

AS CONSTRUCTED  
REVISED DATE

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012-2 (13)	25	

*Steel Pile Cutoff*

Length	Location
292' 0"	Abut. 1 North
283' 0"	Abut. 1 South
179' 0"	Wing Abut. 4 North
133' 0"	Abut. 4 North
105' 0"	Abut. 4 South
125' 0"	Abut. 4 South

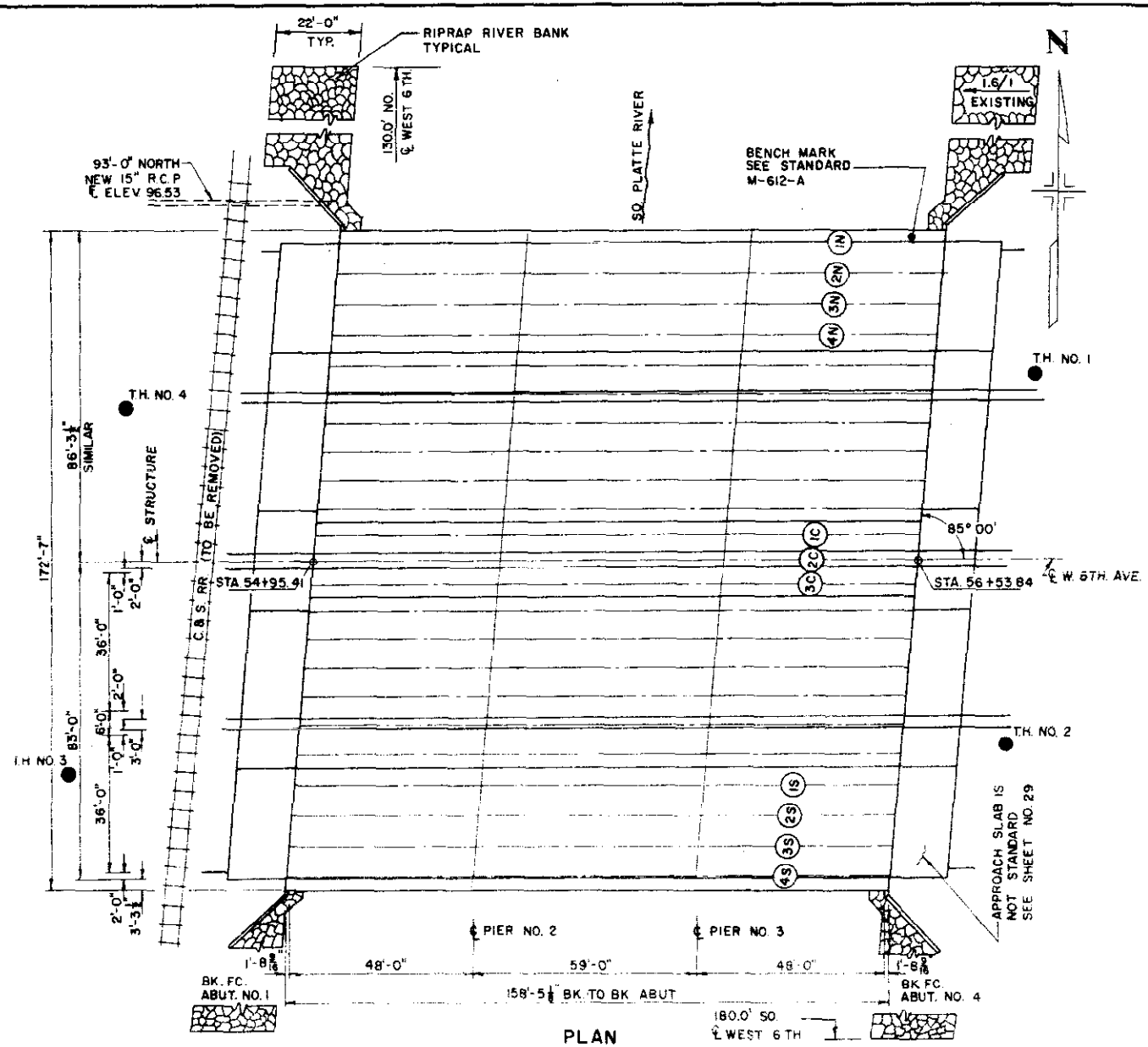
**SUMMARY OF QUANTITIES**

ITEM	UNIT	DESCRIPTION	ABUTS	PIERS	SUPER STR	TOTAL
202	EA	REM PORT PRESENT STR				2
206	CU YD	STR EXCAV	226.937	630	152.7	1456
206	CU YD	STR BKFL (CL 3)	764.334	515	133.9	1269
403	TON	HBP (GR. E) (HAUL & ASPHALT)	27.17		188.88	105.165
411	GAL	LIQ ASPH MATL (RC-800)	33.26		102.148	172.285
501	SQ FT	STEEL SHEET PILE (TY 1)	2910	2372	2372	2040
506	CU YD	RIPRAP	566.63			631.550
509	L.S.	STR STEEL				L.S.
509	L.S.	STR STEEL (GALV)				L.S.
210	LIN FT	RES RAILING	61		375	436
513	EA	DRAIN PIPE 4IN (-4 FT)			28.36	36.28
601	CU YD	CONCRETE CL A	505.515	204	494.44	1131.955
602	LB	REINF STEEL *	42,050	20,100	81,600	153,750
606	LIN FT	GD RAIL TY 3A (DOUBLE)	50		150	200
613	LIN FT	1/2 IN ELEC COND			401.306	401.306
614	SQ FT	1/2 IN EXP JT MATL	567.842			567.842
615	SQ FT	16 GA GALV SHT STEEL	166			166
617	LIN FT	FENCE CHAIN LINK (36 INCH)	50		150	200

① INCLUDES QUANTITIES FOR 2 APPROACH SLABS.  
THERE SHALL BE NO SEPARATE PAYMENT FOR ITEMS MARKED THUS (2) PAYMENT THEREFORE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 601, CONCRETE CL A.  
③ DESIGN WEIGHT = 256,780 LB. \* Paid as Per Suppliers Invoices 157,509 lbs  
④ DESIGN WEIGHT = 3,625 LB.

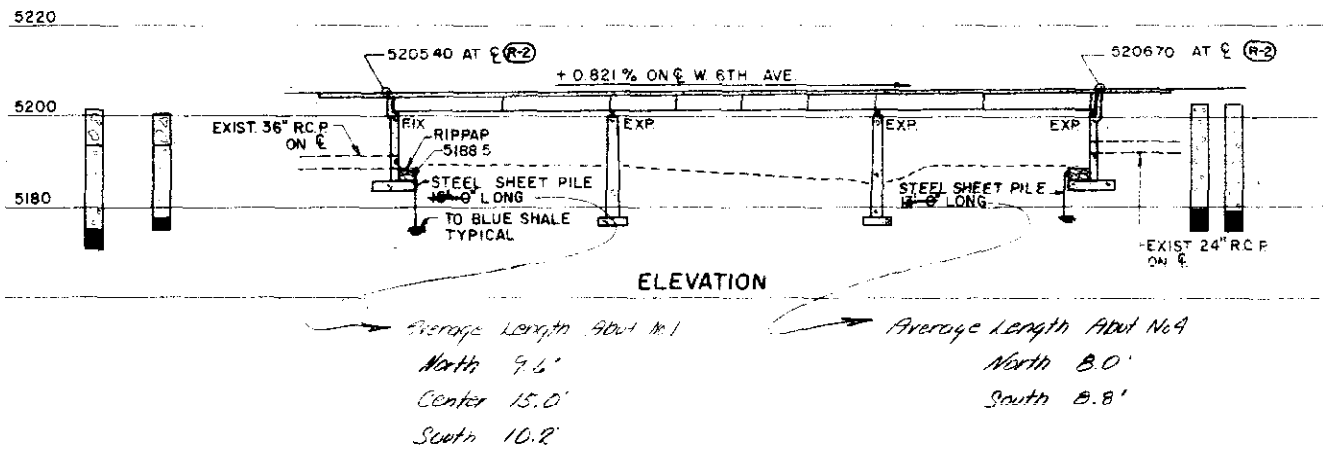
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**LEGEND**

- EXISTING
- REMOVE
- NEW CONST.



**TEST HOLE LEGEND**

- DUMP MATERIAL
- SILT
- CLAY
- SAND
- GRAVEL
- BROWN SHALE
- BLUE SHALE
- EXISTING TEST HOLE

JEFFERSON ASSOCIATES  
CIVIL ENGINEERS

**DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO**

**GENERAL PLAN AND  
ELEVATION**

Across SOUTH PLATTE RIVER ON 6th AVE  
Sta 54+95.41 TO 56+53.84  
Near DENVER Sec. 5 - T. 4 S. R. 68 W.

