

BRIDGE CONTRACT No. 4768

INDEX						
PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION	CONTRACT NO.
F-214 (G)	4G-K-4175	R.C. GIRDER	3@28', 5K, 45°L	STONEY LONESOME CREEK	545+70	4768
SHEET NO.	SHEET DESIGNATION	SUBJECT				
1		INDEX & TITLE SHEET				
2	ONE SHEET	TYPICAL CROSS SECTIONS				
3	ONE SHEET	DETAILS				
4	ONE SHEET	WIDENED R.C.C. APPROACH PVMT.				
5	C1 (STRUCTURE 4G-K-4175)	LAYOUT				
6	C2	GENERAL PLAN				
7	C3	BENT NO. 1 & NO. 4 DETAILS				
8	C4	PIER NO. 2 & NO. 3 DETAILS				
9	C5	DETAILS SPANS 'A' & 'C'				
10	C6	DETAILS SPANS 'A' & 'C'				
11	C7	DETAILS SPAN 'B'				
12	C8	DETAILS SPAN 'B'				
13	ONE SHEET	SUMMARY				
14-16	THREE SHEETS	CROSS SECTIONS				
17	BRIDGE STD. C1	STANDARD MISCELLANEOUS DETAILS (REV. 12-2-58)				
18	ROAD STD. SHEET A	STANDARD PAVEMENT JOINTS (APRIL, 1957)				
19	ROAD STD. SHEET MP	MISCELLANEOUS STANDARDS (REV. 3-11-58)				
20	BRIDGE STD. M1	MISCELLANEOUS APPROACH DETAILS (REV. 2-3-57)				
21	BRIDGE STD. M2	MISCELLANEOUS APPROACH DETAILS (REV. 2-3-57)				
22	BRIDGE STD. M3	MISCELLANEOUS APPROACH DETAILS (REV. 1-15-58)				
23	BRIDGE STD. S2	TYPICAL DETAILS FOR PLACING SPECIAL FILLING MATERIALS (REV. 9-20-52)				
24	SHEET 1 DETOURS	STANDARD DETOUR SIGNS (REV. 2-11-54)				
25	SHEET 2 DETOURS	STANDARD DETOUR SIGNS (REV. 11-12-58)				

STATE OF INDIANA
STATE HIGHWAY DEPARTMENT

BRIDGE PLANS
FOR SPANS OVER 20 FEET
ON
STATE ROAD NO. 46 SECTION K
F.A. PROJECT NO. F-214(G)

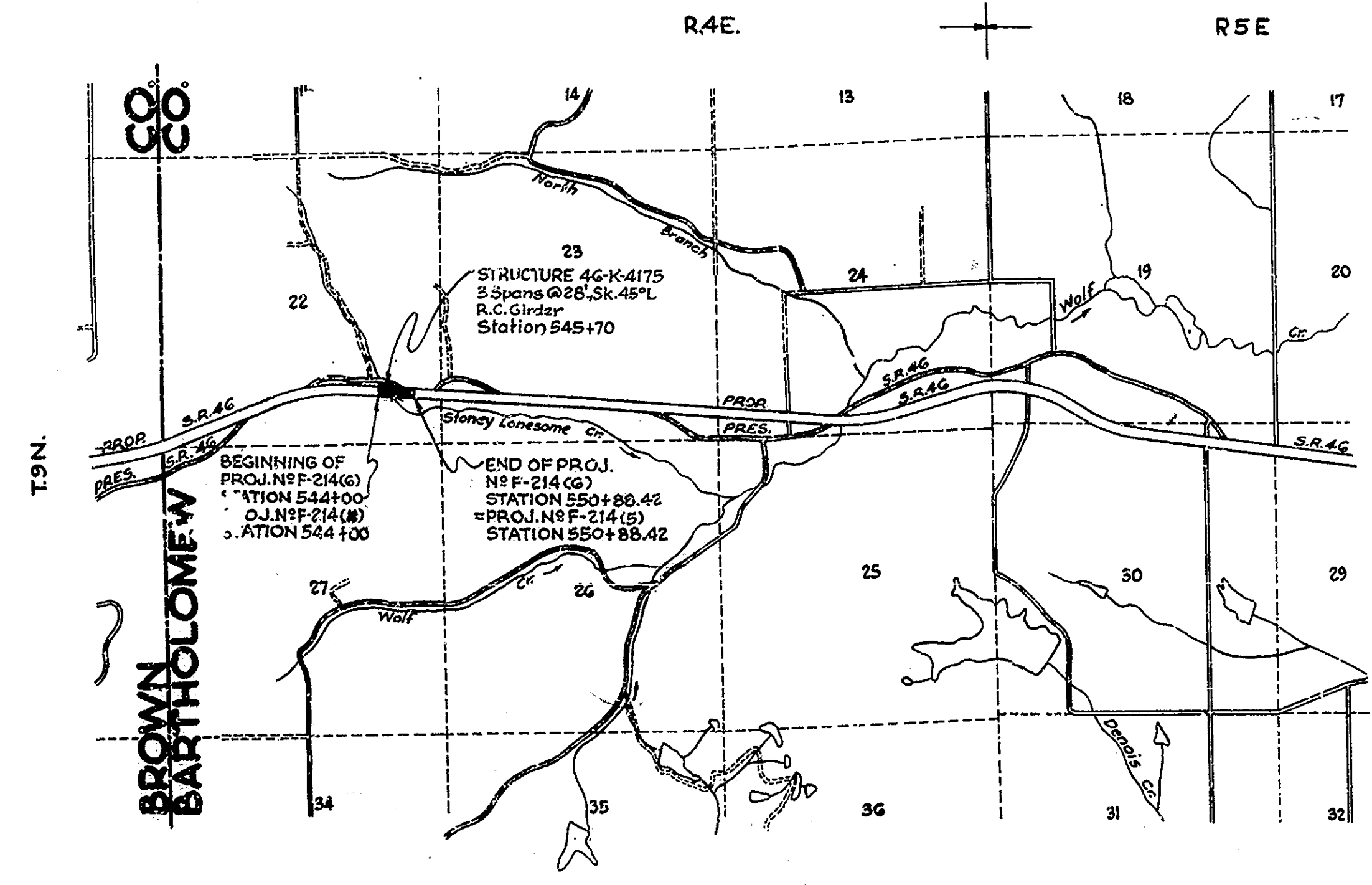
NASHVILLE-COLUMBUS ROAD
BEGINNING AT A POINT ON PROPOSED S.R. 46 APPROX. 1150' WEST OF THE EAST LINE OF SECTION 22 AND EXTENDING EAST A DISTANCE OF APPROX. 688.42' TO A POINT ON PROPOSED S.R. 46 APPROX. 470.58' WEST OF THE EAST LINE OF SECTION 22, ALL IN SECTION 22-T3N-R4E, BARTHOLOMEW COUNTY.

ROADWAY LENGTH = 0.113 MI. MAX. GRADE = -1.2%
BRIDGE LENGTH = 0.017 MI.
TOTAL LENGTH = 0.130 MI.

BRIDGES OVER 20' SPAN					
PUB. ROAD RES. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(G)	1958	1	25

TRAFFIC DATA

A.D.T. 1955	2250 V.P.D.
A.D.T. 1975 (PROJECTED)	3700 V.P.D.
TRUCKS	20 %
DESIGN SPEED	70 M.P.H.
ACCESS CONTROL	NONE



Rev. Sheet No. 2, 4-29-59

Scale: 1"=2000'

APPROVED AND ADOPTED
BY STATE HIGHWAY DEPARTMENT OF INDIANA
John Peters
CHAIRMAN, STATE HIGHWAY DEPARTMENT OF INDIANA
DATE: 6-17-58

APPROVED
Carl E. Vogelsong
CHIEF ENGINEER, STATE HIGHWAY DEPARTMENT OF INDIANA
DATE: 6-16-58

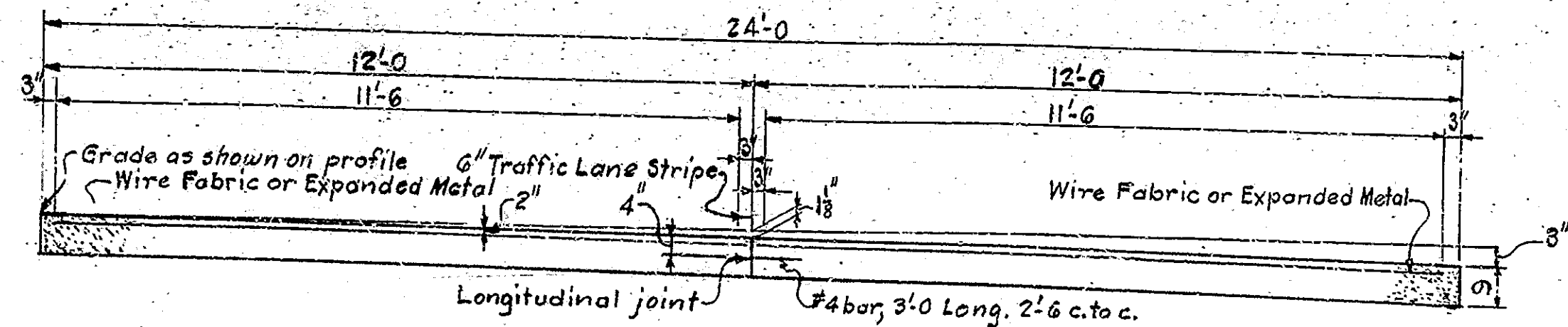
STATE HIGHWAY DEPARTMENT OF INDIANA
1957 STANDARD ROAD AND BRIDGE SPECIFICATIONS
TO BE USED WITH THESE PLANS

RECOMMENDED FOR APPROVAL DATE 6-13-58
C.R. Rimmer
ENGINEER OF BRIDGE DESIGN, STATE HIGHWAY DEPARTMENT OF INDIANA

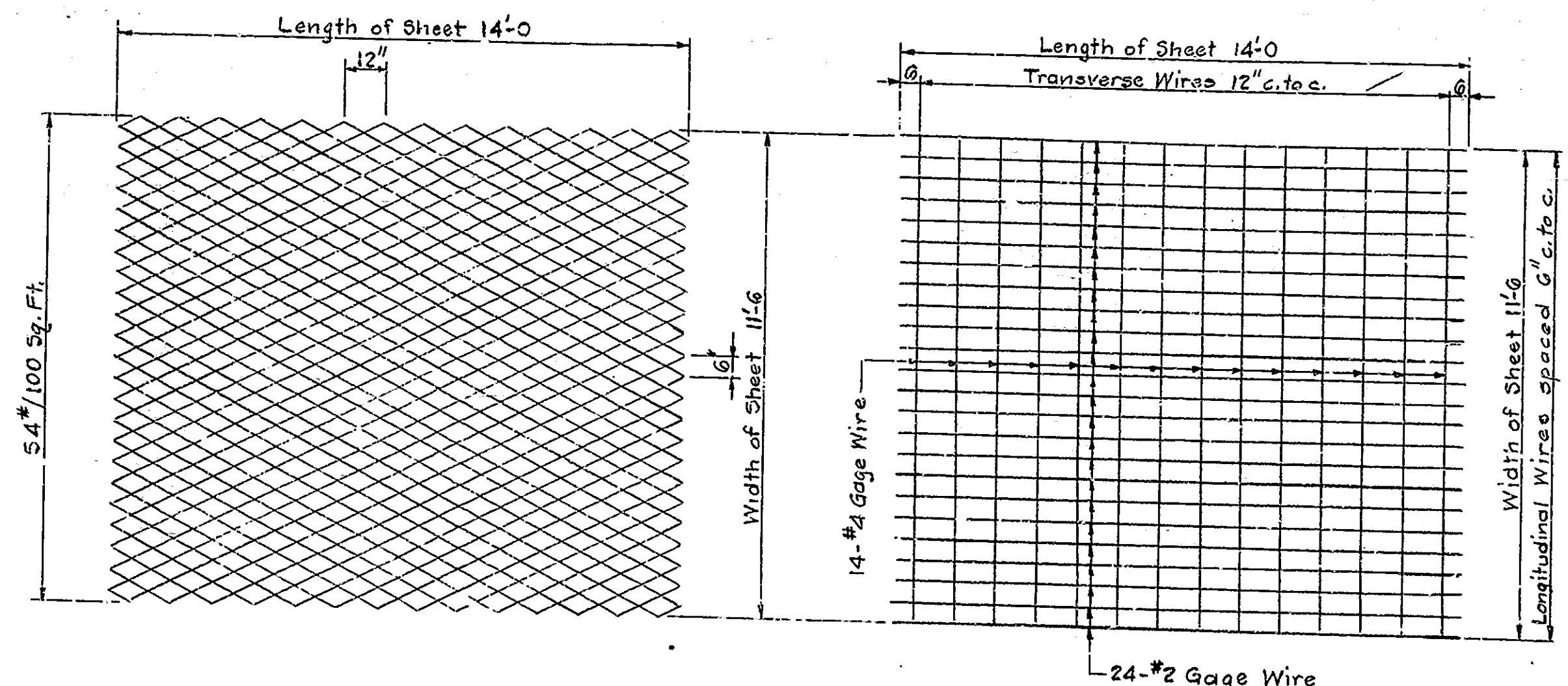
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED: _____
DIVISION ENGINEER DATE _____

BRIDGE FILE-4G-K-4175

BRIDGES OVER 20' SPAN					
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	214(c)	1958	2	25

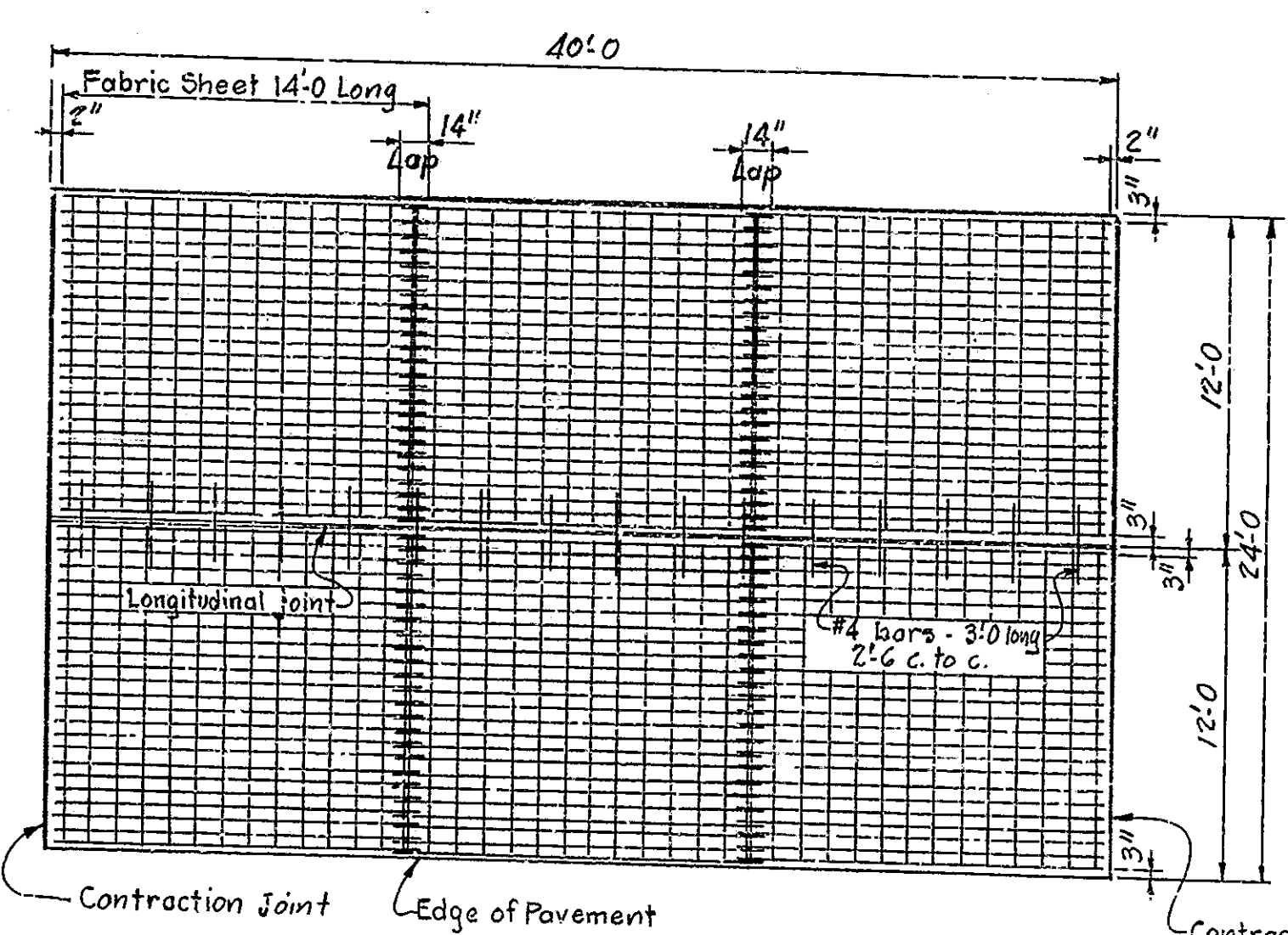


CROSS SECTION
Scale: 1/4"=1'-0"



TYPICAL SHEET EXPANDED METAL FABRIC
Scale: 3/8"=1'-0"

TYPICAL SHEET WIRE FABRIC
Scale: 3/8"=1'-0"

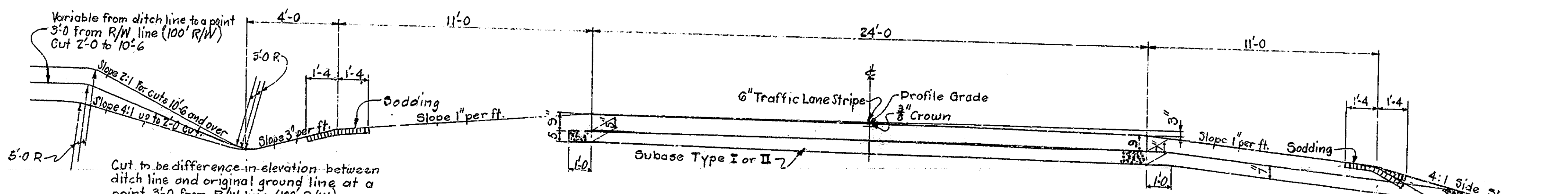


PLAN OF REINFORCED CONCRETE SLAB
Scale: 3/8"=1'-0"

NOTE: If the contractor elects he will be permitted to use fabric sheets 10'-8" long with a 12" transverse lap instead of length of sheets and lap as shown.

