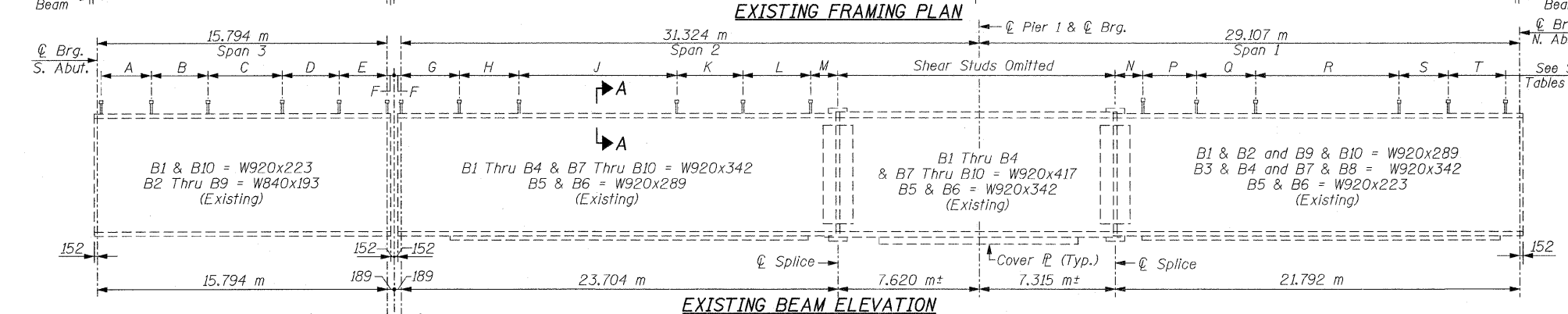
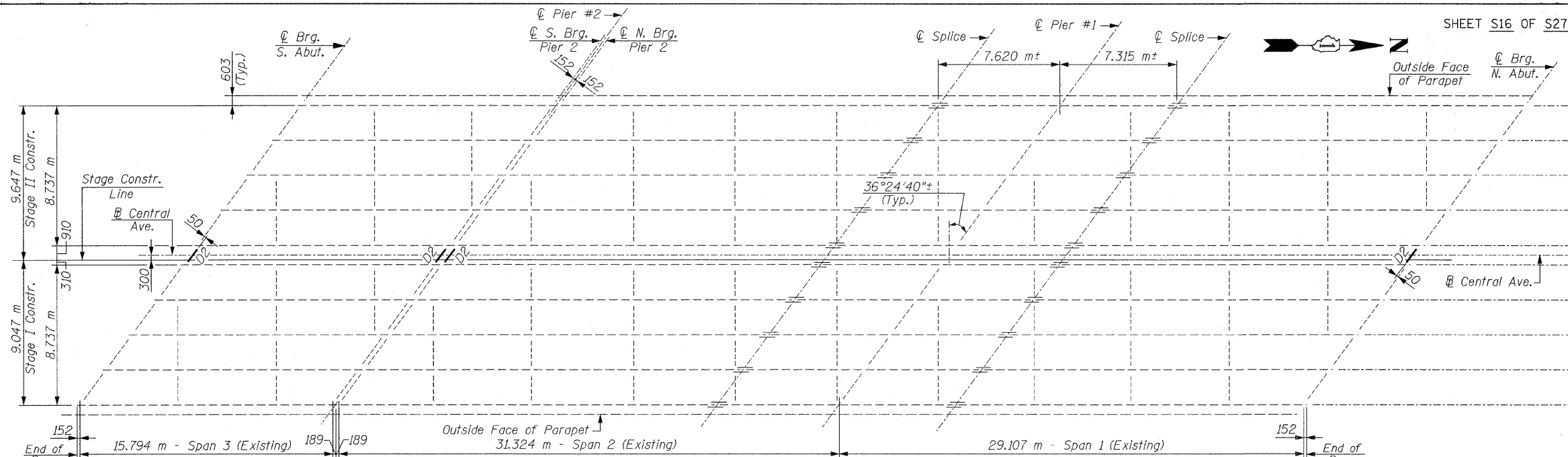


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90	1213B-1	COOK	94	63
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60640				



SHEAR STUD TABLES (EXISTING)

