FEDERAL AID ROUTE NO	SEC.	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 64		LAWRENCE	34	1
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	F-I-08-4( )	

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

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALES
PLAN 1 INCH 100 FT
PROFILE, HOR. 1 INCH 100 FT
PROFILE, VERT. 1 INCH 10 FT
CROSS-SECTIONS 1 INCH 5 FT.

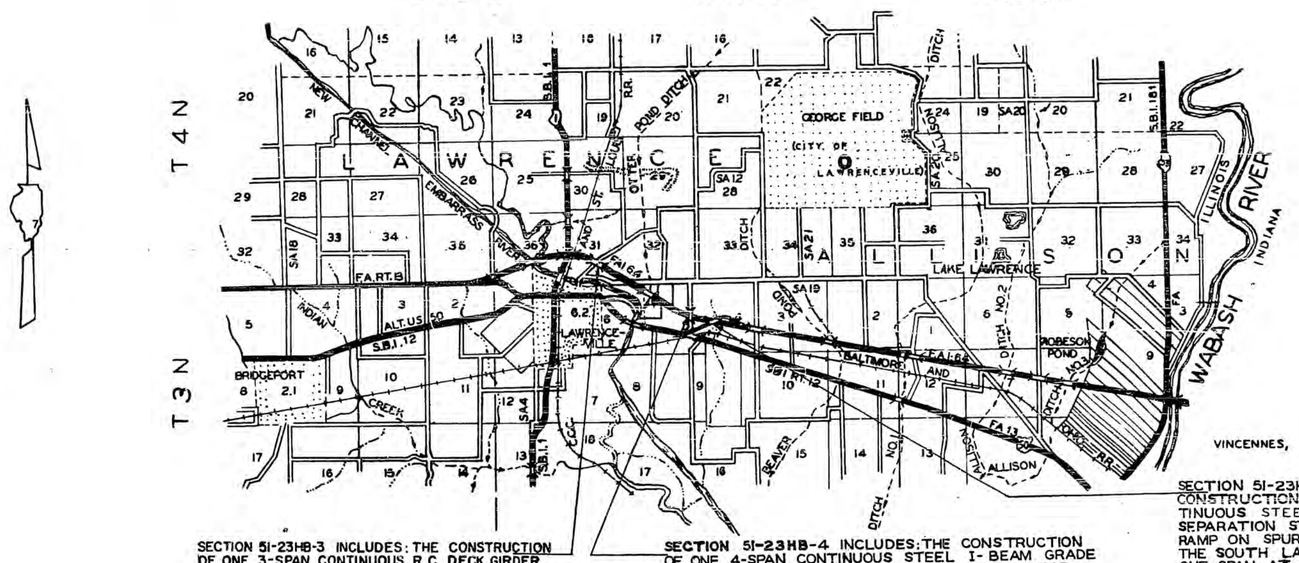
F.A.I. ROUTE 64

SECTION 51-23HB-3, 51-23HB-4, 51-23HB-6

PROJECT F.I.-08-4 (18)(19)

LAWRENCE COUNTY

INDEX OF SHEETS AND SUMMARY OF QUANTITIES ON SHEET NO. 2



SECTION 51-23HB-3 INCLUDES: THE CONSTRUCTION OF ONE 3-SPAN CONTINUOUS R.C. DECK GIRDER GRADE SEPARATION STRUCTURE CARRYING F.A.I. RTE. 64 OVER LOCAL ROAD. TWO SPANS AT 37'-3" & ONE SPAN AT 48'-3" AT STA. 604+20.00. 39' ROADWAY.

SECTION 51-23HB-4 INCLUDES: THE CONSTRUCTION OF ONE 4-SPAN CONTINUOUS STEEL I-BEAM GRADE SEPARATION STRUCTURE CARRYING LOCAL ROAD OVER F.A.I. RT. 64. TWO SPANS AT 45'-10" & TWO SPANS AT 68'-4" WITH 26' ROADWAY. STA. 688+02

SECTION 51-23HB-6 INCLUDES: THE CONSTRUCTION OF ONE 3-SPAN CONTINUOUS STEEL I-BEAM GRADE SEPARATION STRUCTURE CARRYING "A" RAMP ON SPUR FROM S.B.I. RT. 12 OVER THE SOUTH LANES OF F.A.I. RT. 64 ONE SPAN AT 61'-4", ONE SPAN AT 56'-2", ONE SPAN AT 78'-6" WITH A 20' ROADWAY. STA. 702+77.55

LAYOUT
APPROXIMATE SCALE: 1 INCH = 1 MILE

	NET LENGTH TO BE IMPROVED	NET LENGTH OF SECTION
SECTION 51-23HB-3	127.42 FEET = 0.024 MILE	127.42 FT. = 0.024 MILE
SECTION 51-23HB-4	231.14 FEET = 0.044 MILE	0.00 FT. = 0.000 MILE
SECTION 51-23HB-6	201.66 FEET = 0.038 MILE	0.00 FT. = 0.000 MILE

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

SUBMITTED 2-18 19 59
D. A. Bless
DISTRICT ENGINEER

EXAMINED March 9, 19 59
Arthur Rudell
ENGINEER OF ROAD PLANS AND CONTRACTS

PASSED March 9, 19 59
ENGINEER OF DESIGN

APPROVED March 9, 19 59
CHIEF HIGHWAY ENGINEER

APPROVED March 9, 19 59
DIRECTOR

PLANS FOR STRUCTURES EXAMINED FEB. 20 19 59
ENGINEER OF BRIDGE & TRAFFIC STRUCTURES

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DIVISION ENGINEER — DATE

Eugene J. Daily

LAWRENCE COUNTY SECTION 51-23HB-4 51-23HB-6

FAI ROUTE 64, SECTION 51-23HB-3, 51-23HB-4, 51-23HB-6, LAWRENCE COUNTY

PLANS PREPARED BY CLARK, DAILY AND DIETZ, URBANA, ILLINOIS AND

DISTRICT [illegible] DESIGN OFFICE, EFFINGHAM ILLINOIS

APPROVED Feb 15, 1959 — [signature: Fred C. Nehrer] DISTRICT ENGINEER OF DESIGN

APPROVED [illegible], 1959 — [signature: Robert N. Gamble] DISTRICT ENGINEER OF CONSTRUCTION

APPROVED Feb 7, 1959 — [signature: C. L. Van Deusen] DISTRICT ENGINEER OF MAINTENANCE

APPROVED Feb 17, 1959 — [signature: H. H. Woelfer] DISTRICT ENGR. OF RESEARCH AND PLANNING

APPROVED Feb 18, 1959 — [signature] DISTRICT ENGINEER OF TRAFFIC

APPROVED Feb 18, 1959 — [signature: C. C. Bliss] DISTRICT ENGINEER

GENERAL NOTES

FAI ROUTE 64, SECTION 51-23HB-3, 51-23HB-4, 51-23HB-6

LAWRENCE COUNTY

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, STANDARD SPECIFICATIONS, ADOPTED JANUARY 2, 1958, AND THE SPECIAL PROVISIONS.

SECTION 51-23HB-3 INCLUDES THE CONSTRUCTION OF ONE (1) THREE SPAN CONTINUOUS REINFORCED CONCRETE DECK GIRDER BRIDGE, OVER A LOCAL ROAD AT STATION 604+20; 2 SPANS AT 37'-3" AND 1 SPAN AT 48'-3" WITH A 39' ROADWAY, AND OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THE SECTION.

SECTION 51-23HB-4 INCLUDES THE CONSTRUCTION OF ONE (1) FOUR SPAN CONTINUOUS STEEL I-BEAM BRIDGE CARRYING A LOCAL ROAD OVER FAI ROUTE 64 AT STATION 686+02, 4 SPANS; 2 SPANS AT 45'-10" AND 2 SPANS AT 68'-4" WITH A 26' ROADWAY, AND OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THE SECTION.

SECTION 51-23HB-6 INCLUDES THE CONSTRUCTION OF ONE (1) THREE SPAN CONTINUOUS STEEL I-BEAM BRIDGE CARRYING AN INTERCHANGE RAMP OVER THE SOUTH LANES OF FAI ROUTE 64 AT STATION 94A+69.07, 3 SPANS; 1 SPAN AT 61'-4", 1 SPAN AT 78'-6", AND 1 SPAN AT 56'-2" WITH A 20' ROADWAY, AND OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THE SECTION.

EARTH EXCAVATION FOR THE BRIDGE AT STATION 94A+69.07 SHALL BE OBTAINED WITHIN THE LIMITS OF THE RIGHT OF WAY BETWEEN STATIONS 694+00 TO 710+00. (SEE SPECIAL PROVISIONS).

EMBANKMENT FOR THE BRIDGE AT STATION 604+20 SHALL BE FURNISHED BY THE CONTRACTOR FROM SOURCES APPROVED BY THE ENGINEER. (SEE SPECIAL PROVISIONS).

NO PAYMENT WILL BE MADE FOR OVERHAUL ON ANY MATERIAL MOVED FROM ANY SOURCE.

THE CONTRACTOR SHALL FURNISH AND ERECT FIVE (5) SIGNS FOR HIGHWAY IMPROVEMENT IN ACCORDANCE WITH STANDARD 2136 INCLUDED IN THE PLANS AND AT LOCATIONS DESIGNATED BY THE ENGINEER.

INDEX OF SHEETS

FAI ROUTE 64, SECTION 51-23HB-3, 51-23HB-4, 51-23HB-6

LAWRENCE COUNTY

CLASS I CONCRETE SCHEDULE

FAI ROUTE 64, SECTION 51-23HB-3, 51-23HB-4, 51-23HB-6

LAWRENCE COUNTY

LOCATION	CLASS I CONCRETE (CU.YDS.)	REINFORCEMENT BARS (LBS.)	STRUCTURAL STEEL (LBS.)
BRIDGE, STATION 604+20	455.0	94,800	12,950
SUB-TOTAL SECTION 51-23HB-3	455.0	94,800	12,950
BRIDGE STATION 686+02	449.3	55,080	177,310
SUB-TOTAL SECTION 51-23HB-4	449.3	55,080	177,310
BRIDGE, STATION 94A+69.07	299.4	36,950	160,390
CULVERT, STATION 702+02	4.4	140	
SUB-TOTAL SECTION 51-23HB-6	303.8	37,090	160,390
TOTALS SECTIONS 51-23HB-3, 51-23HB-4 AND 51-23HB-6	1208.1	186,970	351,150

SUMMARY OF QUANTITIES

FAI ROUTE 64, SECTION 51-23HB-3, 51-23HB-4, 51-23HB-6

LAWRENCE COUNTY

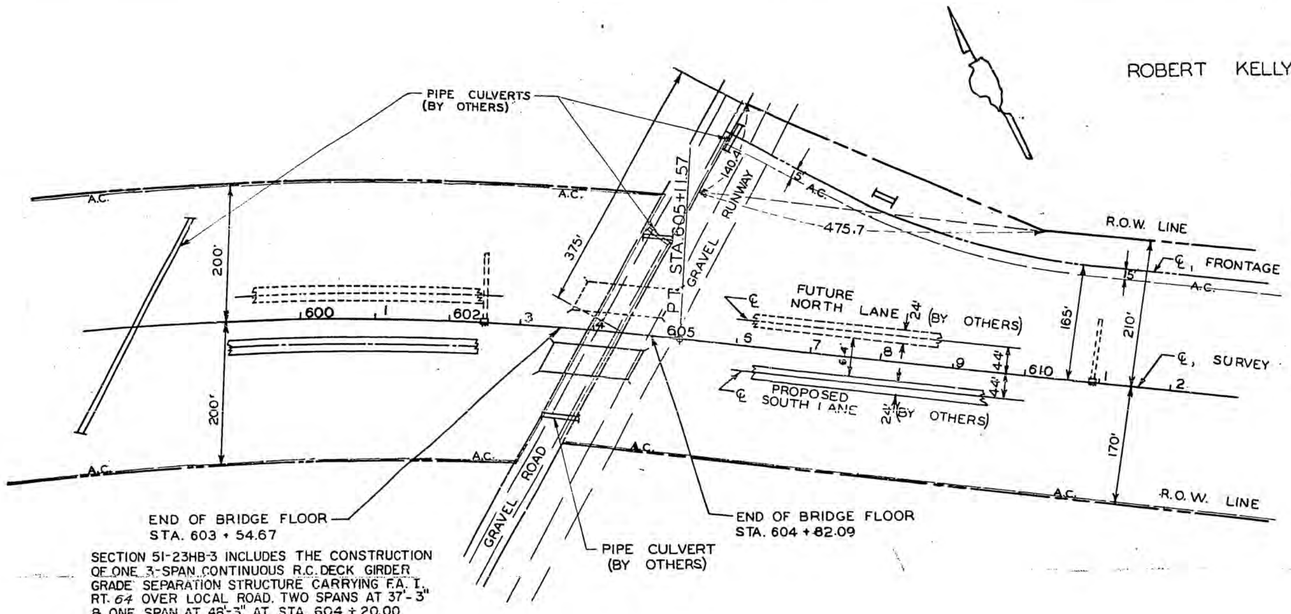
ITEMS	UNIT	PROJ. FI-08-4(18) SECTION 51-23HB-3	PROJ. FI-08-4(19) SECTION 51-23HB-4,6	TOTAL ALL SECTIONS
CLASS X CONCRETE	CU.YDS.	455.0	753.1	1,208.1
REINFORCEMENT BARS	LBS.	94,800	92,170	186,970
FURNISHING AND ERECTING STRUCTURAL STEEL	LBS.	12,950	338,200	351,150
EMBANKMENT	CU.YDS.	9,250		9,250
EARTH EXCAVATION	CU.YDS.		2756	2,756
CLASS A EXCAVATION FOR STRUCTURES	CU.YDS.	171	517	688
ROCK EXCAVATION FOR [illegible]	CU.YDS.		180	180
SLOPE WALL	SQ.YDS.	778	840	1,618
NAME PLATES	EACH	1	3	4
TEST PILES (CREOSOTED TIMBER)	EACH	1		1
TEST PILES (CONCRETE)	EACH	1		1
TEST PILES (STEEL)	EACH		2	2
FURNISHING CREOSOTED PILES (20.1' to 38')	LIN.FT.	1,092	348	1,440
FURNISHING CREOSOTED PILES (OVER 38')	LIN.FT.	668		668
FURNISHING CONCRETE PILES	LIN.FT.	423		423
FURNISHING STEEL PILES (12 BP53)	LIN.FT.		224	224
DRIVING TIMBER PILES	LIN.FT.	1,760	348	2,108
DRIVING CONCRETE PILES	LIN.FT.	423		423
DRIVING STEEL PILES	LIN.FT.		224	224
PIPE CULVERTS, TYPE 2A (RCP-CLASS III) 24"	LIN.FT.		100	100
ALTERNATE A: METAL HANDRAIL	LIN.FT.	283	922	1,205
ALTERNATE B: ALUMINUM HANDRAIL	LIN.FT.	293	942	1,235