NOTE: Where it becomes necessary to make a longitudinal lap of fabric sheet due to widened pavement, the mesh shall be lapped not less than 6".

REINFORCED CONCRETE PAVEMENT



TYPICAL FILL SECTION
Scale: 3/8"=1'-0"

NOTE: Where any part of a fill requires a 2:1 slope, that slope shall be continued thruout the fill on that side

**TYPICAL CROSS SECTIONS,
STATE HIGHWAY DEPARTMENT OF INDIANA**

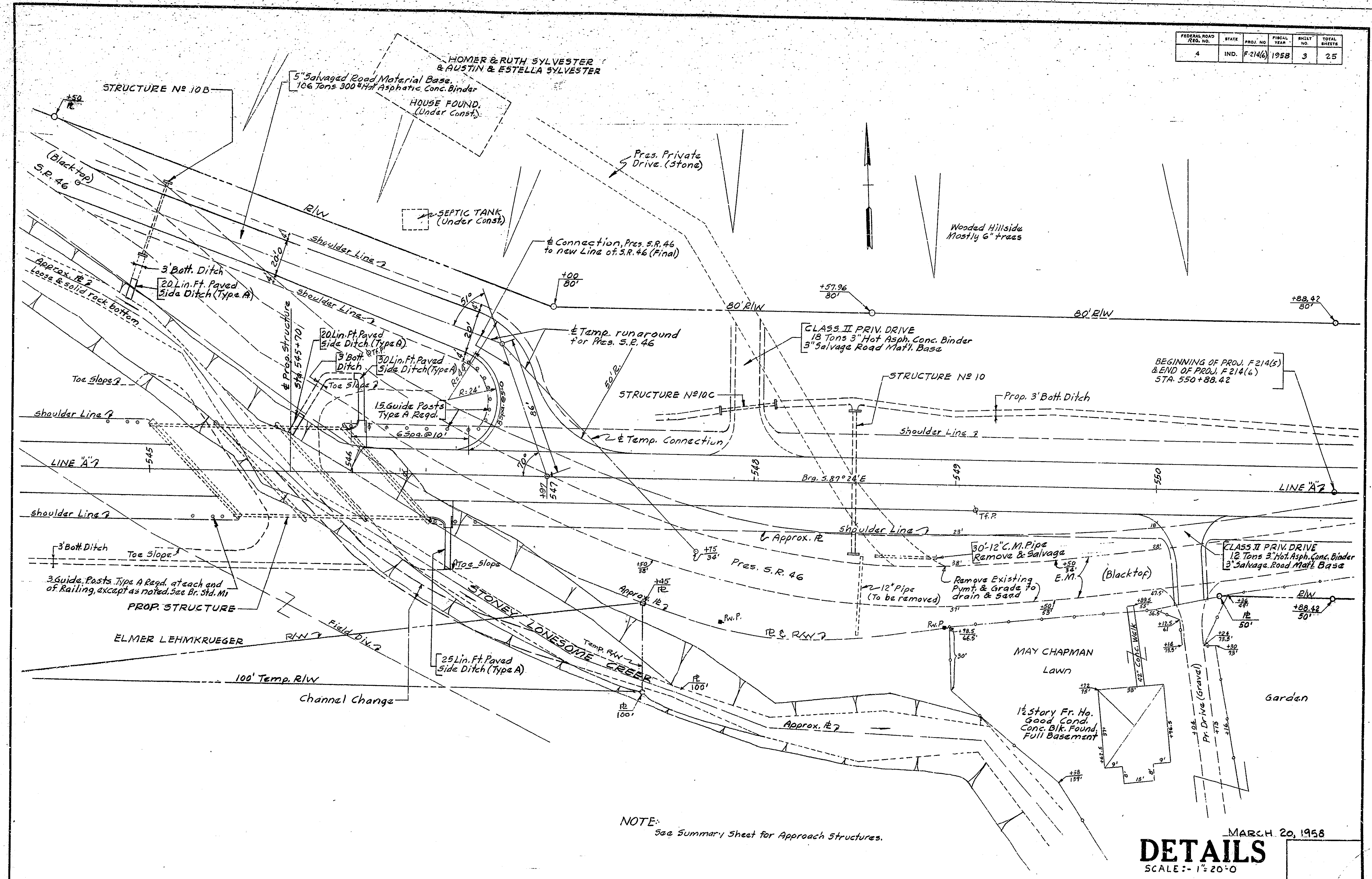
SCALE: AS NOTED. MARCH 20, 1958

RECOMMENDED FOR APPROVAL: *C. R. Rimmer*
ENGINEER OF BRIDGE DEPT.

DRAWING: OF
PROJECT: F 214(c)
BRIDGE CONTRACT NO. 4768
BRIDGE FILE: 46-K-4175

DESIGNED: CKD
DRAWN: B. H. S. 11-7-58 CKD R. M. S. 11-7-58
TRACED: CKD

FEDERAL ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(6)	1958	3	25



NOTE: See Summary Sheet for Approach Structures.

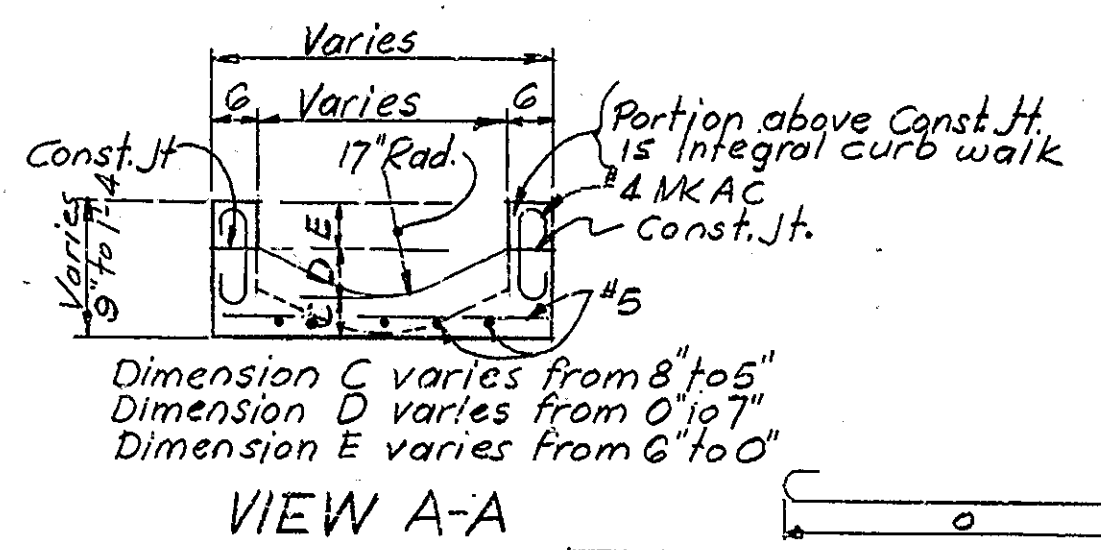
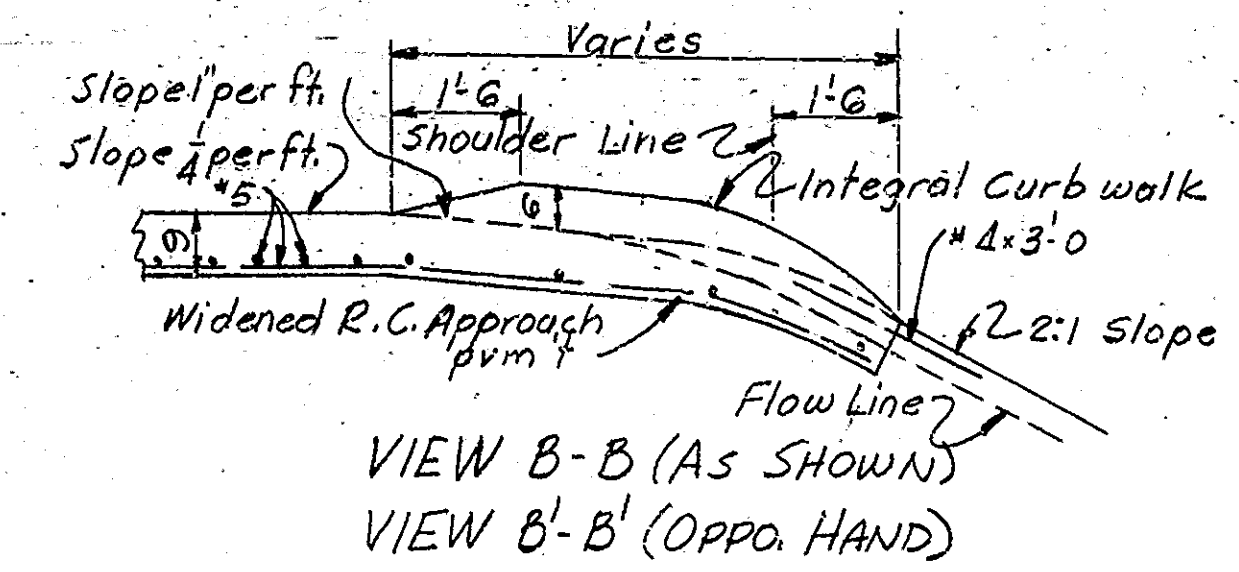
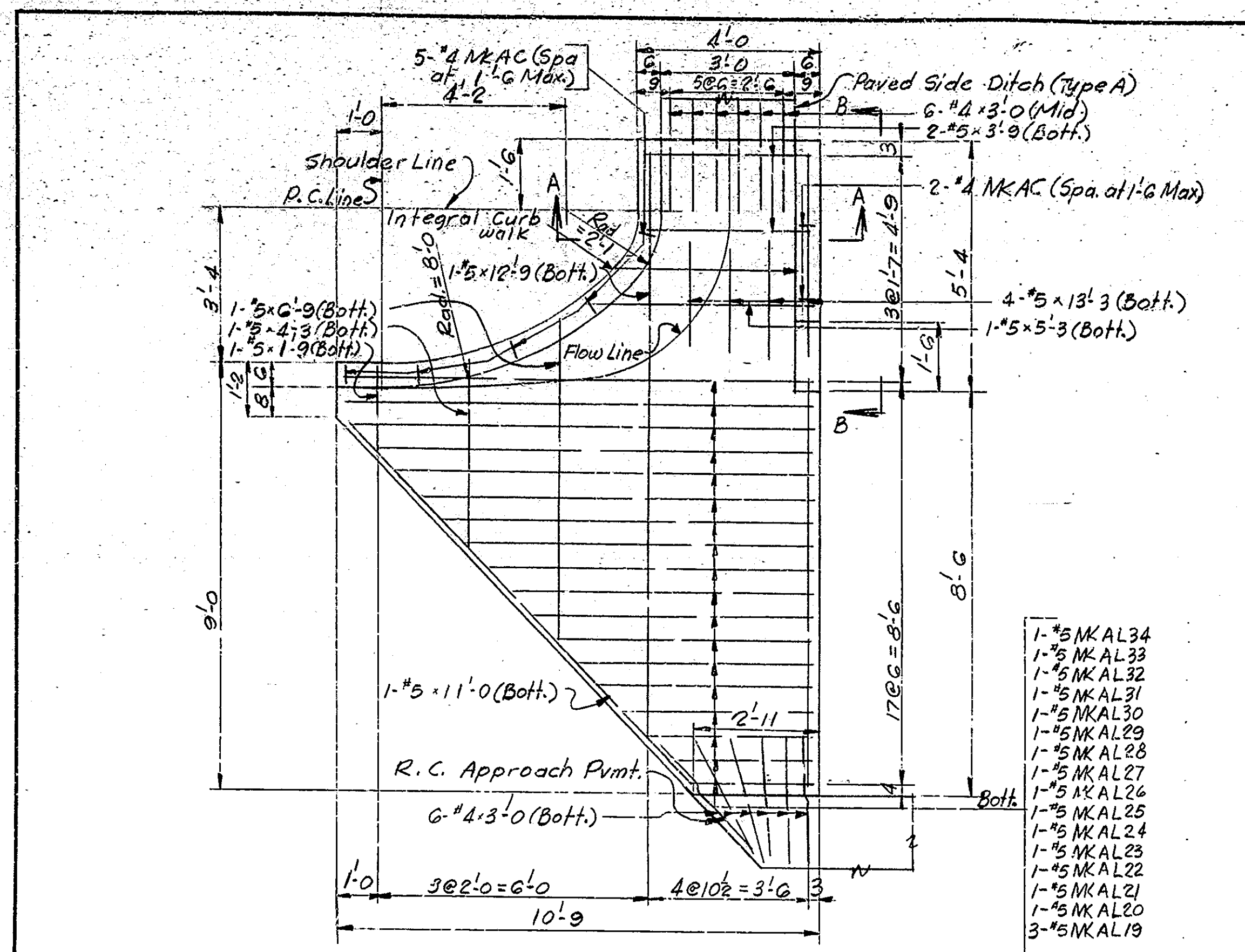
MARCH 20, 1958
DETAILS
 SCALE: - 1" = 20'-0"

J.T.B. 1-17-58 V. By R.M.S. 1-20-58

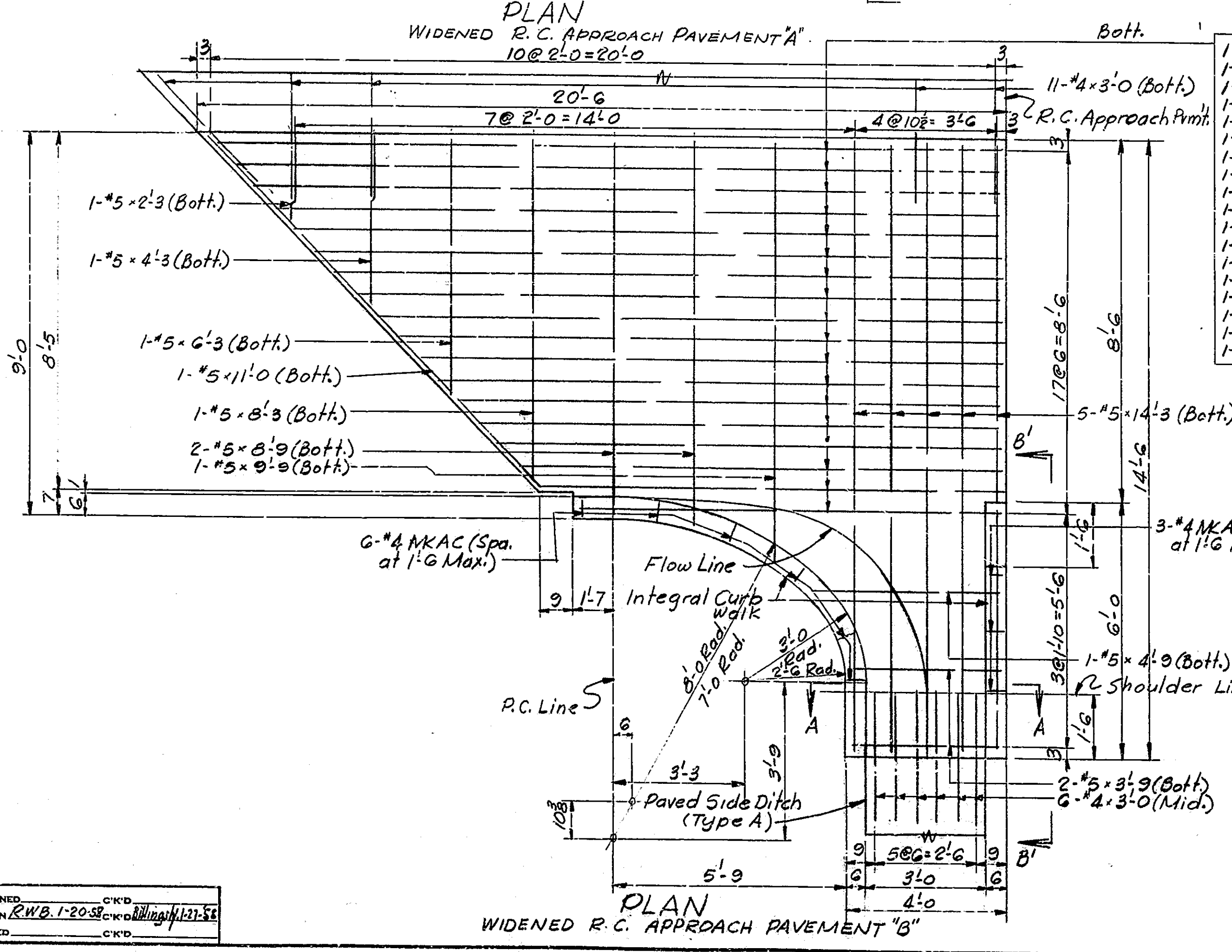
BRIDGE FILE 46-K-4175

CRA

BRIDGES OVER 20' SPAN					
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(G)	1950	4	25