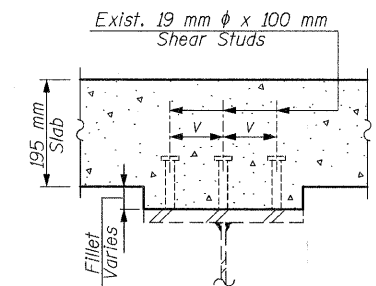
SOUTH ABUTMENT TO CL PIER 2																		
GIRDER	NO. OF STUDS	A			B			C			D			E			V	
		SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH		
GIRDER 1	116	9	305	2.743	6	457	2.743	8	606	4.850	6	457	2.743	9	305	2.743	0.152	89
GIRDER 2	128	9	279	2.515	8	381	3.048	8	587	4.696	8	381	3.048	9	279	2.515	0.152	89
GIRDER 3	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 4	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 5	116	9	330	2.972	6	432	2.591	8	587	4.696	6	432	2.591	9	330	2.972	0.152	89
GIRDER 6	116	9	330	2.972	6	432	2.591	8	587	4.696	6	432	2.591	9	330	2.972	0.152	89
GIRDER 7	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 8	218	18	178	3.200	12	229	2.743	12	327	3.934	12	229	2.743	18	178	3.200	0.152	89
GIRDER 9	128	9	279	2.515	8	381	3.048	8	587	4.696	8	381	3.048	9	279	2.515	0.152	89
GIRDER 10	116	9	305	2.743	6	457	2.743	8	606	4.850	6	457	2.743	9	305	2.743	0.152	89

CL PIER 2 TO CL SPLICE																		
GIRDER	NO. OF STUDS	G			H			J			K			L			V	
		SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH		
GIRDER 1	167	12	305	3.658	8	457	3.658	15	610	9.144	8	457	3.658	12	235	2.819	0.821	83
GIRDER 2	197	18	279	5.029	13	381	4.953	10	533	5.334	12	406	4.877	12	229	2.743	0.818	83
GIRDER 3	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 4	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 5	146	12	381	4.572	9	508	4.572	13	584	7.594	6	533	3.200	8	403	3.226	0.589	95
GIRDER 6	146	12	381	4.572	9	508	4.572	13	584	7.594	6	533	3.200	8	403	3.530	0.589	95
GIRDER 7	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 8	260	24	203	4.877	18	279	5.029	15	381	5.715	14	305	4.267	15	203	3.048	0.816	83
GIRDER 9	197	18	279	5.029	13	381	4.953	10	533	5.334	12	406	4.877	12	229	2.743	0.818	83
GIRDER 10	167	12	305	3.658	8	457	3.658	15	610	9.144	8	457	3.658	12	235	2.819	0.821	83

CL SPLICE TO NORTH ABUTMENT																			
GIRDER	NO. OF STUDS	N			P			Q			R			S			TOTAL STUDS		
		LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA	LENGTH	SPCS	SPA		LENGTH	
GIRDER 1	149	0.691	9	314	2.829	8	457	3.658	12	610	7.315	8	457	3.658	12	305	3.658	95	432
GIRDER 2	176	0.672	12	298	3.581	9	406	3.658	8	559	4.470	13	381	4.953	16	279	4.470	95	501
GIRDER 3	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 4	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 5	140	0.572	8	375	2.997	6	533	3.200	9	610	5.486	9	508	4.572	14	356	4.978	95	402
GIRDER 6	140	0.572	8	375	2.997	6	533	3.200	9	610	5.486	9	508	4.572	14	356	4.978	95	402
GIRDER 7	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 8	233	0.813	13	225	2.931	10	305	3.048	15	381	5.715	18	279	5.029	21	203	4.267	83	711
GIRDER 9	176	0.672	12	298	3.581	9	406	3.658	8	559	4.470	13	381	4.953	16	279	4.470	95	501
GIRDER 10	149	0.691	9	314	2.829	8	457	3.658	12	610	7.315	8	457	3.658	12	305	3.658	95	432

ALL DIMENSIONS ARE IN MILLIMETERS (mm), EXCEPT AS SHOWN.
ALL LENGTHS ARE IN METERS (m).

NOTES:
All information shown in the existing beam elevation and in the shear stud tables is from the original steel fabrication drawings dated 1958.
If the number and spacing of shear studs differs from those shown in the shear stud tables, if the Contractor damage any shear studs during the removal of the concrete deck or if any of the existing shear studs are corroded or damaged, the Contractor must install new shear studs, the new shear studs must match existing type, size, amount and spacing of the existing shear studs and in no case should the spacing be any larger than the spacing shown in the shear stud tables.
Existing shear studs are to be completely cleaned of any debris.
Cost for the above work as described is to be included with "Removal of Existing Concrete Deck".



SECTION A-A
SHEAR CONNECTOR DETAIL
For dimensions "V", see Shear Stud Tables (this Sheet)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN & DETAILS
CENTRAL AVENUE (F.A.U. RTE. 2798)
OVER
INTERSTATE 90 (KENNEDY EXPWY.) & C.T.A.
F.A.I. RTE. 90 SECTION: 1213B-1
COOK COUNTY STATION 1+000.000
STRUCTURE NO. 016-0659
SCALE: NONE DRAWN BY: D.L./J.M.
DATE: JANUARY 16, 2009 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS