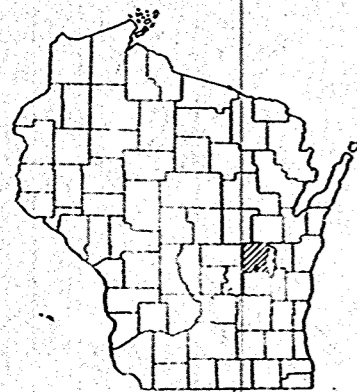


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INDEX OF SHEETS

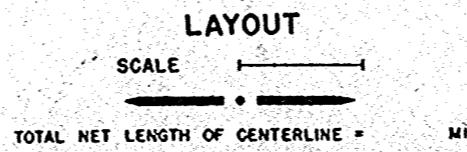
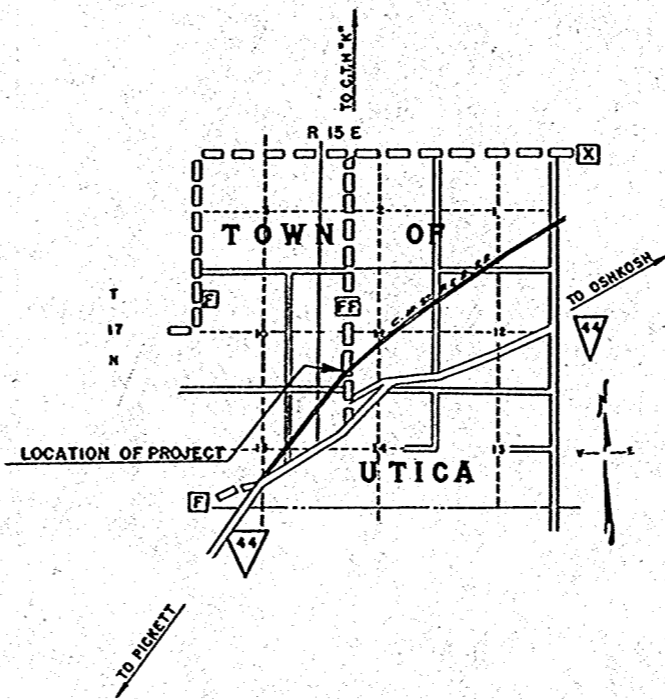
SHEET NO. 1	TITLE
SHEET NO. 2	TYPICAL CROSS SECTIONS
SHEET NO.	ESTIMATE OF QUANTITIES
SHEET NO.	MISCELLANEOUS QUANTITIES
SHEET NO.	RIGHT OF WAY PLAT
SHEET NO. 2	PLAN AND PROFILE STA. 16+00 TO STA. 24+00
SHEET NO.	STANDARD DETAILS
SHEET NO.	DRAINAGE STRUCTURES
SHEET NO.	CROSS SECTIONS



STATE OF WISCONSIN  
STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED  
**FISK-C.T.H. "K" ROAD**  
C.T.H. "FF"  
(RAILWAY CROSSING SIGNAL)  
WINNEBAGO COUNTY  
PROJECT SG 1259 (I)

SCALES { PLAN 1 IN. = 100 FT.  
PROFILE HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.  
CROSS SECTIONS HOR. 1 IN. = 5 FT. VERT. 1 IN. = 5 FT.



CONVENTIONAL SIGNS

STATE LINE	.....	CULVERTS IN PLACE	.....
COUNTY LINE	.....	CULVERTS REQUIRED	.....
TOWNSHIP OR RANGE LINE	.....	DROP INLET	.....
SECTION LINE	.....	POWER POLE	.....
NEW RIGHT OF WAY LINE	.....	TELEPHONE OR TELEGRAPH POLE	.....
PRESENT RIGHT OF WAY LINE	.....	RIGHT OF WAY MARKERS	.....
WIRE FENCE { WOVEN	.....	REFERENCE STAKE FOR HUBS ONLY	.....
{ BARBED	.....	MARSH	.....
LOT LINE	.....	HEDGE	.....
CORPORATE OR CITY LIMITS	.....	TREES	.....
PROPERTY LINE	.....		
TRAVELED WAY OR P.E.	.....	GROUND ELEVATION	.....
RAILROADS	.....	GRADE ELEVATION	.....
BASE OR SURVEY LINE	.....		

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
70.6	1259.0	STATE	FEDERAL	WIS. 5N	1	6

CIRCUIT PLANS APPROVED BY THE PUBLIC SERVICE COMMISSION OF WISCONSIN ON 6/28/55

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC R.R. CO.