- 1-#5 NKAL34
- 1-#5 NKAL33
- 1-#5 NKAL32
- 1-#5 NKAL31
- 1-#5 NKAL30
- 1-#5 NKAL29
- 1-#5 NKAL28
- 1-#5 NKAL27
- 1-#5 NKAL26
- 1-#5 NKAL25
- 1-#5 NKAL24
- 1-#5 NKAL23
- 1-#5 NKAL22
- 1-#5 NKAL21
- 1-#5 NKAL20
- 3-#5 NKAL19



Size	Mark	Q	Length
#5	AL 1	18'-11	20'-6
#5	AL 2	18'-5	20'-0
#5	AL 3	18'-11	19'-6
#5	AL 4	18'-5	19'-0
#5	AL 5	17'-11	18'-6
#5	AL 6	17'-5	18'-0
#5	AL 7	16'-11	17'-6
#5	AL 8	16'-5	17'-0
#5	AL 9	15'-11	16'-6
#5	AL 10	15'-5	16'-0
#5	AL 11	14'-11	15'-6
#5	AL 12	14'-5	15'-0
#5	AL 13	13'-11	14'-6
#5	AL 14	13'-5	14'-0
#5	AL 15	12'-11	13'-6
#5	AL 16	12'-5	13'-0
#5	AL 17	11'-11	12'-6
#5	AL 18	11'-5	12'-0
#5	AL 19	10'-11	11'-6
#5	AL 20	9'-11	10'-6
#5	AL 21	9'-5	10'-0
#5	AL 22	8'-11	9'-6
#5	AL 23	8'-5	9'-0
#5	AL 24	7'-11	8'-6
#5	AL 25	7'-5	8'-0
#5	AL 26	6'-11	7'-6
#5	AL 27	6'-5	7'-0
#5	AL 28	5'-11	6'-6
#5	AL 29	5'-5	6'-0
#5	AL 30	4'-11	5'-6
#5	AL 31	4'-5	5'-0
#5	AL 32	3'-11	4'-6
#5	AL 33	3'-5	4'-0
#5	AL 34	2'-11	3'-6

BILL OF MATERIALS
REINFORCING STEEL

MARK	SIZE	NO. BARS	LENGTH	WEIGHT
AL1	#5	1	20'-6	
AL2	#5	1	20'-0	
AL3	#5	1	19'-6	
AL4	#5	1	19'-0	
AL5	#5	1	18'-6	
AL6	#5	1	18'-0	
AL7	#5	1	17'-6	
AL8	#5	1	17'-0	
AL9	#5	1	16'-6	
AL10	#5	1	16'-0	
AL11	#5	1	15'-6	
AL12	#5	1	15'-0	
AL13	#5	1	14'-6	
AL14	#5	1	14'-0	
AL15	#5	1	13'-6	
AL16	#5	1	13'-0	
AL17	#5	1	12'-6	
AL18	#5	1	12'-0	
AL19	#5	1	11'-6	
AL20	#5	1	10'-6	
AL21	#5	1	10'-0	
AL22	#5	1	9'-6	
AL23	#5	1	9'-0	
AL24	#5	1	8'-6	
AL25	#5	1	8'-0	
AL26	#5	1	7'-6	
AL27	#5	1	7'-0	
AL28	#5	1	6'-6	
AL29	#5	1	6'-0	
AL30	#5	1	5'-6	
AL31	#5	1	5'-0	
AL32	#5	1	4'-6	
AL33	#5	1	4'-0	
AL34	#5	1	3'-6	
AC	#4	16	1'-0	
AC	#4	20	3'-0	
TOTAL #4				78#
TOTAL #5				704#
TOTAL STEEL				782#
9" Widened R.C.C. Pmnt				33 Sq. Yds
Integral Curb Walk				0.3 Cur Yds

NOTES:-
For Reinforcing Bar Notes see Br. Std. C1.
For location of Widened R.C. Approach Pavements see drug. C2

WIDENED R.C. APPROACH PAVEMENT
STATE HIGHWAY DEPARTMENT OF INDIANA

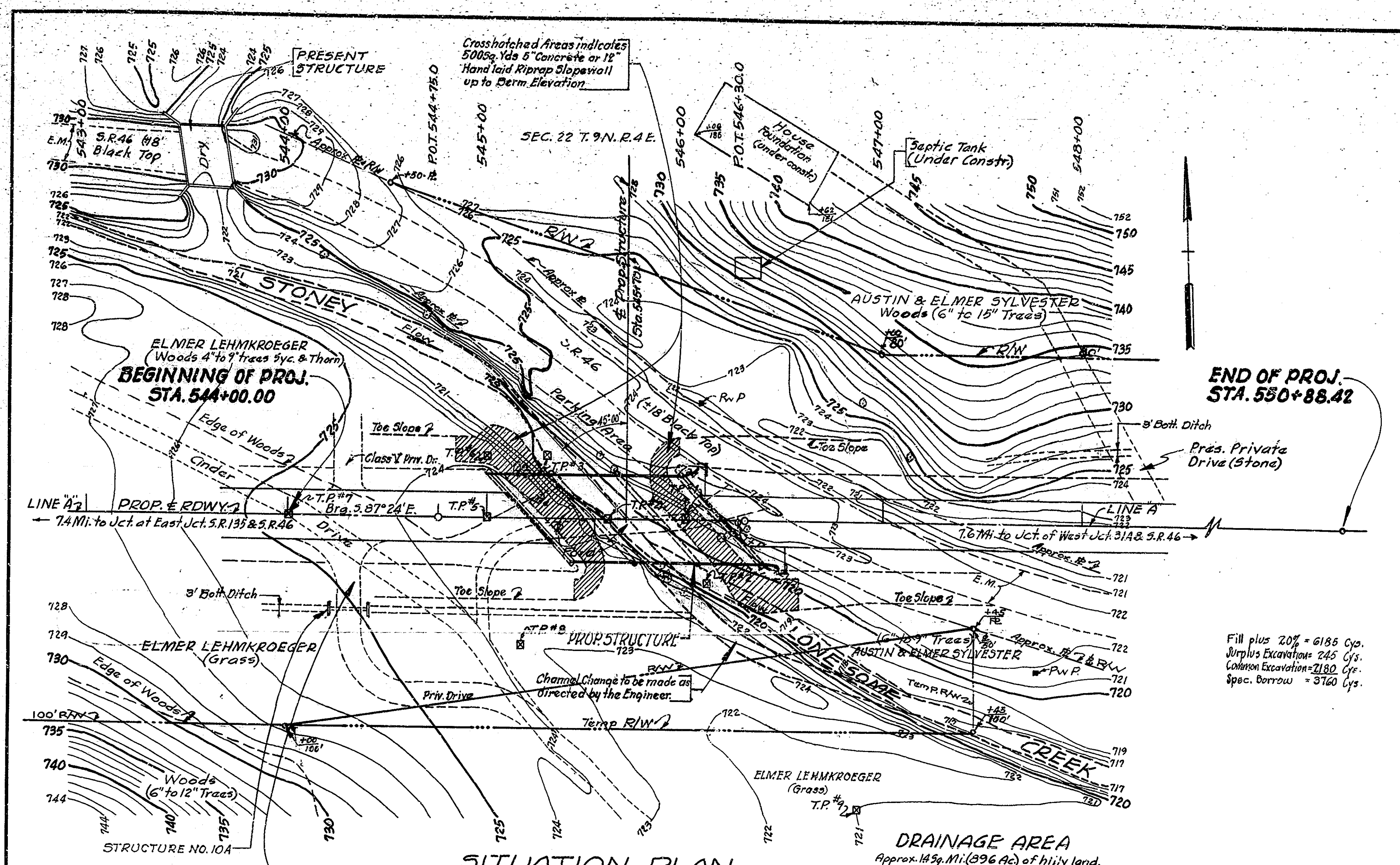
SCALE: 1/2" = 1'-0"

MARCH 20, 1950

RECOMMENDED FOR APPROVAL: *C. P. Rummel*
ENGINEER OF BRIDGE DESIGN

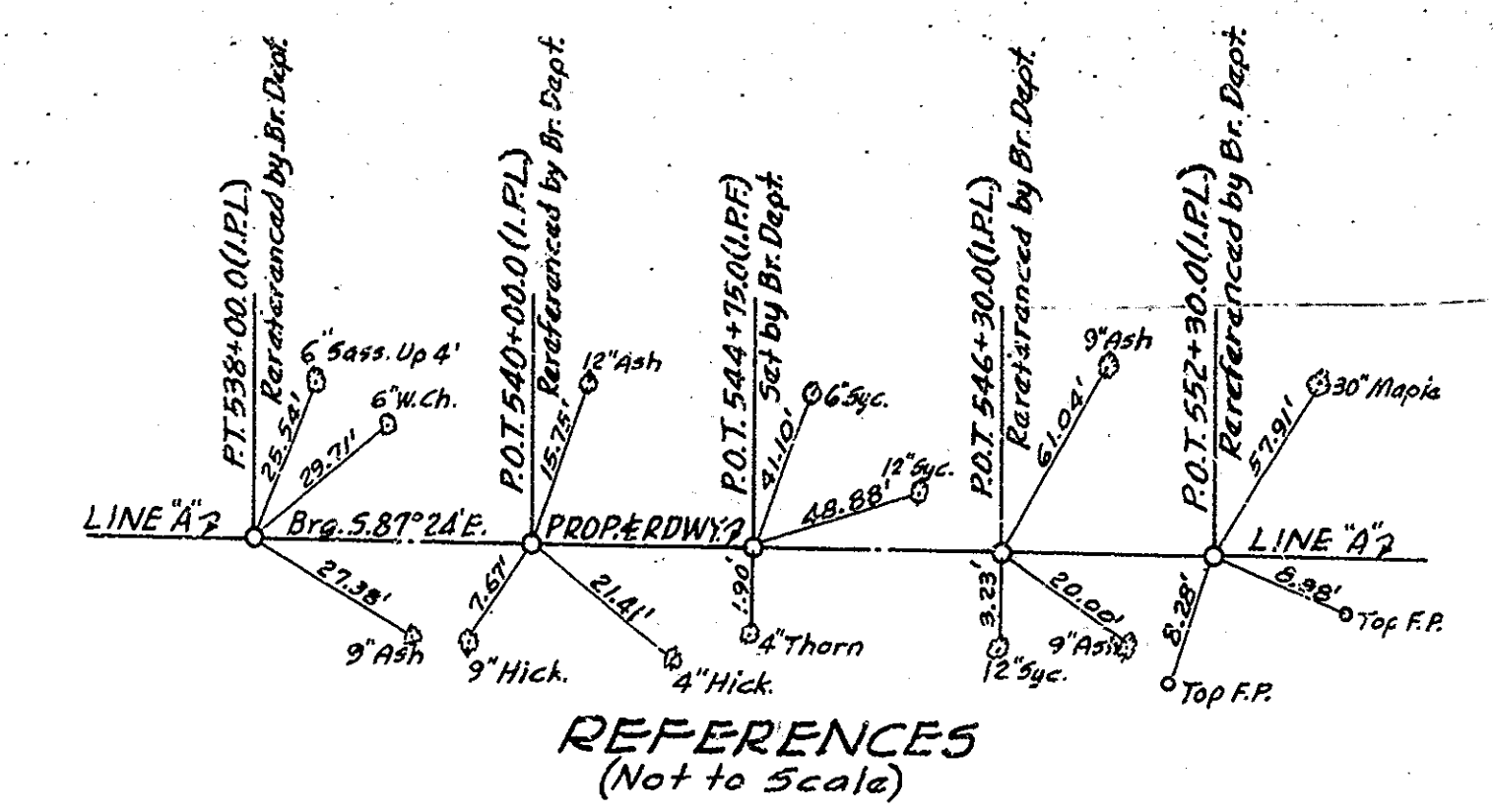
DRAWING OF
PROJECT: F-214(G)
BRIDGE CONTRACT NO. 4769
BRIDGE FILE: 46-K-4175

DESIGNED: C.K.D.
DRAWN: R.W.B. 1-20-50
TRACED: C.K.D.



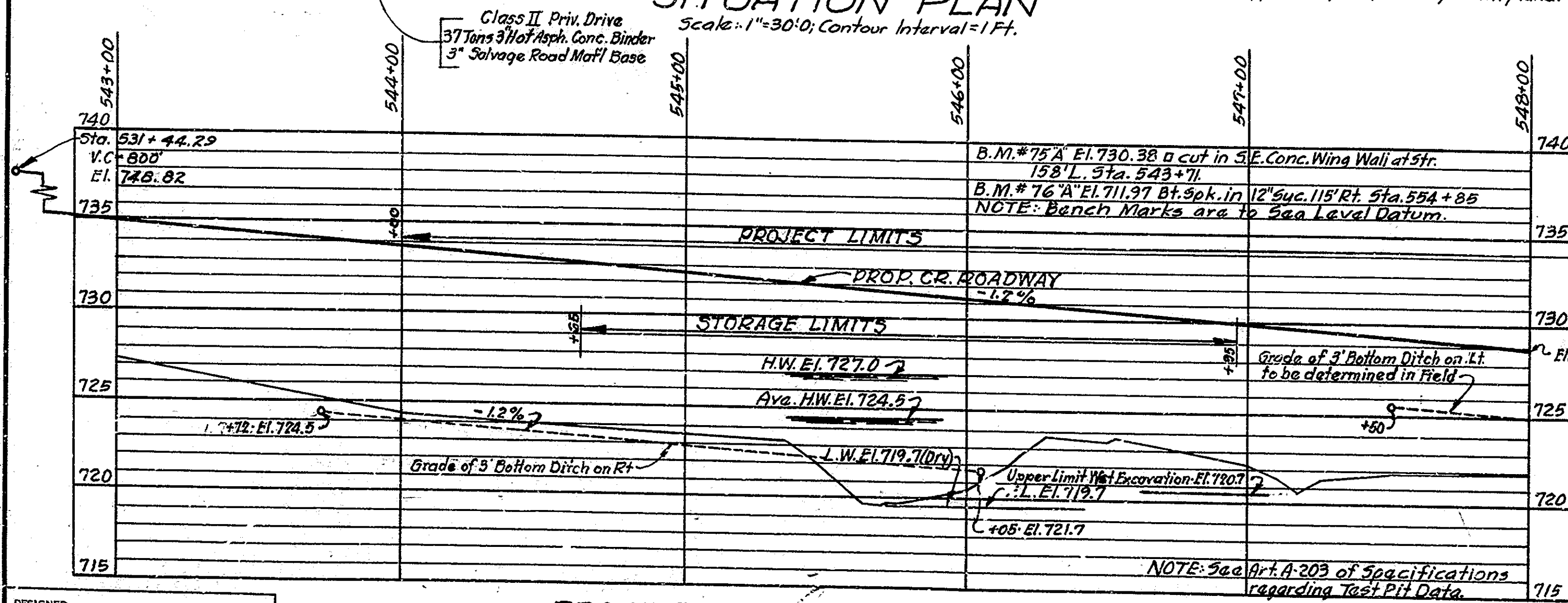
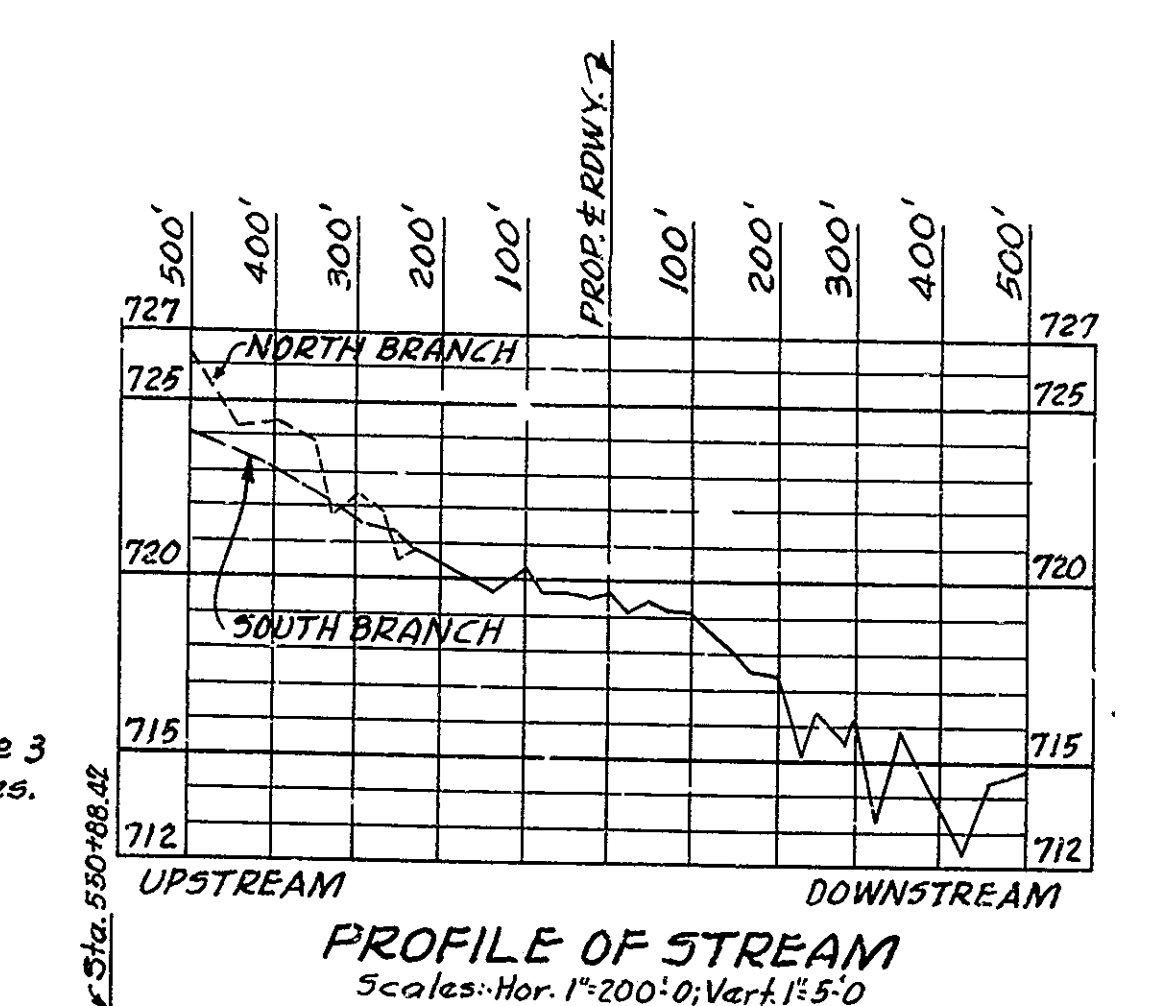
UTILITY OWNERS
 Power Lines: P.S. Co. of Ind. (Columbus)
 Telephone Lines: Indiana Bell Tel. Co. (Columbus)

