06-12-2015 LETTING ITEM 230

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-000164-00-BR	COOK	122	1
	ILLINOIS	CONTRACT NO. 61B58		

DESIGN DESIGNATION

LOCAL STREET, (URBAN)
DIVISION ST. (MS 1090)

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF BRIDGE REHABILITATION OF THE DIVISION ST. BRIDGE OVER THE CAL SAG CHANNEL.

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

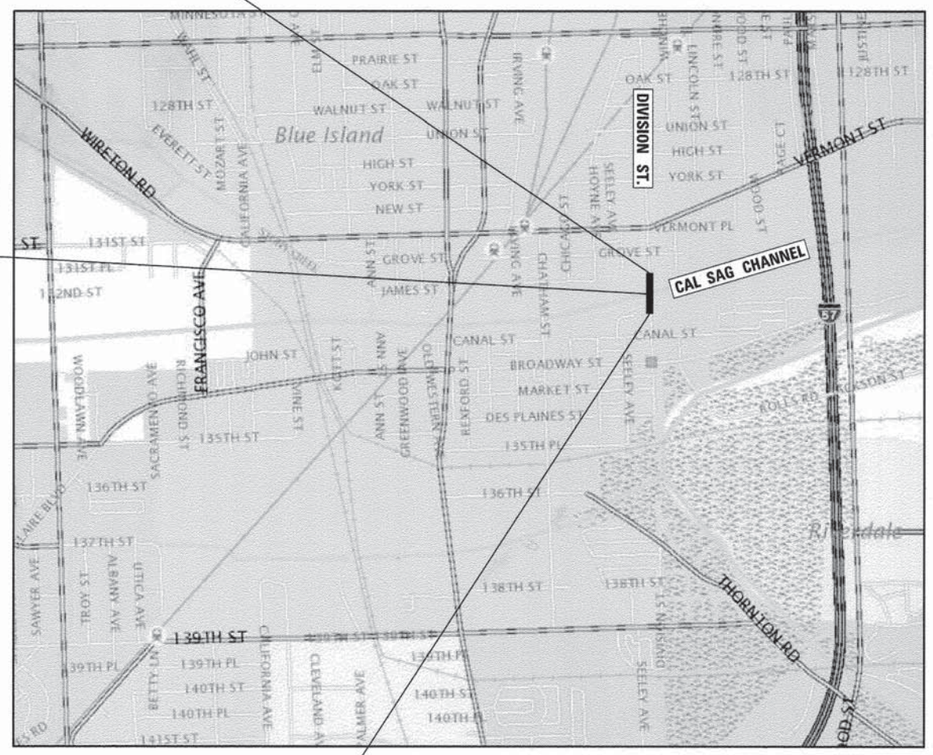
DIVISION ST. (MS 1090)
OVER THE CAL SAG CHANNEL
BRIDGE REHABILITATION
SECTION 14-00164-00-BR
PROJECT: BROS-4003(501)
CITY OF BLUE ISLAND
COOK COUNTY
JOB NO: C-91-317-15

LOCATION OF SECTION INDICATED THUS: –

END PROJECT
DIVISION STREET
STA 9+91.90

R 14 E 3rd PM

T 37 N



N

EXISTING SN: 016-5005 STA. 7+16.01
4-SPAN STRUCTURE, APPROACH SPANS ARE REINFORCED CONC. DECK ON STEEL GIRDERS. MAIN SPAN IS STEEL TRUSS.

TRAFFIC DATA

2014 ADT = 0
POSTED SPEED LIMIT = 20 MPH

100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT MANAGER:

CONTRACT NO. 61B58

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

BEGIN PROJECT
DIVISION STREET
STA 4+97.34

CALUMET TOWNSHIP
LOCATION MAP
SCALE 1" = 1000'

GROSS AND NET LENGTH OF PROJECT = 495 FEET=0.09 MI.

FEDERAL AID PROGRAM ENGINEER: FAWAD AQUEEL, P.E. (847) 705-4021 SCHAUMBURG, IL

BRAD L. J. NOAK
062-061264
REGISTERED PROFESSIONAL ENGINEER
OF ILLINOIS
DATE: 3/19/2015
SEAL EXPIRES: 11/30/2015
SHEETS: 1-9A

PATRICIA K. BARKER
62-51255
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
DATE: 3/20/2015
SEAL EXPIRES: 11/30/2015
SHEETS: 10-15

ANDREW W. MCKENNA
#062-053691
REGISTERED PROFESSIONAL ENGINEER OF THE
STATE OF ILLINOIS
DATE: 3/20/2015
SEAL EXPIRES: 11/30/2015
SHEETS: 16-17

OREN SKUDELSKY
062-053782
REGISTERED PROFESSIONAL ENGINEER OF
ILLINOIS
DATE: 3/20/2015
SEAL EXPIRES: 11/30/2015
SHEETS: 18-27

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED March 20 20 15
Domingo F. Vargos
CITY OF BLUE ISLAND, MAYOR

PASSED April 10 2015
Christopher Holt
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW April 10 20 15
John Fortmann for
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420101-05	24' (7.2M) JOINTED PCC PAVEMENT
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATES FOR BRIDGES
606001-06	CONCRETE CURB TYPE B AND COMBINATION CURB AND GUTTER
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
812001	RACEWAY EMBEDDED IN STRUCTURE
814001-03	HANDHOLES

COMMITMENTS

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING TREES WITHIN THE CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED ON THE PLANS.

2. THE CONTRACTOR SHALL CONTACT THE US COAST GUARD THIRTY (30) DAYS PRIOR TO THE START OF ANY WORK THAT TEMPORARILY ALTERS THE NAVIGATIONAL CLEARANCES OF THE BRIDGE OR PLACES EQUIPMENT IN OR OVER THE WATERWAY THAT MAY IMPEDE NAVIGATION. SEE SPECIAL PROVISIONS FOR DETAILS. THE CONTACT PERSON IS AS FOLLOWS:

   DISTRICT COMMANDER
   SCOT STRIFFLER, BRIDGE PROGRAM MANAGER
   UNITED STATES COAST GUARD
   NINTH U.S. COAST GUARD DISTRICT
   1240 EAST NINTH STREET
   CLEVELAND, OH 44199
   PHONE: (216) 902-6085

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENTS SET FORTH IN "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012; THE "SUPPLEMENTAL SPECIFICATIONS & RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2015; SPECIAL PROVISIONS AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.

2. BEFORE STARTING ANY EXCAVATIONS, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

3. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES; IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE COUNTY.

4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF BLUE ISLAND.

5. ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN. NO EQUIPMENT, MATERIALS OR A YARD OR FIELD OFFICE SHALL BE SET UP OR STORED ON CITY OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE CITY OR THE PROPERTY OWNER.

6. ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING OR SODDING SHALL BE CONSTRUCTED TO 4 IN BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.

7. PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES FOR THE PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

8. IF THE CONTRACTOR CHOOSES TO DISPOSE OF UNCONTAMINATED SOIL OR UNCONTAMINATED SOIL MIXED WITH CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) AT A CCDD FILL OPERATION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL NECESSARY FIELD AND LABORATORY ANALYSIS AND TO OBTAIN THE LICENSED PROFESSIONAL ENGINEER'S CERTIFICATION REQUIRED AS PER PUBLIC ACT 96-1416 TO USE THE SITE. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

9. UTILITIES CONTACTS:

   J.U.L.I.E.
   JOINT UTILITY LOCATION FOR EXCAVATORS
   (800) 892-0123 OR 811

   CITY OF BLUE ISLAND PUBLIC WORKS
   ROBERT HOULF
   3153 WIRETON ROAD
   BLUE ISLAND, IL 60406
   (708) 595-5442

   NICOR GAS
   BRUCE KOPPANG
   1844 FERRY ROAD
   NAPERVILLE, IL 60563
   (630) 388-3046

   COMMONWEALTH EDISON ELECTRIC COMPANY
   BRAD SHINABARGAR
   25000 S. GOVERNORS HIGHWAY
   UNIVERSITY PARK, IL 60466
   (708) 235-2692

I:\CHI\PRJ\000203634\Civil\CADD\3634 Index Sht.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - BJN	REVISED	
FILE NAME = 3634 Index Sht.dgn	DRAWN - PRR	REVISED	
PLOT SCALE =	CHECKED - BJN	REVISED	
PLOT DATE =	DATE - 3/16/2015	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES
STRUCTURE NO. 016-5005

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	2
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

				CONSTRUCTION CODE			
				URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
• 20800150	TRENCH BACKFILL	CU YD	44	28		16	
20900110	POROUS GRANULAR BACKFILL	CU YD	127		127		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	284	284			
25000210	SEEDING, CLASS 2A	ACRE	0.1	0.1			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	5	5			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	5	5			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	5	5			
25100115	MULCH, METHOD 2	ACRE	0.1	0.1			
25100630	EROSION CONTROL BLANKET	SQ YD	284	284			
28000400	PERIMETER EROSION BARRIER	FOOT	318	318			
28000510	INLET FILTERS	EACH	4	4			
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	10	10			
28100107	STONE RIPRAP, CLASS A4	SQ YD	640		640		

• DENOTES SPECIALTY ITEM

I:\CH\PRJ\08008036341\Civil\CADD\3634 SOQ.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - BJN	REVISED
FILE NAME = 3634 SOQ.dgn		DRAWN - PRR	REVISED
PLOT SCALE =		CHECKED - BJN	REVISED
PLOT DATE =		DATE - 3/16/2015	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
STRUCTURE NO. 016-5005

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	3
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

				CONSTRUCTION CODE			
				URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	232	232			
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	184	184			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	1,345	1,345			
44000100	PAVEMENT REMOVAL	SQ YD	184	184			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	248	248			
44000600	SIDEWALK REMOVAL	SQ FT	1,345	1,345			
50102400	CONCRETE REMOVAL	CU YD	94.4		94.4		
50104650	SLOPE WALL REMOVAL	SQ YD	494		494		
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1		
50157300	PROTECTIVE SHIELD	SQ YD	1,970		1,970		
50200100	STRUCTURE EXCAVATION	CU YD	221		221		
50300225	CONCRETE STRUCTURES	CU YD	92.2		92.2		
50300260	BRIDGE DECK GROOVING	SQ YD	1,340		1,340		

• DENOTES SPECIALTY ITEM

I:\CH\PRJ\0000036341\Civil\GADD\3634 S00.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - BJN	REVISED
FILE NAME = 3634 S00.dgn		DRAWN - PRR	REVISED
PLOT SCALE =		CHECKED - BJN	REVISED
PLOT DATE =		DATE - 3/16/2015	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
STRUCTURE NO. 016-5005

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	4
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		

				CONSTRUCTION CODE			
				URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
50300300	PROTECTIVE COAT	SQ YD	2,217		2,217		
50401205	PRECAST CONCRETE CAPS	EACH	3		3		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1		
50500505	STUD SHEAR CONNECTORS	EACH	9,676		9,676		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	205,950		205,950		
50800515	BAR SPLICERS	EACH	66		66		
50800530	MECHANICAL SPLICERS	EACH	72		72		
* 50900200	STEEL RAILING, TYPE 2399	FOOT	607		607		
51500100	NAME PLATES	EACH	1		1		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	196		196		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	7		7		
52100505	ANCHOR BOLTS, 5/8"	EACH	78		78		
52100520	ANCHOR BOLTS, 1"	EACH	16		16		

* DENOTES SPECIALTY ITEM

I:\CHI\PRJ\00002634\Civil\CADD\3634 SQQ.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - BJN	REVISED	
FILE NAME = 3634 SQQ.dgn	DRAWN - PRR	REVISED	
PLOT SCALE =	CHECKED - BJN	REVISED	
PLOT DATE =	DATE - 3/16/2015	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
STRUCTURE NO. 016-5005

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	5
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

					CONSTRUCTION CODE		
				URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
• 56103200	DUCTILE IRON WATER MAIN 10"	FOOT	970				970
58700300	CONCRETE SEALER	SQ FT	2,867		2,867		
59000200	EPOXY CRACK INJECTION	FOOT	45		45		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	85		85		
60255500	MANHOLES TO BE ADJUSTED	EACH	6	6			
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	248	248			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	13	13			
67100100	MOBILIZATION	L SUM	1	1			
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1,020	1,020			
• 81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	294	186		108	
• 81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	936	600		336	
• 81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	555			555	
• 81200100	CONDUIT EMBEDDED IN STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	30	30			

• DENOTES SPECIALTY ITEM

I:\CH1\PRJ\0000003634\Civil\CADD\3634 SQQ.dgn

					CONSTRUCTION CODE			
					URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
• 81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	39			39	
• 81300310	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 6" X 4"	EACH	6	6			
• 81300600	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 8" X 6"	EACH	14			14	
• 81302200	JUNCTION BOX, CAST IRON, ATTACHED TO STRUCTURE, 10" X 8" X 6"	EACH	8			8	
• 81400710	HEAVY-DUTY HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2			2	
• 81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	3,672	2,448		1,224	
• 81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	730			730	
• 81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,460			1,460	
• 82200605	WATERWAY OBSTRUCTION WARNING LUMINAIRE, LED	EACH	6	6			
• 84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	4			4	
X0300062	GRAFFITI REMOVAL	SQ YD	62			62	
* X0300864	MAINTENANCE OF NAVIGATION	L SUM	1	1			
X0321865	ANTI-GRAFFITI PROTECTION SYSTEM	SQ FT	5,521			5,521	

• DENOTES SPECIALTY ITEM

I:\CH\PRJ\080080363A\Civil\CADD\3634 S00.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - BJN	REVISED	
FILE NAME = 3634 S00.dgn	DRAWN - PRR	REVISED	
PLOT SCALE =	CHECKED - BJN	REVISED	
PLOT DATE =	DATE - 3/16/2015	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
STRUCTURE NO. 016-5005

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	7
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
					URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
					ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
*	X0326331	CLEANING AND PAINTING BEARINGS	EACH	4		4		
•	X5610651	ABANDON EXISTING WATER MAIN, FILL WITH CLSM	FOOT	155				155
•	X5610710	WATER MAIN REMOVAL, 10"	FOOT	500				500
•	X5630010	CUT AND CAP EXISTING 10" WATER MAIN	EACH	2				2
•	XX003037	DUCTILE IRON FITTINGS AND ACCESSORIES	POUND	2,500				2,500
•	XX003402	WATER MAIN INSULATION	FOOT	906				906
•	XX005206	EXPLORATORY EXCAVATION	FOOT	40				40
•	XX007776	REMOVE AND ABANDON VALVE BOX	EACH	2				2
•	XX008156	LINE STOPS	EACH	4				4
•	XX008196	TRENCH BACKFILL, WATER MAIN, SPECIAL	FOOT	330				330
	Z0001903	STRUCTURAL STEEL REMOVAL	POUND	166,220		166,220		
	Z0001905	STRUCTURAL STEEL REPAIR	POUND	310		310		
	Z0003802	REMOVAL OF EXISTING BEARINGS	EACH	23		23		

• DENOTES SPECIALTY ITEM

I:\CHI\PRJ\0808083634\Civil\CADD\3634 SOQ.dgn

					CONSTRUCTION CODE			
					URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY		ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
Z0004552	APPROACH SLAB REMOVAL	SQ YD	200			200		
Z0005880	BRIDGE HANDRAIL REMOVAL	FOOT	779			779		
* Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1			1		
* Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1			1		
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH < 5 INCHES)	SQ FT	175			175		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1			
Z0018004	DRAINAGE SCUPPERS, DS-12	EACH	8			8		
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FT	144			144		
Z0073500	TEMPORARY SUPPORT SYSTEM	L SUM	1			1		
• XX009038	10"X10" TAPPING SLEEVE AND 10" DIA. VALVE IN 60" DIA. VALVE VAULT, TYPE 1 FRAME, CLOSED LID	EACH	2					2
• XX009039	10"X10" TAPPING SLEEVE AND 10" DIA. VALVE IN VALVE BOX	EACH	2					2
• XX009040	CUT AND CAP TEMPORARY 10" WATER MAIN	EACH	4					4
• XX009041	EBBA EX-TEND 200	EACH	2					2

• DENOTES SPECIALTY ITEM

J:\CH1\PRJ\0000083634\Civil\CADD\3634 SQQ.dgn

LOCHNER					
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - BJN	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES STRUCTURE NO. 016-5005
	FILE NAME = 3634 SQQ.dgn	DRAWN - PRR	REVISED		
	PLOT SCALE =	CHECKED - BJN	REVISED		
	PLOT DATE =	DATE - 3/16/2015	REVISED		

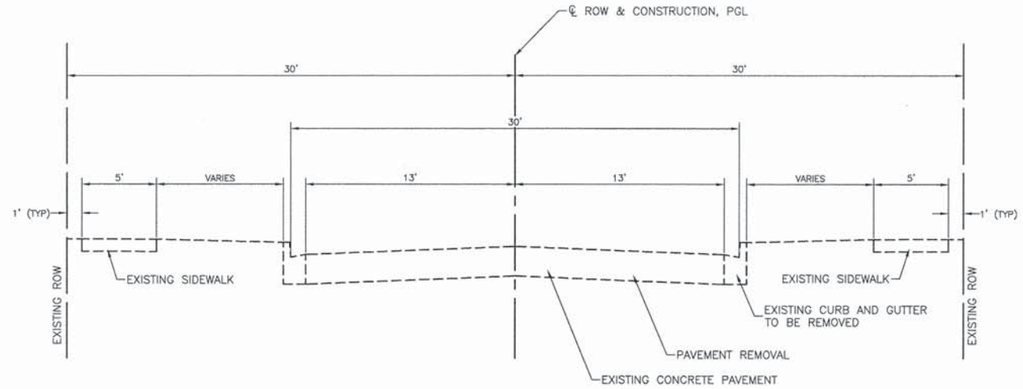
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	9
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

				CONSTRUCTION CODE			
				URBAN - 80% FEDERAL, 20% STATE		100% VILLAGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	STRUCTURAL 0014	LIGHTING 0021	UTILITIES 0043
• XX009042	EBBA FLEX-TEND JOINT ASSEMBLY	EACH	2				2
* X5091725	BICYCLE RAILING (SPECIAL)	FOOT	779		779		
* XX001249	ORNAMENTAL FENCE	FOOT	113		113		
XX009043	HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE	CU YD	690.0		690.0		
• XX002063	LIGHTING SYSTEM COMPLETE	L SUM	1	1			

• DENOTES SPECIALTY ITEM

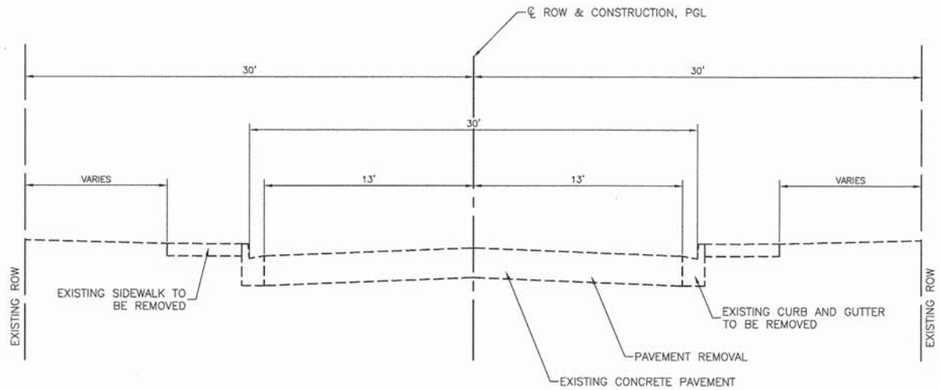
I:\CHI\PRJ\020203634\Civil\CADD\3634 SOQ.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - BJN	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES STRUCTURE NO. 016-5005	MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME = 3634 SOQ.dgn	DRAWN - PRR	REVISED			1090	14-00164-00-BR	COOK	122	9A
	PLOT SCALE =	CHECKED - BJN	REVISED						CONTRACT NO. 61B58	
	PLOT DATE =	DATE - 3/16/2015	REVISED					ILLINOIS FED. AID PROJECT		



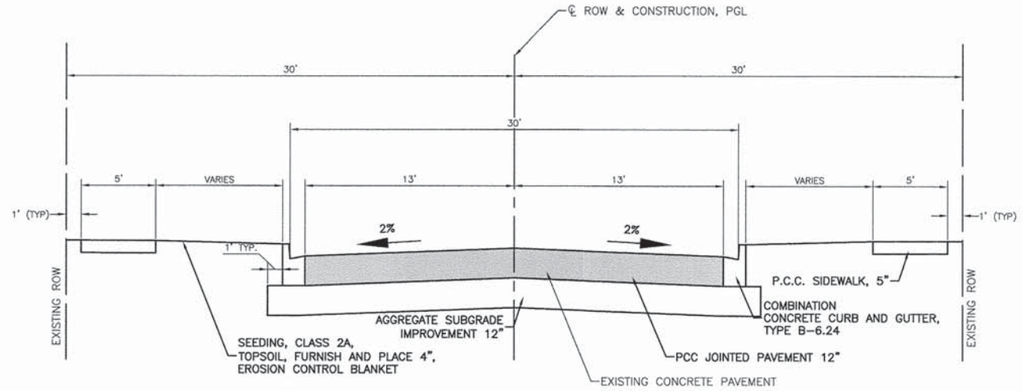
EXISTING TYPICAL SECTION

NORTH APPROACH - LOOKING NORTH
STA. 9+13.15 TO STA. 9+91.90
BRIDGE OMISSION STA. 5+41.79 TO STA. 9+13.15



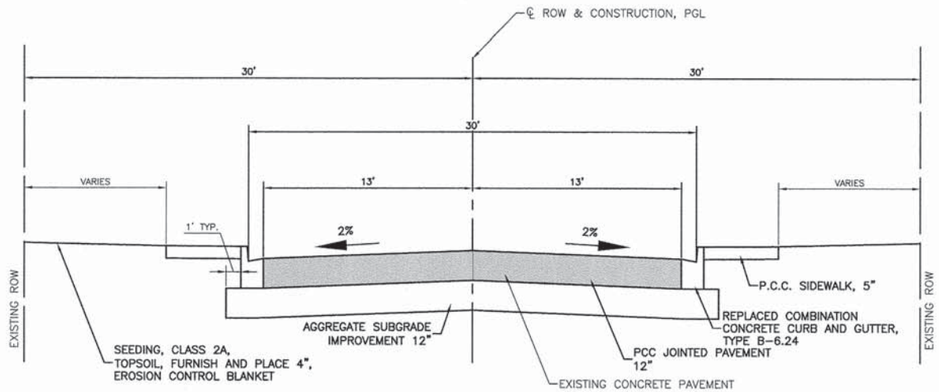
EXISTING TYPICAL SECTION

SOUTH APPROACH - LOOKING NORTH
STA. 4+97.34 TO STA. 5+41.79
BRIDGE OMISSION STA. 5+41.79 TO STA. 9+13.15



PROPOSED TYPICAL SECTION

NORTH APPROACH - LOOKING NORTH
STA. 9+43.15 TO STA. 9+91.90
SEE NOTE 1.



PROPOSED TYPICAL SECTION

SOUTH APPROACH - LOOKING NORTH
STA. 4+97.34 TO STA. 5+12.29
SEE NOTE 1.

NOTES:

1. FOR PROPOSED SECTIONS IN BRIDGE OMISSION (STA. 5+41.79 TO STA. 9+13.15), SOUTH APPROACH SLAB (STA. 5+12.29 TO STA. 5+41.79), AND NORTH APPROACH SLAB (STA. 9+13.15 TO STA. 9+43.15) SEE "STRUCTURAL SHEETS".

Robinson ENGINEERING

USER NAME =	DESIGNED — PKB/JPH	REVISED —
	CHECKED — PKB	REVISED —
PLOT SCALE =	DRAWN — L.T.L.	REVISED —
PLOT DATE = 01-20-15	CHECKED — G.A.K.	REVISED —

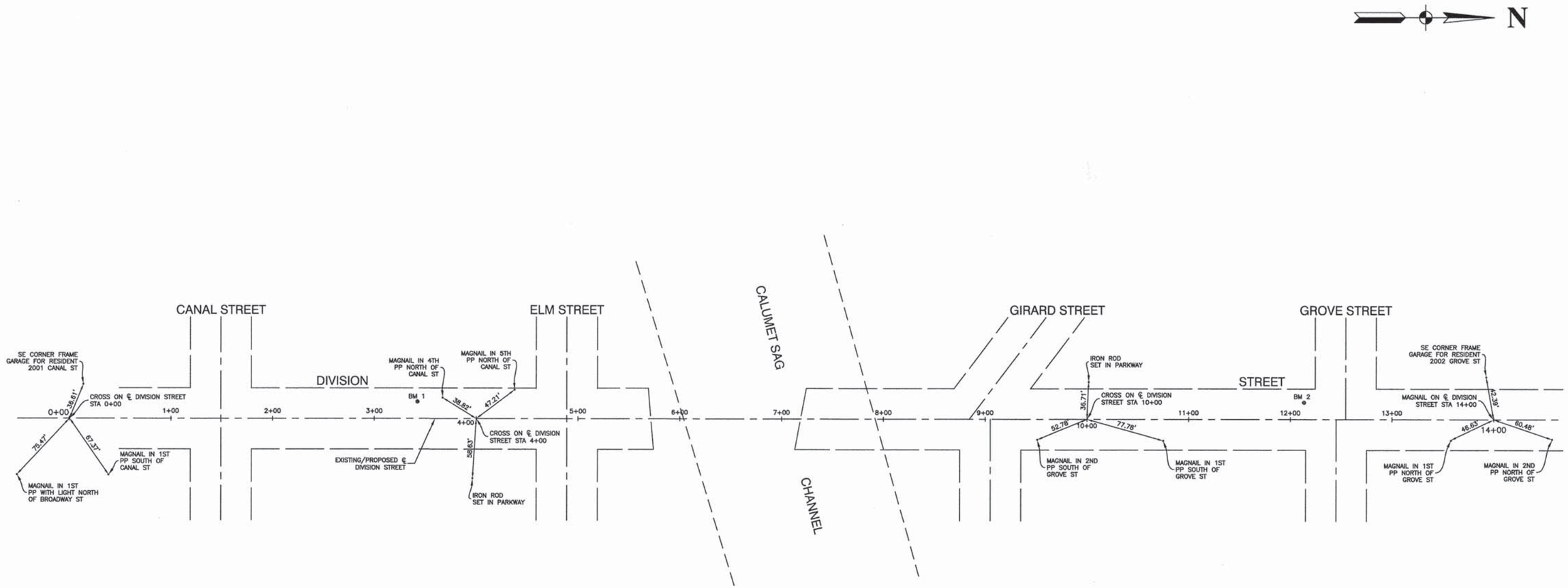
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVIVSION STREET BRIDGE STRUCTURE NO. 016-5005
BLUE ISLAND, ILLINOIS
TYPICAL CROSS SECTIONS

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	10
		CONTRACT NO. 61B58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SECTION 31, TOWNSHIP 37, RANGE 14



BENCHMARK 1
CHISELLED SQUARE ON EAST SIDE OF CONC. BASE OF ALUMINUM LIGHT POLE ON WEST SIDE OF DIVISION STREET, SECOND LIGHT POLE NORTH OF CANAL STREET
STA. = 3+42.46, OFFSET = 16.57' LEFT
ELEV. = 596.45

BENCHMARK 2
CHISELLED SQUARE ON EAST SIDE OF CONC. BASE OF ALUMINUM LIGHT POLE AT SW CORNER OF DIVISION STREET AND GROVE STREET
STA. = 12+13.40, OFFSET = 16.60' LEFT
ELEV. = 589.00

PROJECT DATUM:
ILLINOIS STATE PLANE COORDINATES,
HORIZONTAL – NAD83, VERTICAL – NAVD88

PLAN: SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — CADD FILE NAME — NOTE BOOK — NO. — BY — DATE

PROFILE: SURVEYED — PLOTTED — GRADES CHECKED — B.M. NOTED — NOTE BOOK — BY — DATE

Robinson ENGINEERING	USER NAME =	DESIGNED — PKB/JPH	REVISED —
		CHECKED — PKB	REVISED —
	PLOT SCALE =	DRAWN — L.T.L.	REVISED —
	PLOT DATE = 01-20-15	CHECKED — G.A.K.	REVISED —

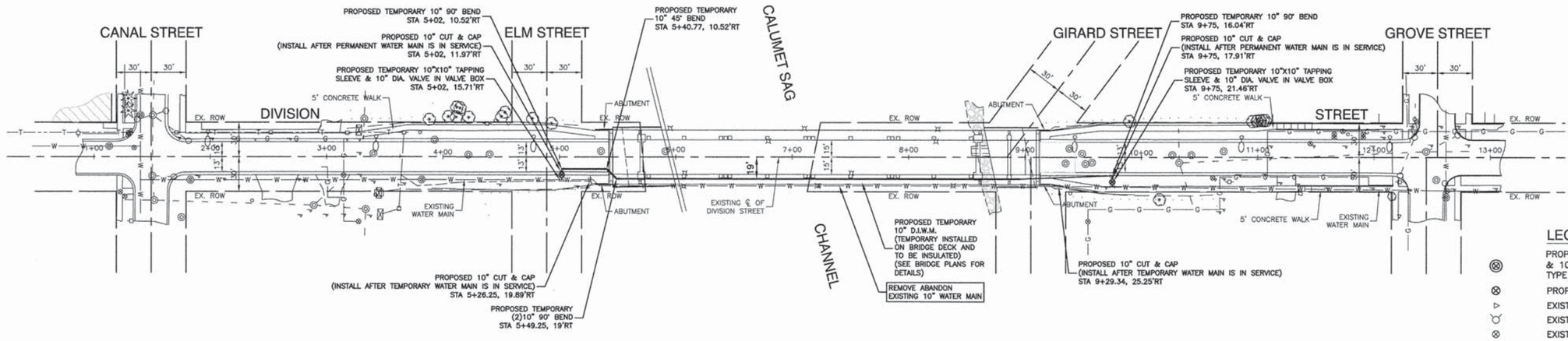
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVIVSION STREET BRIDGE
BLUE ISLAND, ILLINOIS
ALIGNMENT, TIES & BENCHMARKS

SCALE: 1"=50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	11
		CONTRACT NO. 61B58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SECTION 31, TOWNSHIP 37, RANGE 14



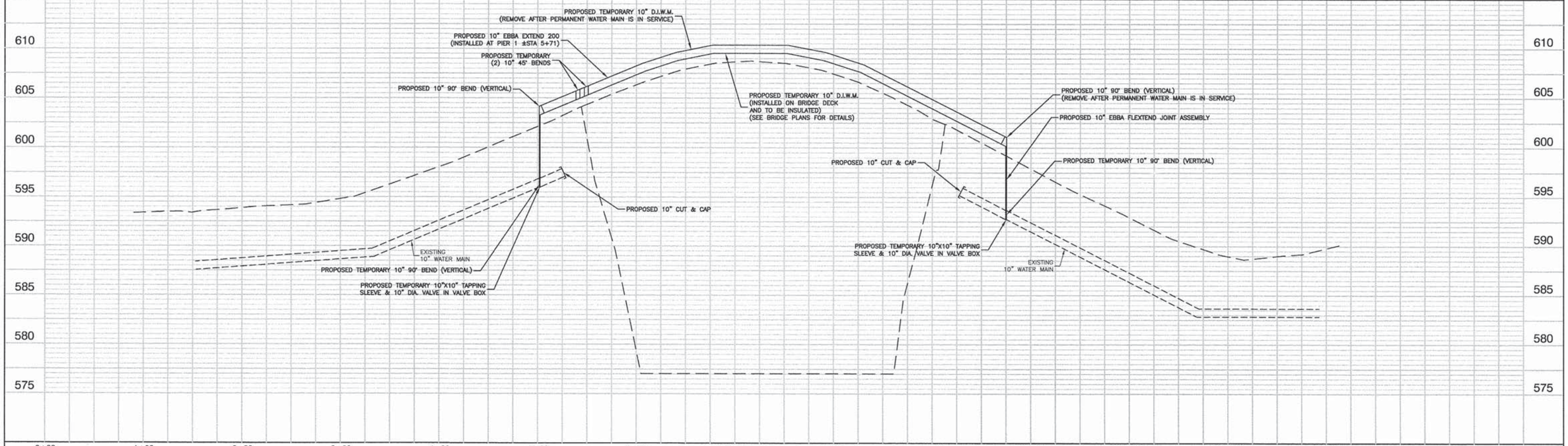
NOTE: FOR WATER MAIN CONNECTION DETAILS ON BRIDGE SEE "STRUCTURAL SHEETS"

LEGEND

- PROPOSED 10"X10" TAPPING SLEEVE & 10" DIA. VALVE IN 60" DIA. VALVE VAULT, TYPE 1 FRAME, CLOSED LID
- PROPOSED WATER VALVE IN BOX
- EXISTING BUFFALO BOX
- EXISTING HYDRANT
- EXISTING VALVE BOX
- CUT AND CAP EXISTING WATER MAIN
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING GAS MAIN
- EXISTING OVERHEAD TELEPHONE
- EXISTING UNDERGROUND TELEPHONE
- PROPOSED WATER MAIN

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME / NOTE BOOK / NO. / BY / DATE

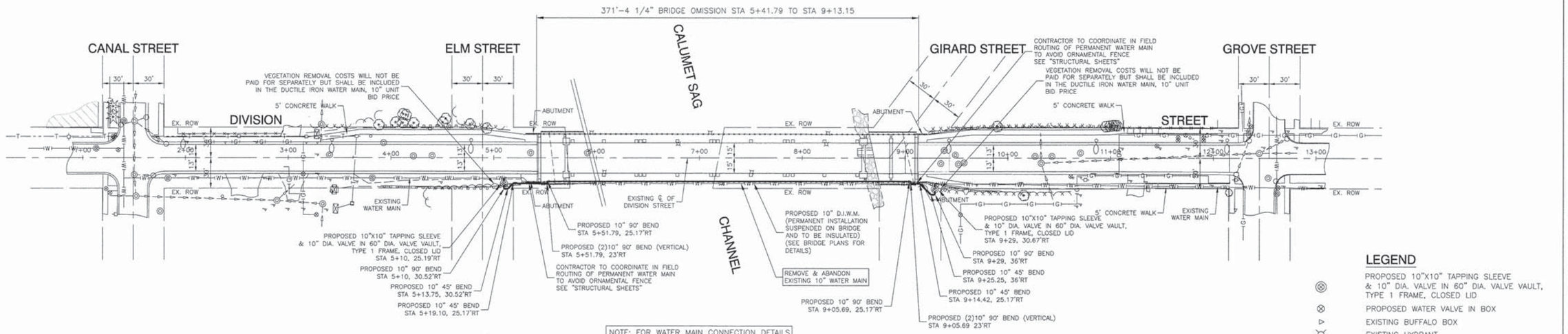
PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / NOTE BOOK / BY / DATE



Robinson ENGINEERING	USER NAME =	DESIGNED — PKB/GAK	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIVIVSION STREET BRIDGE BLUE ISLAND, ILLINOIS TEMPORARY WATER MAIN PLAN AND PROFILE
	PLOT SCALE =	CHECKED — PKB	REVISED —		SCALE: 1"=50' / SHEET NO. OF SHEETS / STA. TO STA.
	PLOT DATE = 01-20-15	DRAWN — L.T.L.	REVISED —		
		CHECKED — G.A.K.	REVISED —		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	12
		CONTRACT NO. 61B58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SECTION 31, TOWNSHIP 37, RANGE 14



N

NOTE: FOR WATER MAIN CONNECTION DETAILS ON BRIDGE SEE "STRUCTURAL SHEETS"

NOTE: CONTRACTOR IS RESPONSIBLE THAT PIPE JOINTS FOR WATER MAIN INSTALLED ON THE BRIDGE DO NOT CONFLICT WITH PIPE HANGER BRACKET LOCATIONS.

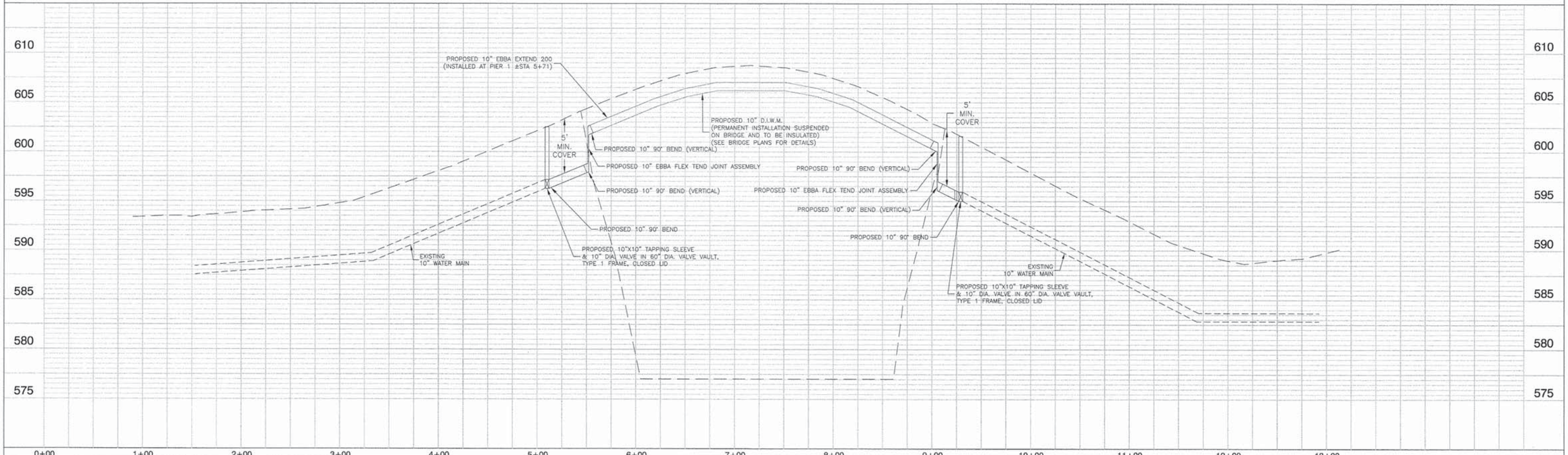
NOTE: CONTRACTOR SHALL FIELD VERIFY LOCATION OF TAPPING SLEEVES. IF CONDITIONS ARE DIFFERENT AS SHOWN ON THE PLANS CONTRACTOR SHALL NOTIFY ENGINEER BEFORE PROCEEDING

LEGEND

- PROPOSED 10"X10" TAPPING SLEEVE & 10" DIA. VALVE IN 60" DIA. VALVE VAULT, TYPE 1 FRAME, CLOSED LID
- PROPOSED WATER VALVE IN BOX
- EXISTING BUFFALO BOX
- EXISTING HYDRANT
- EXISTING VALVE BOX
- CUT AND CAP EXISTING WATER MAIN
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING GAS MAIN
- EXISTING OVERHEAD TELEPHONE
- EXISTING UNDERGROUND TELEPHONE
- PROPOSED WATER MAIN

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, NOTE BOOK, BY, DATE

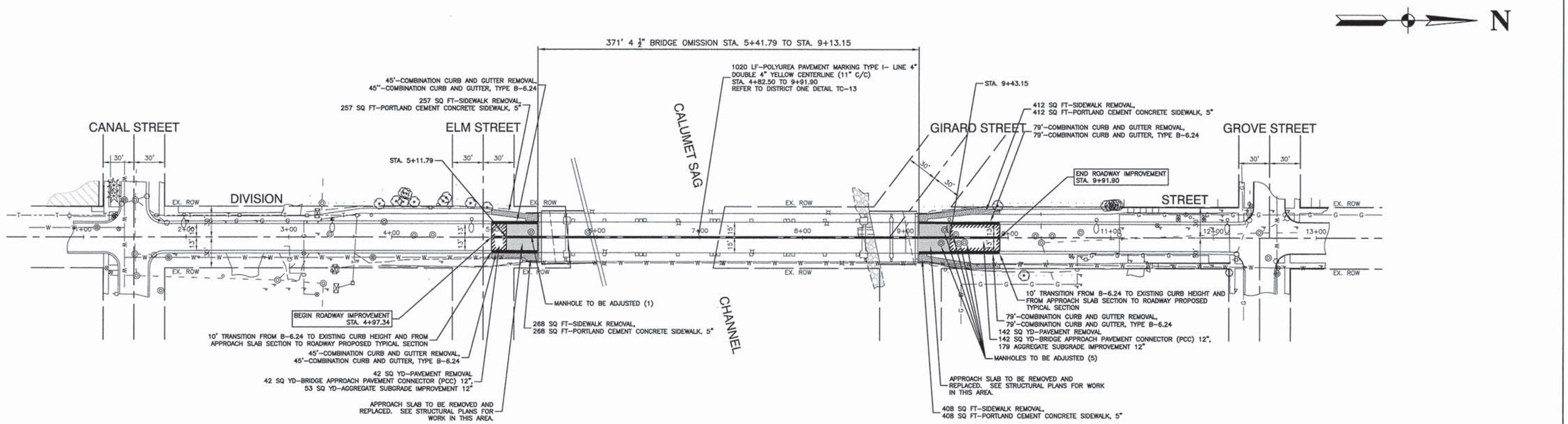


Robinson ENGINEERING	USER NAME =	DESIGNED — PKB/GAK	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIVIVSION STREET BRIDGE BLUE ISLAND, ILLINOIS PERMANENT WATER MAIN PLAN AND PROFILE
		CHECKED — PKB	REVISED —		
	PLOT SCALE =	DRAWN — L.T.L.	REVISED —		
	PLOT DATE = 01-20-15	CHECKED — G.A.K.	REVISED —		SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

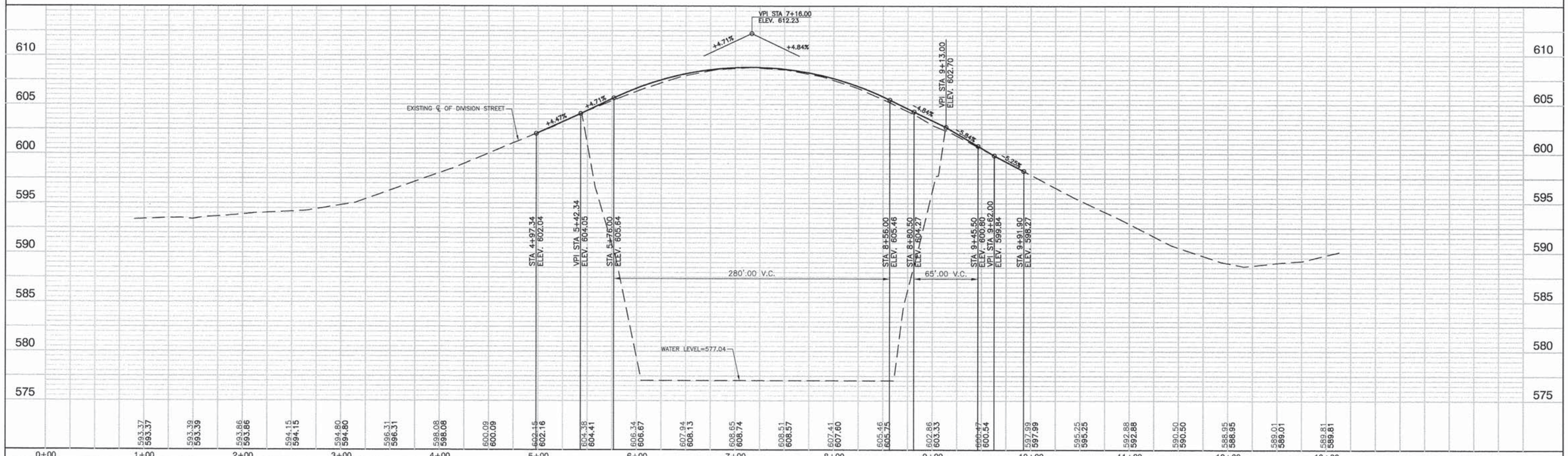
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	13
		CONTRACT NO. 61B58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SECTION 31, TOWNSHIP 37, RANGE 14

PLAN
SURVEYED —
DRAWN —
ALIGNMENT CHECKED —
P.I. MAY CHECKED —
NOTE BOOK —
NO. —
BY
DATE



PROFILE
SURVEYED —
DRAWN —
GRADES CHECKED —
B.M. NOTED —
NOTE BOOK —
BY
DATE



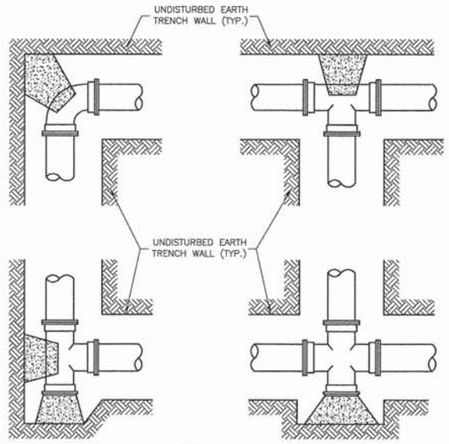
Robinson ENGINEERING	USER NAME =	DESIGNED — PKB/JPH	REVISED —
		CHECKED — PKB	REVISED —
	PLOT SCALE =	DRAWN — L.T.L.	REVISED —
	PLOT DATE = 01-20-15	CHECKED — G.A.K.	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

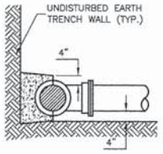
DIVIVSION STREET BRIDGE
BLUE ISLAND, ILLINOIS
ROADWAY PLAN AND PROFILE

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	14
		CONTRACT NO. 61B58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



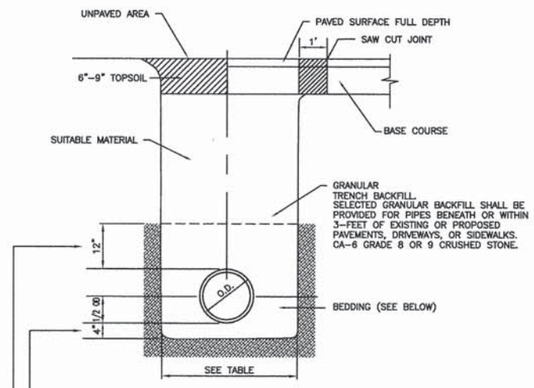
PLANS



SECTION

NOTES:
1. PROVIDE PRECAST OR CAST-IN-PLACE CONCRETE THRUST BLOCKS OF ADEQUATE SIZE AND THRUST BEARING SURFACE TO PREVENT MOVEMENT OF PIPELINE UNDER PRESSURE.
2. PLACE THE BASE AND THE THRUST BEARING SIDES OF THRUST BLOCK DIRECTLY AGAINST UNDISTURBED EARTH.
3. PLACE THRUST BLOCKING SO THE FITTING JOINTS WILL BE ACCESSIBLE FOR REPAIR.

TYPICAL THRUST BLOCK INSTALLATIONS



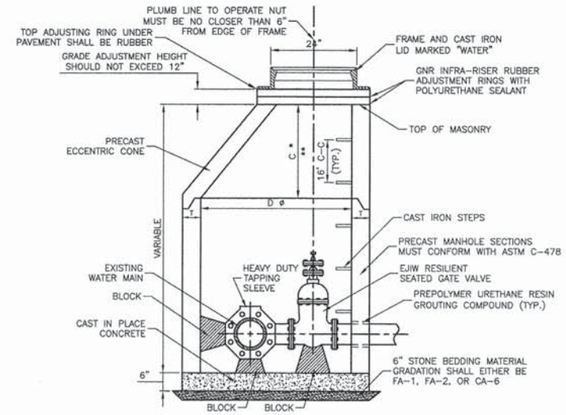
BEDDING SHALL BE REQUIRED TO BE A MINIMUM THICKNESS EQUAL TO 1/4 OF THE OUTSIDE DIAMETER OF THE PIPE BUT SHALL NOT BE LESS THAN 4", AS A MINIMUM, BEDDING AND HAUNCHING MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION." THE GRADATIONS SHALL CONFORM TO CA-7 OR CA-11.

FOR NONRIGID (PVC) PIPE THE BEDDING MATERIAL SHALL BE PLACED A MINIMUM 12" OVER THE TOP OF THE PIPE AND SHALL BE GRADE EITHER CA 11 OR CA 13 AND SHALL BE CAREFULLY PLACED SO AS TO FILL THE SPACE UNDER AND AROUND THE PIPE.

NOMINAL PIPE SIZES (INCHES)	TRENCH WIDTHS* (INCHES)
12 OR SMALLER	30
14-18	36
20-24	48
27-30	55
33 OR LARGER	1 1/3 TIMES PIPE O.D.

*TO COMPLY WITH OSHA REQUIREMENTS.

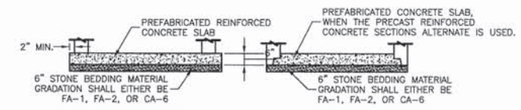
TRENCH BACKFILL DETAIL



ALTERNATE MATERIALS FOR WALLS	D	C	T
PRECAST REINFORCED CONCRETE SECTION	4'-0" 5'-0"	2'-6" 3'-9"	4" 5"
CAST-IN-PLACE CONCRETE	4'-0" 5'-0"	2'-6" 3'-9"	6" 6"

* DIMENSION "C" FOR PRECAST REINFORCED CONCRETE SECTION MAY VARY FROM THE DIMENSION GIVEN ±6"

** SEE DETAIL FOR PRECAST REINFORCED CONCRETE FLAT SLAB TOP.



ALTERNATE BOTTOM SLAB

NOTES:
1. VALVE TO ALIGN W/ CENTER OF FRAME OPENING.
2. 5'-0"ø FOR ALL SIZES.
3. VALVE VAULT TO CONFORM TO ASTM C-478.
4. ALL VALVES SHALL BE EAST JORDAN IRON WORKS RESILIENT SEATED GATE VALVES.
5. ALL VALVES SHALL OPEN COUNTER CLOCKWISE AND CLOSE CLOCKWISE WITH NON-RISING STEM.
6. PROVIDE CA-6 AGGREGATE BACKFILL MATERIAL AROUND VAULT TO SUB-GRADE ELEVATION; IN PAVED AREAS.

VALVE IN VAULT DETAIL FOR PRESSURE CONNECTION

JOINT RESTRAINT TABLE - Unless additional pipe restraint is shown on the Plans, the restrained length measured from the fitting joint to the end of the last restrained joint pipe for pipe fittings shall equal or exceed those tabulated below:

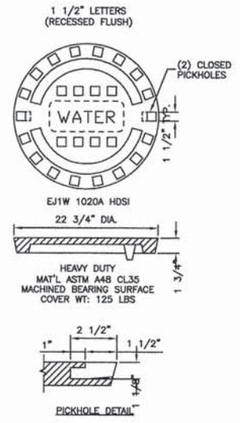
RESTRAINED LENGTH - FEET
FITTINGS

Pipe Size (Inches)	Tee * Branch	90 Elbow	45 Elbow	22-1/2 Elbow	11-1/4 Elbow	Dead Ends
4	9	10	5	2	1	15
6	17	14	6	3	2	21
8	24	18	8	4	2	27
10	30	22	10	5	3	33
12	36	26	11	6	3	38
14	42	29	12	6	3	44
16	48	33	14	7	4	49
18	53	37	16	8	4	54
20	58	40	17	8	4	60
24	104	71	30	15	8	105
30	125	86	36	18	9	126
36	146	99	42	21	10	147

Test Pressure on sizes 20" and smaller based on 100 psi.
Test Pressure on sizes 24" and larger based on 150 psi.
Increase all lengths in Table by 75% for use on polyethylene wrapped pipe.
*One full length (18') of pipe on both sides of branch to be restrained.

NOTE:
FOR BIDDING PURPOSES ONLY
CONTRACTOR TO SUBMIT DESIGN CALCULATIONS PRIOR TO CONSTRUCTION.

DUCTILE IRON JOINT RESTRAINT TABLE



SPECIAL LETTERED WATER VALVE VAULT LID

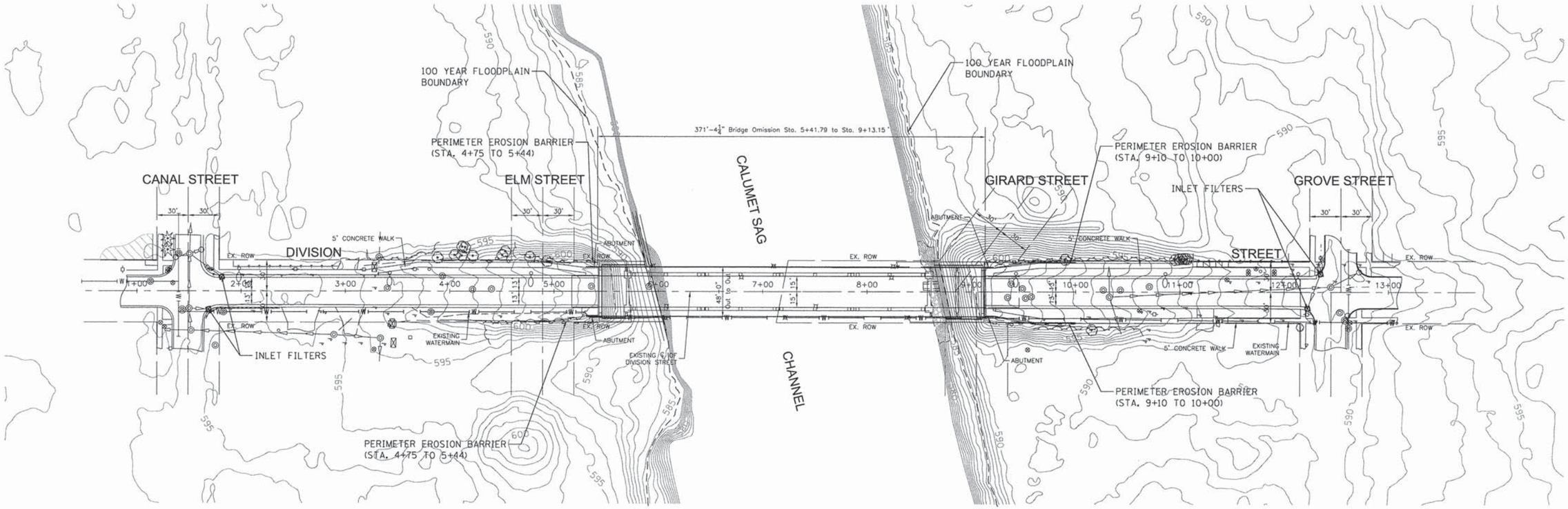
Robinson ENGINEERING	USER NAME =	DESIGNED - PKB/GAK	REVISED -
		CHECKED - PKB	REVISED -
	PLOT SCALE =	DRAWN - L.T.L.	REVISED -
	PLOT DATE = 01-20-15	CHECKED - G.A.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVIVSION STREET BRIDGE STRUCTURE NO. 016-5005
BLUE ISLAND, ILLINOIS
CONSTRUCTION DETAILS

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	15
		CONTRACT NO. 61B58		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL (LATEST REVISIONS).

2. DISTURBED AREAS ARE TO BE PROTECTED FROM EROSION IN A TIMELY MANNER. UPON COMPLETION OF GRADING OR CONSTRUCTION, THE AREA WILL BE STABILIZED (USING PERMANENT MEASURES WHEN POSSIBLE) WITHIN 7 CALENDAR DAYS. TEMPORARY STABILIZATION THROUGH USE OF GROUND COVER, SEEDING, MULCHING, OR OTHER APPROVED MEASURES WILL BE INSTALLED WITHIN 1 DAY WHENEVER SITE DEVELOPMENT WORK, GRADING OR OTHER EARTH DISTURBING ACTIVITIES CEASE TO BE CONTINUOUS FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. THE 1/14 DAY REQUIREMENT IS TAKEN TO MEAN THAT THE STABILIZATION OPERATION IS COMPLETE OR NEARING COMPLETION IN THE DEFINED TIME. TEMPORARY STABILIZATION MAY BE USED FOR AREAS THAT WILL BECOME DISTURBED AGAIN AFTER 14 DAYS.

3. PLACE PERIMETER EROSION BARRIER (PEB) PRIOR TO ANY EARTH DISTURBING OR GRADING ACTIVITIES. THE PEB LOCATED ALONG THE EXISTING RIGHT-OF-WAY LINE AT THE LOCATIONS SHOWN ON THE PLANS MAY BE MODIFIED OR ELIMINATED IN THE FIELD AS DIRECTED BY THE ENGINEER DUE TO INTERFERENCE WITH EXISTING GUARDRAIL OR EXISTING TREES TO REMAIN. THE PEB SHALL BE CONSTRUCTED WITH SILT FILTER FENCE, ROLLED EXCELSIOR OR URETHANE/FOAM GEOTEXTILES IN ACCORDANCE WITH ARTICLE 280.04 (b) OF THE IDOT STANDARD SPECIFICATIONS.

4. INSERT INLET FILTERS UNDER THE FRAMES OF THE EXISTING OPEN LID DRAINAGE STRUCTURES AT THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

5. THE CONTRACTOR MUST TAKE MEASURES TO MINIMIZE SOIL TRACKED ONTO PUBLIC AND PRIVATE ROADS, INCLUDING THE USE OF STABILIZED CONSTRUCTION ENTRANCE(S) AND VEHICLE WASHDOWN FACILITIES WHERE APPROPRIATE. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY SHOVELING OR STREET CLEANING (NOT FLUSHING) BEFORE THE END OF EACH WORK DAY AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. THE LOCATION OF STABILIZED CONSTRUCTION ENTRANCES SHALL BE APPROVED BY THE ENGINEER. THIS WORK WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED ON THE UNIT COST OF VARIOUS PAY ITEMS IN THE CONTRACT.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING THE DUST AND AIRBORNE DIRT GENERATED BY HIS/HER CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH ARTICLE 107.36 OF THE STANDARD SPECIFICATIONS.

7. THE CONTRACTOR MUST TAKE MEASURES TO MINIMIZE DEBRIS FROM FALLING INTO THE CAL-SAG CHANNEL. THE CONTRACTOR MUST CLEAN OUT ANY CONSTRUCTION DEBRIS THAT FALLS IN THE CAL-SAG CHANNEL AT THE END OF EACH WORK DAY.

8. SOIL OR TOPSOIL SHALL NOT BE STOCKPILED UNLESS PERIMETER EROSION BARRIERS ARE UTILIZED ON THE DOWNSLOPE SIDE OF THE PILES. THE STOCKPILES SHALL BE PLACED AWAY FROM THE BANKS OF THE CAL-SAG CHANNEL (MINIMUM OF 50 FEET FROM TOP OF BANK). THE STOCKPILES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL SHAPING OF THE PILE WITH TEMPORARY STABILIZATION MEASURES (MULCH METHOD 2 OR OTHER MEASURES AS APPROVED BY THE ENGINEER). THE COST OF THE CONTROLS SHALL BE BORNE BY THE CONTRACTOR.

9. THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE CITY OF BLUE ISLAND. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE ENGINEER AND USACE FOR APPROVAL PRIOR TO STARTING CONSTRUCTION IN THE CAL-SAG CHANNEL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL SYSTEMS AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH ARTICLE 280.05 OF THE STANDARD SPECIFICATIONS. IN ADDITION THE FOLLOWING MAINTENANCE REQUIREMENTS SHALL APPLY:

    INLET FILTERS: REMOVE SEDIMENT FROM INLET FILTER BASKET WHEN BASKET IS 25% FULL OR 50% OF THE FABRIC PORES ARE COVERED WITH SILT. REMOVE PONDED WATER ON ROAD SURFACES IMMEDIATELY. CLEAN FILTER IF STANDING WATER IS PRESENT LONGER THAN ONE HOUR AFTER A RAIN EVENT. REMOVE TRASH ACCUMULATED AROUND OR ON TOP OF PRACTICE. WHEN FILTER IS REMOVED FOR CLEANING, REPLACE FILTER IF ANY TEAR IS PRESENT.

    PERIMETER EROSION BARRIER: REPAIR TEARS, GAPS OR UNDERMINING. RESTORE LEANING PEB AND ENSURE TAUT. REPAIR OR REPLACE ANY MISSING OR BROKEN STAKES IMMEDIATELY. CLEAN PEB IF SEDIMENT REACHES ONE-THIRD HEIGHT OF BARRIER (SILT FENCE) OR ONE-HALF HEIGHT OF BARRIER (ROLLED EXCELSIOR OR URETHANE/FOAM GEOTEXTILES). REMOVE PEB ONCE FINAL STABILIZATION ESTABLISHES SINCE PEB IS NO LONGER NECESSARY AND SHOULD BE REMOVED. REPAIR PEB IF UNDERMINING OCCURS ANYWHERE ALONG ITS ENTIRE LENGTH.

11. STABILIZE THE FINAL GRADED SLOPES WITH PERMANENT SEEDING AND EROSION CONTROL BLANKET AS SOON AS SOON AS POSSIBLE.

    SEEDING USAGE:

    CLASS 2A SALT TOLERANT ROADSIDE MIX FOR ALL DISTURBED AREAS. USE EROSION CONTROL BLANKET ON ALL PERMANENTLY SEEDED AREAS.

    TEMPORARY EROSION CONTROL SEEDING : USED IN AREAS REQUIRING SHORT TERM TEMPORARY SEEDING DURING CONSTRUCTION. NO FERTILIZERS REQUIRED.

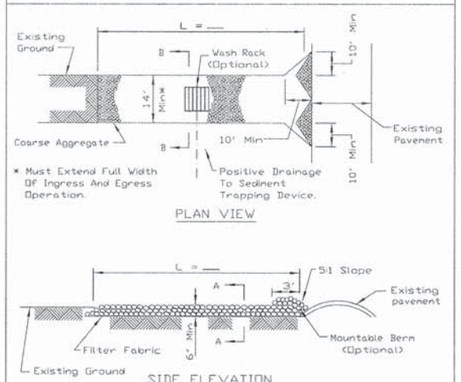
    ALL SEEDING RATES, DATES AND FERTILIZATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS.

12. SEE THE SPECIAL PROVISIONS FOR THE STORM WATER POLLUTION PREVENTION PLAN.

I:\CH\PRJ\000003634\Civil\CADD\3634 SESC Plan Sheet.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - DA	REVISED	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**EROSION AND SEDIMENT CONTROL PLAN**	MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME = 3634 SESC Plan Sheet.dgn	CHECKED - AM	REVISED			1090	14-00164-00-BR	COOK	122	16
	PLOT SCALE =	DRAWN - DA	REVISED					CONTRACT NO. 61B58		
	PLOT DATE =	CHECKED - AM	REVISED					ILLINOIS FED. AID PROJECT		

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW

SIDE ELEVATION

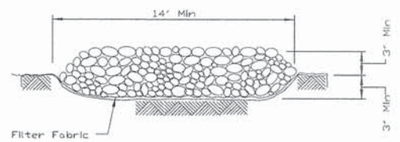
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE
Project
Designed — Date
Checked — Date
Approved — Date

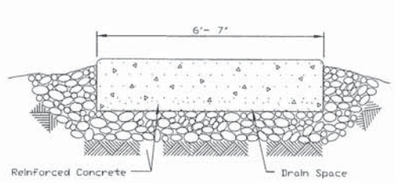
NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-630
SHEET 1 OF 2
DATE 8-18-94

STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



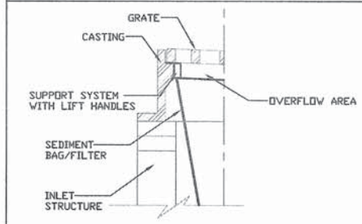
SECTION B-B

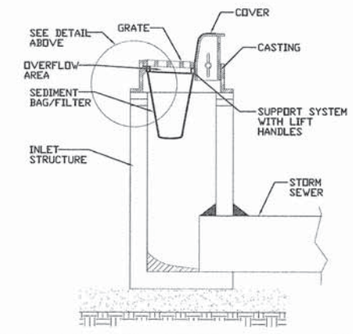
REFERENCE
Project
Designed — Date
Checked — Date
Approved — Date

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-630
SHEET 2 OF 2
DATE 8-18-94

INLET PROTECTION - PAVED AREAS
DROP-IN PROTECTION

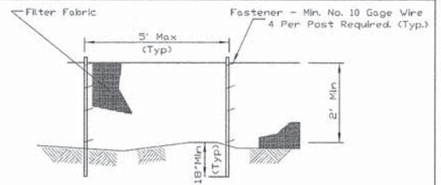




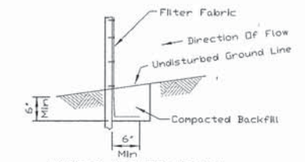
REFERENCE
Project
Designed — Date
Checked — Date
Approved — Date

STANDARD DWG. NO. IUM-561D
SHEET 1 OF 1
DATE 01-11-11

SILT FENCE PLAN



ELEVATION



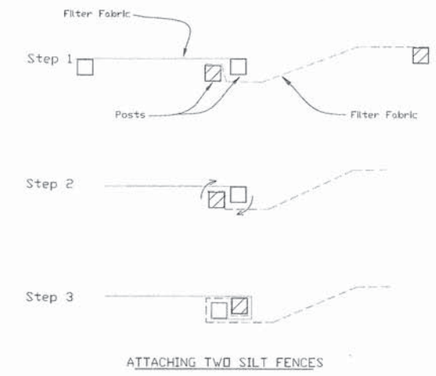
FABRIC ANCHOR DETAIL

NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE
Project
Designed — Date
Checked — Date
Approved — Date

STANDARD DWG. NO. IUM-620A
SHEET 1 OF 2
DATE 3-16-12

SILT FENCE - SPLICING TWO FENCES



ATTACHING TWO SILT FENCES

1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Cut the fabric near the bottom of the stakes to accomodate the 6" flap.
4. Drive both posts a minimum of 18 inches into the ground and bury the flap.
5. Compact backfill (particularly at splices) completely to prevent stormwater piping.

REFERENCE
Project
Designed — Date
Checked — Date
Approved — Date

STANDARD DWG. NO. IUM-620B(W)
SHEET 1 OF 1
DATE 3-16-2012

I:\CH\PRJ\0000003634\Civil\CADD\3634 SESC Details.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - DA	REVISED
	FILE NAME = 3634 SESC Details.dgn	CHECKED - AM	REVISED
	PLOT SCALE =	DRAWN - DA	REVISED
	PLOT DATE =	CHECKED - AM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL
DETAILS SHEET

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	17
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

GENERAL ELECTRICAL NOTES

1. LOCATIONS OF EQUIPMENT SHOWN ARE APPROXIMATE. CONTRACTOR TO COORDINATE LOCATION OF ALL EQUIPMENT IN THE FIELD WITH OTHER EQUIPMENT PRIOR TO INSTALLATION.

2. ALL CONDUIT ROUTING SHOWN IS DIAGRAMMATIC AND IS SHOWN ONLY FOR GENERAL GUIDANCE FOR THE CONTRACTOR IN SUBMITTING BIDS AND IS NOT TO BE CONSTRUED AS FINAL EITHER AS TO ARRANGEMENTOR QUANTITY REQUIRED. THE SIZE AND NUMBER OF CONDUITS NEEDEDTO BE DETERMINED BY THE CONTRACTOR TO ACHIEVE THE OPERATIONAL REQUIREMENT OF ALL SYSTEMS, AND AS GENERAL GUIDANCE FOR DEVELOPING OF FINAL DETAILED WORKING (SHOP DRAWINGS). ALL WORKING DRAWINGS ARE SUBJECT TO APPROVAL BY THE ENGINEER. ONLY APPROVED SHOP DRAWINGS TO BE USED FOR FIELD INSTALLATION.

3. ALL NEW CONDUITS, FITTINGS AND HARDWARE INSTALLED IN EXPOSED OUTDOOR AREAS TO BE GRC. ALL PULLBOXES AND JUNCTION BOXES IN OUTDOOR AREAS TO BE STAINLESS STEEL, NEMA TYPE 4X, AND CORROSION RESISTANT.

4. MINIMUM CONDUIT SIZE TO BE 3/4" UNLESS OTHERWISE INDICATED. CONDUIT FILL NOT TO EXCEED 40%.

5. ALL CONDUIT INSTALLED EXPOSED IN FINISHED AREAS OR ON EXTERIOR, TO BE PAINTED TO MATCH SURROUNDING SURFACES.

6. ALL WORK TO COMPLY WITH THE CITY OF BLUE ISLAND BUILDING CODE AND IDOT STANDARDS; AND ALL ASSOCIATED AMENDMENTS.

7. ALL MATERIALS RELATED TO LIGHTING SYSTEMS TO BE FURNISHED BY THE CONTRACTOR. CONTRACTOR TO INSTALL THE LIGHTING, INCLUDING FIXTURES. CONDUIT AND CONDUCTORS.

8. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL CORD WITH THREE FEET PIGTAIL ON BOTH END OF THE CONDUIT.

9. EXISTING ITEMS NOTED TO REMAIN TO BE LEFT IN PLACE AND IN OPERATION.

10. ALL TRENCHING CAUSED BY NEW WORK TO BE BACKFILLED AND FINISHED TO MATCH EXISTING SURROUNDING.

11. CONTRACTOR TO PROVIDE SHOP DRAWING SUBMITTALS FOR REVIEW AND APPROVAL, INCLUDING BUT NOT LIMITED TO LIGHT FIXTURE DATA SHEETS, LIGHTING PHOTOMETRIC CALCULATIONS, INSTALLATION DETAILS, CONDUIT LAYOUT, NAVIGATION LIGHTING DATA SHEETS, LIGHT FIXTURE COLOR SAMPLES, AND TEMP NAVIGATION LIGHT SYSTEM.

12. CONTRACTOR TO COORDINATE ALL WORK WITH COMED FOR SERVICE OUTAGES, OVERHEAD UTILITY PROTECTION, AND UNDERGROUND UTILITY INDENTIFICATION AND PROTECTION PRIOR TO START OF WORK.

13. CONTRACTOR TO MAINTAIN OSHA REQUIRED SAFE CLEARANCE AND PROTECTION OF OVERHEAD UTILITIES PRIOR TO START OF STRUCTURAL DEMOLITION WORK.

ABBREVIATIONS

A, AMP	AMMETER OR AMPERE
AC	ALTERNATING CURRENT
AF	CIRCUIT BREAKER FRAME SIZE (AMPERES)
AS	AMMETER SWITCH
AT	CIRCUIT BREAKER TRIP RATING (AMPERES)
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C	CONDUIT
CKT	CIRCUIT
COMED	COMMONWEALTH EDISON CO.
CT	CONTROL TRANSFORMER
CTR	CONTACTOR
DEG	DEGREE
DISC. SW	DISCONNECT SWITCH
EA	EACH
EQ	EQUAL
E, EXIST	EXISTING
G	GROUNDING WIRE IN CONDUIT, EXPOSED WHERE SO INDICATED ON PLANS.
GFI	GROUND FAULT INTERRUPTER
GRD	GROUND
GRC	GALVANIZED RIGID STEEL CONDUIT
GRC PVC	GALVANIZED RIGID STEEL PVC COATED CONDUIT
HH	HAND HOLE
IL	INDIACTING LIGHT
JB	JUNCTION BOX
LC	LIGHTING CONTACTOR
MH	METL HALIDE
NC	NORMALLY CLOSED
PB	PUSHBUTTON
PNL	PANEL
PH	PHASE
SS	STAINLESS STEEL
UNO	UNLESS NOTED OTHERWISE

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
TRENCH BACKFILL	CU YD	44
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	294
CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	936
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	555
CONDUIT EMBEDDED IN STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	30
CONDUIT EMBEDDED IN STRUCTURE 2" DIA., PVC	FOOT	39
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8"X 6"X 4"	EACH	6
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14"X 8"X 6"	EACH	14
JUNCTION BOX, CAST IRON, ATTACHED TO STRUCTURE, 10"X 8"X 6"	EACH	8
HEAVY-DUTY HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	3672
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	730
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1460
WATERWAY OBSTRUCTION WARNING LUMINAIRE, LED	EACH	6
REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	4
BRIDGE LIGHTING, SPECIAL	LS	1
MAINTENANCE OF NAVIGATION	LS	1

M:\4570-IDOT Div St Bridge over Cal-Sag River\04 - CADD\Elect\E01.dgn

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd. Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrauf	DESIGNED JCM	REVISED
FILE NAME = E01.dgn	CHECKED OS	REVISED
PLOT SCALE = 1.0000 sf / in.	DRAWN HR	REVISED
PLOT DATE = 3/24/2015	CHECKED JCM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL ELECTRICAL NOTES, ABBREVIATIONS, & SUMMARY OF QUANTITIES

SHEET NO. E-01 OF 10 SHEETS

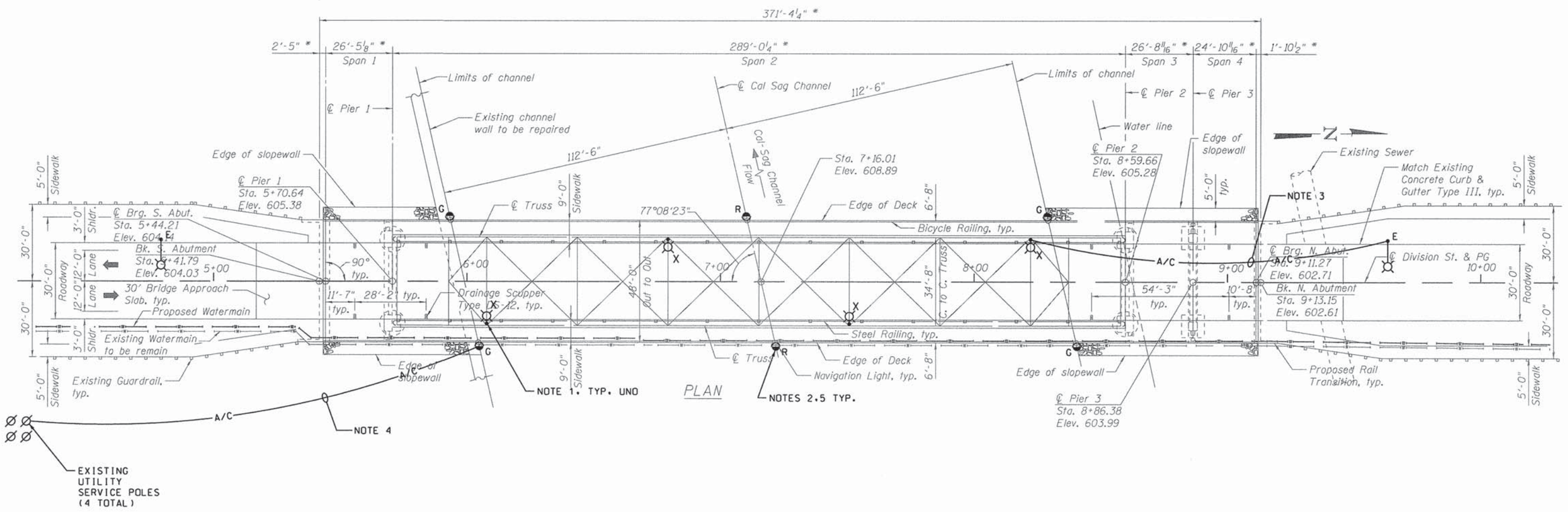
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	18
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

LEGEND

- NAVIGATION LIGHT FIXTURE (180 DEG). EXISTING TO BE REMOVED. NO SALVAGE
  "G"= GREEN LENS
  "R"= RED LINES
- ROADWAY LIGHT FIXTURE
  "E"= EXISTING TO REMAIN
  "x"= EXISTING TO BE REMOVED. NO SALVAGE
- UTILITY POLE. EXISTING
- AERIAL CABLE

NOTES

1. REMOVE AND REPLACE EXISTING STRUCTURE MOUNTED ROADWAY LIGHT FIXTURE. CONDUIT AND CABLE. REMOVAL OF CONDUIT AND CABLE ATTACHED TO STRUCTURE TO BE INCLUDED IN REMOVAL OF LIGHTING UNIT. NO SALVAGE PAY ITEM.
2. REMOVE AND REPLACE EXISTING NAVIGATION LIGHT FIXTURE. MOUNTING BRACKET. CONDUIT AND CABLE. NAVIGATION LIGHT REMOVAL TO BE INCLUDED IN THE NEW WATERWAY OBSTRUCTION WARNING LUMINAIRE. LED PAY ITEM. THE REMOVAL OF THE CONDUIT ATTACHED TO HANDRAIL TO BE INCLUDED IN THE BRIDGE HANDRAIL REMOVAL PAY ITEM.
3. REMOVE EXISTING TEMPORARY AERIAL CABLE BACK TO EXISTING LIGHT POLE. PROVIDE NEW UNDERGROUND POWER FEED. REFER TO SHEET E-03 FOR NEW WORK. AERIAL CABLE REMOVAL WORK TO BE INCLUDED IN LIGHT FIXTURE REMOVAL PAY ITEM.
4. REMOVE EXISTING TEMPORARY AERIAL CABLE BACK TO EXISTING UTILITY SERVICE POLE MOUNTED DISCONNECT SWITCH. PROVIDE NEW UNDERGROUND POWER FEED. REFER TO SHEET E-03 FOR NEW WORK. AERIAL CABLE REMOVAL WORK TO BE INCLUDED IN LIGHT FIXTURE REMOVAL PAY ITEM.
5. CONTRACTOR TO PROVIDE TEMPORARY NAVIGATION LIGHTS MOUNTED TO EXISTING STEEL STRUCTURE. TEMPORARY LIGHTING TO REMAIN OPERATIONAL UNTIL NEW NAVIGATION LIGHTS ARE INSTALLED AND OPERATING. THE COST OF THE TEMPORARY NAVIGATION LIGHTING SYSTEM INCLUDING LIGHT FIXTURES. CONDUIT. WIRE AND POWER CONNECTION TO BE INCLUDED IN THE MAINTENANCE OF NAVIGATION PAY ITEM.



AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrouf	DESIGNED JCM	REVISED
FILE NAME = E02.dgn	CHECKED OS	REVISED
PLOT SCALE = 20.0000 ' / in.	DRAWN HR	REVISED
PLOT DATE = 3/24/2015	CHECKED JCM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING ROADWAY LIGHTING PLAN

SHEET NO. E-02 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	19

CONTRACT NO. 61B58

ILLINOIS FED. AID PROJECT

M:\4578-1001 Div St Bridge over Cal-Sag River\04 - CADD\Elec\E02.dgn

LEGEND

A ☼ LIGHT FIXTURE
"A"= ROADWAY. CREE MODEL STR LWY-3ME-HT-2-F-UL-SV-A-40K-F-SC WITH WM-2L-SV
OR BY AEL AUTOBAHN SERIES ATB2 WITH EQUIVALENT OPTIONS.
"B"= PEDESTRIAN. STERNBERG LIGHTING MODEL
1W-1521FLED-HS-H-SV2-6ARC-45-T2-F-MDL03-FHD-S-CUSTOM
FINISH TO MATCH BRIDGE COLOR OR GE STREETDREAMS SERIES WITH EQUIVALENT OPTIONS. (NOTE 9)
"C"= BRIDGE ARCHITECTURAL LIGHTING. CREE
FLD-OL-N6-D2-14-D-UL-SV-700-40K OR HUBBELL ARCHITECTURAL AREA LIGHTING MODEL
PIVOT LED PV5350D-24-HB-CUSTOM COLOR-SLD-24 (NOTE 10)

Ø UTILITY POLE. EXISTING

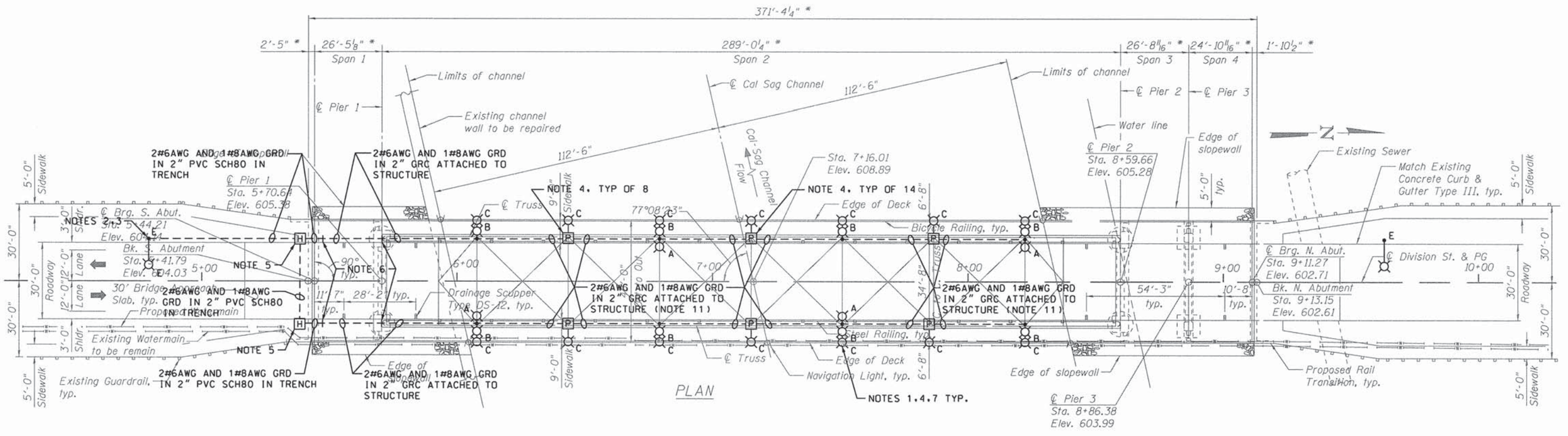
[P] PULL BOX/JUNCTION BOX. SIZE AS NOTED ON DRAWINGS

[H] 24" HANDHOLE. HEAVY DUTY. PORTLAND CEMENT

– – – CONDUIT DIRECT BURIED. EMBEDDED.
OR ATTACHED TO STRUCTURE AS
NOTED ON PLAN

NOTES

1. PROVIDE NEW ROADWAY AND PEDESTRIAN LIGHTING FIXTURES. COST OF LIGHT FIXTURES TO BE INCLUDED IN BRIDGE LIGHTING. SPECIAL PAY ITEM.
2. INTERCEPT EXISTING LIGHTING CIRCUIT AT EXISTING LIGHT POLE AND EXTEND TO BRIDGE LIGHTING.
3. REMOVE AND REPLACE EXISTING CONDUIT BETWEEN BRIDGE AND LIGHT POLE FOUNDATION. PROVIDE NEW UNDERGROUND CONDUIT FROM EXISTING LIGHT POLE FOUNDATION TO BRIDGE LIGHTING AS SHOWN. CONTRACTOR MAY CONNECT DIRECTLY TO EXISTING POLE IF EXISTING LIGHT POLE FOUNDATION CONDUIT IS NOT USABLE.
4. PROVIDE 14"x8"x6" SS JUNCTION BOX ATTACHED TO UNDERSIDE OF DECK.
5. 24" HEAVY DUTY HANDHOLE FOR BRIDGE LIGHTING AND NAVIGATION LIGHTING SYSTEMS.
6. PROVIDE EXPANSION/DEFLECTION FITTING. COST OF FITTING IS INCIDENTAL TO THE CONDUIT PAY ITEM.
7. REFER TO SHEET E-04 SECTION FOR ADDITIONAL INSTALLATION REQUIREMENTS.
8. REFER TO SHEET E-05 FOR LIGHTING WIRING DIAGRAM.
9. CUSTOMER COLOR TO MATCH BLUE MUNSELL NO. 2-5 PB-5/10.
10. CUSTOMER COLOR TO MATCH BLACK MUNSELL NO. 0.
11. CONDUIT EXPOSED AND ROUTED ABOVE CONCRETE DECK TO BE PAINTED TO MATCH BRIDGE COLOR BLUE MUNSELL NO. 2-5 PB-5/10. COST OF PAINTING CONDUIT TO BE INCLUDED IN CONDUIT PAY ITEM.



PLAN

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd. Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrauf	DESIGNED JCM	REVISED
FILE NAME = E03.dgn	CHECKED OS	REVISED
PLOT SCALE = 20.0000 ' / in.	DRAWN HR	REVISED
PLOT DATE = 3/24/2015	CHECKED JCM	REVISED

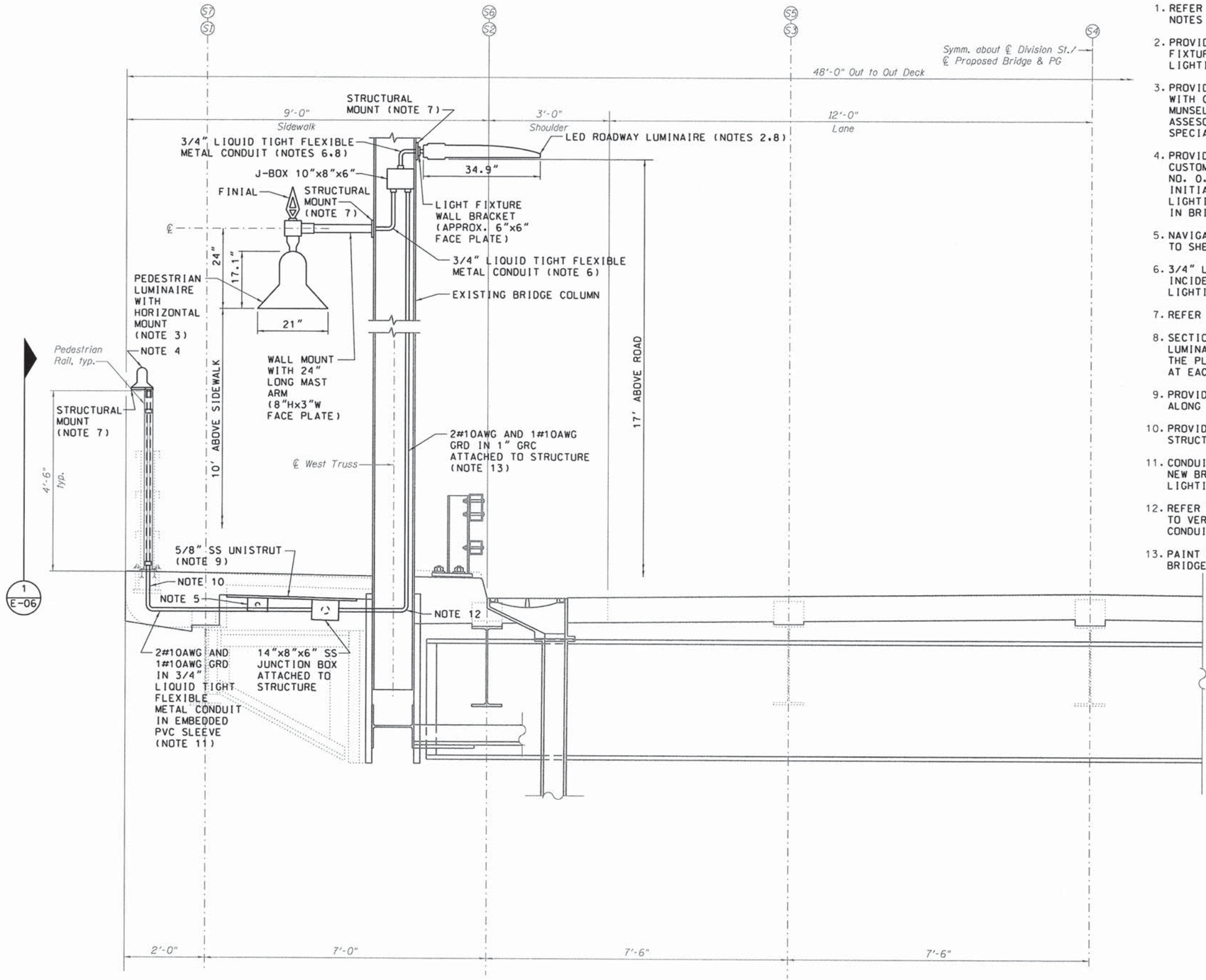
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY LIGHTING PLAN

SHEET NO. E-03 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	20
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

M:\45178-IDOT Div. St Bridge over Cal-Sag River\04 - CADD\Elect\E03.dgn



SECTION ROADWAY LIGHTING

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

NOTES

1. REFER TO SHEET E-01 FOR GENERAL ELECTRICAL NOTES AND ABBREVIATIONS.
2. PROVIDE NEW ROADWAY LIGHTING FIXTURE. LIGHTING FIXTURE AND ASSESORIES TO BE INCLUDED IN BRIDGE LIGHTING. SPECIAL PAY ITEM.
3. PROVIDE NEW PEDESTRIAN SIDEWALK LIGHTING FIXTURE WITH CUSTOM FINISH TO MATCH BRIDGE COLOR. BLUE MUNSELL NO. 2-5PB-5/10. LIGHTING FIXTURE AND ASSESORIES TO BE INCLUDED IN BRIDGE LIGHTING. SPECIAL PAY ITEM.
4. PROVIDE NEW BRIDGE FACADE LIGHTING FIXTURE WITH CUSTOM FINISH TO MATCH RAILING COLOR. BLACK MUNSELL NO. 0. ADJUST AIM TO ILLUMINATE BRIDGE STRUCTURE. INITIAL SETTING AT 65 DEG. ABOVE HORIZONTAL. LIGHTING FIXTURE AND ASSESORIES TO BE INCLUDED IN BRIDGE LIGHTING. SPECIAL PAY ITEM.
5. NAVIGATION LIGHTING JUNCTION BOX AND RACEWAY. REFER TO SHEET E-10 FOR ADDITIONAL REQUIREMENTS.
6. 3/4" LIQUID TIGHT FLEXIBLE METAL CONDUIT IS INCIDENTAL AND IS TO BE INCLUDED IN THE BRIDGE LIGHTING. SPECIAL PAY ITEM.
7. REFER TO STRUCTURAL DRAWINGS FOR MOUNTING DETAILS.
8. SECTION SHOWS ROADWAY, PEDESTRIAN AND ARCHITECTURAL LUMINAIRES. ACTUAL LUMINAIRES WILL VARY. REFER TO THE PLAN DRAWINGS FOR ACTUAL LUMINAIRES INSTALLED AT EACH LOCATION.
9. PROVIDE UNISTRUT SUPPORT EVERY 3'-0" ON CENTER ALONG THE ENTIRE LENGTH OF BRIDGE.
10. PROVIDE 2" PVC SLEEVE. COORDINATE WORK WITH STRUCTURAL.
11. CONDUIT AND CABLE TO BE INCLUDED IN COST OF NEW BRIDGE FACADE LIGHTING UNDER BRIDGE LIGHTING. SPECIAL PAY ITEM.
12. REFER TO SHEET S-15 AND S-16 FOR CONDUIT ROUTING TO VERTICAL TRUSS MEMBER. COORDINATE AND INSTALL CONDUIT PRIOR TO NEW SIDEWALK FORM AND POUR.
13. PAINT EXPOSED CONDUIT AND JUNCTION BOXES TO MATCH BRIDGE STRUCTURE BLUE COLOR MUNSELL 2-5PB-5/10.

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd Suite 200, Chicago, IL 60641
Phone: 773-457-3300 • Fax: 773-457-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrauf	DESIGNED JCM	REVISED
FILE NAME = E04.dgn	CHECKED OS	REVISED
PLOT SCALE = 1:4 '/' in.	DRAWN HR	REVISED
PLOT DATE = 3/24/2015	CHECKED JCM	REVISED

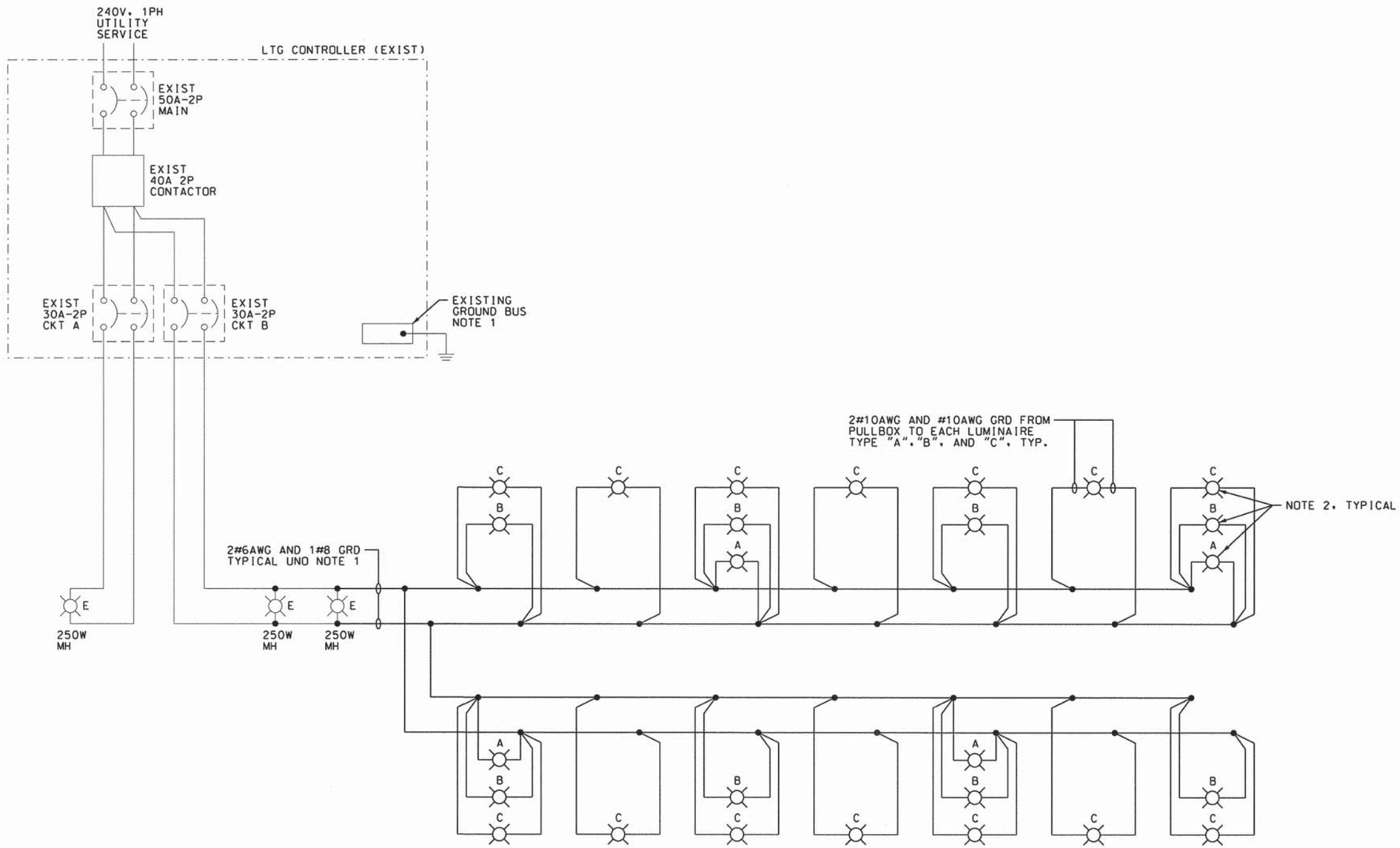
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION ROADWAY LIGHTING

SHEET NO. E-04 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	21
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

M:\4578-IDOT Div St Bridge over Cal-Sag River\04 - CADD\Elect\E04.dgn



ELECTRICAL WIRING DIAGRAM

LIGHTING CONTROLLER LOAD TABLE			
CKT	SIZE (A)	LOAD (W)	LOAD (A)
A	30	250	1.0
B	30	2208	9.2

LEGEND

- A 273W LED ROADWAY LUMINAIRE
- B 33.6W LED PEDESTRIAN LUMINAIRE
- C 63.8W LED BRIDGE ARCHITECTURAL LUMINAIRE
- E EXISTING 250W ROADWAY LUMINAIRE
- CIRCUIT BREAKER SIZE AND POLES AS SHOWN

NOTES

1. EACH LIGHT CKT CONTAINS ONE #8 AWG GRD CABLE TO EACH LUMINAIRE.
2. EACH LUMINAIRE TO BE PROVIDED WITH FUSE ON EACH PHASE (2 FUSES PER LUMINAIRE).

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd. Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3320

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrouf	DESIGNED JCM	REVISED	
FILE NAME = E05.dgn	CHECKED OS	REVISED	
PLOT SCALE = 1.0000 sf / in.	DRAWN HR	REVISED	
PLOT DATE = 3/13/2015	CHECKED JCM	REVISED	

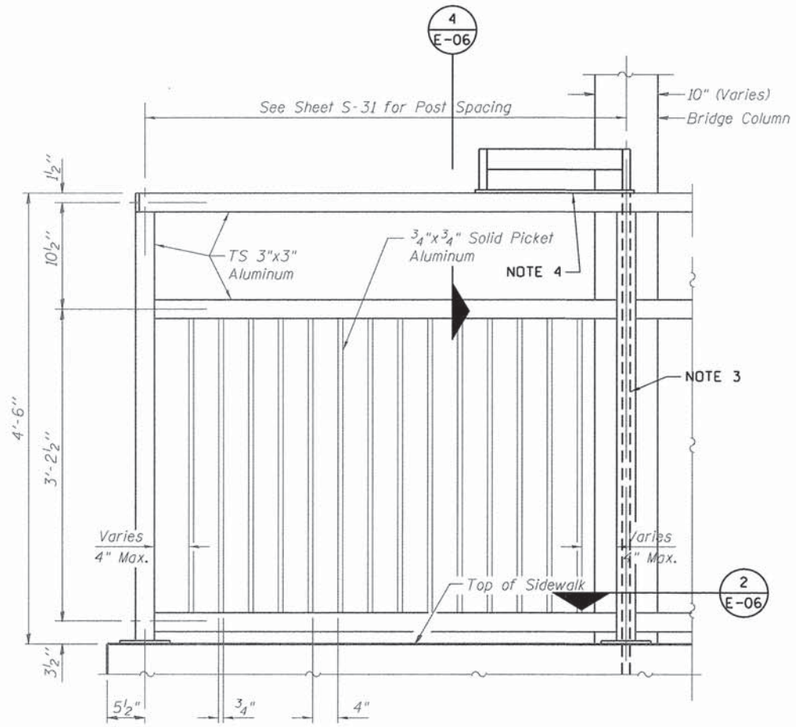
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELECTRICAL WIRING DIAGRAM

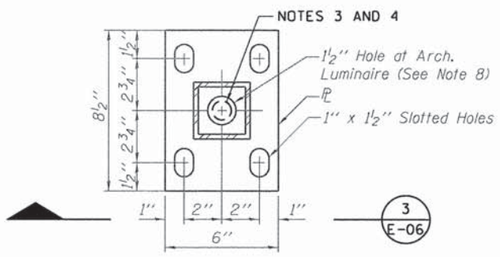
SHEET NO. E-05 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	22
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

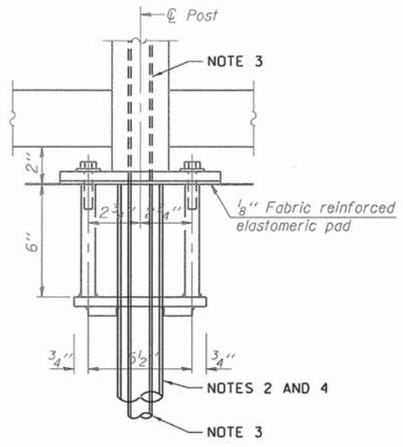
M:\4578-1001 Div. St. Bridge over Cal-Sag River\04 - CADD\Elect\E05.dgn



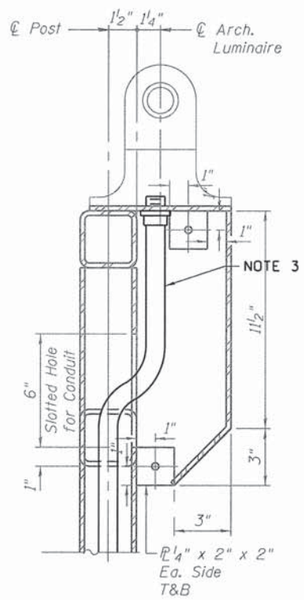
1 BICYCLE RAILING ELEVATION



2 BASE PLATE



3 SECTION AT BASE PLATE



4 SECTION A-A

NOTES:

1. REFER TO SHEET E-01 FOR GENERAL ELECTRICAL NOTES AND ABBREVIATIONS.
2. PROVIDE 2" PVC SLEEVE EMBEDDED IN CONCRETE SIDEWALK.
3. 3/4" LIQUID TIGHT FLEXIBLE METAL CONDUIT. REFER TO DETAIL ON SHEET E-04 FOR ADDITIONAL WORK.
4. STRUCTURAL MOUNTING PLATE. REFER TO STRUCTURAL DRAWINGS FOR INSTALLATION DETAIL.

M:\4528-IDOT Div. St. Bridge over Cal-Sag River\V84 - CADD\Elect\E06.dgn

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd. Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrauf	DESIGNED JCM	REVISED
FILE NAME = E06.dgn	CHECKED OS	REVISED
PLOT SCALE = 1ø '1' / in.	DRAWN HR	REVISED
PLOT DATE = 3/13/2015	CHECKED JCM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE ARCHITECTURAL LIGHTING DETAILS

SHEET NO. E-06 OF 10 SHEETS

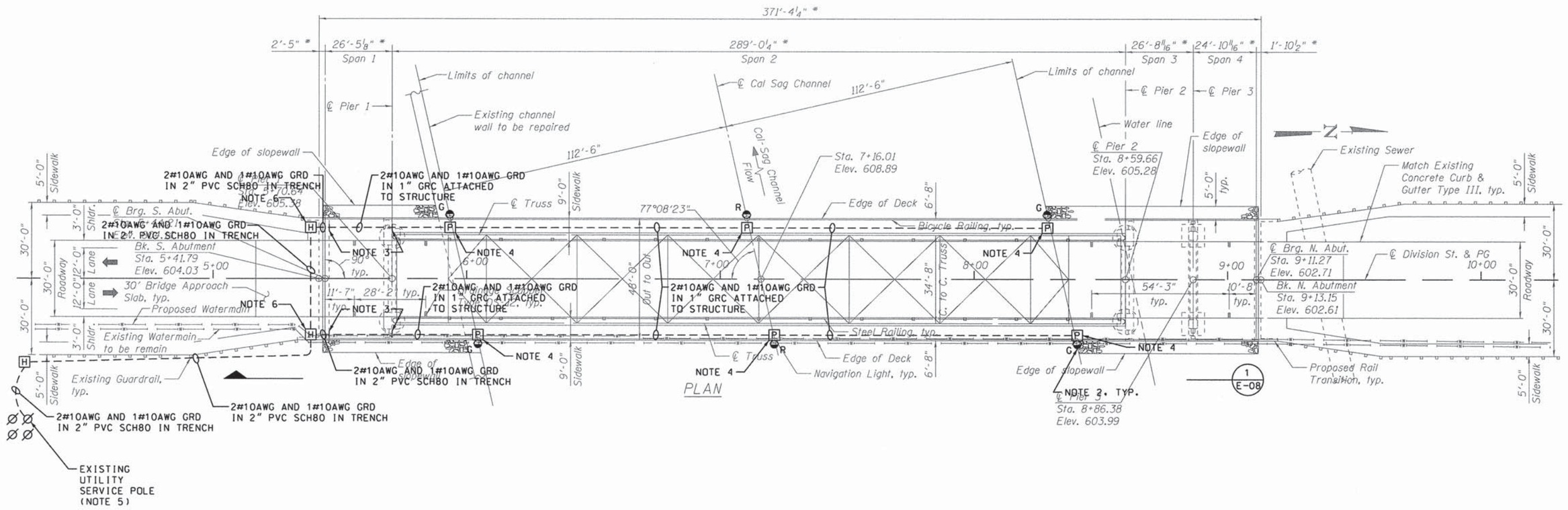
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	23
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

LEGEND

- NAVIGATION LIGHT FIXTURE (180 DEG)
  "G"= GREEN LENS
  "R"= RED LINES
- UTILITY POLE, EXISTING
- [P] PULL BOX/JUNCTION BOX, SIZE AS NOTED ON DRAWINGS
- [H] 24" HANDHOLE, HEAVY DUTY, PORTLAND CEMENT
- CONDUIT DIRECT BURIED, EMBEDDED, OR ATTACHED TO STRUCTURE AS NOTED ON PLAN

NOTES

1. REFER TO SHEET E-01 FOR GENERAL ELECTRICAL NOTES AND ABBREVIATIONS.
2. PROVIDE NEW NAVIGATION LIGHT FIXTURE. LETTER ADJACENT TO SYMBOL REPRESENTS LENS COLOR. REFER TO SHEET E-04 FOR INSTALLATION DETAIL.
3. PROVIDE EXPANSION/DEFLECTION FITTING. COST OF FITTING IS INCIDENTAL TO THE CONDUIT PAY ITEM.
4. PROVIDE 8"x6"x4" SS JUNCTION BOX ATTACHED TO UNDERSIDE OF DECK.
5. INTERCEPT EXISTING NAVIGATION LIGHT ELECTRIC SERVICE AT EXISTING JUNCTION BOX MOUNTED ON EXISTING UTILITY POLE. COST OF CONNECTION IS INCLUDED IN THE COST OF NAVIGATION LIGHTING SYSTEM PAY ITEM.
6. HANDHOLE CONTAINS BRIDGE LIGHTING WIRING. REFER TO SHEET E-03 FOR ADDITIONAL WORK.



AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd. Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrouf	DESIGNED JCM	REVISED	
FILE NAME = E07.dgn	CHECKED OS	REVISED	
PLOT SCALE = 20.0000 ' / in.	DRAWN HR	REVISED	
PLOT DATE = 3/13/2015	CHECKED JCM	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED NAVIGATION LIGHTING PLAN

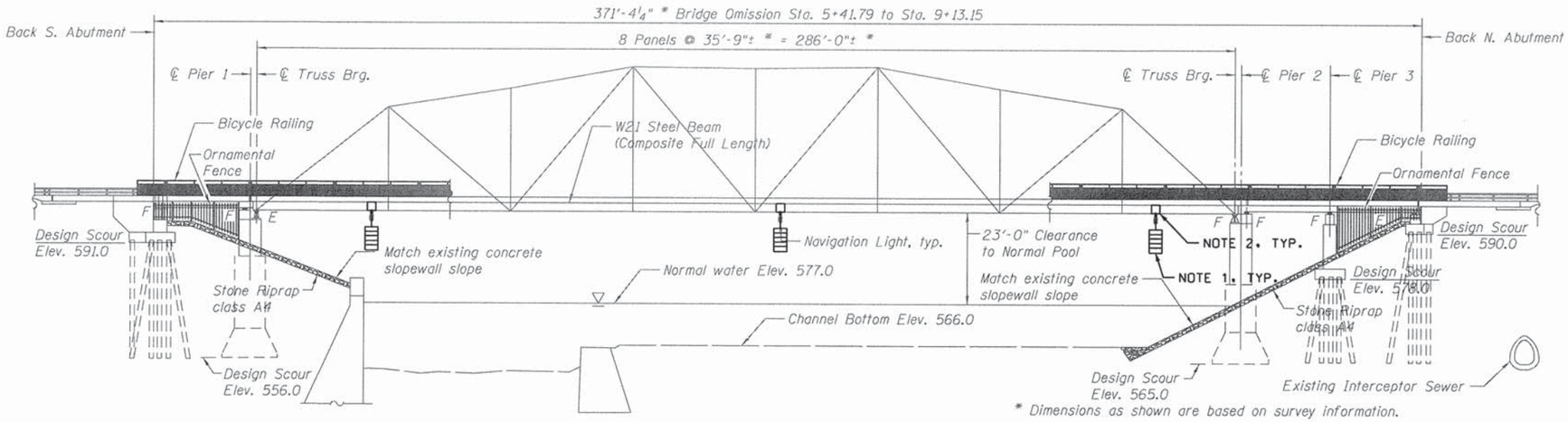
SHEET NO. E-07 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	24
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

M:\45178-1001 Div. St Bridge over Cal-Sag River\R4 - CADD\Elect\E07.dgn

NOTES

1. PROVIDE NEW NAVIGATION LIGHT FIXTURE IN SAME LOCATION AS EXISTING.
2. REFER TO SHEET E-09 FOR NAVIGATION LIGHT INSTALLATION DETAIL.



1 ELEVATION
NTS

M:\4578-IDOT Div St Bridge over Cal-Sag River\04 - CADD\Elect\E08.dgn

AAA ENGINEERING
WBE/DBE CERTIFIED
4023 W. Irving Park Rd Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrouf	DESIGNED JCM	REVISED	
FILE NAME = E08.dgn	CHECKED OS	REVISED	
PLOT SCALE = 20.0000 ' / in.	DRAWN HR	REVISED	
PLOT DATE = 3/13/2015	CHECKED JCM	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

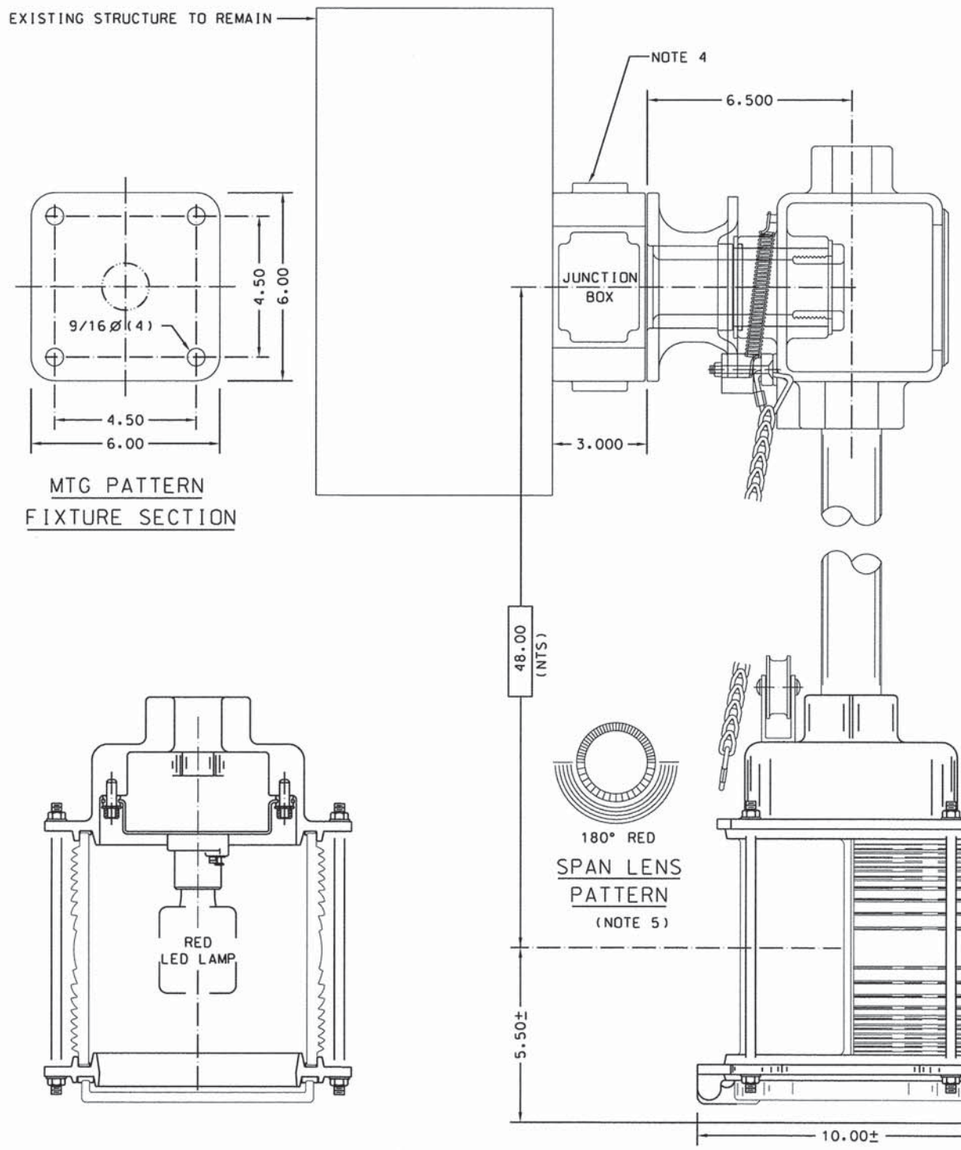
PROPOSED NAVIGATION LIGHTING BRIDGE ELEVATION

SHEET NO. E-08 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	25
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

NOTES

1. REFER TO PLAN DRAWING ON SHEET E-07 FOR LIGHT FIXTURE LOCATIONS.
2. EACH NAVIGATION LIGHT TO BE B&B MODEL NUMBER BS-A-JB-LED-G180-R180. OR EDKO FEDERAL SERIES.
3. ALL LAMPS TO BE LED TYPE.
4. 6"X 6" CAST JUNCTION BOX ATTACHED TO FACE OF CONCRETE SIDEWALK AND TO BE INCLUDED IN WATER OBSTRUCTION WARNING LUMINAIRE. LED PAY ITEM.
5. PROVIDE GREEN LENS COLOR WHERE SHOWN ON PLANS.
6. ALL WORK SHOWN ON THIS DRAWING TO BE INCLUDED IN WATER OBSTRUCTION WARNING LUMINAIRE. LED PAY ITEM.



MTG PATTERN
FIXTURE SECTION

SECTION VIEW

SIDE VIEW

FRONT VIEW

M:\4570-IDOT Ov. St. Bridge over Cal-Sag River\R4 - CADD\Elect\E09.dgn

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd. Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3330

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrauf	DESIGNED JCM	REVISED
FILE NAME = E09.dgn	CHECKED OS	REVISED
PLOT SCALE = 20.0000 sf / in.	DRAWN HR	REVISED
PLOT DATE = 3/13/2015	CHECKED JCM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

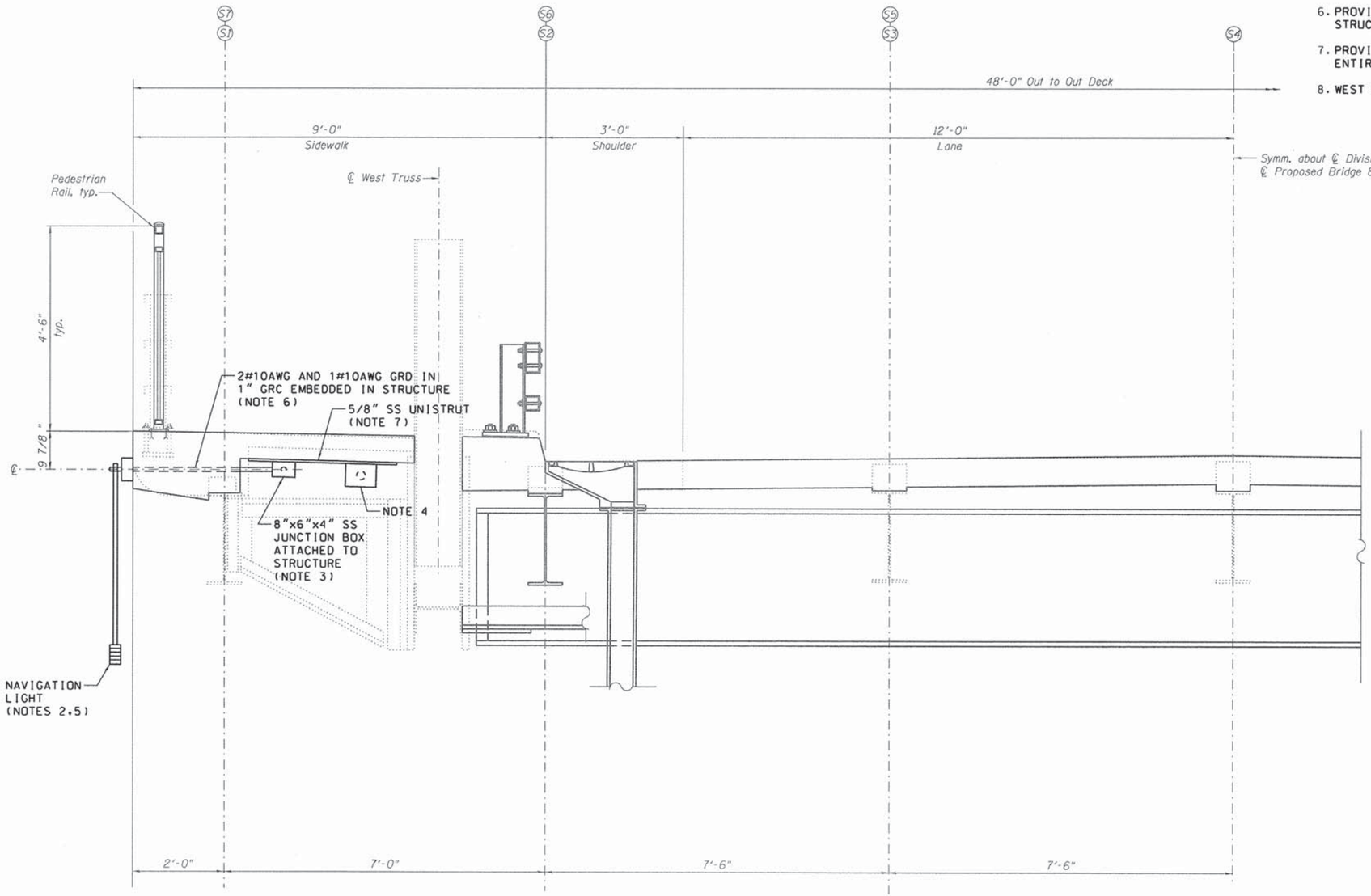
NAVIGATION LIGHT DETAILS

SHEET NO. E-09 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	26
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		

NOTES

1. REFER TO SHEET E-01 FOR GENERAL ELECTRICAL NOTES AND ABBREVIATIONS.
2. REFER TO SHEET E-09 FOR NAVIGATION LIGHT DETAIL.
3. REFER TO SHEET E-07 FOR RACEWAY AND CABLE PLAN.
4. ROADWAY LIGHTING JUNCTION BOX AND RACEWAY. REFER TO SHEET E-03 FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE LIGHT FIXTURE EXTENSION TO ALIGN BOTTOM OF NAVIGATION LIGHT WITH BOTTOM OF LOWEST BRIDGE STRUCTURE.
6. PROVIDE 2" PVC SLEEVE. COORDINATE WORK WITH STRUCTURAL.
7. PROVIDE UNISTRUT EVERY 3'-0" ON CENTER ALONG ENTIRE LENGTH OF BRIDGE.
8. WEST SIDE OF BRIDGE SHOWN. EAST SIMILIAR.