RECOMMENDED FOR APPROVAL

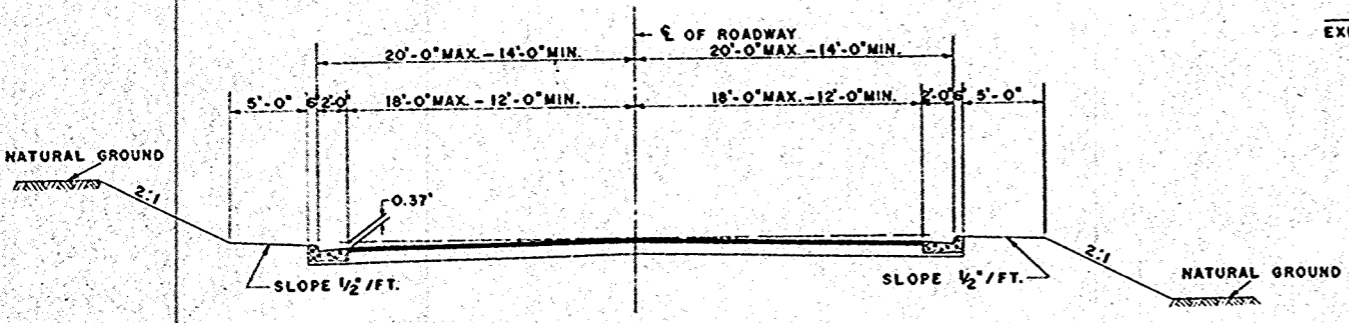
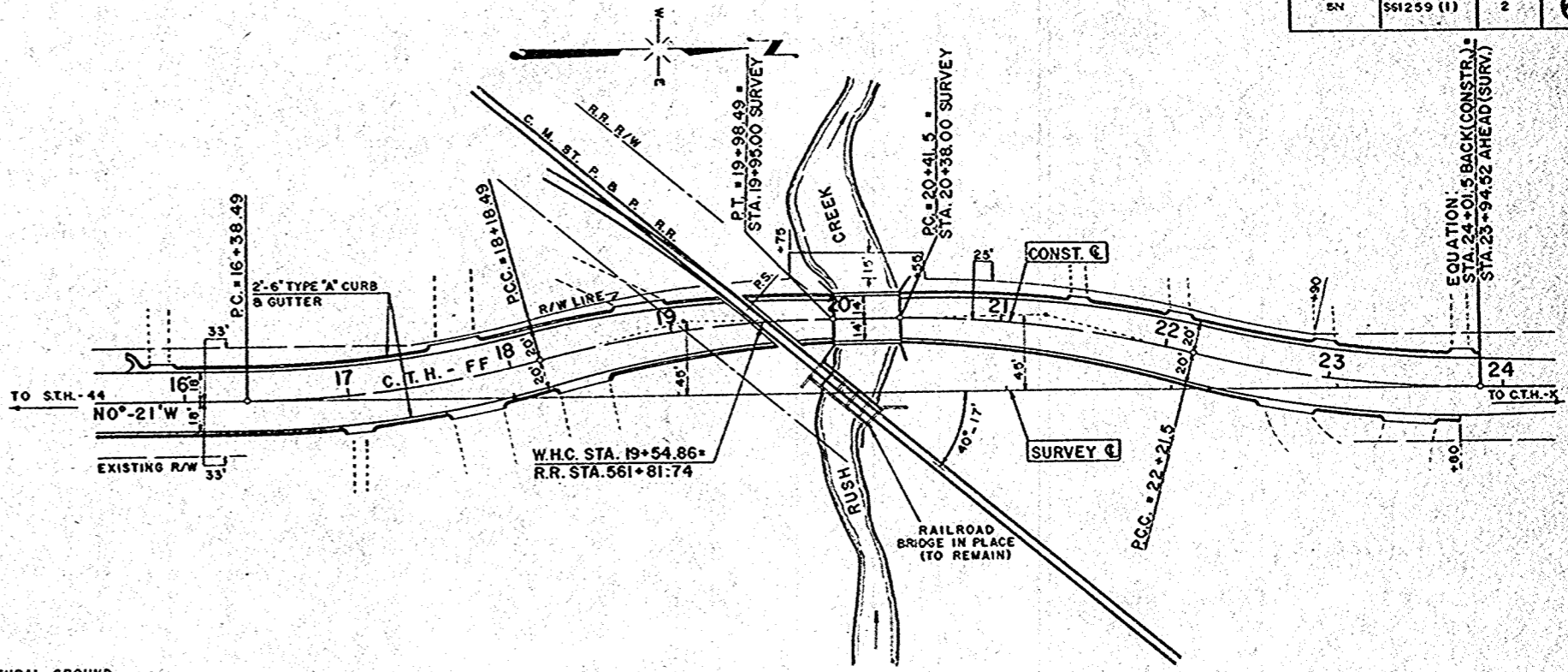
DATE 5-19-55 *W.E. Blount*  
DISTRICT ENGINEER

