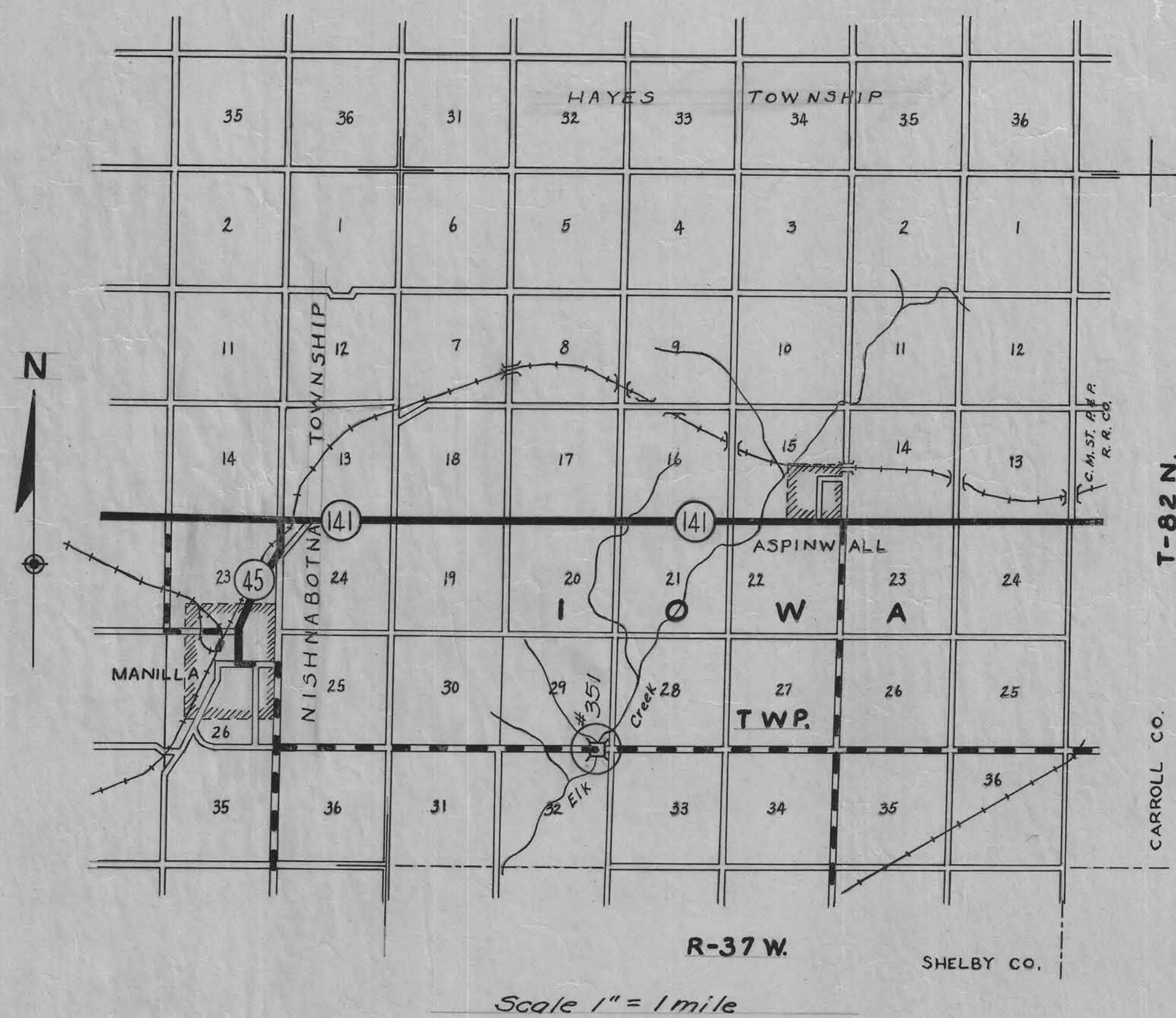


STATE OF IOWA
 STATE HIGHWAY COMMISSION
 DESIGN FOR
 120'x20' CONTINUOUS I-BEAM BRIDGE
 SECONDARY ROAD SYSTEM SN. PROJECT No. 1399
 CRAWFORD COUNTY
 JULY - 1950.



