INDEX OF SHEETS

STATE	DIVISION JOB NO.	SHEET NO.	TOTAL SHEETS
WISC.	4455	1	29

STATE OF WISCONSIN
WISCONSIN HIGHWAY COMMISSION

PLAN AND PROFILE OF PROPOSED
WAUSAU-BROKAW ROAD
MARATHON COUNTY
STATE AID PROJECT

COMMENCING AT END OF CONCRETE PAVEMENT AT N. END OF SIXTH ST. IN CITY OF WAUSAU
EXTENDING NORTHERLY ON COUNTY TRUNK HIGHWAY 'W' 19754.8 FT.

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 AND NATIONAL LINE
- COUNTY LINE
- CITY, VILLAGE, OR TOWN
- TOWNSHIP LINE
- SECTION LINE
- FENCE LINE
- GUARD RAIL
- UNFENCED PROPERTY
- RIGHT OF WAY LINE
- TRAVELED WAY
- RAILROADS
- RETAINING WALL
- LEVEE
- BASE OR SURVEY LINE
- CULVERTS
- DROP INLET
- TROLLEY POLE
- POWER POLE
- TELEPHONE OR TELEGRAPH POLES
- MAIL BOX
- REFERENCE STAKES
- MARSH
- HEDGE
- TREES
- GROUND ELEVATION — DATUM LINE
- GRADE ELEVATION — DATUM LINE

LAYOUT
SCALE 8.8 IN. = 1 MI. OR 1" = 600'

TOTAL NET LENGTH OF CENTERLINE = 3.741 MI.

WISCONSIN HIGHWAY COMMISSION
MADISON, WIS.

Surveyor E.A.V.-C.T.K. Note Book LOOSE LEAF
Div. Computor E.A.V. M. O. Checker P.N.M.
Div. Checker A.M.S. Correct

CORRECT: N. M. Isabella
DIVISION ENGINEER

RECOMMENDED FOR APPROVAL: C. L. Weymouth
DEPUTY STATE HIGHWAY ENGINEER

APPROVED: DATE 3/21 1928
H. J. Kuelling
STATE HIGHWAY ENGINEER

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	1455	2	29

DIVISION JOB NO. 4455

ESTIMATE OF QUANTITIES.

THIS PROJECT IS TO BE EXECUTED UNDER WISCONSIN STANDARD SPECIFICATIONS AS APPROVED BY THE U. S. BUREAU OF PUBLIC ROADS ON

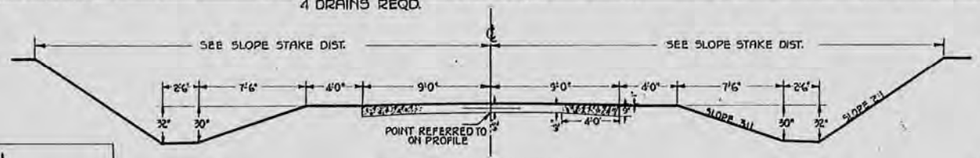
MILE NO.	STATION TO STATION	NET LENGTH OF CENTERLINE	CLEARING	GRUBBING	EXCAVATION: EARTH	ROCK	SOLID ROCK		BORROW	CHANNEL CHANGE	INTERCEPTING DITCH	OFFTAKE AND OUTLET DITCH	SURFACING: BANK PROTECTION	18 FT. CONCRETE SURFACING	EXPANSION JOINTS	REINF. STEEL IN PAV'T	CONC. CURBING	CUT OFF WALL	FT. GRAVEL SURFACING	FT. SHALE SURFACING	FT. SURFACING	DRAINAGE STRUCTURES: CULVERTS 6 FT. SPAN AND UNDER CONC.	CULVERTS 6 FT. SPAN AND UNDER STEEL	SMALL BRIDGES 6 FT. TO 20 FT. SPAN INCLUSIVE CONC.	SMALL BRIDGES 6 FT. TO 20 FT. SPAN INCLUSIVE STEEL	BRIDGES OVER 20 FT. SPAN CONC. CLASS 'A'	CONC. CLASS	REINF. STEEL	BALUSTERS	STRUCT. STEEL	CAST STEEL	CONCRETE PIPE TYPE 'I' 24 IN	CONCRETE PIPE TYPE 'I' IN	CORRUGATED GALV. SHEET METAL PIPE TYPE 'I' IN	TYPE 'II' IN	TYPE 'III' IN	PILING	GROUT RIP-RAP	TILE DRAINS	CATCH BASIN INLET	CURB AND GUTTER 15"X36"	19"X36"	CONC. FLUME	GUARD FENCE TYPE 'A'	TYPE 'B'	TYPE 'C' POSTS	MARKER POSTS	PROJECT MARKER	Mile No.
		LIN. FT.	ACRES	ACRES	CU. YDS.	CU. YDS.	CU. YDS.		CU. YDS.	CU. YDS.	LIN. FT.	CU. YDS.	SQ. YDS.	SQ. YDS.	NO.	LBS.	LIN. FT.	LIN. FT.	CU. YDS.	CU. YDS.		CU. YDS.	LBS.	CU. YDS.	LBS.	CU. YDS.	CU. YDS.	LBS.	NO.	LBS.	LBS.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.			LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.			LIN. FT.	LIN. FT.	NO.	NO.	NO.	
1	0+00 TO 53	5287.5			4618		406							10,583	118	4840																108													1936					1
2	53 TO 106	5279.2			9301					250				10,543.9	118	12,972																													400					2
3	106 TO 159	5211.6			5615	106	3116							10528.8	118	8090							5.5	370	288.7	13,020																										3
4	159 TO 198+17	3916.5			3668									7833.0	84	510							8.4	605																												4
	0+00 TO 198+17	19,754.8			23,202	106	3522			250				39,488.7	438	36,412							13.9	975	288.7	13,020																										3048				

MATERIAL HAUL

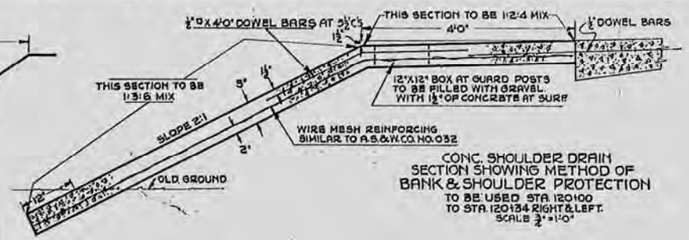
LENGTH OF HAUL	QUANTITY HAULED	QUANTITY HAULED
	CU. YDS.	CU. YDS.
MILES 0 TO ½		
½ TO 1		
1 TO 1½		
1½ TO 2		
2 TO 2½		
2½ TO 3		
3 TO 3½		
3½ TO 4		
4 TO 4½		
4½ TO 5		
5 TO 5½		
5½ TO 6		
TOTALS		

ESTIMATE FOR CONTRACTORS INFORMATION

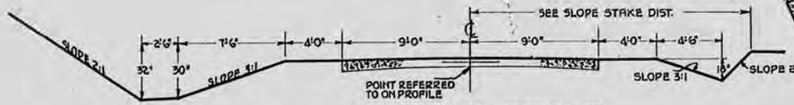
MILE NO.	TOTAL PARTING STRIP	½" DIA. DOWELS P'T'G. ST.	½" DIA. DOWELS EXP. JTS.	CEMENT REQ'D. BBLS. PAV'T.	CULVS. & BRIDGES	CURB & GUTTER	DRAINS REQ'D.	EXP. JT. FILLER	BRIDGE NAME PLATES	DOWELS FOR CURB & GUTTER					
	LIN. FT.	LBS.	LBS.	BBLS.	BBLS.	BBLS.	NO.	SIZE	NO.	LBS.					



STANDARD SECTION IN CUT

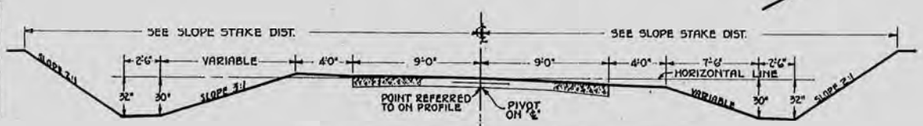


CONC. SHOULDER DRAIN
SECTION SHOWING METHOD OF
BANK & SHOULDER PROTECTION
TO BE USED STA. 120+00
TO STA. 120+34 RIGHT & LEFT.
SCALE ½"=1'-0"



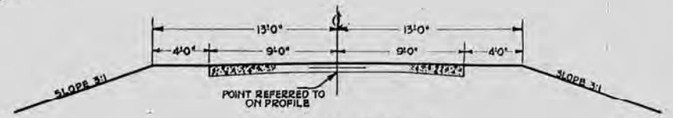
SPECIAL 'V' DITCH SECTION TO
BE USED STA. 41+00 TO 45+00

SECTION ON HIGH FILLS
GUARD RAIL REQD.

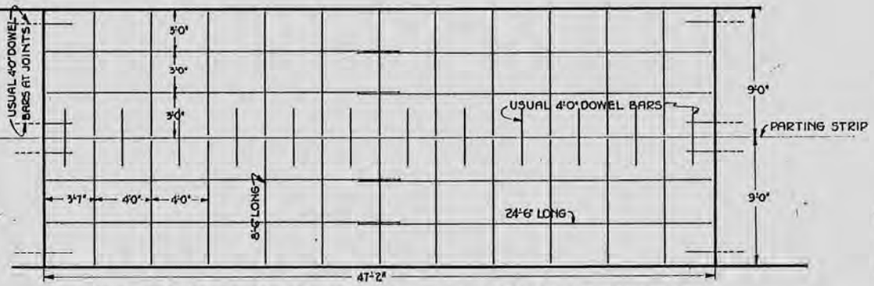


NOTE: FOR AMOUNT OF SUPERELEVATION SEE CURVE INFORMATION ON PLANS. SUPERELEVATION SHALL BEGIN AT A POINT NOT LESS THAN 150 FT. BEFORE THE P.C. AND AFTER THE P.T. ATTAINING FULL SUPERELEVATION AT THE P.C. AND P.T. AND REMAINING CONSTANT BETWEEN THESE TWO POINTS.

SECTION AT SUPERELEVATED CURVE

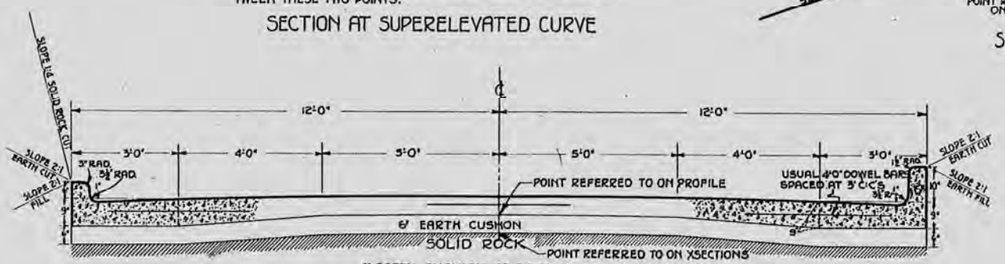


SECTION ON LOW FILLS



PLAN OF ONE 47'-2" SECTION OF PAVEMENT SHOWING METHOD OF REINFORCING TO BE USED OVER AREAS AS ARE SHOWN ON PLANS

ALL BARS ½"Ø (SQUARE) @ LONGITUDINAL BARS REQUIRED 24'-6" LONG LAPPED 40 DIAM SPACED AS SHOWN ABOVE. 22 TRANSVERSE BARS 8'-6" LONG SPACED AS SHOWN ABOVE. PLACE LONGITUDINAL BARS 2" FROM BOTTOM OF SLAB AND TRANSVERSE BARS ON TOP OF THESE WIRE THESE BARS SECURELY TOGETHER TO FORM SEPARATE PARTS OR MATS ON EACH SIDE OF PARTING STRIP



6' EARTH CUSHION TO BE USED
STA. 132+00 TO 136+00
STA. 141+00 TO 147+00

SPECIAL CURB AND GUTTER SECTION TO BE USED STA. 123+56 TO 152+00

SCALE 1"=2'-0"

TYPICAL CROSS SECTION

FOR

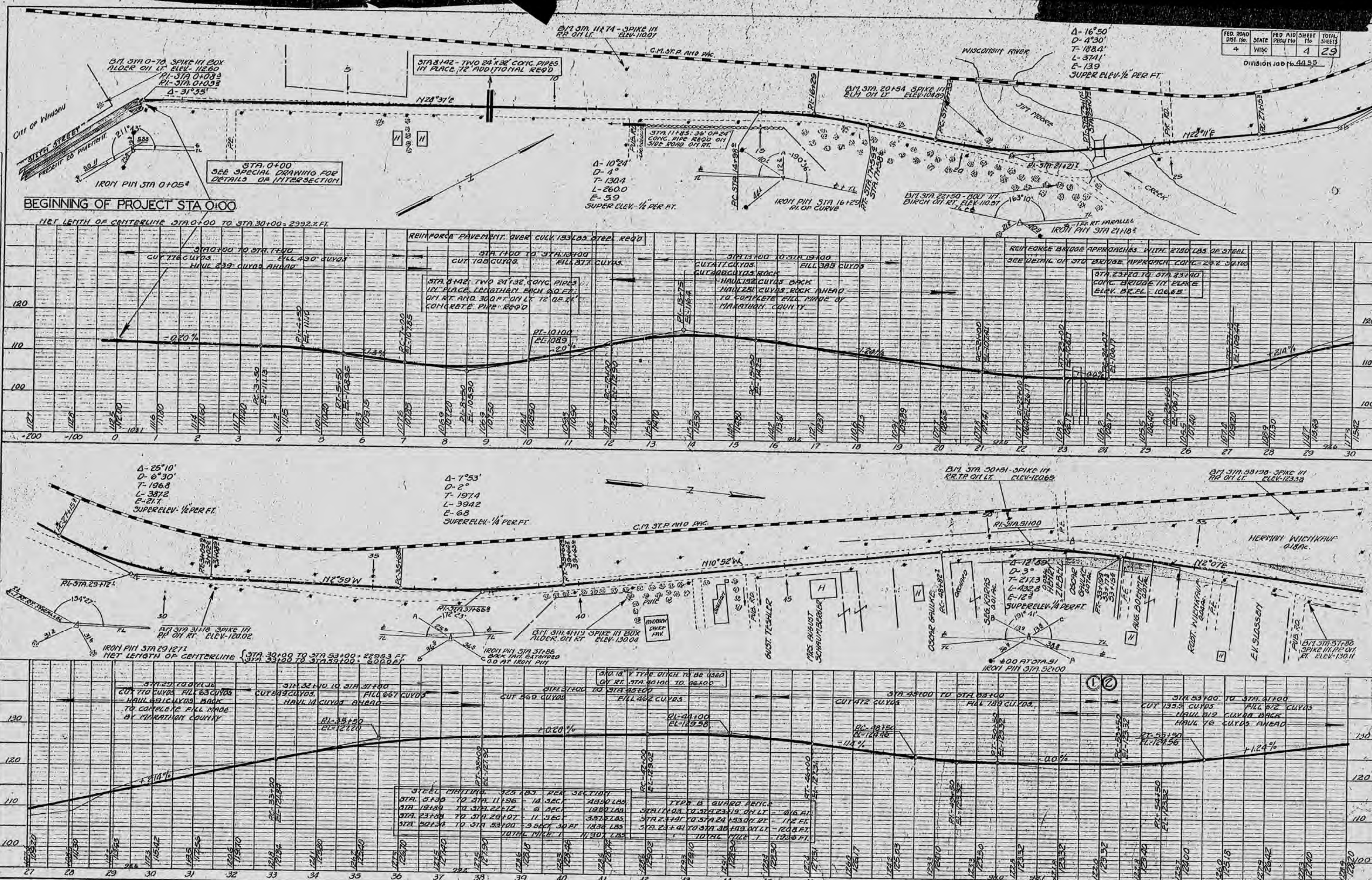
18' ONE COURSE P.C. CONC. SURFACING

WISCONSIN HIGHWAY COMMISSION
MADISON - WIS.

SCALE 1 IN = 5 FT. UNLESS OTHERWISE STATED


FED. ROAD DIST. NO. 4
STATE WISC.
SHEET NO. 3
TOTAL SHEETS 29
DIVISION JOB NO. 4455
T29N
WISCONSIN RIVER
RELOCATION
MARATHON COUNTY
CHICAGO MILWAUKEE ST. P. & PACIFIC R.R.
DICK SHOTT
EDMOND MATHE
A. LUEDTKE
ROSS MANESIAN
M. URMANSKI
STANLEY ROSMENOSKI
L.M. DUNCAN
MRS. LARSON
HENRY GAULKE
HERMAN WEINKAUF
CONRAD PAFF
FRED WURSTER
B. SAHZ
JOE BROWN
JOHN SALZEMAN
FRANK CYGARZNICK
J.M. KEUBLER
OSCAR GAULKE
CREEK
R7E
13
12
1
LOCATION SKETCH
SCALE 2"=1 MI.
CITY OF WAUSAU
BROKAW
AMOUNT PAID
R/W
FENCE
BLDGS
TOTAL
PAID
REMARKS

PLAT OF RIGHT OF WAY REQUIRED
STATE AID PROJECT NO. 4455
C.T.H."W" WAUSAU-BROKAW ROAD
MARATHON COUNTY
SCALE 1"=400'



FED. ROAD DIST. No. 4 | STATE WISC. | FED. AID PROJ. No. | SHEET No. 4 | TOTAL SHEETS 29
DIVISION JOB No. 4495
BEGINNING OF PROJECT STA 0+00
NET LENGTH OF CENTERLINE STA. 0+00 TO STA. 30+00 = 2992.7 FT.
B.M. STA. 0+70 SPIKE IN BOX ALDER ON LT. ELEV. 112.60
P.I. - STA. 0+08
P.I. - STA. 0+03
Δ - 31°35'
CITY OF WAUSAU
SIXTH STREET
IRON PIN STA 0+05
STA. 0+00 SEE SPECIAL DRAWING FOR DETAILS OF INTERSECTION
STA. 8+42 - TWO 24"x32" CONC. PIPES IN PLACE, 72' ADDITIONAL REQ'D
B.M. STA. 11+74 - SPIKE IN RR ON LT. ELEV. 110.07
C.M. ST. P. AND PAC.
N 28°37' E
STA 11+85: 36' OF 24" CONC. PIPE REQ'D ON SIDE ROAD ON RT.
Δ - 10°24'
D - 4°
T - 130.4
L - 260.0
E - 5.9
SUPER ELEV. - 1/2 PER FT.
IRON PIN STA 16+29 P.I. OF CURVE
B.M. STA. 20+54 SPIKE IN ELM ON LT. ELEV. 104.89
WISCONSIN RIVER
JIM MOORE
Δ - 16°50'
D - 4°30'
T - 188.4'
L - 374.1'
E - 13.9
SUPER ELEV. - 1/2" PER FT.
N 22°11' E
B.M. STA. 22+50 - BOLT IN BIRCH ON RT. ELEV. 110.57
CREEK
IRON PIN STA 21+18
REINFORCE PAVEMENT OVER CULV. 133 LBS STEEL REQ'D
STA. 0+00 TO STA. 7+00 CUT 776 CU. YDS. FILL 430 CU. YDS. HAUL 239 CU. YDS. AHEAD
STA. 7+00 TO STA. 13+00 CUT 108 CU. YDS. FILL 817 CU. YDS.
STA. 13+00 TO STA. 19+00 CUT 411 CU. YDS. CUT 400 CU. YDS. ROCK FILL 385 CU. YDS. HAUL 152 CU. YDS. BACK HAUL 251 CU. YDS. ROCK AHEAD TO COMPLETE FILL MADE BY MARATHON COUNTY
STA. 8+42: TWO 24"x32" CONC. PIPES IN PLACE, LENGTHEN EACH 6.0 FT. ON RT. AND 30.0 FT. ON LT. 72' OF 24" CONCRETE PIPE REQ'D
REINFORCE BRIDGE APPROACHES WITH 2180 LBS OF STEEL
SEE DETAIL OF STD. BRIDGE APPROACH
STA. 23+20 TO STA. 23+40 CONC. BRIDGE IN PLACE ELEV. BR. FL. 106.65
-0.20%
-1.84%
+2.0%
-1.20%
+2.11%
P.I. - 13+75 EL. - 116.4
B.M. STA. 50+31 - SPIKE IN RR. T.P. ON LT. ELEV. 120.65
B.M. STA. 58+98 - SPIKE IN RR ON LT. ELEV. 123.39
Δ - 25°10'
D - 6°30'
T - 196.8
L - 387.2
E - 21.7
SUPERELEV. - 1/2 PER FT.
Δ - 7°53'
D - 2°
T - 197.4
L - 394.2
E - 6.8
SUPERELEV. - 1/4 PER FT.
N 12°59' W
N 10°52' W
P.I. - STA. 29+12
P.I. - STA. 37+66
P.I. - STA. 51+00
B.M. STA. 31+18 SPIKE IN RR ON RT. ELEV. 120.02
IRON PIN STA 29+27
NET LENGTH OF CENTERLINE { STA. 30+00 TO STA. 53+00 = 2295.3 FT, STA. 53+00 TO STA. 59+00 = 600.0 FT }
IRON PIN STA 37+86 BACK TAN. EXTENDED 0.0 AT IRON PIN
B.M. STA. 41+13 SPIKE IN BOX ALDER ON RT. ELEV. 130.04
GUST. TESHLER
MRS. AUGUST SCHAUMBERGER
OSCAR GAULKE
SEB. KARIS
OSCAR GAULKE
AUG. BORNITZ
RUDT. WIECHKAUF
E. V. SLOSSEN
HERMAN WIECHKAUF 0.18 Ac.
Δ - 12°53'
D - 3°
T - 217.3
L - 432.8
E - 12.3
SUPERELEV. - 1/4 PER FT.
IRON PIN STA. 52+00
B.M. STA. 57+80 SPIKE IN P.P. ON RT. ELEV. 130.11
STA. 18" V TYPE DITCH TO BE USED ON RT. STA. 40+00 TO 46+00
STA. 29+00 TO STA. 32+00 CUT 110 CU. YDS. FILL 63 CU. YDS. HAUL 691 CU. YDS. BACK TO COMPLETE FILL MADE BY MARATHON COUNTY
STA. 32+00 TO STA. 37+00 CUT 689 CU. YDS. FILL 667 CU. YDS. HAUL 14 CU. YDS. AHEAD
STA. 37+00 TO STA. 45+00 CUT 269 CU. YDS. FILL 402 CU. YDS.
STA. 45+00 TO STA. 53+00 CUT 412 CU. YDS. FILL 180 CU. YDS.
STA. 53+00 TO STA. 61+00 CUT 135 CU. YDS. FILL 612 CU. YDS. HAUL 119 CU. YDS. BACK HAUL 76 CU. YDS. AHEAD
+2.14%
+0.28%
-1.18%
-0.0%
+1.24%
P.I. - 33+50 EL. - 127.20
P.I. - 44+00 EL. - 129.58
PT. - 55+50 EL. - 124.56
STEEL MATTING 325 LBS. PER SECTION
STA. 5+35 TO STA. 11+96 - 14 SECT. 4550 LBS.
STA. 19+89 TO STA. 22+12 - 6 SECT. 1950 LBS.
STA. 23+58 TO STA. 28+07 - 11 SECT. 3575 LBS.
STA. 50+34 TO STA. 53+00 - 5 SECT. 30 FT. 1832 LBS.
TOTAL MILE 1 11,907 LBS.
TYPE B GUARD FENCE
STA. 11+03 TO STA. 23+19 ON LT. 916 FT.
STA. 23+41 TO STA. 24+53 ON LT. 112 FT.
STA. 25+61 TO STA. 38+49 ON LT. 1288 FT.
TOTAL MILE 1 1938 FT.
PLAN
PROFILE
PLATE 2 - PLAN-PROFILE
KEUFFEL & ESSER CO. NEW YORK

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.		5	29

DIVISION JOB NO. 4452

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.		6	29

DIVISION JOB NO. 4458

PLAN — SURVEYED 10/1/57 10/2/57 10/3/57; PLOTTED 10/4/57 10/5/57 10/6/57; ALIGNMENT CHECKED 10/7/57 10/8/57 10/9/57; GRADES CHECKED 10/10/57 10/11/57 10/12/57; R. MS. NOTED 10/13/57 10/14/57 10/15/57; STRUCTURE NOTES AS CKD. 10/16/57 10/17/57 10/18/57

PROFILE — SURVEYED 10/19/57 10/20/57 10/21/57; PLOTTED 10/22/57 10/23/57 10/24/57; NOTE BOOK PT. OF WAY CHECKED 10/25/57 10/26/57 10/27/57; SEC. 10/28/57 10/29/57 10/30/57

B.M. STA 107+10 SPIKE IN POWER POLE ON LT. ELEV-127.62

R.R. 110748 ℄

MARATHON COUNTY

A. LUEDTKE 0.71 Ac.

Woods

C.M. ST. P. AND PAC.