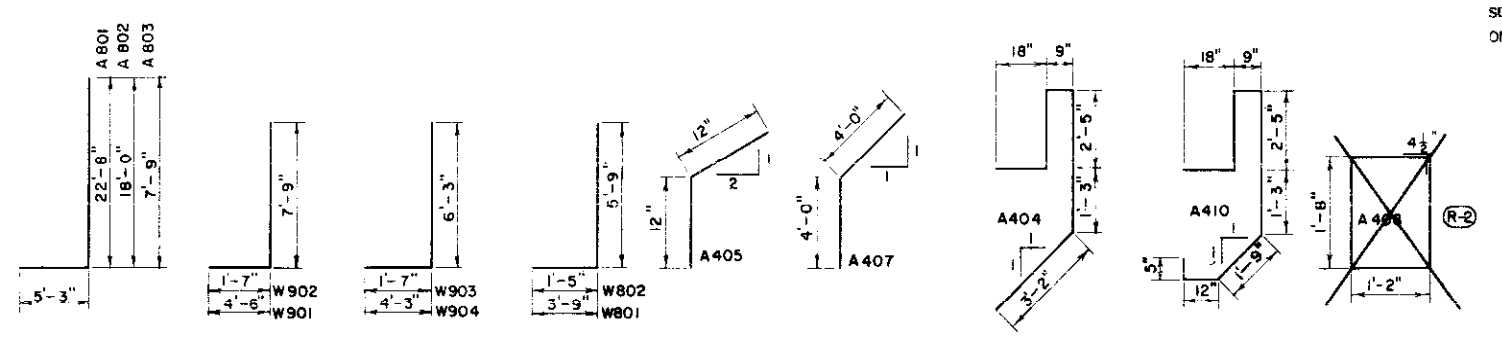
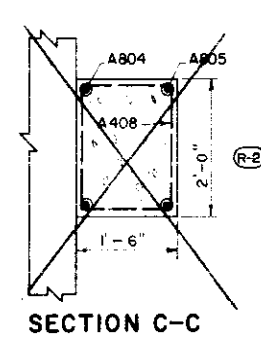
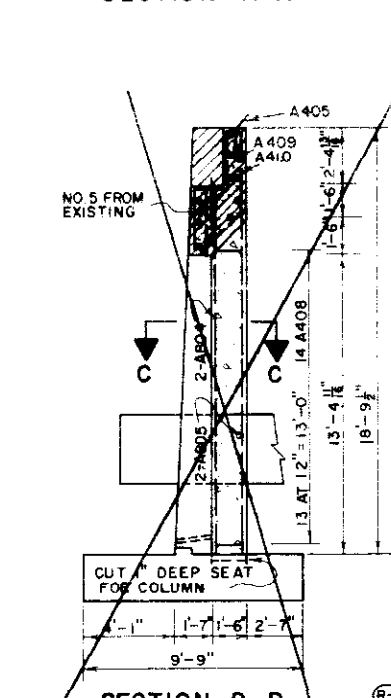
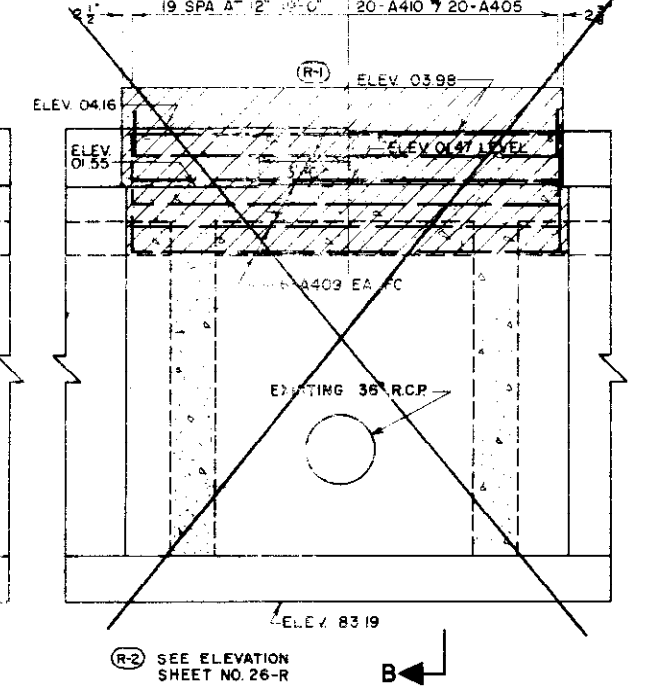
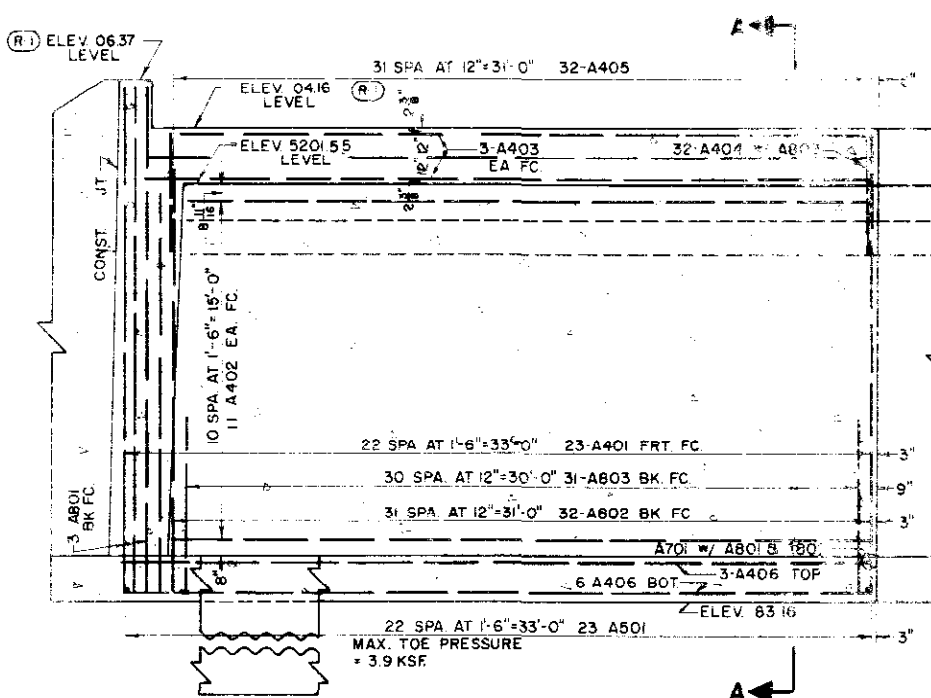
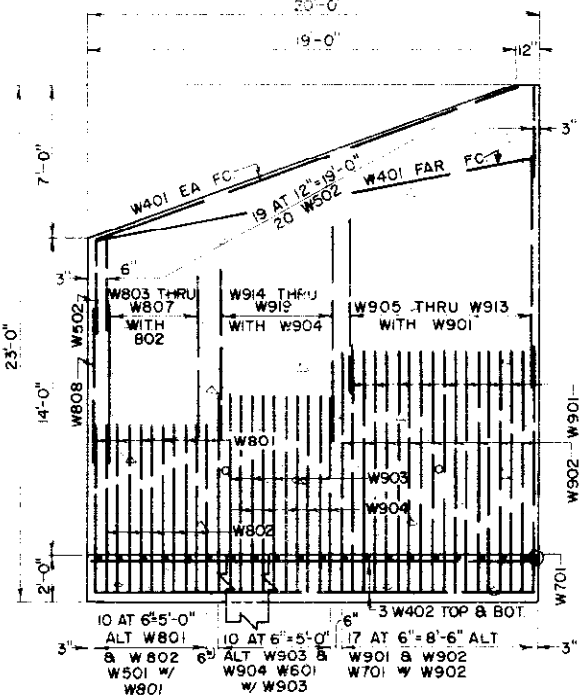
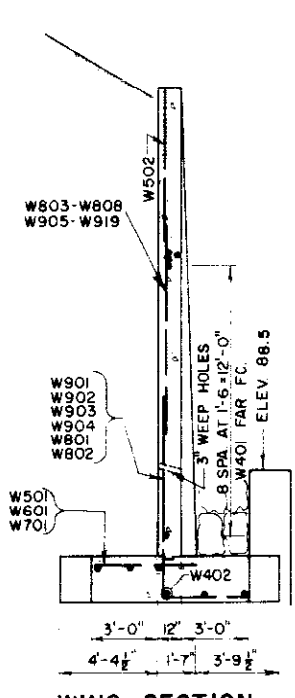
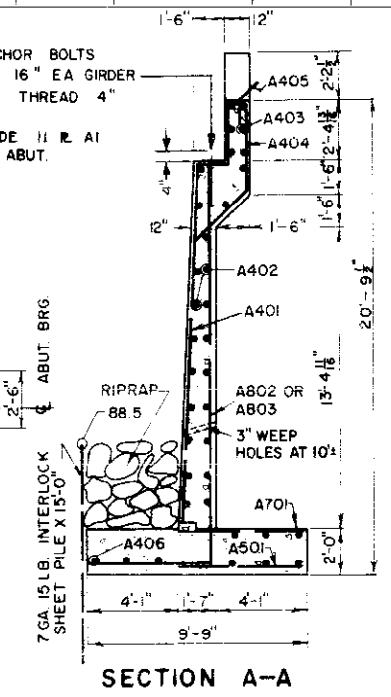
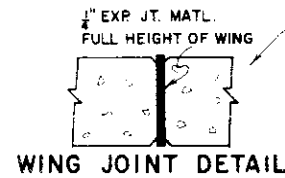
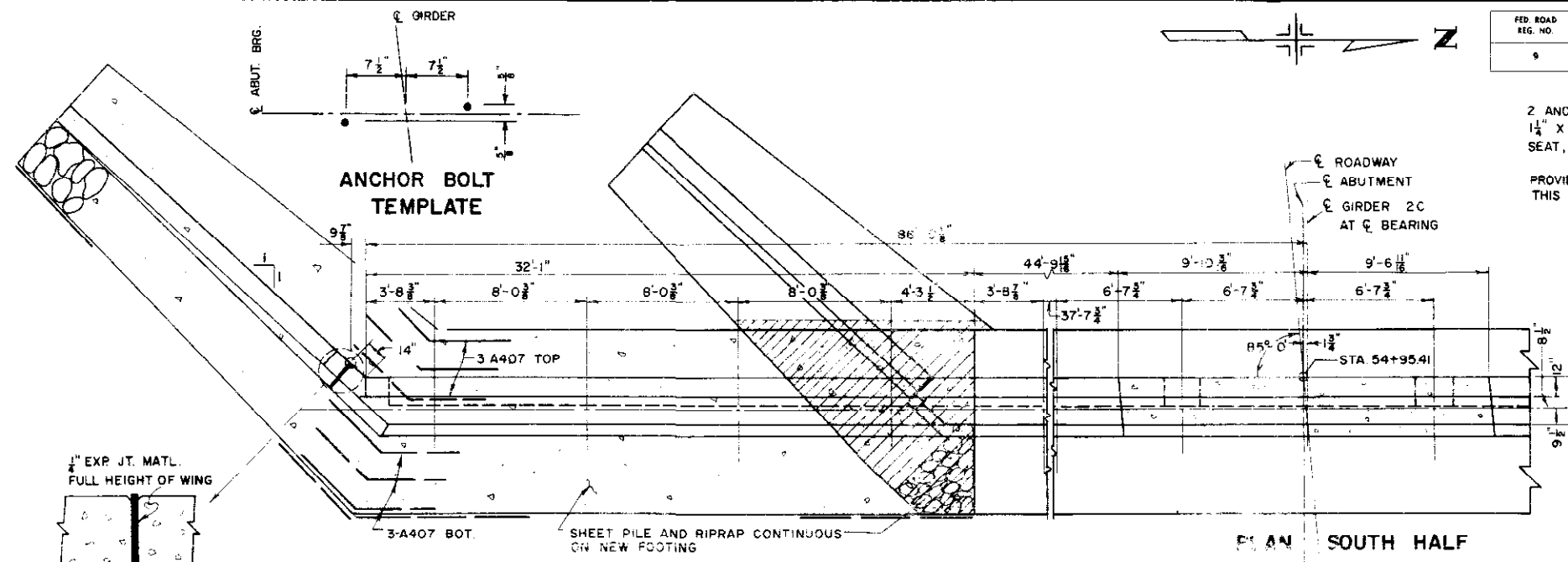
Designed by M.L.K. Approved by  
Made by G.A.M. Bridge Engineer  
Checked by T.V.S. Date: 19

NORTH F-16-EE  
STRUCTURE NO. SOUTH F-16-EF

REVISIONS

REVISIONS (R-1) 1-23-67 SEAT ELEVATIONS G.D.C.  
(R-2) 5-5-67 CENTER WALL G.D.C.

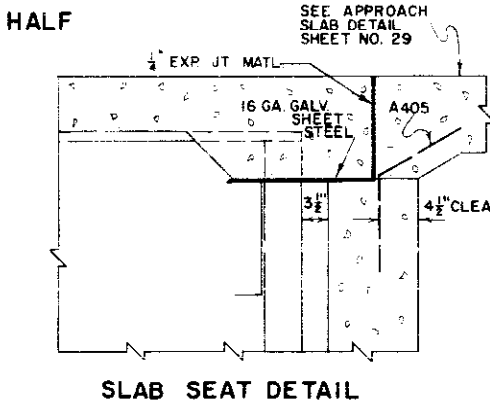
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012-2(13)	26	



BAR LIST  
BAR SUMMARY  
SUMMARY OF QUANTITIES  
ON SHEET NO. 27

- EXISTING
- REMOVE
- NEW CONST.

LEGEND



SLAB SEAT DETAIL

NORTH F-16-EE  
STRUCTURE NO. SOUTH F-16-EE

JEFFERSON ASSOCIATES  
CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO

DETAILS  
ABUTMENT NO. 1  
SOUTH SIDE

Across SOUTH PLATTE RIVER ON 6<sup>TH</sup> AVE.  
Sta. 54 + 95.41 TO 56 + 53.64  
Near DENVER Sec. 5 T. 4S R. 60W

Designed by GDC Approved by \_\_\_\_\_  
Made by WJP Bridge Engineer  
Checked by T.V.S. Date: 19

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012-2(13)	26-R	



**\*BAR LIST**

MARK	SIZE	SHAPE	NO. REQD.	LENGTH
A401	4		13	16'-3"
A409	4		16	19'-2"
AR801	8		21	16'-3"
AR802	8		21	5'-0"

**\*BAR SUMMARY**

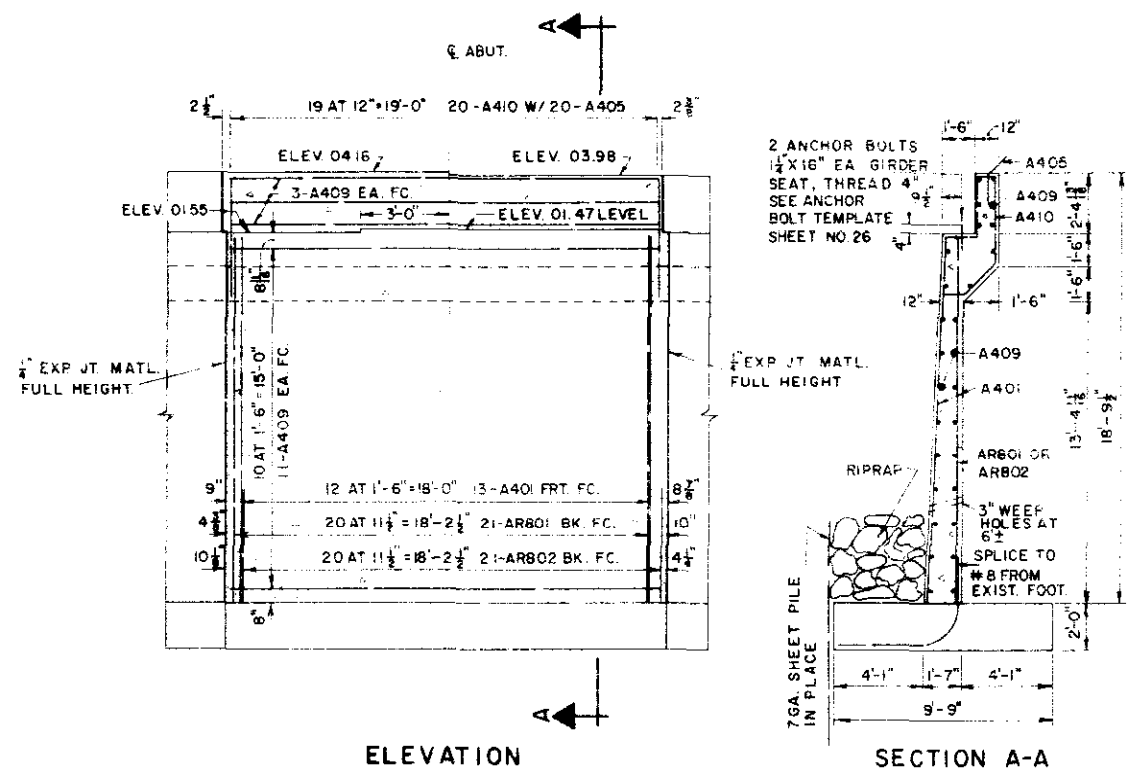
520	L.F. #4 AT 0.668 #/FT. =	350
445	L.F. #8 AT 2.670 #/FT. =	1,190
TOTAL =		1,540

**\*SUMMARY OF QUANTITIES**

ITEM	UNIT	DESCRIPTION	AMOUNT
206	CU. YD.	STR. EXCAV.	111
206	CU. YD.	STR. BKFL. (CL. 3)	70
501	SQ. FT.	STEEL SHT. PILE (TY I) 799	3,966
506	CU. YD.	RIPRAP	11
601	CU. YD.	CONCRETE CL. A	10
602	LB.	REINF. STEEL 1537	1,640
①	SQ. FT.	1/2 IN. EXP. JT. MATL.	55

\* ADDITIONAL QUANTITIES REQUIRED TO CONSTRUCT ABUT. WALL.