SECTION NAVIGATION LIGHTING INSTALLATION

SCALE: 3/4"=1'-0" (NOTE 8)

M:\4578-IDOT Div St Bridge over Cal-Sag River\04 - CADD\Elect\E10.dgn

AAA ENGINEERING
WBE/DBE CERTIFIED
4323 W. Irving Park Rd Suite 200, Chicago, IL 60641
Phone: 773-657-3300 • Fax: 773-657-3320

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME = hrauf	DESIGNED JCM	REVISED	
FILE NAME = E10.dgn	CHECKED OS	REVISED	
PLOT SCALE = 1:4 '/ in.	DRAWN HR	REVISED	
PLOT DATE = 3/13/2015	CHECKED JCM	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION NAVIGATION LIGHTING INSTALLATION

SHEET NO. E-10 OF 10 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	27
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		

Bench Mark:
Chiseled square on east side of concrete base of aluminum light pole at southwest corner of Division St. and Grove St., Sta. 12+13.40, 16.60' Lt., Elev. 589.00

Existing Structure:
S.N. 016-5005 Built in 1964 as ART8, Section 46-V VB at Sta. 20+63.79 as a four span structure consisting of a 29'-2" steel beam South approach span, a 289'-8" steel Warren Truss, and 26'-2" and 27'-0" steel beam north approach spans. Total length = 372'-0" Bk. to Bk. Abuts. (Dimensions based on existing plans). The clear roadway width is 30'-0" with 5'-0" sidewalks on either side outside of the truss chords. North and South Abutments and Pier 3 are concrete supported on steel piles. Pier 1 and Pier 2 are concrete on belled caissons in hard pan. Structure is currently closed due to its deteriorated condition.

No Salvage

SCOPE OF WORK

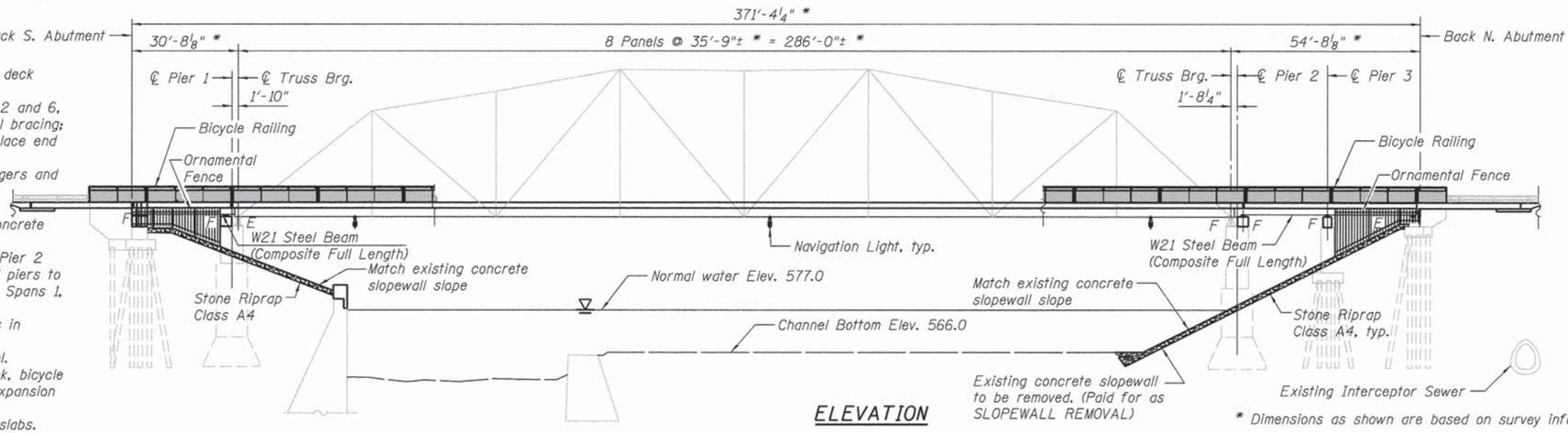
1. Remove existing concrete deck, railing, deck drains and expansion joints.
2. Remove and replace existing Stringers 2 and 6, designated diaphragm and bottom lateral bracing; install chord web repair plates and replace end floorbeams in Span 2.
3. Remove existing steel floorbeams, stringers and bearings in Spans 1, 3 and 4.
4. Repair spalls, delaminations and open cracks in substructures with formed concrete repair and epoxy crack injection.
5. Replace concrete struts at Pier 1 and Pier 2 and reconfigure existing abutments and piers to permanently remove steel floorbeams in Spans 1, 3 and 4.
6. Replace existing bearings and stringers in Spans 1, 3 and 4.
7. Clean and paint existing structural steel.
8. Place new 7½" reinforced concrete deck, bicycle railing, traffic barrier, scuppers and expansion joints.
9. Remove and replace existing approach slabs.
10. Remove existing slopewalls, install ornamental fence in Spans 1 and 4, and replace with riprap.
11. Repair existing sea wall.
12. Remove and replace existing water main.
13. Remove and replace existing bridge, roadway and navigation lighting and place sidewalk and architectural lighting.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)					
	S. Abut.	Pier 1	Pier 2	Pier 3	N. Abut.
Q100	591.0	556.0	565.0	580.0	590.0
Q500	591.0	556.0	565.0	580.0	590.0

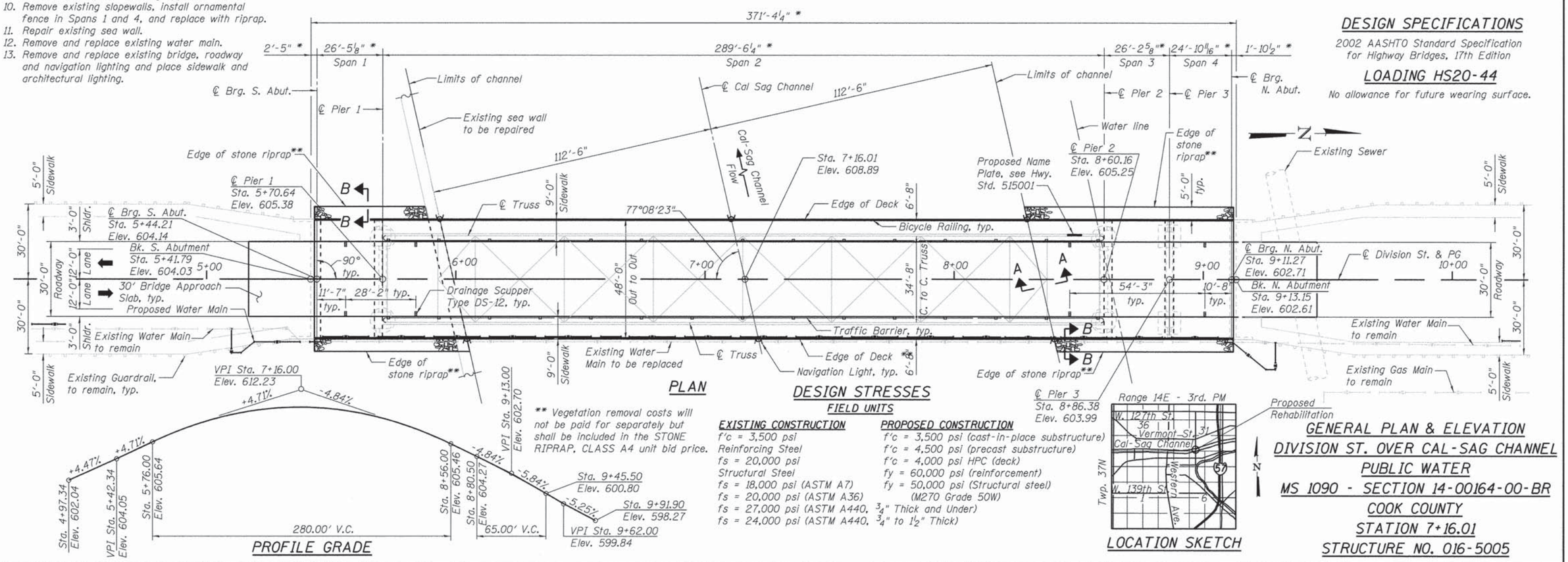
NOTES

1. See Section A-A and Section B-B on Sheet S-3
2. Existing pedestrian railing shall be removed. Cost is included with BRIDGE HANDRAIL REMOVAL.



ELEVATION

* Dimensions as shown are based on survey information.



PLAN

PROFILE GRADE

** Vegetation removal costs will not be paid for separately but shall be included in the STONE RIPRAP, CLASS A4 unit bid price.

DESIGN STRESSES

FIELD UNITS

EXISTING CONSTRUCTION

f'c = 3,500 psi
Reinforcing Steel
fs = 20,000 psi
Structural Steel
fs = 18,000 psi (ASTM A7)
fs = 20,000 psi (ASTM A36)
fs = 27,000 psi (ASTM A440, ¾" Thick and Under)
fs = 24,000 psi (ASTM A440, ¾" to 1½" Thick)

PROPOSED CONSTRUCTION

f'c = 3,500 psi (cast-in-place substructure)
f'c = 4,500 psi (precast substructure)
f'c = 4,000 psi HPC (deck)
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (Structural steel)
(M270 Grade 50W)

LOCATION SKETCH

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specification for Highway Bridges, 17th Edition

LOADING HS20-44

No allowance for future wearing surface.

Proposed Rehabilitation

GENERAL PLAN & ELEVATION
DIVISION ST. OVER CAL-SAG CHANNEL
PUBLIC WATER
MS 1090 - SECTION 14-00164-00-BR
COOK COUNTY
STATION 7+16.01
STRUCTURE NO. 016-5005

GERALD L.J. NOACK
062-057166
LICENSED STRUCTURAL ENGINEER
ILLINOIS
DATE: 3/20/2015
SEAL EXPIRES: 11/30/2015
SHEETS: 28-80

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

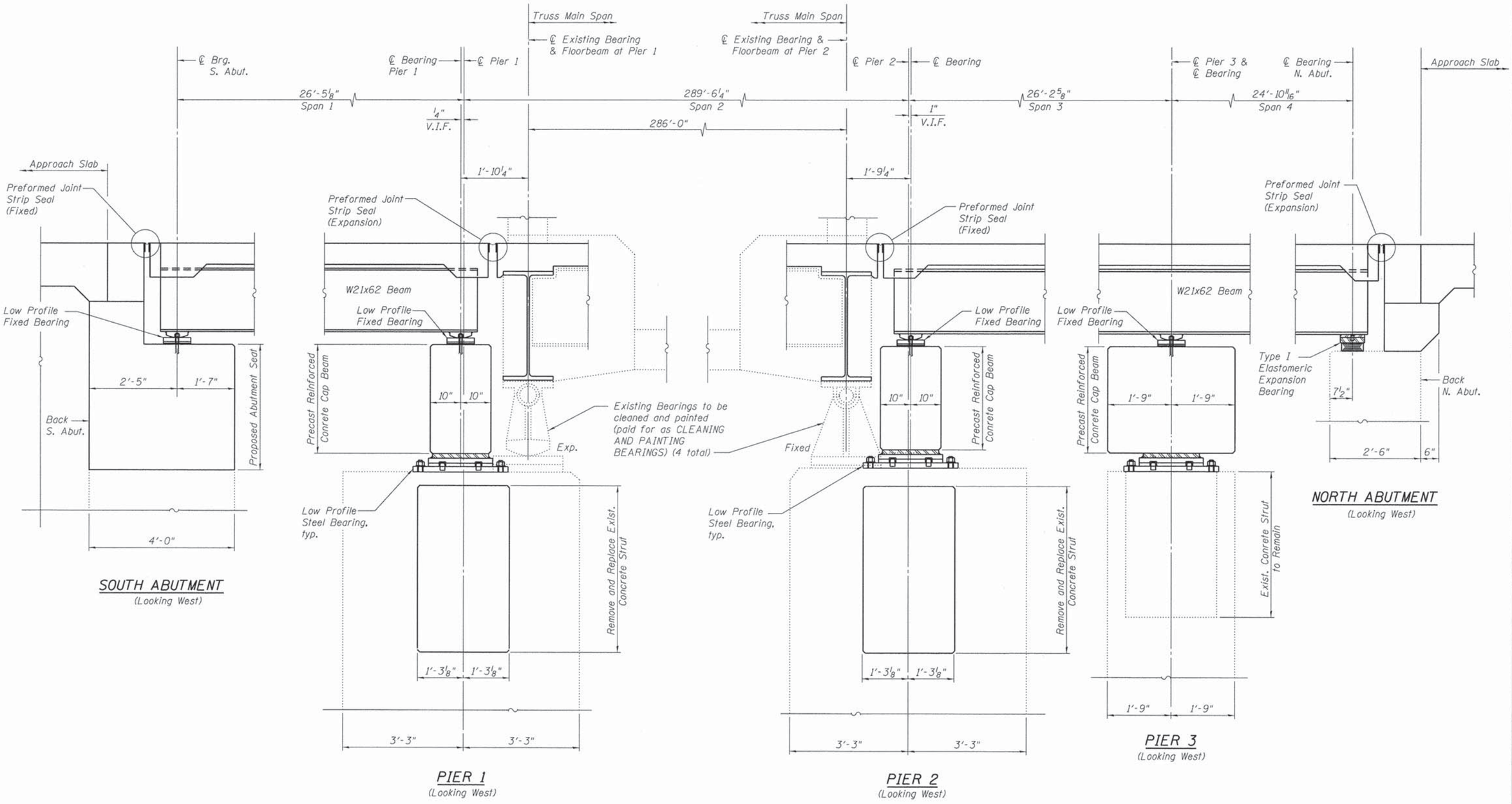
USER NAME =	DESIGNED - BJN	REVISED	
FILE NAME = 016-5005-001-GP.dgn	CHECKED - RH	REVISED	
PLOT SCALE =	DRAWN - EF	REVISED	
PLOT DATE =	CHECKED - RH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. S-1 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	28
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

I:\CHI\PRJ\000003634\Structure\dgn\016-5005-001-GP.dgn



SOUTH ABUTMENT
(Looking West)

PIER 1
(Looking West)

PIER 2
(Looking West)

PIER 3
(Looking West)

NORTH ABUTMENT
(Looking West)

NOTES

1. See Sheet S-44 thru S-46 abutment details.
2. See Sheet S-47 thru S-50 for pier details.
3. See Sheet S-20 thru S-27 for superstructure details.

I:\CIVIL\PRJ\020020353A\Structure\dgn\016-5005-002-GP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - LJB	REVISED
	FILE NAME = 016-5005-002-GP.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - BJN	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE ELEVATION
STRUCTURE NO. 016-5005
SHEET NO. S-2 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	29
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

1. Fasteners shall be ASTM A325 Type 3.
   Bolts $\frac{7}{8}$ in. ϕ. holes $\frac{15}{16}$ in. ϕ. unless otherwise noted.
2. Calculated weight of Structural Steel = 153,749 lbs. (M270 Grade 50W)
3. All structural steel shall be AASHTO M 270 Grade 50W (except expansion joints which shall be AASHTO M 270 Grade 50), unless otherwise noted.
4. No field welding is permitted except as specified in the contract documents.
5. Anti-Graffiti Protection System shall be applied to all exposed vertical faces of abutments, piers, wingwalls and sea wall. The cost is paid for as ANTI-GRAFFITI PROTECTION SYSTEM.
6. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
7. Reinforcement bars designated (E) shall be epoxy coated.
8. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. Existing shear connector shall be protected and reused.
   Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
9. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
10. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
11. The Contractor shall obtain all necessary permits from the Coast Guard and shall be per Maintenance of Navigation Special Provision. All channel clearances and free navigation shall not be unreasonably interfered with. The Contractor shall submit a plan of operations to the Coast Guard which shall include a schedule of construction site activities. The plan of operations shall be submitted thirty (30) days prior to the start of any work that temporarily alters the navigational clearances or places equipment in or over the waterway that may impede navigation.
12. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.
13. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
14. Concrete Sealer shall be applied to the designated areas of the pier, abutment and sea wall repairs.
15. Cleaning and painting of the existing structural steel shall be as specified in the Special Provisions for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirement of Paint System 1 - OZ/E/U. The color of the final finish coat for all existing steel surfaces shall be Blue, Munsell No. 2.5PB 5/10. Three color chip samples of the final finish coat shall be submitted to the Engineer for approval.
    The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
16. The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for water main and all steel surfaces (except Bicycle Railing and Ornamental Fence) shall be Blue Munsell No. 2.5PB 5/10. The color of the final finish coat for the Bicycle Railing and Ornamental Fence shall be Black Munsell No. 0. Three color chip samples of the final finish coat shall be submitted to the Engineer for approval prior to finish coating the steel structure.
17. A minimum of 4 air monitors will be required to monitor abrasive blasting operations of the site. See Special Provision for "Containment and Disposal of Lead Paint Cleaning Residues".
18. The Contractor shall submit calculations and details demonstrating the structural integrity of the bridge is maintained under the additional imposed loads of the containment system. See Special Provisions for "Containment and Disposal of Lead Paint Cleaning Residues".
19. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
20. Plan structural steel and concrete repairs were prepared in accordance with Bridge Condition Report, prepared by H.W. Lochner, Inc., dated May 2013 and a follow up inspection on May 23, 2014. The Engineer may determine during construction that modification or additional to these repairs may be necessary. Any such modification shall be approved by the Engineer and shall be paid for at the same rate at the unit bid price for the particular item.
21. The Contractor shall submit Structural Assessment Report(s) as required for the Contractor's means and methods of construction, see Special Provisions. The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges (Advanced Typical), for preparation of the Structural Assessment Reports(s). Contractor's pre-approval shall not be applicable for this project.
    The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the Special Provisions. See Special Provision.
22. Limited existing plans for S.N. 016-5005 are included in these Plans (for information only). Additionally, existing plans for S.N. 016-6620 are included (for information only) as those plans, in some instances, offer a more complete representation of the As-Built conditions of S.N. 016-5005.

PAINTING NOTES

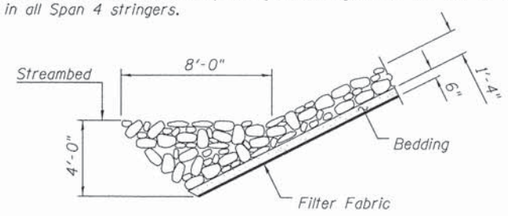
Cleaning and painting of existing structures includes all original steel to remain in Span 2 (including but not limited to floorbeams, stringers, trusses, lateral bracing, diaphragms, anchor bolts, etc.).

All locations are to be treated in accordance with the Special Provision for "Cleaning and Painting Existing Steel Structures". See Figure 1 (this Sheet) for clean and paint areas for truss built up box members.

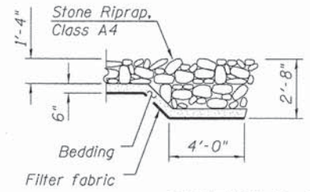
CURRENT RATINGS ON FILE FOR EXISTING STRUCTURE

Inventory: HS 0.0
Operating: HS 0.0
Live Load Restrictions: 0 tons

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS Loading and configuration. Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.
The Inventory and Operating Ratings given above are based on severe section loss in the curb line roadway stringers (Stringers S2 and S6, all spans) and in all Span 4 stringers.



SECTION A-A



SECTION B-B

INDEX OF SHEETS

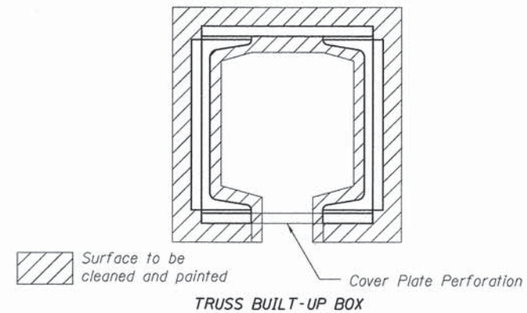
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
POROUS GRANULAR BACKFILL	CU YD		127	127
STONE RIPRAP, CLASS A4	SQ YD		640	640
CONCRETE REMOVAL	CU YD		94.4	94.4
SLOPE WALL REMOVAL	SQ YD		494	494
REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1
PROTECTIVE SHIELD	SQ YD	1,970		1,970
STRUCTURE EXCAVATION	CU YD		221	221
CONCRETE STRUCTURES	CU YD	19.2	73.0	92.2
BRIDGE DECK GROOVING	SQ YD	1,340		1,340
PROTECTIVE COAT	SQ YD	2,217		2,217
PRECAST CONCRETE CAPS	EACH		3	3
FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
STUD SHEAR CONNECTORS	EACH	9,676		9,676
REINFORCEMENT BARS, EPOXY COATED	POUND	177,640	28,310	205,950
BAR SPLICERS	EACH	66		66
MECHANICAL SPLICERS	EACH	72		72
STEEL RAILING, TYPE 2399	FOOT	607		607
NAME PLATES	EACH	1		1
PREFORMED JOINT STRIP SEAL	FOOT	196		196
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH		7	7
ANCHOR BOLTS, 5/8"	EACH		78	78
ANCHOR BOLTS, 1"	EACH		16	16
CONCRETE SEALER	SQ FT		2,867	2,867
EPOXY CRACK INJECTION	FOOT		45	45
GEOCOMPOSITE WALL DRAIN	SQ YD		85	85
GRAFFITI REMOVAL	SQ YD		62	62
ANTI-GRAFFITI PROTECTION SYSTEM	SQ FT		5,521	5,521
CLEANING AND PAINTING BEARINGS	EACH		4	4
STRUCTURAL STEEL REMOVAL	POUND	166,220		166,220
STRUCTURAL STEEL REPAIR	POUND	310		310
REMOVAL OF EXISTING BEARINGS	EACH		23	23
APPROACH SLAB REMOVAL	SQ YD	200		200
BRIDGE HANDRAIL REMOVAL	FOOT	779		779
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1		1
CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1		1
STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5 INCHES)	SQ FT		175	175
DRAINAGE SCUPPERS, DS-12	EACH	8		8
PIPE UNDERDRAINS FOR STRUCTURES 4"	FT		144	144
TEMPORARY SUPPORT SYSTEM	L SUM	1		1
BICYCLE RAILING (SPECIAL)	FOOT	779		779
ORNAMENTAL FENCE	FOOT		113	113
HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE	CU YD	690.0		690.0

STATION 7+16.01
REBUILT 2016 BY
STATE OF ILLINOIS
MS 1090 - SECTION 14-00164-00-BR
LOADING HS-20
STRUCTURE NO. 016-5005

Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with NAME PLATES.

NAME PLATE
See Std. 515001



TRUSS BUILT-UP BOX MEMBER PAINTING DETAIL
FIGURE 1

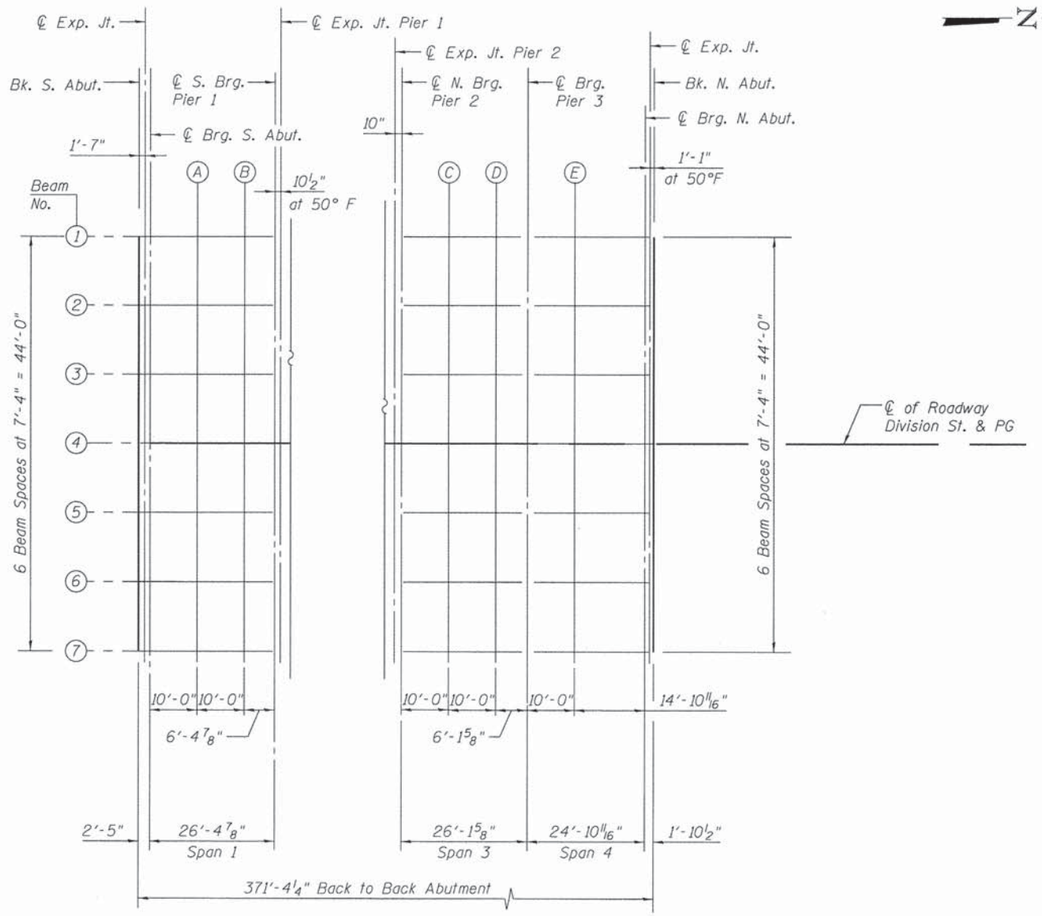
I:\CH\PRJ\2020036341\Struct\dgn\016-5005-003-GN.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - BJN	REVISED
	FILE NAME = 016-5005-003-GN.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND BILL OF MATERIAL
STRUCTURE NO. 016-5005
SHEET NO. S-3 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	30
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



PLAN

I:\CH\PRJ\000003634\Struct\dgn\016-5005-004-SE.dgn

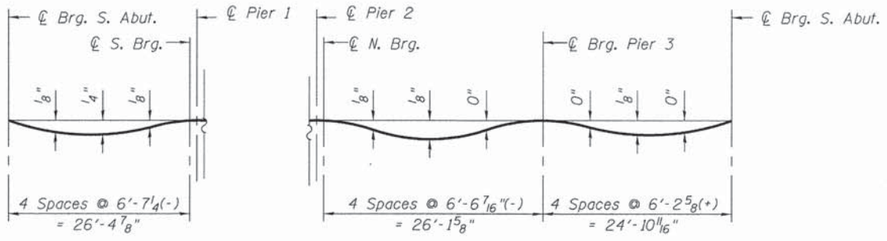
LOCHNER	USER NAME =	DESIGNED - LJB	REVISED
H. W. LOCHNER, INC.	FILE NAME = 016-5005-004-SE.dgn	CHECKED - BJN	REVISED
225 WEST WASHINGTON STREET	PLOT SCALE =	DRAWN - LJB	REVISED
12 TH FLOOR	PLOT DATE =	CHECKED - BJN	REVISED
CHICAGO, ILLINOIS 60606			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS 1
STRUCTURE NO. 016-5005

SHEET NO. S-4 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	31
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

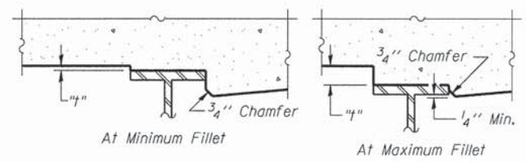


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	-22.00	604.45	604.45
℄ Exp. Jt.	5+43.37	-22.00	604.52	604.52
℄ Brg. S. Abut.	5+44.21	-22.00	604.56	604.56
A	5+54.21	-22.00	605.03	605.05
B	5+64.21	-22.00	605.50	605.51
℄ S. Brg. Pier 1	5+70.62	-22.00	605.80	605.80
℄ Exp. Jt.Pier 1	5+71.49	-22.00	605.85	605.85
℄ Exp. Jt.Pier 2	8+59.41	-22.00	605.72	605.72
℄ N. Brg. Pier 2	8+60.24	-22.00	605.68	605.68
C	8+70.24	-22.00	605.19	605.20
D	8+80.24	-22.00	604.71	604.71
℄ Brg. Pier 3	8+86.38	-22.00	604.41	604.41
E	8+96.38	-22.00	603.91	603.91
℄ Brg. N. Abut.	9+11.27	-22.00	603.13	603.13
℄ Exp. Jt.	9+12.06	-22.00	603.09	603.09
Bk. N. Abut.	9+13.15	-22.00	603.03	603.03

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	-14.67	603.84	603.84
℄ Exp. Jt.	5+43.37	-14.67	603.92	603.92
℄ Brg. S. Abut.	5+44.21	-14.67	603.96	603.96
A	5+54.21	-14.67	604.43	604.45
B	5+64.21	-14.67	604.90	604.91
℄ S. Brg. Pier 1	5+70.62	-14.67	605.20	605.20
℄ Exp. Jt.Pier 1	5+71.49	-14.67	605.24	605.24
℄ Exp. Jt.Pier 2	8+59.41	-14.67	605.11	605.11
℄ N. Brg. Pier 2	8+60.24	-14.67	605.07	605.07
C	8+70.24	-14.67	604.59	604.60
D	8+80.24	-14.67	604.11	604.11
℄ Brg. Pier 3	8+86.38	-14.67	603.81	603.81
E	8+96.38	-14.67	603.30	603.31
℄ Brg. N. Abut.	9+11.27	-14.67	602.53	602.53
℄ Exp. Jt.	9+12.06	-14.67	602.49	602.49
Bk. N. Abut.	9+13.15	-14.67	602.43	602.43

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	-7.33	603.98	603.98
℄ Exp. Jt.	5+43.37	-7.33	604.05	604.05
℄ Brg. S. Abut.	5+44.21	-7.33	604.09	604.09
A	5+54.21	-7.33	604.56	604.58
B	5+64.21	-7.33	605.03	605.05
℄ S. Brg. Pier 1	5+70.62	-7.33	605.34	605.34
℄ Exp. Jt.Pier 1	5+71.49	-7.33	605.38	605.38
℄ Exp. Jt.Pier 2	8+59.41	-7.33	605.25	605.25
℄ N. Brg. Pier 2	8+60.24	-7.33	605.21	605.21
C	8+70.24	-7.33	604.72	604.73
D	8+80.24	-7.33	604.24	604.24
℄ Brg. Pier 3	8+86.38	-7.33	603.94	603.94
E	8+96.38	-7.33	603.44	603.44
℄ Brg. N. Abut.	9+11.27	-7.33	602.66	602.66
℄ Exp. Jt.	9+12.06	-7.33	602.62	602.62
Bk. N. Abut.	9+13.15	-7.33	602.56	602.56

I:\CHI\PRJ\000020634\Struct\dgn\016-5005-005-SE.dgn

℄ DIVISION ST., PG & BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	0.00	604.03	604.03
℄ Exp. Jt.	5+43.37	0.00	604.10	604.10
℄ Brg. S. Abut.	5+44.21	0.00	604.14	604.14
A	5+54.21	0.00	604.61	604.63
B	5+64.21	0.00	605.08	605.09
℄ S. Brg. Pier 1	5+70.62	0.00	605.38	605.38
℄ Exp. Jt.Pier 1	5+71.49	0.00	605.42	605.42
℄ Exp. Jt.Pier 2	8+59.41	0.00	605.29	605.29
℄ N. Brg. Pier 2	8+60.24	0.00	605.25	605.25
C	8+70.24	0.00	604.77	604.78
D	8+80.24	0.00	604.29	604.29
℄ Brg. Pier 3	8+86.38	0.00	603.99	603.99
E	8+96.38	0.00	603.49	603.49
℄ Brg. N. Abut.	9+11.27	0.00	602.71	602.71
℄ Exp. Jt.	9+12.06	0.00	602.67	602.67
Bk. N. Abut.	9+13.15	0.00	602.61	602.61

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	7.33	603.98	603.98
℄ Exp. Jt.	5+43.37	7.33	604.05	604.05
℄ Brg. S. Abut.	5+44.21	7.33	604.09	604.09
A	5+54.21	7.33	604.56	604.58
B	5+64.21	7.33	605.03	605.05
℄ S. Brg. Pier 1	5+70.62	7.33	605.34	605.34
℄ Exp. Jt.Pier 1	5+71.49	7.33	605.38	605.38
℄ Exp. Jt.Pier 2	8+59.41	7.33	605.25	605.25
℄ N. Brg. Pier 2	8+60.24	7.33	605.21	605.21
C	8+70.24	7.33	604.72	604.73
D	8+80.24	7.33	604.24	604.24
℄ Brg. Pier 3	8+86.38	7.33	603.94	603.94
E	8+96.38	7.33	603.44	603.44
℄ Brg. N. Abut.	9+11.27	7.33	602.66	602.66
℄ Exp. Jt.	9+12.06	7.33	602.62	602.62
Bk. N. Abut.	9+13.15	7.33	602.56	602.56

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	14.67	603.84	603.84
℄ Exp. Jt.	5+43.37	14.67	603.92	603.92
℄ Brg. S. Abut.	5+44.21	14.67	603.96	603.96
A	5+54.21	14.67	604.43	604.45
B	5+64.21	14.67	604.90	604.91
℄ S. Brg. Pier 1	5+70.62	14.67	605.20	605.20
℄ Exp. Jt.Pier 1	5+71.49	14.67	605.24	605.24
℄ Exp. Jt.Pier 2	8+59.41	14.67	605.11	605.11
℄ N. Brg. Pier 2	8+60.24	14.67	605.07	605.07
C	8+70.24	14.67	604.59	604.60
D	8+80.24	14.67	604.11	604.11
℄ Brg. Pier 3	8+86.38	14.67	603.81	603.81
E	8+96.38	14.67	603.30	603.31
℄ Brg. N. Abut.	9+11.27	14.67	602.53	602.53
℄ Exp. Jt.	9+12.06	14.67	602.49	602.49
Bk. N. Abut.	9+13.15	14.67	602.43	602.43

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5+41.79	22.00	604.45	604.45
℄ Exp. Jt.	5+43.37	22.00	604.52	604.52
℄ Brg. S. Abut.	5+44.21	22.00	604.56	604.56
A	5+54.21	22.00	605.03	605.05
B	5+64.21	22.00	605.50	605.51
℄ S. Brg. Pier 1	5+70.62	22.00	605.80	605.80
℄ Exp. Jt.Pier 1	5+71.49	22.00	605.85	605.85
℄ Exp. Jt.Pier 2	8+59.41	22.00	605.72	605.72
℄ N. Brg. Pier 2	8+60.24	22.00	605.68	605.68
C	8+70.24	22.00	605.19	605.20
D	8+80.24	22.00	604.71	604.71
℄ Brg. Pier 3	8+86.38	22.00	604.41	604.41
E	8+96.38	22.00	603.91	603.91
℄ Brg. N. Abut.	9+11.27	22.00	603.13	603.13
℄ Exp. Jt.	9+12.06	22.00	603.09	603.09
Bk. N. Abut.	9+13.15	22.00	603.03	603.03

I:\CH1\PRJ\000083631\Structs\dgn\016-5005-006-SE.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

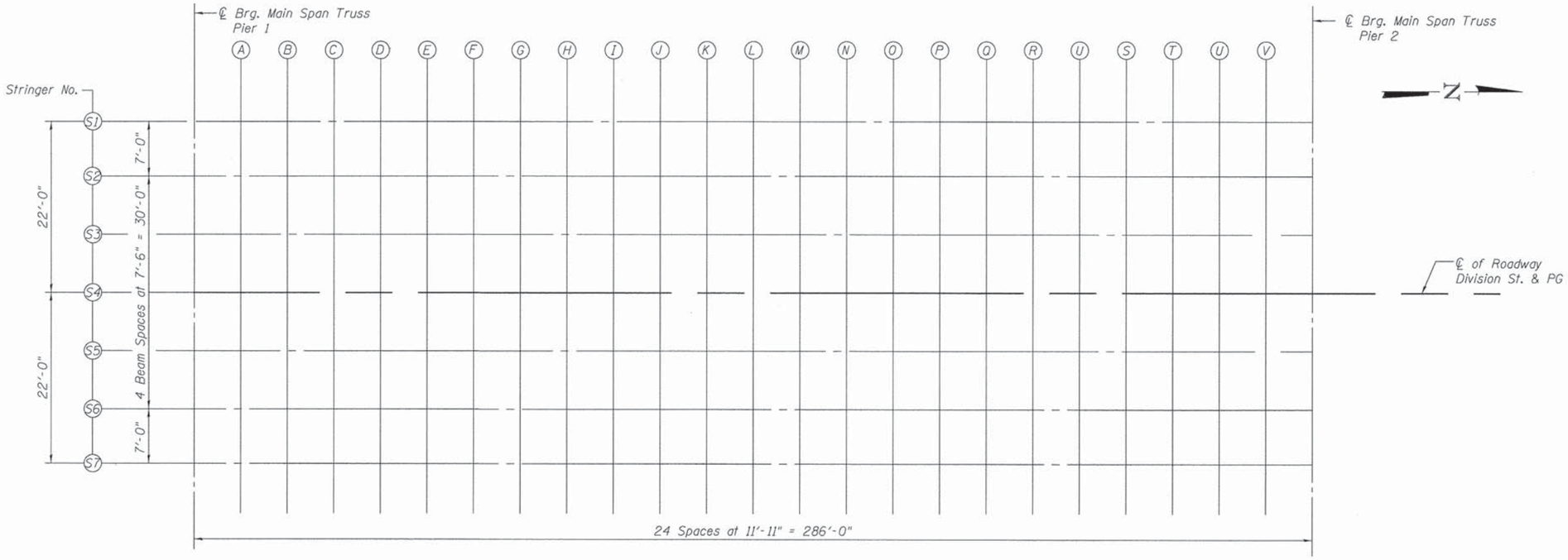
USER NAME =		DESIGNED - LJB	REVISED
FILE NAME = 016-5005-006-SE.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - LJB	REVISED
PLOT DATE =		CHECKED - BJN	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

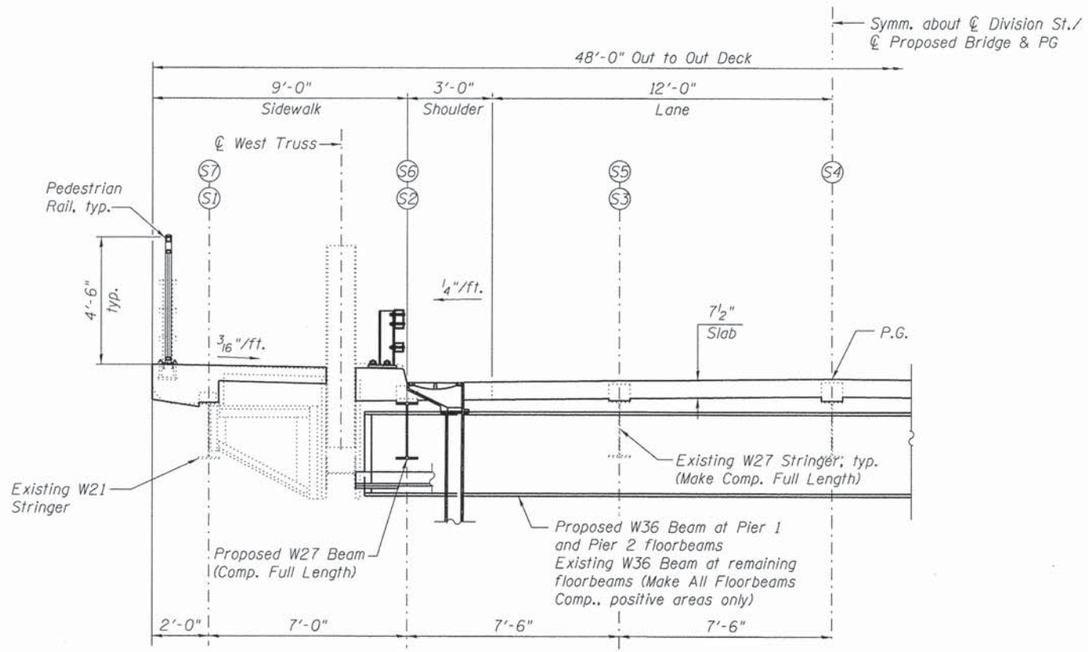
TOP OF SLAB ELEVATIONS 3
STRUCTURE NO. 016 – 5005
SHEET NO. S-6 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	33

CONTRACT NO. 61B58
ILLINOIS FED. AID PROJECT

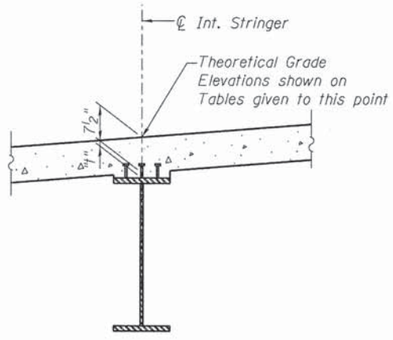


PLAN

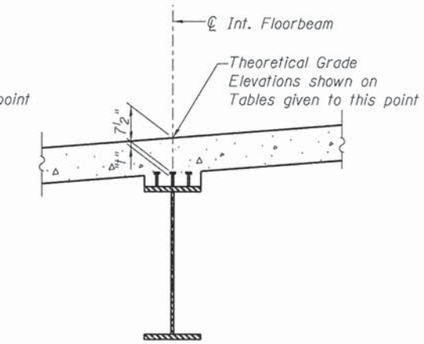


CROSS SECTION AT TRUSS SPAN

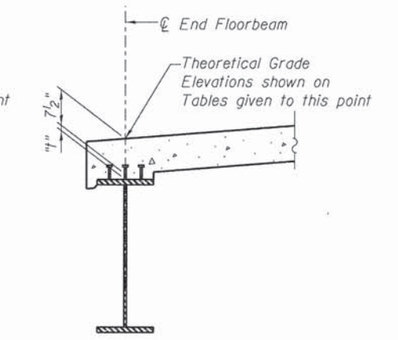
Looking North



AT INT. STRINGER



AT INT. FLOORBEAM



AT END FLOORBEAM

Note

To determine "t": After all steel structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection", minus slab thickness equals the fillet height "t" above the top flange of beams.

I:\CH1\PRJ\0000035341\Structs\dgn\016-5005-007-SE.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - RH	REVISED
	FILE NAME = 016-5005-007-SE.dgn	CHECKED - BJN	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATION 4
STRUCTURE NO. 016-5005

SHEET NO. S-7 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	34
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

STRINGER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	-22.00	605.89	605.89
A	5+84.39	-22.00	606.44	606.53
B	5+96.30	-22.00	606.94	607.07
C	6+08.22	-22.00	607.40	607.50
D	6+20.14	-22.00	607.80	607.98
E	6+32.05	-22.00	608.16	608.36
F	6+43.97	-22.00	608.47	608.63
G	6+55.89	-22.00	608.73	608.97
H	6+67.80	-22.00	608.94	609.19
I	6+79.72	-22.00	609.11	609.31
J	6+91.64	-22.00	609.22	609.49
K	7+03.55	-22.00	609.29	609.56
L	7+15.47	-22.00	609.31	609.53
M	7+27.39	-22.00	609.28	609.55
N	7+39.30	-22.00	609.20	609.47
O	7+51.22	-22.00	609.07	609.28
P	7+63.14	-22.00	608.90	609.15
Q	7+75.05	-22.00	608.67	608.91
R	7+86.97	-22.00	608.40	608.57
S	7+98.89	-22.00	608.08	608.28
T	8+10.80	-22.00	607.71	607.89
U	8+22.72	-22.00	607.30	607.40
V	8+34.64	-22.00	606.83	606.96
W	8+46.55	-22.00	606.32	606.41
℄ Brg. Main Span Truss Pier 2	8+58.47	-22.00	605.76	605.76

STRINGER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	-15.00	605.28	605.28
A	5+84.39	-15.00	605.83	605.89
B	5+96.30	-15.00	606.33	606.43
C	6+08.22	-15.00	606.79	606.90
D	6+20.14	-15.00	607.20	607.35
E	6+32.05	-15.00	607.55	607.73
F	6+43.97	-15.00	607.86	608.03
G	6+55.89	-15.00	608.12	608.33
H	6+67.80	-15.00	608.34	608.56
I	6+79.72	-15.00	608.50	608.71
J	6+91.64	-15.00	608.61	608.86
K	7+03.55	-15.00	608.68	608.93
L	7+15.47	-15.00	608.70	608.93
M	7+27.39	-15.00	608.67	608.92
N	7+39.30	-15.00	608.59	608.84
O	7+51.22	-15.00	608.47	608.68
P	7+63.14	-15.00	608.29	608.52
Q	7+75.05	-15.00	608.07	608.28
R	7+86.97	-15.00	607.79	607.97
S	7+98.89	-15.00	607.47	607.65
T	8+10.80	-15.00	607.11	607.26
U	8+22.72	-15.00	606.69	606.80
V	8+34.64	-15.00	606.22	606.32
W	8+46.55	-15.00	605.71	605.77
℄ Brg. Main Span Truss Pier 2	8+58.47	-15.00	605.15	605.15

STRINGER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	-7.50	605.42	605.43
A	5+84.39	-7.50	605.97	606.04
B	5+96.30	-7.50	606.47	606.58
C	6+08.22	-7.50	606.93	607.05
D	6+20.14	-7.50	607.33	607.50
E	6+32.05	-7.50	607.69	607.87
F	6+43.97	-7.50	608.00	608.18
G	6+55.89	-7.50	608.26	608.48
H	6+67.80	-7.50	608.47	608.71
I	6+79.72	-7.50	608.64	608.86
J	6+91.64	-7.50	608.75	609.00
K	7+03.55	-7.50	608.82	609.07
L	7+15.47	-7.50	608.84	609.08
M	7+27.39	-7.50	608.81	609.06
N	7+39.30	-7.50	608.73	608.98
O	7+51.22	-7.50	608.60	608.83
P	7+63.14	-7.50	608.43	608.66
Q	7+75.05	-7.50	608.21	608.42
R	7+86.97	-7.50	607.93	608.12
S	7+98.89	-7.50	607.61	607.80
T	8+10.80	-7.50	607.24	607.41
U	8+22.72	-7.50	606.83	606.95
V	8+34.64	-7.50	606.36	606.46
W	8+46.55	-7.50	605.85	605.91
℄ Brg. Main Span Truss Pier 2	8+58.47	-7.50	605.29	605.30

STRINGER 4/ PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	0.00	605.47	605.48
A	5+84.39	0.00	606.02	606.09
B	5+96.30	0.00	606.52	606.63
C	6+08.22	0.00	606.98	607.10
D	6+20.14	0.00	607.38	607.55
E	6+32.05	0.00	607.74	607.93
F	6+43.97	0.00	608.05	608.24
G	6+55.89	0.00	608.31	608.53
H	6+67.80	0.00	608.52	608.76
I	6+79.72	0.00	608.69	608.91
J	6+91.64	0.00	608.80	609.06
K	7+03.55	0.00	608.87	609.13
L	7+15.47	0.00	608.89	609.13
M	7+27.39	0.00	608.86	609.12
N	7+39.30	0.00	608.78	609.03
O	7+51.22	0.00	608.65	608.88
P	7+63.14	0.00	608.48	608.71
Q	7+75.05	0.00	608.25	608.48
R	7+86.97	0.00	607.98	608.17
S	7+98.89	0.00	607.66	607.85
T	8+10.80	0.00	607.29	607.46
U	8+22.72	0.00	606.88	607.00
V	8+34.64	0.00	606.41	606.52
W	8+46.55	0.00	605.90	605.96
℄ Brg. Main Span Truss Pier 2	8+58.47	0.00	605.34	605.35

STRINGER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	7.50	605.42	605.43
A	5+84.39	7.50	605.97	606.04
B	5+96.30	7.50	606.47	606.58
C	6+08.22	7.50	606.93	607.05
D	6+20.14	7.50	607.33	607.50
E	6+32.05	7.50	607.69	607.87
F	6+43.97	7.50	608.00	608.18
G	6+55.89	7.50	608.26	608.48
H	6+67.80	7.50	608.47	608.71
I	6+79.72	7.50	608.64	608.86
J	6+91.64	7.50	608.75	609.00
K	7+03.55	7.50	608.82	609.07
L	7+15.47	7.50	608.84	609.08
M	7+27.39	7.50	608.81	609.06
N	7+39.30	7.50	608.73	608.98
O	7+51.22	7.50	608.60	608.83
P	7+63.14	7.50	608.43	608.66
Q	7+75.05	7.50	608.21	608.42
R	7+86.97	7.50	607.93	608.12
S	7+98.89	7.50	607.61	607.80
T	8+10.80	7.50	607.24	607.41
U	8+22.72	7.50	606.83	606.95
V	8+34.64	7.50	606.36	606.46
W	8+46.55	7.50	605.85	605.91
℄ Brg. Main Span Truss Pier 2	8+58.47	7.50	605.29	605.30

STRINGER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	15.00	605.28	605.28
A	5+84.39	15.00	605.83	605.89
B	5+96.30	15.00	606.33	606.43
C	6+08.22	15.00	606.79	606.90
D	6+20.14	15.00	607.20	607.35
E	6+32.05	15.00	607.55	607.73
F	6+43.97	15.00	607.86	608.03
G	6+55.89	15.00	608.12	608.33
H	6+67.80	15.00	608.34	608.56
I	6+79.72	15.00	608.50	608.71
J	6+91.64	15.00	608.61	608.86
K	7+03.55	15.00	608.68	608.93
L	7+15.47	15.00	608.70	608.93
M	7+27.39	15.00	608.67	608.92
N	7+39.30	15.00	608.59	608.84
O	7+51.22	15.00	608.47	608.68
P	7+63.14	15.00	608.29	608.52
Q	7+75.05	15.00	608.07	608.28
R	7+86.97	15.00	607.79	607.97
S	7+98.89	15.00	607.47	607.65
T	8+10.80	15.00	607.11	607.26
U	8+22.72	15.00	606.69	606.80
V	8+34.64	15.00	606.22	606.32
W	8+46.55	15.00	605.71	605.77
℄ Brg. Main Span Truss Pier 2	8+58.47	15.00	605.15	605.15

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - RH	REVISED	
FILE NAME = 016-5005-008-SE.dgn	CHECKED - BJN	REVISED	
PLOT SCALE =	DRAWN - EF	REVISED	
PLOT DATE =	CHECKED - BJN	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS 5
STRUCTURE NO. 016-5005
SHEET NO. S-8 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	35
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

STRINGER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. Main Span Truss Pier 1	5+72.47	22.00	605.89	605.89
A	5+84.39	22.00	606.44	606.53
B	5+96.30	22.00	606.94	607.07
C	6+08.22	22.00	607.40	607.50
D	6+20.14	22.00	607.80	607.98
E	6+32.05	22.00	608.16	608.36
F	6+43.97	22.00	608.47	608.63
G	6+55.89	22.00	608.73	608.97
H	6+67.80	22.00	608.94	609.19
I	6+79.72	22.00	609.11	609.31
J	6+91.64	22.00	609.22	609.49
K	7+03.55	22.00	609.29	609.56
L	7+15.47	22.00	609.31	609.53
M	7+27.39	22.00	609.28	609.55
N	7+39.30	22.00	609.20	609.47
O	7+51.22	22.00	609.07	609.28
P	7+63.14	22.00	608.90	609.15
Q	7+75.05	22.00	608.67	608.91
R	7+86.97	22.00	608.40	608.57
S	7+98.89	22.00	608.08	608.28
T	8+10.80	22.00	607.71	607.89
U	8+22.72	22.00	607.30	607.40
V	8+34.64	22.00	606.83	606.96
W	8+46.55	22.00	606.32	606.41
℄ Brg. Main Span Truss Pier 2	8+58.47	22.00	605.76	605.76

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - RH	REVISED
FILE NAME = 016-5005-009-SE.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - BJN	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS 6
STRUCTURE NO. 016–5005
SHEET NO. S-9 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	36
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		

WEST EDGE OF SHOULDER

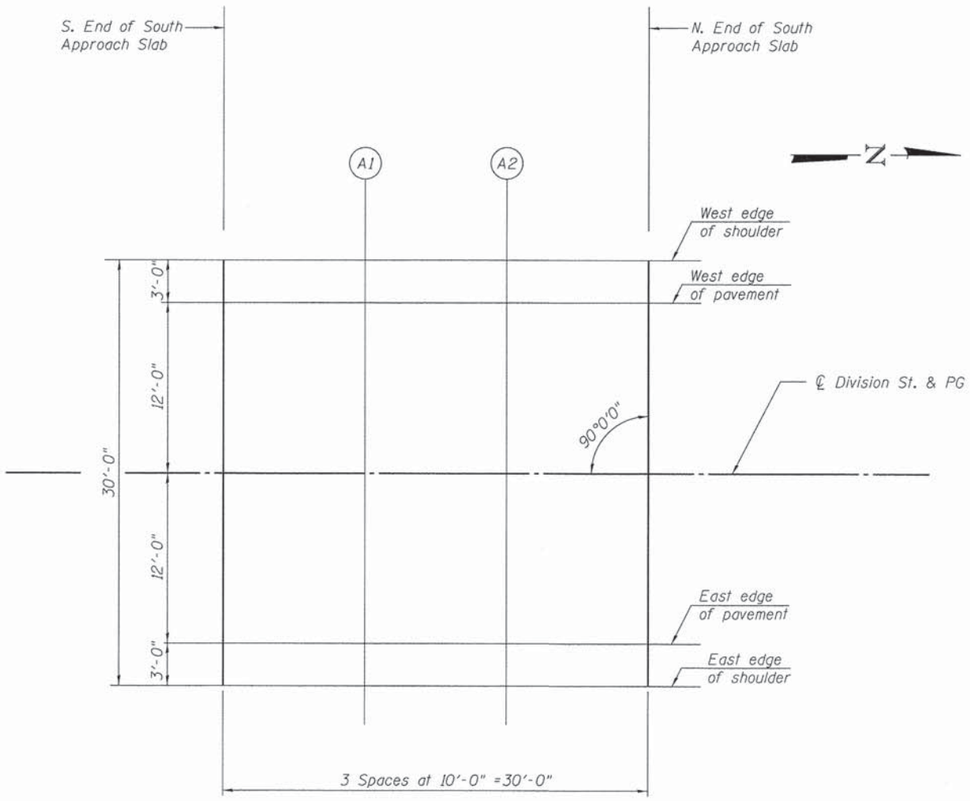
Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Pav't.	5+12.29	-15.00	602.52
A1	5+22.29	-15.00	602.97
A2	5+32.29	-15.00	603.41
N. End S. Appr. Pav't.	5+42.29	-15.00	603.86

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Pav't.	5+12.29	-12.00	602.58
A1	5+22.29	-12.00	603.03
A2	5+32.29	-12.00	603.48
N. End S. Appr. Pav't.	5+42.29	-12.00	603.92

℄ DIVISION ST. & PG

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Pav't.	5+12.29	0.00	602.71
A1	5+22.29	0.00	603.15
A2	5+32.29	0.00	603.60
N. End S. Appr. Pav't.	5+42.29	0.00	604.05



SOUTH APPROACH SLAB - PLAN

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Pav't.	5+12.29	12.00	602.58
A1	5+22.29	12.00	603.03
A2	5+32.29	12.00	603.48
N. End S. Appr. Pav't.	5+42.29	12.00	603.92

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Pav't.	5+12.29	15.00	602.52
A1	5+22.29	15.00	602.97
A2	5+32.29	15.00	603.41
N. End S. Appr. Pav't.	5+42.29	15.00	603.86

I:\CHI\PRJ\000003634\Structure\dgn\016-5005-010-AE.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - LJB	REVISED
FILE NAME = 016-5005-010-AE.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - LJB	REVISED
PLOT DATE =		CHECKED - BJN	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS 1
STRUCTURE NO. 016-5005
SHEET NO. S-10 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	37
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

WEST EDGE OF SHOULDER

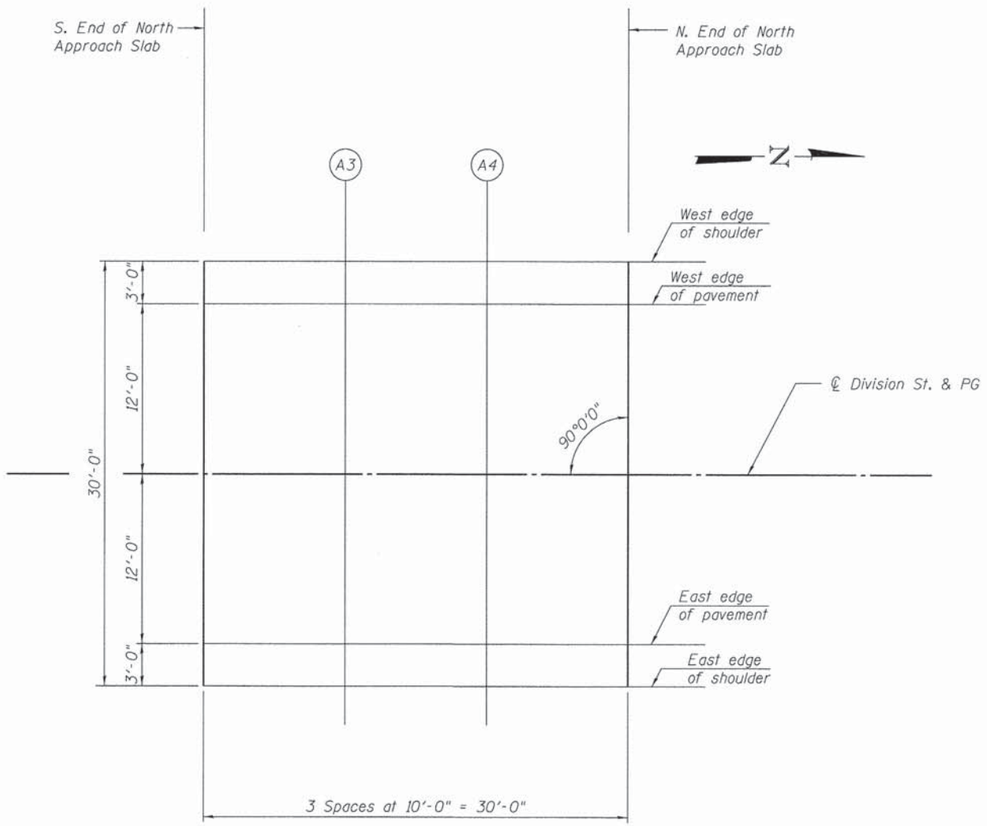
Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Pav't.	9+13.15	-15.00	602.42
A3	9+23.15	-15.00	601.88
A4	9+33.15	-15.00	601.32
N. End N. Appr. Pav't.	9+43.15	-15.00	600.75

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Pav't.	9+13.15	-12.00	602.49
A3	9+23.15	-12.00	601.94
A4	9+33.15	-12.00	601.39
N. End N. Appr. Pav't.	9+43.15	-12.00	600.81

℄ DIVISION ST. & PG

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Pav't.	9+13.15	0.00	602.61
A3	9+23.15	0.00	602.07
A4	9+33.15	0.00	601.51
N. End N. Appr. Pav't.	9+43.15	0.00	600.94



NORTH APPROACH SLAB - PLAN

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Pav't.	9+13.15	12.00	602.49
A3	9+23.15	12.00	601.94
A4	9+33.15	12.00	601.39
N. End N. Appr. Pav't.	9+43.15	12.00	600.81