HIGHWAY CLASSIFICATION
F.A.I. ROUTE 64 1690-T-70
F.A. ROUTE 13 SPUR 450-M-50
LOCAL ROAD STA. 686+02 40-P-60

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 64	51-23*	LAWRENCE	34	3
STA. 594+00			STA. 612+00	

*HB-3, HB-4, HB-6

ROBERT KELLY

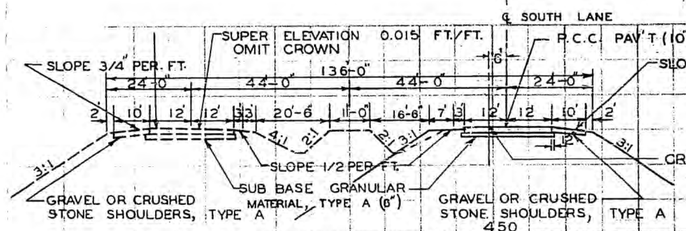


CURVE DATA
℄ SURVEY F.A.I. RT. 64
P.I. STA. 581+12.32
Δ = 66°00' D = 1°12'
R = 4774.74' T = 3100.75
L = 5500 E = 918.5
S.E. = 0.015'/' ATTAINED STA. 605.12
TO STA. 606+12

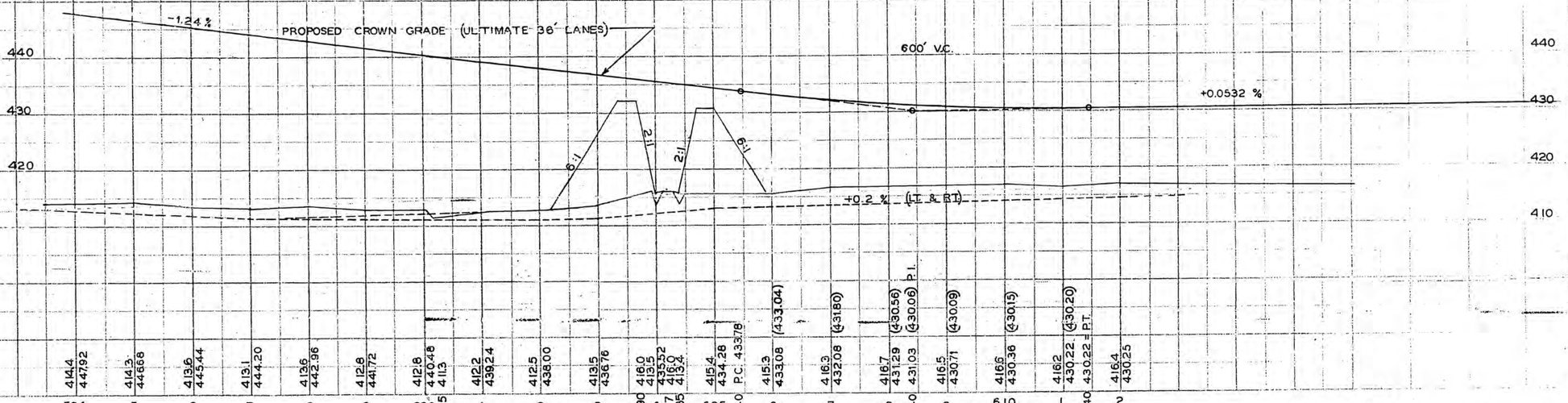
NOTE: DASHED LINES INDICATE FUTURE CONSTRUCTION

SECTION 51-23HB-3 INCLUDES THE CONSTRUCTION OF ONE 3-SPAN CONTINUOUS R.C. DECK GIRDER GRADE SEPARATION STRUCTURE CARRYING F.A.I. RT. 64 OVER LOCAL ROAD. TWO SPANS AT 37'-3" & ONE SPAN AT 48'-3" AT STA. 604 + 20.00 WITH 39' ROADWAY

B.M. ~ S.&W. IN 30" COTTONWOOD 300' RT.
STA. 606 + 00 ELEV. 418.48



TYPICAL CROSS SECTION



737

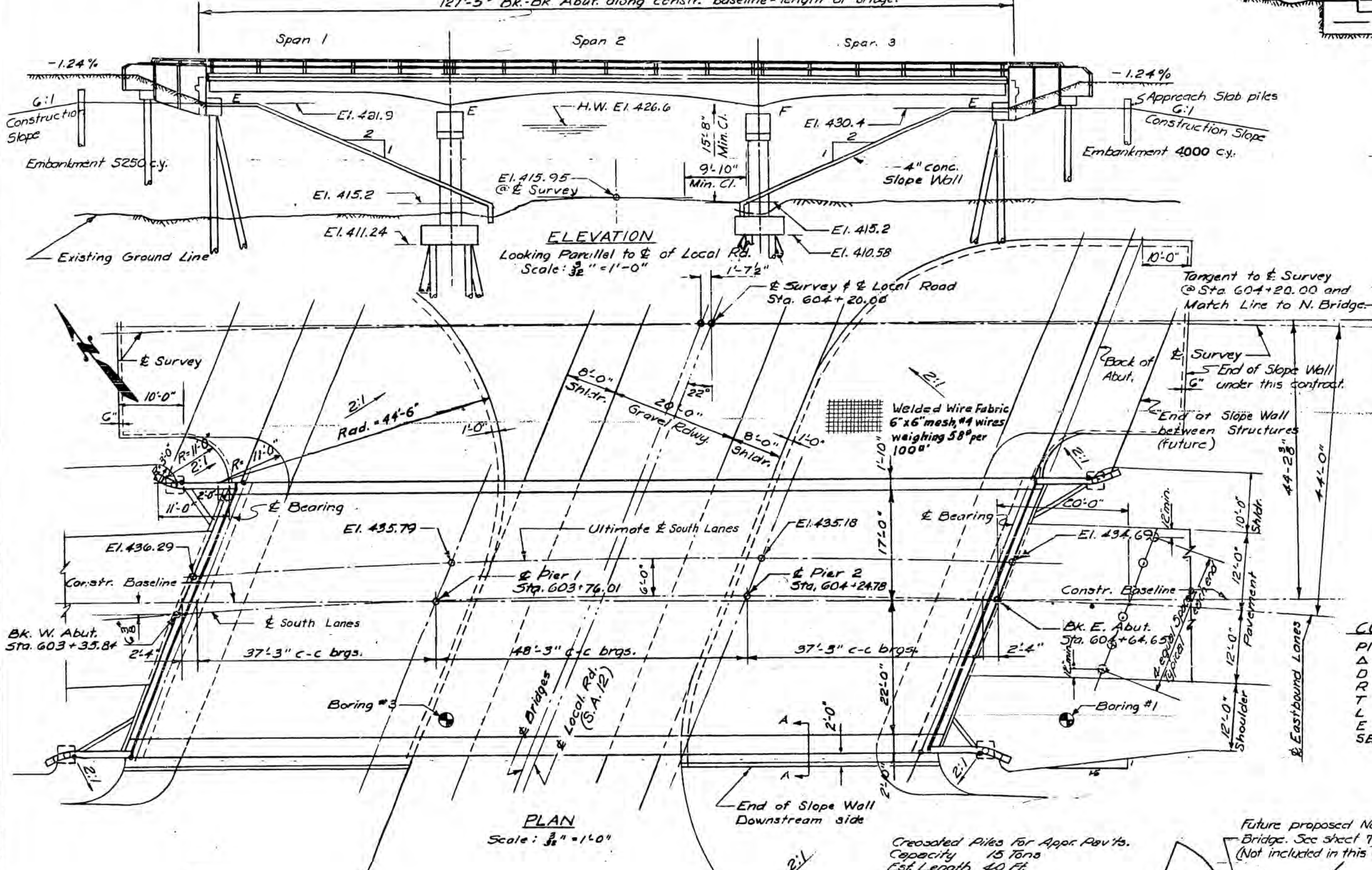
F.A.I. ROUTE 64 SEC-51-23 HB-3 LAWRENCE CO. BRIDGE STA. 604 + 20
SEC. 51-23 HB-4
SEC. 51-23 HB-6

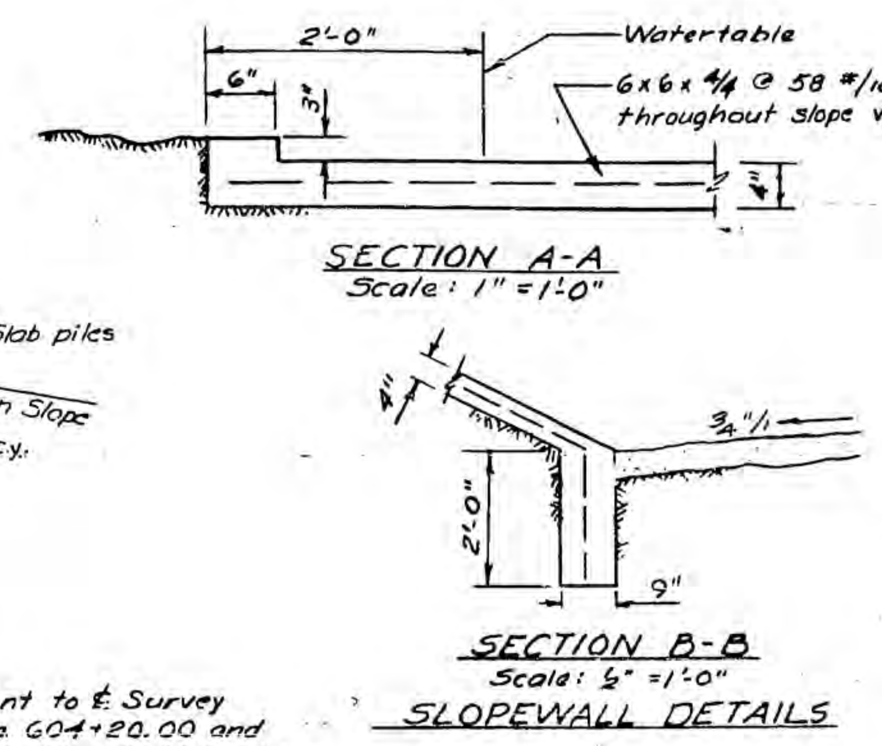
SHEET NO. 1	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10 SHEETS	F.A.I. 64	51-23*	LAWRENCE	34	6
	FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

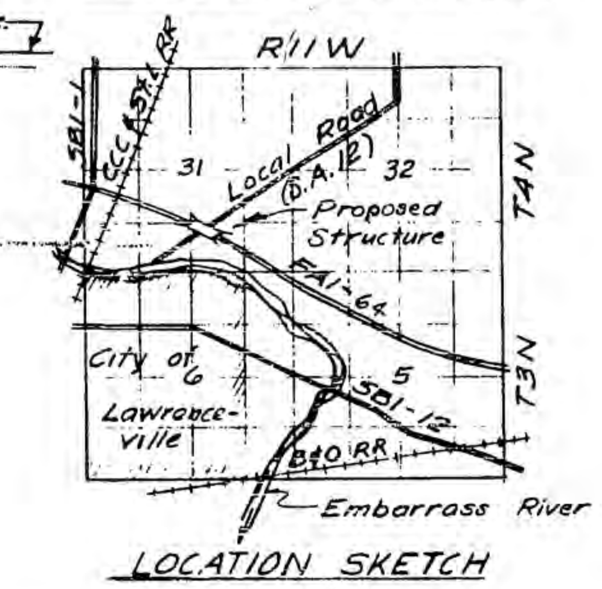
*HB-3, HB-4, HB-6

B.M.: S¼W in 30" Cottonwood 300' Rt. Sta. 606+00. El. 418.64

No existing structure.







GENERAL NOTES

1. SPECIFICATIONS: THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION," ADOPTED JANUARY 2, 1958, SHALL APPLY.
2. CONCRETE: CLASS X CONCRETE SHALL BE USED THROUGHOUT. THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS.
3. HANDRAIL: SEE SPECIAL PROVISIONS FOR OPTIONAL HANDRAIL TYPES AND BASIS OF PAYMENT.
4. STRUCTURAL STEEL: ALL ROCKERS, BEARING PLATES, LEAD PLATES, PINTLES AND ANCHOR BOLTS IN THE BRIDGE BEARINGS, AND ALL STEEL IN THE EXPANSION JOINTS SHALL BE FURNISHED AND SET IN ACCORDANCE WITH ARTICLES 51.15 AND 51.13 RESPECTIVELY, AND ARE INCLUDED FOR PAYMENT AS STRUCTURAL STEEL.
5. PAINT: EXCEPT AS OTHERWISE PROVIDED ALL STRUCTURAL STEEL AND METAL HANDRAIL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT IN ACCORDANCE WITH ARTICLES 56.1 THROUGH 56.5 OF THE STANDARD SPECIFICATIONS. ALL PAINT SHALL BE FURNISHED AND APPLIED BY THE CONTRACTOR.
6. PILES: BEARING CAPACITY SHALL BE AS SHOWN ON THE PLANS. SEE SPECIAL PROVISIONS FOR OPTIONAL PILE TYPES AND BASIS OF PAYMENT.
7. TEST PILES: THE CONTRACTOR SHALL DRIVE ONE TEST PILE AT WEST ABUTMENT AND PIER 2 IN PERMANENT LOCATIONS IN ACCORDANCE WITH ARTICLE 60.15 OF THE STANDARD SPECIFICATIONS BEFORE ORDERING THE REMAINDER OF THE PILES.
8. EMBANKMENT: SEE SPECIAL PROVISIONS.
9. PILES: At the abutments Piles shall be driven thru holes drilled thru the embankment in accordance with Article 60.9 (c) of the Standard Specifications

NAME PLATE DATA

See Standard 2113

STATION 604+20.00
BUILT 19 BY
STATE OF ILLINOIS
FAI Rt. 64 SEC. 51-23HB-3
F.A. PROJECT FI-08-4(18)
LOADING H20-S16 & ALT.