① THERE SHALL BE NO SEPARATE PAYMENT FOR ITEMS MARKED THUS ①. PAYMENT THEREFORE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 601, CONCRETE CL. A.



REV. BY	DATE

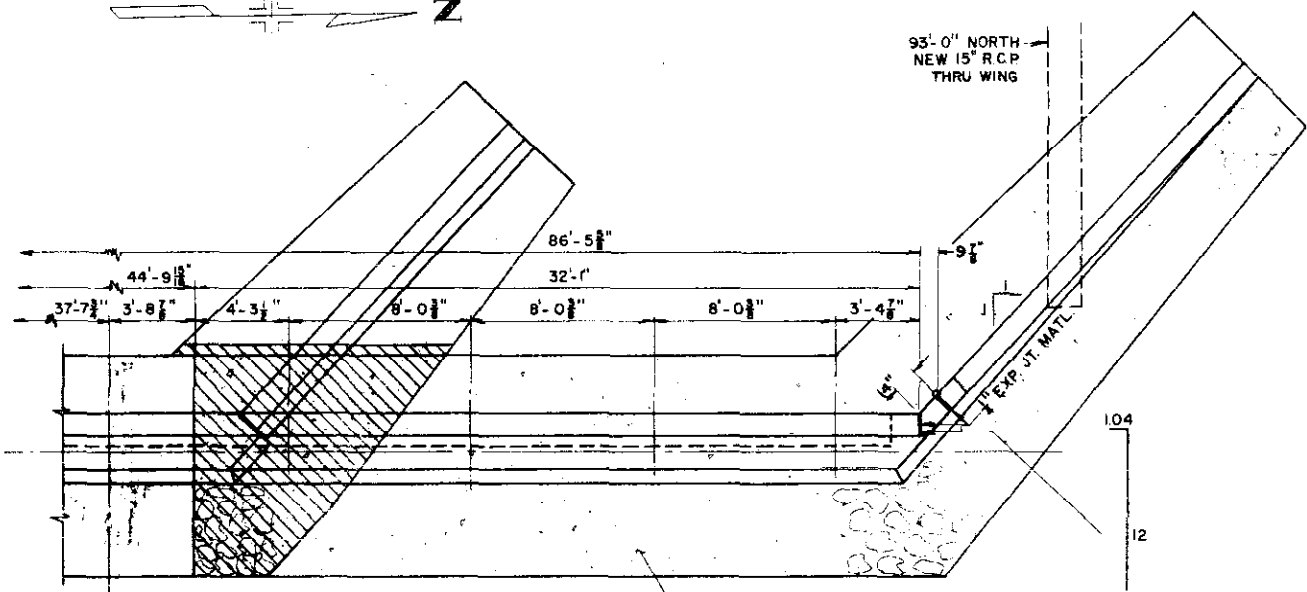
NORTH F-16-EE  
STRUCTURE NO. SOUTH F-16-EF

**DEPARTMENT OF HIGHWAYS**  
**STATE OF COLORADO**  
**REVISED**  
**DETAILS**  
**ABUT. NO. 1**

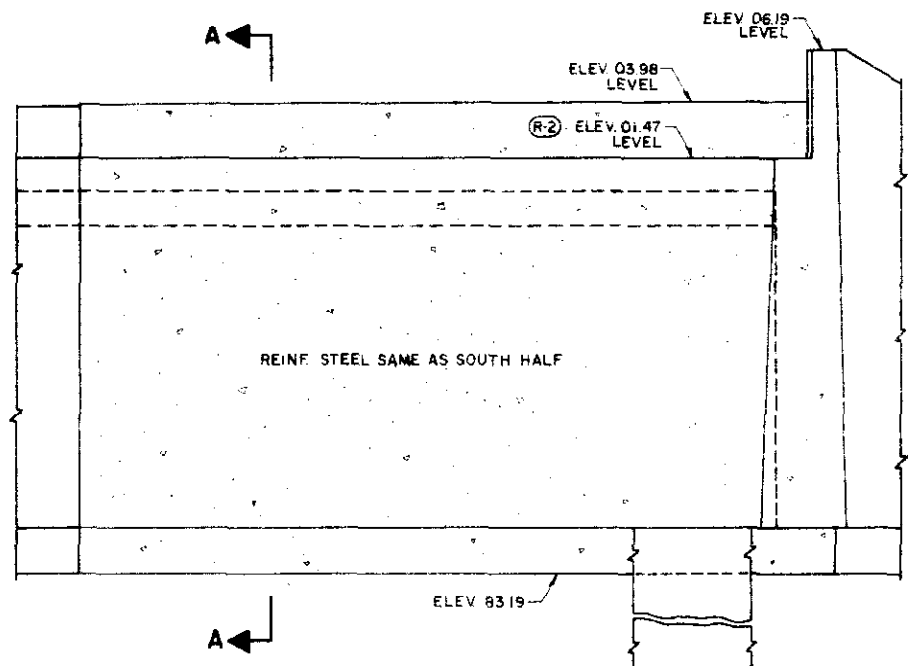
Across SOUTH PLATTE RIVER ON 6TH AVE.  
Sta 54+95.41 TO 56+53.84  
Near DENVER Sec. 5 T. 4S R. 98W

Designed by T.V.S. Approved by  
Made by G.D.C. Bridge Engineer  
Checked by G.D.C. Date: 19

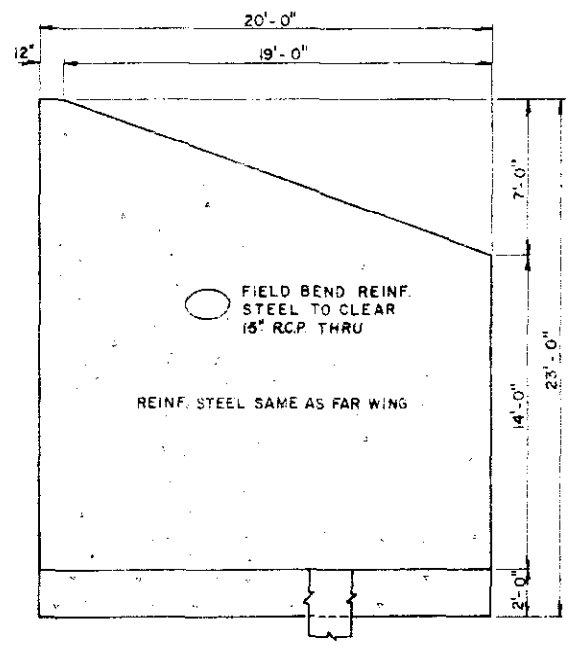
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U012-2 (13)	27	



PLAN NORTH HALF



ELEVATION NORTH HALF



WING ELEVATION

BAR SUMMARY	
5460 L.F. #4 AT 0.668 #/FT. =	3660
655 L.F. #5 AT 1.043 #/FT. =	685
45 L.F. #6 AT 1.502 #/FT. =	65
475 L.F. #7 AT 2.044 #/FT. =	970
2840 L.F. #8 AT 2.670 #/FT. =	7585
780 L.F. #9 AT 3.400 #/FT. =	2650
TOTAL = 15,615 LB.	

BAR LIST				
MARK	SIZE	SHAPE	REQD	LENGTH
W401	4		24	19'-9"
W402	4		12	24'-0"
A401	4		46	16'-3"
A402	4		44	30'-9"
A403	4		12	31'-9"
A404	4		64	11'-6"
A405	4		84	2'-0"
A406	4		18	32'-0"
A407	4		12	8'-0"
A408	4		28	6'-5"
A409	4		12	19'-2"
A410	4		20	11'-6"
W501	5		12	3'-9"
W502	5		40	9'-0"
A501	5		46	5'-5"
W601	6		10	4'-3"
W701	7		20	4'-9"
A701	7		70	5'-5"
W801	8		12	9'-6"
W802	8		10	7'-2"
W803	8		2	4'-1"
W804	8		2	4'-5"
W805	8		2	4'-9"
W806	8		2	5'-1"
W807	8		2	5'-5"
W808	8		2	3'-9"
A801	8		6	27'-11"
A802	8		64	23'-3"
A803	8		62	13'-0"
A804	8		4	16'-3"
A805	8		4	18'-8"
W901	9		18	12'-3"
W902	9		18	9'-4"
W903	9		10	7'-10"
W904	9		10	10'-6"
W905	9		2	6'-10"
W906	9		2	8'-6"
W907	9		2	8'-1"
W908	9		2	7'-9"
W909	9		2	7'-4"
W910	9		2	7'-0"
W911	9		2	6'-7"
W912	9		2	6'-3"
W913	9		2	5'-10"
W914	9		2	7'-0"
W915	9		2	6'-8"
W916	9		2	6'-4"
W917	9		2	6'-0"
W918	9		2	5'-8"
W919	9		2	5'-4"

SUMMARY OF QUANTITIES			
SECTION	UNIT	ITEM	AMOUNT
206	CU YD	STR EXCAV.	392
206	CU YD	STR BKFL (CL 3)	386
501	SQ FT	STEEL SHT. PILE (TY I) 602	1560
506	CU YD	RIPRAP 312	274
601	L.S.	STR STEEL	L.S.
601	CU YD	CONCRETE CL. A	201
602	LB	REINF STEEL 15,596	15,615
①	SQ FT	1" EXP. JT. MATL.	256
①	SQ FT	16 GA. GALV. SHT. STEEL	166

THERE SHALL BE NO SEPARATE PAYMENT FOR ITEMS MARKED THUS (Ⓢ). PAYMENT THEREFORE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 601, CONCRETE CL. A.

Ⓢ DESIGN WEIGHT = 145 LB.

REV	BY	DATE	DESCRIPTION

JEFFERSON ASSOCIATES  
CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO

DETAILS  
ABUTMENT NO. 1  
NORTH SIDE

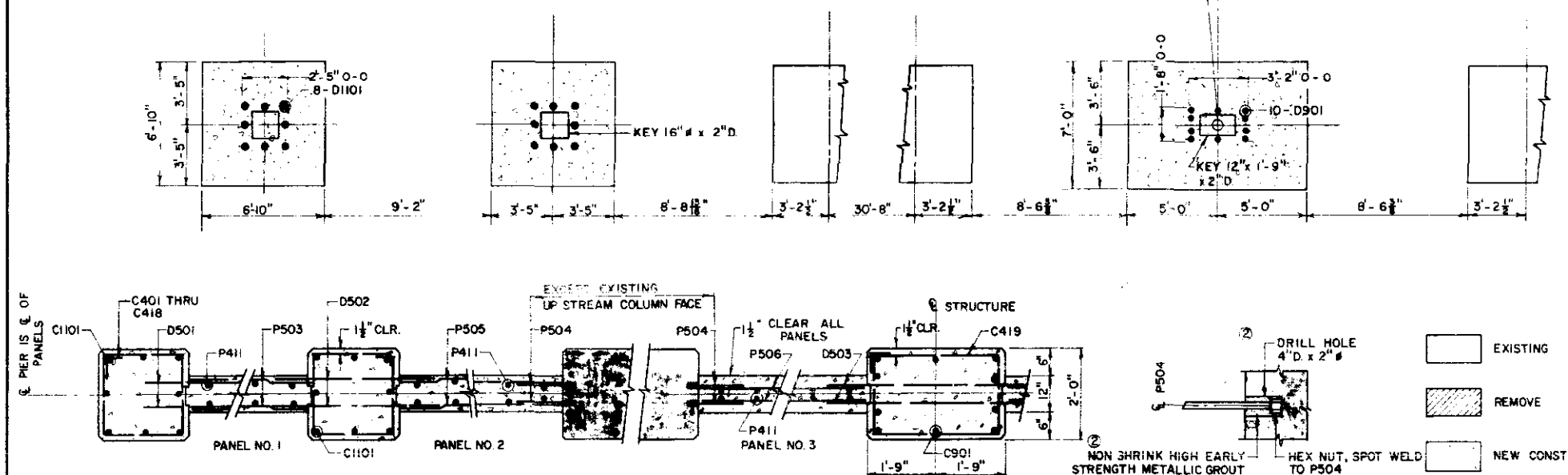
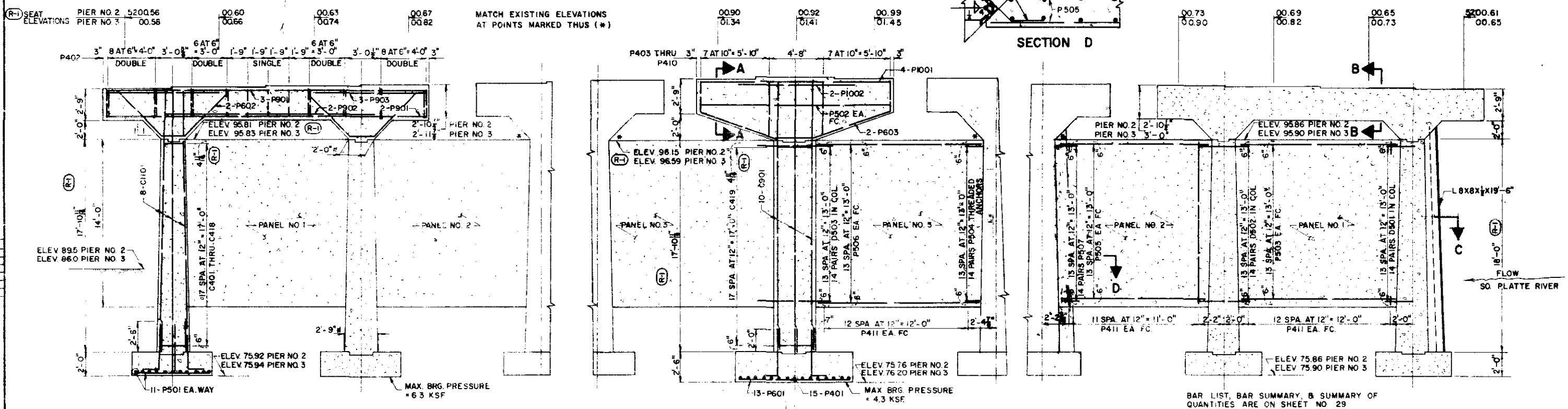
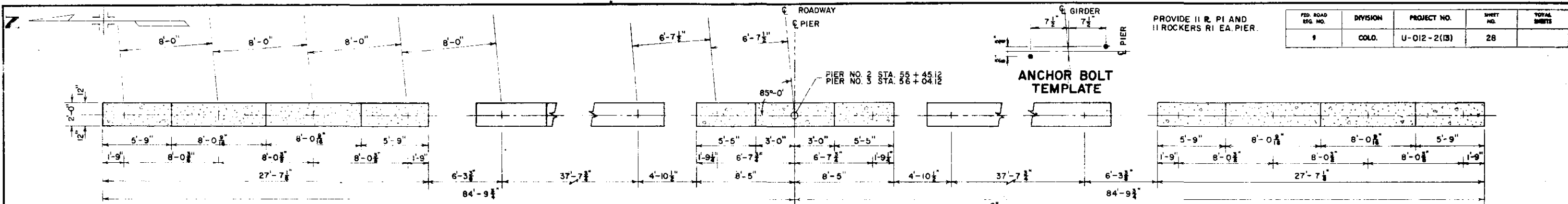
Across SO. PLATTE RIVER ON 6th AVE  
Sta. 54+95.41 TO 56+53.84  
Near DENVER Sec. 5 T. 4S. R. 68W