CHANNEL CHANGE
250 CUYDS TO BE USED TO CLOSE OLD CHANNEL

DICK SHOTT 0.8 Ac.

IRON PIN

N 35° 16' W

S 32° 32' E 292.5'

95

HENRY GAULKE 0.49 Ac.

DICK SHOTT

Woods

HENRY GAULKE

90

B.M. STA. 93+11 SPIKE IN WHITE PINE ON RT. ELEV-126.02

B.M. STA. 98+28 TREE ON RT. SPIKE IN ASH ELEV-113.05

P.R.E.

B BCH+20.34

105

110

H

EDMOND MATHIE

D

216° 48'

Δ-58° 20'
D-5°
T-639.6
L-1166.7
E-166.4
SUPERELEV-1½" PER FT.

STAKE BESIDE IRON PIN STA 107+24
℄-17.7 FT. CT. AT PIN.

180° 00'

STAKE BESIDE IRON PIN STA 100+54
℄-12.1 FT. LT. AT PIN

B.M. STA. 119+62 SPIKE IN WHITE PINE ON LT. ELEV-109.32

P.C. 115+79.4
P.R.C. 116+82.1
P.T. 117+72

201° 03'

ROSS MATHESIAN

STAKE BESIDE IRON PIN STA 115+19
℄ 0.0 AT PIN

NET LENGTH OF CENTERLINE STA. 89+00 TO STA. 106+00 = 1700.0 FT.
STA. 106+00 TO STA. 119+00 = 13037 FT.

REINFORCE BRIDGE APPROACHES WITH 2780 LBS. OF STEEL

SEE DETAIL OF STANDARD BRIDGE APPROACH CONC - 262 30 YDS.

STA. 98+39 TO STA. 98+57: 18' SPAN, 24' RDWY. REIN. CONC. SLAB SPAN. BRIDGE REQD. ELEV-BRIDGE FLOOR-122.35' ELEV. OF FOOTINGS-106.00. ELEV. GR. AT ASH TREE AT OF STA. 98+28 = 113.05 CONCRETE = 169.8 CUYDS. STEEL-7900 LBS. 2 DRAINS REQD.

STEEL MATTING 325 LBS. PER SECTION

STA. 53+00 TO STA. 55+33	3 SECT ITM.	1742 LBS.
STA. 59+00 TO STA. 62+77	8 SECT	2600 LBS.
STA. 87+50 TO STA. 93+16	12 SECT	3900 LBS.
STA. 94+49 TO STA. 97+49	3 SECT	975 LBS.
STA. 99+06 TO STA. 100+47	3 SECT	975 LBS.
	TOTAL MILE 2	10,192 LBS.

TYPE "B" GUARD FENCE

STA. 97+89 TO STA. 98+37	ON LT. -	48 FT.
STA. 98+39 TO STA. 99+79	ON LT. -	120 FT.
STA. 97+89 TO STA. 98+37	ON RT. -	48 FT.
STA. 98+59 TO STA. 100+43	ON RT. -	184 FT.
	TOTAL MILE 2 -	400 FT.

STA. 92+00 TO STA. 99+00
CUT 1666 CUYDS. FILL 1483 CUYDS.

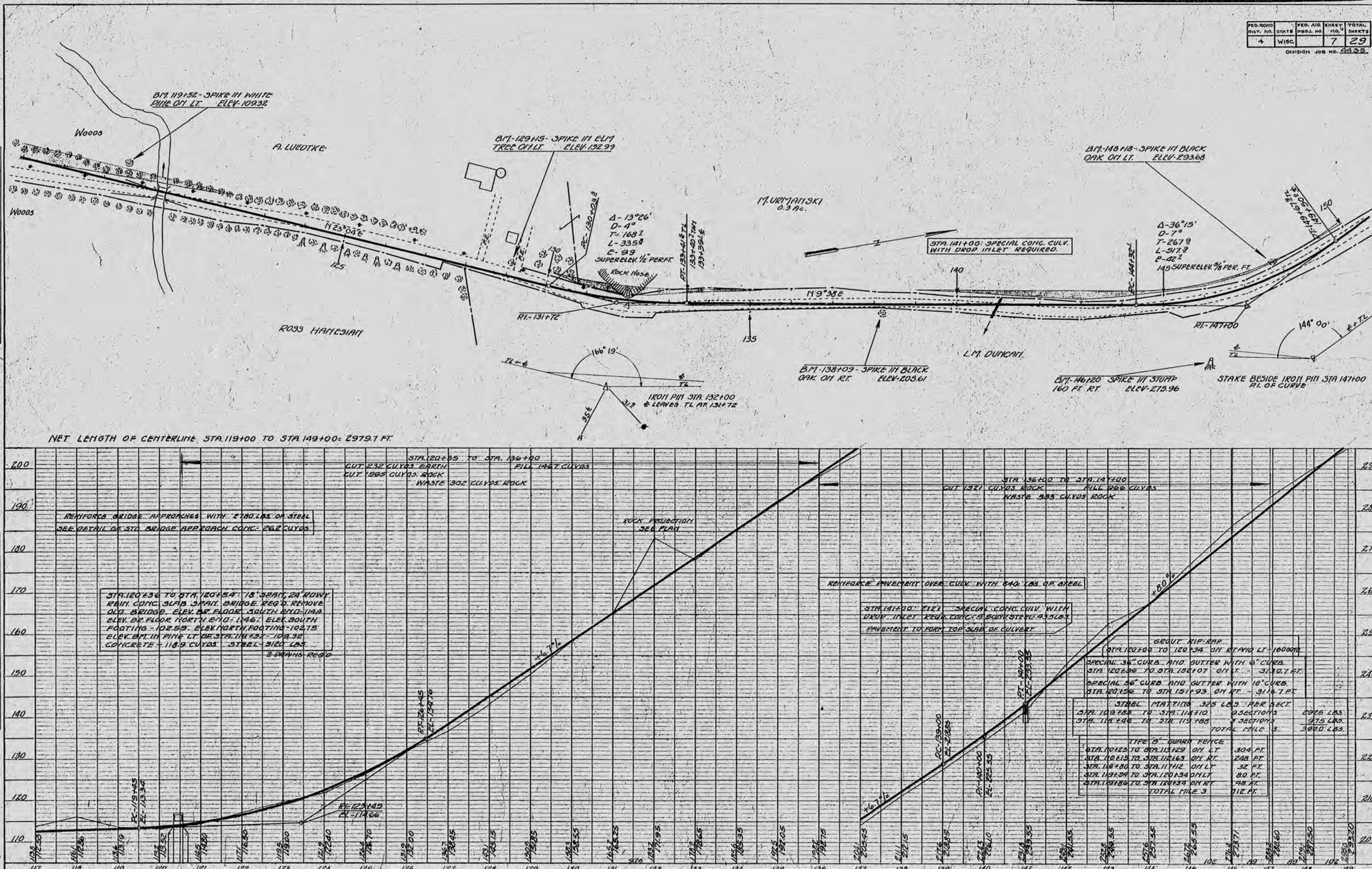
STA. 99+00 TO STA. 106+00
CUT 2835 CUYDS. FILL 1247 CUYDS.
HAUL 26 CUYDS. BACK
WASTE 213 CUYDS.
HAUL 575 CUYDS. AHEAD

STA. 106+00 TO STA. 114+00
CUT 2636 CUYDS. FILL 2676 CUYDS.

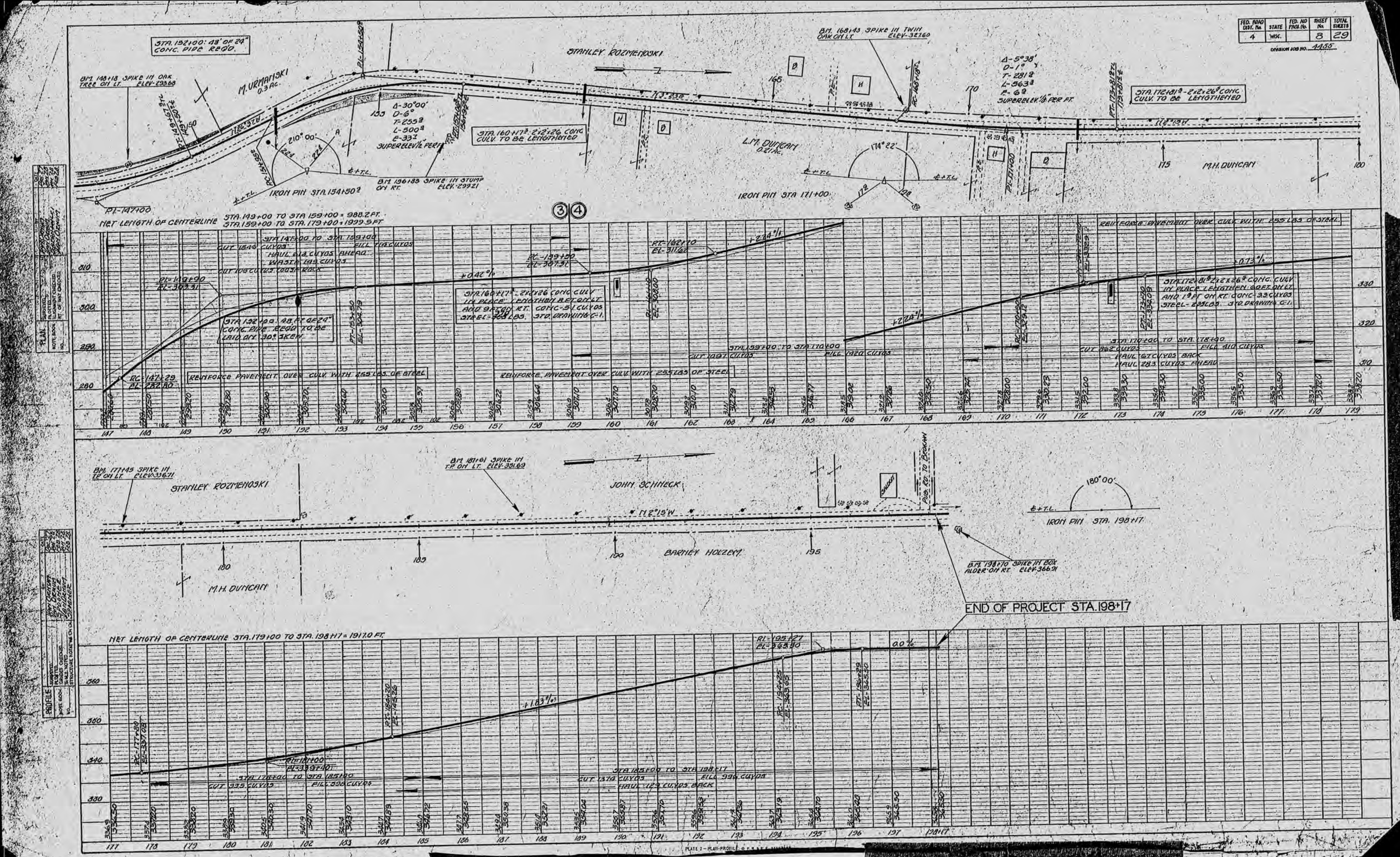
STA. 114+00 TO STA. 120+35
CUT 1141 CUYDS. FILL 871 CUYDS.
WASTE 54 CUYDS.

PC-87+50 EL-146.25
PT-90+50 EL-119.35
PC-93+50 EL-125.20
PT-93+60 EL-125.20
PC-96+00 EL-124.30
PT-96+70 EL-124.30
PC-96+50 EL-123.23
PC-97+25 EL-123.85
PC-98+00 EL-127.53
PC-98+75 EL-128.85
PC-99+25 EL-123.85
PC-100+25 EL-123.33
PT-100+75 EL-123.98
PC-104+25 EL-129.92
PC-107+75 EL-128.64
PC-114+70 EL-114.85
PT-114+00 EL-111.92
+0.33%

PLATE 1 - PLAN - PROFILE U.S.P.R.M.E. STANDARD
KEUFFEL & ESSER CO. NEW YORK



FED. ROAD DIST. NO. 4 | STATE WISC. | FED. AID PROJ. NO. | SHEET NO. 7 | TOTAL SHEETS 29
DIVISION JOB NO. 4435
PLAN
PROFILE
B.M. 119+52 - SPIKE IN WHITE PINE ON LT. ELEV-109.32
WOODS
A. LUEDTKE
N 23° 04' E
125
B.M. 129+15 - SPIKE IN ELM TREE ON LT. ELEV-132.99
PC-130+03
Δ-13°26'
D-4°
T-168
L-335
E-9.9
SUPERELEV. ½" PER FT.
Rock Nose
PT-133+41
PI-131+72
ROSS HANESIAN
135
166° 19'
IRON PIN STA. 132+00
℄ LEAVES T.L. AT 131+72
M. URMANSKI
0.3 Ac.
STA. 141+00: SPECIAL CONC. CULV. WITH DROP INLET REQUIRED.
N 9° 38' E
140
B.M. 138+09 - SPIKE IN BLACK OAK ON RT. ELEV-205.61
L.M. DUNCAN
Δ-36°15'
D-7°
T-267
L-517
E-42
145 SUPERELEV. ⅝" PER FT.
PC-144+32
PI-147+00
B.M. 148+18 - SPIKE IN BLACK OAK ON LT. ELEV-293.68
150
144° 00'
B.M. 146+20 SPIKE IN STUMP 160 FT. RT. ELEV-275.96
STAKE BESIDE IRON PIN STA 147+00 P.I. OF CURVE
NET LENGTH OF CENTERLINE STA. 119+00 TO STA. 149+00 = 2979.1 FT.
STA. 120+55 TO STA. 136+00
CUT 232 CU.YDS. EARTH
CUT 1585 CU.YDS. ROCK
FILL 1467 CU.YDS.
WASTE 302 CU.YDS. ROCK
REINFORCE BRIDGE APPROACHES WITH 2780 LBS. OF STEEL
SEE DETAIL OF STD. BRIDGE APPROACH CONC. - 26.2 CU.YDS.
ROCK PROJECTION SEE PLAN
STA. 120+36 TO STA. 120+54: 18' SPAN, 24' RDWY. REIN. CONC. SLAB SPAN BRIDGE REQ'D. REMOVE OLD BRIDGE. ELEV. OF FLOOR SOUTH END - 114.6; ELEV. BR. FLOOR NORTH END - 114.6; ELEV. SOUTH FOOTING - 102.55. ELEV. NORTH FOOTING - 102.75. ELEV. B.M. IN PINE LT. OF STA. 119+52 - 109.32
CONCRETE - 118.9 CU.YDS. STEEL - 5120 LBS.
2 DRAINS REQ'D
+6.7%
PC-119+45
PT-126+45
PI-123+45
STA. 136+00 TO STA. 147+00
CUT 1321 CU.YDS. ROCK
FILL 266 CU.YDS.
WASTE 393 CU.YDS. ROCK
REINFORCE PAVEMENT OVER CULV. WITH 640 LBS. OF STEEL
STA. 141+00: SPECIAL CONC. CULV. WITH DROP INLET REQ'D. CONC.-5.5 CU.YDS. STEEL-435 LBS.
PAVEMENT TO FORM TOP SLAB OF CULVERT
GROUT RIP-RAP
STA. 120+00 TO 120+34 ON RT. AND LT. - 1600 S.Y.
SPECIAL 36" CURB AND GUTTER WITH 6" CURB
STA. 120+36 TO STA. 152+07 ON LT. - 3130.7 FT.
SPECIAL 36" CURB AND GUTTER WITH 10" CURB
STA. 120+56 TO STA. 151+93 ON RT. - 3116.7 FT.
STEEL MATTING 325 LBS. PER SECT.
+8.0%
PC-139+00
PI-140+00
PT-141+00
TOTAL MILE 3 3900 LBS.
TYPE "B" GUARD FENCE
TOTAL MILE 3 712 FT.
117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149
PLATE 1 - PLAN - PROFILE
KEUFFEL & ESSER CO. NEW YORK



FED. ROAD DIST. No. | STATE | FED. AID PROJ. No. | SHEET No. | TOTAL SHEETS
4 | WIS. | | 8 | 29
STA. 152+00: 48' OF 24" CONC. PIPE REQ'D.
BM. 148+18 SPIKE IN OAK TREE ON LT. ELEV.-295.68
M. URMANSKI 0.3 Ac.
STANLEY ROZMENOSKI
BM. 168+43 SPIKE IN TWIN OAK ON LT. ELEV.-327.60
Δ-30°00' D-6° T-255.3 L-500.0 E-33.7 SUPERELEV. 1/2" PER FT.
Δ-5°38' D-1° T-281.8 L-563.3 E-6.9 SUPERELEV. 1/8" PER FT.
STA. 172+81.9 - 2'x2'x26' CONC. CULV. TO BE LENGTHENED
STA. 160+17.3 - 2'x2'x26' CONC. CULV. TO BE LENGTHENED
BM. 156+85 SPIKE IN STUMP ON RT. ELEV.-299.21
IRON PIN STA. 154+50.2
L.M. DUNCAN 0.21 Ac.
IRON PIN STA. 171+00
M.H. DUNCAN
PT.-147+00
NET LENGTH OF CENTERLINE STA. 149+00 TO STA. 159+00 = 988.2 FT. STA. 159+00 TO STA. 179+00 = 1999.5 FT.
STA. 147+00 TO STA. 159+00
CUT 1518 CU.YDS. FILL 7 CU.YDS.
HAUL 612 CU.YDS. AHEAD
WASTE 149 CU.YDS.
PT.-149+90 EL.-303.31
PC.-147+29 EL.-282.80
STA. 152+00: 48 FT. OF 24" CONC. PIPE REQ'D TO BE LAID ON 30% SKEW.
+0.42%
PC.-159+50 EL.-307.31
PT.-162+10 EL.-311.68
+2.24%
STA. 160+17.3: 2'x2'x26' CONC. CULV. IN PLACE. LENGTHEN 8 FT. ON LT. AND 9 FT. ON RT. CONC.-5.1 CU.YDS. STEEL-408 LBS. STD. DRAWING C-1.
REINFORCE PAVEMENT OVER CULV. WITH 255 LBS. OF STEEL
STA. 159+00 TO STA. 170+00
CUT 1097 CU.YDS. FILL 1420 CU.YDS.
REINFORCE PAVEMENT OVER CULV. WITH 255 LBS. OF STEEL
+0.73%
STA. 172+81.9: 2'x2'x26' CONC. CULV. IN PLACE. LENGTHEN 6 FT. ON LT. AND 1 FT. ON RT. CONC.-3.3 CU.YDS. STEEL-235 LBS. STD. DRAWING C-1.
STA. 170+00 TO STA. 179+00
CUT 862 CU.YDS. FILL 410 CU.YDS.
HAUL 67 CU.YDS. BACK
HAUL 283 CU.YDS. AHEAD
BM. 177+45 SPIKE IN T.P. ON LT. ELEV.-336.71
BM. 181+61 SPIKE IN T.P. ON LT. ELEV.-351.69
STANLEY ROZMENOSKI
JOHN SCHNECK
N 2°15' W
TO BRAHAM
180°00'
IRON PIN STA. 198+17
M.H. DUNCAN
BARNEY HOLZEM
BM. 198+10 SPIKE IN BOX ALDER ON RT. ELEV.-366.71
END OF PROJECT STA. 198+17
NET LENGTH OF CENTERLINE STA. 179+00 TO STA. 198+17 = 1917.0 FT.
PC.-177+80 EL.-337.08
PT.-181+00 EL.-339.40
PT.-186+20 EL.-349.20
+1.83%
PC.-194+25 EL.-363.05
PI.-195+27 EL.-365.50
PT.-196+29 EL.-365.50
0.0%
STA. 179+00 TO STA. 185+00
CUT 335 CU.YDS. FILL 336 CU.YDS.
STA. 185+00 TO STA. 198+17
CUT 1374 CU.YDS. FILL 996 CU.YDS.
HAUL 129 CU.YDS. BACK
PLAN
PROFILE

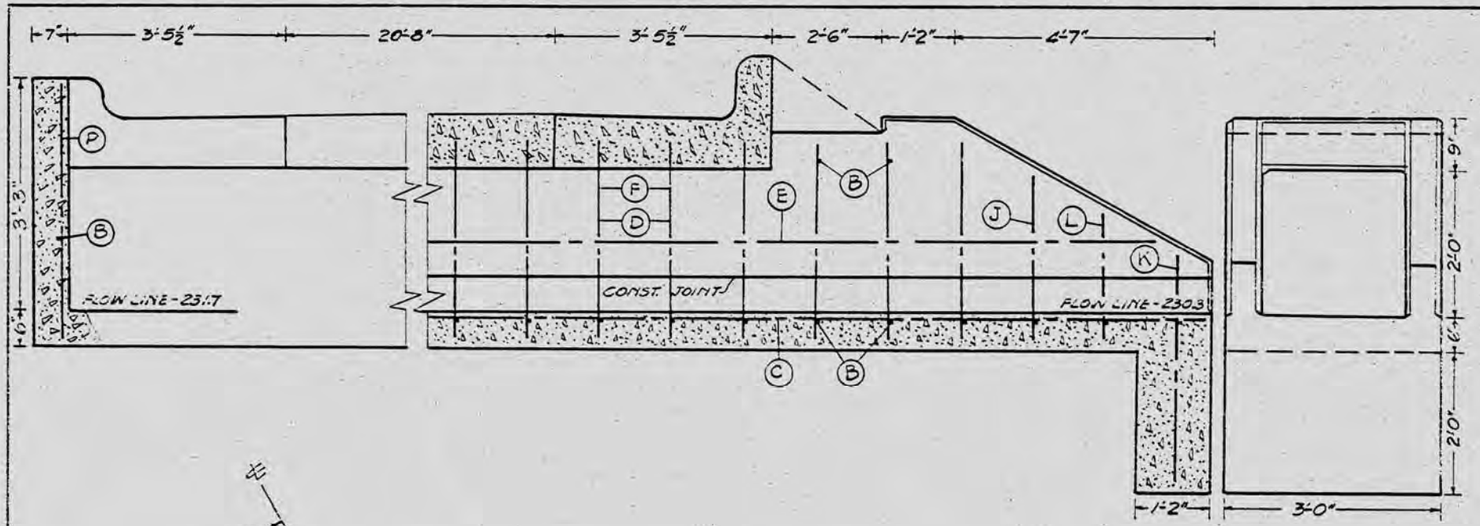
CULVERT SCHEDULE.