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Pav't.	9+13.15	15.00	602.42
A3	9+23.15	15.00	601.88
A4	9+33.15	15.00	601.32
N. End N. Appr. Pav't.	9+43.15	15.00	600.75

I:\CH1\PRJ\000003534\Struct\dgn\016-5005-011-AE.dgn

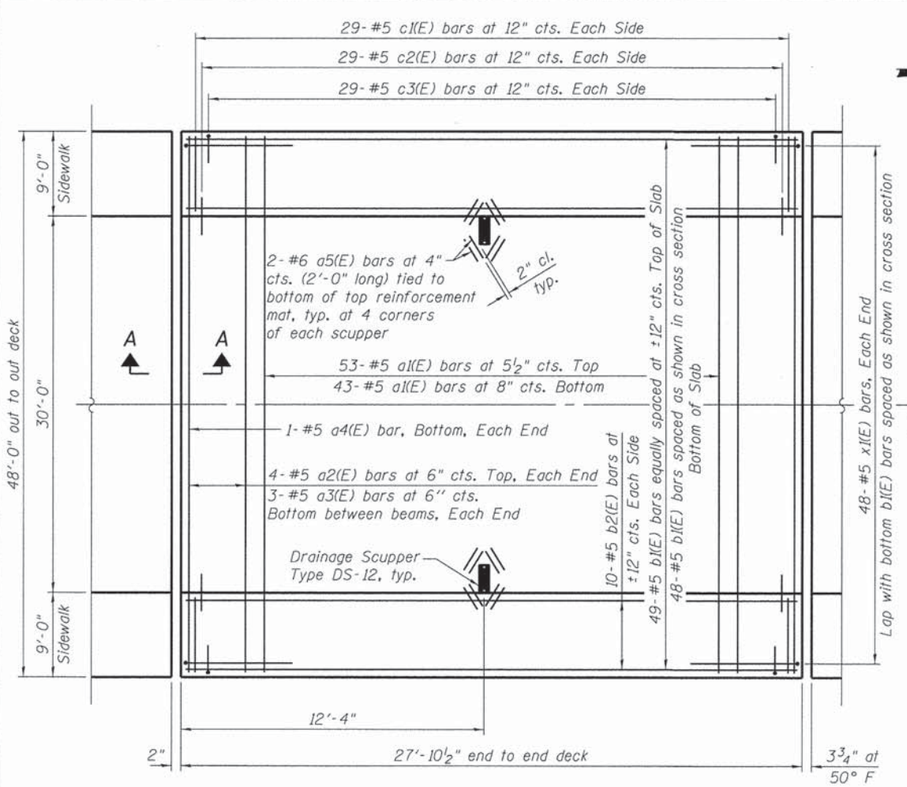
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - LJB	REVISED
FILE NAME = 016-5005-011-AE.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - LJB	REVISED
PLOT DATE =		CHECKED - BJN	REVISED

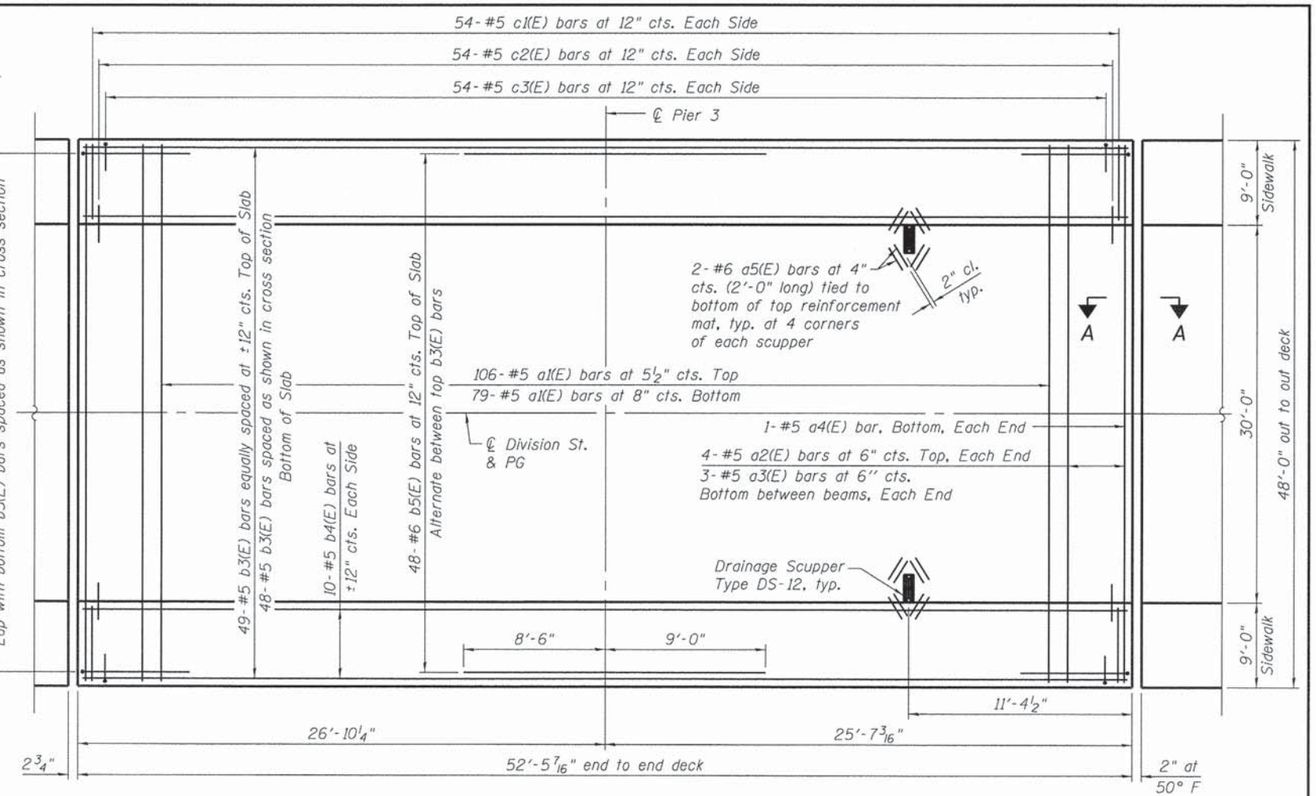
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS 2
STRUCTURE NO. 016-5005
SHEET NO. S-11 OF 95 SHEETS

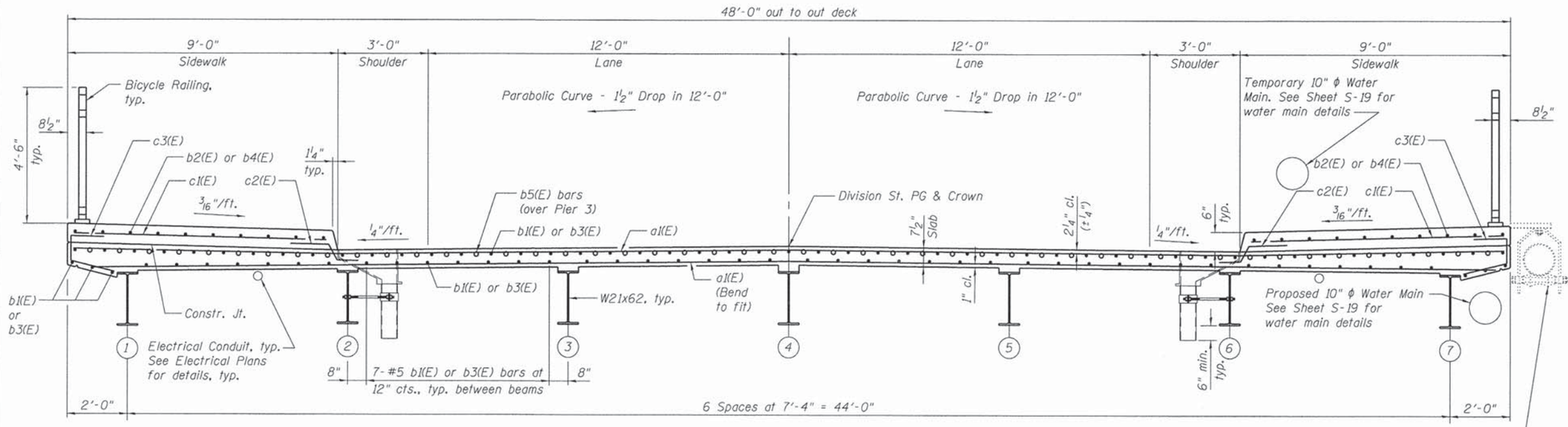
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	38
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



DECK PLAN - SPAN 1



DECK PLAN - SPANS 3 & 4



CROSS SECTION - SPANS 1, 3 & 4

(Looking North)

1. See Sheet S-13 for superstructure details and Bill of Material.
2. Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet EJ-SSJ. See Sheet S-36 .
3. See Sheet S-13 for Section A-A.
4. For Bicycle Railing details, see Sheet S-32
5. See Electrical Plans for lighting details.
6. Existing bridge deck shall be entirely removed. Cost included with REMOVAL OF EXISTING CONCRETE DECK.

I:\CH\PRJ\808083634\Structr\dgn\016-5005-012-DP.dgn

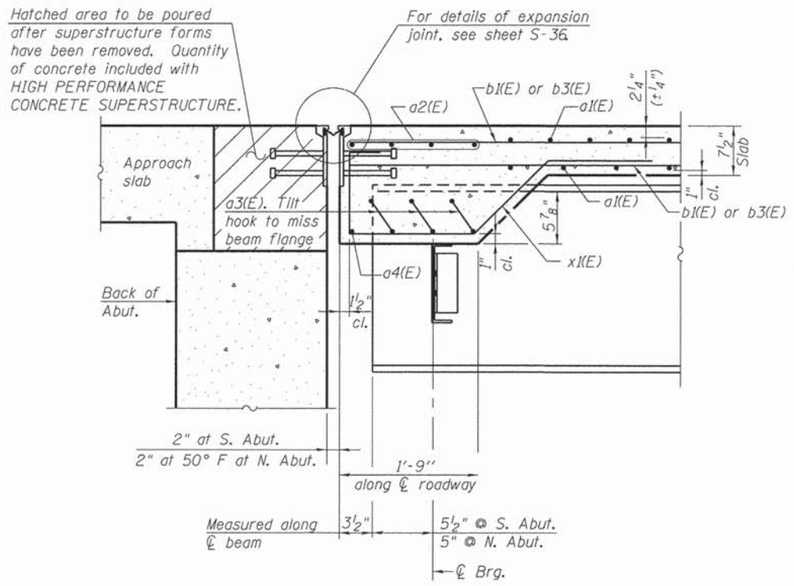
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - LJB	REVISED
FILE NAME = 016-5005-012-DP.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - LJB	REVISED
PLOT DATE =		CHECKED - BJN	REVISED

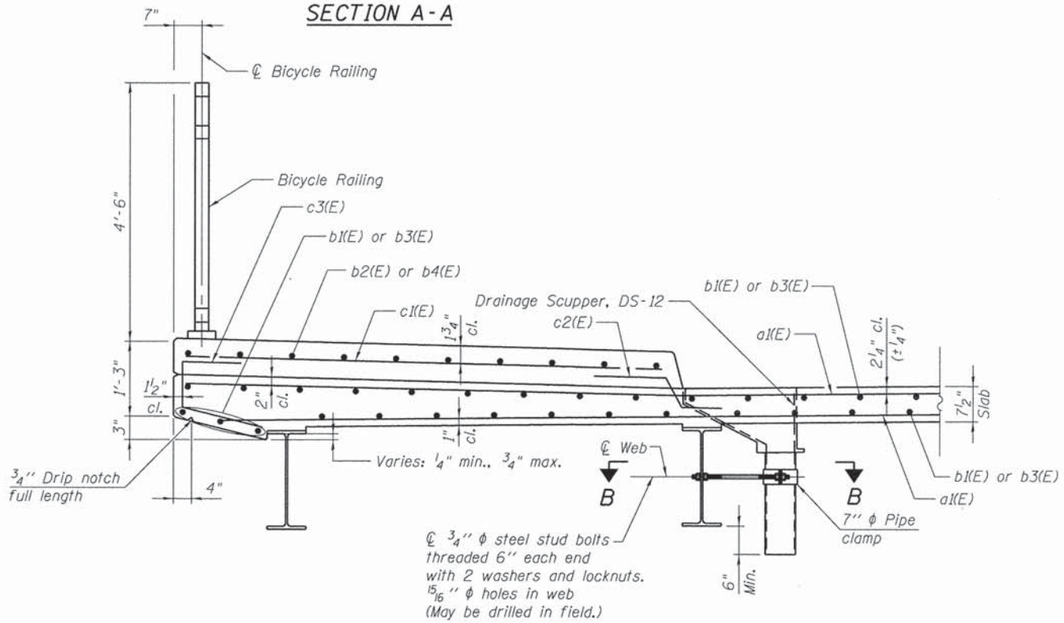
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN & CROSS SECTION FOR SPANS 1, 3 $ 4
STRUCTURE NO. 016-5005
SHEET NO. S-12 OF 95 SHEETS

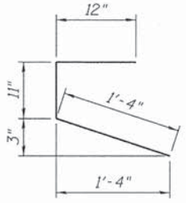
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	39
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



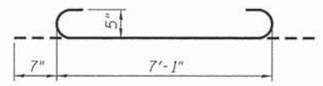
SECTION A-A



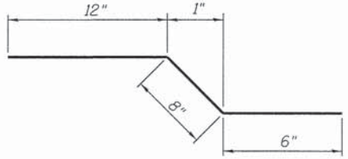
SECTION THRU SIDEWALK AT SPAN 1 AND SPAN 3



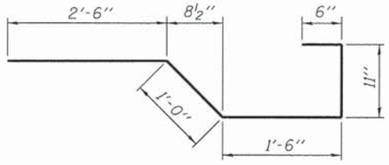
BAR c3(E)



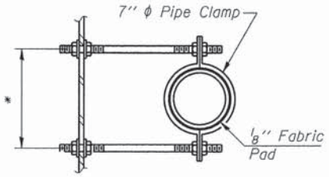
BAR a3(E)



BAR c2(E)



BAR x1(E)



SECTION B-B

* Dimension as required by Pipe Clamp

SUPERSTRUCTURE SPANS 1, 3 & 4
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	281	#5	47'-8"	
a2(E)	16	#5	47'-8"	
a3(E)	72	#5	8'-3"	
a4(E)	4	#5	47'-8"	
a5(E)	32	#6	2'-0"	
b1(E)	97	#5	27'-6"	
b2(E)	20	#5	27'-6"	
b3(E)	97	#5	52'-3"	
b4(E)	20	#5	52'-3"	
b5(E)	48	#6	17'-6"	
c1(E)	166	#5	8'-8"	
c2(E)	166	#5	2'-2"	
c3(E)	166	#5	3'-3"	
x1(E)	192	#5	6'-5"	
Reinforcement Bars, Epoxy Coated			Pound	30,380
High Performance Concrete Superstructure			Cu. Yd.	135.8
Protective Coat			Sq. Yd.	438
Bridge Deck Grooving			Sq. Yd.	251

NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. For location of Section A-A, see Sheet S-12.

I:\CH\PRJ\000028634\Structs\dgn\016-5005-013-DP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - LJB	REVISED
	FILE NAME = 016-5005-013-DP.dgn	CHECKED - BJN	REVISED
	PLOT SCALE =	DRAWN - LJB	REVISED
	PLOT DATE =	CHECKED - BJN	REVISED

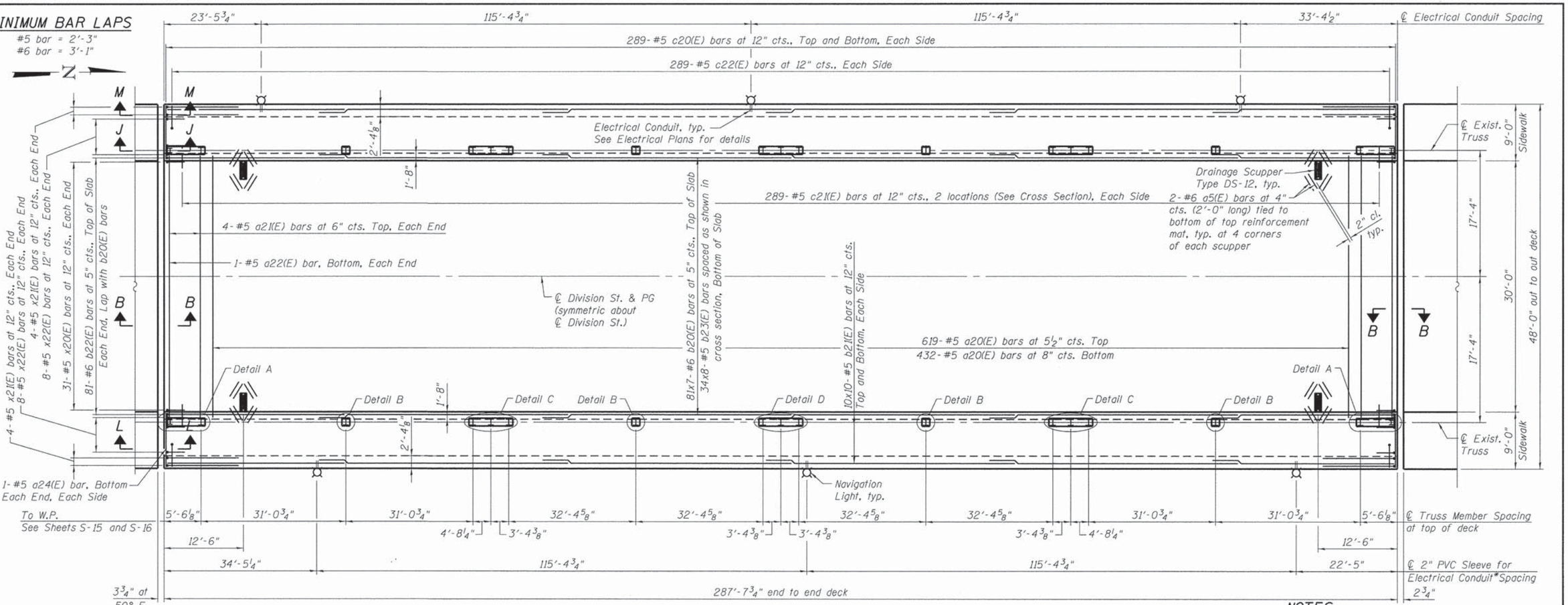
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS 1
STRUCTURE NO. 016-5005
SHEET NO. S-13 OF 95 SHEETS

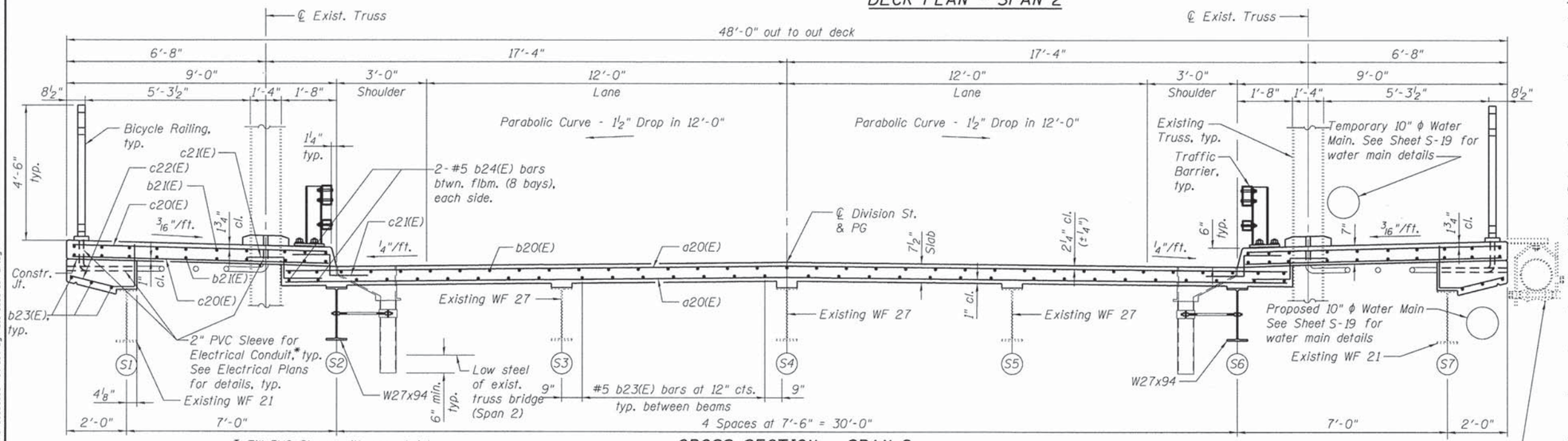
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	40
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

MINIMUM BAR LAPS

#5 bar = 2'-3"
#6 bar = 3'-1"



DECK PLAN - SPAN 2



* Fill PVC Sleeve with non-shrink grout after conduit installation.

CROSS SECTION - SPAN 2

(Looking North)

NOTES

1. See Sheets S-15 thru S-17 for superstructure details and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet EJ-SSJ.
4. See Sheet S-17 for Sections B-B, J-J, L-L and M-M.
5. See Sheet S-15 for Details A, B and E.
6. See Sheet S-16 for Details C and D.
7. For Bicycle Railing details, see Sheet S-32
8. See Electrical Plans for lighting details.
9. Cut b22(E) bars to clear drainage scuppers.
10. Space b21(E) bars in sidewalk to miss truss openings.
11. Cut x20(E) bars to clear end floorbeam connection to the truss.
12. Space c20(E) bars to miss truss members U1-L1, U2-L2, U3-L3, U4-L4, U3'-L3', U2'-L2' and U1'-L1'.
13. Cut c20(E) bars to clear truss members L0-U1, L2-U1, L2-U3, L4-U3, L4-U3', L2'-U3', L2'-U1' and L0'-U1'.
14. Existing bridge deck shall be entirely removed and cost included with REMOVAL OF EXISTING CONCRETE DECK.
15. Existing shear connectors on stringers shall be protected and reused during bridge deck replacement.

I:\CHI\PRJ\2002003634\Struct\dgn\816-5005-014-DP.dgn

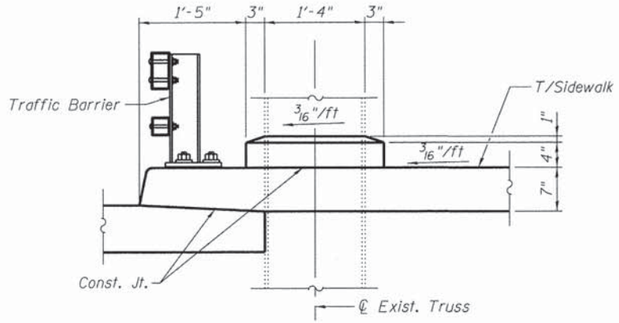
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - LJB	REVISED	
FILE NAME = 816-5005-014-DP.dgn	CHECKED - BJN	REVISED	
PLOT SCALE =	DRAWN - LJB	REVISED	
PLOT DATE =	CHECKED - RH BJN	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

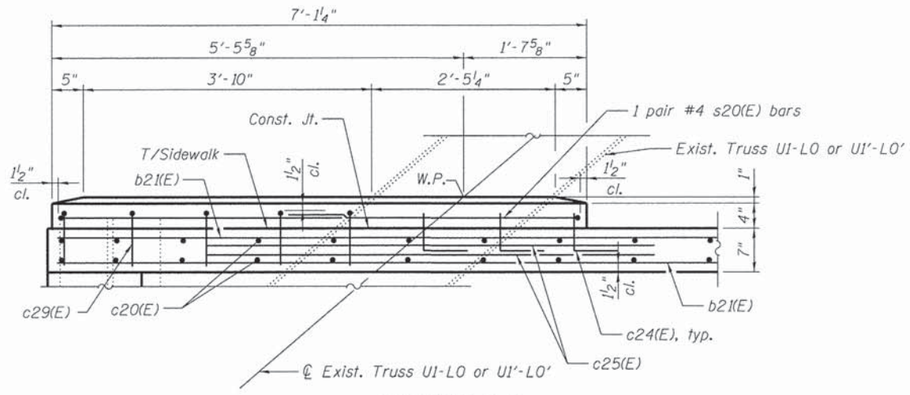
DECK PLAN & CROSS SECTION FOR SPAN 2
STRUCTURE NO. 016-5005
SHEET NO. S-14 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	41
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

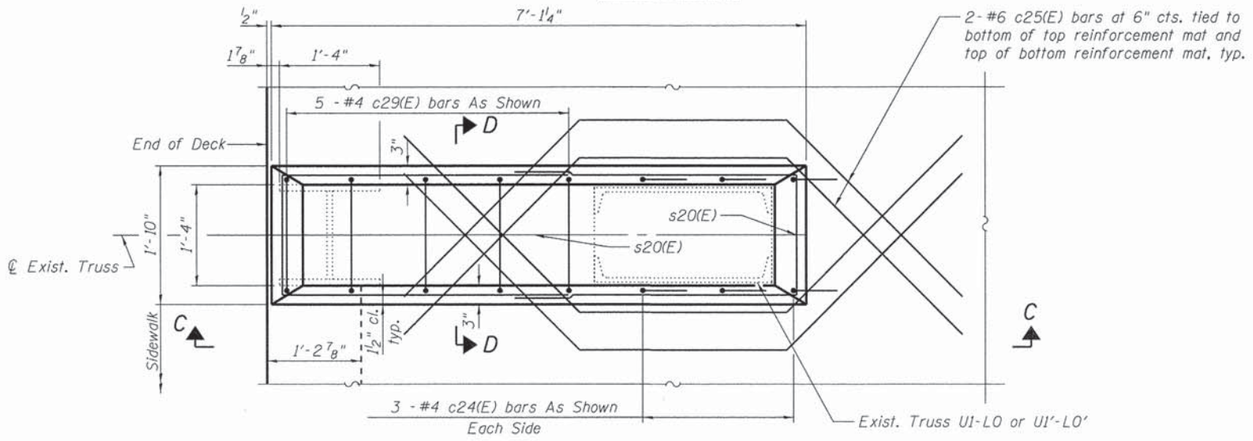


VIEW D-D

Reinforcement not shown for clarity.
For additional reinforcement details, see Sheets S-14 thru S-17.

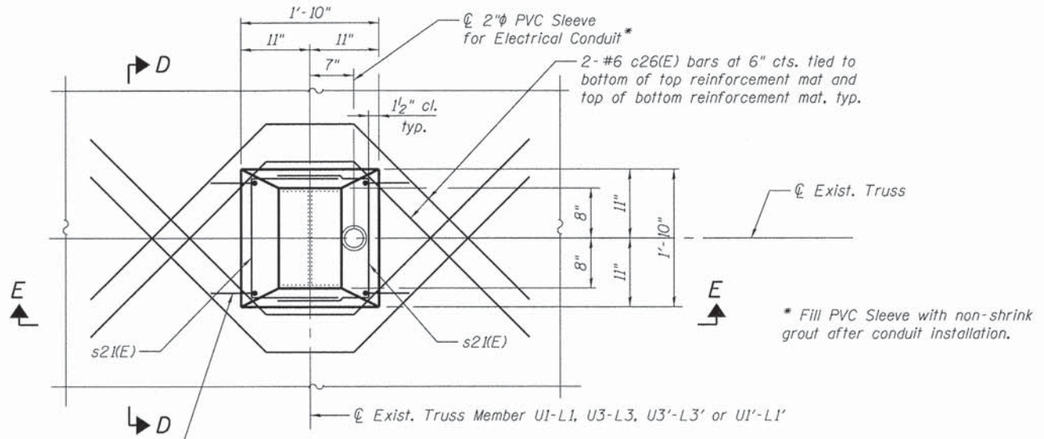


SECTION C-C



DETAIL A

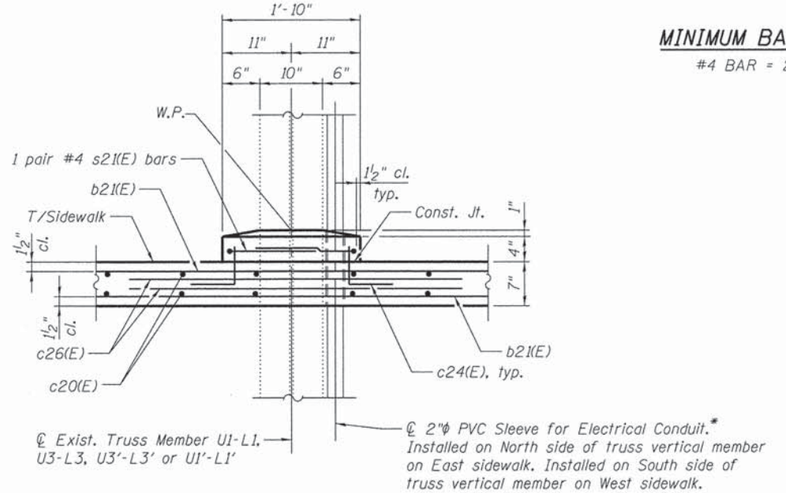
Sidewalk reinforcement not shown for clarity.
For additional reinforcement details, see Sheet S-14.
Details for South half of bridge shown;
Details for North half of bridge similar, opposite.



DETAIL B

Sidewalk reinforcement not shown for clarity.
For additional reinforcement details, see Sheet S-14.

* Fill PVC Sleeve with non-shrink grout after conduit installation.



SECTION E-E

MINIMUM BAR LAP

#4 BAR = 2'-0"

NOTES

1. See Note 10 on Sheet S-3
2. Reinforcement bars designated (E) shall be epoxy coated.
3. For location of Details A, B and E, see Sheet S-14.

I:\CH\PRJ\0020036341\Struct\dgn\016-5005-015-DP.dgn

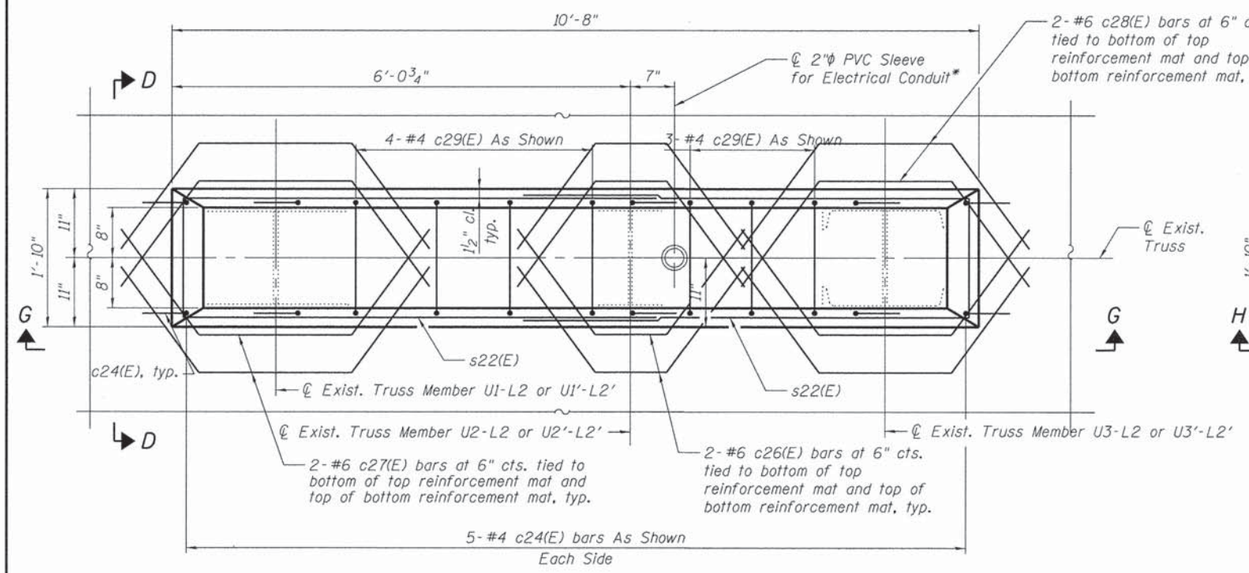
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - LJB	REVISED	
FILE NAME = 016-5005-015-DP.dgn	CHECKED - RH	REVISED	
PLOT SCALE =	DRAWN - LJB	REVISED	
PLOT DATE =	CHECKED - RH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

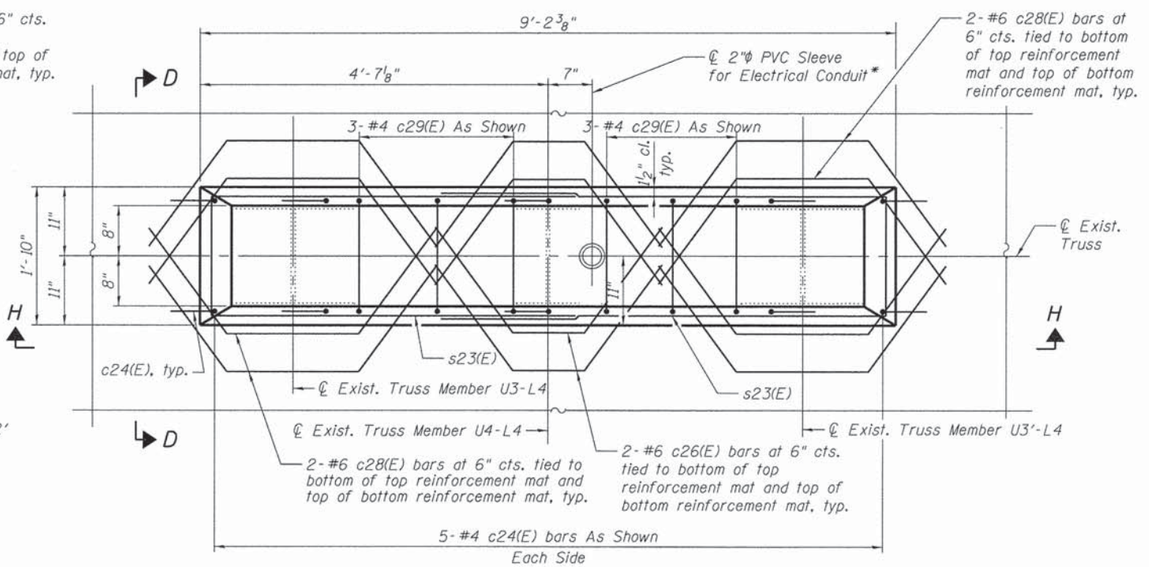
SUPERSTRUCTURE DETAILS 2
STRUCTURE NO. 016-5005
SHEET NO. S-15 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	42
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



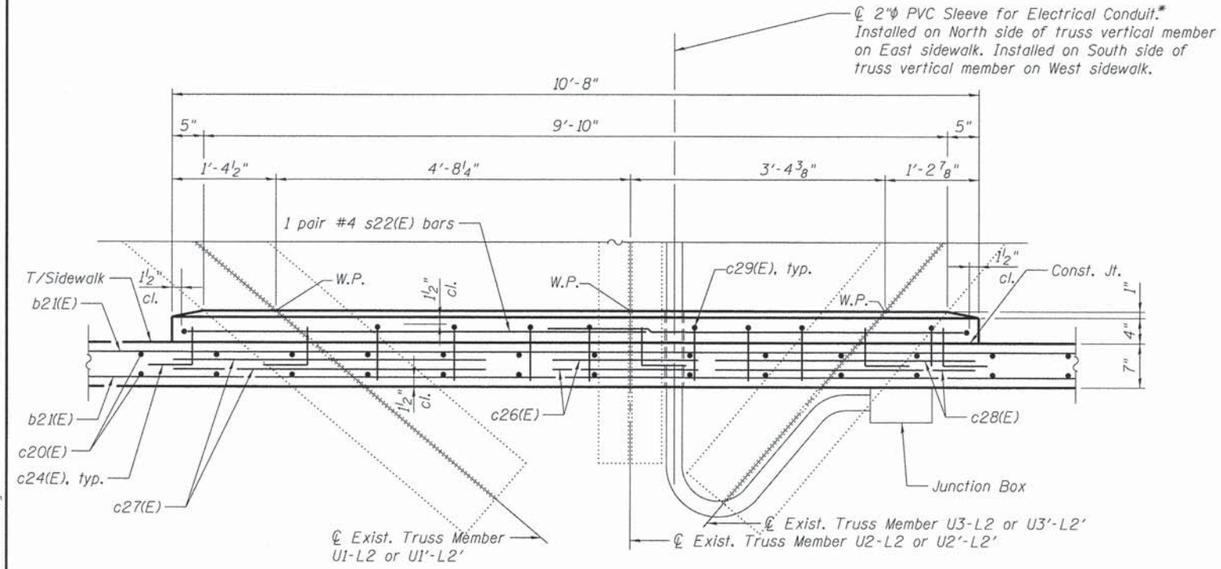
DETAIL C

Sidewalk reinforcement not shown for clarity.
For additional reinforcement details, see Sheet S-14.
Details for South half of bridge shown;
Details for North half of bridge similar, opposite.



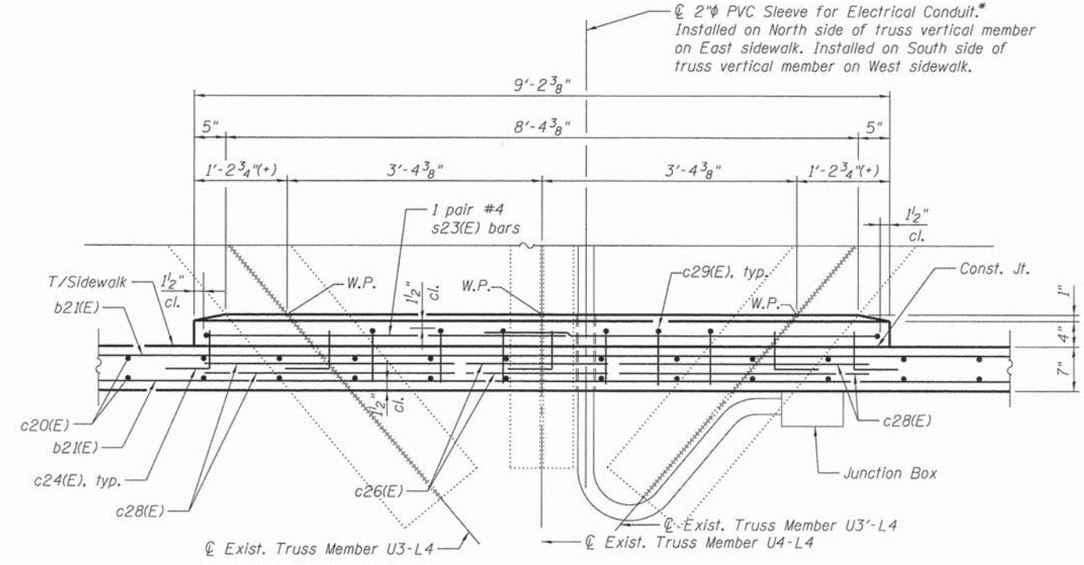
DETAIL D

Sidewalk reinforcement not shown for clarity.
For additional reinforcement details, see Sheet S-14.



SECTION G-G

Gusset plate not shown for clarity



SECTION H-H

Gusset plate not shown for clarity

MINIMUM BAR LAP

#4 bar = 2'-0"

* Fill PVC Sleeve with non-shrink grout after conduit installation.

NOTES

1. See Note 10 on Sheet S-3.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. For location of Details C and D, see Sheet S-14.
   For View D-D, see Sheet S-15.

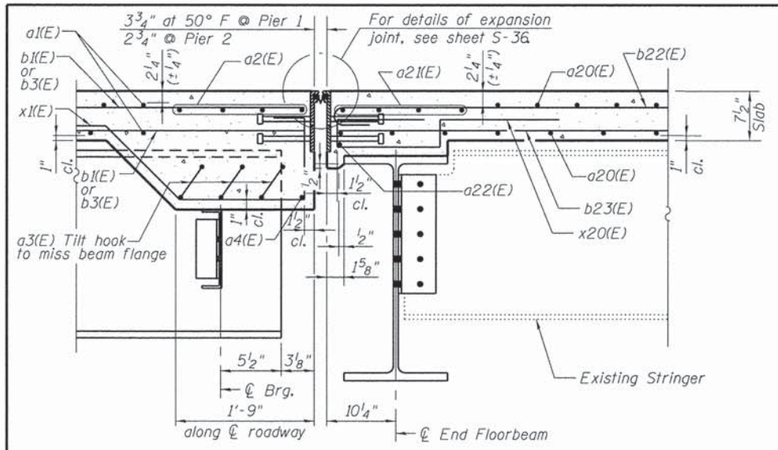
I:\CH1\PRJ\00000353415\struct\dgn\016-5005-016-DP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - LJB	REVISED
	FILE NAME = 016-5005-016-DP.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - LJB	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

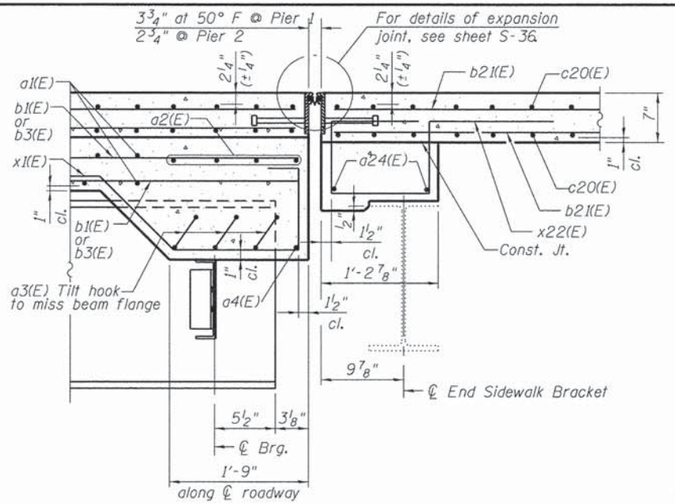
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS 3
STRUCTURE NO. 016-5005
SHEET NO. S-16 OF 95 SHEETS

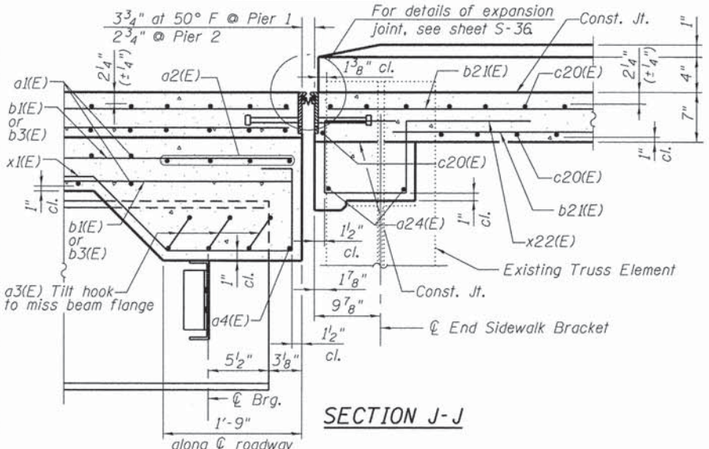
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	43
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



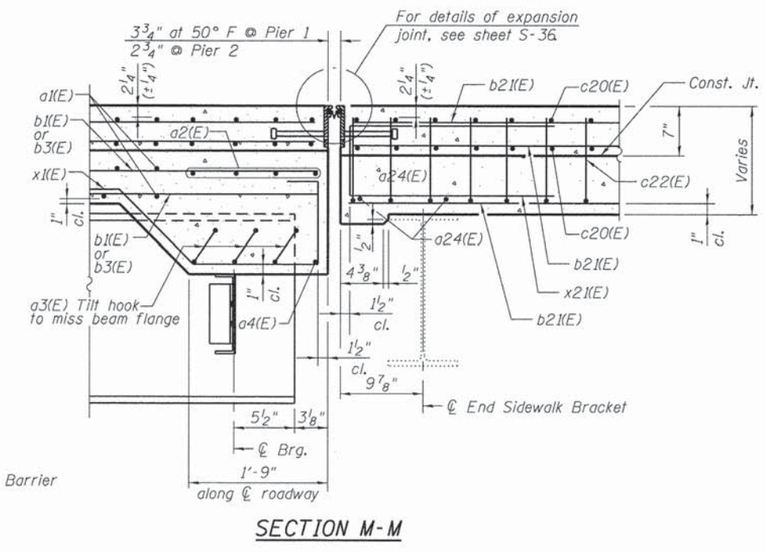
SECTION B-B



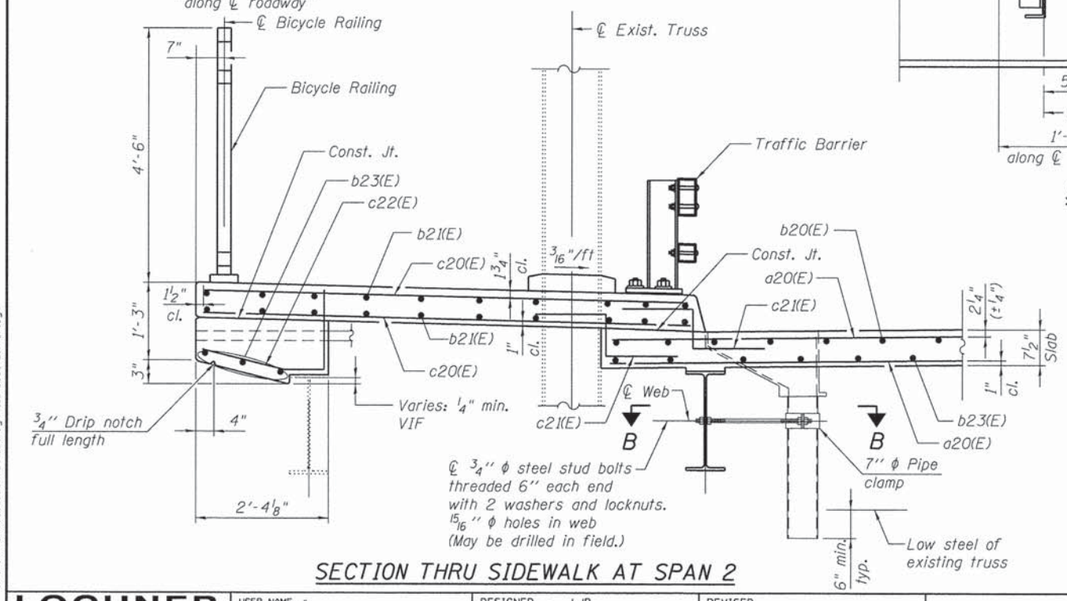
SECTION L-L



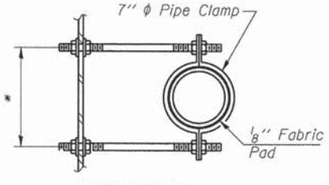
SECTION J-J



SECTION M-M

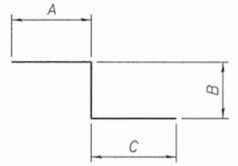


SECTION THRU SIDEWALK AT SPAN 2



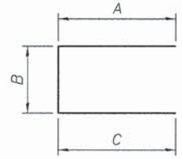
SECTION B-B

* Dimension as required by Pipe Clamp



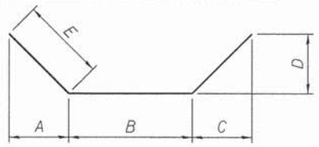
BARS c21(E) & c23(E)

Bar	A	B	C
c21(E)	1'-6"	9"	1'-6"
c23(E)	2'-8"	2"	2'-0"



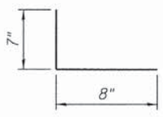
BARS s20(E) thru s23(E) & x21(E)

Bar	A	B	C
s20(E)	4'-5"	1'-6"	4'-5"
s21(E)	1'-6"	1'-6"	1'-6"
s22(E)	6'-4"	1'-6"	6'-4"
s23(E)	5'-7"	1'-6"	5'-7"
x21(E)	2'-3"	11"	2'-3"
c29(E)	7"	1'-5"	7"

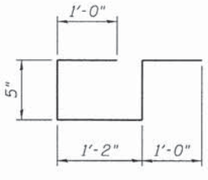


BARS c25(E) thru c28(E)

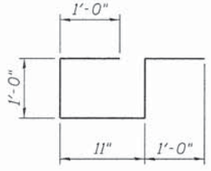
Bar	A	B	C	D	E
c25(E)	2'-4"	2'-9"	2'-4"	2'-4"	3'-3"
c26(E)	2'-4"	1'-2"	2'-4"	2'-4"	3'-3"
c27(E)	2'-4"	2'-3"	2'-4"	2'-4"	3'-3"
c28(E)	2'-4"	2'-0"	2'-4"	2'-4"	3'-3"



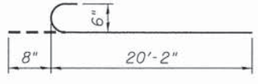
BAR c24(E)



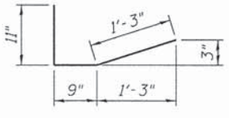
BAR x20(E)



BAR x22(E)



BAR b22(E)



BAR c22(E)

SUPERSTRUCTURE SPAN 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a20(E)	1051	#5	33'-0"	
a21(E)	8	#5	33'-0"	
a22(E)	2	#5	33'-0"	
a23(E)	32	#6	2'-0"	
a24(E)	8	#5	5'-9"	
b20(E)	567	#6	38'-10"	
b21(E)	400	#5	30'-9"	
b22(E)	162	#6	20'-10"	
b23(E)	272	#5	37'-11"	
b24(E)	32	#5	35'-4"	
c20(E)	1156	#5	8'-8"	
c21(E)	1156	#5	3'-9"	
c22(E)	578	#5	2'-11"	
c24(E)	116	#4	1'-3"	
c25(E)	32	#6	9'-3"	
c26(E)	112	#6	7'-8"	
c27(E)	32	#6	8'-9"	
c28(E)	64	#6	8'-6"	
c29(E)	60	#4	2'-7"	
s20(E)	8	#4	10'-4"	
s21(E)	16	#4	4'-6"	
s22(E)	8	#4	14'-2"	
s23(E)	4	#4	12'-8"	
x20(E)	62	#5	4'-0"	
x21(E)	16	#5	5'-5"	
x22(E)	32	#5	4'-11"	
Reinforcement Bars, Epoxy Coated			Pound	120,200
High Performance Concrete Superstructure			Cu. Yd.	383.0
Protective Coat			Sq. Yd.	1566
Bridge Deck Grooving			Sq. Yd.	895

NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. For location of Sections B-B, J-J, L-L and M-M, see Sheet S-14.

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

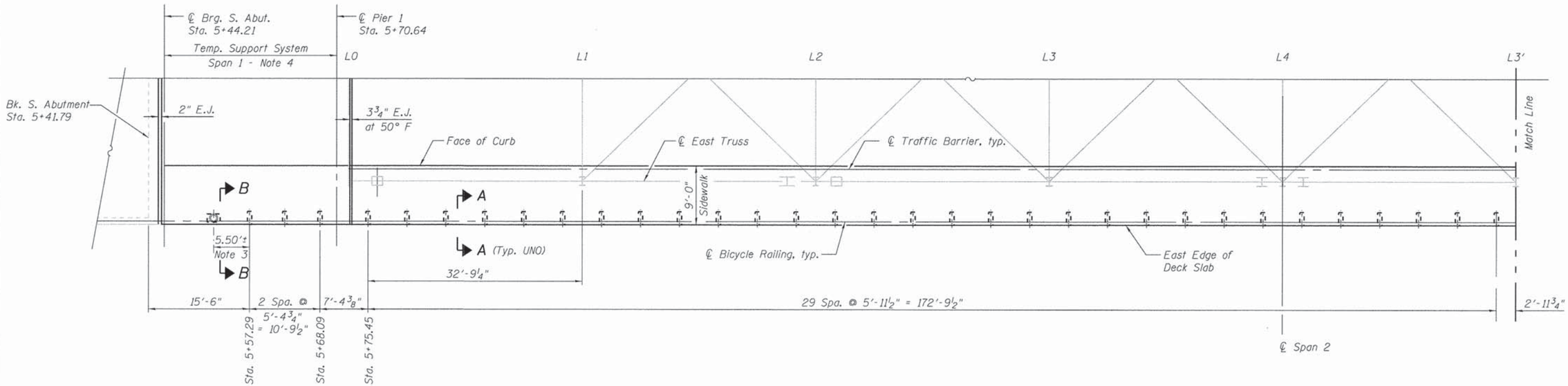
USER NAME =		DESIGNED - LJB	REVISED
FILE NAME = 016-5005-017-DP.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - LJB	REVISED
PLOT DATE =		CHECKED - BJN	REVISED

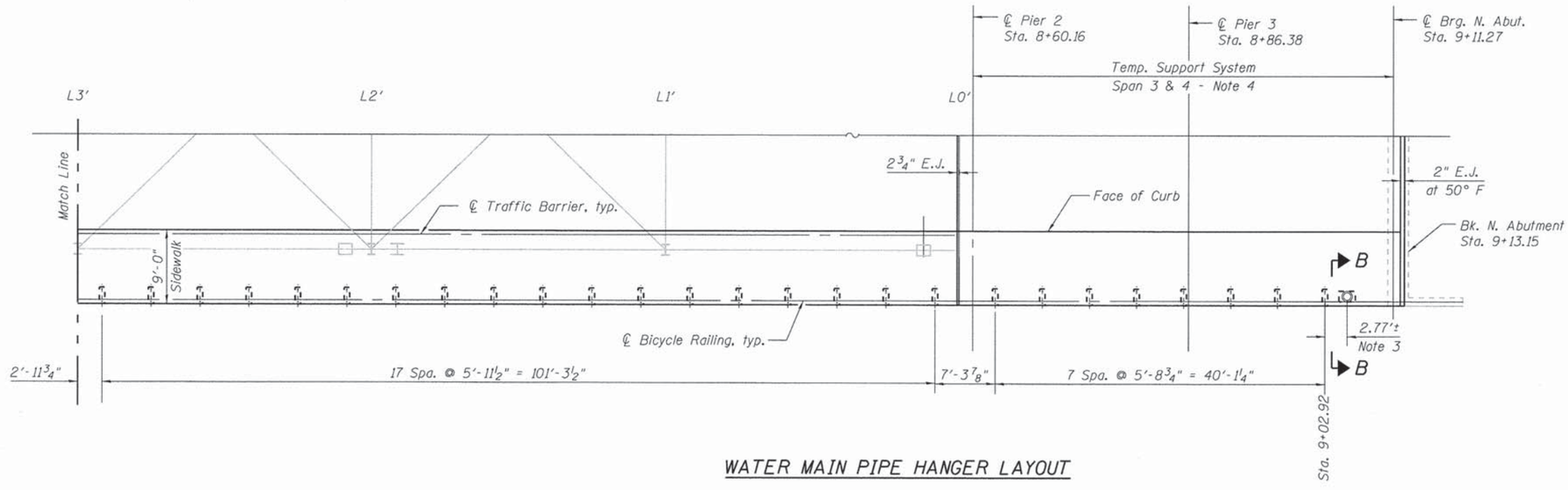
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS 4
STRUCTURE NO. 016-5005
SHEET NO. S-17 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	44
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

I:\CH1\PRJ\2008038341\Struct\dgn\016-5005-017-DP.dgn





WATER MAIN PIPE HANGER LAYOUT

NOTES

1. For Section A-A and B-B see sheet S-19.
2. For Temporary Water Main support detail see sheet S-19. For location of temporary water main see Civil drawings.
3. Coordinate location of plate embed with actual location of vertical leg of water main.
4. Provide temporary support above roadway pavement and approach slabs, temporary shoring in Spans 1, 3 and 4 and temporary connections to existing structural steel in Span 2 to support and protect the existing and temporary water main during reconstruction. Coordinate shore locations with construction staging, new water main installation and Civil drawings. See specifications for additional information on Temporary Support System. Cost is included with TEMPORARY SUPPORT SYSTEM.
5. Coordinate location of pipe joints and offsets from hanger supports.
6. All water main support hangers are to be final adjusted after all dead loads are applied to the superstructure and in the absence of live loads for a snug fit to the trapeze bars. The water main is to be operating under normal service conditions. The outdoor temperature should be within plus-or-minus 10-degrees of an air temperature of 50-degrees F.