DESIGN - 351. IOWA TWP. CRAWFORD CO.
 SEC. 29-32 STA. 152+65 OVER ELK CREEK.

120'x20' CONT. I-BEAM BRIDGE

PART	TOTAL
Concrete	160.2 Cu. Yds.
Reinforcing Steel	25,696 Lbs.
Structural Steel	61,684 Lbs.
Treated Piling 16 @ 35'	560 Lin. Ft.
Untreated Piling 20 @ 25'	500 Lin. Ft.
Channel Excavation Cl. 10	1245 Cu. Yds.
Excavation Class 20	— Cu. Yds.
Excavation Class 21	82 Cu. Yds.
Removal of old Structure	No Removal.

Mileage Summary = 123'-2" = 0.0233 mile.

Specifications:
 Design: A.A.S.H.O. H-15 loading.
 Construction: Standard Specifications of Iowa State Highway Commission Series of 1948, except on rail surfaces visible from the roadway the two field coats of paint shall be white conforming to Par. 4135.04 A.

APPROVED



BOARD OF SUPERVISORS

APPROVED

CHIEF ENGINEER
 IOWA HIGHWAY COMM.



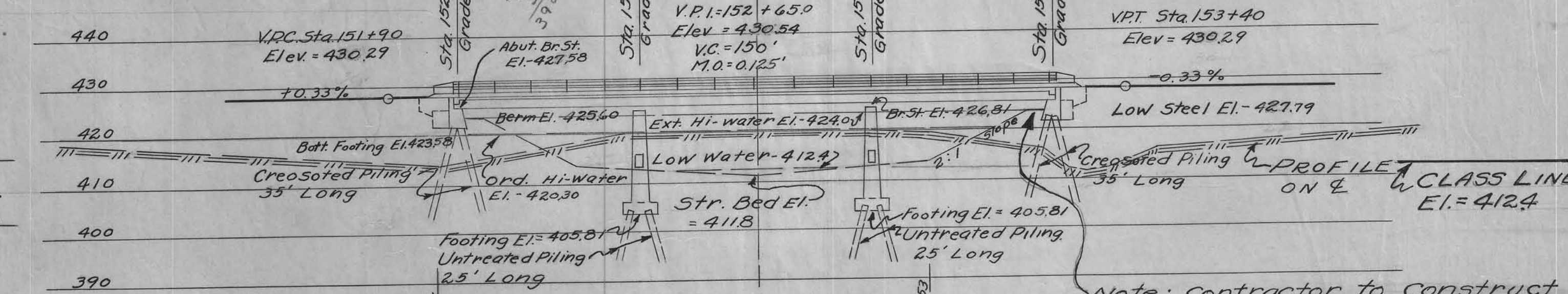
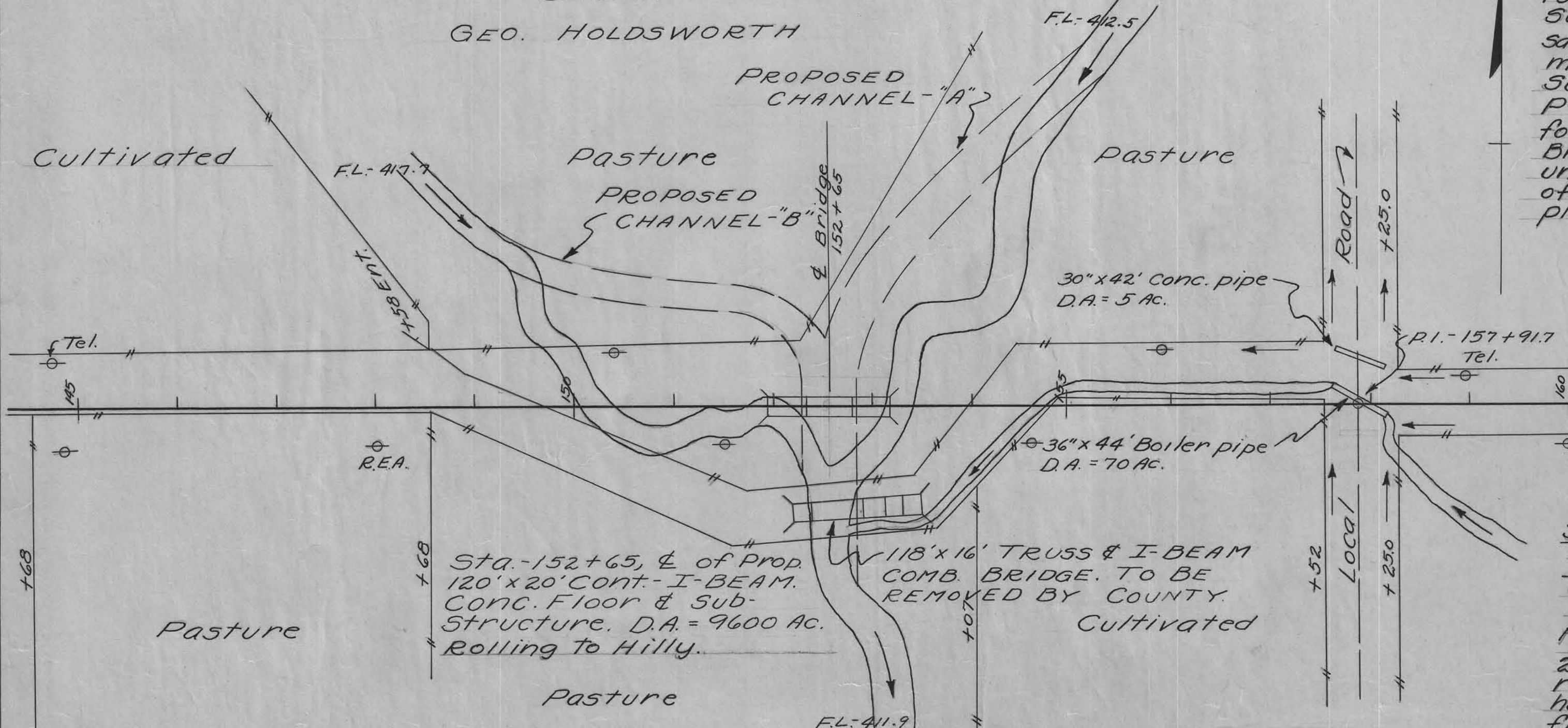
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IOWA TOWNSHIP
T.82N. R.37W.
SEC.-29
GEO. HOLDSWORTH