Designed by G.D.C. Approved by \_\_\_\_\_  
Made by J.M.C. Bridge Engineer  
Checked by T.V.S. Date: \_\_\_\_\_ 19

NORTH F-16-EE  
STRUCTURE NO. SOUTH F-16-EF

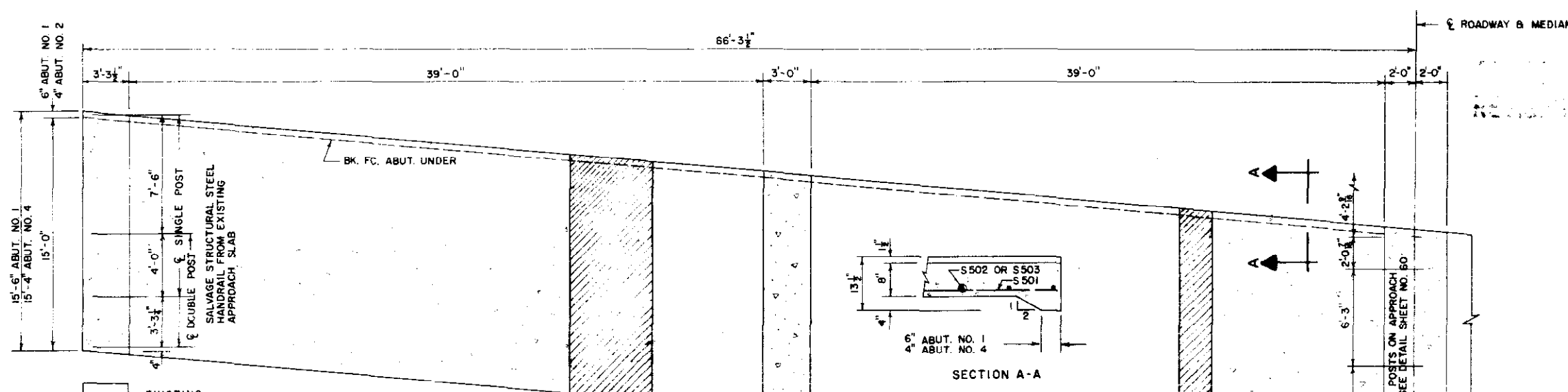
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	COLO.	U-012-2(13)	28	

PROVIDE 11 R. PI AND 11 ROCKERS RI EA. PIER.



DEPARTMENT OF HIGHWAYS STATE OF COLORADO  
 PIER DETAILS  
 Across SO. PLATTE RIVER ON 6th AVE.  
 Sta. 54+95.41 TO 56+53.84  
 Near DENVER Sec. 5 T. 4 S. R. 68 N  
 Designed by L.H.C. Approved by  
 Made by L.E.S. Bridge Engineer  
 Checked by T.V.S. Date: 19  
 NORTH F-16-EE  
 SOUTH F-16-EF  
 STRUCTURE NO. 19  
 JEFFERSON ASSOCIATES CIVIL ENGINEERS  
 MAX. BRG. PRESSURE = 6.3 KSF  
 MAX. BRG. PRESSURE = 4.3 KSF  
 2- SEE FOOT NOTE SHEET NO. 29

REV. ROAD LIG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012-2 (13)	29	



① BAR LIST

MARK	SIZE	SHAPE	REQD.	LENGTH
C 404	4	[Symbol]	32	6'-8"
C 501	5	[Symbol]	64	1'-4"
C 403	4	[Symbol]	32	2'-9"
C 405	4	[Symbol]	16	6'-5"
S 401	4	[Symbol]	26	15'-3"
S 501	5	[Symbol]	414	15'-3"
S 502	5	[Symbol]	32	29'-9"
S 503	5	[Symbol]	64	37'-0"

① BAR SUMMARY

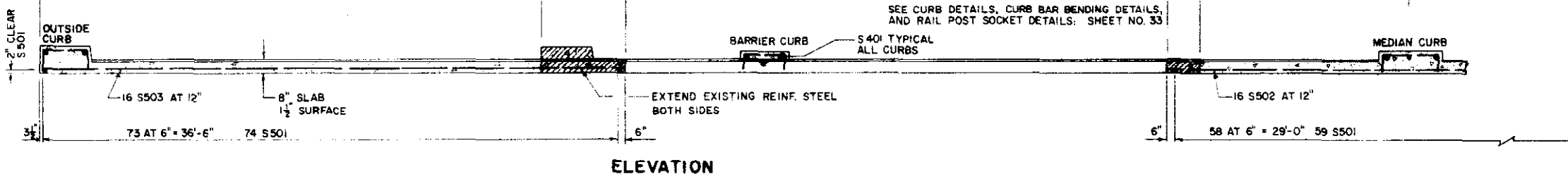
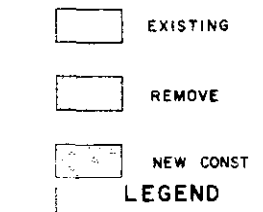
800	L.F. # 4 AT 0.668 #/FT.	= 535
9720	L.F. # 5 AT 1.043 #/FT.	= 10,140
<b>TOTAL</b>		<b>= 10,675</b>

① SUMMARY OF QUANTITIES

SECTION	UNIT	ITEM	AMOUNT
206	CU. YD.	STR. EXCAVATION	61
403	TON	HBP (GR E)	17 27
411	GAL	LIQ ASPH MATL/RC-600	26 27
509	L.S.	STR. STEEL	L.S.
509	L.S.	STR. STEEL (GALV)	L.S.
210	LIN FT	RES RAILING	61
601	CU YD	CONCRETE CL. A.	92
602	LB	REINF. STEEL 10,725	10,675
606	LIN FT	GD. RAIL TY. 3A DBL	50

① TWO APPROACH SLABS  
 ② DESIGN WEIGHT = 150 LB.  
 ③ DESIGN WEIGHT = 760 LB.

REV.	BY	DATE



APPROACH SLAB DETAILS

① BAR SUMMARY

8455	L.F. # 4 AT 0.668 #/FT.	= 5,650
7125	L.F. # 5 AT 1.043 #/FT.	= 7,430
545	L.F. # 6 AT 1.502 #/FT.	= 820
1475	L.F. # 9 AT 3.400 #/FT.	= 5,015
175	L.F. # 10 AT 4.303 #/FT.	= 755
1775	L.F. # 11 AT 5.313 #/FT.	= 9,430
<b>TOTAL</b>		<b>= 29,100</b>

① SUMMARY OF QUANTITIES

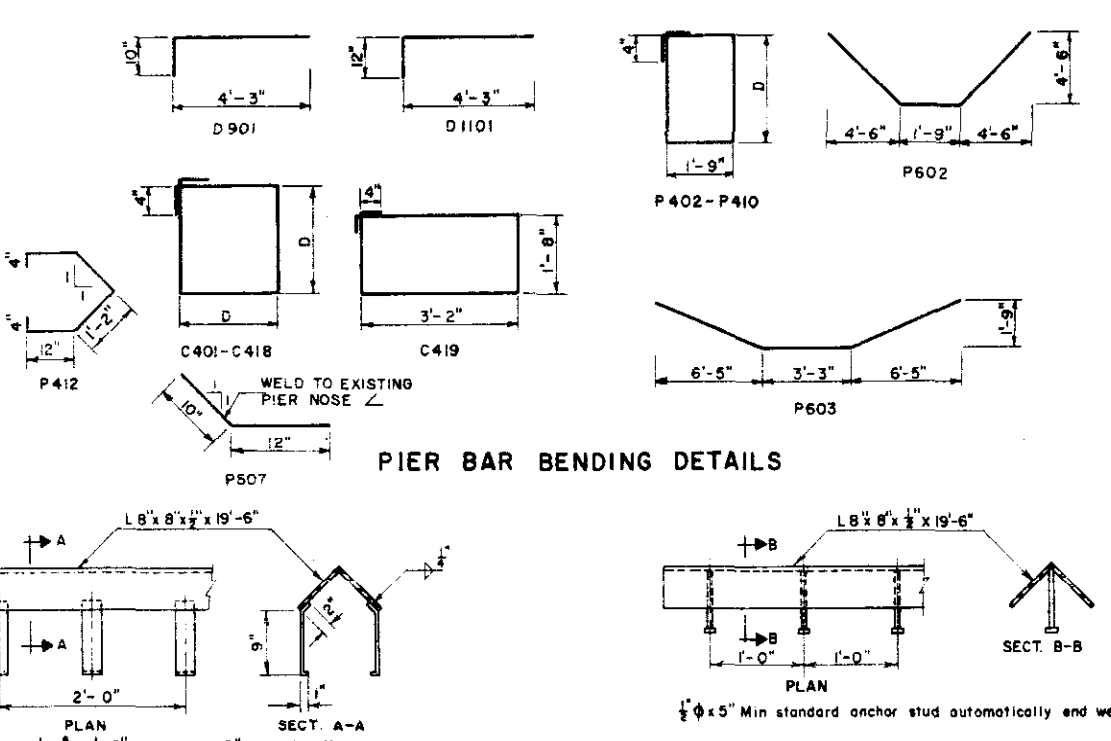
SECTION	UNIT	ITEM	AMOUNT
206	CU. YD.	STR. EXCAV.	630
206	CU. YD.	STR. BKFL. (CL 3)	515
509	L.S.	STR. STEEL	L.S.
601	CU. YD.	CONCRETE CL. A.	204
602	LB.	REINF. STEEL	29,100

THERE SHALL BE NO SEPARATE PAYMENT FOR ITEMS MARKED THUS (①) PAYMENT THEREFORE SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR ITEM 601, CONCRETE CL. A.  
 ① TWO PIERS  
 ② DESIGN WEIGHT = 1485 LB.

