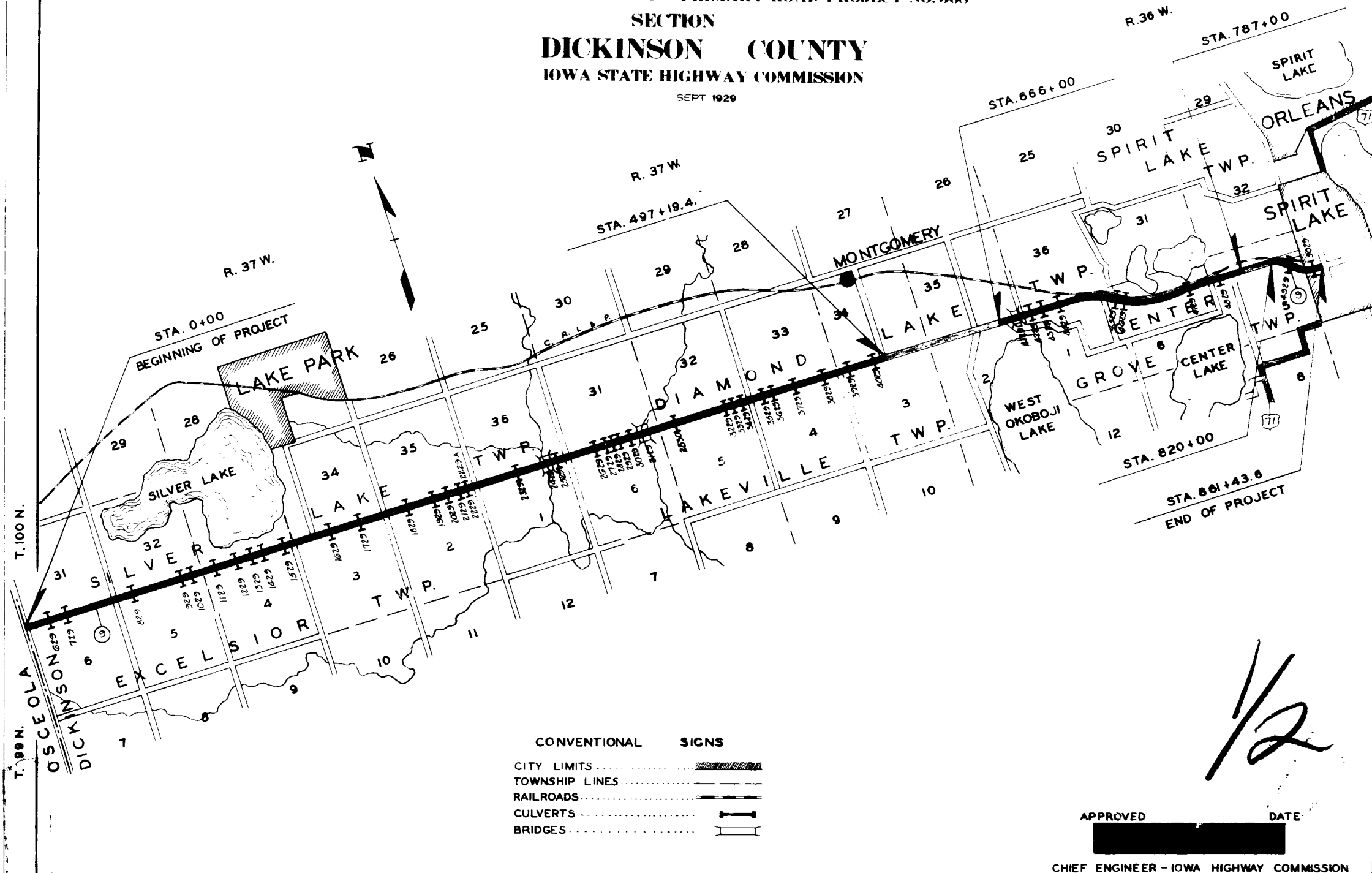


DESIGNS FOR
BRIDGES AND CULVERTS
 PRIMARY ROAD SYSTEM PRIMARY ROAD PROJECT NO. 368
 SECTION
DICKINSON COUNTY
 IOWA STATE HIGHWAY COMMISSION