GENERAL NOTES:

This bridge has been designed for H-15 loading of A.A.S.H.O. with an allowance of 19 lbs. per sq. ft. of roadway for future wearing surface. Superstructure details and notes are same as Std. V-6 for 120' span and V-6 misc. both as revised 11-15-46. Sub-structure details are same as Std. P-5 for piers and same as Std. K-6 for abutments. Bridge Contractor to clear channel under bridge for dist. of 30' each side of $\frac{1}{2}$ of road as shown in situation plan.

B.M. #14, Sta-153+00, fc. post 150' Lt. El. 421.22
Preliminary Layout For
120'x20' CONTINUOUS I-BEAM BRIDGE
Concrete Floor, Steel Handrail
Sta. 152+65.0 Project No. SN-1399
CRAWFORD COUNTY
MARCH 1950



CONCRETE ONE ABUT.

Footing	142 C.Y.
Wing walls & backwall	58 "
Wing posts CL "C"	1.0 "
Total	210 C.Y.

TOTAL ESTIMATED QUANTITIES

ITEM	SUPER.	2 ABUTS.	2 PIERS	TOTAL
CONCRETE	704	42.0	47.8	160.2
REIN. STEEL	17,692	2,812	5,192	25,696
STRUCT. STEEL	61,684			61,684
CREG. PILES		16 @ 35'		560
UNTREAT. PILES			20 @ 25'	500
CLASS 20 EXCAV.				82
CLASS 21 EXCAV.				1245
CHANNEL EXCAV.				

CONCRETE ONE PIER

Footing	68 C.Y.
Columns	6.5 "
Cap	8.5 "
Strut	2.1 "
Total	239 C.Y.