PIER BAR LIST & QUANTITIES

BAR LIST

MARK	SIZE	D	SHAPE	NO REQD.	LENGTH
C 401	2	5"	[Symbol]	8	10'-4"
C 402	2	4"	[Symbol]	8	10'-2"
C 403	2	4"	[Symbol]	8	10'-0"
C 404	2	3"	[Symbol]	8	9'-10"
C 405	2	3"	[Symbol]	8	9'-8"
C 406	2	2"	[Symbol]	8	9'-6"
C 407	2	2"	[Symbol]	8	9'-4"
C 408	2	1"	[Symbol]	8	9'-2"
C 409	2	1"	[Symbol]	8	9'-0"
C 410	2	0"	[Symbol]	8	8'-10"
C 411	2	0"	[Symbol]	8	8'-8"
C 412	1	11"	[Symbol]	8	8'-6"
C 413	1	11"	[Symbol]	8	8'-4"
C 414	1	10"	[Symbol]	8	8'-2"
C 415	1	10"	[Symbol]	8	8'-0"
C 416	1	9"	[Symbol]	8	7'-10"
C 417	1	9"	[Symbol]	8	7'-8"
C 418	1	8"	[Symbol]	8	7'-6"
C 419	38	10'	[Symbol]	38	10'-4"
P 401	30	6'	[Symbol]	30	6'-6"
P 402	268	7'	[Symbol]	268	7'-5"
P 403	4	7'	[Symbol]	4	7'-7"
P 404	4	8'-1"	[Symbol]	4	8'-1"
P 405	4	8'-7"	[Symbol]	4	8'-7"
P 406	4	9'-1"	[Symbol]	4	9'-1"
P 407	4	9'-7"	[Symbol]	4	9'-7"
P 408	4	10'-1"	[Symbol]	4	10'-1"
P 409	4	10'-7"	[Symbol]	4	10'-7"
P 410	4	11'-1"	[Symbol]	4	11'-1"
P 411	304	13'-6"	[Symbol]	304	13'-6"
P 412	36	5'-0"	[Symbol]	36	5'-0"



JEFFERSON ASSOCIATES  
 CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
 STATE OF COLORADO

APPROACH SLAB DETAILS  
 PIER BAR LIST  
 & QUANTITIES

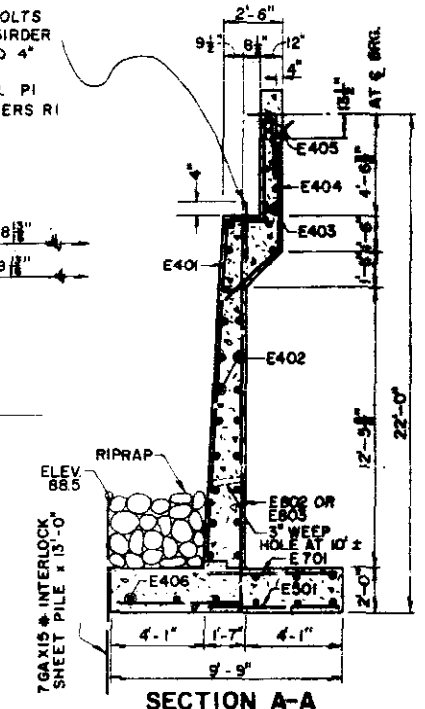
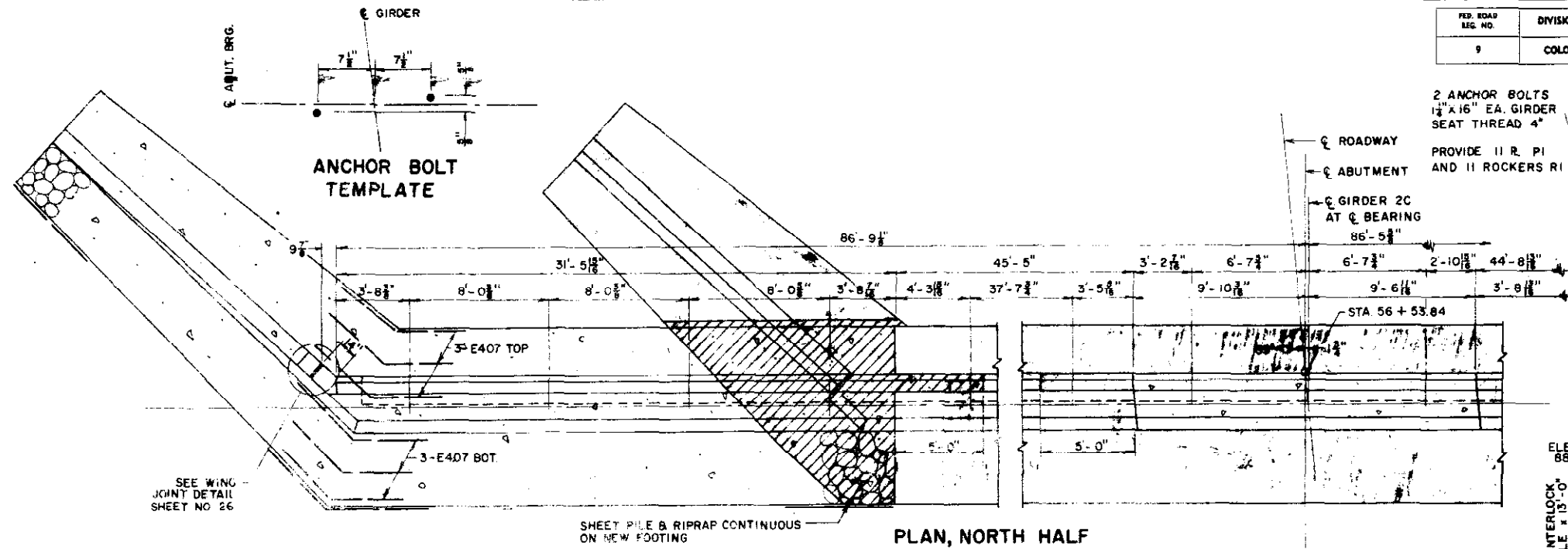
Across SOUTH PLATTE RIVER ON 6th AVE.  
 Sta. 54+95.41 TO 56+53.84  
 Near DENVER Sec. 5 T. 4 S. R. 68 W.

Designed by GDC  
 Made by WJP  
 Checked by TVB

Approved by  
 Bridge Engineer  
 Date: 19

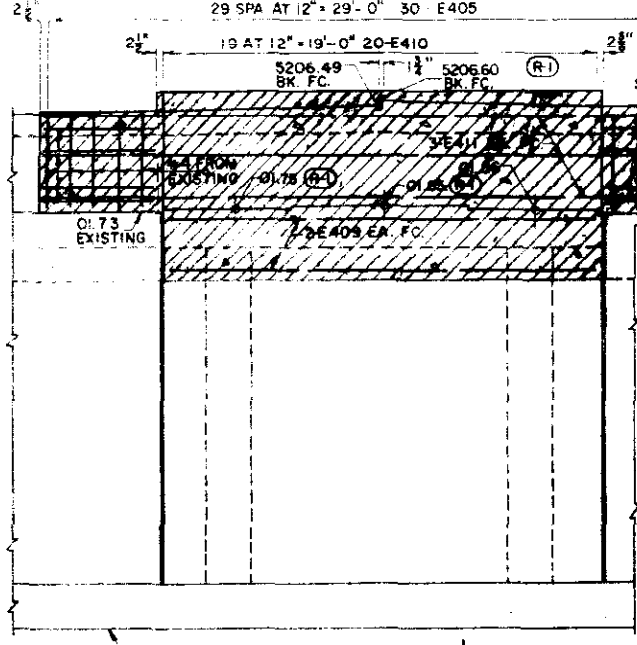
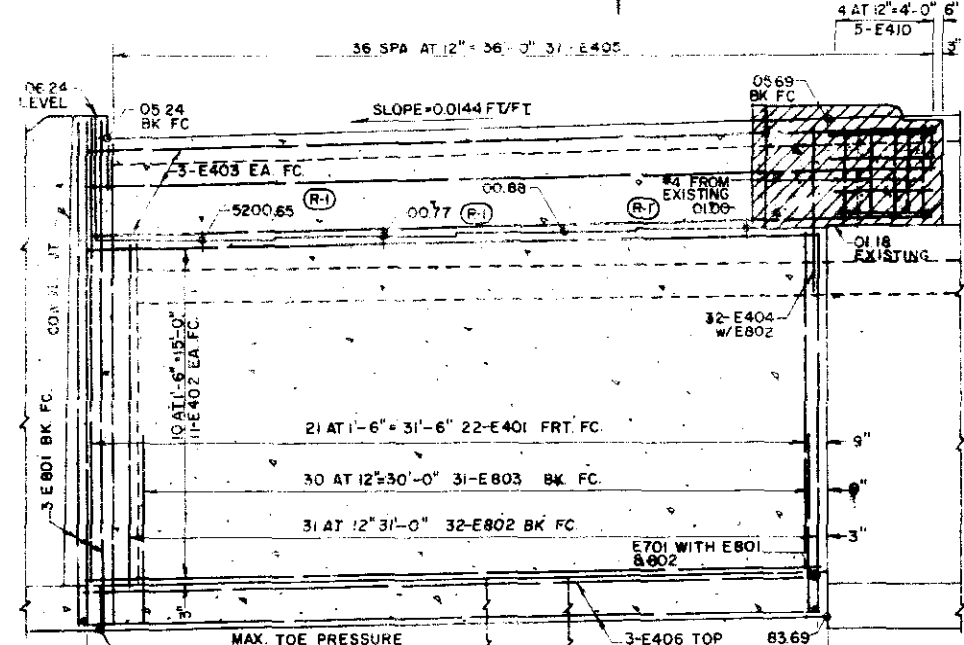
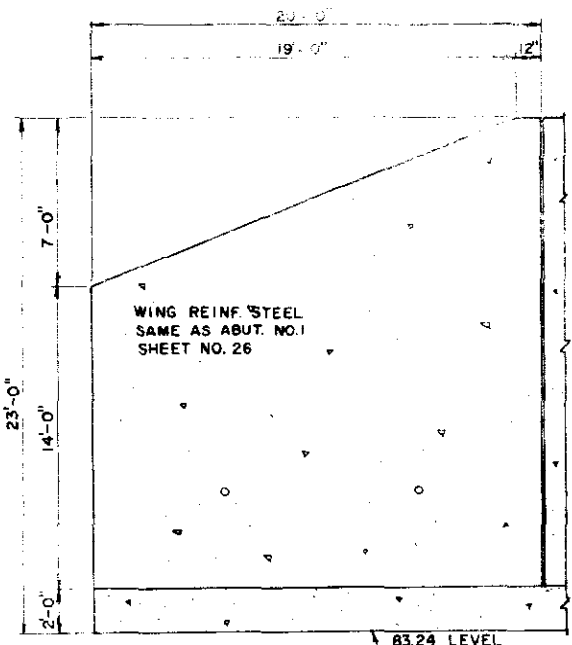
STRUCTURE NO. NORTH F-16-EE SOUTH F-16-EF

FED. ROAD LEG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012-2 (13)	30	



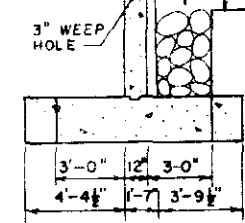
PLAN, NORTH HALF

SECTION A-A

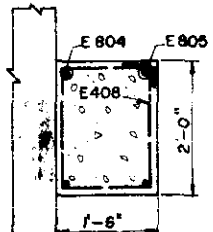


ELEVATION, NORTH HALF

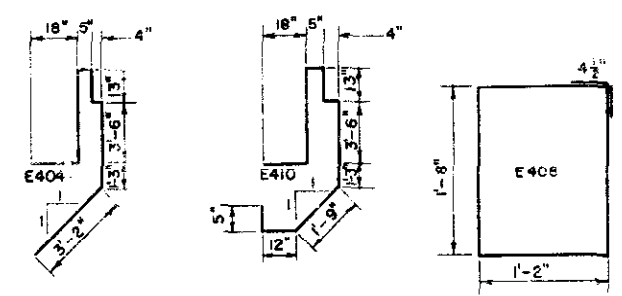
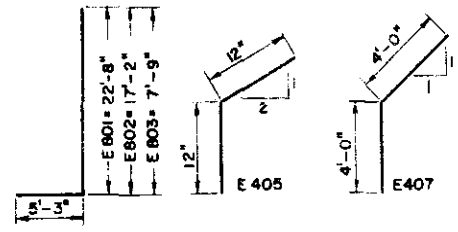
SECTION B-B



WING SECTION



SECTION C-C



- EXISTING
- REMOVE
- NEW CONST

LEGEND

SEE ABUTMENT SECTION AND EXPANSION DEVICE DETAIL SHEET NO. 32  
 BAR LIST  
 BAR SUMMARY  
 SUMMARY OF QUANTITIES  
 ON SHEET NO. 31

