R-23259

R-23259 part 4 of 5

Federal Road Region No.	State	Project No.	Fiscal Year	Sheet No.	Total Sheets
5	IND.	NH-042-7(16)		1	62

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET ON U.S NO. 50

PROJECT NO. ST-042-7(H)P.E. NH-042-7 (16)CN

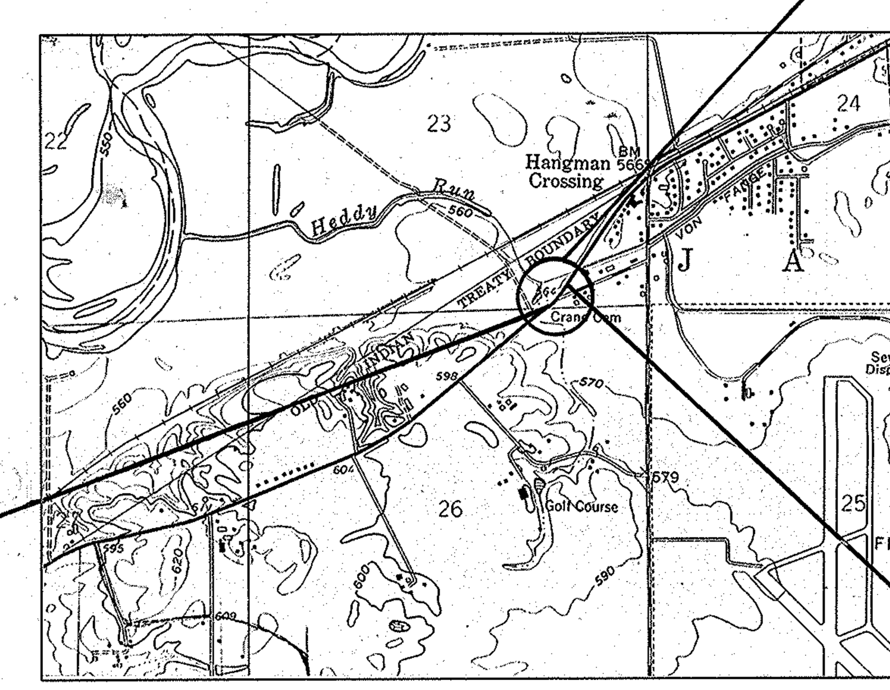
U.S. 50 AT: RP 100+15

BEGINNING AT A POINT ON U.S. 50 APPROXIMATELY 235 FEET NORTHEASTERLY OF THE INTERSECTION OF U.S. 50 AND OLD U.S. 50, THENCE NORTHEASTERLY 550 FEET ALONG U.S. 50 TO A POINT ON U.S. 50 APPROXIMATELY 785 FEET NORTHEASTERLY OF THE INTERSECTION OF U.S. 50 AND OLD U.S. 50, ALL IN JACKSON TOWNSHIP, JACKSON COUNTY, INDIANA.

BRIDGE LENGTH	.013 MI.
ROADWAY LENGTH	.091 MI.
TOTAL LENGTH	.104 MI.
MAX. GRADE	0.12 %

STRUCTURE NO. 2
BRIDGE NO. 50-36-1250C

BEGIN PROJECT NH-042-7(16)
P.O.T. 408+00.00 "R"



END PROJECT NH-042-7(16)
P.O.T. 413+50.00 "R"

JACKSON TWP.
JACKSON COUNTY
SCALE: 1"=2000'

INDEX

PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION
NH -042-7(16)	50-36-1250	SUPERSTRUCTURE AND ABUTMENT RECONSTRUCT. COMP. PRESTRESSED I-BEAM BRIDGE	59'-3 3/4	HEDDY RUN DITCH	410+76.14 "R"

SHEET NO.	SHEET DESIGNATION	SUBJECT	F.H.W.A. APPROVAL
1		TITLE AND INDEX	
2		TYPICAL CROSS SECTION	
3		ROAD PLAN & PROFILE LINE "R"	
4-5A		MAINTENANCE OF TRAFFIC /WIDE ROAD DETOUR	
6		TEMPORARY EROSION & SEDIMENT CONTROL	
7		MISCELLANEOUS TABLES AND DETAILS	
8		SUPERELEVATION TRANSITION DIAGRAM (FOR INFORMATION ONLY)	
9-10		SOIL BORINGS	
11	C1	LAYOUT	
12-13	C2-C3	GENERAL PLAN I AND II	
14	C4	ABUTMENT NO. 1 DETAILS	
15	C5	ABUTMENT NO. 2 DETAILS	
16	C6	FOOTING DETAILS	
17	C7	ABUTMENT AND WINGWALL DETAILS	
18	C8	ABUTMENT BILL OF MATERIALS	
19-21	C9-C11	SUPERSTRUCTURE DETAILS	
22	C12	TYPE III I-BEAM DETAILS	
23	C13	R.C. BRIDGE APPROACH DETAILS	
24	C14	R.C. BRIDGE APPROACH BILL OF MATERIALS	
25		BRIDGE SUMMARY SHEET	
26-30		CROSS SECTIONS	

TRAFFIC DATA		
A.D.T. (1989)		12,300 V.P.D.
A.D.T. (1994) PROJECTED)		16,360 V.P.D.
A.D.T. (2014) PROJECTED)		1309 V.P.H.
TRUCKS		D.H.V. 7% A.A.D.T.8%
DESIGN SPEED		55 M.P.H.
ACCESS CONTROL		NONE
FUNCTIONAL CLASSIFICATION	RURAL PRINCIPAL ARTERIAL	
PROJECT DESIGN CRITERIA		3R (NON-FREEWAY)
RURAL/URBAN		RURAL
TERRAIN		ROLLING

PLANS PREPARED BY: FIRST GROUP ENGINEERING INC.
5714 WEST 74TH STREET
INDIANAPOLIS, INDIANA 46278

CERTIFIED BY: Lawrence C. Suhre 4/22/97
LAWRENCE C. SUHRE, P.E.
(317) 290-9549

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

APPROVED FOR LETTING: Philip W. Kildea
Chief, Division of Design

THESE PLANS PREPARED BY:

FIRST GROUP ENGINEERING INC.
CONSULTING ENGINEERS
5714 W. 74TH STREET, INDIANAPOLIS, INDIANA
PH. (317) 290-9549

NOTE
WHENEVER BHF-042-7( )
APPEARS ON THESE PLANS OR CONTRACT DOCUMENTS
IT SHALL BE INTERPRETED AS NH-042-7(016)

INDEX CONTINUED
STANDARD DRAWINGS

SHEET NO.	SHEET DESIGNATION	SUBJECT	F.H.W.A. APPROVAL	ADOPTED "A" REVISION "R"
31	BRIDGE STD. BR-1	CONCRETE BRIDGE RAILING TRANSITION, TYPE TGB	3-9-93	A AUG 1992
32	BRIDGE STD. BR-1A	CONCRETE BRIDGE RAILING TRANSITION, TYPE TGB	3-9-93	A AUG 1992
	BRIDGE STD. BR3	STEEL BRIDGE RAIL		
	BRIDGE STD. BR4	STEEL BRIDGE RAILING DETAILS		
	BRIDGE STD. BR5	RAILING CONNECTION DETAILS		
	BRIDGE STD. BR6	RAILING CONNECTION DETAILS		
33	BRIDGE STD. C1	MISCELLANEOUS DETAILS	9-1-97	R 9-1-97
	BRIDGE STD. C2	MISCELLANEOUS DETAILS		
34	BRIDGE STD. C3	MISCELLANEOUS DETAILS	1-26-95	R 1-3-95
35	BRIDGE STD. C5	MISCELLANEOUS DETAILS	PENDING	R 10-3-94
	BRIDGE STD. D	CASTING DETAILS ROADWAY DRAINS		
	BRIDGE STD. D1	ADJUSTING FRAME DETAILS FOR ROADWAY DRAINS		
	BRIDGE STD.			
36	BRIDGE STD. PB-3	PRESTRESSED CONCRETE TYPE 3 I-BEAMS	4-16-62	A JAN 1962
	BRIDGE STD. PB	PRESTRESSED CONCRETE TYPE I-BEAMS		
	BRIDGE STD. PB6	PRESTRESSED BOX BEAMS		
	BRIDGE STD. PB-7A	PRESTRESSED COMPOSITE BOX BEAMS 3'-9 WIDE		
	BRIDGE STD. PB	PRESTRESSED COMPOSITE BOX BEAMS WIDE		
37	BRIDGE STD. PB10	TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS	8-14-63	A NOV 1962
38	BRIDGE STD. PB11	ELASTOMERIC BEARING PAD DETAILS, CONCRETE BEAMS	2-3-87	R 2-02-87
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD. R2A	BRIDGE LIGHTING DETAILS		
	BRIDGE STD. R2B	BRIDGE LIGHTING DETAILS		
39	BRIDGE STD. S1	MISCELLANEOUS DETAILS	1-22-87	R 12-01-86
	BRIDGE STD. SH1	STEEL SHOE DETAILS		
	BRIDGE STD. T SHEET A	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD. T SHEET B	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
40	ROAD STD. SHEET RCBA-1	REINFORCED CONCRETE BRIDGE APPROACH	1-31-96	R 10-2-95
41	ROAD STD. SHEET RCBA-2	REINFORCED CONCRETE BRIDGE APPROACH	1-31-96	R 1-2-96
42	ROAD STD. SHEET MA	MISCELLANEOUS DETAILS	PENDING	R 3-1-90
43	ROAD STD. SHEET E	STANDARD SINGLE LANE SECTIONS	7-10-87	R 6-1-87
	ROAD STD. SHEET			
44	ROAD STD. SHEET MI-1	MISCELLANEOUS DETAILS	6-20-91	A APR 1991
	ROAD STD. SHEET			
		MISCELLANEOUS DETAILS		
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
45	ROAD STD. SHEET MN	MISCELLANEOUS DETAILS	9-24-85	R 6-3-85
46	ROAD STD. SHEET MP	MISCELLANEOUS DETAILS	3-20-95	R 3-1-95
	ROAD STD. SHEET			
47	ROAD STD. SHEET G-1	W-BEAM GUARDRAIL COMPONENTS	2-5-96	R 1-2-96
48	ROAD STD. SHEET G-2	THRIE-BEAM GUARDRAIL COMPONENTS	7-20-92	A DEC 1991
49	ROAD STD. SHEET G-3	W-BEAM GUARDRAIL ASSEMBLIES	2-5-96	R 1-2-96
50	ROAD STD. SHEET T-1	GUARDRAIL TRANSITION TYPE TGB	3-9-93	A AUG 1992
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
51	ROAD STD. SHEET E-2	GUARDRAIL END TREATMENT TYPE OS	1-31-96	R 11-1-95
	ROAD STD. SHEET			
52	ROAD STD. SHEET B-1	BRIDGE APPROACH GUARDRAIL	3-9-93	A AUG 1992
53	ROAD STD. SHEET CB-2	TEMPORARY CONCRETE BARRIER	PENDING	5-1-95
	ROAD STD. SHEET SE-2	STANDARD FOR SUPERELEVATION		
	TRAFFIC STD. SHEET			
	TRAFFIC STD. SHEET			
	TRAFFIC STD. SHEET			
	TRAFFIC STD. SHEET			
54	ROAD STD. SHEET TEC-1	TEMP. EROSION AND SEDIMENT CONTROL, PERIMETER PROTECTION	1-31-96	R 9-1-95
55	ROAD STD. SHEET TEC-2	TEMP. EROSION AND SEDIMENT CONTROL, PERIMETER PROTECTION	1-31-96	R 9-1-95
	ROAD STD. SHEET			
56	ROAD STD. SHEET TEC-9	TEMP. EROSION AND SEDIMENT CONTROL, STRAW BALE DITCH CHECK	1-31-96	R 9-1-95
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
	ROAD STD. SHEET	MISCELLANEOUS DETAILS		
	ROAD STD.			
	ROAD STD. SHEET			
	TRAFFIC STD. SHEET 9	TRAFFIC SIGN DETAILS		
	ROAD STD. SHEET GR10	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET GR10A	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 1 DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 1A DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 1D DETOURS			
57	ROAD STD. SHEET 2 DETOURS	STANDARD DETOUR SIGNS	6-20-91	R 4-1-91
58	ROAD STD. SHEET 2A DETOURS	STANDARD DETOUR SIGNS	1-31-96	R 10-2-95
59	ROAD STD. SHEET 3 DETOURS	STANDARD DETOUR SIGNS	PENDING	R 9-1-88
60	ROAD STD. SHEET 3A DETOURS	STANDARD DETOUR SIGNS	2-5-96	R 1-2-96
61	ROAD STD. SHEET 4 DETOURS	STANDARD DETOUR SIGNS	1-11-89	R 9-1-88
62	ROAD STD. SHEET 5 DETOURS	SIGN DESIGN DETAILS	PENDING	R 9-1-88

FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

APPROVED

DIVISION ADMINISTRATOR DATE

INDIANA DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS DATED 1996 TO BE USED WITH THESE PLANS.

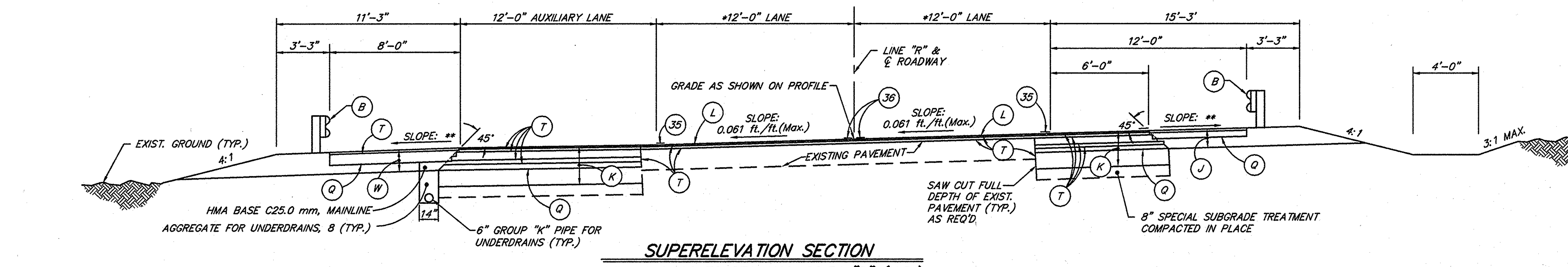
REVISIONS	
DATE	SHEET NO.
8/18/97	2&7

REVISIONS	
DATE	SHEET NO.

BRIDGE FILE: 50-36-1250C

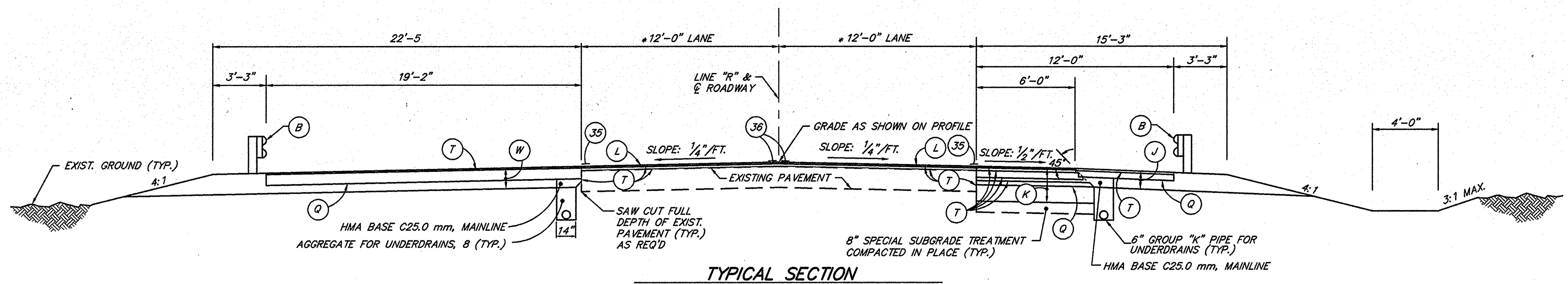
DES. NO. 9068431

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		2	62



SUPERELEVATION SECTION

STA. 408+00 TO STA. 410+22.34 "R" (N.B.)
STA. 408+00 TO STA. 409+83.71 "R" (S.B.)



TYPICAL SECTION

STA. 411+29.93 TO STA. 413+50 "R" (S.B.)
STA. 411+57.68 TO STA. 413+50 "R" (N.B.)

LEGEND

- (B) W-BEAM GUARDRAIL @ 6'-3 SPACING
- (J) 165#/SYD. HMA SURFACE 9.5 mm, SHOULDER WITH CORRUGATIONS (MI-1) ON 495#/SYD. HMA BASE 25.0 mm, SHOULDER ON 6" TYPE "O" COMPACTED AGGREGATE BASE, (SIZE 53)
- (K) 110#/SYD. HMA SURFACE 19.5 mm, MAINLINE ON 220#/SYD. HMA INTERMEDIATE 19.0 mm, MAINLINE ON 550#/SYD. HMA BASE, 25.0 mm, MAINLINE ON 400#/SYD. HMA BASE C25.0 mm, MAINLINE ON 400#/SYD. HMA BASE 25.0 mm, MAINLINE ON 12" TYPE "O" C.A.B. (SIZE 53)
- (L) 110#/SYD. HMA SURFACE 9.5 mm, MAINLINE ON VARIABLE DEPTH (MIN. 2") HMA INTERMEDIATE 19.0 mm, MAINLINE (IF NEEDED) ON VARIABLE DEPTH HMA BASE 25.0 mm, MAINLINE (IF REQ'D.)
- (P) LIMITS OF COMPACTED AGGREGATE
- (Q) ASPHALT MATERIAL FOR PRIME COAT
- (T) ASPHALT MATERIAL FOR TACK COAT
- (W) ASPHALT WIDENING 110#/SYD. HMA SURFACE 9.5 mm, MAINLINE ON 880#/SYD. HMA INTERMEDIATE 19.0 mm, MAINLINE ON 6" TYPE "O" COMPACTED AGGREGATE BASE, (SIZE 53)
- (35) LINE, PAINT, SOLID, WHITE, 4"
- (36) LINE, THERMOPLASTIC, SOLID, YELLOW, 4"
- (37) TEMPORARY PAVEMENT MARKING, SOLID, WHITE, (CROSSHATCH LINE), 24" @ 40'-0 SPACING

FOR ADDITIONAL DETAILS, SEE CONSTRUCTION DETAILS, SHEET NO. 7

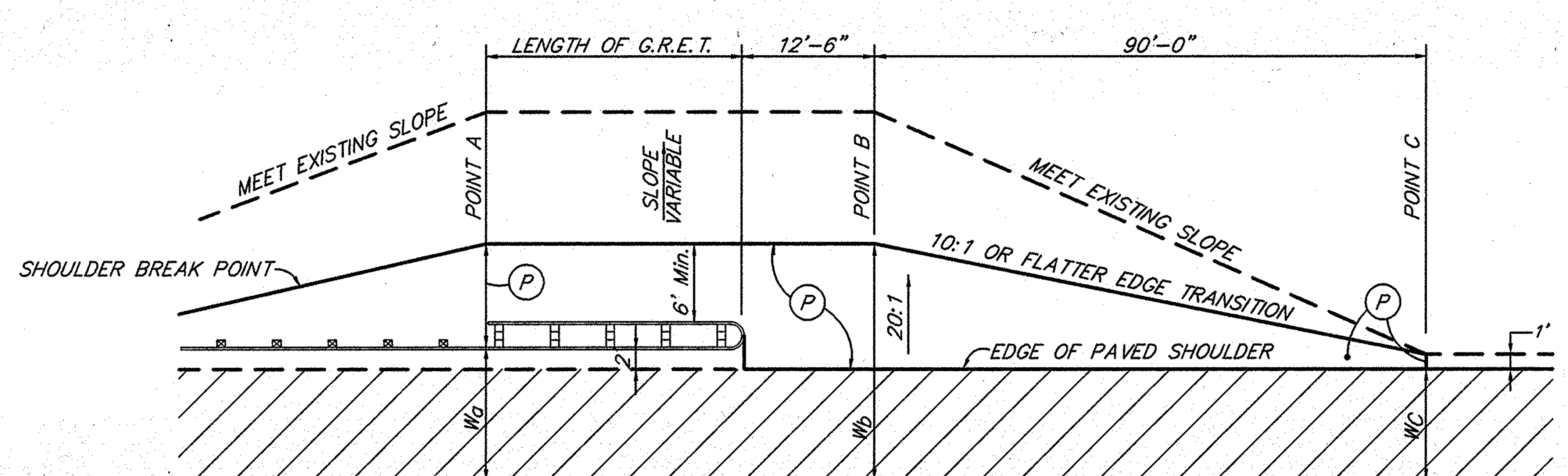
FOR SUPERELEVATION DIAGRAM, SEE SHEET NO. 8

BITUMINOUS CORRUGATIONS TO BE CONSTRUCTED AT COMPLETION OF PROJECT

* EXISTING PAVEMENT TO BE SCARIFIED AS NECESSARY TO ALLOW A MINIMUM OF 3" HMA RESURFACE

** FOR SHOULDER SLOPES SEE STANDARD SINGLE LANE SECTIONS SHEET E.

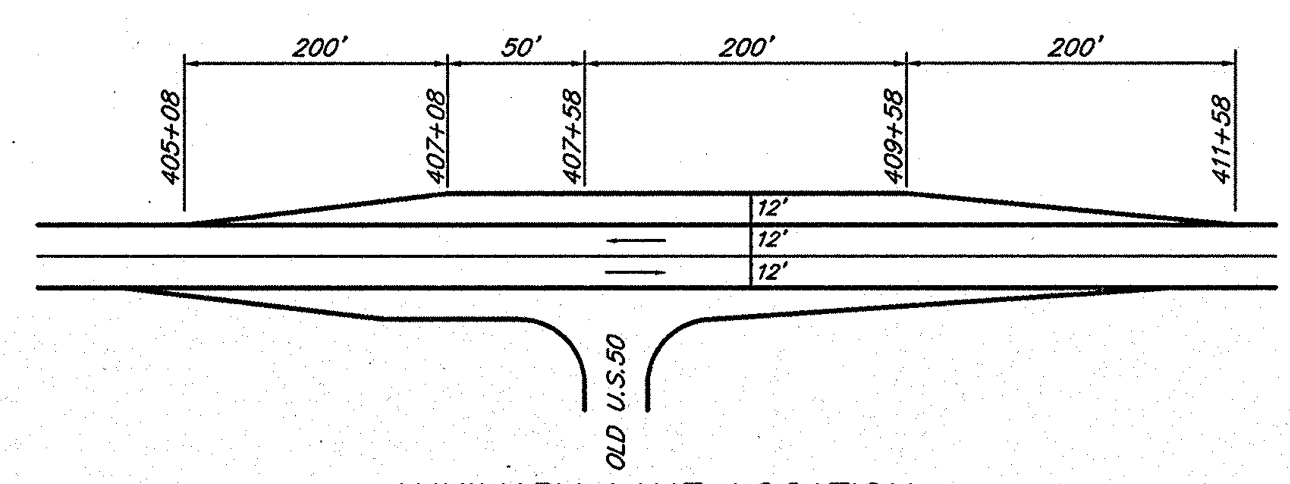
THE CONTRACTOR HAS THE OPTION OF SUBSTITUTING "QC/QA-HMA" ITEMS FOR "HMA" ITEMS SHOWN.



GRADING PLAN VIEW AT GUARDRAIL END TREATMENTS AT OUTSIDE SHOULDER

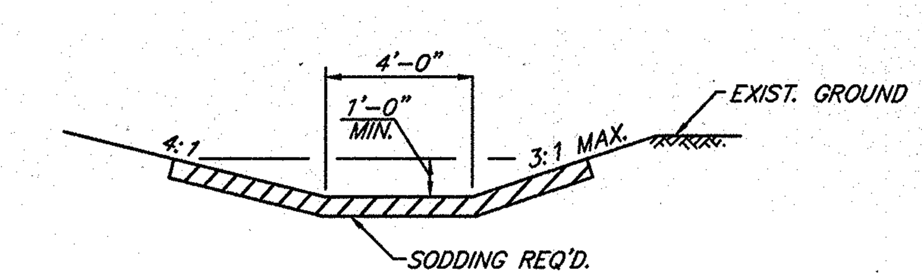
NOT TO SCALE

NOTE: (P) LIMITS OF COMPACTED AGGREGATE



AUXILIARY LANE LOCATION

NOT TO SCALE

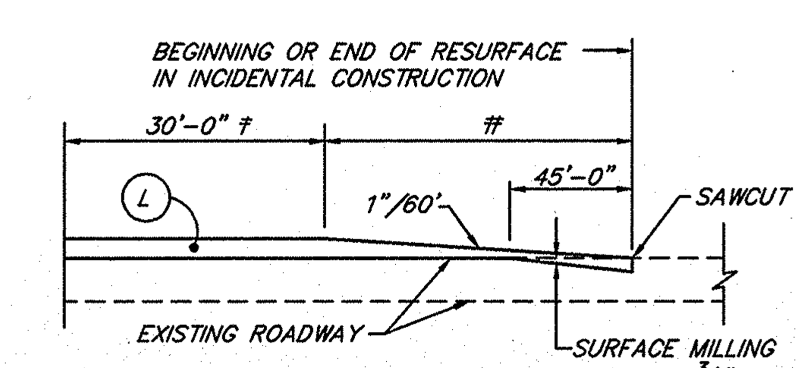


SODDED DITCH DETAIL

NOT TO SCALE

STATION TO STATION	LEFT OR RIGHT	POINT A STATION	POINT A Wa	POINT B STATION	POINT B Wb	POINT C STATION	POINT C Wc	W-BEAM GUARDRAIL @ 6'-3	G.R.E.T "OS" SENTRE 21'-3	GUARDRAIL TRANSITION "TGB"
408+55.77 TO 410+58.27	RIGHT	408+77.02	12'-0"	408+43.27	20'-0"	407+53.27	10'-0"	156.25 LFT.	1 EACH	1 EACH
408+69.40 TO 409+90.65	LEFT	408+90.65	8'-0"	408+56.90	16'-0"	407+66.90	10'-0"	75 LFT.	1 EACH	1 EACH
410+83.12 TO 412+91.87	LEFT	412+70.62	19'-2"	413+20.00	27'-2"	414+10.00	VARYING	162.50 LFT.	1 EACH	1 EACH
411+50.74 TO 412+90.74	RIGHT	412+69.49	12'-0"	413+03.24	20'-0"	413+93.24	10'-0"	93.75 LFT.	1 EACH	1 EACH

GUARDRAIL TABLE



NOTE:
† WEDGE TO BE CONTINUATION OF ROADWAY PROFILE GRADE
†† TAPER WEDGE UNIFORMLY TO MEET EXISTING ROADWAY SURFACE
95' @ BEGINNING OF PROJECT
195' @ END OF PROJECT

INCIDENTAL CONSTRUCTION DETAIL

NOT TO SCALE

INDIANA DEPARTMENT OF TRANSPORTATION
TYPICAL CROSS SECTIONS

SCALES: 1/4" = 1'-0 OR AS NOTED

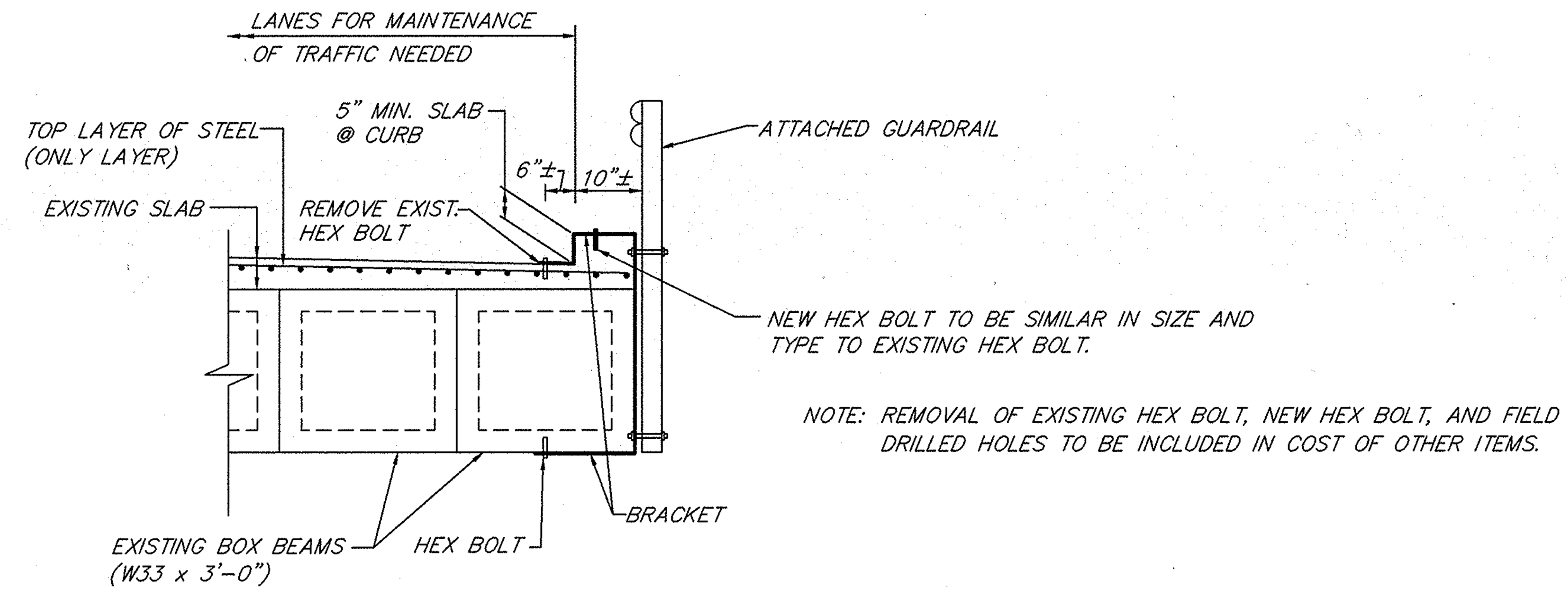
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

R-23259

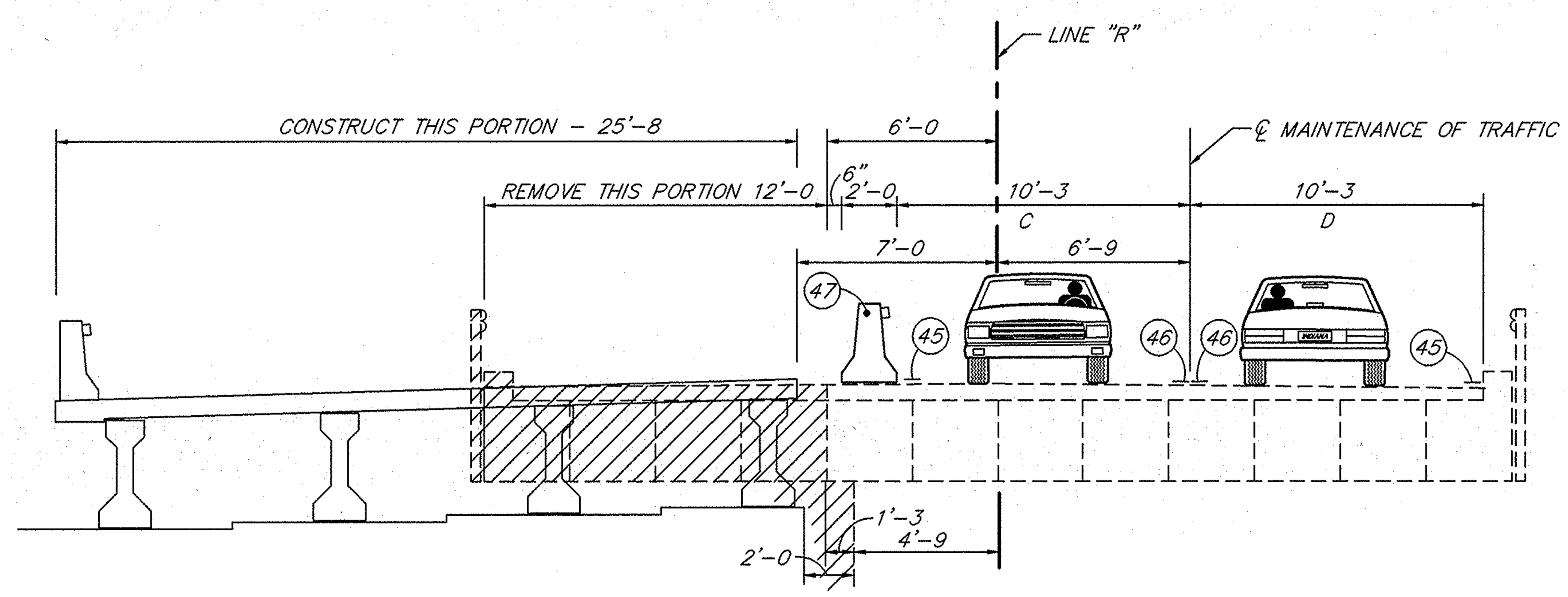
C:\106\HEBTYP, 08/20/97 at 0803, DF

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
BHF-042-7( )	"R"	3	62	

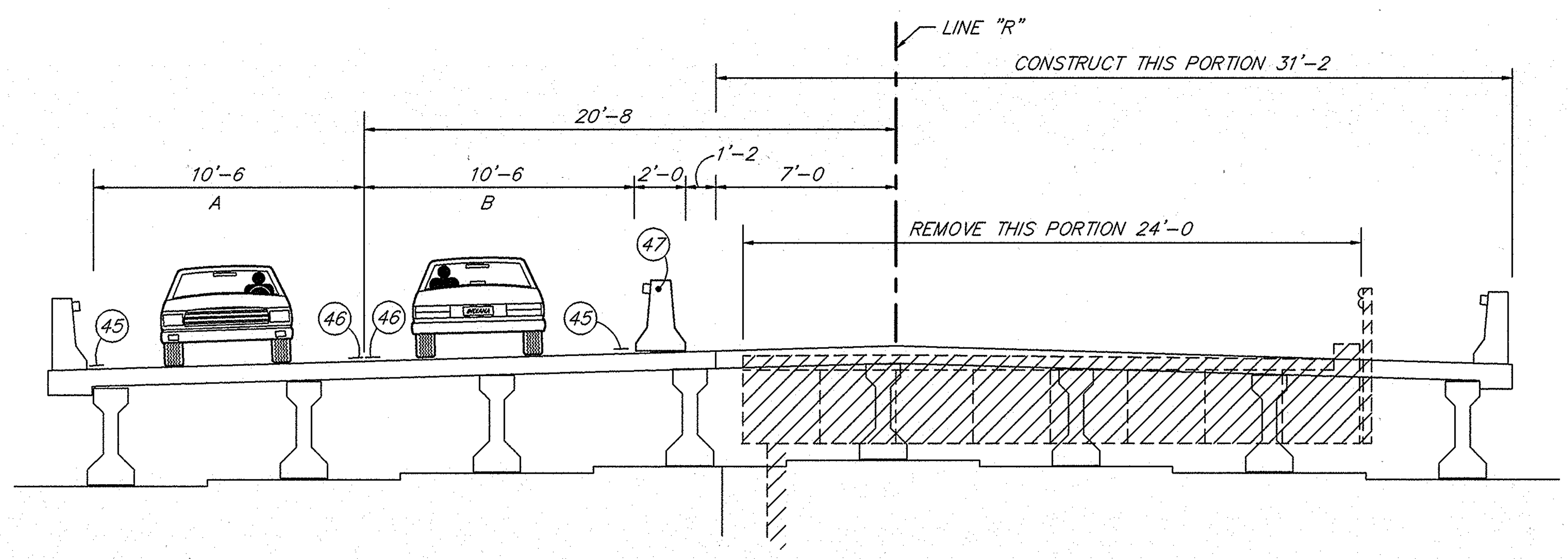
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )	4	62	



PHASE I
Scale: 1"=2'-0"



PHASE II



PHASE III

MAINTENANCE OF TRAFFIC SUMMARY			
	PHASE I & II	PHASE III	TOTALS
TEMP. PAVEMENT MARKING, SOLID, WHITE, 4", LFT.	2250	2528	4778
TEMP. PAVEMENT MARKING, SOLID, YELLOW, 4", LFT.	8250	8528	16,778
TEMP. CONCRETE BARRIER (ANCHORED), LFT.	470	650	650
REMOVAL OF LINE, LFT.	4500	——	4500
CONSTRUCTION SIGN, TYPE A, EACH	16	16	16
CONSTRUCTION SIGN, TYPE B, EACH	4	4	4

REMOVAL OF EXISTING STRUCTURE TO BE PAID FOR AS "PRESENT STRUCTURE, REMOVE PORTIONS", LSUM

LEGEND

(45) TEMPORARY PAVEMENT MARKING, SOLID, WHITE, 4 IN.