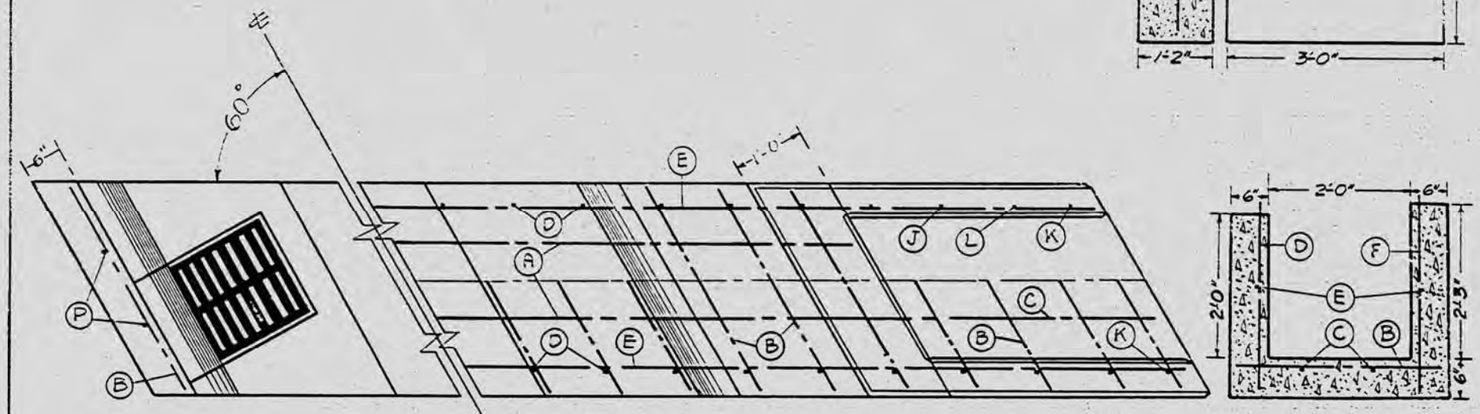
NAME OF ROAD WAUSAU-BROKAW MARATHON COUNTY. STATE AID PROJECT NO. DIVISION JOB NO. 4455

MILE No	PLAN SHEET No	STATION	SIZE WIDTH	SIZE HEIGHT	SIZE LENGTH	KIND OF CULVERT	TYPE	INLET ENDWALL Stand. Straight	INLET ENDWALL Flush Above Opening	INLET ENDWALL Sloping	INLET ENDWALL Drop Inlet	INLET ENDWALL Breaker Wall Req.	DISCH. ENDW. Stand. Straight	DISCH. ENDW. Sloping	PLACE CULV. Left from ℄	PLACE CULV. Right from ℄	ELEV. BOT. Discha.	ELEV. BOT. Inlet	FLOW Left	FLOW Right	CONC IN CULVERT	STEEL IN CULV.	REMARKS.
1	4	8+42	24"		72.0'	CONC. PIPE									36.8	31.2	99.8	102.1	✓				TWO PIPES LENGTHENED 30.0' LT. 6.0 RT.
3	7	141+00	24"	24"		CONC. CULV					LT						230.3	231.7		✓			CULV. TO BE BUILT ON 30° SKEW
3	8	152+00	24"		48.0	CONC. PIPE									23.0	25.0	301.6	299.0		✓			PIPE TO BE LAID ON 30° SKEW.
4	8	160+73	24"	24"	170'	CONC. CULV	C-1			3:1				3:1	21.0'	22.0'	309.2	309.6		✓	51	357	2-2'x2'6" CULV. LENGTHENED 80.2 LT. 90 FT RT
4	8	172+81	24	24	75'	CONC. CULV.	C-1			3:1				3:1	17.0	17.0	330.25	330.25		✓	334	219	2-2'x2'6.5 CULV. LENGTHENED 60 LT. 15' RT.
1	4	11+85	24"		36'	CONC. PIPE											DITCH	LINE					SIDE ROAD CULV.

SUMMARY OF PIPE CULVERTS.

TYPE	CORRUGATED SHEET METAL PIPE (Total Lineal Feet.) Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	CAST IRON PIPE Diam.	Total Lin. Feet	Diam.	Total Lin. Feet	CONCRETE PIPE Diam.	Total Lin. Feet	Diam.	Total Lin. Feet
Pure Iron																	24"	156		
Copper Pure Iron																				
Copper Iron																				
Molybdenum																				
Copper Steel																				





BILL OF BARS			
MARK	NO.	LENGTH	SPACING
A	4	16'-4"	1'-0" CTRS
B	45	3'-3"	1'-0" CTRS
C	4	18'-10"	1'-0" CTRS
D	35	2'-9"	1'-0" CTRS
F	29	3'-0"	1'-0" CTRS
E	4	18'-4"	1'-0" CTRS
K	2	3'-3"	1'-0" CTRS
L	2	1'-9"	1'-0" CTRS
P	2	3'-6"	1'-0" CTRS
J	2	2'-3"	1'-0" CTRS

ALL STEEL REINFORCEMENT TO BE ½" INCH SQUARE DEFORMED BARS.

CONCRETE	5.5 CUYDS
STEEL	505 LBS

Note: See Drg # 4455 — For Pavement in barrel Details.

WAUSAU-BROKAW ROAD
DIVISION JOB NO. 4455

CONCRETE SHALL BE CLASS "A" 1:2:4 PROPORTIONS. BEVEL ALL EXPOSED EDGES 1 INCH.
REINFORCEMENT SHALL BE MECHANICAL BOND BARS OF NET SECTION EQUAL TO AREA OF BARS SPECIFIED
ALL REINFORCEMENT SHALL BE HELD IN PLACE BY METALIC BAR CHAIRS AND SPACERS.
CATCH BASIN INLET TO BE SIMILAR TO NO. 18, AYLWARD AND SONS CATALOGUE "I".

RECOMMENDED FOR APPROVAL
N. M. Isabella
DIV. ENG.

DETAIL OF
SPECIAL CULVERT STA 141+00

WISCONSIN HIGHWAY COMMISSION
MADISON, WIS.

Approved;
C. H. Swaymouth
Deputy State Highway Engr.

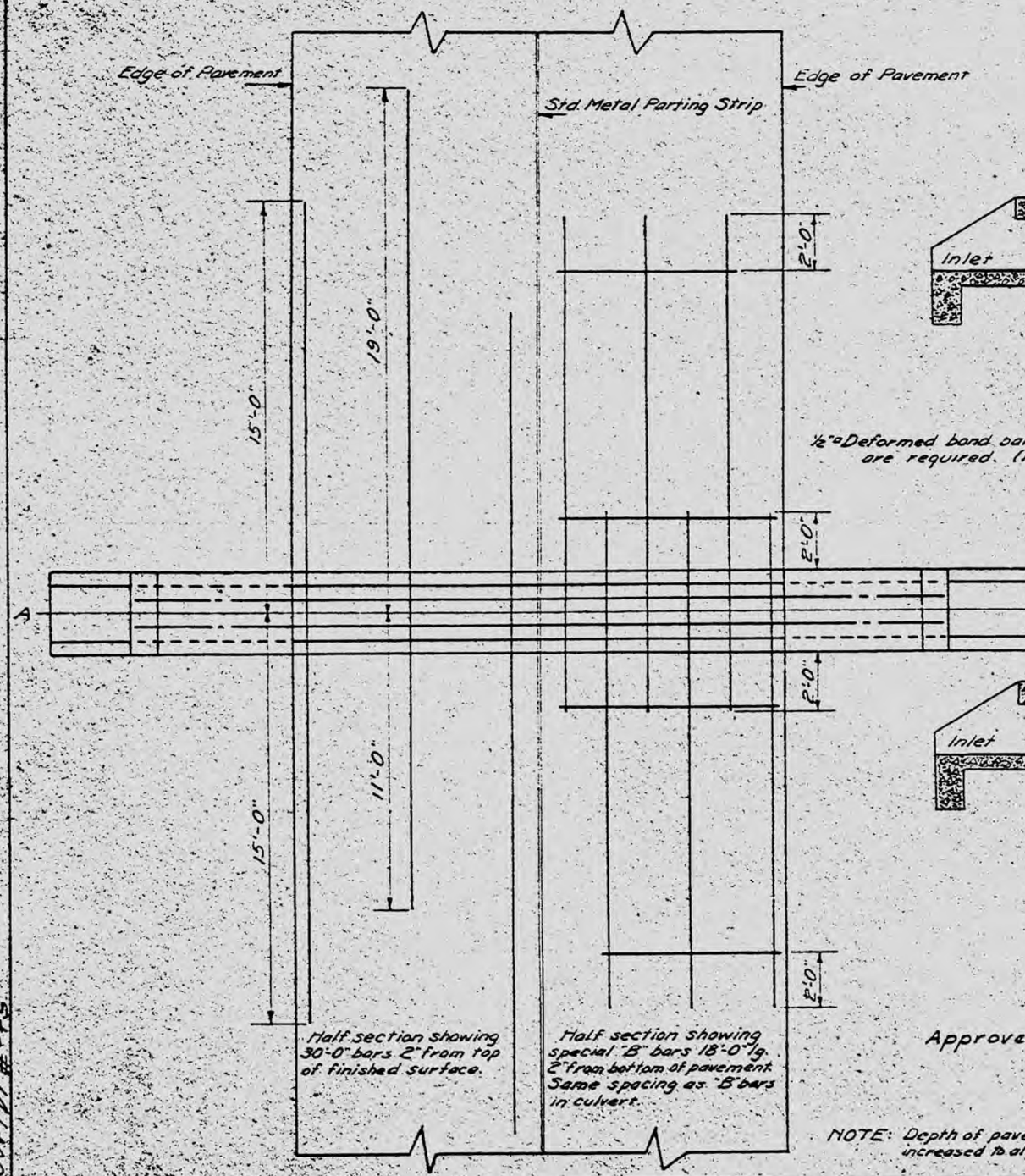
State Highway Engineer

Sta. #141+00

Div. Job # 4455 — A1

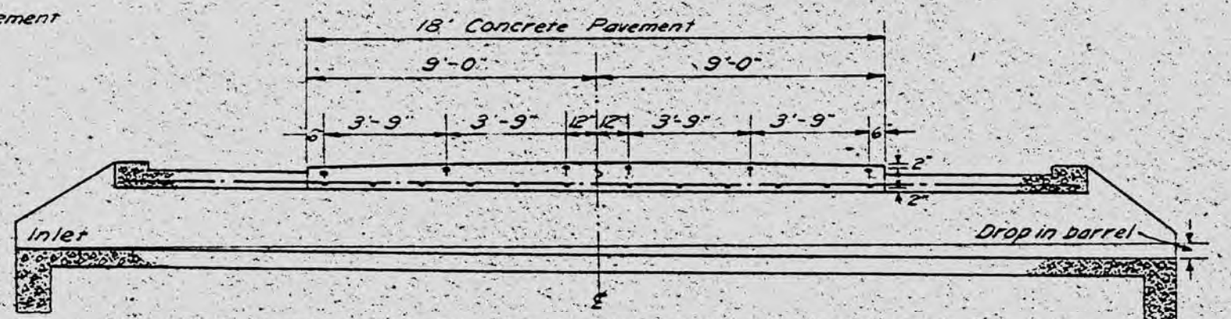
FED ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WIS			

Division Job No.



Half section showing 30'-0" bars 2" from top of finished surface.

Half section showing special "B" bars 18'-0" lg. 2" from bottom of pavement. Same spacing as "B" bars in culvert.

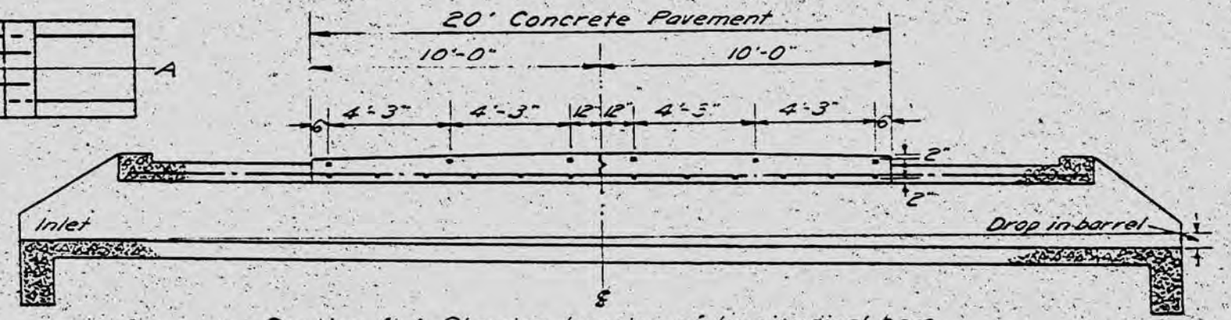


Section A-A Showing location of longitudinal bars. Special "B" bars 2" from bottom of slab and the 30'-0" bars 2" from top of finished surface.

½"ø Deformed band bars thru parting strip are required. (Not shown on plan)

BILL OF BARS

No.	Size	Length	Location
6	½"ø	30'-0"	Longitudinal
	½"ø	18'-0"	Longitudinal
4	½"ø	6'-6"	Transverse
4	½"ø	8'-0"	Transverse



Section A-A Showing location of longitudinal bars. Special "B" bars 2" from bottom of slab and the 30'-0" bars 2" from top of finished surface.

Note: Use with Drg. #4455—

BILL OF BARS

No.	Size	Length	Location
6	½"ø	30'-0"	Longitudinal
20	½"ø	18'-0"	Longitudinal
4	½"ø	7'-6"	Transverse
4	½"ø	9'-0"	Transverse

Steel 515 lbs.

Approved:

Deputy State Highway Engineer.

NOTE: Depth of pavement over culvert is increased to allow for slope in barrel.

DESIGN FOR
REINFORCING PAVEMENT IN CULVERT BARREL
WISCONSIN HIGHWAY COMMISSION
MADISON, WIS. FEB. 1925

APPROVED:- 3/19/25

State Highway Engineer.

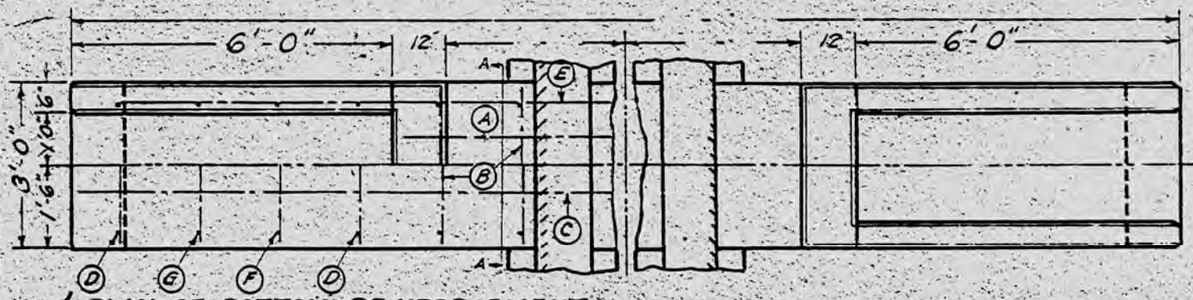
Drawn by: RBS
Checked by: CWG

DIV. 1

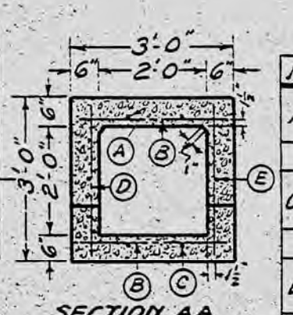
Std. #4700

Div. Job # 4455 — A2

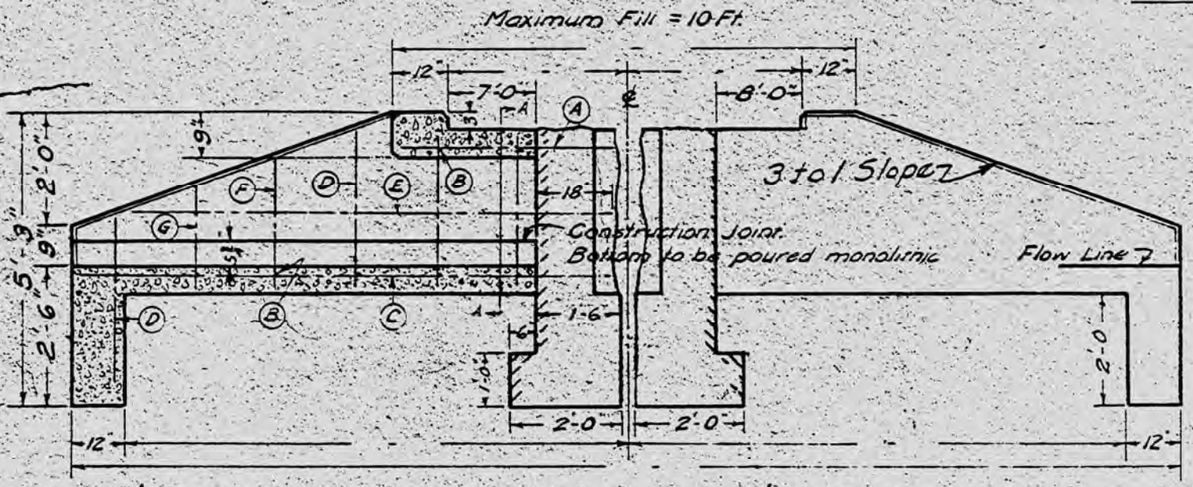
¼ PLAN OF TOP REINFORCEMENT



½ PLAN OF FINISHED CULVERT

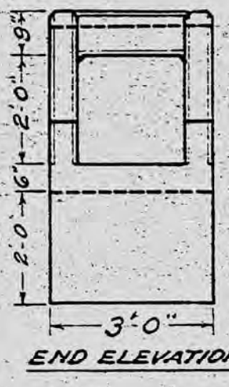


½ PLAN OF BOTTOM REINFORCEMENT



½ TRANSVERSE SECTION ON ℄

½ SIDE ELEVATION



END ELEVATION

SECTION AA SHOWING REINFORCEMENT

Reinforcement to be properly supported with approved metallic bar spacers.

BILL OF REINFORCING

Mark		Number	Length	Spacing	Location of Bar
A	Right	2	10'-3"	1'-0"	Top, Longitudinal
	Left	2	9'-3"	1'-0"	
B		46	2'-9"	1'-6"	Top & Floor, Transverse
C	Right	2	16'-4"	1'-0"	Floor, Longitudinal
	Left	2	15'-4"	1'-0"	
D		38	2'-9"	1'-6"	Walls, Vertical
E	Right	2	15'-9"	1'-0"	Walls, Longitudinal
	Left	2	14'-9"	1'-0"	
F		84	2'-3"	1'-6"	Wings, Vertical
G		84	1'-9"	1'-6"	Wings, Vertical
K		4	3'-3"	1'-0"	Wings, Vertical
Total Steel Required					370 pounds

QUANTITIES FOR ONE CULVERT

Concrete Cu. Yds.	Cement Bbl.	Sand Cu. Yds.	Stone Cu. Yds.
5.1	7.7	2.1	4.3

INFORMATION FOR LOCATION

Station No.	Elevation of Flow Line Disc.	Elevation of Flow Line Inlet	Distance of Disc. above or below Top of Stake Above	Distance of Disc. above or below Top of Stake Below	Elev. Top of Stake No.	Elev. Top of Stake	Distance Disc R or L of ℄
160+17½							

Roadway

STANDARD DESIGN

2'×2' CONC. CULVERT EXTENSION

SLOPING ENDWALLS

WISCONSIN HIGHWAY COMMISSION

MADISON, WISC.

Approved: Oct. 1925

C. H. Seymouth — Design Engineer

H. J. Kuelling — State Highway Engineer

½ "15/25

Std. # 160+17½

GENERAL NOTES:

Do not scale this drawing.
All concrete shall be Class A-1:2:4 proportions.
Bevel all exposed edges with a triangular strip cut from a ¾" x ¾" piece.

All reinforcement shall be ½" square deformed mechanical bond bars.
Bars shall lap 40 diameters where spliced and shall be securely wired with #16 wire.
Depth of cut off wall to vary with soil conditions.

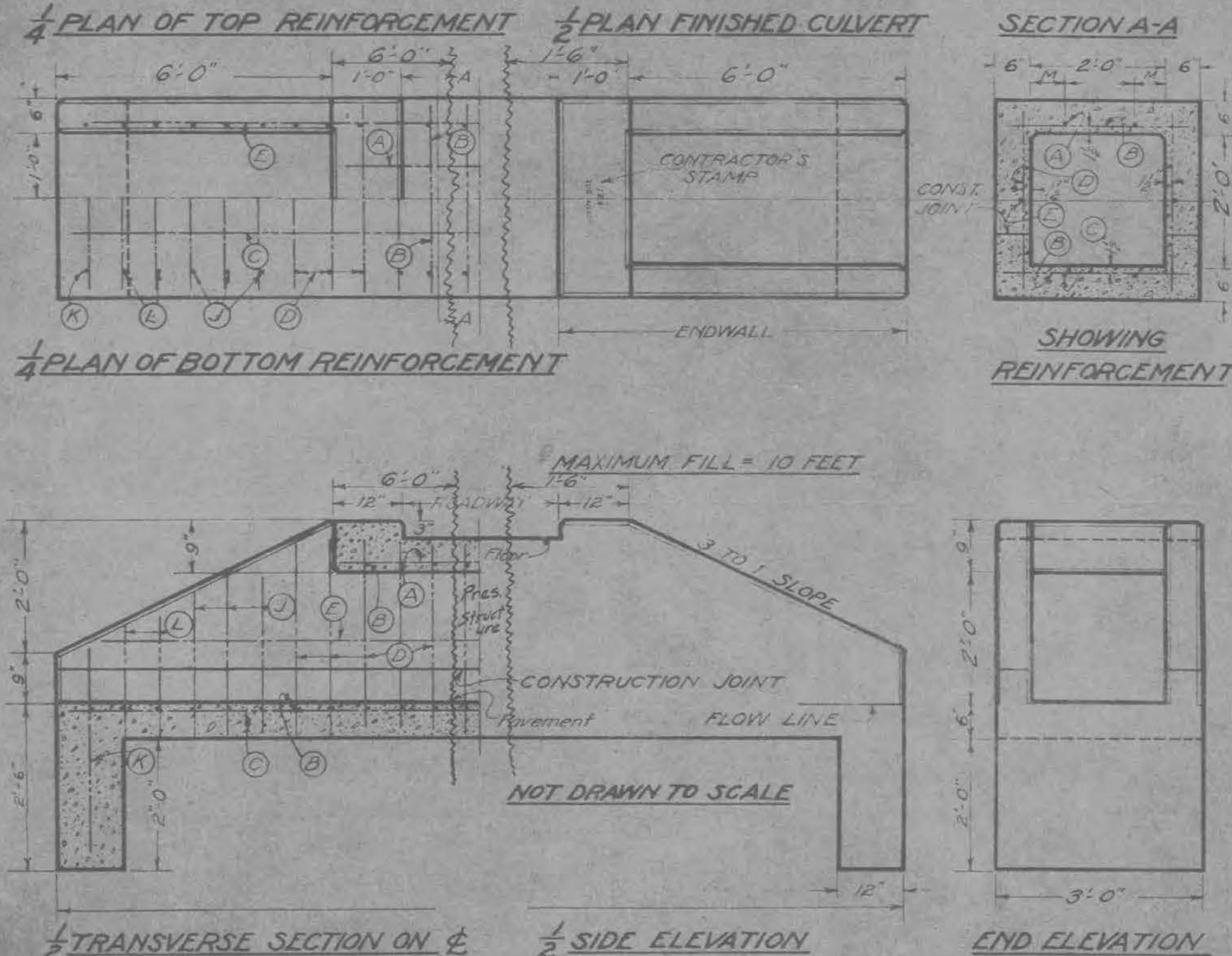
Slope barrel ¼ inch per foot toward discharge end unless otherwise specified.
Dowel longitudinal steel 18" into old culvert.
Standard specifications of Wisconsin Highway Commission.

