

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF HIGHWAYS  
 PLANS FOR PROPOSED  
 FEDERAL AID HIGHWAY

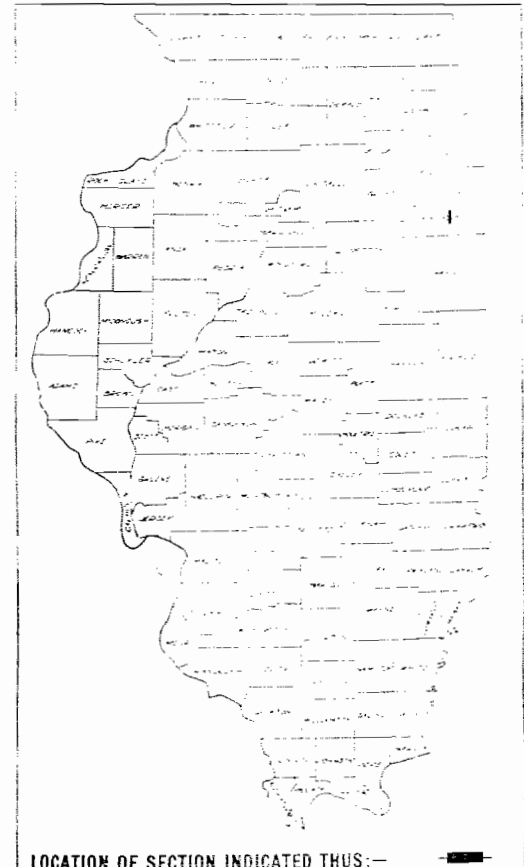
26 139-HB-3,VB  
 139-HF-3,VF KANKAKEE 21

**FOR  
 INFORMATION  
 ONLY**

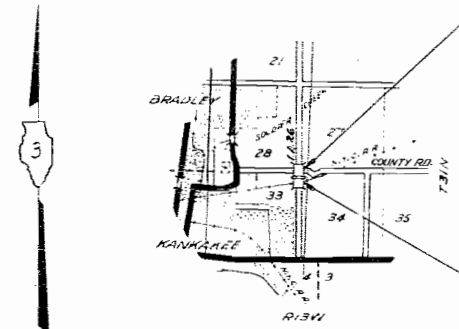
SCALES

PLAN	1 INCH	100 FT
PROFILE HOR	1 INCH	100 FT
PROFILE VERT	1 INCH	10 FT
CROSS SECTIONS	1 INCH	5 FT

F.A. ROUTE 26 SECTION 139 <sup>HB-3,VB</sup>/<sub>HF-3,VF</sub>  
 KANKAKEE COUNTY  
 PROJECT UGI-29(4)



**SEC. 139 HF-3, 139-VF INCLUDES**  
 Furnishing and fabrication of structural steel and metal handrail, furnishing and applying shop coat of paint and delivery of the structural steel and metal handrail to a b. R.R. siding Kankakee Ill. for two (2) parallel 2-span steel I-beam highway grade separation structures over County Rd., spans 2 @ 35'-9" @ 45'-0" at sta. 138+90.96 and two (2) parallel 5-span steel I-beam railroad grade separation structures over N.Y.C. R.R., spans 4 @ 48'-6", 1 @ 60'-6" at station 143+72.02.



**SEC. 139 HB (3) INCLUDES**  
 Two (2) parallel 3-span steel I-beam highway grade separation structures, on R.C. open piers and R.C. open abutts. over County Rd., spans 2 @ 35'-9" @ 45'-0" at sta. 138+90.96

**SEC. 139-VB INCLUDES**  
 Two (2) parallel 5-span steel I-beam railroad grade separation structures over N.Y.C. R.R., spans 4 @ 48'-6", 1 @ 60'-6" at sta. 143+72.02

Legend  
 1 inch = 1 mile

DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
 DIVISION OF HIGHWAYS  
 Feb 23 1964  
 John Grayhack Jr. CHIEF ENGINEER  
 H. G. ... CHIEF OF ROAD PLANS AND CONTRACTS  
 E. L. ... ENGINEER OF DESIGN  
 M. J. ... CHIEF OF ESTIMATES  
 Ed Roenigk ...

DEPARTMENT OF COMMERCE  
 BUREAU OF PUBLIC ROADS  
 APPROVED  
 CONTRACT FILE NO. DATE

INDEX OF SHEETS  
(Sec. 139HB-3, 139VB)

- Sheet No. 1. Title Sheet
- Sheet No. 2. Index of Sheets, Summary of Quantities, Standards 2113 & 1971S
- Sheet No. 3,3a Plan-Profile Sta. 123 to Sta 177
- Sheet No. 4-21. Inclusive - Special Bridge Designs

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 26	139-HB(3) <sup>HF-3</sup>	KANKAKEE	21	2
FED. ROAD DIST. 7 ILLINOIS			PROJECT UGI-29(4)	

SUMMARY OF QUANTITIES  
(SEC. 139HB-3, 139VB)

44,460	cu.yds.	Borrow Excavation
195	lin.ft.	Pipe Culverts, Type 2 (SSROCP) 24"
1.4	cu.yds.	Handrail Concrete
2,926.3	cu.yds.	Class X Concrete
324,840	lbs.	Reinforcement Bars
679,040	lbs.	Structural Steel
1,657	lin.ft.	Metal Handrail
720	lin.ft.	Furnishing Untreated Piles, up to 30'
720	lin.ft.	Driving Timber Piles
2	each	Name Plates
5,600	cu.yds.	Class A Excavation for Structures
153	cu.yds.	Rock Excavation for Structures

INDEX OF SHEETS  
(Sec. 139-HF-3, 139-VF)

- Sheet No. 1 Title Sheet
- Sheet No. 2 Index of Sheets, Summary of Quantities.
- Sheet No. 3,3a Plan-Profile Sta. 123 to Sta.177
- Sheet No. 4-21. Inclusive - Special Bridge Designs

SUMMARY OF QUANTITIES  
(139HF-3, 139VF)

679,040	lbs.	Structural Steel
1,657	lin.ft.	Metal Handrail

STATION 126+00 IS A POINT NEAR THE EAST LINE OF SECTION 28 T.31N. R.12E. OF 3RD PM  
 APPROXIMATELY 967' NORTH OF THE S.E. CORNER OF SECTION 28  
 ROAD SECTION 2 R.C.C. SLABS OF 24' ROADBED 108'  
 SEC. 27-T.31N.-R.12E.-3.P.M.

SEC. 34-T.31N.-R.12E.-3.P.M.

SECTION	COUNTY	TOWNSHIP	RANGE	SHEET NO.
139VA	Kankakee	21	3	

CONSTRUCT STANDARD 1908 METHOD II APPROACH SLABS  
 STA. TO STA.  
 30408 LBS. REINFORCEMENT BARS  
 8486 SQ. YDS. R.C.C. PAYEMENT 10 1/2" - 10 1/2" - 10 1/2"  
 6.00 CU. YDS. CLASS "C" CONCRETE

OMISSION STA. TO STA.  
 NOT INCLUDED IN SECTION 139VA  
 FOR DETAILS OF STRUCTURE SEE SECTION 139VB

2 UNITS HEDGE REMOVAL  
 RT. & LT. STA. 151+07

STA.	TO STA.	SIDE	COURSE TYPE	CU. YDS.
151+07	158+00	LT.	GRAVEL OR CRUSHED STONE SURFACE COURSE TYPE B	231
152+41	158+00	RT.		187
TOTAL				418

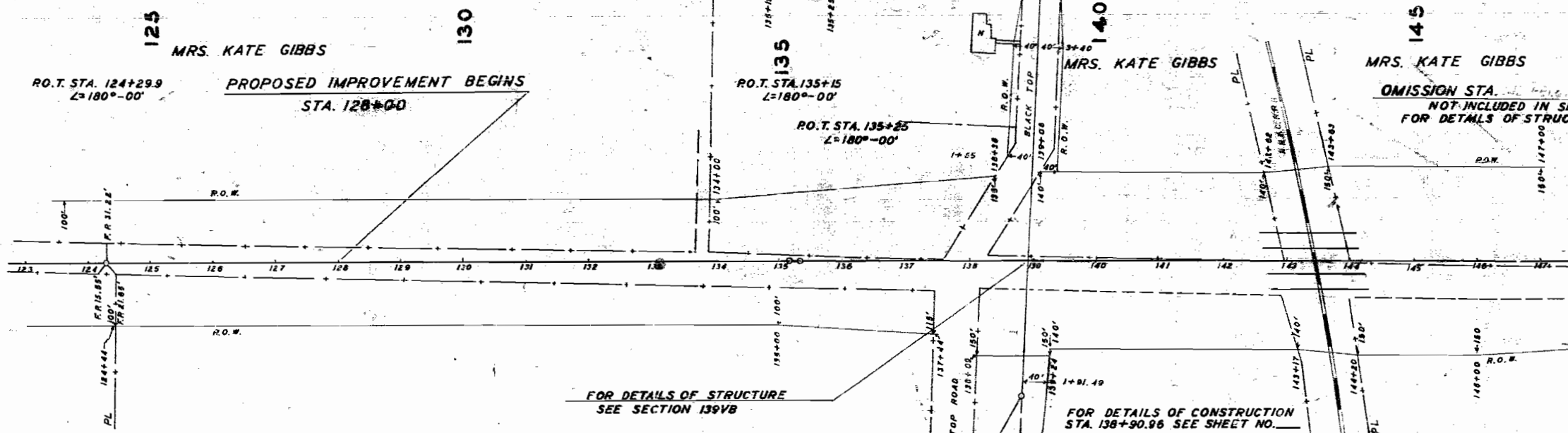
STA.	SIDE	TONS	BIT. MATERIALS APPLIED
138+90.96	RT. & LT.	1164	PRIME TOP COURSE
			1295 4048

BORROW EXCAVATION AVAILABLE  
 LT. STATION 83+50 TO STATION 90+50  
 LT. STATION 144+11 TO STATION 151+07

PLAN	DATE
REVISIONS	
NO. 1	
NO. 2	
NO. 3	

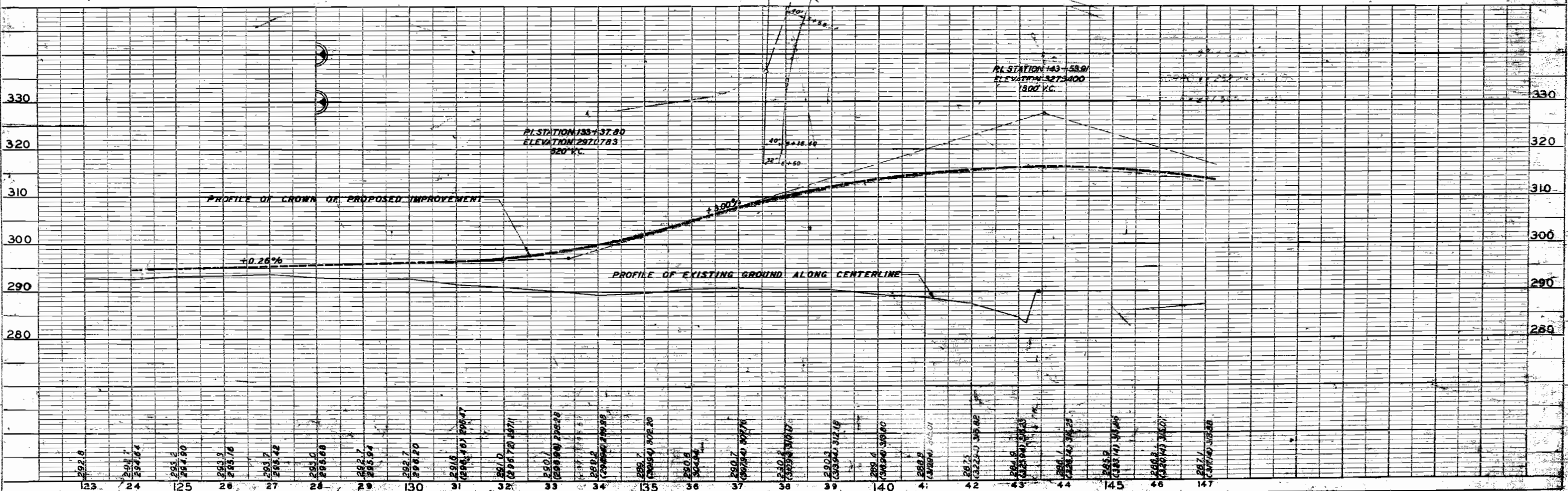
ENTIRE SECTION EXAMINED AND APPROVED AS TO POLICY  
 DISTRICT ENGINEER DATE

PROFILE	DATE
REVISIONS	
NO. 1	
NO. 2	
NO. 3	



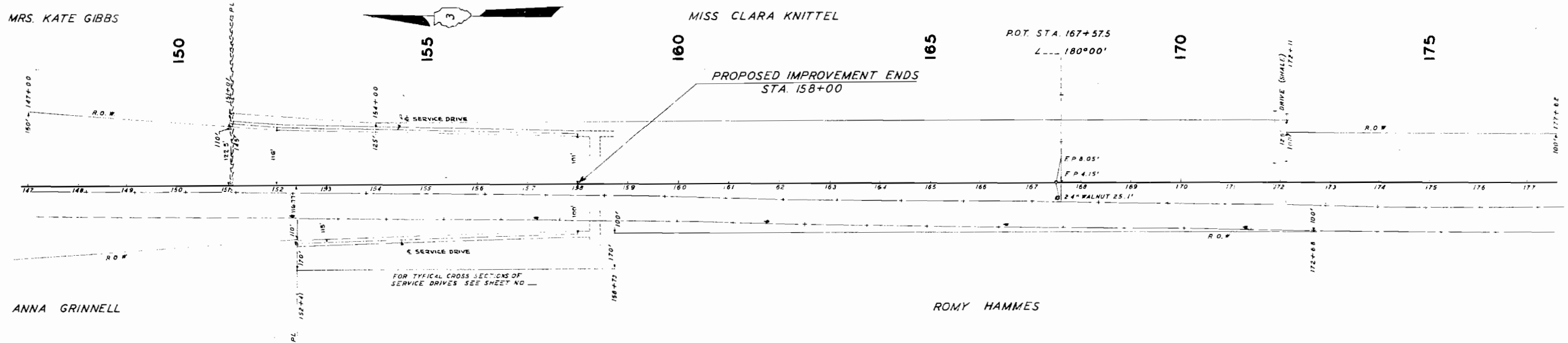
SEC. 28-T.31N.-R.12E.-3.P.M.

SEC. 33-T.31N.-R.12E.-3.P.M.



SEC. 34 - T.31N.-R.12E.-3PM.

ROAD NO.	SECTION	SQ. LY.	TOTAL S. W. FT.	SHEET NO.
FA 26	SEC. 139VA	Kankakee	21	32
STA.	158+71	177+62		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



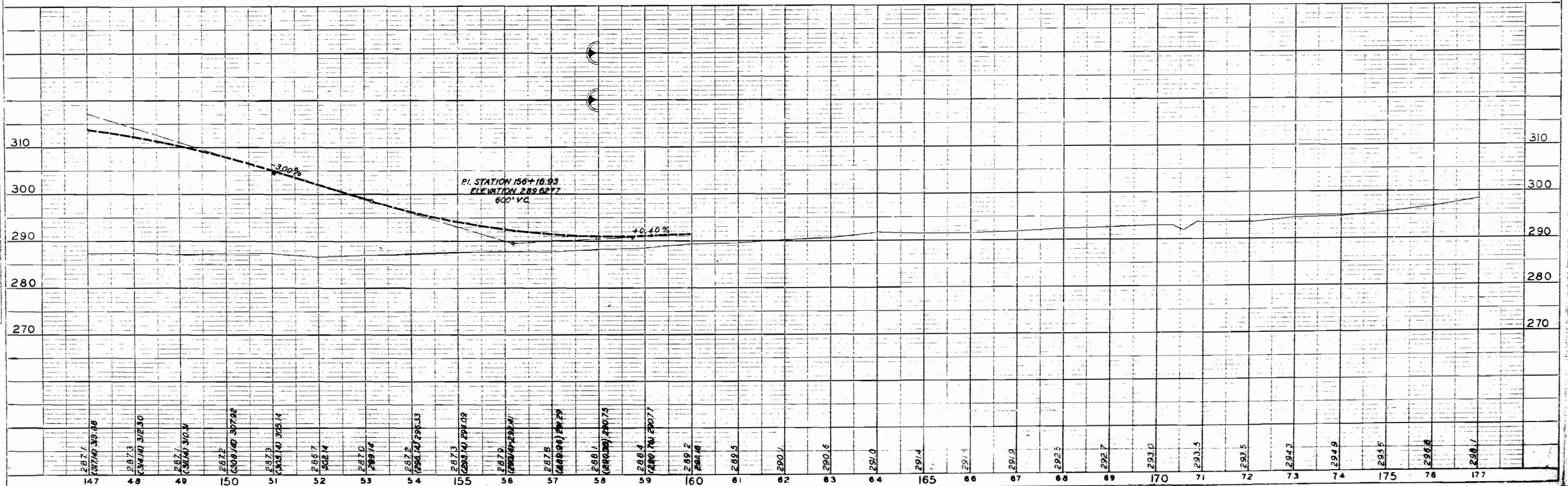
PLAN	DATE
APPROVED	11/17/17
NOTED	
NOTED	
NOTED	
NOTED	

SEC. 33 - T.31N.-R.12E.-3PM.

B.M. S&W IN ROOT 30" COTTONWOOD 120' RT.  
STA. 155+00 ELEVATION 285.86

B.M. S&W IN PP 80' RT.  
STA. 161+85 ELEV. 290.82

B.M. S&W IN 30" COTTONWOOD 140' RT.  
STA. 167+60 ELEV. 290.65

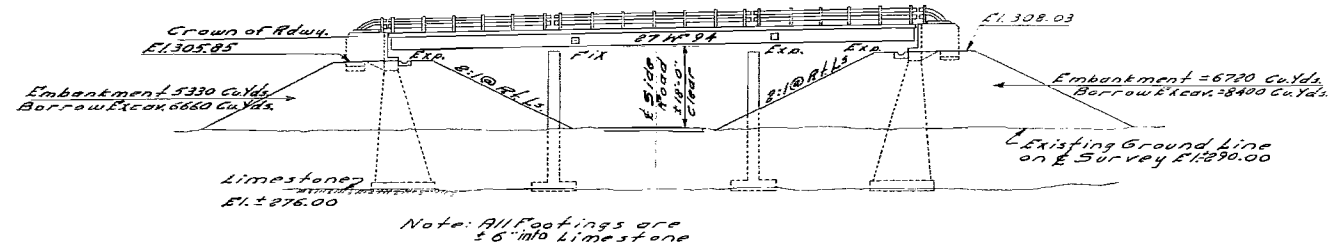


PROFILE	DATE
APPROVED	11/17/17
NOTED	
NOTED	
NOTED	
NOTED	

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. /
26	139	KANKAKEE	2	4	8 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS VLS. AID PROJECT.					

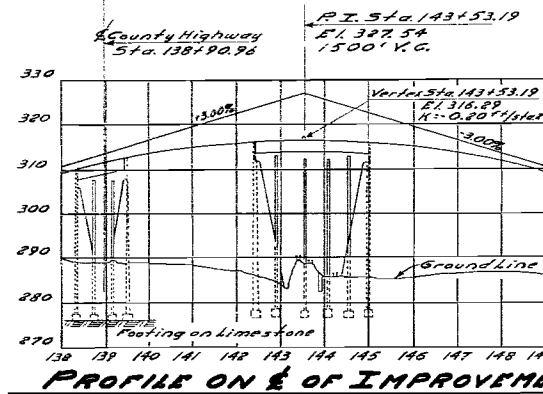
No Existing Structure  
B.M. No. 6 - X on S. end of W. Hdwl. Culv.  
50' Rf. Sta. 144+00 Elev. 289.38



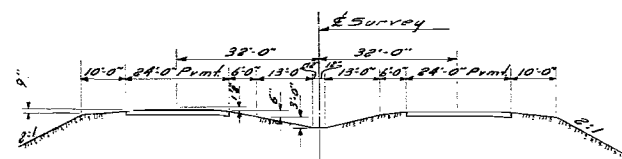
Note: All footings are 6" No. 10 Limestone

**ELEVATION**

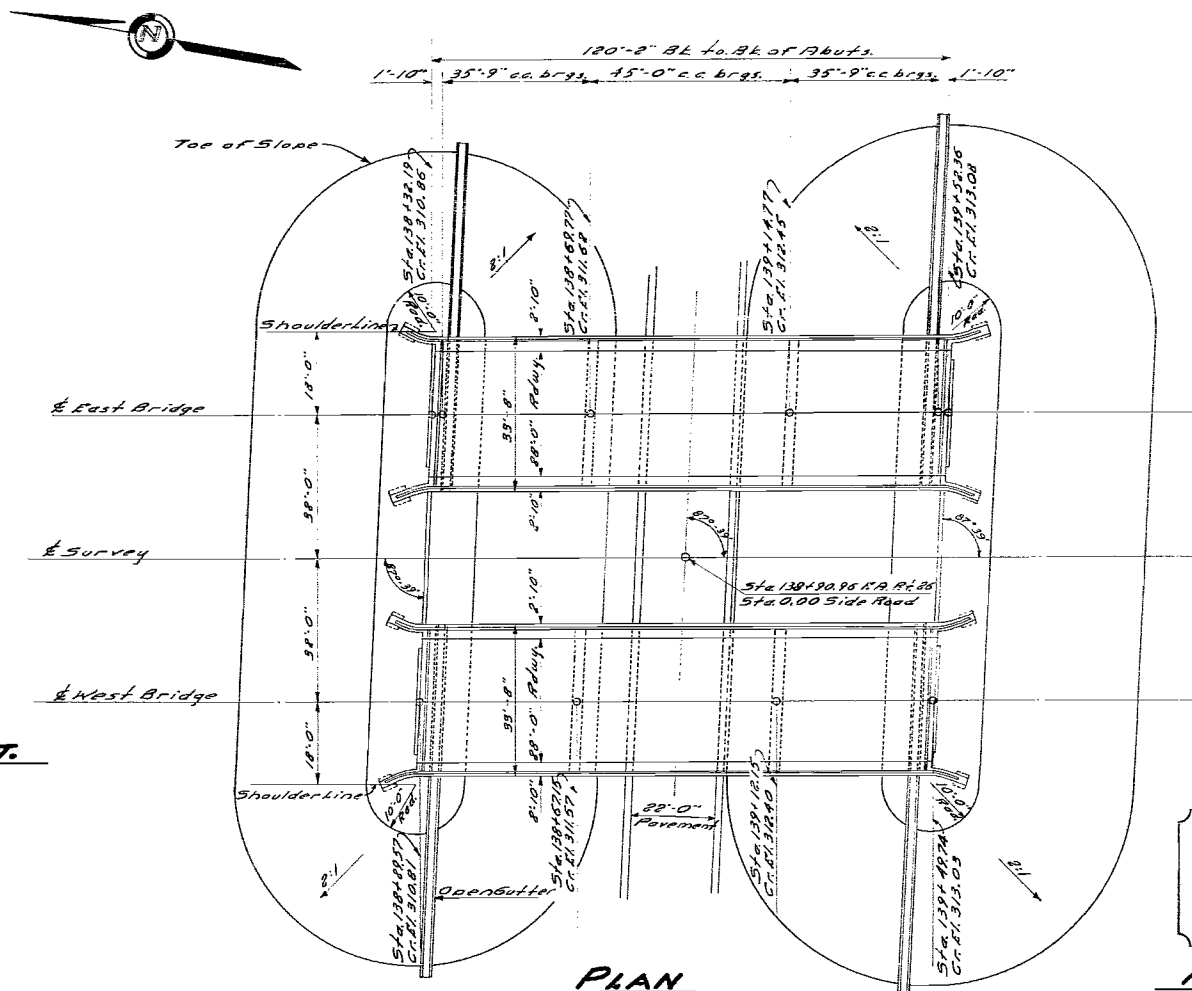
Scale: 1" = 30'-0"



PROFILE ON E OF IMPROVEMENT



TYPICAL SECTION OF APPROACH PAVT.



**PLAN**

Scale: 1" = 30'-0"

**STRESSES**

$f_c$  --- 1400 p.s.i. Super.  
 $f_m$  --- 800 p.s.i. Sub.  
 $f_s$  --- 20000 p.s.i. Reinf. Bars.  
 $f_s$  --- 18000 p.s.i. Struct. Steel  
 $n$  --- 10

**NAME & DATA**

See Standard 213

**GENERAL NOTES**

Class X Concrete shall be used thruout except for Handrail Concrete in end posts as shown on plans.  
The Concrete Floor Slab shall be finished in accordance with Article 51.18B of the Standard Specifications. The Curbs and Slab outside of longitudinal construction joints shown on a cross section shall be poured monolithically. No Transverse Construction Joints shall be made in the slab except by written permission of the Engineer.  
Rivets 3/8", Open Holes 1 1/2", unless noted.  
Field Connections riveted, unless noted.  
All Rollers, Rockers, Bearing Plates, Lead Plates, Pintles and Anchor Bolts shall be fabricated and set in accordance with Article 51.14 of the Standard Specifications and are included for payment as Structural Steel.  
Anchor Bolts shall be set before riveting diagrams over supports.  
All I Beams shall be assembled to their proper grade and alignment and shall be inspected and reamed while so assembled.  
All Structural Steel shall be inspected by the Illinois Division of Highways before painting.  
Except as otherwise provided all structural steel shall be given one shop coat of red lead paint and two field coats of aluminum paint. See Article 52.1 to 52.5 inclusive of the Standard Specifications.  
All Paint shall be furnished and applied by the Contractor involved.

