INDEX OF SHEETS

Sheet No I Title Page 2 Standard 1601, Spec Grading Section 3 Detail of Wye Conn. of State & County Roads 4 Plan & Profile Sto 227-50 to 240-00 5 240-00 - 267-25

6 County Road Connection

7 to 71 Inclusive Cross Sections . 72 Spec Culv Des. Sta. 229+95, 254+44, 26/+/2 73 Standard 1616, 1538

Secs IORV-B, F&E-NRH

Sheet No | Title Page . 5 Plan & Profile Sta 240+00 to 267+25

75 to 93 Spec Br Des. Sto 245+57 Sht. 1to 9 of 19 93A Standard 1177

SUMMARY OF QUANTITIES

Sec. 10 RA · NRH

081 Units Hedge Pulling 46992 CuYds Earth Excavation 40000 Cuids Rock Excovation
856 Cuids Channel Excovation
2383/ Cuids Barrow

107033 CuYds Settlement of Embankments 83 CuYds Traffic Bound Surface Course

1 Each Colch Basin Type C with Type 2 Grate 38 Each Erecting Right of Way Markers 154 Linft Pipe Culverts 15 inch

28 Linft Pipe Culverts 24 inch

34 Linft Pipe Culverts
92 Linft Pipe Culverts
54.9 Culds Class X Concrete 36 inch 12 inch

6690 Lbs Reinforcement Bars 1438 Sayds Rip Rop (5 inch)

Sec RV-B-NRH

533.0 Culds Class A Concrete 1345.7 Cu.Yds Class X Concrete

125A30 Lbs. Reinforcement Bors 2680 Lin.Ft Furnishing Untrealed Piles Up to 20ft Long

11 580 Linft. Furnishing Creasated Ales Up to 2011 Long 14 260 Linft Driving Piles Up to 2011 Long 5 Each Test Piles

Sec. RV-F-NRH

293630 Lbs Structural Steel 10250 Lbs Blost Plotes

1522 Bbls Cement

30/0 Bbls. Cement

Sec. RV- E- NRH

1139 Cuyds Hond Roll Concrete 837.4 CuYds Class X Concrete
224110 Lbs. Reinforcement Bars 1293630 Lbs Structural Steel 10250 Lbs Blost Plates Each Name Plate 5234 Soft Hollow Floor or Woll Tile 6230 Saft Wire Fabric
2 Each C I Inlets and Grates 118 Lin Ft 4" Soil Pipe 72 Each Floor Drains
1 Each Removal of Old Bridge

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS PLANS FOR PROPOSED STATE BOND ISSUE HIGHWAY

SCALES

ROUTE 8, SECS. IORA-NRH, PEORIA F. A. PROJECT 244-A-NRH

From a point near the S.E. Corner of Section 11, T. 8 N. R. T.E. of the 410PM To a point near the SE. Cor of the SNNs of the SENs of Sec 12, T. 8 N. R. T.E. of the 4th P.M.

Addition - Secs. IORV-B,E 4F-NRH bridge 5to 245+57 R. 7 E. LAYOUT BEGINS LAYOUT ENDS 5/0 227+50 OMISSION 510 242+60.25-248+53.75 PEORIA PROPOSED IMPROVEMENT LAYOUT

Approximate Scale-IIrich=IMile

Net Length of Layout : 39323Ft : 0.7448 Miles

SEC. IORV-B-NRH INCLUDES Substructure for a Steel Truss and I Bean

SEC. /ORV-F-NRH INCLUDES

Furnishing and Fabrication of Structural Steel and Blast Plates, application of shap coof of point and delivery f.o.b. Maxwell Illinois of one Steel Truss Span @ 140', 3 F. Beam Spans @ 60' and 6 F. Beam Spans @ 45' of Sla 245 * 57

SEC. IORV-E-NRH INCLUDES

Unloading and transportation of faoricated Structural Steel and Blost Plates from the unloading point at Maxwell Illinois, erecting of Structural Steel and Blast Plates, spot pointing rivel heads and abrasions of shap coat, application of two field coats. Construction of Reinforced Concrete Floors, Hand Rails and Sidewalks for one Steel Truss Span @ 140', 3-1 Beam Spans @ 60 and 6 1-Beam Spans @ 45 al Sta 245+57

8 JORN-NEH Peoria 93 1 For information only

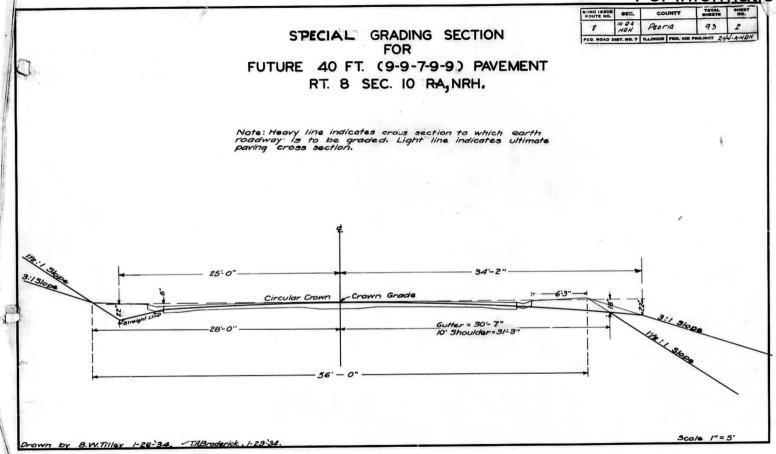






STATE LINE RETAINING WALL UNTY LINE BASE OR SURVEY LINE Y. VILLAGE OR TOWN LEVEE TO VNSHIP LINE SECTION LINE CULVERT GRANT LINE STORM SEWER SECTION CORNER TILE DRAIN FENCE LINE DROP INLET UNFENCED PROPERTY TROLLEY POLE RIGHT OF WAY LINE GUARD RAIL TELEPHONE OR TELEGRAPH POLE STEAM RAILROAD MARSH ELECTRIC RAILROAD HEDGE