Div. Job # 4455 — B

C — *

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WIS			

Division Job No. _____



USE THIS COLUMN ONLY (↓ 2 x 2)

Span x Height		1½ x 1½	2 x 1½	2 x 2	2½ x 1½	2½ x 2	2½ x 2½
A-bars	Number	2	2	2+2	2	2	2
	Length			L 7'-3" / R 2'-9"			
	Spacing	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
B-bars	Number			27			
	Length	2'-3"	2'-9"	2'-9"	3'-3"	3'-3"	3'-3"
	Spacing	1'-0"	[illegible]-0"	1'-0"	0'-10"	0'-6"	0'-10"
C-bars	Number	2	2	2+2	2	2	2
	Length			L 8'-9" / R 5'-3"			
	Spacing	1'-0"	1'-0"	1'-0"	1'-0"	[illegible]	[illegible]
D-bars	Number			19			
	Length	2'-3"	2'-3"	2'-9"	2'-3"	[illegible]	[illegible]
	Spacing	1'-0"	1'-0"	1'-0"	[illegible]-0"	1'-0"	[illegible]-0"
E-bars	Number	2	2	2+2	2	2	[illegible]
	Length			L 11'-9" / R 6'-9"			
	Spacing	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	[illegible]
J-bars	Number	8	8	8	8	8	12
	Length	1'-9"	1'-9"	2'-3"	[illegible]	2'-3"	2'-9"
K-bars	Number	4	4	4	4	4	4
	Length	3'-3"	3'-3"	3'-3"	3'-3"	3'-3"	3'-0"
L-bars	Number	0	0	8	0	8	[illegible]
	Length			1'-9"		1'-9"	1'-9"
M		3"	6"	6"	9"	9"	9"
Cu. Yds. Conc.				3.34			
Cu. Yds. Conc. Lin. Ft. Bbl.		.148	.167	.185	.18[illegible]	[illegible].04	[illegible]
Lbs. Steel				235			
Lbs. Steel per Lin. Ft.		12.15	13.62	14.45	15.3[illegible]	[illegible].40	17.25
Conc. 1 Endw.		0.82	0.92	1.16	1.02	1.269	1.555

STANDARD DESIGN
CONCRETE BOX CULVERTS
3 TO 1 SLOPING ENDWALLS

SIZE: 2' x 2' * Ext. STA. 172+81.5

WISCONSIN HIGHWAY COMMISSION

Correct: F. Crane, Bridge Engineer

Approved: [signature], Deputy State Highway Engineer

Approved: [signature], State Highway Engineer

GENERAL NOTES.

All concrete shall be Class A-1:2:4 proportions. Slope barrel ¼ inch per foot toward discharge end unless otherwise specified. Bottom to be poured monolithic to construction joint. Bevel all exposed edges with a triangular strip from a ¾"x¾" piece. Depth of cut-off wall to vary with soil conditions.

All reinforcement shall be ½" square deformed mechanical bond bars properly separated with approved metallic bar spacers. Bars shall lap 40 diameters where spliced, and shall be securely wired with #16 wire.

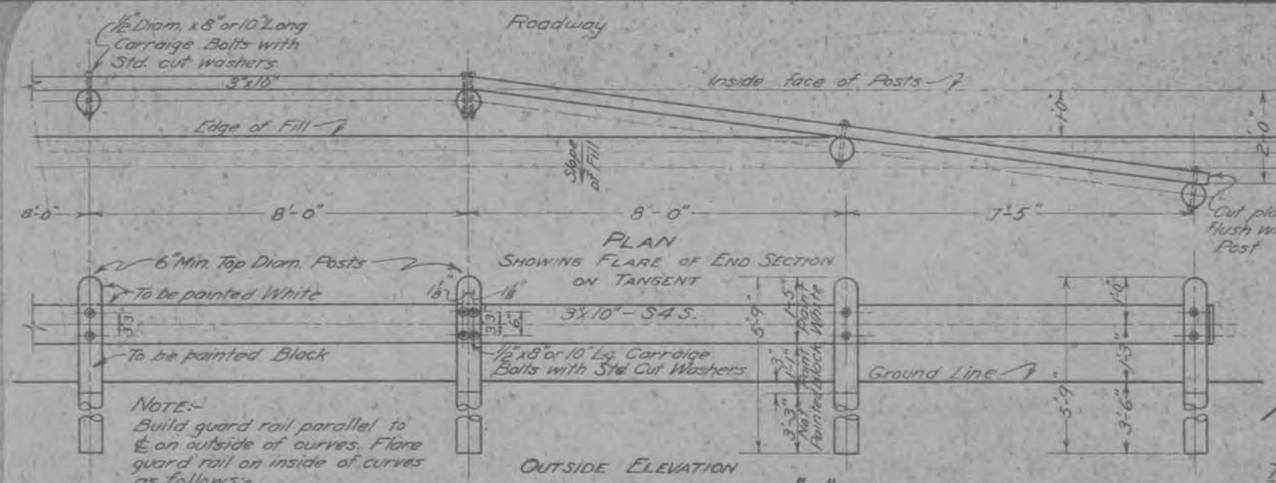
Standard specifications of the Wisconsin Highway Commission.

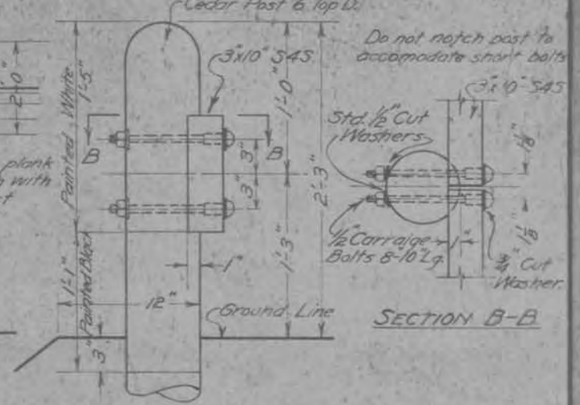
Div. Job# 4455 — C

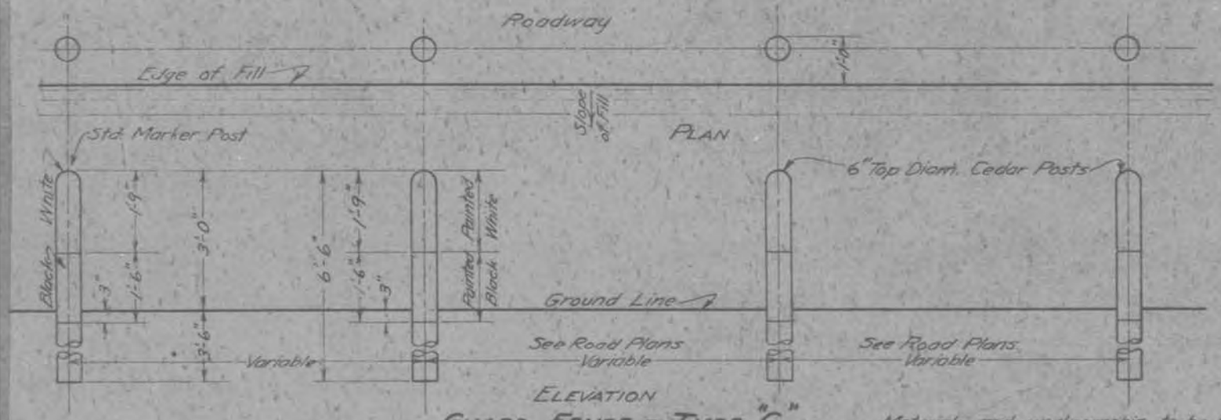
C-101

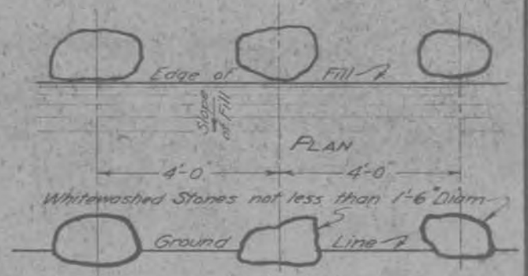
9/1/27 A-ST 3.1

Sta. #172+81









Materials and workmanship to be in accordance with Wisconsin Highway Commission's Specifications.

SPECIFICATIONS.

All posts shall be of good sound straight seasoned new cedar, fir, or white oak. Posts shall be round, having a minimum top diameter of 6". Posts shall have rounded tops and shall be shaved to the white from 3" below ground line to the top. On the right hand side, as the section is entered, of each guard fence section of 100' or over, a standard marker shall be placed as first post. All lumber shall be of good sound seasoned new fir white norway or yellow pine surfaced on four sides and free from large knots. After erection all posts and lumber shall receive 3 coats of paint - colors as shown. Paint shall be mixed and applied strictly in accordance with specifications. All bolts and metal fittings shall be galvanized. All bolts projecting more than ½" from nut shall be cut off one half inch from nut.

STANDARD DESIGN
GUARD FENCE
TYPES "A" "C" & "D."
WISCONSIN HIGHWAY COMMISSION

Correct:- Frank Chase — Plan Engineer.

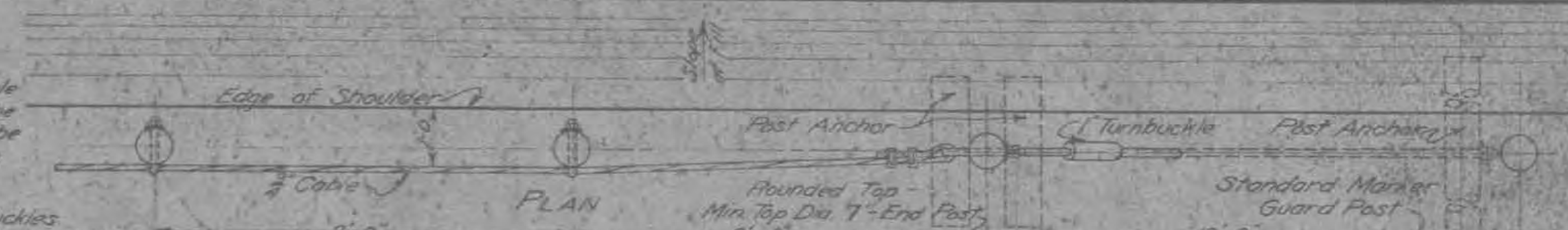
Approved:- C. H. Swanson — Deputy State Highway Engineer

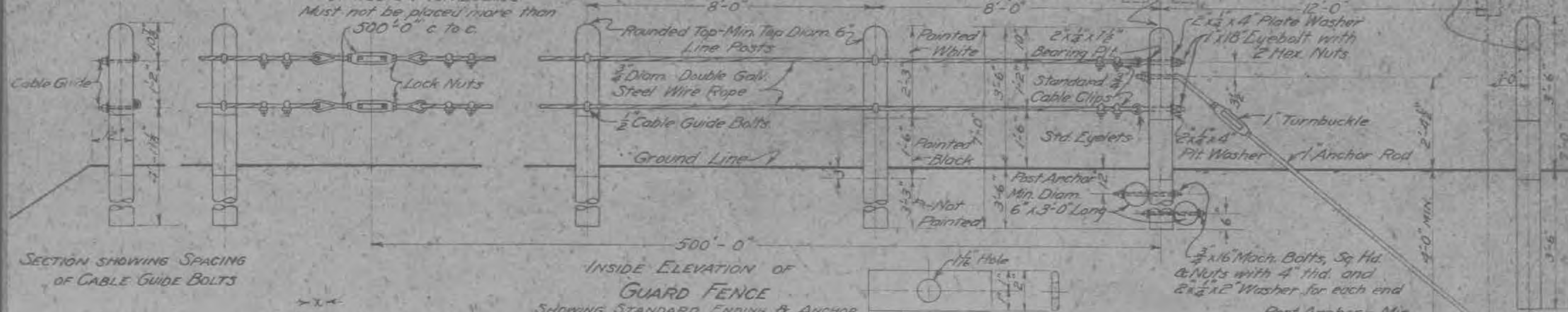
Approved:- H. J. Kueffner — State Highway Engineer

9/1/27.

SPECIFICATIONS.

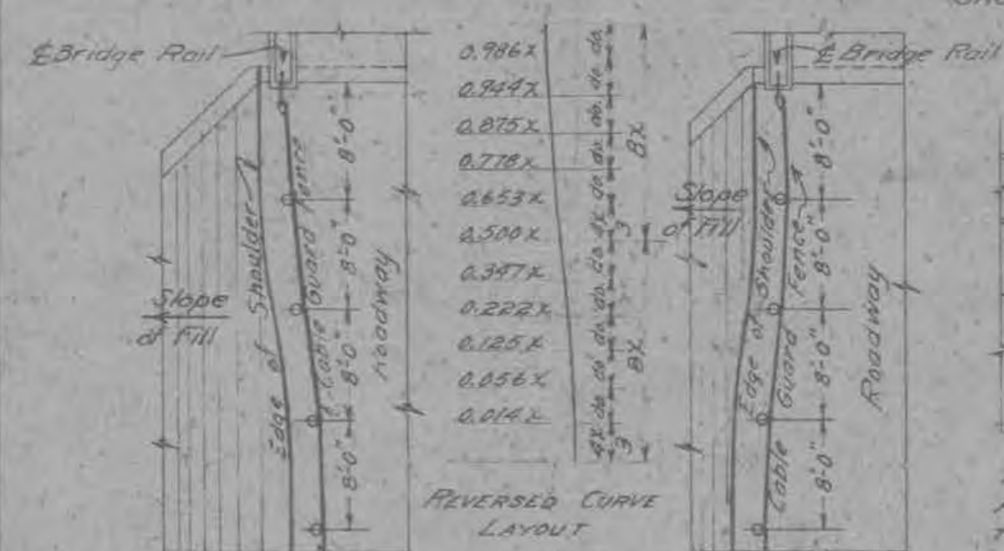
All bolts and metal fittings shall be galvanized. Cable to be double galvanized. After erection, all cable guide bolts projecting more than 1" from nut shall be cut off ½" from nut. Eyebolts and cable clips to be drop forged. Materials and workmanship to be in accordance with the Wisconsin Highway Commission's Specifications.





SECTION SHOWING SPACING OF CABLE GUIDE BOLTS

INSIDE ELEVATION OF GUARD FENCE SHOWING STANDARD ENDING & ANCHOR

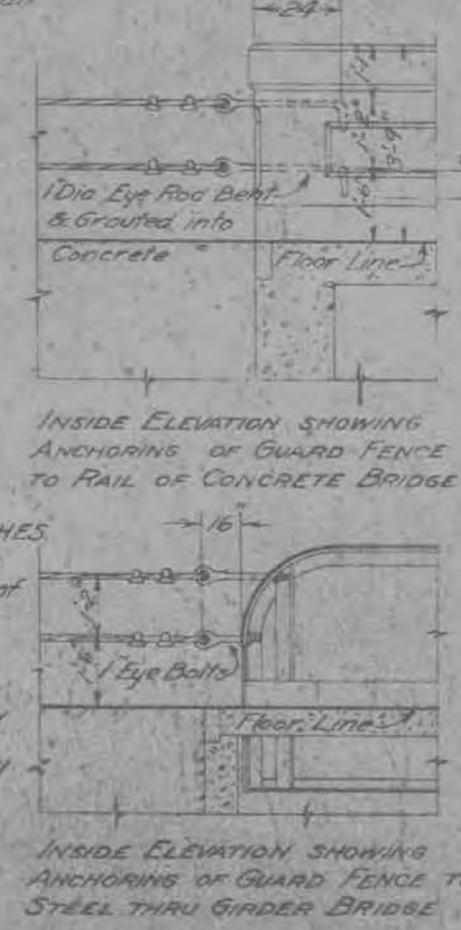


REVERSED CURVE LAYOUT

METHOD OF PLACING GUARD FENCE AT BRIDGE APPROACHES.

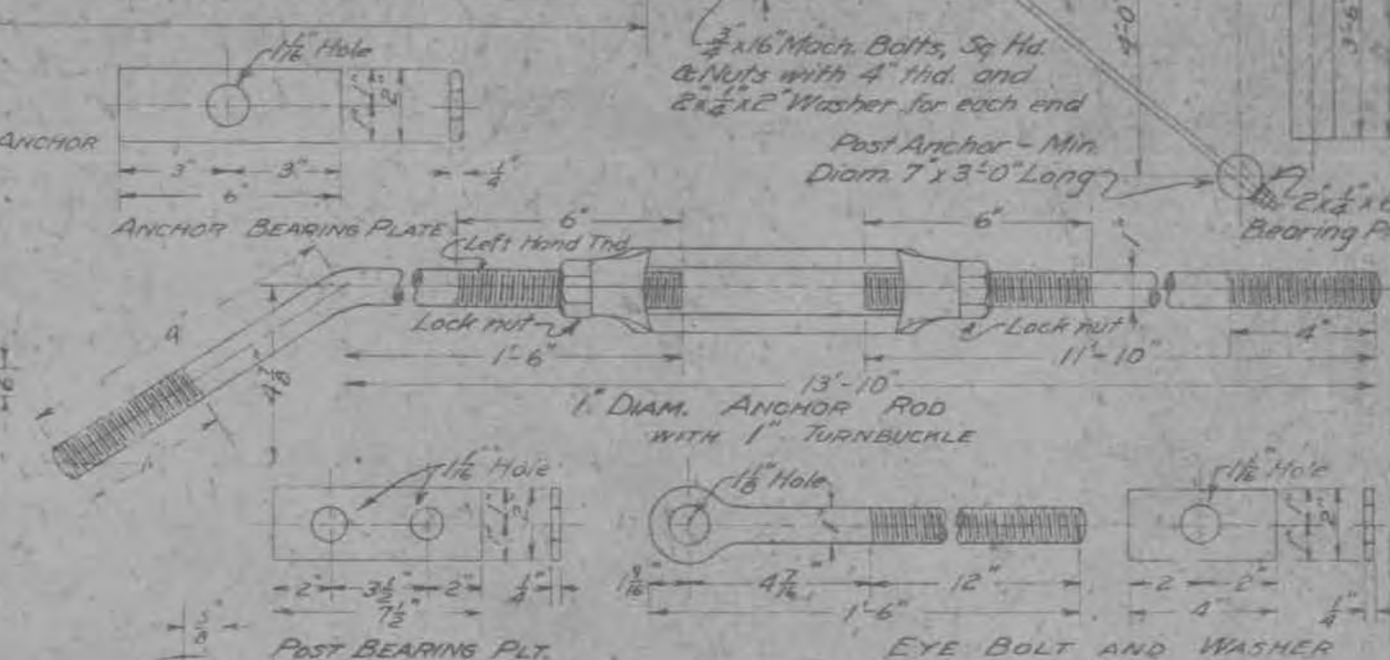
Distance between fences less than roadway of bridge.

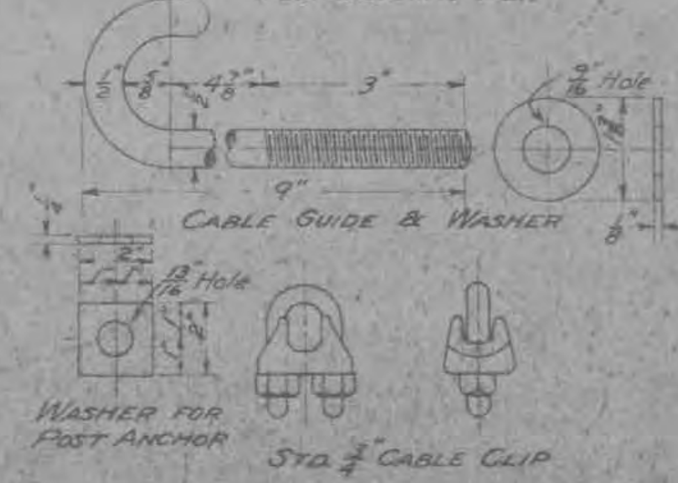
Distance between fences greater than roadway of bridge.



INSIDE ELEVATION SHOWING ANCHORING OF GUARD FENCE TO RAIL OF CONCRETE BRIDGE

INSIDE ELEVATION SHOWING ANCHORING OF GUARD FENCE TO STEEL THRU GIRDER BRIDGE





SPECIFICATIONS.

All posts shall be of good sound straight seasoned new cedar, fir, or white oak. Posts shall be round. End posts shall have a min. top diam. of 7", other posts 6". Posts shall have rounded tops, and be shaved to the white from 3" below ground line to top. On the right hand side as the section is entered, of each guard fence section of 100 ft. or over, a standard marker shall be placed as first post. All posts shall receive 3 coats of paint after erection, colors as shown.