**TOTAL BILL OF MATERIAL**

ITEM	UNITS	SUPER.	SUB.	TOTAL	TOTAL
		139-HB3	139-HF3		
Class X Concrete	Cu.Yds.	2144	813.3	1027.7	
Handrail Concrete	Cu.Yds.		0.7	0.7	
Metal Handrail	Lin'ft.	544		544	544
Reinforcement Bars	Lbs.	38,560	70,240	103,800	
Structural Steel	Lbs.	178,330		178,330	178,330
Name Plates	Ea.	1		1	
Class A Excavation for Struct.	Cu.Yds.		2530	2530	
Borrow Excavation	Cu.Yds.		15,060	15,060	
Rock Excavation for Struct.	Cu.Yds.		70	70	

STATION 138+90.96  
BUILT 195-BY  
STATE OF ILLINOIS  
P.A.R.T. 26-5FC.139HB  
P.A. PROJ. UGI 29(A)  
LOADING H20-516

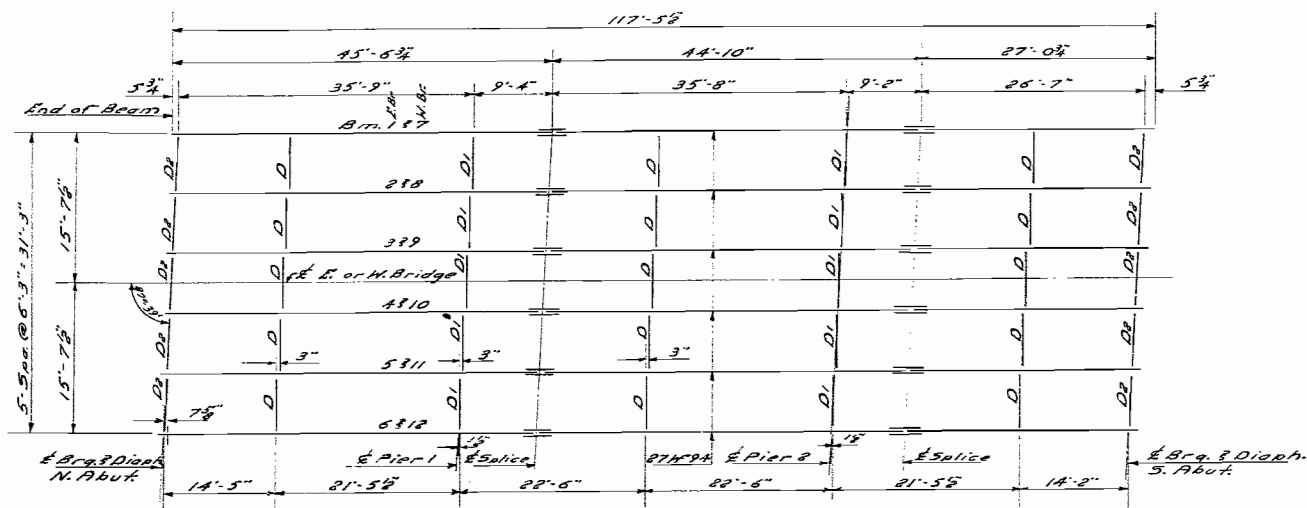
**GENERAL PLAN & ELEVATION**

**KANKAKEE BELT LINE  
PROJECT UGI 29(A)  
P.A.R.T. 26-5FC.139-HB3-HF3  
KANKAKEE COUNTY  
STATION 138+90.96**

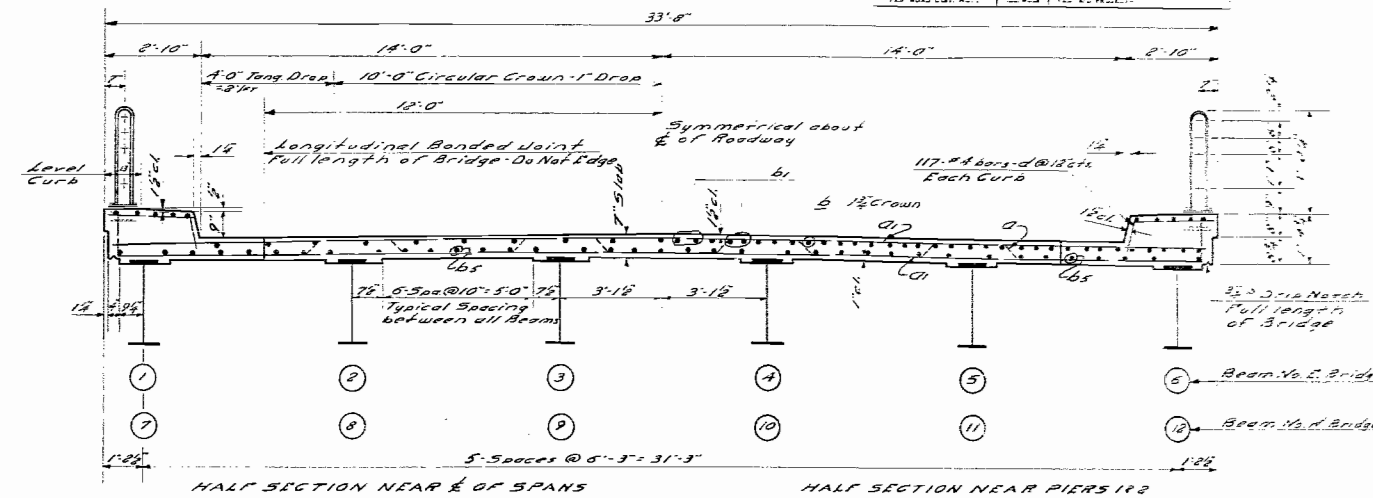
DESIGNED <i>F.M. Schili</i>	EXAMINED <i>W.E. Hanson</i>	Feb 19 1954
CHECKED <i>W.N. Sommer</i>	PASSED <i>[Signature]</i>	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN <i>F.M. &amp; C. Polley</i>	APPROVED <i>[Signature]</i>	CHIEF HIGHWAY ENGINEER
CHECKED <i>W.N. Sommer</i>		

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

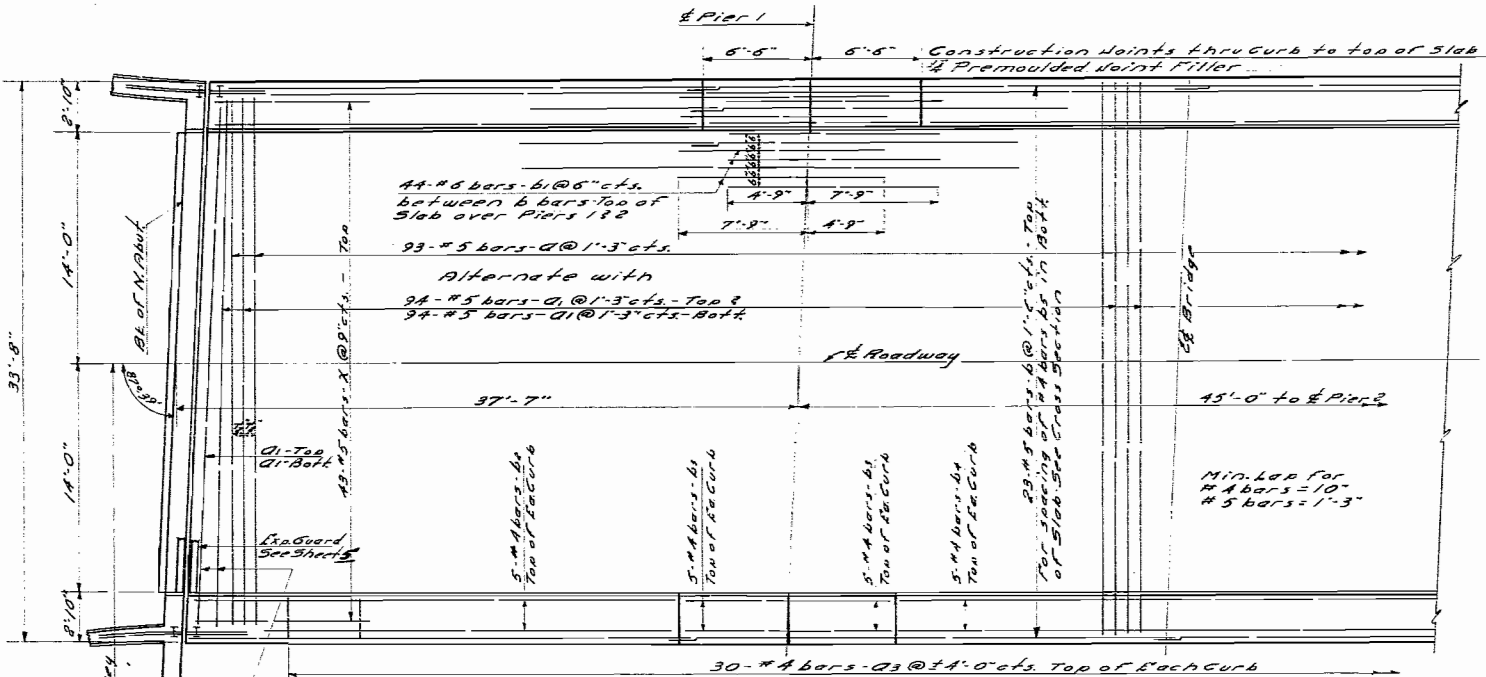
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
126	126	KANKAKEE	5	2
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



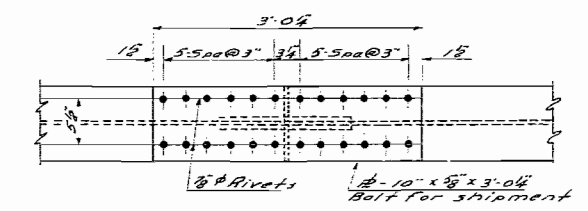
**LAYOUT OF STRUCTURAL STEEL**



**CROSS SECTION-LOOKING SOUTH**

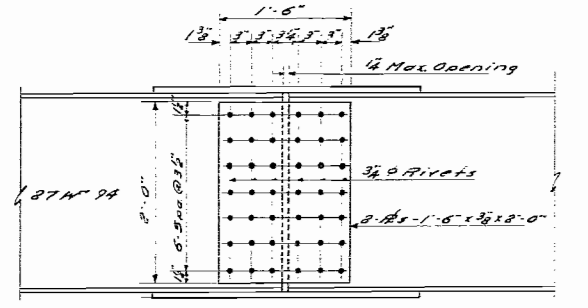


**PLAN-SHOWING REIN IN SPANS 1-2-3**

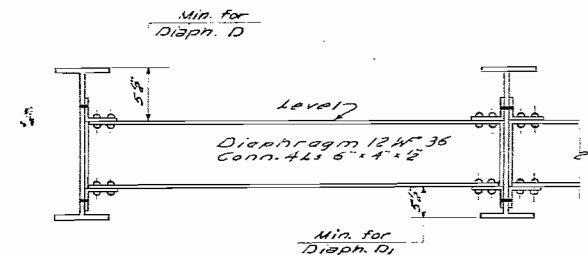


**DETAIL OF FILLET**

Method of Determining Fillet Heights  
After all structural steel has been erected, elevations of the top of flanges of the beams shall be taken at intervals not to exceed 10ft from these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above top of beam.



**DETAIL OF BEAM SPlice**



**DETAIL OF DIAPHRAGMS D3 & D1**

**BILL OF MATERIAL SUPERSTRUCTURE**

BAR NO.	SIZE	LENGTH	SHAPE
d	185 #5	36'-10"	
d1	384 #5	33'-4"	
d2	120 #4	8'-6"	
b	184 #5	30'-6"	
b1	176 #6	12'-6"	
b2	40 #4	29'-3"	
b3	80 #4	6'-3"	
b4	40 #4	16'-6"	
b5	296 #4	30'-0"	
d	458 #4	1'-0"	
x	172 #5	3'-9"	

Class X Concrete Cu. Yds. 2144  
Reinforcement Bars Lbs. 38,360  
Structural Steel Lbs. 159,240

**SUPERSTRUCTURE  
KANKAKEE BELT LINE  
PROJECT UGZ 29(4)  
P.A. RT. 26-SEG. 139-HB3-HF3  
KANKAKEE COUNTY  
STATION 138+90.96**



**BAR-D**

**BAR-X**

DESIGNED F. M. Schili  
CHECKED W. M. Sommer  
DRAWN F. M. & C. Pulley  
CHECKED WMS

EXAMINED W. B. Hansen  
PASSED  
APPROVED R. R. Bateman

Feb 19 1954

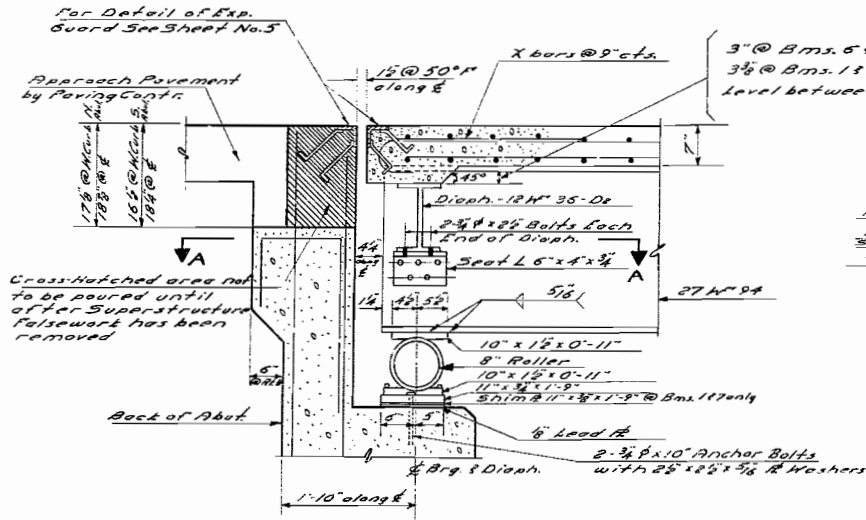
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

ENGINEER IN CHARGE

CHIEF HIGHWAY ENGINEER

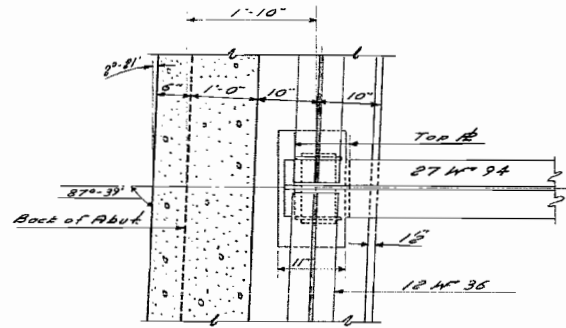
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

SCALE	SECTION	QUANTITY	TOTAL SHEETS	NO.	SHEET NO.
1" = 12"	13		6	8	3
1" = 24"	14				
1" = 48"	15				
KANKAKEE					
ILLINOIS					
FED. ROAD DIST. NO. 7					
FED. AID PROJ. NO.					

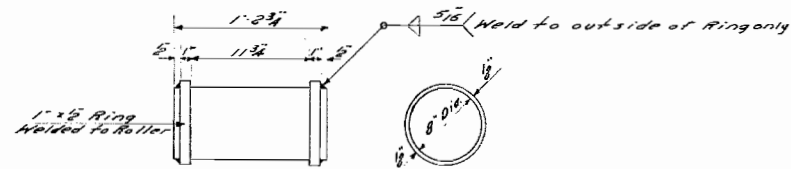


**SECTION THROUGH ABUTMENTS**

Same for N. or S. Abutment for either E. or W. Structure



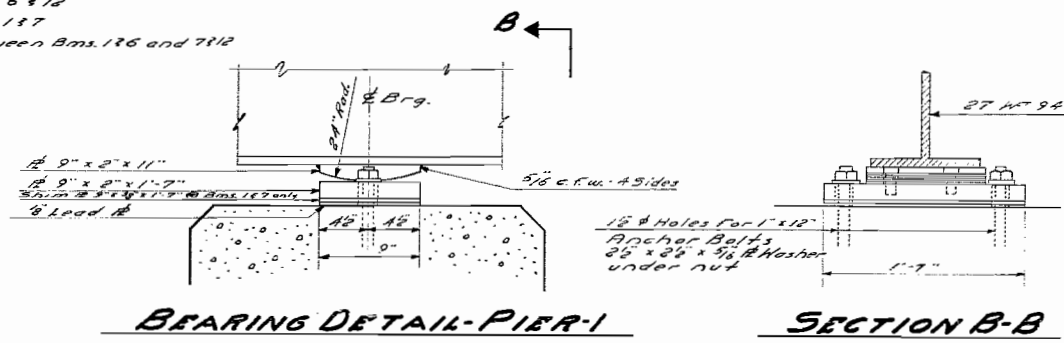
**SECTION A-A**



**DETAIL OF ROLLERS AT ABUTS**

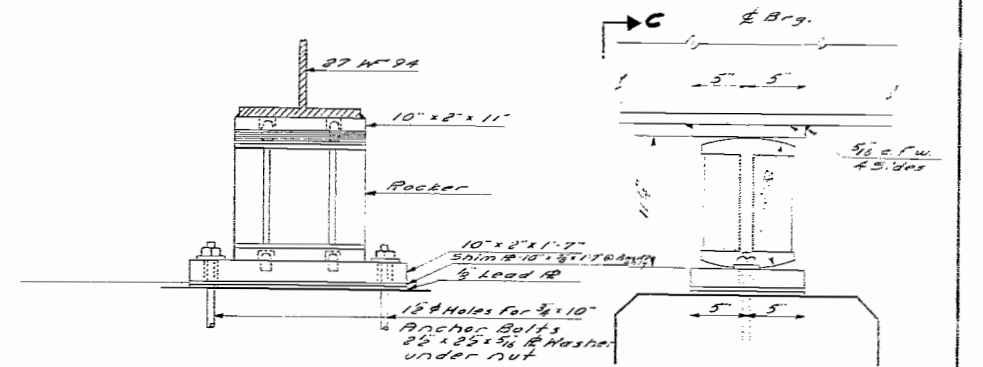
24 Req'd

Note: If Roller is turned from a solid piece & End Projections may be omitted.



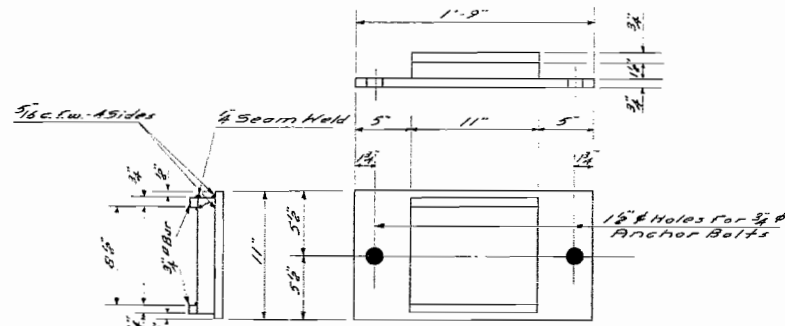
**BEARING DETAIL - PIER 1**

**SECTION B-B**



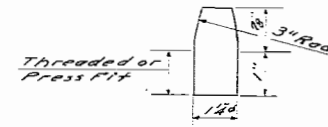
**SECTION C-C**

**BEARING DETAIL - PIER 2**



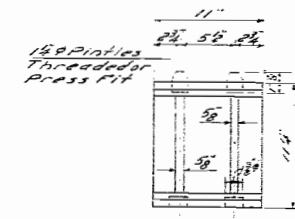
**BOTTOM BEARING RS. ABUTS**

24 Req'd



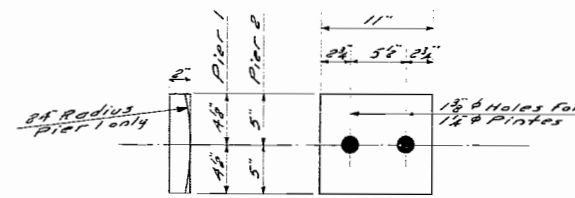
**PINTLE**

7/8 Req'd



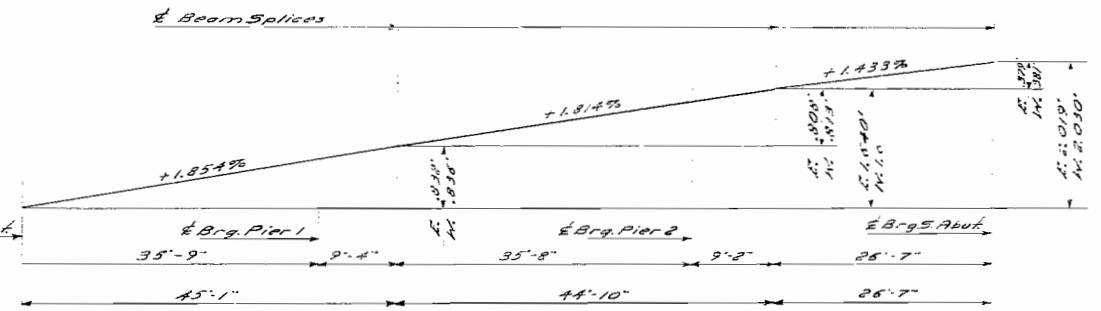
**DETAIL OF ROCKER AT PIER 2**

Rockers may be fabricated as shown or made of cast steel 12 Required



**TOP BEARING RS. PIERS 1 & 2**

12 - Rs. 9" x 8" x 0" - 11" - Pier 1  
12 - Rs. 10" x 8" x 0" - 11" - Pier 2



**CAMBER DIAGRAM FOR BEAMS**

Beams 1 to 12 all have same camber

**BILL OF MATERIAL**

Structural Steel (Brg. Details) 15,360 lbs.

**DETAILS**

**KANKAKEE BELTLINE  
PROJECT 162 29(4)  
I.A.R.T. 26-SEC. 139-HB3-HF3  
KANKAKEE COUNTY  
STATION 138+90.96**

DESIGNED	T.M. Schil	EXAMINED	Feb 19 1954 W.B. Hanson ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
CHECKED	W.H. Zimmerman	PASSED	[Signature]
DRAWN	T.M. L.C. Pulley	APPROVED	R.R. Bartelmy CHIEF HIGHWAY ENGINEER
CHECKED	W.B.		

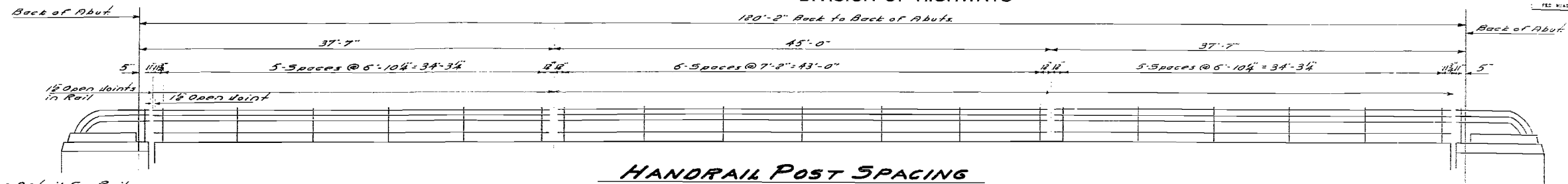
**BOTTOM BEARING RS. PIERS 1 & 2**

12 - Rs. 9" x 8" x 1" - 7" - Pier 1  
12 - Rs. 10" x 8" x 1" - 7" - Pier 2

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

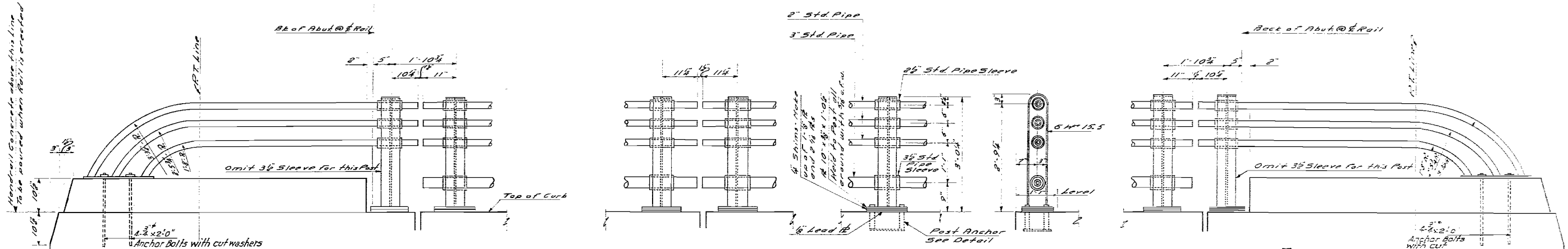
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
126	39A	ANKAKEE	8	7
FED. ROAD DIST. NO. 2		CALCULATED	FED. AID PROJECT	

8 SHEETS



**HANDRAIL POST SPACING**

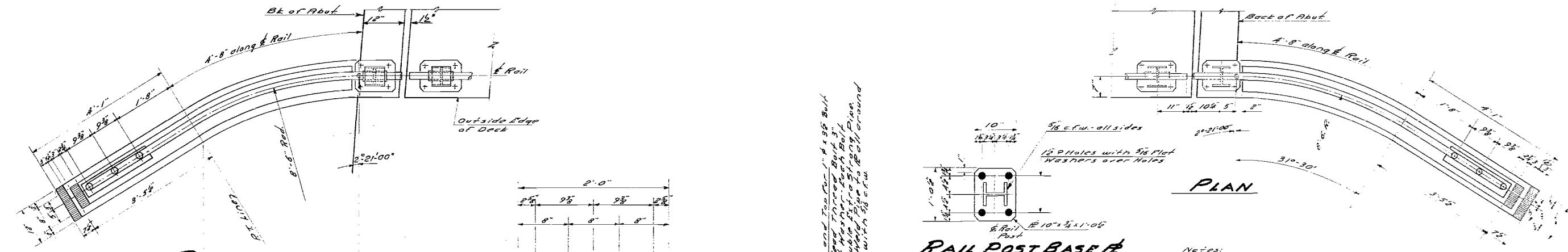
See Detail for Rail of End Post



**DEVELOPED ELEVATION OF RAIL AT END POST**

**TYPICAL ELEV. OF DOUBLE TYPICAL POST DETAIL**

**ELEVATION**

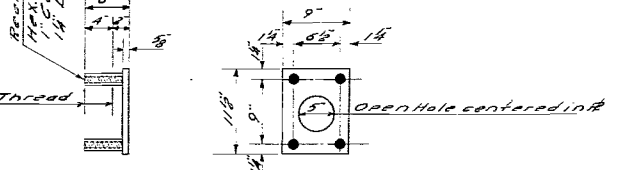


**PLAN**

**RAIL POST BASE**

**BASE AT END OF RAIL**

**PLAN**



**ANCHOR DETAILS**

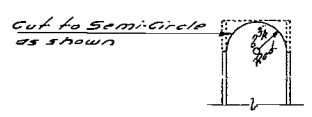
Notes:  
All Rail Posts shall be vertical.  
Rolling shall be used for Metal Handrail Lineal feet and shall be the Horizontal Distance measured along the center line of Rail from end to end of Rail at top of Sidewalk.  
The Metal Handrail shall be given one Shop Coat of Red Lead Paint and two Field Coats of Aluminum Paint. Paint shall be furnished and applied by the Contractor involved.

**BILL OF MATERIAL**  
Metal Handrail Lin. Ft 544

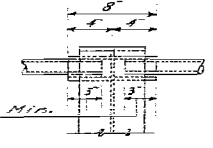
**HANDRAIL DETAILS**  
**KANKAKEE BELT LINE**  
**PROJECT UGI 29(4)**  
**I.A.P.T. 26-SEC. 139-HB3-MF3**  
**KANKAKEE COUNTY**  
**STATION 138+90.96**

DESIGNED	F. M. Schell
CHECKED	W. N. Donnelly
DRAWN	F. M. L. C. Polley
CHECKED	W. N. D.

EXAMINED	Feb 19 1954 W. E. Hanson
PASSED	[Signature]
APPROVED	[Signature]



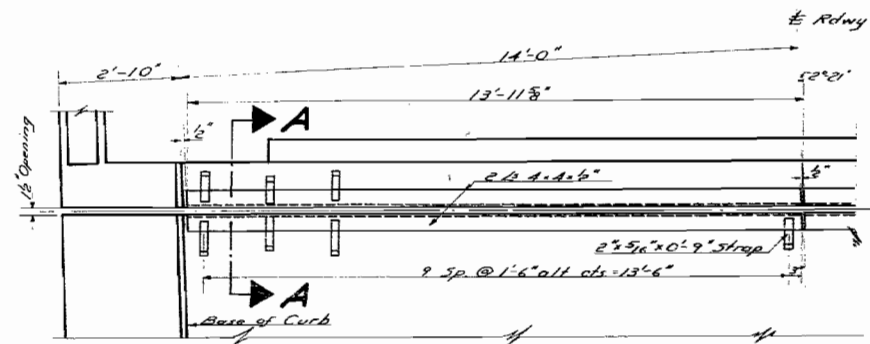
**END ELEVATIONS OF POST**



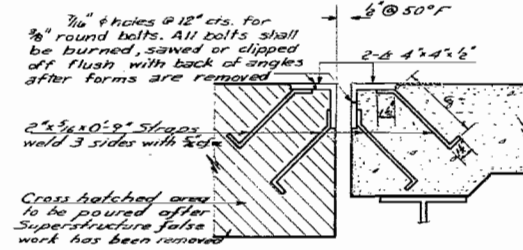
**SIDE ELEV. OF POST**

Direction of skew changed 6-1-54

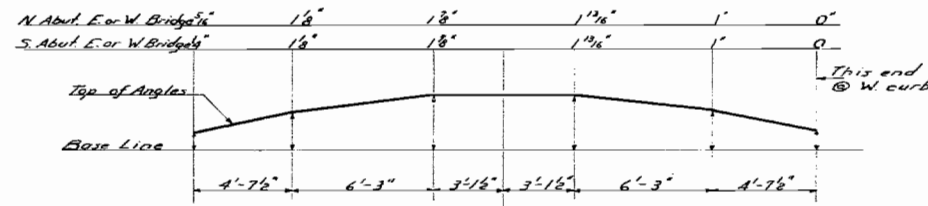




**PLAN OF EXPANSION GUARDS**



**SECTION A-A**



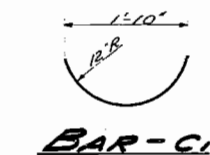
**PROFILE OF EXPANSION GUARD-LOOKING SOUTH**

Note: Expansion Guard shall be finished in accordance with 51.12 (d) of the Standard Specifications. All angles, straps and welds shall be paid for as Structural Steel. The weight of 4 Expansion Guard complete, included in the bill of material on sheet No 1 as structural steel equals 3120 lbs. All surfaces inaccessible after erection, shall receive two shop coats of red lead paint except the 2" x 4" straps which shall not be painted.