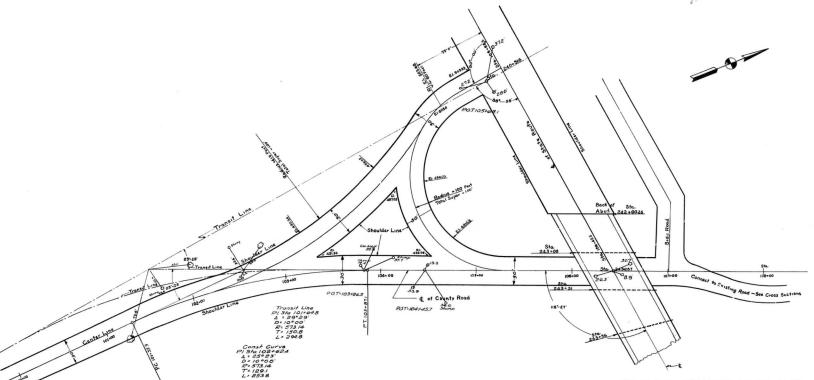
For information only



STATE OF ILLINOIS

DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

For information only

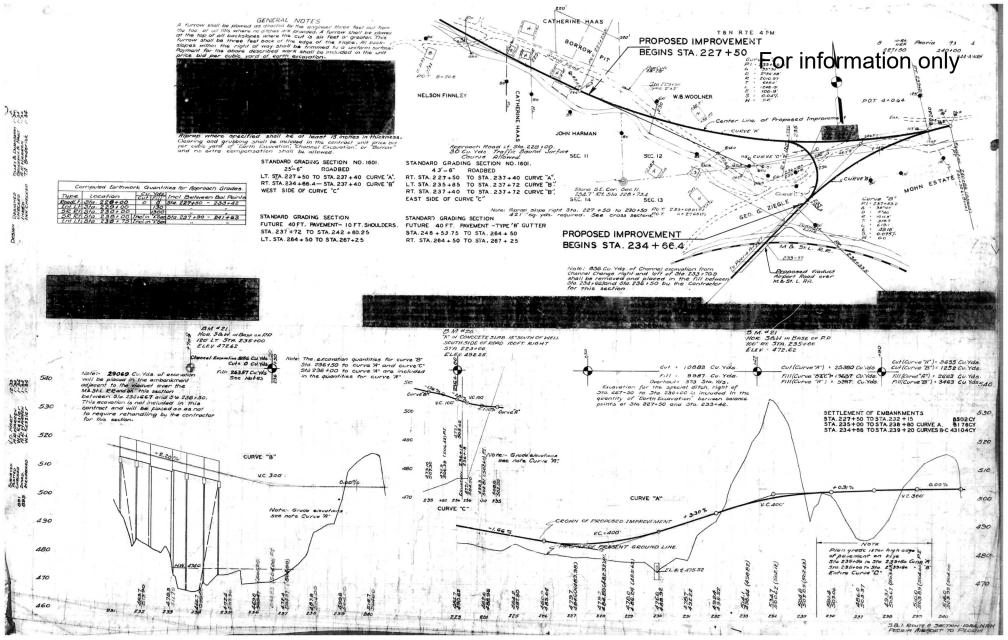


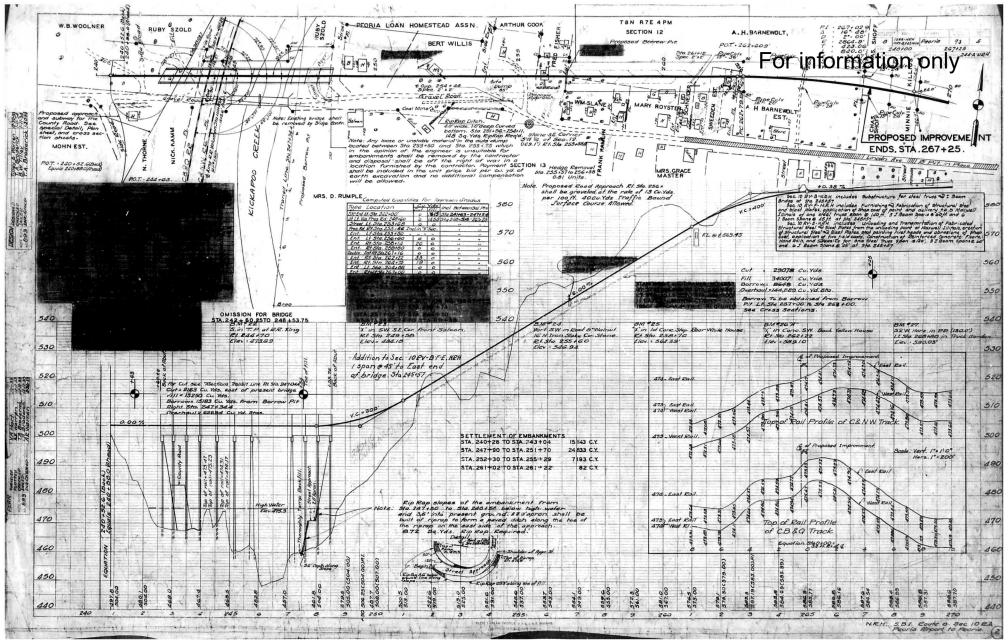
ROUTE 8 SECTION-10 RA,NRH.
DETAIL OF WYE CONNECTION
STATE AND COUNTY ROADS

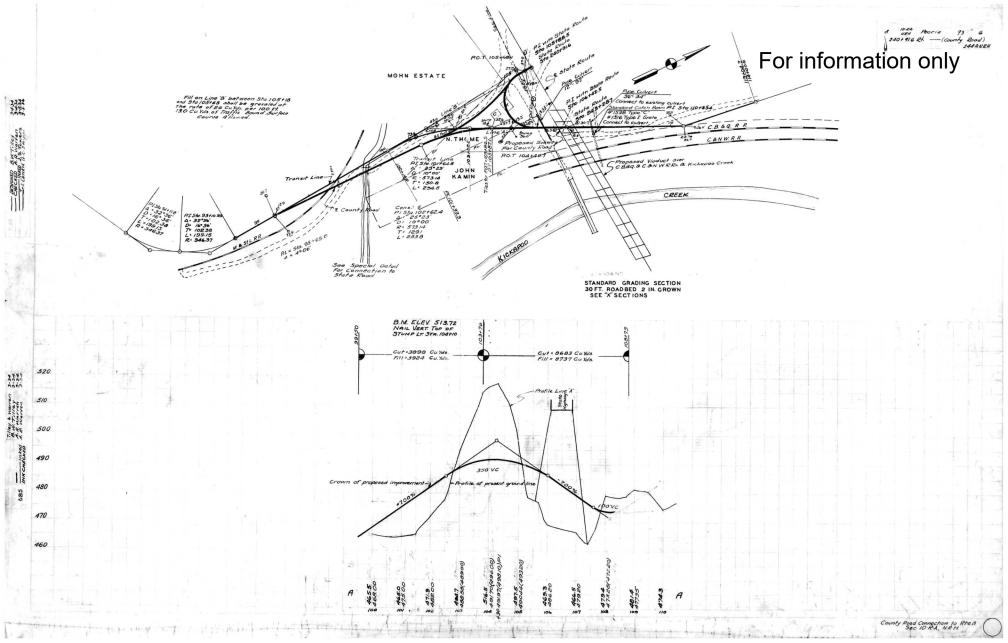
STATION 243+28.7 = 106+42.5 PEORIA COUNTY

SCALE 1"- 30"

DATE , 3-5-34



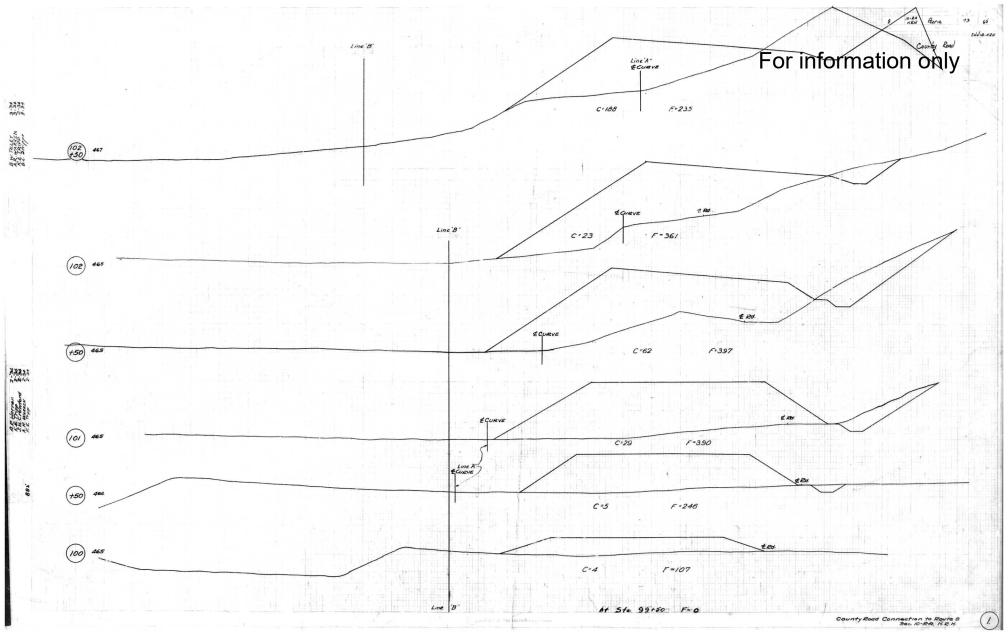


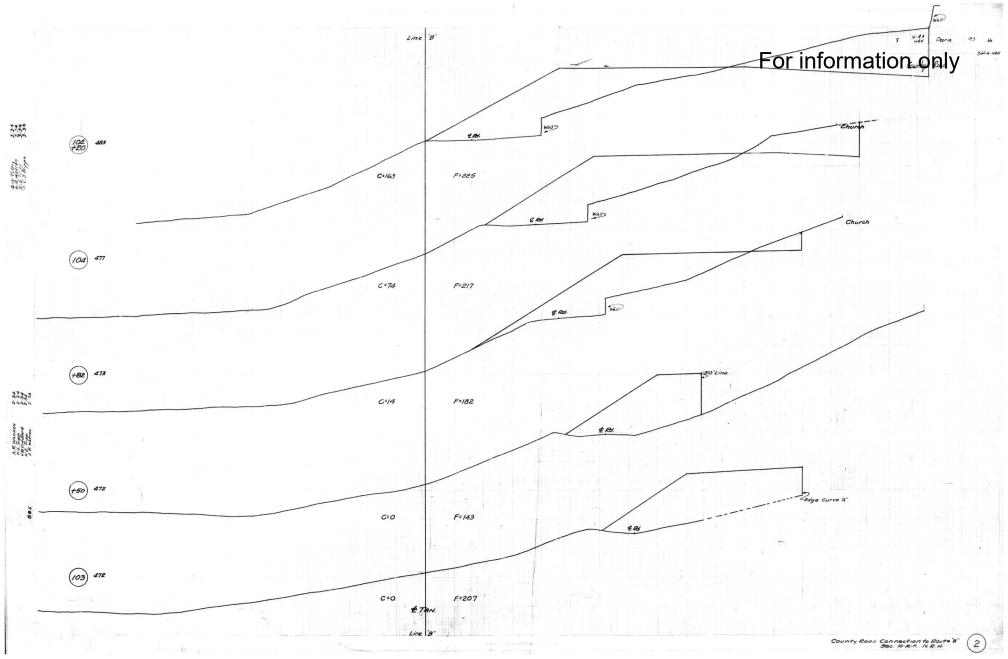


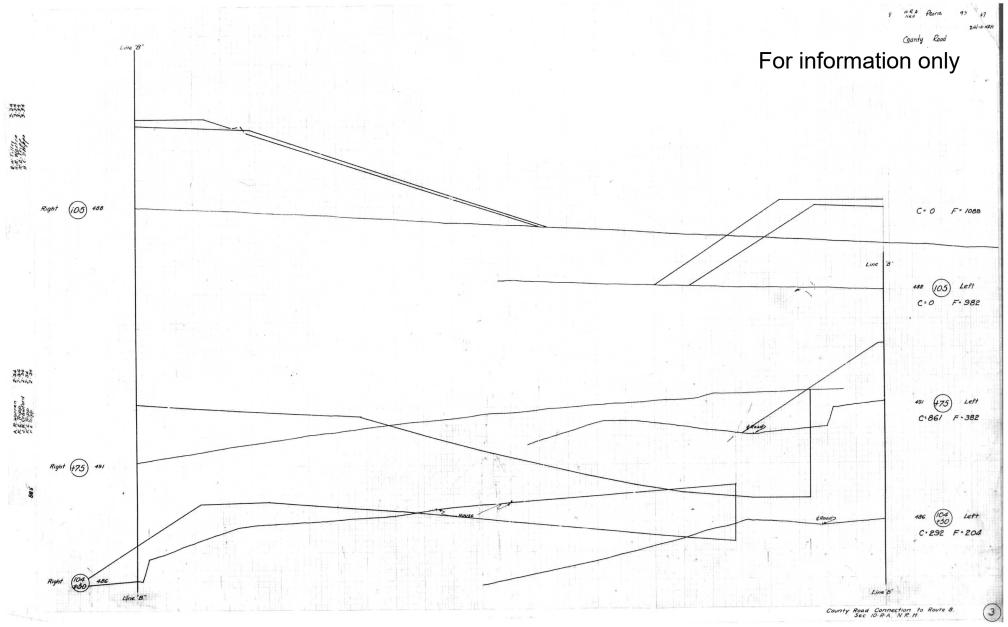
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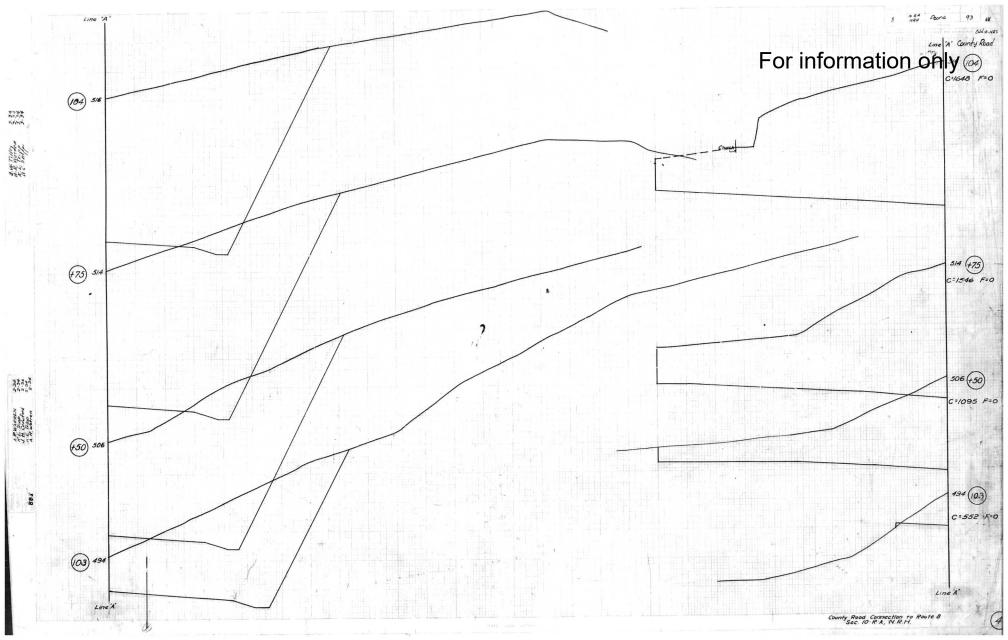
FOR SHEET(S) 7 THRU 64