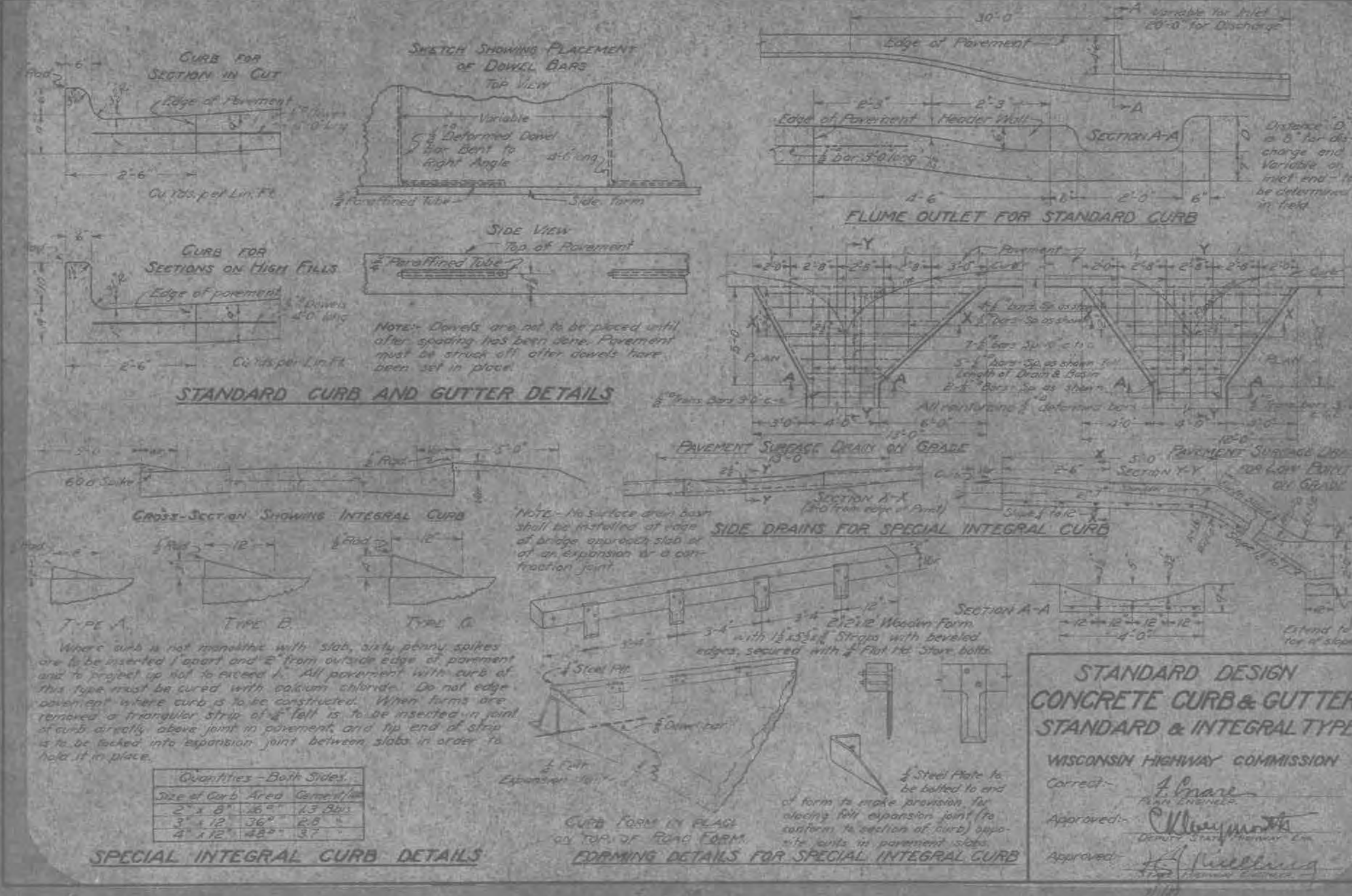
STANDARD DESIGN
GUARD FENCE
TYPE "B."
WISCONSIN HIGHWAY COMMISSION

Correct:- Frank Brain — PLAN ENGINEER

Approved:- C. K. Wegmouth — DEPUTY STATE HIGHWAY ENG.

Approved:- H. J. Kuelling — STATE HIGHWAY ENGINEER

C - 37



Where curb is not monolithic with slab, sixty penny spikes are to be inserted 1' apart and 2" from outside edge of pavement and to project up not to exceed 1". All pavement with curb of this type must be cured with calcium chloride. Do not edge pavement where curb is to be constructed. When forms are removed a triangular strip of ½" felt is to be inserted in joint of curb directly above joint in pavement and tip end of strip is to be tucked into expansion joint between slabs in order to hold it in place.

Quantities - Both Sides.		
Size of Curb	Area	Cement/100'
2" x 8"	16□"	1.3 Bbls.
3" x 12"	36□"	2.8 "
4" x 12"	48□"	3.7 "

SPECIAL INTEGRAL CURB DETAILS

STANDARD DESIGN
CONCRETE CURB & GUTTER
STANDARD & INTEGRAL TYPE

WISCONSIN HIGHWAY COMMISSION

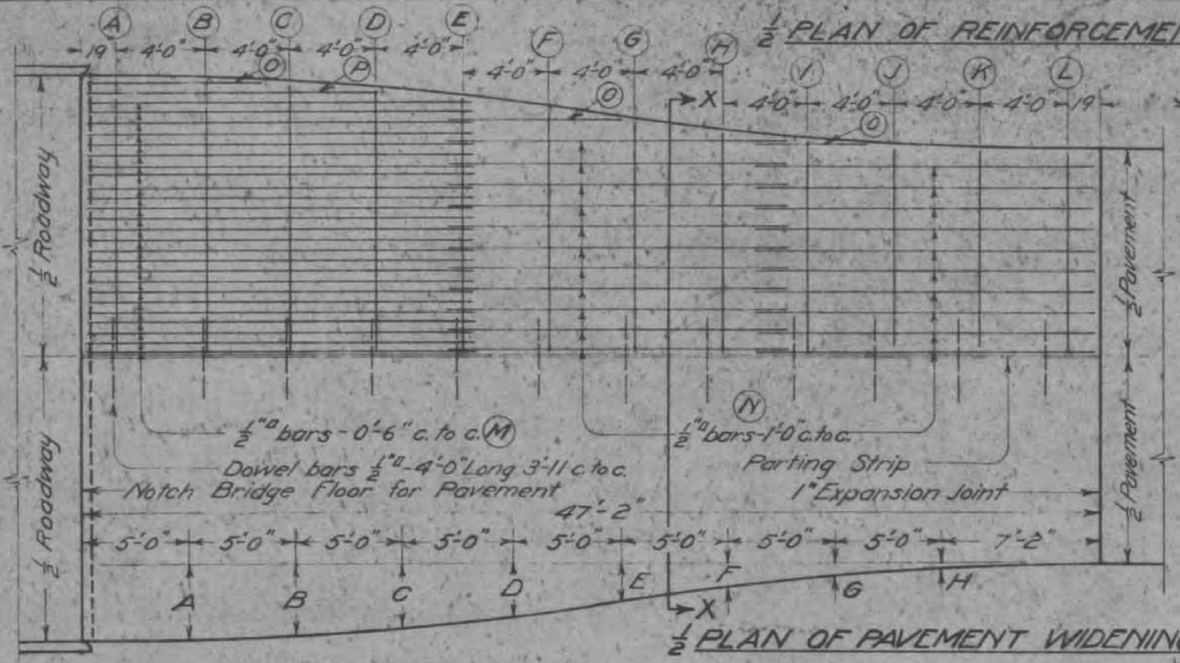
Correct:- F. Crane, Plan Engineer

Approved:- C. Kleymonth, Deputy State Highway Eng.

Approved:- [signature], State Highway Engineer

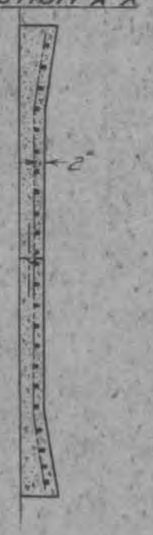
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WIS			

½ PLAN OF REINFORCEMENT



½ PLAN OF PAVEMENT WIDENING

SECTION X-X



BILL OF REINFORCING FOR ONE END

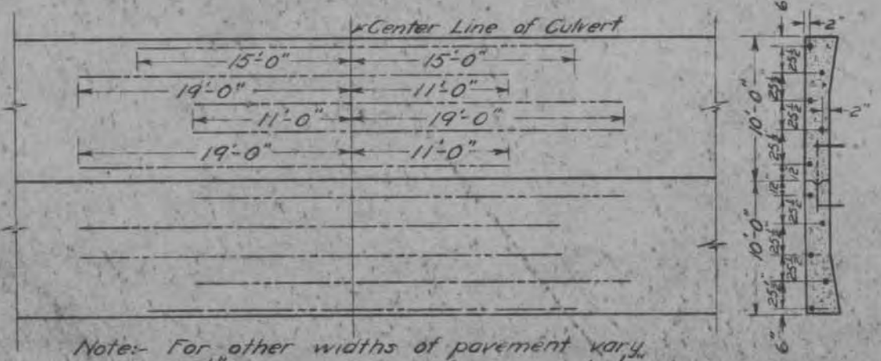
Bar	18' Pav't. 24' Rdy.		18' Pav't. 28' Rdy.		20' Pav't. 24' Rdy.		20' Pav't. 28' Rdy.	
	№	Length	№	Length	№	Length	№	Length
A	2	11'-0"	2	13'-0"	2	11'-0"	2	13'-0"
B	2	11'-0"	2	13'-0"	2	11'-0"	2	13'-0"
C	2	10'-6"	2	12'-6"	2	11'-0"	2	12'-6"
D	2	10'-6"	2	12'-0"	2	10'-6"	2	12'-6"
E	2	10'-0"	2	12'-0"	2	10'-6"	2	12'-0"
F	2	10'-0"	2	11'-0"	2	10'-6"	2	11'-6"
G	2	9'-6"	2	10'-6"	2	10'-0"	2	11'-0"
H	2	9'-6"	2	10'-0"	2	10'-0"	2	10'-6"
I	2	9'-0"	2	9'-6"	2	10'-0"	2	10'-0"
J	2	9'-0"	2	9'-0"	2	9'-6"	2	9'-6"
K	2	8'-6"	2	8'-6"	2	9'-6"	2	9'-6"
L	2	8'-6"	2	8'-6"	2	9'-6"	2	9'-6"
M	42	18'-0"	50	18'-0"	44	18'-0"	50	18'-0"
N	36	16'-0"	38	16'-0"	42	16'-0"	42	16'-0"
O	6	6'-6"	6	7'-0"	4	7'-6"	6	8'-0"
P	2	15'-6"	4	12'-0"	2	11'-0"	2	13'-6"

	A	B	C	D	E	F	G	H
18' Pav't. 24' Rdy.	2.40'	2.27'	1.94'	1.56'	1.14'	.80'	.48'	.28'
18' Pav't. 28' Rdy.	4.43'	4.13'	3.63'	2.90'	2.00'	1.19'	.57'	.19'
20' Pav't. 24' Rdy.	1.44'	1.37'	1.24'	1.00'	.69'	.42'	.23'	.07'
20' Pav't. 28' Rdy.	3.42'	3.19'	2.79'	2.23'	1.68'	.93'	.47'	.16'

SLAB SPANS

Note:- All reinforcement is ½" square deformed bars. Place longitudinal bars 2" from bottom of slab and transverse bars on top of these. Wire longitudinal and transverse bars securely together to form separate mats on each side of parting strip.

REINFORCING & WIDENING FOR BRIDGE APPROACH

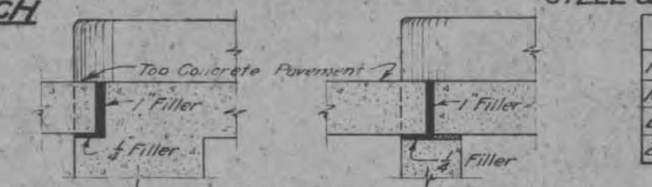


Note:- For other widths of pavement vary the 25½" spaces. All reinforcement is ½" square deformed bars 30' long - 10 req'd. Weight of steel 255 lbs.

PAVEMENT REINFORCEMENT OVER CULVERT

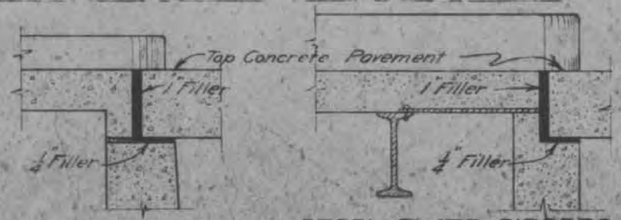
STEEL & ADDITIONAL CONC. FOR ONE END

	Lbs. Steel	Sq. Yds. Conc.
18' Pav't. 24' Rdy.	1390	13.10
18' Pav't. 28' Rdy.	1580	23.58
20' Pav't. 24' Rdy.	1500	7.86
20' Pav't. 28' Rdy.	1630	18.35



R.C. DECK GIRDERS WITHOUT SHOES & ROCKERS.

R.C. DECK GIRDERS WITH SHOES & ROCKERS.



I-BEAM SPANS

STEEL PLATE GIRDERS & STEEL TRUSSES

METHODS OF CONNECTING CONCRETE PAVEMENT WITH BRIDGE STRUCTURES.

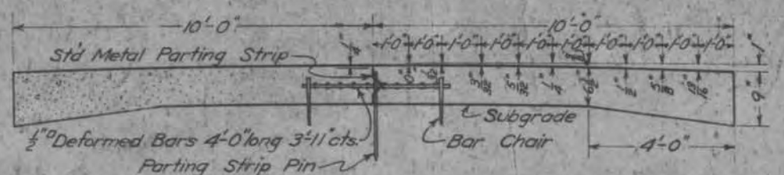
STANDARD DESIGN
PAVEMENT REINFORCING
FOR
BRIDGE APPROACHES & CULVERTS

WISCONSIN HIGHWAY COMMISSION

Correct:- J. Crane
PLAN ENGINEER.

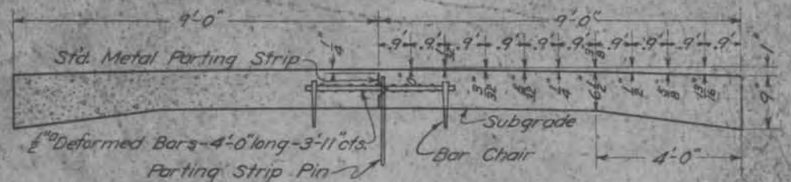
Approved:- C. H. Swift
DEPUTY STATE HIGHWAY ENG.

Approved:- H. J. Tullgren
STATE HIGHWAY ENGINEER.



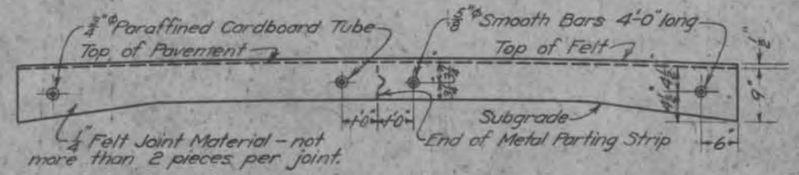
CROSS SECTION OF STD. 20 FT. CONCRETE PAVEMENT.

SECTION AREA = 11.68 SQ. FT.
1" Parabolic Crown.

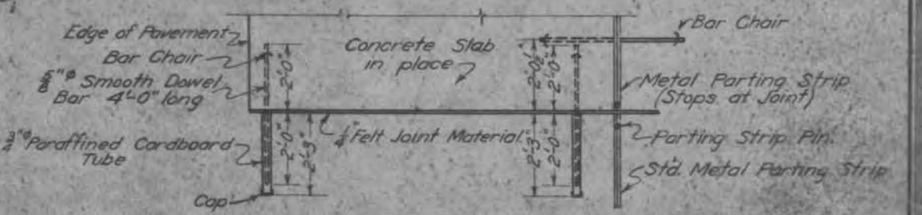


CROSS SECTION OF STD. 18 FT. CONCRETE PAVEMENT.

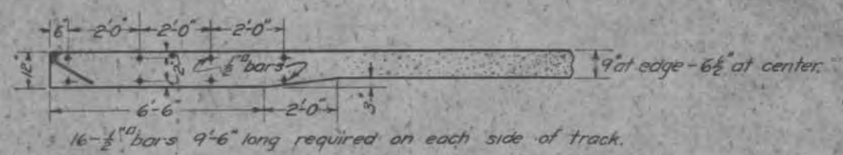
SECTION AREA = 10.60 SQ. FT.
1" Parabolic Crown.



TRANSVERSE JOINT DETAIL.

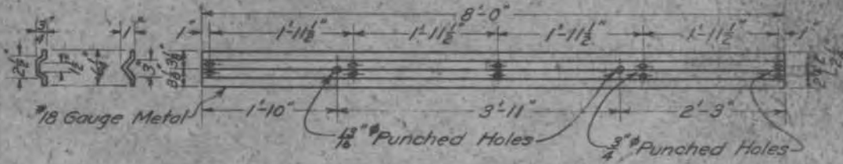


HALF PLAN OF TRANSVERSE JOINT.

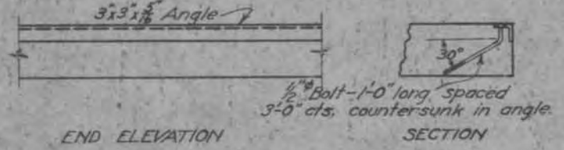


16-½"ø bars 9'-6" long required on each side of track.

SECTION AT RIGHT ANGLES TO TRACK SHOWING REINFORCEMENT.



STANDARD METAL PARTING STRIP.

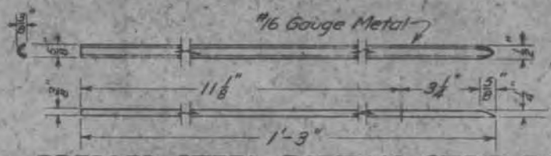


½"ø Bolt - 1'-0" long spaced 3'-0" cts. countersunk in angle.

END ELEVATION SECTION

ARMOR PROTECTION AT R.R. CROSSING.

NOTE:- Protect ends of pavement at railroad crossings with 3"x3"x5/16" angle placed as shown and anchored by ½"x1'-0" bolts at 3'-0" cts. Bolts shall be countersunk in angle flush with surface and shall fit snugly. The crown to be flat and may be worked out in 25 feet.



PRESSED STEEL PARTING STRIP PIN.

SAMPLE BAR PIN.

APPROVED BAR PINS MUST BE USED.

STANDARD DESIGN CONCRETE PAVEMENT SECTIONS AND PAVEMENT JOINT DETAILS.

WISCONSIN HIGHWAY COMMISSION.

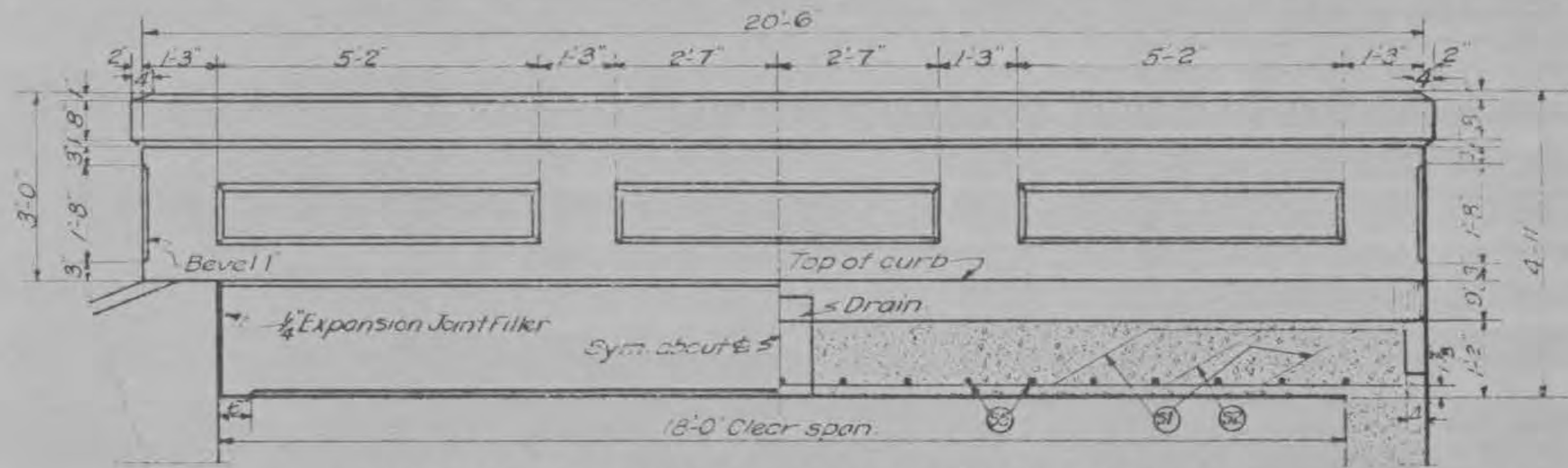
Correct:- E. Praze
PLAN ENGINEER.

Approved:- C. K. Breymouth
DEPUTY STATE HIGHWAY ENGINEER.

Approved:- H. J. Tuelling
STATE HIGHWAY ENGINEER.

C-40

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WIS			



HALF SIDE ELEVATION   HALF SECTION A-A

GENERAL NOTES

Concrete shall be class "A" 1:2:4 proportions.

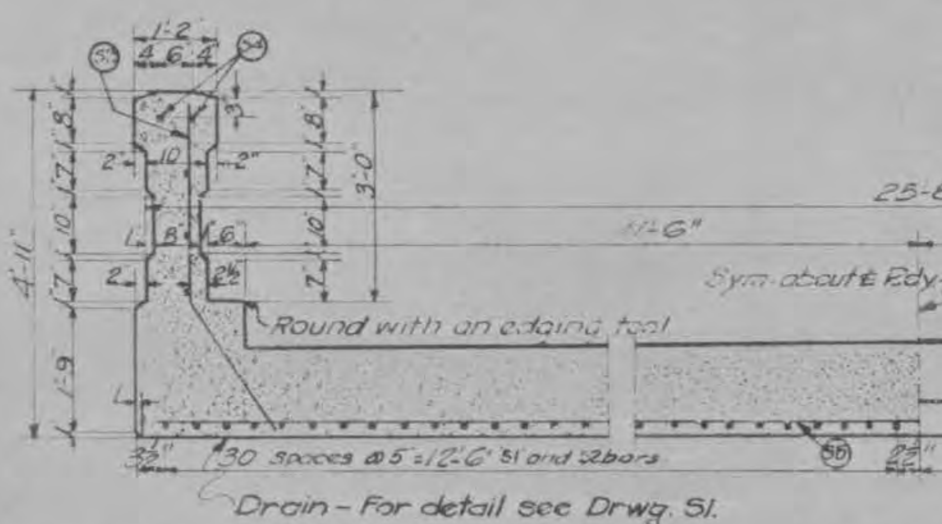
Reinforcement shall be mechanical bond bars of net section equal to the area of bars specified.

The arrangement of the longitudinal bars shall be as follows: The "s1" bars alternate with the "s2" bars. Ends are reversed for adjacent "s1" bars and "s2" bars.

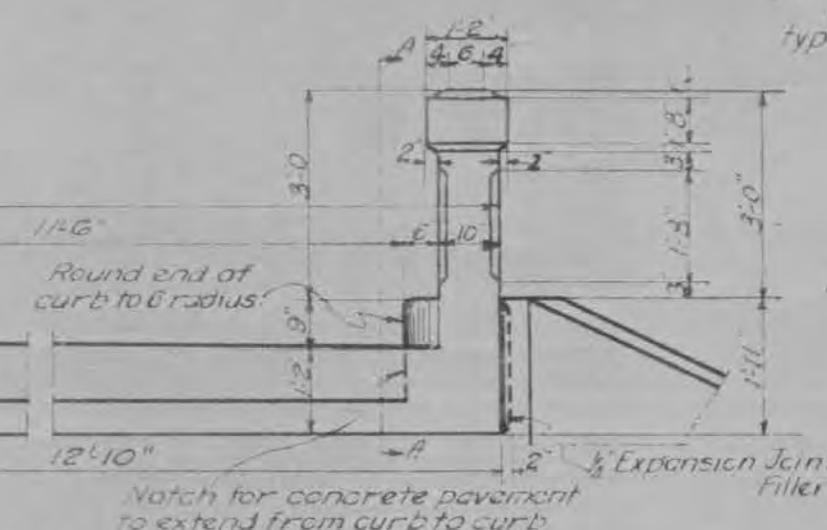
Longitudinal and transverse floor bars shall be bent around drains.

All reinforcement shall be held in place by metallic bar chairs.

Expansion joint filler to be of approved type.



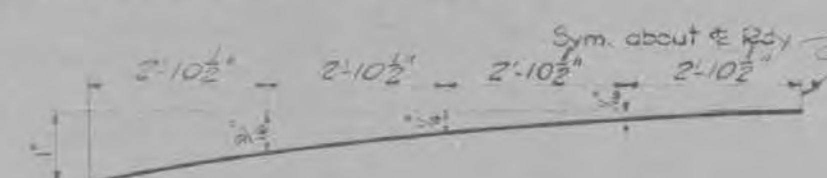
HALF CROSS SECTION OF ROADWAY THRU PANELING



HALF END ELEVATION

ESTIMATED QUANTITIES

Concrete: 29.2 Cu. Yds.
Reinforcing Steel: 3240 lbs.
Drains: 2 reqd. complete
Expansion Joint Filler 1/4"



ROADWAY CROWN.