SEPT 1929



APPROVED _____ DATE _____

CHIEF ENGINEER - IOWA HIGHWAY COMMISSION
 DICKINSON COUNTY - PRIMARY PROJECT NO 368

SEPT. 1929

[illegible]

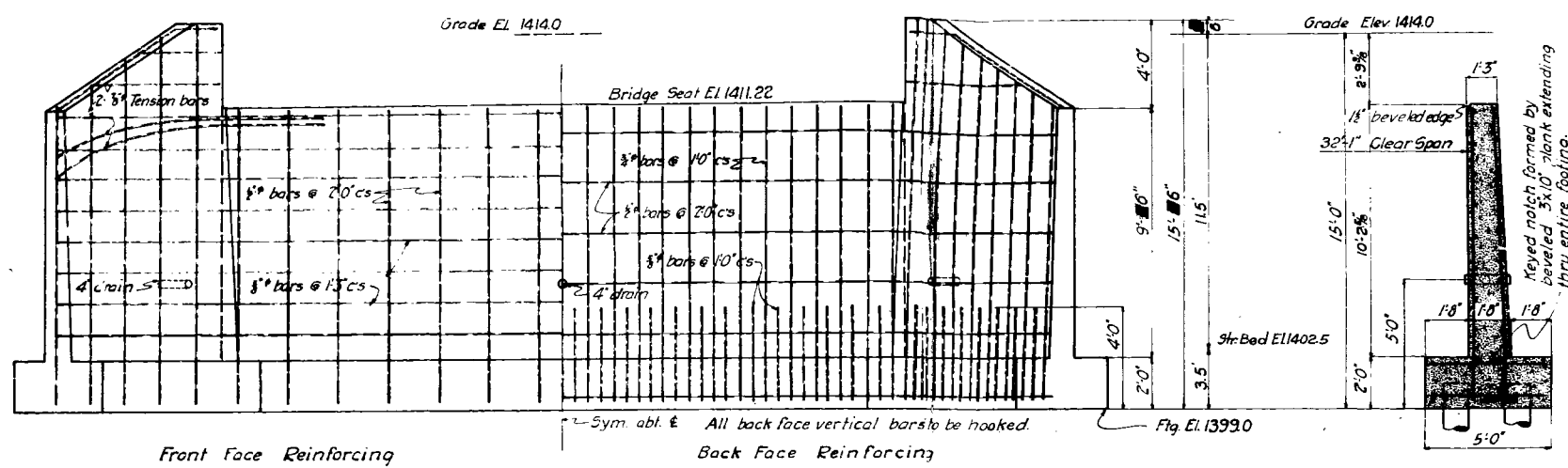
- Abandon 1-25-30. See Jan. 1930 Title sheet.