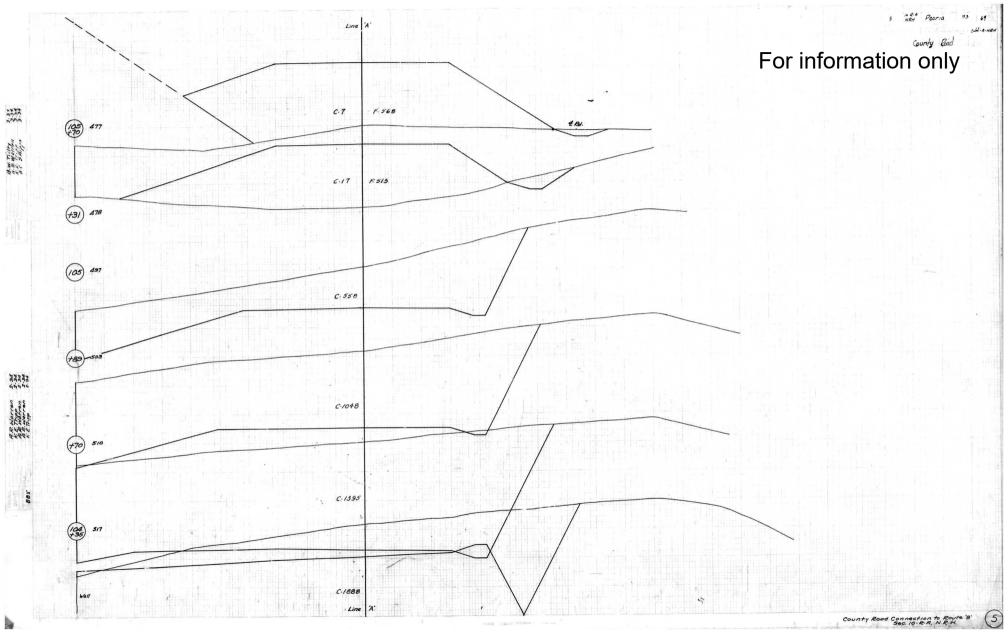
SEE ROUTE 8
SECTION IOR
PEORIA COUNTY

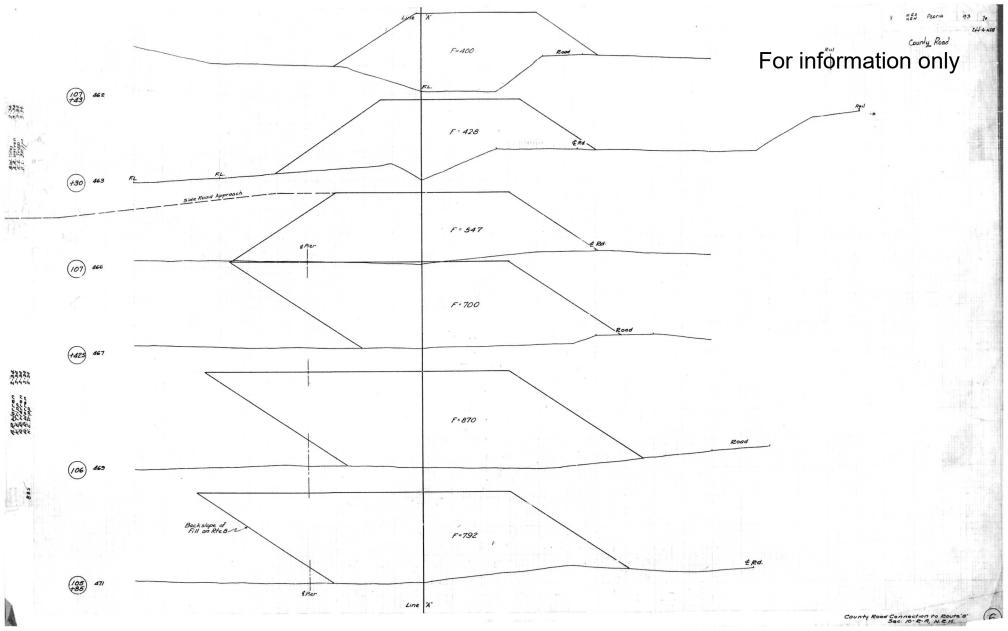


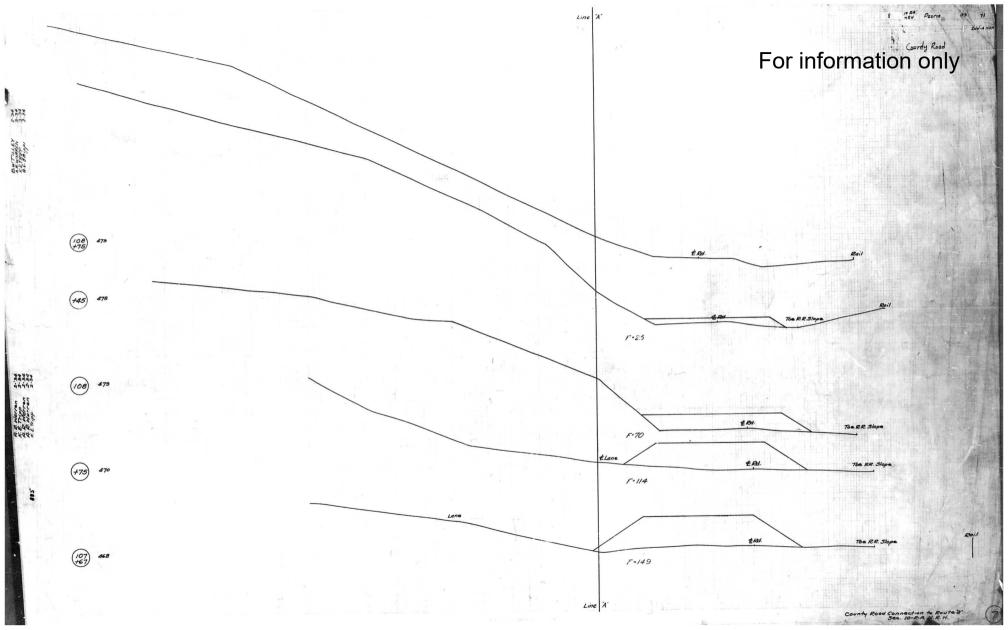


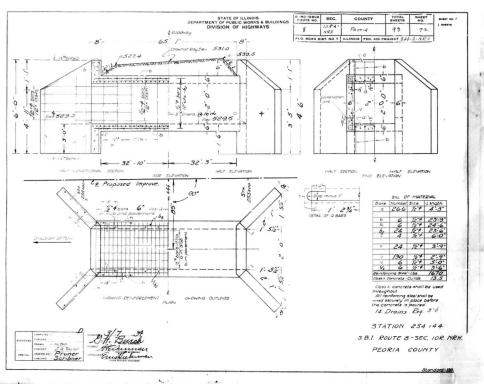


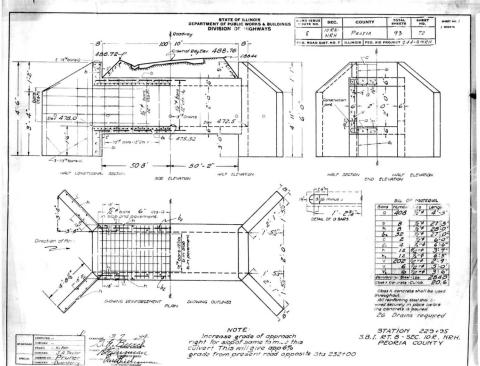


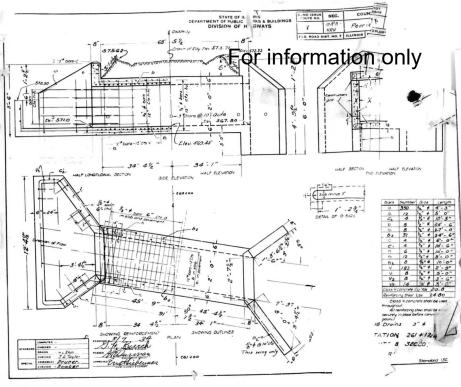


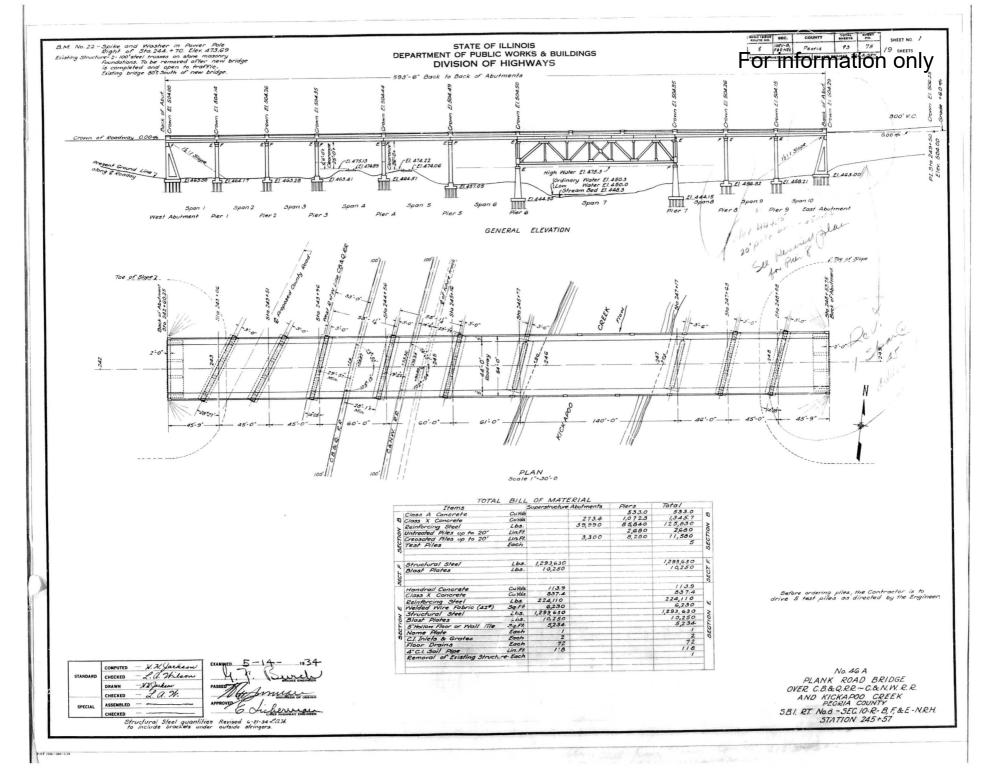


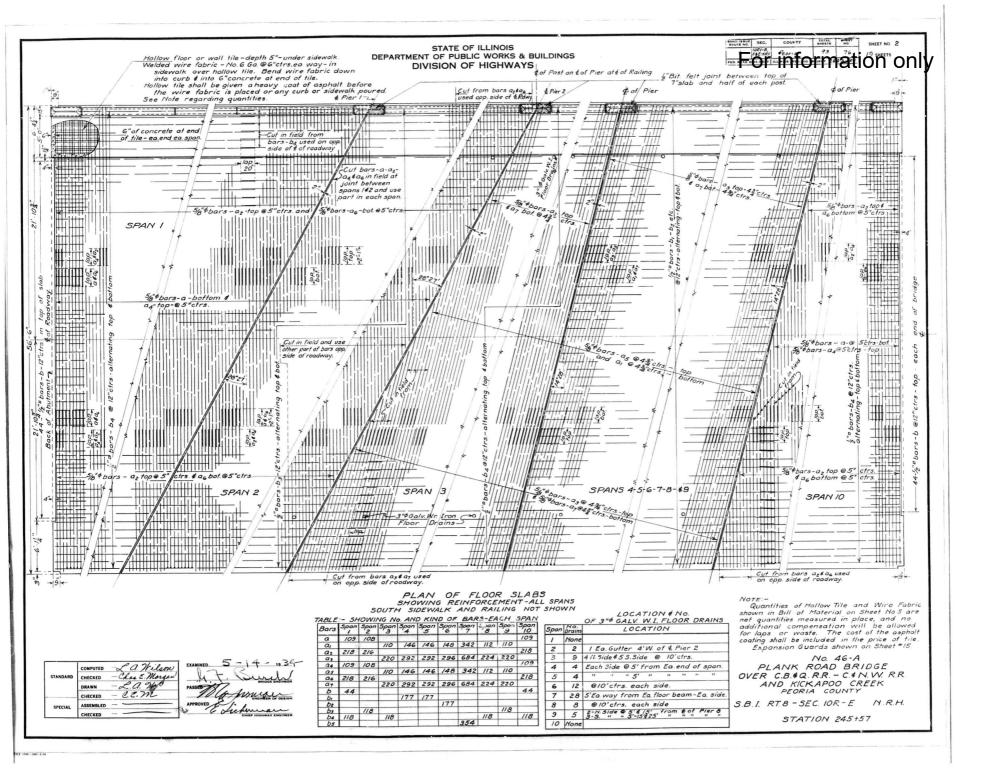






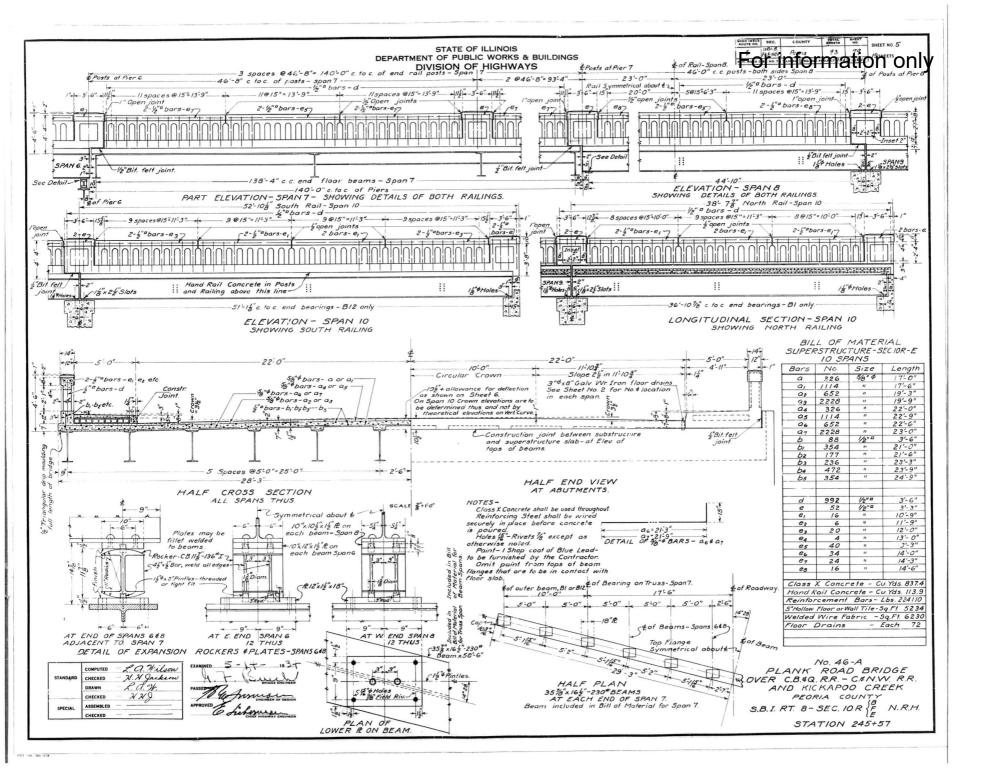


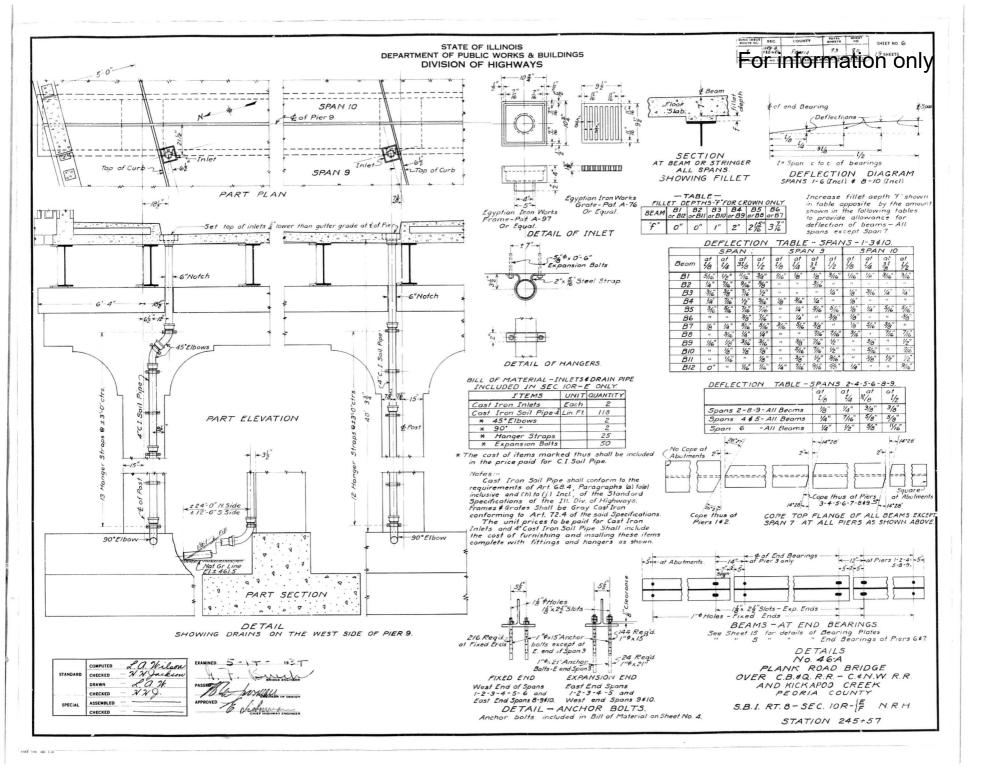


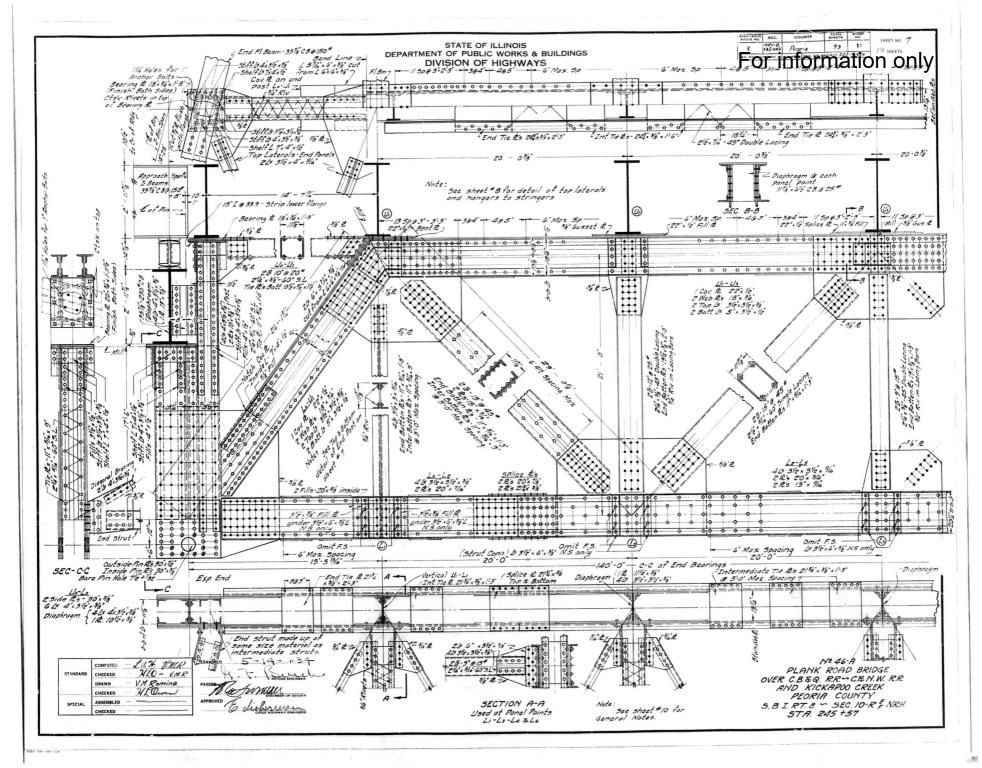


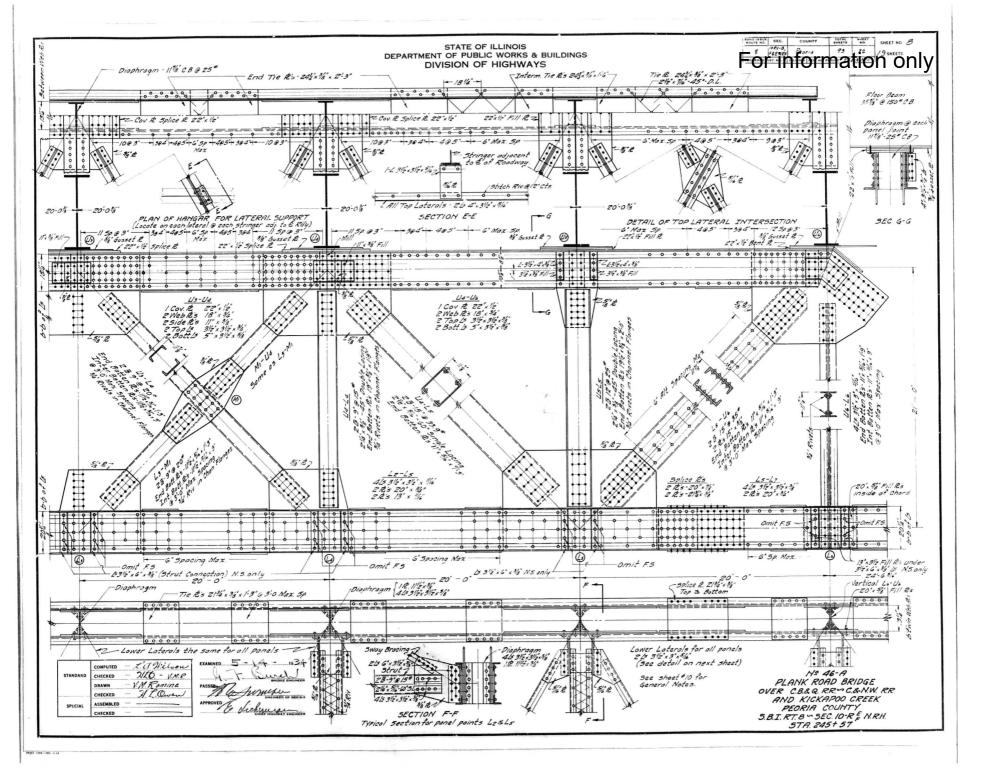
	STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS North Rail Span 1 60'-734" Vispaces © 15"= 13-9" 1/1 spaces © 15"= 13'-9"	FINE OF STATE OF STAT
2-1/4" bars - e 2-1/4" bars - e 4	// spaces @ 15" = 13'-9"	spaces @15"= 13"-9"
4" - 12" 4" + Holes		18" 26" Slots 18" \$ Holes 19" X 15" Anchor Bolts 19" 18" Anchor Bolts
South Rail Span 30'-	DINAL SECTION - SPAN - SHOWING NORTH RAILING. 10½" 1	h Roils - Span 2 or 9 - 45'-0" s. in pasts 415"ctrs. in railing between posts (Ospaces & 15" - 12" 6" 11815'13'9" 9" 3" 6" 12" 6" 11815'13'9" 9" 3" 6" 12" 6" 11815'13'9" 9" 3" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"