BILL OF BARS

NO.	MRK.	SIZE	SPAC'G	LENGTH	LOCATION
31	S1	7/8 φ	10" cts.	20'-0"	Longitudinal in floor
31	S2	7/8 φ	10" cts.	20'-0"	Longitudinal in floor
28	S3	1/2 φ	1'-6 cts.	5'-0"	Vertical in railing
10	S4	1/2 φ	10" cts.	20'-0"	Horizontal in railing
19	S5	1/2 φ	1'-0 cts.	25'-9"	Transverse in floor

No. [redacted]
Bridge Job No. B [redacted]

WISCONSIN HIGHWAY COMMISSION

REINFORCED CONCRETE SLAB
18 FT. 0 IN. SPAN 24 FT. 0 IN. ROADWAY

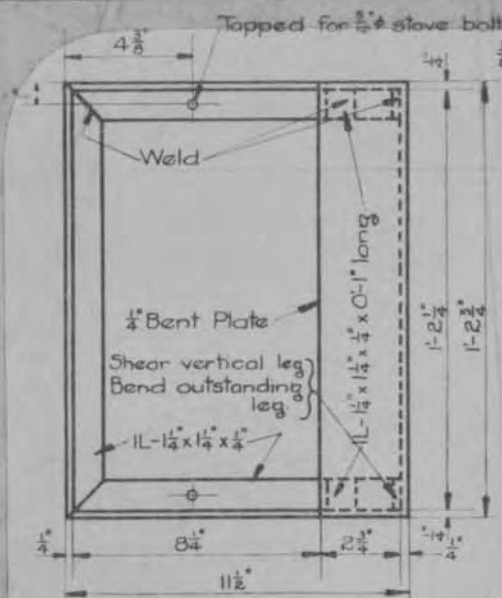
Correct: C. H. Nash
Bridge Engineer

Drawn
Checked

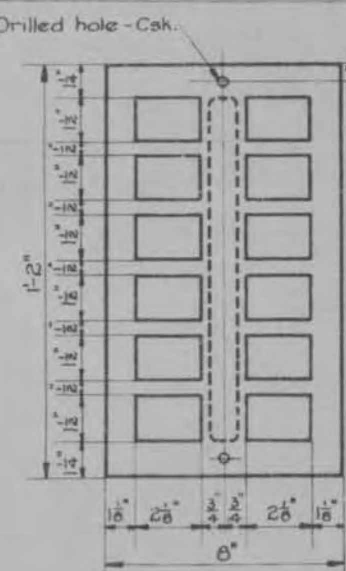
Approved: 9/19/27
State Highway Engineer

Approved: C. Weymouth
Deputy State Highway Engineer

Plan Dept. H 18-24

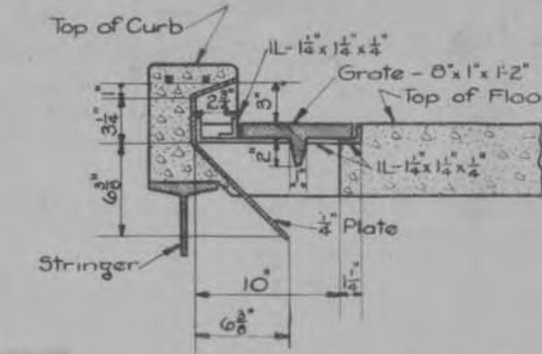


PLAN OF DRAIN FRAME.

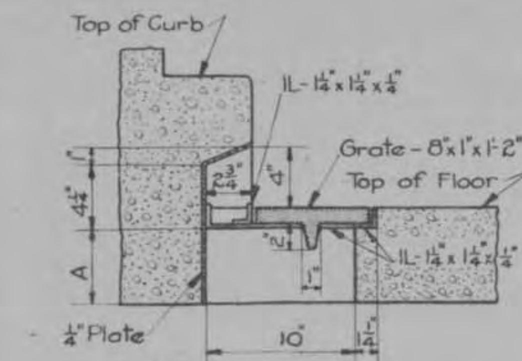


DETAIL OF C.I. GRATE.

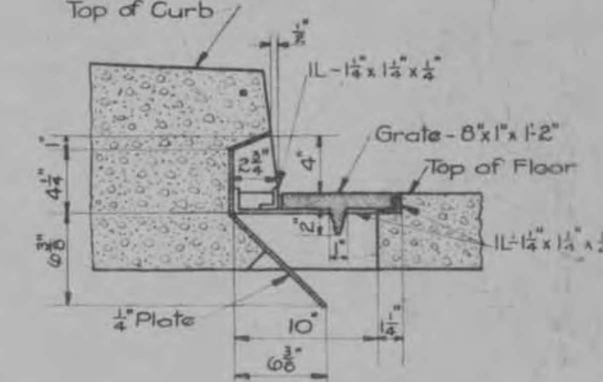
[redacted]



FOR TRUSSES.



FOR SLABS AND DECK GIRDERS.



FOR PLATE GIRDERS.

TYPICAL SECTION THRU DRAIN.

TABLE OF DIMENSIONS.

Spans.	Dimension "A".
T20-20 to T60-20 Inclusive.	6 1/4"
T20-24 to T60-24 do.	5 3/4"
T20-28 to T60-28 do.	6 1/4"
H8 All Roadways.	7 1/4"
H10 do.	8 1/4"
H12 do.	9 1/4"
H14 do.	10 1/4"
H16 do.	11 3/4"
H18 do.	1'-0 3/4"
H20 do.	1'-1 3/4"
H22 do.	1'-3 1/4"
H24 do.	1'-4 1/4"

GENERAL NOTES.

Frames for drains shall be fabricated of structural steel in the shop in strict accordance to the details shown for the particular type of span desired.

Cast iron grates required. Grates to be made of resmelted pig iron.

Bolts in grates shall be 5/16" ϕ galvanized flat head stove bolts.

PROJECT NO. [redacted]
DIVISION JOB NO. [redacted]
BRIDGE JOB NO. [redacted]

WISCONSIN HIGHWAY COMMISSION

DRAIN DETAILS FOR STANDARD SPANS

CORRECT: C. H. Hirsch — BRIDGE ENGINEER

APPROVED: C. A. Weymouth — DEPUTY STATE HIGHWAY ENGINEER

4-19-28

APPROVED: W. C. Buetow — STATE HIGHWAY ENGINEER

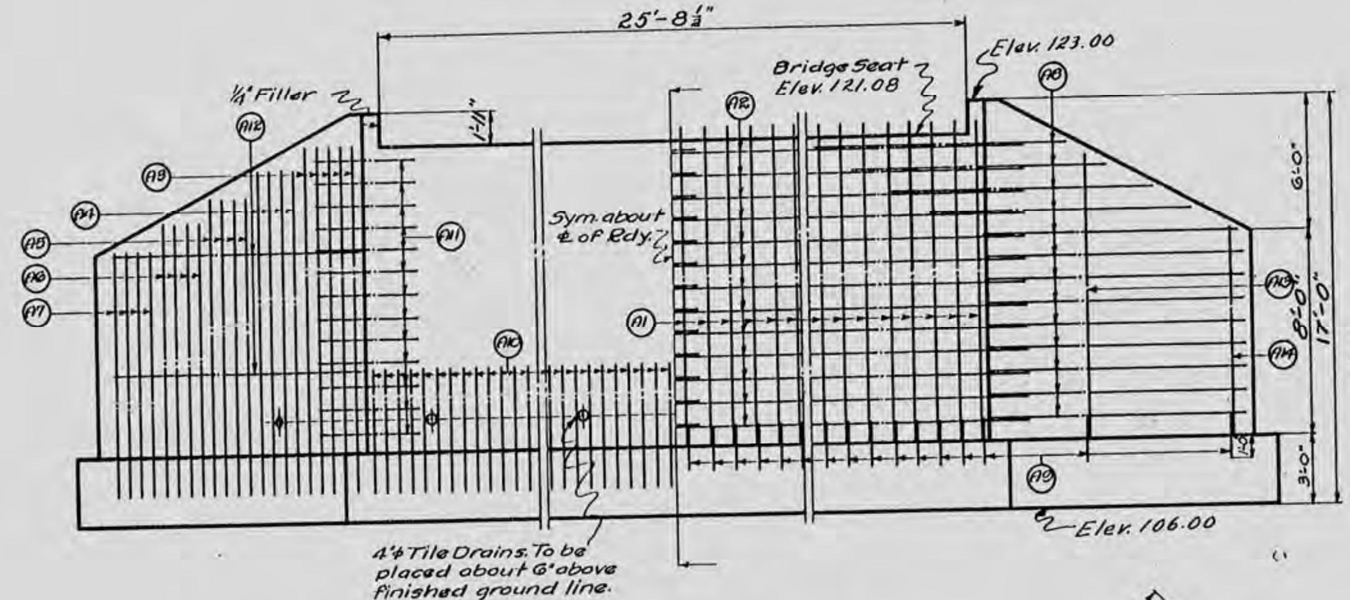
DRAWN ___
CHECKED ___

S1.

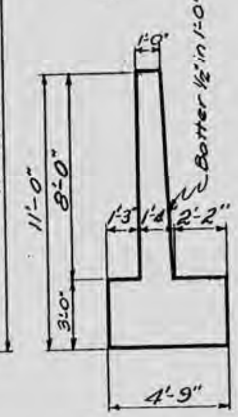
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WIS			

WISCONSIN PROJECT No. ____
DIVISION JOB No. 4455

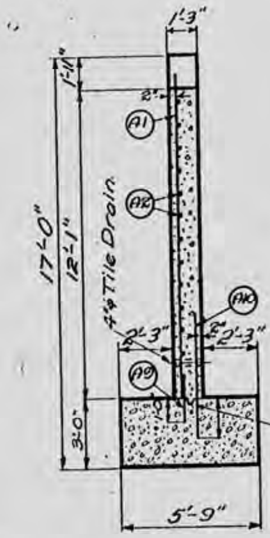
SLAB SPAN ABUTMENTS.
For heights over 15'-0" and up to and including 18'-0":
Parapet notch + out to out of railings + 1½".



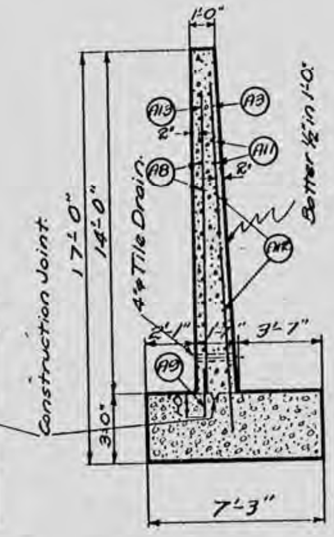
FRONT ELEVATION.



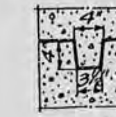
END VIEW OF WINGS.



SECTION ON ℄ OF RDY.

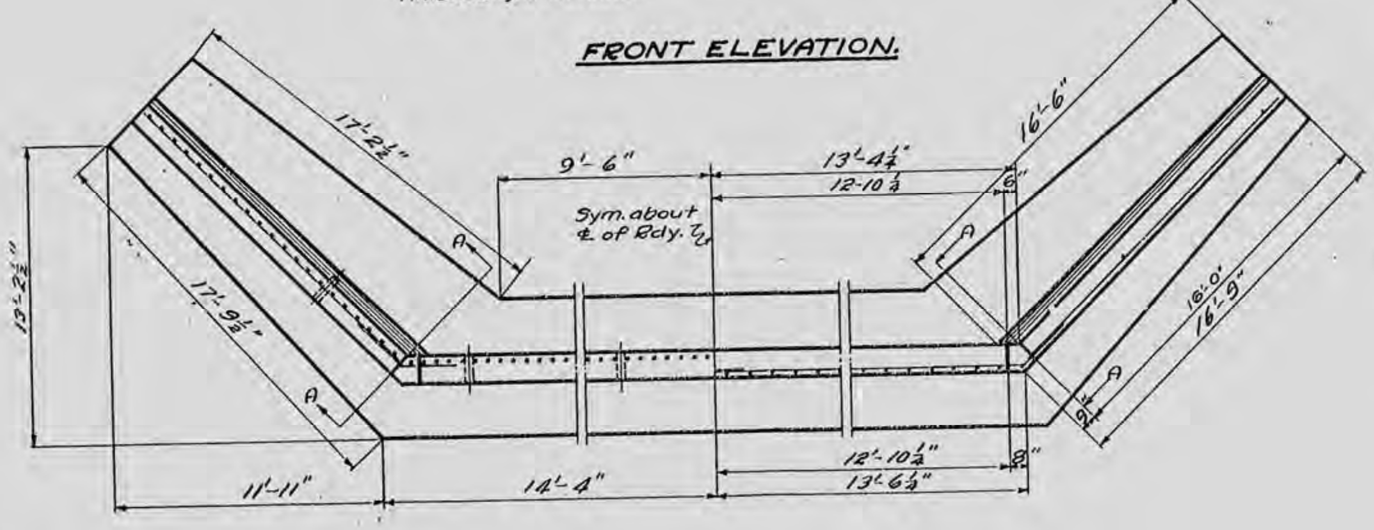


SECTION A-A.



DETAIL OF CONSTRUCTION JOINT.

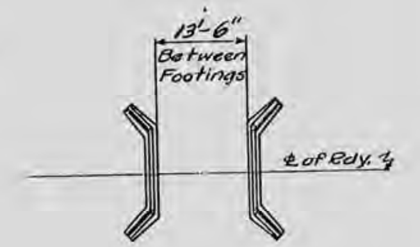
See Specifications under "Depositing Concrete."



Showing Footing Dimensions, Drains and Reinforcement in Back Face.

Showing Neatwork Dimensions and Reinforcement in Front Face.

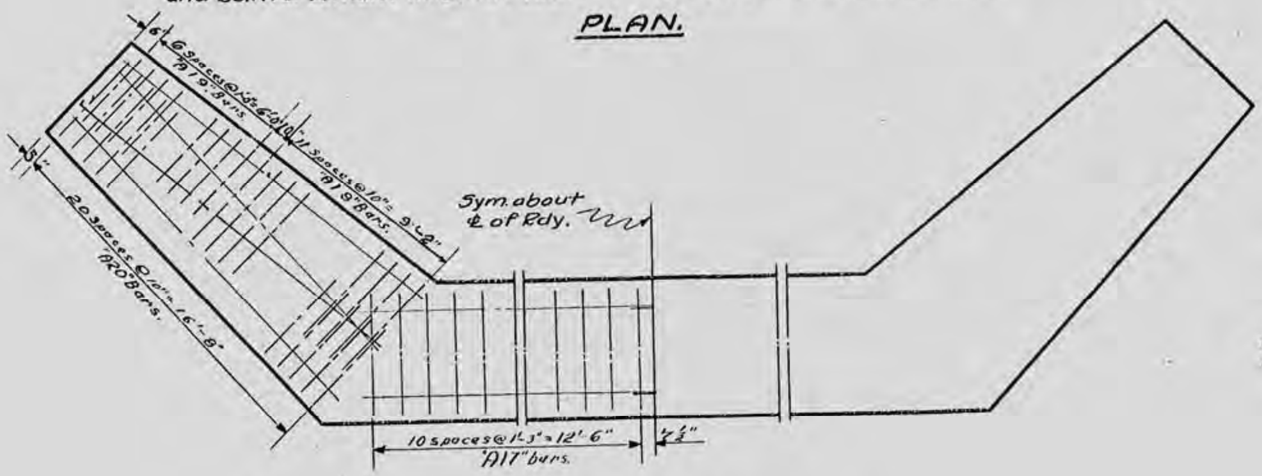
PLAN.



LOCATION DIAGRAM.

BILL OF BARS.

NO.	MARK	SIZE	LENGTH	SPACING	LOCATION	IMBED IN FTG.
56	A1	½"□	13'-0"	1'-0" cts.	Vertical in body. (Front face)	
48	A2	½"□	17'-0"	1'-0" cts.	Horizontal in body. (Front face)	
20	A3	¾"φ	15'-0"	9" cts.	Vertical in wings. (Back face)	2'-6"
10	A4	⅝"φ	13'-6	9" cts.	Vertical in wings. (Back face)	2'-1"
16	A5	½"□	12'-0	9" cts.	Vertical in wings. (Back face)	1'-9"
10	A6	½"□	11'-0	9" cts.	Vertical in wings. (Back face)	1'-9"
10	A7	½"□	9'-6"	9" cts.	Vertical in wings (Back face)	1'-9"
48	A8	½"□	16'-0"	1'-0" cts.	Horizontal in wings. (Front face)	
64	A9	½"φ	2'-0"	shown	Dowels for spacing "A1", "A13" + "A14" bars	1'-0"
64	A10	½"φ	6'-0"	10" cts.	Vertical in body. (Back face)	1'-9"
48	A11	½"□	5'-0"	1'-0" cts.	Horizontal in corners (Back face)	
8	A12	½"φ	16'-0"	shown	Horizontal in wings. (Back face)	
4	A13	½"φ	12'-0"	shown	Vertical in wings. (Front face)	
4	A14	½"φ	9'-6"	shown	Vertical in wings. (Front face)	
8	A15	½"φ	15'-0"	shown	Longitudinal in body footing.	
10	A16	½"φ	17'-0"	shown	Longitudinal in wing footing.	
44	A17	½"□	5'-0"	1'-3" cts.	Transverse in body footing.	
48	A18	½"φ	5'-0"	10" cts.	Transverse in wing footing (Heel)	
28	A19	½"φ	4'-6"	1'-0" cts.	Transverse in wing footing (Heel)	
84	A20	½"φ	3'-6"	10" cts.	Transverse in wing footing (Toe)	



FOOTING PLAN.

SUPERSTRUCTURE-ONE SPAN-H18-24&S1.

GENERAL NOTES.

Concrete shall be class "A" 1:2:4 proportions.
Bevel exposed edges of concrete 1".
Reinforcement shall be mechanical bond bars of net section equal to the area of bars specified.

ESTIMATED QUANTITIES.

Concrete: — 140.6 Cu. Yds.
Reinforcing Steel: — 4660 #
Tile Drains: 4"φ 10 lin. ft. req'd.

BRIDGE JOB No. B4750

WISCONSIN HIGHWAY COMMISSION
REINFORCED CONCRETE ABUTMENTS
FOR THE
SCHOTT BRIDGE
TOWN OF TEXAS — MARATHON CO.
STA. 98+48

CORRECT: C. T. Arsh
BRIDGE ENGINEER

APPROVED: C. K. Weymouth
DEPUTY STATE HIGHWAY ENGINEER

APPROVED: H. J. Kuelling
STATE HIGHWAY ENGINEER

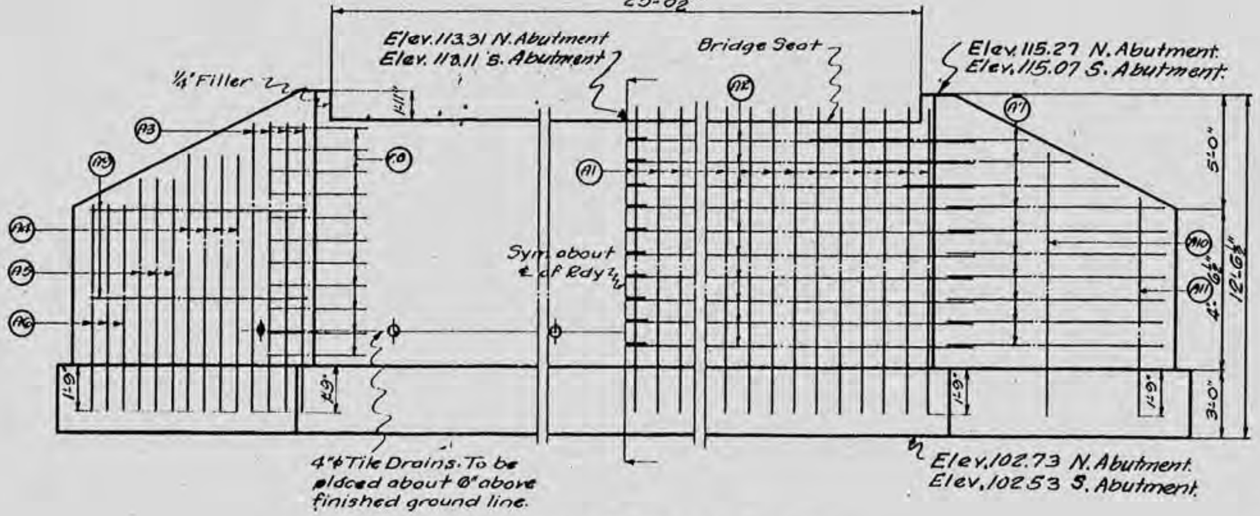
Drawn L.W.F.
Checked W.F.

C.E.M. 11-1-'28
L.W.F.

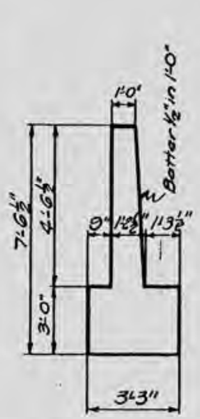
X 2135

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	WIS.	4455		16	29

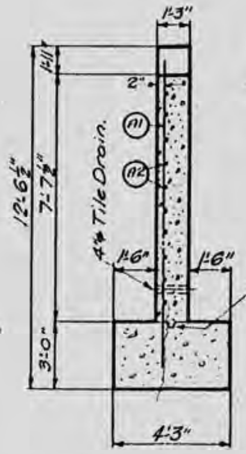
WISCONSIN PROJECT No. ____
DIVISION JOB No. 4455



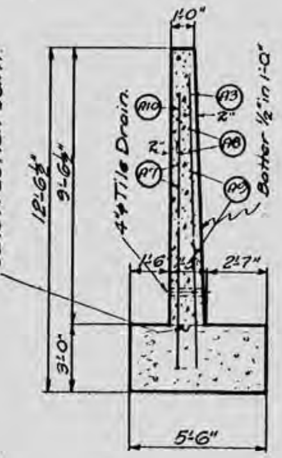
FRONT ELEVATION.



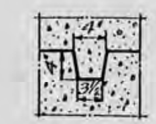
END VIEW OF WINGS.



SECTION ON ℄ OF RDY.

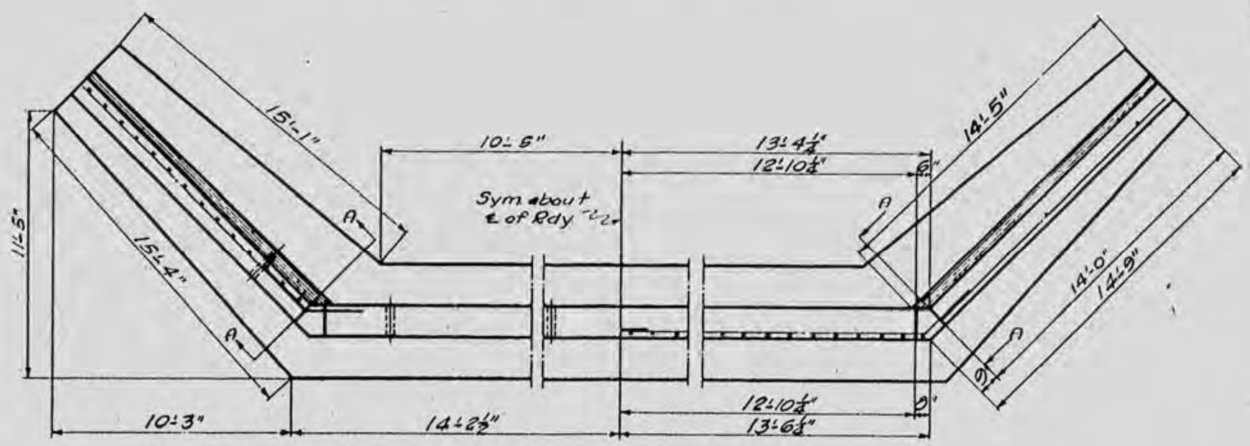


SECTION A-A.