BRIDGES OVER 20' SPAN				
STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IND.	F-214(6)	1958	5	25

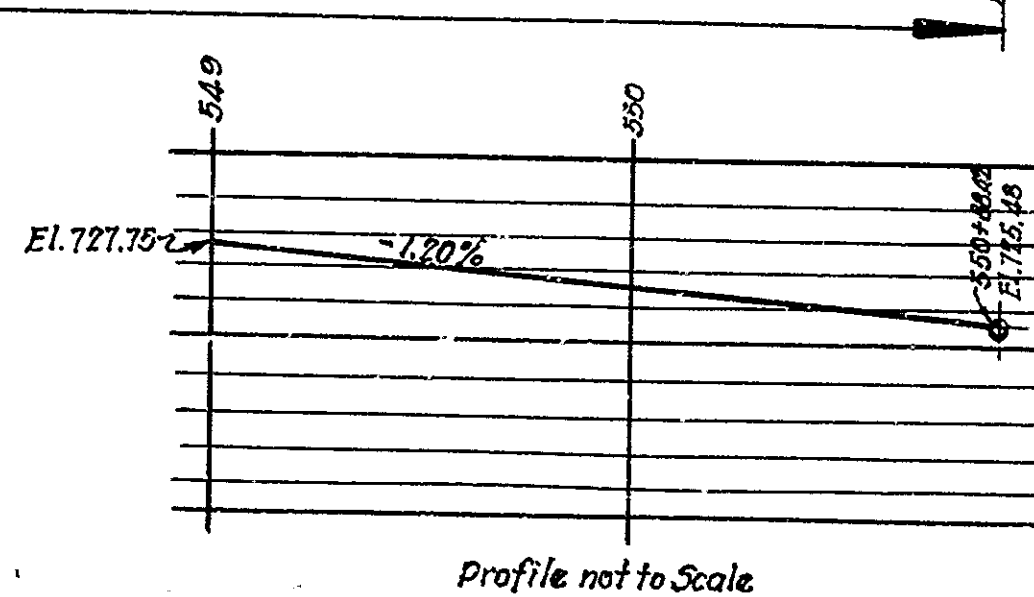


TEST PIT DATA				
NO.	LOCATION	ELEV. TOP GROUND	ELEV. PIT BOTTOM	REMARKS
1	Sta. 546+00	720.5	714.7	Test Pit 1-10
2	30' RT Sta. 546+10	719.3	714.6	NOTE: All rods
3	30' LT Sta. 545+30	719.6	714.8	drove & pulled vary
4	Sta. 545+60	719.8	714.5	hard; probably stop
5	Sta. 545+00	723.6	714.4	pad by shale or other
6	30' LT Sta. 545+00	724.0	714.8	hard substance - most
7	Sta. 544+00	724.6	717.8	rods required
8	30' RT Sta. 545+16	723.0	713.5	hydraulic jack
9	30' RT Sta. 545+00	721.0	710.0	to pull.
10	30' RT Sta. 545+00	719.5	708.5	

Fill plus 20% = 6185 Cys.
 Surplus Excavation = 245 Cys.
 Cohesion Excavation = 2180 Cys.
 Spec. Borrow = 3760 Cys.



NOTE:
 For additional approach details see Sheet No. 3
 See Summary Sheet for Approach Structures.



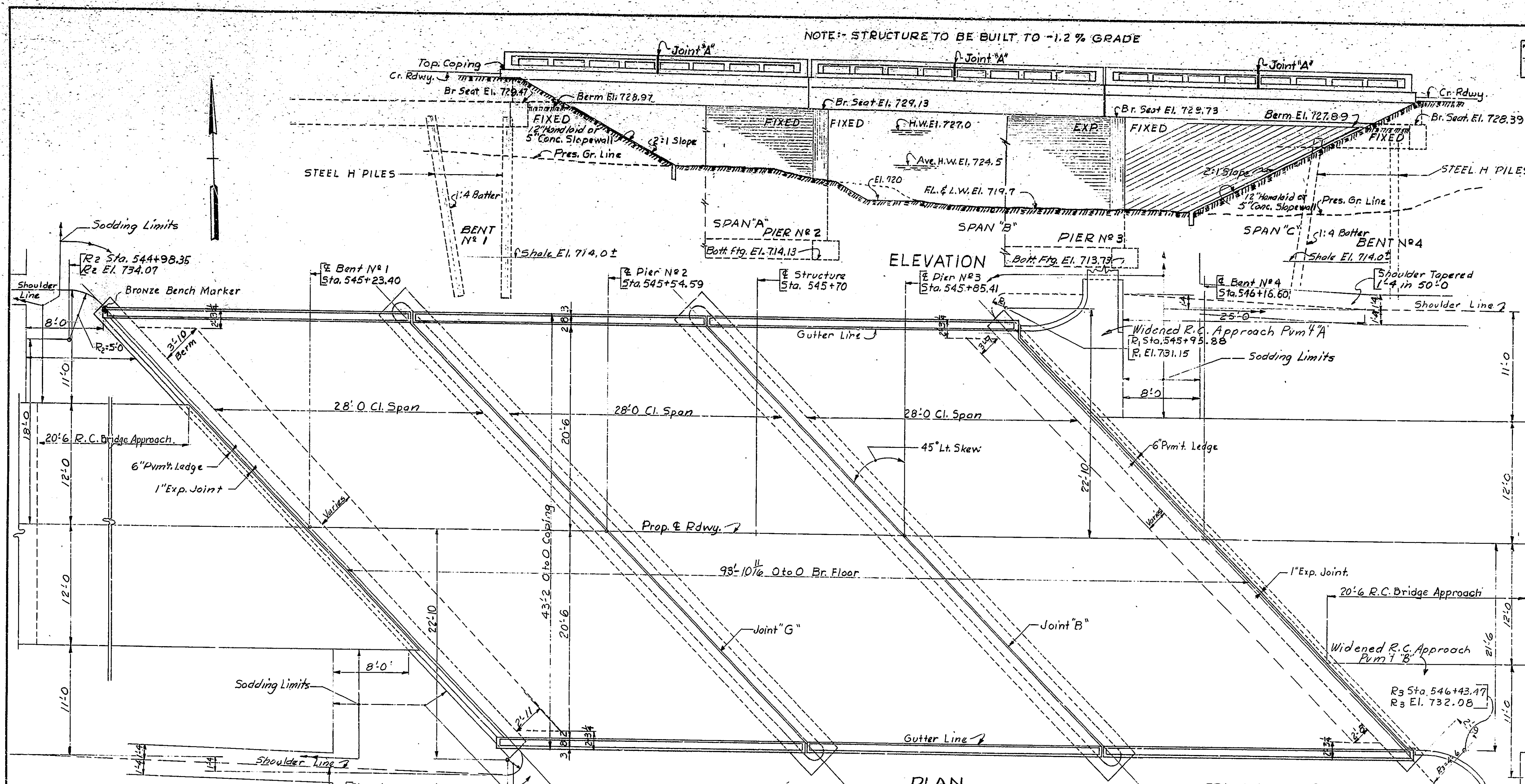
LAYOUT
REINFORCED CONCRETE GIRDER BRIDGE
 3 SPANS @ 28'-0" SKEW 45° L. 41'-0" ROADWAY
 OVER STONEY LONESOME CREEK ON STATE ROAD 46-K
STATE HIGHWAY COMMISSION OF INDIANA
 BARTHOLOMEW COUNTY
 SCALE: AS NOTED MARCH 20, 1958
 RECOMMENDED FOR APPROVAL: *C. R. Rimmer*
 DRAWING: C-1 OF 8
 PROJECT: F-214(6) STATION: 545+70
 BRIDGE CONTRACT NO. 4768
 BRIDGE FILE: 46-K-4175

DESIGNED: C.K.D.
 DRAWN: A.R. 6-5-57 C.K.D. J.D. 6-24-57
 TRACED: J.T.B. 10-3-57 C.K.D. 6-15-10-4-57

PROFILE ON PROPOSED ROADWAY
 Scales: Hor. 1"=30'0"; Vert. 1"=5'0"

NOTE: FIELD NOTES-BOOK BR. 1490 Pages 44-80.

BRIDGES OVER 20' SPAN					
PUR. ROAD AGENCY	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(6)	1958	6	25



JOINT LEGEND

JOINT "A" - indicates a vertical $\frac{3}{4}$ " open joint in rolling only.

JOINT "B" - indicates vertical $\frac{1}{2}$ " preformed joint filler extending from approximately $\frac{1}{2}$ " below the surface of the roadway and top of coping down to top of pier at girders and to bottom of curtain walls between girders. Joint sealing compound, hot poured joint sealer or cold applied mastic type filler to be placed in top $\frac{1}{2}$ " portion.

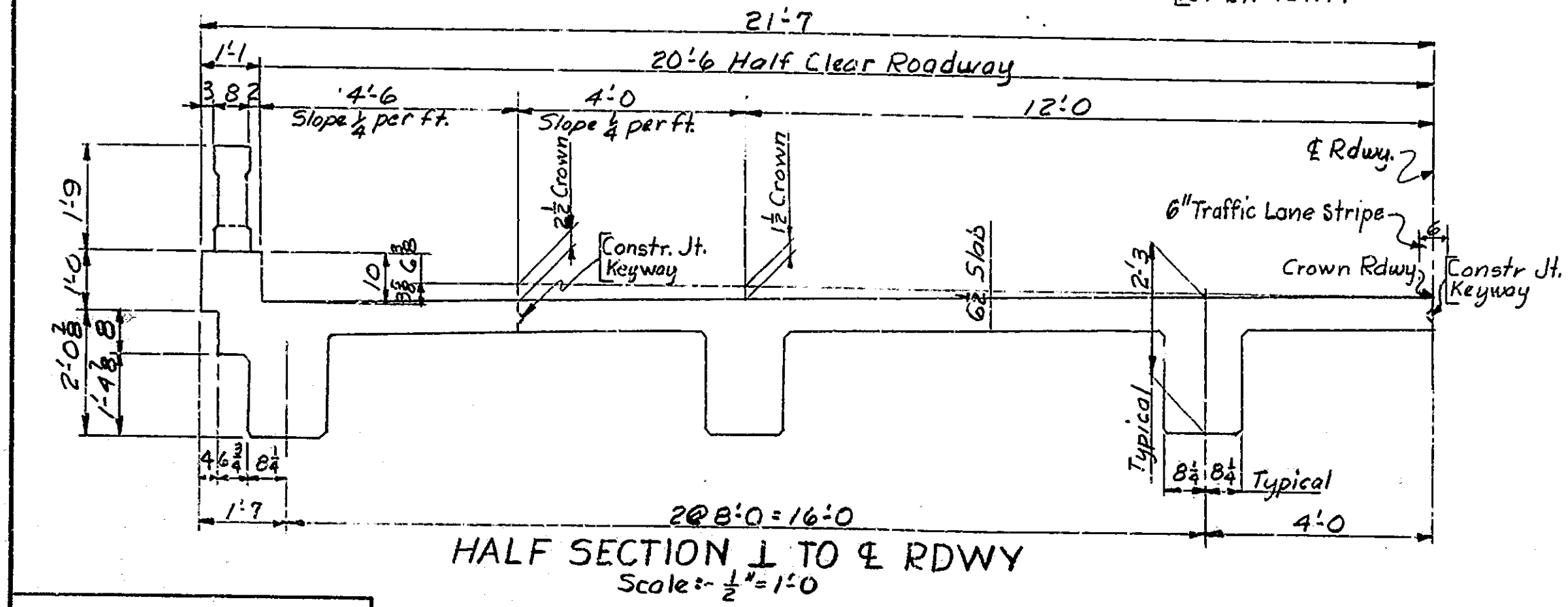
JOINT "C" - indicates $\frac{1}{2}$ " preformed joint filler under front $\frac{3}{4}$ " of girder bearing area with one layer of medium weight roofing area and on vertical faces of keyways at expansion end pier No 3.

JOINT "D" - indicates $\frac{1}{2}$ " preformed joint filler under front $\frac{3}{4}$ " of girder bearing area at fixed ends of R.C. girders at piers No 2 and No 3.

JOINT "E" - indicates $\frac{1}{2}$ " preformed joint filler under front $\frac{3}{4}$ " of girder bearing area of R.C. girders at bents No 1 and No 4.

JOINT "G" - indicates vertical $\frac{1}{4}$ " joint in top $\frac{1}{2}$ " of roadway and top of coping filled with joint sealing compound, hot poured joint sealer or cold applied mastic type filler with vertical construction joint extending down from $\frac{1}{4}$ " joint to top of pier at girders and to bottom of curtain walls between girders.

Pavement to be warped from 15' at 12'-0" point to Handrail Tilted Section in 100' feet starting at end of R.C. Bridge Approach. (Typical for both ends.)



GENERAL NOTES:-

No present structure at proposed bridge site.

Depth of footing to be extended if found necessary. See Art. B 403.2(a) of specifications.

Footing shall extend minimum of 6" into solid rock.

Reinforcing steel not to be ordered until rock is uncovered.

Piles shall be driven to approximate refusal.

Reinforcing steel covering shall be 1 inch in floor slabs, 3 inches in footings, except bottom steel which shall be 4 inches, and 2 inches in all other parts unless noted.

Concrete in footings and pier stems to be Class "E".

Concrete in superstructure, including railings and bent caps to be class "A".

Concrete in structure not noted above and in concrete slope wall to be class "D".

Continuous concrete pours shall be required between construction joints as shown on detail plans.

Bevel forms $\frac{1}{4}$ " under copings; and chamfer exposed edges 1/4" unless noted.

Construct 5" concrete slope wall or alternate 12" handlaid riprap slope walls at locations as shown on layout.

Tolerance in position of pile head maximum 2 inches.

3" expansion joint to be placed in approach pavement approximately 60' from each end of bridge floor.

All rolling to be constructed perpendicular to grade.

6" traffic lane stripe to be placed along R roadway on bridge floor and pavement.

See special provisions for items included in this contract.

STANDARD DRAWINGS

STANDARD DRAWING	DATE	PURPOSE
C1	Rev. 12-2-58	Bar bending details, 1" Exp. Jt. Test bar samples, Reinforcing bar notes
M1	Rev. 6-3-57	Pavement offsets, Sodded shoulder detail, Private Drive Details, Paved side ditch type "A", Guide Posts, & B/W Markers
M2	Rev. 6-3-57	3" Exp. Jt. Slope wall
M3	Rev. 1-15-59	R.C. Bridge Approach Details
S2	Rev. 9-20-55	Details for placing Grade B Spec. Berm
1	Rev. 2-11-54	Standard Detour Signs
2	Rev. 11-18-58	Standard Detour Signs
A	April 57	Standard Pavement Joints
M.P.	Rev. 3-11-59	Pipe For Surface Drainage

DESIGN DATA

Design for H20-S16-44 loading in accordance with 1953 AA5HO Specifications, except floor slab designed for 16,000 lb. wheel load.