######################################	18"x24" Slots \$1"4x15" Anchor bolls 18" 145" Anchor bolls 18" 145" Anchor bolls ELEVATION - SPANS 142 49 12"	45: 0" 44'-0" [45' 29'-6" 40' 5 29'-6" 40' 5 29'-6" 14'-0" 14'-0" 1773" 40' 5
B2 CB 302-172* Diaphragms + Di	Diaphrogens - all beam spans 2"	-15½" -15½" 30' 0"
## ## ## ## ## ## ## ## ## ## ## ## ##	AN 2 eomo CB 301 2'x ros 100 = 44-10 long BB -24+ 152 - 1-25 -	-7:104" -15½" -15½" -15½" -15½" 106" -15½" -15½" -15½" 106" -15½" -15½"
STANDARD COMPUTED L. Q. Wilson STANDARD CHECKED SPECIAL ASSEMBLED ASSEMBLED APPROVED SPECIAL SPECIAL APPROVED SPECIAL S	M29′-9½″→	445 Symmetrical about \$2 - 14'-21/4"

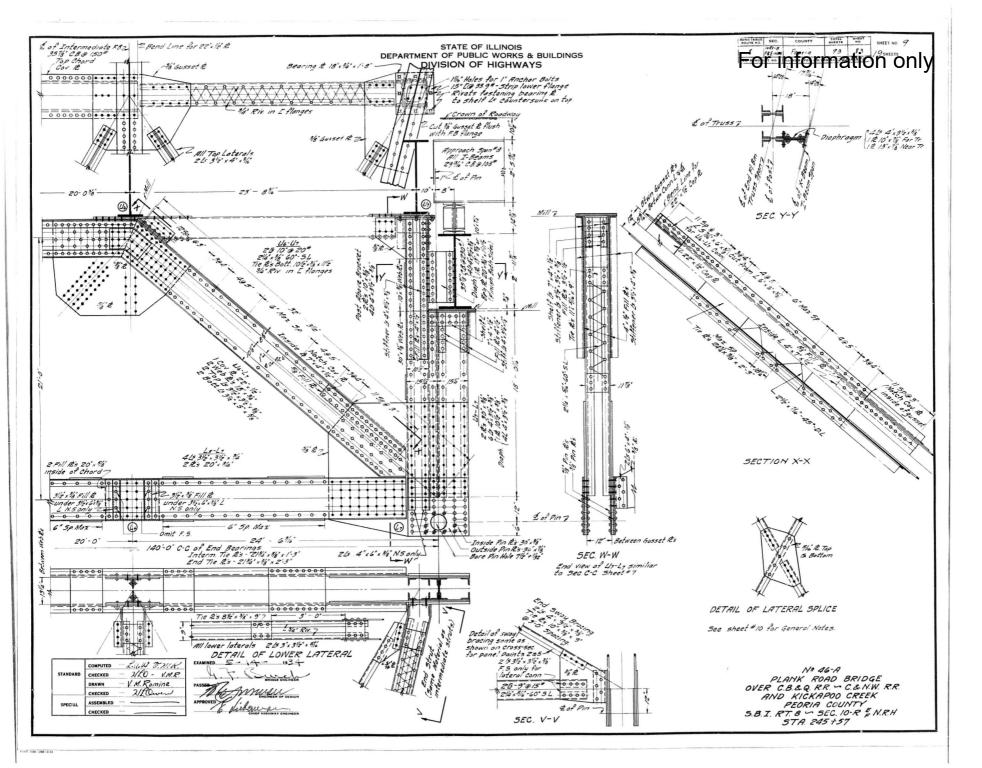
North Rail Span3 = 37'-23,"	STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS	Span 6 " 61'-0"
#" bors - d * 2 spaces \$6 5" 10" 5 spaces \$6 5" 10" 1	= 10'-0" - 148 - 3' 6" 15 - spaces @15" = 3'-9" -	
(Path Maria)	15" x 2½" Slots 7" - 2" 4" Bit. felt joint.	#Span II
36'-0%' for BI only LONGITUDINAL SECTION - SHOWING NORTH RA South Rail-Span3 = 52'-9%'	SPAN 3	507 - 5PAN 6 59'-10" - 59'
3 5 5 5 5 5 5 5 5 5	15*12:6" > 9 spaces @15"* 11:3" 15" 1	//* Bars - d e/2"ctrs in posts & 15"ctrs. in railing between posts 19"
2" '2" '2" '3" '5" '	15 15 15 16 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	18x215lots Joint 2
ELEVATION - SPAN 3 SHOWING SOUTH RAI	/2"H H + 0	ELEVATION - SPANS 4#5