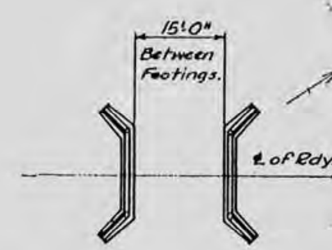
DETAIL OF CONSTRUCTION JOINT.

See Specifications under "Depositing Concrete."

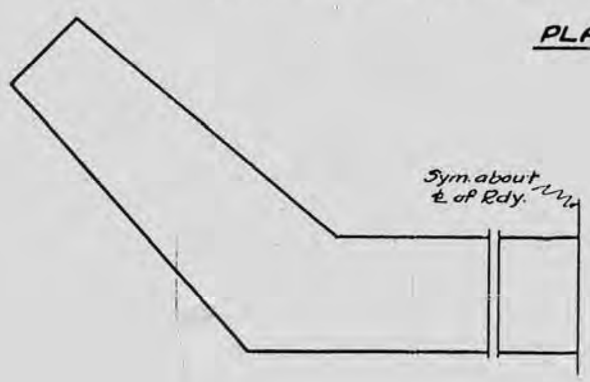


Showing Footing Dimensions, Drains and Reinforcement in Back Face. Showing Neat work Dimensions and Reinforcement in Front Face.

PLAN.



LOCATION DIAGRAM.



HALF FOOTING PLAN.

BILL OF BARS.

NO.	MARK	SIZE	LENGTH	SPACING	LOCATION
56	A1	½" ▫	10'-3"	1'-0" cts	Vertical in body. (Front Face)
28	A2	½" ▫	17'-6"	1'-0" cts	Horizontal in body. (Front Face)
16	A3	½" ▫	10'-0"	1'-0" cts	Vertical in wings. (Back Face)
16	A4	½" ▫	9'-0"	1'-0" cts	Vertical in wings. (Back Face)
12	A5	½" ▫	7'-6"	1'-0" cts.	Vertical in wings. (Back Face)
12	A6	½" ▫	6'-6"	1'-0" cts.	Vertical in wings. (Back Face)
28	A7	½" ▫	14'-0"	1'-0" cts.	Horizontal in wings. (Front Face)
28	A8	½" ▫	5'-0"	1'-0" cts.	Horizontal in corners (Back Face)
8	A9	½" ϕ	14'-0"	shown	Horizontal in wings. (Back Face)
4	A10	½" ϕ	10'-0"	shown	Vertical in wings. (Front Face)
4	A11	½" ϕ	7'-0"	shown	Vertical in wings. (Front Face)

SUPERSTRUCTURE - ONE SPAN - H18-24 & S1.

GENERAL NOTES.

Concrete shall be class "A" - 1:2:4 proportions.

Bevel exposed edges of concrete 1".

Reinforcement shall be mechanical bond bars of net section equal to the area of bars specified.

Both abutments are alike.

ESTIMATED QUANTITIES.

Concrete: ———— 89.7 Cu. Yds.
Reinforcing Steel: ———— 1880 #
Tile Drains: 4" ϕ 14 lin. ft. req'd.

BRIDGE JOB No. B4749

WISCONSIN HIGHWAY COMMISSION
REINFORCED CONCRETE ABUTMENTS
FOR THE
LUEDTKE BRIDGE
TOWN OF TEXAS - MARATHON CO.

CORRECT: C. J. [signature] — BRIDGE ENGINEER

APPROVED. [signature] — DEPUTY STATE HIGHWAY ENGINEER 2-16-28

APPROVED: 2-6-28 [signature] — STATE HIGHWAY ENGINEER

Drawn [initials] Checked [initials]

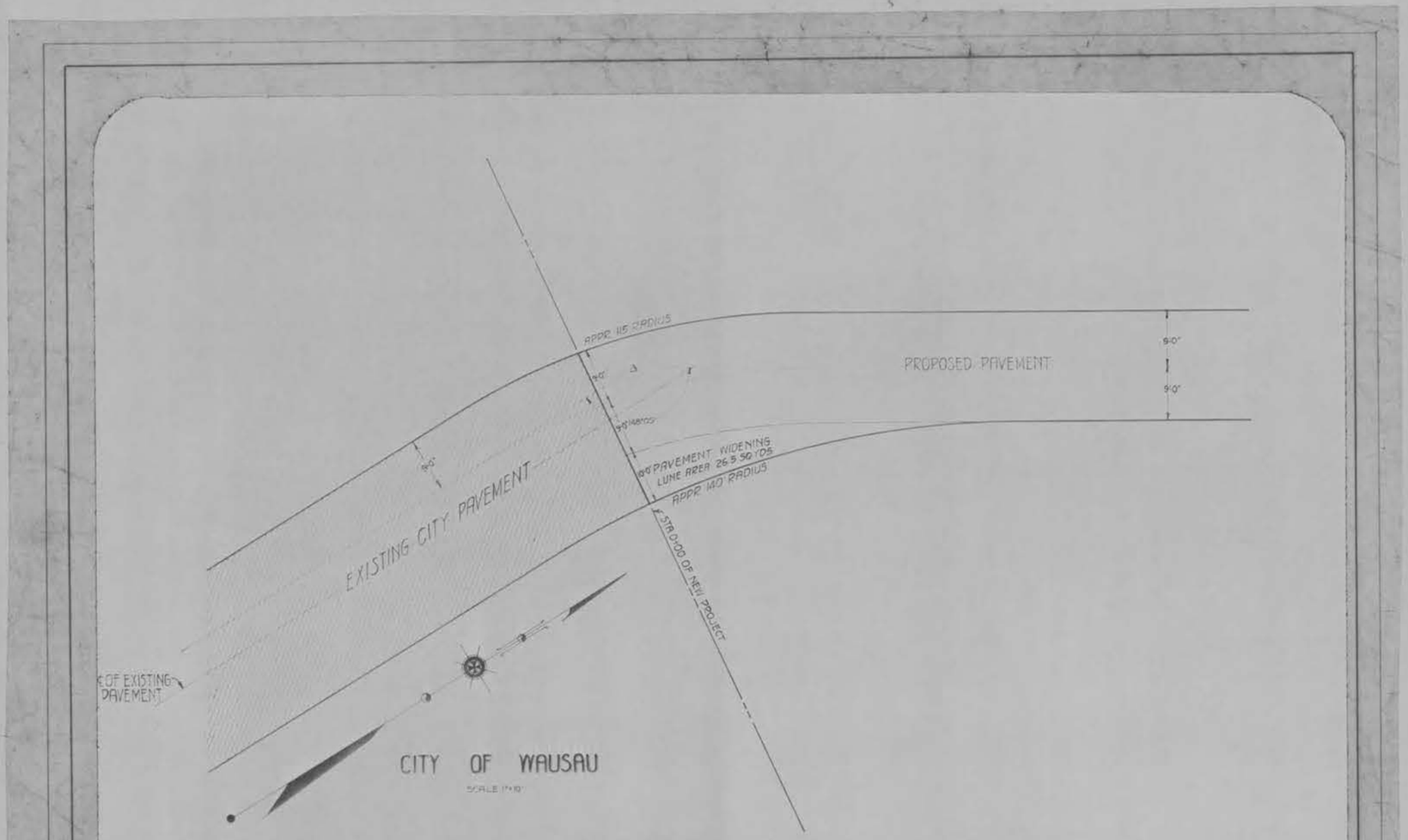
C.E.M. 11-1-26
LWP

X212

For heights over 12'-0" and up to and including 15'-0"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WIS.			

DIVISION JOB NO.



DETAIL OF PAVEMENT WIDENING AT SOUTH END OF WAUSAU-BROKAW JOB PROJ. NO. 4455

RECOMMENDED FOR APPROVAL

H. McDonald
DIVISION ENGINEER

WISCONSIN HIGHWAY COMMISSION
MADISON, WIS.

APPROVED:

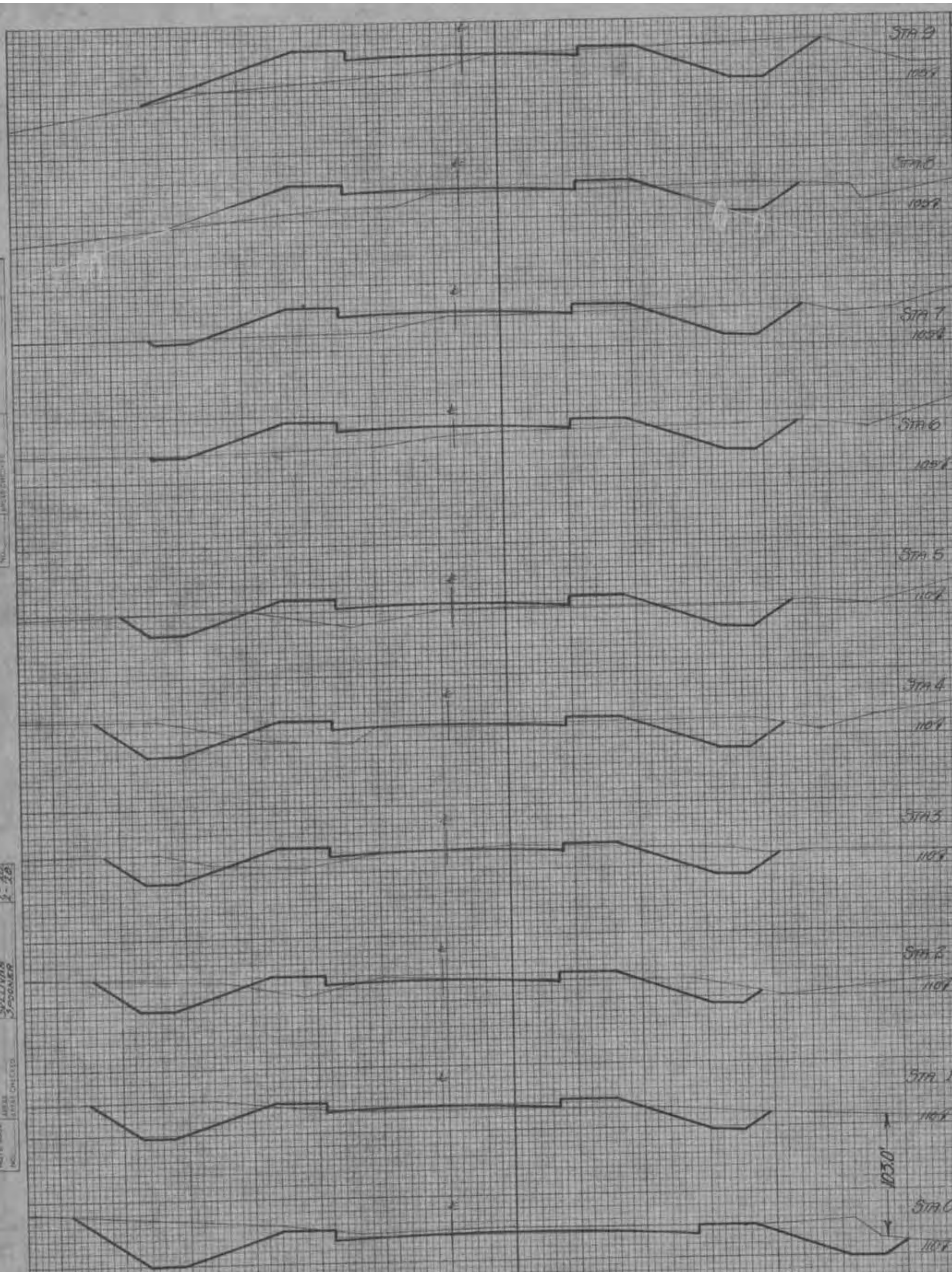
C K Weymouth
DEPUTY STATE HIGHWAY ENGINEER

STATE HIGHWAY ENGINEER

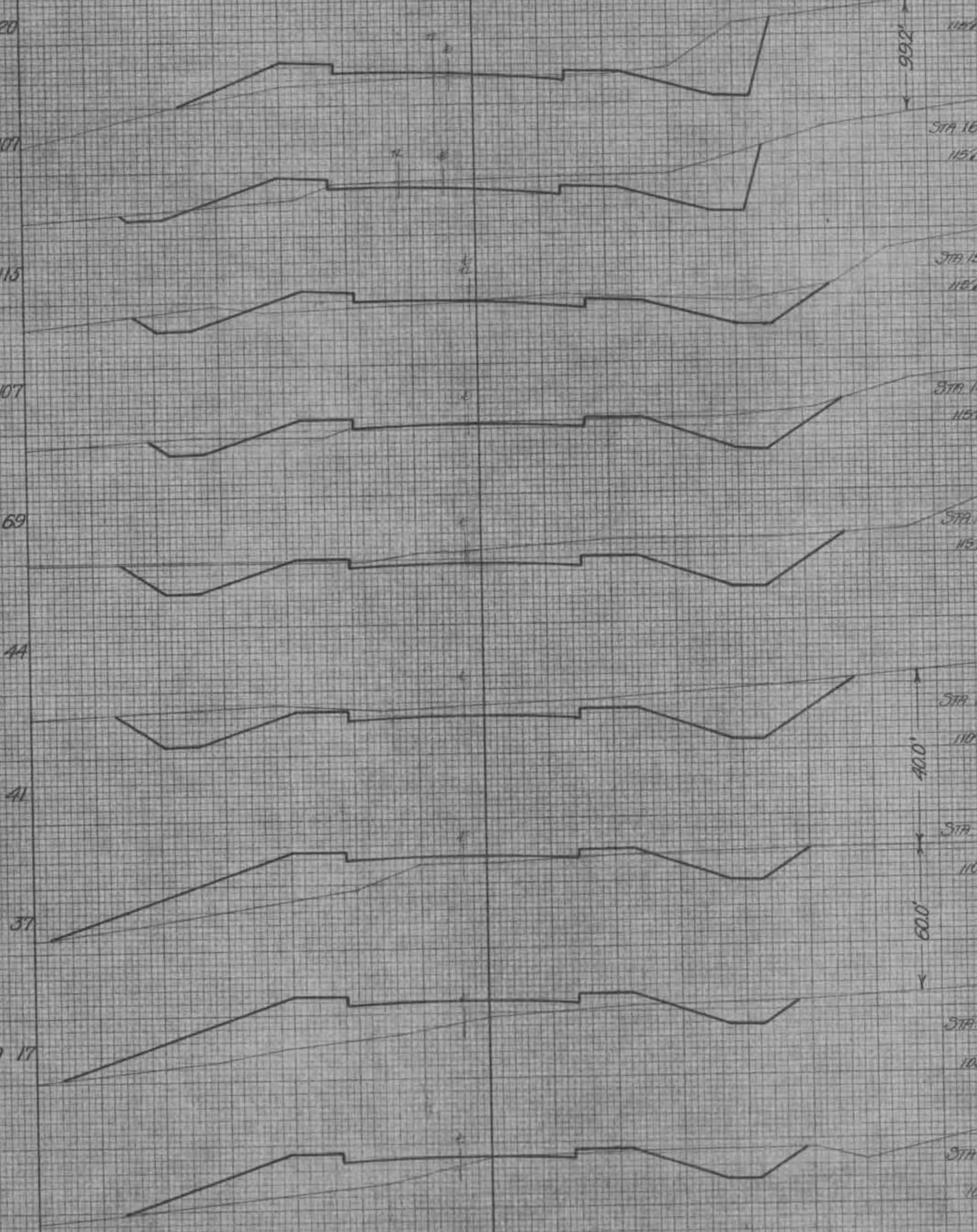
Div. Job # 4455 — Pav. Widening

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	18	29

DIVISION JOB NO. [illegible]



STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
Sta 9	26	35		
			76	120
Sta 8	15	30		
			59	107
Sta 7	17	28		
			57	115
Sta 6	14	34		
			69	107
Sta 5	23	24		
			107	69
Sta 4	35	15		
			122	44
Sta 3	31	11		
			113	41
Sta 2	30	11		
			119	37
Sta 1	34	9		
			189	17
Sta 0	65	0		
COLUMN TOTALS			911	657



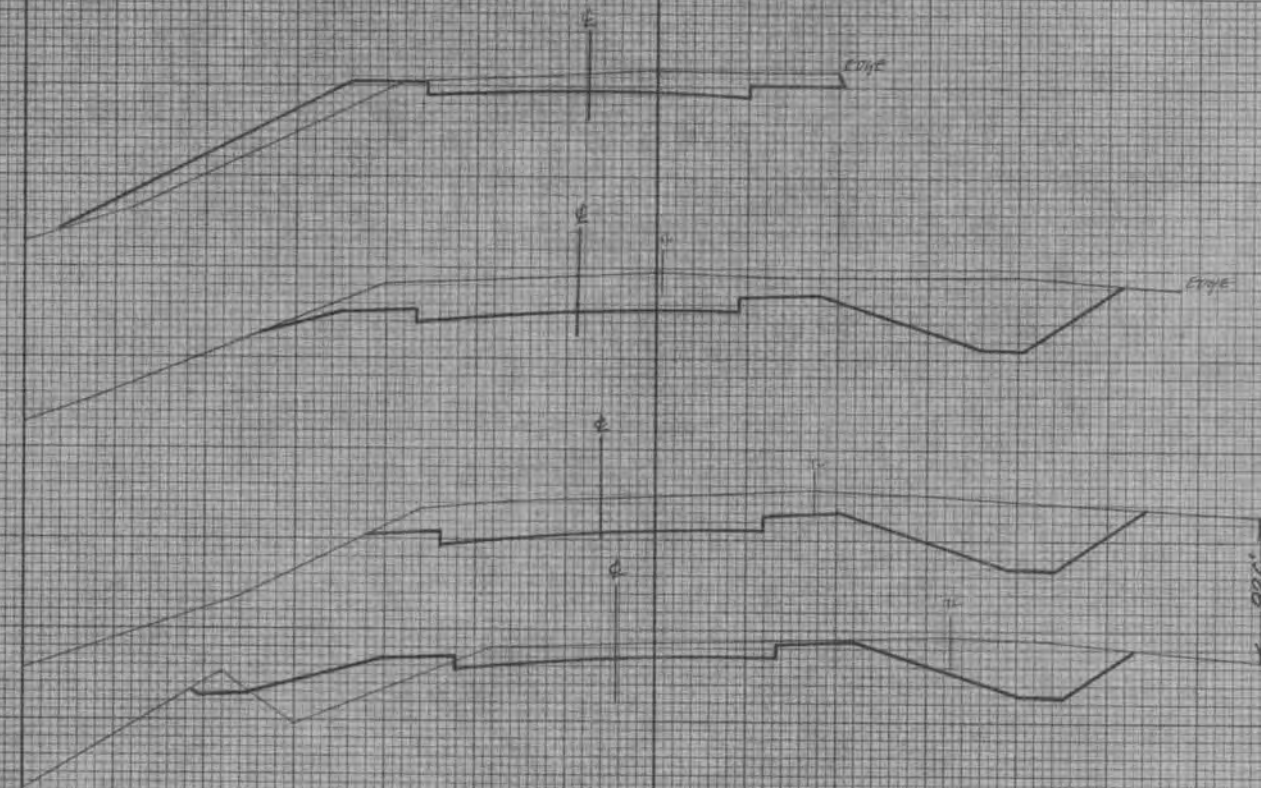
STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
Sta 17	30 R			
	4	21		
			39	57
			111 R	
Sta 16	30 R			
	17	10		
			94	41
			56 R	
Sta 15	34	12		
			124	37
Sta 14	33	8		
			213	17
Sta 13	82	1		
			317	2
Sta 12	89	0		
			80	50
Sta 11+60	18	68		
			31	176
Sta 11	11	91		
			57	263
Sta 10	20	51		
			85	159
			167 Rock	
COLUMN TOTALS			1040	802

ORIGINAL SURVEY	BY	DATE
SURVEYED	Geo. Orthuft	12-27
PLOTTED	Geo. Orthuft	1-28
TEMPLATE	Van Camar	1-28
AREAS	Sullivan	1-28
AREAS CHECKED	J. Posner	2-28
NOTE BOOK NO.		