GENERAL PLAN

REINFORCED CONCRETE GIRDER
3 SPANS 28'-0", 28'-0", 28'-0"
41'-0" CLEAR ROADWAY SKEW 45° Lt.
OVER STONEY LONESOME CREEK
ON STATE ROAD 46

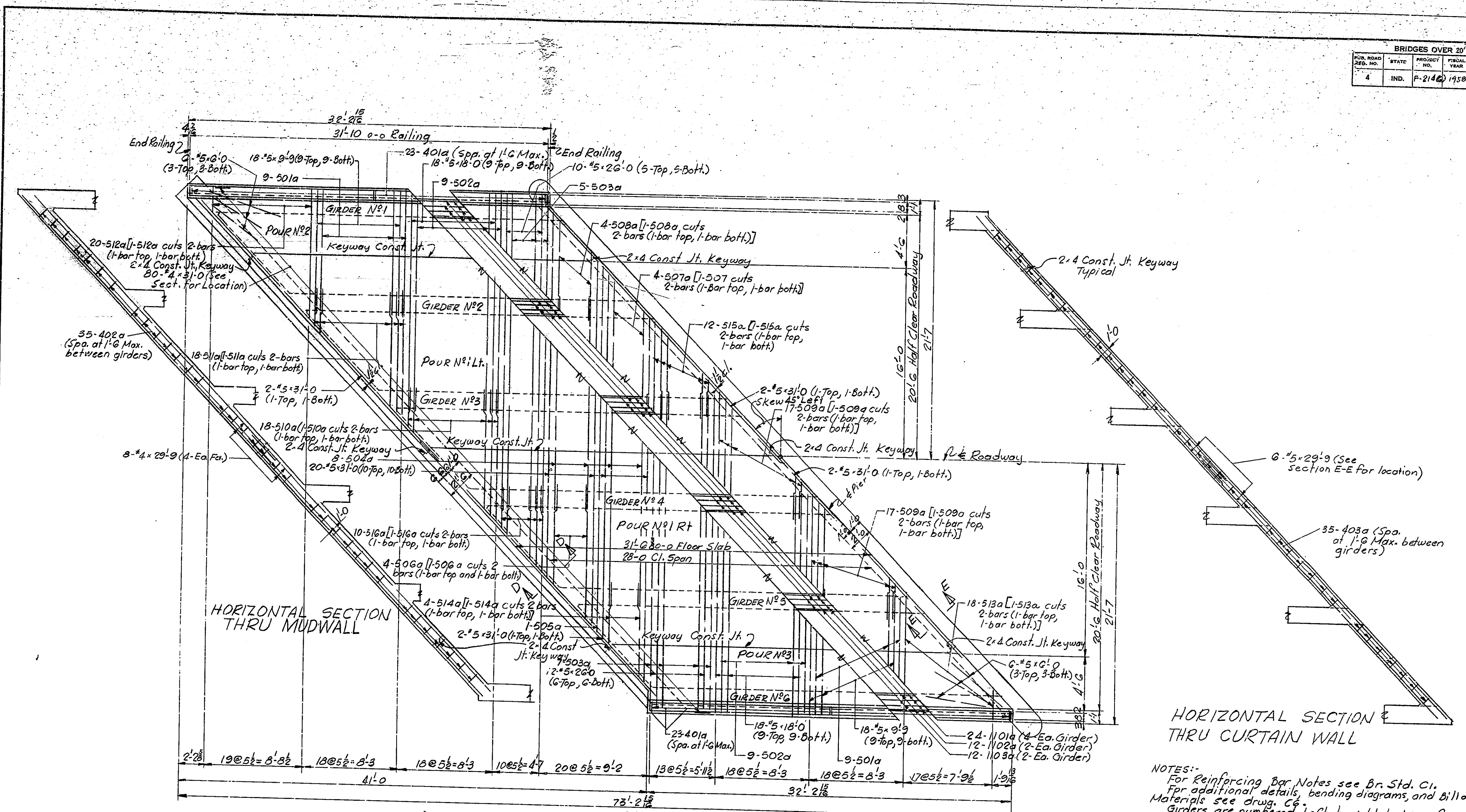
STATE HIGHWAY DEPARTMENT OF INDIANA
BARTHOLOMEW COUNTY
MARCH 20, 1958

RECOMMENDED FOR APPROVAL: *C. R. Limerick*
ENGINEER OF BRIDGE DESIGN

DRAWING: C20F 8
PROJECT: F-214(6)
BRIDGE CONTRACT NO. 4768
BRIDGE FILE: 46-K-4175

DESIGNED: C.K.D.
DRAWN: LEG 10-18-57
TRACED: C.K.D.

BRIDGES OVER 20' SPAN					
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(2)	1958	9	25



DESIGN DATA:-
 Unit Stresses:- $f_s = 20000 \text{ psi}$
 $f_c = 1200 \text{ psi}$
 Live Load: H20-S16-44 with impact and distribution of loads in accordance with 1953 AASHTO specifications, except floor slab which is designed for 16000 wheel load.
 Dead Load increased 15% sq. ft. of roadway for future wearing surface.
 Slab designed with wearing surface.
 Maximum D.L. deflection $\frac{1}{4}$

NOTES:-
 For Reinforcing Bar Notes see Br. Std. C1.
 For additional details, bending diagrams, and Bill of Materials see drwg. C6.
 Girders are numbered left to right looking forward with the stationing.

DETAILS SPANS A AND C
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: $\frac{1}{2} = 1'-0$

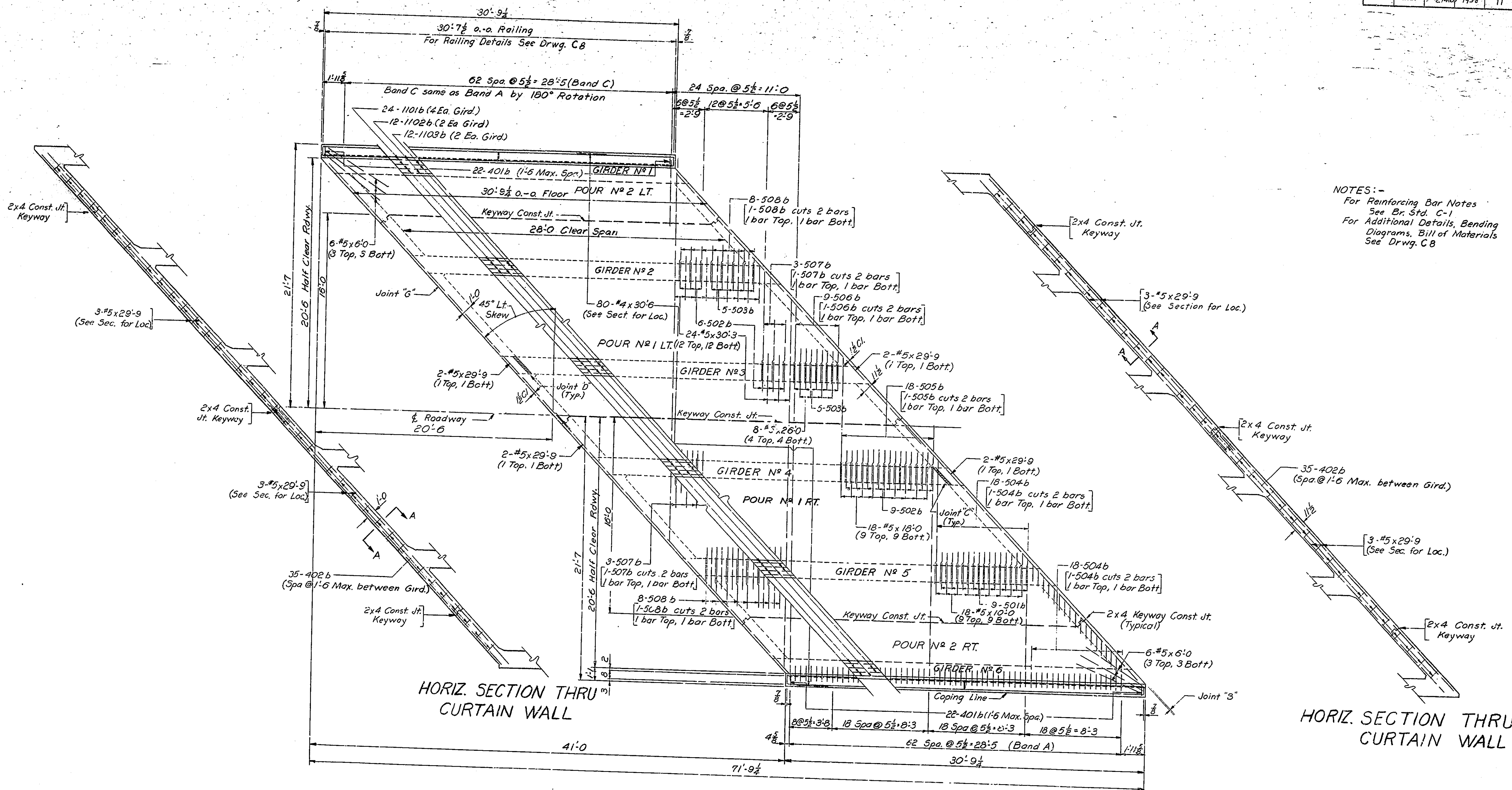
MARCH 20, 1958

RECOMMENDED FOR APPROVAL: *R. Blumner*
 ENGINEER OF BRIDGE DESIGN

DRAWING: C-50F8
 PROJECT: F-214(2)
 BRIDGE CONTRACT NO. 4768
 BRIDGE FILE: 46-K-4175

DESIGNED: C-10-00 CWD
 DRAWN: RNB 10-15-57 WED PK 11-7-57
 TRACKED: CWD

BRIDGES OVER 20' SPAN				
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	F-214(6)	1958	11 25



NOTES:-
 For Reinforcing Bar Notes
 See Br. Std. C-1
 For Additional Details, Bending
 Diagrams, Bill of Materials
 See Drwg. C B

PLAN

DETAILS SPAN B
 STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 1/4" = 1'-0"

MARCH 20, 1958

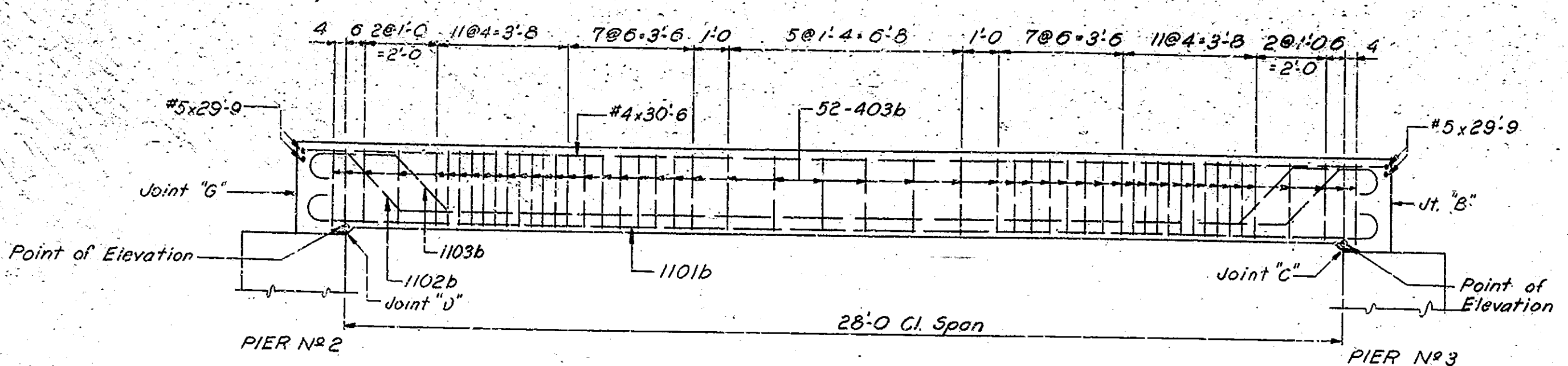
RECOMMENDED FOR APPROVAL: *Edumier*

DRAWING - C7 OF 8
 PROJECT - F-214(6)
 BRIDGE CONTRACT NO. 4768
 BRIDGE FILE - 46-K-4175

DESIGNED C1000 C.W.D.
 DRAWN J.W. 10-11-36 C.W.D. R.K. 11-7-57
 TRACED _____ C.W.D.

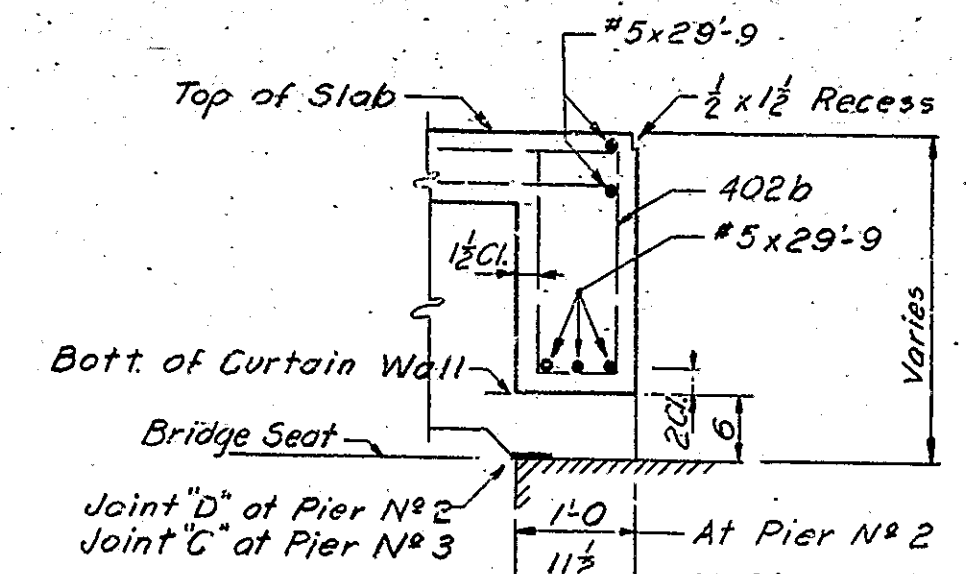
BRIDGES OVER 20' SPAN						
PUB. ROAD A.P.A. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
4	IND.	F-214(6)	1958	12	25	

BOTTOM GIRDER ELEVATIONS (SPAN B)						
Girder	1	2	3	4	5	6
Pier No 2	729.62	729.69	729.70	729.60	729.40	729.14
Pier No 3	729.28	729.35	729.36	729.26	729.06	728.80

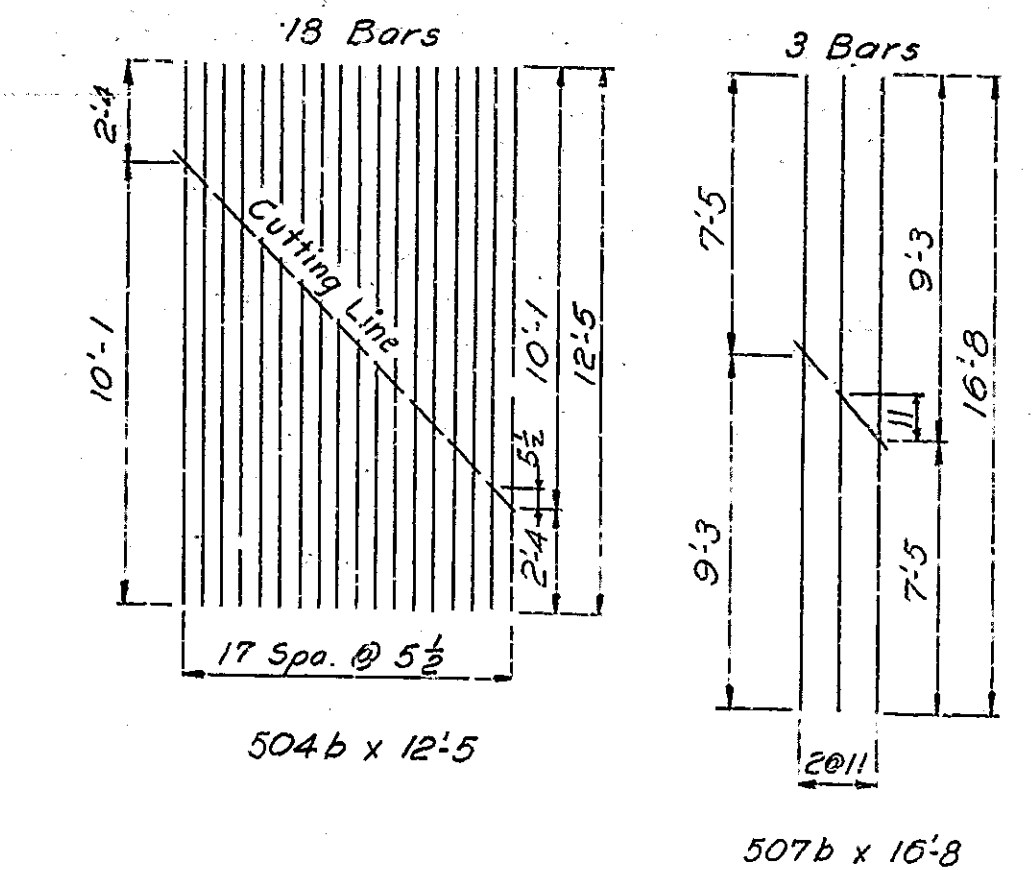


LONGITUDINAL GIRDER SECTION
THRU GIRDERS
Scale: $\frac{3}{8}$ " = 1'-0"