# Pier S All beams 59'-10" c.c. of end bearings -7:10\[\frac{1}{2} \rightarrow 14'-4" \rightarrow 15'-15'-15'-15'-15'-15'-15'-15'-15'-15'-	# 113" All beams 44-10" cc end bearings - All beari	ams 44-0° .c. end bearings 45-0° .c. end bearings 46-0° .c. end bear
-7:10\frac{1}{2} \rightarrow 15\frac{7}{2}'' \\ -7:10\frac{7}{2} \rightarrow 15\frac{7}{2}'' \\ -7:10\frac{7}{2} \rightarrow 15\frac{7}{2}'' \\ -9:13'' \rightarrow 14'-4'' \rightarrow 7:8\frac{7}{2}'' \\ -6'' \rightarrow 9:10'' \rightarrow 14'-4'' \rightarrow 7:8\frac{7}{2}'' \\ -6'' \rightarrow 14'-4'' \rightarrow 7:8\frac{7}{2}'' \\ -6'' \rightarrow 14'-4'' \rightarrow 7:8\frac{7}{2}'' \\ -6'' \rightarrow 14'-4'' \righta	PLAN - UNDER FLOOR SLAB SPANS 6, 8, 9 \$ 10 HOWING BEAMS AND SPACING OF DIAPHRAGMS BILL OF MATERIAL - BEAM SPANS MATERIAL INCLUDED IN BOTH SECS. ICR-F \$10R-E. ITEMS UNITS QUANTITIES Structural Steel Lbs. 776,870 See Sheets Nos. 5 \$6 for Bill of Material included in Section ICR-E only. Expansion Guards, Bearing Plates and Blast Plates included in Secs. f \$E\$ are not included in Bill of Material above See Sheets 168 for dealing \$ quantities for these liters.	No. 46-A PLANK ROAD BRIDGE OVER C.B. &Q. R.R. ~ C. &N.W. R.R. AND KICKAPOO CREEK PEORIA COUNTY SB.I. RT. 8 ~ SEC. IOR ~ F & E-N.R.H.