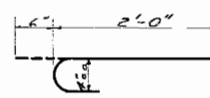
DESIGNED *T.M. Schili*  
CHECKED *W.N. Sommer*  
DRAWN *T.M. Schili R. Griffin*  
CHECKED *W.T.B.*

EXAMINED *W.E. Hanson*  
PASSED *[Signature]*  
APPROVED *[Signature]*  
CHIEF HIGHWAY ENGINEER

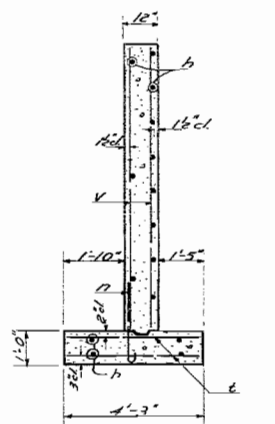
Feb 19 1954



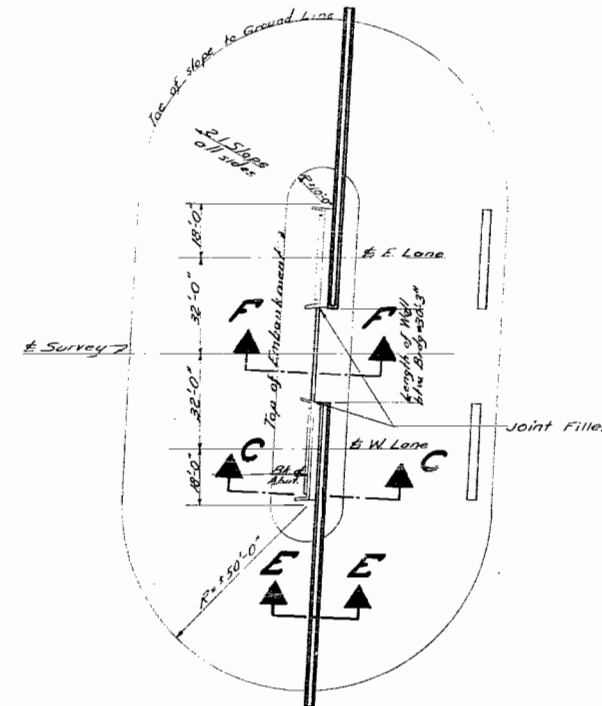
**BAR-C1**



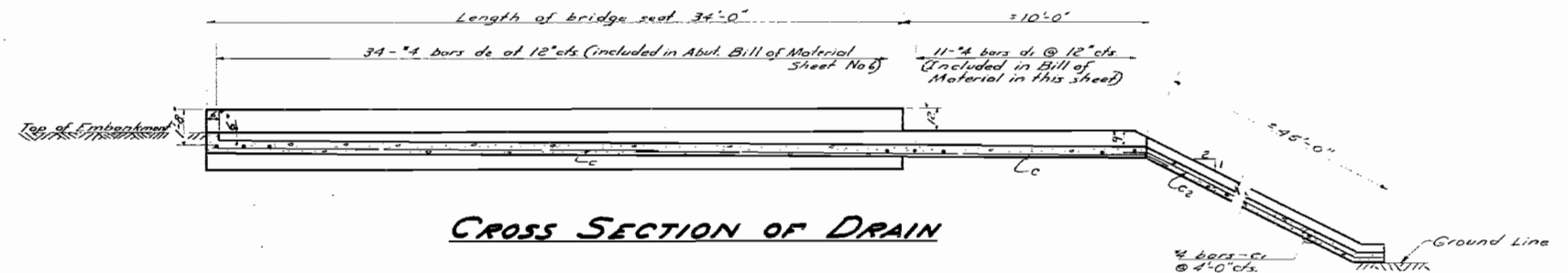
**BAR-D**



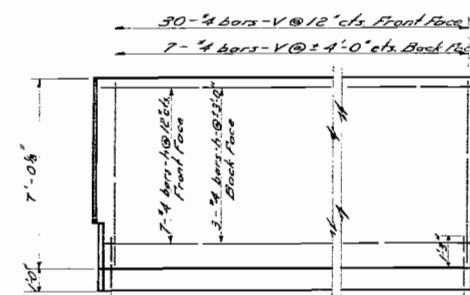
**SECTION F-F**



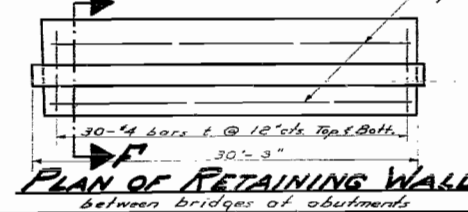
**PLAN OF DRAINS AT ABUTMENTS**  
N & S Abuts similar except as shown



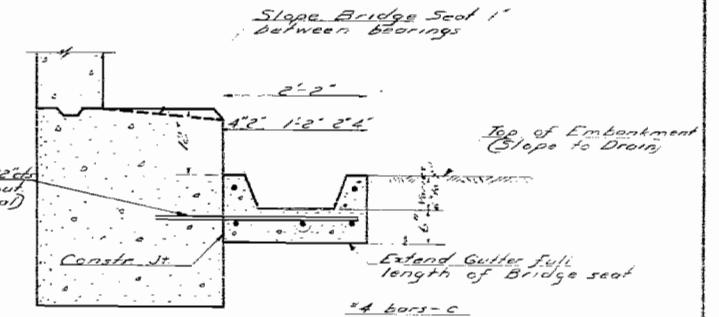
**CROSS SECTION OF DRAIN**



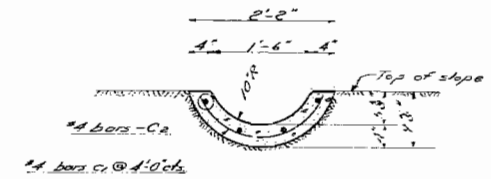
**ELEVATION**



**PLAN OF RETAINING WALL**  
between bridges of abutments



**SECTION C-C**



**SECTION E-E**

**BILL OF BARS**

Bar	No	Size	Length	Shape
c	40	#4	23'-6"	—
c1	48	#4	2'-3"	—
c2	32	#4	26'-0"	—
h	28	#4	16'-0"	—
n	60	#4	2'-6"	—
z	120	#4	3'-9"	—
v	74	#4	6'-9"	—
d1	44	#4	1'-10"	—

**BILL OF MATERIALS**

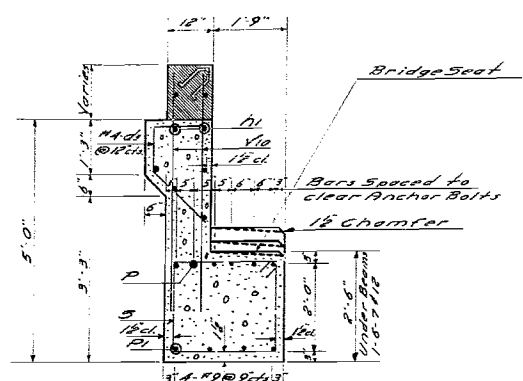
ITEM	UNIT	QUANTITY	REMARKS	TOTAL
Concrete	Cu Yds	175	252	427
Reinforced Bars	Lbs	1365	1035	2400

**EXPANSION GUARD - DRAINAGE AND RETAINING WALL**

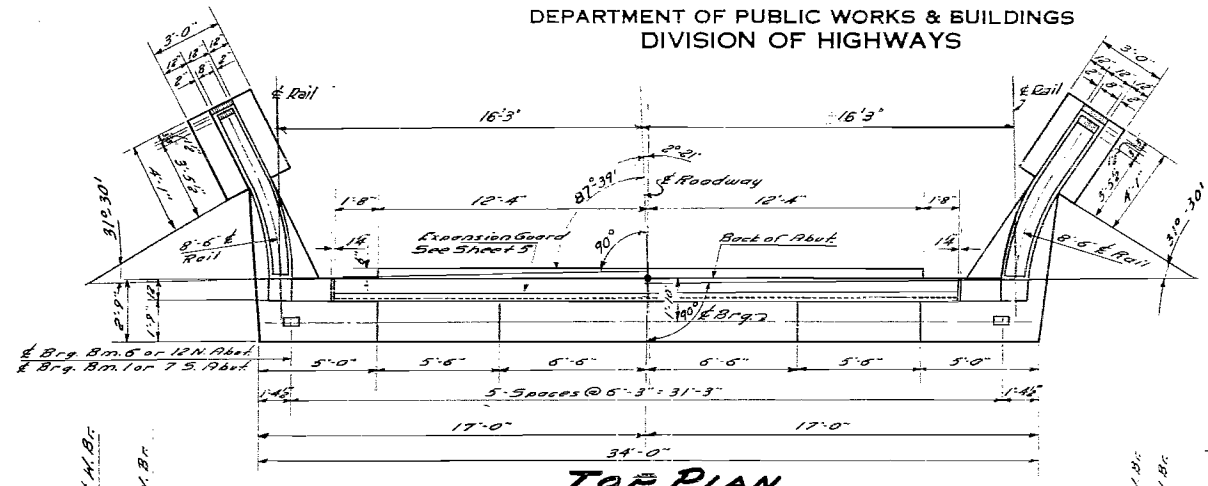
**KANKAKEE BELT LINE PROJECT U.G.I. 29(4)**  
**F.A. Rt. 26-SEC. 139-HB3-HF3**  
**KANKAKEE COUNTY**  
**STATION 138+90.96**

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

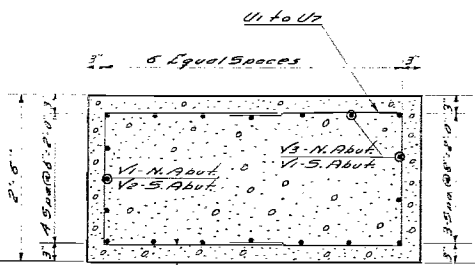
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	REVISED
26	139-HB3-1	KANKAKEE	2	9	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



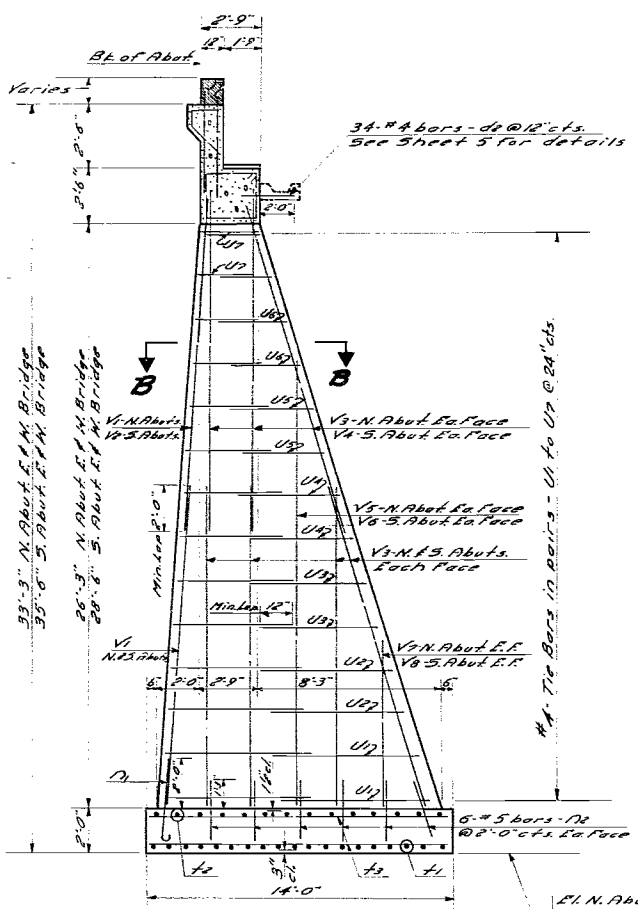
**SECTION THRU GAP**



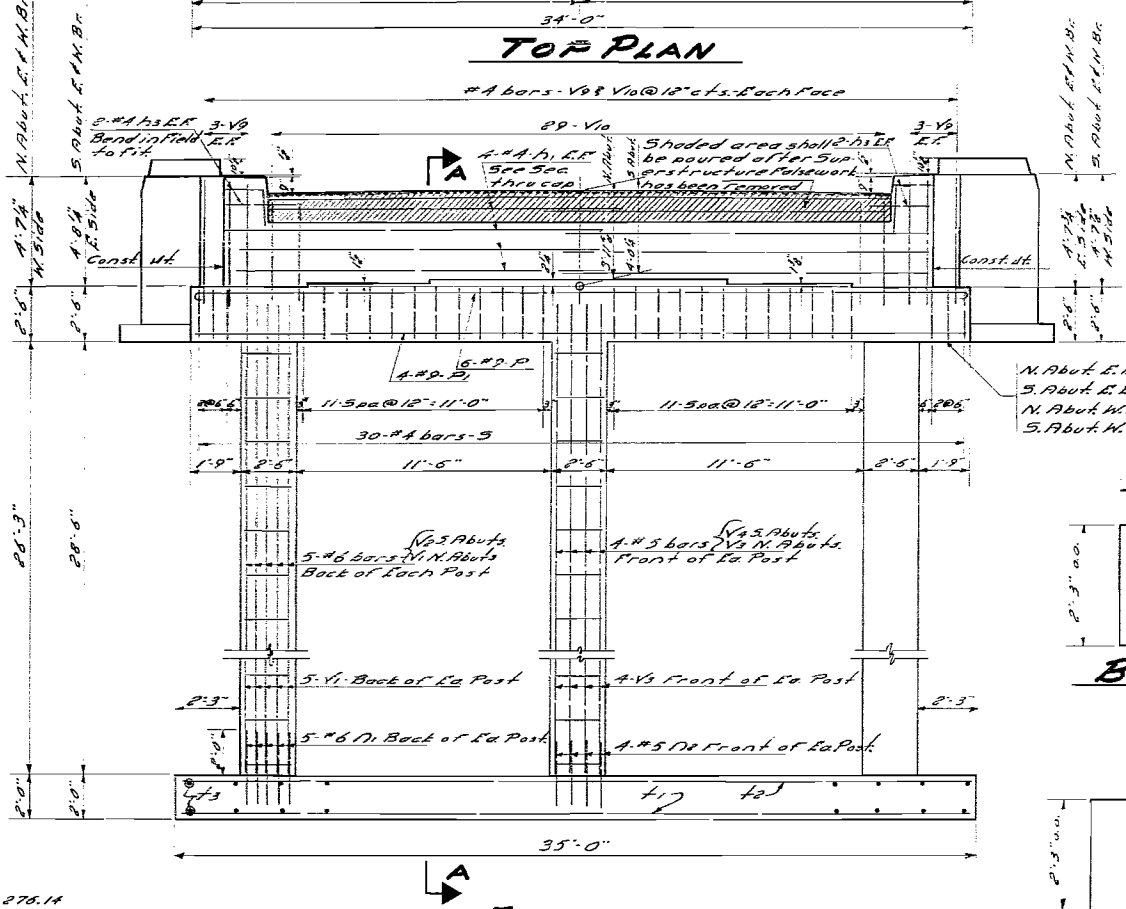
**TOP PLAN**



**SECTION B-B**



**SECTION A-A**



**ELEVATION**

**BAR-P**

**BAR-S**

**BAR-N**

**BAR-U1 to U7**

**BAR-D3**

**BILL OF MATERIAL - ABUTS  
TWO STRUCTURES**

BAR	NO.	SIZE	LENGTH	SHAPE
P	24	#9	35'-2"	
P1	16	#9	33'-8"	
D3	136	#4	3'-0"	
D3	100	#4	3'-9"	
V1	90	#6	15'-0"	
V2	30	#6	17'-0"	
V3	168	#5	15'-0"	
V4	48	#5	17'-0"	
V5	12	#5	20'-6"	
V6	12	#5	22'-5"	
V7	12	#5	7'-9"	
V8	12	#5	9'-6"	
V9	48	#4	5'-9"	
V10	832	#4	5'-0"	
S	120	#4	10'-3"	
U1	48	#4	16'-3"	
U2	48	#4	14'-3"	
U3	48	#4	12'-9"	
U4	48	#4	11'-9"	
U5	48	#4	9'-9"	
U6	48	#4	8'-9"	
U7	48	#4	6'-9"	
N1	60	#6	4'-5"	
N2	168	#5	2'-6"	
S1	32	#4	16'-6"	
S2	32	#4	3'-9"	
T1	76	#5	34'-8"	
T2	56	#5	34'-4"	
T3	144	#5	13'-6"	

Note: See Plan of Wings on Sheet No. 7

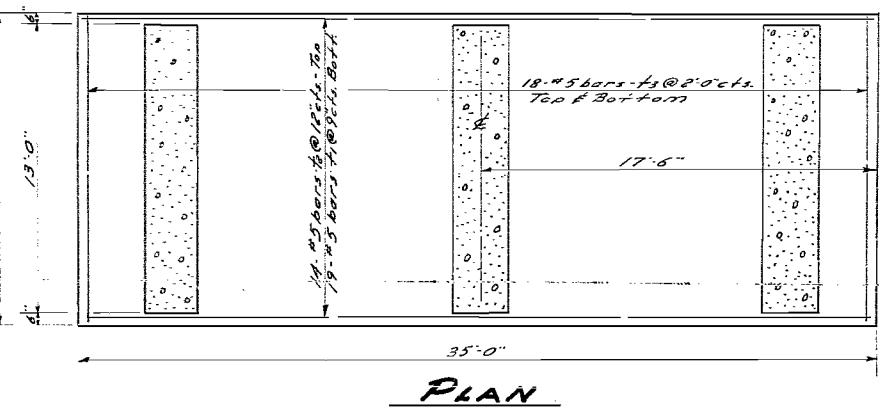
\* Class X Conc. 2-N. Abuts: 2282 cu. yds.  
Class X Conc. 2-S. Abuts: 2386 cu. yds.

Class X Concrete Cu. Yds. 4673  
Handrail Concrete Cu. Yds. 0.7  
Reinforcement Bars Lbs. 25980

Note: The exact elevation of the rock bed is not known. Rest all footings on rock.

DESIGNED	F. M. Schile	EXAMINED	Feb 19 1954 W. E. Hanson
CHECKED	J. W. A. G. Pulley	APPROVED	H. B. Johnson
DRAWN	F. M. A. C. Pulley		
CHECKED	W. E. B.		

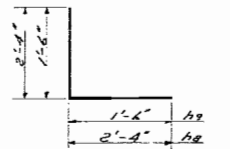
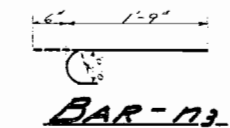
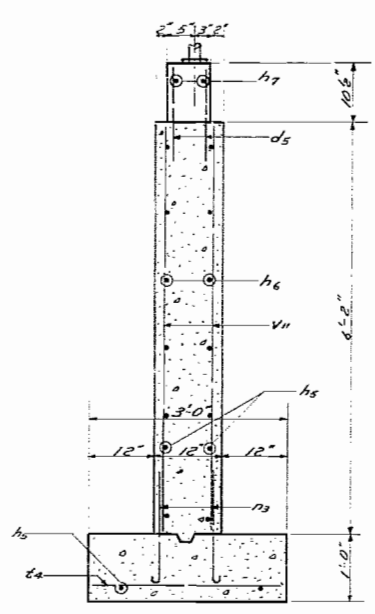
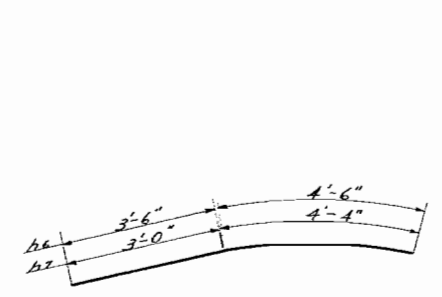
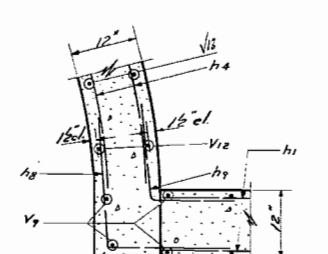
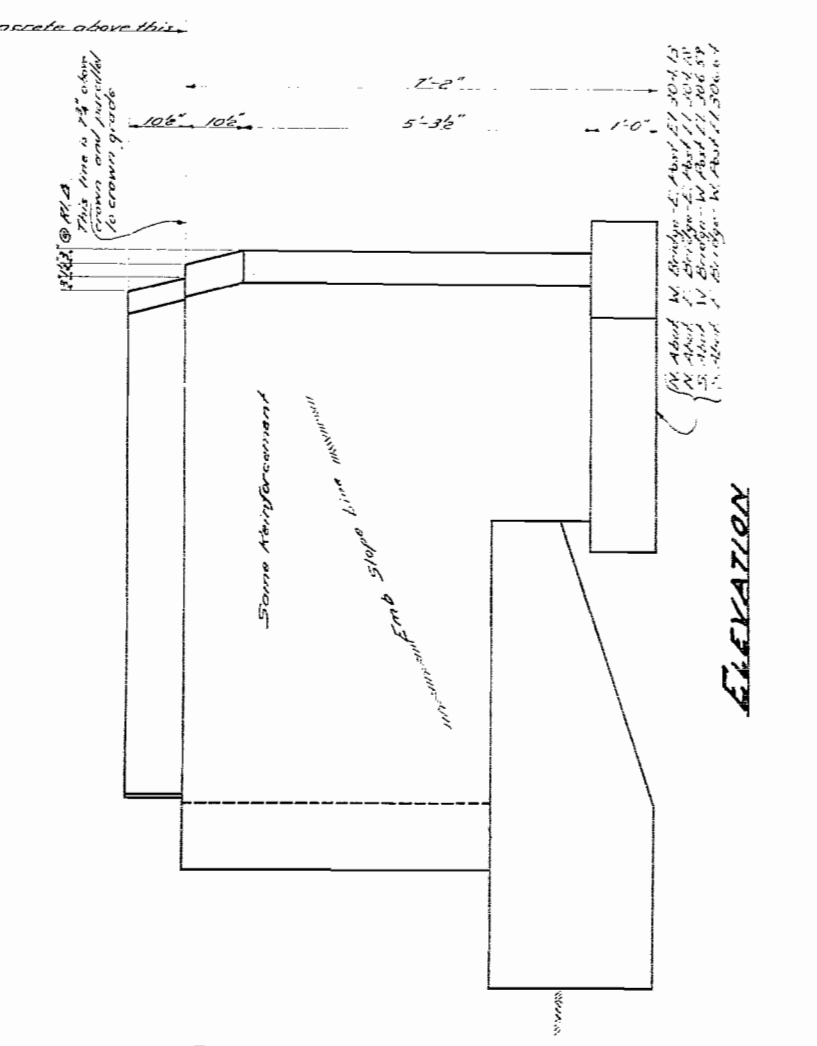
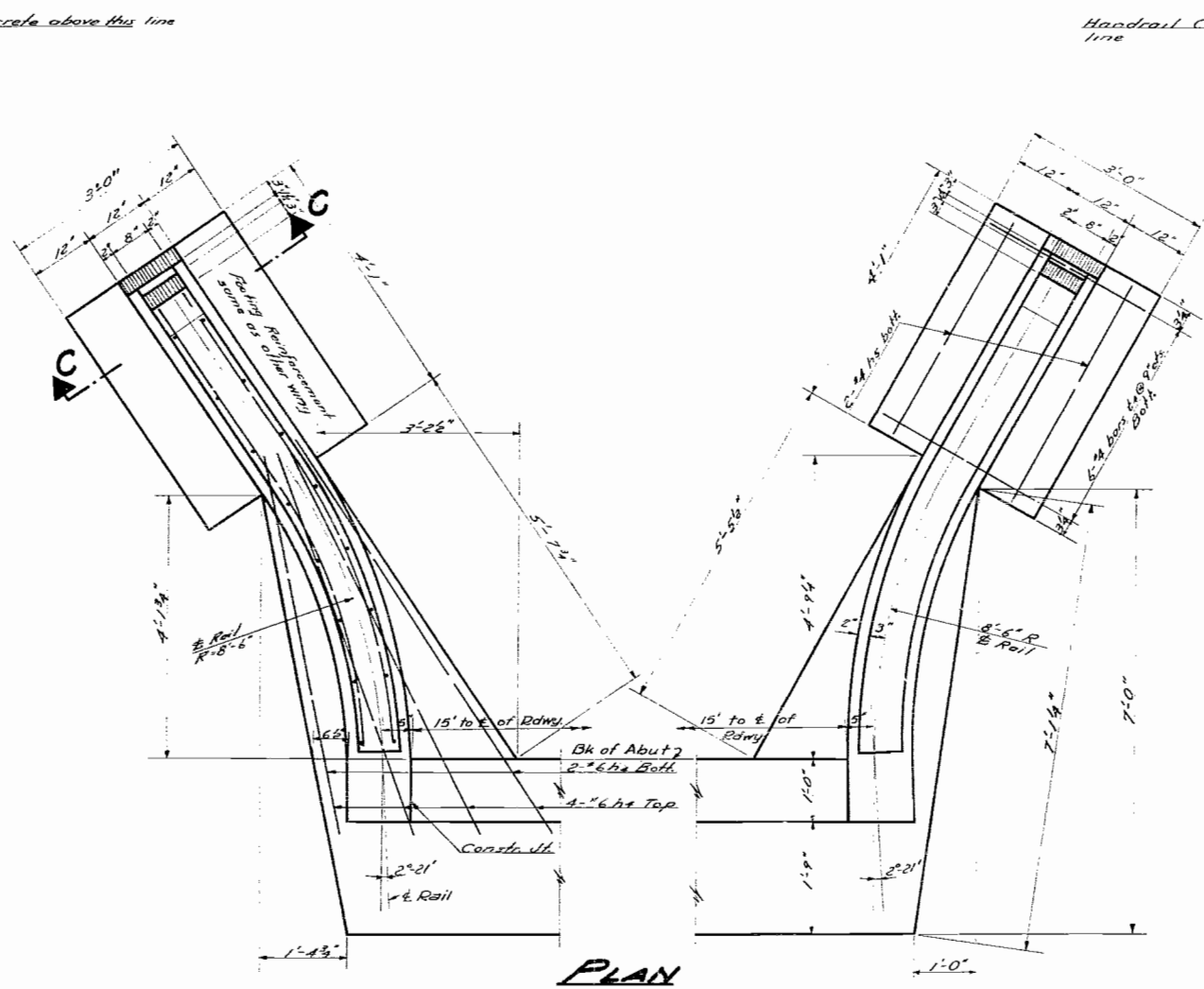
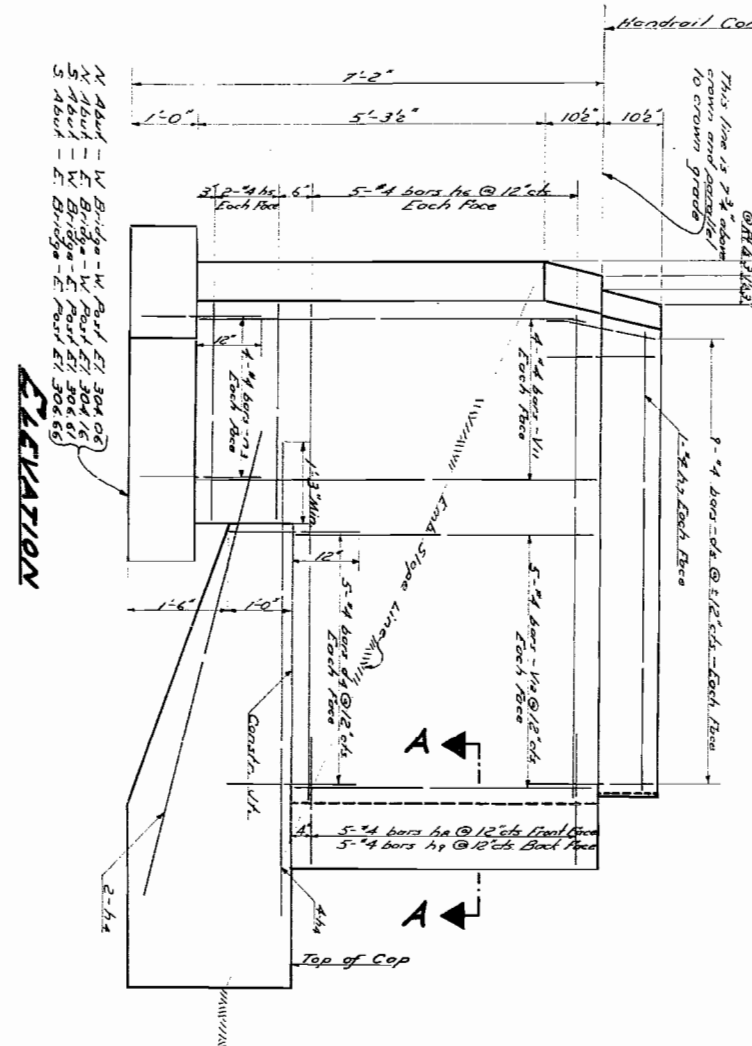
**ABUTMENTS**  
**KANKAKEE BELT LINE**  
**PROJECT LEG 29(4)**  
**F.A. RT. 26-SEC. 139-HB3-HF3**  
**KANKAKEE COUNTY**  
**STATION 138+90.96**



**PLAN**

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
138+23.47	138+23.47	KANKAKEE	21	10
SHEETS 8 SHEETS				



**BILL OF REINFORCEMENT BARS**

BAR	NO	SIZE	LENGTH	SHAPE	BAR	NO	SIZE	LENGTH	SHAPE
h4	48	4	7'-0"	—	V11	64	4	6'-0"	—
h5	48	4	3'-9"	—	V12	80	4	4'-6"	—
h6	80	4	8'-0"	—					
h7	16	4	7'-4"	—	d4	20	4	2'-0"	—
h8	40	4	4'-8"	—	d5	144	4	1'-6"	—
h9	40	4	3'-0"	—					
h4	48	4	2'-6"	—	n3	64	4	2'-3"	—

Reinforcement Bars Lbs. 2260

Note: Class X Concrete and Handrail Concrete are included in Bill of Material on Sheet No 6

DESIGNED *P. M. Schili*  
 CHECKED *W. H. Somers*  
 DRAWN *P. M. & R. Griffin*  
 CHECKED *WMS*