(46) TEMPORARY PAVEMENT MARKING, SOLID, YELLOW, 4 IN.

(47) TEMPORARY CONCRETE BARRIER (ANCHORED)

SEQUENCE OF CONSTRUCTION

PHASE I: REMOVE HEX NUT AT ROADWAY SURFACE AT SOUTH (EAST) COPING. REMOVE HEX BOLTS. DRILL NEW HOLE THROUGH BRACKET AND 6" INTO CONCRETE ON TOP OF CURB 1/4" LARGER THAN BOLT SIZE USED FOR CONNECTION. PLACE CEMENT GROUT IN HOLE AND INSERT BOLT INTO GROUTED HOLE. REMOVE EXCESS GROUT. CONSTRUCT FULL DEPTH WIDENING ON SOUTH (EAST) SIDE OF ROADWAY.

PHASE II: MOVE TRAFFIC TO LANES C AND D, REMOVE PORTION OF EXISTING STRUCTURE, CONSTRUCT ABUTMENT, SUPERSTRUCTURE AND PORTION OF R.C. BRIDGE APPROACH SLAB AS SHOWN.

PHASE III: CONSTRUCT WIDENING ON NORTH (WEST) SIDE OF ROADWAY AND MOVE TRAFFIC TO LANES A AND B. REMOVE REMAINING PORTION OF EXISTING STRUCTURE. CONSTRUCT ABUTMENT, SUPERSTRUCTURE AND REMAINING PORTION OF R.C. BRIDGE AS SHOWN.

FOR ADDITIONAL MAINTENANCE OF TRAFFIC DETAILS, SEE SHEET 5

MAINTENANCE OF TRAFFIC

INDIANA DEPARTMENT OF TRANSPORTATION

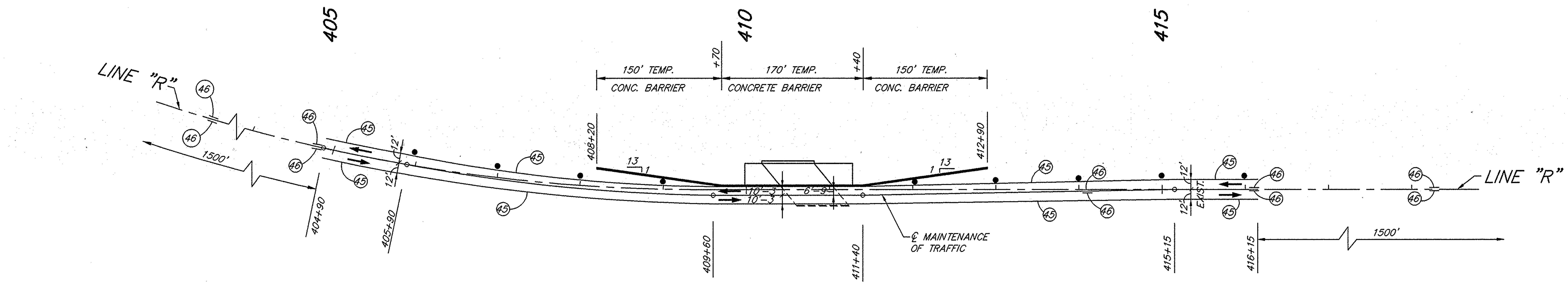
JACKSON COUNTY

SCALE: 1"=4'-0, UNLESS NOTED   DATE: 4-22-1997

DRAWING OF   SHEET 4 OF 62
PROJECT: BHF-042-7( )   STATION: 410+76.14 LINE "R"
BRIDGE CONTRACT NO. B-23259
BRIDGE FILE: 50-36-1250 C

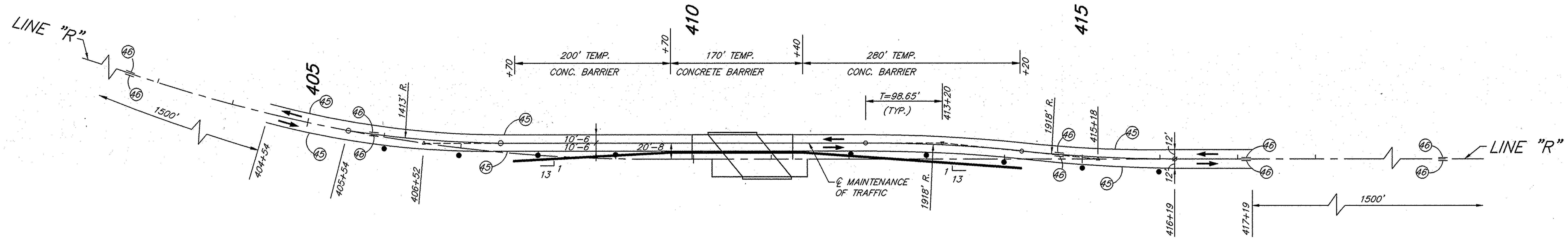
LAWRENCE C. SUIRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		5	62



PHASE II

SCALE: NOT TO SCALE



PHASE III

SCALE: NOT TO SCALE

LEGEND

(45) TEMPORARY PAVEMENT MARKING, SOLID, WHITE, 4 IN.

(46) TEMPORARY PAVEMENT MARKING, SOLID, YELLOW, 4 IN.

— TEMPORARY CONCRETE BARRIER (ANCHORED)

• DRUM WITH TYPE "C" STEADY-BURNING LIGHT

NOTES:

FOR PHASE I CONSTRUCTION, TYPICAL SECTIONS AND QUANTITIES, SEE SHEET NO. 4

REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE MAINTENANCE OF TRAFFIC SCHEMES.

CONSTRUCTION ZONE SPEED LIMIT TO BE 35 M.P.H.

SEE STD. DETOUR SIGNS SHEET 1D DETOUR AND SHEET 2 DETOURS FOR ADDITIONAL DETAILS FOR SIGNING AND TEMPORARY PAVEMENT MARKINGS.

MAINTENANCE OF TRAFFIC

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

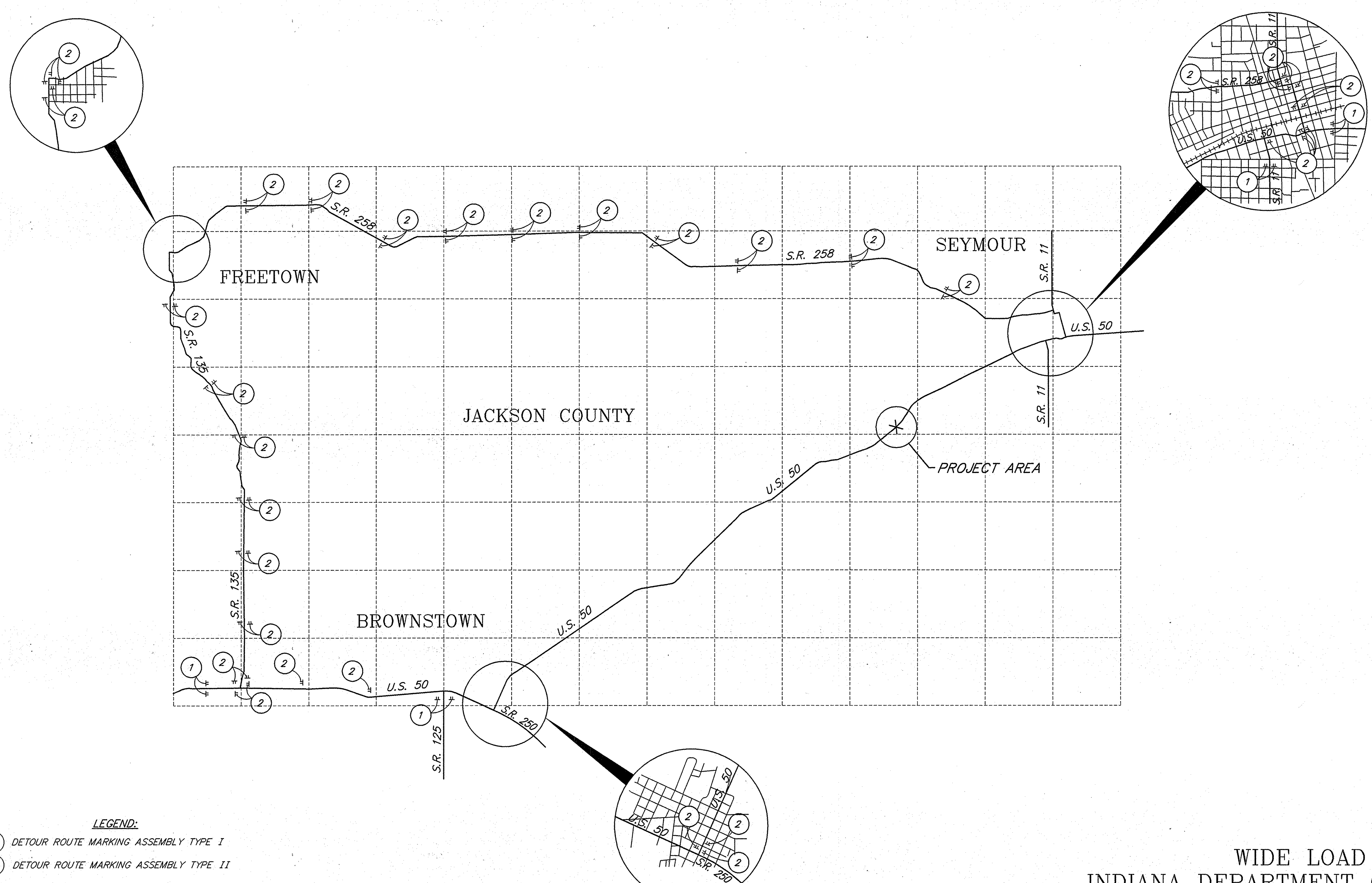
SCALE: AS NOTED

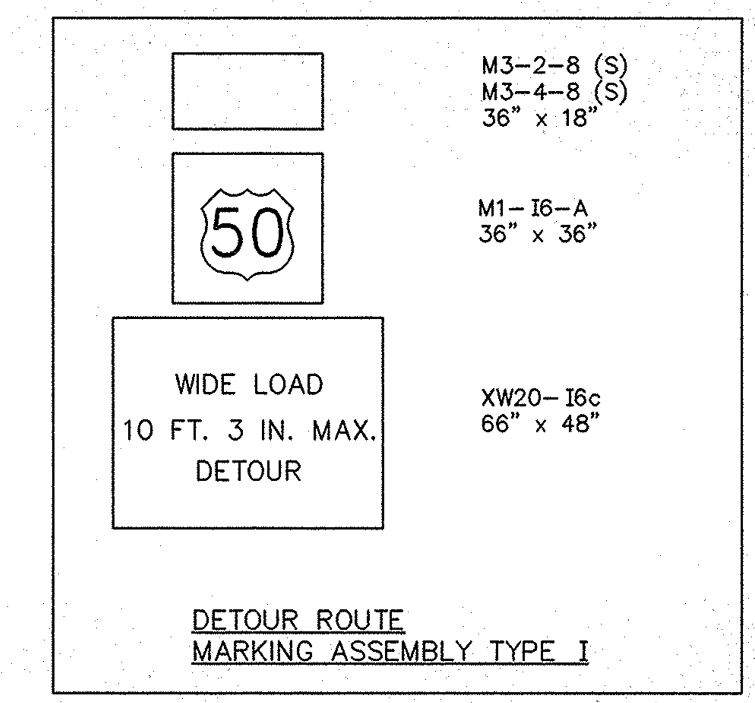
DATE: 4-22-1997

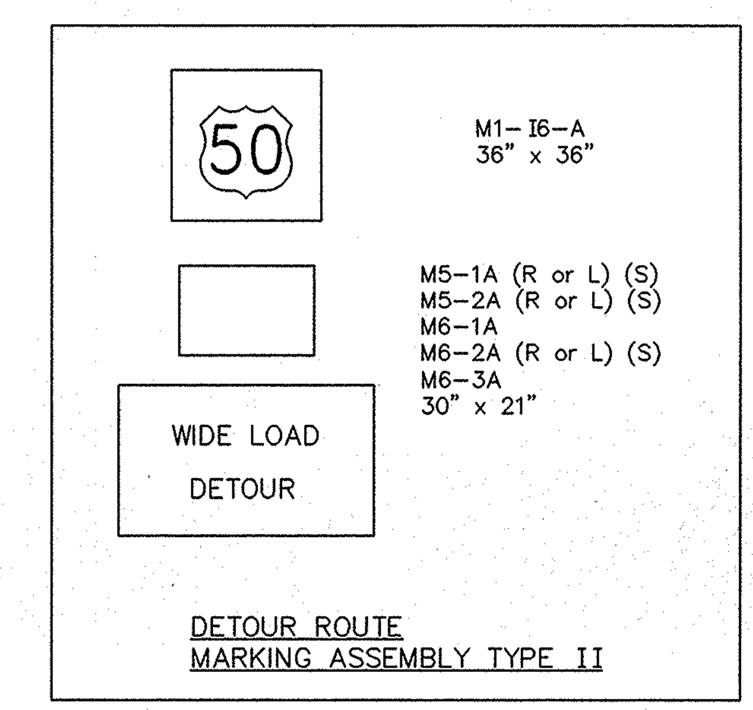
SHEET 5 OF 62

PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER







LEGEND:

(1) *DETOUR ROUTE MARKING ASSEMBLY TYPE I*

(2) *DETOUR ROUTE MARKING ASSEMBLY TYPE II*

NOTE:

MODIFIED DETOUR ROUTE MARKING ASSEMBLES TO BE MOUNTED ON MINIMUM OF TWO CHANNEL POSTS TYPE "B". SIGNS TO BE MOUNTED A MINIMUM OF 5'-6" ABOVE EDGE OF PAVEMENT. DETOUR ROUTE MARKING ASSEMBLY TYPES I & II TO BE PAID FOR AS "DETOUR ROUTE MARKER ASSEMBLY", EACH

C:\106\BRIDGE\106DET01, 04/29/97 at 14:38, REN

WIDE LOAD DETOUR DETAILS

SCALE: 1:4000

WIDE LOAD DETOUR
INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

SCALE: AS NOTED

DATE: 4-22-1997

PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IN	BHF-042-7( )		6	62

TABLE OF QUANTITIES

LOCATION	METHOD OF TEMPORARY EROSION CONTROL															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
STATION	LFT.	LFT.	CYD.	EACH	LFT.	LFT.	LFT.	LFT.	LFT.	LFT.	LFT.	CYD.	EACH	EACH	EACH	EACH
"LINE R"																
406+00 TO 416+00 LT.					960											
408+00 RT.	21															
408+40 RT.	21															
408+80 RT.	21															
409+20 RT.	21															
409+60 RT.	21															
410+00 RT.	21															
410+60 RT.	21															
411+30 RT.	21															
411+70 RT.	21															
412+20 RT.	21															
412+70 RT.	21															
413+20 RT.	21															
413+70 RT.	21															
SUBTOTALS THIS COLUMN	273				960											
SUBTOTALS PRECEDING SHEET																

TABLE OF QUANTITIES

LOCATION	METHOD OF TEMPORARY EROSION CONTROL															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
STATION	LFT.	LFT.	CYD.	EACH	LFT.	LFT.	LFT.	LFT.	LFT.	LFT.	LFT.	CYD.	EACH	EACH	EACH	EACH
SUBTOTALS THIS COLUMN																
SUBTOTALS PRECEDING SHEET																

TEMPORARY EROSION CONTROL LEGEND AND SUMMARY

A	*TEMPORARY EROSION AND SEDIMENT CONTROL, STRAW BALE DITCH CHECK*		*273 LFT.*	I	*TEMPORARY EROSION AND SEDIMENT CONTROL, SLOPE DRAIN (PIPE)*	*LFT.*
B	*TEMPORARY EROSION AND SEDIMENT CONTROL, RIPRAP DITCH CHECK*		*LFT.*	J	*TEMPORARY EROSION AND SEDIMENT CONTROL, SLOPE DRAIN (OPEN)*	
C	*TEMPORARY EROSION AND SEDIMENT CONTROL, SEDIMENT TRAP*		*CYD.*	K	*TEMPORARY EROSION AND SEDIMENT CONTROL, TEMPORARY SLOPE PROTECTION. (TEMPORARY DITCHES)*	*LFT.*
D	*TEMPORARY EROSION AND SEDIMENT CONTROL, CULVERT PIPE PROTECTION*		*EACH*	L	*TEMPORARY EROSION AND SEDIMENT CONTROL, SEDIMENT BASIN*	*CYD.*
E	*TEMPORARY EROSION AND SEDIMENT CONTROL, PERIMETER PROTECTION, (SILT FENCE)*	960	*960 LFT.*	M	*TEMPORARY EROSION AND SEDIMENT CONTROL, DROP INLET PROTECTION, (BALE INLET FILTER)*	*EACH*
F	*TEMPORARY EROSION AND SEDIMENT CONTROL, PERIMETER PROTECTION, (STRAW BALE BARRIER)*			N	*TEMPORARY EROSION AND SEDIMENT CONTROL, DROP INLET PROTECTION, (SILT FENCE INLET FILTER)*	
G	*TEMPORARY EROSION AND SEDIMENT CONTROL, DRAINAGE BARRIER AT SWALE*		*LFT.*	O	*TEMPORARY EROSION AND SEDIMENT CONTROL, DROP INLET PROTECTION, (GRAVEL INLET FILTER)*	
H	*TEMPORARY EROSION AND SEDIMENT CONTROL, INTERCEPTOR DITCH*		*LFT.*	P	*TEMPORARY EROSION AND SEDIMENT CONTROL, CURB INLET PROTECTION, (SANDBAG DIVERSION AT CURB INLET)*	*EACH*

TEMPORARY EROSION CONTROL TABLE

LAWRENCE C. SUHRE
REGISTERED
No. 18417
STATE OF INDIANA
PROFESSIONAL ENGINEER

R-23259

Remove F.B.C.C.S. Pipe
REVISIONS 8/18/97: Bituminous Items to Superpave

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IN.	BHF-042-7( )		7	62

RIGHT OF WAY MARKERS

LOCATION	LEFT(EACH)	RIGHT(EACH)
LINE "R"		
407+00	1	
408+00	1	
408+61.28		1
409+00		1
409+46.28	1	
410+00		1
412+00	1	
413+58.1		1
414+00	1	
415+08.79	1	
415+36.72		1
SUBTOTALS	6	5
TOTALS	11 EACH	

UNDERDRAIN TABLE

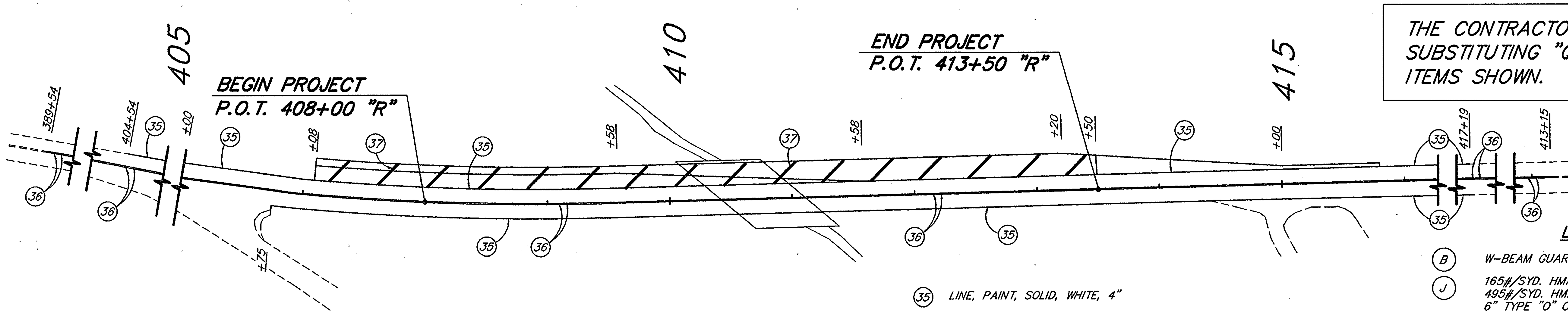
LEFT OF CENTERLINE

REMARKS	CONNECT TO STRUCTURE NO.	OUTLET THRU SHOULDER	DELINIATOR POST (EACH)	SODDING (SYS.)	6" NON-PERF. PIPE (FEET)	TEES EACH 6" TO 6"	TEES EACH 6" TO	TEES EACH 6" TO	WYE EACH	BENDS EACH 45°	BENDS EACH 90°	AT STATION	6" GROUP "K" PIPE (FEET)	STATION
														LINE "R"
		X	1	2	28						1	409+60	252	407+08 409+60
														DEER CREEK BRIDGE
		X	1	2	28						1	411+30	490	411+30 416+20
SUBTOTALS			2	4	56						2		742	

RIGHT OF CENTERLINE

STATION	6" GROUP "K" PIPE (FEET)	AT STATION	BENDS EACH 45°	BENDS EACH 90°	WYE EACH	TEES EACH 6" TO 6"	TEES EACH 6" TO	TEES EACH 6" TO	6" NON-PERF. PIPE (FEET)	SODDING (SYS.)	DELINEATOR POST (EACH)	OUTLET THRU SHOULDER	CONNECT TO STRUCTURE NO.	REMARKS
411+85 414+75	290	411+85		1					26	2	1	X		
	290			1					26	2	1			

THE CONTRACTOR HAS THE OPTION OF SUBSTITUTING "QC/QA-HMA" ITEMS FOR "HMA" ITEMS SHOWN.



PAVEMENT MARKING DETAILS
SCALE: 1"=50'

(35) LINE, PAINT, SOLID, WHITE, 4"
(36) LINE, THERMOPLASTIC, SOLID, YELLOW, 4"
(37) TEMPORARY PAVEMENT MARKING, SOLID, WHITE, (CROSSHATCH LINE), 24" @ 40'-0 SPACING

LEGEND

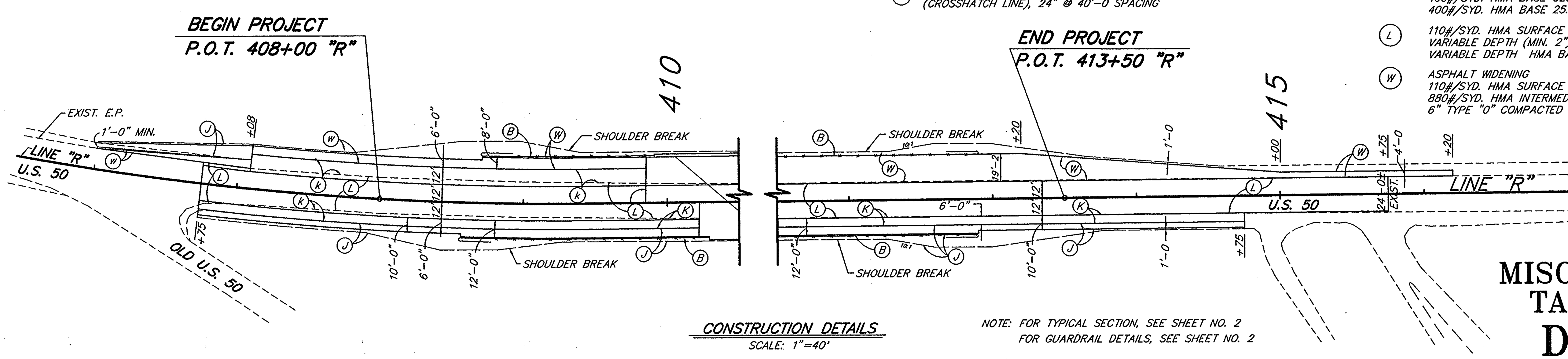
(B) W-BEAM GUARDRAIL @ 6'-3 SPACING

(J) 165#/SYD. HMA SURFACE 9.5 mm, SHOULDER WITH CORRUGATIONS (MI-1) ON
495#/SYD. HMA BASE 25.0 mm, SHOULDER ON
6" TYPE "O" COMPACTED AGGREGATE BASE, (SIZE 53)

(K) 110#/SYD. HMA SURFACE 19.5 mm, MAINLINE ON
220#/SYD. HMA INTERMEDIATE 19.0 mm, MAINLINE ON
550#/SYD. HMA BASE, 25.0 mm, MAINLINE ON
400#/SYD. HMA BASE C25.0 mm, MAINLINE ON
400#/SYD. HMA BASE 25.0 mm, MAINLINE ON 12" TYPE "O" C.A.B. (SIZE 53)

(L) 110#/SYD. HMA SURFACE 9.5 mm, MAINLINE ON
VARIABLE DEPTH (MIN. 2") HMA INTERMEDIATE 19.0 mm, MAINLINE (IF NEEDED) ON
VARIABLE DEPTH HMA BASE 25.0 mm, MAINLINE (IF REQ'D.)

(W) ASPHALT WIDENING
110#/SYD. HMA SURFACE 9.5 mm, MAINLINE ON
880#/SYD. HMA INTERMEDIATE 19.0 mm, MAINLINE ON
6" TYPE "O" COMPACTED AGGREGATE BASE, (SIZE 53)



CONSTRUCTION DETAILS
SCALE: 1"=40'

NOTE: FOR TYPICAL SECTION, SEE SHEET NO. 2
FOR GUARDRAIL DETAILS, SEE SHEET NO. 2

MISCELLANEOUS TABLES AND DETAILS

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

R-23259

U.S. 50
SUPERELEVATION TRANSITION DIAGRAM

SCALES: 1"=50' HORIZ.
1"=0.25' VERT.

LAWRENCE C. SQUIRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

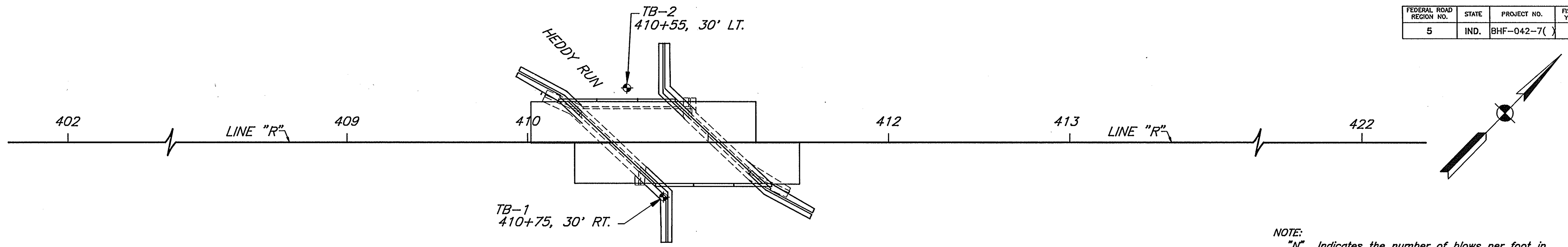
R-23259

LEVEL BOOK NO.				FILE	
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		8	62
U.S. 50			LINE "R"		

FOR INFORMATION ONLY

C:\1060\BRIDGE\SUPERELL 04/29/97 at 14:41 REH

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		9	62



BORING PLAN

Scale: 1"=30'-0"

NOTE:
"N" Indicates the number of blows per foot in Standard Penetration Test driving a 2" O.D. Split-Spoon Sampler 1 foot with a 140 lb. hammer falling 30 inches.

Indicates Ground Water Level upon completion.

	TB-1	TB-2
BORING NO.	TB-1	TB-2
STATION	410+75 "R"	410+55 "R"
ELEVATION	EL. 556.50	EL. 557.20
OFFSET	30' RT.	30' LT.