APPROVED

DATE 5-31-55 *W.E. Blount*  
CHIEF ENGINEER

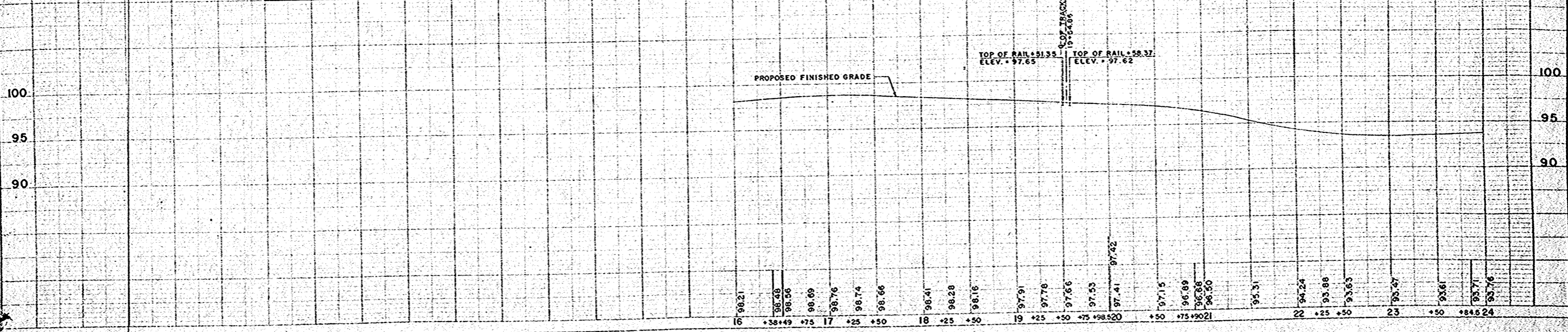
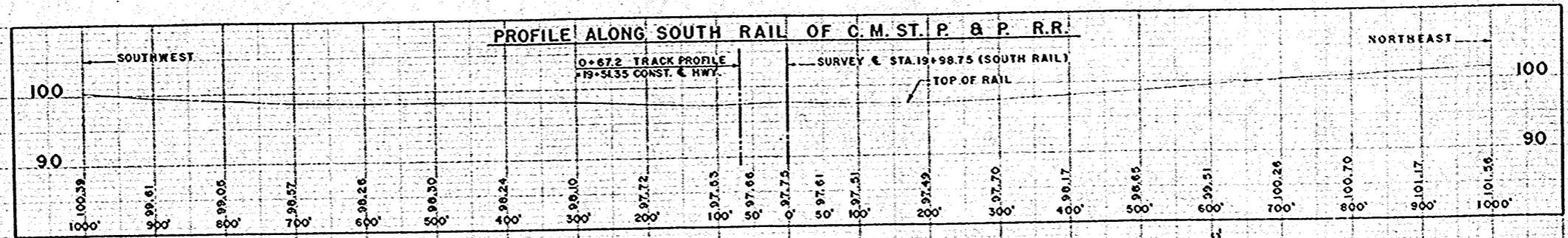
STATE HIGHWAY COMMISSION OF WISCONSIN MADISON, WIS.	DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS
SUPERVISOR: N.L.G. (NOTE BOOK 9992-9993) DIVISION ENGINEER: G.A.H. (IN CHARGE) DISTRICT ENGINEER: H.C.A. (CHECK)	RECOMMENDED FOR APPROVAL
CORRECT: <i>W.E. Blount</i> DATE <u>4-15-54</u> DIVISION ENGINEER	DISTRICT ENGINEER DATE
RECOMMENDED FOR APPROVAL: <i>W.E. Blount</i> DATE <u>4-15-54</u> ASST. STATE HIGHWAY ENGINEER	APPROVED
APPROVED: <i>W.E. Blount</i> DATE <u>4-15-54</u> STATE HIGHWAY ENGINEER	DIVISION ENGINEER DATE

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
3	18+38	PAINT X ON COR. WELL FOUND. 22RT	96.84