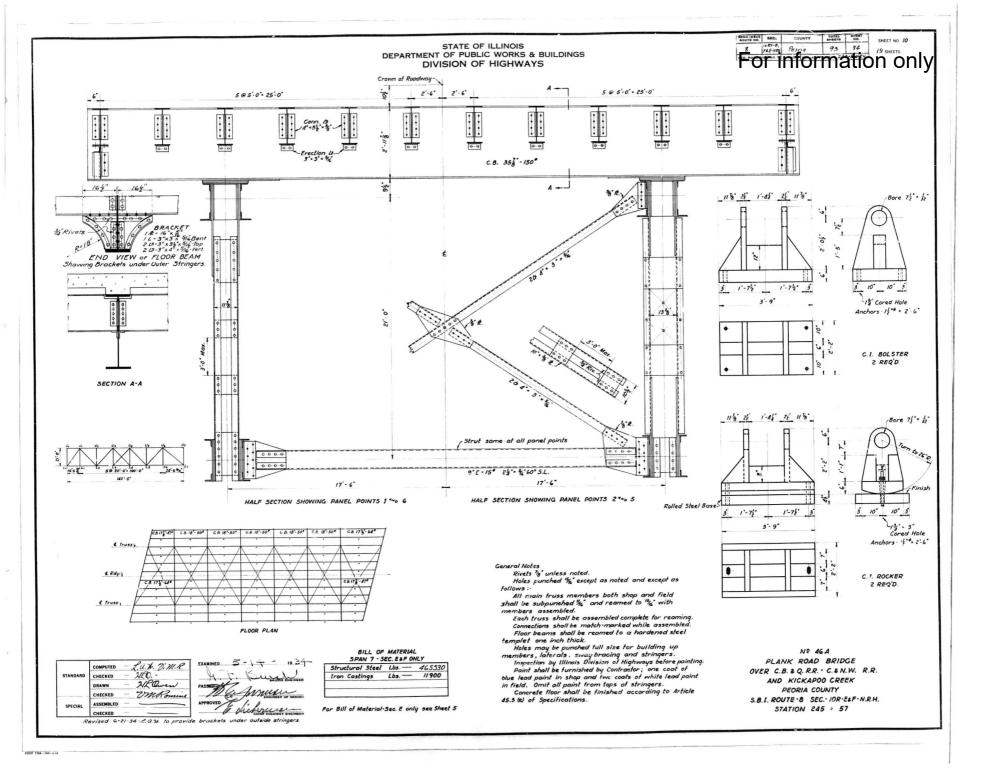


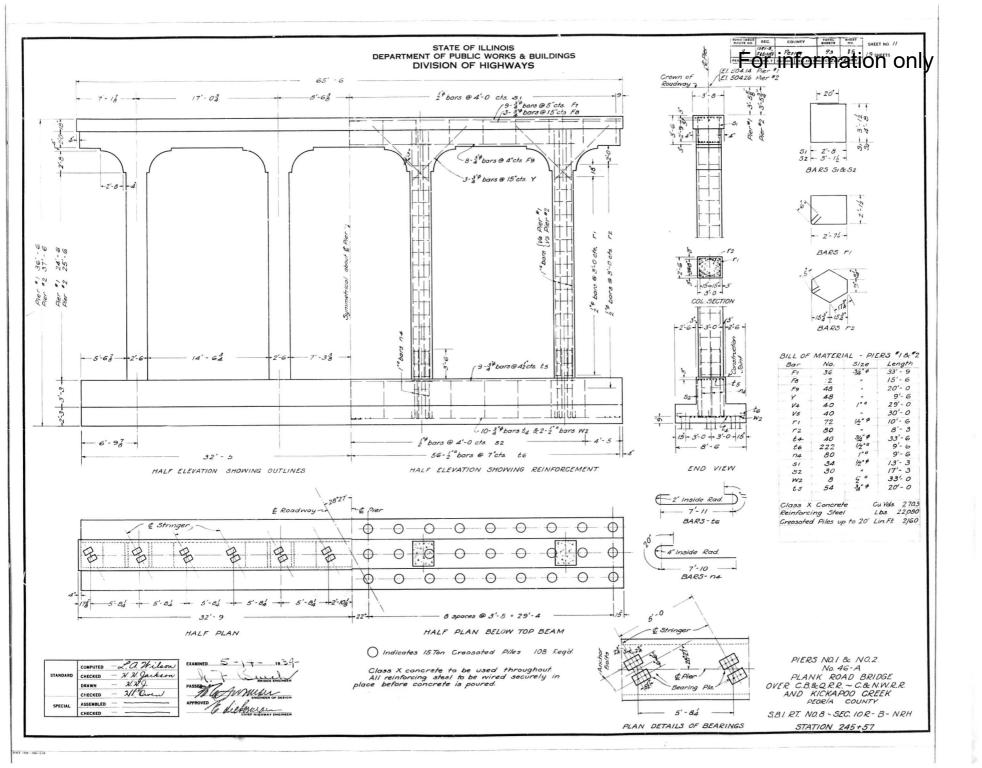


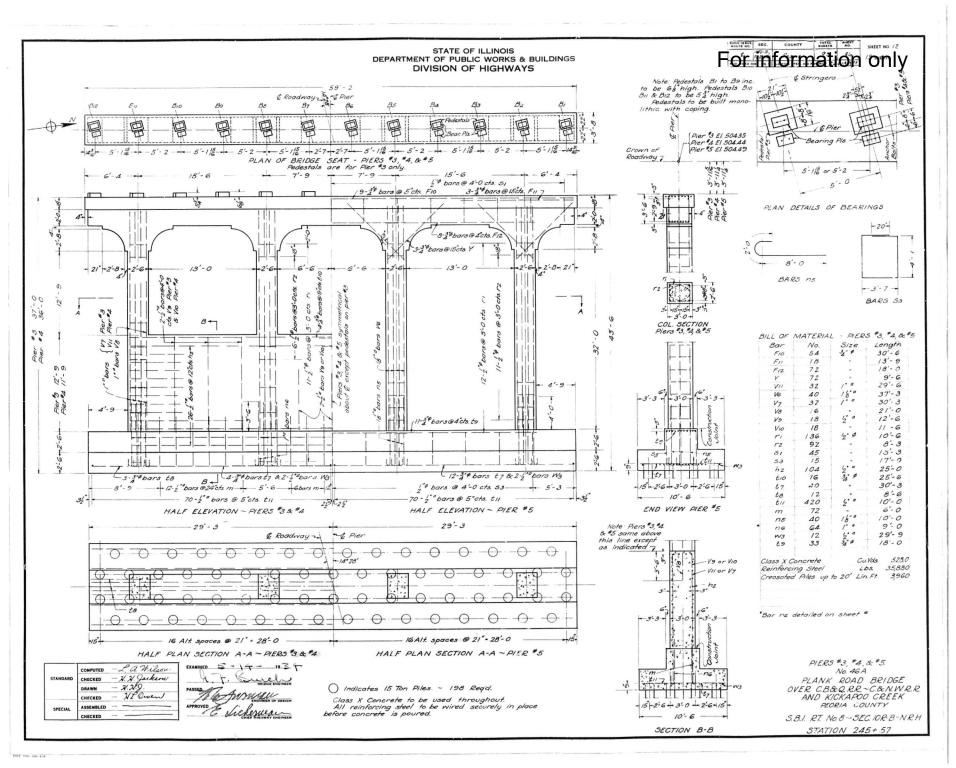


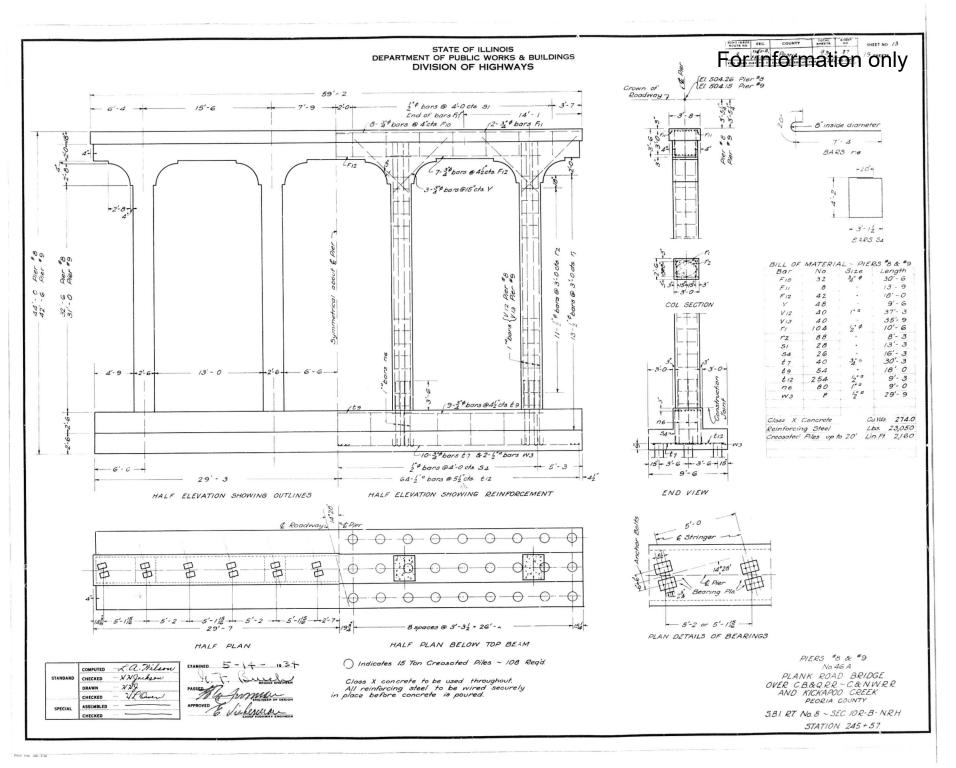


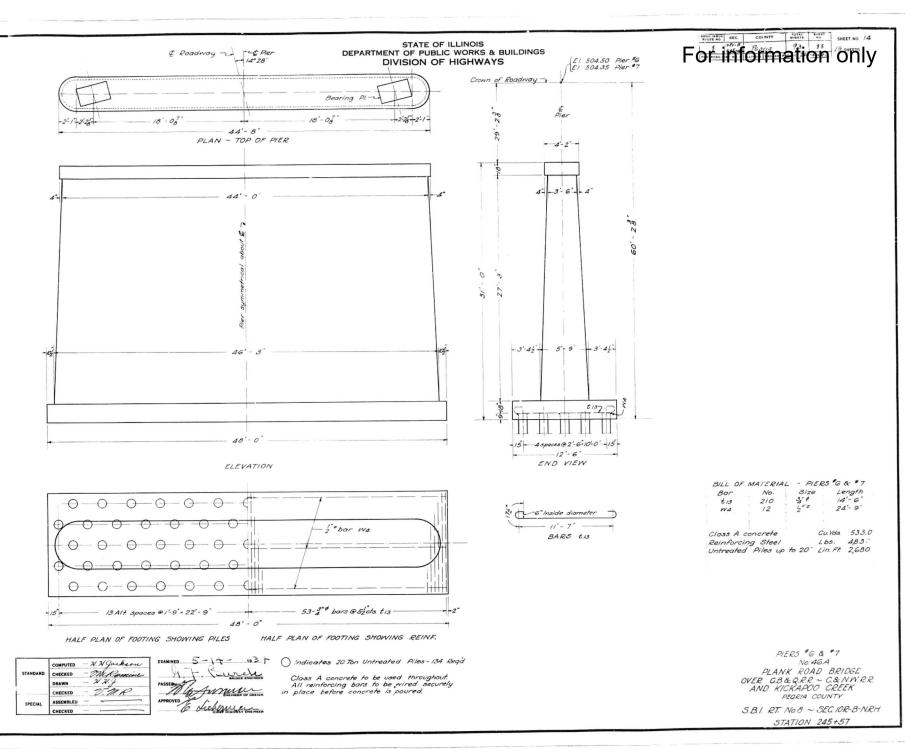




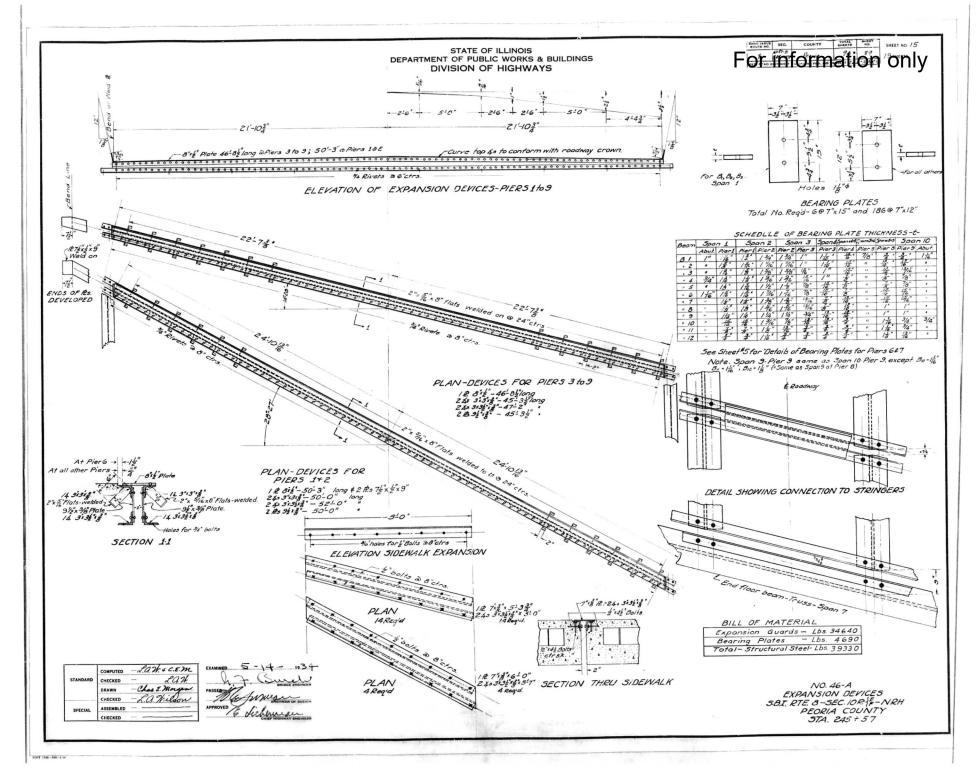


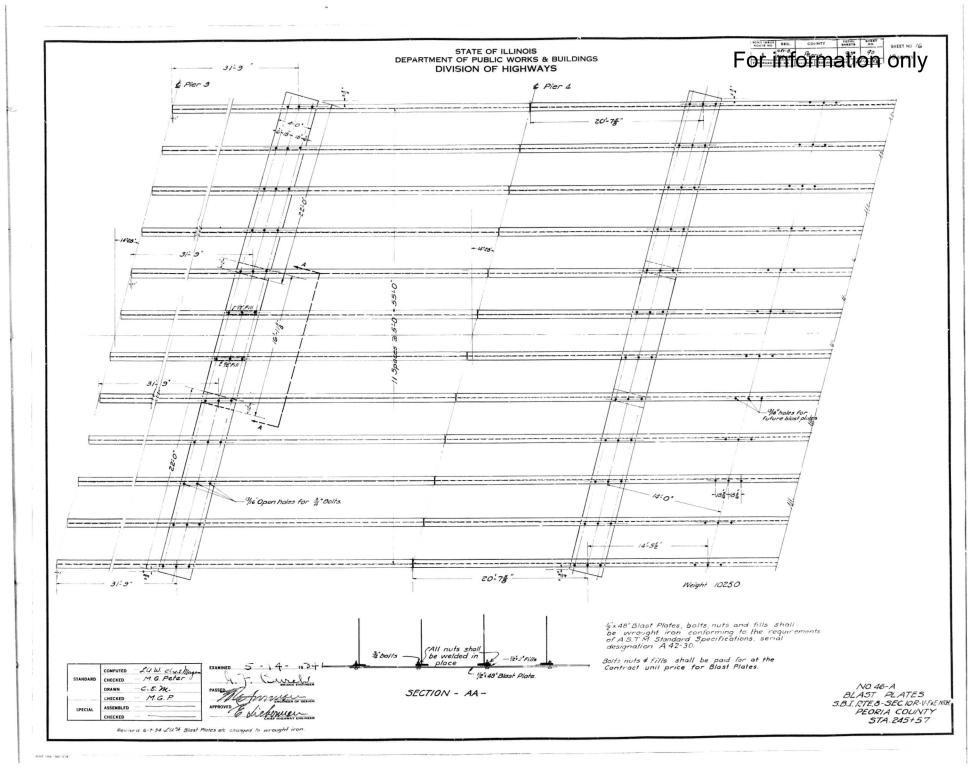


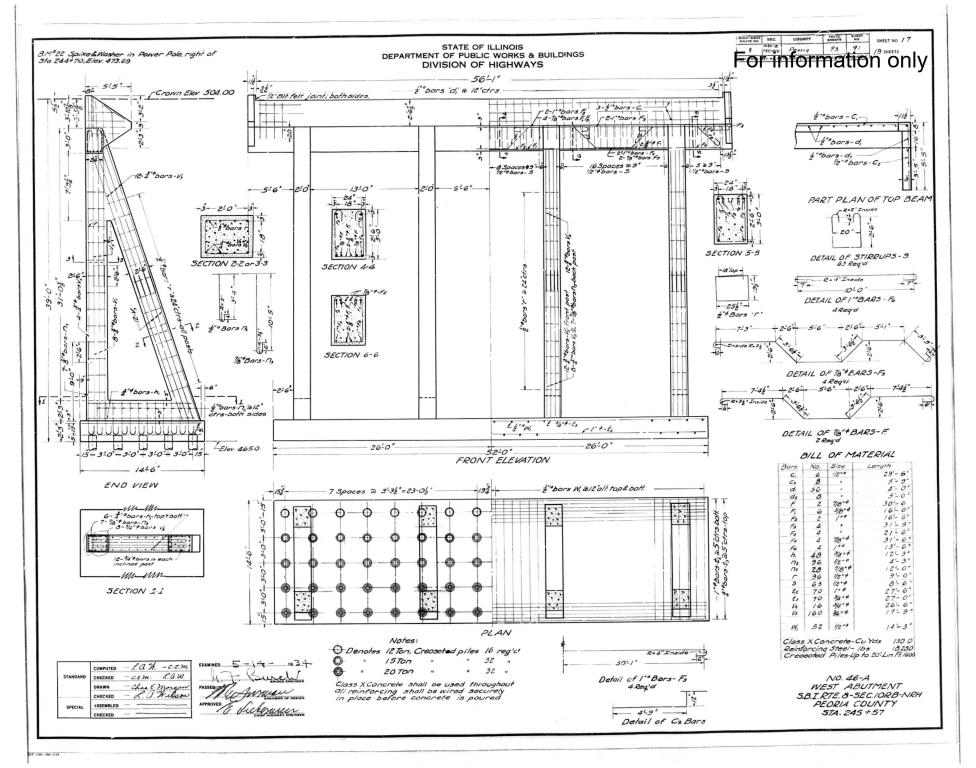


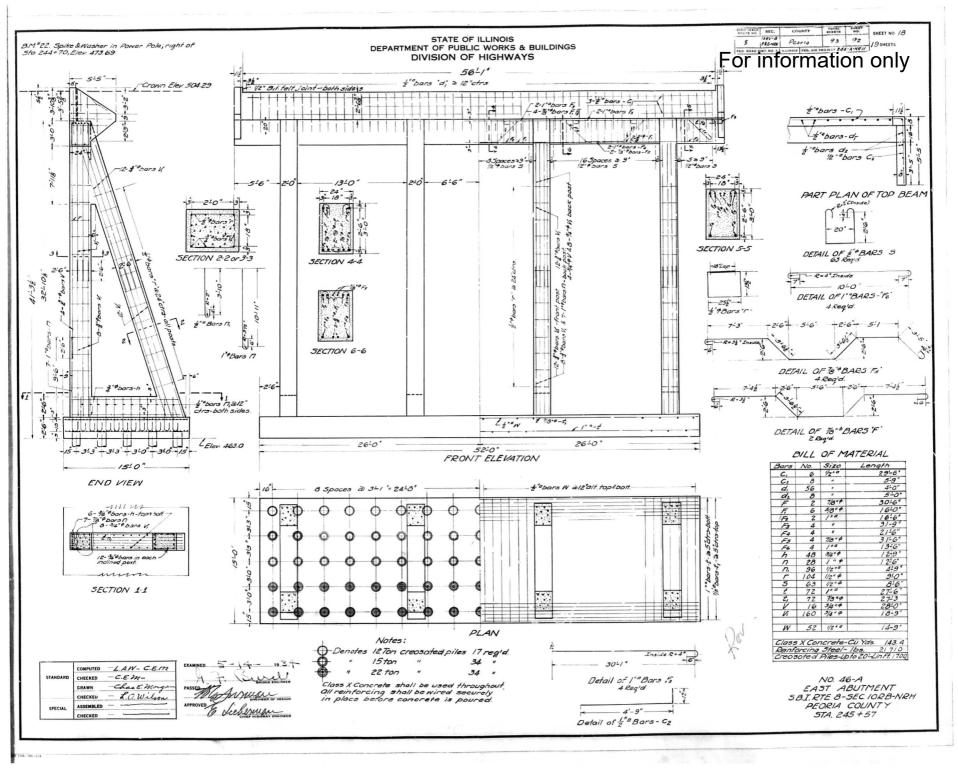


POST 7386-386









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

COUNTY SHEETS NO SEC 8 JORV-E-NRH Paoria 99 DIECT Z44-A-NRH

SHEET NO. 19 19 SHEETS

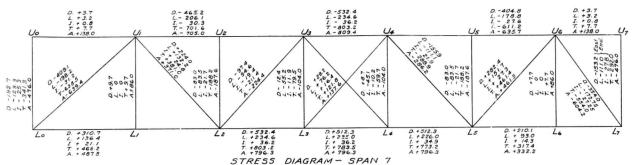
For information only

NOTATION:

D- Dead load stress L - Live load stress - H-15 loading.

I - Impact Stress. T - Total Stress.

A - Allowable axial stress, Maximum.



Stresses in thousands of pounds.

30-0" to rear axle of a 11.25 Ton Truck of the same dimensions 30'-0" to front uxle of a 11.25 Ton Truck 9'-0" Clearance and Lane Width 14'-0" 15 Ton Truck 80% on rear axle 20% on front oxle Curb H-15" 15"> -6'- 0"-12

H-15 TRUCK LOADING FOR LOADED LENGTHS UNDER GO FEET.

For transverse floor beams: A Parallel lines of trucks symmetrical about £ of roadway.

For longitudinal beams \$ stringers: 75 = 5555 lines of trucks each for 83 to 810.

Or 0.30 lines of trucks +3 width of L.L. on sidewalk for 82 \$ 811.

Or 2.0 width of L.L. on sidewalk only for 81 \$ 812.

Impact Coeff: = 50 of Truck loading, where L = loaded length in feet.

Concentrated load 13500 for Moment

H-15 EQUIVALENT LOADING FOR LOADED LENGTHS OF 60 FEET OR MORE. Used for the design of trusses and piers. Impact Coeff. = \frac{50}{125+L}.

Note:-All live loads to be so placed as to cause maximum stress in the member considered.

SIDEWALK LOADING. Live load on sidewalk = P^* per sq.ft. where $P = \left(40 + \frac{3000}{L}\right) \left(\frac{55 - W}{50}\right)$ in which: L= loaded length of sidewalk in feet.
W= width of sidewalk in feet. W=5 in this case.
P- Not to exceed 100. P = 100 for design of floor beams & stringers-Span 7.