INDIANA DEPARTMENT OF TRANSPORTATION

PROJECT NO. ST-047-7(4) DES. NO. 9068431 BORING NO. TB-1
STRUCTURE NO. 50-36-12508 COUNTY: JACKSON ROAD NO. US 50
PROJECT LOCATION: OVER 4.0 MILES WEST OF SEYMOUR ELEVATION: 556.50 (169.62m)
STATION/OFFSET/LINE: 410+75/30'(9.14m) RT./CENTERLINE START: 5/27/93
BORING METHOD & RIG TYPE: HSA/TRUCK FINISH: 5/27/93
WATER DEPTH @ COMP. 1.5' (.46m) : AFTER 24 HRS. PENDING CAVED @ PENDING

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	Description	Remarks	SAMPLE NO.	RECOV. (%)	QP-tsf
100 — 0	2/6 1/6 2/6	BLACK, SLIGHTLY MOIST, VERY LOOSE, VERY SOFT, SANDY LOAM	ELEV. 555.50	SS-1	40	
95 — 5	2/6 3/6 3/6	DARK GRAY, MOIST, MEDIUM STIFF, CLAY	ELEV. 552.75	SS-2	60	
	2/6 2/6 1/6	GRAY, WET TO VERY MOIST, VERY LOOSE TO MEDIUM DENSE SAND A-3 (0) LAB NO. 93-5760	ELEV. 555.50	SS-3	60	
90 — 10	2/6 2/6 0/6			SS-4	70	
85 — 15	3/6 3/6 3/6			SS-5	70	
80 — 20	5/6 7/6 8/6		WATER ADDED	SS-6	80	
75 — 25	9/6 9/6 11/6			SS-7	75	
70 — 30	6/6 7/6 8/6			SS-8	90	
	Boring Continues					

DRILLER: DT INSPECTOR: EW DATUM: USC&GS
WEATHER: SUNNY TEMPERATURE: 70 F PAGE: 1 OF 2

DIVISION OF MATERIALS AND TESTS

INDIANA DEPARTMENT OF TRANSPORTATION

PROJECT NO. ST-047-7(4) DES. NO. 9068431 BORING NO. TB-1
STRUCTURE NO. 50-36-12508 COUNTY: JACKSON ROAD NO. US 50
PROJECT LOCATION: OVER 4.0 MILES WEST OF SEYMOUR ELEVATION: 556.50 (169.62m)
STATION/OFFSET/LINE: 410+75/30'(9.14m) RT./CENTERLINE START: 5/27/93
BORING METHOD & RIG TYPE: HSA/TRUCK FINISH: 5/27/93
WATER DEPTH @ COMP. 1.5' (.46m) : AFTER 24 HRS. PENDING CAVED @ PENDING

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	Description	Remarks	SAMPLE NO.	RECOV. (%)	QP-tsf
70 — 30						
65 — 35	5/6 10/6		SS-9: 2 ATTEMPTS AT RECOVERY	SS-9	0	
60 — 40	13/6 17/6			SS-10		
55 — 45	9/6 9/6 12/6			SS-11	100	
50 — 50	10/6 13/6	BOTTOM OF TEST HOLE 50.0' (15.24m)	ELEV. 506.50	SS-12	80	

DRILLER: DT INSPECTOR: EW DATUM: USC&GS
WEATHER: SUNNY TEMPERATURE: 70 F PAGE: 2 OF 2

INDIANA DEPARTMENT OF TRANSPORTATION

PROJECT NO. ST-047-7(4) DES. NO. 9068431 BORING NO. TB-2
STRUCTURE NO. 50-36-12508 COUNTY: JACKSON ROAD NO. US 50
PROJECT LOCATION: OVER 4.0 MILES WEST OF SEYMOUR ELEVATION: 557.2 (169.8m)
STATION/OFFSET/LINE: 410+55/30'(9.14m) LT./CENTERLINE START: 6/1/93
BORING METHOD & RIG TYPE: HOS/CME 45-8 FINISH: 6/1/93
WATER DEPTH @ COMP. 5.2' (1.58m) : AFTER HRS.G CAVED @ 6.8'

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	Description	Remarks	SAMPLE NO.	RECOV. (%)	QP-tsf
100 — 0	2/6 2/6 2/6	BLACK, MOIST, SOFT, SILTY CLAY LOAM	ELEV. 557.20	SS-1	60	
	1/6 0/6 1/6	GRAY, MOIST, VERY LOOSE, SILTY LOAM	ELEV. 554.20 WATER ON ROD AT 3.8'	SS-2	65	
95 — 5	2/6 1/6 2/6	GRAY, WET, VERY LOOSE, SAND	ELEV. 550.95 HOLE CAVED TO 6.8'	SS-3	100	
90 — 10	2/6 1/6 3/6			SS-4	100	
85 — 15	5/6 6/6 9/6	GRAY, WET, MEDIUM DENSE, SAND A-2-4 (0) LAB NO. 93-5947	ELEV. 544.95	SS-5	100	
80 — 20	2/6 6/6 11/6			SS-6	70	
75 — 25	5/6 6/6 8/6			SS-7	100	
70 — 30	5/6 12/6 13/6			SS-8	55	
	Boring Continues					

DRILLER: DT INSPECTOR: DT DATUM: USC&GS
WEATHER: CLEAR TEMPERATURE: 68 F PAGE: 1 OF 2

DIVISION OF MATERIALS AND TESTS

INDIANA DEPARTMENT OF TRANSPORTATION

PROJECT NO. ST-047-7(4) DES. NO. 9068431 BORING NO. TB-2
STRUCTURE NO. 50-36-12508 COUNTY: JACKSON ROAD NO. US 50
PROJECT LOCATION: OVER 4.0 MILES WEST OF SEYMOUR ELEVATION: 557.2
STATION/OFFSET/LINE: 410+55/30'(9.14m) LT./CENTERLINE START: 6/1/93 (169.8m)
BORING METHOD & RIG TYPE: HOS/CME 45-8 FINISH: 6/1/93
WATER DEPTH @ COMP. 5.2' (1.58m) : AFTER HRS.G CAVED @ 6.8'

ELEVATION / DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	Description	Remarks	SAMPLE NO.	RECOV. (%)	QP-tsf
70 — 30						
65 — 35	3/6 5/6			SS-9	40	
60 — 40	8/6 11/6			SS-10	45	
55 — 45	5/6 8/6			SS-11	80	
50 — 50	13/6 18/6	BOTTOM OF TEST HOLE 50.0' (15.24m)	ELEV. 507.20	SS-12	75	

DRILLER: DT INSPECTOR: DT DATUM: USC&GS
WEATHER: CLEAR TEMPERATURE: 68 F PAGE: 2 OF 2

SOIL BORINGS AT STRUCTURE

INDIANA DEPARTMENT OF TRANSPORTATION

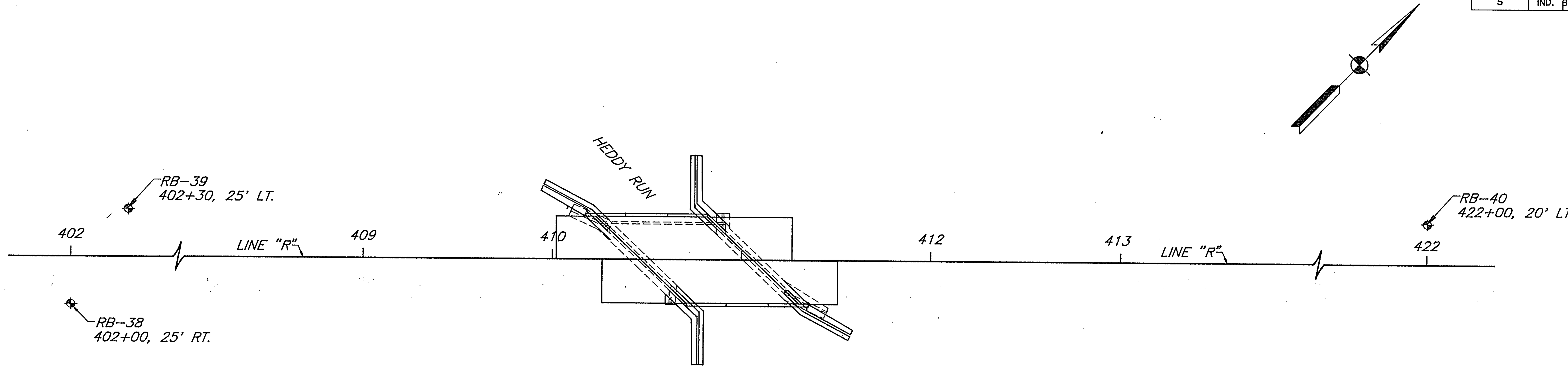
JACKSON COUNTY

SCALE: — AS NOTED DATE: — 4-22-1997

DRAWING: — OF SHEET: — 9 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250C

LAWRENCE G. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		10	62



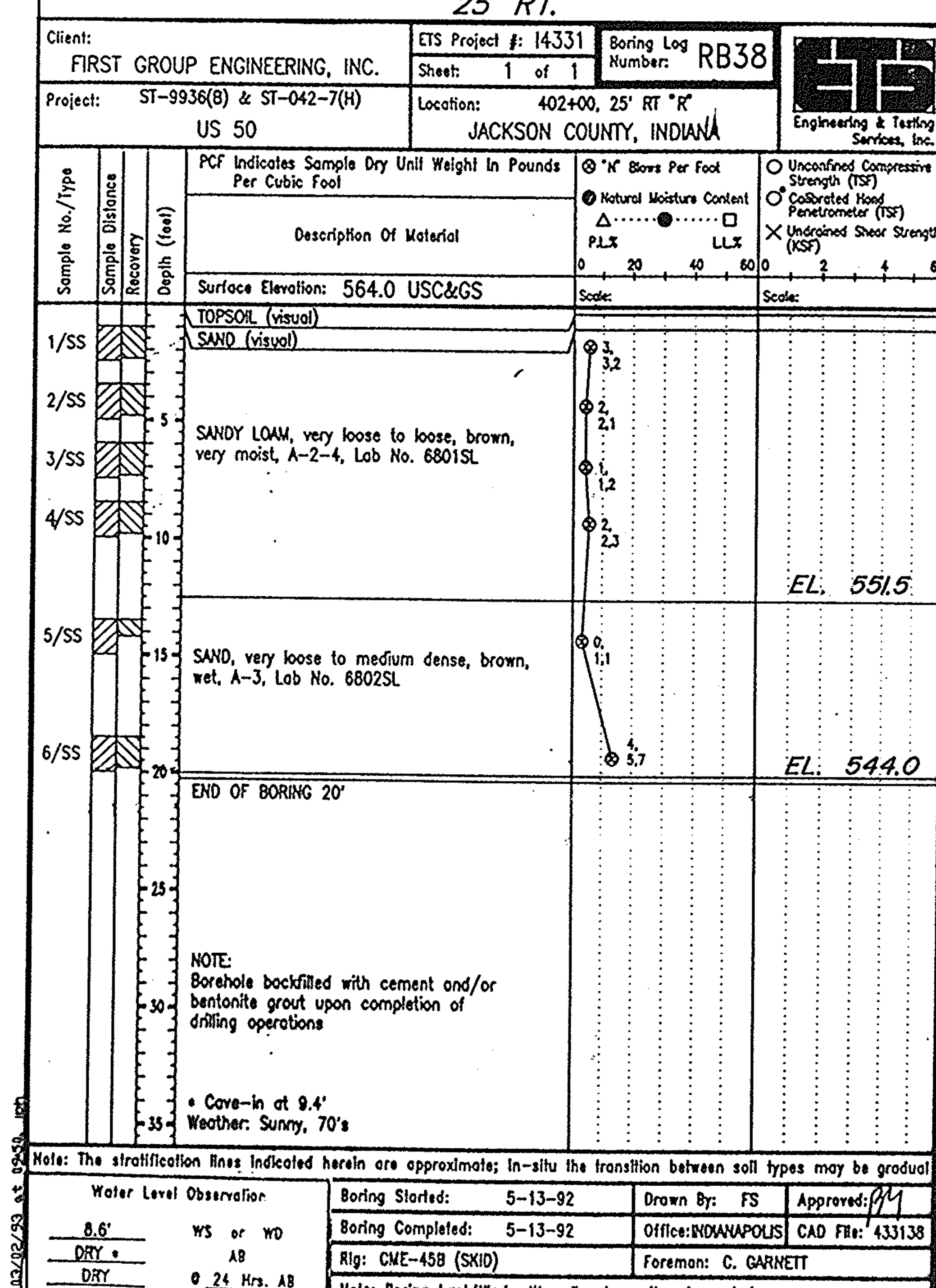
BORING PLAN

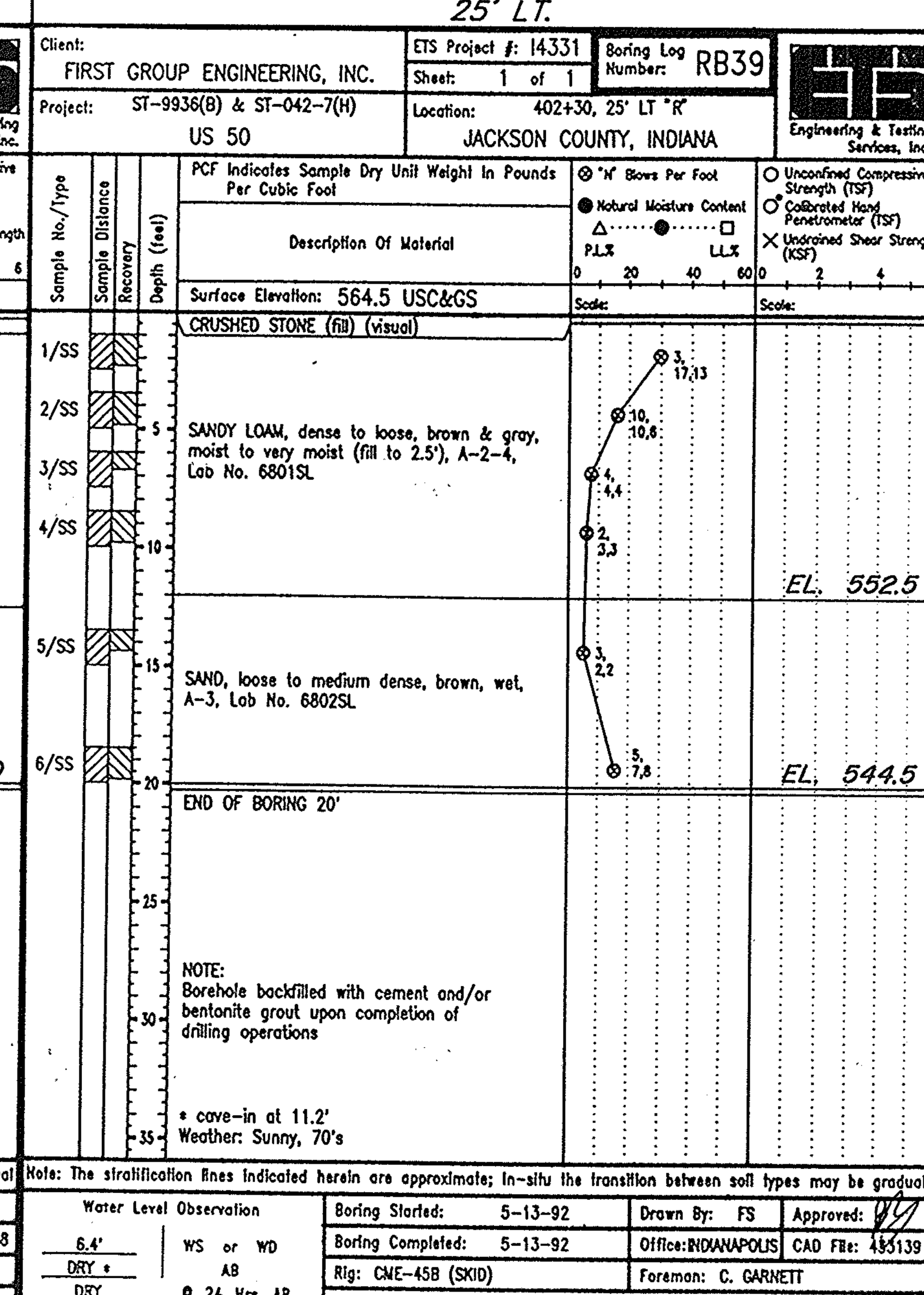
Scale: 1"=30'-0"

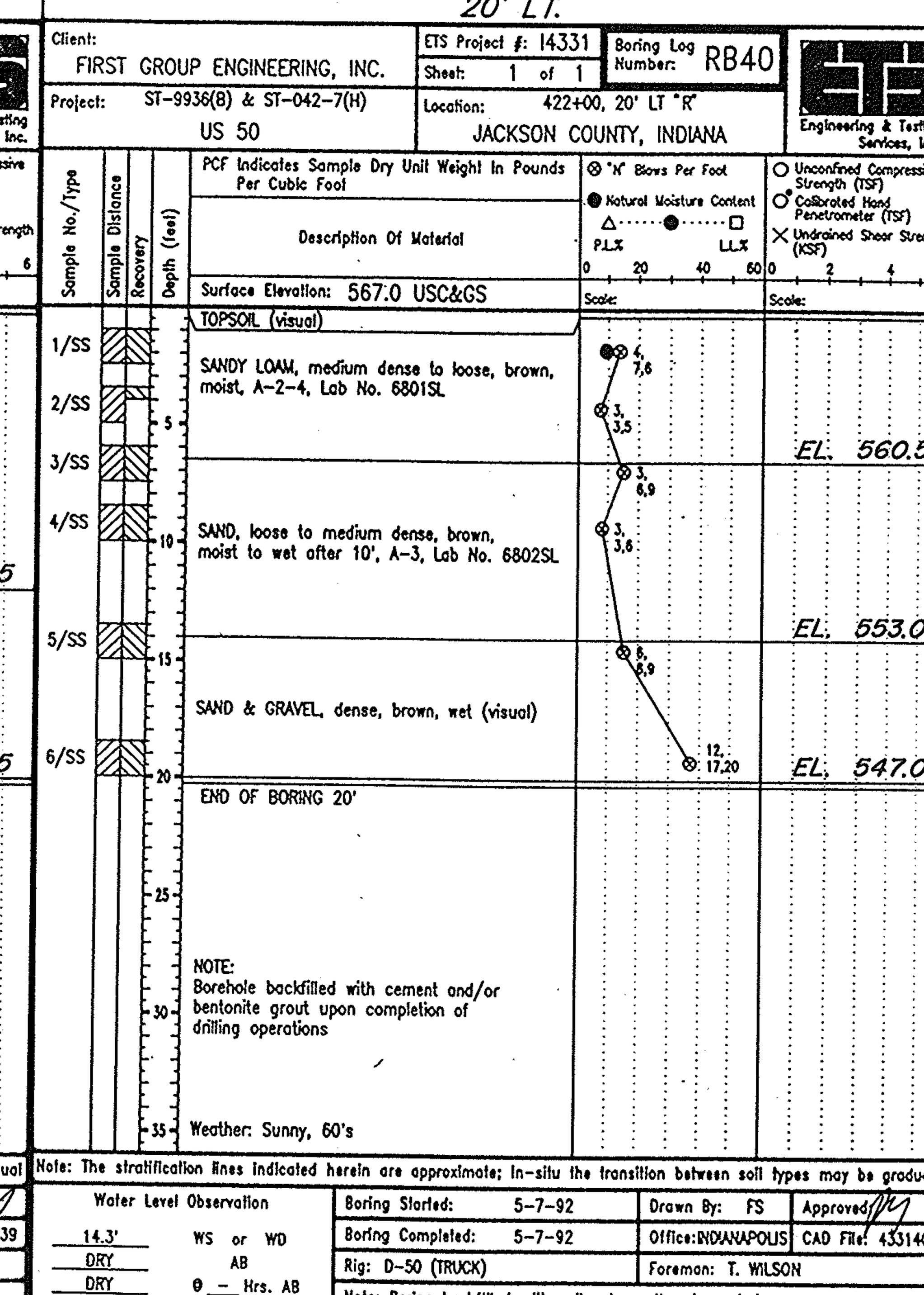
NOTE:
"N" Indicates the number of blows per foot in Standard Penetration Test driving a 2" O.D. Split-Spoon Sampler 1 foot with a 140 lb. hammer falling 30 inches.

Indicates Ground Water Level upon completion.

BORING NO.	RB-38	RB-39	RB-40
STATION	402+00 "R"	402+30 "R"	422+00 "R"
ELEVATION	EL. 564.0	EL. 564.5	EL. 567.0
OFFSET	25' RT.	25' LT.	20' LT.







SOIL BORINGS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

SCALE: - AS NOTED DATE: - 4-22-1997

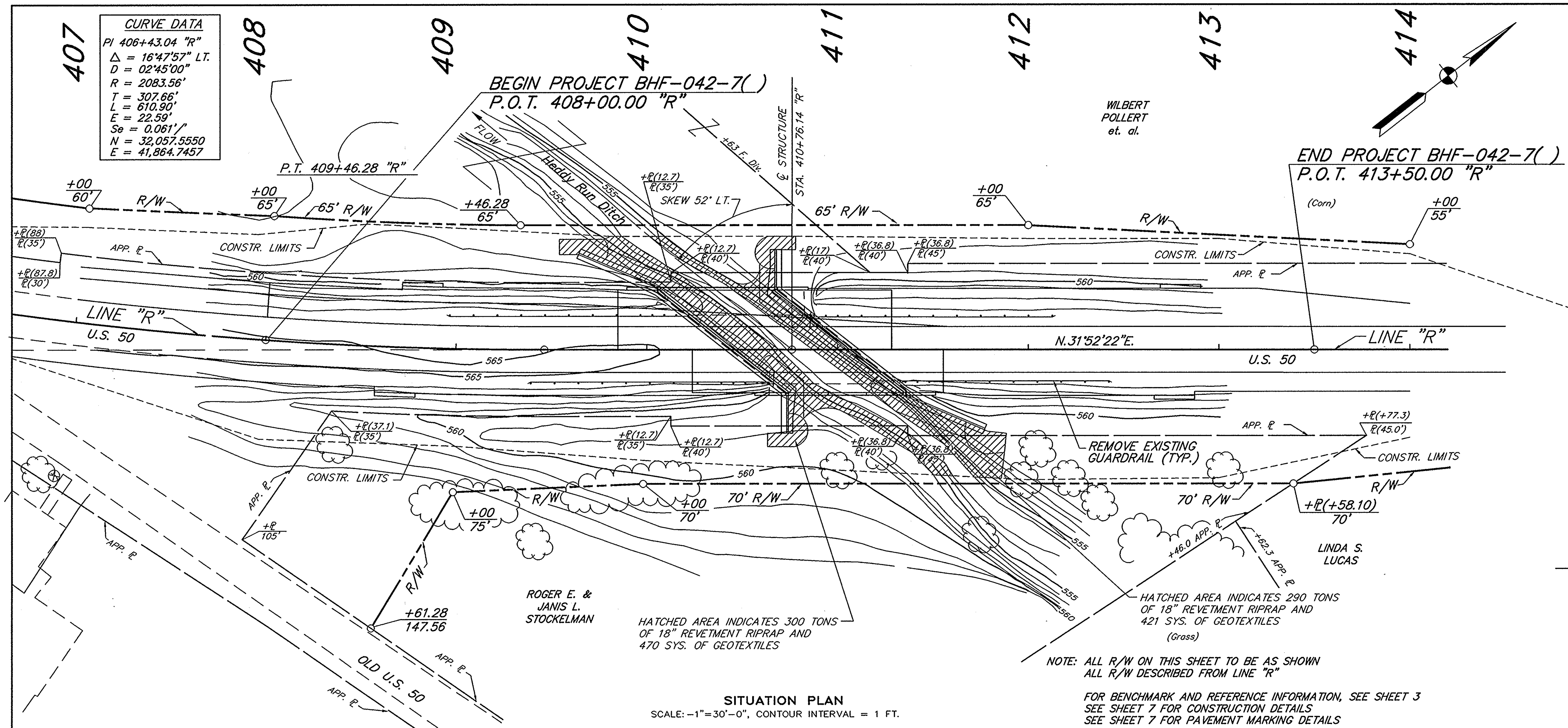
DRAWING: - OF SHEET: - 10 OF 62

PROJECT: BHF-042-7( )

BRIDGE CONTRACT NO. R-23259

BRIDGE FILE: 50-36-1250C

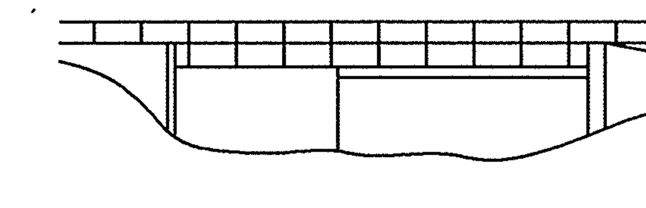
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER



NOTE: ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W DESCRIBED FROM LINE "R"

FOR BENCHMARK AND REFERENCE INFORMATION, SEE SHEET 3
SEE SHEET 7 FOR CONSTRUCTION DETAILS
SEE SHEET 7 FOR PAVEMENT MARKING DETAILS

SITUATION PLAN
SCALE: -1"=30'-0", CONTOUR INTERVAL = 1 FT.

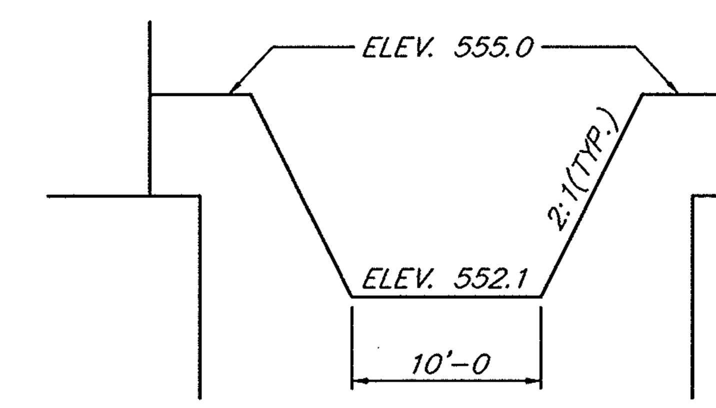


EXISTING STRUCTURE
NOT TO SCALE

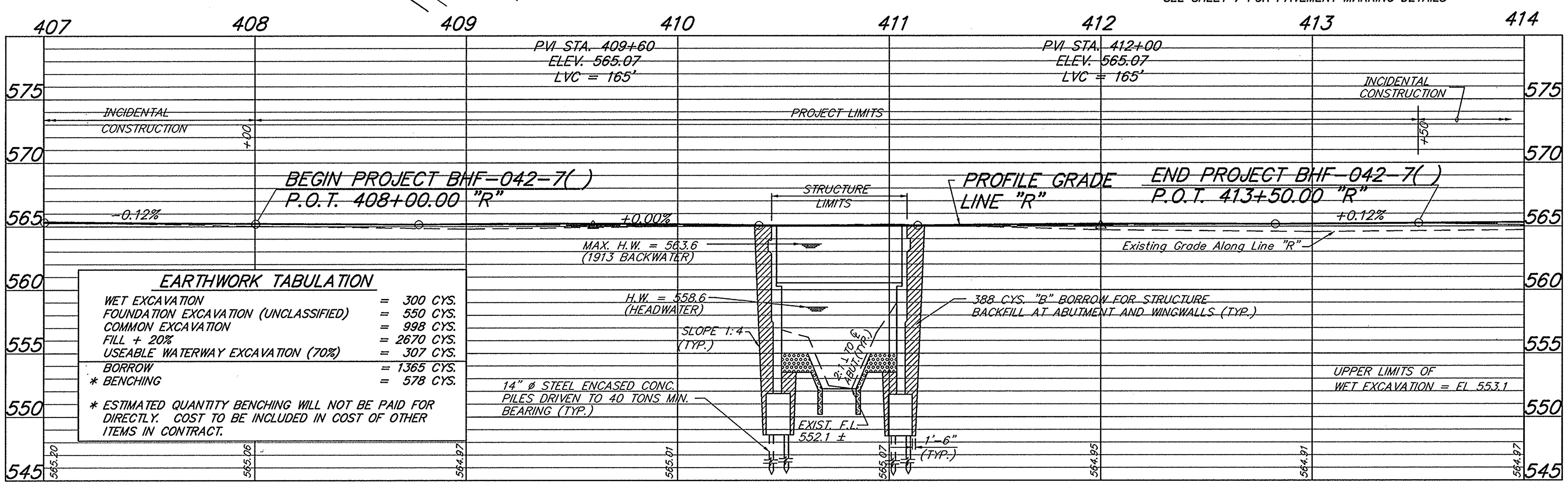
NOTE:
THE PRESENT STRUCTURE WAS BUILT BY THE STATE IN 1932 AS PROJECT NO. 50-SECTION K, CONTRACT NO. 518. IT WAS RECONSTRUCTED USING P.C. BOX BEAMS, 1 SPAN @ 60', 52° LEFT SKEW, WITH A 34'-4" CLEAR ROADWAY, ON PILES.

UTILITY OWNERS

ELECTRIC:	PUBLIC SERVICE CO. OF INDIANA 1000 E. MAIN ST. PLAINFIELD, IN. 46168
TELEPHONE:	CONTINENTAL TELEPHONE CO. 3RD. & WALNUT ST. SEYMOUR, IN. 47274
WATER:	JACKSON CO. WATER UTILITIES, INC. 1119 W. SPRING ST. BROWNSTOWN, IN. 47220
GAS:	INDIANA GAS CO., INC. 207 N. FRONT ST. SEYMOUR, IN. 47274



TYP. CHANNEL SECTION
(⊥ TO ℄ ABUTMENT)



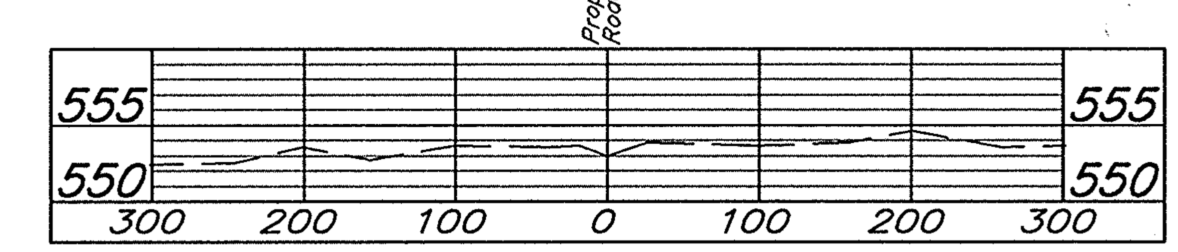
EARTHWORK TABULATION

WET EXCAVATION	=	300 CYS.
FOUNDATION EXCAVATION (UNCLASSIFIED)	=	550 CYS.
COMMON EXCAVATION	=	998 CYS.
FILL + 20%	=	2670 CYS.
USEABLE WATERWAY EXCAVATION (70%)	=	307 CYS.
BORROW	=	1365 CYS.
* BENCHING	=	578 CYS.

* ESTIMATED QUANTITY BENCHING WILL NOT BE PAID FOR DIRECTLY. COST TO BE INCLUDED IN COST OF OTHER ITEMS IN CONTRACT.

PROFILE ON PROPOSED ℄ ROADWAY
SCALES HORIZ. 1"=30'-0" VERT. 1"=5'-0"

NOTE: FIELD NOTES, BOOK 16205 T1
16206 L1
Br3018 (For Information Only)



PROFILE OF CHANNEL
SCALE: 1"=10' VERT.
1"=100' HORIZ.