NORMAL FINISHED TYPICAL SECTION

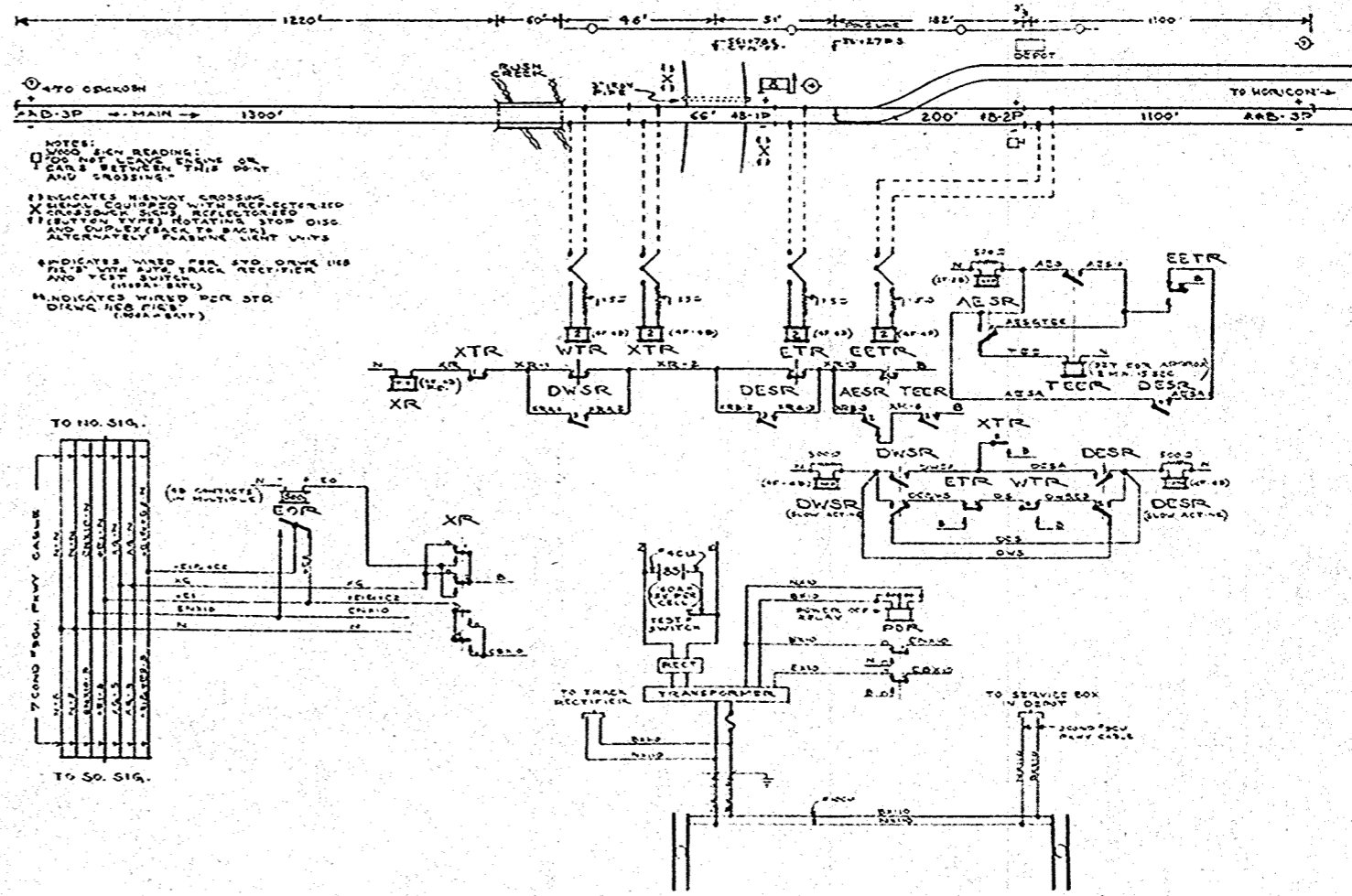
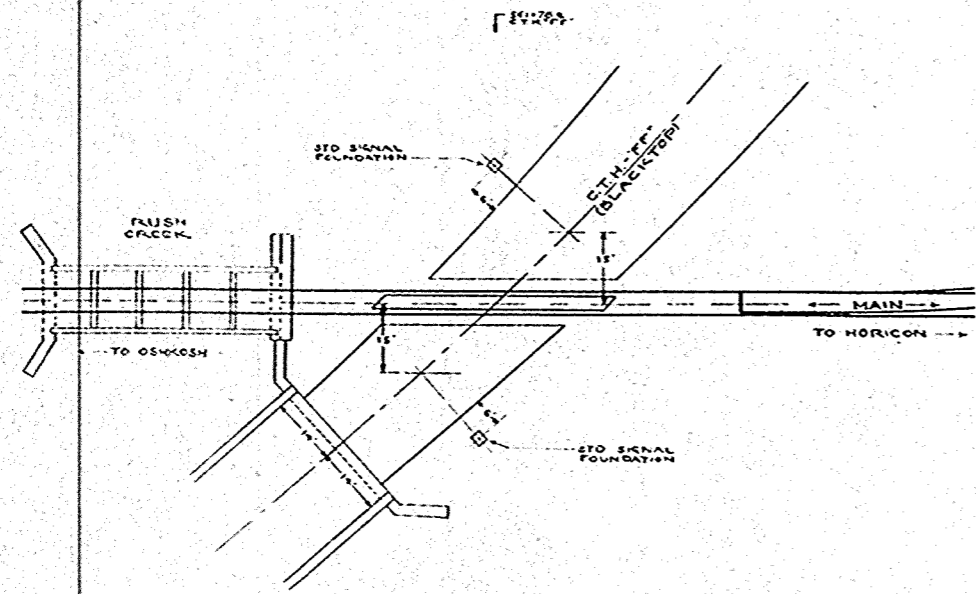
P.I. = 17+29.04 Δ = 14°-24' D = 8'-00" T = 90.55' L.C. = 180.00' R = 716.78'	P.I. = 19+09.04 Δ = 14°-24' D = 8'-00" T = 90.55' L.C. = 180.00' R = 716.78'	P.I. = 21+32.05 Δ = 14°-24' D = 8'-00" T = 90.55' L.C. = 180.00' R = 716.78'	P.I. = 23+12.05 Δ = 14°-24' D = 8'-00" T = 90.55' L.C. = 180.00' R = 716.78'
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COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT	FEDERAL	FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
70.6	1259.0	3.11	WIS.	SN	3	6