CURVE DATA

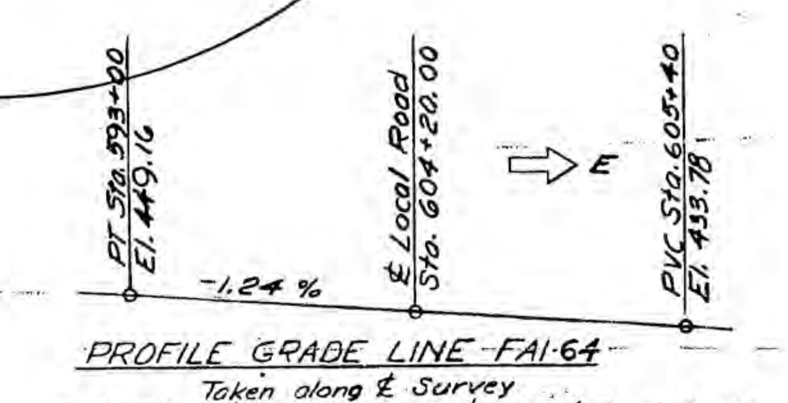
PI Sta. 581+12.32
Δ = 66°-00'
D = 1°-12'
R = 4774.74
T = 3100.75
L = 5500'
E = 918.5'
SE = 0.015 '/'
Attained Sta. 605+12 to Sta. 606+12

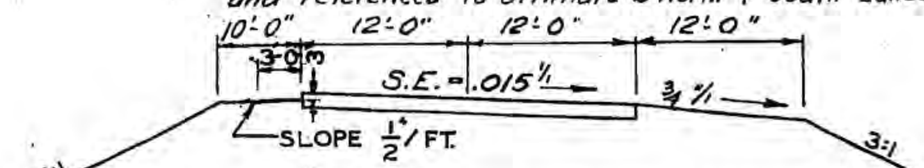
BILL OF MATERIAL - SOUTH BRIDGE

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
Class X Concrete	Cu. Yds	238.0	217.0	455.0
Reinforcement Bars	Lbs.	75,030	19,770	94,800
Structural Steel	Lbs.	12,950		12,950
Alternate A: Metal Handrail	Lin. Ft.	283		283
Alternate B: Aluminum Handrail	Lin. Ft.	293		293
Slope Wall	Sq. Yds.		778	778
Class A Excavation for Struc.	Cu. Yds.		171	171
Name Plates	Ea.	1		1
Concrete Piles	Lin. Ft.		423	423
Test Piles (concrete)	Ea.		1	1
Creosoted Piles, 20.1' - 38'	Lin. Ft.		1092	1092
Test Piles (Creosoted Timber)	Ea.		1	1
Embankment	Cu. Yds.		9250	9250
Creosoted Piles, Over 38'	Lin. Ft.		668	668

GEOMETRY NOTES

All stationing is referred to ℄ Survey.
Construction Baseline is parallel to a line tangent to the ℄ Survey at Sta. 604+20.00.
Construction Baseline intersects ℄ South Lanes at back of E. Abut. on south bridge.
Construction Baseline intersects ℄ North Lanes at back of W. Abut. on north bridge.



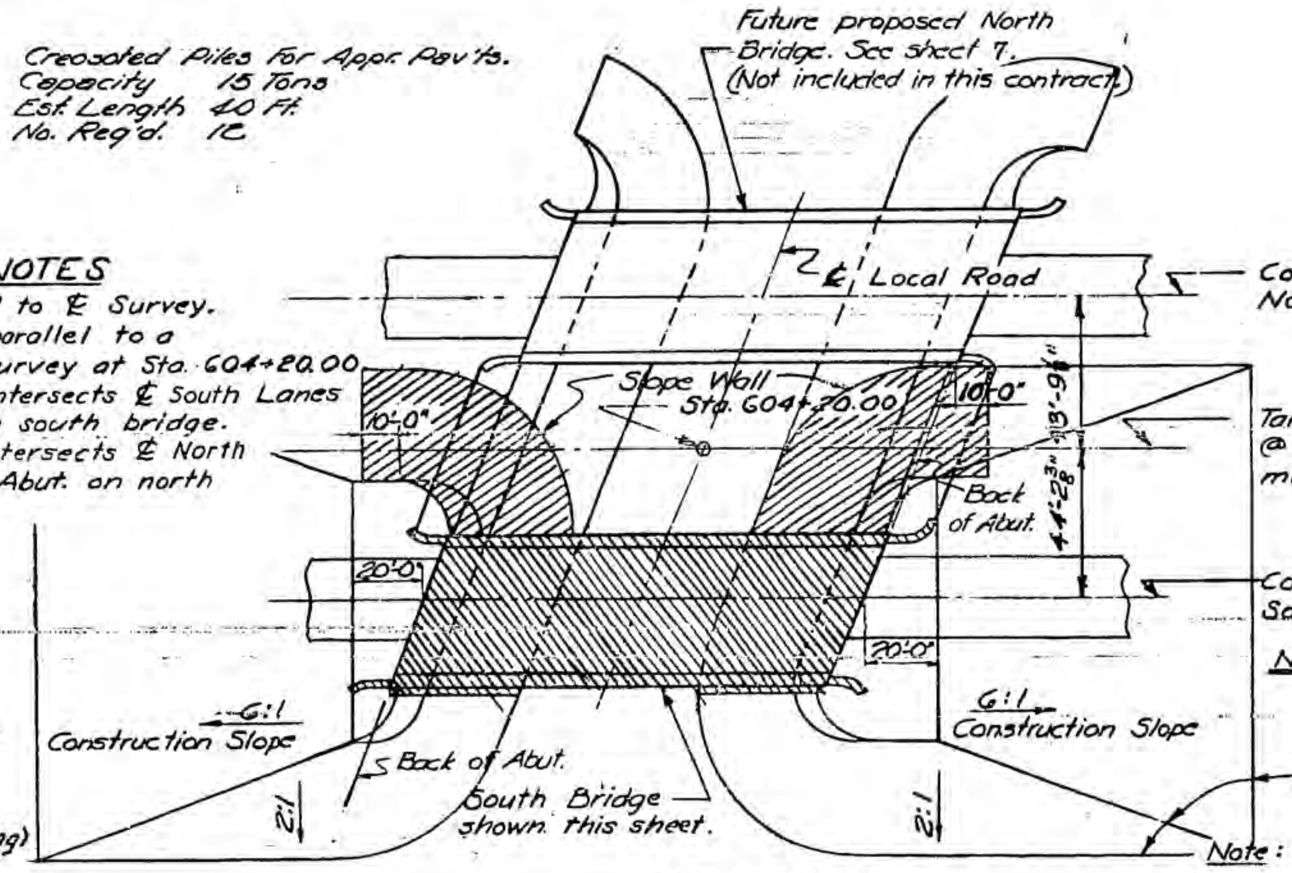


DESIGN STRESSES

f_c = 1400 psi (Super.)
f_c = 1000 psi (Sub.)
f_s = 20,000 psi (Reinf.)
f_s = 18,000 psi (Struct.)
n = 10
v = 75 psi (shear in pier footing)

LOADING

H-20-S16-44 & Alternate



Note: Cross-hatched portion of South Bridge to be constructed under this contract. Information pertaining to North Bridge is included for reference purposes only.

Note: See sheet 7 for boring data.

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

NO.	REVISION	BY	DATE
1	Deleted North Bridge	RWA	12-6-58

GENERAL PLAN AND ELEVATION—SOUTH BRIDGE

SECTION 51-23HB-3 STATION 604+20.00
FAI. RTE 64 PROJECT FI-08-4( )
LAWRENCE COUNTY

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED W.G.G	SCALE AS NOTED	SHEET 1
DRAWN R.W.A		
CHECKED G.W.Z	DATE 11-21-57	OF 10

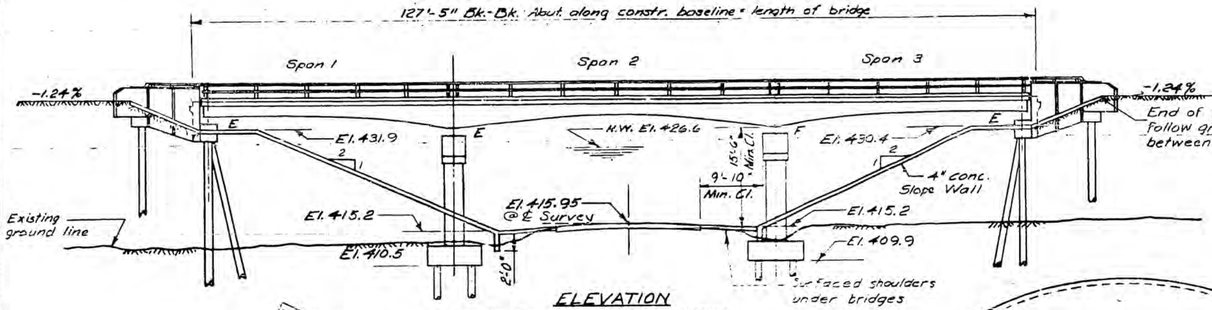
CD&D NO. 389-C

B.M. – 5/8" W in 30" Cottonwood 300' Rt. Sta. 606+00. El. 418.64.

No existing structure.

SHEET NO. 2 10 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	F.A.I 64	51-23*	LAWRENCE	34	7
	FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

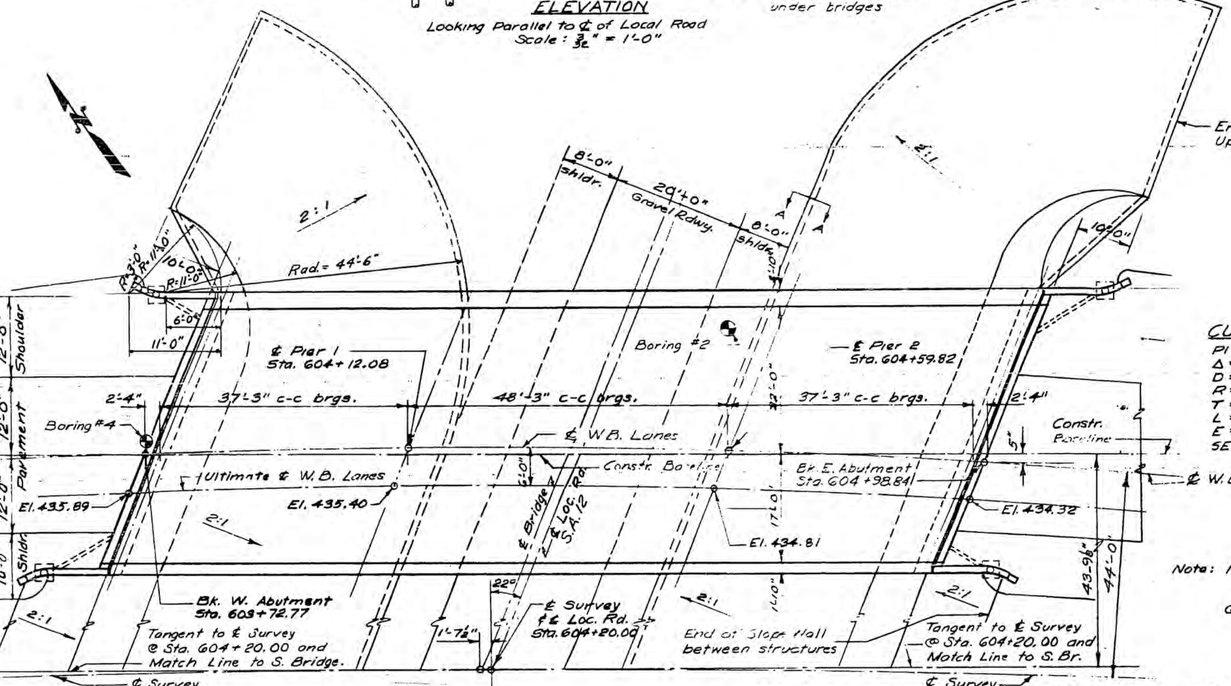
*HB-3; H3-4, HP-6



ELEVATION

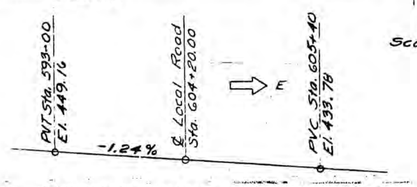
Looking Parallel to ℄ of Local Road

Scale: 3/32" = 1'-0"



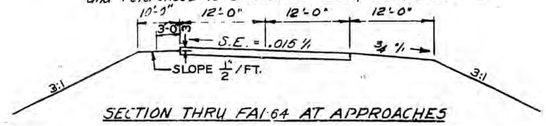
PLAN

Scale: 3/32" = 1'-0"

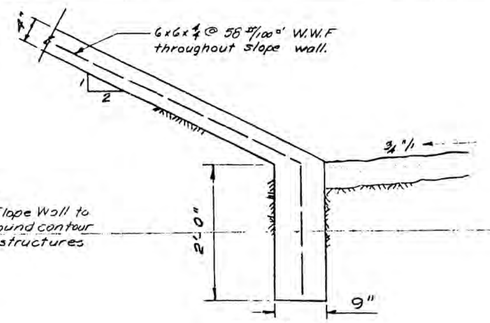


PROFILE GRADE LINE FAI-64

Taken along ℄ Survey and referenced to Ultimate ℄ E.B. & W.B. Lanes



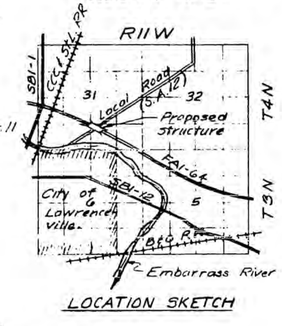
SECTION THRU FAI-64 AT APPROACHES



SECTION A-A

SLOPEWALL DETAILS

Scale: 1" = 1'-0"



LOCATION SKETCH

See sheet 6 for General Notes and Key Plan.

NAME PLATE DATA

See Standard 2113

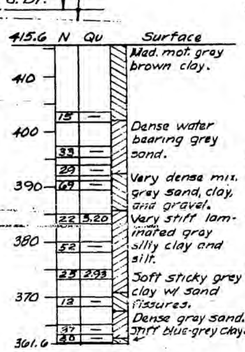
STATION 604+20.00
BUILT 195 BY
STATE OF ILLINOIS
FAI-64 SEC. 51-23HB-3
FI PROJECT FI-08-4(5)
LOADING H20-S16

CURVE DATA

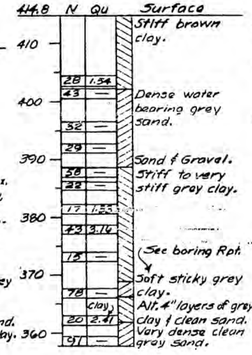
PI Sta. 581+12.32
Δ = 66°-00'
D = 1°-12'
R = 4774.74'
T = 3100.75'
L = 5500'
E = 918.5'
SE = 0.015% Attained Sta. 605+12 to Sta. 606+12.

BORING DATA

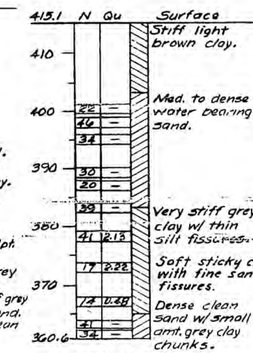
Note: N = Blows per foot of penetration of sampling spoon. Hammer weight = 350 lbs. Drop = 12 inches.
Qu = Unconfined compressive strength in tons per square foot.