LAYOUT

SUPERSTRUCTURE AND ABUTMENT RECONSTRUCTION
COMPOSITE PRESTRESSED I-BEAM BRIDGE
1 SPAN @ 59'-3¾"; SKEW 52° Lt.; 53'-10" CLEAR ROADWAY
ON US 50 OVER HEDDY RUN DITCH

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

SCALE: HORZ 1"=30' DATE: 4-22-1997
VERT 1"=5'

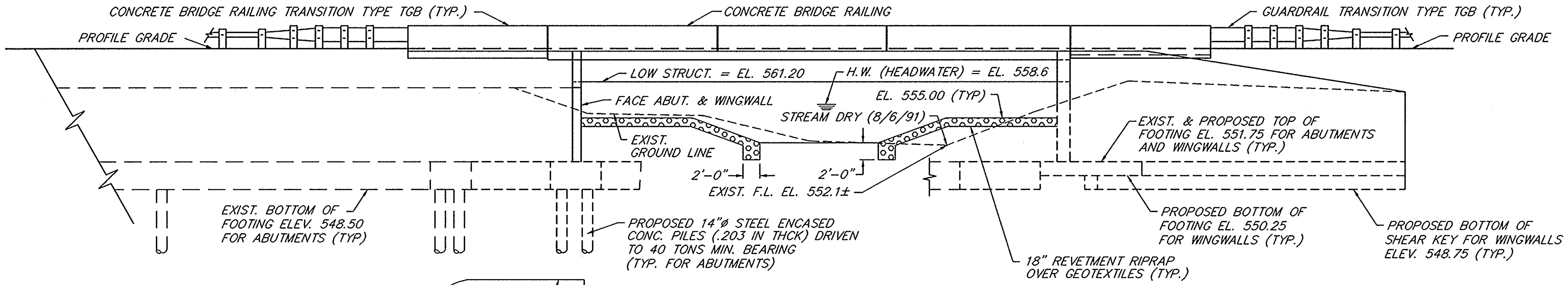
DRAWING C1 OF C14 SHEET 11 OF 62
PROJECT: BHF-042-7( ) STA. 410+76.14 LINE "R"
BRIDGE CONTRACT NO. R-23253
BRIDGE FILE: 50-36-1250 C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN MAN	C'K'D JG/RJZ		
DESIGNED RLS	C'K'D JG/RJZ		
TRACED	C'K'D		

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		12	62

STRUCTURE TO BE BUILT ON A 0.00% GRADE



ELEVATION
SCALE: 1/8" = 1'-0"

FOR LOCATION OF REVETMENT RIPRAP AND GEOTEXTILES, SEE SHEET NO. 11

PLAN
SCALE: 1/8" = 1'-0"

GENERAL PLAN I

SUPERSTRUCTURE AND ABUTMENT RECONSTRUCTION
COMPOSITE PRESTRESSED I-BEAM BRIDGE
1 SPAN @ 59'-3 3/4 SKEW 52° Lt. 53'-10 CLEAR ROADWAY
ON US 50 OVER HEDDY RUN DITCH

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

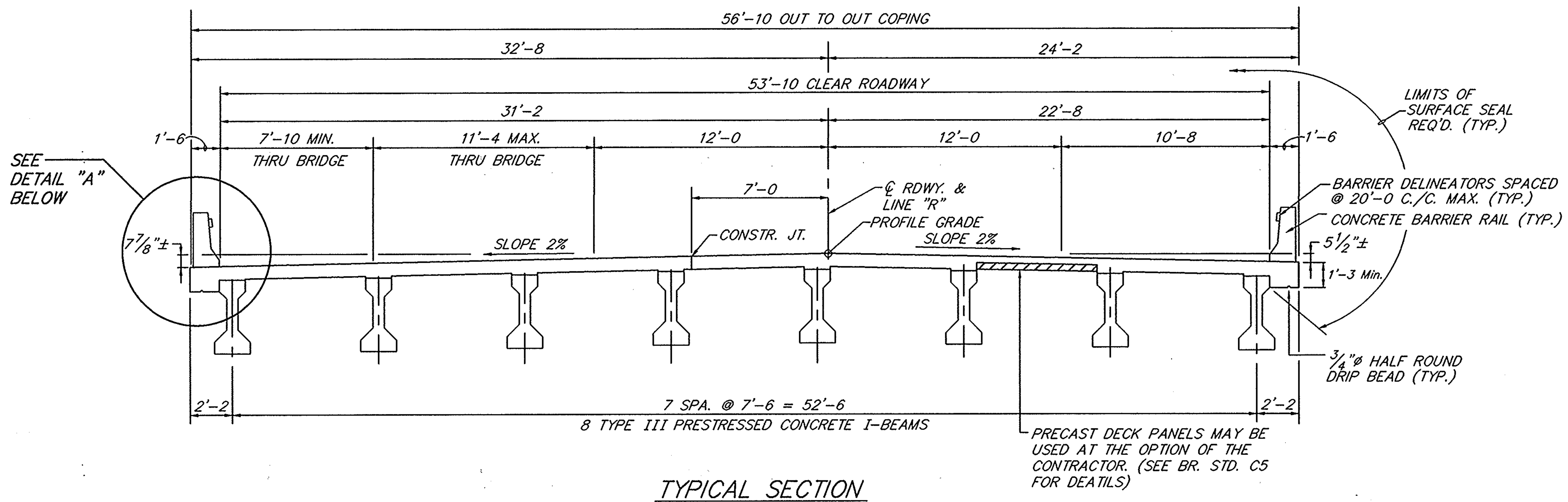
SCALE: AS NOTED
DATE: 4-22-1997

DRAWING C2 OF C14 SHEET 12 OF 62
PROJECT: BHF-042-7( ) STATION: 410+76.14 LINE "R"
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

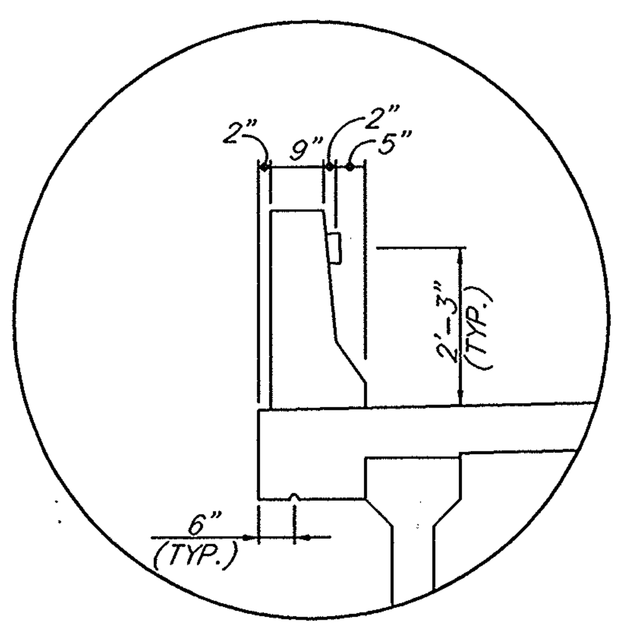
DRAWN M.N.	C'K'D R.Z.	
DESIGNED R.Z.	C'K'D J.G.	
TRACED	C'K'D	

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		13	62



TYPICAL SECTION

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



DETAIL "A"

GENERAL NOTES

EXISTING STRUCTURE TO BE REMOVED DOWN TO TOP OF EXISTING FOOTING. PORTIONS OF EXISTING FOOTING TO BE REMOVED AS SHOWN IN PLANS.

SEE BRIDGE STANDARD C1 FOR DETAILS OF PILES.

REINFORCING STEEL COVERING SHALL BE 3" IN FOOTINGS EXCEPT BOTTOM STEEL WHICH SHALL BE 4". REINFORCING STEEL COVERING SHALL BE 2 1/2" IN TOP OF FLOOR SLAB, 1" IN BOTTOM OF FLOOR SLAB, AND 2" IN ALL OTHER AREAS UNLESS NOTED.

SURFACE SEAL SHALL BE REQUIRED ON EXPOSED PORTIONS OF WINGWALLS, TOP OF ABUTMENT CAP, FRONT AND TOP OF MUDWALL, TOP OF DECK, FACE OF DECK COPINGS, UNDERSIDE OF BRIDGE FLOOR FROM COPING TO FACE OF EXTERIOR BEAM AND ALL SURFACES OF CONCRETE BARRIER RAIL. ESTIMATED QUANTITY = 7,120 S.F. (LSUM)

2 LANES OF TRAFFIC TO BE MAINTAINED AT ALL TIMES. SEE SHEETS 4 AND 5 FOR DETAILS.

CONTRACTOR TO VERIFY SKEW AND FACE OF ABUTMENT TO FACE OF ABUTMENT DISTANCE BEFORE ORDERING BEAMS.

BRIDGE STANDARDS	
SHEET	SUBJECT
BR-1 & 1A	CONCRETE BRIDGE RAILING TRANSITION, TYPE TGB
C1	SPLICING PILE SHELL, REINF. NOTES, R.C. WING & ABUT.
C3	JOINT & NOTCH DETAIL
C5	PRECAST DECK PANEL DETAILS
PB3	PRESTRESSED CONCRETE TYPE III I-BEAMS
PB10	TOLERANCE FOR FABRICATION OF PRESTRESSED BEAMS
PB11	ELASTOMERIC BEARING PAD, CONCRETE BEAMS
S1	B BORROW FOR STRUCTURE BACKFILL

ROAD STANDARDS	
SHEET	SUBJECT
RCBA-1	PAVEMENT JOINTS, R.C. PAVEMENT REINFORCING
RCBA-2	BRIDGE APPROACH SLAB REINFORCING
MA	MONUMENTS, R/W MARKERS
M II	BITUMINOUS CORRUGATIONS
MN	CULVERT BACKFILL METHODS A & B
MP	PIPE GROUPS
G-1	W-BEAM GUARDRAIL COMPONETS
G-2	THRIE-BEAM GUARDRAIL COMPONETS
G-3	W-BEAM GUARDRAIL ASSEMBLIES
T-1	GUARDRAIL TRANSITION TYPE TGB
E-2	GUARDRAIL END TREATMENT TYPE OS
B-1	TYPICAL BRIDGE APPROACH GUARDRAIL
CB-2	TEMPORARY CONCRETE BARRIER
2,2A,3,3A	STANDARD DETOUR SIGNS
4,5	SIGN DESIGN DETAILS
TEC-1	TEMP. EROSION AND SEDIMENT CONTROL
TEC-2	TEMP. EROSION AND SEDIMENT CONTROL
TEC-9	TEMP. EROSION AND SEDIMENT CONTROL
E	SUPERELEVATION, SHOULDER SLOPES

DESIGN DATA

DESIGN STRENGTHS:

CONCRETE CLASS "C" f'_c = 4,000 P.S.I. f_y = 60,000 P.S.I. (Gr 60)
CONCRETE CLASS "A" f'_c = 3,500 P.S.I.
CONCRETE CLASS "B" f'_c = 3,000 P.S.I.

LIVE LOADS:

HS 20-44 LOADED WITH DISTRIBUTION IN ACCORDANCE WITH 1996 A.A.S.H.T.O. SPECIFICATIONS AND SUBSEQUENT INTERIM SPECIFICATIONS.

DEAD LOAD:

ACTUAL WEIGHT PLUS 35 PSF (COMPOSITE) FOR FUTURE WEARING SURFACE AND 15 PSF (NON-COMPOSITE) FOR PERMANENT METAL DECK FORMS.

GENERAL PLAN II

SUPERSTRUCTURE AND ABUTMENT RECONSTRUCTION
COMPOSITE PRESTRESSED I-BEAM BRIDGE
1 SPAN @ 59'-3 3/4 SKEW 52° LT. 53'-10 CLEAR ROADWAY
ON US 50 OVER HEDDY RUN DITCH

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

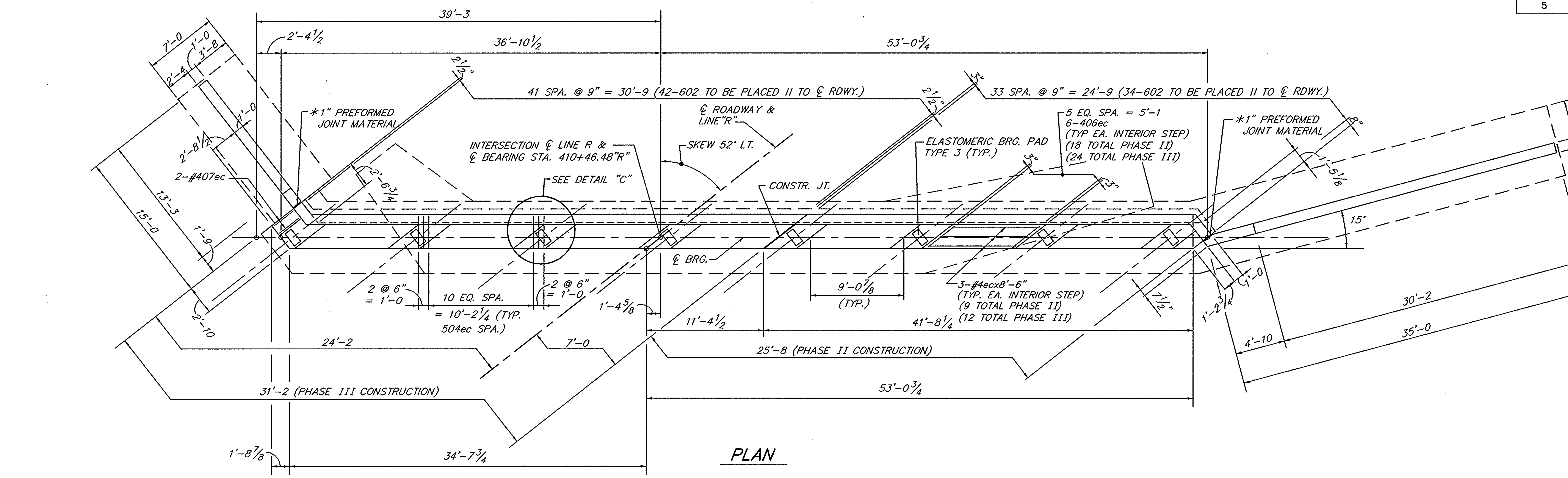
SCALE: AS NOTED DATE: 4-22-1997

DRAWING C_3 OF C_{14} SHEET 13 OF 62
PROJECT: BHF-042-7( ) STATION: 410+76.14 LINE "R"
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

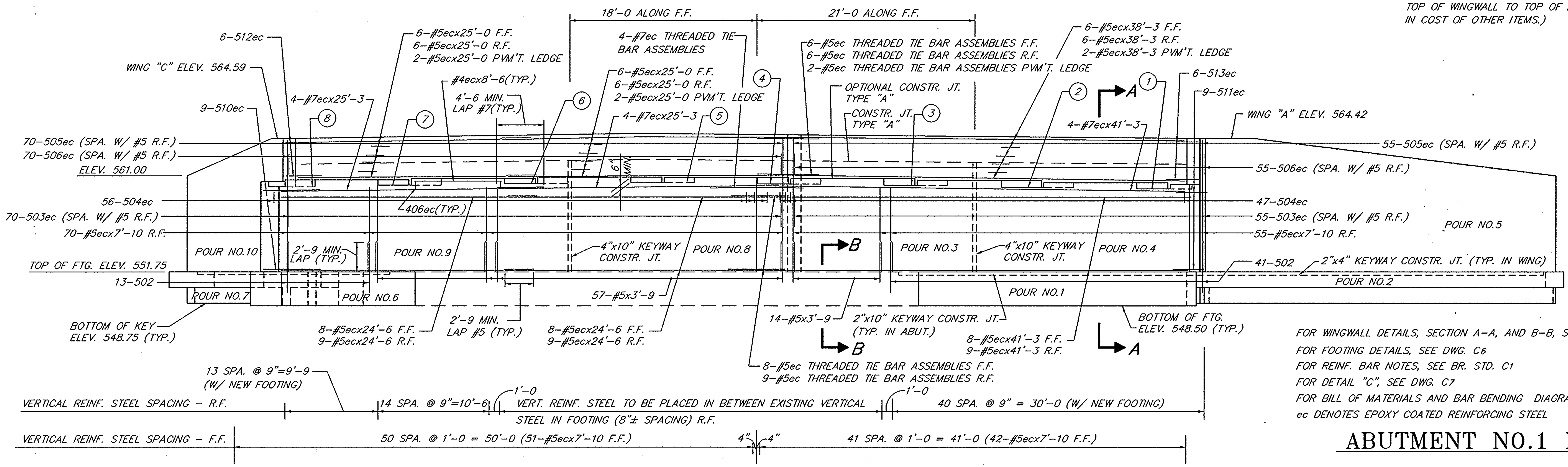
DRAWN M.N. C'K'D R.Z.
DESIGNED R.Z. C'K'D J.G.
TRACED C'K'D

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		14	62



PLAN

* 1" PREFORMED JOINT FILLER TO EXTEND FROM TOP OF WINGWALL TO TOP OF FOOTING (INCLUDED IN COST OF OTHER ITEMS.)



FOR WINGWALL DETAILS, SECTION A-A, AND B-B, SEE DWG. C7
FOR FOOTING DETAILS, SEE DWG. C6
FOR REINF. BAR NOTES, SEE BR. STD. C1
FOR DETAIL "C", SEE DWG. C7
FOR BILL OF MATERIALS AND BAR BENDING DIAGRAMS, SEE DWG. C8
ec DENOTES EPOXY COATED REINFORCING STEEL

ELEVATION

ABUTMENT NO.1 DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

BRIDGE SEAT ELEVATIONS								
	1	2	3	4	5	6	7	8
ABUTMENT NO.1	559.730	559.880	560.030	560.180	560.330	560.200	560.050	559.900

EXISTING VERTICAL STEEL EXTENDING OUT OF FOOTING ON REAR FACE TO BE CLEANED AND STRAIGHTENED. DRILL 1"⌀ HOLE 1'-0 INTO EXISTING FOOTING BETWEEN EXISTING VERTICAL STEEL (R.F.) AND FILL W/ CEMENT GROUT. INSERT #5x3'-9 RE-BAR AND REMOVE EXCESS GROUT.

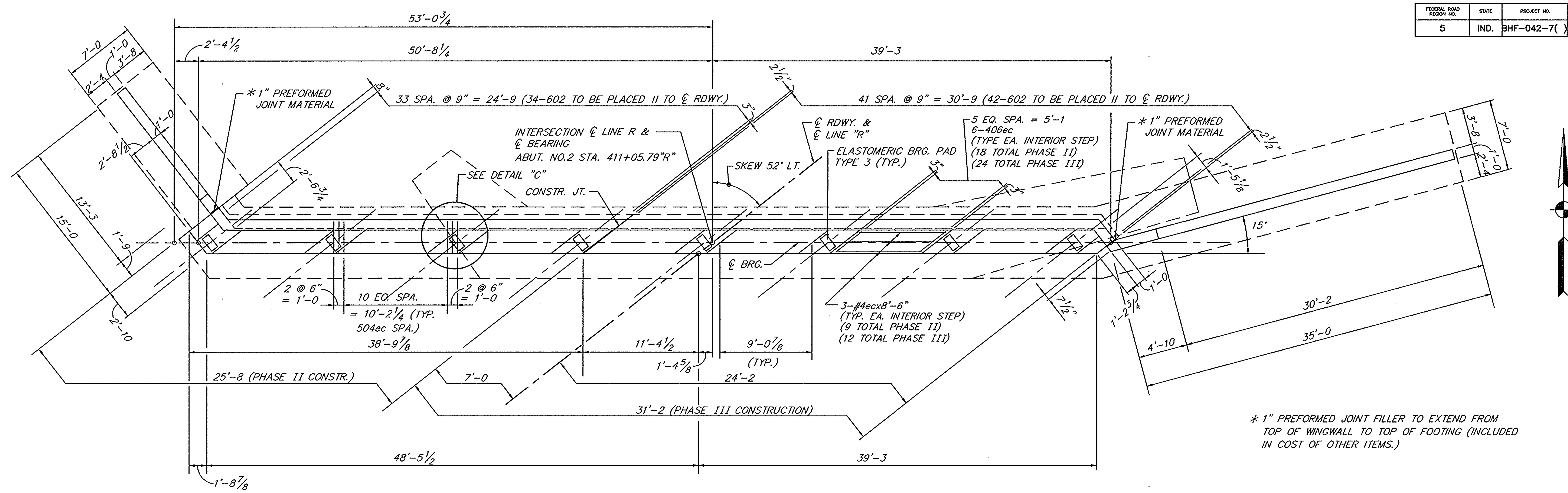
SCALE: 3/16" = 1'-0 DATE: 4-22-1997

DRAWING C4 OF C14 SHEET 14 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN M.N. C'K'D R.Z.
DESIGNED R.Z. C'K'D J.G.
TRACED C'K'D

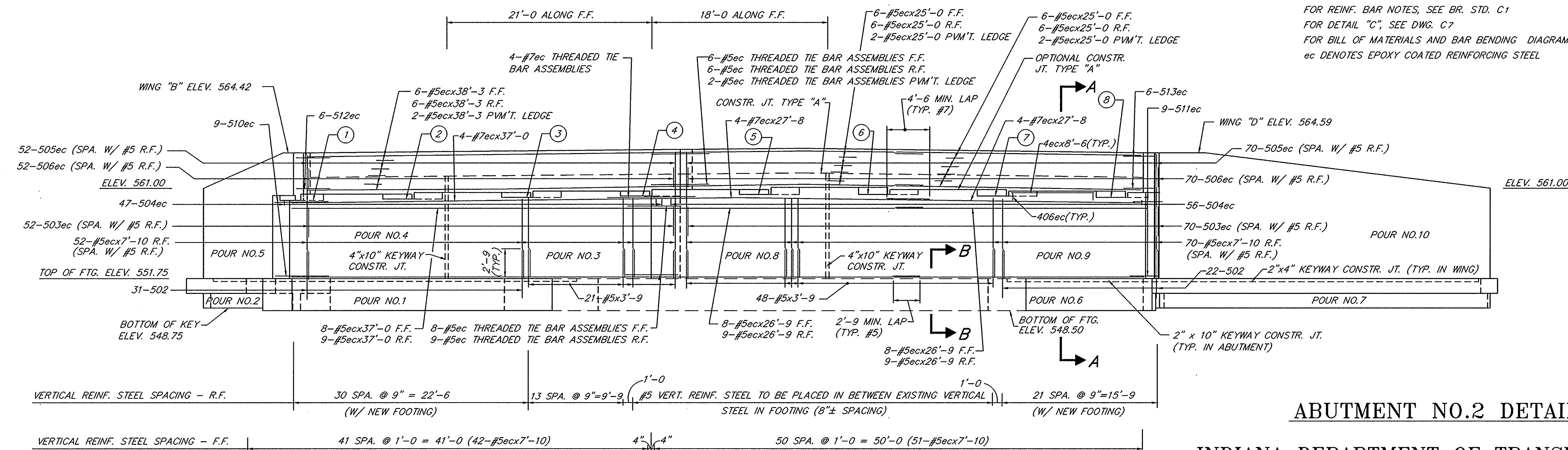
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		15	62



PLAN

* 1" PREFORMED JOINT FILLER TO EXTEND FROM TOP OF WINGWALL TO TOP OF FOOTING (INCLUDED IN COST OF OTHER ITEMS.)

FOR WINGWALL DETAILS, SECTION A-A AND B-B, SEE DWG. C 7
FOR FOOTING DETAILS, SEE DWG. C6
FOR REINF. BAR NOTES, SEE BR. STD. C1
FOR DETAIL "C", SEE DWG. C7
FOR BILL OF MATERIALS AND BAR BENDING DIAGRAMS, SEE DWG. C8
ec DENOTES EPOXY COATED REINFORCING STEEL



ELEVATION

EXISTING VERTICAL STEEL EXTENDING OUT OF FOOTING ON REAR FACE TO BE CLEANED AND STRAIGHTENED. DRILL 1"ø HOLE 1'-0 INTO EXISTING FOOTING BETWEEN EXISTING VERTICAL STEEL (R.F.) AND FILL W/ CEMENT GROUT. INSERT #5x3'-9 RE-BAR AND REMOVE EXCESS GROUT.

BRIDGE SEAT ELEVATIONS

	1	2	3	4	5	6	7	8
ABUTMENT NO.2	559.730	559.880	560.030	560.180	560.330	560.200	560.050	559.900

ABUTMENT NO.2 DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

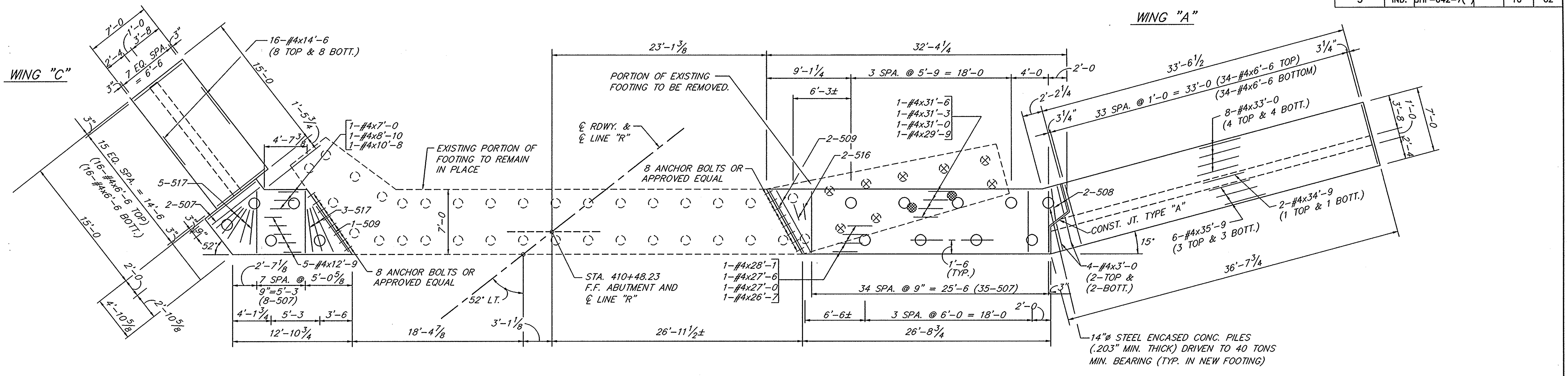
SCALE: 3/16" = 1'-0 DATE: 4-22-1997

DRAWING C5 OF C14 SHEET 15 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

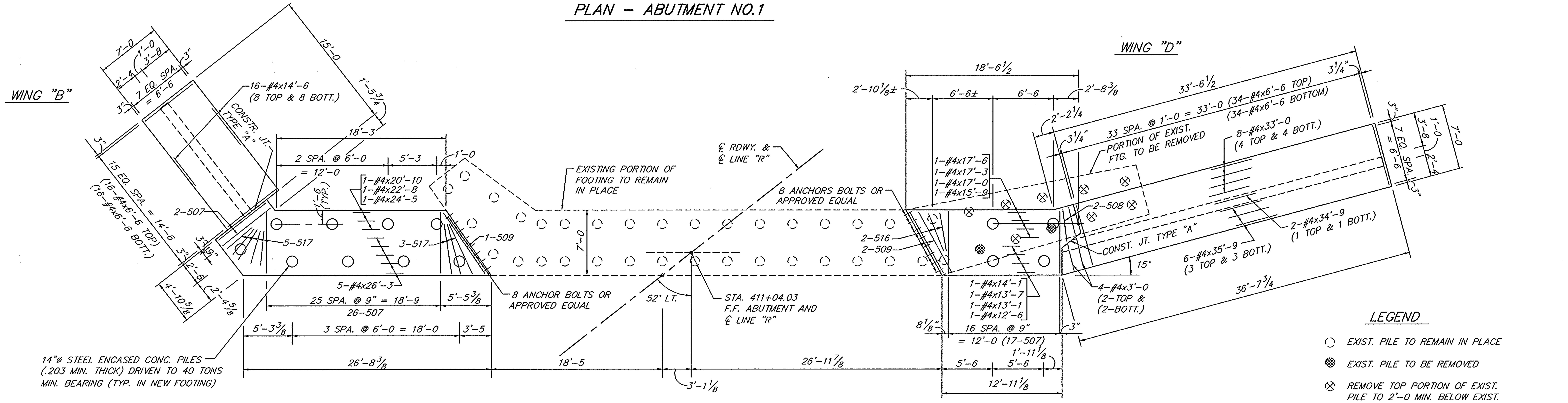
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN M.N. C'K'D R.Z.
DESIGNED R.Z. C'K'D J.G.
TRACED C'K'D

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		16	62



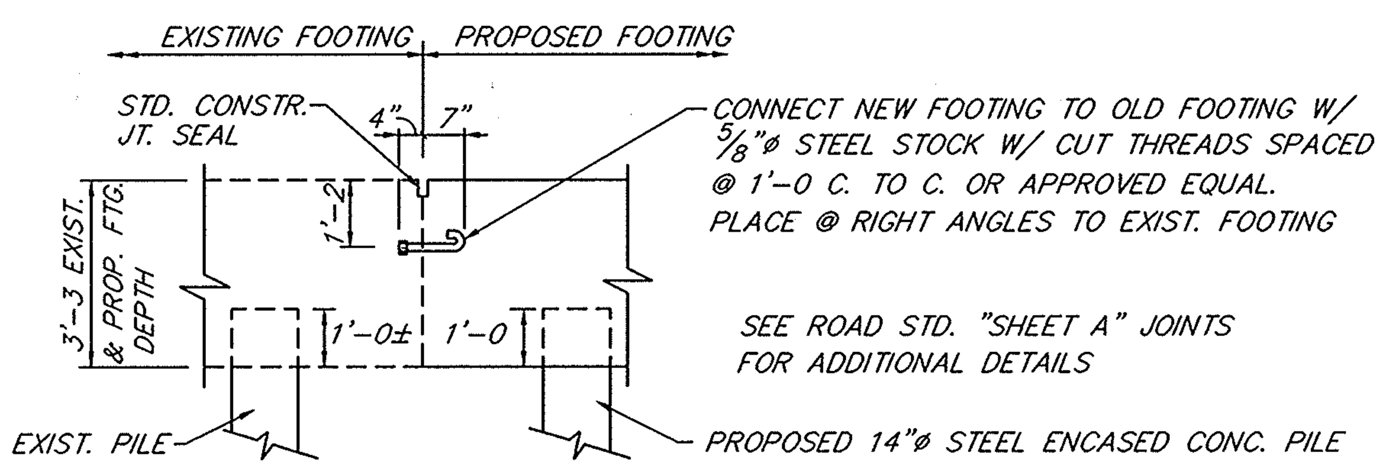
PLAN – ABUTMENT NO.1



PLAN – ABUTMENT NO.2

LEGEND

- EXIST. PILE TO REMAIN IN PLACE
- EXIST. PILE TO BE REMOVED
- REMOVE TOP PORTION OF EXIST. PILE TO 2'-0 MIN. BELOW EXIST. FOOTING ELEVATION.



ANCHOR DETAIL

SCALE: NOT TO SCALE

NOTES: 1'-6 MIN. CLEARANCE REQ'D. BETWEEN FACE OF EXISTING PILES AND FACE OF PROPOSED PILES.