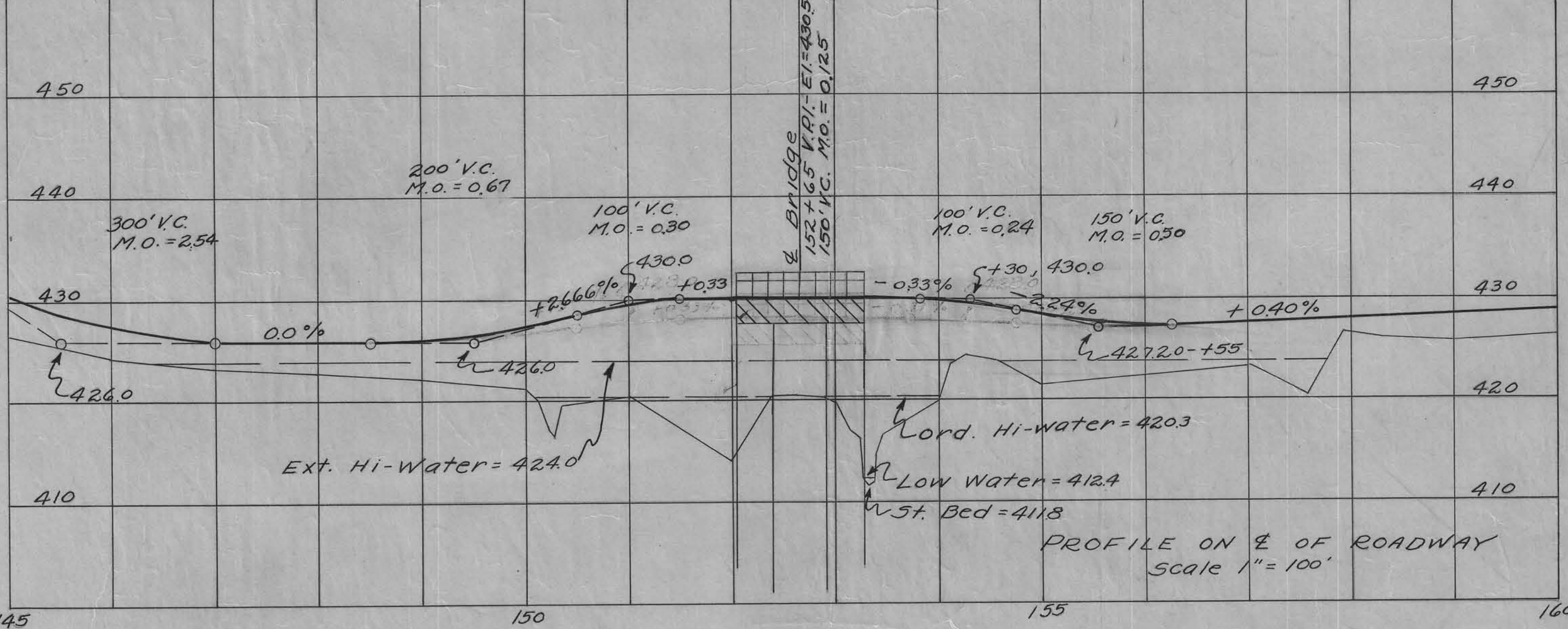
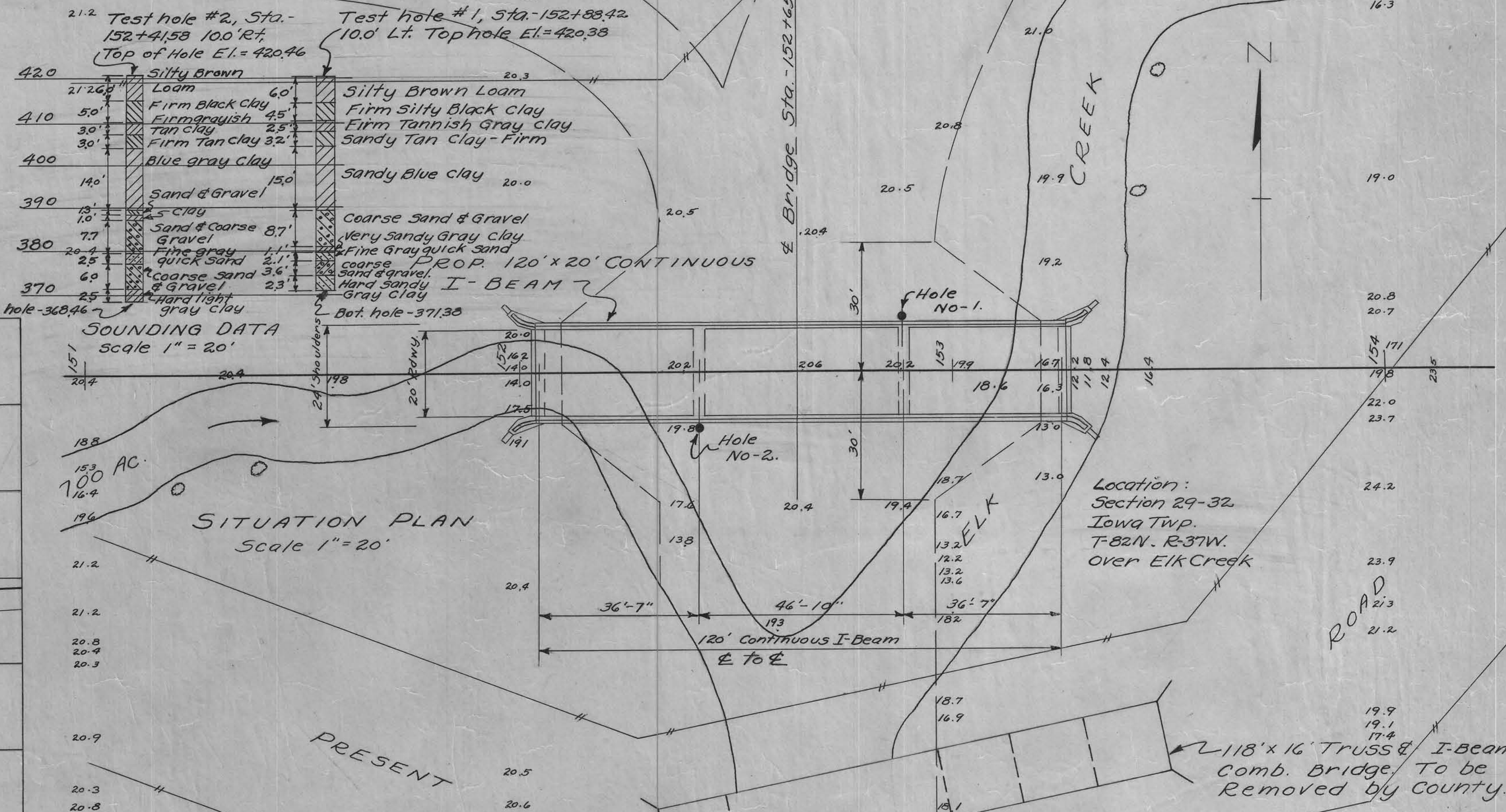


SUPERSTRUCTURE DETAILS:
Refer to Standard V-6 & V-6 misc. revised 11-15-46

PIERS: Refer to Standard P-5, Jan. 1950 With an H = 21'

ABUTMENTS: Refer to Standard K-6 of January, 1950.

Specifications:
Construction: standard Spec. of Iowa State Highway Comm. Series of 1948.
Special provisions for special Water proof Joint dated 8-17-48.
Paint: In accordance with Par. 2508 of the specifications except that rail surfaces visible from roadway shall have the regular shop paint followed by two field coats of white paint conforming with Par. - 4135.04 A.



Preliminary Plan For
120'x20' CONTINUOUS I-BEAM BRIDGE
Concrete Floor, Steel Handrail
CRAWFORD COUNTY
Sta. 152+65
Proj. SN-1399
Design No. - 351. Sheet # 1 of 1. File # 44804

Iowa Twp
Sec. 29, R. 37