ENLARGED VIEW OF CROSSING  
SHOWING LOCATION OF SIGNAL FOUNDATIONS  
SCALE 1"=20'



CM. ST. P. & P. RR.  
HIGHWAY CROSSING PROTECTION  
C.T.H. "FF"  
FISK, WIS.

CORRECTED:  
*W.E. Blomquist*  
ASS'T. CHIEF ENG. S&S. CO. WIS.  
APPROVED:  
*[Signature]*  
CHIEF ENGINEER

**IT IS FURTHER SPECIFIED THAT THE EXPRESSION OR EQUIVALENT IS TO BE INCLUDED IN, AND FORM A PART OF EACH SPECIFICATION FOR A PARTICULAR PRODUCT, WHICH APPEARS ON THIS SHEET.**

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE FEDERAL	F.R.A. DISTRICT OFFICE	SHEET NUMBER	TOTAL SHEETS
			WIS. 5N	4	6

PROJ. NO. SG 1259(1)

- 2 -

- ITEM NO. DESCRIPTION**
1. **Alternately Flashing Light Signal with Rotating Stop Sign**  
 10 volt D.C. Highway Crossing Signal consisting of reflector button type rotating stop sign, standard AAR duplex flashing lights (back to back) and two AAR reflector button type crossback signs (back to back) completely assembled and ready for erection and without limitation because of specific consideration in such assembly certain specific items as follows:
- A. Two 90 degree reflector button type railroad crossing signs, Association of American Railroads, Signal Section Specification No. 16-24, Drawing No. 16428 and 16435.
  - B. One reflector button type stop sign, Manual or Uniform Traffic Control Devices for Street and Highways, American Association of State Highway Officials, National Conference on Street and Highway Safety, Washington, D.C., Reprinted September 1937, except the reflector units shall be crystal (colorless) for the border and red for the word "STOP". Reflector units to be AAR Signal Section Specifications 15537 and 15537.
  - C. Four large, cast iron, housing a chromium plated spun brass reflector supporting bayonet lamp socket. Door to be hinged to lamp body with screw type lock. Each lamp assembled to include:
    - 1 - 20 inch black background
    - 1 - 12 inch hood enameled black on top or outside and enameled glossy white on underside.
    - 1 - rod round - 8 3/8 inch with transmission values of 220 to 300 AAR Standard Scale and beam spread of not less than three degrees each side of axial beam at point where laterality of beam is 50% of the axial beam under normal conditions.
    - 1 - 10 volt 18 watt lamp bulb, single contact bayonet base.
  - D. Operating Mechanism
    - (a) 1 - 10 volt DC motor with 10 volt electric operating mechanism
    - (b) Dry plate clutch between upper end of vertical armature shaft and motor pinion through universal joint clutch to consist of a metal disc revolving between two fiber plates and arranged for adjustment by means of four compression springs regulating the pressure between fiber and metal discs.
    - (c) Gear to be of the spur gear type and entirely enclosed, making use of an annular gear with two filler wires working between it and the motor pinion. Annular gear to be stationary, firmly held by the cast iron enclosing gear housing. The filler gears shall have their bearings on a drop frame tee shaft operating in stainless steel ball bearings with driving crank keyed and held in place by threaded and cottered nut. The motor pinion with its connecting shaft from the clutch into the gear housing shall be of one piece construction with the lower end squared into the clutch hub and the other operating in the end of the tee shaft as a bearing. Drop forged shafts and gears shall all be of chrome nickel steel.
    - (d) Mechanism shall be self-locking in extreme positions by means of the throw of the driving crank as it moves in the grooved driven crank into the dead center point at both ends of its stroke.
2. **Rectifiers**  
 (a) Rectifiers without transformers for charging 6 cells lead storage batteries, 20 volt, 60 cycle, 8-13.5 volts, D.C., Type RL-22, Po. #220913, Spec. #355, Draw. C-9135 Sh. 1.9 USAS Company.