EXAMINED *W. E. Hanson*  
 PASSED *[Signature]*  
 APPROVED *R. P. [Signature]*

Feb 19 1954

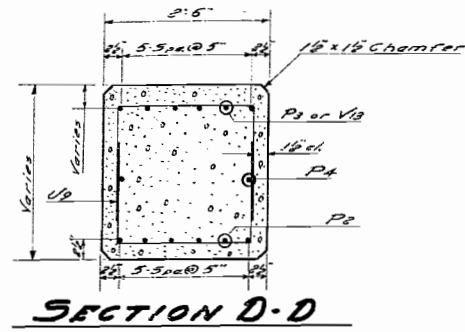
**ABUTMENT WINGS**

**KANKAKEE BELT LINE**  
**PROJECT U.G.I. 29(4)**  
**F.A. RT. 26 SEC. 139-HB3**  
**KANKAKEE COUNTY**  
**STATION 138+90.96**

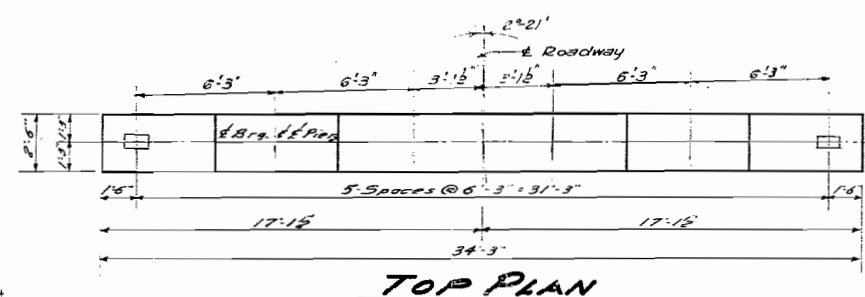
Note: Bend the bars in field, to fit the corners as shown in Section A-A

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

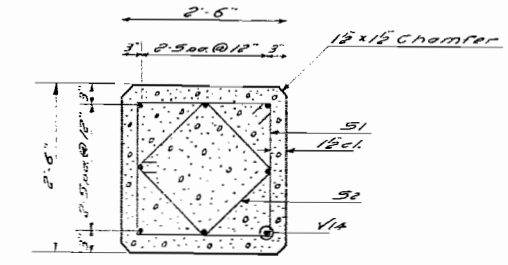
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
138+90.96	138+90.96	KANKAKEE	21	11	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



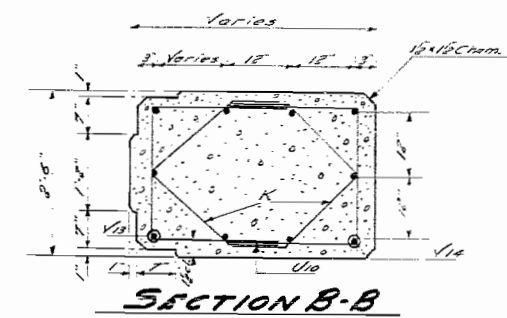
SECTION D-D



TOP PLAN

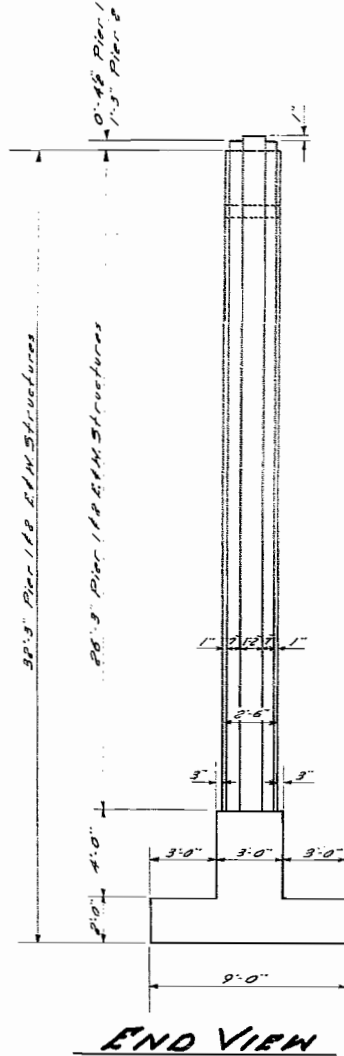


SECTION C-C

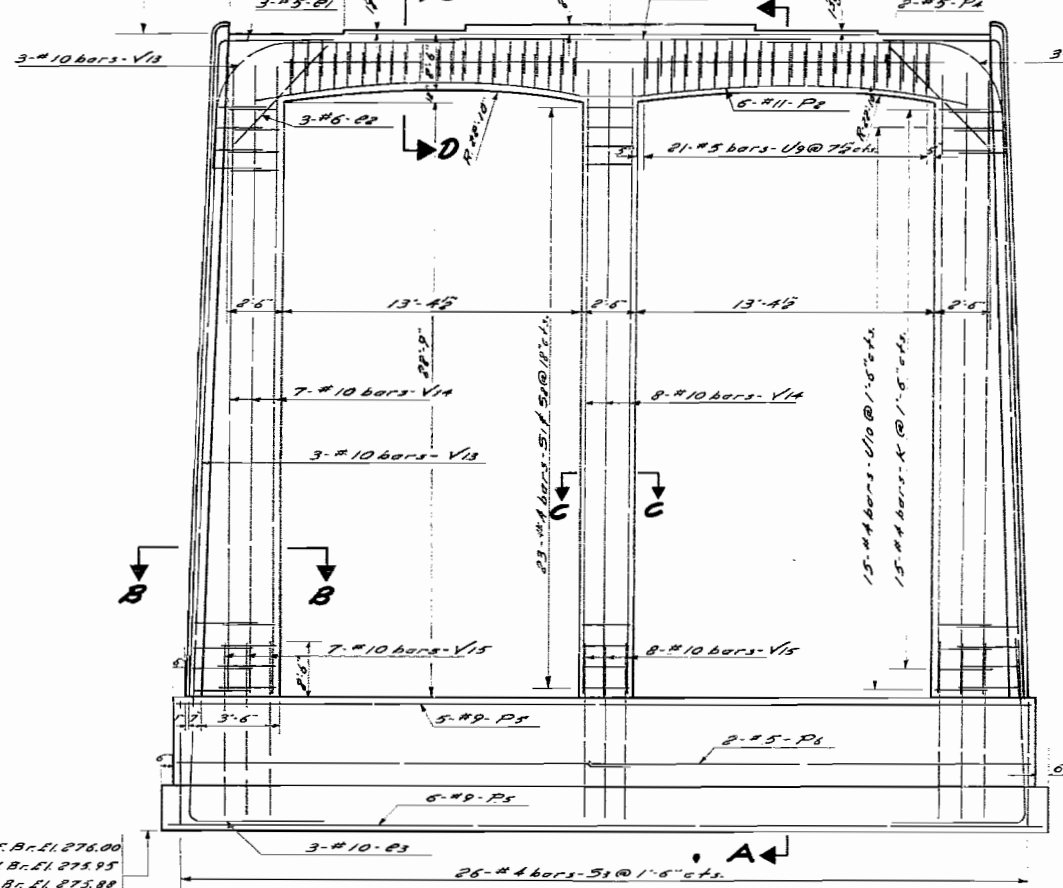


SECTION B-B

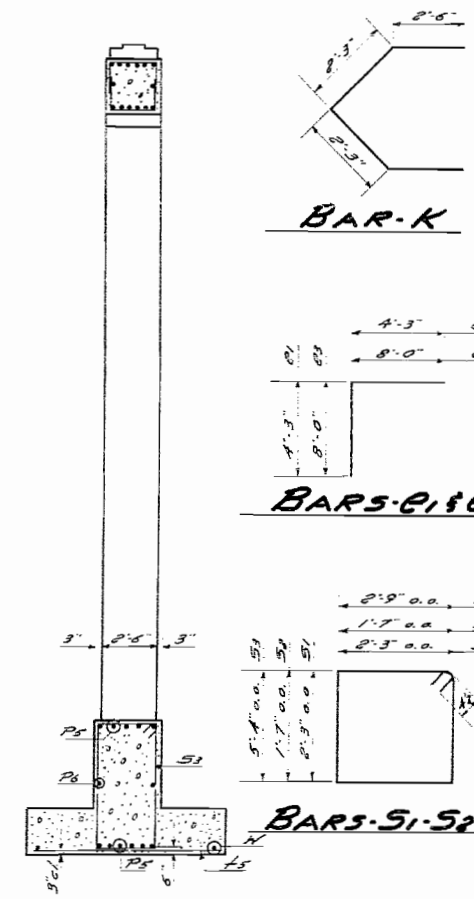
Pier #1 E. Br. El. 308.25  
Pier #1 N. Br. El. 308.20  
Pier #2 E. Br. El. 308.13  
Pier #2 N. Br. El. 308.09



END VIEW



ELEVATION

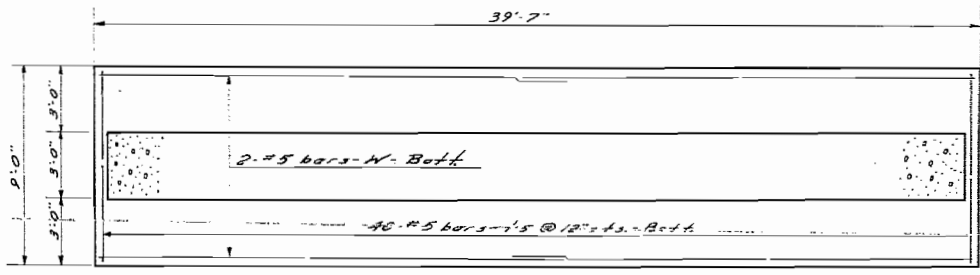


SECTION A-A

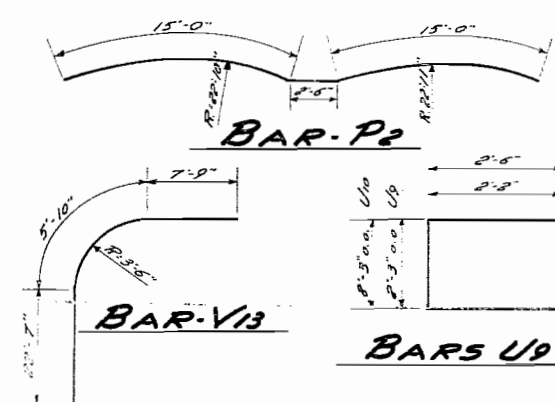
BILL OF MATERIAL - 4 PIERS

Bar	NO.	SIZE	LENGTH	SHAPE
P1	24	#11	32'-6"	—
P2	24	#11	18'-0"	—
P3	8	#5	30'-0"	—
P4	44	#9	38'-0"	—
P5	16	#5	20'-0"	—
V1	24	#10	36'-8"	┌
V2	88	#10	24'-3"	┌
V3	88	#10	7'-9"	┌
S1	24	#5	8'-6"	┌
S2	24	#6	5'-0"	┌
S3	24	#10	15'-0"	┌
U9	336	#5	6'-7"	┌
U10	240	#4	7'-3"	┌
K	160	#5	8'-9"	┌
K	240	#4	9'-6"	┌

Class X Concrete Cu Yds 301.3  
Reinforcement Bars Lbs. 32800



FOOTING PLAN



DESIGNED *T.M. Sekili*  
CHECKED *W.H. Somerville*  
DRAWN *T.M. & G. Pulley*  
CHECKED *WMS*

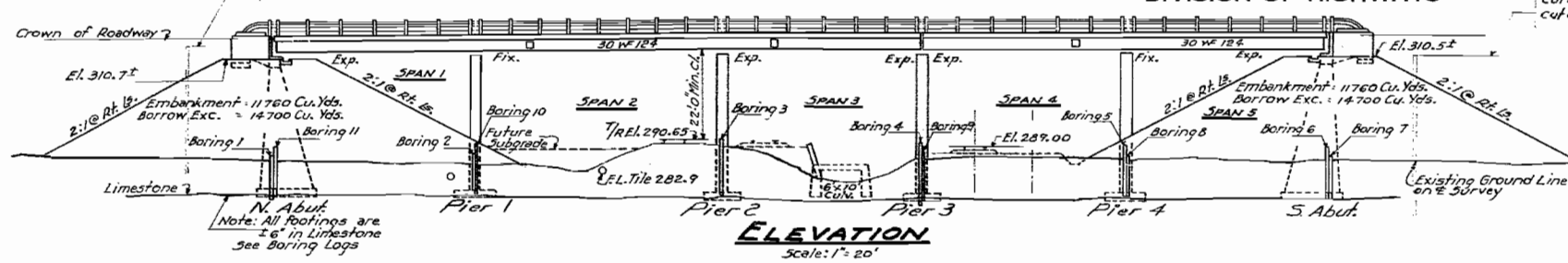
EXAMINED *W.E. Hanson*  
PASSED *[Signature]*  
APPROVED *[Signature]*  
Feb 19 1954  
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES  
ENGINEER OF DESIGN  
CHIEF HIGHWAY ENGINEER

PIERS 138  
KANKAKEE BELTLINE  
PROJECT UGI 29(4)  
F.A. RT. 26-SEC. 139-HB3  
KANKAKEE COUNTY  
STATION 138+90.96

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL PILES	SPAN	SHEET NO.
26	139-VB-VF	KANKAKEE	2	12	105-8875

B.M. 6.7 on So. End of W. Hdwl Culvert 50' Rt.  
Station 14400 - Elev. 289.38  
No Existing Structure.

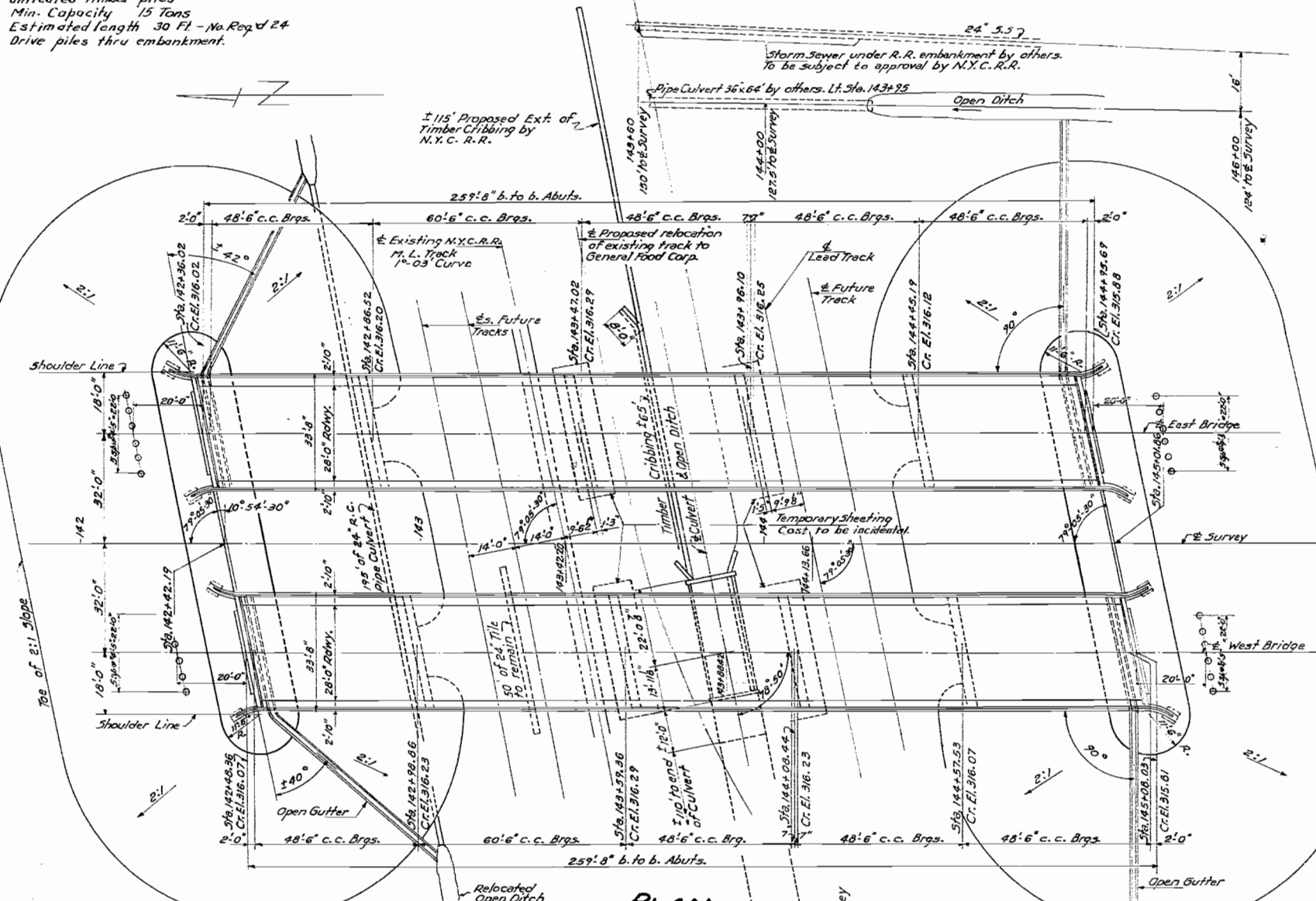


**ELEVATION**  
Scale: 1" = 20'

**BORING DATA**

Boring No.	Station	Depth	Soil Description	Depth (ft)
Boring 1	Sta. 142+48	32' Lt. E	Loose black clayey sandy silt	286.5
Boring 2	Sta. 142+99	32' Rt. E	Med. dark brown silty clay	283.0
Boring 3	Sta. 143+96	32' Lt. E	Med. fine gray brown sand	277.6
Boring 4	Sta. 144+45	32' Lt. E	Med. gray brown fine sand occ. thin clay lenses	277.7
Boring 5	Sta. 144+97	32' Rt. E	Med. brown clay and debris fill	286.5
Boring 6	Sta. 145+08	32' Rt. E	Loose black clayey sand silt top soil	285.0
Boring 7	Sta. 145+46	32' Lt. E	Med. light brown clay	282.5
Boring 8	Sta. 145+98	32' Rt. E	Med. fine brown silty soil	278.5
Boring 9	Sta. 146+49	32' Lt. E	Med. gray clayey sand	280.0
Boring 10	Sta. 146+99	32' Rt. E	Loose brown clayey sand	280.0
Boring 11	Sta. 147+50	32' Lt. E	Med. gray clayey sand	277.0
Boring 12	Sta. 148+00	32' Rt. E	Med. gray clayey sand	276.7

**Approach Pavt Piles:**  
Piles for Method II - Standard 1908-R  
Untreated timber piles  
Min. Capacity 15 Tons  
Estimated length 30 Ft. - No. Req'd 24  
Drive piles thru embankment.



**PLAN**  
Scale: 1" = 20'

**GENERAL NOTES**

Class-X Concrete shall be used throughout except for handrail concrete in end posts as shown on plans. The concrete floor slab shall be finished in accordance with Art. 31.18 (a) of the Standard Specifications. The curbs and slab outside of longitudinal construction joints shown on cross section shall be poured monolithically. No transverse construction joints shall be made in the slab except by written permission of the Engineer. Rivets 2" Open Holes 1/2", unless noted. Field connections riveted unless noted. All rollers, rockers, bearing plates, lead plates, pintles and anchor bolts shall be fabricated and set in accordance with Art. 31.14 of the Standard Specifications and are included for payment as Structural Steel. Anchor Bolts shall be set before riveting chafers over supports. All beams shall be assembled to their proper grade and alignment with or without chafers, inspected and reamed while so assembled. All structural steel shall be inspected by the Illinois Division of Highways before painting.

Except as otherwise provided all structural steel shall be given one shop coat of red lead paint and two field coats of aluminum paint. See Arts. 37.1 to 37.5 inclusive of the Standard Specifications. All paint shall be furnished and applied by the Contractor involved. Boring data are given only as a guide to bidders in estimating soil conditions which may be encountered in the work.

N. Y. C. R. R.  
BUILT 195 BY  
STATE OF ILLINOIS  
F.A. RT. 26 - SEC. 139-VB-VF  
F.A. PROJ. U6129(4) STA 143+72  
LOADING H20-516

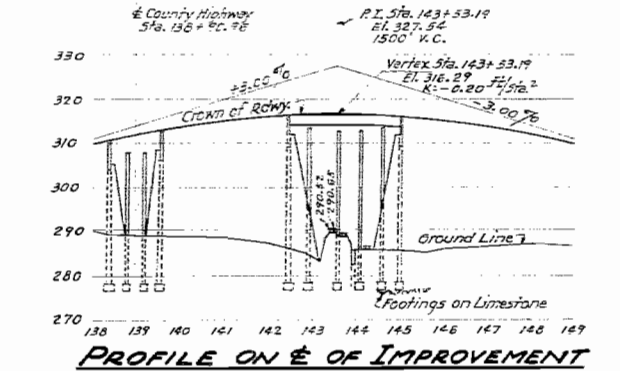
**LETTERING FOR NAME PLATE**  
See Standard 2113

**TOTAL BILL OF MATERIAL - 2 BRIDGES**

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL	TOTAL
Class-X Concrete	Cu. Yds.	437.0	1461.6	1898.6	1898.6
Handrail Concrete	Cu. Yds.		0.7	0.7	0.7
Metal handrail	Lin. Ft.	1113		1113	1113
Reinforcement Bars	Lbs.	84410	131570	215980	215980
Structural Steel	Lbs.	500710		500710	500710
Name Plates	Each	1		1	1
Class-A Excavation for Structures	Cu. Yds.		2970	2970	2970
Borrow Excavation	Cu. Yds.		29400	29400	29400
24" R.C. Pipe Culvert, Type 2	Lin. Ft.		195	195	195
Rock Excavation for Structures	Cu. Yds.		83	83	83
Untreated Piles	Lin. Ft.		720	720	720

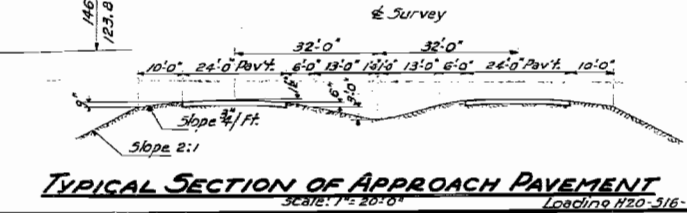
**STRESSES**

f <sub>c</sub>	- 1400 lb./sq. Super
f <sub>c</sub>	- 800 lb./sq. Sub.
f <sub>s</sub>	- 20000 lb./sq. Reinf. Bars
f <sub>s</sub>	- 18000 lb./sq. Structural Steel
n	- 10



**PROFILE ON E OF IMPROVEMENT**

DESIGNED	W. N. Sommer	EXAMINED	W. E. Hanson
CHECKED	T. Schilt	PASSED	
DRAWN	W. H. Miller	APPROVED	R. L. Cantelano
CHECKED	T. M. L.		

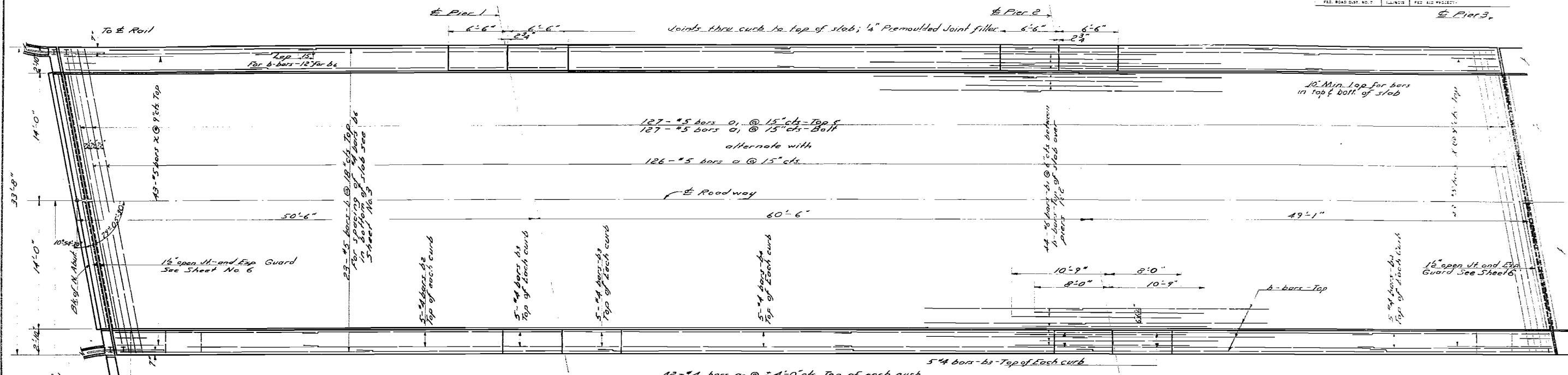


**TYPICAL SECTION OF APPROACH PAVEMENT**  
Scale: 1" = 20'

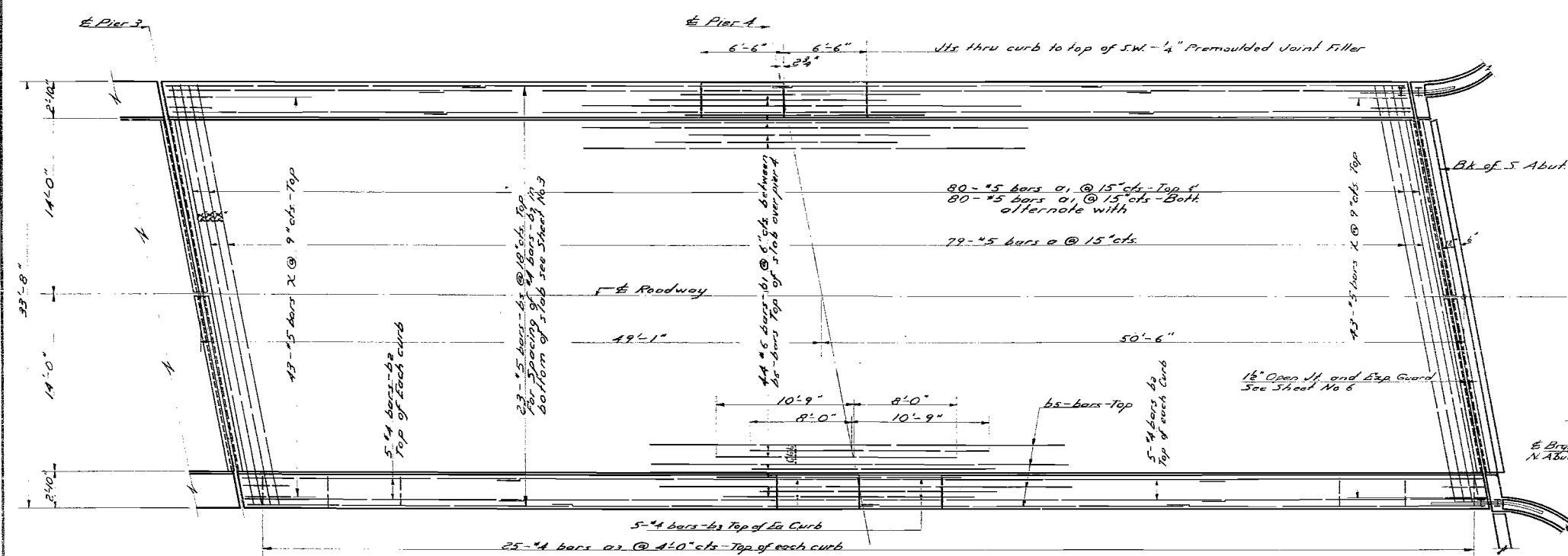
**GENERAL PLAN & ELEVATION  
GRADE SEPARATION  
NEW YORK CENTRAL R. R.  
KANKAKEE BELT LINE  
PROJECT U6129(4)  
F.A. RT. 26 - SEC. 139-VB-VF  
KANKAKEE COUNTY**

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
139VB	26	KANKAKEE	21	13
SHEET NO. 2				
10 SHEETS				



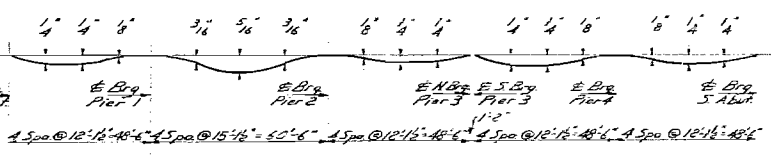
**PLAN-SHOWING REINFORCEMENT-SPAN 1-2-3**  
Same for E. & W. Structures



**PLAN-SHOWING REINFORCEMENT SPAN 4-5**  
Same for E. & W. Structures

**BILL OF MATERIAL - TWO BRIDGES**

BAR NO.	SIZE	LENGTH	SHAPE
a	410	5	37'-5" wavy
a1	828	25	33'-10"
a3	268	4	2'-6"
b	276	5	27'-6"
b1	264	6	18'-9"
b2	160	4	21'-6"
b3	120	4	6'-3"
b4	40	4	24'-3"
b5	184	5	25'-6"
b6	444	4	27'-3"
b7	296	4	25'-3"
d	1032	4	1'-0"
x	344	5	3'-9"
Class X Concrete			Cu Yds. 137.0
Reinforcement Bars			Lbs. 84,470

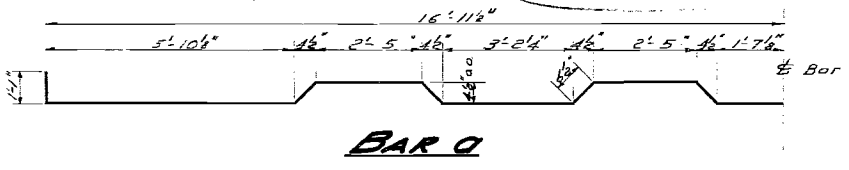


**D.L. DEFLECTION**  
In addition to D.L. Deflection, Contractor shall make allowance for settlement of forms and shrinkage of concrete.