REMOVAL OF EXISTING PILES TO BE INCLUDED IN COST OF "PRESENT STRUCTURE, REMOVE PORTIONS" L.SUM

FOR ABUTMENT DETAILS, SEE DWG. C4 & C5

FOR ADDITIONAL DETAILS AND WINGWALL DETAILS, SEE DWG. C7

FOR ADDITIONAL ANCHOR BOLT DETAILS SEE RD. STD. "SHEET A" JOINTS

FOR BAR BENDING DIAGRAMS AND BILL OF MATERIALS, SEE DWG. C7

DRAWN M.N.	C'K'D R.Z.		
DESIGNED R.Z.	C'K'D J.G.		
TRACED	C'K'D		

FOOTING DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

SCALE: 3/16" = 1'-0, UNLESS NOTED DATE: 4-22-1997

DRAWING C6 OF C14 SHEET 16 OF 62

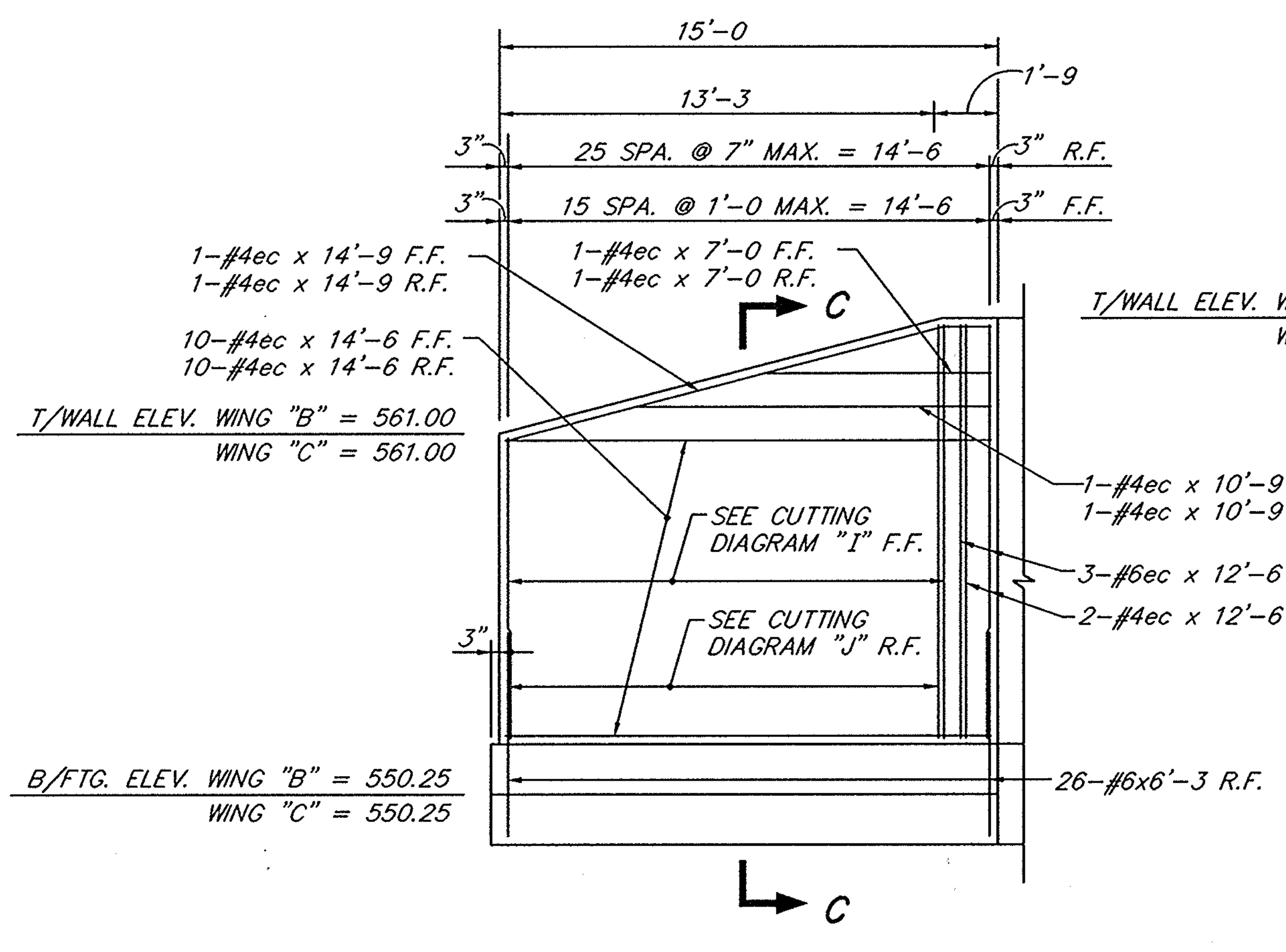
PROJECT: BHF-042-7( )

BRIDGE CONTRACT NO. R-23259

BRIDGE FILE: 50-36-1250 C

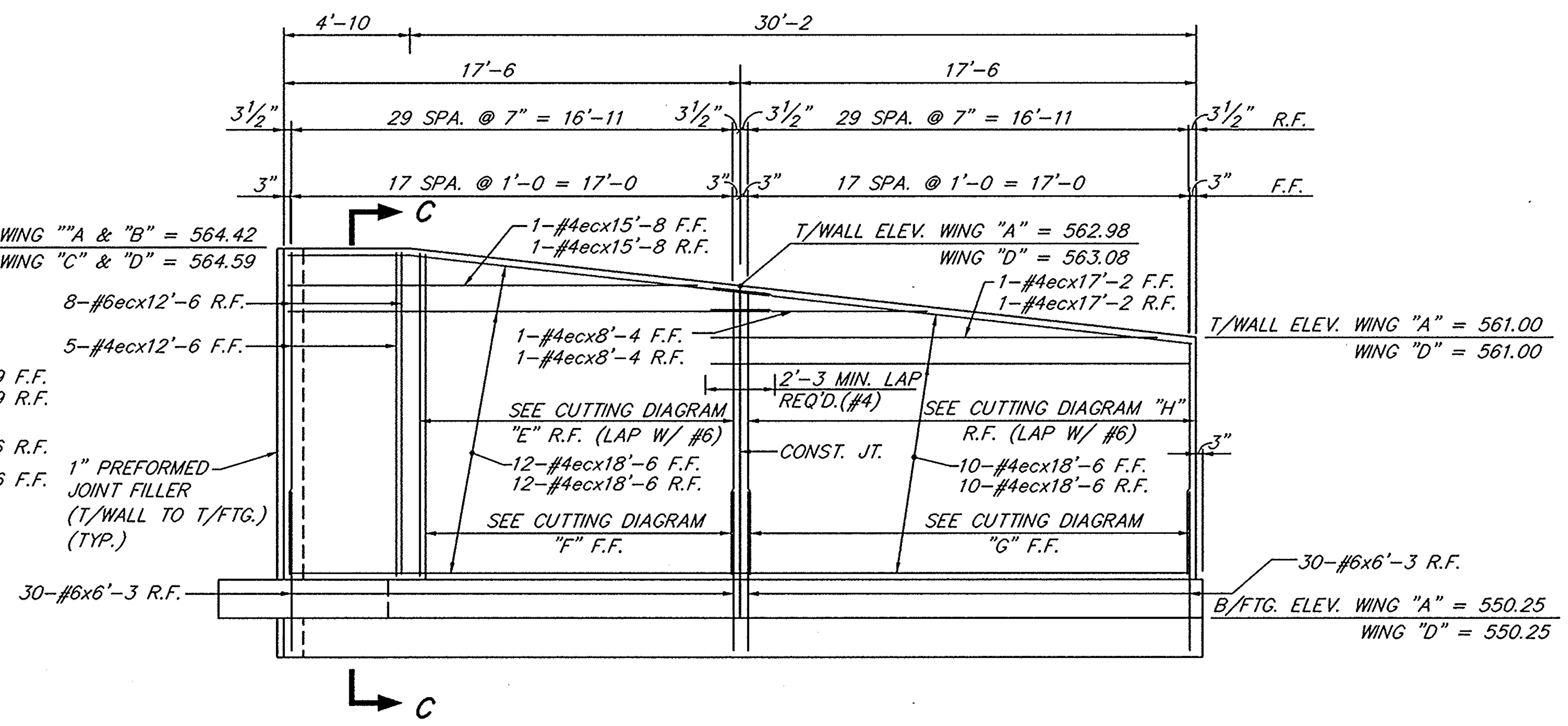
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		17	62



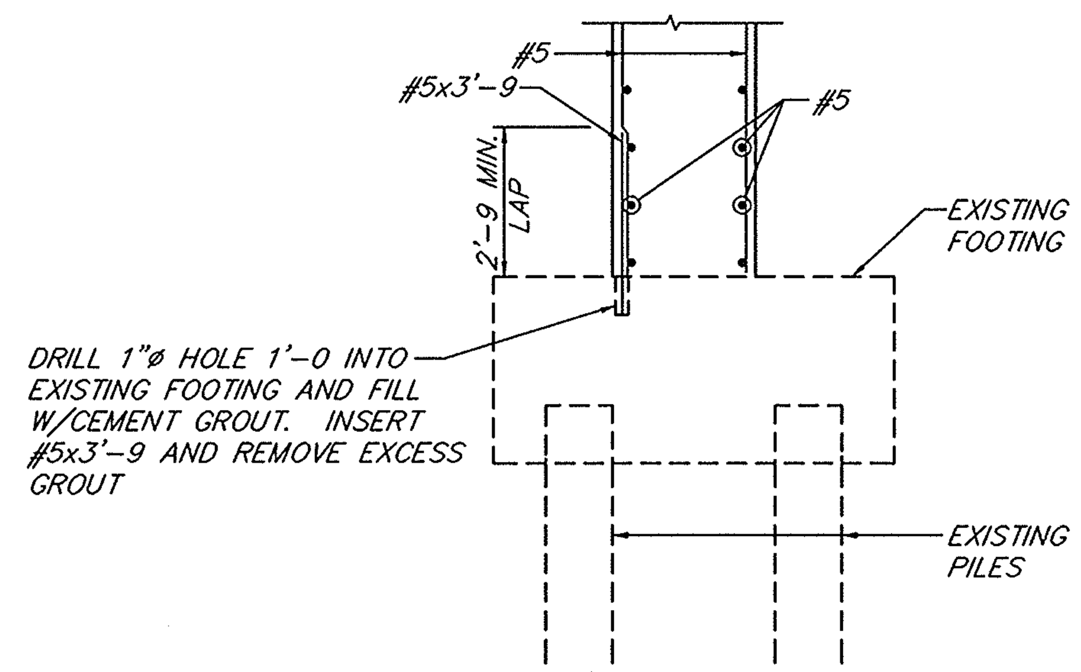
WINGWALL "B" & "C"

SCALE: 1/4" = 1'-0



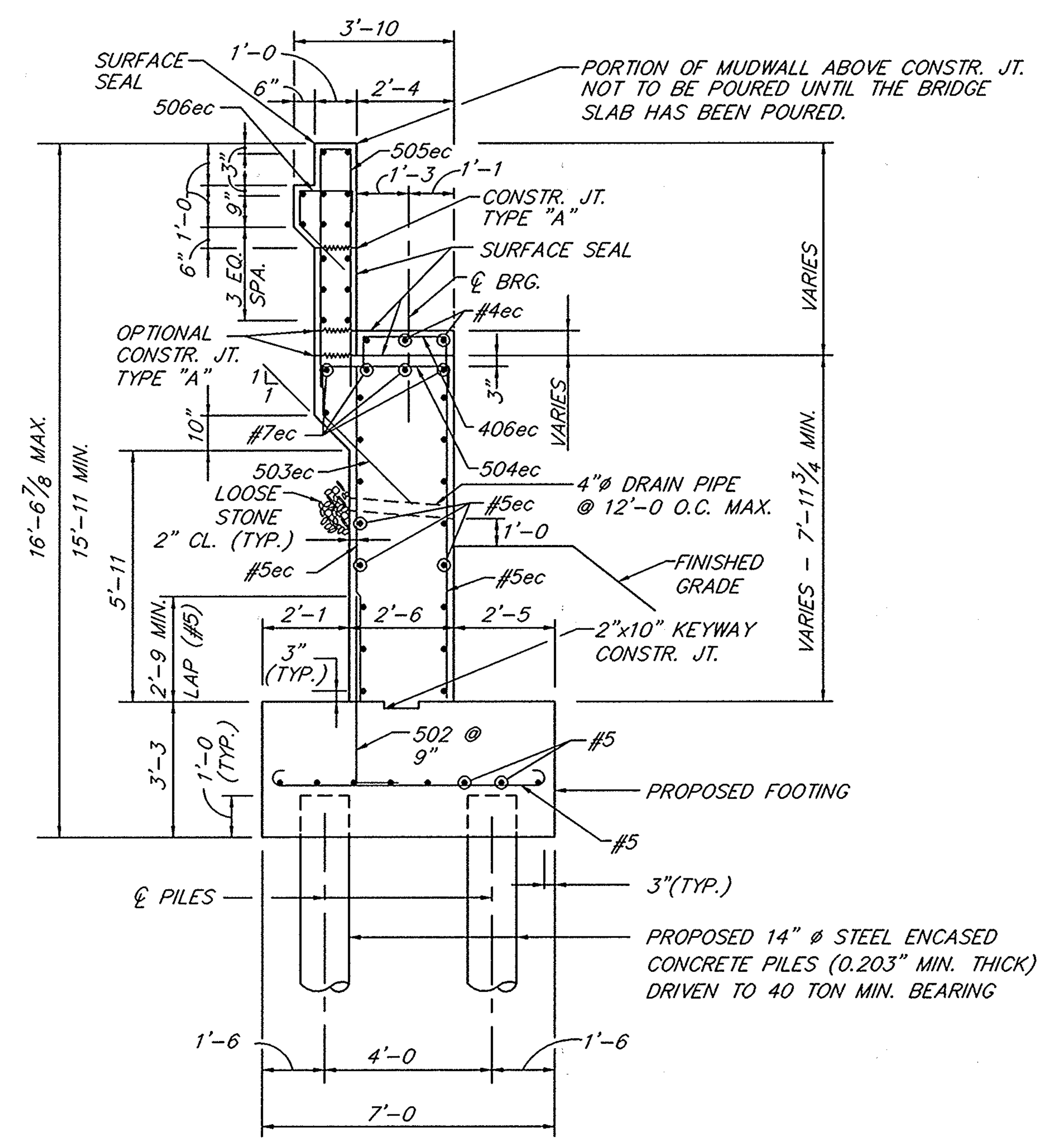
WINGWALL "A" & "D"

SCALE: 1/4" = 1'-0



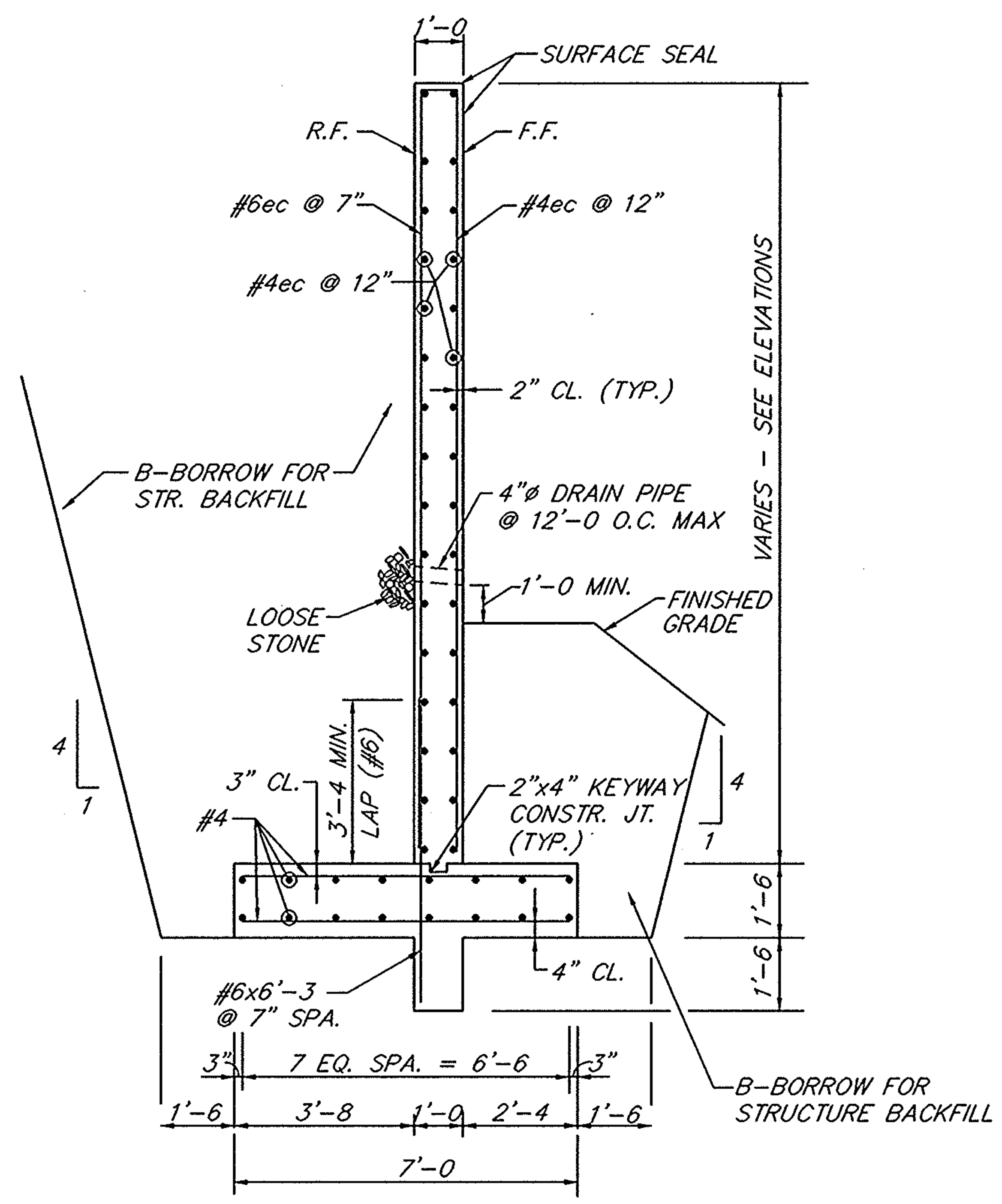
SECTION B-B

NOT TO SCALE



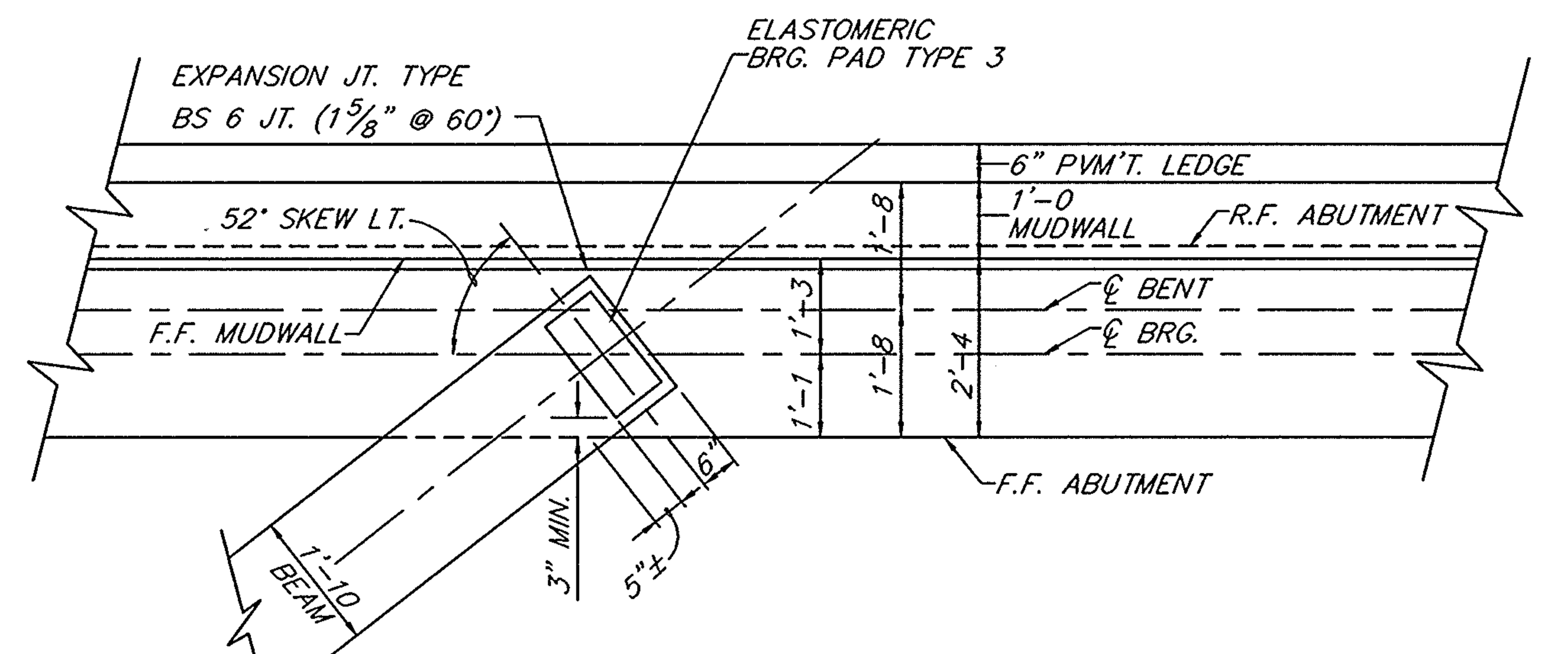
SECTION "A-A"

SCALE: 3/8" = 1'-0



SECTION C-C

SCALE: 3/8" = 1'-0



DETAIL "B"

SCALE: 1/2" = 1'-0

NOTES:

- FOR FOOTING DETAILS, SEE DWG. C6
- FOR REINFORCING BAR NOTES, SEE BR. STD. C1
- "EC" DENOTES EPOXY COATED REINFORCING STEEL
- FOR ADDITIONAL DETAILS, SECTION A-A AND B-B, SEE DWGS. C4 OR C5
- FOR BILL OF MATERIALS & BAR BENDING DIAGRAMS, SEE DWG. C8

ABUTMENT & WINGWALL DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

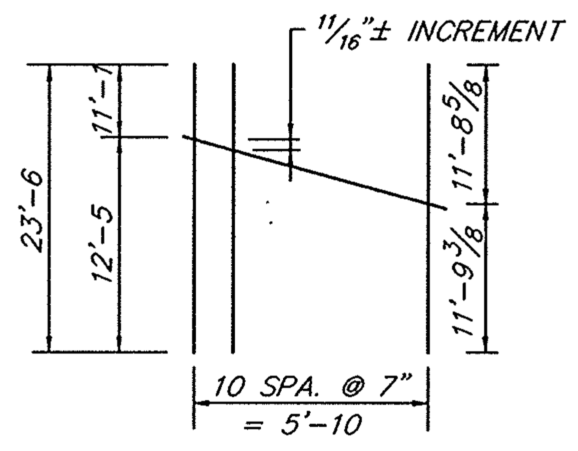
SCALE: AS NOTED DATE: 4-22-1997

DRAWING C7 OF C14 SHEET 17 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

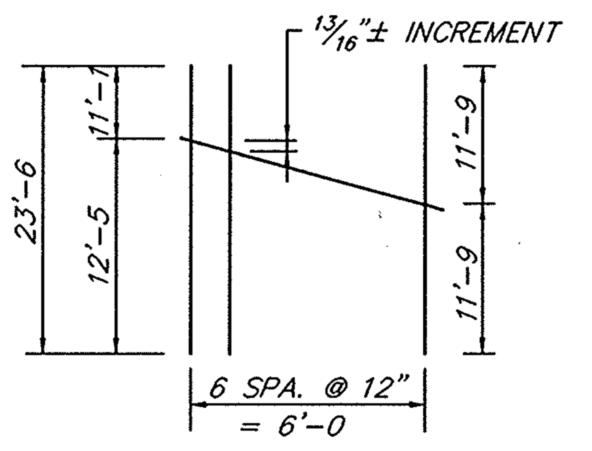
LAWRENCE ... SQUIRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN	M.N.	C'K'D	R.Z.
DESIGNED	R.Z.	C'K'D	J.G.
TRACED		C'K'D	

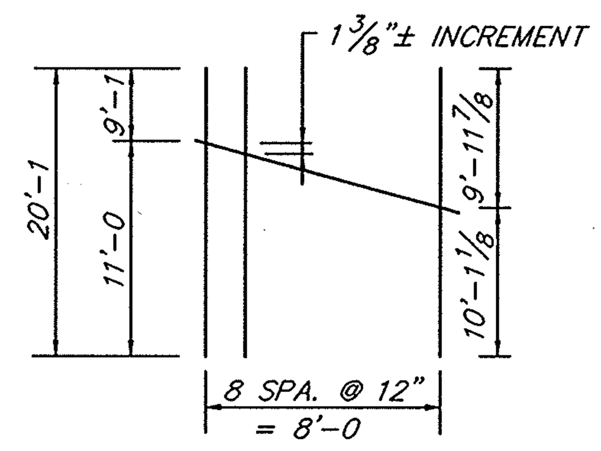
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		18	62



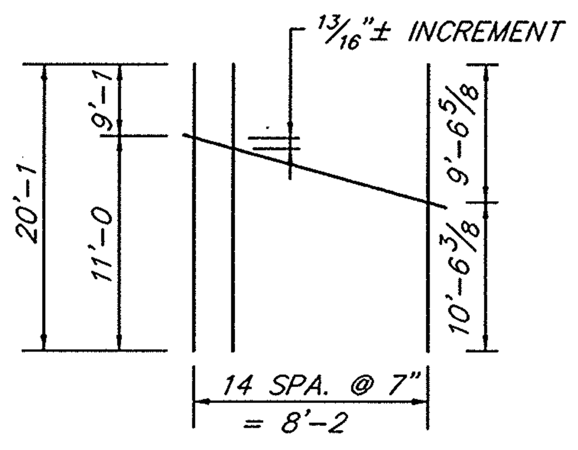
CUTTING DIAGRAM "E"
11-#6ec x 23'-6
(CUTS 22 BARS)



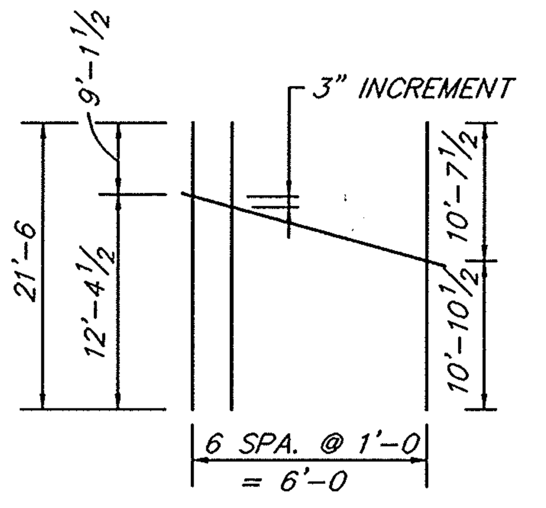
CUTTING DIAGRAM "F"
7-#4ec x 23'-6
(CUTS 14 BARS, 13 REQ'D.)



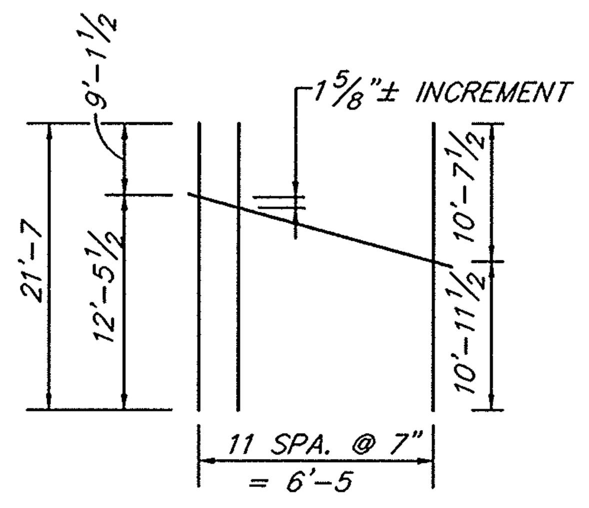
CUTTING DIAGRAM "G"
9-#6ec x 20'-1
(CUTS 18 BARS)



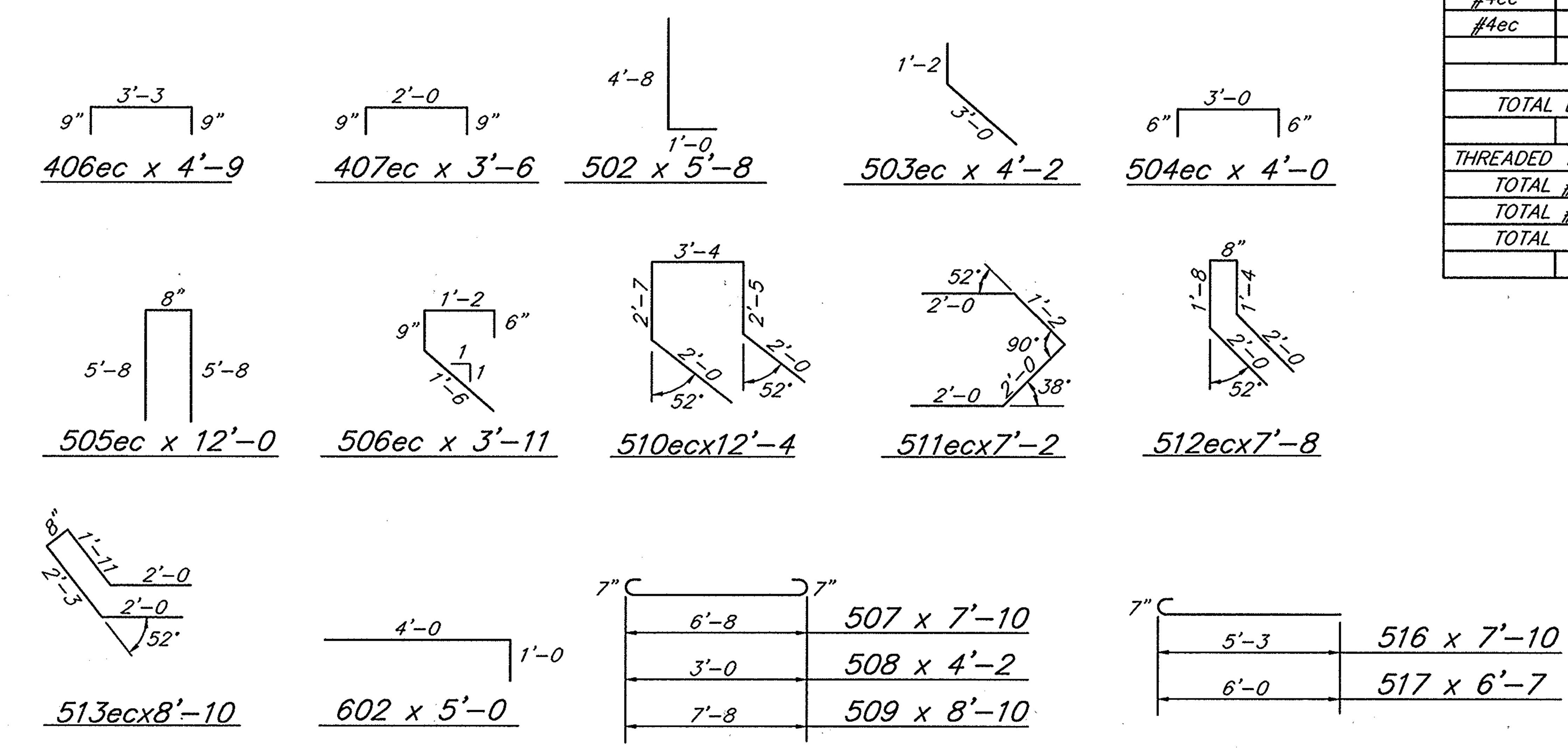
CUTTING DIAGRAM "H"
15-#4ec x 20'-1
(CUTS 30 BARS)



CUTTING DIAGRAM "I"
7-#4ec x 21'-6
(CUTS 14 BARS)



CUTTING DIAGRAM "J"
12-#6ec x 21'-7
(CUTS 24 BARS, 23 REQ'D.)



ec DENOTES EPOXY COATED REINF. STEEL

BAR BENDING DIAGRAMS

ABUTMENT NO.1 BILL OF MATERIALS

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
EPOXY COATED REINFORCING			
#7ec	4	41'-3	
#7ec	8	25'-3	
TOTAL #7			750
#6ec	11	23'-6	
#6ec	12	21'-7	
#6ec	9	20'-1	
#6ec	11	12'-6	
TOTAL #6			1255
513ec	6	8'-10	
512ec	6	7'-8	
511ec	9	7'-2	
510ec	9	12'-4	
506ec	125	3'-11	
505ec	125	12'-0	
504ec	103	4'-0	
503ec	125	4'-2	
#5ec	17	41'-3	
#5ec	14	38'-3	
#5ec	28	25'-0	
#5ec	34	24'-6	
#5ec	218	7'-10	
TOTAL #5			8004
406ec	42	4'-9	
#4ec	7	23'-6	
#4ec	7	21'-6	
#4ec	15	20'-1	
#4ec	44	18'-6	
#4ec	2	17'-2	
#4ec	2	15'-8	
#4ec	2	14'-9	
#4ec	20	14'-6	
#4ec	7	12'-6	
#4ec	2	10'-9	
#4ec	21	8'-6	
#4ec	2	8'-4	
#4ec	2	7'-0	
TOTAL #4			1558
TOTAL E.C. REINF. STEEL			11,567
THREADED TIE BAR ASSEMBLIES			
TOTAL #7ec =			4 EA.
TOTAL #5ec =			31 EA.
TOTAL =			35 EA.

ABUTMENT NO.1 BILL OF MATERIALS (CON'T.)