GC

4

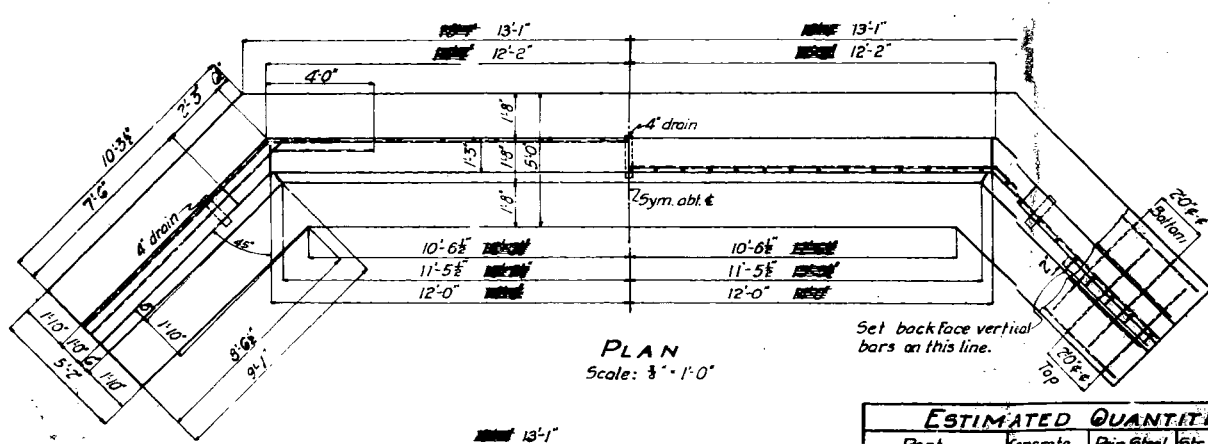
44

Bench Mark: No 24 Sta. 296+37 Iron Pin in fence line S.W. of Bridge 42 Rt. Elev. 1407.54

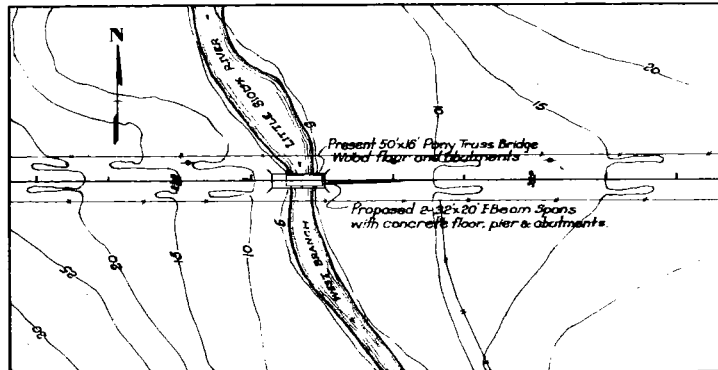


ELEVATION
Scale: 3/4" = 1'-0"

SECTION
Scale: 3/4" = 1'-0"

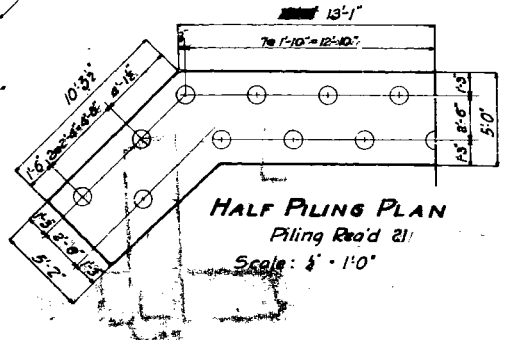


PLAN
Scale: 3/4" = 1'-0"



TOPOGRAPHICAL MAP
BRIDGE SITE
IN
DICKINSON COUNTY
Sec's 1 & 36 Twp's 99 & 100 N
R. 38 W P. 368

Footing Reinforcing:
Transverse: 8 #5 bars, 4'-6" long, at 2'-0" cs, top.
8 #5 bars, 4'-6" long, at 2'-0" cs, bottom.
Longitudinal: 4-8 #5 bars as shown.
Transverse top and bottom bars staggered thru at entire footing.



HALF PILING PLAN
Piling Req'd 21
Scale: 3/4" = 1'-0"