LEGEND

℄ Embedded Plate for Pipe Hanger

Embedded Plate at Water Main Elbow

I:\CH\PRJ\000003634\Structure\dgn\016-5005-018-WH.dgn

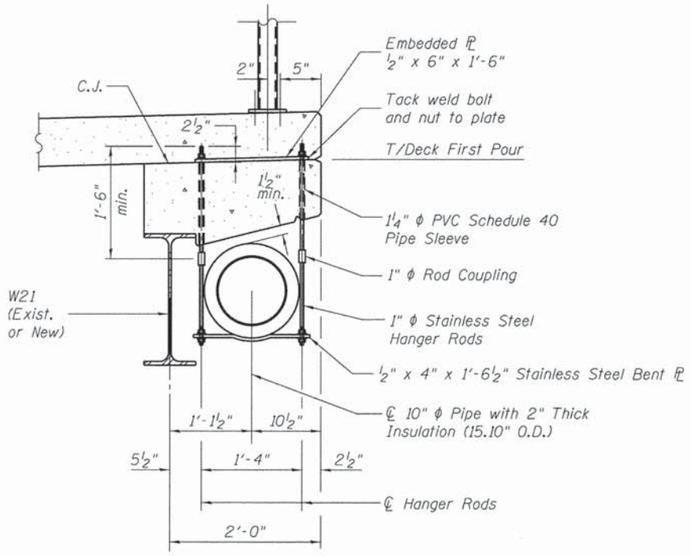
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - GWS	REVISED
FILE NAME = 016-5005-018-WH.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - GWS	REVISED

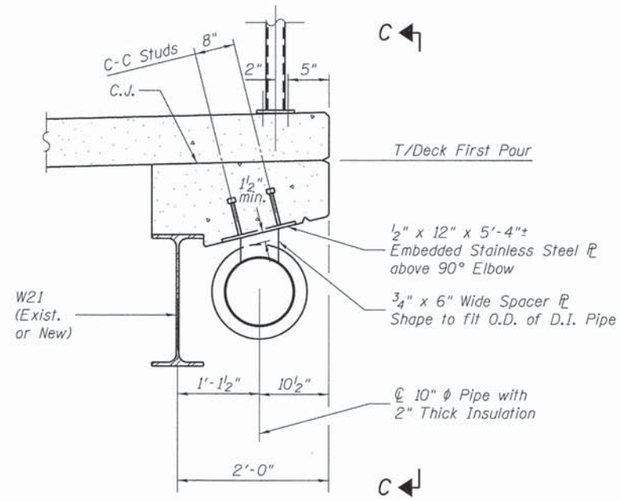
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATER MAIN HANGER LAYOUT PLAN
STRUCTURE NO. 016-5005
SHEET NO. S-18 OF 95 SHEETS

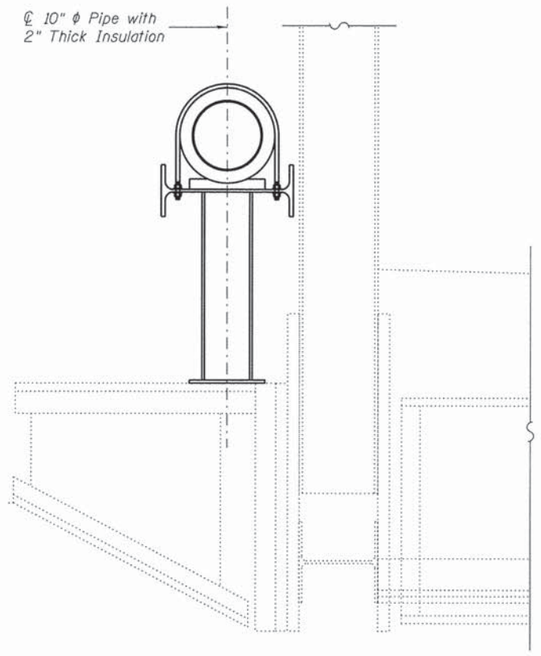
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	45
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



SECTION A-A (Note 3)

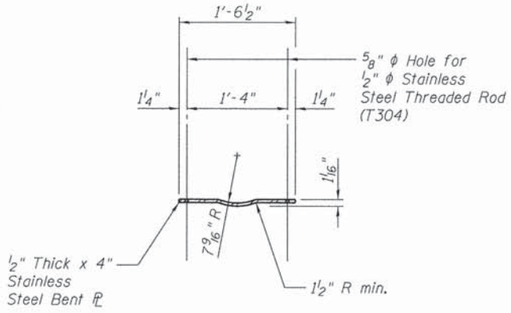


SECTION B-B (Note 4)

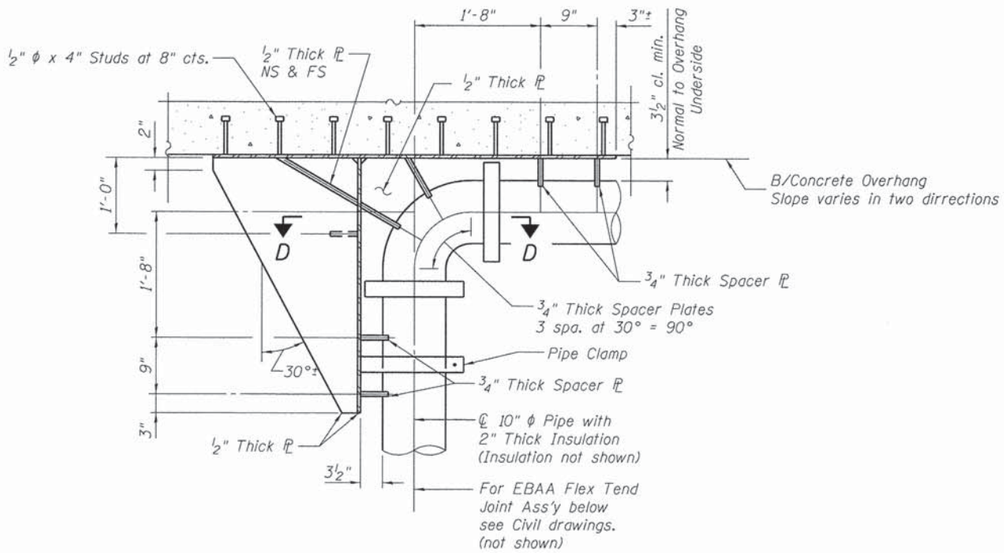


SUGGESTED TEMPORARY WATER MAIN DETAIL

Provide temporary connections to existing structural steel in Span 2 to support and protect the existing and temporary water main during reconstruction. Coordinate connection locations with construction staging, new water main installation and Civil drawings. See specifications for additional information on Temporary Support System. Cost is included with TEMPORARY SUPPORT SYSTEM.

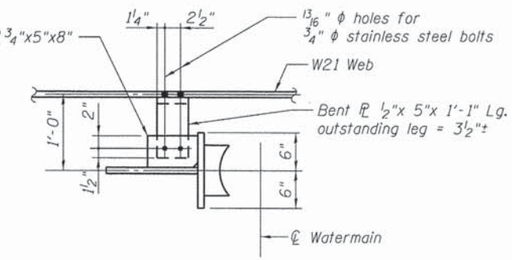


BENT PLATE DETAIL (Note 3)



SECTION C-C (Note 4)

S. Abut. thrust block shown.
N. Abut. thrust block opposite hand



SECTION D-D

NOTES

1. *For location of Section A-A and B-B see sheet S-18.*
2. *Coordinate Temporary Water Main supports with Civil drawings.*
3. *All trapeze-type watermain supports (plates and hardware) are stainless steel and will be included and paid for in FURNISHING AND ERECTING STRUCTURAL STEEL. PVC sleeves will be included in the unit price in HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.*
4. *All materials for the thrust block weldment to be stainless steel (ASTM A276, Type 304 or 316, Fy min. = 30 ksi) including plate and headed studs. Weld electrodes shall be compatible with the parent metal in accordance with AWS D1.6, Structural Welding Code-Stainless Steel. The thrust block weldments will be included and paid for in FURNISHING AND ERECTING STRUCTURAL STEEL. All corner clips are ½" x ½". All plates joined with ¼" fillet welds, both sides.*

I:\CH\PRJ\00020353413\Struct\dgn\016-5005-019-WH.dgn

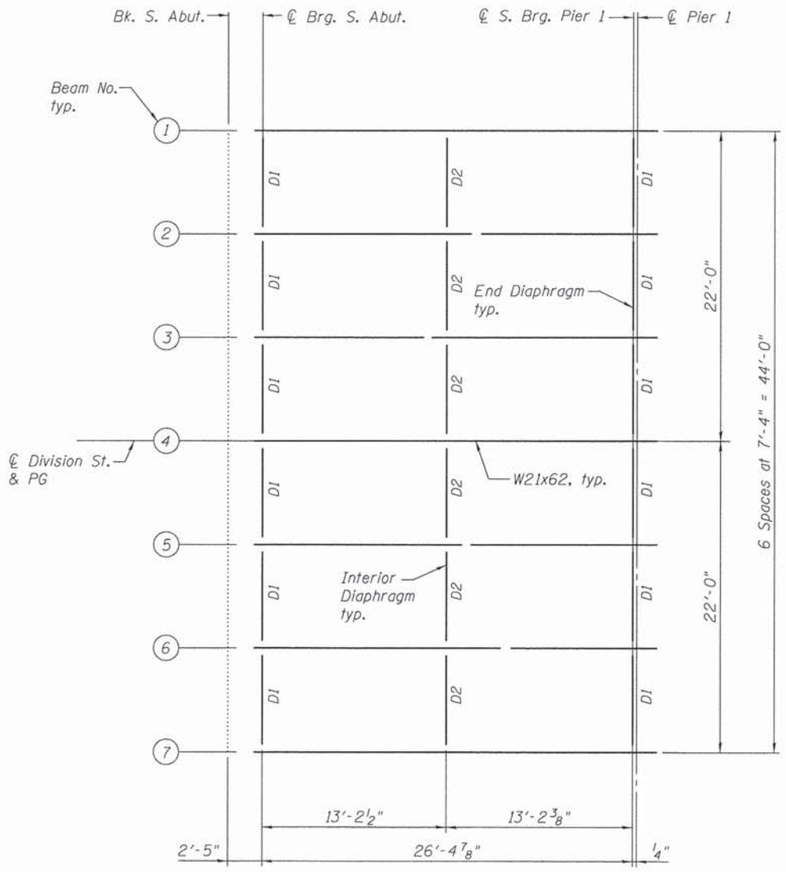
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - GWS	REVISED
FILE NAME = 016-5005-019-WH.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - GWS	REVISED

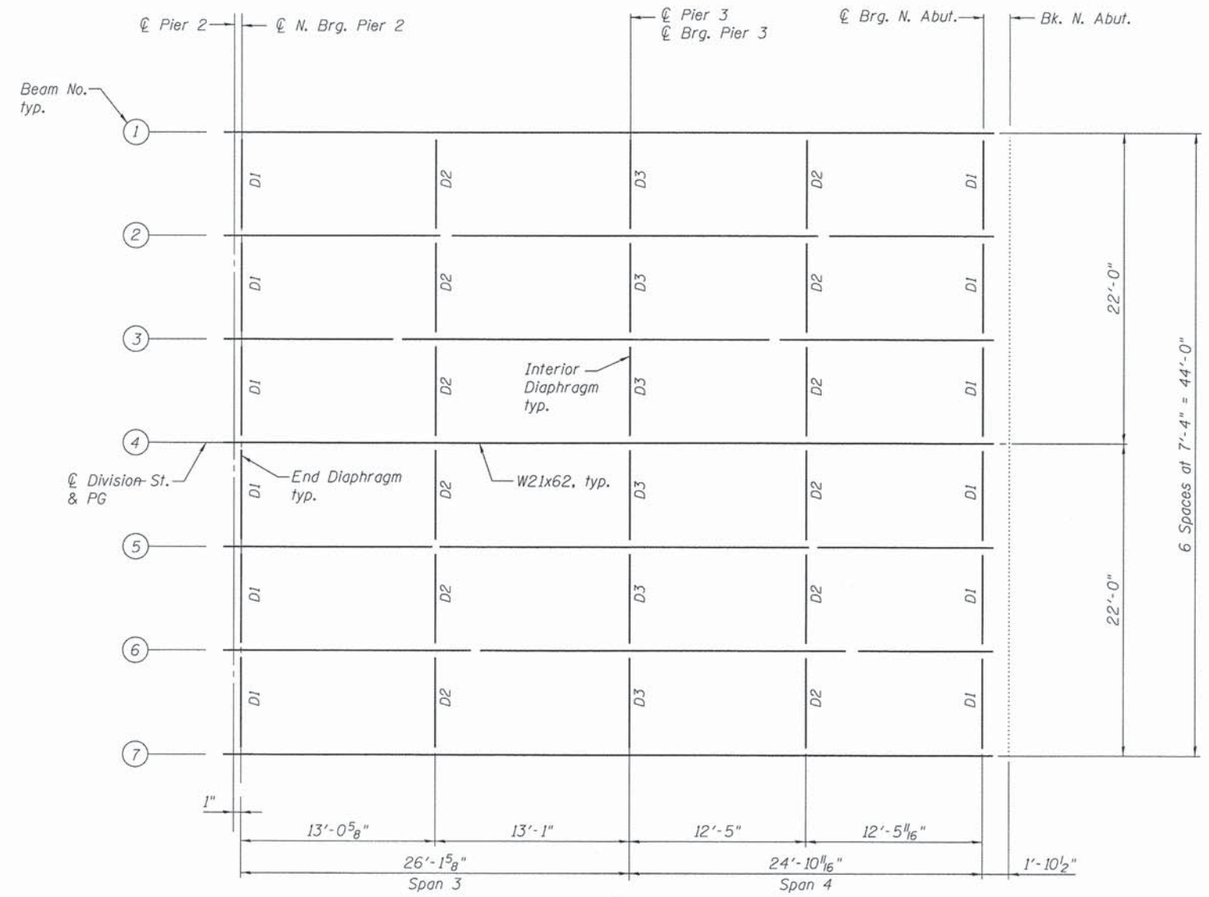
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WATERMAIN HANGER DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-19 OF 95 SHEETS

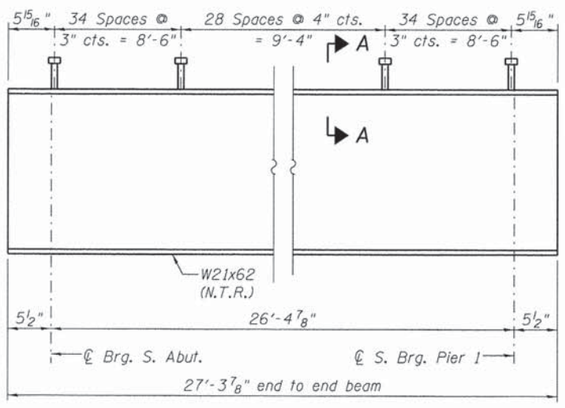
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	46
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



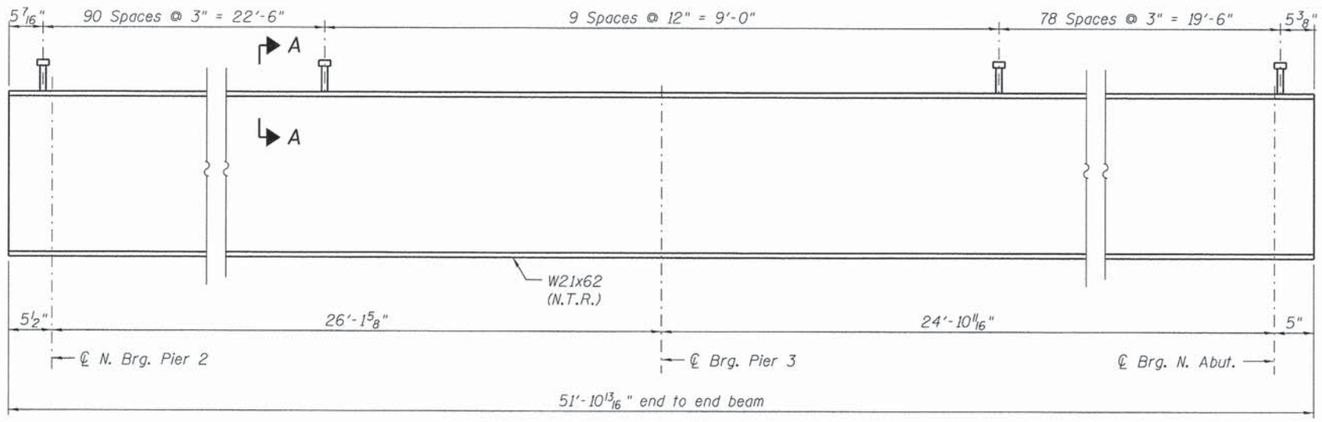
FLOOR FRAMING PLAN - SPAN 1



FLOOR FRAMING PLAN - SPANS 3 & 4



BEAM ELEVATION - SPAN 1



BEAM ELEVATION - SPANS 3 & 4

NOTES

1. For Section A-A and diaphragm details, see Sheet S-21.
2. Existing steel to be removed. See Sheets S-54 thru S-64 for existing steel framing plan.
3. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
4. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

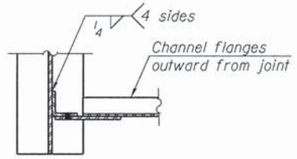
I:\CH1\PRJ\000020634\Structure\dgn\016-5005-020-SD.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - LJB	REVISED
	FILE NAME = 016-5005-020-SD.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - LJB	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

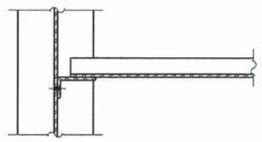
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING & GIRDER DETAILS FOR SPANS 1, 3 & 4
STRUCTURE NO. 016-5005
SHEET NO. S-20 OF 95 SHEETS

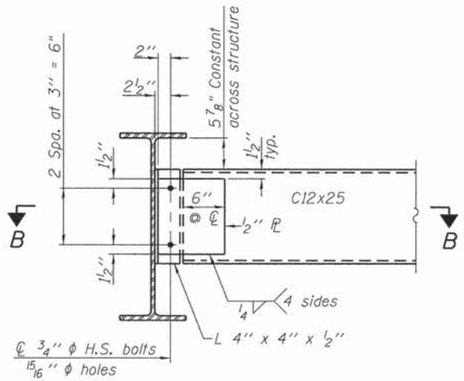
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	47
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



SECTION B-B

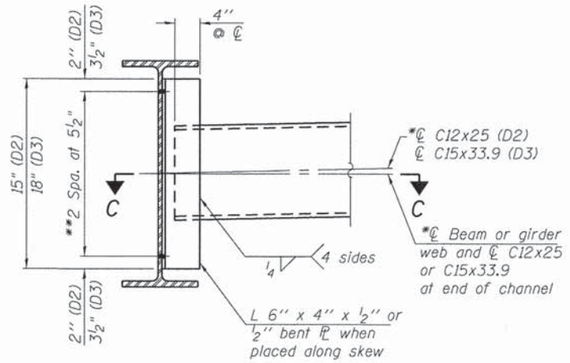


SECTION C-C



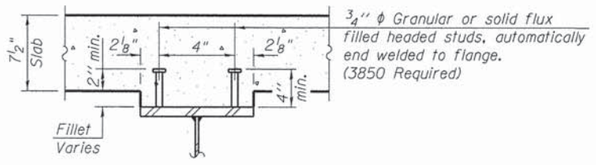
END DIAPHRAGM - D1

Note:
Two hardened washers required for each set of oversized holes.



INTERIOR DIAPHRAGM - D2 OR D3

Note:
Two hardened washers required for each set of oversized holes.
*Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.
**3/4" ϕ HS bolts, 15/16" ϕ holes



SECTION A-A

INTERIOR GIRDER MOMENT TABLE					
		0.5 Span 1	0.4 Span 3	Pier 3	0.6 Span 4
I_s	(in^4)	1330	1330	1330	1330
$I_c(n)$	(in^4)	4408	4404		4355
$I_c(3n)$	(in^4)	3402	3398		3346
S_s	(in^3)	127	127	127	127
$S_c(n)$	(in^3)	206	206		204
$S_c(3n)$	(in^3)	185	185		184
℄	(k/')	0.80	0.80	1.06	0.80
M℄	('k)	68	39	79	33
s℄	(k/')	0.26	0.26		0.26
M_s℄	('k)	22	15		13
M$\mathfrak{L}$	('k)	141	132	78	121
MIM	('k)	42	39	23	36
$5/3$[M$\mathfrak{L}$ + I]	('k)	305	285	168	262
M_a	('k)	514	441	321	400
* M_u	('k)	994.8	926.0		922.0
f_s ℄ non-comp	(ksi)	6.4	3.7	7.4	3.1
f_s ℄ (comp)	(ksi)	1.4	1.0		0.8
f_s $5/3$ [M$\mathfrak{L}$ + M_I]	(ksi)	17.8	16.6	15.9	15.4
f_s (Overload)	(ksi)	25.7	21.4	23.4	19.4
** f_s (Total)	(ksi)			30.4	
VR	(k)	47.1	47.5		46.9

INTERIOR GIRDER REACTION TABLE						
		S. Abut.	Pier 1	Pier 2	Pier 3	N. Abut.
R℄	(k)	14.4	14.4	11.3	32.6	10.4
R$\mathfrak{L}$	(k)	36.2	36.2	34.7	42.2	33.9
R_I	(k)	10.9	10.9	10.4	12.0	10.2
R_{Total}	(k)	61.4	61.4	56.4	86.7	54.5

* Compact section
** Braced non-compact and partially braced section

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total and Overload) due to non-composite dead loads (in.^{4} and in.^{3}).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s(Total and Overload) due to short-term composite live loads (in.^{4} and in.^{3}).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s(Total and Overload) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).
Z: Plastic Section Modulus of the steel section in non-composite areas (in.^{3}).
℄: Un-factored non-composite dead load (kips/ft.).
M℄: Un-factored moment due to non-composite dead load (kip-ft.).
s℄: Un-factored long-term composite (superimposed) dead load (kips/ft.)
M_s℄: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M$\mathfrak{L}$: Un-factored live load moment (kip-ft.).
M_I: Un-factored moment due to impact (kip-ft.).
M_a: Factored design moment (kip-ft.).
$1.3\ [M℄ + M_s℄ + \frac{5}{3}(M\mathfrak{L} + M_I)]$
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M℄ + M_s℄ + \frac{5}{3}(M\mathfrak{L} + M_I)$
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M℄ + M_s℄ + \frac{5}{3}(M\mathfrak{L} + M_I)]$
VR: Maximum$\mathfrak{L}$ + impact shear range within the composite portion of the span for stud shear connector design (kips).

NOTES

1. For location of Section A-A, see Sheet S-20

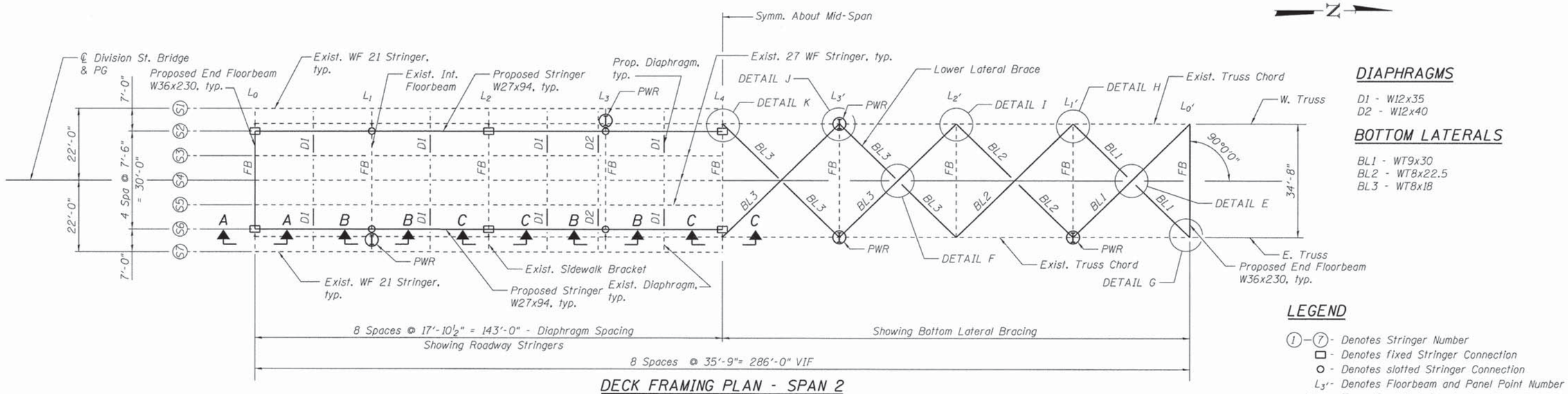
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - LJB	REVISED
FILE NAME = 016-5005-021-SD.dgn		CHECKED - RH	REVISED
PLOT SCALE =		DRAWN - LJB	REVISED
PLOT DATE =		CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS 1
STRUCTURE NO. 016-5005
SHEET NO. S-21 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	48
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



DECK FRAMING PLAN - SPAN 2

DIAPHRAGMS

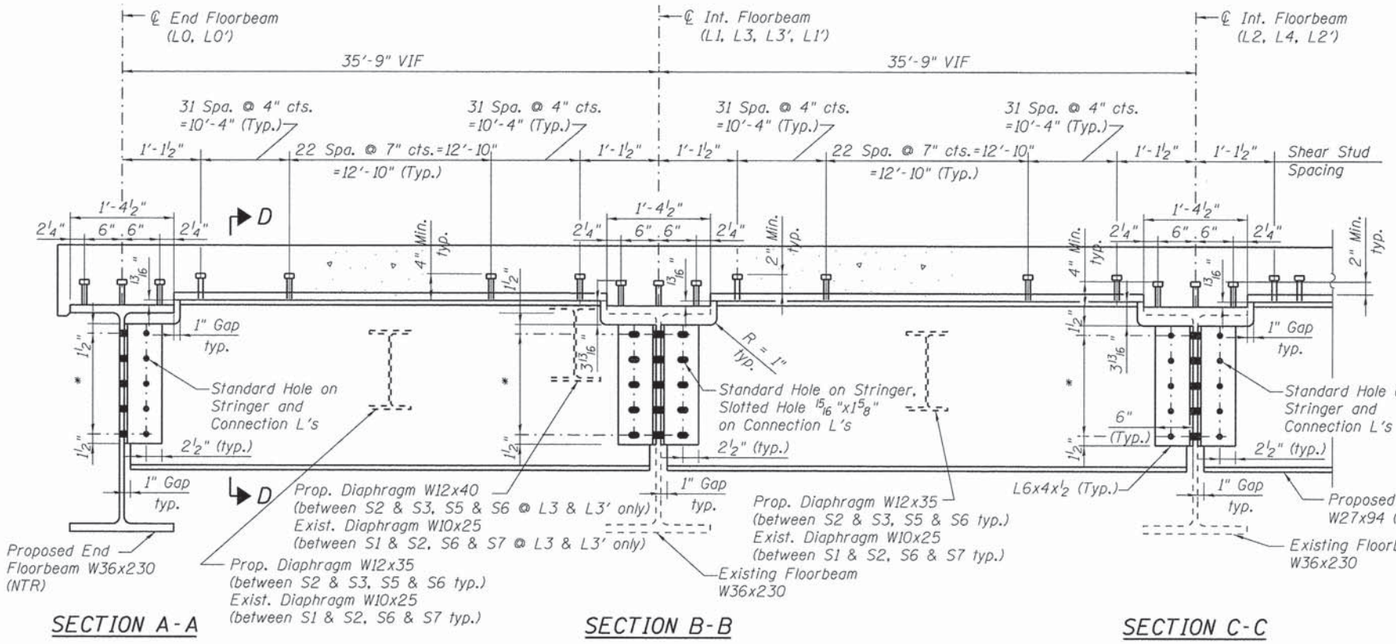
D1 - W12x35
D2 - W12x40

BOTTOM LATERALS

BL1 - WT9x30
BL2 - WT8x22.5
BL3 - WT8x18

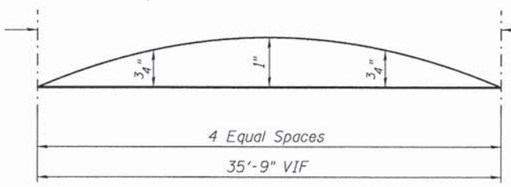
LEGEND

①-⑦ - Denotes Stringer Number
□ - Denotes fixed Stringer Connection
○ - Denotes slotted Stringer Connection
$L_{3'}$ - Denotes Floorbeam and Panel Point Number
PWR - Truss Post Web Repair See Sheet S-26 for locations and details
FB - Floorbeam

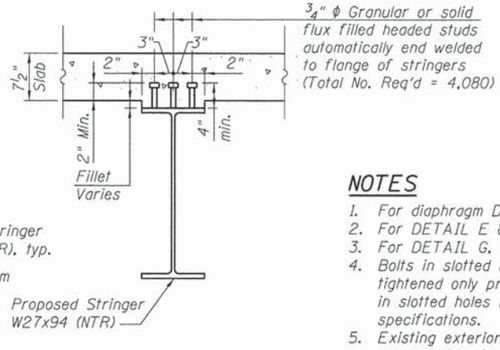


SECTION A-A | SECTION B-B | SECTION C-C

STRINGER S2 & S6 ELEVATION



STRINGER S2 & S6 CAMBER DIAGRAM



SECTION D-D

* Bolt hole spacings on prop. connection angles shall match bolt hole spacings on existing interior floorbeam per field verification by the Contractor prior to steel fabrication.

NOTES

1. For diaphragm D1 & D2 see Sheet S-24.
2. For DETAIL E & F see Sheet S-24.
3. For DETAIL G, H, I, J & K see Sheet S-25.
4. Bolts in slotted holes at one end of stringer must be finger tightened only prior to deck pour. After deck pour, all bolts in slotted holes must be fully tightened according to specifications.
5. Existing exterior steel diaphragms shall be temporarily supported during existing stringers S2and S6 replacement. Cost of temporary support is included with STRUCTURAL STEEL REMOVAL.
6. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
7. The Contractor shall remove and replace existing W27 Steel stringer (S2 and S6), steel diaphragms and bottom laterals as designated. Removal of existing stringers, diaphragms and bottom laterals shall be paid as STRUCTURAL STEEL REMOVAL.

I:\CAD\PRJ\0600083634\Structure\dgn\016-5005-022-SD.dgn

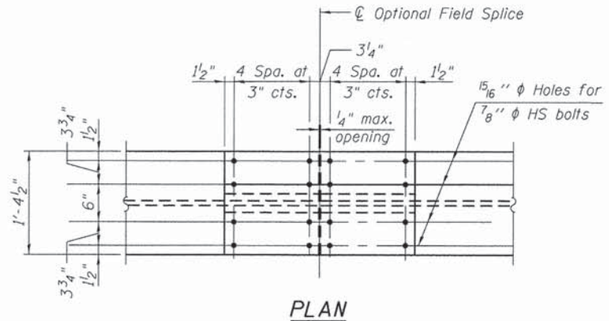
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - RH/GWS	REVISED	
FILE NAME = 016-5005-022-SD.dgn	CHECKED - RH	REVISED	
PLOT SCALE =	DRAWN - EF	REVISED	
PLOT DATE =	CHECKED - BJN	REVISED	

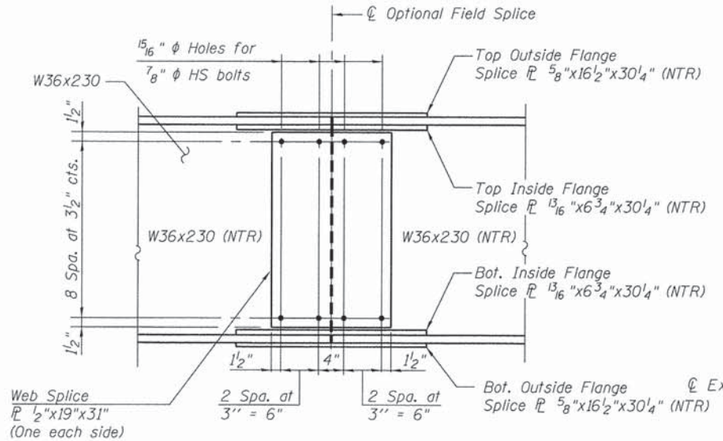
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING & STRINGER DETAILS FOR SPAN 2
STRUCTURE NO. 016-5005
SHEET NO. S-22 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	49
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

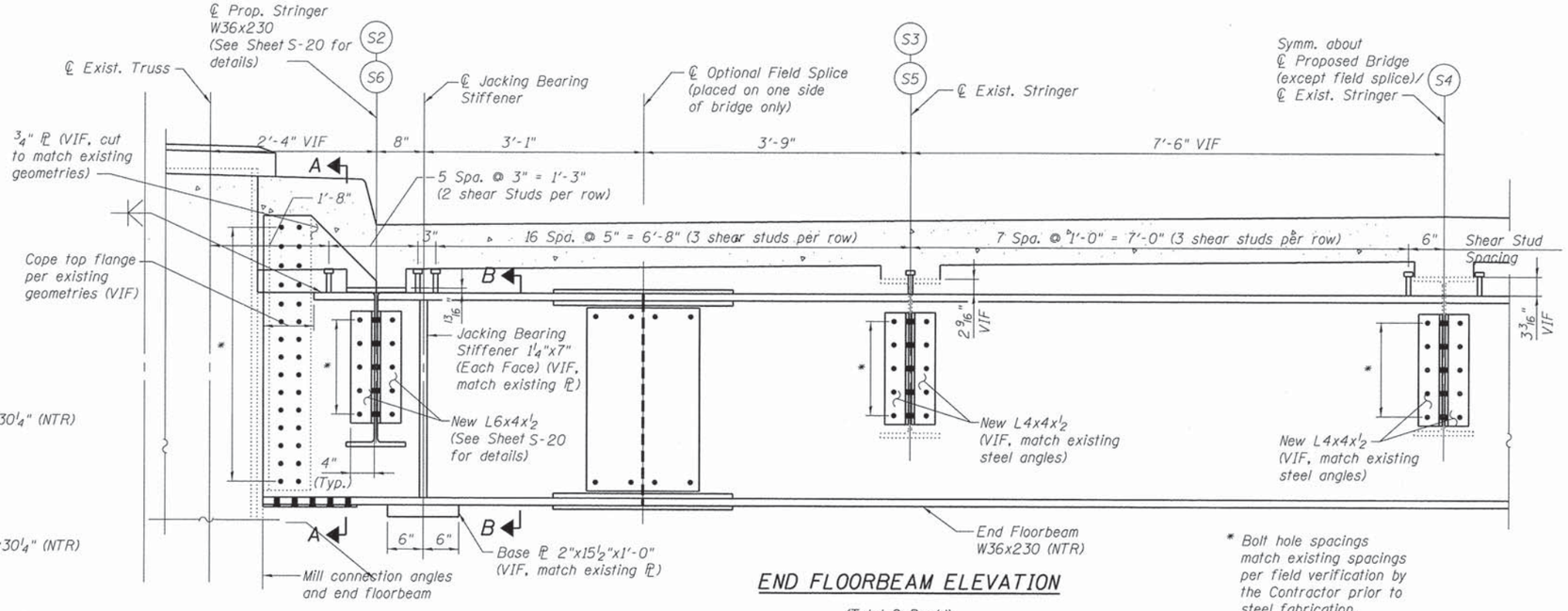


PLAN



OPTIONAL END FLOORBEAM SPLICE DETAIL

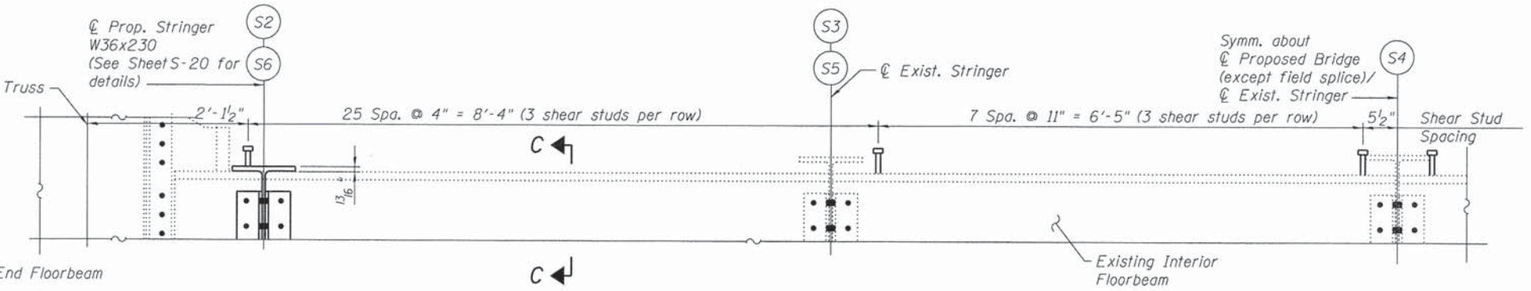
(Total 2 Req'd)



END FLOORBEAM ELEVATION

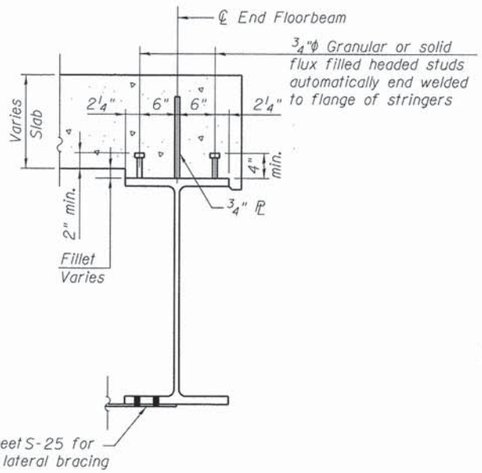
(Total 2 Req'd)

* Bolt hole spacings match existing spacings per field verification by the Contractor prior to steel fabrication.

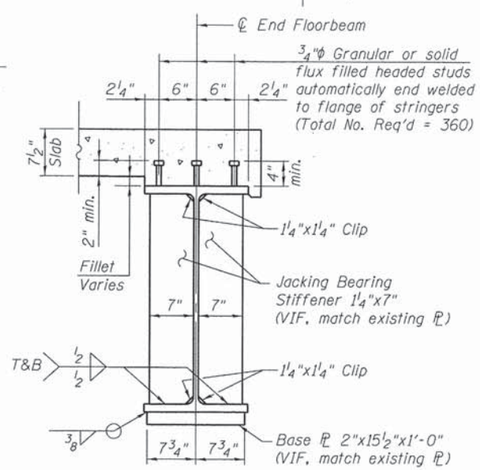


INTERIOR FLOORBEAM ELEVATION

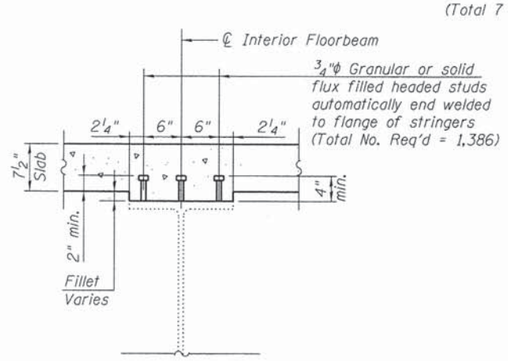
(Total 7 Req'd)



SECTION A-A



SECTION B-B



SECTION C-C

NOTES

1. Existing stringers shall be temporarily supported when the end floorbeam is replaced. The Contractor is responsible to protect and maintain the geometries of all remaining steel members and connections during steel erection.
2. The shear connectors placed on top flange of the end floorbeam shall be respaced to avoid interference of the field splice connections if the Contractor choose to utilize the field splice for end floorbeam erection. The caluculations of rearranged shear connector spacing must be prepared by the Structural Engineer licensed in the State of Illinois and submitted by the Contractor for the Engineer's approval.
3. Sidewalk brackets and existing stringers connected to the end floorbeams shall be temporarily supported during end floorbeam replacement. Cost of temporary support is included with STRUCTURAL STEEL REMOVAL.

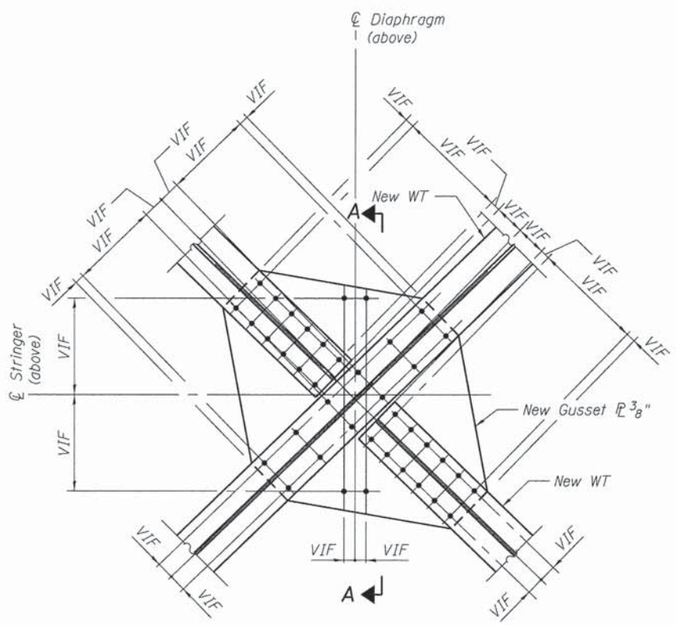
I:\CH1\PRJ\000080363A1\Struct\dgn\016-5005-023-SD.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - RH	REVISED
	FILE NAME = 016-5005-023-SD.dgn	CHECKED - LJB	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

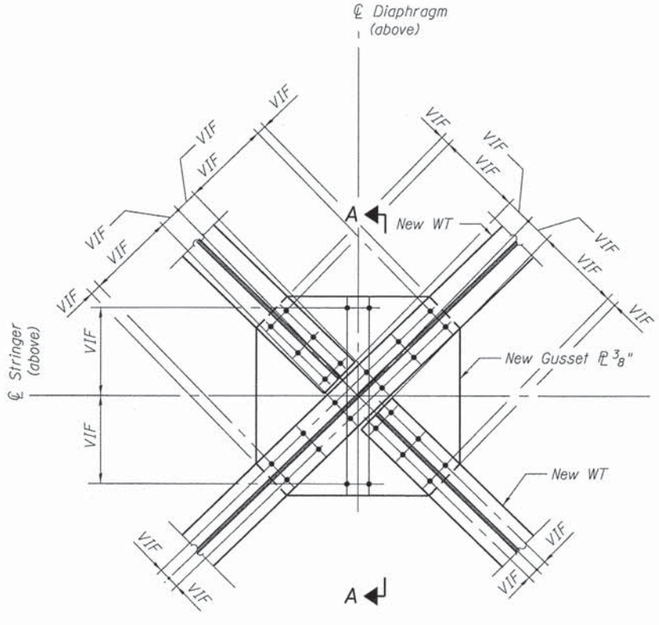
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FLOORBEAM DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-23 OF 95 SHEETS

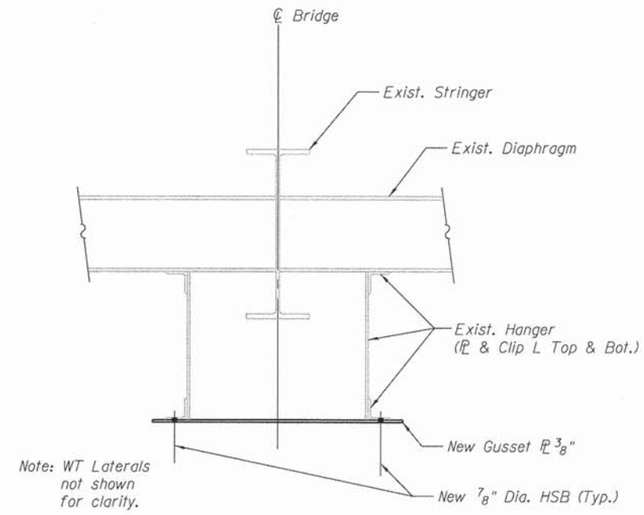
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	50
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



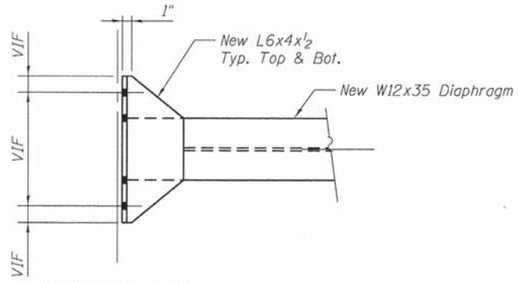
DETAIL E
(2 places)



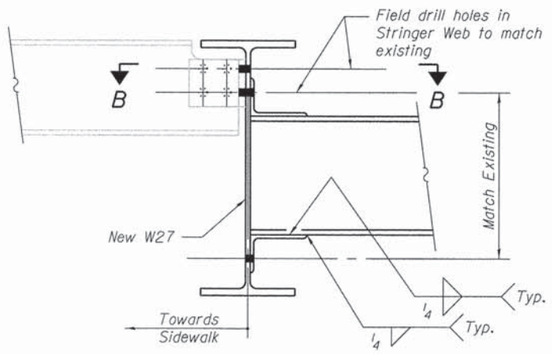
DETAIL F
(6 places)



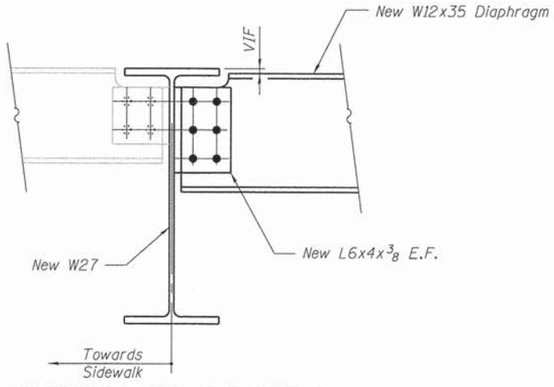
SECTION A-A



SECTION B-B



DIAPHRAGM D1-END DETAIL



DIAPHRAGM D2-END DETAIL

NOTES

1. For location of Detail E & F see Sheet S-22.
2. For location of Diaphragms D1 & D2 see Sheet S-22.
3. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.

LEGEND

☼	Existing fastener to Remain
●	Existing fastener to be Removed & Replaced
VIF	Verify in Field
OSL	Outstanding Leg

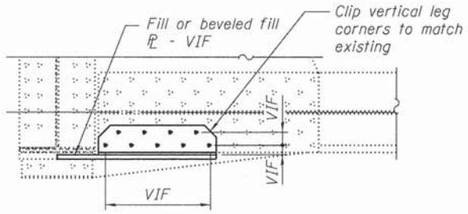
I:\CH1\PR1\000003634\S1-ver1\dgn\016-5005-824-SD.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - GWS	REVISED
	FILE NAME = 016-5005-824-SD.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - GWS	REVISED

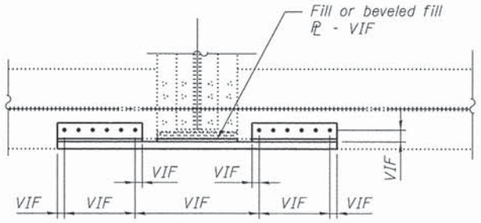
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL DETAILS 2
STRUCTURE NO. 016-5005
SHEET NO. S-24 OF 95 SHEETS

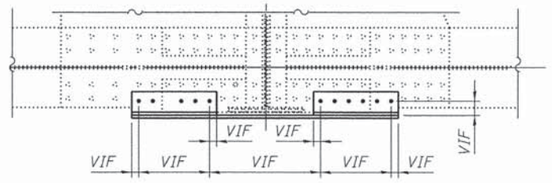
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	51
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



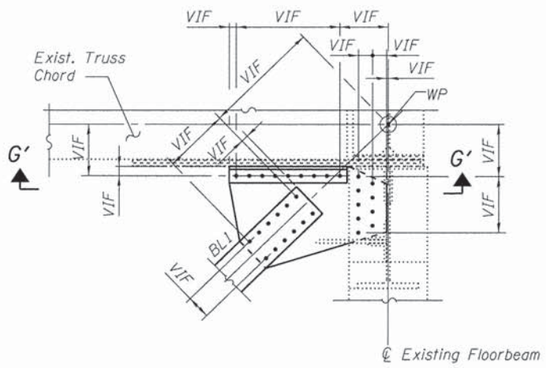
SECTION G'-G'



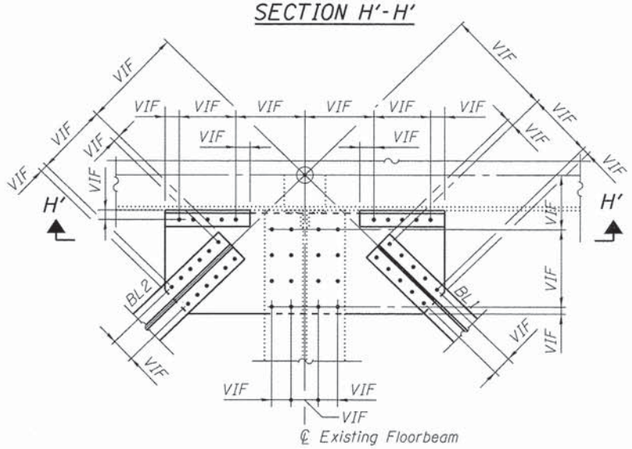
SECTION H'-H'



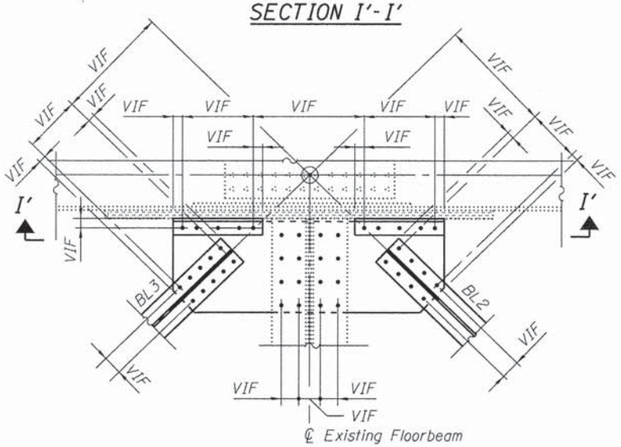
SECTION I'-I'



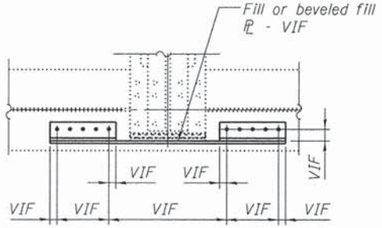
DETAIL G



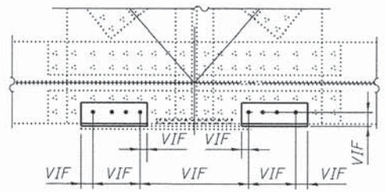
DETAIL H



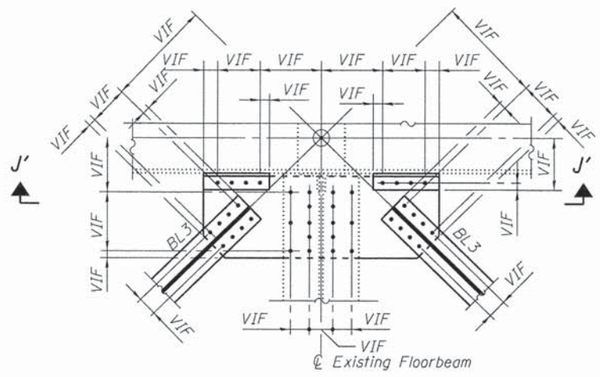
DETAIL I



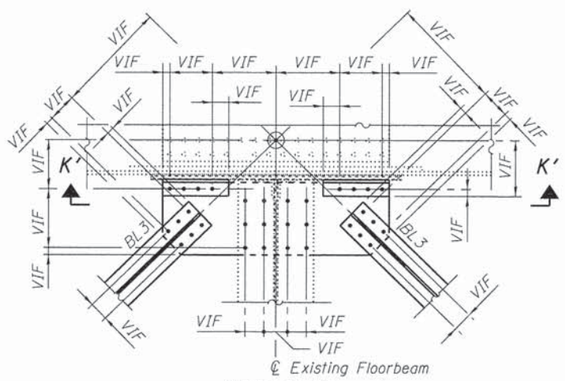
SECTION J'-J'



SECTION K'-K'



DETAIL J



DETAIL K

BOTTOM LATERALS

BL1 - WT9x30
BL2 - WT8x22.5
BL3 - WT8x18

LEGEND

⁘	Existing fastener to Remain
●	Existing fastener to be Removed & Replaced
VIF	Verify in Field
OSL	Outstanding Leg

NOTES:

1. All botttom lateral gusset plates asumed $\frac{3}{8}$" thick.
2. All bottom lateral gusset connection angles assumed $\frac{3}{8}$" thick. Verify leg sizes in field and match.
3. For location of Detail G, H, I, J & K see Sheet S-22.

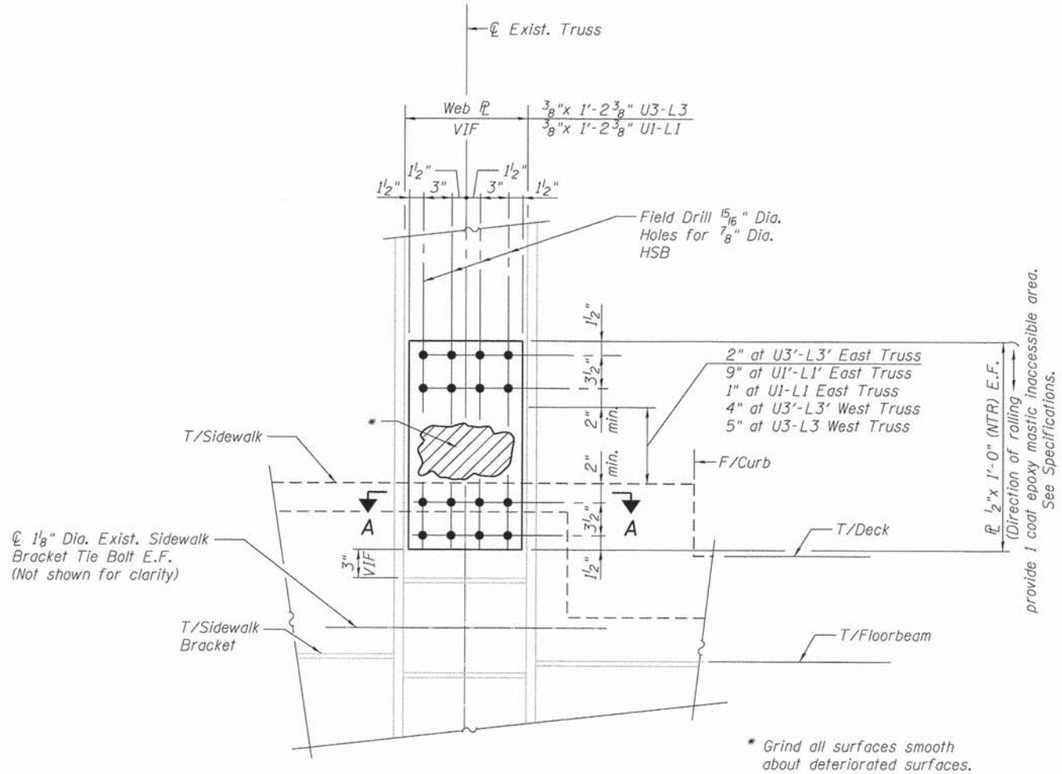
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - GWS	REVISED
FILE NAME = 016-5005-025-SD.dgn	CHECKED - RH	REVISED
PLOT SCALE =	DRAWN - EF	REVISED
PLOT DATE =	CHECKED - GWS	REVISED

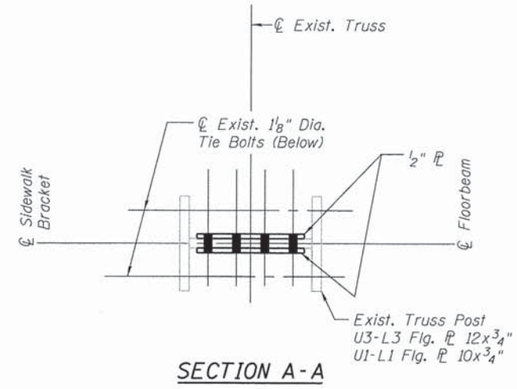
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS 3
STRUCTURE NO. 016-5005
SHEET NO. S-25 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	52
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



TRUSS POST WEB REPAIR



SECTION A-A

LEGEND

◌	Existing fastener to Remain
●	Existing fastener to be Removed & Replaced, unless noted otherwise
VIF	Verify in Field
OSL	Outstanding Leg
NTR	Notch Toughness Requirement

BILL OF MATERIAL

Item	Unit	Quantity
Structural Steel Repair	Pound	310

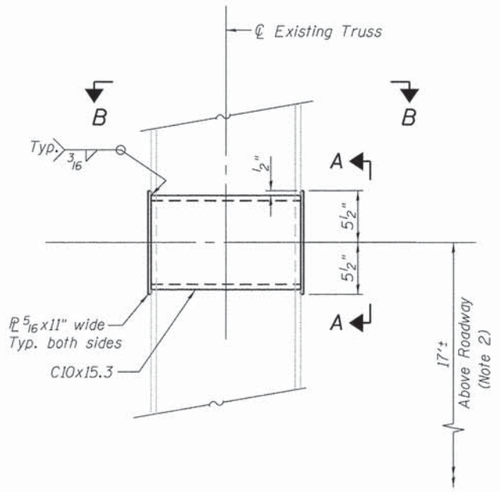
I:\CH\PRJ\2020203634\Struct\dgn\016-5005-026-SD.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - GWS	REVISED
	FILE NAME = 016-5005-026-SD.dgn	CHECKED - BJN	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

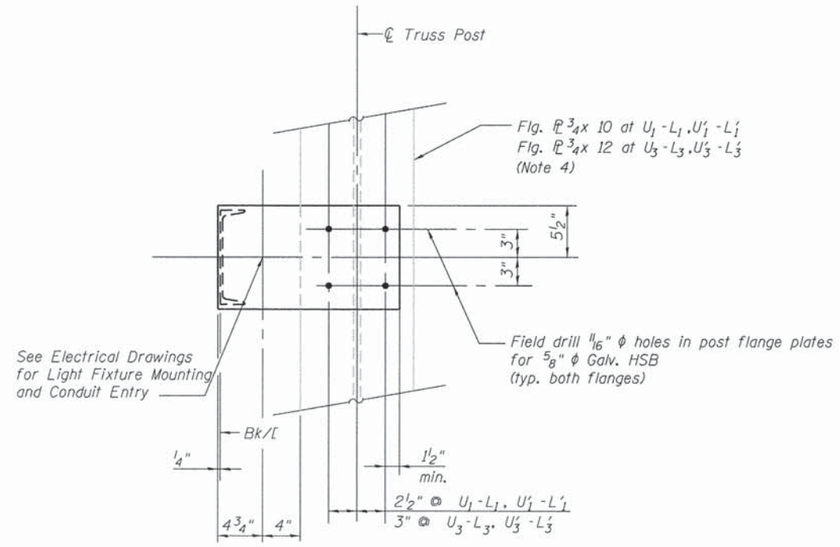
STRUCTURAL STEEL DETAILS 4
STRUCTURE NO. 016-5005
SHEET NO. S-26 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	53
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

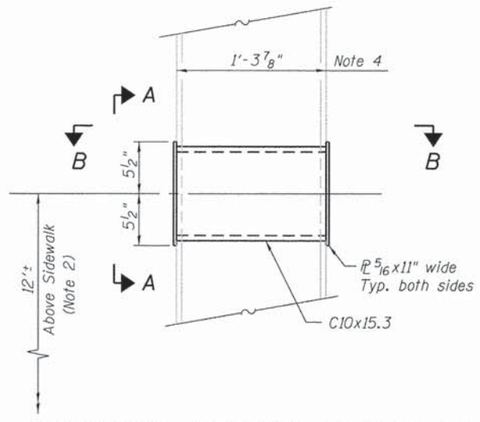


ROADWAY LIGHT FIXTURE BRACKETS (Note 3)

Looking South - East Truss U_1-L_1, U_3'-L_3'
Looking North - West Truss U_3-L_3, U_1'-L_1'
(4 Total)

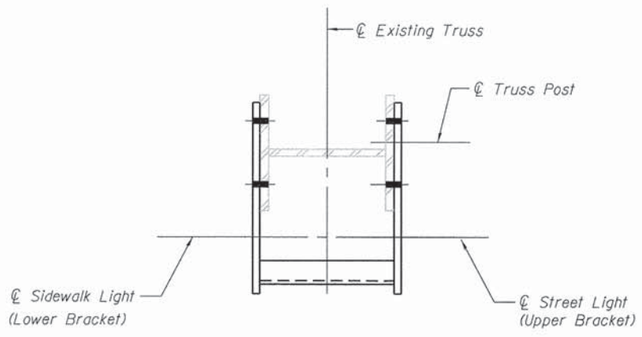


SECTION A-A



PEDESTRIAN LIGHT FIXTURE BRACKETS (Note 3)

Looking South - East Truss U_1-L_1, U_3-L_3, U_3'-L_3', U_1'-L_1'
Looking North - West Truss U_1-L_1, U_3-L_3, U_3'-L_3', U_1'-L_1'
(8 Total)



SECTION B-B

NOTES

1. Light fixture support brackets based on roadway and sidewalk fixtures specified on Electrical drawings. Mounting to be centered vertically on plate. Coordinate mounting bolt layout and conduit size and entry location for actual fixture furnished. Notify Engineer of discrepancies.
2. Verify in field actual bracket and light fixture heights above finished concrete and coordinate with Electrical drawings. Dimensions shown for information only.
3. See Electrical drawings for fixture locations.
4. Nominal dimensions provided for the existing truss post sections. Verify dimensions and plate thicknesses in the field.
5. Plates and shapes on this sheet to be AASHTO M270 (Grade 36).
6. Furnish and install steel material shown on this sheet under item FURNISHING AND ERECTING STRUCTURAL STEEL.