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
PLAIN REINFORCING			
602	76	5'-0	
#6	86	6'-3	
TOTAL #6			1378
517	8	6'-7	
516	2	5'-10	
509	3	8'-10	
508	2	4'-2	
507	45	7'-10	
502	54	5'-8	
#5	71	3'-9	
TOTAL #5			1068
#4	6	35'-9	
#4	2	34'-9	
#4	8	33'-0	
#4	1	31'-6	
#4	1	31'-3	
#4	1	31'-0	
#4	1	29'-9	
#4	1	28'-1	
#4	1	27'-6	
#4	1	27'-0	
#4	1	26'-7	
#4	16	14'-6	
#4	5	12'-9	
#4	1	10'-8	
#4	1	8'-10	
#4	1	7'-0	
#4	100	6'-6	
#4	4	3'-0	
TOTAL #4			1179
TOTAL PLAIN REINF. STEEL			3625
CONCRETE			
CLASS "B" IN FOOTING			
POUR NO.1			24.8 CYS.
POUR NO.2			15.5 CYS.
POUR NO.6			10.0 CYS.
POUR NO.7			6.8 CYS.
TOTAL CLASS "B" IN FOOTING			57.1 CYS.
CLASS "A" IN SUBSTRUCTURE			
POUR NO.3			18.5 CYS.
POUR NO.4			19.5 CYS.
POUR NO.5			14.6 CYS.
POUR NO.8			17.7 CYS.
POUR NO.9			29.6 CYS.
POUR NO.10			6.3 CYS.
TOTAL CLASS "A" IN SUBSTR.			106.2 CYS.
MISCELLANEOUS			
ANCHOR BOLTS			16 EA.
FIELD DRILLED HOLES IN CONC.=			71 EA.
PILE, CONCRETE, STEEL SHELL			
ENCASED,(.203" THICK), 14"ø =			560 LFT.
(14 @ 40 LFT. EA.)			
4" ø DRAIN PIPE, STD. =			21.5 LFT.

ABUTMENT NO.2 BILL OF MATERIALS

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
EPOXY COATED REINFORCING			
#7ec	4	37'-0	
#7ec	8	27'-8	
TOTAL #7			755
#6ec	11	23'-6	
#6ec	12	21'-7	
#6ec	9	20'-1	
#6ec	11	12'-6	
TOTAL #6			1255
513ec	6	8'-10	
512ec	6	7'-8	
511ec	9	7'-2	
510ec	9	12'-4	
506ec	122	3'-11	
505ec	122	12'-0	
504ec	103	4'-0	
503ec	122	4'-2	
#5ec	14	38'-3	
#5ec	17	37'-0	
#5ec	34	26'-9	
#5ec	28	25'-0	
#5ec	215	7'-10	
TOTAL #5			7921
406ec	42	4'-9	
#4ec	7	23'-6	
#4ec	7	21'-6	
#4ec	15	20'-1	
#4ec	44	18'-6	
#4ec	2	17'-2	
#4ec	2	15'-8	
#4ec	2	14'-9	
#4ec	20	14'-6	
#4ec	7	12'-6	
#4ec	2	10'-9	
#4ec	21	8'-6	
#4ec	2	8'-4	
#4ec	2	7'-0	
TOTAL #4			1558
TOTAL E.C. REINF. STEEL			11,489
THREADED TIE BAR ASSEMBLIES			
TOTAL #7ec =			4 EA.
TOTAL #5ec =			31 EA.
TOTAL =			35 EA.

ABUTMENT NO.2 BILL OF MATERIALS (CON'T.)

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
PLAIN REINFORCING			
602	76	5'-0	
#6	86	6'-3	
TOTAL #6			1378
517	8	6'-7	
516	2	5'-10	
509	3	8'-10	
508	2	4'-2	
507	45	7'-10	
502	53	5'-8	
#5	69	3'-9	
TOTAL #5			1054
#4	6	35'-9	
#4	2	34'-9	
#4	8	33'-0	
#4	5	26'-3	
#4	1	24'-5	
#4	1	22'-8	
#4	1	20'-10	
#4	1	17'-6	
#4	1	17'-3	
#4	1	17'-0	
#4	1	15'-9	
#4	16	14'-6	
#4	1	14'-1	
#4	1	13'-7	
#4	1	13'-1	
#4	1	12'-6	
#4	100	6'-6	
#4	4	3'-0	
TOTAL #4			1177
TOTAL PLAIN REINF. STEEL			3609
CONCRETE			
CLASS "B" IN FOOTING			
POUR NO.1			21.6 CYS.
POUR NO.2			6.8 CYS.
POUR NO.6			13.2 CYS.
POUR NO.7			15.5 CYS.
TOTAL CLASS "B" IN FOOTING			57.1 CYS.
CLASS "A" IN SUBSTRUCTURE			
POUR NO.3			19.1 CYS.
POUR NO.4			17.3 CYS.
POUR NO.5			6.3 CYS.
POUR NO.8			16.9 CYS.
POUR NO.9			32.0 CYS.
POUR NO.10			14.6 CYS.
TOTAL CLASS "A" IN SUBSTR.			106.2 CYS.
MISCELLANEOUS			
ANCHOR BOLTS			16 EA.
FIELD DRILLED HOLES IN CONC.=			69 EA.
PILE, CONCRETE, STEEL SHELL			
ENCASED,(.203" THICK), 14"ø =			520 LFT.
(13 @ 40 LFT. EA.)			
4" ø DRAIN PIPE, STD. =			21.5 LFT.

ABUTMENT BILL OF MATERIALS
INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

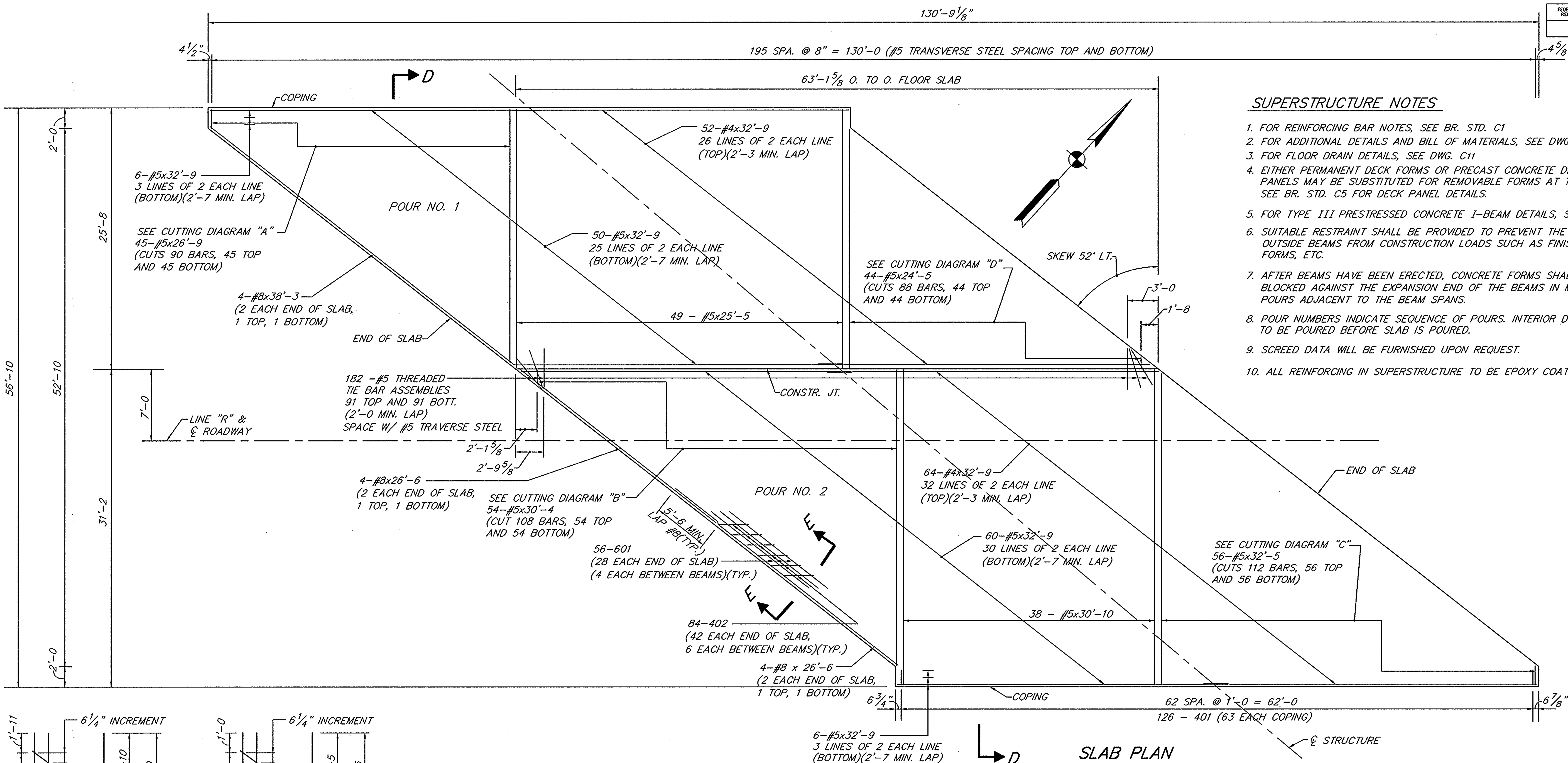
SCALE: NONE DATE: 4-22-1997

DRAWING C8 OF C14 SHEET 18 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN M.N. C'K'D R.Z.
DESIGNED R.Z. C'K'D J.G.
TRACED C'K'D

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		19	62



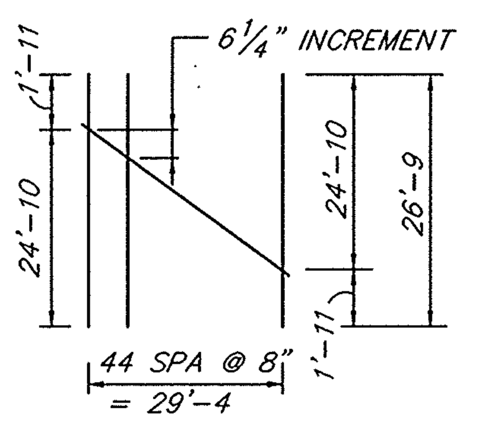
SLAB PLAN

SCALE: 3/16" = 1'-0

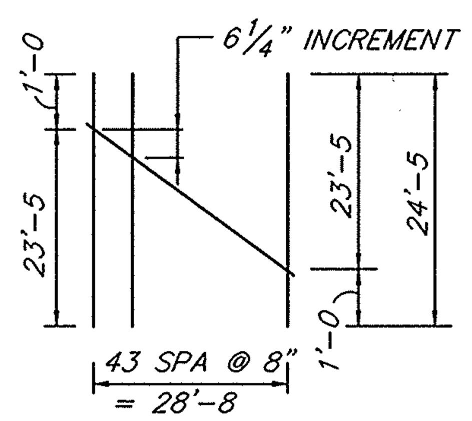
SUPERSTRUCTURE NOTES

1. FOR REINFORCING BAR NOTES, SEE BR. STD. C1
2. FOR ADDITIONAL DETAILS AND BILL OF MATERIALS, SEE DWG.
3. FOR FLOOR DRAIN DETAILS, SEE DWG. C11
4. EITHER PERMANENT DECK FORMS OR PRECAST CONCRETE DECK PANELS MAY BE SUBSTITUTED FOR REMOVABLE FORMS AT THIS STRUCTURE SEE BR. STD. C5 FOR DECK PANEL DETAILS.
5. FOR TYPE III PRESTRESSED CONCRETE I-BEAM DETAILS, SEE DWG. C12
6. SUITABLE RESTRAINT SHALL BE PROVIDED TO PREVENT THE ROTATION OF THE OUTSIDE BEAMS FROM CONSTRUCTION LOADS SUCH AS FINISHING MACHINE, FORMS, ETC.
7. AFTER BEAMS HAVE BEEN ERECTED, CONCRETE FORMS SHALL NOT BE BLOCKED AGAINST THE EXPANSION END OF THE BEAMS IN MAKING ANY POURS ADJACENT TO THE BEAM SPANS.
8. POUR NUMBERS INDICATE SEQUENCE OF POURS. INTERIOR DIAPHRAGMS TO BE POURED BEFORE SLAB IS POURED.
9. SCREED DATA WILL BE FURNISHED UPON REQUEST.
10. ALL REINFORCING IN SUPERSTRUCTURE TO BE EPOXY COATED.

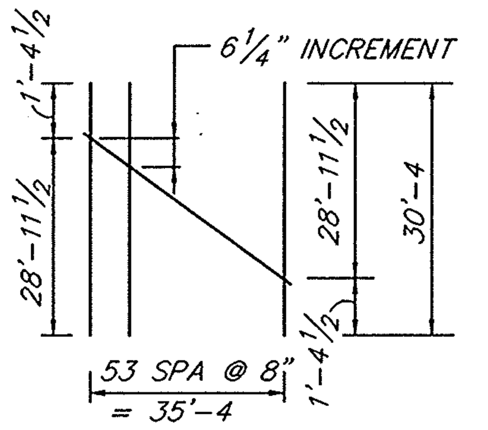
NOTES:
FOR LOCATION OF DIAPHRAGMS, SEE DWG. C10
FOR ADDITIONAL SUPERSTRUCTURE DETAILS, SEE DWG. C11
FOR REINFORCING BAR NOTES, SEE BR. STD. C1



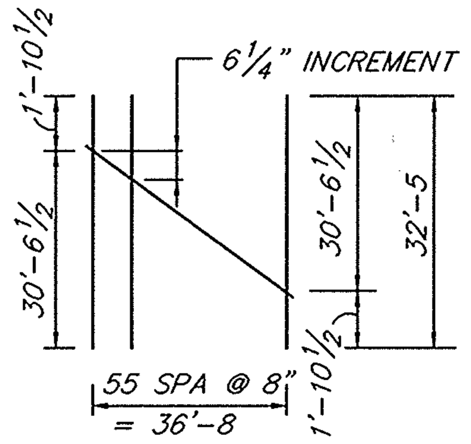
CUTTING DIAGRAM "A"
#5x26'-9



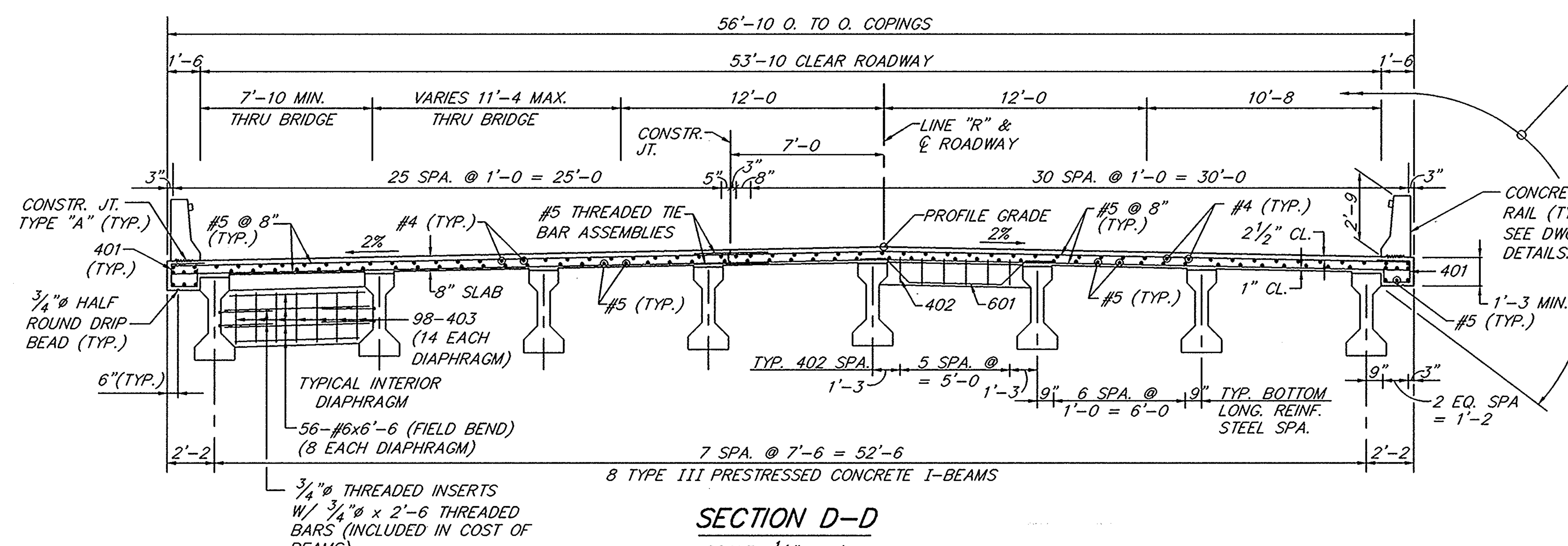
CUTTING DIAGRAM "D"
#5x24'-5



CUTTING DIAGRAM "B"
#5x30'-4



CUTTING DIAGRAM "C"
#5x32'-5



SECTION D-D

SCALE: 1/4" = 1'-0

C:\DS\BRIDGE\HRSUPER. 04/29/97 at 15:00, REN

DRAWN M.N.	C'K'D R.Z.
DESIGNED R.Z.	C'K'D J.G.
TRACED	C'K'D

SUPERSTRUCTURE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

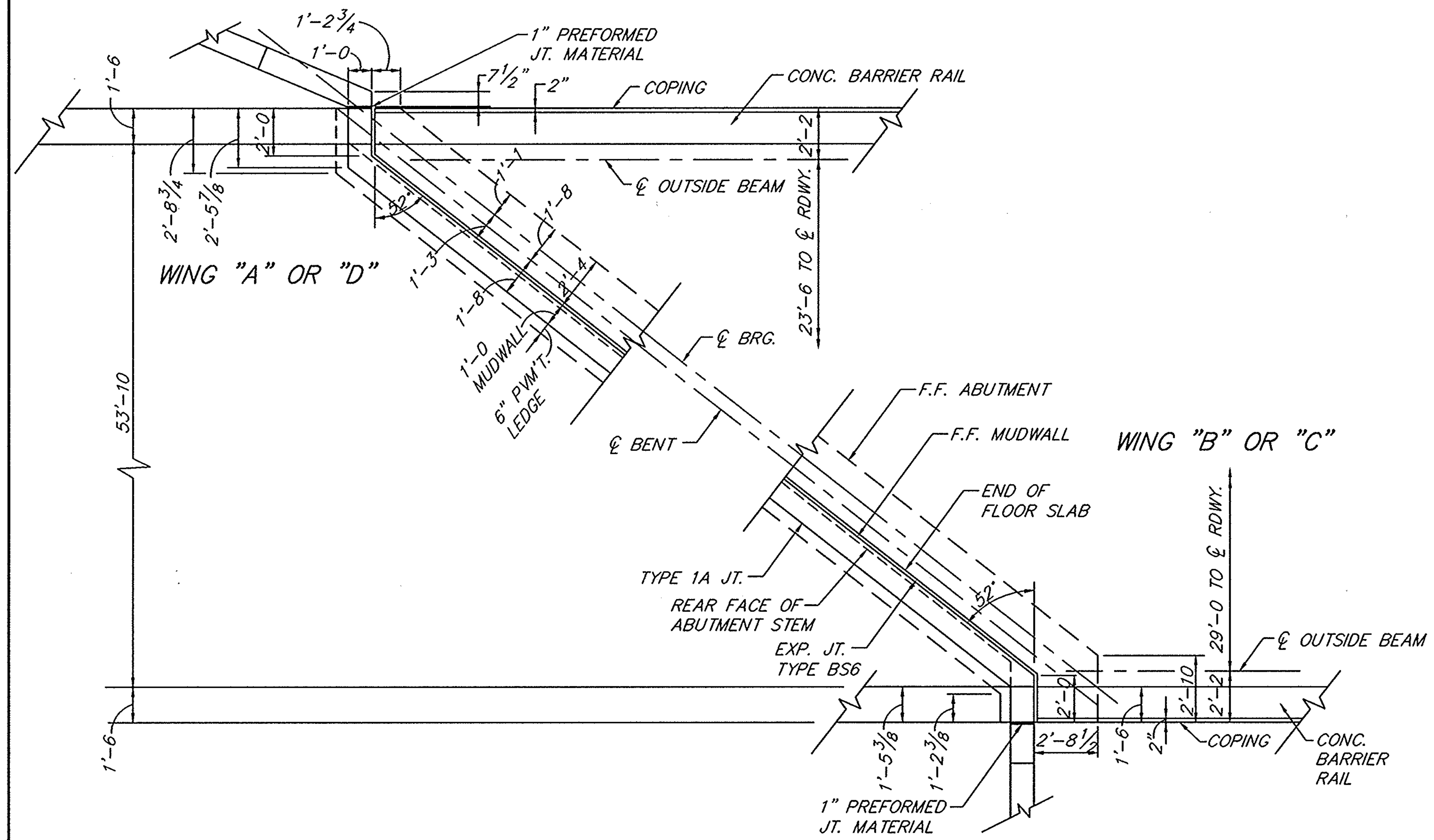
JACKSON COUNTY

SCALE: AS NOTED DATE: 4-22-1997

DRAWING C9 OF C12 SHEET 19 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

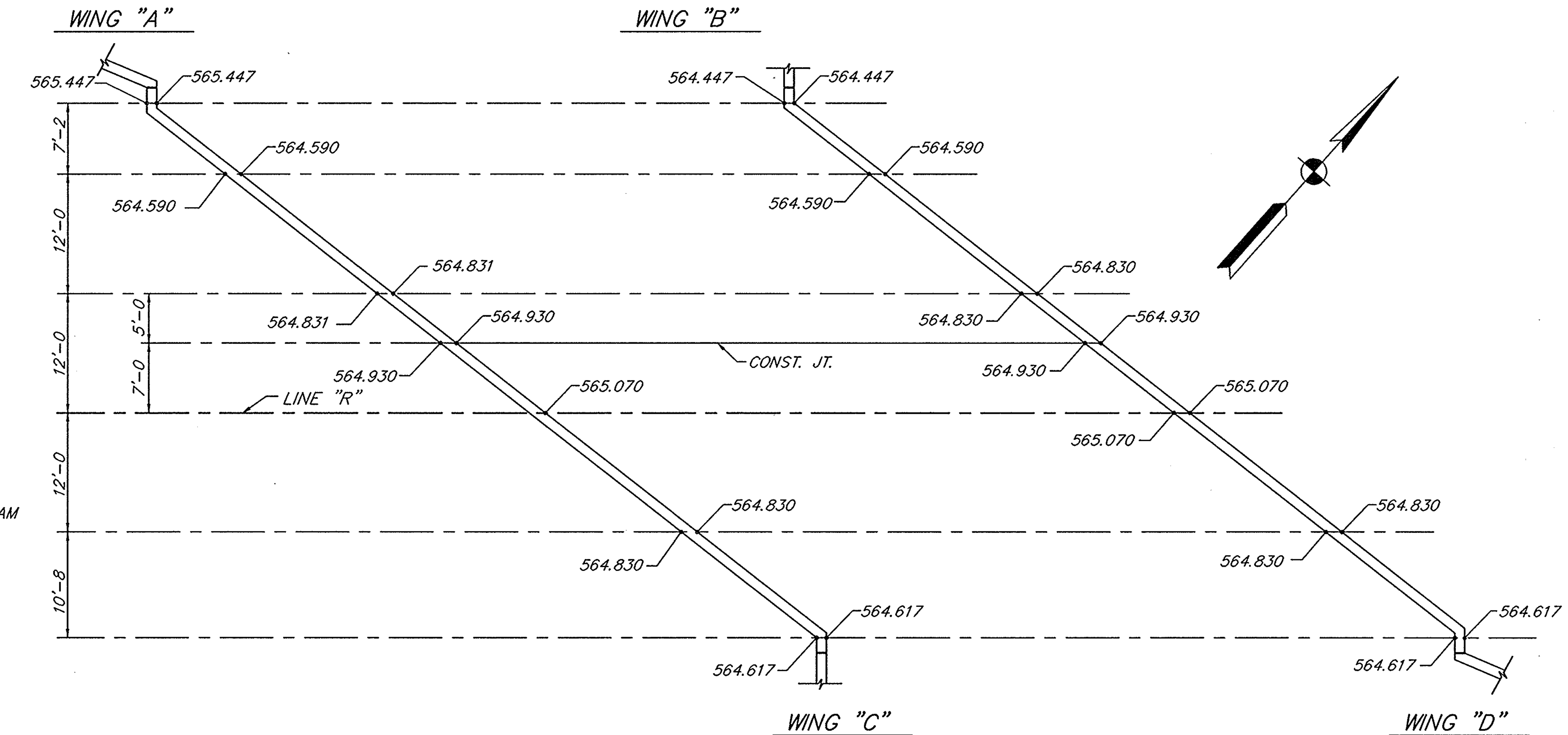
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		20	62



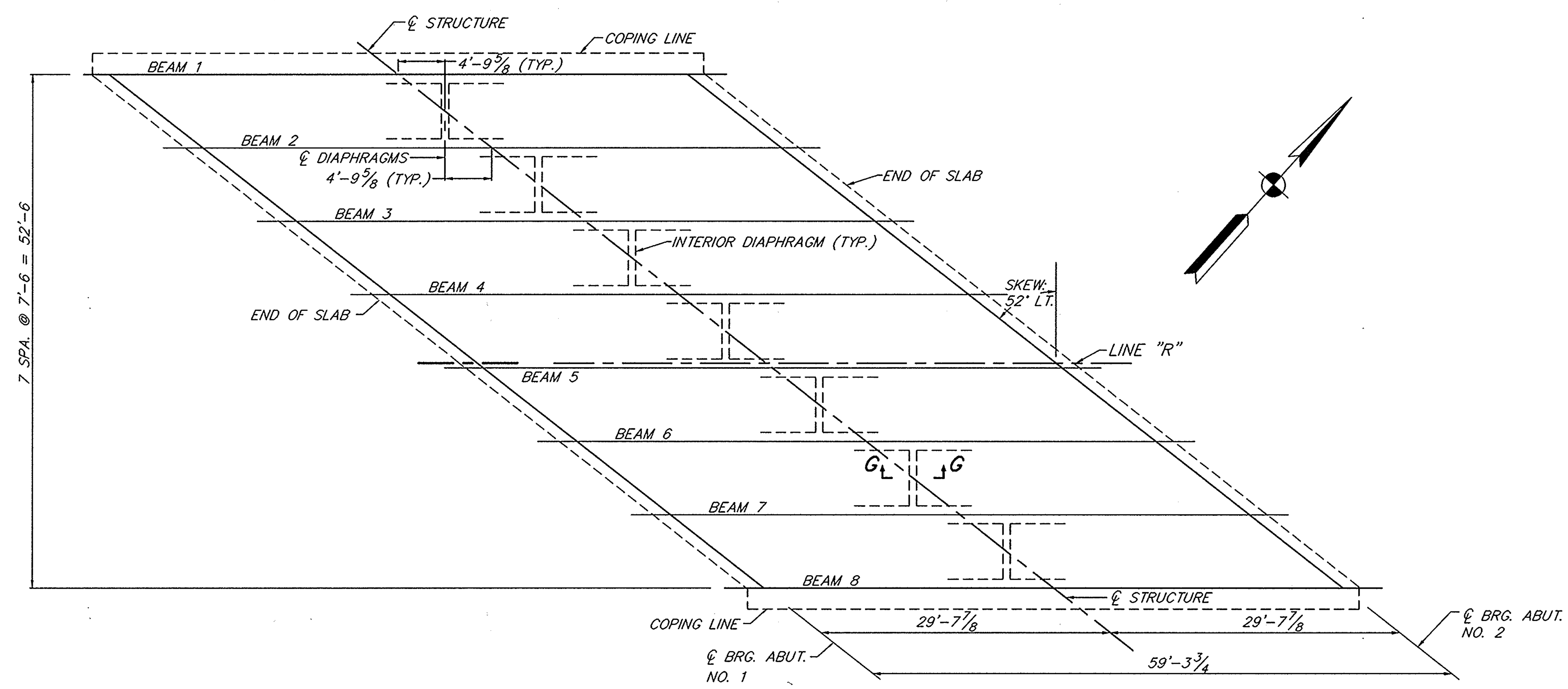
CORNER DETAILS

SCALE: 1/4"=1'-0



MUDWALL ELEVATIONS

SCALE: NOT TO SCALE



FRAMING PLAN

SCALE: 3/8" = 1'-0

FOR SECTION G-G, SEE DWG. C11
FOR BEAM DETAILS, SEE DWG. C12
FOR DIAPHRAGM DETAILS, SEE DWG. C11
FOR ADDITIONAL SUPERSTRUCTURE DETAILS, SEE DWG. C9 & C11

SUPERSTRUCTURE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

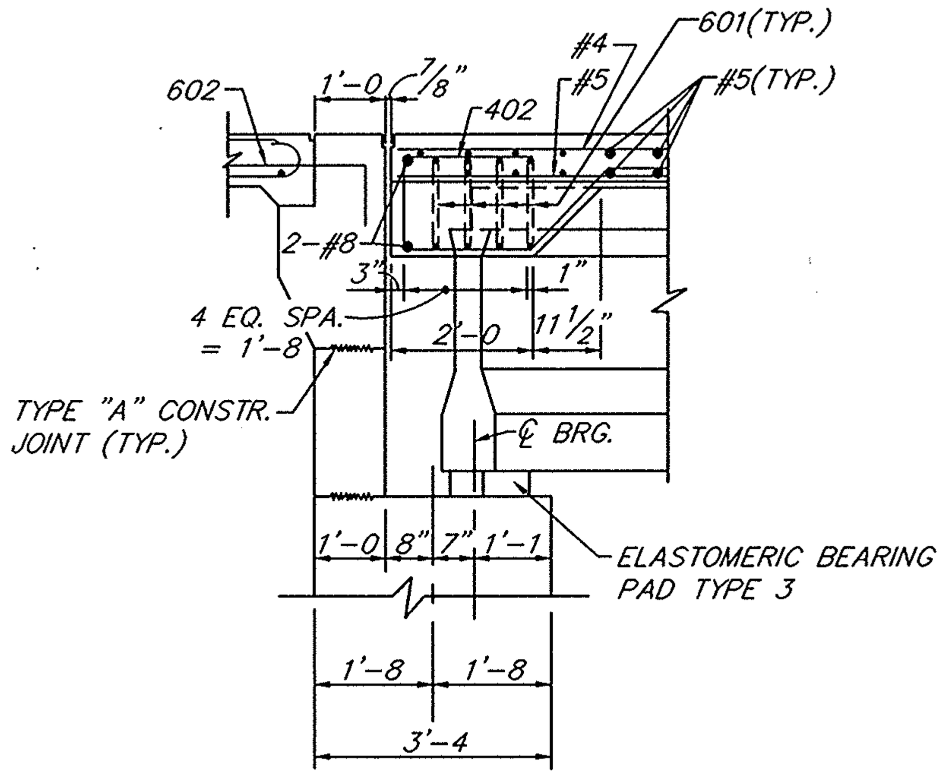
SCALE: AS NOTED DATE: 4-22-1997

DRAWING C10 OF C14 SHEET 20 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250 C

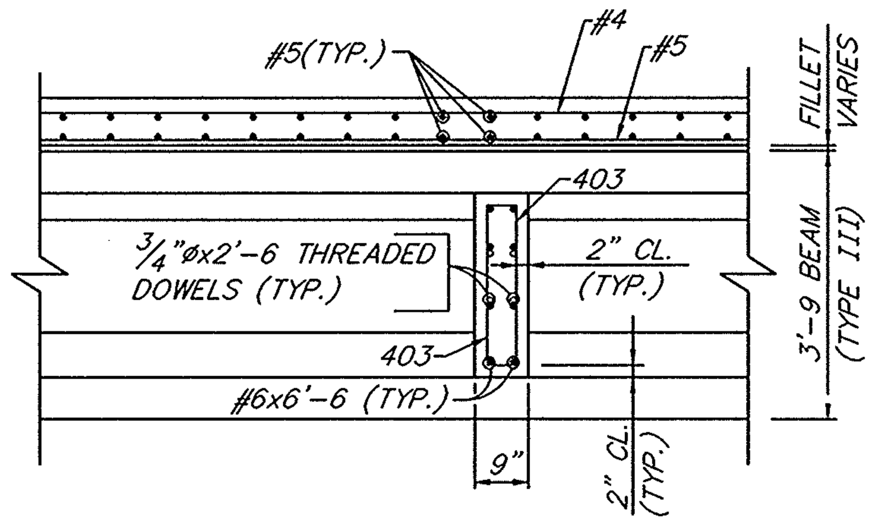
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN M.N.	C'K'D R.Z.
DESIGNED R.Z.	C'K'D J.G.
TRACED	C'K'D