DESIGNED W. N. Sommer  
CHECKED F. M. Schili  
DRAWN WNB R. Griffin  
CHECKED F. M. S.

EXAMINED W. E. Hansen  
PASSED [Signature]  
APPROVED R. L. [Signature]

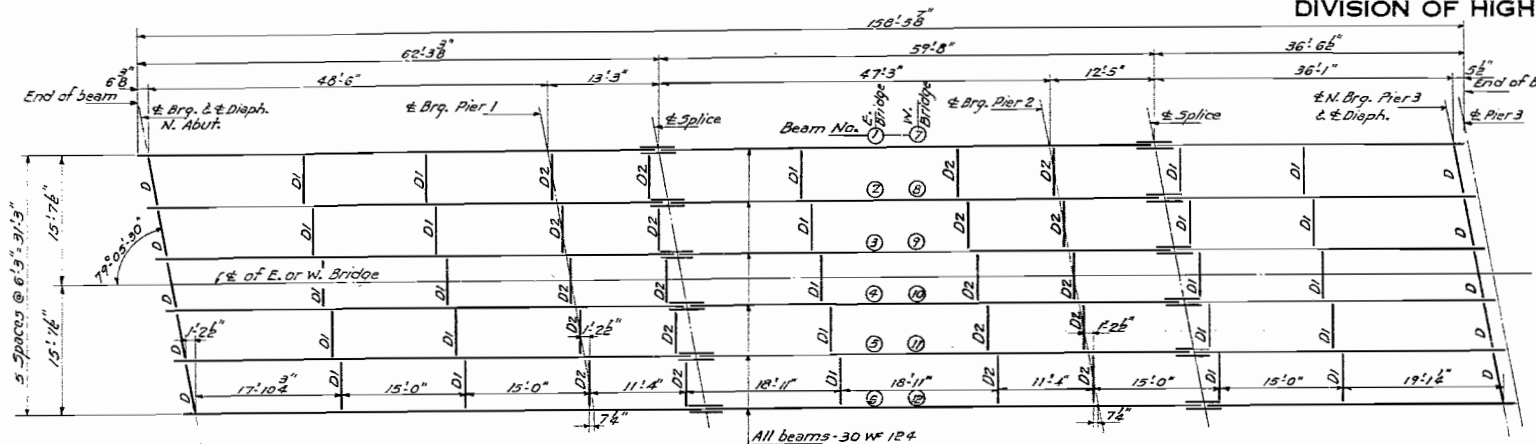
FEB 19 1954  
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES  
CHIEF HIGHWAY ENGINEER



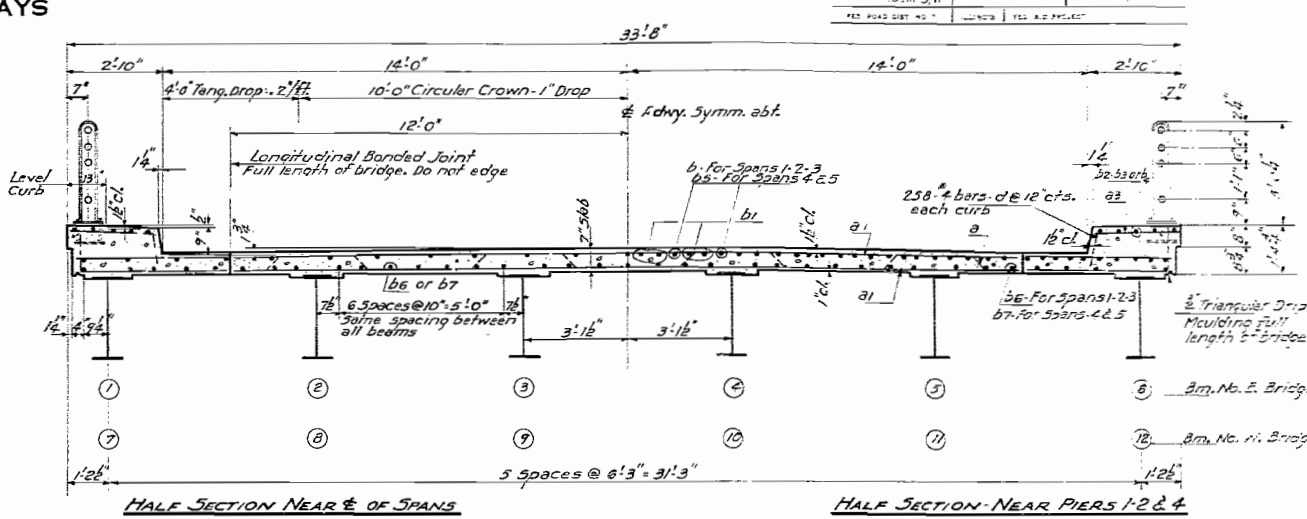
**DECK PLAN**  
**GRADE SEPARATION**  
**NEW YORK CENTRAL R.R.**  
**KANKAKEE BELT LINE**  
**PROJECT UGI 294**  
**P.A. RT. 26 SEC 139VB-VF**  
**KANKAKEE COUNTY**

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

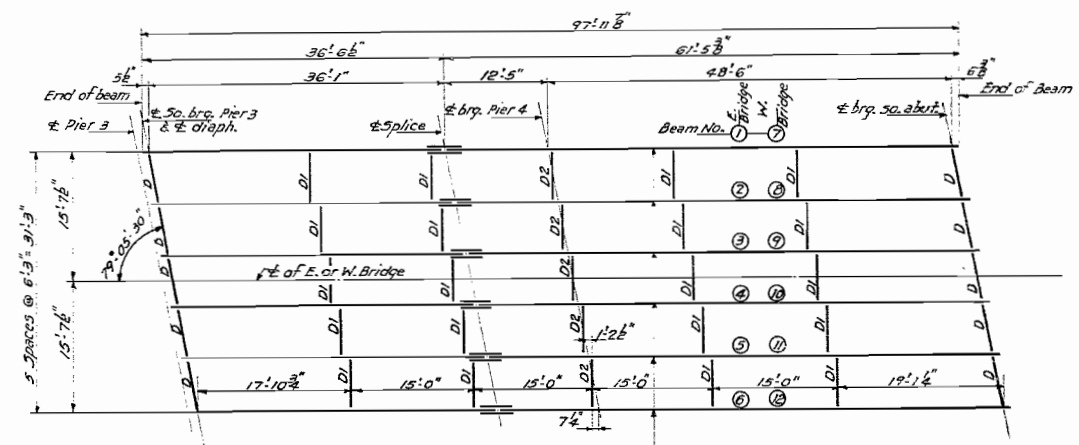
PLATE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
139A, 139B, 139C, 139D, 139E, 139F, 139G, 139H, 139I, 139J, 139K, 139L, 139M, 139N, 139O, 139P, 139Q, 139R, 139S, 139T, 139U, 139V, 139W, 139X, 139Y, 139Z	1-2-3	ILLINOIS	4	10



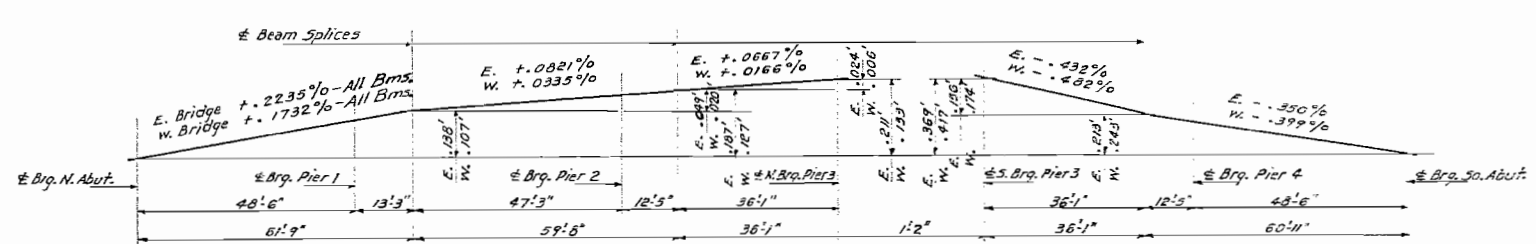
**LAYOUT OF STRUCTURAL STEEL- SPANS 1-2-3**  
All dimensions are horizontal dimensions.



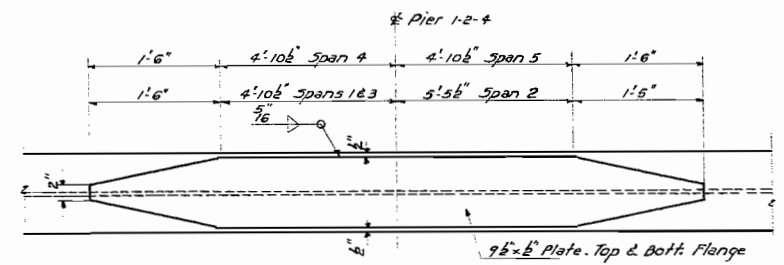
**CROSS SECTION-LOOKING SOUTH**



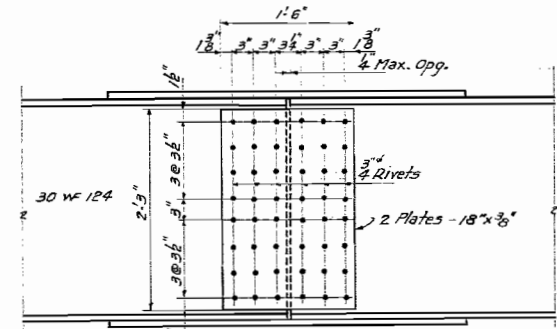
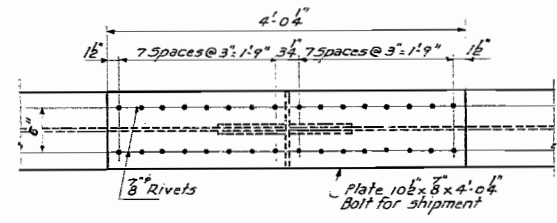
**LAYOUT OF STRUCTURAL STEEL- SPANS 4&5**  
All dimensions are horiz. dimensions



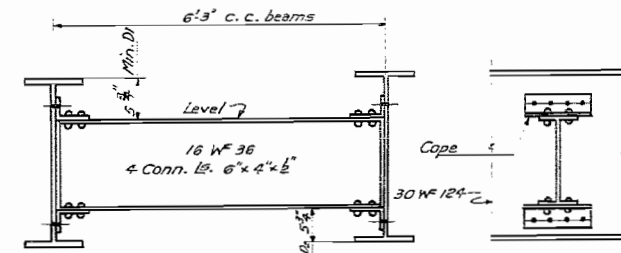
**CAMBER DIAGRAM FOR BEAMS**



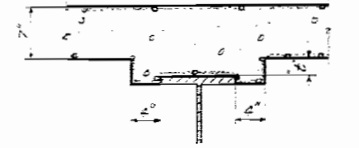
**DETAIL OF COVER PLATES**  
At Piers 1-2 & 4



**DETAIL OF BEAM SPLICE**



**DETAIL OF DIAPHRAGMS D1 & D2**  
Note: D1 & D2 are all alike, the only difference being in the distance from top or bottom flange.  
D1 - Req'd. for 2 bridges - 90  
D2 - Req'd. for 2 bridges - 50



**DETAIL OF FILLET**

**METHOD OF DETERMINING FILLET HEIGHT "c"**  
After all structural steel has been erected elevations of the top of flanges of the beams shall be taken at intervals not to exceed 10'. From these elevations subtract the increment "a" deflections for these points, determined from the Dead Load deflection diagram. The elevations so obtained subtracted from the theoretical erect elevations minus floor thickness, equals the fillet height "c" above top of beam.

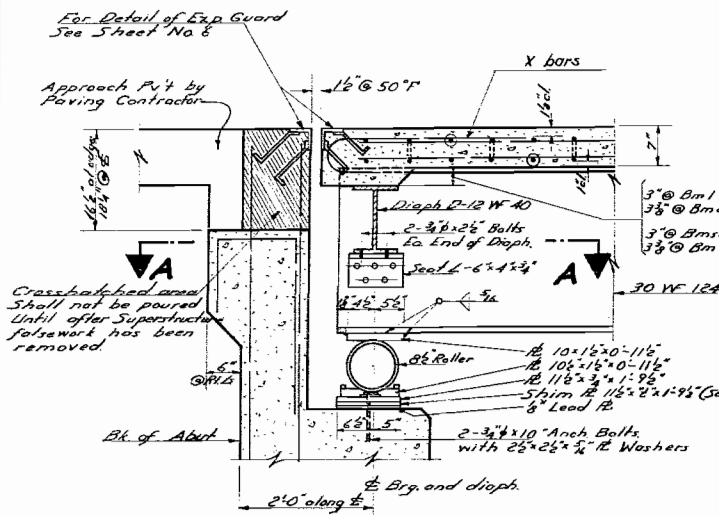
**BILL OF MATERIAL**  
Structural Steel Lbs. - 466790

**DETAILS**  
**GRADE SEPARATION**  
**NEW YORK CENTRAL R. R.**  
**KANKAKEE BELT LINE**  
**PROJECT UGI 29(4)**  
**F.A. RT. 26 ~ SEC. 139-YB-VF**  
**KANKAKEE COUNTY**

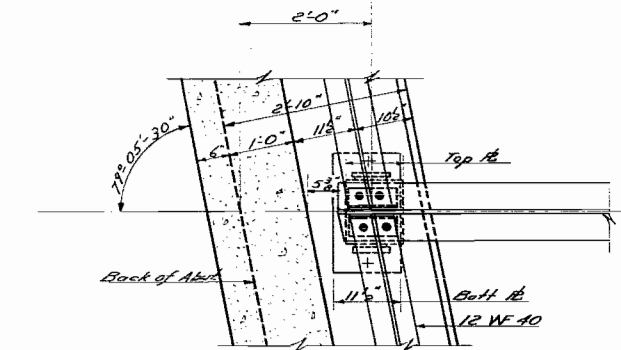
DESIGNED *W. H. Sommer*  
CREATED *F. M. Schile*  
DRAWN *Charles M. Miller*  
CHECKED *F. M. Schile*  
EXAMINED *W. B. Hanson*  
PASSED *[Signature]*  
APPROVED *P. P. Williams*

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

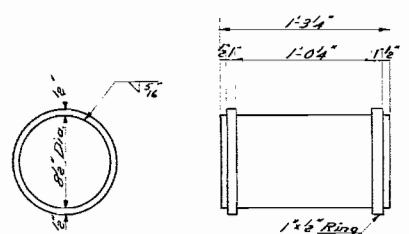
ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
26	139 VB-VF	KANKAKEE	5/15	10 SHEETS
FILE NO.	PROJECT	ILLINOIS	FILE NO.	



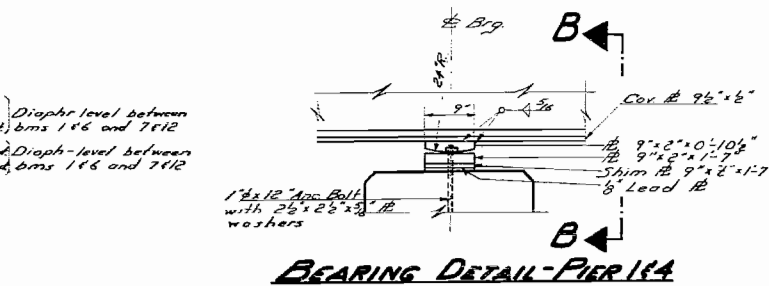
**SECTION THRU ABUTMENTS**  
Same for N or S Abut. for either E or W Structure



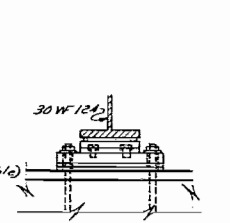
**SECTION A-A**



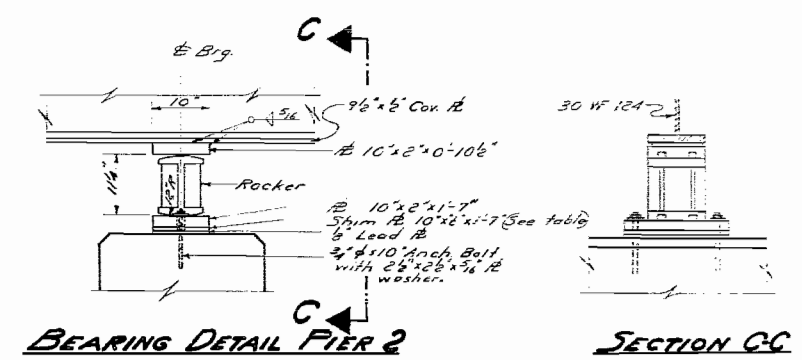
**DETAIL OF ROLLER**  
As Req'd



**BEARING DETAIL - PIER 1A**

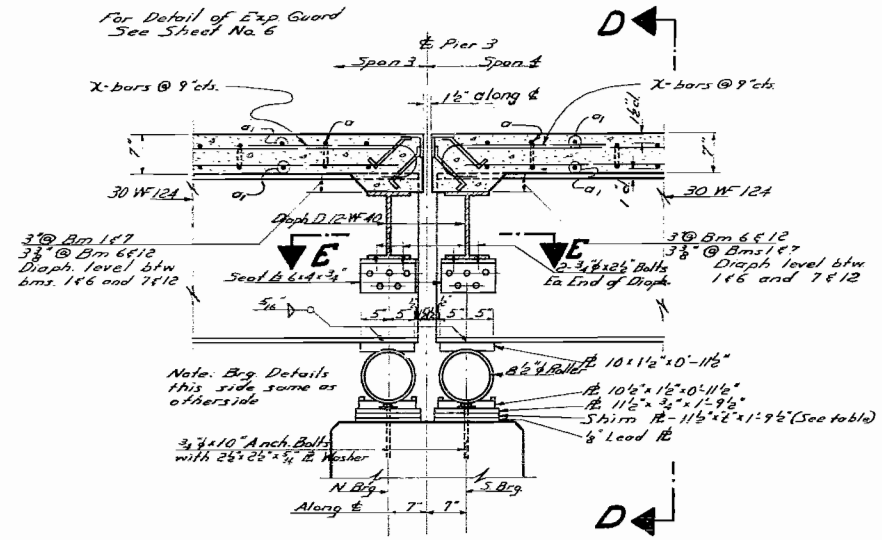


**SECTION B-B**

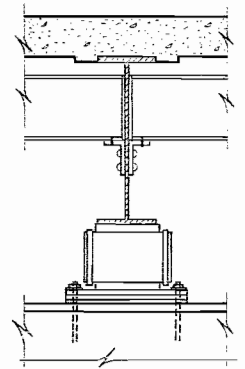


**BEARING DETAIL PIER 2**

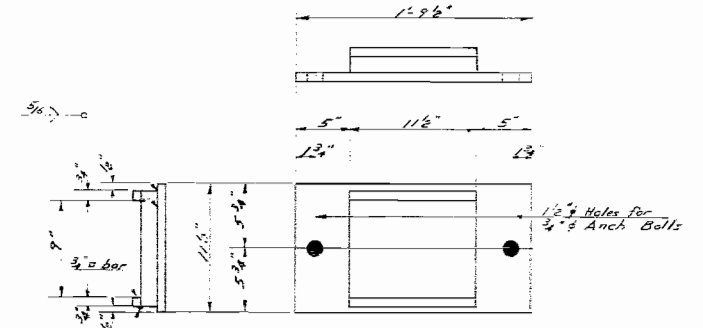
**SECTION C-C**



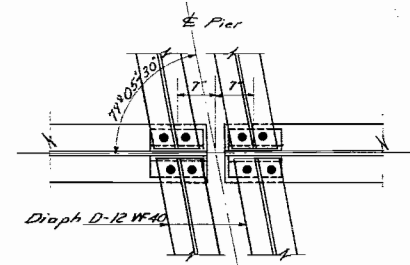
**BEARING DETAIL AT PIER 3**



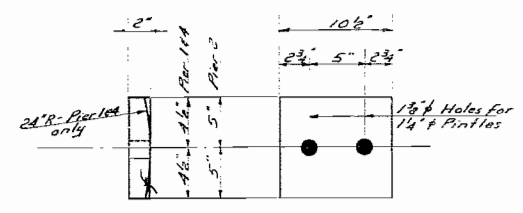
**SECTION D-D**



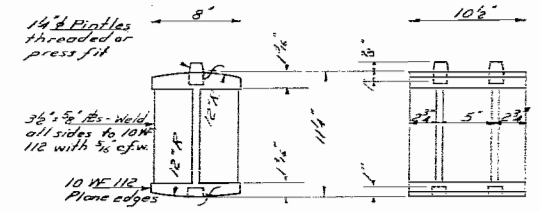
**BOTT. BRG B'S - ABUTS & PIER 3**  
As Req'd



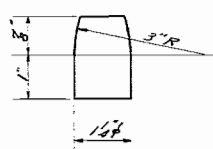
**SECTION E-E**



**TOP BRG B'S - PIER 1A-4**  
24 B 9' x 2' x 10 1/2" Req'd for Pier 1A  
12 B 10' x 2' x 10 1/2" for Pier 2



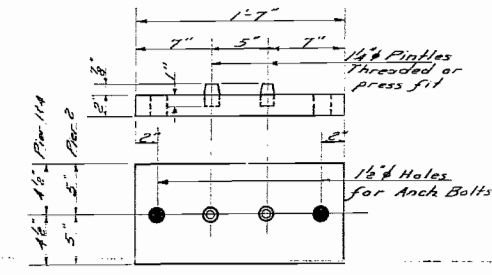
**ROCKER DETAIL**  
As Req'd



**PINTLE**  
96 Req'd

**TABLE OF SHIM B'S THICKNESS "t"**

Location	Bm. No.	1	2	3	4	5	6	7	8	9	10	11	12
N. Abut - Pier 1A and N. Brg. Pier 3	0	0	0	0	0	3/8	0	0	0	0	0	0	3/8
S. Brg. Pier 3	1	3/8	1/4	1/8	0	0	0	1/2	3/8	1/4	1/8	0	0
Pier 4 & S. Abut	2	0	0	0	0	0	0	3/8	0	0	0	0	0



**BOTT. BRG B'S - PIER 1A-4**  
24 B 9' x 2' x 10 1/2" For Pier 1A  
12 B 10' x 2' x 10 1/2" For Pier 2

**BILL OF MATERIAL**  
Structural Steel (Brg. Details) Lbs 29130

**BEARING DETAILS**

**GRADE SEPARATION**  
**NEW YORK CENTRAL R.R.**  
**KANKAKEE BELT LINE**  
**PROJECT UGI 29(4)**  
**F.A. RT. 26 SEC. 139 VB-VF**  
**KANKAKEE COUNTY**

DESIGNED *W. N. Sommer*  
CHECKED *T. M. Schie*  
DRAWN *W. N. R. Griffin*  
CHECKED *T. M. Schie*