See Section A-A for Reinf. Steel in Curtain Walls

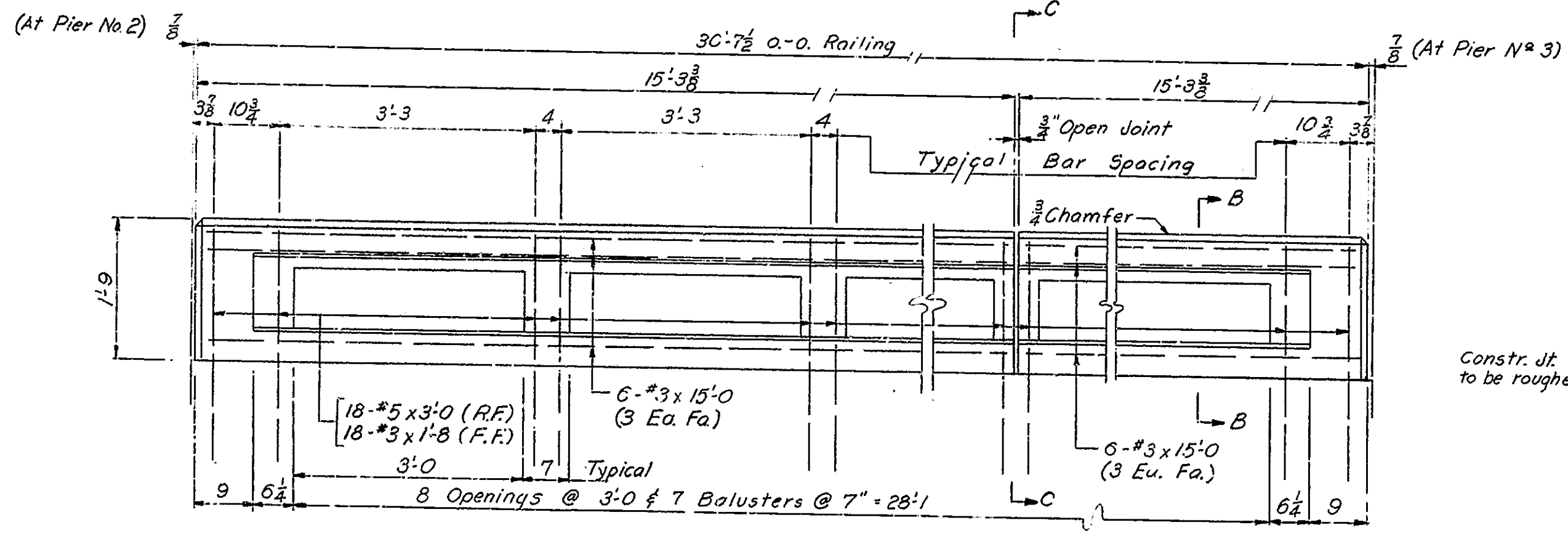


SECTION A-A
Scale: $\frac{3}{8}$ " = 1'-0"

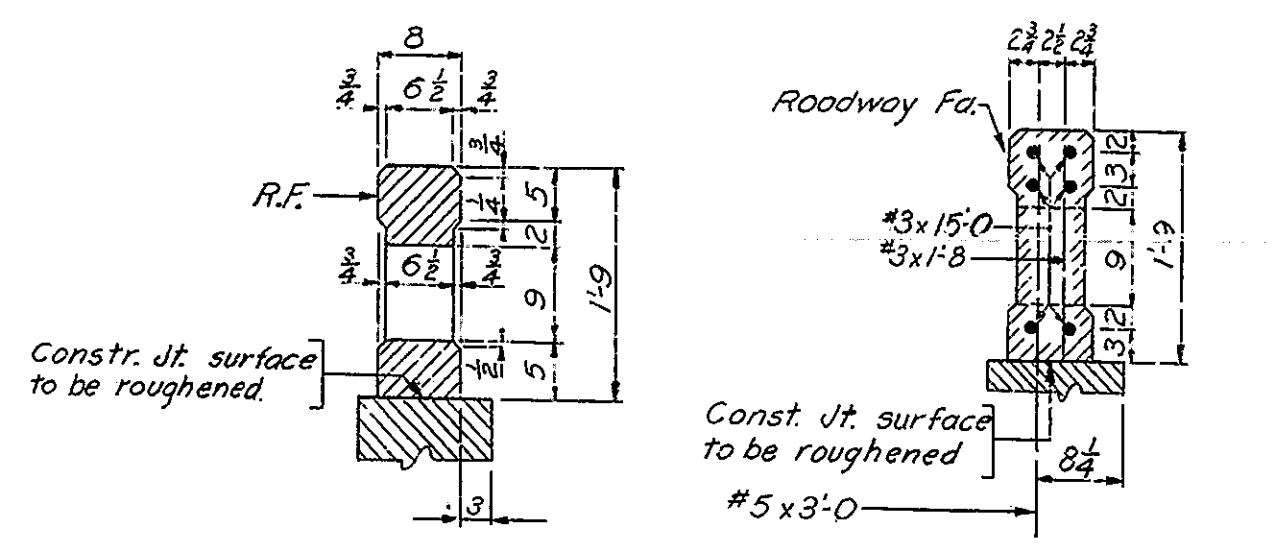


BILL OF MATERIALS

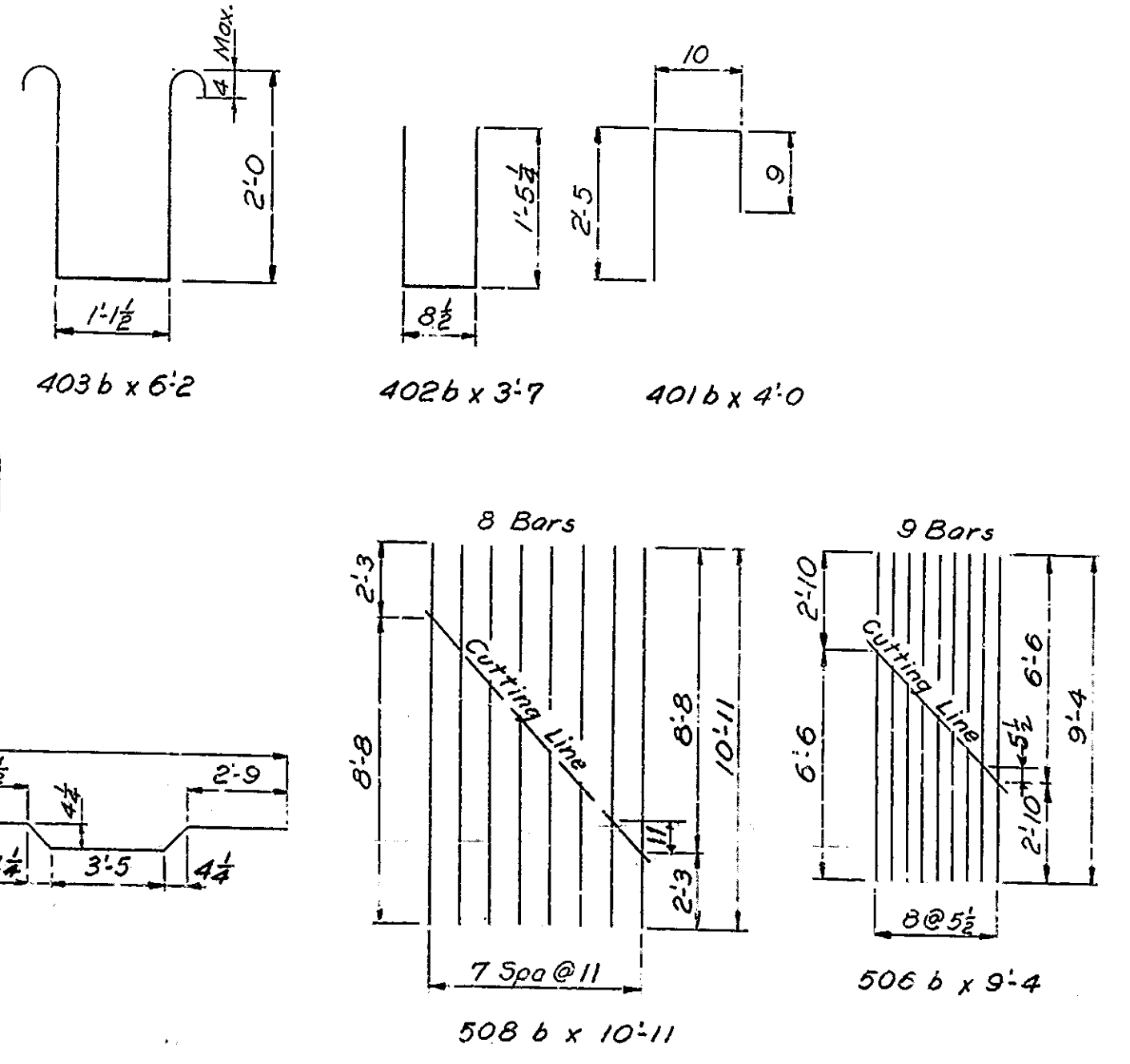
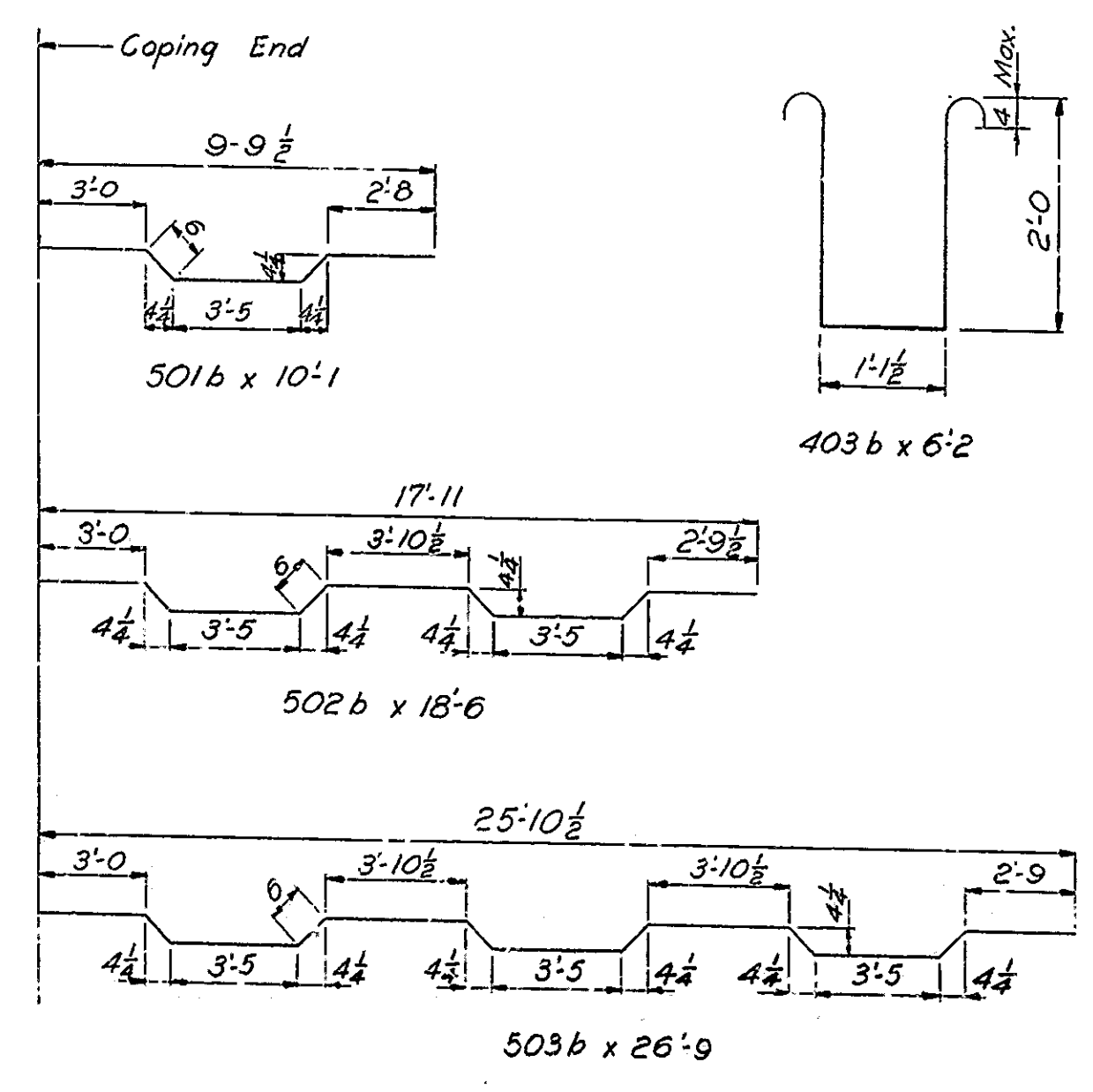
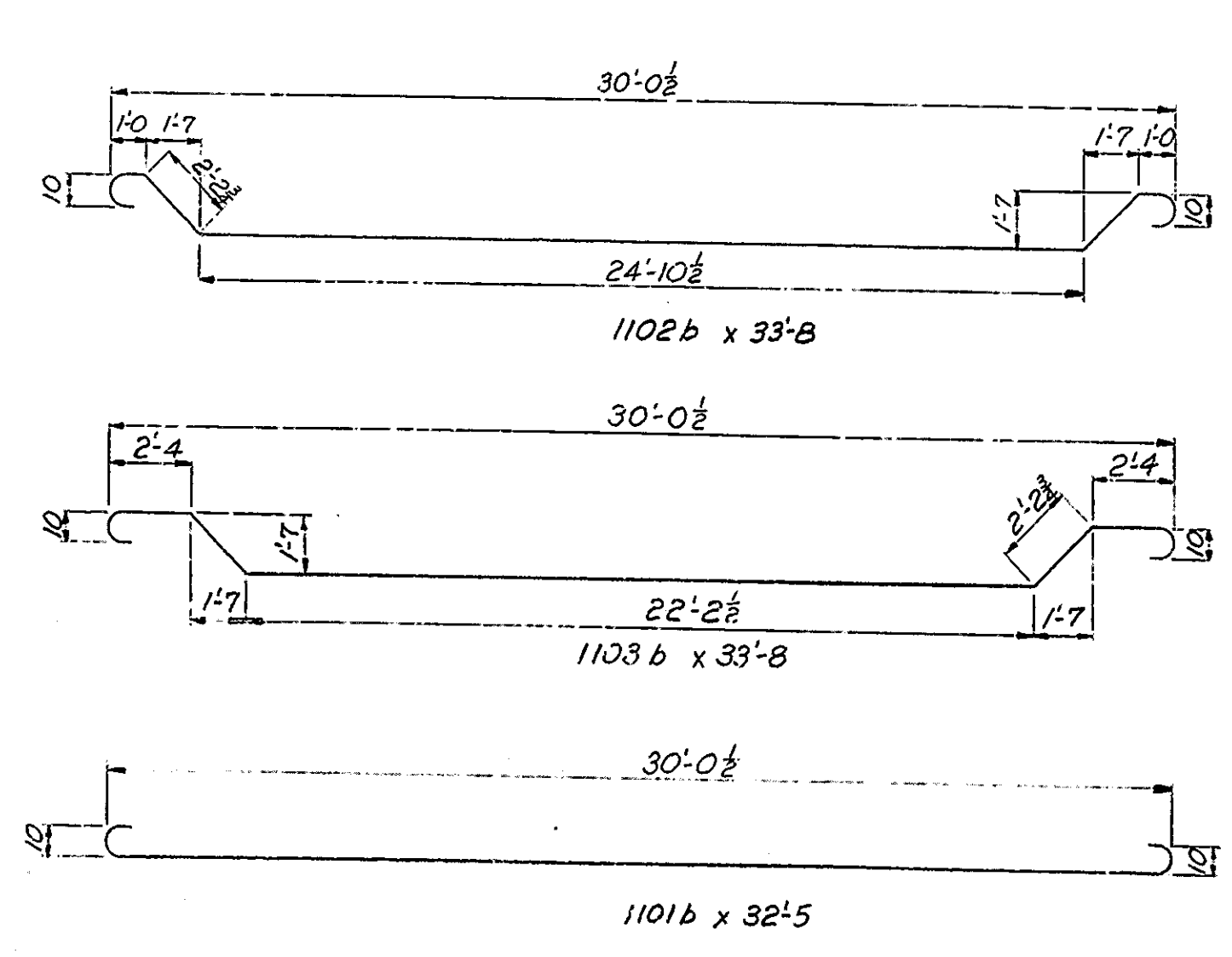
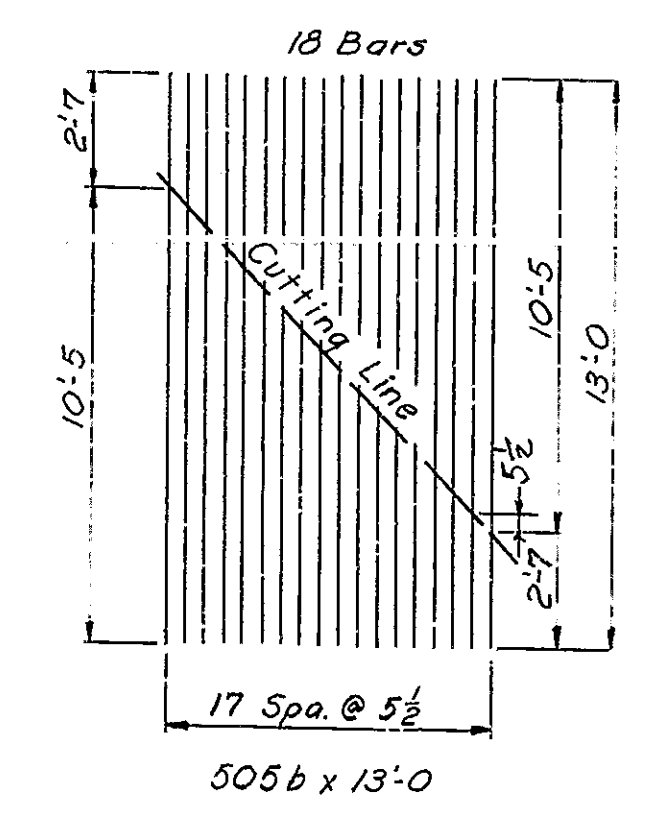
REINFORCING STEEL			
SIZE AND MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
1101b	24	32'-5	
1102b	12	33'-8	
1103b	12	33'-8	
TOTAL #11			8428
501b	18	10'-1	
502b	24	18'-6	
503b	15	26'-9	
504b	72	12'-5	
505b	36	13'-0	
506b	18	9'-4	
507b	6	18'-8	
508b	16	10'-11	
#5	24	30'-3	
#5	20	29'-9	
#5	16	26'-0	
#5	36	18'-0	
#5	36	10'-0	
#5	12	6'-0	
#5	36	3'-0	
TOTAL #5			6004
401b	44	4'-0	
402b	70	3'-7	
403b	312	6'-2	
#4	80	30'-0	
TOTAL #4			3200
#3	24	15'-0	
#3	36	1'-8	
TOTAL #3			158
TOTAL STEEL			17,788
CONCRETE			
Class F ₁			
Four N ^o 1 Lt.			17.9 Cys
Four N ^o 2 Lt.			7.9 Cys
Four N ^o 1 Rt.			17.0 Cys
Four N ^o 2 Rt.			77.0 Cys
TOTAL CLASS F ₁			511.8 Cys
Railing Concrete (L ₁ Cys) 6131.7			



RAILING ELEVATION
Scale: $\frac{3}{8}$ " = 1'-0"



SECTION BB Showing Concrete Dimensions Scale: $\frac{3}{8}$ " = 1'-0"
SECTION C-C Showing Reinf. Steel Scale: $\frac{3}{8}$ " = 1'-0"



NOTES:
For Reinforcing Bar Notes See Br. Std. C-1.
See Drwg C-6 for Section 1 to & Roadway
For Additional Details and Location of Section A-A See Drwg C-7

DETAILS SPAN B
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: $\frac{3}{8}$ " = 1'-0" UNLESS NOTED MARCH 20, 1958
RECOMMENDED FOR APPROVAL: [Signature]
DRAWING: C-8 OF 8
PROJECT: F-214(6)
BRIDGE CONTRACT NO. 4768
BRIDGE FILE: 46-K-4175

DESIGNED C.10.00 C.K.D.
DRAWN J.W.10-18-57 C.K.D. R.K.11-13-57
TRACED C.K.D.