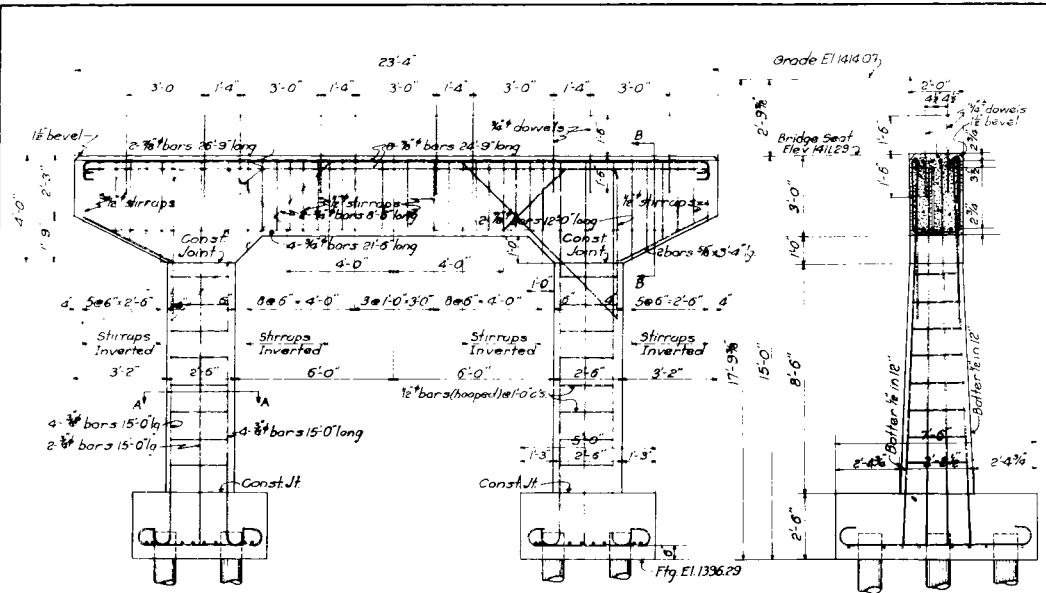
ESTIMATED QUANTITIES				
Part	Concrete	Rein. Steel	Str. Steel	Piling
Superstructure	470.0	9570	36820	
Pier	16.3	1860		2#20
Abutments	13.6	4500		42#20
Totals	499.9	15930	36820	54#20

General Notes:
Horizontal reinforcing bars may be applied at or near the top.
Use a 50 diameter lap or splice and a 16 diameter hook on all hooked bars.
All exposed corners of 4" or less to be filled with a 1" dressed beveled stop.
For details of Superstructure see Standard VSA.
Use piling as shown on plan.
Standard Specifications for Iowa Highway Commission Series 1925.

Bridge No.
Over West Branch Little Sioux River
Sections No. 36-1
Silver Lake and Excelsior Twp.
Dickinson Co.

Design for
2-32'x20' I-BEAM SPANS
Concrete Floor and Abutments
ABUTMENT DETAILS
Sta 296+65 Primary Proj No. 368
DICKINSON COUNTY
Iowa Highway Commission
Sept. 1925
Scale as noted

Design No. 2429 Dickinson Co.

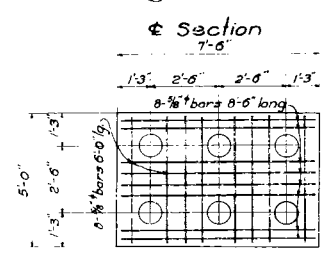


Pier Details
Scale: 1/2"=1'-0"

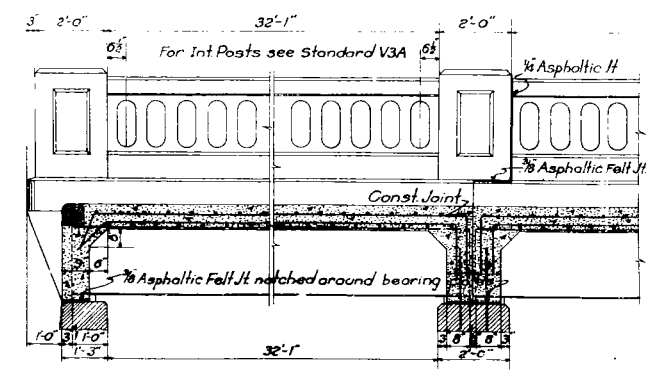
General Notes
 For details of Abutments see Sheet 1 of this design.
 For details of Superstructure see Standard V3A
 (Revised May 12 1928) except as shown on this sheet.
 Skeleton Handrail to be used as shown on Standard V3A.
 Red or faint lines indicate present structure.
 All exposed corners of 90° or less to be filleted with a dressed beveled strip except on Handrail.
 All reinforcing to be wired in position before concrete is placed.
 All hooked bars to have a 16 diameter hook.
 Main reinforcing bars in beam of Pier not to be spliced.
 All splices to have a 50 diameter lap.
 All concrete to be Class A except in Handrail which is to be Class C.
 Standard Specifications of the Iowa Highway Commission, Series of 1925.