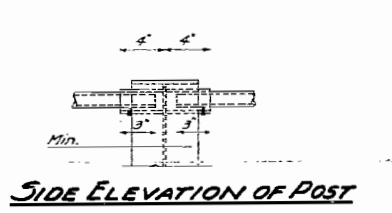
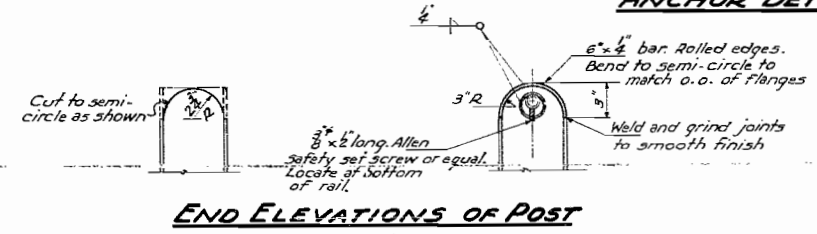
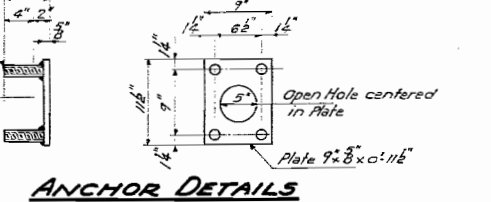
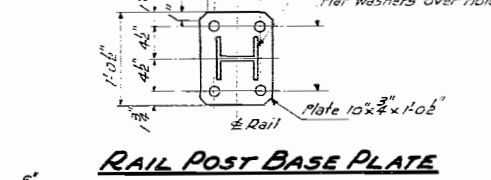
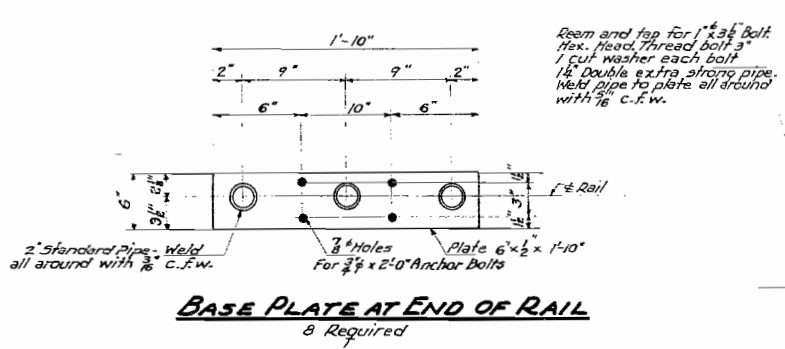
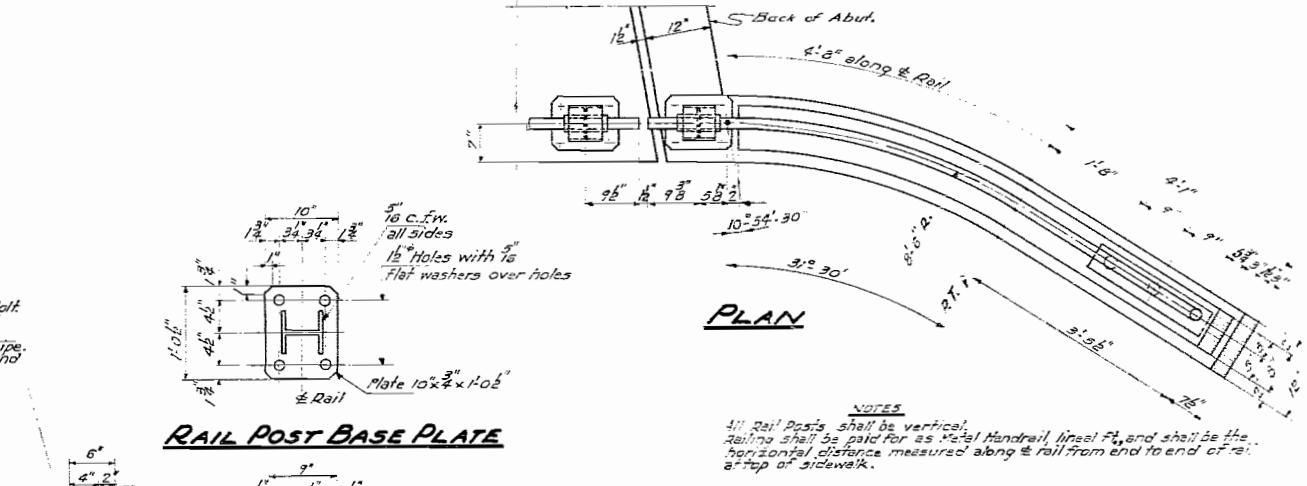
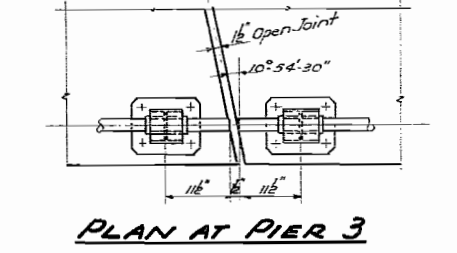
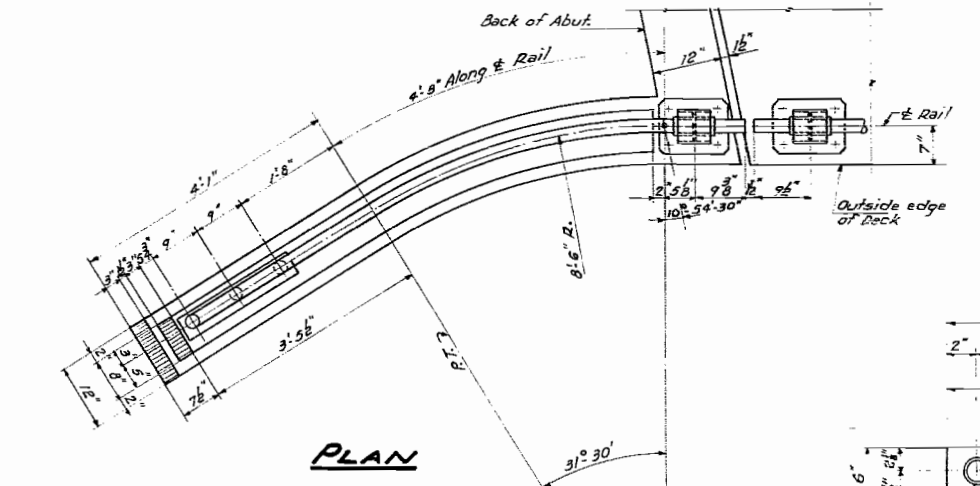
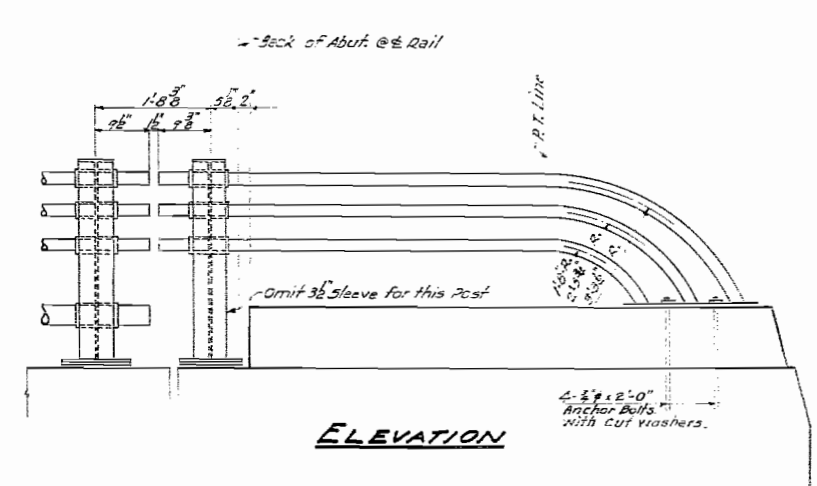
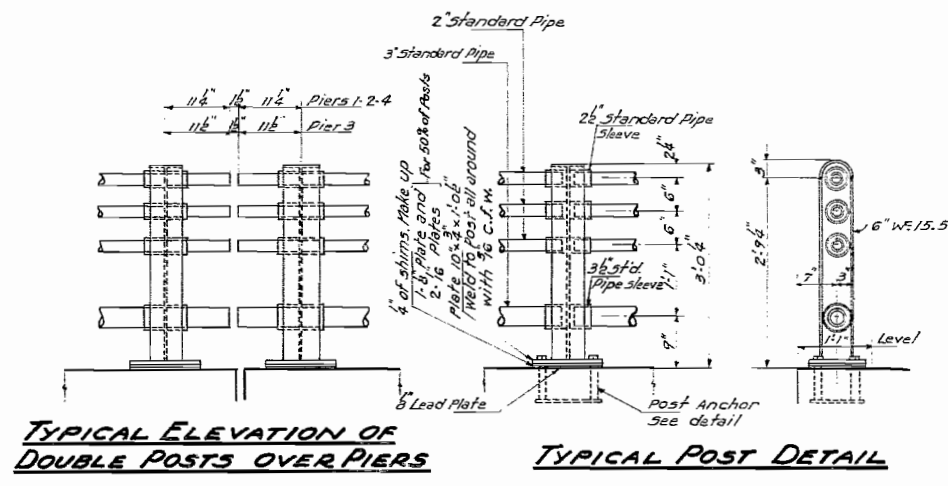
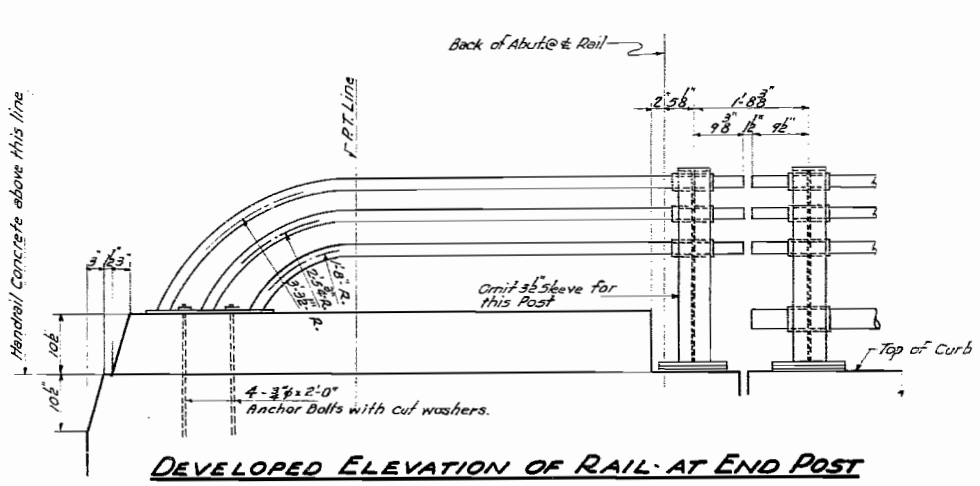
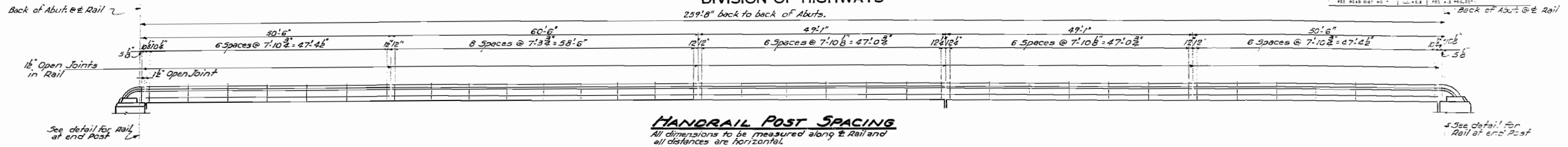
EXAMINED *W. E. Johnson*  
PASSED *[Signature]*  
APPROVED *[Signature]*

FEB 19 1934  
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES  
CHIEF HIGHWAY ENGINEER



STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	STATION	PIERS	POSTS	SHEET NO.
139VB-VF	KANKAKEE	21	16	108	5
F.A. RT. 26 ~ SEC. 139VB-VF					



**NOTES**

1) Rail Posts shall be vertical. Railings shall be paid for as Metal Handrail, lined Ft. and shall be the horizontal distance measured along Rail from end to end of rail to top of sidewalk.

The Metal Handrail shall be given one shop coat of red lead paint and two field coats of aluminum paint. Paint shall be furnished and applied by the Contractor involved.

**BILL OF MATERIAL**  
Metal Handrail Lin. Ft. 1113

**HANDRAIL DETAILS**  
**GRADE SEPARATION**  
**NEW YORK CENTRAL R.R.**  
**PROJECT UGI 29(4)**  
**F.A. RT. 26 ~ SEC. 139VB-VF**  
**KANKAKEE COUNTY**

DESIGNED *W. M. Sommer*  
CHECKED *T. M. Schil*  
DRAWN *W. M. Miller*  
CHECKED *T. M. Schil*

EXAMINED *W. E. Hanson*  
CHIEF OF BRIDGE AND TRAFFIC STRUCTURES

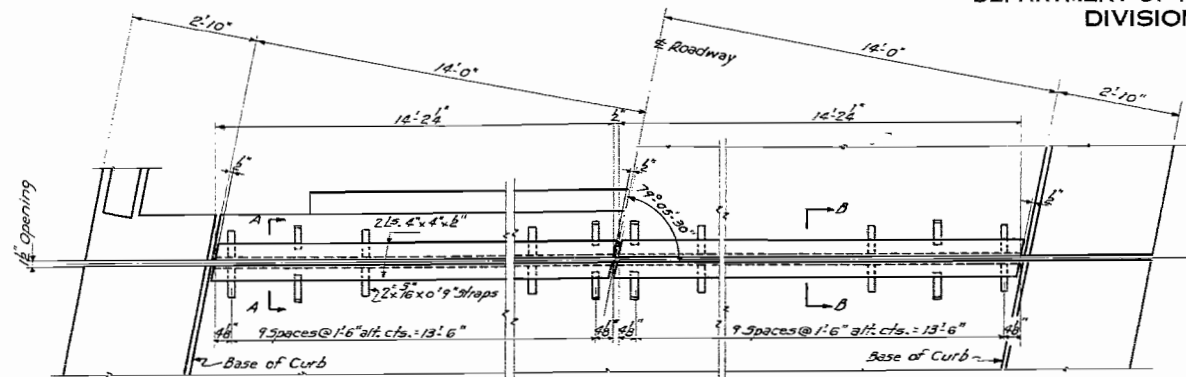
PASSED *[Signature]*  
ENGINEER OF DESIGN

APPROVED *[Signature]*  
CHIEF HIGHWAY ENGINEER

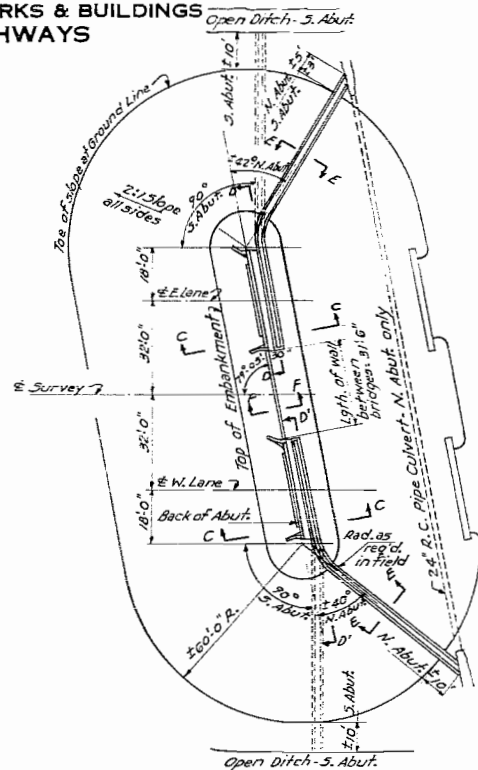
FEB 19 1954

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

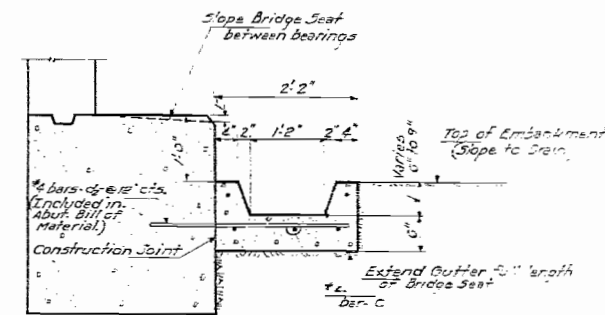
ROUTE NO.	SECTION	COUNTY	SHEETS	DATE	SHEET NO. OF
1 A 26	139-VB-VF	KANKAKEE	21	17	10 SHEETS
FED. ROAD DIST. NO. 7					



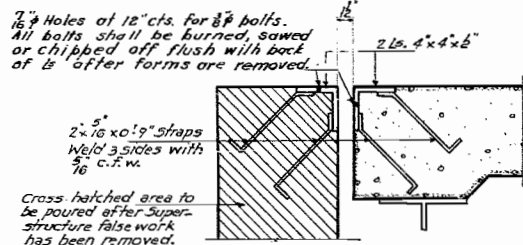
HALF PLAN AT ABUTMENTS  
HALF PLAN AT PIER 3  
**PLAN OF EXPANSION GUARDS**



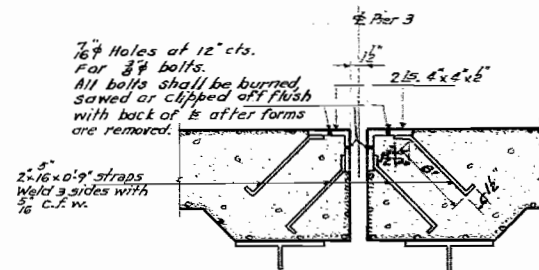
**PLAN OF DRAINS AT ABUTMENTS**  
N. & S. Abutts. similar except as shown



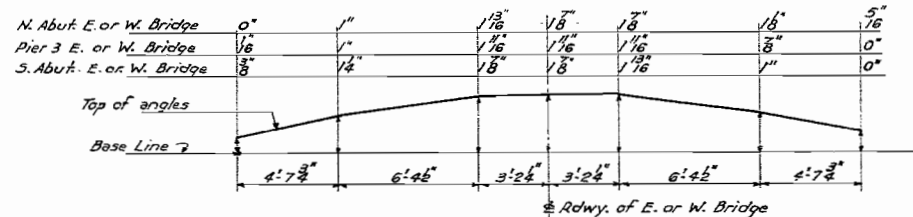
**SECTION C-C**



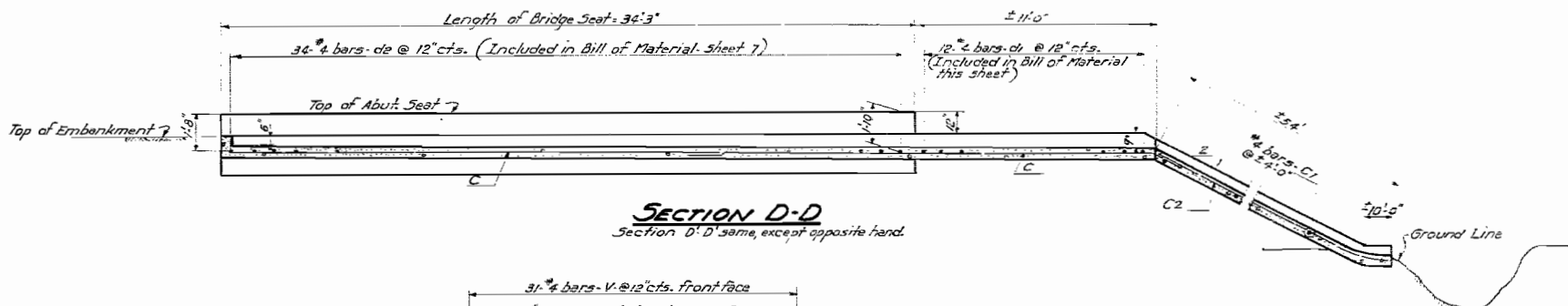
**SECTION A-A**  
At Abutments



**SECTION B-B**

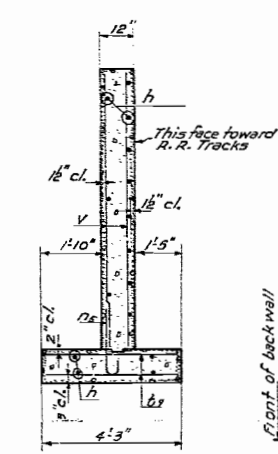


**PROFILE OF EXPANSION GUARD-LOOKING SOUTH**

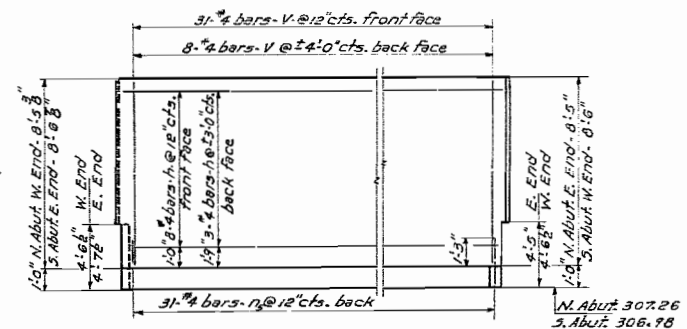


**SECTION D-D**  
Section D-D same, except opposite hand.

**NOTE**  
Expansion Guards shall be finished in accordance with Art. 5.112(d) of the Standard Specifications. All angles, straps and welds shall be paid for as structural steel. The weight of six Expansion Guards complete, included in Bill of Material on sheet 1 as Structural Steel is 4790 Lbs. All surfaces inaccessible after erection shall receive two shop coats of red lead paint except 2x16 straps which shall not be painted.



**SECTION F-F**



**ELEVATION**

**BILL OF BARS**

Bar	No.	Size	Length	Shape
C	40	1/2"	23'9"	—
C1	60	1/2"	2'3"	—
C2	48	1/2"	22'3"	—
h	60	1/2"	18'0"	—
ns	62	1/2"	2'5"	—
g	124	1/2"	3'9"	—
v	78	1/2"	6'3"	—
cl	48	1/2"	1'10"	—

**BILL OF MATERIAL**

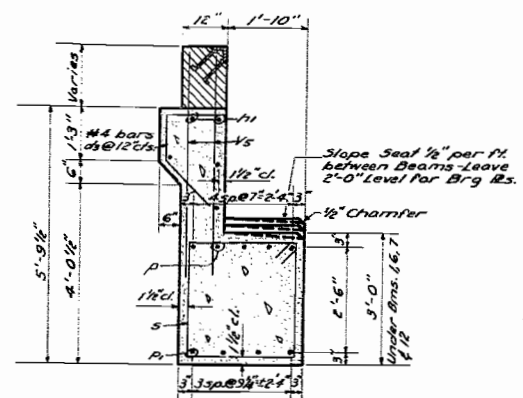
ITEM	Quantity	Unit	Total
Class II Concrete	18.3	Cu Yds.	47.5
Reinforcement Bars	1500	Lbs.	2970

DESIGNED	W. M. Sommer	EXAMINED	W. E. Hanson
CHECKED	T. M. Schick	PASSED	[Signature]
DRAWN	W. M. Miller	APPROVED	R. H. Bartleson
CHECKED	T. M. Schick		

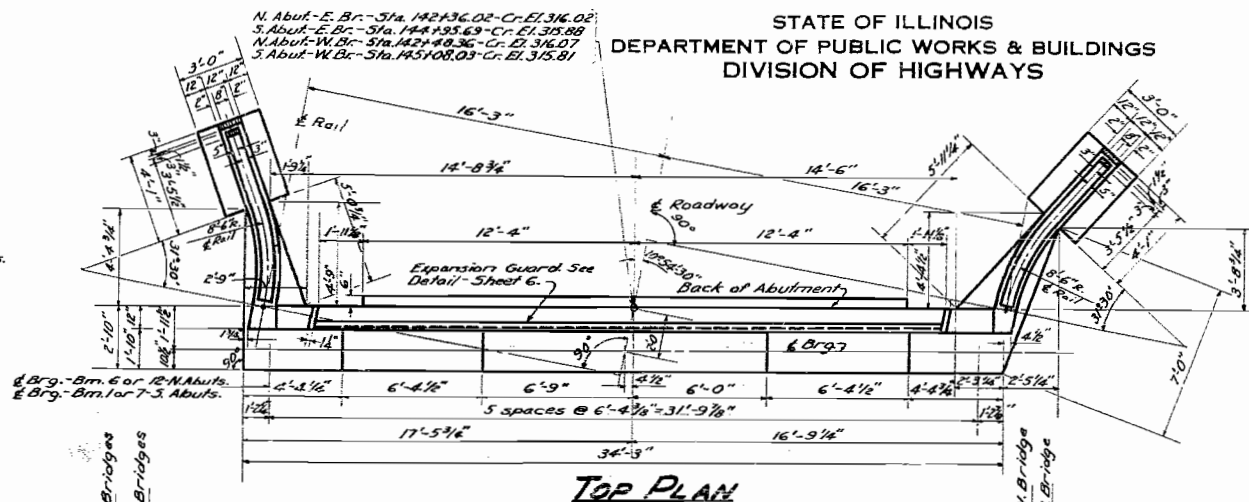
**EXPANSION GUARD-DRAINAGE DETAILS & RETAINING WALLS**  
GRADE SEPARATION  
NEW YORK CENTRAL R. R.  
KANKAKEE BELT LINE  
PROJECT UG1-29(4)  
F.A. RT. 26 ~ SEC. 139-VB-VF  
KANKAKEE COUNTY

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

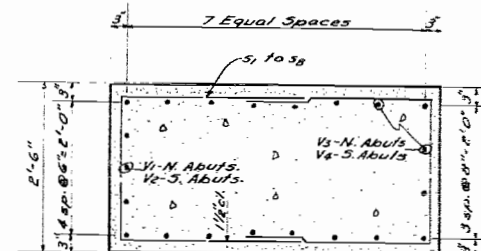
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
133B-33B	26	KANKAKEE	2	8
PROJECT				10 SHEETS



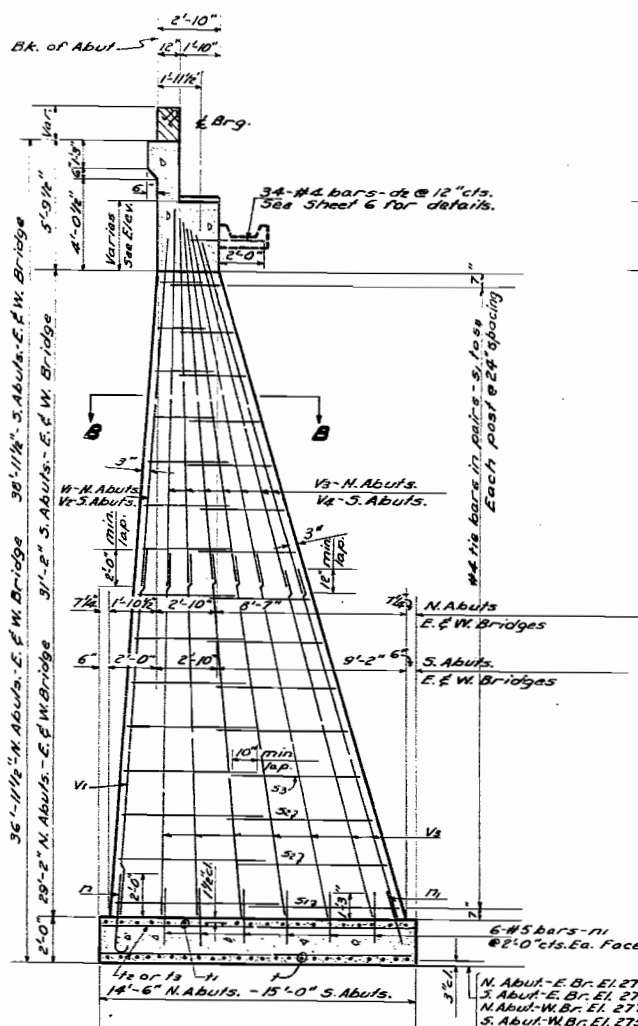
SECTION THRU CAP



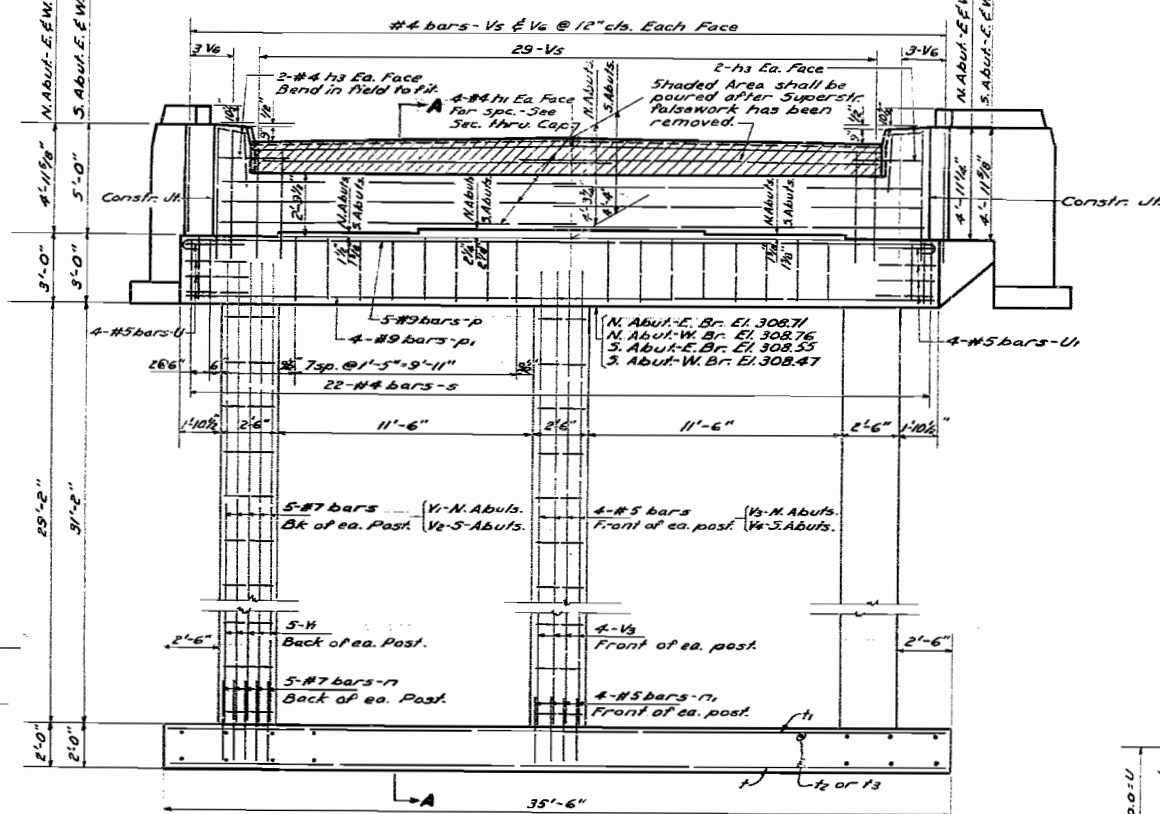
TOP PLAN



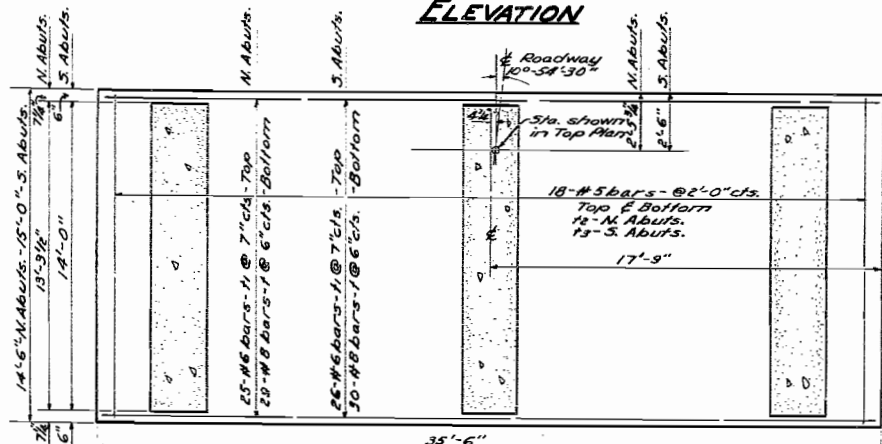
SECTION B-B



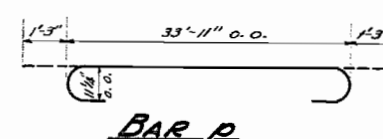
SECTION A-A  
(N. Abuts. shown - S. Abuts. similar)



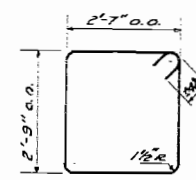
ELEVATION



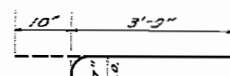
PLAN



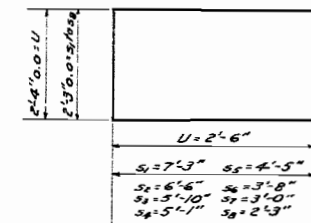
BAR P



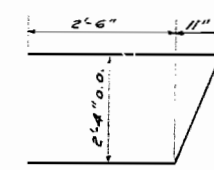
BAR S



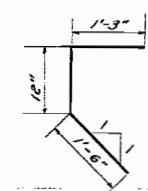
BAR N



BARS U & S, TO S8



BAR U



BAR d3

BILL OF MATERIAL  
4 ABUTMENTS

BAR	NO.	SIZE	LENGTH	SHAPE
d	136	#4	3'-0"	
d3	100	#4	3'-9"	
h1	64	#4	16'-6"	
h3	32	#4	3'-9"	
h	60	#7	4'-7"	
h	192	#5	2'-6"	
p	20	#9	36'-5"	
pi	16	#9	33'-11"	
s	88	#4	11'-6"	
s1	36	#4	16'-9"	
s2	48	#4	15'-3"	
s3	48	#4	13'-11"	
s4	48	#4	12'-5"	
s5	48	#4	11'-1"	
s6	48	#4	9'-7"	
s7	48	#4	8'-3"	
s8	48	#4	6'-9"	
u	118	#9	35'-0"	
u1	102	#6	35'-0"	
u	72	#5	14'-0"	
u3	72	#5	14'-6"	
u	16	#5	7'-4"	
u1	16	#5	8'-6"	
v1	90	#7	16'-6"	
v2	30	#7	18'-6"	
v3	288	#5	16'-3"	
v4	96	#5	18'-3"	
v5	232	#4	5'-0"	
v6	48	#4	5'-9"	

Handrail Concrete Cu. Yds. 0.7  
Class X Concrete Cu. Yds. 528.4  
Reinforcement Bars Lbs. 40880

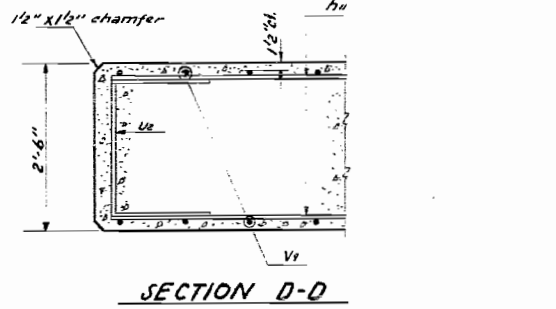
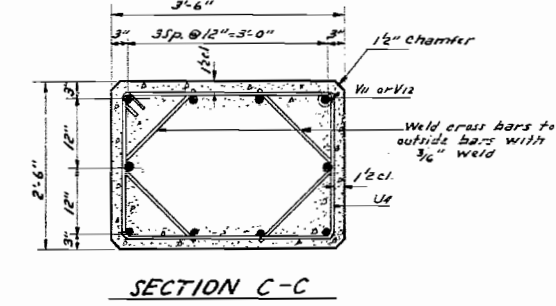
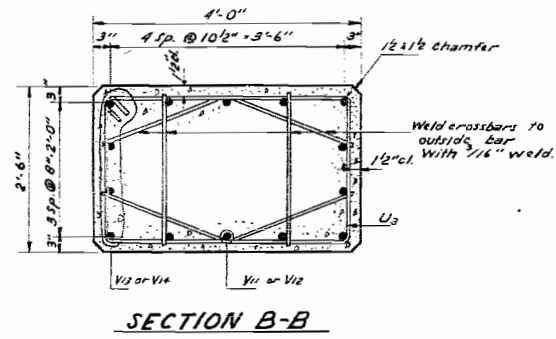
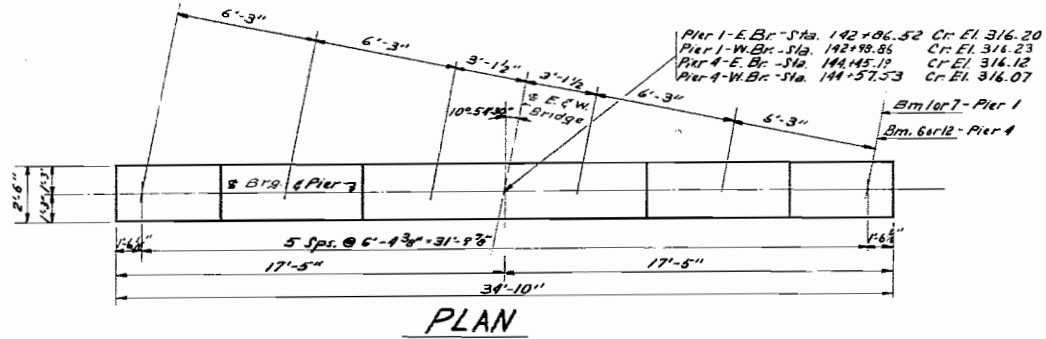
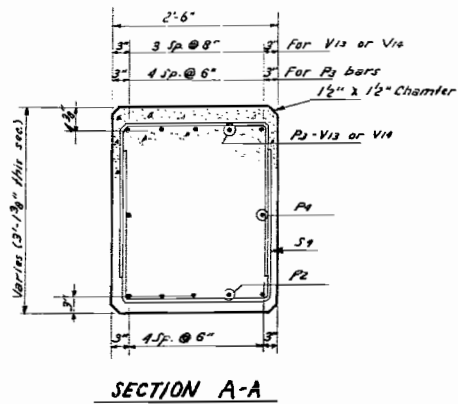
Note: See Plan of Wings on Sheet 8.