JEFFERSON ASSOCIATES  
 CIVIL ENGINEERS

**DEPARTMENT OF HIGHWAYS  
 STATE OF COLORADO**

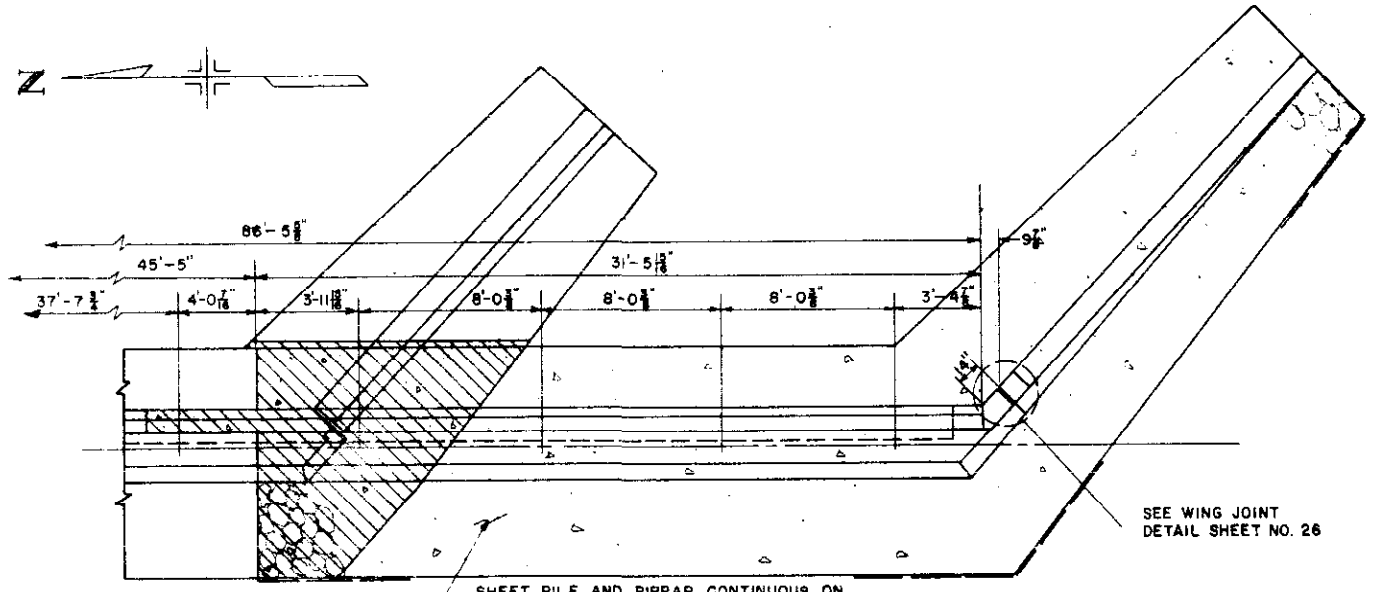
**DETAILS  
 ABUTMENT NO. 4  
 NORTH SIDE**

Across SOUTH PLATTE RIVER ON 6th AVE  
 Sta. 54+95.41 TO 56+53.84  
 Near DENVER Sec. 5 T. 4S R. 60W

Designed by G.D.C. Approved by \_\_\_\_\_  
 Made by J.M.C. Bridge Engineer  
 Checked by T.V.S. Date: \_\_\_\_\_ 19

(R-2) 1-23-67 SEAT ELEVATIONS G.D.C.  
AS NOTED  
REVISED

REV. ROAD SEE NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	COLO.	U 042-2(15)	31	



PLAN SOUTH HALF

BAR SUMMARY		
5875	L.F. #4 AT 0.668 #/FT.	3925
655	L.F. #5 AT 1.043 #/FT.	685
45	L.F. #6 AT 1.502 #/FT.	65
475	L.F. #7 AT 2.044 #/FT.	970
2795	L.F. #8 AT 2.670 #/FT.	7465
780	L.F. #9 AT 3.400 #/FT.	2650
TOTAL		15,760 LB.

BAR LIST				
MARK	SIZE	SHAPE	REQD.	LENGTH
W401			24	18'-8"
W402			12	24'-0"
E401			44	15'-4"
E402			44	31'-2"
E403			12	36'-3"
E404			64	15'-10"
E405			104	2'-0"
E406			18	31'-8"
E407			12	8'-0"
E408			28	6'-5"
E409			4	19'-2"
E410			20	15'-10"
E411			6	29'-2"

SUMMARY OF QUANTITIES			
SECTION	UNIT	ITEM	AMOUNT
206	CU. YD.	STR. EXCAVATION	434
206	CU. YD.	STR. BACKFILL (CL. 3)	368
501	SQ. FT.	STEEL SHEET PILE (TY. I)	13,809.71
506	CU. YD.	RIPRAP	308.276
509	L. S.	STR. STEEL	L. S.
601	CU. YD.	CONCRETE CL. A	212
602	LB.	REINF. STEEL	15,746 → 15,760
①	SQ. FT.	1/2 EXP. JT. MATL.	258

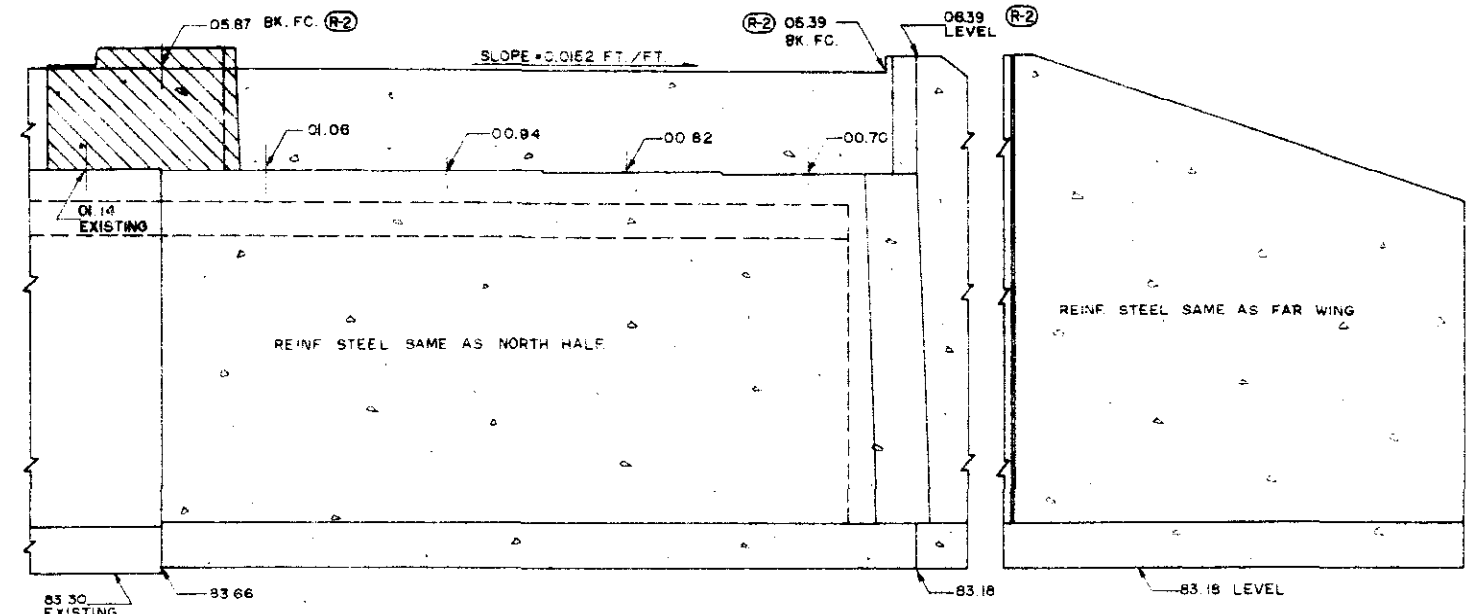
THERE SHALL BE NO SEPARATE PAYMENT FOR ITEMS MARKED THUS (①) PAYMENT THEREFORE SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 601, CONCRETE CL. A.  
② DESIGN WEIGHT = 145 LB.

W501			12	3'-8"
W502	5		40	9'-0"
E501			46	5'-5"
W601	6		10	4'-3"
W701	7		20	4'-8"
E701			70	5'-5"

W801			12	9'-8"
W802			10	7'-2"
W803			2	4'-1"
W804			2	4'-5"
W805			2	4'-9"
W806			2	5'-1"
W807			2	5'-5"
W808			2	3'-9"
E801			8	27'-11"
E802			64	22'-5"
E803			62	13'-0"
E804			4	16'-3"
E805			4	20'-0"

W901			18	12'-3"
W902			18	9'-4"
W903			10	7'-10"
W904			10	10'-6"
W905			2	8'-10"
W906			2	8'-6"
W907			2	8'-1"
W908			2	7'-9"
W909			2	7'-4"
W910			2	7'-0"
W911			2	6'-7"
W912			2	6'-3"
W913			2	5'-10"
W914			2	7'-0"
W915			2	6'-8"
W916			2	6'-4"
W917			2	6'-0"
W918			2	5'-8"
W919			2	5'-4"

DATE	BY	REVISION



ELEVATION SOUTH HALF

WING ELEVATION

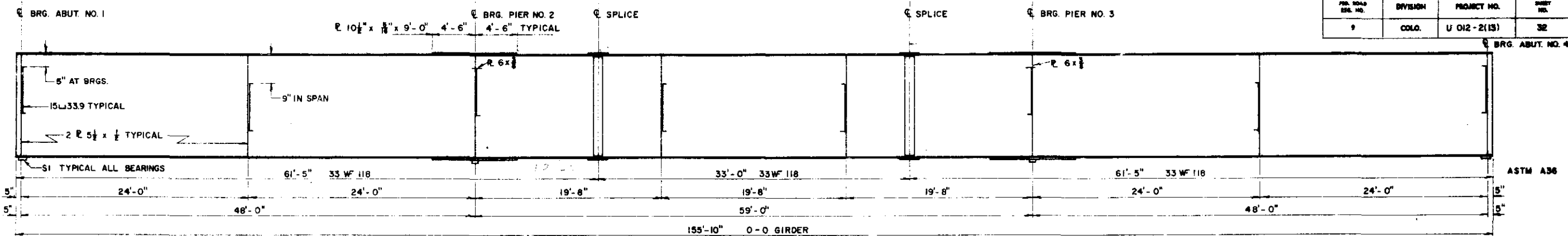
JEFFERSON ASSOCIATES  
CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO  
DETAILS  
ABUTMENT NO. 4  
SOUTH SIDE  
Across SO. PLATTE RIVER ON 6th AVE.  
Sta. 54+95.41 TO 56+53.84  
Near DENVER, Sec. 5, T. 4 S. R. 68 W.  
Designed by GDC Approved by  
Made by W.J.P. Bridge Engineer  
Checked by TVS Date: 19

NORTH F-16-EE  
STRUCTURE NO. SOUTH F-16-EF

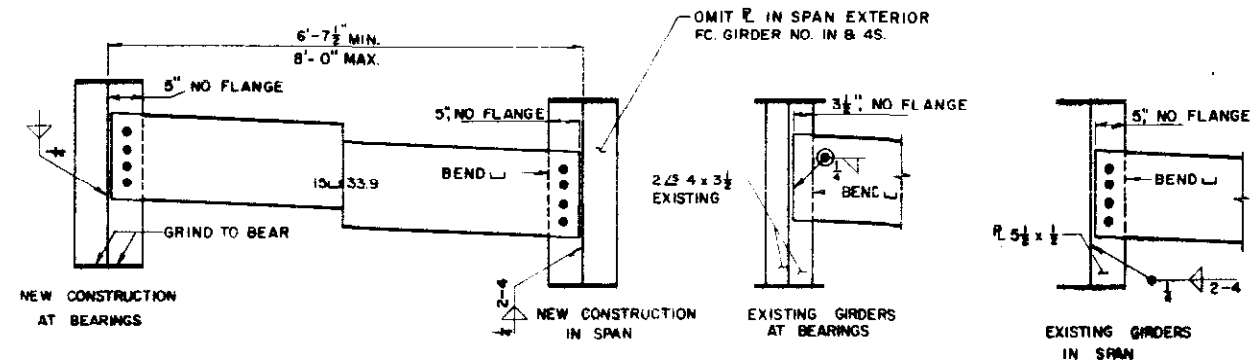


PROJ. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012-2(13)	32	

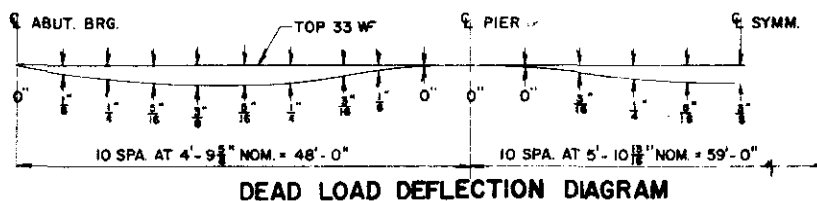


GIRDER ELEVATION

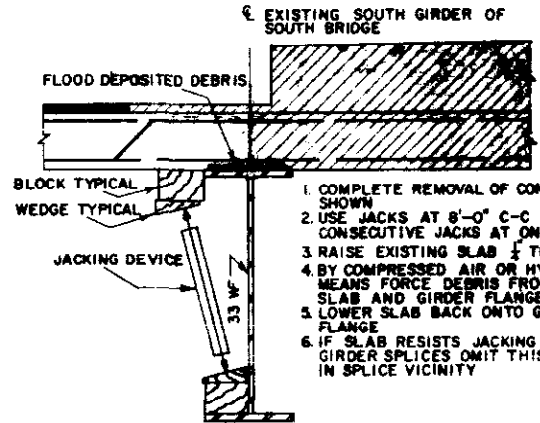
SPLICE BOLTS SHALL BE 1/2" DIAMETER, ALL OTHERS SHALL BE 3/4" DIAMETER. FABRICATE ALL GIRDERS FLAT WITHOUT CAMBER AT SPLICES. SPLICE HOLES SHALL BE SUBPUNCHED 1/8" DIAMETER AND REAMED TO 1/2" DIAMETER WITH GIRDERS ASSEMBLED AND BLOCKED IN FLAT POSITION.