Port	Estimated Quantities			
	Concrete	Rein Steel	Str Steel	Piling
Superstructure	700	9570	36820	
Pier	163	1860	36820	12@20'
Totals	863	11430	36820	12@20'

* Class C Concrete 10 yds.



Half Piling Plan
12 Piling Required
Scale: 1/2"=1'-0"

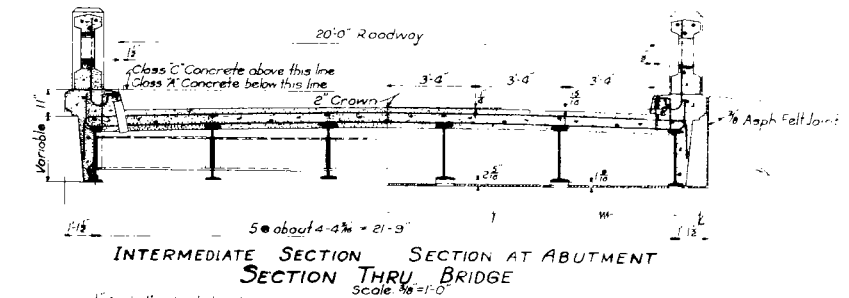


LONGITUDINAL SECTION THRU BRIDGE
Scale: 1/2"=1'-0"

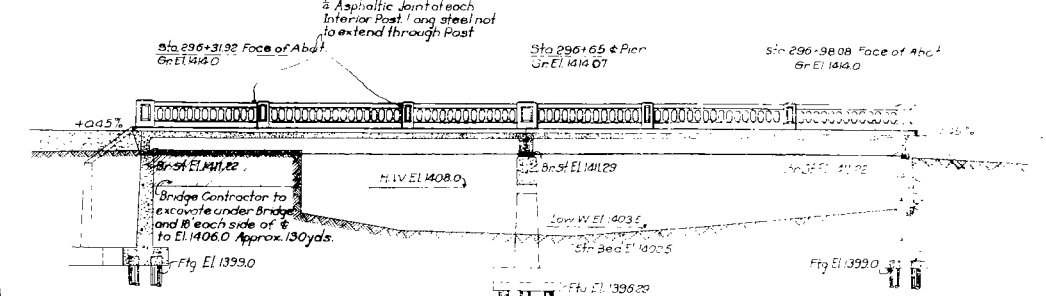
SECTION THRU SLAB
Scale: 1/4"=1'-0"

Section B-B
Scale: 1/2"=1'-0"
Section A-A
Scale: 1/2"=1'-0"

Bench Mark: #24 Sta 296+37 Iron Pin in fence line S.W. of Bridge 42' Rt. Elev 1407.54



INTERMEDIATE SECTION SECTION THRU BRIDGE
Scale: 1/2"=1'-0"



Situation Plan

Drainage Area: Flat 25 sq. mi.

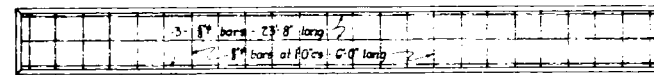
Note: Bridge Contractor to remove present 50'x16' Pony Truss Bridge as directed by the Engineer.
 Wood pile abutments to be removed to stream bed elevation.

Bridge No.
Over West Branch Little Sioux River
Section No. 36-1
Silver Lake and Excelsior Twp.
Dickinson Co.