ABUTMENTS  
GRADE SEPARATION  
NEW YORK CENTRAL R.R.  
KANKAKEE BELTLINE  
PROJECT U.G.I.-29(4)  
F.A. RT. 26 - SEC. 139-VB  
KANKAKEE COUNTY

DESIGNED	W. N. Sommer	EXAMINED	Feb 19 1954
CHECKED	F. M. Schili	PASSED	
DRAWN	W. N. Sommer	APPROVED	R. R. Cartmeyer
CHECKED	F. M. Schili		

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
26	3943 VB	KANKAKEE	21	20
10 SHEETS				

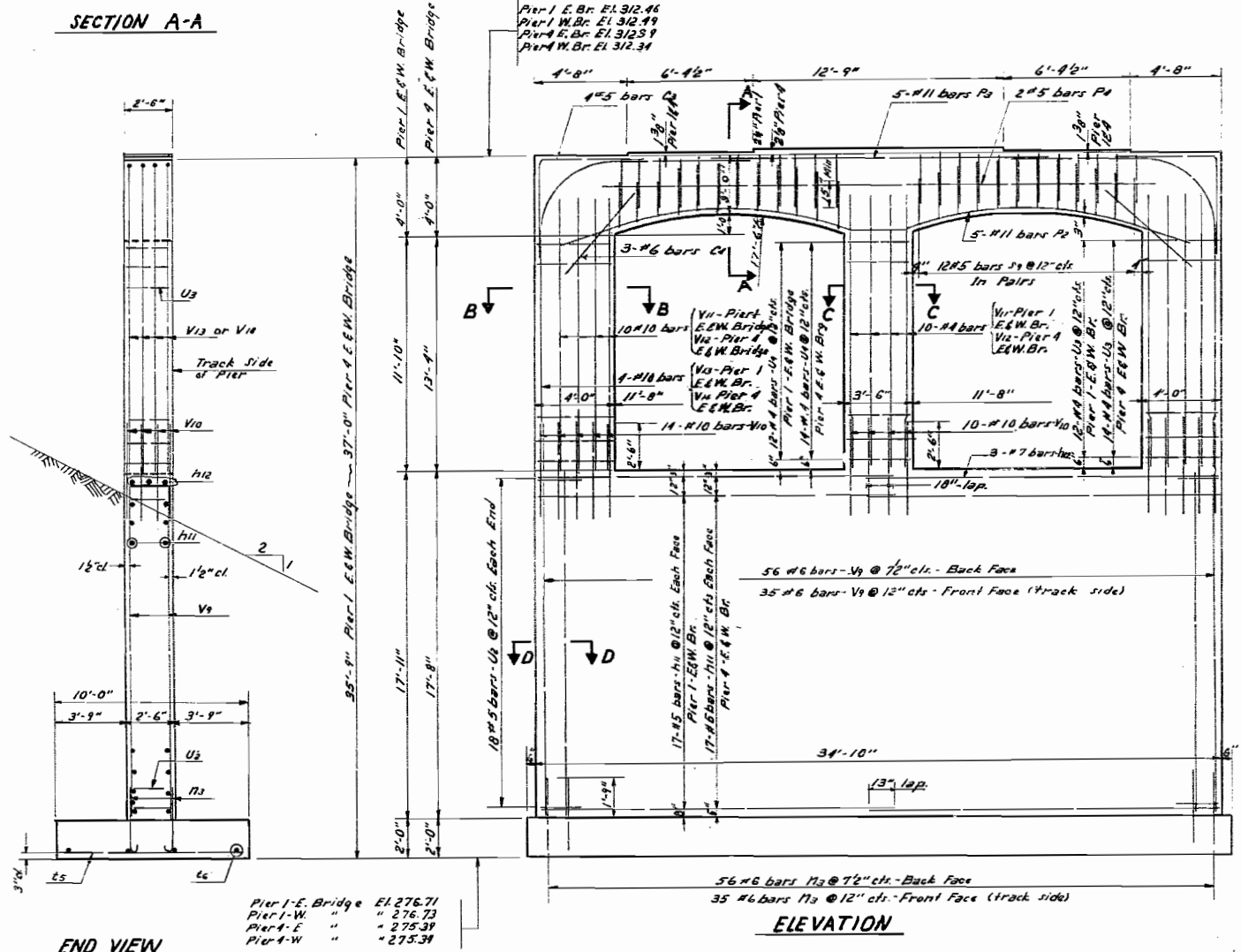


BILL OF MATERIAL - 4 PIERS

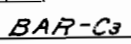
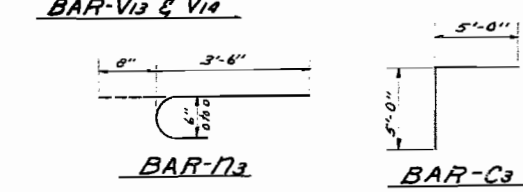
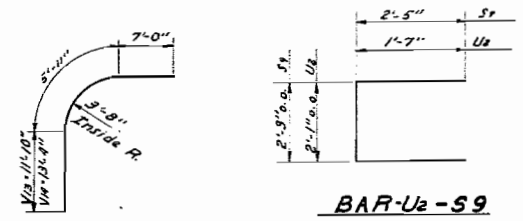
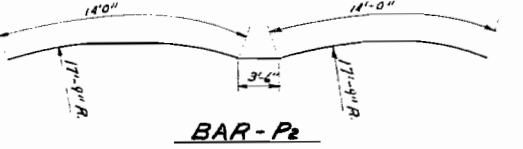
BAR	NO	SIZE	LENGTH	SHAPE
C3	32	#5	10'-0"	
C4	24	#6	6'-0"	
h1	272	#5	17'-9"	
h12	24	#7	18'-0"	
N3	364	#6	4'-2"	
P2	20	#11	31'-6"	
P3	20	#11	17'-6"	
P4	8	#5	28'-0"	
S3	192	#5	7'-1"	
U5	216	#6	9'-6"	
U6	32	#5	18'-3"	
U8	144	#5	5'-3"	
U9	104	#4	25'-0"	
U4	52	#4	17'-3"	
U9	364	#6	17'-6"	
V10	152	#10	5'-0"	
V11	160	#10	14'-0"	
V12	60	#10	15'-6"	
V13	16	#10	24'-9"	
V14	16	#10	26'-3"	

Class I Concrete Cu Yds 439.5  
Reinforcement Bars lbs 46,400

NOTE:  
Care shall be exercised by the contractor in making fill back of Piers so that the full force from bulldozers or other machinery will not be applied against them.



Pier 1-E Bridge EL 276.71  
Pier 1-W " " 276.73  
Pier 4-E " " 275.39  
Pier 4-W " " 275.39

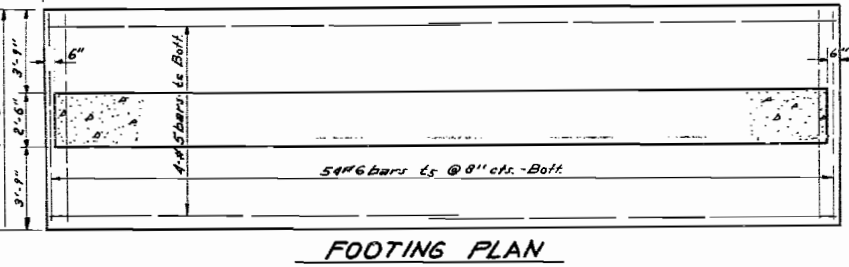


PIERS 1-4  
GRADE SEPARATION  
NEW YORK CENTRAL R.R.  
KANKAKEE BELT LINE  
PROJ UGI-29(4)  
PART 26 SEC. 139 VB  
KANKAKEE COUNTY

DESIGNED W.H. Sommer  
CHECKED F.M. Schili  
DRAWN Wm. T. Graesch  
CHECKED F.M. Schili

EXAMINED W.E. Hanson  
PASSED [Signature]  
APPROVED R.H. Bartelmy

Feb 19 1954

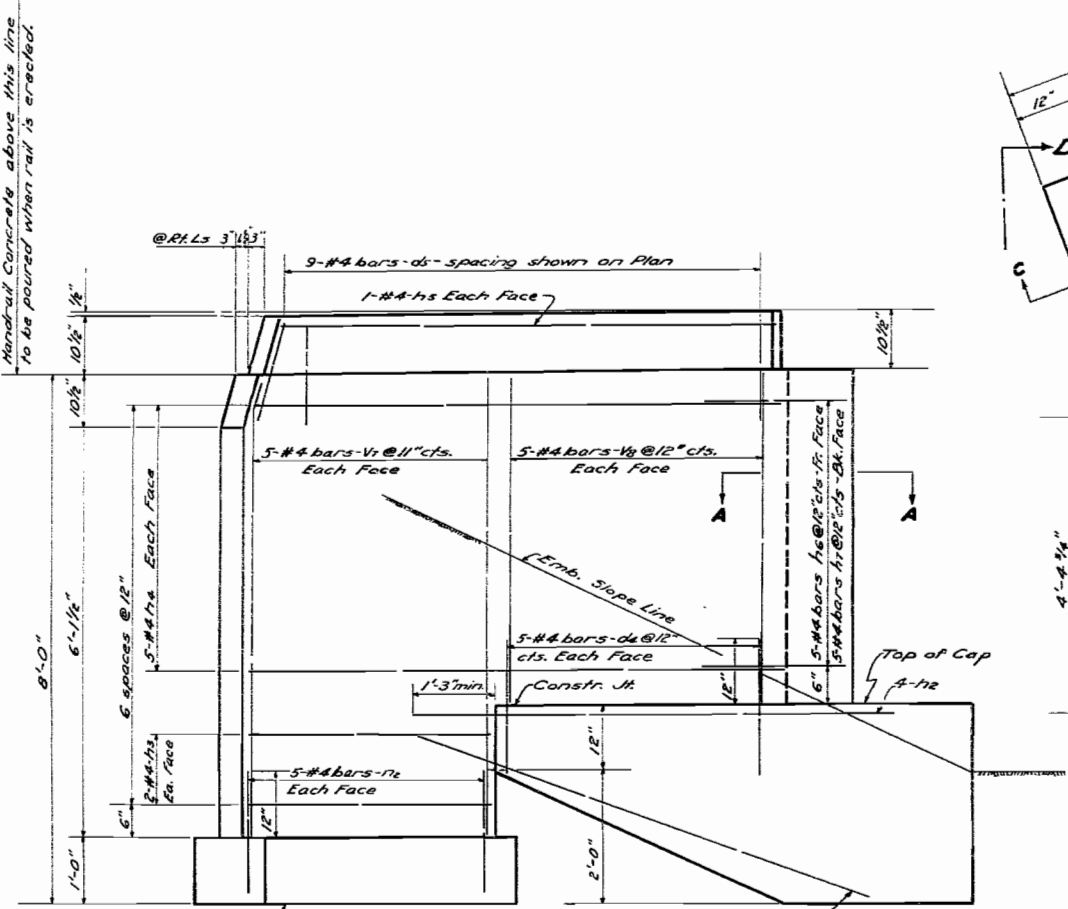


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

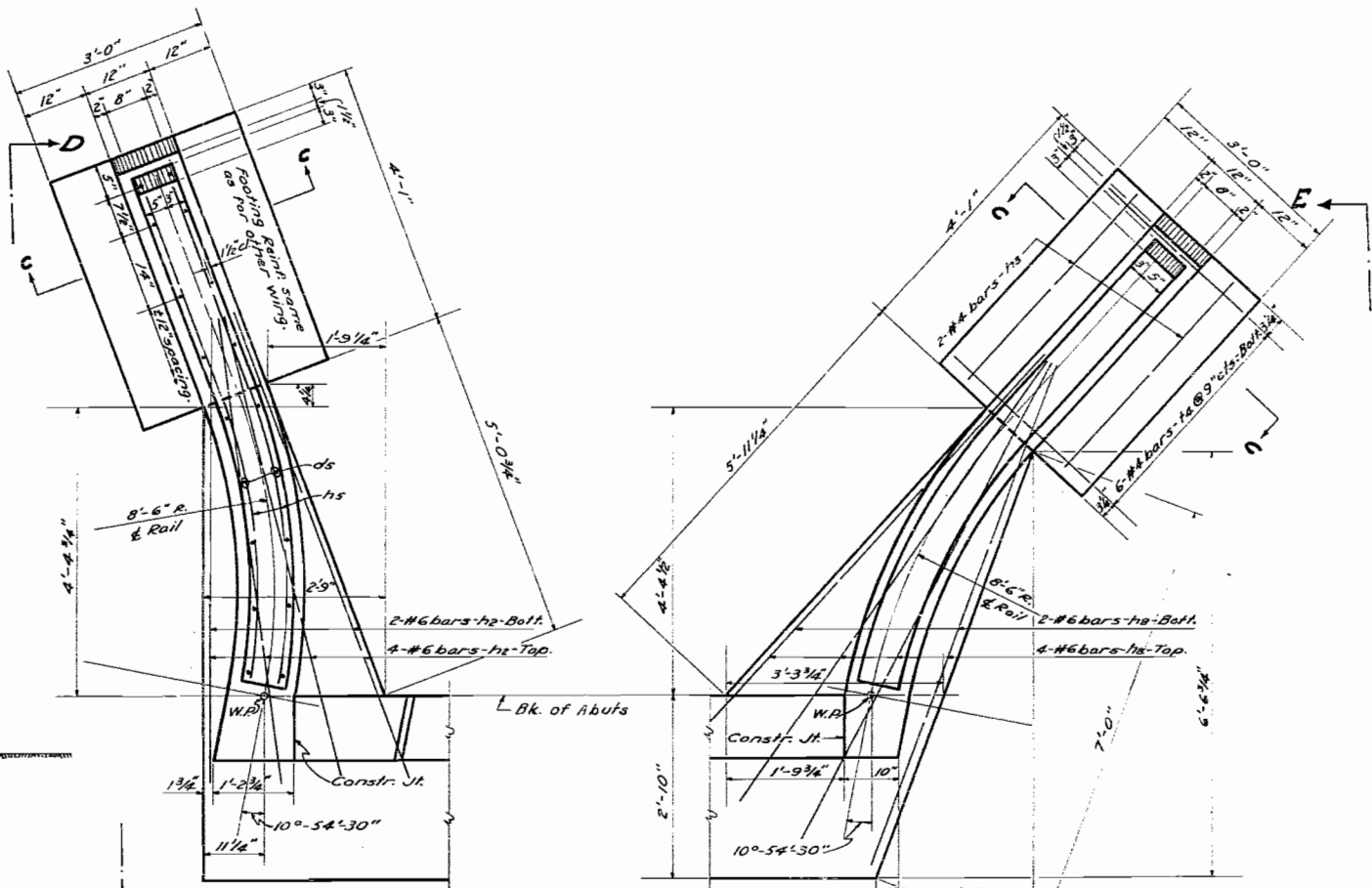
ROUTE NO.	SECTION	COUNTY	POST MILES	SHEET NO.
26	139HP-3-VF	KANKAKEE	21	10

10 SHEETS

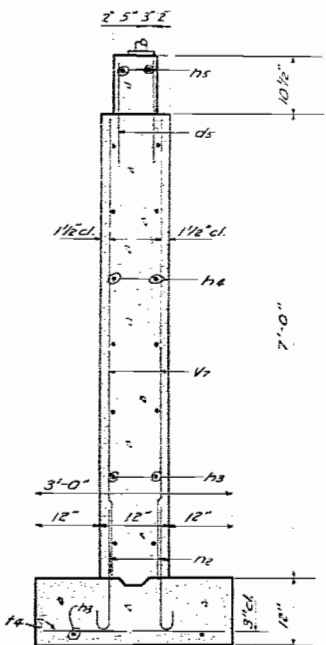
Handrail Concrete above this line to be poured when rail is erected.



**ELEVATION D-D**

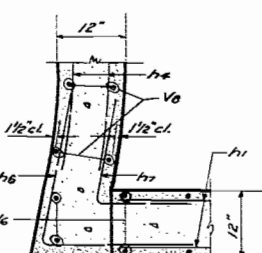


**PLAN**

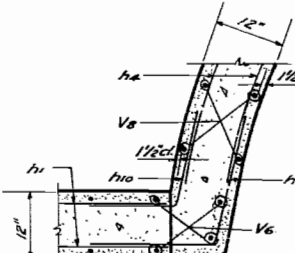


**SECTION C-C**

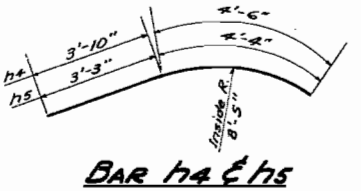
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N. Abut.-W. Br.-El. 308.69  
S. Abut.-E. Br.-El. 308.51  
S. Abut.-W. Br.-El. 308.44



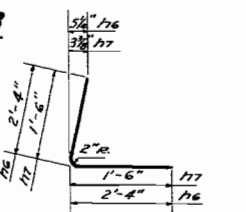
**SECTION A-A**



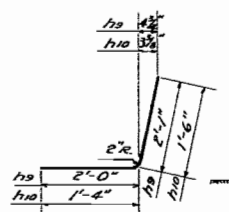
**SECTION B-B**



**BAR h4 & h5**

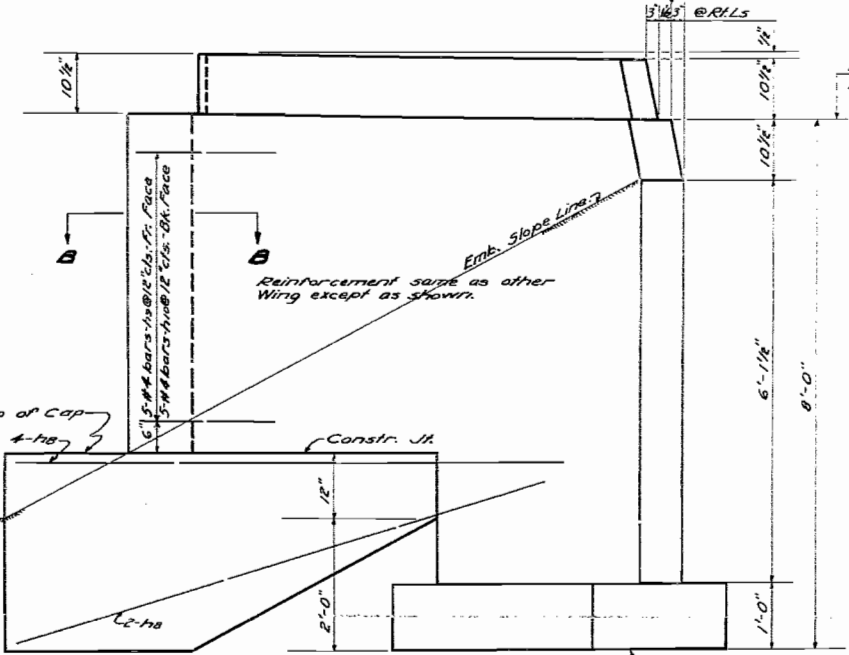


**BAR h6 & h7**



**BAR h9 & h10**

**BAR h2**



**ELEVATION E-E**

Handrail Concrete above this line to be poured when rail is erected.

**BILL OF REINFORCEMENT BARS**

BAR No.	SIZE	LENGTH	SHAPE	BAR No.	SIZE	LENGTH	SHAPE
h4	#4	2'-0"	—	h8	#4	8'-3"	—
ds	#4	1'-6"	—	h9	#4	4'-1"	—
h2	#6	7'-3"	—	h10	#4	2'-10"	—
h3	#4	3'-9"	—	h2	#4	2'-3"	—
h4	#4	8'-4"	—	h4	#4	2'-6"	—
h5	#4	7'-7"	—	h7	#4	6'-10"	—
h6	#4	4'-8"	—	h7	#4	3'-0"	—
h7	#4	3'-0"	—				
Reinforcement Bars				Lbs. 2480			

Note: Class X Concrete and Handrail Concrete are included in bill of Material on Sheet 7.

**ABUTMENT WINGS  
GRADE SEPARATION  
NEW YORK CENTRAL R.R.  
KANKAKEE BELTLINE  
PROJECT U.G.I.-29(4)  
F.A. RT. 26 - SEC. 139-VB  
KANKAKEE COUNTY**

DESIGNED W.M. Sommer  
CHECKED F.M. Schili  
DRAWN 2018. J. Garcel  
CHECKED F.M. Sch.

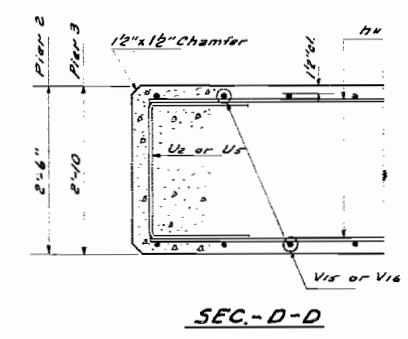
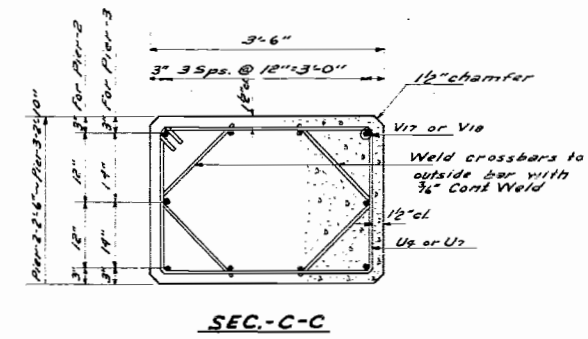
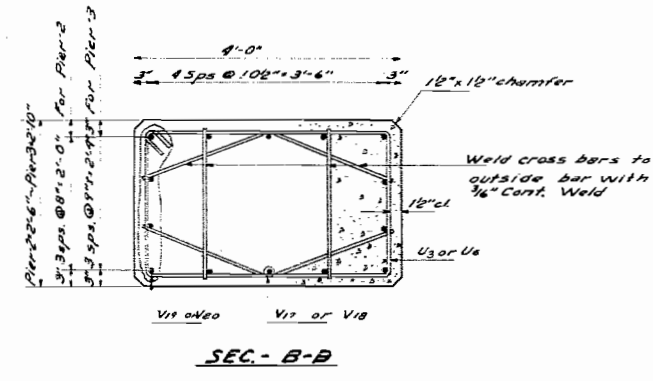
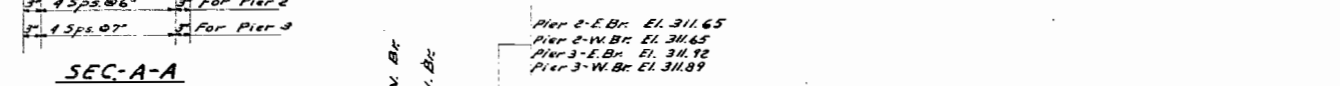
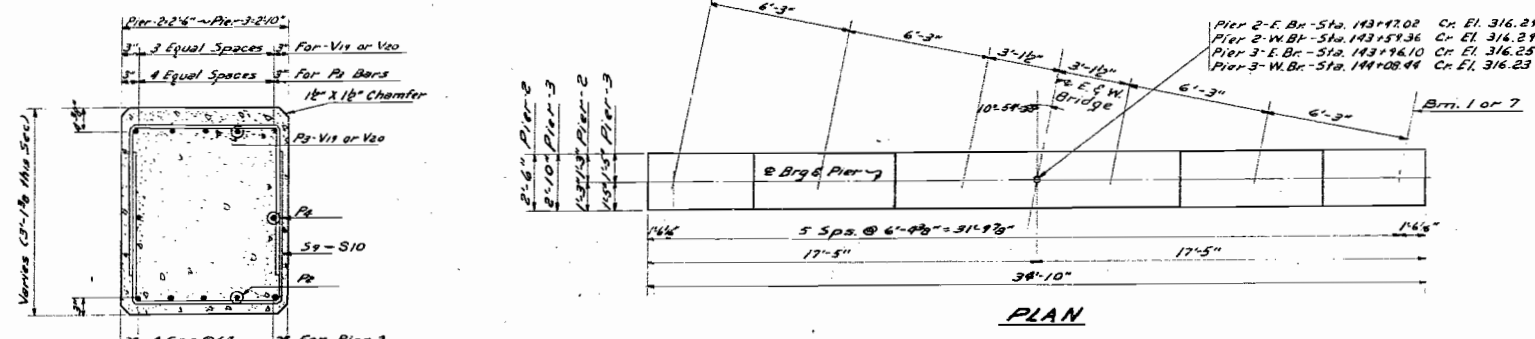
EXAMINED W.E. Hanson  
PASSED [Signature]  
APPROVED R.H. Bartsch