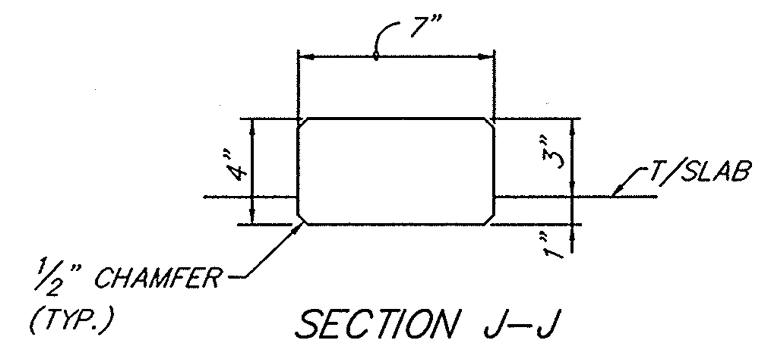
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		21	62



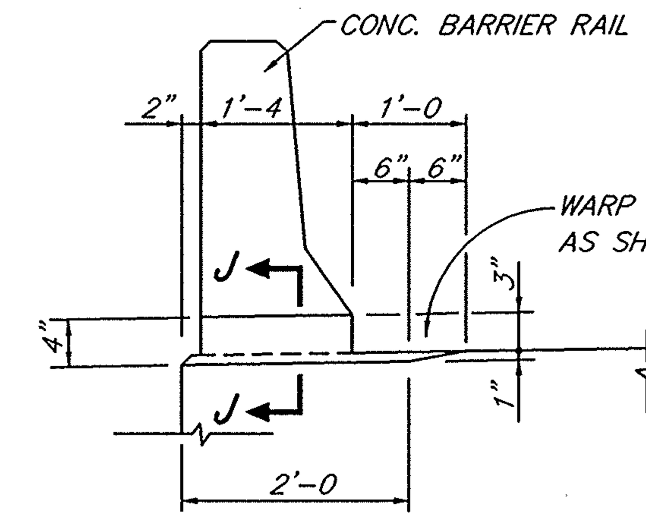
SECTION E-E
SCALE: NOT TO SCALE



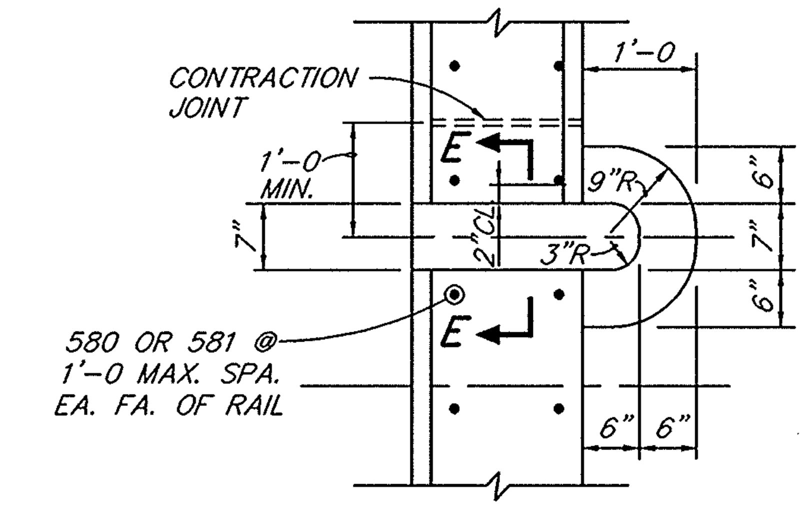
SECTION G-G
SCALE: NOT TO SCALE



SECTION J-J
SCALE: NOT TO SCALE



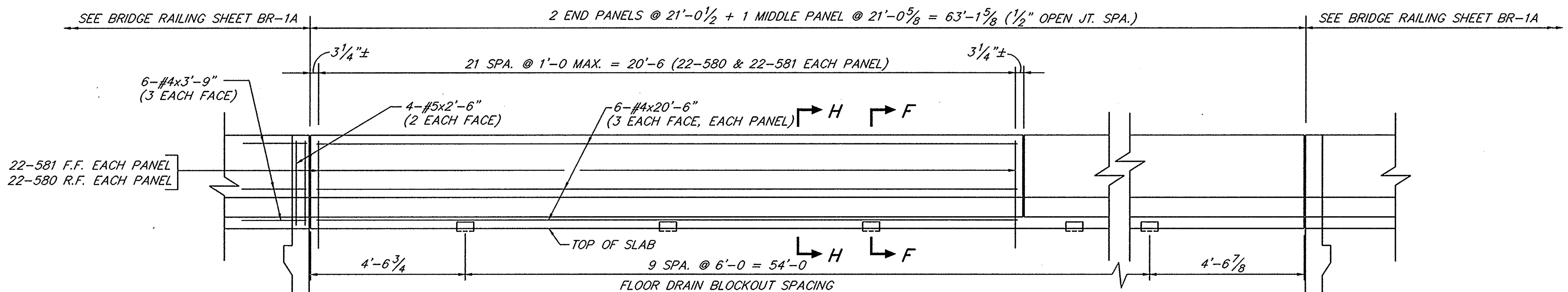
SECTION F-F
SCALE: 3/4" = 1'-0



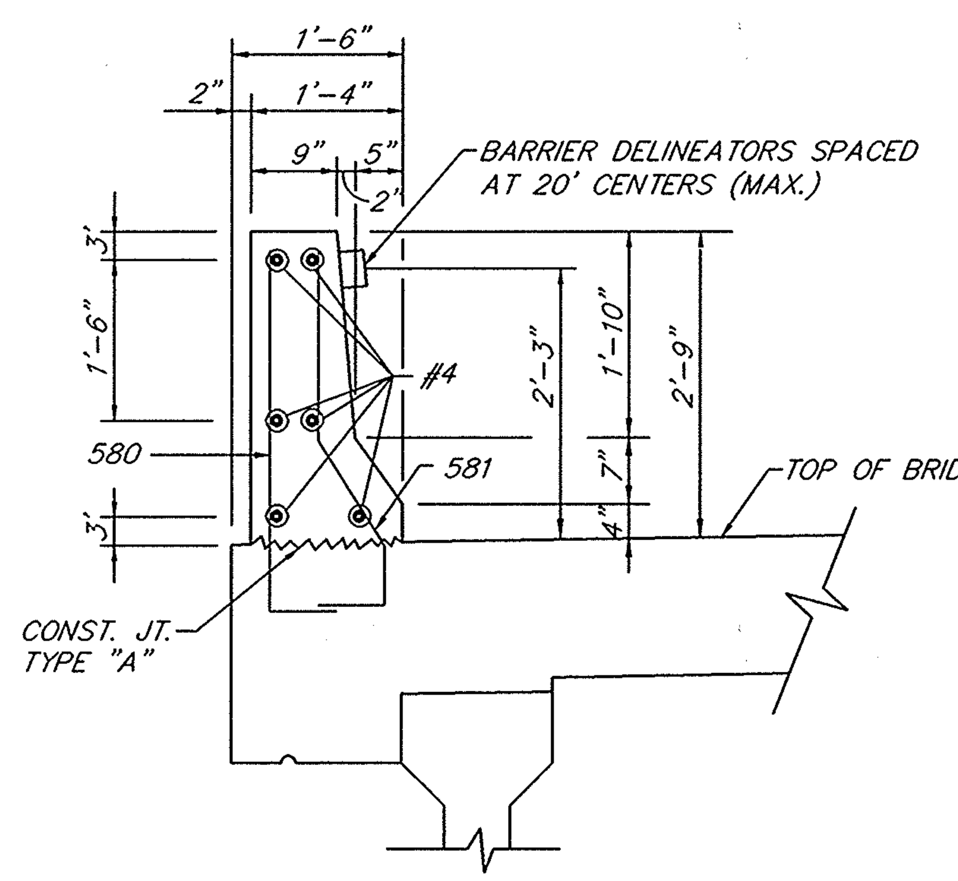
PLAN
SCALE: 3/4" = 1'-0

NOTE: — BLOCK-OUTS SHALL BE PLACED AT 6'-0 MAX. SPACING.
— SURFACE SEAL SHALL BE APPLIED TO INSIDE OF BLOCK-OUTS.
— BLOCK-OUTS TO BE ADJUSTED IN THE FIELD TO FALL BETWEEN VERTICAL STEEL.

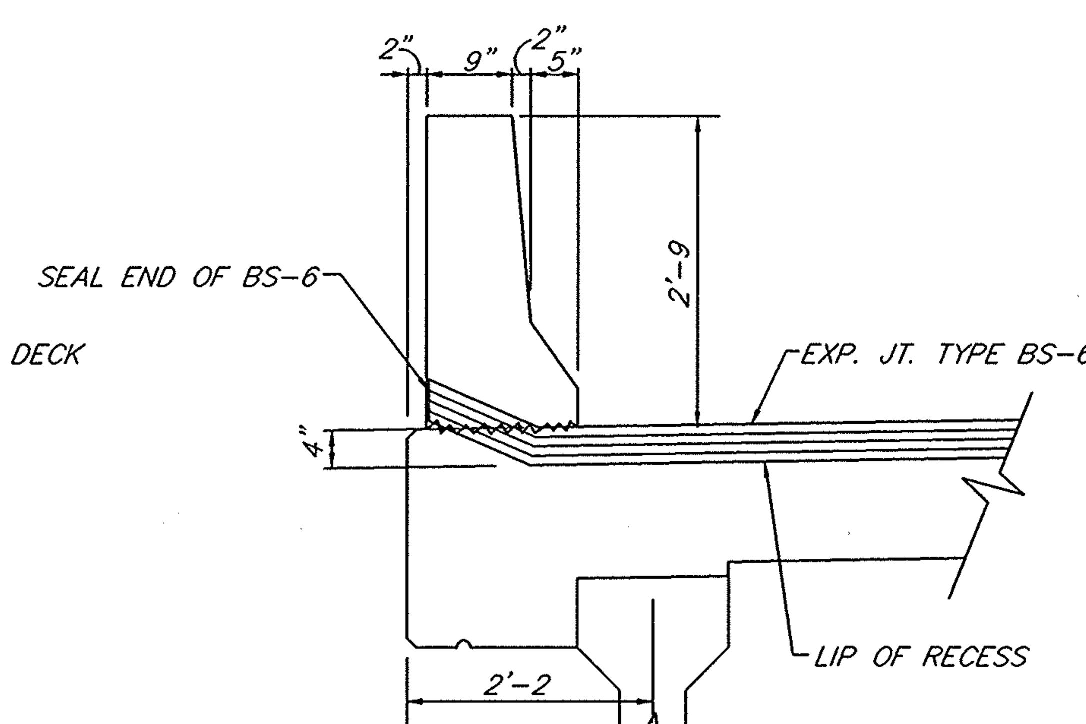
FLOOR DRAIN BLOCK-OUT DETAILS
SCALE: AS NOTED



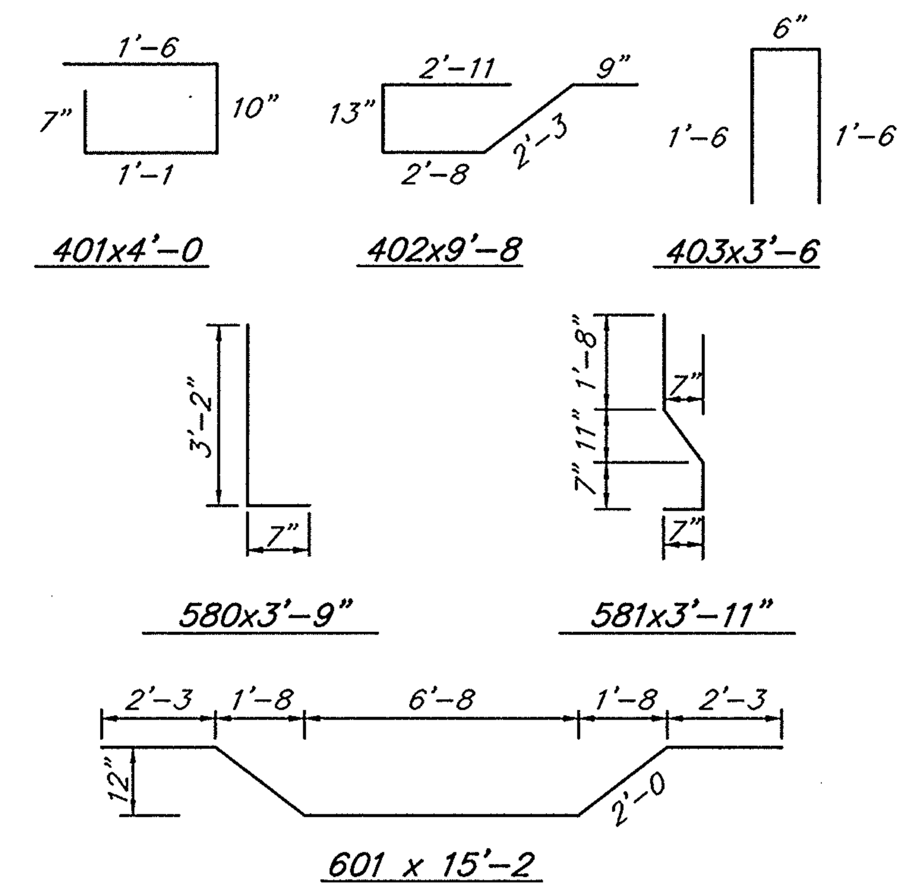
CONCRETE RAILING ELEVATION
SCALE: 1/2" = 1'-0"



SECTION H-H
SCALE: 3/4" = 1'-0"



SECTION THRU EXPANSION JT.
SCALE: 3/4" = 1'-0"



BAR BENDING DIAGRAMS
NOT TO SCALE

BILL OF MATERIALS

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
EPOXY COATED REINFORCING			
#8	4	38'-3	
#8	8	26'-6	
TOTAL #8			975
601	56	15'-2	
#6	56	6'-6	
TOTAL #6			1822
581	132	3'-11	
580	132	3'-9	
#5	122	32'-9	
#5	56	32'-5	
#5	38	30'-10	
#5	54	30'-4	
#5	45	26'-9	
#5	49	25'-5	
#5	44	24'-5	
#5	16	2'-6	
TOTAL #5			13,764
403	98	3'-6	
402	84	9'-8	
401	126	4'-0	
#4	116	32'-9	
#4	36	20'-6	
#4	24	3'-9	
TOTAL #4			4203
TOTAL E.C. REINF. STEEL			20,764
THREADED TIE BAR ASSEMBLIES			
TOTAL #5ec =			182 EA.
CONCRETE			
* CLASS "C" IN SUPERSTRUCTURE			
POUR NO.1 =			55.8 CYS.
POUR NO.2 =			69.2 CYS.
TOTAL CLASS "C" IN SUPERST. =			125.0 CYS.
CLASS "C" IN RAILING =			12.5 CYS.
MISCELLANEOUS			
BARRIER DELINEATORS =			8 EA.
SURFACE SEAL			
(EST. QUANTITY = 7120 SFT.)			L.SUM
CONCRETE STRUCTURAL MEMBERS			
(TYPE III = 482.67 LFT.)			L.SUM
EXP. JT. TYPE BS-6 =			183.0 LFT.

* INCLUDES PORTION OF MUDWALL ABOVE CONSTRUCTION JT.

NOTES: FOR SECTION F-F, SEE DWG. C9
FOR SECTION G-G, SEE DWG. C10
ALL REINFORCING STEEL IN SUPERSTRUCTURE TO BE EPOXY COATED.
FOR ADDITIONAL SUPERSTRUCTURE DETAILS, SEE DWG. C9 & C10
FOR REINFORCING BAR NOTES, SEE BR. STD. C1

SUPERSTRUCTURE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

SCALE: AS NOTED　　DATE: 4-22-1997

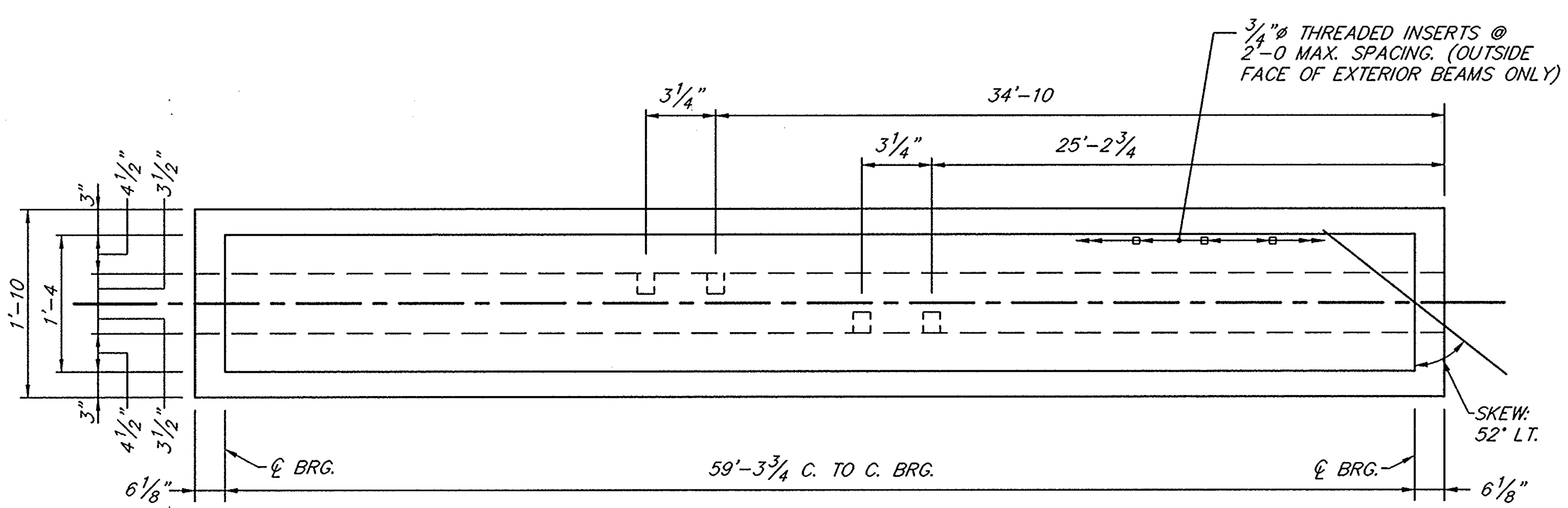
DRAWING C11 OF C14　SHEET 21 OF 62
PROJECT: BHF-042-7( )　STATION: 410+76.14 LINE "R"
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250C

LAWRENCE C. SUIRE
REGISTERED
No. 18417
STATE OF INDIANA
PROFESSIONAL ENGINEER

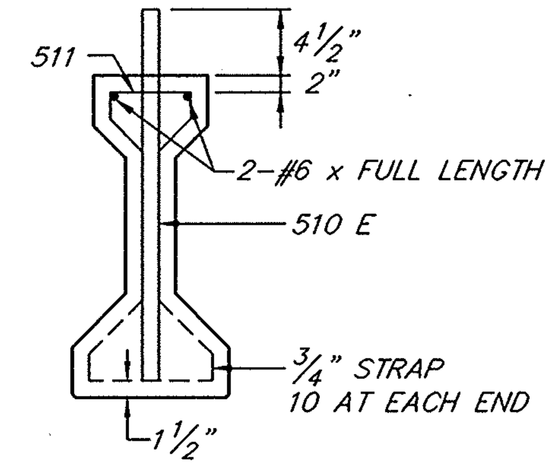
DESIGNED	R.Z.	CK'D	J.G.
DRAWN	M.A.N.	CK'D	R.Z.
TRACED		CK'D	

O:\006\BRIDGE\WRRAIL 04/29/97 AT 1504 REN

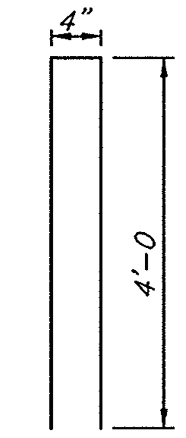
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7(H)		22	62



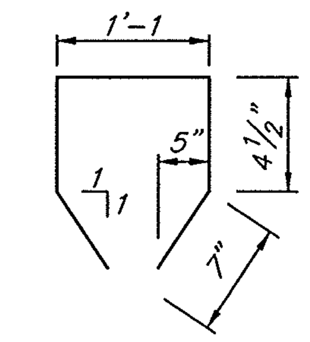
PLAN



STIRRUP DETAIL



510 E X 8'-4



511 X 3'-0

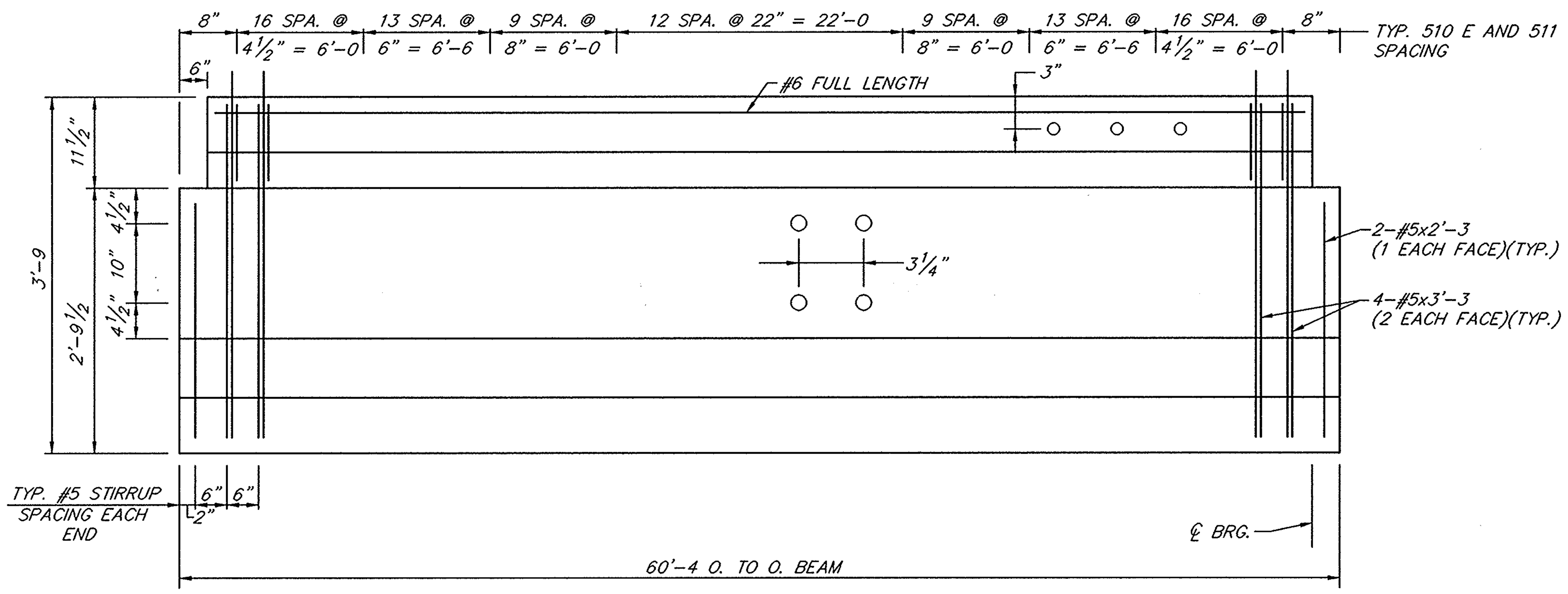
NOTES

- BARS 510 E AND 511 COMBINE TO FORM ONE STIRRUP. ALL BARS TO BE #5 REINFORCING.

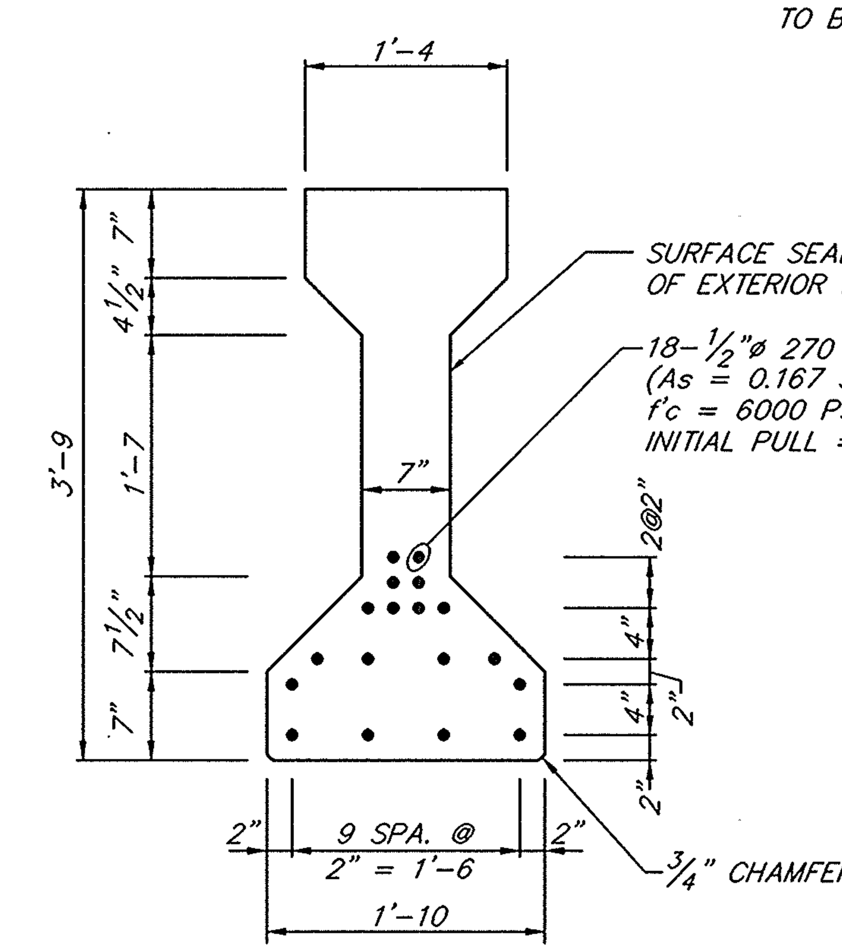
NOTES

BRIDGE SEAT ELEVATIONS WERE CALCULATED USING RESIDUAL BEAM CAMBER (DESIGN CAMBER AND DEAD LOAD DEFLECTION OF SLAB) WITH THE TOP OF BEAM 1/2" BELOW THE BOTTOM OF SLAB ELEVATION AT THE CENTERLINE OF SPAN.

ACTUAL CAMBERS WHICH ARE GREATER THAN DESIGN CAMBERS WILL BE COMPENSATED FOR BY ALLOWING THE TOP OF BEAM TO EXTEND INTO THE SLAB A MAXIMUM OF 1".

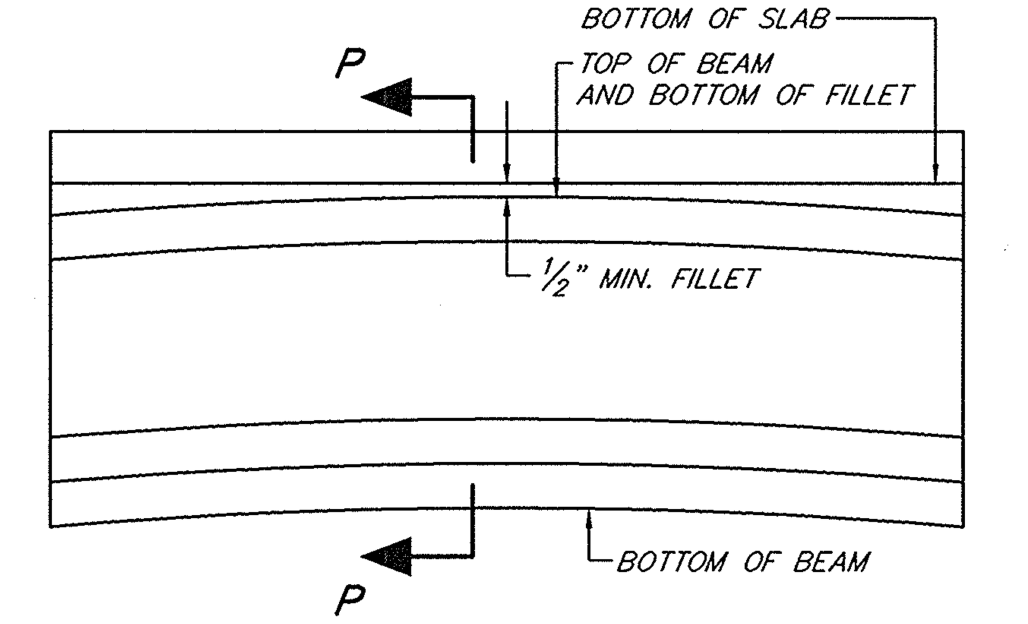


ELEVATION

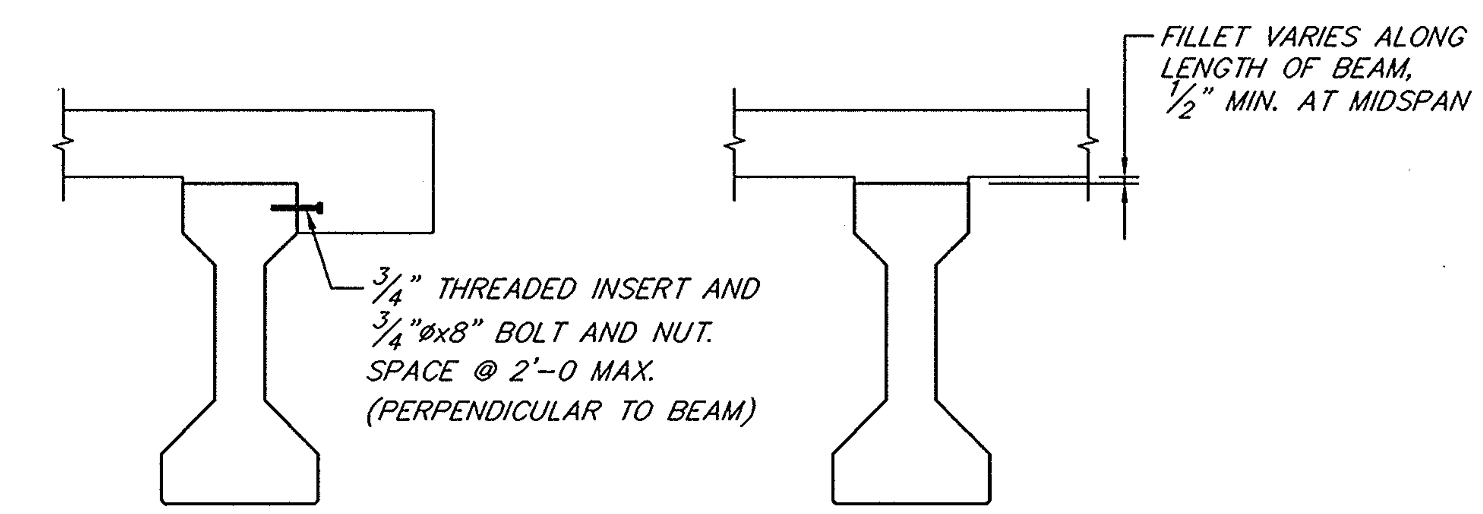


TYPICAL BEAM SECTION

	MIDSPAN
INITIAL BEAM CAMBER, IN.	0.8658
D.L. DEFLECTION, IN.	0.5025
RESIDUAL CAMBER, IN.	0.3633



ELEVATION

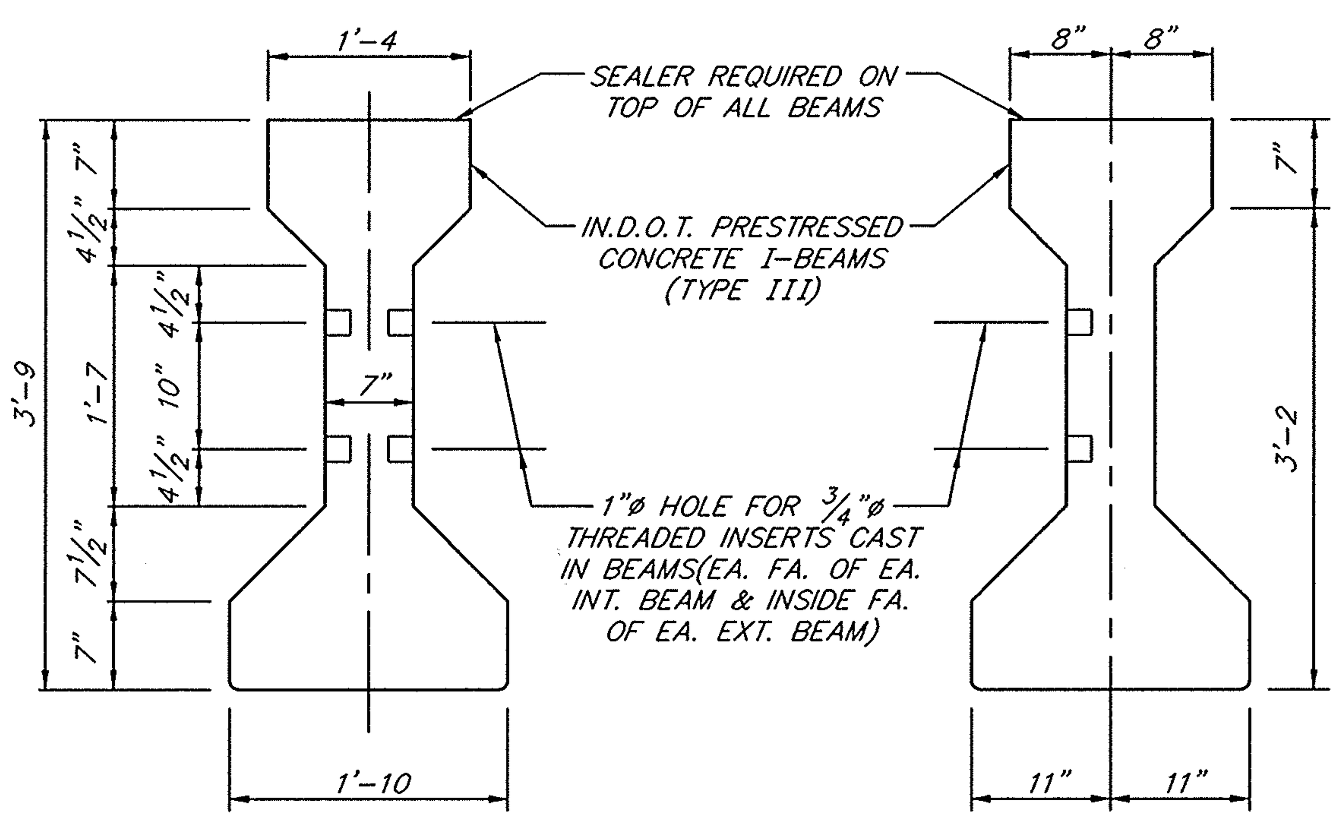


SECTION P-P – OUTSIDE BEAM

SECTION P-P – INSIDE BEAM

NOTES

- REINFORCING BARS DESIGNATED "E" SHALL BE EPOXY COATED.
- SEE BRIDGE STANDARD PB3 FOR ADDITIONAL BEAM DETAILS.
- SEE BRIDGE STANDARD PB10 FOR TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS.
- SEE BRIDGE STANDARD PB11 FOR TYPE 3 BEARING PADS.
- SEE BRIDGE STANDARD C1 FOR REINFORCING BAR NOTES.
- THE PRESTRESSED BEAMS SHALL BE CAST A MINIMUM OF 15 DAYS BEFORE THE DECK IS POURED.
- THE CONCRETE STRENGTH MUST BE 4000 PSI. OR MORE BEFORE PRESTRESSING FORCE IS APPLIED.
- CONCRETE STRENGTHS:
  FINAL BEAM = 6000 PSI, BEAM @ RELEASE = 5000 PSI,
  SLAB = 4000 PSI.
- ALL STRAIGHT STRANDS. NONE ARE DRAPED.
- PRESTRESSING STEEL SHALL BE 1/2" DIAMETER, 7 WIRE, SPECIAL LO-LAX STRANDS WITH A MINIMUM TENSILE STRENGTH OF 270,000 PSI. INITIAL TENSION ON STRANDS TO BE 202,500 PSI
- BEAMS SHALL BE SUPPORTED AT BEARING POINTS WHILE STORED AND TRANSPORTED TO JOB SITE.
- REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 STEEL