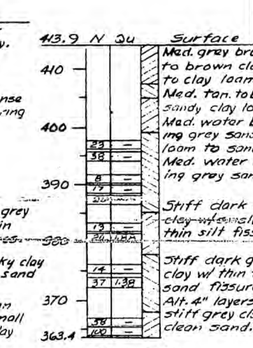
BORING #1
Sta. 604+75
63' Rt. Survey ℄



BORING #2
Sta. 604+60
63' Lt. Survey ℄



BORING #3
Sta. 603+76
63' Rt. Survey ℄



BORING #4
Sta. 603+73
46' Lt. Survey ℄

GEOMETRY NOTES

All stationing is referred to ℄ Survey.
Construction Baseline is parallel to a line tangent to the ℄ Survey at Sta. 604+20.00.
Construction Baseline intersects ℄ E.B. lanes at back of E. Abut. on South bridge.
Construction Baseline intersects ℄ W.B. lanes at back of W. Abut. on north bridge.

DESIGN STRESSES

f_c = 1400 psi (Super.)
f_s = 20,000 " (Rein.)
f_s = 18,000 " (Struc.)
n = 10

LOADING

H-20-S16-44

BILL OF MATERIAL – NORTH BRIDGE

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
Class X Concrete*	Cu. Yds.	238.0	186.8	424.8
Reinforcement Bars	Lbs.	76,800	18,370	95,170
Structural Steel	Lbs.	12,845		12,845
Metal Handrail	Lin. Ft.	250.5		250.5
Name Plates	Each	1		1
Slope Wall	Sq. Yds.		960	960
Class A Excavation for Struc.	Cu. Yds.		174	174
12" Metal Shell Piles	Lin. ft.		2,090	2,090
Test Piles (12" Metal Shell)	Each		2	2

*See General Notes nos. G #7

Note: North Bridge is proposed for the future, and is not included in this contract. Information pertaining to the North Bridge is void. This sheet is included for presenting Boring Data only.

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

NO.	REVISION	BY	DATE
1	Omission of North Bridge from Sec.	GWZ	11-15-58

GENERAL PLAN AND ELEVATION-NORTH BRIDGE

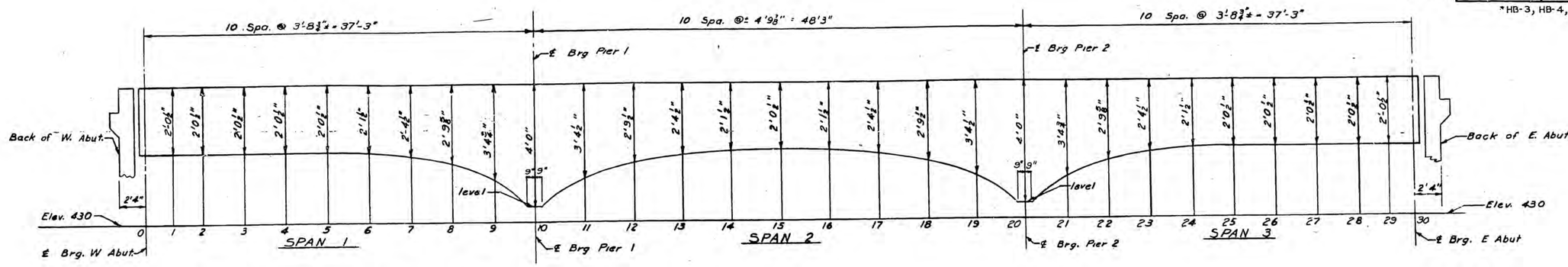
SECTION 51-23HB-3 F.A.I. RTE. 64 LAWRENCE COUNTY
STATION 604+20.00
PROJECT FI-08-4( )

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED W.G.G	SCALE AS NOTED	SHEET	2
DRAWN R.W.A	DATE 11-22-57	OF	10
CHECKED G.W.Z	CD&D NO. 389-C		

SHEET NO. 4	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10 SHEETS	F.A.I. 64	51-23 *	LAWRENCE	34	6
	FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

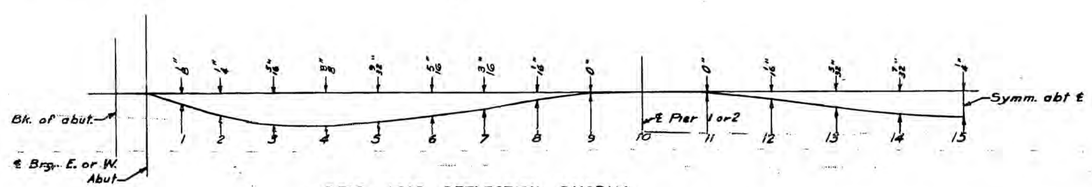
*HB-3, HB-4, HB-6



Note: Ordinates given in table are the Vertical distances between elevation 430 and the bottom of the girders. They include allowance for dead load deflection and superelevation. The contractor shall make allowance for settlement of forms and shrinkage of concrete

TABLE OF ORDINATES FOR GIRDERS

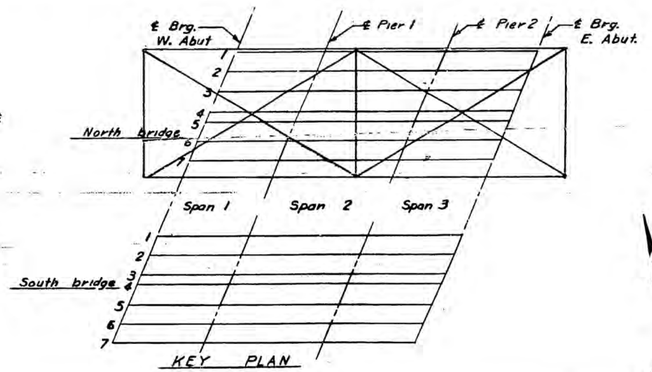
	Point / Girder	℄ Brg W. Abut	1	2	3	4	5	6	7	8	9	℄ Brg Pier 1	11	12	13	14	15	16	17	18	19	℄ Brg Pier 2	21	22	23	24	25	26	27	28	29	℄ Brg E. Abut
		SPAN 1										SPAN 2										SPAN 3										
NORTH BRIDGE	1	4'1¼"	4'1"	4'0⅝"	4'0⅝"	3'11½"	3'10⅞"	3'9⅜"	3'6⅜"	3'0⅝"	2'4⅜"	1'8¼"	2'3½"	2'9⅛"	3'1⅞"	3'4⅝"	3'4½"	3'2⅜"	2'11"	2'5½"	1'9½"	1'1½"	1'8½"	2'3¾"	2'7⅝"	2'10"	2'10"	2'9½"	2'8⅝"	2'8¼"	2'7½"	2'7¼"
	2	4'0⅜"	4'1¼"	3'11⅛"	3'11⅛"	3'10⅜"	3'10⅛"	3'8⅞"	3'5½"	2'11⅞"	2'3⅞"	1'7⅜"	2'2⅜"	2'8⅝"	3'1"	3'3¼"	3'3⅝"	3'2⅞"	2'10¼"	2'4⅜"	1'8⅝"	1'0⅜"	1'7⅛"	2'2⅜"	2'6⅝"	2'9¼"	2'9¼"	2'8⅝"	2'8⅛"	2'7⅜"	2'6⅜"	2'6⅜"
	3	3'11¼"	3'11⅛"	3'11"	3'10½"	3'9⅝"	3'9¼"	3'8⅛"	3'4⅝"	2'11"	2'3"	1'6⅝"	2'1½"	2'7¼"	3'0⅛"	3'2½"	3'2¾"	3'1"	2'9¼"	2'3½"	1'7¾"	0'11½"	1'6¾"	2'1½"	2'6"	2'8⅛"	2'8⅜"	2'7¾"	2'7¼"	2'6½"	2'5⅜"	2'5½"
	4	3'10¼"	3'10½"	3'10⅛"	3'9⅝"	3'9"	3'8⅜"	3'7¼"	3'3⅜"	2'10⅝"	2'2¼"	1'5⅜"	2'0⅝"	2'6⅜"	2'11½"	3'1⅝"	3'1⅞"	3'0⅛"	2'8½"	2'2⅝"	1'7"	0'10⅝"	1'5⅞"	2'0⅜"	2'5¼"	2'7⅛"	2'7½"	2'6⅞"	2'6¼"	2'5⅝"	2'4⅝"	2'4⅝"
	5	3'10⅜"	3'10¼"	3'9⅞"	3'9¼"	3'8⅝"	3'8"	3'6⅞"	3'3⅜"	2'9⅞"	2'1¼"	1'5⅜"	2'0¼"	2'6¼"	2'10⅝"	3'1¼"	3'1½"	2'11¾"	2'8"	2'2¼"	1'6¼"	0'10¼"	1'5¼"	2'0¼"	2'4⅜"	2'7"	2'7⅜"	2'6½"	2'5⅞"	2'5¼"	2'4⅔"	2'4¼"
	6	3'9⅜"	3'9¼"	3'8⅞"	3'8⅜"	3'7⅞"	3'7⅜"	3'6"	3'2⅞"	2'8⅞"	2'0⅞"	1'4⅜"	1'11⅜"	2'5⅜"	2'10"	3'0¼"	3'0⅝"	2'10⅞"	2'7⅞"	2'1⅜"	1'5⅜"	0'9¼"	1'4⅝"	1'11⅜"	2'3⅛"	2'6⅜"	2'6⅛"	2'5⅝"	2'5"	2'4⅜"	2'3⅝"	2'3½"
	7	3'8¼"	3'8⅜"	3'7⅝"	3'7⅛"	3'6¼"	3'5"	3'4⅛"	2'8"	2'0"	1'3½"	1'0¼"	2'4⅔"	2'9⅛"	2'11⅜"	3'1¼"	2'11¾"	2'10"	2'6¼"	2'0¼"	1'4⅜"	0'8⅜"	1'3⅝"	1'10¼"	2'3"	2'5¼"	2'5¼"	2'4½"	2'4⅛"	2'3⅜"	2'2⅝"	2'2⅝"
SOUTH BRIDGE	1	4'3¾"	4'3⅜"	4'3"	4'2⅜"	4'1⅞"	4'1¼"	3'-11⅝"	3'7⅛"	3'2¼"	2'6½"	1'10¼"	2'5½"	2'11⅜"	3'4¼"	3'6½"	3'6⅛"	3'5⅛"	3'1⅝"	2'7½"	1'11⅜"	1'3½"	1'10¼"	2'4⅜"	2'9¼"	3'0"	3'0½"	3'-0"	2'11⅜"	2'10⅜"	2'-10⅝"	2'9⅝"
	2	4'2⅝"	4'2½"	4'2"	4'1½"	4'1"	4'0⅜"	3'10¾"	3'7"	3'1⅜"	2'5⅝"	1'9⅜"	2'4⅜"	2'11"	3'3⅜"	3'5⅜"	3'6"	3'4½"	3'0½"	2'6⅝"	1'10⅛"	1'2⅝"	1'9¼"	2'3⅜"	2'8⅜"	2'11"	2'11⅝"	2'-11⅝"	2'10½"	2'9⅝"	2'-9¼"	2'8½"
	3	4'2"	4'1⅜"	4'1¼"	4'0⅝"	4'0⅛"	3'11½"	3'9⅜"	3'6⅜"	3'0½"	2'4⅜"	1'8⅞"	2'3½"	2'10⅛"	3'2½"	3'4⅜"	3'5"	3'3½"	2'11½"	2'5⅜"	1'9⅞"	1'1⅜"	1'8⅜"	2'3"	2'7½"	2'10⅛"	2'10⅞"	2'10¼"	2'9⅜"	2'9"	2'-8¼"	2'7⅝"
	4	4'1⅝"	4'1¼"	4'0⅜"	4'0¼"	3'11⅜"	3'11⅛"	3'9½"	3'5⅝"	3'0⅛"	2'4⅜"	1'8½"	2'3¼"	2'9⅝"	3'2"	3'4⅜"	3'4⅝"	3'2⅝"	2'11⅛"	2'5⅜"	1'9½"	1'1¼"	1'8"	2'2⅝"	2'7¼"	2'9⅜"	2'10¼"	2'9⅜"	2'9⅛"	2'8½"	2'7⅞"	2'7⅛"
	5	4'0⅜"	4'0⅜"	4'0"	3'11½"	3'10⅝"	3'10¼"	3'8⅜"	3'4⅝"	2'-11¼"	2'3½"	1'7⅜"	2'2½"	2'8⅛"	3'1¼"	3'3½"	3'3⅞"	3'2"	2'10¼"	2'4½"	1'8⅝"	1'0⅜"	1'7⅛"	2'1⅜"	2'6½"	2'8⅜"	2'9⅛"	2'8⅞"	2'8⅛"	2'7⅜"	2'7"	2'6⅜"
	6	4'0"	3'11½"	3'11¼"	3'10⅝"	3'10"	3'9½"	3'7⅞"	3'4"	2'10½"	2'3⅜"	1'6⅞"	2'1⅜"	2'8"	3'0⅜"	3'2⅝"	3'3"	3'1¼"	2'9½"	2'3⅝"	1'7⅞"	0'11⅝"	1'6¼"	2'0⅛"	2'5⅜"	2'8"	2'8⅜"	2'8⅛"	2'7½"	2'6⅝"	2'6⅛"	2'5½"
	7	3'11⅛"	3'10⅜"	3'10¼"	3'9⅞"	3'9¼"	3'8⅝"	3'7"	3'3⅛"	2'9⅝"	2'1⅝"	1'6"	2'0⅜"	2'7¼"	2'11½"	3'1⅞"	3'2⅛"	3'0⅝"	2'8⅜"	2'2⅜"	1'7"	0'10½"	1'5½"	2'0⅛"	2'4½"	2'7¼"	2'7⅜"	2'7¼"	2'6⅝"	2'6"	2'5⅜"	2'4⅝"



DEAD LOAD DEFLECTION DIAGRAM

Note: These values are included in the table of ordinates for girders

Note: The North Bridge is proposed for the future and is not included in this contract. Information pertaining to the North Bridge is void.



