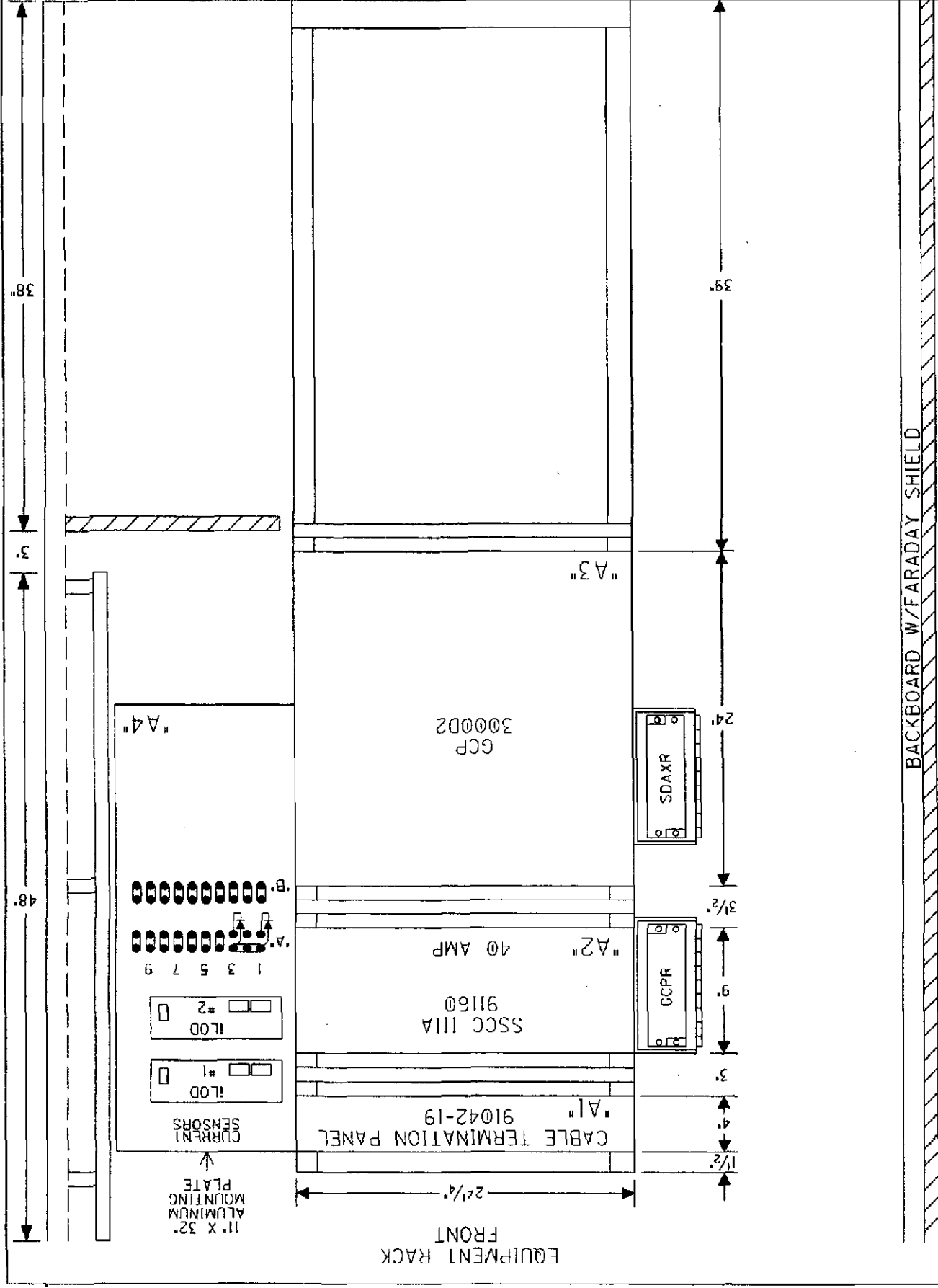
TERMINAL BOARD 1

RIGHT ROW

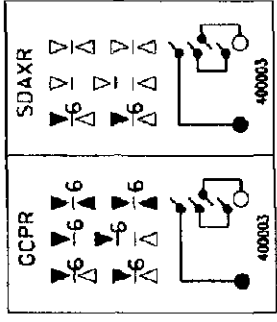
FARADAY SHIELD DETAIL - IC

DESIGNED BY:	WJK 01-05-07	NORFOLK SOUTHERN
DRAWN BY:	SWS 01-05-07	
CHECKED BY:	SEK 03-07-07	
IN SERVICE:	- -	
OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.		M.P.: CJ-184.01
CFLCS AT S. SHAFFER ST.		SPRINGFIELD, OH
DAYTON DISTRICT		FILE NO. R-
CADD OF DWG. NO.	8211840.18	SHEET 18 of 21

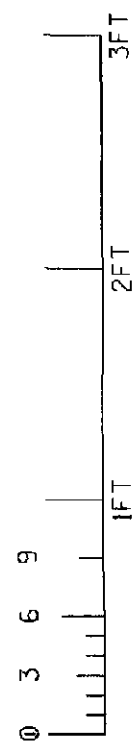
PROPERTY
PENNSYLVANIA R.R.