I:\CH1\PRJ\0000003534\Struct\dgn\016-5005-027-SD.dgn

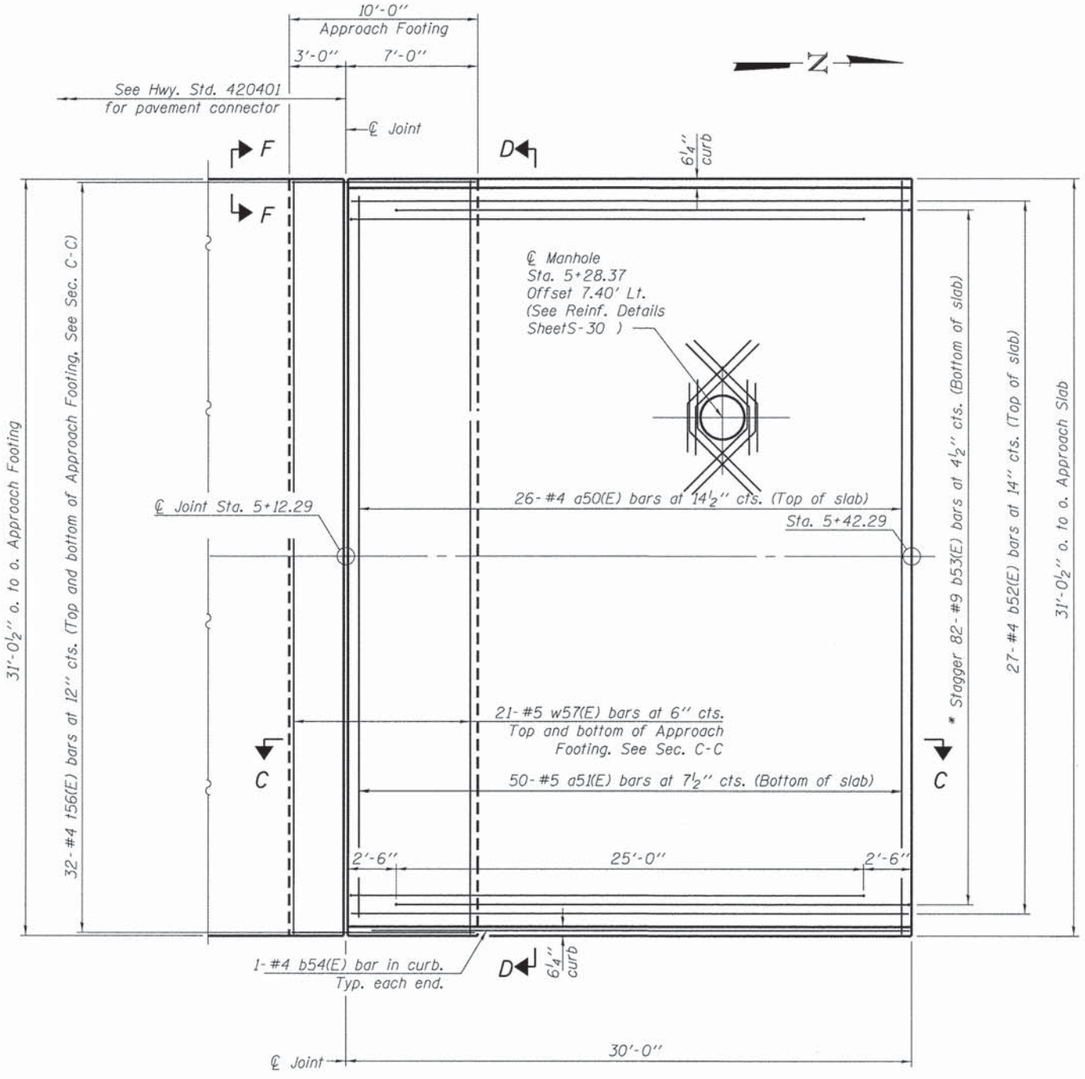
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - GWS	REVISED	
FILE NAME = 016-5005-027-SD.dgn	CHECKED - BJN	REVISED	
PLOT SCALE =	DRAWN - EF	REVISED	
PLOT DATE =	CHECKED - RH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS 5
STRUCTURE NO. 016-5005
SHEET NO. S-27 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	54
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



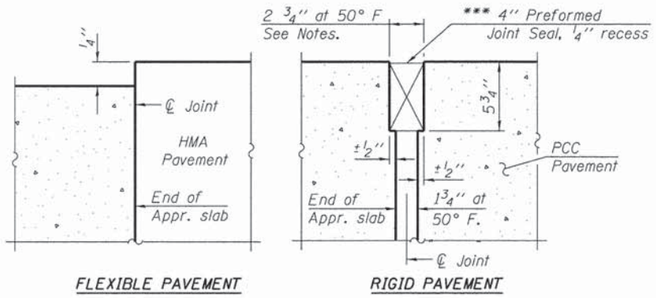
PLAN SOUTH APPROACH SLAB

* Tilt #9 b53(E) bars as required to maintain clearance.
** Cut a50(E), a51(E), b52(E) and b53(E) bars to avoid interference with manhole.

Notes:
See Sheet S-30 for Sections C-C & D-D.
a50(E) and a51(E) bar spacings measured along ℄ Rdwy.

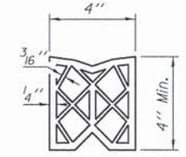
The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1½" for installation purposes.

*** Cost included with HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.

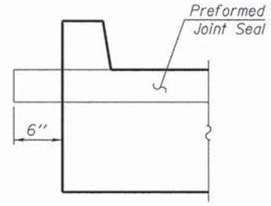


FLEXIBLE PAVEMENT RIGID PAVEMENT

DETAIL A



PREFORMED JOINT SEAL



VIEW F-F

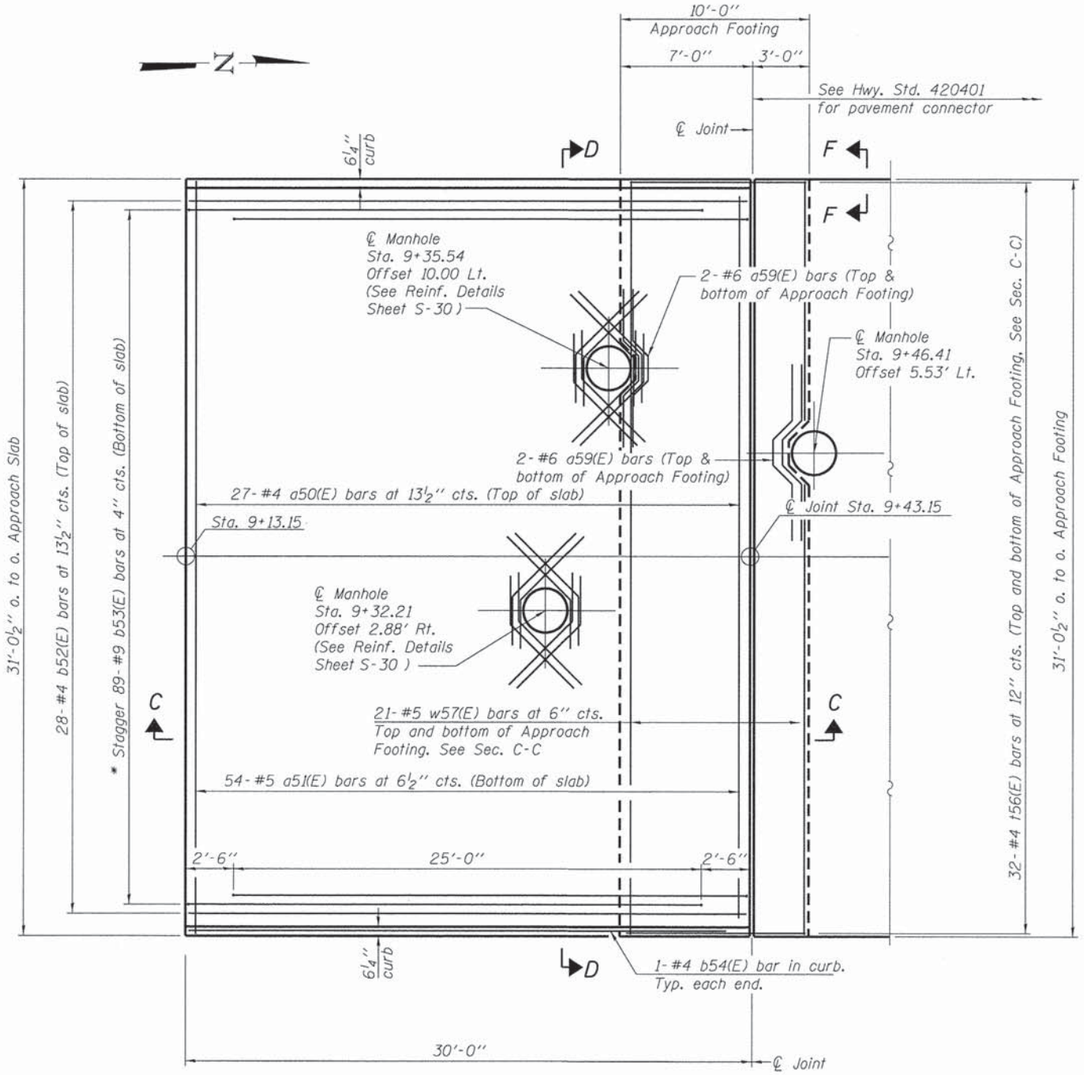
I:\CH\PRJ\0000036334\Structure\dgn\016-5005-028-AD.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - JDM	REVISED
	FILE NAME = 016-5005-028-AD.dgn	CHECKED - DAG	REVISED
	PLOT SCALE =	DRAWN - JDM	REVISED
	PLOT DATE =	CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS 1
STRUCTURE NO. 016-5005
SHEET NO. S-28 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	55
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



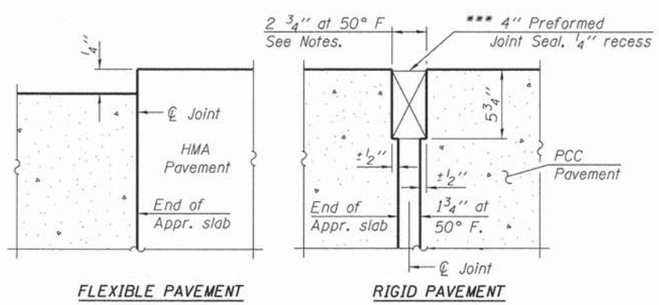
PLAN NORTH APPROACH SLAB

* Tilt #9 b53(E) bars as required to maintain clearance.
** Cut a50(E), a51(E), b52(E), b53(E), t56(E), and w57(E) bars to avoid interference with manhole.

Notes:
See sheet S-30 for Sections C-C & D-D.
a50(E) and a51(E) bar spacings measured along ℄ Rdwy.

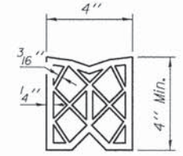
The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1½" for installation purposes.

*** Cost included with HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.

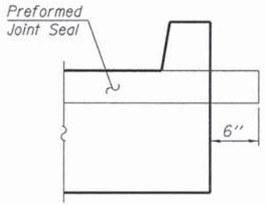


FLEXIBLE PAVEMENT RIGID PAVEMENT

DETAIL A



PREFORMED JOINT SEAL



VIEW F-F

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

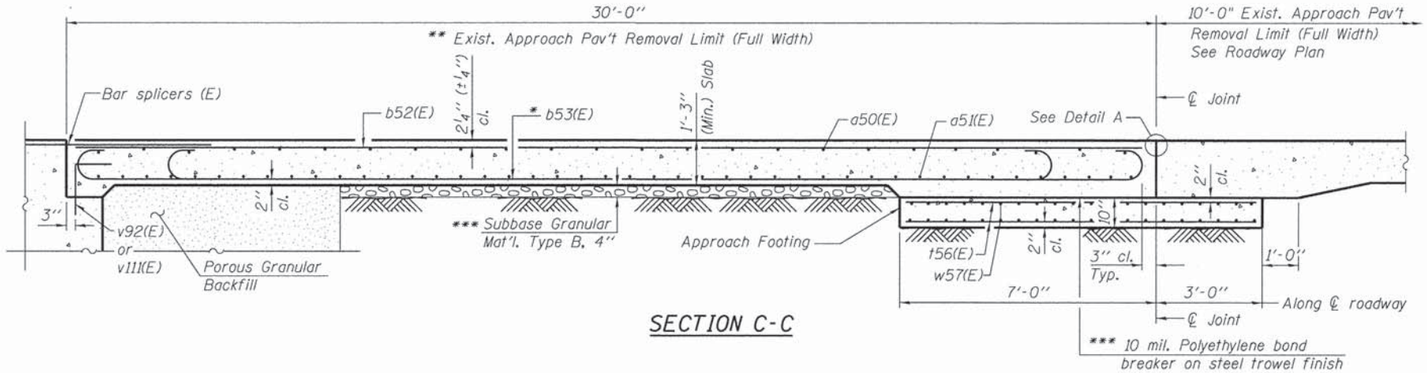
USER NAME =	DESIGNED - JDM	REVISED
FILE NAME = 016-5005-029-A0.dgn	CHECKED - DAG	REVISED
PLOT SCALE =	DRAWN - JDM	REVISED
PLOT DATE =	CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

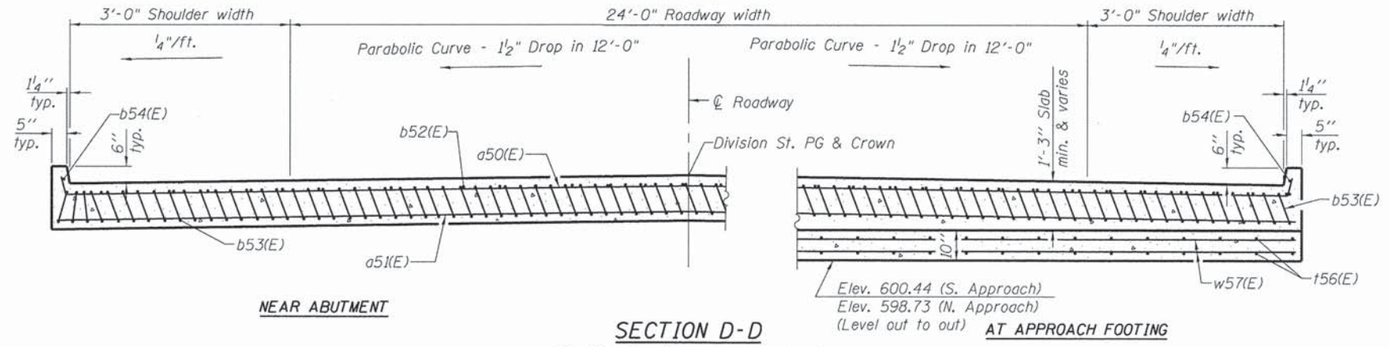
APPROACH SLAB DETAILS 2
STRUCTURE NO. 016-5005
SHEET NO. S-29 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	56

CONTRACT NO. 61B58
ILLINOIS FED. AID PROJECT



SECTION C-C



NEAR ABUTMENT

AT APPROACH FOOTING

SECTION D-D

(See Plan for dimensions not shown)

Notes:
See Sheets S-28 and S-29 for Detail A.
Approach slab and parapet concrete shall be paid for as HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.
Approach footing concrete shall be paid for as CONCRETE STRUCTURES.
Reinforcement shall be paid for as REINFORCEMENT BARS, EPOXY COATED.
For v92(E) and v111(E) bar details, see abutment drawings.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see abutment drawings.
Cost of excavation for approach footing included with CONCRETE STRUCTURES.
For Porous Granular Backfill and drainage treatment details, see abutment drawings.

TWO APPROACHES BILL OF MATERIAL

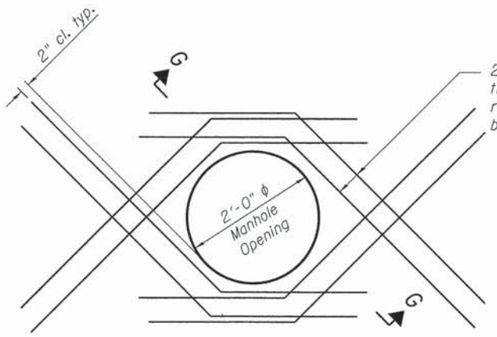
Bar	No.	Size	Length	Shape
a50(E)	53	#4	31'-4"	
a51(E)	104	#5	30'-8"	
a59(E)	8	#6	8'-1"	
b52(E)	55	#4	29'-8"	
b53(E)	171	#9	29'-9"	
b54(E)	4	#4	29'-8"	
t56(E)	128	#4	9'-8"	
w57(E)	84	#5	30'-8"	
High Performance Concrete Superstructure			Cu. Yd.	87.8
Concrete Structures			Cu. Yd.	19.2
Reinforcement Bars, Epoxy Coated			Pound	26,520
Protective Coat			Sq. Yd.	213
Bridge Deck Grooving			Sq. Yd.	194

MANHOLE REINFORCEMENT BILL OF MATERIAL FOR ONE MANHOLE

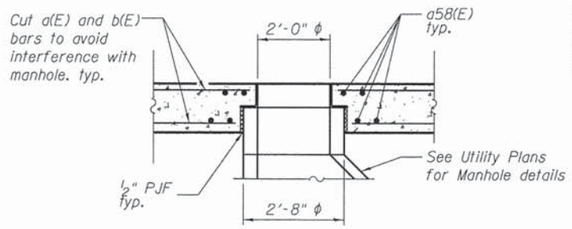
(3 required)

Bar	No.	Size	Length	Shape
a58(E)	16	#6	7'-4"	
Reinforcement Bars, Epoxy Coated			Pound	180

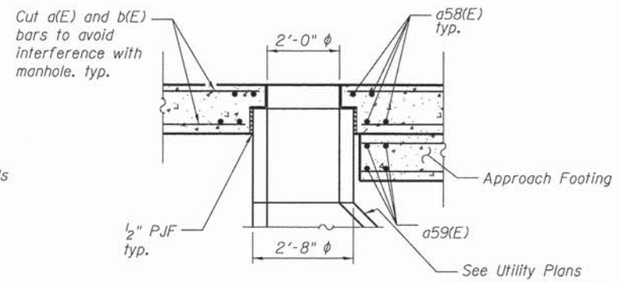
* Tilt #9 b53(E) bars as required to maintain clearance.
** Cost included with APPROACH SLAB REMOVAL.
*** Cost included with HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.



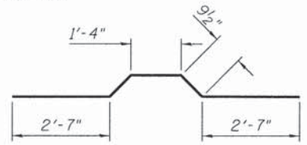
MANHOLE REINFORCEMENT



AT APPROACH SLAB

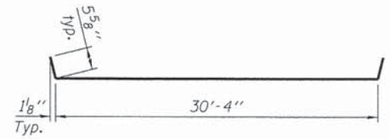


AT APPROACH FOOTING

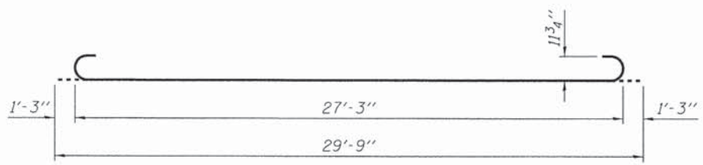


BAR a59(E)

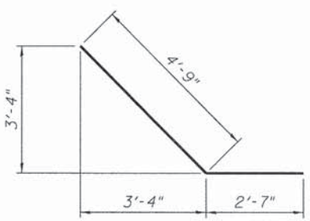
SECTION G-G



BAR a50(E)



BAR b53(E)



BAR a58(E)

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

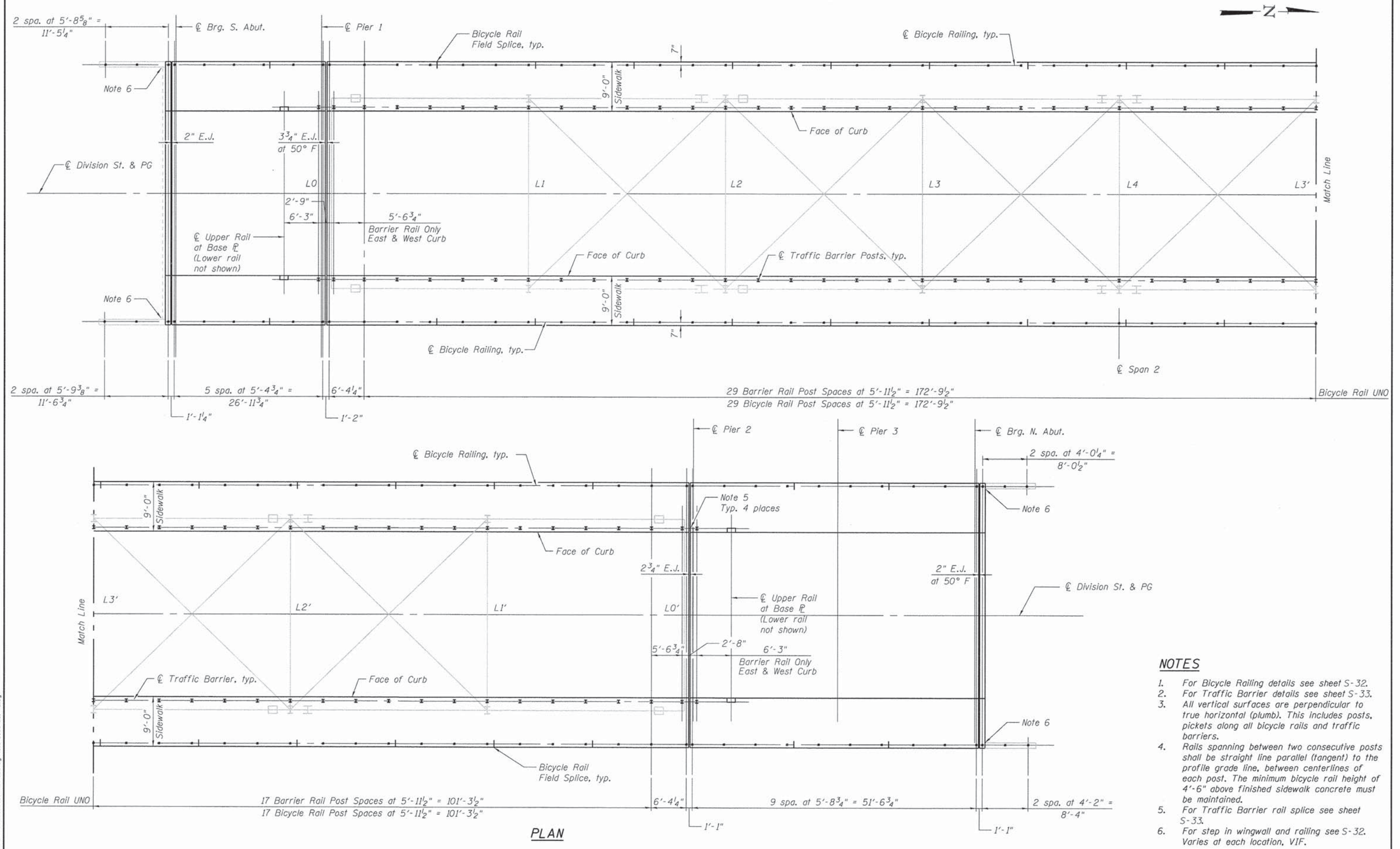
USER NAME =		DESIGNED - JDM	REVISED
FILE NAME = 016-5005-030-A0.dgn		CHECKED - DAG	REVISED
PLOT SCALE =		DRAWN - JDM	REVISED
PLOT DATE =		CHECKED - BPH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS 3
STRUCTURE NO. 016-5005
SHEET NO. S-30 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	57
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

I:\CHI\PRJ\000080634\Structs\dgn\016-5005-030-A0.dgn



PLAN

NOTES

1. For Bicycle Railing details see sheet S-32.
2. For Traffic Barrier details see sheet S-33.
3. All vertical surfaces are perpendicular to true horizontal (plumb). This includes posts, pickets along all bicycle rails and traffic barriers.
4. Rails spanning between two consecutive posts shall be straight line parallel (tangent) to the profile grade line, between centerlines of each post. The minimum bicycle rail height of 4'-6" above finished sidewalk concrete must be maintained.
5. For Traffic Barrier rail splice see sheet S-33.
6. For step in wingwall and railing see S-32. Varies at each location, VIF.

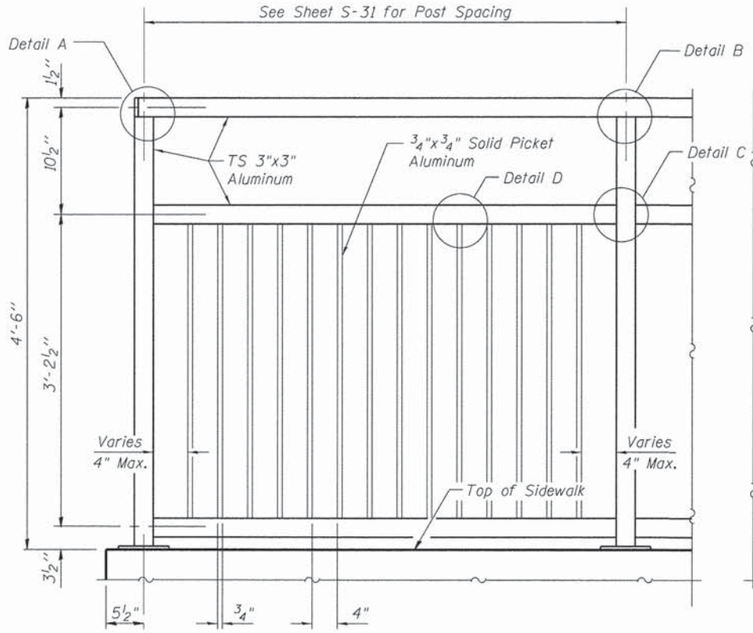
I:\CH1\PRJ\0000835A\Struct\dgn\016-5005-031-RL.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - GWS	REVISED
	FILE NAME = 016-5005-031-RL.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - GWS	REVISED

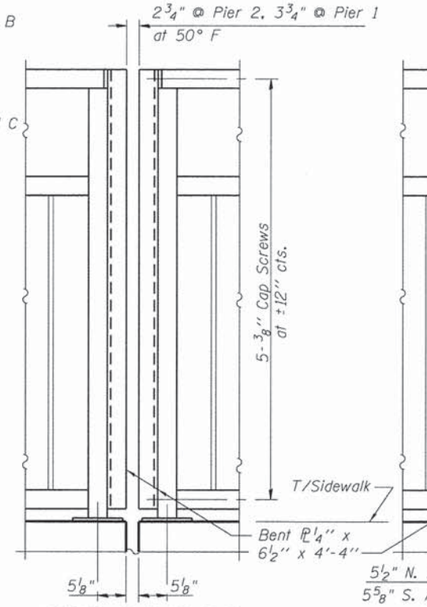
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC BARRIER, BICYCLE RAILING & LIGHTING FIXTURE LAYOUT
STRUCTURE NO. 016-5005
SHEET NO. S-31 OF 95 SHEETS

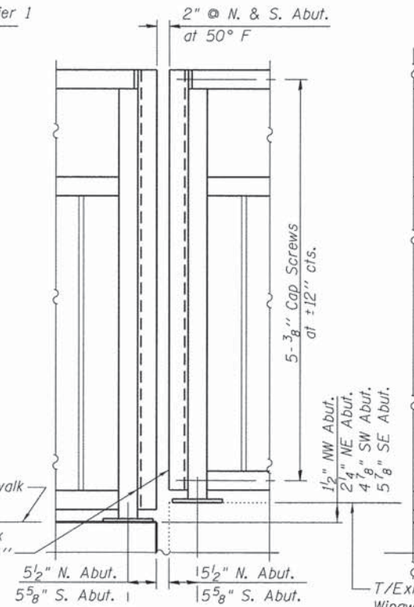
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	58
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



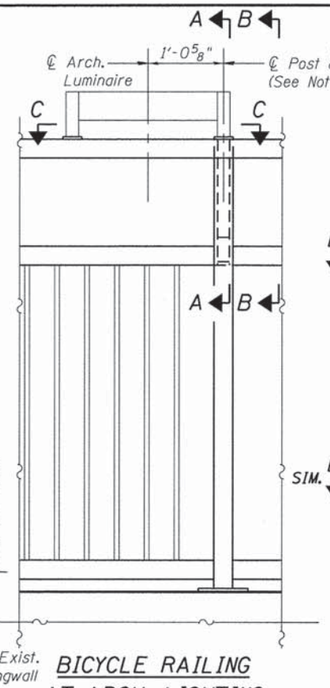
BICYCLE RAILING



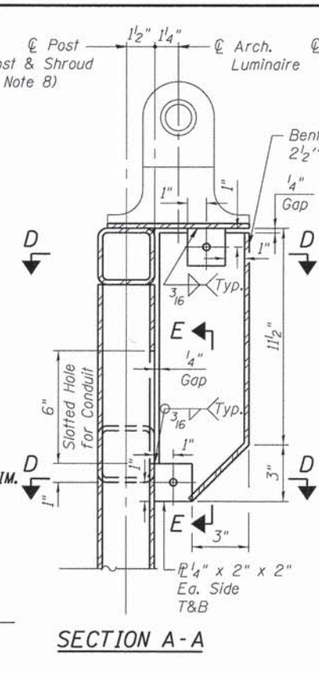
BICYCLE RAILING AT PIERS



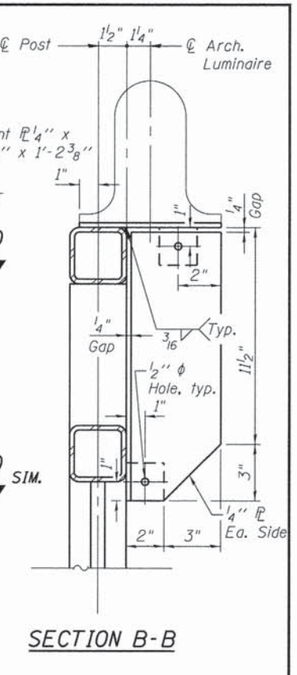
BICYCLE RAILING AT ABUTMENTS



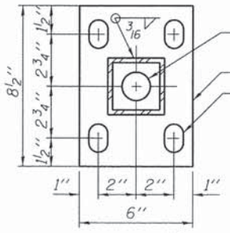
BICYCLE RAILING AT ARCH. LIGHTING



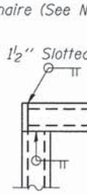
SECTION A-A



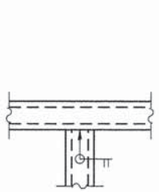
SECTION B-B



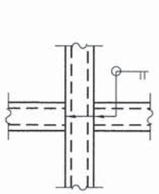
BASE PL



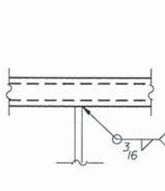
DETAIL A



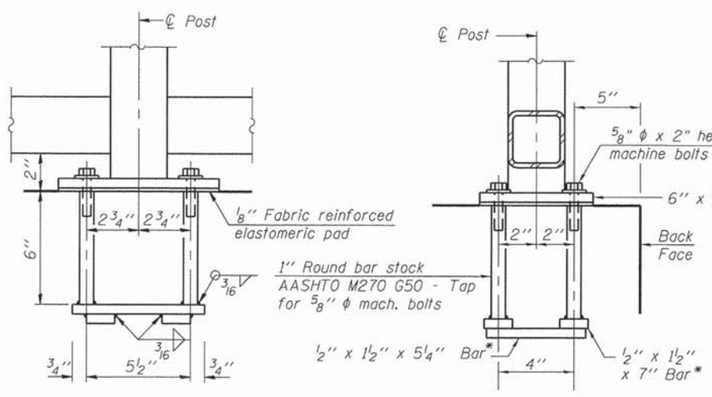
DETAIL B



DETAIL C

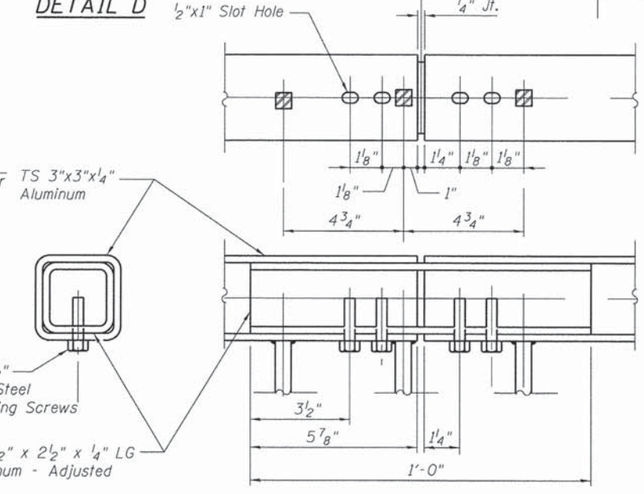


DETAIL D



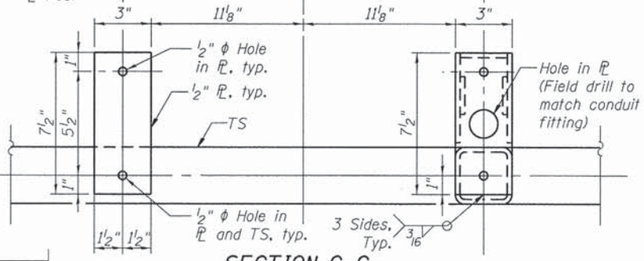
ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



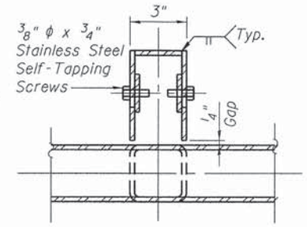
*Materials conform to AASHTO M270 GR. 36

RAIL SPLICE

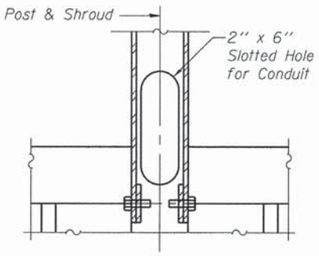


SECTION C-C

West Bicycle Railing shown. East Bicycle Railing opposite hand



SECTION D-D



SECTION E-E

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing (Special)	Foot	779

NOTES:

1. Bicycle railings shall be according to section 509 of the IDOT Standard Specifications, except as noted.
2. All tubing will be aluminum alloy 6063-T52.
3. All dimensions are in feet and inches except as noted.
4. All posts, railing shall be painted in accordance with section 506 of the IDOT Standard Specifications.
5. All rail will be sandblasted per SSPC-SP6 followed by shop applied primer and top coat as follows:
   3.00 MILS DFT TNEMEC L69-Hi-build epoxyline II epoxy interim coat, then
   2.00 MILS DFT TNEMEC 73-Color aliphatic acrylic polyurethane topcoat - black.
6. All bolts, nuts and washers shall be stainless steel.
7. Shop drawings based on individual project plan view locations must be submitted to the resident engineer for approval.
8. See Sheet E-03 for Architectural Lighting locations. Light fixture support and shroud details based on architectural fixture specified on Electrical drawings. Coordinate luminaire mounting details for actual fixture furnished. Notify Engineer of discrepancies.

I:\CH1\PRJ\0000203634\Structure\dgn\016-5005-032-RL.dgn

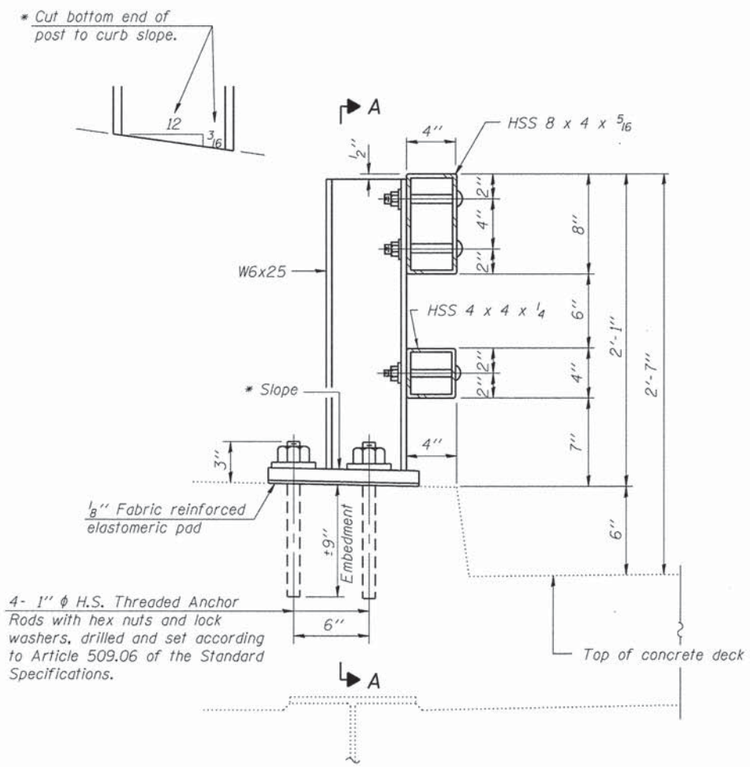
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - GWS	REVISED
FILE NAME = 016-5005-032-RL.dgn		CHECKED - RH	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - GWS	REVISED

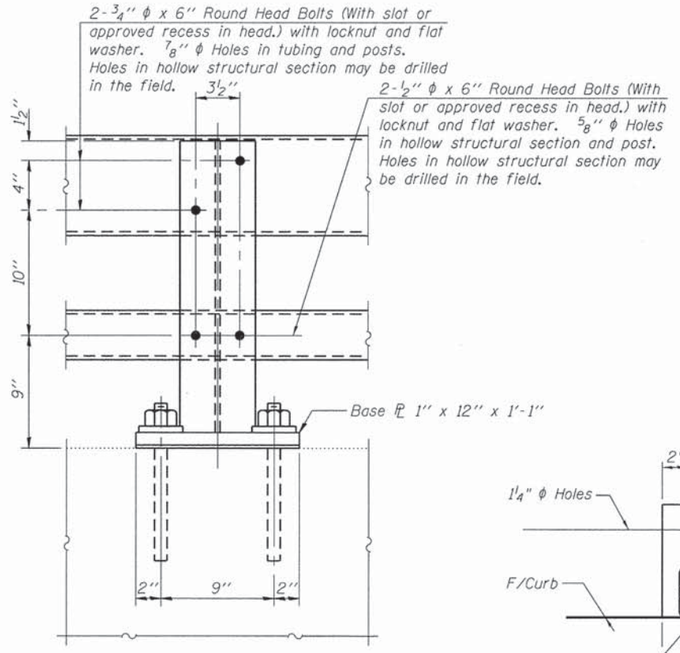
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-32 OF 95 SHEETS

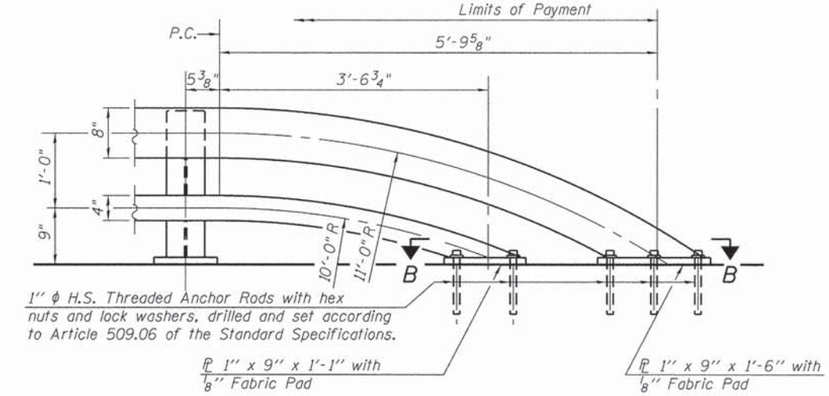
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	59
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



SECTION AT RAIL POST

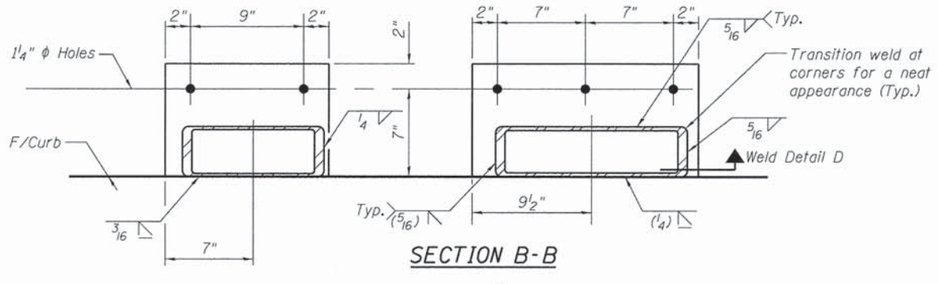


SECTION A-A

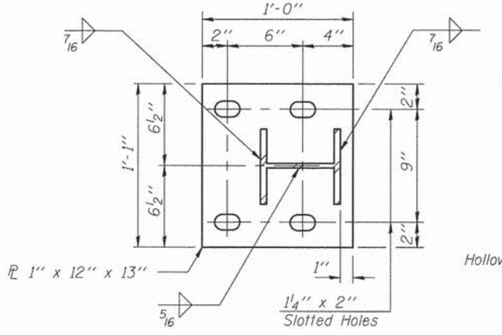


RAIL TERMINAL

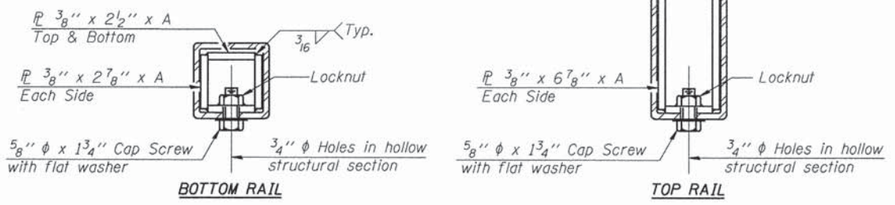
SE & NE Shown
SW & NE Opp. Hand



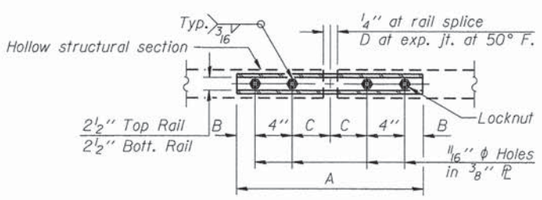
SECTION B-B



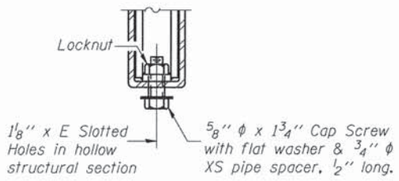
BASE PLATE DETAIL



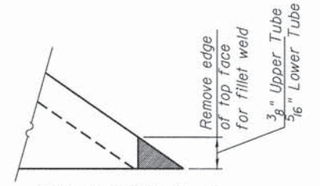
SECTIONS AT RAIL SPLICE



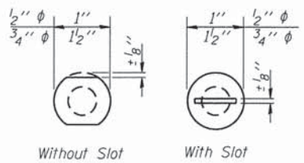
PLAN-BOTT. SPLICE PL TYPICAL



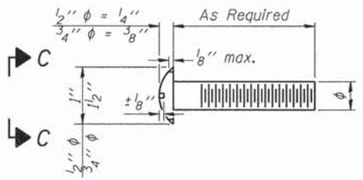
RAIL SPLICE CONNECTION AT EXPANSION JT.



WELD DETAIL D



VIEW C-C



DETAIL OF 1/2" ϕ & 3/4" ϕ ROUND HEAD BOLTS

Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.

Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

Cost of Traffic Barrier shall be paid for as STEEL RAILING, TYPE 2399.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤4"	2 1/2"	1'-8"	2"	4"	2 1/2"
>4" ≤6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
>6 1/2" ≤9"	5"	2'-4"	3 1/2"	6 1/2"	9"
>9" ≤13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

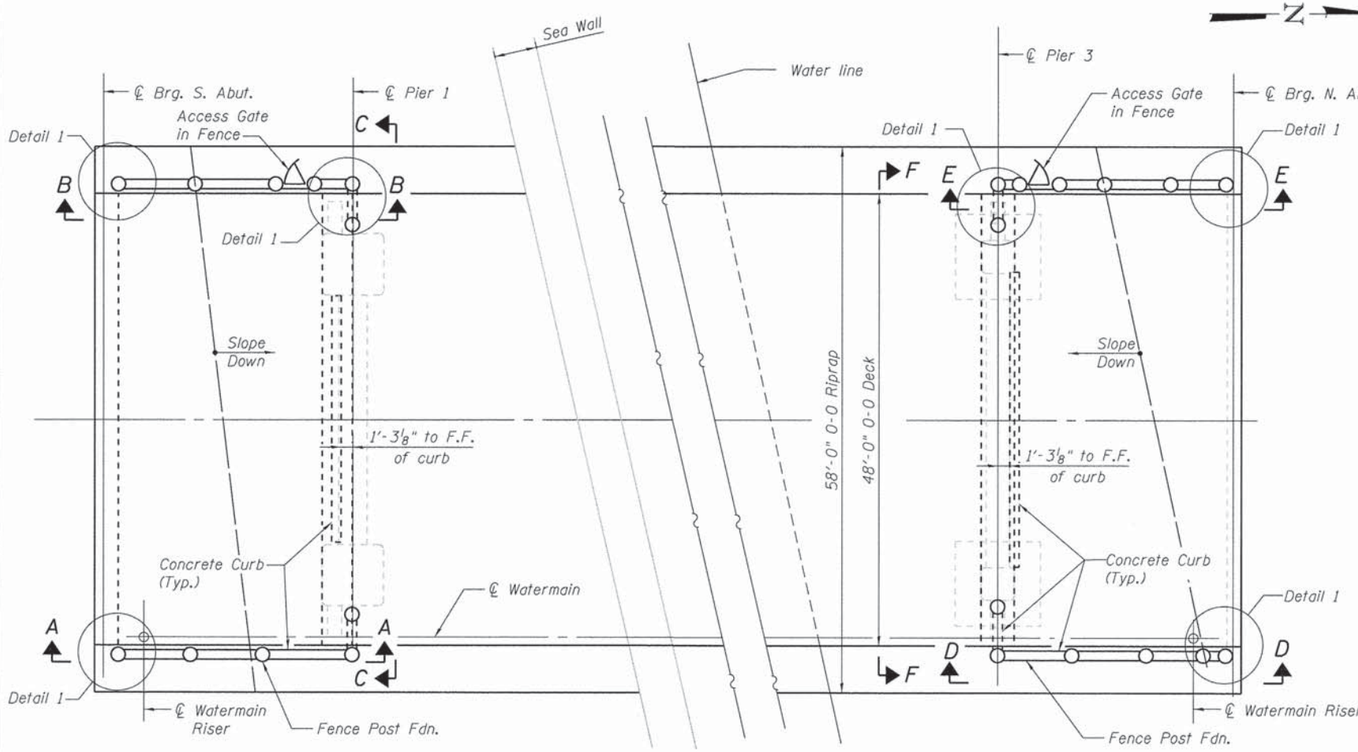
Item	Unit	Quantity
Steel Railing, Type 2399	Foot	607

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - GWS	REVISED
	FILE NAME = 016-5005-033-RL.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - EF	REVISED
	PLOT DATE =	CHECKED - GWS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

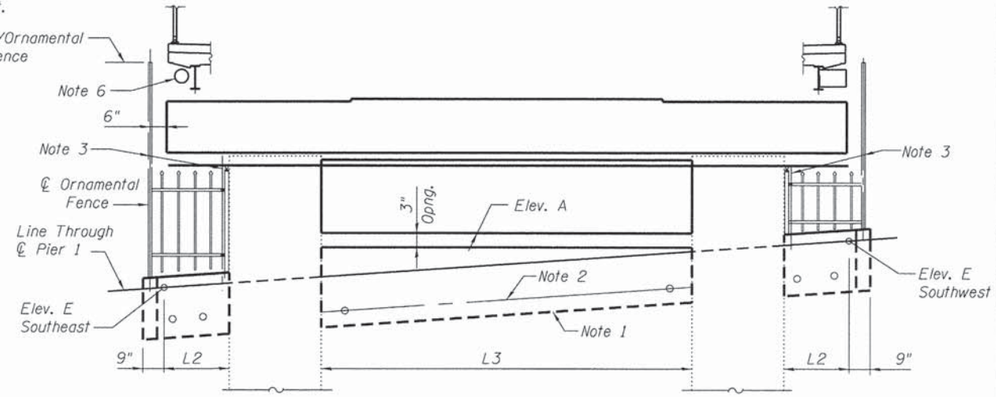
TRAFFIC BARRIER DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-33 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	60
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

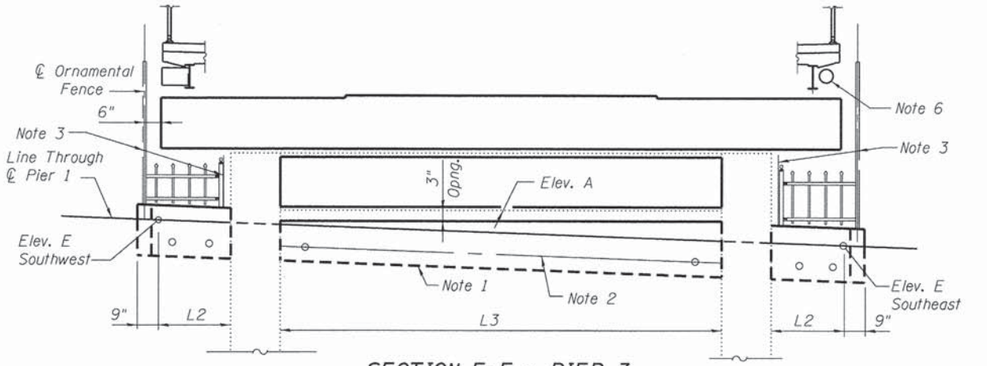


PLAN - SPAN 1

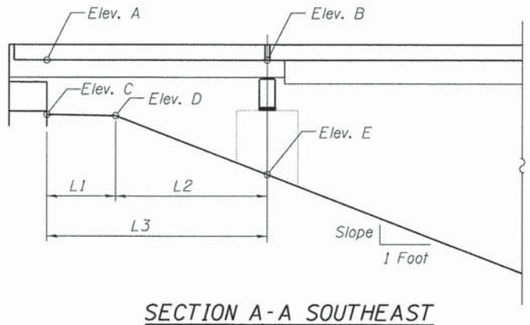
PLAN - SPAN 4



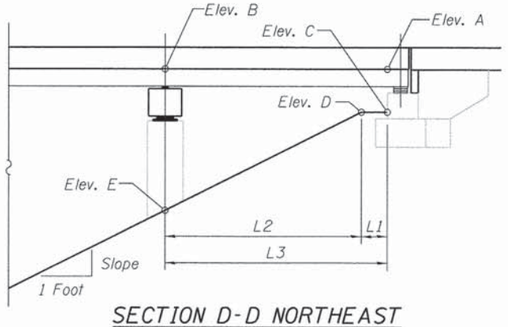
SECTION C-C - PIER 1



SECTION F-F - PIER 3



SECTION A-A SOUTHEAST
SECTION B-B SOUTHWEST



SECTION D-D NORTHEAST
SECTION E-E NORTHWEST

NOTES

1. Bottom of concrete curb to match bottom of riprap bedding. Bottom of curb to be level in narrow direction. Front face of curb equals back face of pier struts in the direction of view.
2. Install 3" dia. weep holes in transverse curbs at 5'± centers, invert equals top of bedding. Place ½" PJF between curb and existing construction, including fence post foundations.
3. Concrete foundations for ornamental fence posts at returns not shown for clarity.
4. For typical railing details and concrete curb see S-35.
5. For typical riprap details see S-3.
6. Coordinate installation of eastern fences with watermain work.
7. For Detail 1, see S-35.

TABLE 1 - Fence Openings

	Elev. A[1]	Elev. B[1]	Elev. C[3]	Elev. D[3]	Elev. E[3]	Slope/Ft.[4]	Dim. L1[5]	Dim. L2	Dim. L3	Comment
Southwest Fence	603.41	604.58	596.7 ±	596.7 ±	593.4 ±	0.36'	8.22'	16.63'	24.85'	Provide access gate plus return.
Southeast Fence	603.41	604.58	596.7 ±	596.7 ±	590.7 ±	0.30'	13.93'	11.01'	24.85'	Provide return.
Pier 1	593.17[2]					Varies		4.42'	26.17'	No fence - concrete curb only.
Northwest Fence	601.94	603.16	597.8 ±	597.8 ±	593.1 ±	0.41'	12.86'	11.40'	24.26'	Provide access gate plus return.
Northeast Fence	601.94	603.16	597.8 ±	597.8 ±	592.3 ±	0.25'	2.58'	21.68'	24.26'	Provide return.
Pier 3	593.14[2]					Varies		4.92'	31.16'	No fence - concrete curb only.

Table Footnotes:
1. Elevations at bottom of edge of deck; derived from Sheet S-4, S-5, S-6 and S-13, UNO.
2. Bottom of proposed pier strut beam per Sheet S-47.
3. Nominal elevations of proposed riprap based on existing slopewall conditions; verify in field.
4. Slope of riprap bank based on existing slopewall elevations; verify in field.
5. Dimension based on existing slopewall layout; verify in field.
6. Coordinate bottom of fence line with top of concrete curb.

I:\CH1\PRJ\000020634\Structural\dgn\016-5005-034-RL.dgn

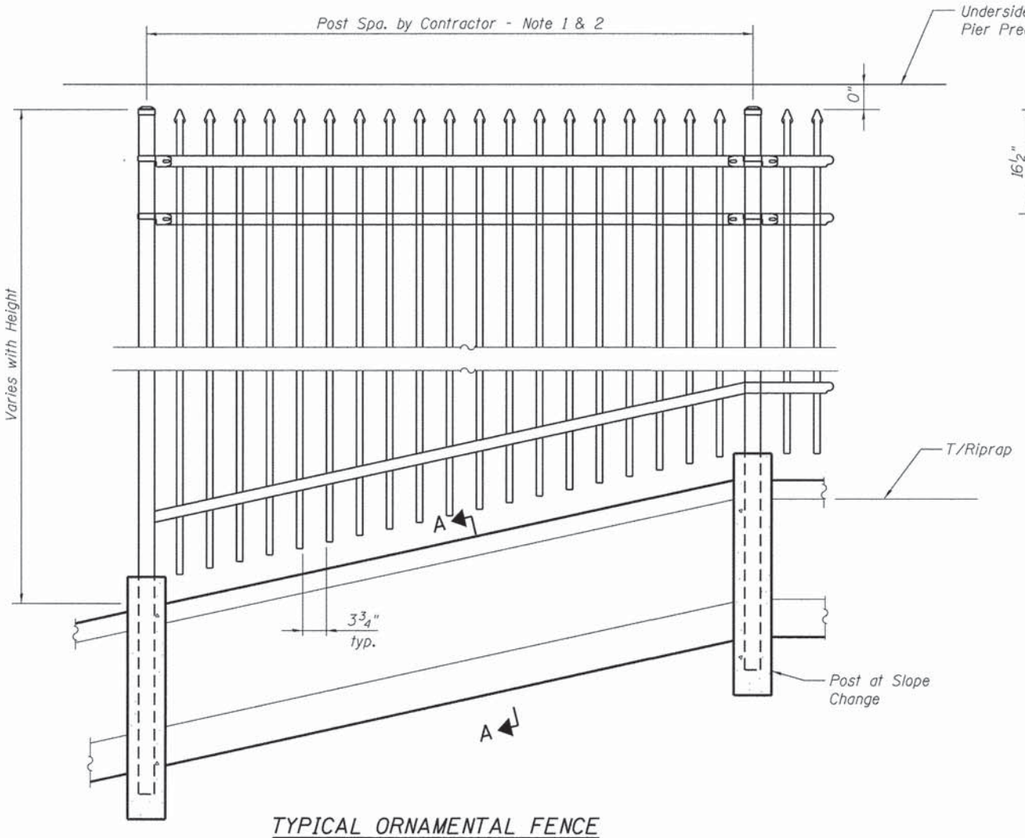
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - GWS	REVISED	
FILE NAME = 016-5005-034-RL.dgn	CHECKED - BJN	REVISED	
PLOT SCALE =	DRAWN - EF	REVISED	
PLOT DATE =	CHECKED - BJN	REVISED	

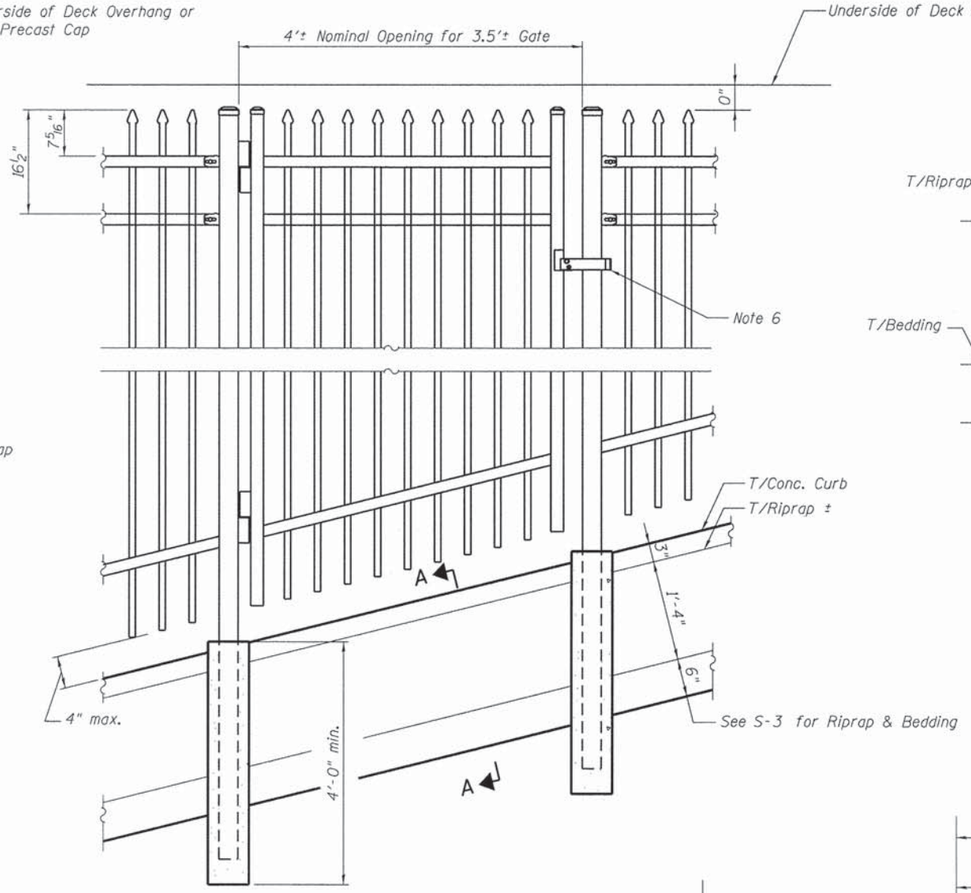
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ORNAMENTAL FENCE LAYOUT
STRUCTURE NO. 016-5005
SHEET NO. S-34 OF 95 SHEETS

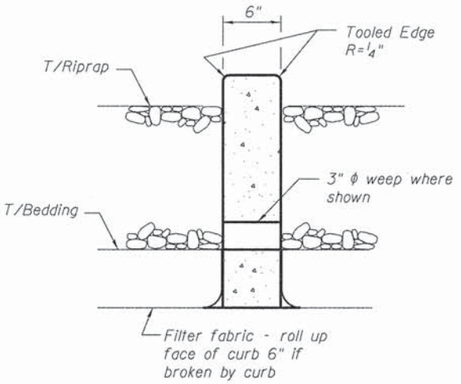
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	61
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



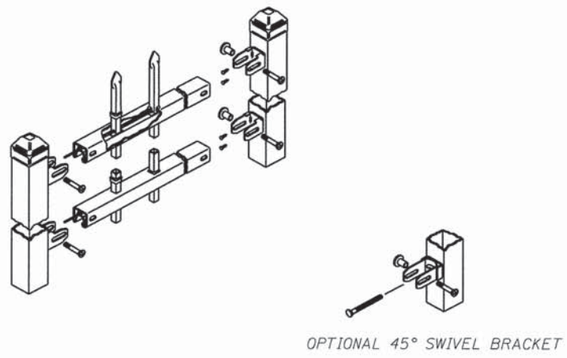
TYPICAL ORNAMENTAL FENCE



ACCESS GATE - SPAN 1 SHOWN
ACCESS GATE - SPAN 4 OPP. HAND
(Looking East)



SECTION A-A

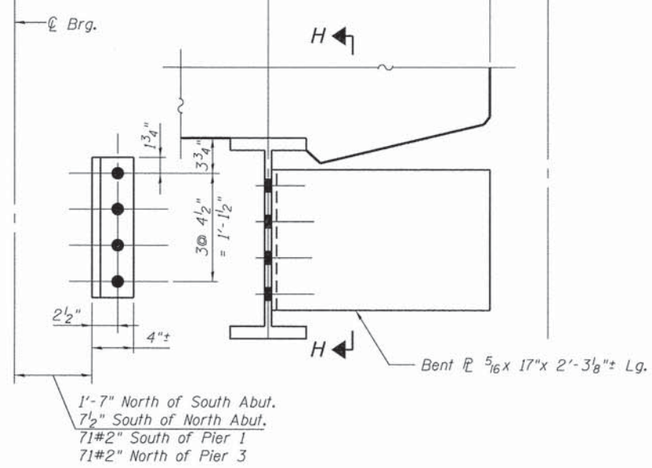


OPTIONAL 45° SWIVEL BRACKET

RAIL ASSEMBLY DETAIL

NOTES

1. Fence components shown for information only. Complete fence system including foundations to be designed by the Contractor. See Specifications for additional information.
2. The fence details shown are the basis of design and manufactured by Ameristar, model Echelon II Classic or equal. It is unknown if this fence system is adaptable to the sloping ground situation, including the gated openings and maximum heights. The Contractor shall make his own investigation into the use of a manufactured fence system, similar to what is depicted, or a fabricated fence made from standard structural shapes which include squares, rounds, bars, tubes, and channels, to mimic the look and appearance of the manufactured system shown.
3. The top of the fence on the east side of the bridge requires interface coordination with the water main under the edge of the sidewalk deck and its entry into the ground in front of the abutments. See S-18 and Civil drawings for more information.
4. All posts, railing shall be painted in accordance with Section 506 of the IDOT Standard Specifications.
5. All rail will be sandblasted per SSPC-SP6 followed by shop applied primer and top coat as follows:
   3.00 MILS DFT TNEMEC L69-Hi-build epoxyline II epoxy interim coat, then
   2.00 MILS DFT TNEMEC 73-Color aliphatic acrylic polyurethane topcoat - black.
6. Clearance between pickets may not exceed 4" nor be less than 1½". Other openings (e.g. between top of fence and underside of bridge) may not exceed 6". Openings are to be measured using a sphere of outside diameter equal to the opening dimensions noted.
7. Gate locking mechanisms (keyed dead bolt or padlock hasp) to be reviewed and approved by City of Blue Island.