- ITEM NO. DESCRIPTION**
- (b) RTA-104 track rectifiers, 100-130 volts, 60 cycles, Po. 215412, Spec. #327, Draw. C-9135 Sh. 18. USAS Company.
  - 3. **Transformers**  
 W-11 Transformer, 110/115 volts, 60 cycles, AC, 2 secondaries (1-0. 38-25 volts secondary and 1-15 volt secondary) Po. #213122, Spec. 3154 Draw. C-9228 Sh. 4 USAS Company.
  - 4. **Relays**
    - (a) DN-11, 2 ohm D.C. neutral relay, 4 front and 4 back contacts, and shock absorbing springs, Po. #152232, USAS Company.
    - (b) DN-11, 1000 ohm D.C. neutral relay, 4 front and 4 back contacts and shock absorbing springs. Po. #157187, USAS Company.
    - (c) DN-11, 1000 ohm D.C. neutral relay, 4 front and 4 back heavy duty contacts and shock absorbing springs, Po. #204494, USAS Company.
    - (d) DN-22P power transfer relay, 10 volts 2P428 contacts 75-75 ohm Po. #224025, USAS Company.
    - (e) D.C. Flasher relay, 40 flashes per minute, 10-12 volt operation, Style FN-15A with 4 normal and 4 reverse contacts, Po. #265738, USAS Company.
    - (f) DN-22A, 1000 ohm D.C. neutral relay, 2P428 contacts, Po. #224890, USAS Company.
    - (g) TH-10 thermal relay 10 volt, 180-220 SEC operating time, Po. #187707, USAS Company
  - 5. **Signs**  
 Wood sign with cedar post reading "DO NOT LEAVE CARS STANDING BETWEEN THIS POINT AND CROSSING."
  - 6. **Ground Rod**  
 1/2" x 8' C.W. Ground rod #9428 Pg. 900 complete with clamp #9591 Page 901. Graybar Cat. #103.
  - 7. **Instrument Case**  
 (a) 8 way sheet metal instrument case complete, Po. #272922, Draw. D-2439, Sh. 205 with wire outlet on right side of case) outlet Po. #198013, Draw. B-1034-2 Sh. #81, USAS Company.
  - 8. **Bond Wires**  
 Signal bond, Type ZAB 6 1/2" Cadweld Signal Bonds, Cat. #20134 Erico Products, Inc.
  - 9. **Parkway Outlets**  
 Elastic potheads complete with covers per Std. Draw. 1092.
  - 10. **Pin Type Terminals**  
 Pin type rail terminals, S.A. Corp.
  - 11. **Relay Case Wire**
    - (a) #16 AWG (19 strands) 2/64" wall rubber insulation, TC Green, Kerite Co.
    - (b) #14 AWG solid copper 5/64" wall Kerite insulation, single braid, Kerite Company.
  - 12. **Aerial Line Wire**  
 #10 WHD solid copper line wire, double braid.

- U.S. & S. Co. - Union Switch & Signal Company  
Swissvale, Pa.
- W.R.R.S. Co. - Western Railroad Supply Company  
Chicago, Illinois
- S. A. Corp. - Signal Accessories Corp.  
Utica, N. Y.
- Edison Battery Co. - Thomas A. Edison, Inc.  
Storage Battery Divn.  
West Orange, N. J.
- E. R. A. Corp. - Railroad Accessories Corp.  
New York, New York

- Hubbard and Company  
Pittsburgh, Pa.
- The Kerite Company  
Bozour, Conn.
- The Rail Joint Company  
Troy, N. Y.
- Graybar Electric Company  
New York, N. Y.
- National Telephone Supply Co.  
Cleveland, Ohio

- Erico Products, Inc.  
Cleveland, Ohio
- Adams and Westlake Co.  
Elkhart, Indiana
- Electric Service & Supply Co.  
Philadelphia, Pa.
- Cadweld Signal Company  
Minneapolis, Minn.
- Line Material Company  
Milwaukee, Wis.
- American Farnor, Inc.  
2607 W. Lawrence Ave.  
Chicago 25, Illinois