Design for
2-32'x20' I-BEAM SPANS
Concrete Floor and Abutments
PIER & SUPERSTRUCTURE DETAILS
Sta 296+65 Primary Proj No. 368
DICKINSON COUNTY
Iowa Highway Commission
Sept 1928. Scales as noted

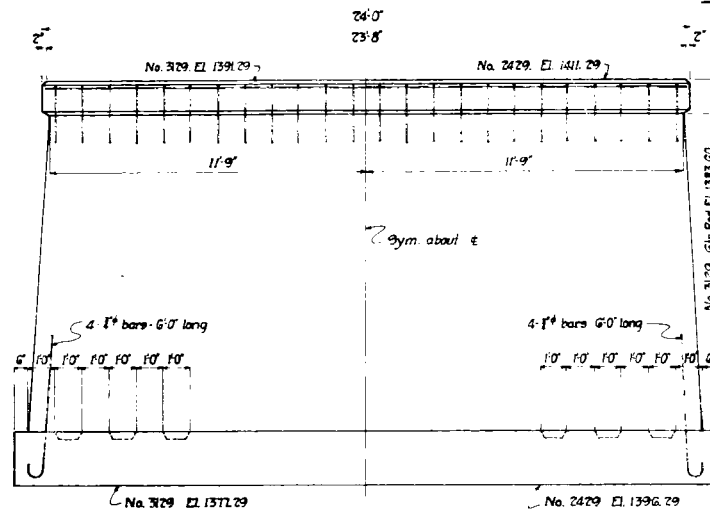
Design No. 2429 Dickinson Co.
Jan. 11

Bench Marks: Design No. 3129, BM #29, Spike in brace post of fence line N Sta. 354+05, El. 1391.22
Design No. 2429, BM #24, Iron pin in fence line SW of bridge, 47' E. Sta. 296+37, El. 1407.54

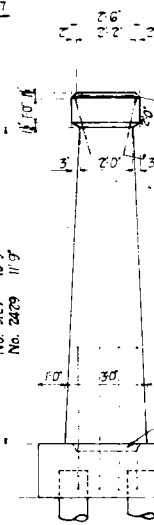


PLAN OF CAP

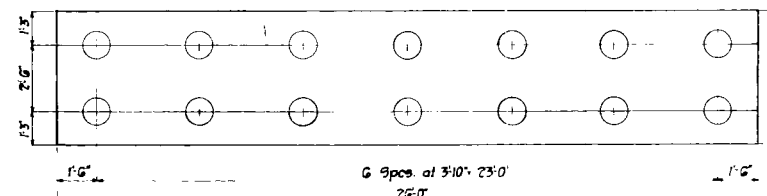
No. 3129, Gr. El. 1394.07
No. 2429, Gr. El. 1414.07



ELEVATION OF PIERS



END ELEVATION



PLAN OF FOOTINGS

ESTIMATE OF QUANTITIES IN PIERS			
Part	Concrete	Rein. Steel	Piling
Design No. 3129	36.6	295	14 at 20'
Design No. 2429	38.8	295	14 at 20'

Note: Pier details on this sheet to supersede those shown on original designs. Change made on construction to provide better foundations.

General Notes:

- All exposed edges of 90° or less to be filleted with a 1" dressed beveled strip.
- All reinforcing steel to be securely wired in place before concrete is placed.
- Use a 50 diameter tap on all reinforcing bar splices and a 16 diameter hook on all hooked bars.
- All concrete to be Class A.
- Standard Specifications of the Iowa State Highway Commission, Series of 1925.

Alternate Pier Details for
2-32'x20' I BEAM SPANS

Concrete Floor and Abutments

PIER DETAILS

Sta. 355+05
Sta. 296+05

Primary Project No. 368

DICKINSON COUNTY

to a State Highway Commission
October 1929

Scale: 1" = 1'-0"

Design No. 3129
Over E. Branch of
Little Sioux River
Sections 31 & 32
Diamond Lake & Lakeville Twp.
Dickinson Co.

Design No. 2429
Over W. Branch of
Little Sioux River
Sections 36 & 37
Silver Lake & Excelsior Twp.
Dickinson Co.

Design No. 3129
Design No. 2429

Dickinson County

Sheet 2-65-2

JMS C.E.R.