Feb 19 1954

N. Abut.-E. Br.-El. 308.61  
N. Abut.-W. Br.-El. 308.67  
S. Abut.-E. Br.-El. 308.48  
S. Abut.-W. Br.-El. 308.40

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

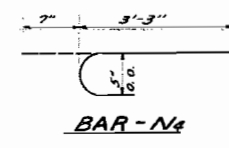
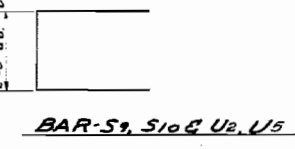
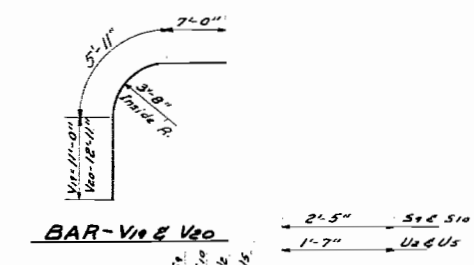
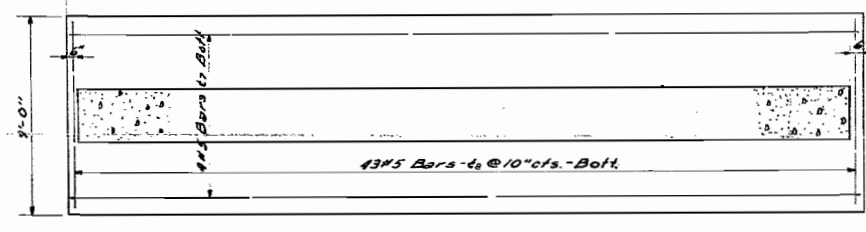
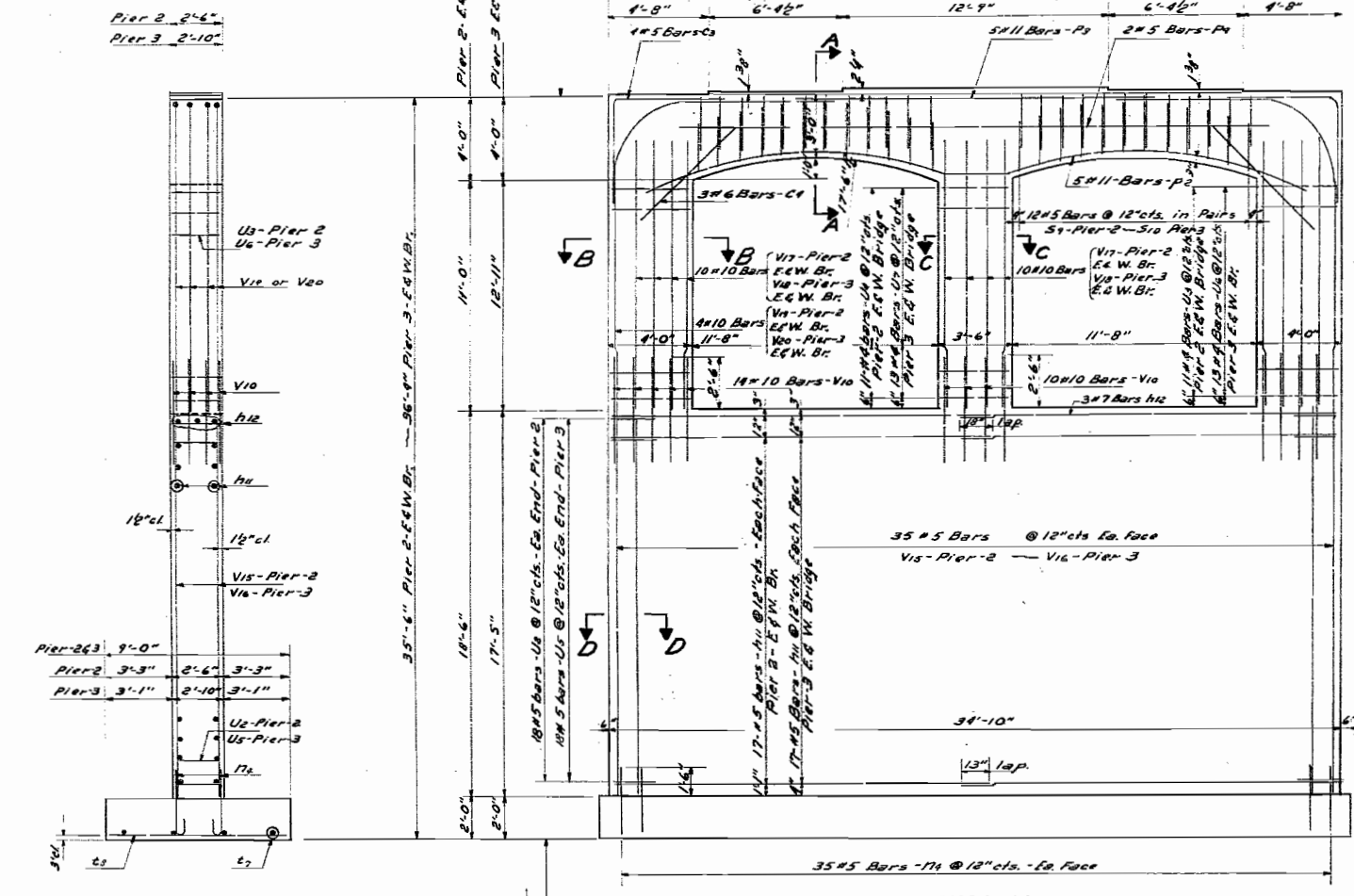
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
139-139-VB	139-139-VB	KANKAKEE	21	21
PROJECT NAME		PROJECT NO.		
FA RT 26 SEC. 139-VB		KANKAKEE COUNTY		



**BILL OF MATERIAL - 4 PIERS**

BAR	NO	SIZE	LENGTH	SHAPE
C3	32	#5	10'-0"	
C4	24	#6	6'-0"	
h4	272	#5	17'-9"	
h14	24	#7	18'-0"	
h74	280	#5	3'-10"	
Pz	20	#11	31'-6"	
P3	20	#11	17'-6"	
P4	8	#5	28'-0"	
S9	96	#5	7'-1"	
S10	96	#5	7'-5"	
S1	32	#5	18'-3"	
S2	172	#5	8'-6"	
U4	72	#5	5'-3"	
U3	44	#4	25'-0"	
U4	22	#4	17'-3"	
U5	72	#5	5'-7"	
U6	52	#5	26'-9"	
U7	26	#4	18'-9"	
V10	152	#10	5'-0"	
V15	140	#5	18'-3"	
V16	140	#5	17'-1"	
V17	60	#10	13'-9"	
V18	60	#10	15'-0"	
V19	16	#10	23'-11"	
V20	16	#10	25'-10"	
Class X Concrete		CuYds	450.2	
Reinforcement Bars		Lbs.	38,820	

NOTE:  
See detail of C3 and Pz bars on Sheet 9



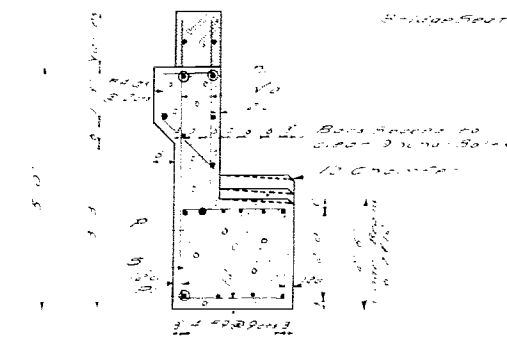
DESIGNED W. H. Sommer  
 CHECKED F. M. Schick  
 DRAWN W. H. Sommer  
 CHECKED F. M. Schick

EXAMINED W. E. Hanson  
 PASSED  
 APPROVED R. P. Bortolusso

Feb 19 1954

**PIERS 243**  
**GRADE SEPARATION**  
**NEW YORK CENTRAL R.R.**  
**KANKAKEE BELT LINE**  
**PROJ UGI - 29 (4)**  
**FA RT 26 SEC. 139-VB**  
**KANKAKEE COUNTY**

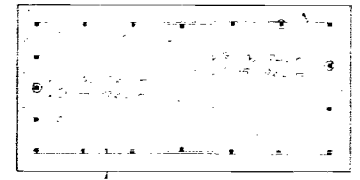
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS



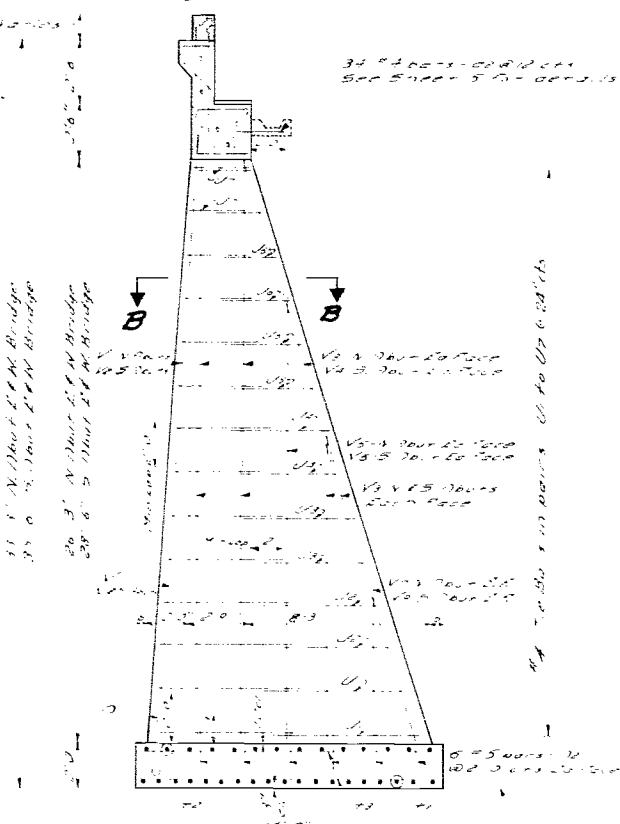
**SECTION THRU GAP**



**TOP PLAN**



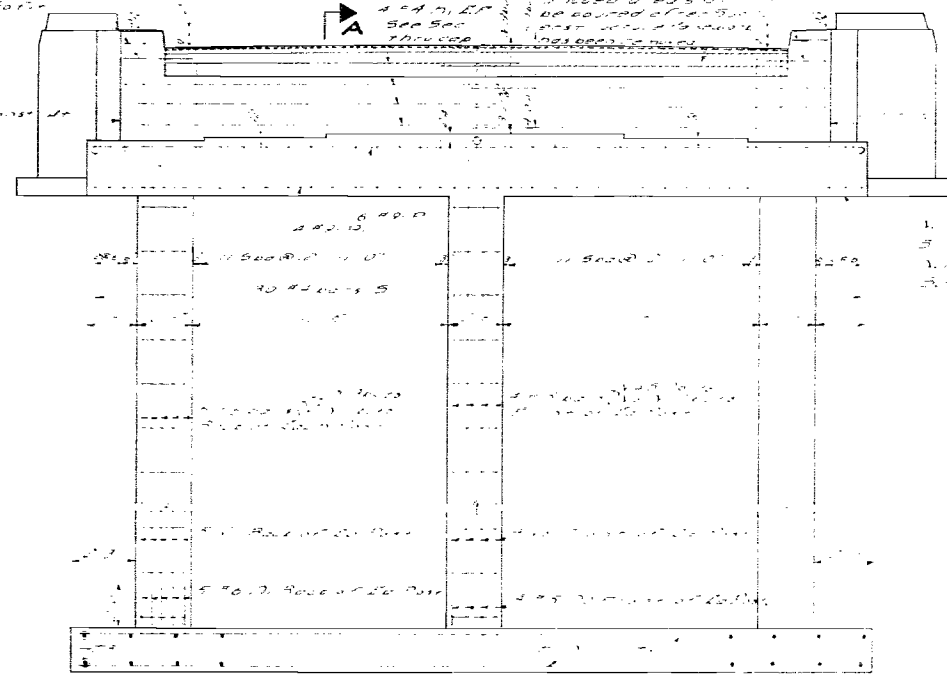
**SECTION B-B**



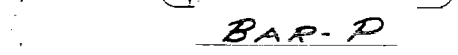
**SECTION A-A**

Both Abuts similar except as shown

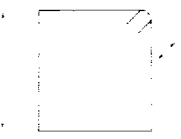
1. 1' 10" Abut. E. of M. Bridge  
2. 1' 10" Abut. W. of M. Bridge  
3. 1' 10" Abut. E. of M. Bridge  
4. 1' 10" Abut. W. of M. Bridge  
5. 1' 10" Abut. E. of M. Bridge  
6. 1' 10" Abut. W. of M. Bridge  
7. 1' 10" Abut. E. of M. Bridge  
8. 1' 10" Abut. W. of M. Bridge  
9. 1' 10" Abut. E. of M. Bridge  
10. 1' 10" Abut. W. of M. Bridge



**ELEVATION**



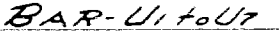
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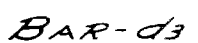
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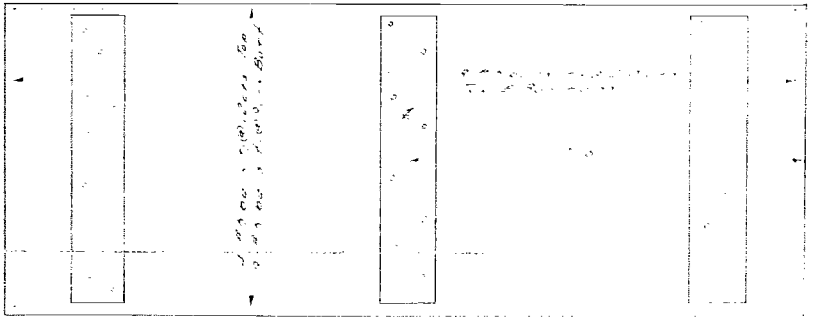
**BAR-N**



**BAR-U1 to U7**



**BAR-D3**



**PLAN**

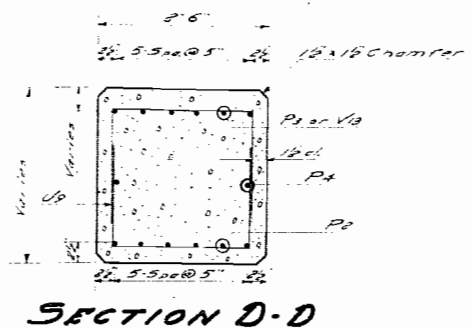
**BILL OF MATERIAL - ABUTTS  
TWO STRUCTURES**

NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	Concrete	100	cu yd	1.50	150.00
2	Reinforcing Steel	100	lb	0.10	10.00
3	Formwork	100	sq ft	0.05	5.00
4	Gravel	100	cu yd	1.00	100.00
5	Earthwork	100	cu yd	0.50	50.00
6	Paint	100	gal	0.02	2.00
7	Iron Pins	100	lb	0.01	1.00
8	Iron Nails	100	lb	0.01	1.00
9	Iron Bolts	100	lb	0.01	1.00
10	Iron Washers	100	lb	0.01	1.00
11	Iron Screws	100	lb	0.01	1.00
12	Iron Rivets	100	lb	0.01	1.00
13	Iron Rods	100	lb	0.01	1.00
14	Iron Plates	100	sq ft	0.01	1.00
15	Iron Channels	100	lb	0.01	1.00
16	Iron Angles	100	lb	0.01	1.00
17	Iron Bars	100	lb	0.01	1.00
18	Iron Pipes	100	lb	0.01	1.00
19	Iron Fittings	100	lb	0.01	1.00
20	Iron Castings	100	lb	0.01	1.00
21	Iron Bolts	100	lb	0.01	1.00
22	Iron Nuts	100	lb	0.01	1.00
23	Iron Washers	100	lb	0.01	1.00
24	Iron Screws	100	lb	0.01	1.00
25	Iron Rivets	100	lb	0.01	1.00
26	Iron Rods	100	lb	0.01	1.00
27	Iron Plates	100	sq ft	0.01	1.00
28	Iron Channels	100	lb	0.01	1.00
29	Iron Angles	100	lb	0.01	1.00
30	Iron Bars	100	lb	0.01	1.00
31	Iron Pipes	100	lb	0.01	1.00
32	Iron Fittings	100	lb	0.01	1.00
33	Iron Castings	100	lb	0.01	1.00
34	Iron Bolts	100	lb	0.01	1.00
35	Iron Nuts	100	lb	0.01	1.00
36	Iron Washers	100	lb	0.01	1.00
37	Iron Screws	100	lb	0.01	1.00
38	Iron Rivets	100	lb	0.01	1.00
39	Iron Rods	100	lb	0.01	1.00
40	Iron Plates	100	sq ft	0.01	1.00
41	Iron Channels	100	lb	0.01	1.00
42	Iron Angles	100	lb	0.01	1.00
43	Iron Bars	100	lb	0.01	1.00
44	Iron Pipes	100	lb	0.01	1.00
45	Iron Fittings	100	lb	0.01	1.00
46	Iron Castings	100	lb	0.01	1.00
47	Iron Bolts	100	lb	0.01	1.00
48	Iron Nuts	100	lb	0.01	1.00
49	Iron Washers	100	lb	0.01	1.00
50	Iron Screws	100	lb	0.01	1.00
51	Iron Rivets	100	lb	0.01	1.00
52	Iron Rods	100	lb	0.01	1.00
53	Iron Plates	100	sq ft	0.01	1.00
54	Iron Channels	100	lb	0.01	1.00
55	Iron Angles	100	lb	0.01	1.00
56	Iron Bars	100	lb	0.01	1.00
57	Iron Pipes	100	lb	0.01	1.00
58	Iron Fittings	100	lb	0.01	1.00
59	Iron Castings	100	lb	0.01	1.00
60	Iron Bolts	100	lb	0.01	1.00
61	Iron Nuts	100	lb	0.01	1.00
62	Iron Washers	100	lb	0.01	1.00
63	Iron Screws	100	lb	0.01	1.00
64	Iron Rivets	100	lb	0.01	1.00
65	Iron Rods	100	lb	0.01	1.00
66	Iron Plates	100	sq ft	0.01	1.00
67	Iron Channels	100	lb	0.01	1.00
68	Iron Angles	100	lb	0.01	1.00
69	Iron Bars	100	lb	0.01	1.00
70	Iron Pipes	100	lb	0.01	1.00
71	Iron Fittings	100	lb	0.01	1.00
72	Iron Castings	100	lb	0.01	1.00
73	Iron Bolts	100	lb	0.01	1.00
74	Iron Nuts	100	lb	0.01	1.00
75	Iron Washers	100	lb	0.01	1.00
76	Iron Screws	100	lb	0.01	1.00
77	Iron Rivets	100	lb	0.01	1.00
78	Iron Rods	100	lb	0.01	1.00
79	Iron Plates	100	sq ft	0.01	1.00
80	Iron Channels	100	lb	0.01	1.00
81	Iron Angles	100	lb	0.01	1.00
82	Iron Bars	100	lb	0.01	1.00
83	Iron Pipes	100	lb	0.01	1.00
84	Iron Fittings	100	lb	0.01	1.00
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87	Iron Nuts	100	lb	0.01	1.00
88	Iron Washers	100	lb	0.01	1.00
89	Iron Screws	100	lb	0.01	1.00
90	Iron Rivets	100	lb	0.01	1.00
91	Iron Rods	100	lb	0.01	1.00
92	Iron Plates	100	sq ft	0.01	1.00
93	Iron Channels	100	lb	0.01	1.00
94	Iron Angles	100	lb	0.01	1.00
95	Iron Bars	100	lb	0.01	1.00
96	Iron Pipes	100	lb	0.01	1.00
97	Iron Fittings	100	lb	0.01	1.00
98	Iron Castings	100	lb	0.01	1.00
99	Iron Bolts	100	lb	0.01	1.00
100	Iron Nuts	100	lb	0.01	1.00

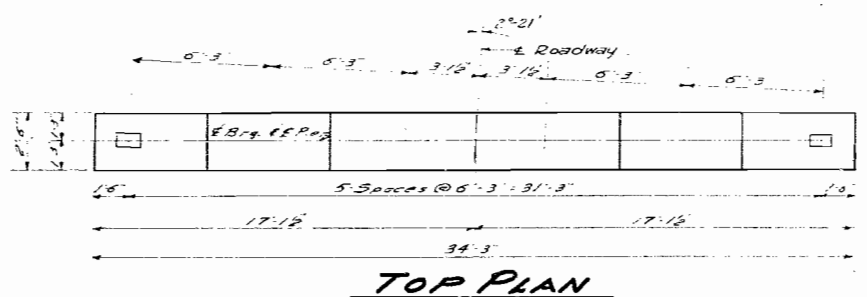
DESIGNED BY: T.M. Schell  
CHECKED BY: W.A.S.  
DRAWN BY: T.M. Schell  
DATE: 10/15/1915

**ABUTMENTS**  
**KANKAKEE BELT LINE**  
**PROJECT LIGI 29(4)**  
**P.A. RT. 26-SEC. 139-HB3-HF**  
**KANKAKEE COUNTY**  
**STATION 138+90.96**

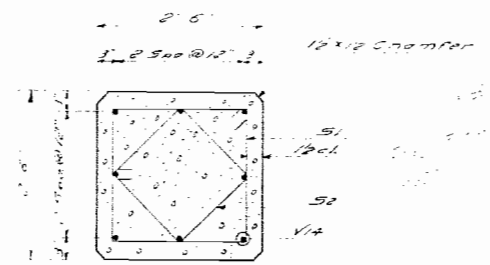
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS



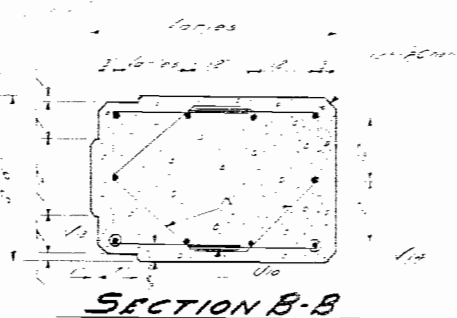
SECTION D-D



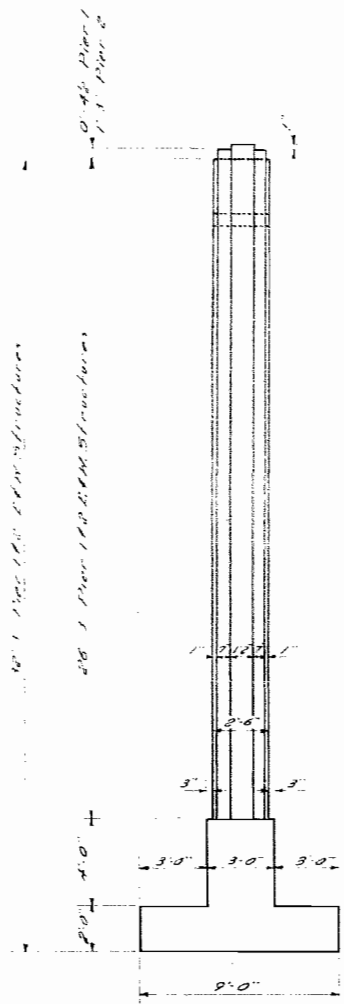
TOP PLAN



SECTION C-C

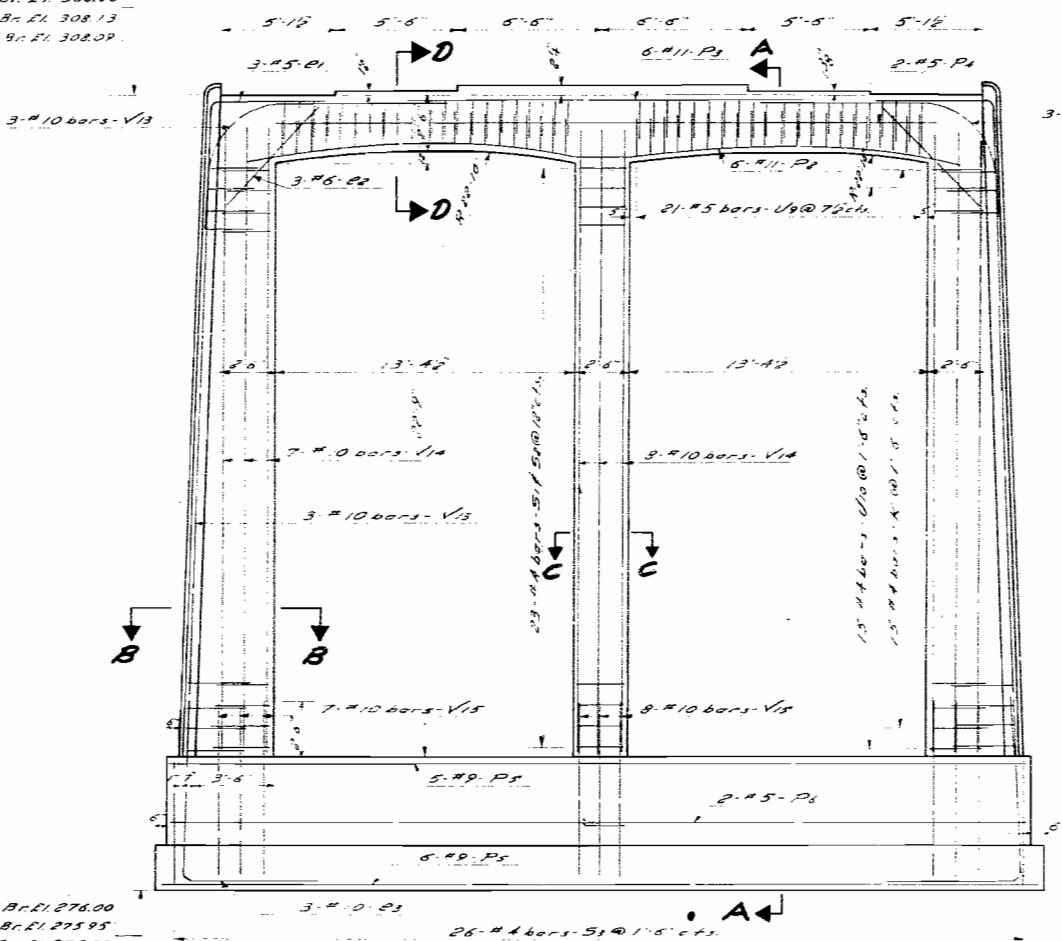


SECTION B-B

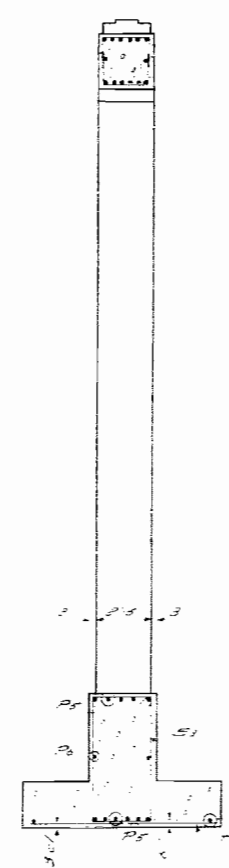


END VIEW

Pier 1 E. Br. El. 308.25  
Pier 2 W. Br. El. 308.20  
Pier 3 E. Br. El. 308.13  
Pier 4 W. Br. El. 308.09



ELEVATION



SECTION A-A

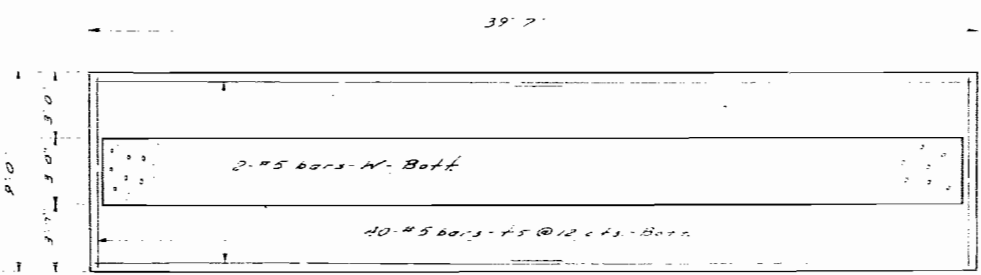
BAR-K

BAR-S-E-183

BAR-S-51-52353

BILL OF MATERIAL - PIERS

Bar	NO.	SIZE	LENGTH	SHAPE
P1	24	#11	32'-6"	
P2	24	#11	18'-0"	
P4	8	#5	30'-0"	
P5	24	#5	38'-0"	
P6	16	#5	20'-0"	
V3	24	#10	36'-8"	
V4	88	#10	24'-3"	
V5	88	#10	7'-9"	
E1	24	#5	8'-6"	
E2	24	#6	5'-0"	
E3	24	#10	16'-0"	
S1	22	#4	9'-9"	
S2	92	#4	7'-1"	
S3	104	#4	16'-11"	
W	16	#5	20'-0"	
U9	336	#5	6'-7"	
U10	240	#4	7'-3"	
X5	160	#5	8'-9"	
X	240	#4	9'-6"	
C. & G. Concrete			CU Yds	3013
Reinforcement Bars			Lbs.	32600



FOOTING PLAN



BAR-P2

BAR-V13

BAR-S-U9-U10

PIERS 1 & 2

KANKAKEE BELTLINE  
PROJECT UGI 29(4)  
P.A. RT. 26-SEC. 139 HB3  
KANKAKEE COUNTY  
STATION 138+90.96

DESIGNED: T.M. Sekili  
CHECKED: W.M. Dunnington  
DRAWN: T.M. Sekili  
CHECKED: 2015-  
EXAMINED: W.E. Benson  
PASSED: [Signature]  
APPROVED: [Signature]