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- ITEM NO. DESCRIPTION**
- 13. **Underground Cable**
    - (a) Single conductor #9 AWG, solid 5/64" wall Kerite insulation, tape and two jutes underground finish.
    - (b) 3 Conductor cable, each conductor #9 AWG solid 5/64" wall Kerite insulation, taped; conductors laid up into cable form and covered overall with mazy finish.
    - (c) 7 Conductor cable, each conductor #9 AWG solid 5/64" wall Kerite insulation, plain; conductors laid up into cable form and covered overall with mazy finish.
  - 14. **Primary Batteries**  
 1000 A.H. Primary battery complete with porcelain covers, wing nuts, and glass covers, Edison Battery Company.
  - 15. **Storage Batteries**  
 AAR 160 AH Edison Storage Battery. Edison Battery Co.
  - 16. **Battery Boxes**
    - (a) 16 Cell concrete battery tubs complete with steel covers, frost covers, floor racks, terminal boards and chains, SD 2150, BP 236-B.
    - (b) 7 cell concrete battery tubs complete with steel covers, frost covers, floor racks, terminal boards and chains, SD 2148, BP 236-B.
  - 17. **Insulated Rail Joints**  
 9020# Continuous insulated rail joints
  - 18. **Insulated Switch Rods**  
 Set consisting of one head rod and one back rod.
  - 19. **Fuses**
    - (a) Jefferson-Union renewable, 10 amp. enclosed fuse, #380-010, Pg. 403, Graybar Cat. 103.
    - (b) Enclosed cartridge fuse outout bases #3929, Page 413, Graybar Cat. 103.
  - 20. **Microphone Slices**  
 #9 Offset sleeve stock #91-118D, Pg. 16, National Telephone Supply Company, Cat. 15.
  - 21. **Padlocks**  
 Signal padlocks, screw type, RRA Corp.
  - 22. **Tags**
    - (a) One hole black fibre tags AAR Spec. 16222, AAR Draw. 1622A.
    - (b) Two hole black fibre tags similar to AAR Spec. 16222, but having one 1/8" hole in each end, AAR Draw. 1622A.
  - 23. **Brelets**  
 Ring tongue plasti-bond AMP heavy duty terminals #35628 for #16-18 stranded wire. American Farnor, Inc.
  - 24. **Tape**
    - (a) Kerite Friction tape.
    - (b) Kerite rubber tape.

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- ITEM NO. DESCRIPTION**
- 25. **Screws**
    - (a) #8 - 3/4" Blued B. H. Wood screws.
    - (b) #10 - 1-1/4" Blued B. H. Wood screws.
  - 26. **Coating Leather**  
 1/2" Rawhide belt lacing
  - 27. **Terminals**  
 AAR porcelain terminals #10563 with screws, AAR Draw. #1056-C.
  - 28. **Arresters**  
 Style 6B lightning arresters with silicate of carbide discs, Ref. 2, Po. 066-2 Pl. K-121, WRES Company.
  - 29. **Resistors**
    - (a) 500 ohm fixed resistors, Po. #235931, USAS Company
    - (b) 1.5 ohm Everett variable track resistors, #810-2 RRA Corp.
  - 30. **Paint**
    - (a) Aluminum Dulux Paste, DuPont Company
    - (b) Black Paint, AAR Spec. 12022.
    - (c) Viotrolac insulating paint, WRES Company
  - 31. **Cable Poles**  
 12 ft. precast concrete cable pole Std. Draw. X-825.
  - 32. **Foundations**
    - (a) Standard sectional foundation, precast concrete for color-light signal with 11-11/16" x 11-11/16" bolt spacing Std. Draw. X-801.
    - (b) Pr. Standard concrete pedestal precast for 4" x 11" (12 way) or 3" x 3-1/2" (8 way) relay case, Std. Draw. X-803.
  - 33. **Pipe**  
 3" Wrought iron pipe with couplings.
  - 34. **Test Switches**  
 Test terminals #0255-103. WRES Company.