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

NO.	REVISION	BY	DATE
1	Rev. S. Bridge ordinates. Deleted N. Br.	GWZ	11-25-58

GIRDER ORDINATES

SECTION 51-23HB-3 STATION 604+20.00
F.A.I. RTE. 64 PROJECT FI-08-4( )
LAWRENCE COUNTY

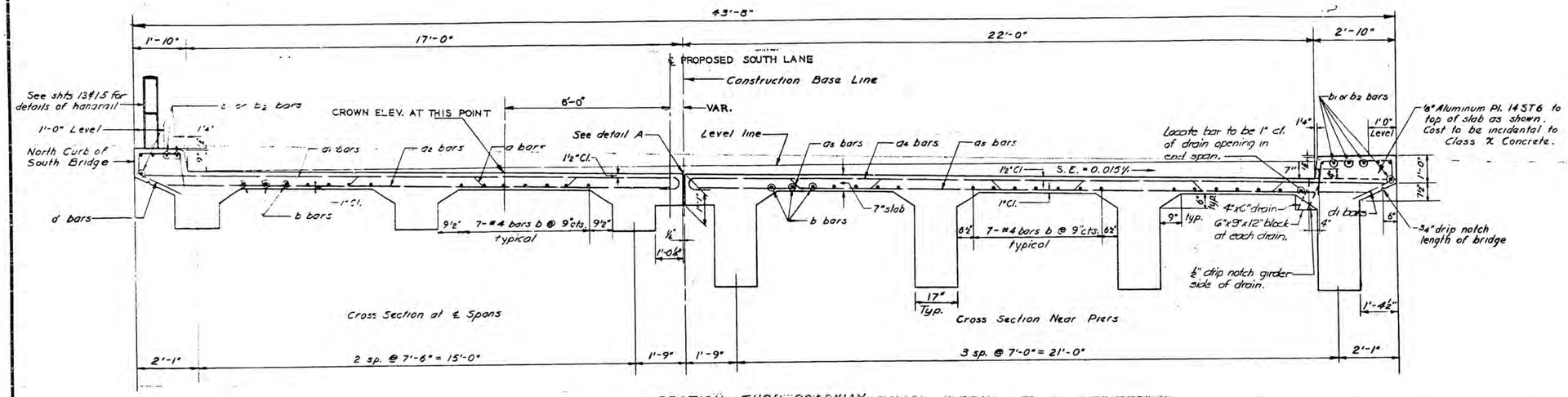
CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED W.G.G	SCALE AS NOTED	SHEET	3
DRAWN B.K.F			
CHECKED J.C	DATE 11-22-57	OF	10

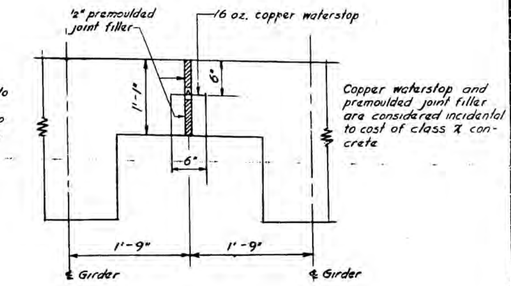
CD&D NO. 389-C

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 64	51-23*	LAWRENCE	34	9
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

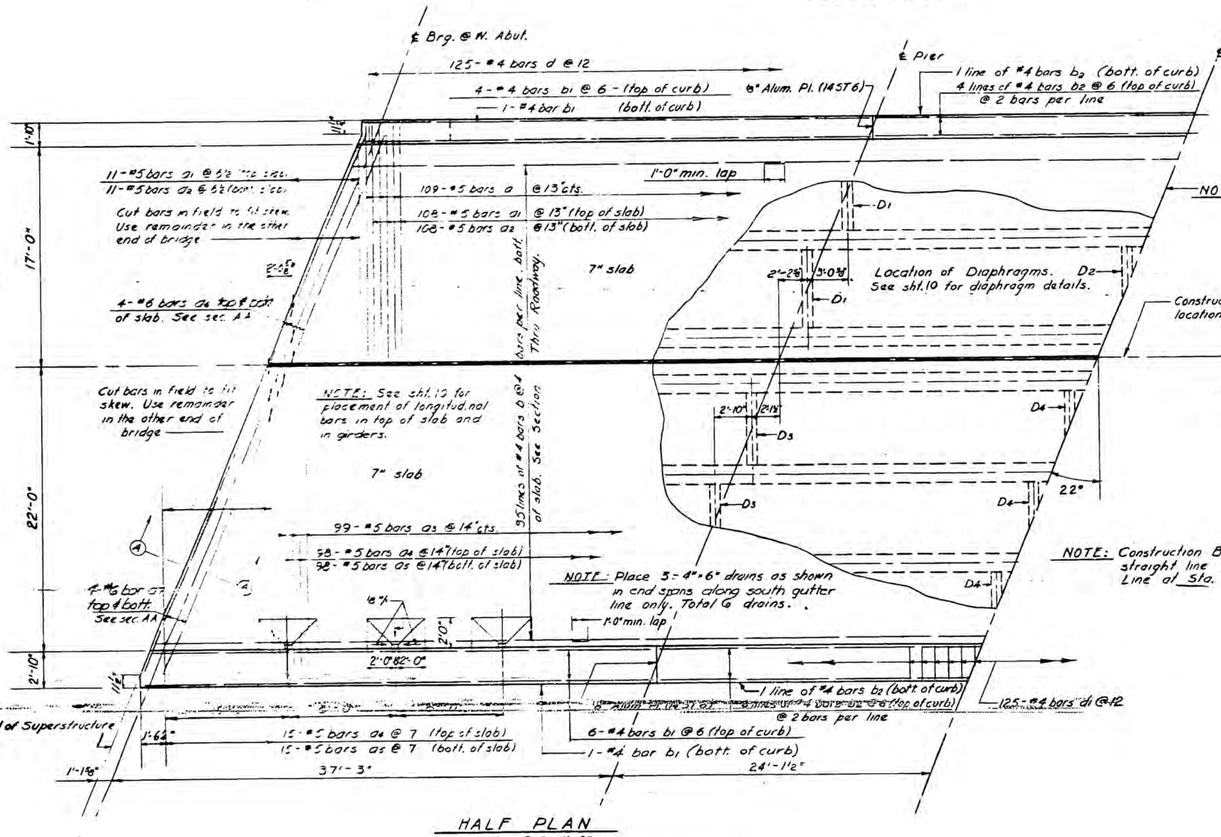
*HB-3, HB-4, HB-6



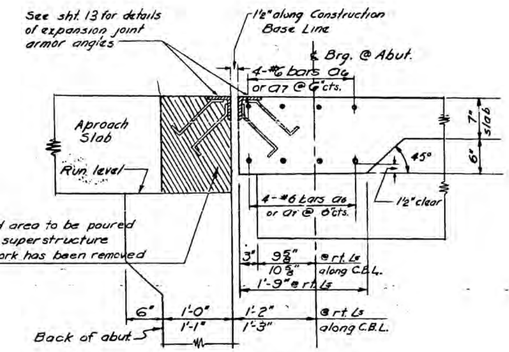
SECTION THRU ROADWAY
Scale: ½" = 1'-0"



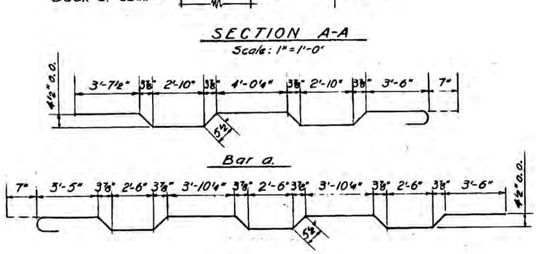
DETAIL A
Longitudinal Joint Details.
Scale: 1" = 1'-0"



HALF PLAN
Scale: 3/16" = 1'-0"



SECTION A-A
Scale: 1" = 1'-0"



NOTE: Construction Base Line is parallel to a straight line tangent to the ℄ Survey Line at Sta. 604+20.00.

BILL OF MATERIALS-SOUTH BRIDGE

Bar	No.	Size	Length	Shape
a	109	#5	19'-2¾	
a1	119	#5	18'-4"	
a2	119	#5	17'-9"	
a3	99	#5	25'-5½	
a4	113	#5	24'-4"	
a5	113	#5	23'-9"	
a6	16	#6	18'-9"	
a7	16	#6	24'-0"	
b	140	#4	31'-9"	
b1	24	#4	37'-6"	
b2	48	#4	24'-4"	
d	125	#4	5'-0¾"	
d1	125	#4	6'-0¾"	
Class X Concrete Cu. Yds.			238.0	
Reinforcement Bars Lbs.			21,360	

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

NO.	REVISION	BY	DATE
1	Omission of North Bridge from Sx. RWA		11-25-58

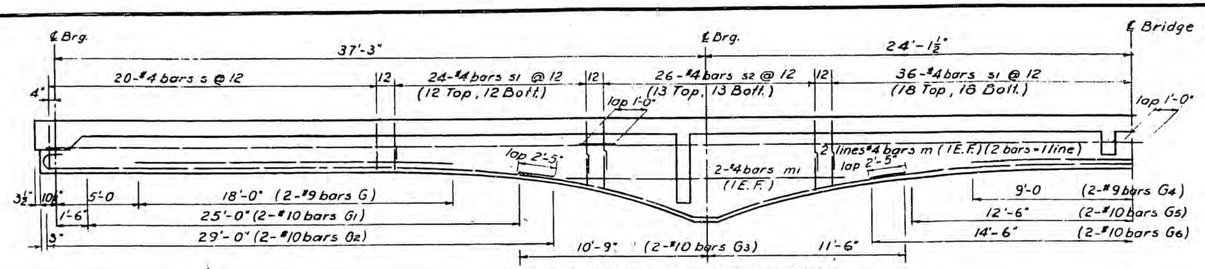
SUPERSTRUCTURE

SECTION 51-23HB-3 STATION 604+20.00
F.A.I. RTE. 64 PROJECT FI-08-4( )
LAWRENCE COUNTY

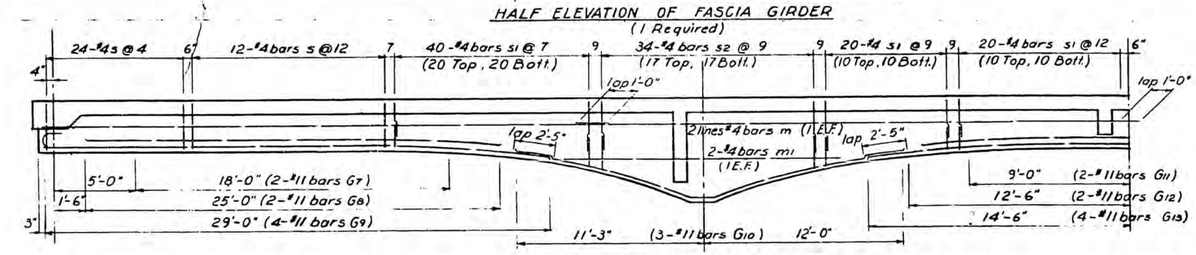
CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED W.G.G	SCALE AS NOTED	SHEET	4
DRAWN J.C			
CHECKED W.G.G	DATE 11-22-57	OF	10

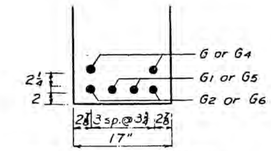
CD&D NO. 389-C



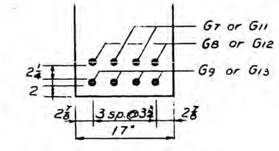
HALF ELEVATION OF FASCIA GIRDER
(1 Required)



HALF ELEVATION OF INTERIOR GIRDER
(6 Required)
Horz. Scale: ½"=1'-0"

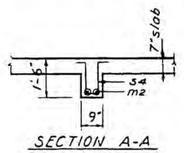


FASCIA GIRDER DETAIL AT ℄ SPANS

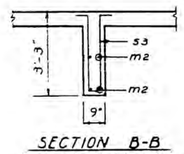


INTERIOR GIRDER DETAIL AT ℄ SPANS

Notes No diaphragm at ℄ span 1 & 3.
Only one fascia girder required due to future widening.



SECTION A-A
Typical for both portions of Roadway

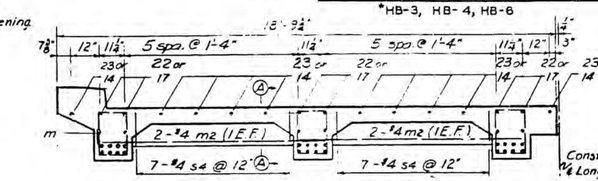


SECTION B-B
Typical for both portions of Roadway

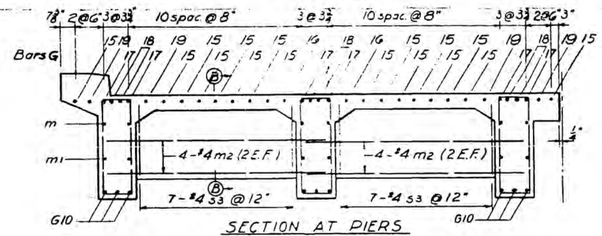
SHEET NO. 5
10 SHEETS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 54	54-23	LAWRENCE	34	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