ITEM	STRUCTURE QUANTITIES															TOTALS	STRUCTURAL STEEL	CAST IRON	STEEL H. PILES									
	CONCRETE				RAILING CONCRETE	REINFORCING STEEL (1934 STD. WTS.)																						
	CLASS F	CLASS D	CLASS E ABOVE FTG.	CLASS E FTG.	CLASS F	#11(1/4")	#10(1/2")	#9(1/2")	#8(1/2")	#7(3/4")	#6(3/4")	#5(5/8")	#4(1/2")	#3(3/4")	#2(1/2")													
	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS. LIN. FT.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.													
SUBSTRUCTURE																												
Bent No 1	14.9															1316	54	445	1815									
Pier No 2			60.8	19.0												3022	203	92	3317									
Pier No 3			60.8	19.0												3022	147	92	3261									
Bent No 4	14.9															1316	54	445	1815									
SUPERSTRUCTURE																												
Span A	53.1				1.7	63.7													18229									
Span B	51.1				1.7	61.3													17788									
Span C	53.1				1.7	63.7													18229									
Integral Curb-walk	.3																											
Splice Bars																												
																117			207									
TOTALS	187.4		121.6	38.0	5.1	188.7										2648	6078	21,922	111,398	482			68,259				12	216

BILL OF SPLICE BARS						
REINFORCING STEEL						
Size	No. Pos.	Length	Location	Weight	Total Weight	
#11	2	11'-0"		117#		
#7	1	8'-0"		16#		
#6	3	7'-6"		34#		
#5	4	6'-9"		28#		
#4	3	6'-0"		12#		
TOTAL				177#	207#	

BILL OF MATERIALS FOR R.C.C. BRIDGE APPROACH						
REINFORCING STEEL						
Size	No. Pos.	Length	Location	Weight	Total Weight	
STANDARD R.C.C. BR. APPROACH						
#9	96	20'-6"	Longit.	2053#		
#5	22	33'-3"	Transv.	763#		
WIDENED R.C.C. APPROACH P.V.M.T. (See Sheet N-4)						
#5				704#		
#4				75#		
TOTAL #5				3520#		
TOTAL #4				75#		
TOTAL STEEL				3598#		

BARRICADES, BARRIERS, TRAFFIC SIGNS, & LIGHTS						
ITEM	UNIT	QUANTITY	ASSEMBLY			
WARNING SIGNS	Each	12	Signs 130 R	4		
			" 123 R	4		
			" 124 R	4		
			" 115 R	4		
STD. BARRICADES (TYPE A)	Each	2	Torches	8		
			Barricades (Type A)	2		
			Signs 113 R	2		
			" W11 R	2		
STD. BARRICADES (TYPE B)	Each	2	Lanterns	4		
			Signs 113	2		
TYPICAL SIGN STALCARDS	Each	2	Suitable Barriers	2		
			Lanterns or Torches	2		
TYPICAL SIGN STALCARDS	Each	2	Barricades (Type B)	2		
			Signs 113	2		
			Lanterns or Torches	2		
			Signs 113 R	2		
TYPICAL SIGN STALCARDS	Each	2	" W11 R	2		
			" 117	2		
			Lanterns	2		

APPROACH STRUCTURES						
STRUCT. No.	LOCATION	SIZE	DESCRIPTION	CL. D CONK. IN STRUKTS. CU. YDS.	REINF. STEEL LBS.	CAST IRON LBS.
10A	45 Ft. Sta. 544+30	12"	Class V Pipe	24'	0.6	
10B	120' Lt. Sta. 545+03	12"	Class I Pipe	36'	0.6	
10C	35' Lt. Sta. 547+97	12"	Class V Pipe	28'	0.6	
10	Sta. 548+50	24"	Class I Pipe	68'	1.2	
REMARKS						
				2 1/2 straight Headwalls, See Br. Std. M1.		
				2 1/2 straight Headwalls, See Br. Std. M1.		
				2 1/2 straight Headwalls, See Br. Std. M1.		
				2 1/2 straight Headwalls, See Br. Std. M1.		
				2 1/2 straight Headwalls, See Br. Std. M1.		
TOTALS				3.0		

BRIDGES OVER 20' SPAN					
REG. NO.	STATE	PROJECT NO.	EST. YEAR	SHEET NO.	TOTAL SHEETS
4	INC.	F-214(6)	1958	13	25

SUMMARY			
ITEM	DESCRIPTION	UNIT	QUANTITY
1	Class F Concrete	Cu. Yds.	187.4
2	Class D Concrete	Cu. Yds.	
3	Class E Concrete above Footings	Cu. Yds.	121.6
4	Class E Concrete in Footings	Cu. Yds.	38.0
5	Railing Concrete	Lin. Ft.	188.7
6	Reinforcing Steel	Lbs.	68,259
7	Structural Steel	Lbs.	
8	Cast Iron	Lbs.	
9	Untreated Timber Piles furnished	Lin. Ft.	
10	Untreated Timber Piles Driven	Lin. Ft.	
11	Furnishing Equipment for Driving Piles	Lump Sum	1
12	Wei Excavation	Cu. Yds.	215
13	Waterway Excavation	Cu. Yds.	150
14	Common Excavation	Cu. Yds.	2180
15	Specia' Borrow	Cu. Yds.	3760
16	Grade B Special Borrow	Cu. Yds.	1010
17	Sodding	Sq. Yds.	680
18	Mulched Seeding	Sq. Yds.	5125
19	Cement Concrete Pavement	Sq. Yds.	
20	Reinforced Cement Concrete Pavement	Sq. Yds.	1639
21	Thickened Joint Cement Concrete Pavement	Sq. Yds.	
22	Aggregate for Compacted Aggregate Base	Tons	
23	Removal Present Structure	Lump Sum	
24	Temporary Bridge and Approaches	Lump Sum	
25	Warning Signs	Each	12
26	Std. Barricades (Type A)	Each	2
27	Class D Concrete in Structures	Cu. Yds.	3.0
28	R/W Markers	Each	7
29	Steel Pile Shells furnished	Lin. Ft.	
30	Steel Pile Shells Driven	Lin. Ft.	
31	Steel H Piles furnished	Lin. Ft.	216
32	Steel H Piles Driven	Lin. Ft.	216
33	Class X Excavation	Cu. Yds.	14
34	Subbase Type I or II	Cu. Yds.	435
35	Pvmt. Contraction Joints	Lin. Ft.	336
36	3" Exp. Joint	Lin. Ft.	48
37	1" Exp. Joint	Lin. Ft.	95
38	Slopewall	Sq. Yds.	500
39	Paved Side Ditch (Type A)	Lin. Ft.	95
40	Guide Posts (Type A)	Each	24
41	12" Class I Pipe	Lin. Ft.	36
42	24" Class I Pipe	Lin. Ft.	68
43	12" Class V Pipe	Lin. Ft.	52
44	Hot Asphaltic Conc. Binder (3")	Tons	173
45	Salvaged Road Material	Cu. Yds.	235
46	Temporary Runaround	Lump Sum	1
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			

SUMMARY
STATE HIGHWAY DEPARTMENT OF INDIANA

MARCH 20, 1958

RECOMMENDED FOR APPROVAL *C.R. Rummel*
ENGINEER IN CHARGE

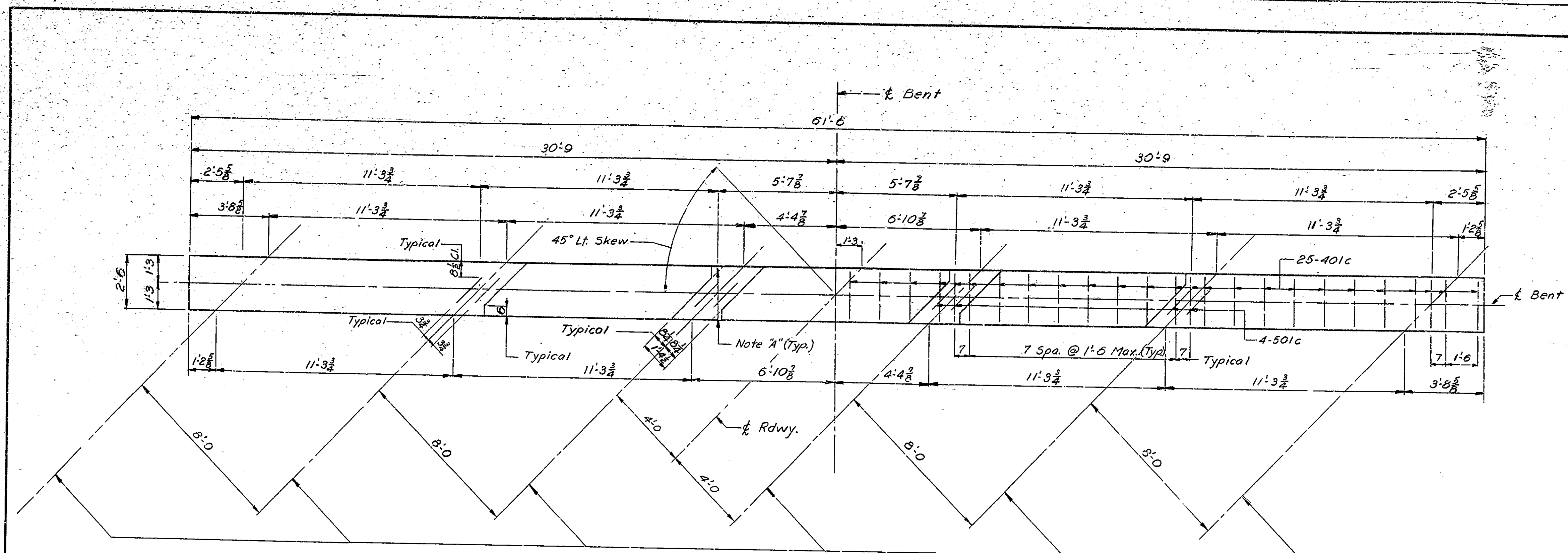
PROJECT - F-214(6)

BRIDGE CONTRACT NO. 4768

BRIDGE FILE 46-K-4175

SUMMARY LEG 1-28-58
TRACED TO 1-29-58
LEG 1-31-58

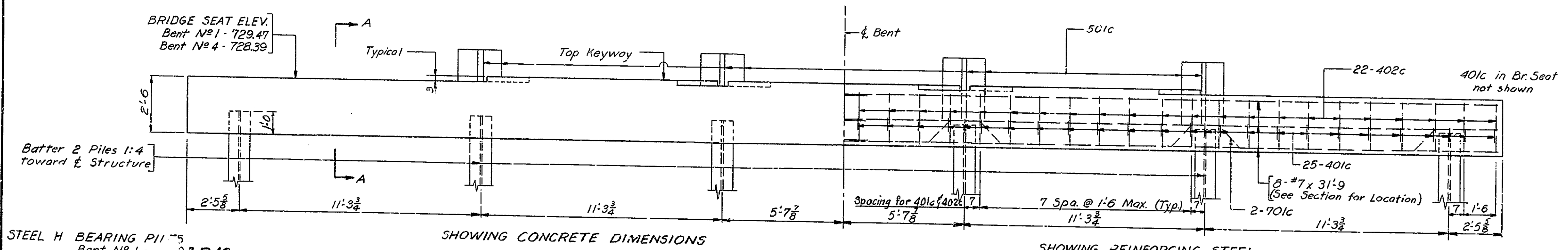
BRIDGES OVER 20' SPAN					
PUB. ROAD NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(6)	1958	7	25



BILL OF MATERIALS
BENT NO. 1

REINFORCING STEEL			
SIZE AND MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
701c	4	33'-11"	
#7	16	31'-9"	
TOTAL #7			1316
501c	8	6'-5"	54
401c	100	3'-3"	
402c	42	7'-9"	
TOTAL #4			445
TOTAL STEEL			1815
CONCRETE			
Class "F" (Cap)			14.9 cys
MISCELLANEOUS			
6-10BP42 x 18"±			108 Lins

SHOWING CONCRETE DIMENSIONS
 SHOWING 501c & 401c IN BRIDGE SEAT
PLAN - BENT NO. 1
 Note "A" Superstructure to be formed to keep concrete from this area of keyway.
 Reinforcing Steel Symmetrical about ξ Bent
 BENT NO. 4 SAME BY 180° ROTATION