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FISK, WISCONSIN

ITEM NUMBER	RAILROAD DRAWING	DESCRIPTION OF MATERIAL	UNIT	QUANTITY
1		Alternating Flashing Light Signal with rotating stop disc.	Es.	2
2a		Rectifier	"	1
2b		Rectifiers	"	2
3		Transformer	"	1
4a		Relays	"	4
4b		Relays	"	2
4c		Relays	"	1
4d		Relays	"	1
4e		Relays	"	1
4f		Relays	"	1
4g		Relays	"	1
5		Sign	"	1
6		Ground rod	"	1
7		Instrument Case	"	1
8		Bond Wires	"	200
9	RF 1092	Parkway Outlets	"	16
10		Pin Type Rail Terminals	Es.	32
11a		Relay Case Wire	M.Ft.	1,000
11b		Relay Case Wire	"	0,300
12		Aerial Line Wire	"	1,000
13a		Underground Cable	"	2,000
13b		Underground Cable	"	0,100
13c		Underground Cable	"	0,300

FISK, WISCONSIN

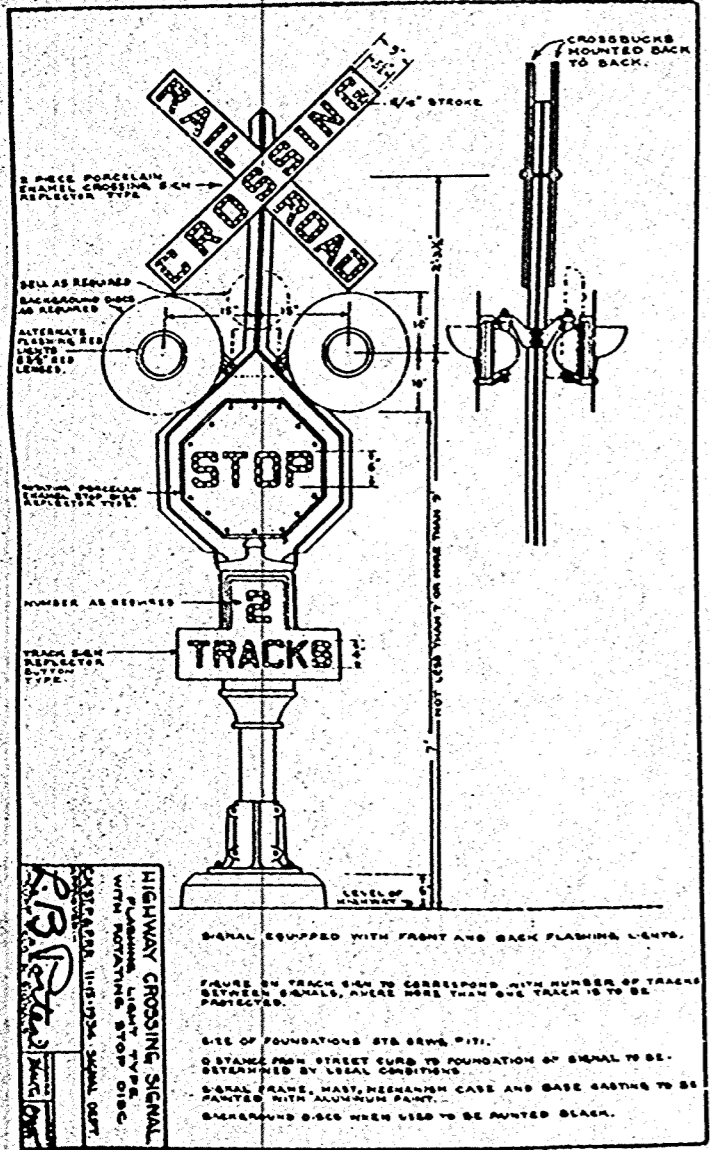
ITEM NUMBER	RAILROAD DRAWING	DESCRIPTION OF MATERIAL	UNIT	QUANTITY
14		Primary Battery	Cells	9
15		Storage Battery	"	8
16a	RF 236-B	Battery Boxes	Es.	1
16b		Battery Boxes	"	2
17		Insulated Rail Joints	"	9
18		Insulated Switch Rods	Set	1
19a		Fuses	Es.	3
19b		Fuses	"	3
20		Nicopress Sleeves	"	16
21a		Padlocks	"	8
22a		Tags	C	2,00
22b		Tags	"	5,00
23		Eyelets	N	1,000
24a		Tape	Rolls	3
24b		Tape	"	2
25a		Screws	Gr.	1
25b		Screws	"	1
26		Cleating Leather	Ft.	100
27		Terminals	Es.	10
28		Arrestors	"	12
29a		Resistors	"	3
29b		Resistors	"	8
30a		Paint	Gal.	2
30b		Paint	"	1

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FISK, WISCONSIN

ITEM NUMBER	RAILROAD DRAWING	DESCRIPTION OF MATERIAL	UNIT	QUANTITY
30c		Paint	Pts.	2
31		Cable Poles	Es.	1
32a	X-501	Foundations	"	2
32b	X-803	Foundations	Fr.	1
33		Pipe	Ft.	40
34		Test Switches	Es.	7





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