DIAPHRAGM & STIFFENER DETAILS



DEAD LOAD DEFLECTION DIAGRAM



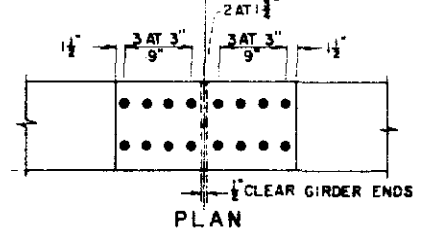
SPECIAL DETAIL FOR EXISTING SOUTH GIRDER OF SOUTH BRIDGE

(PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202)

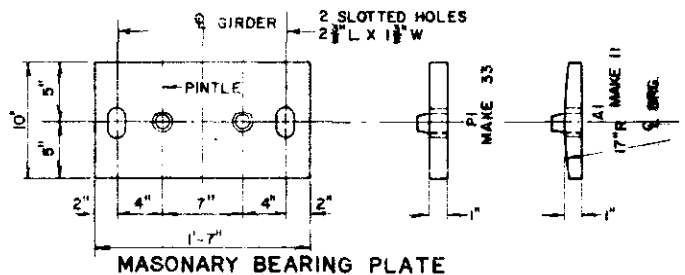
(R-1) ELEVATIONS AT G GIRDER & TOP OF CONCRETE DECK SLAB DOES NOT INCLUDE DEAD LOAD DEFLECTION

POINT	G GIRD.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
IN	05.06	05.06	05.07	05.07	05.08	05.08	05.08	05.09	05.09	05.10	05.10	05.10	05.11	05.11	05.11	05.11
2C	05.28	05.31	05.35	05.39	05.43	05.48	05.52	05.56	05.60	05.64	05.68	05.73	05.78	05.82	05.87	05.92
4S	05.24				05.24	05.25					05.25	05.26	05.26	05.27	05.27	

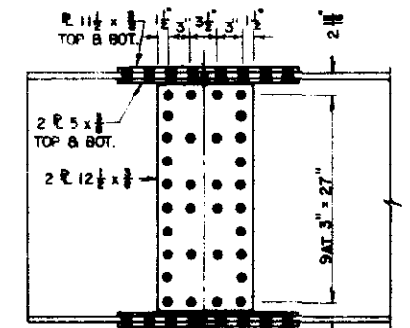
POINT	G GIRD.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
IN	05.11	05.11	05.11	05.12	05.12	05.12	05.12	05.13	05.13	05.14	05.14	05.14	05.15	05.15	05.16	05.16
2C	05.92	05.97	06.02	06.06	06.11	06.16	06.20	06.24	06.28	06.32	06.36	06.41	06.45	06.49	06.53	06.59
4S	05.27	05.27	05.28	05.28	05.29			05.29	05.30				05.30	05.31	05.31	05.31



PLAN

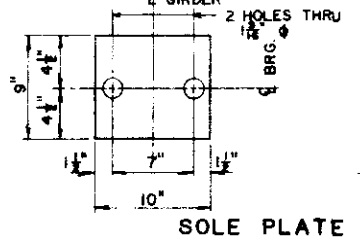


MASONRY BEARING PLATE



ELEVATION

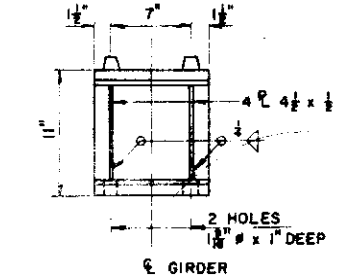
GIRDER SPLICE DETAIL



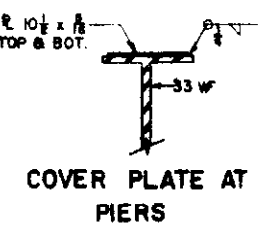
SOLE PLATE

TEMP. TABLE

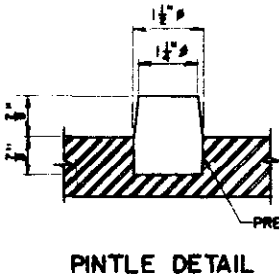
TEMP. °F	DIMENS.
90°	3"
65°	3 1/2"
40°	3"



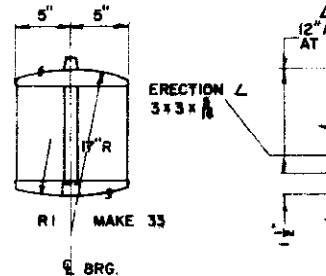
BEARING DEVICE DETAILS



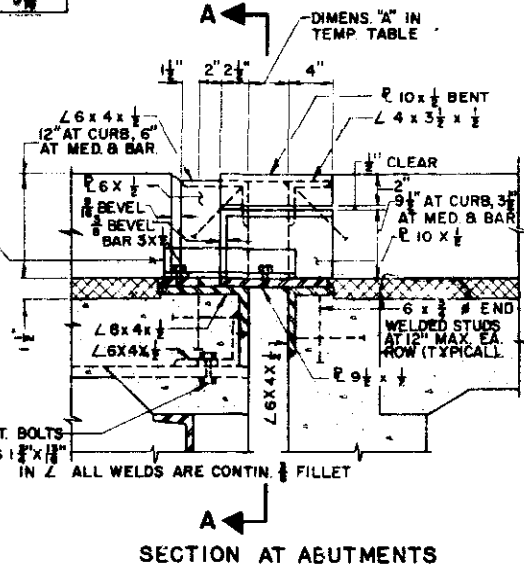
COVER PLATE AT PIERS



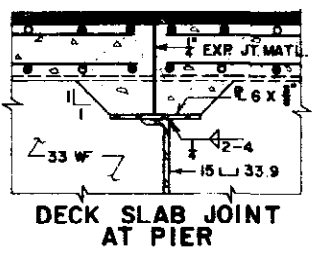
PINTLE DETAIL



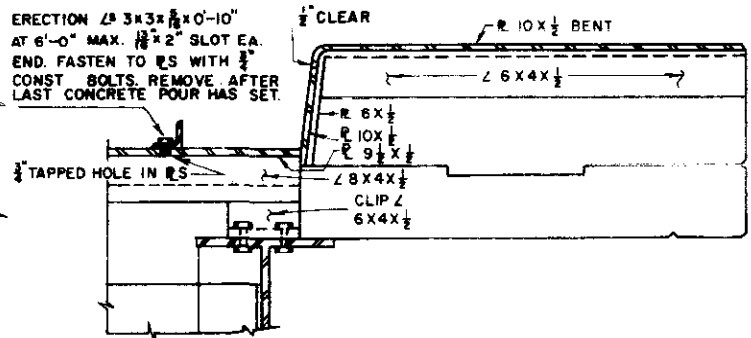
ROCKER



SECTION AT ABUTMENTS

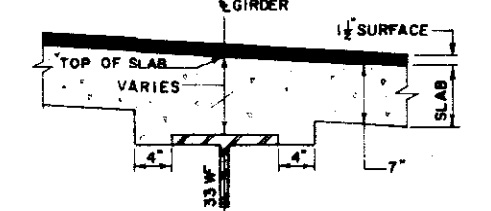


DECK SLAB JOINT AT PIER



SECTION A-A  
EXTERIOR CURB SHOWN

EXPANSION DEVICE DETAILS



DECK SLAB DETAIL AT GIRDERS

STRUCTURE NO. NORTH F-16-EE SOUTH F-16-EF

DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO

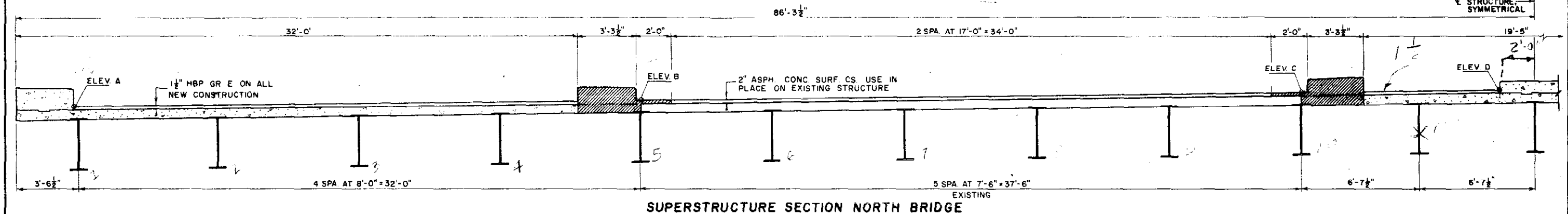
GIRDER & STRUCTURAL  
STEEL DETAILS

Across SOUTH PLATTE RIVER  
Sta. 54+24.41 TO 54+33.84  
Near DENVER Sec. 5 T. 4S. R. 88W

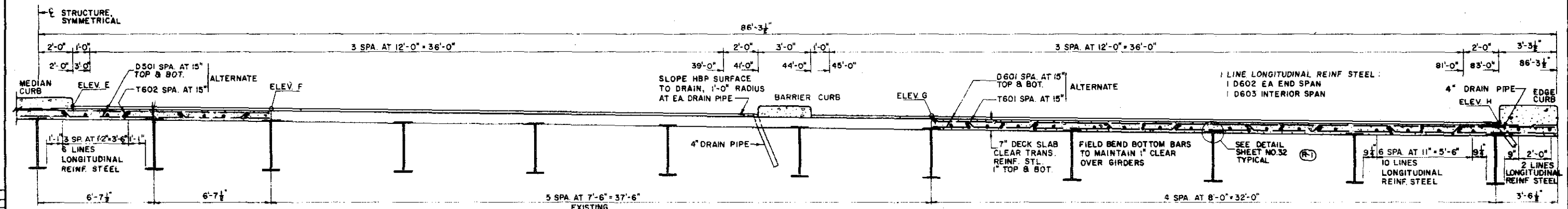
Designed by T.V.S. Approved by  
Made by F.F.J. Bridge Engineer  
Checked by G.D.C. Date: 19

FED. ROAD DIST. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLD.	U-012-2(13)	33	

AS CONSTRUCTED  
 REVISED DATE



SUPERSTRUCTURE SECTION NORTH BRIDGE

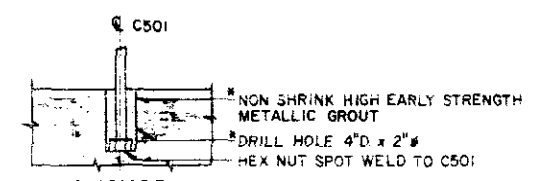


SUPERSTRUCTURE SECTION SOUTH BRIDGE

	ABUT NO. 1	PIER NO. 2	PIER NO. 3	ABUT NO. 4		ABUT NO. 1	PIER NO. 2	PIER NO. 3	ABUT NO. 4
NORTH SLOPE	0.00	0.00446	0.00996	0.0144	SOUTH SLOPE	0.00	0.00498	0.010486	0.0152
ELEV. A	05.19	05.23	05.25	05.29	ELEV. E	05.37	05.78	06.27	06.67
B	05.19	05.37	05.57	05.76	F	05.37	05.72	06.15	06.50
C	05.19	05.54	06.95	06.30	G	05.37	05.54	05.76	05.92
D	05.19	05.59	06.06	06.46	H	05.37	05.38	05.42	05.44

EXISTING  
 REMOVE  
 NEW CONST

LEGEND



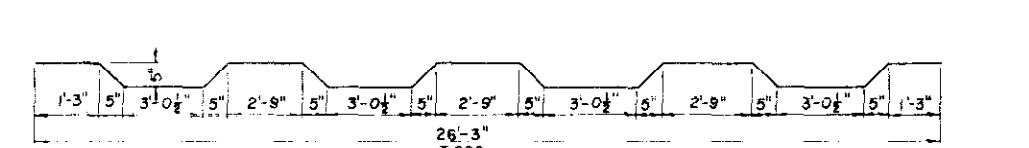
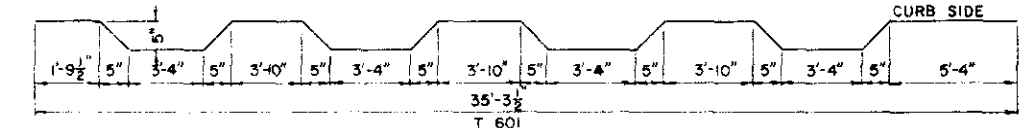
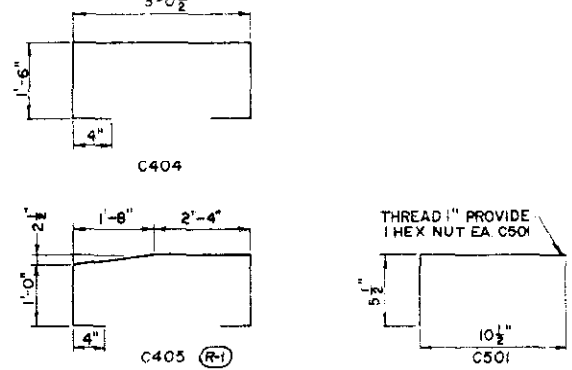
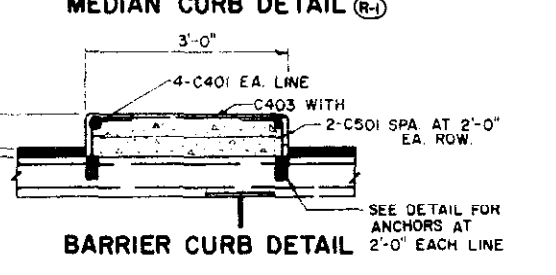
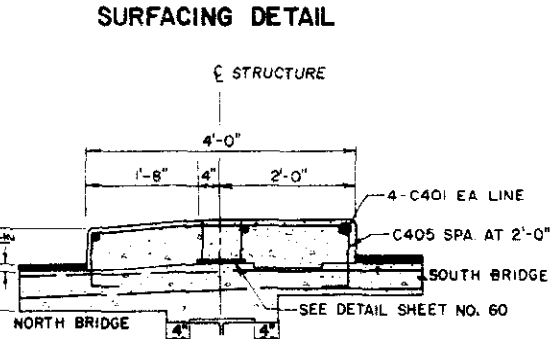
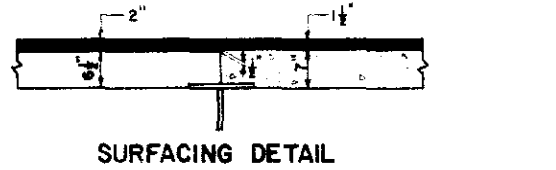
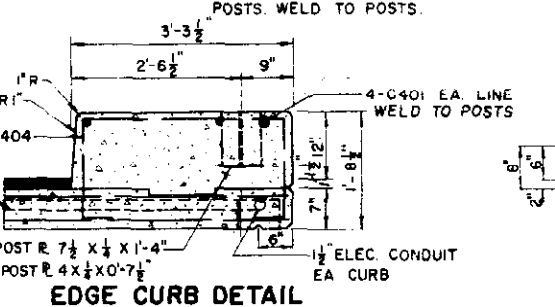
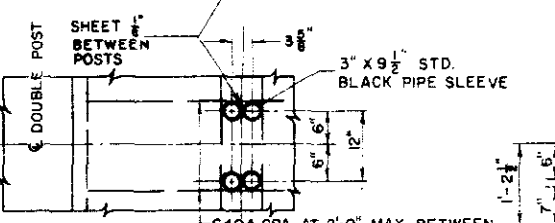
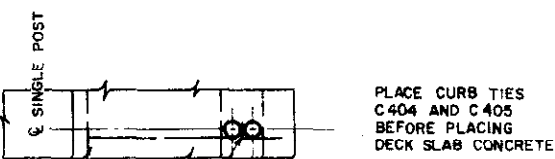
ANCHOR INSTALLATION