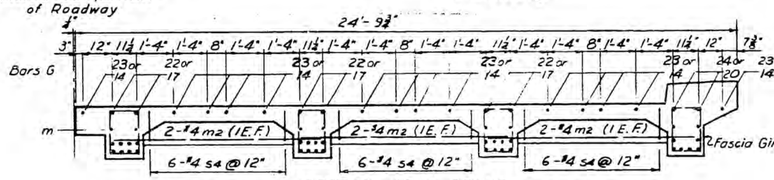
*HB-3, HB-4, HB-6



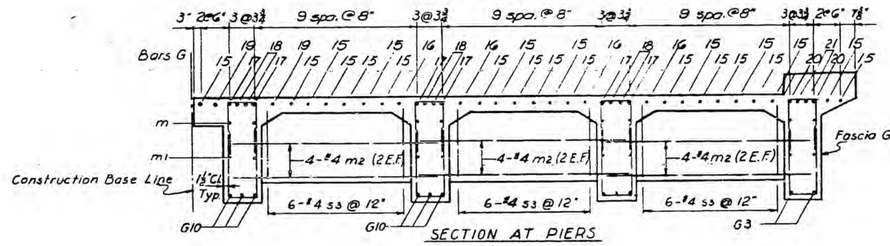
SECTION AT ℄ SPANS
17' Roadway



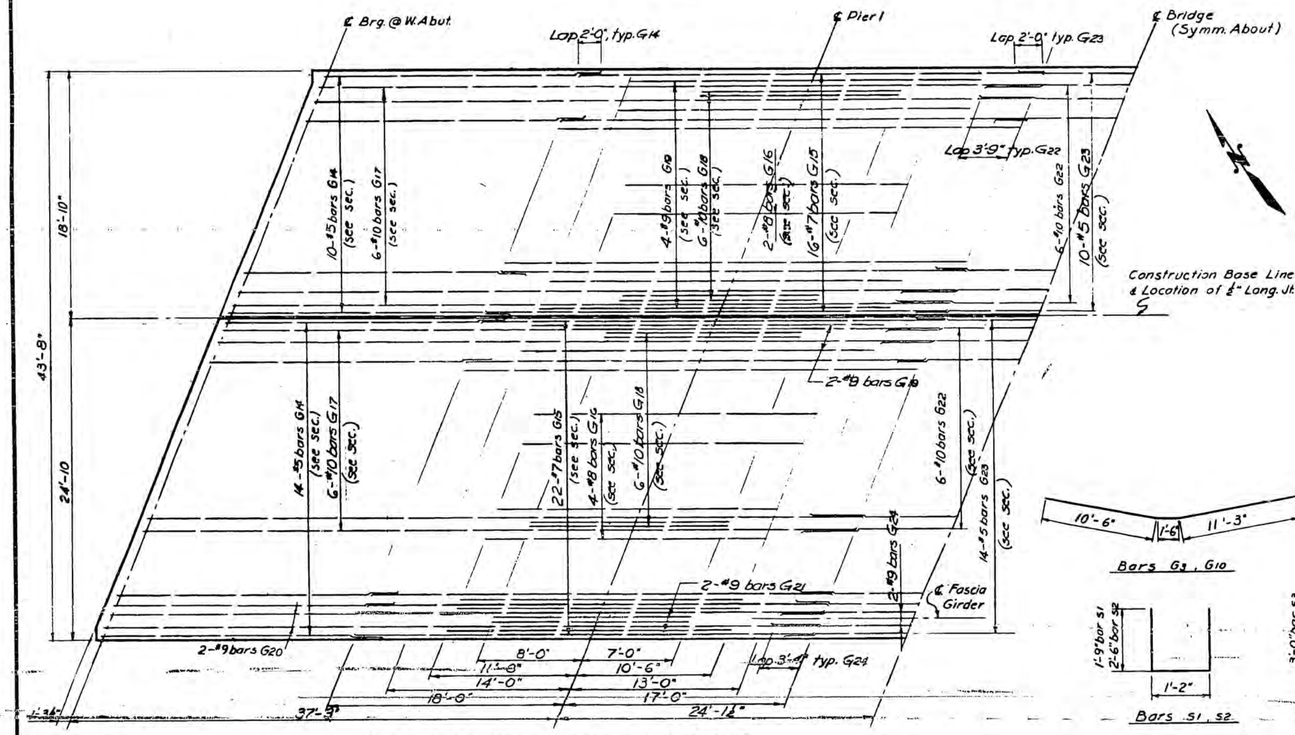
SECTION AT PIERS
17' Roadway



SECTION AT ℄ SPANS
22' Roadway

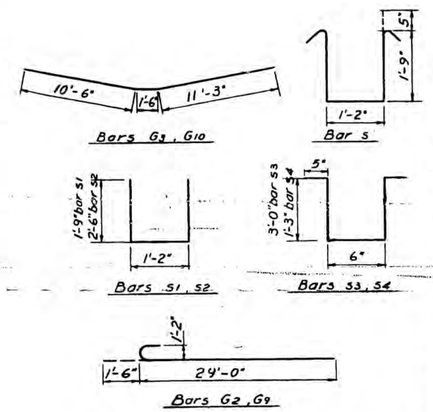


SECTION AT PIERS
22' Roadway
Scale: ⅜"=1'-0"



HALF PLAN REINFORCEMENT-TOP OF SLAB
Scale: ⅛"=1'-0"

Longitudinal steel only.
See Sht 9 for transverse.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
G	4	#9	18'-0"	—	G18	24	#10	15'-0"	—
G1	4	#10	25'-0"	—	G19	12	#9	27'-0"	—
G2	4	#10	30'-6"	⊂	G20	4	#9	54'-9"	—
G3	4	#10	23'-3"	⟋	G21	4	#9	15'-0"	—
G4	2	#9	18'-0"	—	G22	12	#10	21'-9"	—
G5	2	#10	25'-0"	—	G23	24	#5	18'-3"	—
G6	2	#10	29'-0"	—	G24	2	#9	20'-11"	—
G7	24	#11	18'-0"	—					
G8	24	#11	25'-0"	—					
G9	48	#11	30'-6"	⊂					
G10	36	#11	23'-3"	⟋					
G11	12	#11	16'-0"	—					
G12	12	#11	25'-0"	—	m	56	#4	31'-8"	—
G13	24	#11	29'-0"	—	m1	28	#4	16'-0"	—
G14	48	#5	21'-9"	—	m2	50	#4	8'-0"	—
G15	76	#7	35'-0"	—	S	472	#4	5'-6"	⊔
G16	12	#8	21'-6"	—	S1	1078	#4	4'-8"	⊔
G17	24	#10	54'-9"	—	S2	460	#4	6'-2"	⊔
					S3	64	#4	7'-4"	⊔
Reinforcement Bars Lbs.			53670		S4	32	#4	3'-10"	⊔

CD&D NO. 389-C

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

NO.	REVISION	BY	DATE
1	Deleted North Bridge	RWA	12-2-58

GIRDER DETAILS

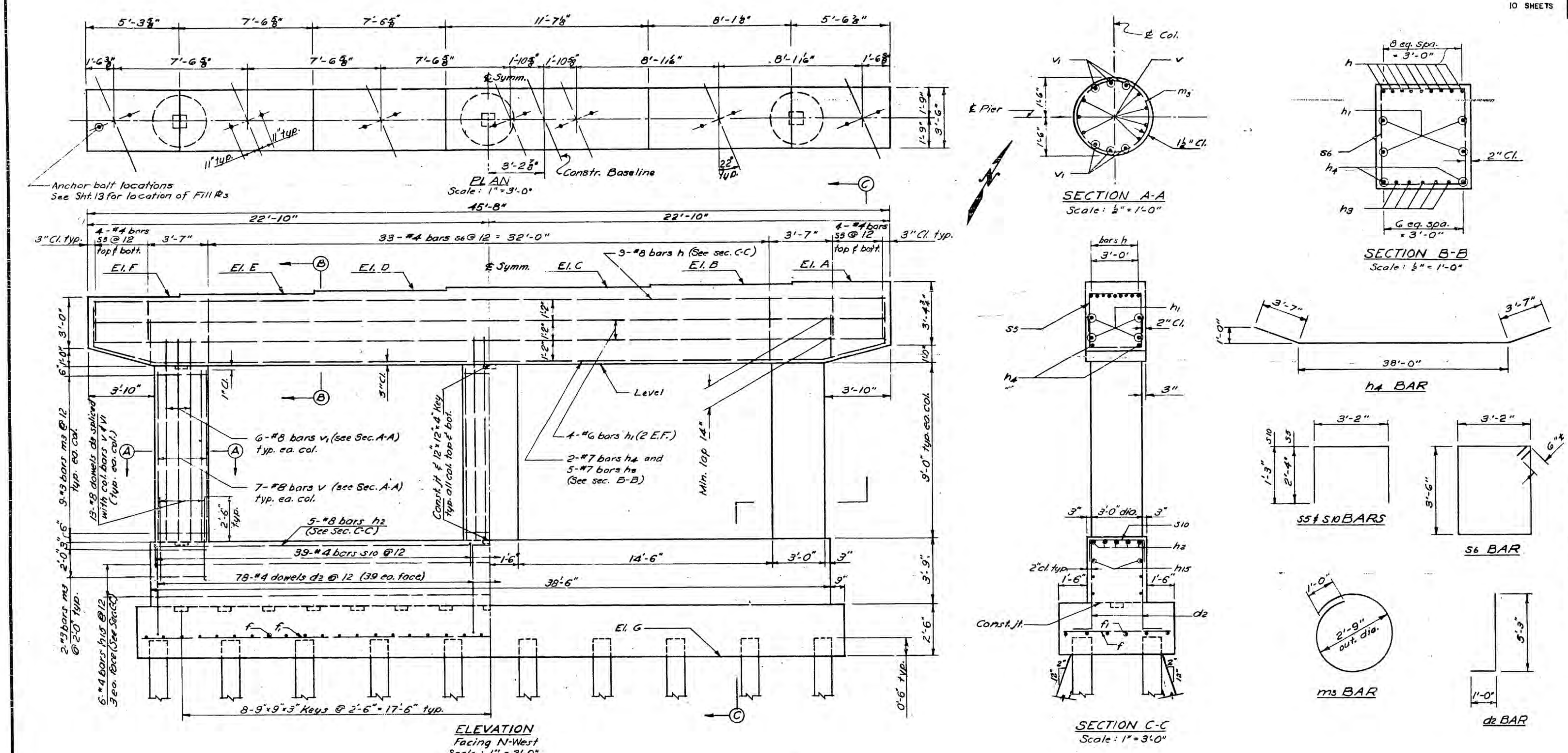
SECTION 54-23HB-3 STATION 604 + 20.00
F.A.I. RTE. 54 PROJECT FI-08-4( )
LAWRENCE COUNTY

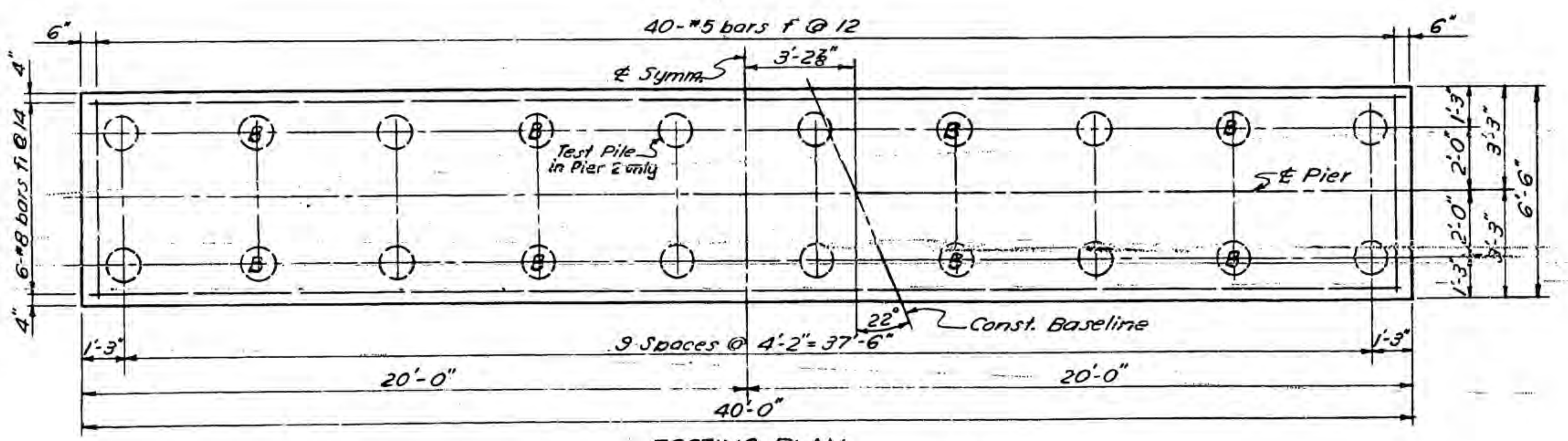
CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED W.G.G.	SCALE AS NOTED	SHEET	5
DRAWN W.G.G.			
CHECKED R.W.A.	DATE 11-22-57	OF	10

SHEET NO. 6 10 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	F.A.I 64	51-23 *	LAWRENCE	34	11
	FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

* HB-3, HB-4, HB-6





FOOTING PLAN
(Showing Reinforcement and Pile details)
Scale: 1" = 3'-0"

PILE DATA

Type: Creosoted Timber
Min. Capacity: 20 Tons
Estimated length: 28'-0"
No. Reqd.: 39 (19 in Pier 2 & 20 in Pier 1)
(Does not include test piles)
Test Piles: 1 (in Pier 2)
Piles marked with "B" driven
to Batter shown

TABLE OF ELEVATIONS

Elev.	Pier 1	Pier 2
A	430.88	430.22
B	430.81	430.15
C	430.70	430.04
D	430.63	429.97
E	430.56	429.90
F	430.49	429.83
G	411.24	410.58

BILL OF MATERIAL - SUBSTR.
PIERS 1 & 2

Bar	No.	Size	Length	Shape
d2	156	4	6'-3"	
d3	78	8	5'-0"	
f	80	5	6'-0"	
f1	12	8	39'-6"	
h	18	8	45'-2"	
h1	8	6	45'-2"	
h2	10	8	38'-2"	
h3	10	7	38'-0"	
h4	4	7	45'-2"	
h15	12	4	38'-2"	
s5	32	4	7'-10"	
s6	66	4	14'-8"	
s10	78	4	5'-8"	
v	42	8	8'-11"	
v1	36	8	10'-5"	
m3	66	3	9'-8"	○

Item	Unit	Total
Class X Concrete	Cu. Yds.	147.3
Reinforcement Bars	Lbs.	12,000
Creos. Timber Piles, 20.1'-38'	Lin. Ft.	1092
Test Piles (Creos. Timber)	Each	1
Class A Excavation	Cu. Yds.	171
Driving Timber Piles	Lin. Ft.	1092

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

NO.	REVISION	BY	DATE
1	Deleted N. Bridge, added collision wall	CBP	12-4-58

PIERS

SECTION 51-23HB-3 STATION 604 + 20.00
F.A.I. RTE. 64 PROJECT FI-08-4( )
LAWRENCE COUNTY

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED W.G.G	SCALE AS NOTED	SHEET 6
DRAWN R.W.A.		
CHECKED J.C	DATE 11-22-57	OF 10

CD&D NO. 389-C

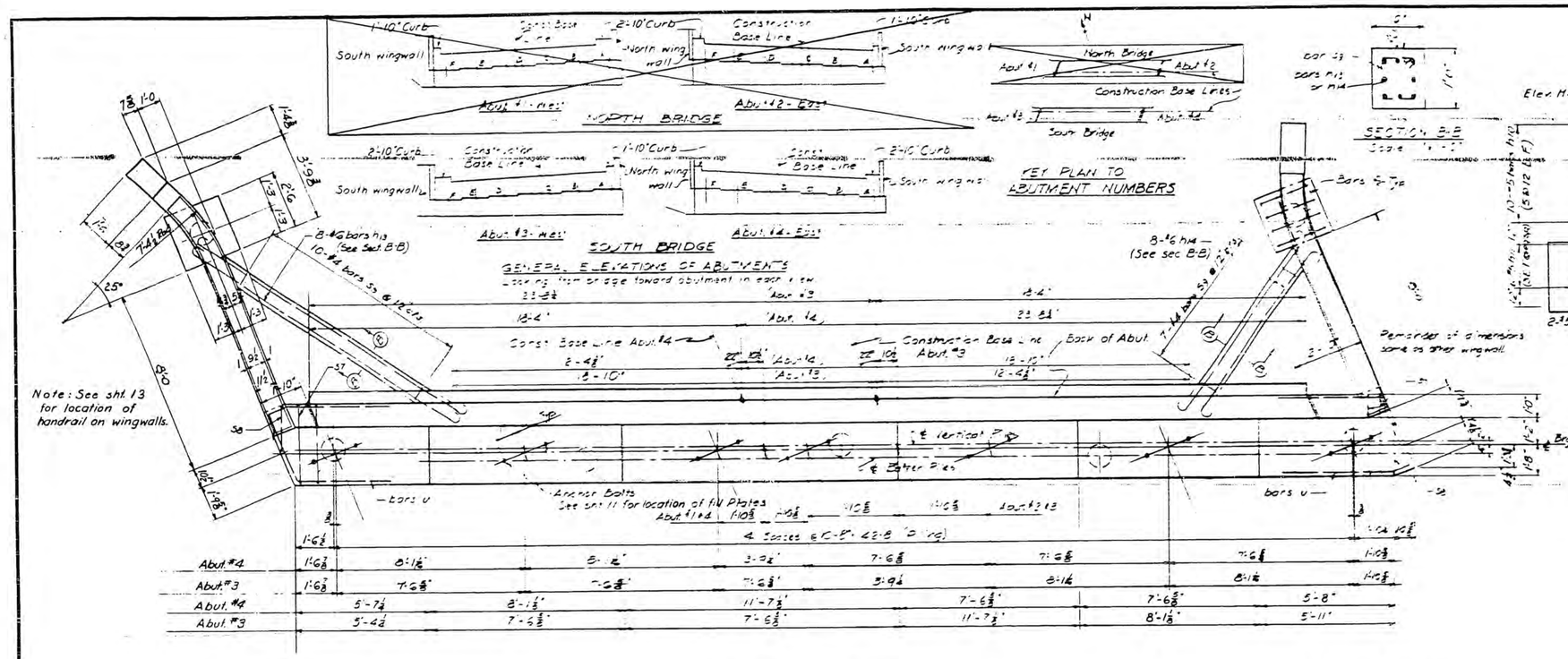
Rev. added Batter to piles 2-20-59 R.R.D.

Revised 8-20-59 - W.W.H. - Removed test pile from Pier 1. In BILL OF MATERIAL - SUBSTR. PIERS 1 & 2 changed quantity of "Creo. Timber Piles - 20.1' to 38' from 1104 to 1092 lin. ft. ... under PILE DATA

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 64	5-23	LAWRENCE	34	2
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 2 SHEETS

*HB-3, HB-4, HB-8



Abut	Wingwall	Elevations J	K
Abut #1	North	438.70	438.84 / 438.10
	South	435.31	438.45 / 431.71
Abut #2	North	437.17	437.03 / 430.27
	South	436.76	436.62 / 429.86
Abut #3	North	438.91	439.05 / 432.31
	South	438.53	438.67 / 431.93
Abut #4	North	437.36	437.22 / 430.46
	South	436.95	436.81 / 430.05

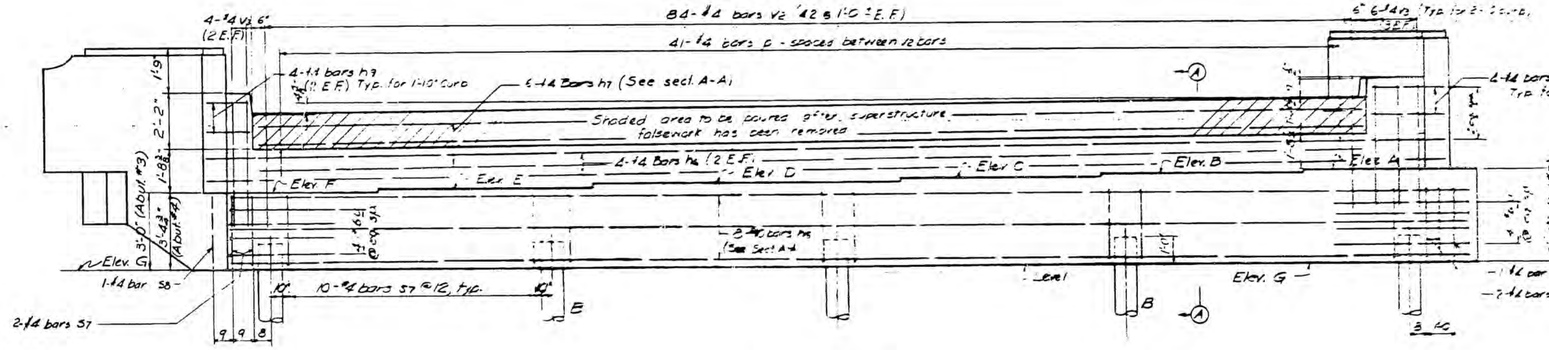
TABLE B

Abut #4	1'-6 3/8"	8'-1 5/8"	8'-2"	3'-9 1/4"	7'-6 5/8"	7'-6 5/8"	7'-6 5/8"	1'-10 3/8"
Abut #3	1'-6 3/8"	7'-6 5/8"	7'-6 5/8"	7'-6 5/8"	3'-9 1/4"	8'-1 5/8"	8'-1 5/8"	1'-10 3/8"
Abut #4		5'-7 1/4"	8'-1 5/8"	11'-7 1/2"	7'-6 5/8"		7'-6 5/8"	5'-8"
Abut #3		5'-4 3/4"	7'-6 5/8"	11'-7 1/2"	7'-6 5/8"		8'-1 5/8"	5'-11"

BILL OF MATERIALS - SOUTH BRIDGE

Bar	No.	Size	Length	Space
h3	16	#5	45'-8"	
h6	8	#4	46'-4"	
h7	12	#4	41'-6"	
h8	8	#4	2'-8"	
h9	8	#4	1'-7"	
h12	40	#5	12'-9"	
h13	24	#5	7'-8"	
h12	8	#5	2'-0"	
h13	16	#6	15'-1"	
h14	16	#6	9'-9"	
s2	168	#4	4'-0"	
s3	20	#4	5'-0"	
s4	24	#6	6'-5"	
s5	40	#5	4'-2"	
s6	72	#5	3'-8"	
s7	58	#4	13'-1"	
s8	4	#4	10'-5"	
s9	34	#4	3'-1"	
s2	32	#5	2'-0"	
v	22	#4	3'-7"	
	16	#6	13'-1"	
Class X Concrete		Cu. Yds.	69.7	
Reinforcement Bars		Lbs.	?????	
Furn. Conc. Piles		Lin. Ft.	423	
Driving Conc. Piles		L. Ft.	423	
Test Piles (Conc.)		Ea.		
Furn. Tree Piles Over 32"		Lin. Ft.	188	
Driving Timber Piles		Lin. Ft.	188	

© See 3:1.4 and Special Provisions for types of Piles which may be used.



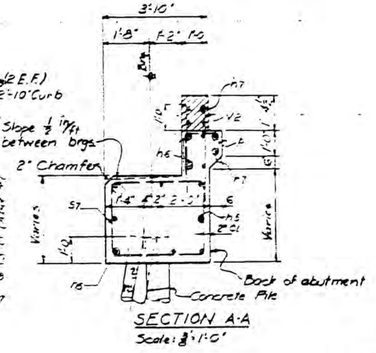


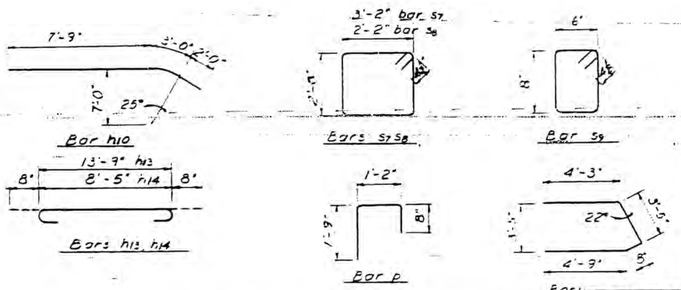
TABLE A

Pts.	Elevations Abut #1	Abut #2	Abut #3	Abut #4
A	433.07	431.17	433.28	431.36
B	433.00	431.24	433.21	431.43
C	432.93	431.32	433.10	431.50
D	432.83	431.43	433.04	431.57
E	432.75	431.50	432.97	431.68
F	432.68	431.57	432.90	431.75
G	429.68	428.17	429.90	428.36

PILE DATA

Concrete Piles
Minimum Pile Capacity = 41 Tons.
Piles Marked 'B' Shall be Batter Shown.
Length of Piles = approx. 47 Ft. each (Ave.)
9 Piles plus 1 test pile required.
A test pile is to be driven at Abut. #3
See Sht 14 and Special Provisions for types of piles which may be used.

Creosoted Timber Piles
Minimum Pile Capacity = 22 Tons
Length of Piles = approx 40 ft. each (Ave.)
4 piles required



NOTE: North Bridge is proposed for the future and is not included in this contract. Information pertaining to the North Bridge is shown for reference purposes only.

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

NO.	REVISION	BY	DATE
1	Second North Bridge	PWA	12-4-57

ABUTMENTS

SECTION 5-23-HB-3 STATION 604 + 20.00
F.A.I. RTE 64 PROJECT FI-08-4( )
LAWRENCE COUNTY

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

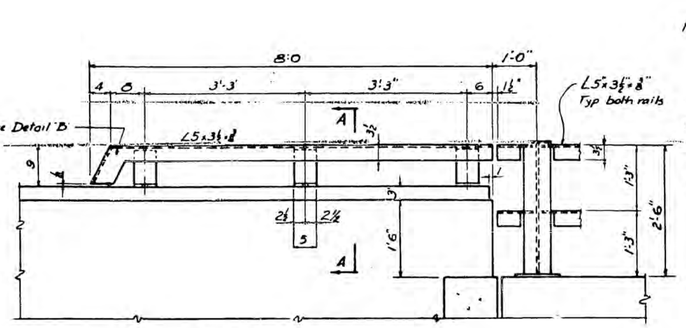
DESIGNED WGG	SCALE AS NOTED	SHEET	
DRAWN PAJ			
CHECKED GWZ	DATE 11-22-57	OF	

C&D NO. 389-C

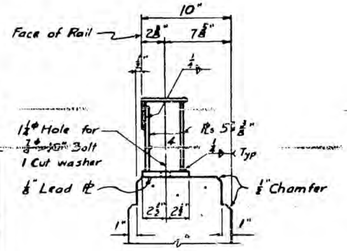
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 64	51-23	LAWRENCE	34	13
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO 8
10 SHEETS

HB-3, HB-4, HB-6



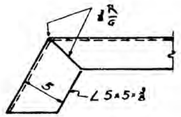
ELEVATION



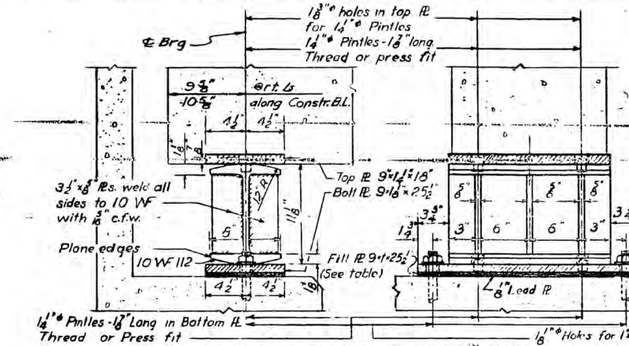
SECTION AA

PLAN

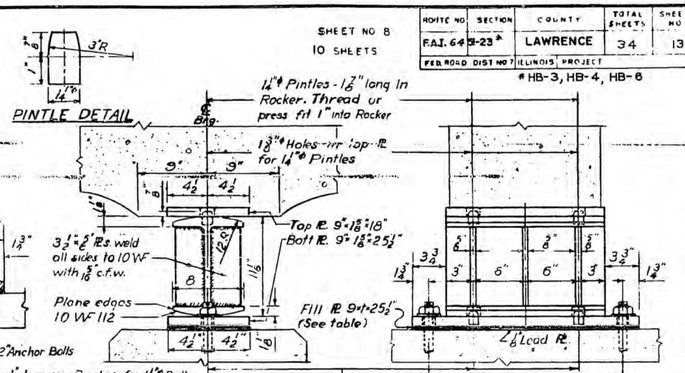
END POST DETAILS



DETAIL B

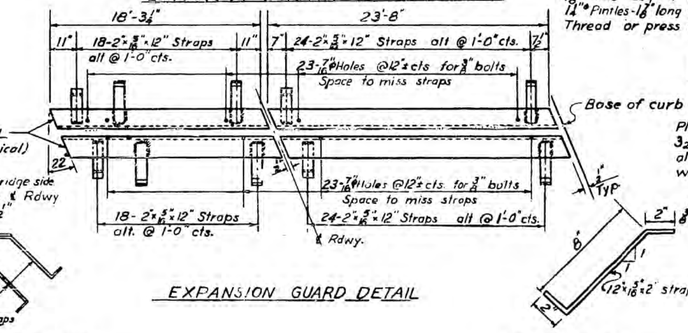


EXPANSION BEARING AT ABUTMENTS



PINTLE DETAIL

EXPANSION BEARING AT PIER 2

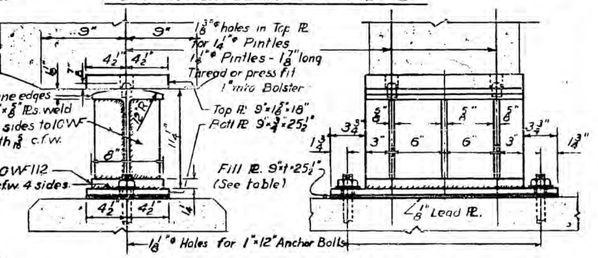


EXPANSION GUARD DETAIL

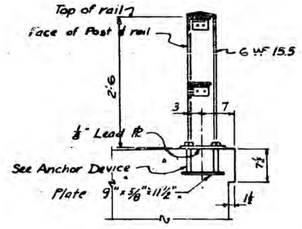
SECTION EXPANSION GUARD

All surfaces inaccessible after erection shall receive two shop coats of red lead paint except the 2" straps. The straps shall not be painted.

STRAP DETAIL

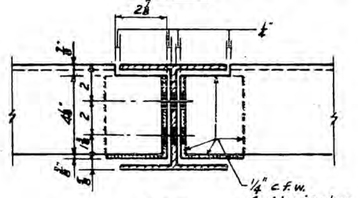


FIXED BEARING AT PIER 1



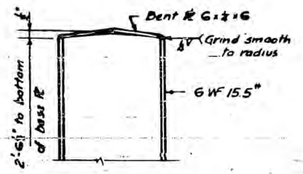
TYPICAL CROSS SECTION
(All Posts shall be vertical)

ELEVATION
DETAIL - C



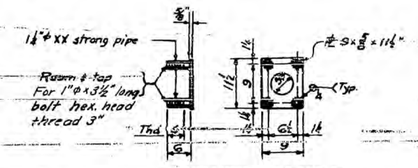
PLAN
DETAIL "C"
Typical Connection

HANDRAIL DETAILS

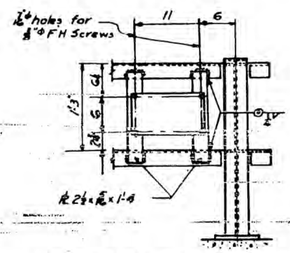


CAP DETAIL
Side View

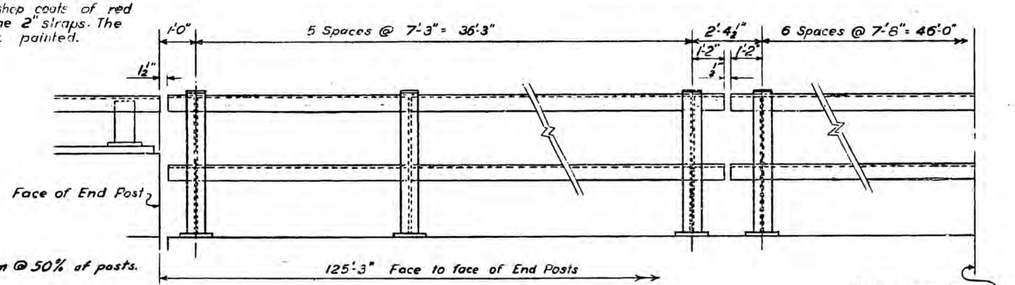
RAIL POST BASE PLATE



ANCHOR DEVICE
Ship with 1"ø x3½" Bolts & Washers in place.



NAME PLATE CONNECTION DETAIL
Locate on south rail at West Abut.



ELEVATION
(Rail spacing)

TABLE OF FILL Rt THICKNESSES

Beam	W. Abut.	Pier 1	Pier 2	E. Abut.
3	7/16"	7/16"	7/16"	7/16"

Note: No fill Rt's required at other bearing locations.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel	Lbs.	12,950
Alt. A: Metal Handrail	Lin. Ft	283

Note:
All bolts, nuts and washers, shall be hot dipped galvanized.

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

NO.	REVISION	BY	DATE
1	Deleted North Bridge	GWZ	11-26-58

STEEL DETAILS

SECTION 51-23HB-3 STATION BM # 20.00
FAI RTE 64 PROJECT FI-08-4( )
LAWRENCE COUNTY

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

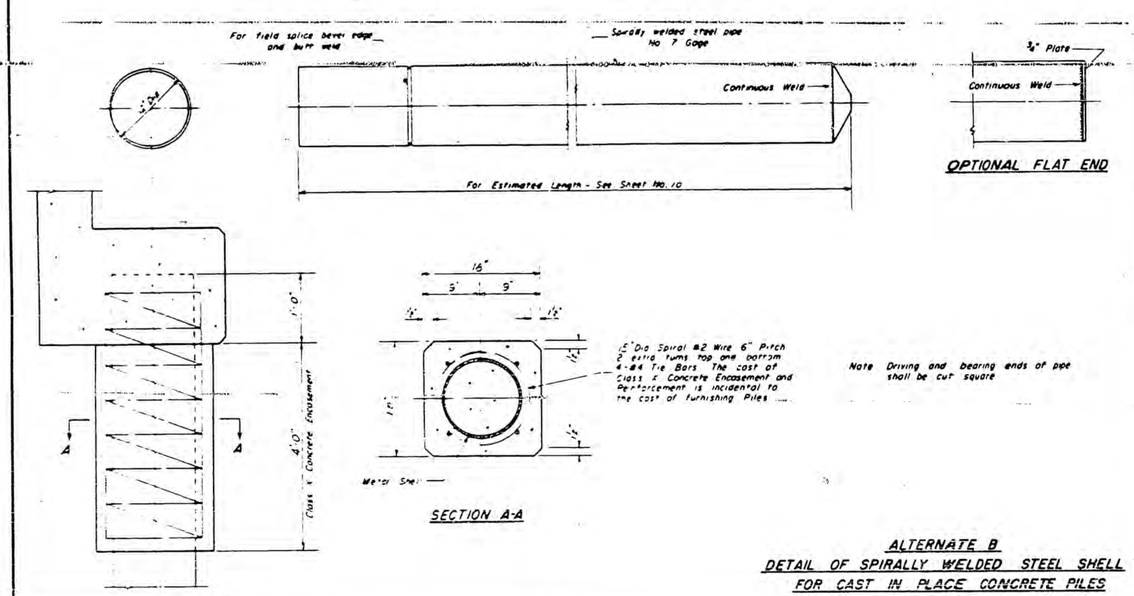
DESIGNED V.P	SCALE AS NOTED	SHEET	8
DRAWN V.P	DATE 11-22-57	OF	10
CHECKED G.W.Z			

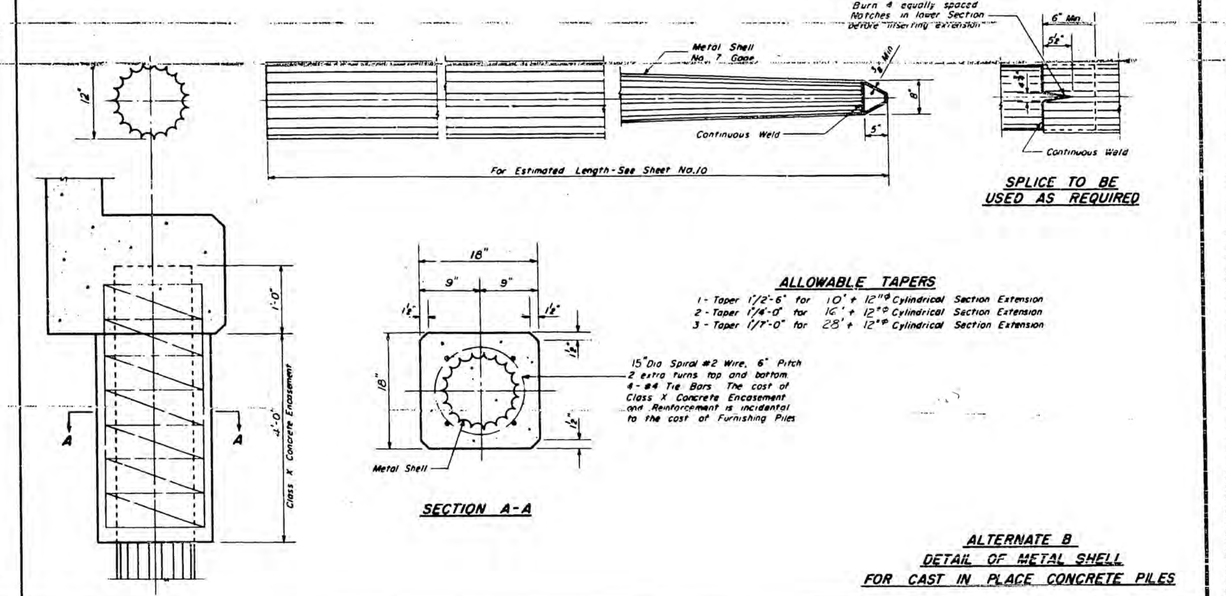
CD & D NO. 389-C

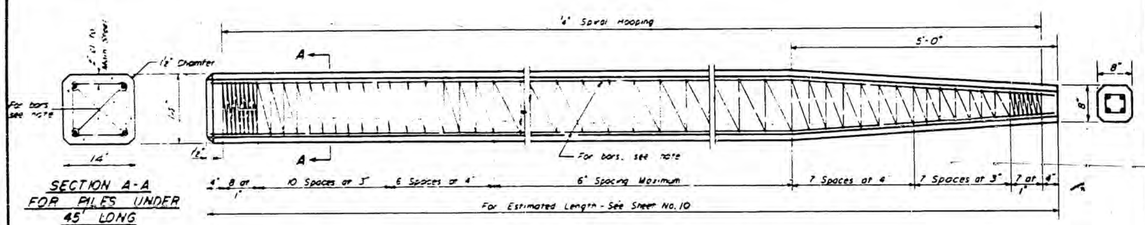
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 64	51-23*	LAWRENCE	34	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9
10 SHEETS

*HB-3, HB-4, HB-6







Note For 14" Piles 45' long or more use 8-#8 bars - 4 for the full length and 4 to the point of bevel.
For 14" Piles under 45'-0" long use 4-#9 bars the full length

Handling For Pile lengths up 45 Ft. use two slings placed at a distance of 0.21 L* from each end
For Piles longer than 45 Ft., use three slings placed at a distance of 0.12 L from each end and at mid-point of pile

* L: Over all length of pile to be handled

ALTERNATE A
DETAIL OF PRECAST CONCRETE PILES

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

NO.	REVISION	BY	DATE

PILE DETAILS

SECTION 51-23HB-3 STATION 604+ 20.00*
F.A.I. RTE. 64 PROJECT FI-08-4( )
LAWERENCE COUNTY

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED	W.G.G	SCALE AS NOTED	SHEET 9
DRAWN	V.P		
CHECKED	G.W.Z	DATE 11-22-57	OF 10

CD & D NO. 389 C

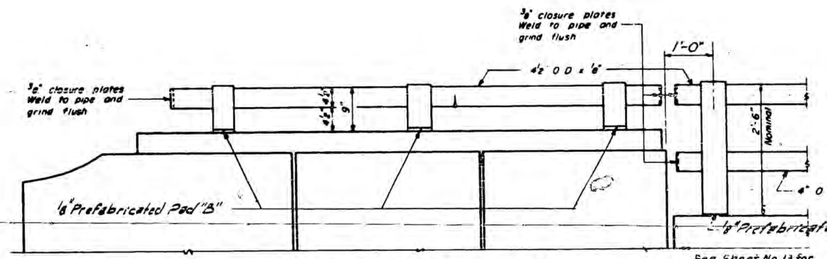
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

	51-23 #*	LAWRENCE	34	5

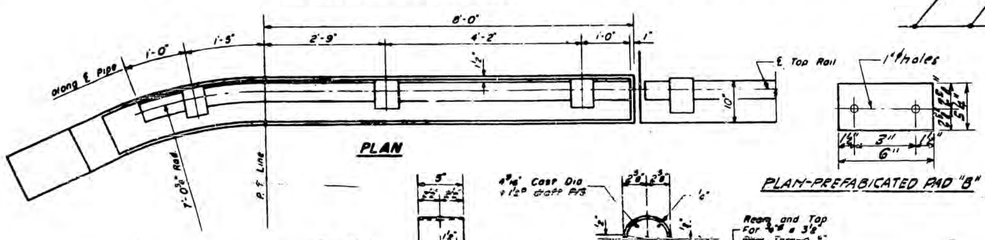
#HB-3, HB-4, HB-8

SHEET NO 12
12 SHEETS

Note: for spacing of Railposts see Sheet #13

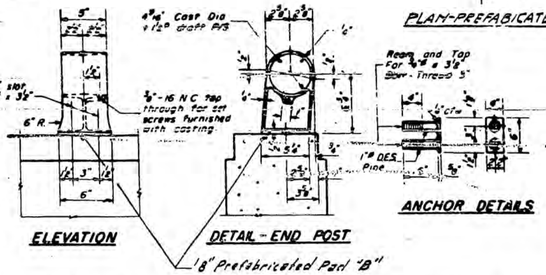


SIDE ELEVATION - END. POST



PLAN

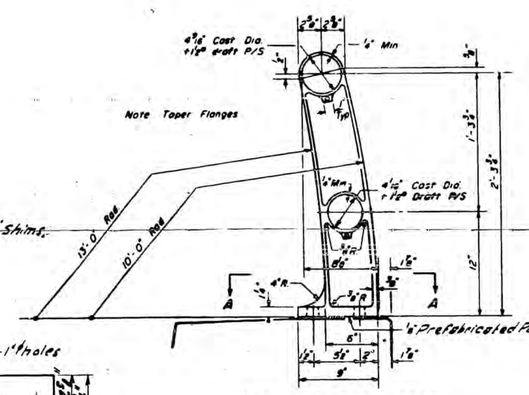
PLAN-PREFABICATED PAD "B"



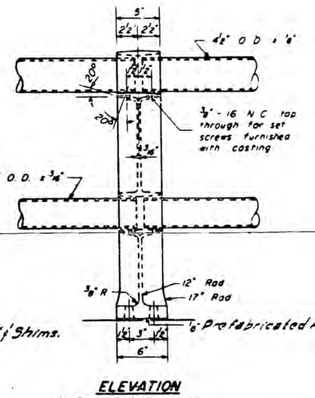
ELEVATION

DETAIL - END POST

ANCHOR DETAILS



DETAIL - HANDRAIL POST



ELEVATION
All Posts shall be vertical

BILL OF MATERIAL

Alt B: Aluminum Handrail	Lin Ft 283

Notes

Aluminum Handrail Post (Permanent Cast) shall conform to ASTM Spec B-108-54T Alloy 50S-T4, condition T-6

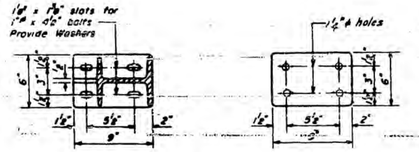
Aluminum Alloy Extruded Tube shall conform to ASTM Spec B221-56T alloy 65S-T6 condition T6

Aluminum Alloy Shims shall be made from sheet or plate conforming to ASTM Spec B209-54T alloy 99QA condition O

Aluminum Alloy Bolts shall be made from rod conforming to ASTM Spec B211-55T Alloy 52S-T6. Bolt heads shall conform to American Standard regular hexagon, ASA Spec B18.2. Threads shall conform to American Standard Course Series, 2 Cls 2, 2A or 2B. The finished bolts shall be heat treated to the T6 temper, given an anodic coating at least 0.0002 inches in thickness and chromate sealed

Aluminum Alloy washers shall be made from sheet conforming to ASTM Spec B209-54T Alloy Cl. CG 42A condition T6

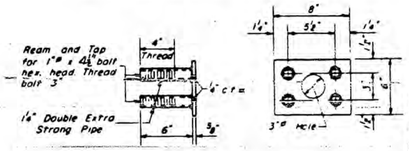
Anchor Device shall conform to Structural Carbon Steel ASTM A7-56T



SECTION A-A

PLAN-PREFABRICATED PAD "A" & SHIMS

Provide one pad at each handrail post.
Provide 1-⅛" and 2-1/16" Shims for 50% of Handrail Posts.



ANCHOR DETAILS
6" x ⅜" x 8" Plate

DESIGNED	
CHECKED	
DRAWN	F.M.P. W. A. Sousamon.
CHECKED	

EXAMINED _____ 19
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES

PASSED _____
DIVISION OF DESIGN

APPROVED _____
CHIEF HIGHWAY ENGINEER

R-4 DRAWN 8-15-57 REV 9-24-57

Revised - 4-2-59 - WJM - Removed note concerning caulking compound in GENERAL NOTES, added prefabricated pads under handrail posts B. added note requiring a certain number of shim plates.

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

NO.	REVISION	BY	DATE

ALTERNATE B: ALUMINUM HANDRAIL

SECTION 51-23HB-3 STATION 604 + 20.00
F.A.I. RTE. 64 PROJECT F-08-41 ( )

CLARK DAILY & DIETZ
CONSULTING ENGINEERS
URBANA, ILLINOIS

DESIGNED RWA	SCALE AS NOTED	SHEET	
DRAWN RWA			
CHECKED CBP	DATE 12-5-58	OF	

CD&D NO. 389-C