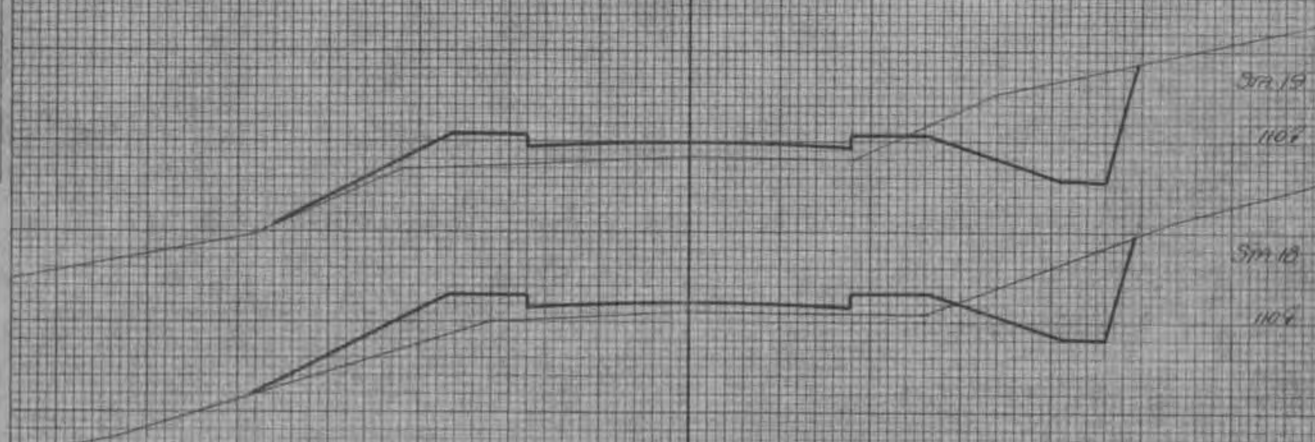
FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	19	29

DIVISION JOB NO. 4455



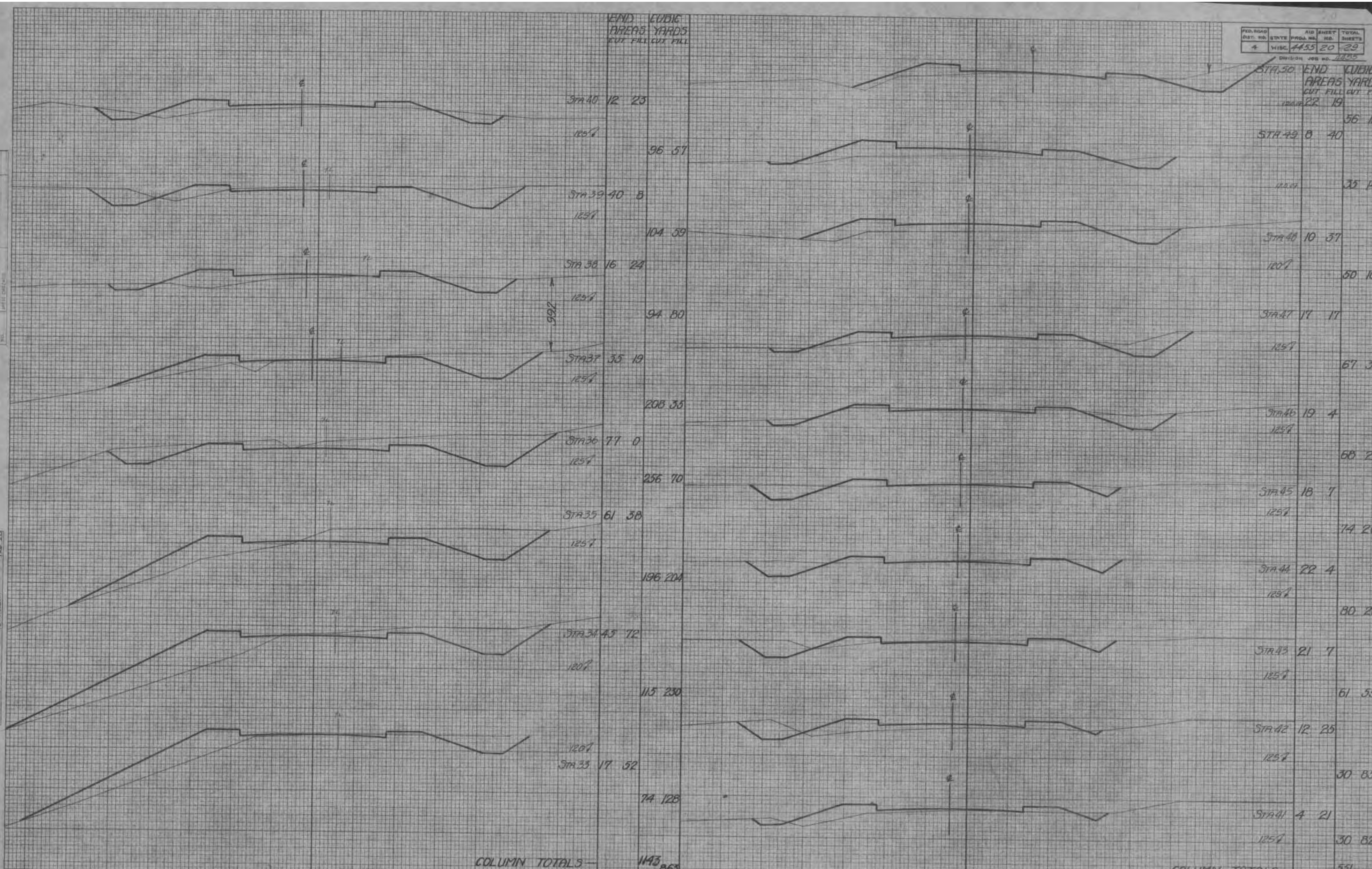
	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA 32 1157	23	17		
			211	32
STA 31 1157	91	0		
			326	0
STA 30 1157	86	0		
			231	31
STA 29 1107	49	18		
COLUMN TOTALS —			770	63



	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
Sta. 19 1107	45	31		
			133 R.	
			0	126
Sta. 18 1104	27	37		
			7	107
			106 R.	
COLUMN TOTALS —			239 Rock / 7	233

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	20	29

DIVISION JOB NO. 4455

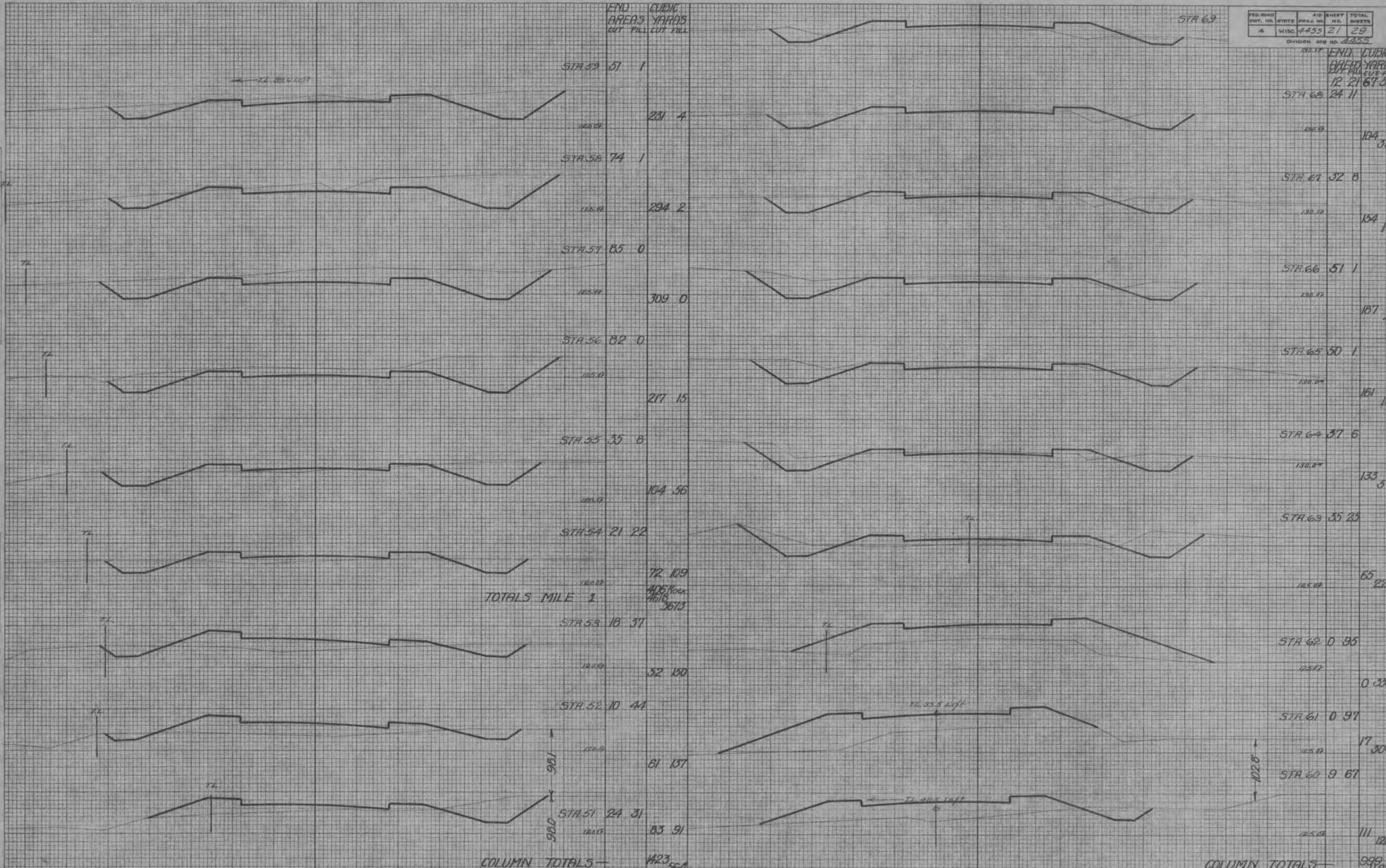


Station	End Areas Cut	End Areas Fill	Cubic Yards Cut	Cubic Yards Fill
STA. 40	12	23		
			96	57
STA. 39	40	8		
			104	59
STA. 38	16	24		
			94	80
STA. 37	35	19		
			208	35
STA. 36	77	0		
			256	70
STA. 35	61	38		
			196	204
STA. 34	45	72		
			115	230
STA. 33	17	52		
			74	128
COLUMN TOTALS —			1143	863

Station	End Areas Cut	End Areas Fill	Cubic Yards Cut	Cubic Yards Fill
STA. 50	22	19		
			56	109
STA. 49	8	40		
			35	143
STA. 48	10	37		
			50	100
STA. 47	17	17		
			67	39
STA. 46	19	4		
			68	20
STA. 45	18	7		
			74	20
STA. 44	22	4		
			80	20
STA. 43	21	7		
			61	59
STA. 42	12	25		
			30	85
STA. 41	4	21		
			30	82
COLUMN TOTALS —			551	677

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	21	29

DIVISION JOB NO. 4455


END AREAS CUT FILL
CUBIC YARDS CUT FILL
STA 59 51 1
231 4
STA 58 74 1
294 2
STA 57 85 0
309 0
STA 56 82 0
217 15
STA 55 35 8
104 56
STA 54 21 22
72 109
TOTALS MILE 1
406 Rock
4616
3613
STA 53 18 37
52 150
STA 52 10 44
81 137
STA 51 24 31
83 91
981
980
COLUMN TOTALS — 1423 564
STA 69
END AREAS CUT FILL
CUBIC YARDS CUT FILL
12 21 67 59
STA 68 24 11
104 35
STA 67 32 8
154 17
STA 66 51 1
187 4
STA 65 50 1
161 13
STA 64 37 6
133 57
STA 63 35 25
65 222
STA 62 0 95
0 356
STA 61 0 97
17 300
STA 60 9 67
102.8
111 126
COLUMN TOTALS — 999 1169

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	22	29

DIVISION JOB NO. 4455

	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 78	2	32		
			13	170
STA. 77	5	40		
			39	109
STA. 76	16	19		
			76	50
STA. 75	25	8		
			180	17
STA. 74	72	1		
			252	2
STA. 73	64	0		
			167	15
STA. 72	26	8		
			65	80
STA. 71	9	35		
			30	133
STA. 70	7	37		
			35	107
COLUMN TOTALS —			857	683

	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 87	50	3		
			189	4
STA. 86	84	0		
			202	26
STA. 85	25	14		
			91	56
STA. 84	24	16		
			143	37
STA. 83	53	4		
			254	7
STA. 82	84	0		
			272	0
STA. 81	63	0		
			154	46
STA. 80	20	25		
			41	12
STA. 79	2	41		
COLUMN TOTALS —				

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	23	29

DIVISION JOB NO. 4455

	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 96	145	0		
			420	0
STA. 95	82	0		
			302	0
STA. 94	81	0		
			222	4
STA. 93	39	2		
			85	87
STA. 92	7	45		
			30	204
STA. 91	9	65		
			30	220
STA. 90	7	54		
			43	183
STA. 89	16	45		
			87	111
STA. 88	31	15		
			150	33
COLUMN TOTALS —			1369	842

	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
+ 35	0	88		
			54	202
STA. 100	82	122		
			50	330
+ 67	0	416		
			0	1089
STA. 99	0	445		
			0	722
+ 48	0	507		
			0	498
STA. 98	0	219		
			6	104
+ 79	12	47		
			170	68
STA. 97	104	0		
			451	0
COLUMN TOTALS —			741	2233

T.L. 43.5 RIGHT →

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATED, NOTE BOOK, NO., AREAS CHECKED

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATED, NOTE BOOK, NO., AREAS CHECKED

ORIGINAL SURVEY	DEC. 27
FINAL SURVEY	JAN. 28
	MAR. 28
	MAY 28
	FEB. 29

PLATE 3—CROSS SECTIONS

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	24	29

DIVISION JOB NO. 4452

STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 108	220	0		
			711	0
STA. 107	216	0		
			589	0
TOTALS MILE 2 — STA. 106	149	0	9301	6489
			422	0
STA. 105	79	0		
			215	0
STA. 104	37	13		
			220	0
STA. 103	82	0		
			531	0
STA. 102	205	0		
			791	0
STA. 101	222	0		
			804	0
+48	302	0		
COLUMN TOTALS —			12 46	4455 46

STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 117	57	0		
			113	111
STA. 116	4	60		
			9	248
STA. 115	1	72		
			154	137
STA. 114	81	0		
			152	194
STA. 113	0	105		
			0	613
STA. 112	0	225		
			0	916
STA. 111	0	302		
			0	630
+40	0	256		
			48	189
STA. 110	65	0		
			394	7
STA. 109	144	4		
			702	7
COLUMN TOTALS —			1502	3112

T.L.

T.L. 48' RIGHT

T.L. 56' RIGHT

T.L. 52' RIGHT

T.L. 47' RIGHT

104.0'

83.0'

102.0'

103.0'

52.0'

13.0'

102.0'

103.0'

101.0'

110.0'

40.0'

112.0'

FINAL SURVEY — SUBMITTED, PLOTTED, TRACED, NOTE BOOK, MISC., LEVEL, AREA CHECKED, DATE

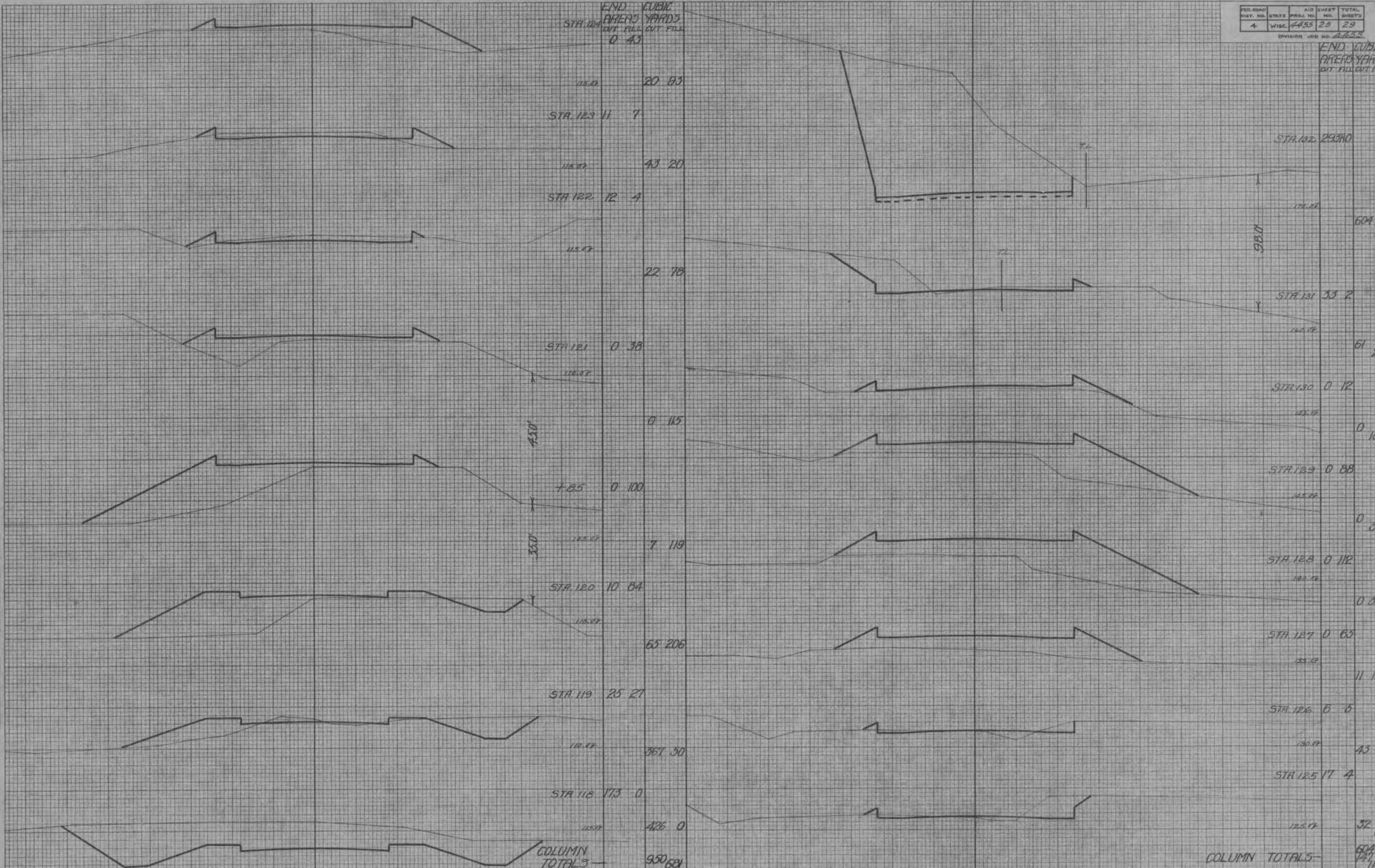
ORIGINAL SURVEY — NOTE BOOK, MISC., FIELDS, PLOTTED, TEMPLATE, LEVEL, AREA CHECKED, DATE

VERIFIED BY: J. SULLIVAN, W. LUNDEEN, J. SPRINGER

SEC. 27, SEC. 28, SEC. 33, SEC. 34, PCR. 128

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	25	29

DIVISION JOB NO. 4455



	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 124	0	43		
			20	83
STA. 123	11	7		
			43	20
STA. 122	12	4		
			22	78
STA. 121	0	38		
			0	115
+85	0	100		
			7	119
STA. 120	10	84		
			65	206
STA. 119	25	27		
			367	30
STA. 118	173	0		
			426	0
COLUMN TOTALS			950	681

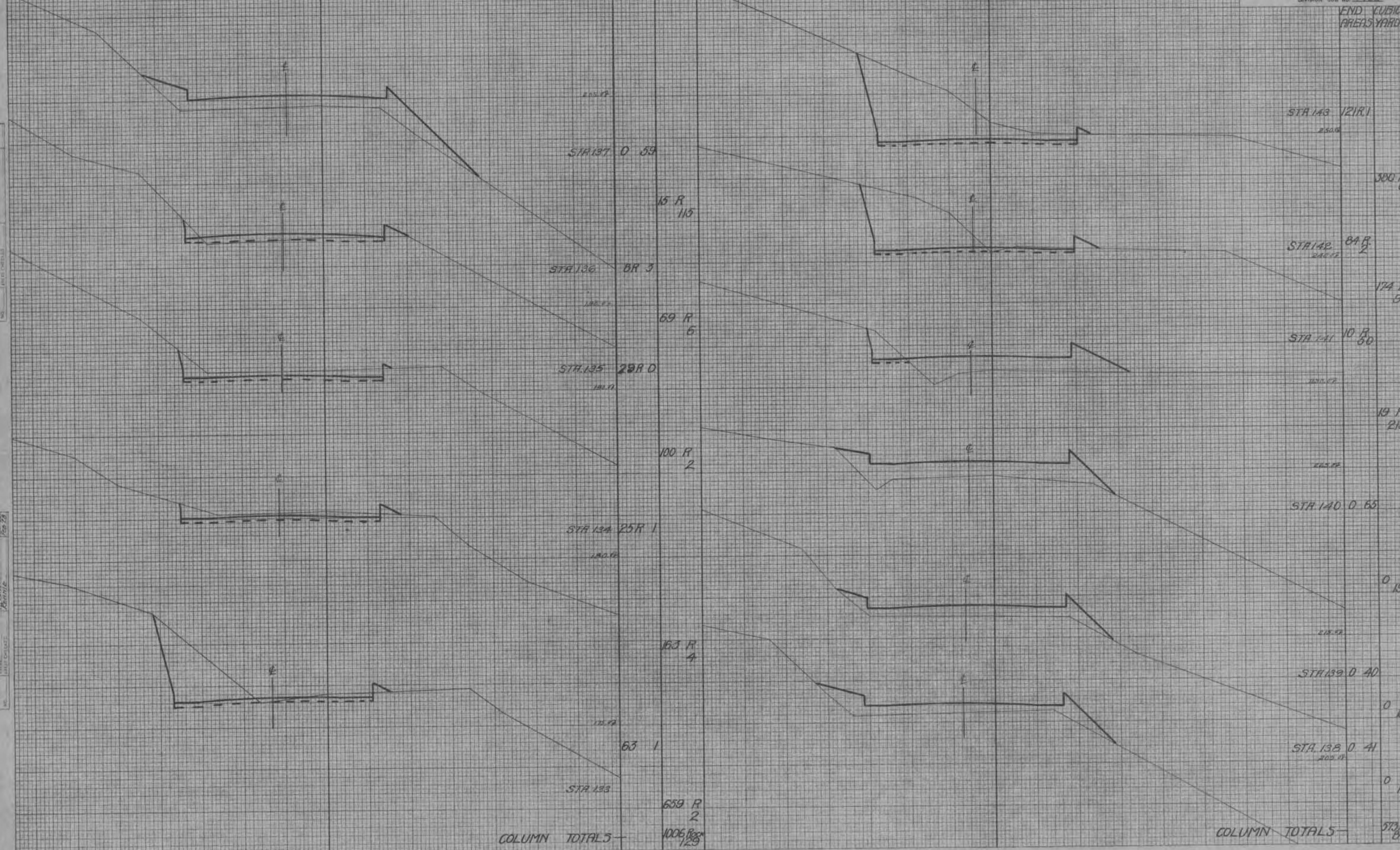
	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 132	293	40		
			604 R	4
STA. 131	33	2		
			61	26
STA. 130	0	12		
			0	185
STA. 129	0	88		
			0	370
STA. 128	0	112		
			0	328
STA. 127	0	65		
			11	130
STA. 126	6	5		
			43	17
STA. 125	17	4		
			32	87
COLUMN TOTALS			604 Rock 147	1147

ORIGINAL SURVEY

FINAL SURVEY

FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	26	29

DIVISION JOB NO. 4455



FED. ROAD DIST. NO.	STATE	AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	4455	27	29

DIVISION 7 JOB NO. 4223

ORIGINAL SURVEY	SURVEYED	DATE
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	FIELD	
	FIELD CHECKED	

FINAL SURVEY	SURVEYED	DATE
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	FIELD	
	FIELD CHECKED	

STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 151	18	3		
			130	6
STA. 150	52	0		
			181	0
STA. 149	46	0		
			169	0
STA. 148	43	0		
			189	0
STA. 147	72	0		
			252 R	0
STA. 146	82	0		
			246 R	0
STA. 145	48	1		
			150 R	0
STA. 144	33	3		
			255 R	1
COLUMN TOTALS			933 Rock	669 13

1020' 890' 890' 1020'

STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 160	3	63		
			24	231
TOTALS MILE 3			316 Rock	312 669
STA. 159	10	62		
STA. 158	15	39		
STA. 157	27	10		
			176	33
STA. 156	68	2		
			283	4
STA. 155	82	0		
			228	0
STA. 154	58	0		
			124	74
STA. 153	8	39		
			15	135
STA. 152	0	61		
			33	119
COLUMN TOTALS			1007	8

102.0' 88.2' 102.0'

FED. ROAD DIST. NO.	STATE	ROAD NO.	SHEET NO.	TOTAL SHEETS
4	WISC.	445	28	29

DIVISION OF HY. ZZZZ

STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 168	57	5		
			191	33
STA. 167	46	13		
			120	80
STA. 166	19	30		
			67	144
STA. 165	17	48		
			76	176
STA. 164	24	47		
			80	172
STA. 163	19	46		
			65	163
STA. 162	16	42		
			48	167
STA. 161	10	48		
			24	206
COLUMN TOTALS			671	1141

STA.	END AREAS CUT	END AREAS FILL	CUBIC YARDS CUT	CUBIC YARDS FILL
STA. 177	51	9		
			137	26
STA. 176	43	5		
			148	18
STA. 175	37	5		
			143	19
STA. 174	40	5		
			139	22
STA. 173	35	7		
			91	67
STA. 172	14	29		
			54	106
STA. 171	15	26		
			76	83
STA. 170	26	17		
			172	35
STA. 169	67	2		
			230	13
COLUMN TOTALS			1190	380

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.
CHECKED