BAR LIST				
MARK	SIZE	SHAPE	NO. REQD	LENGTH
C401	4		68	40'-0"
C403	4		156	2'-9"
C404	4		180	6'-8 1/2"
C405	4		78	6'-5"
C501	5		312	1'-4"
D501	5		252	26'-4"
D601	6		504	35'-5"
D602	6		216	48'-4"
D603	6		108	58'-9"
T601	6		250	36'-8"
T602	6		125	27'-7"

BAR SUMMARY			
4860 L.F.	#4	AT 0.668 #/FT	= 3245
7050 L.F.	#5	AT 1.043 #/FT	= 7365
47,240 L.F.	#6	AT 1.502 #/FT	= 71,000
			TOTAL = 81,600

SUMMARY OF QUANTITIES			
SECTION	UNIT	ITEM	AMOUNT
403	TON	HBP (GR E)	58.180
411	GAL	LIQ ASPH. MATL (RC-800)	148.482
①509	L.S.	STR. STEEL	L.S.
②509	L.S.	STR. STEEL (GALV)	L.S.
210	LIN. FT.	RES. RAILING	375
513	EA.	DRAIN PIPE 4 IN (-4 FT)	36.28
601	CU. YD.	CONCRETE CL. A	137.414
602	LB.	REINF. STEEL	80,152
606	LIN. FT.	GD RAIL TY 3A (DOUBLE)	150
613	LIN. FT.	1/2 IN ELEC. CONDUIT	401.366

① DESIGN WEIGHT = 254,855 LB.  
 ② DESIGN WEIGHT = 2,865 LB.



BAR BENDING DETAILS

JEFFERSON ASSOCIATES  
 CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
 STATE OF COLORADO

SUPERSTRUCTURE  
 DETAILS

Across SO. PLATTE RIVER ON 6TH AVE.  
 Sta 54 + 95.41 TO 56 + 53.84  
 Near DENVER, Sec. 5 T. 4S. R. 68W

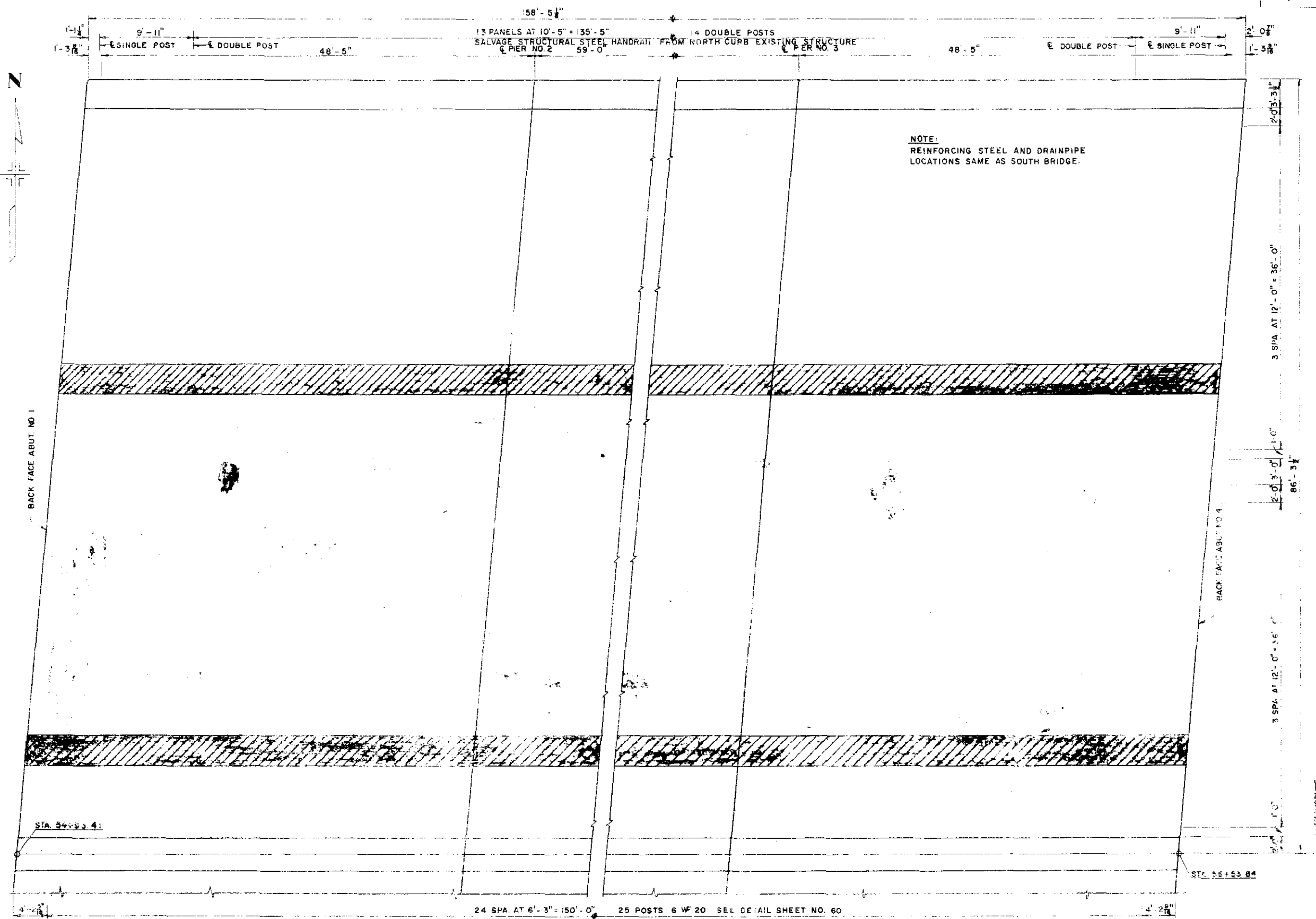
Designed by T.V.S. Approved by  
 Made by G.A.M. Bridge Engineer  
 Checked by G.D.C. Date: 19

STRUCTURE NO. NORTH F-16-EE  
 SOUTH F-16-EF

REVISIONS

REVISIONS

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U012-2(13)	34	



HIGHWAY  
C. H. 137

REV.	BY	DATE
ED 37		
ED 38		
ED 39		
ED 40		
ED 41		
ED 42		
ED 43		

JEFFERSON ASSOCIATES  
CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO

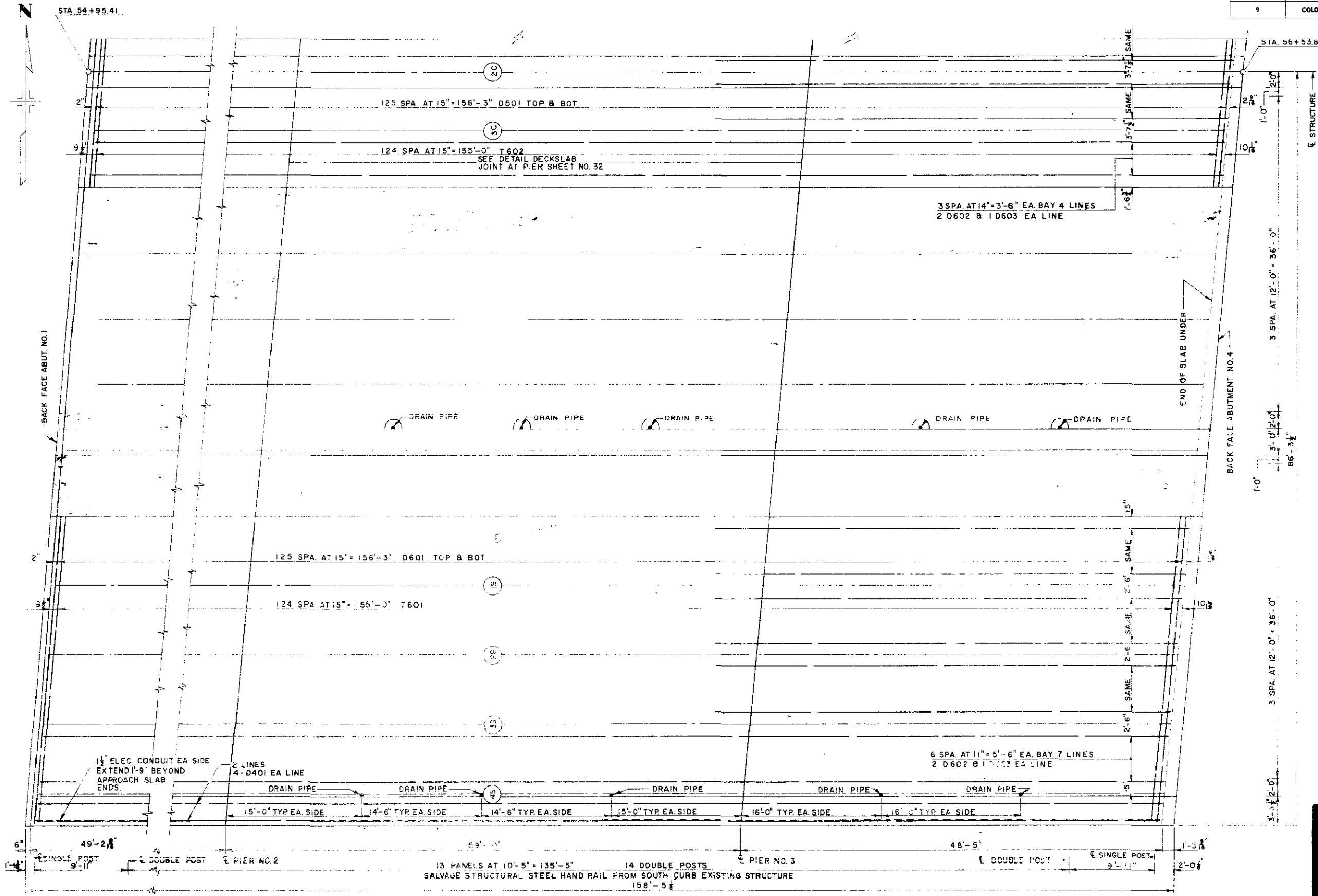
DECK PLAN  
NORTH BRIDGE

Across SOUTH PLATTE ON 6<sup>th</sup> AVE  
Sta. 54+93.41 TO 56+53.84  
Near DENVER Sec. 5 T. 4S. R. 68W

Designed by G.D.C. Approved by  
Made by FFJ Bridge Engineer  
Checked by T.V.S. Date: 19

STRUCTURE NO. NORTH F-16-EE  
SOUTH F-16-EF

FED. ROAD DIST. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	U 012 - 2(13)	35	



JEFFERSON ASSOCIATES  
CIVIL ENGINEERS

DEPARTMENT OF HIGHWAYS  
STATE OF COLORADO

DECK PLAN  
SOUTH BRIDGE

Across SOUTH PLATTE ON 6<sup>th</sup> AVE.  
Sta. 54+95.41 TO 56+53.84  
Near DENVER Sec. 5 T. 4S. R. 68W

Designed by GDC	Approved by
Made by R.L.	Bridge Engineer
Checked by T.V.S.	Date: 19

NORTH F-16-EE  
STRUCTURE NO. SOUTH F-16-EF