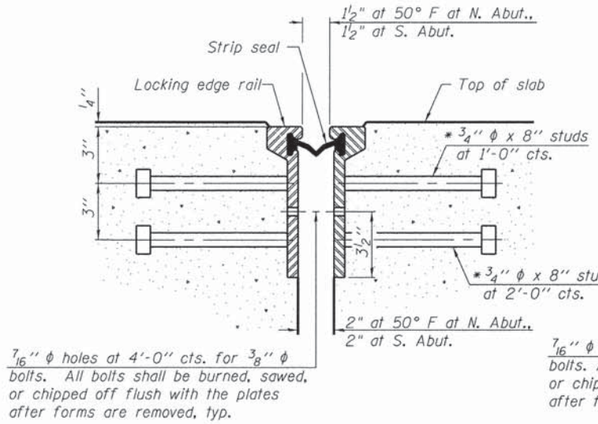
VIEW H-H

DETAIL 1
(Looking Toward Channel)
SE & NW Shown
SW & NE Opp. Hand

I:\CH1\PRJ\00020353\Struct\dgn\016-5005-035-RL.dgn

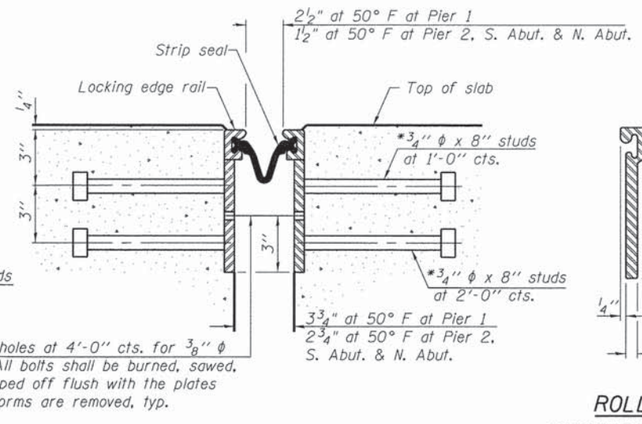
LOCHNER						
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - GWS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ORNAMENTAL FENCE DETAILS STRUCTURE NO. 016-5005 SHEET NO. S-35 OF 95 SHEETS	
	FILE NAME = 016-5005-035-RL.dgn	CHECKED - RH	REVISED			
	PLOT SCALE =	DRAWN - EF	REVISED			
	PLOT DATE =	CHECKED - GWS	REVISED			

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	62
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



SECTION THRU ROLLED RAIL JOINT

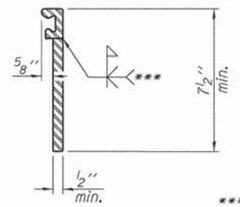
At North and South Abutment Only



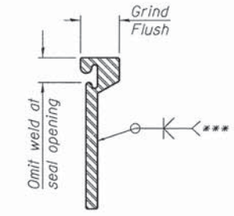
SECTION THRU WELDED RAIL JOINT

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

ROLLED EXTRUDED RAIL



WELDED RAIL



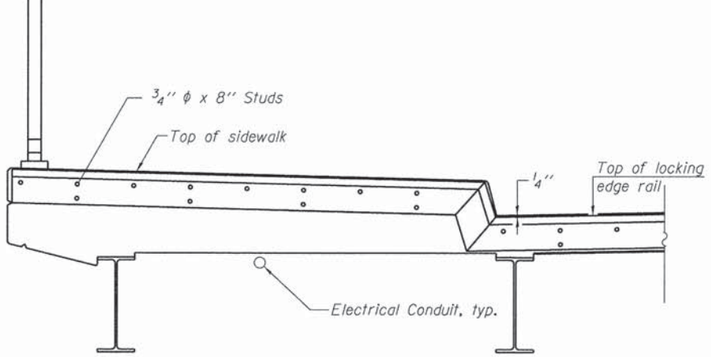
*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS



TYPICAL END TREATMENT AT SIDEWALK

Shorter plates with a single row of studs at 12" cts. may be necessary on sidewalks which are shallower than 9". See manufacturer's recommendation.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint for North Abutment and South Abutment and are based on welded rail expansion joint for Pier 1 and Pier 2. Welded rail expansion joint must be used at Pier 1 and Pier 2. If the Contractor elects to use the welded rail expansion joint at North and South Abutments, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of PREFORMED JOINT STRIP SEAL.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	196

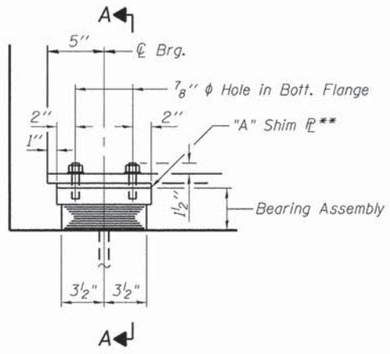
I:\CHI\PROJ\0080836341\Structure\dgn\016-5005-036-EX.dgn

LOCHNER	USER NAME =	DESIGNED - LJB	REVISED
H. W. LOCHNER, INC.	FILE NAME = 016-5005-036-EX.dgn	CHECKED - BJN	REVISED
225 WEST WASHINGTON STREET	PLOT SCALE =	DRAWN - LJB	REVISED
12 TH FLOOR	PLOT DATE =	CHECKED - BJN	REVISED
CHICAGO, ILLINOIS 60606			

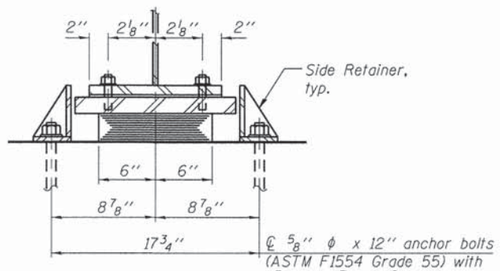
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-5005
SHEET NO. S-36 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	63
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



ELEVATION AT N. ABUT.

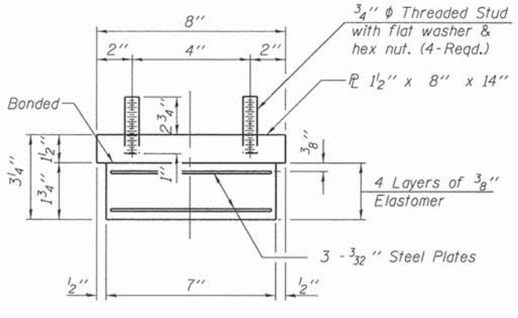


SECTION A-A

℄ 5/8" ϕ x 12" anchor bolts (ASTM F1554 Grade 55) with 1 3/4" x 1 3/4" x 15/16" washer under nut

TYPE I ELASTOMERIC EXP. BRG. AT N. ABUT. BEAMS 1, 2, 6 & 7

(Total 4 Req'd)



BEARING ASSEMBLY

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be installed in holes drilled before or after members are in place.

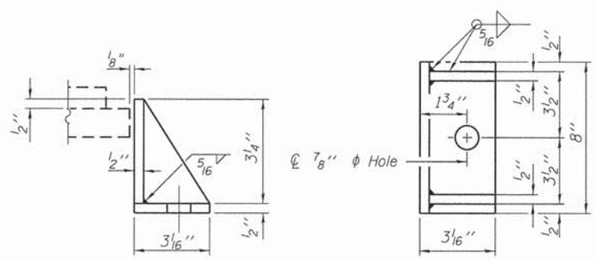
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of ELASTOMERIC BEARING ASSEMBLY, TYPE I.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

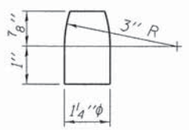
Note:

Shim plates shall not be placed under Bearing Assembly.

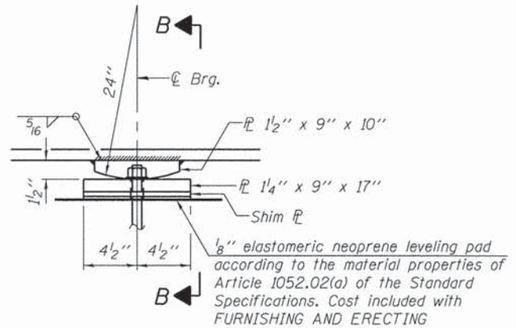


SIDE RETAINER

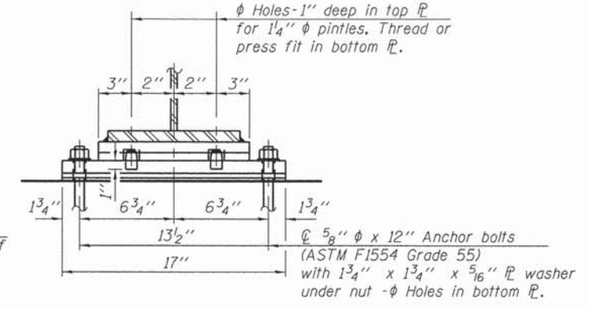
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PINTLE



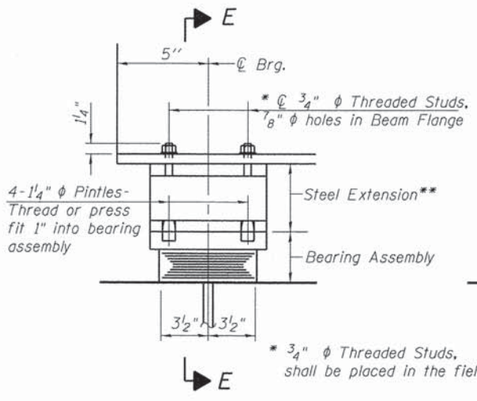
ELEVATION AT S. ABUT. AND PIERS



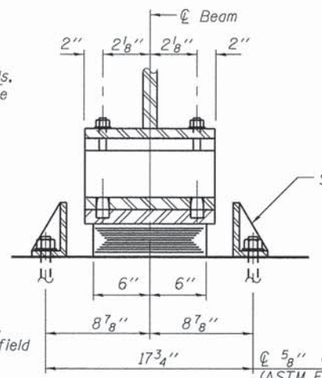
SECTION B-B

FIXED BEARING AT S. ABUT, PIER 1, 2 AND 3

(Total 28 Req'd)

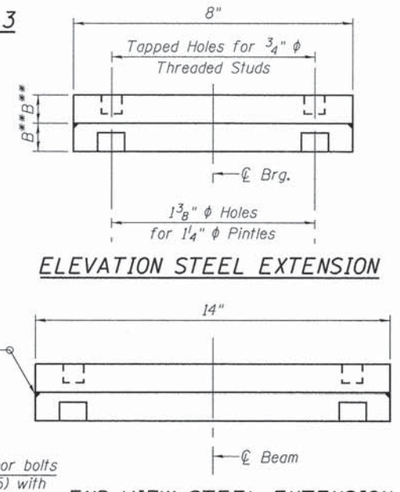


ELEVATION AT ABUT.



SECTION E-E

℄ 5/8" ϕ x 12" anchor bolts (ASTM F1554 Grade 55) with 1 3/4" x 1 3/4" x 15/16" washer under nut



ELEVATION STEEL EXTENSION

END VIEW STEEL EXTENSION

TYPE I ELASTOMERIC EXP. BRG. AT N. ABUT. BEAMS 3 THRU 5

(Total 3 Req'd)

DIMENSIONS OF BEARING AT N. ABUTMENT

	A**	B**	Estimated Bearing Seat Elev.**
Beam 1	5/8"	-	599.70
Beam 2	1 1/16"	-	599.71
Beam 3	-	1 1/4"	599.72
Beam 4	-	1 1/2"	599.74
Beam 5	-	1 1/8"	599.75
Beam 6	9/16"	-	599.76
Beam 7	-	-	599.77

** "A" and "B" dimensions are estimated based on the Estimated Bearing Seat Elev. shown. Steel extension shall be determined if required based on the field survey data conducted by the Contractor after existing bridge is removed. "A" and "B" dimensions shall be adjusted accordingly.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	7
Anchor Bolts, 5/8"	Each	70

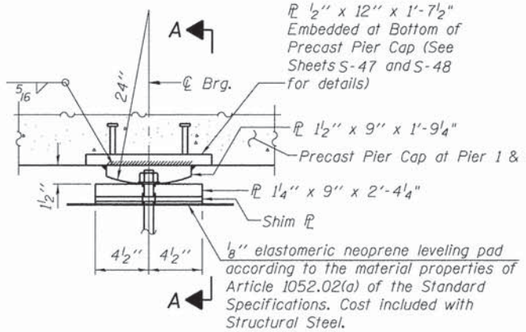
I:\CH1\PRJ\000023634\Structs\dgn\016-5005-037-BD.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - LJB	REVISED
	FILE NAME = 016-5005-037-BD.dgn	CHECKED - BJN	REVISED
	PLOT SCALE =	DRAWN - LJB	REVISED
	PLOT DATE =	CHECKED - BJN	REVISED

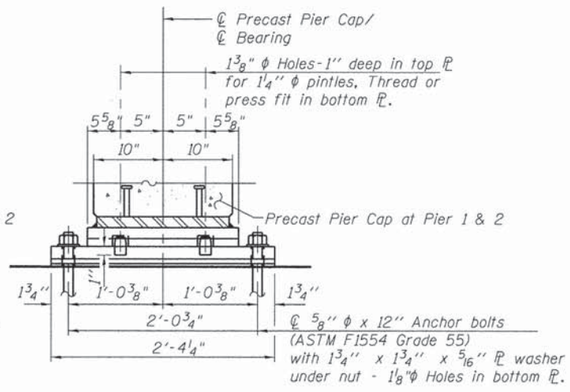
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS 1
STRUCTURE NO. 016-5005
SHEET NO. S-37 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	64
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



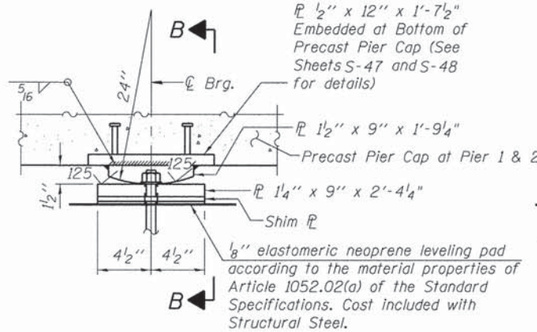
ELEVATION AT PIER



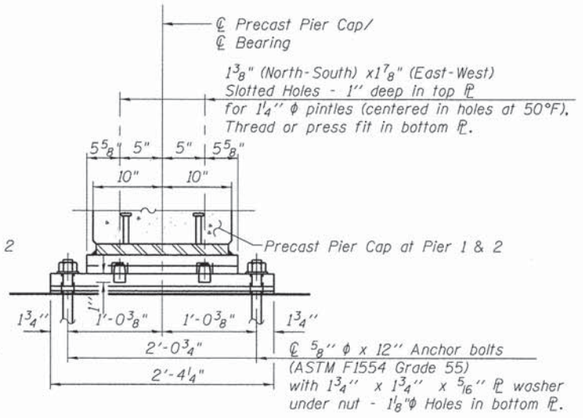
SECTION A-A

EAST FIXED BEARING AT PIER 1 AND PIER 2

(Total 2 Req'd)



ELEVATION AT PIER



SECTION B-B

WEST EXP. BEARING AT PIER 1 AND PIER 2

(Total 2 Req'd)

ELEVATION AT PIER

SECTION B-B

EAST FIXED BEARING AT PIER 3

(Total 1 Req'd)

ELEVATION AT PIER

SECTION B-B

WEST EXP. BEARING AT PIER 3

(Total 1 Req'd)

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 5/8"	Each	8
Anchor Bolts, 1"	Each	4

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings shall be installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

I:\CH1\PRJ\00020036341\Struct\dgn\816-5005-038-BD.dgn

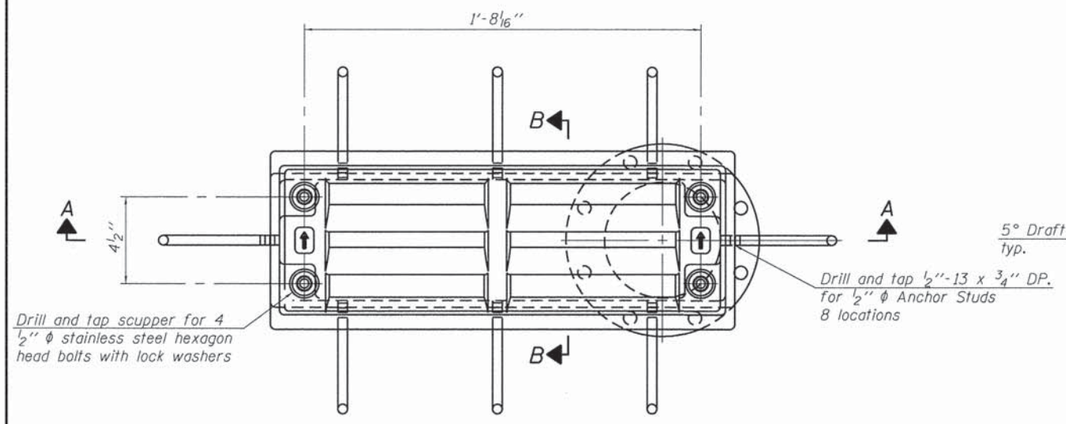
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - RH	REVISED
FILE NAME = 016-5005-038-BD.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - RH	REVISED

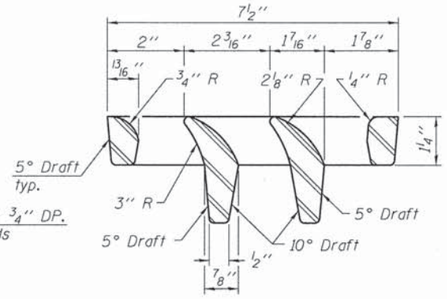
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS 2
STRUCTURE NO. 016–5005
SHEET NO. S-38 OF 95 SHEETS

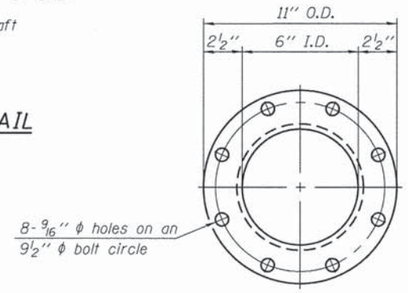
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	65
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



PLAN



VANE GRATE DETAIL



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

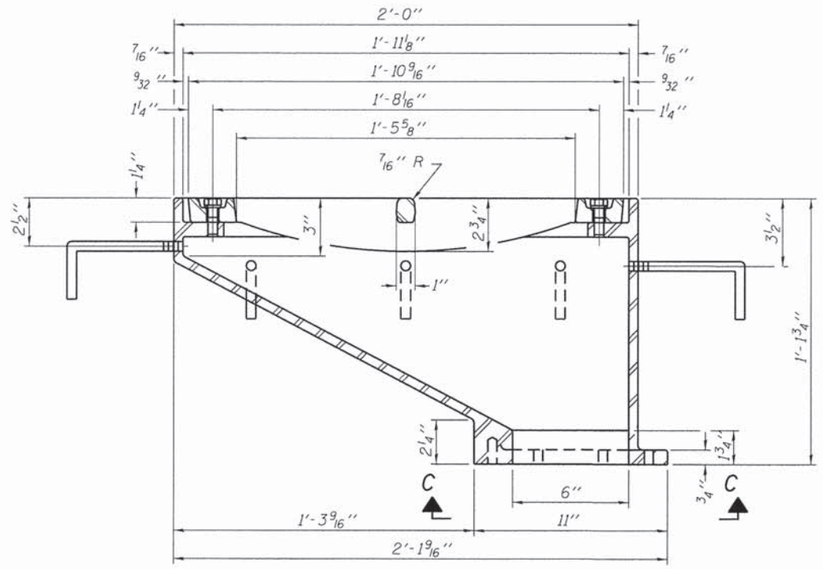
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

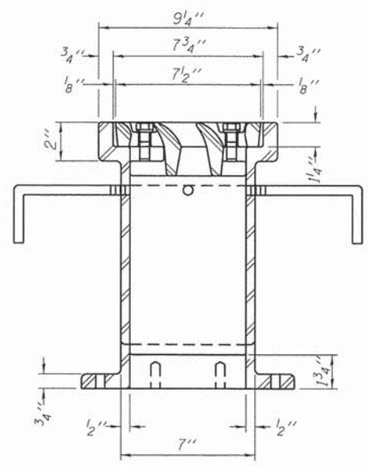
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

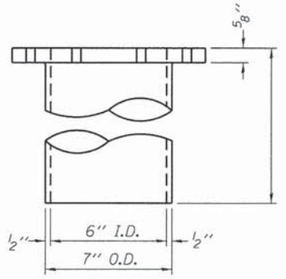


SECTION A-A

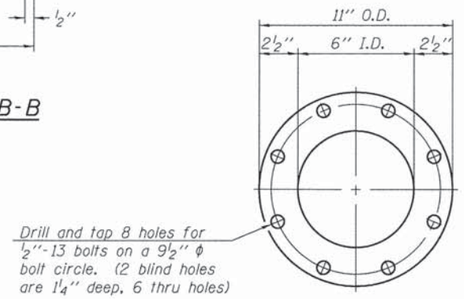
See sheet S-1 for scupper location.



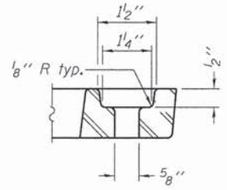
SECTION B-B



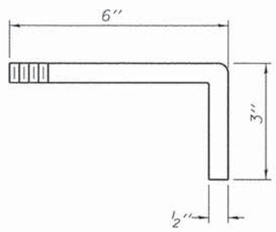
DOWNSPOUT



VIEW C-C



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	8

DS-12 7-1-10

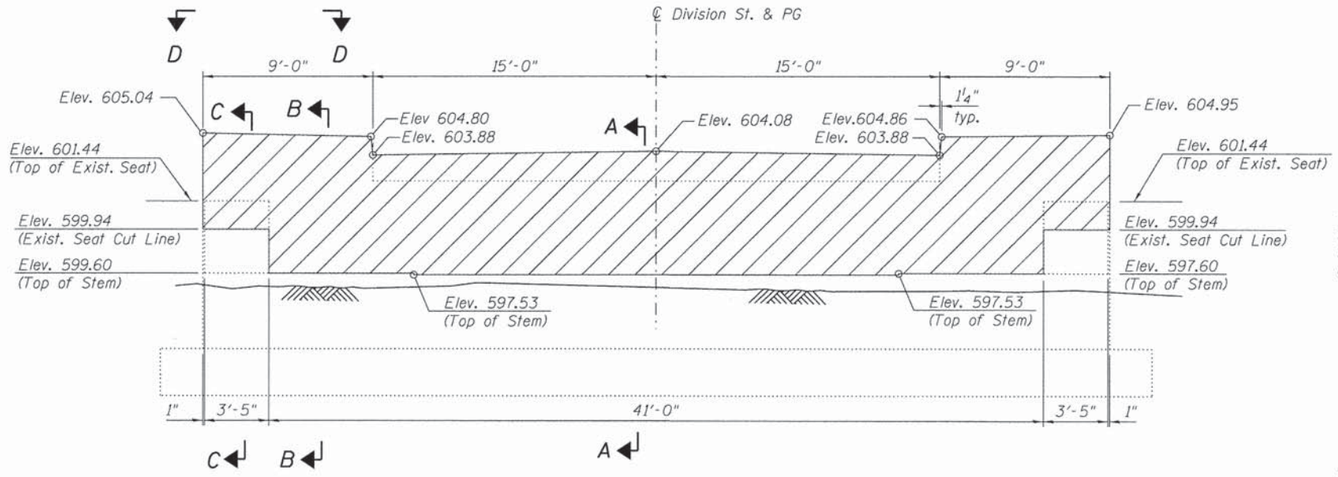
LOCHNER			
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - LJB	REVISED
	FILE NAME = 016-5005-039-DS.dgn	CHECKED - RH	REVISED
	PLOT SCALE =	DRAWN - LJB	REVISED
	PLOT DATE =	CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-5005
SHEET NO. S-39 OF 95 SHEETS

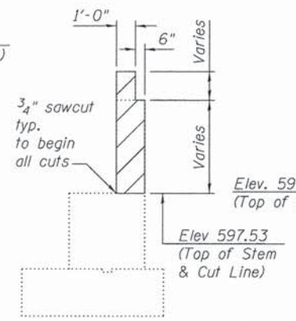
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	66
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

I:\CHI\PRJ\60020363A\Structural\dgn\016-5005-039-DS.dgn

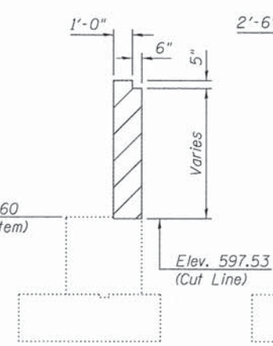


SOUTH ABUTMENT ELEVATION

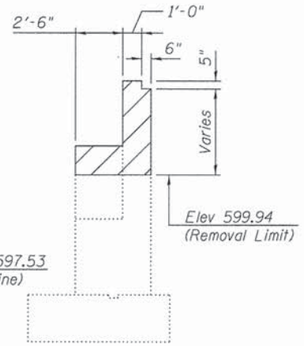
(Looking South)



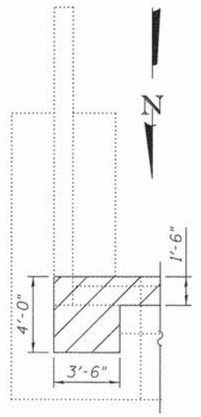
SECTION A-A



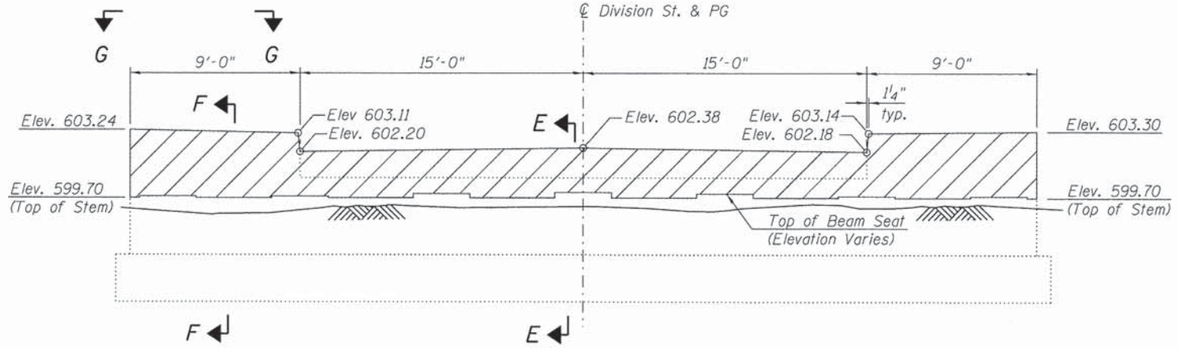
SECTION B-B



SECTION C-C

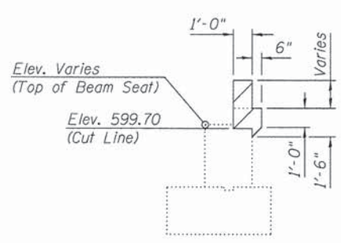


SECTION D-D

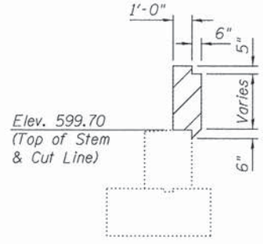


NORTH ABUTMENT ELEVATION

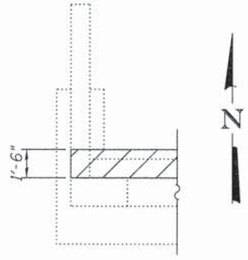
(Looking North)



SECTION E-E



SECTION F-F



SECTION G-G

SOUTH ABUTMENT BILL OF MATERIAL

ITEM	UNIT	TOTAL
Graffiti Removal	Sq. Yd.	1
Removal of Existing Bearings	Each	4
Concrete Removal	Cu. Yd.	16.0

NORTH ABUTMENT BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Bearings	Each	7
Concrete Removal	Cu. Yd.	9.4
Epoxy Crack Injection	Foot	3

NOTES

1. Hatched area indicates Concrete Removal.
2. All elevations and dimensions shall be verified in the field prior to Concrete Removal.
3. Existing wingwall reinforcement shall be cleaned and incorporated into the new construction. Cost included with CONCRETE REMOVAL.
4. All existing reinforcement within concrete removal limits shall be burned flush to remaining concrete surface. Grind existing reinforcement smooth and seal with epoxy. Cost included with CONCRETE REMOVAL.
5. Existing bearings shall be removed (4 at S. Abut., 7 at N. Abut.). Existing anchor bolts shall be burned flush to remaining concrete surface. Grind existing reinforcement smooth and seal with epoxy. Cost included with REMOVAL OF EXISTING BEARINGS.

I:\CHI\PRJ\020093634\Struct\dgn\016-5005-040-RR.dgn

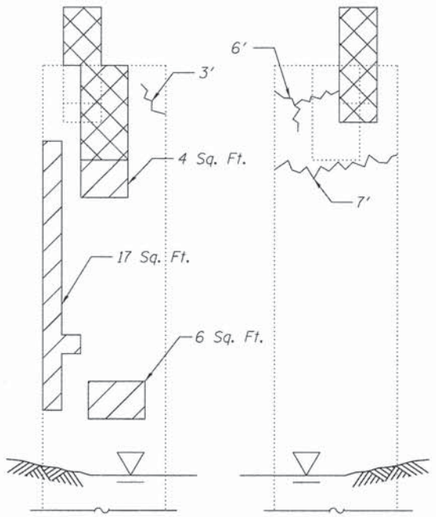
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - BJN	REVISED
FILE NAME = 016-5005-040-RR.dgn		CHECKED - RH	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

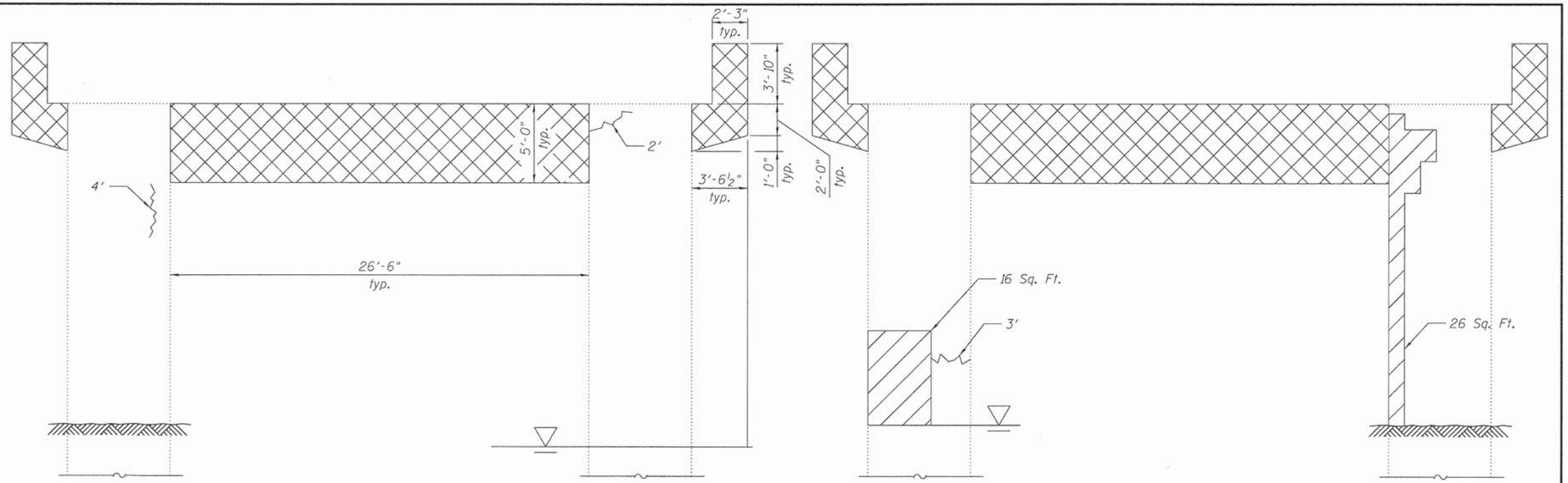
CONCRETE REMOVAL AND REPAIR DETAILS 1
STRUCTURE NO. 016-5005
SHEET NO. S-40 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	67
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



ELEVATION - PIER 2 EAST COLUMN

Looking East Looking West



ELEVATION - PIER 2

Looking North

ELEVATION - PIER 2

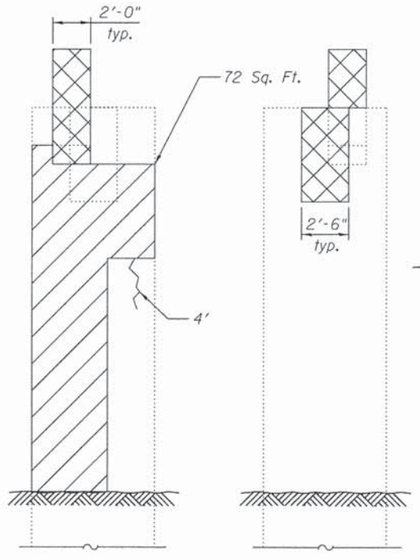
Looking South

PIER 2 BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	141
Epoxy Crack Injection	Foot	29
Concrete Removal	Cu. Yd.	17.3
Graffiti Removal	Sq. Yd.	6
Removal of Existing Bearings	Ea.	4
Concrete Sealer	Sq. Ft.	813

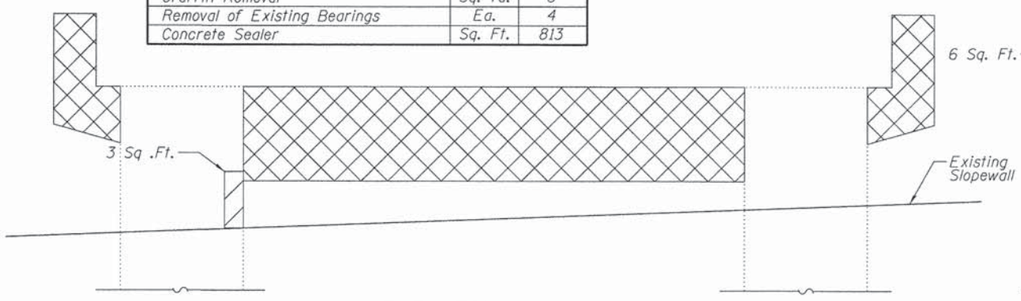
PIER 1 BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	22
Epoxy Crack Injection	Foot	5
Concrete Removal	Cu. Yd.	17.3
Graffiti Removal	Sq. Yd.	16
Removal of Existing Bearings	Ea.	4
Concrete Sealer	Sq. Ft.	811



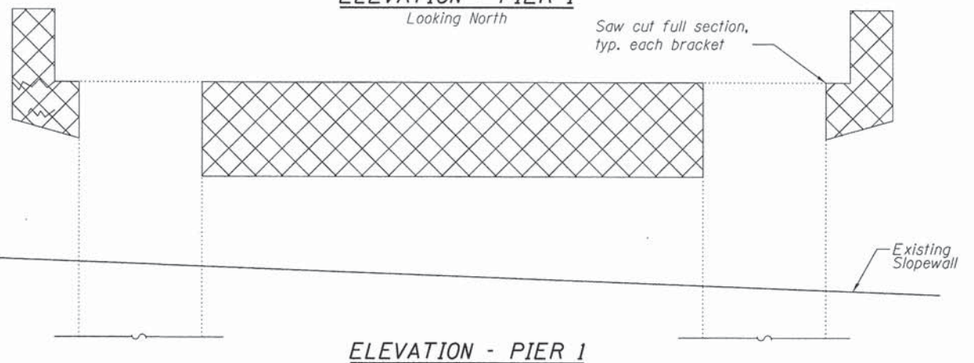
ELEVATION - PIER 2 WEST COLUMN

Looking East Looking West



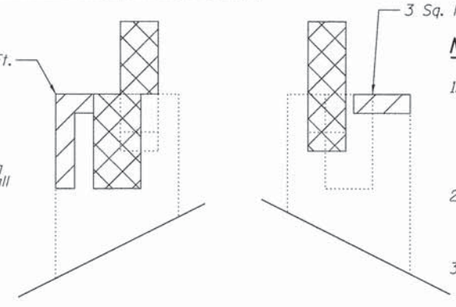
ELEVATION - PIER 1

Looking North



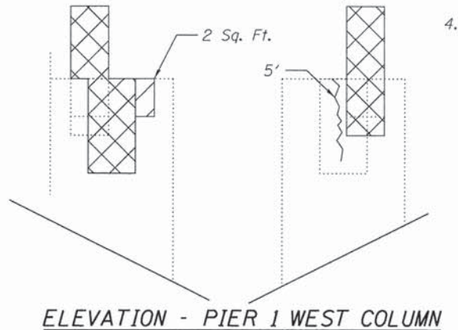
ELEVATION - PIER 1

Looking South



ELEVATION - PIER 1 EAST COLUMN

Looking East Looking West



ELEVATION - PIER 1 WEST COLUMN

Looking West Looking East

NOTES

1. Crack width are $\frac{1}{8}$" $\pm\frac{1}{16}$" unless otherwise noted. The quantities shown are for estimating purposes only. The area to be repaired will be determinated by the Engineer at the time of construction. Actual repair locations shall be shown on As-Built plans.
2. Existing graffiti on exposed vertical faces of pier elements to remain shall be removed. Cost included with GRAFFITI REMOVAL.
3. Existing Span 1 and Span 3 bearings shall be removed (2 at Pier 1, 2 at Pier 2). Existing anchor bolts shall be burned flush to remaining concrete surface. Grind existing reinforcement smooth and seal with epoxy. Cost included with REMOVAL OF EXISTING BEARINGS.
4. All existing reinforcement within concrete removal limits shall be burned flush to remaining concrete surface. Grind existing reinforcement smooth and seal with epoxy. Cost included with CONCRETE REMOVAL.

LEGEND

6' — Epoxy Crack Injection

H.L. — Hairline Crack - Not to be Repaired

Structural Repair of Concrete (Depth equal to or less than 5") and Concrete Sealer

Concrete Removal

J:\CH\PRJ\00003634\Struct\dgn\016-5005-041-RR.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

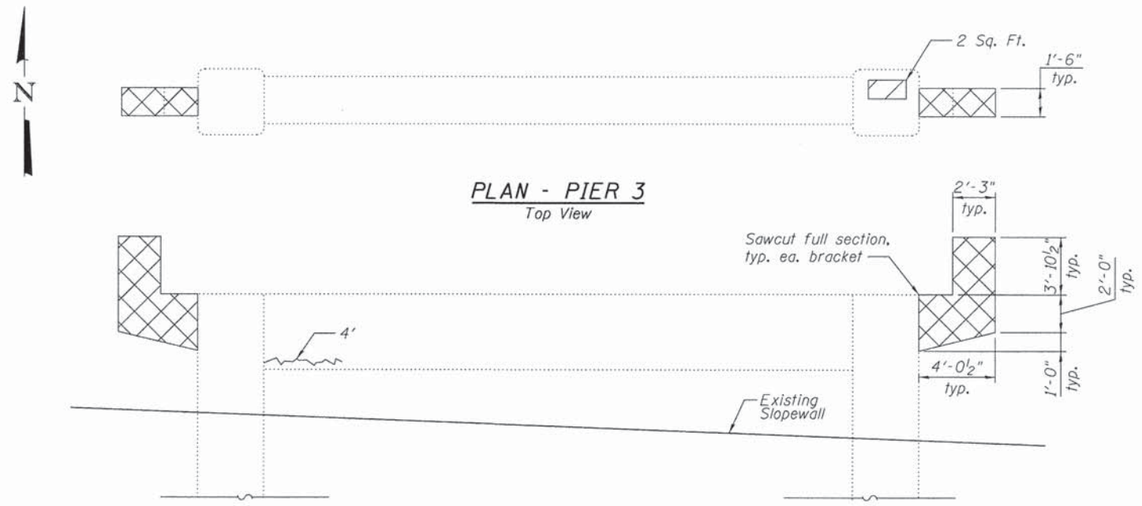
USER NAME =		DESIGNED - BJN	REVISED
FILE NAME = 016-5005-041-RR.dgn		CHECKED - RH	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE REMOVAL AND REPAIR DETAILS 2
STRUCTURE NO. 016-5005

SHEET NO. S-41 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	68
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



PLAN - PIER 3
Top View

ELEVATION - PIER 3
Looking North

ELEVATION - PIER 3
Looking South

PLAN - PIER 3
Bottom View

PIER 3 BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	12
Epoxy Crack Injection	Foot	8
Concrete Removal	Cu. Yd.	2.1
Graffiti Removal	Sq. Yd.	39
Removal of Existing Bearings	Ea.	4

NOTES

1. Crack width are $\frac{1}{8}" \pm \frac{1}{16}"$ unless otherwise noted. The quantities shown are for estimating purposes only. The area to be repaired will be determinated by the Engineer at the time of construction. Actual repair locations shall be shown on As-Built plans.
2. Existing graffiti on exposed vertical faces of pier elements to remain shall be removed. Cost included with GRAFFITI REMOVAL.
3. Existing bearings shall be removed (2 at Pier 3). Existing anchor bolts shall be burned flush to remaining concrete surface. Grind existing reinforcement smooth and seal with epoxy. Cost included with REMOVAL OF EXISTING BEARINGS.

LEGEND

6' — Epoxy Crack Injection

Structural Repair of Concrete (Depth equal to or less than 5")

Concrete Removal

I:\CH1\PRJ\000083634\Struct\dgn\016-5005-042-RR.dgn

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

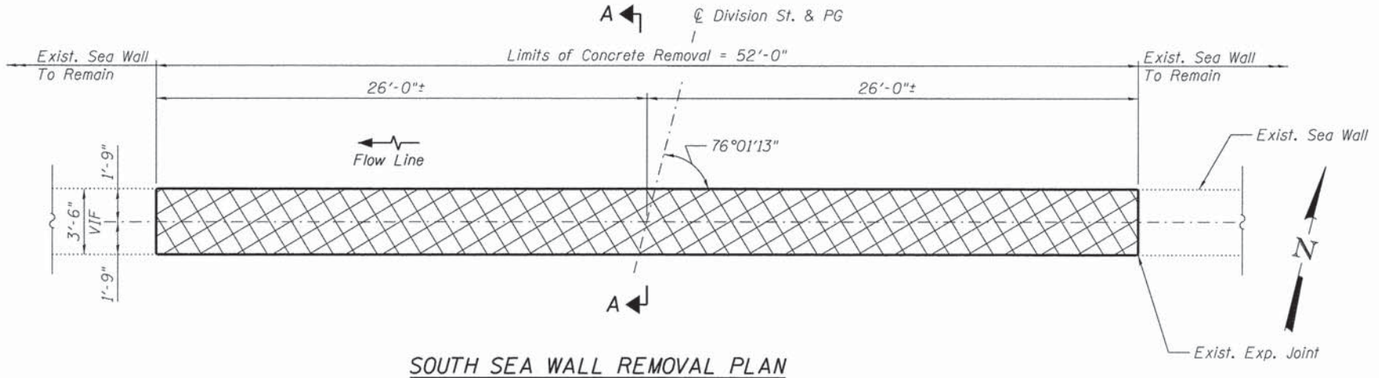
USER NAME =		DESIGNED - BJN	REVISED
FILE NAME = 016-5005-042-RR.dgn		CHECKED - RH	REVISED
PLOT SCALE =		DRAWN - EF	REVISED
PLOT DATE =		CHECKED - RH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

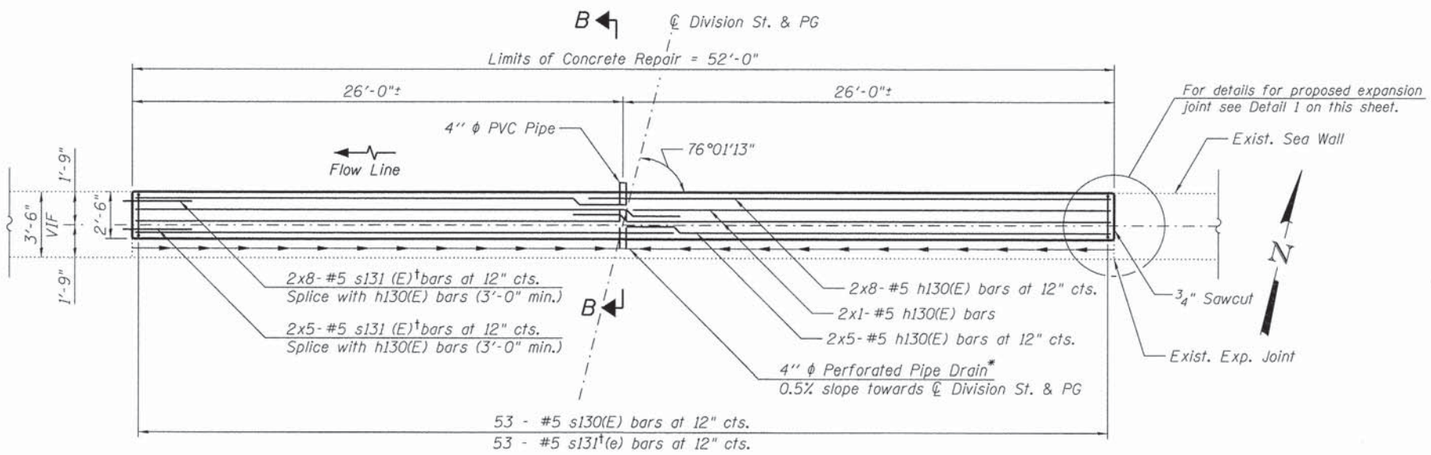
CONCRETE REMOVAL AND REPAIR DETAILS 3
STRUCTURE NO. 016-5005

SHEET NO. S-42 OF 95 SHEETS

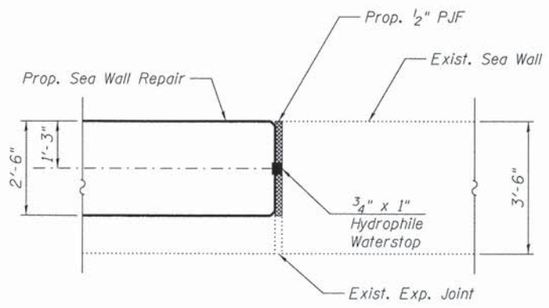
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	69
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



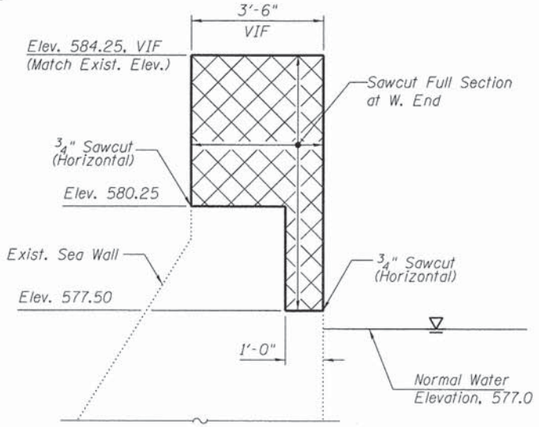
SOUTH SEA WALL REMOVAL PLAN



SOUTH SEA WALL REPAIR PLAN



DETAIL 1



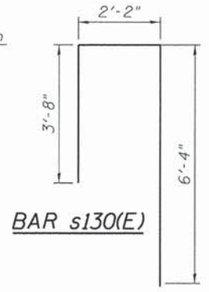
A-A

NOTES:

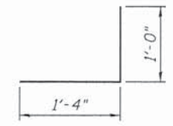
1. All bars designated with a cross (ex: s131†(E)) shall be drilled and epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment = 6".
2. Bars indicate thus 2x8-#5 etc. indicates 2 lines of bars with 8 lengths per line.
3. Concrete Sealer shall be applied to all exposed concrete faces of the sea wall, within the limits of concrete repair.
4. Drain hole in sea wall shall be covered to prevent leakage of backfill material according to Article 502.10.
5. Preformed joint filler shall be placed full height of Sea Wall within limts of proposed concrete repair.
6. Cost for Hydrophile Waterstop and Preformed Joint Filler shall be included with CONCRETE STRUCTURES.

* Included in the cost of PIPE UNDERDRAINS FOR STRUCTURES, 4"

** Backfill remainder of structure excavation and over excavation with same material specified for roadway embankment.



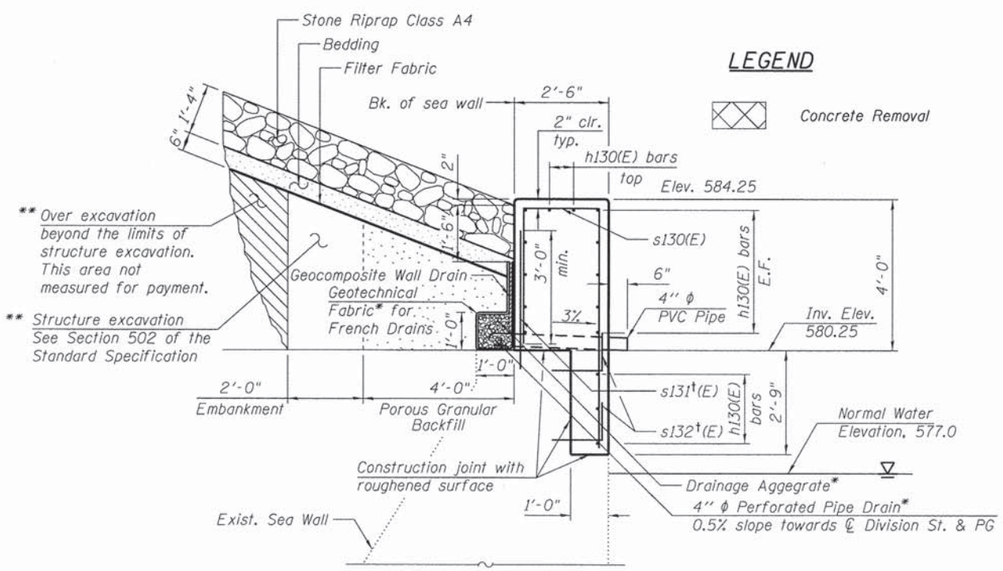
BAR s130(E)



BAR s132†(E)

SOUTH SEA WALL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h130(E)	30	#5	28'-2"	
s130(E)	53	#5	12'-3"	
s131†(E)	66	#5	3'-8"	
s132†(E)	106	#5	2'-4"	
Reinforcement Bars, Epoxy Coated			Pound	2,140
Concrete Structures			Cu. Yd.	24.6
Concrete Sealer			Sq. Ft.	360
Concrete Removal			Cu. Yd.	32.3



B-B

LEGEND

Concrete Removal

USER NAME =	DESIGNED - RH	REVISED	
FILE NAME = 016-5005-043-RR.dgn	CHECKED - BJN	REVISED	
PLOT SCALE =	DRAWN - EF	REVISED	
PLOT DATE =	CHECKED - RH	REVISED	

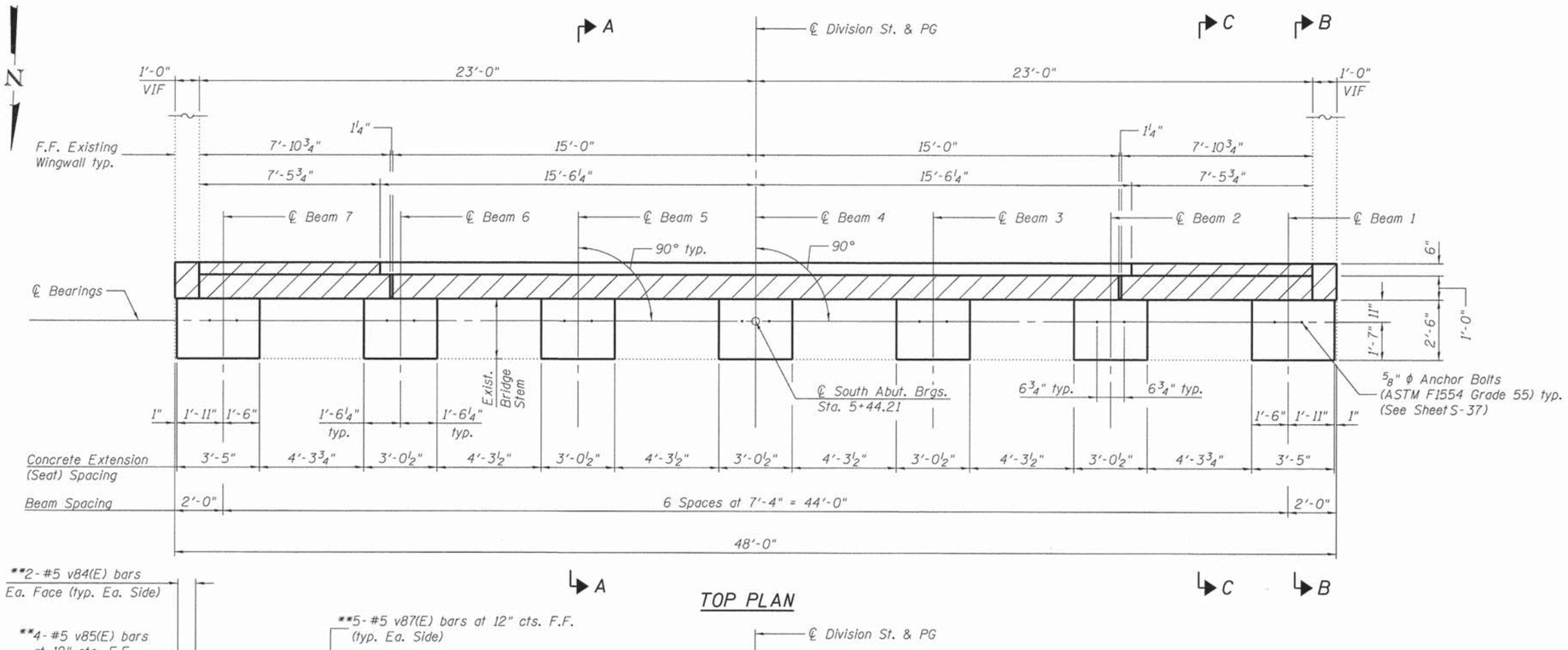
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

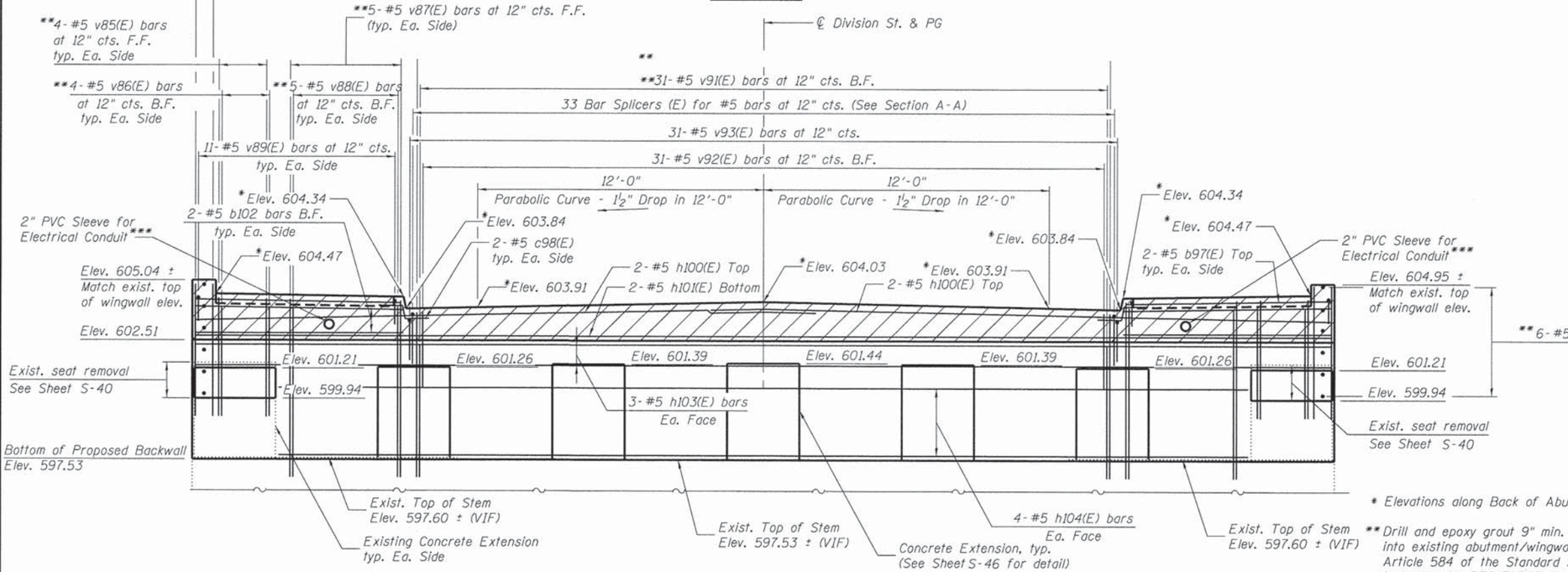
CONCRETE REMOVAL AND REPAIR DETAILS 4
STRUCTURE NO. 016-5005
SHEET NO. S-43 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	70
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

I:\CHI\PRJ\080803634\Structr\dgn\016-5005-043-RR.dgn



TOP PLAN



ELEVATION

* Elevations along Back of Abutment

** Drill and epoxy grout 9" min. (depth varies to 11") into existing abutment/wingwall according to Article 584 of the Standard Sepcifications. Cost included with REINFORCEMENT BARS, EPOXY COATED. Contractor shall locate existing reinforcement prior to drilling and adjust reinforcement spacing to avoid existing reinforcement.