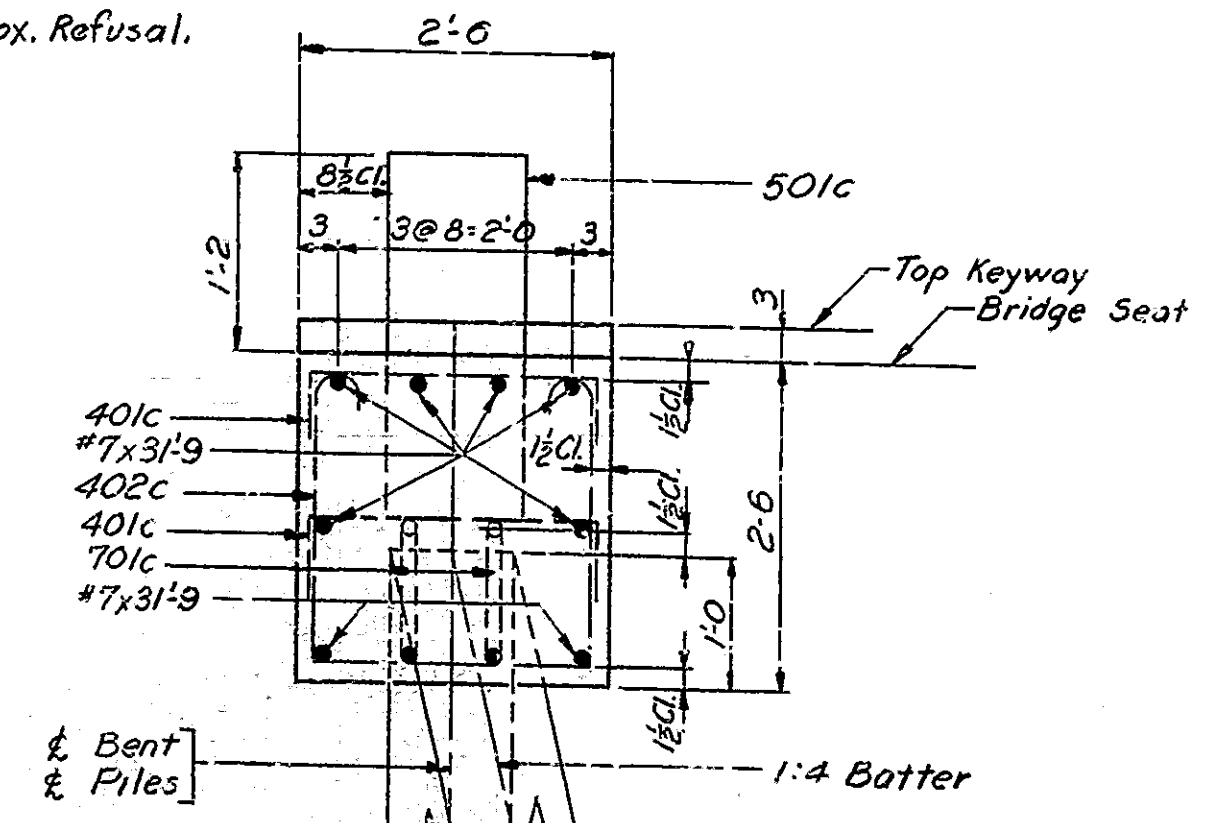


ELEVATION

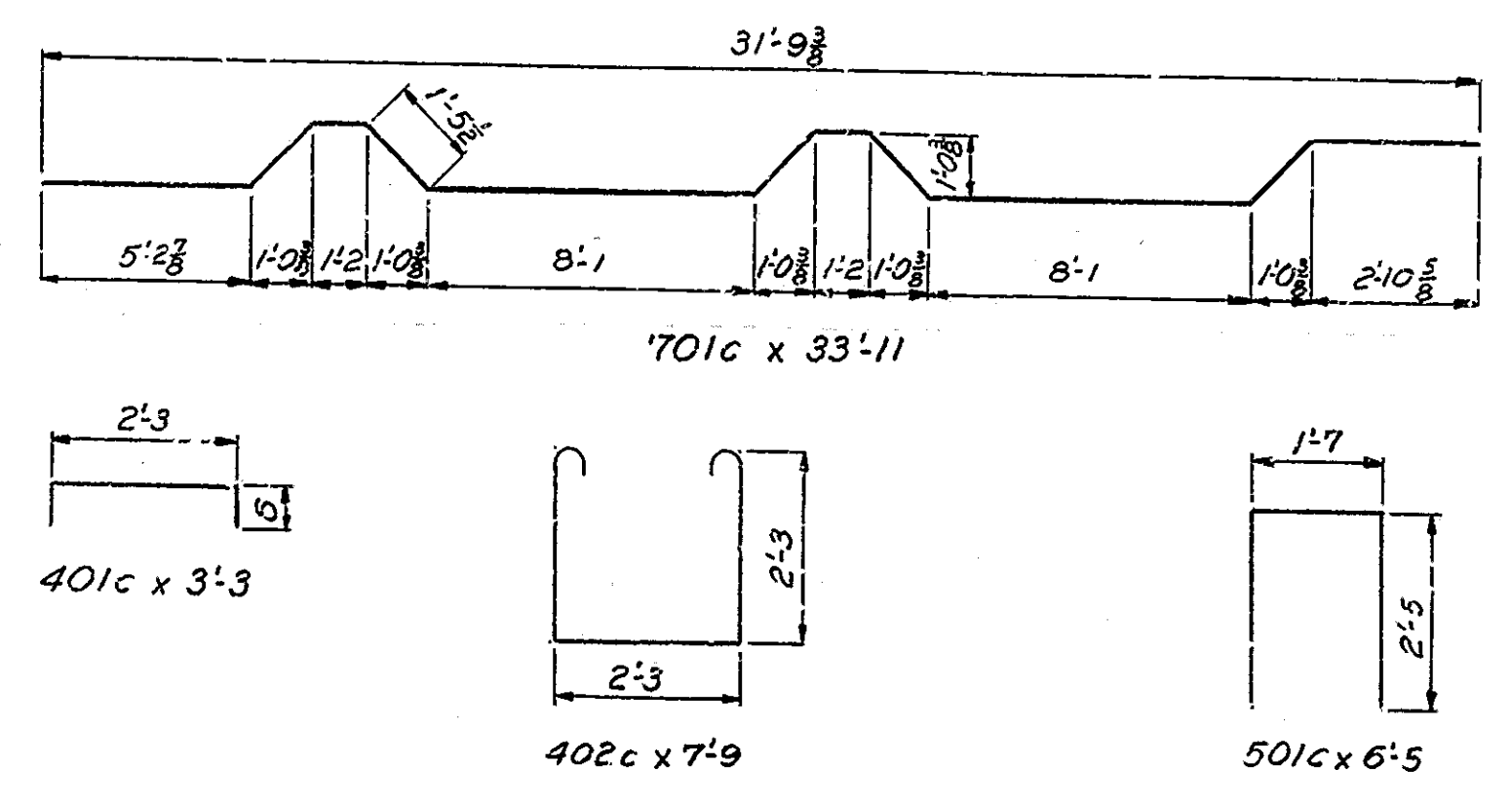
BRIDGE SEAT ELEV.
 Bent No. 1 - 729.47
 Bent No. 4 - 728.39

Batter 2 Piles 1:4
 toward ξ Structure

STEEL H BEARING PILE
 Bent No. 1 = 10BP42
 Bent No. 4 = 10BP42
 Piling to be driven to Approx. Refusal.



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



NOTE: See Br. Std. C-1 for Reinforcing Bar Notes
 Cap is not to be poured until after fill
 has been completed up to approximately
 the elevation of the bottom of the cap.

BENT NO. 1 & NO. 4 DETAILS
 STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 3/8" = 1'-0" UNLESS NOTED MARCH 20, 1958

RECOMMENDED FOR APPROVAL: *C. J. ...*

DRAWING: C30F 8
 PROJECT: F-214(6)
 BRIDGE CONTRACT NO. 4768
 BRIDGE FILE: 46-K-4175

DESIGNED: C. J. ...
 DRAWN: J. W. ...
 TRACED: ...

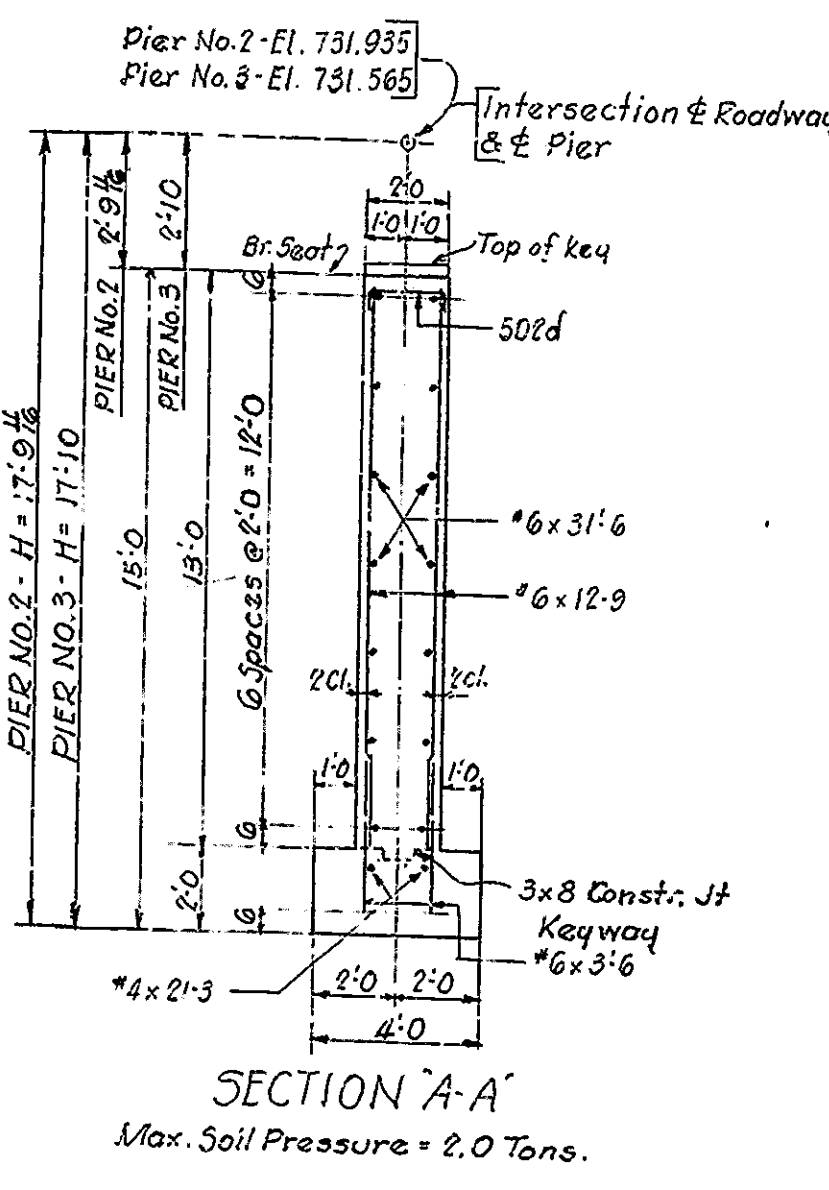
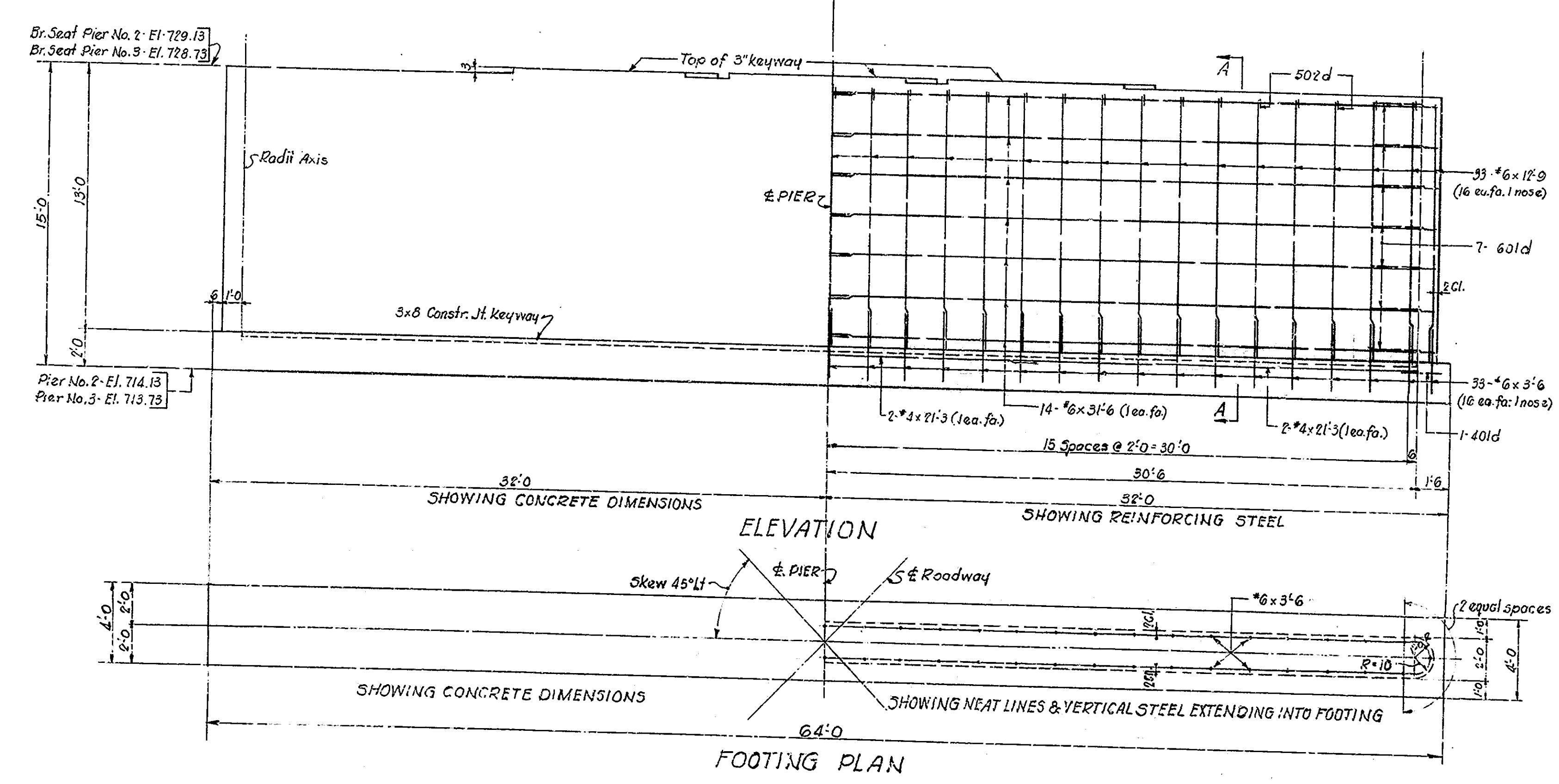
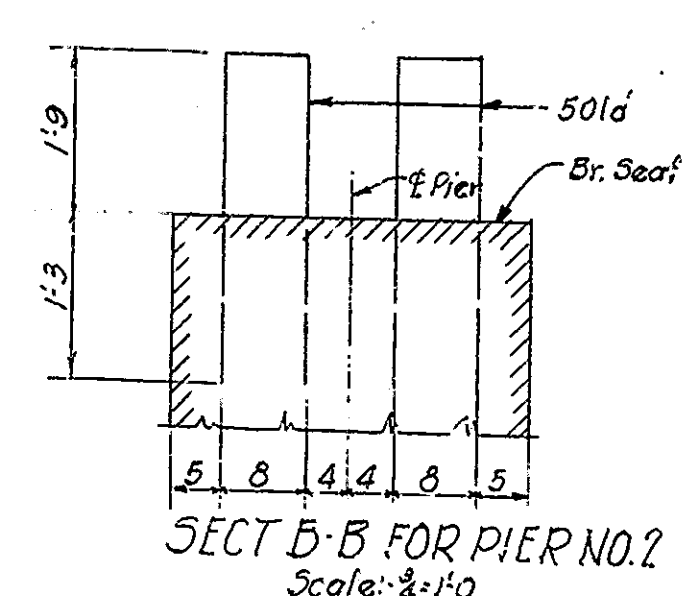
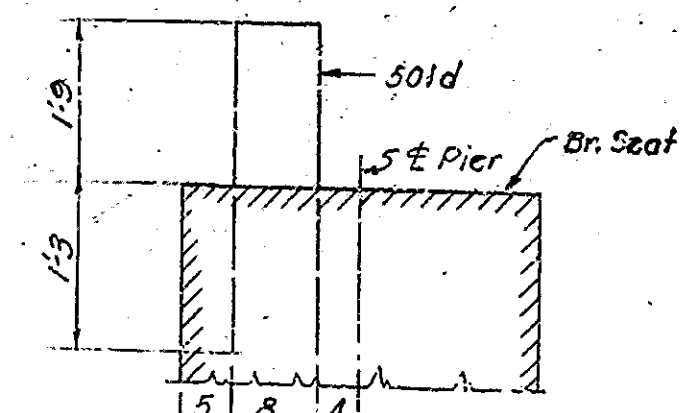
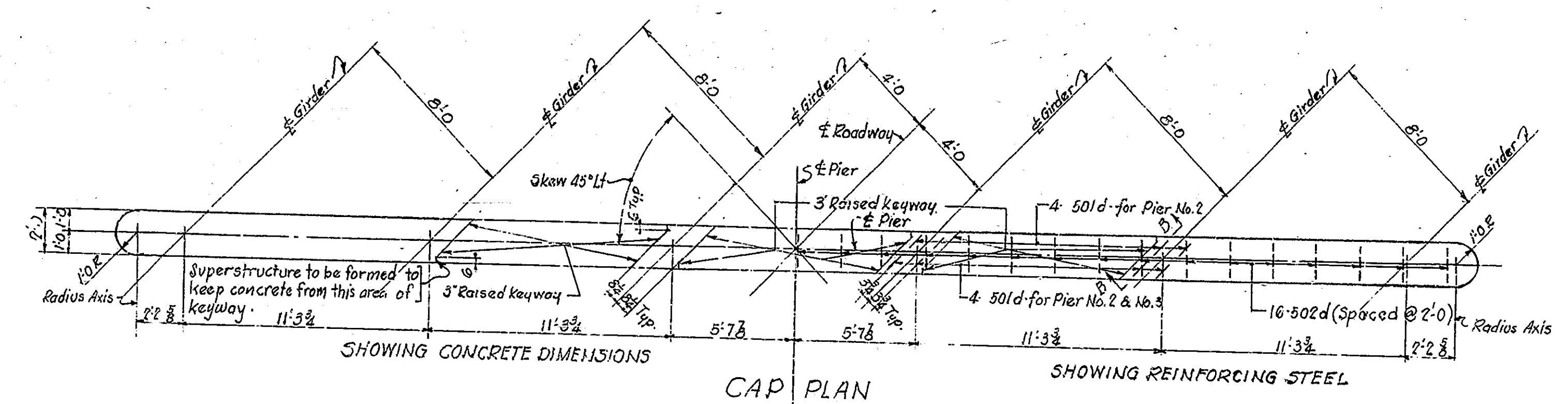
BRIDGES OVER 20' SPAN					
FILE NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-214(6)	1958	8	25

**BILL OF MATERIALS
PIER NO. 2**

REINFORCING STEEL			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT
60ld	14	6'5"	
#6	28	31'6"	
#6	64	12'9"	
#6	64	3'6"	
	Total #6		3022*
50ld	16	6'8"	
50ld	31	2'10"	
	Total #5		203*
40ld	2	5'1"	
#4	6	21'3"	
	Total #4		92*
	Total Steel		3317*
CONCRETE			
Class E Above Footings			60.8 Cys
Class E Footings			19.0 Cys

**BILL OF MATERIALS
PIER NO. 3**

REINFORCING STEEL			
SIZE OR MARK	NO. OF BARS	LENGTH	WEIGHT
60ld	14	6'5"	
#6	28	31'6"	
#6	64	12'9"	
#6	64	3'6"	
	Total #6		3022*
50ld	8	6'8"	
50ld	31	2'10"	
	Total #5		147*
40ld	2	5'1"	
#4	6	21'3"	
	Total #4		92*
	Total Steel		3261*
CONCRETE			
Class E Above Footings			60.8 Cys
Class E Footings			19.0 Cys



NOTE: See Br. Std. C1 for Reinforcing Bar Notes.

**PIER NO. 2 & NO. 3 DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA**

SCALE: 1/4" = 1'-0" unless noted.

MARCH 20, 1958

RECOMMENDED FOR APPROVAL: *C.R. Rimmer*
ENGINEER OF BRIDGE DESIGN

DRAWING: C-4 of 8
PROJECT: F-214(6)
BRIDGE CONTRACT NO. 4768
BRIDGE FILE: 46-K-4175

DESIGNED: LEG-10-11-57 C.K.D. MW-10-23-57
DRAWN: H.E.B-10-28-57 C.K.D. R.K. 11-21-57
TRACED: C.K.D.