SAFETRAN, ALSTOM(GRS) RELAY
CROSS REFERENCE LIST
SAFETRAN ALSTOM(GRS)
400003 - A62-308

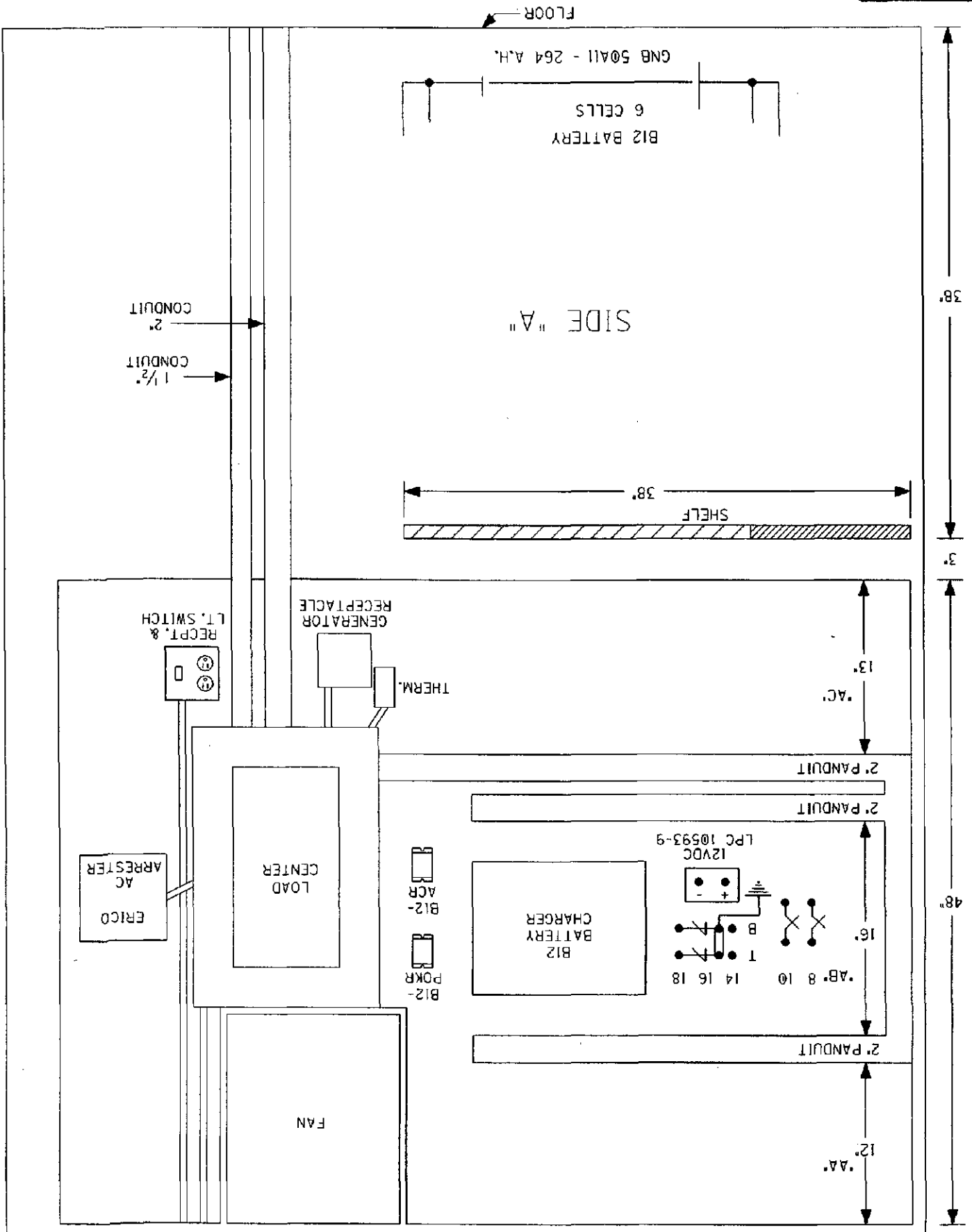


SIDE "C"



RACK PLACEMENT
6' X 6' HOUSE - SIDE "C"

DESIGNED BY: WJK 01-05-07		NORFOLK SOUTHERN	
DRAWN BY: SWS 01-05-07		OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: CJ-184.01	
CHECKED BY: SEK 03-07-07		SPRINGFIELD, OH CFLGS AT S. SHAFFER ST.	
IN SERVICE: -		DAYTON DISTRICT FILE R- No.	
-		CADD or DWG. No. 8211840.19	
-		SHEET No. 19 of 21	



6' X 6' HOUSE - SIDE "A"

DESIGNED BY:	WJK 01-05-07	NS NORFOLK SOUTHERN
DRAWN BY:	SWS 01-05-07	
CHECKED BY:	SEK 03-07-07	
IN SERVICE:	-	
OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.		M.P.: CJ-184.01
DAYTON DISTRICT		FILE NO. R-
CFLGS AT S. SHAFER ST.		SPRINGFIELD, OH
CADD or DWG. No. 8211840.20		SHEET 20 of 21

PROPERTY
PENNSYLVANIA R.R.

REVISION
INITIALS