					SPA	N 7				
	Stringers-End Panels Stringer		Stringers-Int	ringers-Intermed Panels End Floor Beams		Intermediate Floor Beams Beam Supporting Span 6				
	Moment- BII	Shear-89	Moment	Shear	Moment	5hear	Moment	Shear	Moment	Shear
Dead Load	60100 '#	5825 #	24 225#	4845*	56200"	22300	- 247 230 H + 66 8 70	31700#	199 100 1#	64000
Live Load	7/ 500	14870	66 667	14333	440000		- 102 200 + 425 750	43050	581300	58500
Impact	15 400	5020	23 000	4942	150000	14850	+ 146 800	14850	157200	15800
Total	147 000"	25 7/5#	113 892"	24120	646200"	80 200	+639420*	89600	937600	138300*

MOMENTS & SHEARS IN I-BEAM SPANS Beams-Spans-2-89 Beams-BII-Spans 3 \$10 Beoms-Spans 4-5-6 Beam B2-Span / Moment Shear 336 200" 23930" Mornent Shear Moment Shear Moment Shear 254500" 20210# 360000" 24500# Moment Shear 23930# 17280# 190000" Dead Load Live Load 224400 17610 159000 15600 196000 16720 238700 18400 28700 32600 5440 25600 4620 2610 31500 2690 Impact 5921001 44230# 374600# 37500# 479 200'# 39540# 631300# 48340#

ALLOWABLE UNIT STRESSES IN STRUCTURAL STEEL.

Tension -16000 #/a" | but not to exceed 14000 #/a"

Gengression -16000 -70 #; but not to exceed 14000 #/a"

Bending -16000 #/a" on extreme fibre of rolled or built up sections.

" -24000 #/a" on pins and shop rivets.

" -10000 #/a" bolts " field rivets.

Bearing -24000 #/a" bolts " field rivets.

Bearing -24000 #/a" bolts " field rivets.

SPECIFICATIONS -

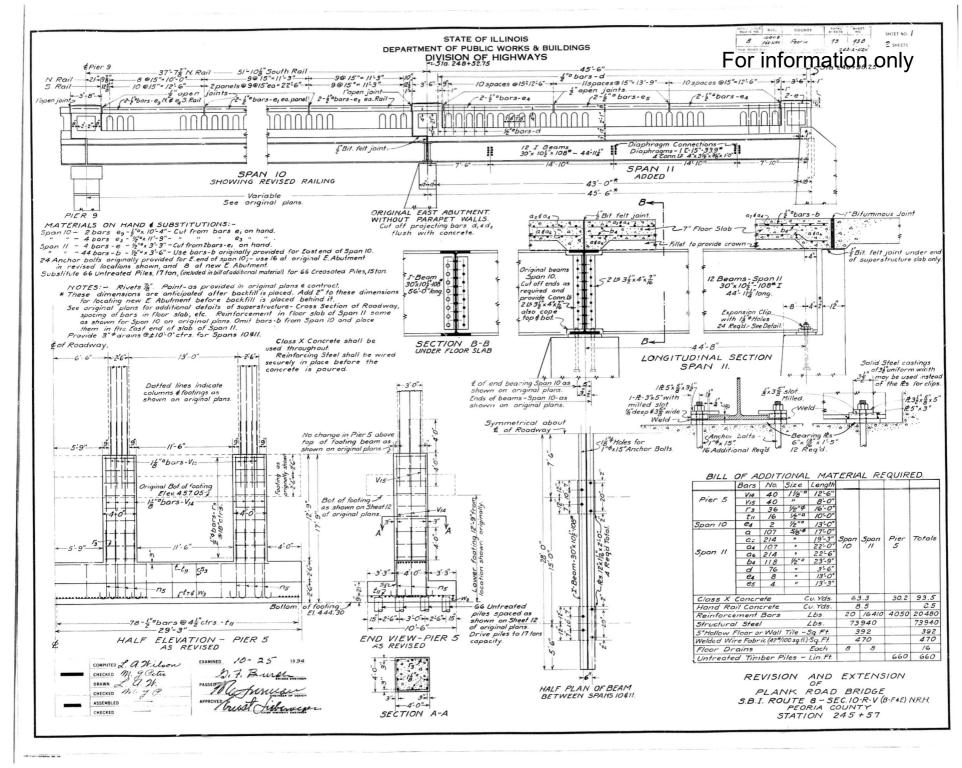
For Design:- Standard Specifications for Highway Bridges and Incidental Structures, adopted by the American Association of State Highway Officials, dated 1931;- with modifications.

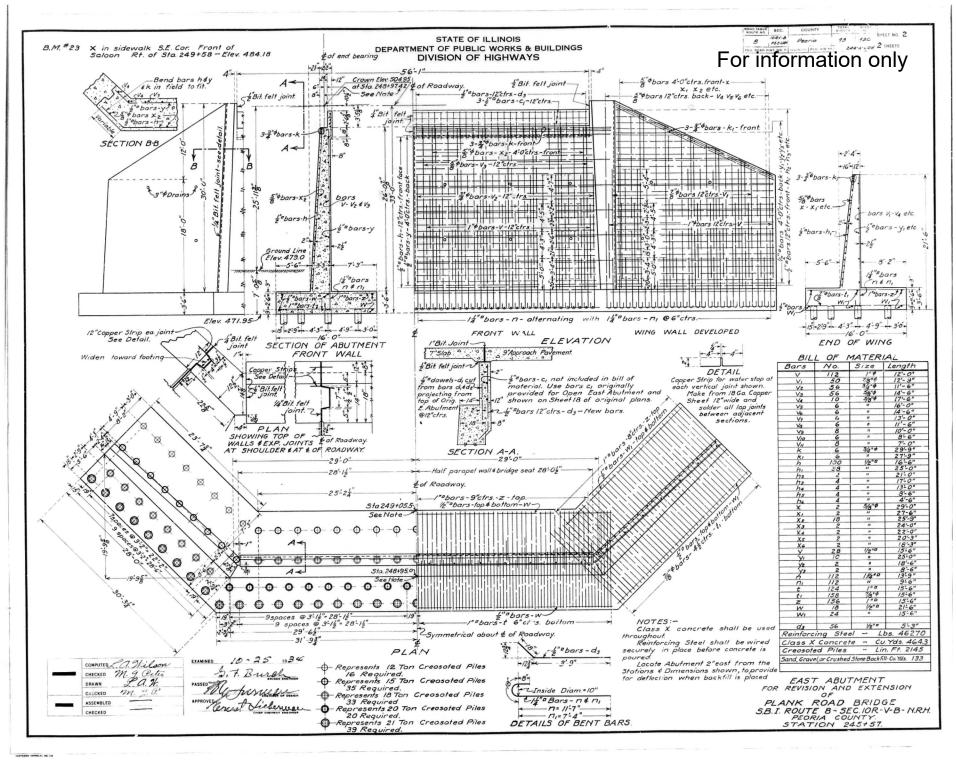
For Fabrication and Erection:- Standard Specifications for Road and Bridge Construction of the Illinois Division of Highways, Adopted January 2, 1932, together with Supplemental Specifications Effective March 27, 1934.

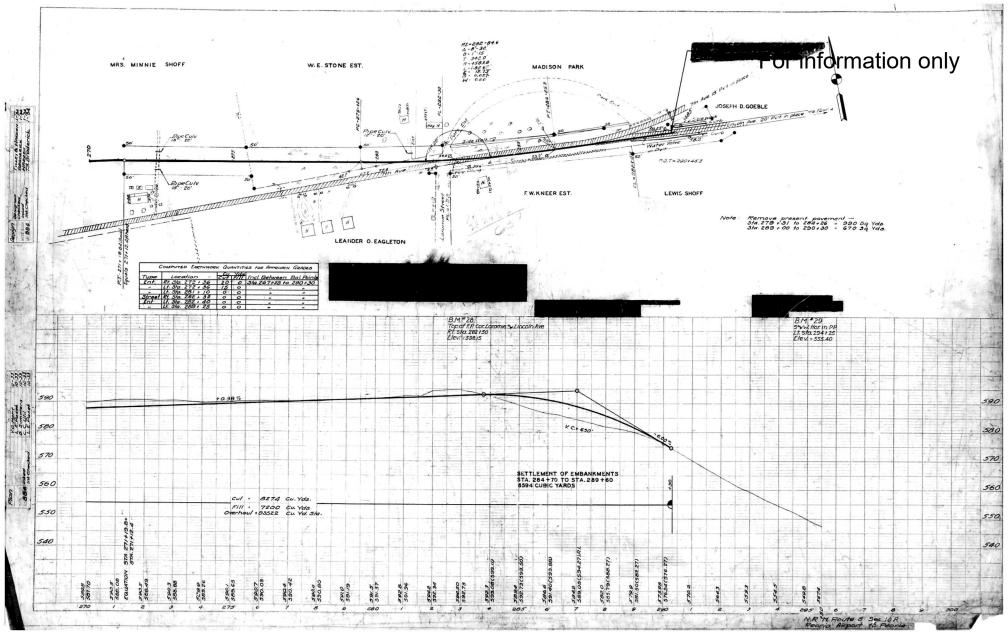
	COMPUTED - La Hilson	EXAMINED 6-7- 1934
STANDARD	CHECKED - WL Owen	47. Surel
	DRAWN - L. Q. 94.	PASSED / C
	CHECKED - 3/20.	to. E. Juginean
SPECIAL ASSEMBLE CHECKED	ASSEMBLED -	APPROVED A B
	CHECKED -	Crust Stellerman

STRESS SHEET

No. 46A PLANK ROAD BRIDGE OVER C.B. &Q. R.R. - C. &N. W. R.R AND KICKAPOO CREEK PEORIA COUNTY. S.B.I. RT. 8 - SECTION IOR-V-FFE-N.R.H STATION 245+57.







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

For information only

SUPPLEMENTARY BULL OF MATERIAL (To be added to Quantities on Sheet 13) ×3-0"→ 10-10 bars-Viz (old) Class X Construte-Cu. Yes Symabt & -10-1" bars - VI4 (new) -5 Original Bottom of Ftg. Elex. 456.82 per Column 10-10 bars-no (old) 9- 3/4 bars-to (016). Sa bars (old) -10-3/4" bars-ty & 2-20 bars-W3 (014) Elev. 444.15 10 bars - 43 cts - tiz-Number and Specing of Piles some
Number and Specing of Piles some
No Sheet on Sheet No. 13. However
Piles may be untreated and shall be
16.5 Tens capacity for Pier 8. 148 Regd in Revised Pier Design 127 " Original " 21 " addition to Sh. + 13) 29-3" PART ELEVATION ~ PIER 8 END VIEW

DETAIL OF REVISION OF PIER 8 PUE TO LOWERING FOOTING FROM ELEV 456,82 TO 444.15

(Details not shown, same as on Sheef 13)

STANDARD

CHECKED & A Thileen
DRAWN - E.B.M.

CHECKED & A Thileen
CHECKED & A Thileen
CHECKED & A Thileen
CHECKED & A Thileen
CHECKED & CHECKED
CHECKED

PASSED JULY 26 1934
PASSED JULY BUNGE ENGINEER
APPROVED CHICAGO SPESION
APPROVED CHICAGO SPESION

REVISION
PIER NO.8

NO. 46 A
PLANK ROAD BRIDGE
OVER CB. 40.FR ~ C. 2.N.W.R.R.
AND KICKAPOO CREEK
PEORIA COUNTY

S.B.I. RT. 8 ~ SEC IOR-B-NRH,
STA. 245+57