INTERIOR BEAM

EXTERIOR BEAM

NOTE

IN.D.O.T. DENOTES "INDIANA DEPARTMENT OF TRANSPORTATION"

DRAWN	D.P.	C'K'D	R.Z.
DESIGNED	G.C.	C'K'D	R.Z.
TRACED		C'K'D	

PRESTRESSED CONCRETE TYPE III I-BEAM DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

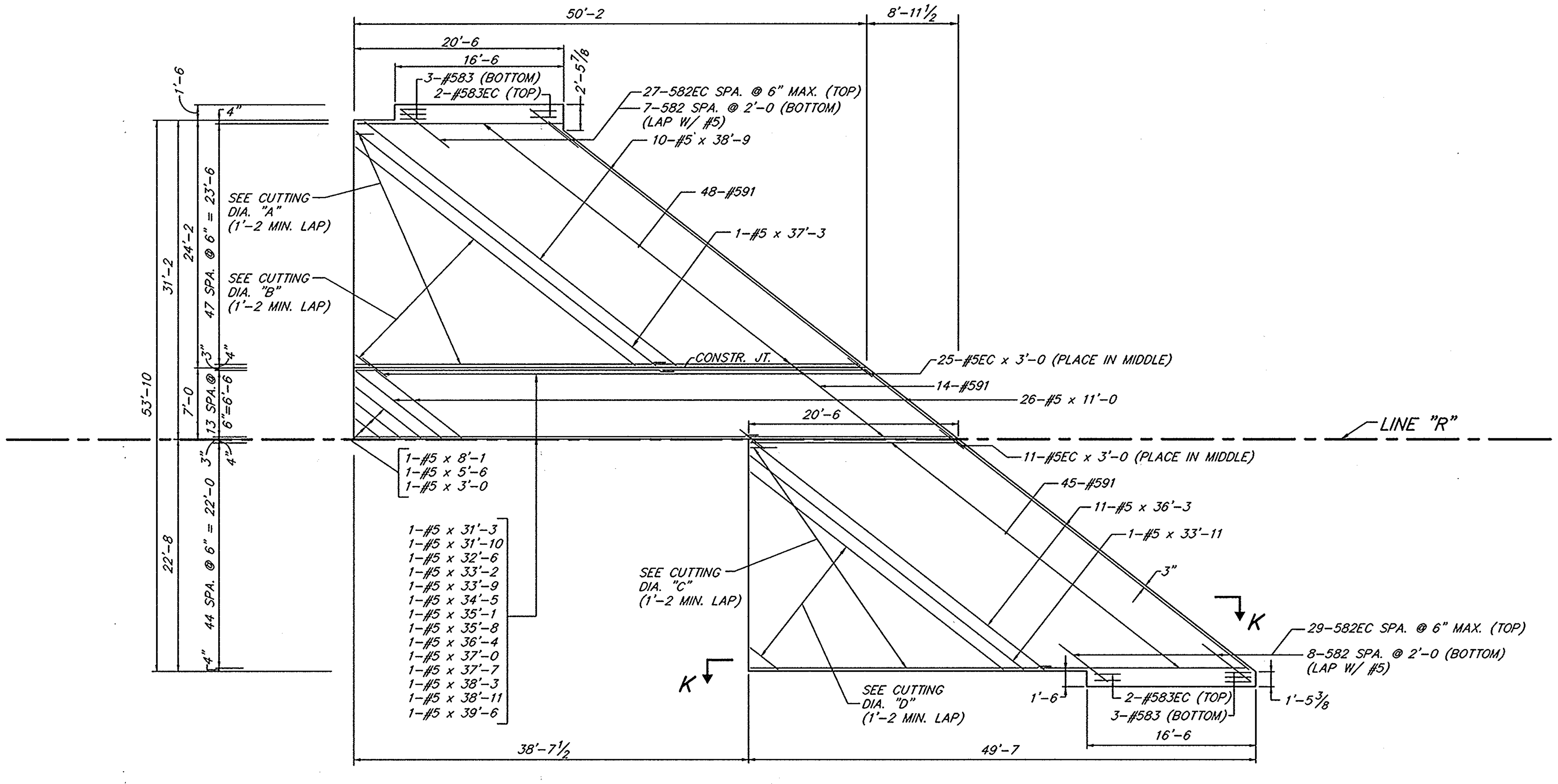
JACKSON COUNTY

SCALE: NONE DATE: 4-22-1997

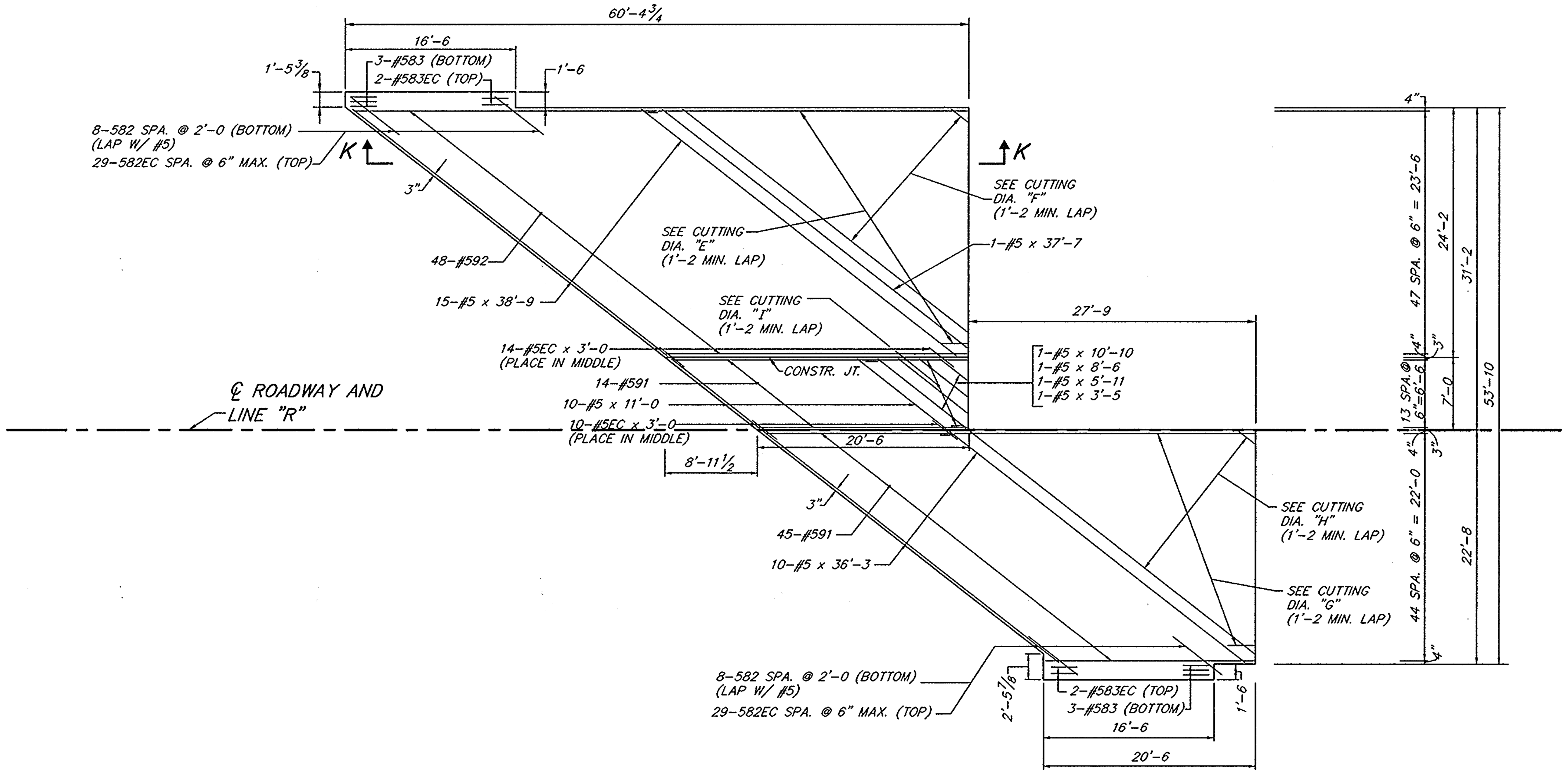
DRAWING C12 OF C14 SHEET 22 OF 62
PROJECT: BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

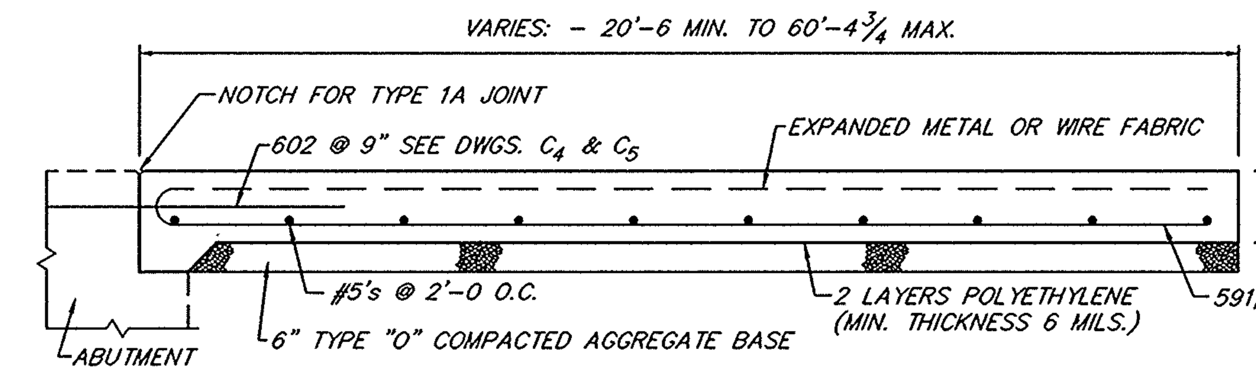
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7(H)		23	62



WEST APPROACH



EAST APPROACH



SECTION "K-K"
NOT TO SCALE

NOTES:

EC DENOTES EPOXY COATED REINFORCING STEEL

FOR LONGITUDINAL CONSTRUCTION JOINT DETAILS, SEE RD. STD. "SHEET A JOINTS".

FOR BAR BENDING DIAGRAMS, CUTTING DIAGRAMS AND BILL OF MATERIALS, SEE DWG. C14

BRIDGE APPROACH DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

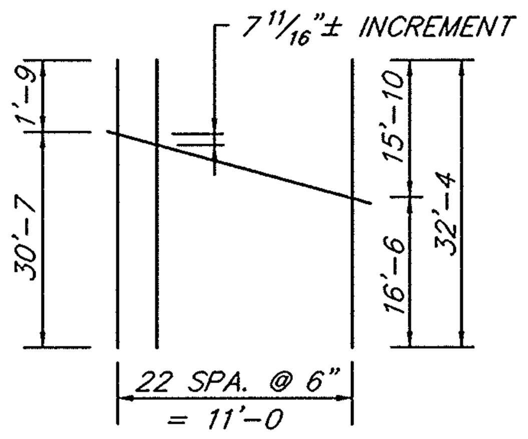
SCALE: 1/8" = 1'-0 DATE: 4-22-1997

DRAWING C13 OF C14 SHEET 23 OF 62
PROJECT: BHF-042-7( ) STATION: -
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE: 50-36-1250C

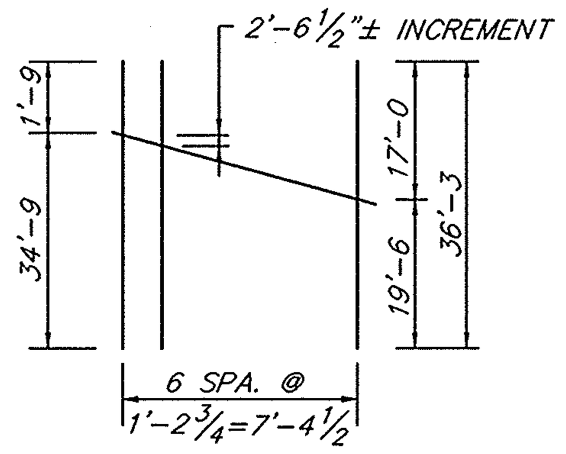
LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF PROFESSIONAL ENGINEER

DRAWN	D.P.	C'K'D	R.Z.
DESIGNED	R.Z.	C'K'D	M.N.
TRACED		C'K'D	

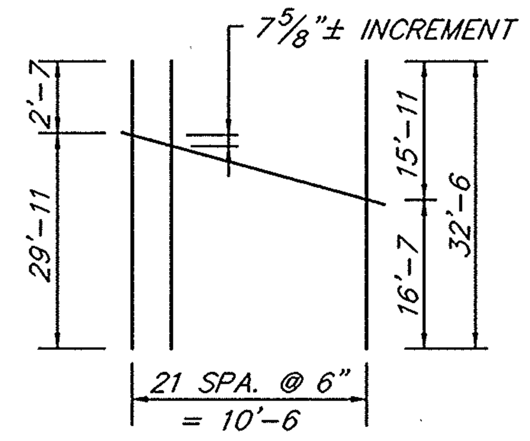
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		24	62



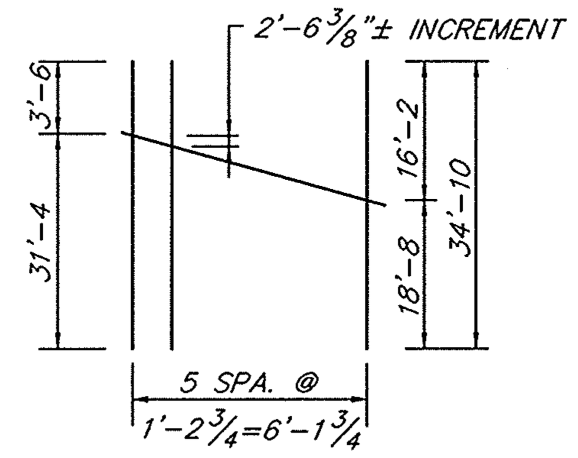
CUTTING DIAGRAM "A"
23-#5 x 32'-4
(CUTS 46 BARS)



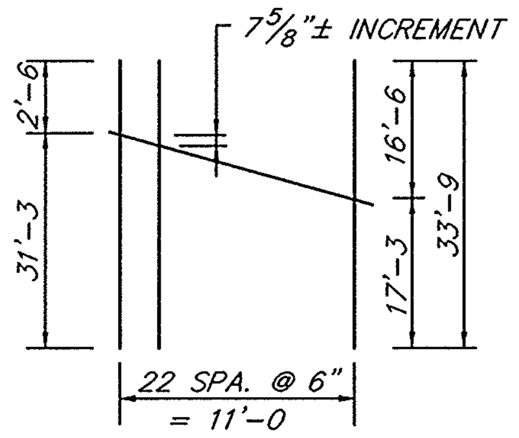
CUTTING DIAGRAM "B"
7-#5 x 36'-6
(CUTS 14 BARS)



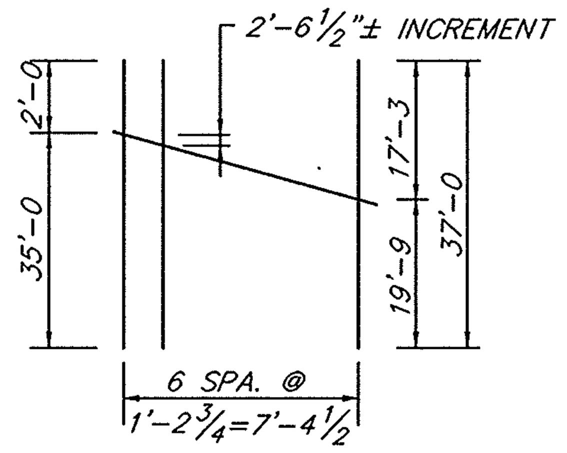
CUTTING DIAGRAM "C"
22-#5 x 32'-6
(CUTS 44 BARS)



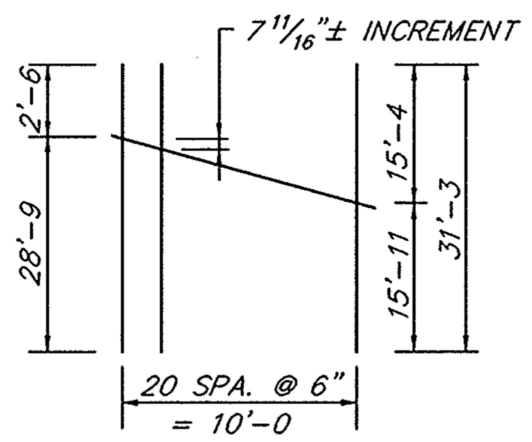
CUTTING DIAGRAM "D"
6-#5 x 34'-10
(CUTS 12 BARS)



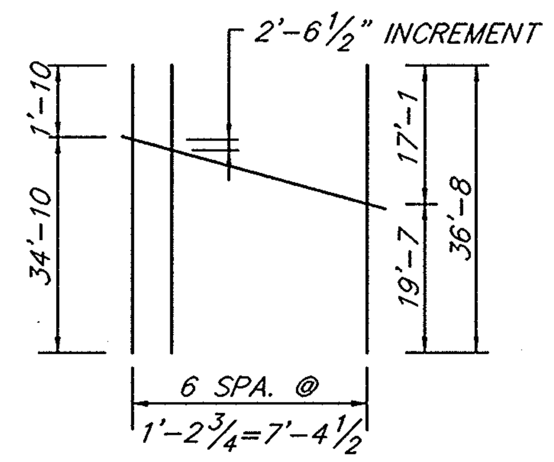
CUTTING DIAGRAM "E"
23-#5 x 33'-9
(CUTS 46 BARS)



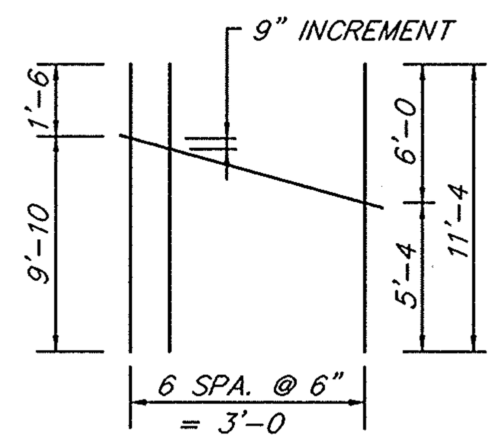
CUTTING DIAGRAM "F"
7-#5 x 37'-0
(CUTS 14 BARS)



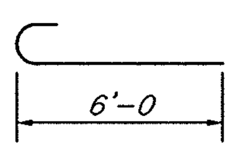
CUTTING DIAGRAM "G"
21-#5 x 31'-3
(CUTS 42 BARS)



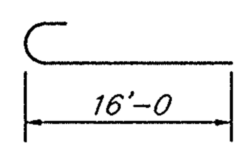
CUTTING DIAGRAM "H"
7-#5 x 36'-8
(CUTS 14 BARS)



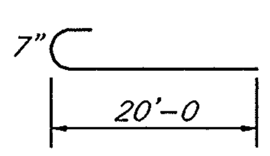
CUTTING DIAGRAM "I"
7-#5 x 11'-4
(CUTS 14 BARS)



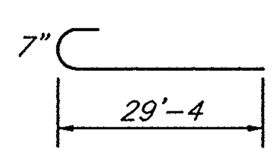
582 x 6'-7



583 x 16'-7



591 x 20'-7



592 x 29'-11

EAST APPROACH BILL OF MATERIALS

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
EPOXY COATED REINFORCING			
583ec	4	16'-7	
582ec	58	6'-7	
#5ec	24	3'-0	
		TOTAL #5	543
		TOTAL E.C. REINF. STEEL	543
PLAIN REINFORCING STEEL			
592	48	29'-11	
591	59	20'-7	
583	6	16'-7	
582	16	6'-7	
#5	15	38'-9	
#5	1	37'-7	
#5	7	37'-0	
#5	7	36'-8	
#5	10	36'-3	
#5	23	33'-9	
#5	21	31'-3	
#5	7	11'-4	
#5	10	11'-0	
#5	1	10'-10	
#5	1	8'-6	
#5	1	5'-11	
#5	1	3'-5	
		TOTAL #5	6261
		TOTAL PLAIN REINF. STEEL	6261
MISCELLANEOUS			
REINF. CONC. PAVEMENT, 10 IN.			
		PHASE II CONST. =	123.4 SYS.
		PHASE III CONST. =	107.7 SYS.
		TOTAL =	233.1 SYS.

WEST APPROACH BILL OF MATERIALS

REINFORCING STEEL			
Mark or Size	No. Req'd.	Length	Weight (Lbs.)
EPOXY COATED REINFORCING			
583ec	4	16'-7	
582ec	56	6'-7	
#5ec	36	3'-0	
		TOTAL #5	566
		TOTAL E.C. REINF. STEEL	566
PLAIN REINFORCING STEEL			
591	107	20'-7	
583	6	16'-7	
582	15	6'-7	
#5	1	39'-6	
#5	1	38'-11	
#5	10	38'-9	
#5	1	38'-3	
#5	1	37'-7	
#5	1	37'-3	
#5	1	37'-0	
#5	7	36'-6	
#5	1	36'-4	
#5	11	36'-3	
#5	1	35'-8	
#5	1	35'-1	
#5	6	34'-10	
#5	1	33'-11	
#5	1	33'-9	
#5	1	33'-2	
#5	23	32'-6	
#5	23	32'-4	
#5	1	31'-10	
#5	1	31'-3	
#5	26	11'-0	
#5	1	8'-1	
#5	1	5'-6	
#5	1	3'-0	
		TOTAL #5	6236
		TOTAL PLAIN REINF. STEEL	6236
MISCELLANEOUS			
REINF. CONC. PAVEMENT, 10 IN.			
		PHASE II CONST. =	93.6 SYS.
		PHASE III CONST. =	133.6 SYS.
		TOTAL =	227.2 SYS.

APPROACH SLAB BILL OF MATERIALS

INDIANA DEPARTMENT OF TRANSPORTATION

JACKSON COUNTY

SCALE: NONE

DATE: 4-22-1997

DRAWING C14 OF C14 SHEET 24 OF 62

PROJECT: BHF-042-7( ) STATION: -

BRIDGE CONTRACT NO. R-23253

BRIDGE FILE: 50-36-1250C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN	D.P.	C'K'D	R.Z.
DESIGNED	R.Z.	C'K'D	R.Z.
TRACED		C'K'D	

STRUCTURE QUANTITIES

ITEM	CONCRETE CLASS C SUPERSTR. CU. YDS.	CONCRETE CLASS A SUBSTR. CU. YDS.	CONCRETE CLASS B ABOVE FTG. CU. YDS.	CONCRETE CLASS B IN FTG. CU. YDS.		10" REINF. CONCRETE PAVEMENT SYS.	CONCRETE RAILING CLASS C CU. YDS.	CONCRETE RAILING CLASS C LIN. FT.	REINF. STEEL TOTAL LBS.	EPOXY COATED THREADED TIE BAR ASSEMBLIES EACH	EPOXY COATED REINF. STEEL LBS.	ANCHOR PLATES MK-AP EACH	PILES EPOXY COATED SHELLS NO.	PILES EPOXY COATED SHELLS LIN. FT.	PILES TREATED TIMBER NO.	PILES TREATED TIMBER LIN. FT.	PILES STEEL ENCASED CONC. NO.	PILES STEEL ENCASED CONC. LIN. FT.	PILES STEEL H BEARING NO.	PILES STEEL H BEARING LIN. FT.	CAST IRON DRAIN PIPE LBS.	CAST IRON, GRATES, BASINS, & FITTINGS LBS.	RAILING TYPE OR LIN. FT.	EXP. JOINT TYPE BS LIN. FT.	EXP. JOINT CLASS LIN. FT.	CONC. STR. MEMBERS BOX BEAMS TYPE SQ. FT.	CONC. STR. MEMBERS I BEAMS TYPE III LIN. FT.	FIELD DRILLED HOLES IN CONCRETE EACH	ANCHOR BOLTS EACH	BARRIER DELINEATORS EACH	BRIDGE DECK SURFACE SQ. YDS.		SURFACE SEAL SQ. FT.	FINISHING AND CURING SQ. YDS.	BLASTING AND CLEANING SQ. YDS.		
SUPERSTRUCTURE	125.0						12.5			182	20764																482.67			8			7120				
SUBSTRUCTURE																																					
ABUTMENT NO. 1		106.2		57.1					3652	35	11567						14	560						91.5				71	16								
ABUTMENT NO. 2		106.2		57.1					3609	35	11489						13	520						91.5				69	16								
R.C. BRIDGE APPROACHES																																					
WEST						227.2			6236		566																										
EAST						233.1			6261		543																										
TOTALS	125.0	212.4		114.2		460.3	12.5		19731	252	44929						27	1080						183.0			482.67	140	32	8			7120				

APPROACH STRUCTURES

STRUCT. NO.	LOCATION	DESCRIPTION SIZE	DESCRIPTION KIND	LENGTH LIN. FT.	CONCR. CL. A IN STRS. CU. YDS.	REINF. STEEL LBS.	PIPE END SEC. CU. YDS.		REMARKS
				TOTALS					

RIP RAP, DITCH & SODDING SUMMARY

LT. OR RT.	STATION TO STATION	PAVED SIDE DITCH (LIN.FT.) TYPE	PAY LENGTH						RIPRAP DITCH	SODDING (SQ.YDS.) FOR DITCHES	FOR LAWNS	TOTAL NURSERY SODDING	TOTAL SOD
RT	407+00 TO 411+30									525			525
RT	411+70 TO 414+00									280		280	
RT	413+00 TO 414+75										720	720	
	UNDERDRAINS												6
	TOTALS											1000	531

APPROACH TABLE

LOCATION LT/RT	LOCATION STATION	DESCRIPTION	WIDTH FT.	RADII FT.	GRADE %	LENGTH FT.	DIST. BEYOND R/W FT.	EXCAVATION (CYS.) CUT	EXCAVATION (CYS.) FILL	BITUM. SURFACE #/SQ.YD.	BITUM. SURFACE TONS	BITUM. BINDER #/SQ.YD.	BITUM. BINDER TONS	BITUM. BASE #/SQ.YD.	BITUM. BASE TONS	COMP. AGG. BASE Depth(In.)	COMP. AGG. BASE TONS

REVISIONS

DATE	ITEM

NOTES:
Weight of Spirals includes weight of $1\frac{1}{2}$ extra turns top and bottom.
Spacers and $1\frac{1}{2}$ turns at laps included in cost of spiral.
*** The weight of structural steel is approximate only, and it shall be the Contractor's responsibility to determine the weight on which he bases his bid.
For Test Bar Samples See Bridge Standard C1.

SUMMARIZED RZ C'K'D
TRACED C'K'D

BRIDGE SUMMARY

INDIANA DEPARTMENT OF TRANSPORTATION

DATE:- 4-22-1997

SHEET:- 25 OF 62

PROJECT:- BHF-042-7( )
BRIDGE CONTRACT NO. R-23259
BRIDGE FILE:- 50-36-1250C

LAWRENCE C. SUHRE REGISTERED No. 18417 STATE OF INDIANA PROFESSIONAL ENGINEER

CROSS SECTIONS

CUT Scale 1 inch 10 feet FILL

PLATE 3

September, 1973

LEVEL BOOK NO.				FILE	
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		26	62
LINE "R"					

TP122

CROSS SECTIONS
Scale 1 inch = 10 feet

CUT ℄ FILL

℄

PLATE 3

September, 1973

LEVEL BOOK NO.				FILE	
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		27	62
LINE "R"					

P122

CROSS SECTIONS

PLATE 3

September, 1973

LEVEL BOOK NO.				FILE	
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		28	62
			LINE "R"		

CROSS SECTIONS
Scale 1 inch 10 feet

CUT | FILL

PLATE 3

September, 1973

LEVEL BOOK NO.				FILE	
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		29	62
				LINE "R"	

CROSS SECTIONS

CUT — Scale 1 inch = 10 feet — FILL

PLATE 3

September, 1973

LEVEL BOOK NO.				FILE	
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	BHF-042-7( )		30	62

LINE "R"