*** See Electrical Plans for details. Fill PVC Sleeve with non-shrink grout after conduit installation.

NOTES

1. Space reinforcement to miss anchor bolts.
2. For Section A-A, B-B and C-C, see Sheet S-46.
3. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.
4. Apply Concrete Sealer to top and sides of concrete extensions and front face of backwall.
5. See Sheet S-40 for details of existing concrete removal.

I:\CH1\PRJ\000002634\Structural\dgn\016-5005-044-AP.dgn

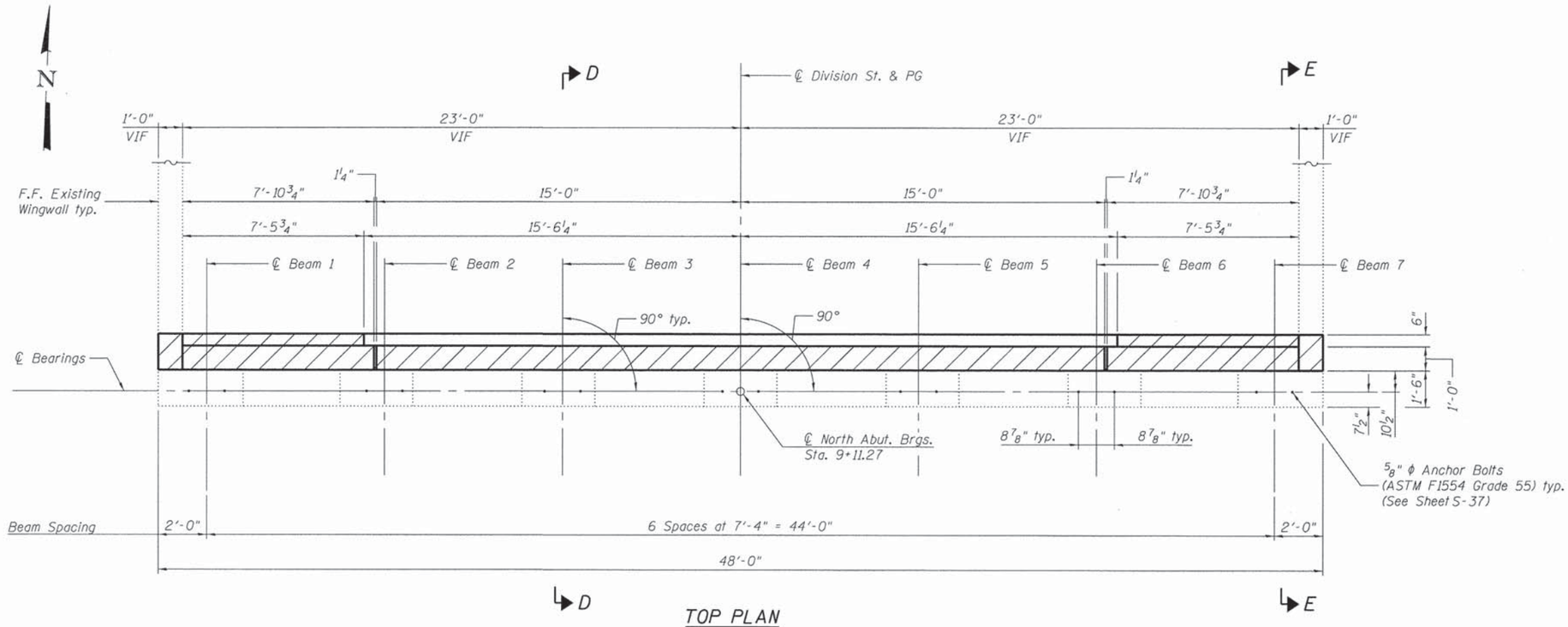
LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED - AT	REVISED
FILE NAME = 016-5005-044-AP.dgn	CHECKED - DAG	REVISED
PLOT SCALE =	DRAWN - AT	REVISED
PLOT DATE =	CHECKED - DAG	REVISED

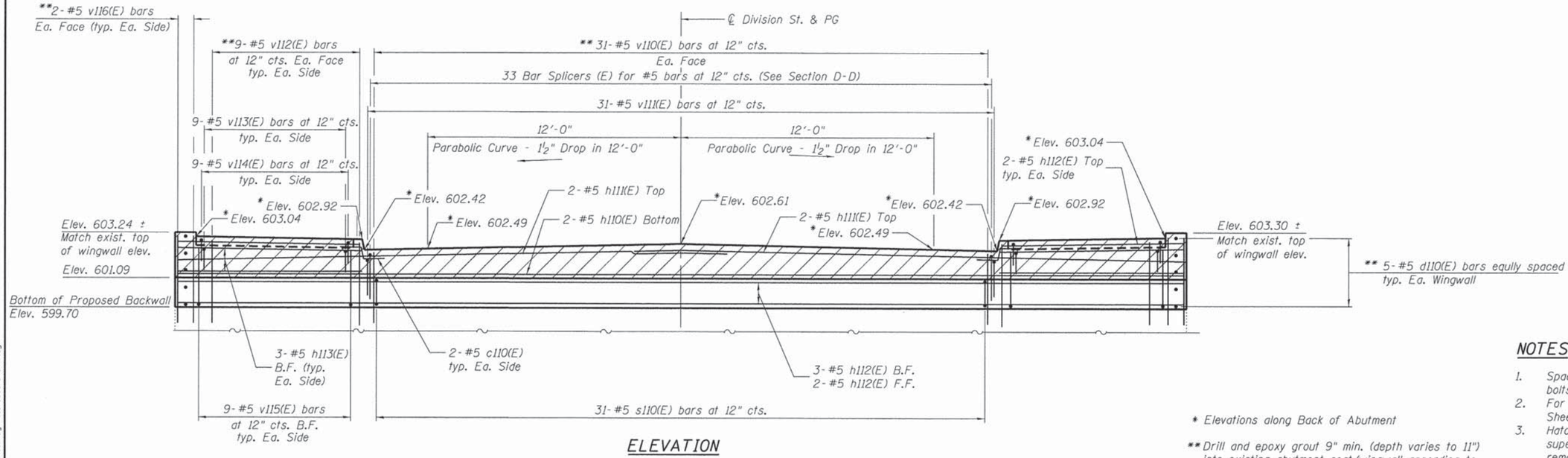
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-44 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	71
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



TOP PLAN



ELEVATION

* Elevations along Back of Abutment

** Drill and epoxy grout 9" min. (depth varies to 11") into existing abutment seat/wingwall according to Article 584 of the Standard Sepcifications. Cost included with REINFORCEMENT BARS, EPOXY COATED. Contractor shall locate existing reinforcement prior to drilling and adjust reinforcement spacing to avoid existing reinforcement.

NOTES

1. Space reinforcement to miss anchor bolts.
2. For Section D-D and E-E, see Sheet S-46 .
3. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE.
4. Apply Concrete Sealer to front face of backwall.
5. See Sheet S-40 for details of existing concrete removal.

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

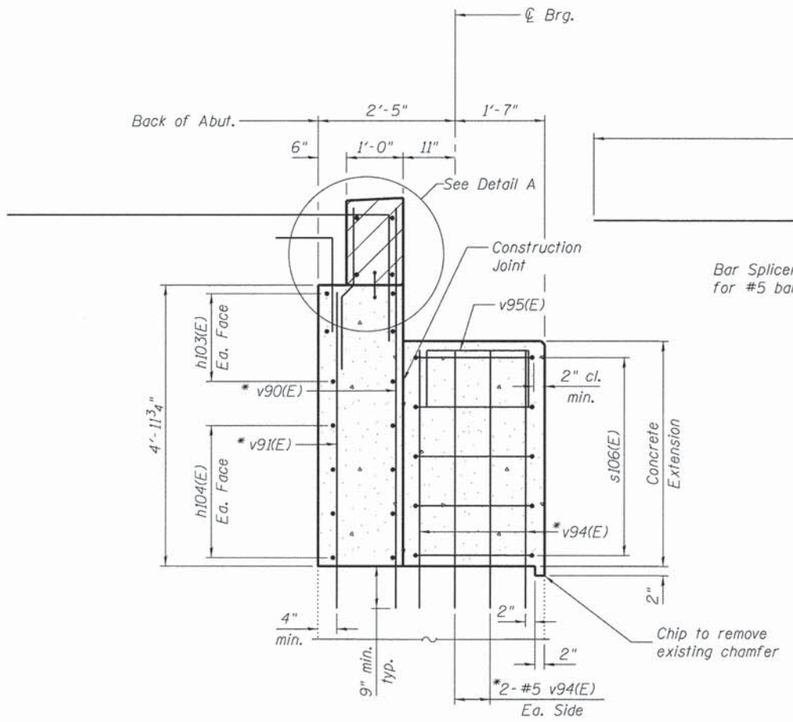
USER NAME =		DESIGNED - AT	REVISED
FILE NAME = 016-5005-045-AP.dgn		CHECKED - DAG	REVISED
PLOT SCALE =		DRAWN - AT	REVISED
PLOT DATE =		CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

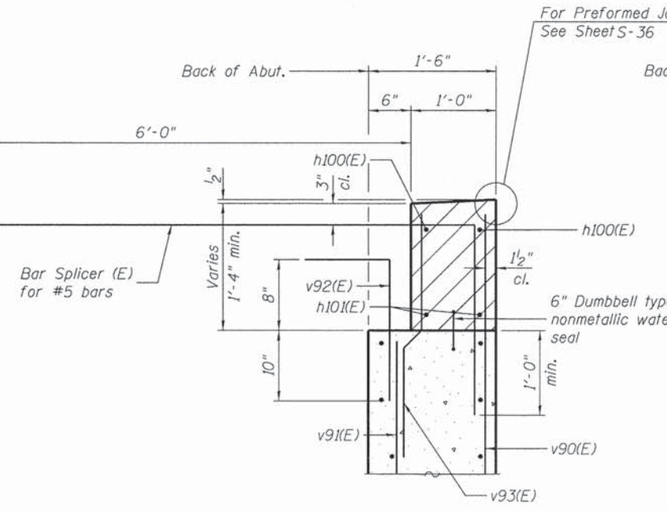
NORTH ABUTMENT DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-45 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	72
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

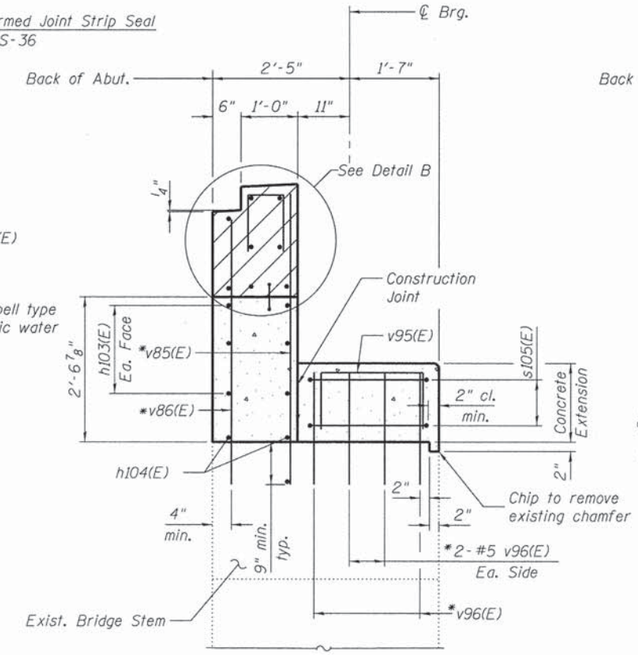
I:\CH\PRJ\0200203634\Struct\dgn\016-5005-045-AP.dgn



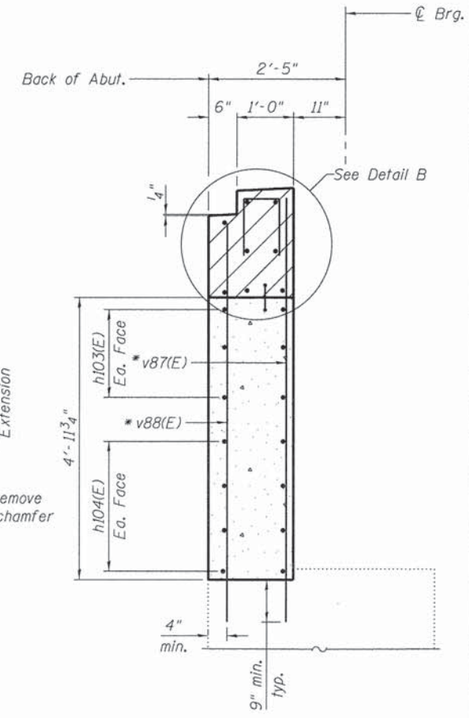
SECTION A-A



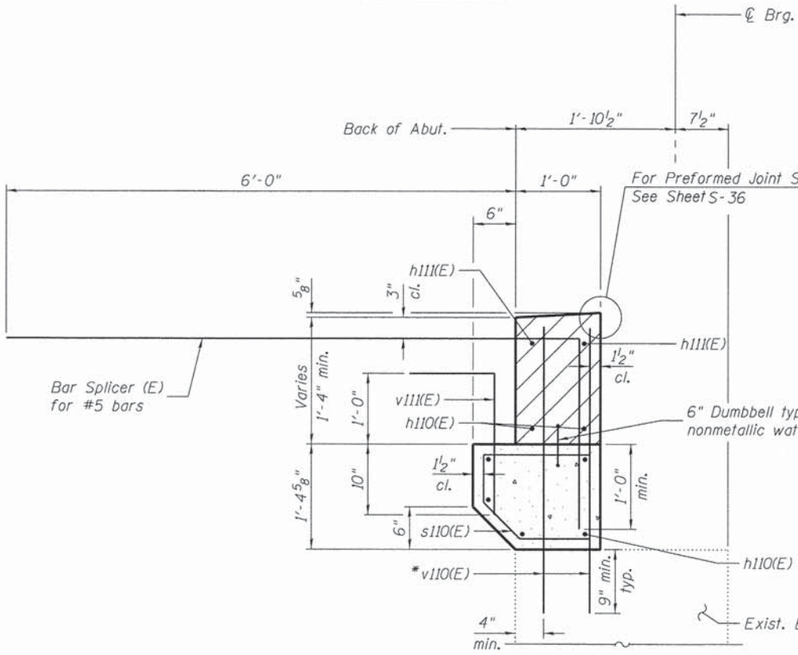
DETAIL A



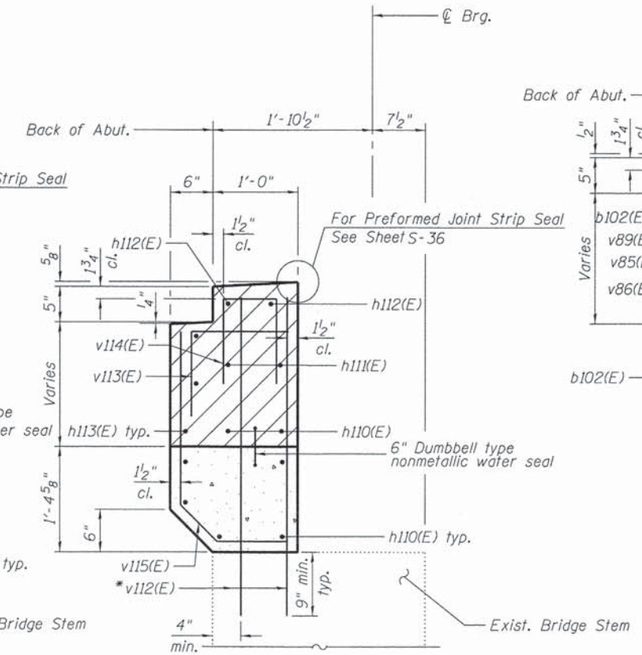
SECTION B-B



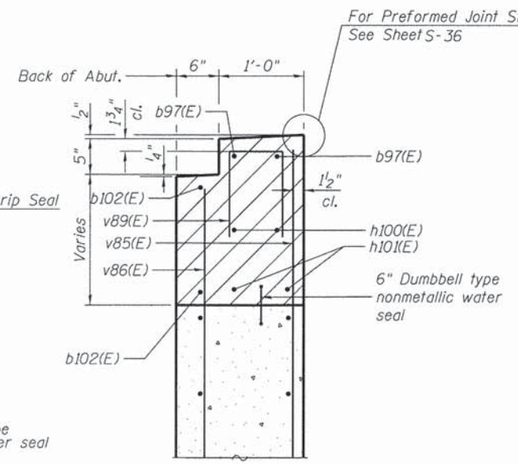
SECTION C-C



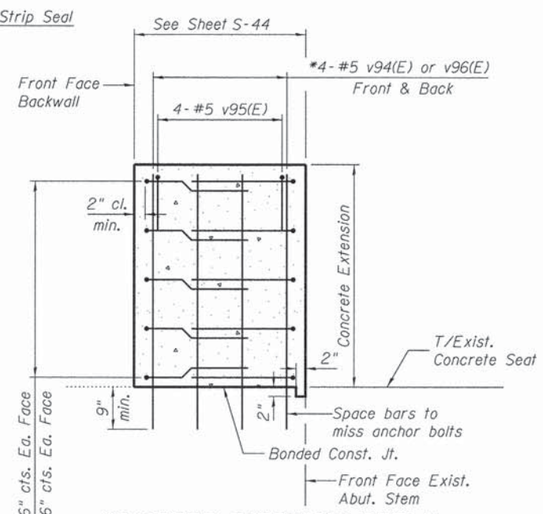
SECTION D-D



SECTION E-E



DETAIL B



CONCRETE EXTENSION DETAIL

(Looking South)

*Drill and epoxy grout 9" min. into existing abutment according to Article 584 of the Standard Sepcifications. Cost included with REINFORCEMENT BARS, EPOXY COATED. Contractor shall locate existing reinforcement prior to drilling and adjust reinforcement spacing to avoid existing reinforcement.

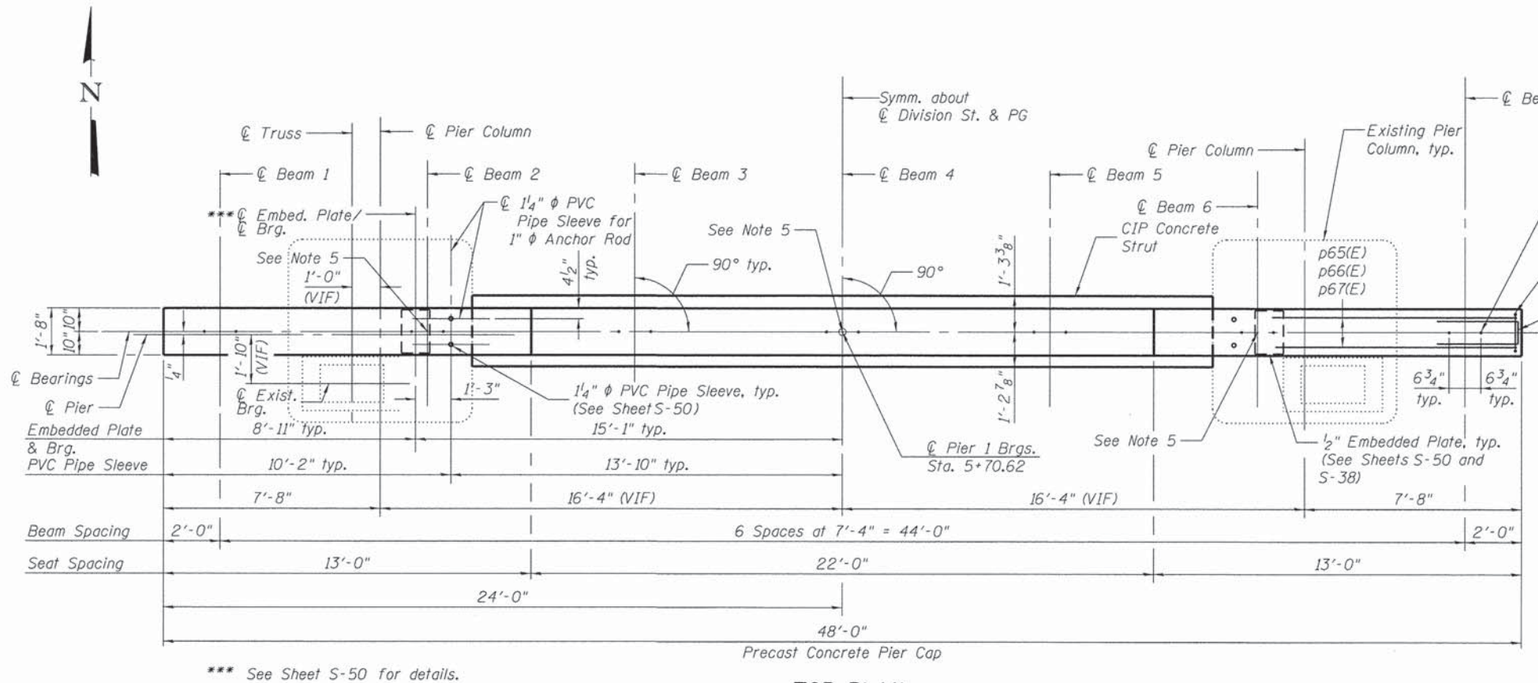
I:\CH\PRJ\000003534\Struct\dgn\016-5005-046-AP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - AT	REVISED
	FILE NAME = 016-5005-046-AP.dgn	CHECKED - DAG	REVISED
	PLOT SCALE =	DRAWN - AT	REVISED
	PLOT DATE =	CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

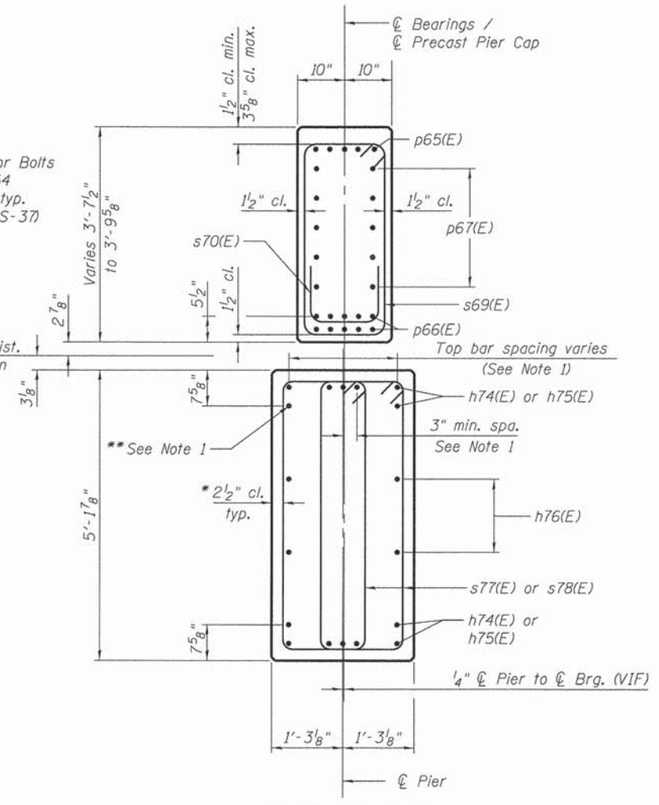
ABUTMENT SECTIONS AND DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-46 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	73
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



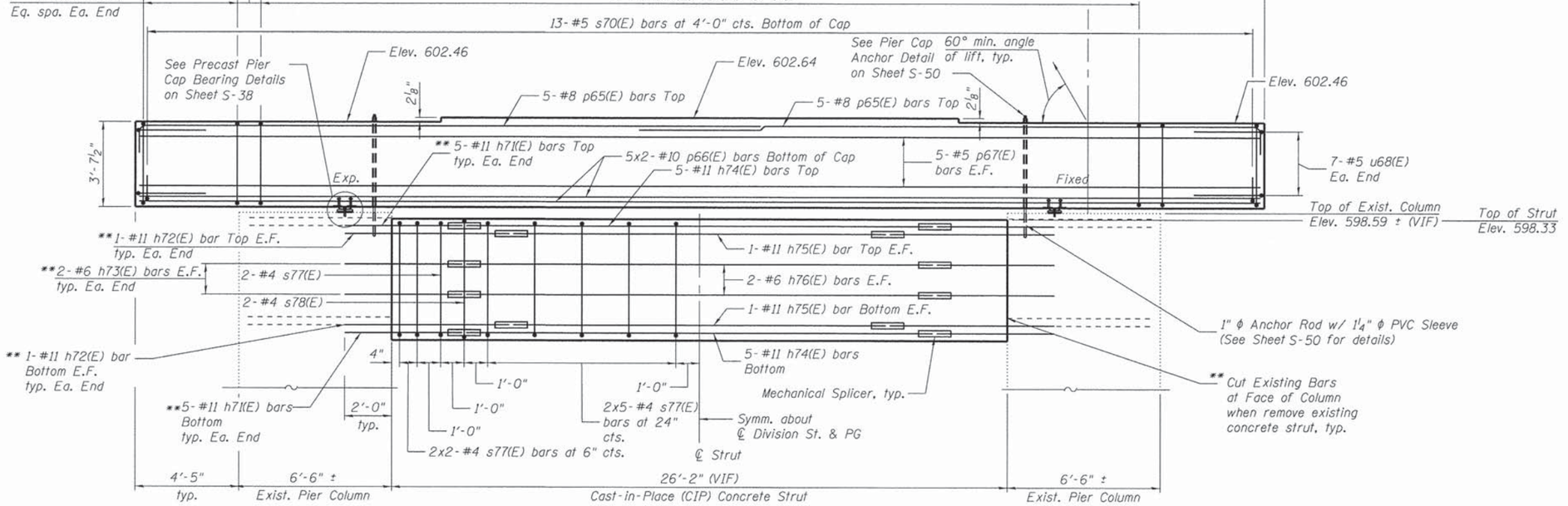
*** See Sheet S-50 for details.

TOP PLAN



SECTION A-A

* Clear cover at mechanical splicer location is 1½".



ELEVATION

(Looking North)

** Drill and epoxy grout (24" min. embedment) into existing pier column according to Article 584 of the Standard Specifications. Cost included with REINFORCEMENT BARS, EPOXY COATED. Contractor shall core drill those holes that interfere with the existing (cut) reinforcement.

NOTES

1. Layout location of cap anchor rods prior to installation of strut reinforcement. Adjust reinforcement spacing in strut to miss anchor rods.
2. Pour steps monolithically with cap.
3. Contractor to coordinate actual anchor bolt locations for the beam bearings and step heights with final bearing designs.
4. All edges shall have ¾" chamfer.
5. Provide ½" steel fill plates at bearing of beam 2, 4 & 6
6. Provide mechanical splicer capable of developing 135% Fy strength for Grade 60 epoxy coated reinforcement.
7. Precast concrete pier cap shall be paid for under PRECAST CONCRETE CAPS.
8. Apply Concrete Sealer to all surfaces of Precast Pier Cap and concrete strut.
9. See Sheet S-41 for details of existing concrete removal.

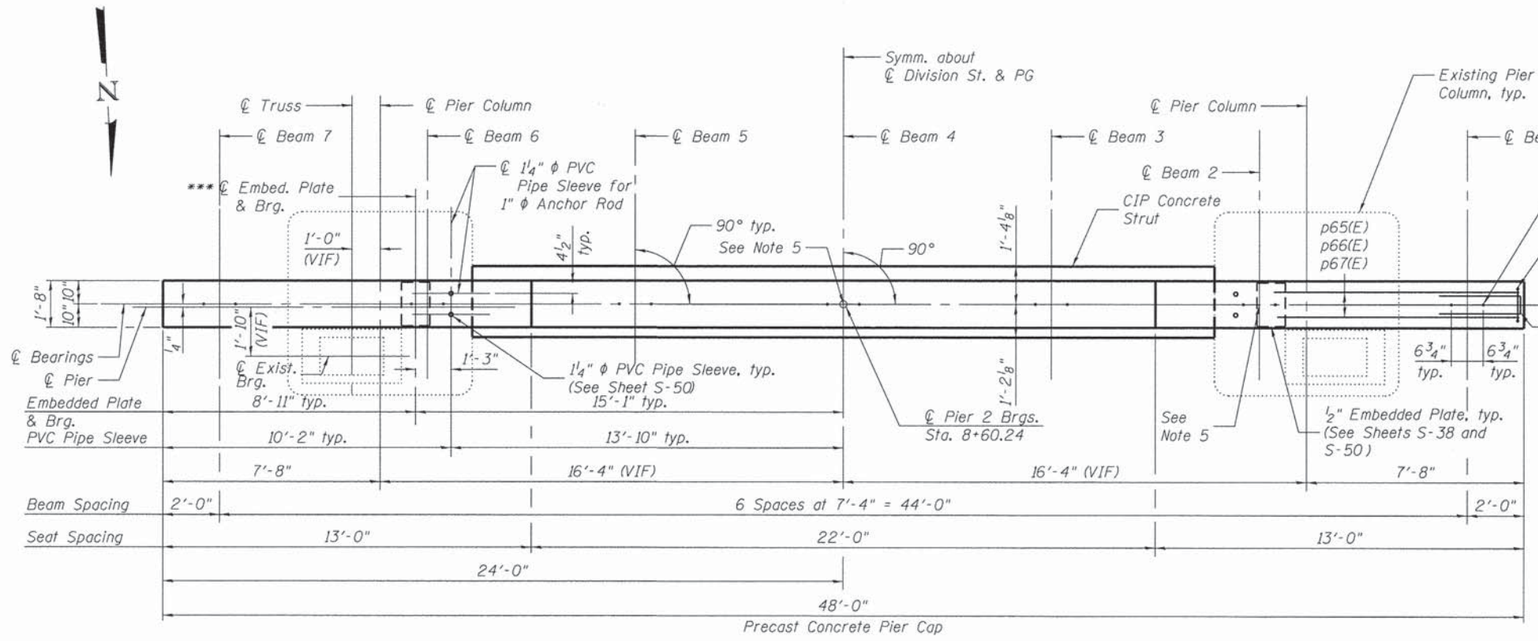
I:\CH\PRJ\000003634\Struct\dgn\016-5005-047-AP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - AT	REVISED
	FILE NAME = 016-5005-047-AP.dgn	CHECKED - DAG	REVISED
	PLOT SCALE =	DRAWN - AT	REVISED
	PLOT DATE =	CHECKED - DAG	REVISED

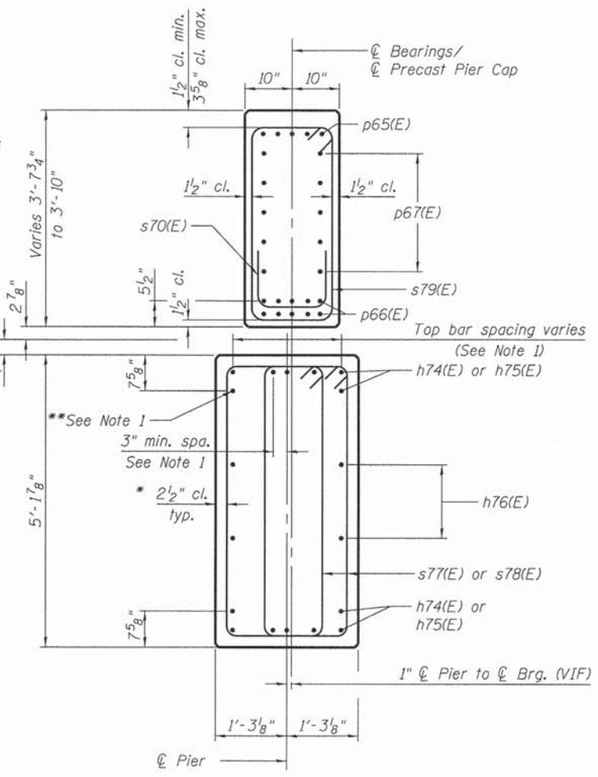
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-47 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	74
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

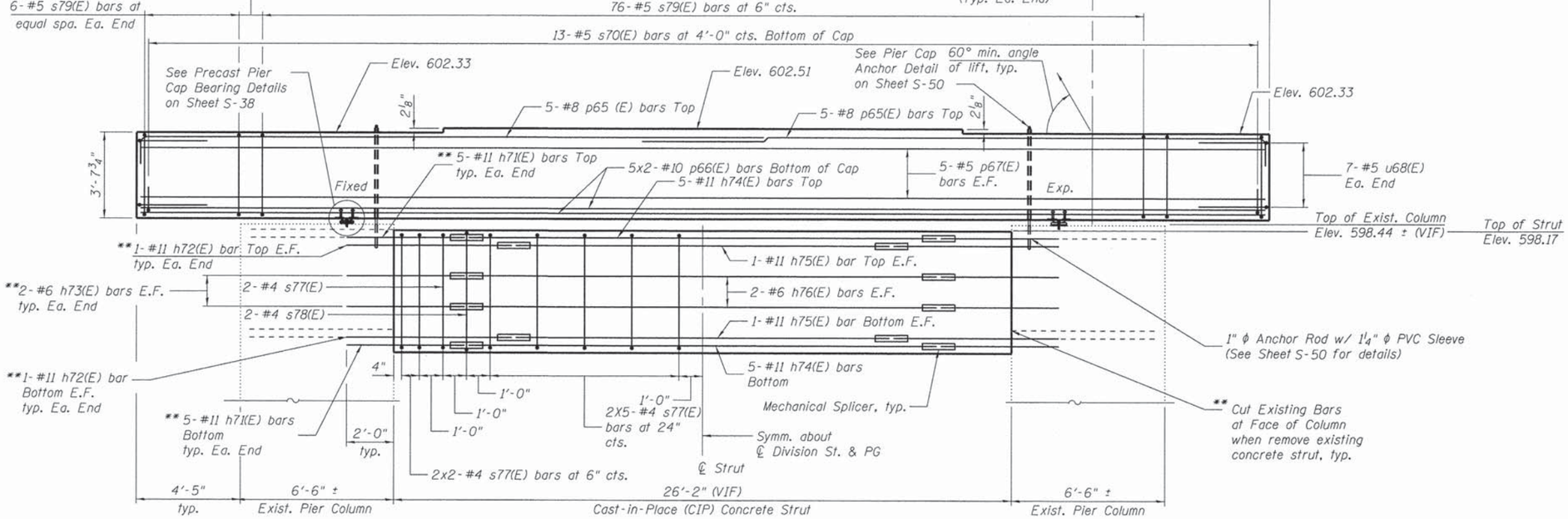


TOP PLAN



SECTION A-A

* Clear cover at mechanical splicer location is 1½".



ELEVATION

(Looking South)

** Drill and epoxy grout (24" min. embedment) into existing pier column according to Article 584 of the Standard Specifications. Cost included with REINFORCEMENT BARS, EPOXY COATED. Contractor shall core drill those holes that interfere with the existing (cut) reinforcement.

NOTES

1. Layout location of cap anchor rods prior to installation of strut reinforcement. Adjust reinforcement spacing in strut to miss anchor rods.
2. Pour steps monolithically with cap.
3. Contractor to coordinate actual anchor bolt locations for the beam bearings and step heights with final bearing designs.
4. All edges shall have ¾" chamfer.
5. Provide ½" steel fill plates at bearing of beam 2, 4 & 6
6. Provide mechanical splicer capable of developing 135% Fy strength for Grade 60 epoxy coated reinforcement.
7. Precast concrete pier cap shall be paid for under PRECAST CONCRETE CAPS.
8. Apply Concrete Sealer to all surfaces of Precast Pier Cap and concrete strut.
9. See Sheet S-41 for details of existing concrete removal.

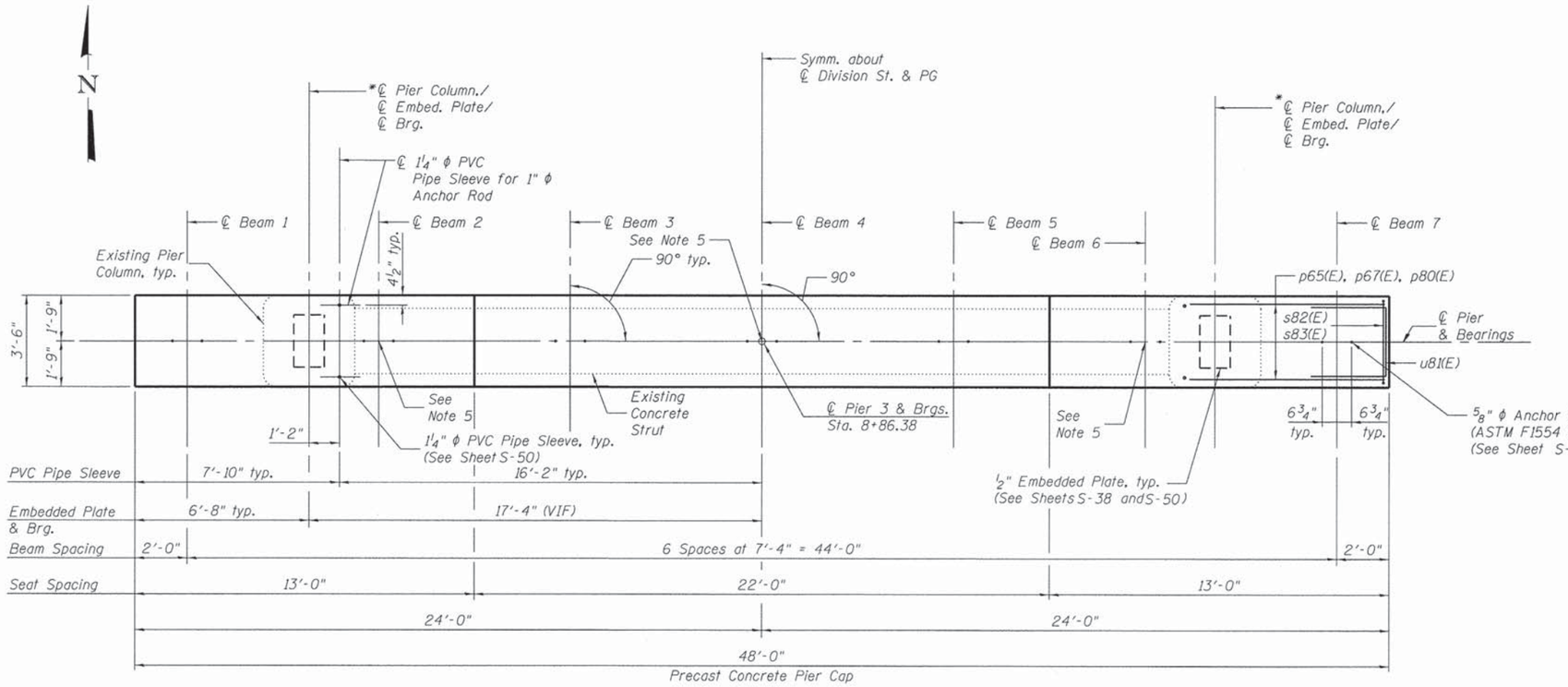
I:\Civil\Proj\00000363\Structs\dgn\016-5005-048-AP.dgn

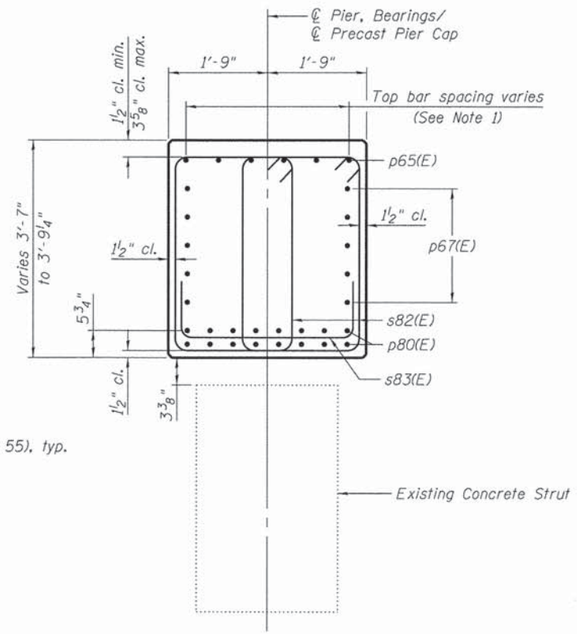
LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - AT	REVISED
	FILE NAME = 016-5005-048-AP.dgn	CHECKED - DAG	REVISED
	PLOT SCALE =	DRAWN - AT	REVISED
	PLOT DATE =	CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-48 OF 95 SHEETS

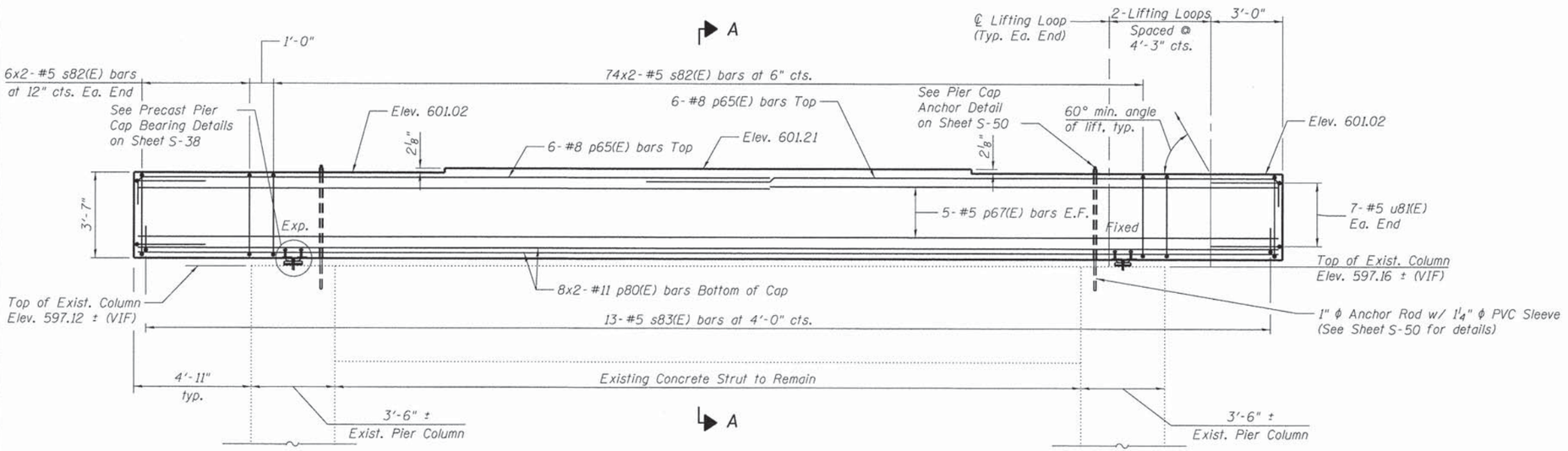
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	75
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			





SECTION A-A

TOP PLAN



ELEVATION

(Looking North)

NOTES

1. Space reinforcement in cap to miss anchor rods.
2. Pour steps monolithically with cap.
3. Contractor to coordinate actual anchor bolt locations for the girder bearings and step heights with final bearing designs.
4. All edges shall have ¾" chamfer.
5. Provide ½" steel fill plates at bearing of beam 2, 4 & 6
6. Pecast concrete pier cap shall be paid for under PRECAST CONCRETE CAPS.

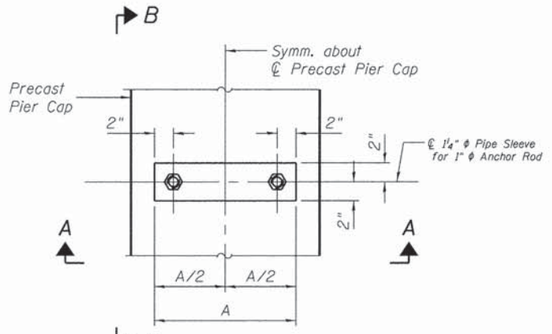
I:\CH\PRJ\000003534\Structure\dgn\016-5005-049-AP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - AT	REVISED
	FILE NAME = 016-5005-049-AP.dgn	CHECKED - DAG	REVISED
	PLOT SCALE =	DRAWN - AT	REVISED
	PLOT DATE =	CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-49 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	76
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



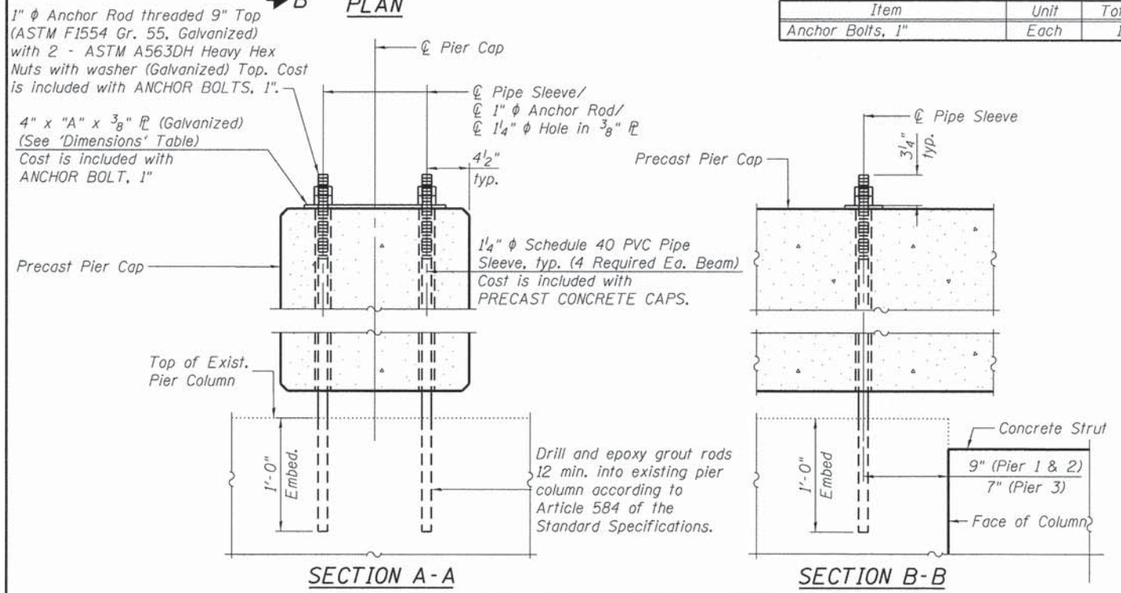
PLAN

DIMENSIONS

	A	B	C
Pier 1	1'-3"	1'-0"	1'-7½"
Pier 2	1'-3"	1'-0"	1'-7½"
Pier 3	3'-1"	1'-2"	2'-0"

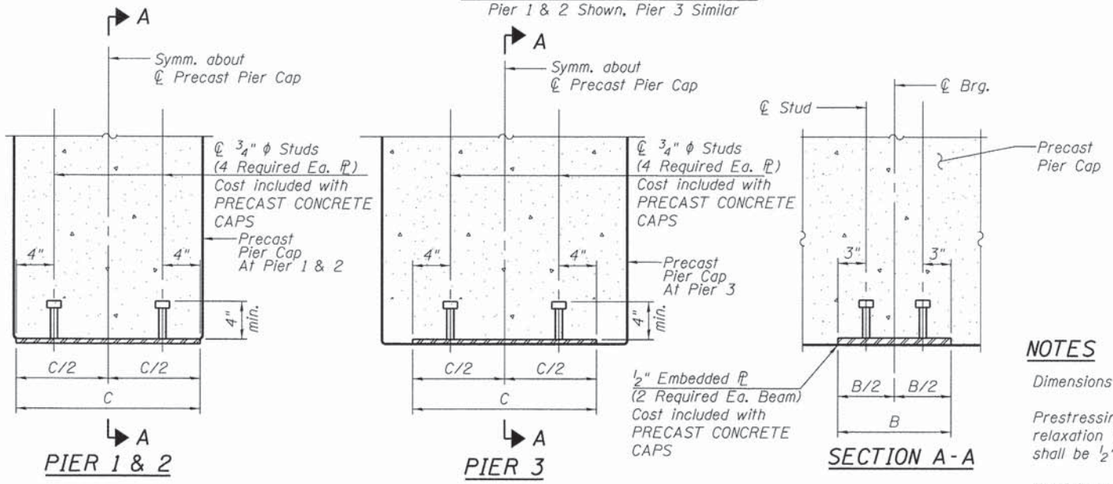
BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	12

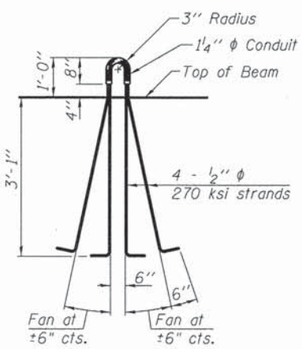


PIER CAP ANCHOR DETAIL

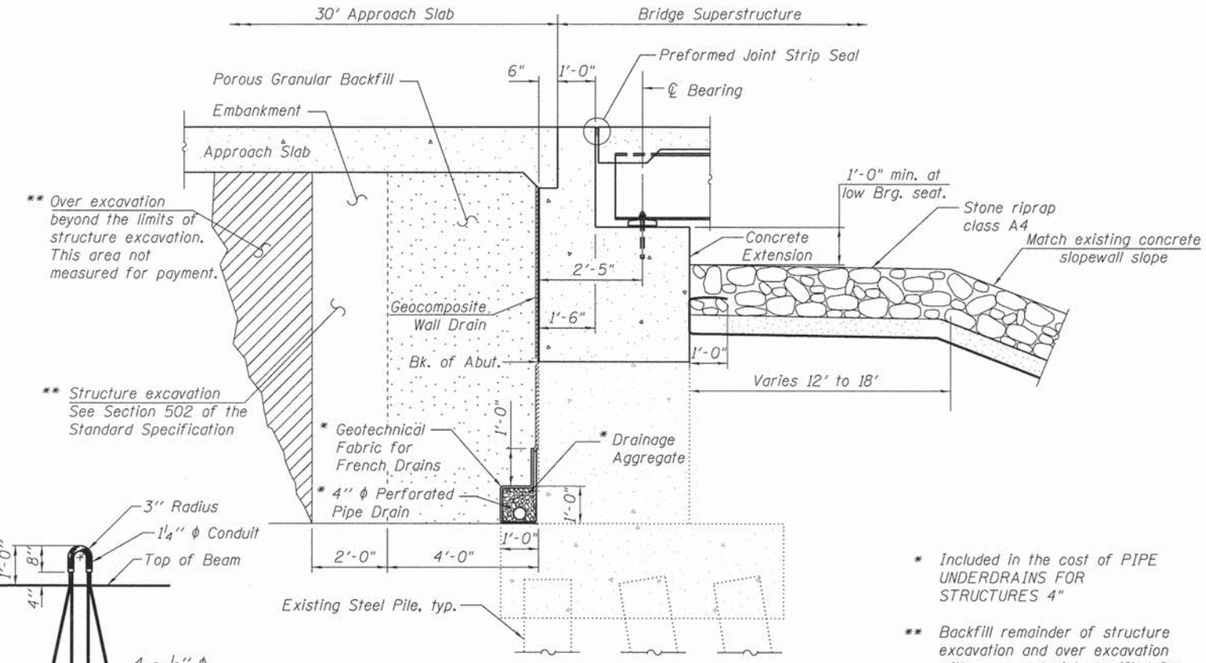
Pier 1 & 2 Shown, Pier 3 Similar



EMBEDDED PLATE DETAIL



LIFTING LOOP DETAIL

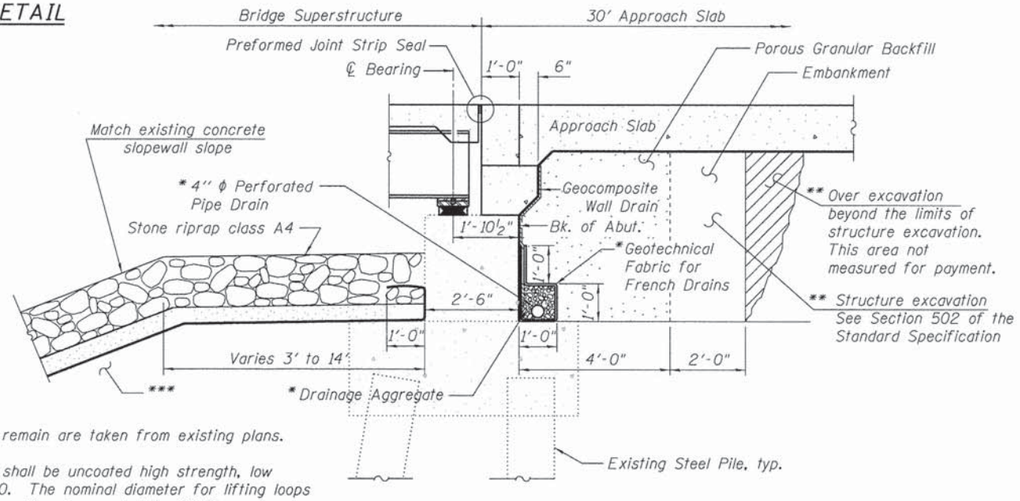


SECTION THRU SOUTH ABUTMENT

* Included in the cost of PIPE UNDERDRAINS FOR STRUCTURES 4"

** Backfill remainder of structure excavation and over excavation with same material specified for roadway embankment.

*** Additional backfill may be required under the proposed stone riprap. Cost is included with POROUS GRANULAR BACKFILL.



SECTION THRU NORTH ABUTMENT

NOTES

Dimensions of existing elements to remain are taken from existing plans.

Prestressing steel for lifting loops shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for lifting loops shall be ½" and the nominal cross sectional area shall be 0.153 sq. in.

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - RH	REVISED
FILE NAME = 016-5005-050-AP.dgn		CHECKED - BJN	REVISED
PLOT SCALE =		DRAWN - AT	REVISED
PLOT DATE =		CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-50 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	77
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

I:\CHI\PRJ\0000803631\Structs\dgn\016-5005-050-AP.dgn

SOUTH ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b97(E)	4	#5	8'-7"	
b102(E)	4	#5	8'-2"	
d99(E)	12	#5	2'-1"	
c98(E)	4	#5	2'-2"	
h100(E)	4	#5	27'-8"	
h101(E)	2	#5	47'-8"	
h103(E)	6	#5	47'-8"	
h104(E)	8	#5	40'-8"	
s105(E)	8	#5	8'-4"	
s106(E)	50	#5	7'-7"	
v84(E)	8	#5	5'-9"	
v85(E)	8	#5	5'-2"	
v86(E)	8	#5	4'-8"	
v87(E)	10	#5	7'-5"	
v88(E)	10	#5	7'-0"	
v89(E)	22	#5	2'-7"	
v90(E)	31	#5	7'-1"	
v91(E)	31	#5	5'-7"	
v92(E)	31	#5	2'-6"	
v93(E)	31	#5	4'-0"	
v94(E)	60	#5	4'-6"	
v95(E)	28	#5	4'-0"	
v96(E)	24	#5	1'-11"	
Reinforcement Bars, Epoxy Coated			Pound	2830
Concrete Structures			Cu. Yd.	19.9
High Performance Concrete Superstructure			Cu. Yd.	3.4
Concrete Sealer			Sq. Ft.	459

NORTH ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
c110(E)	4	#5	3'-6"	
d110(E)	10	#5	2'-1"	
h110(E)	7	#5	47'-8"	
h111(E)	4	#5	25'-8"	
h112(E)	4	#5	8'-6"	
h113(E)	6	#5	8'-1"	
s110(E)	31	#5	3'-1"	
v110(E)	62	#5	3'-7"	
v111(E)	31	#5	3'-6"	
v112(E)	36	#5	4'-0"	
v113(E)	18	#5	2'-2"	
v114(E)	18	#5	2'-8"	
v115(E)	18	#5	3'-3"	
v116(E)	8	#5	4'-2"	
Reinforcement Bars, Epoxy Coated			Pound	1340
Concrete Structures			Cu. Yd.	3.3
High Performance Concrete Superstructure			Cu. Yd.	2.9
Concrete Sealer			Sq. Ft.	132

PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h71(E)	20	#11	5'-0"	
h72(E)	8	#11	7'-0"	
h73(E)	8	#6	5'-0"	
h74(E)	10	#11	20'-2"	
h75(E)	4	#11	16'-2"	
h76(E)	4	#6	20'-2"	
p65(E)	10	#8	34'-3"	
p66(E)	10	#10	47'-8"	
p67(E)	10	#5	47'-8"	
s69(E)	88	#5	10'-9"	
s70(E)	13	#5	3'-3"	
s77(E)	32	#4	13'-5"	
s78(E)	4	#4	14'-0"	
u68(E)	14	#5	2'-10"	
Reinforcement Bars, Epoxy Coated			Pound	7290
Concrete Structures			Cu. Yd.	12.6
Precast Concrete Caps			Each	1
Concrete Sealer			Sq. Ft.	957

PIER 2
BILL OF MATERIAL

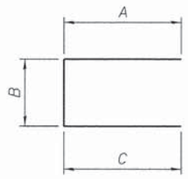
Bar	No.	Size	Length	Shape
h71(E)	20	#11	5'-0"	
h72(E)	8	#11	7'-0"	
h73(E)	8	#6	5'-0"	
h74(E)	10	#11	20'-2"	
h75(E)	4	#11	16'-2"	
h76(E)	4	#6	20'-2"	
p65(E)	10	#8	34'-3"	
p66(E)	10	#10	47'-8"	
p67(E)	10	#5	47'-8"	
s70(E)	13	#5	3'-3"	
s77(E)	32	#4	13'-5"	
s78(E)	4	#4	14'-0"	
s79(E)	88	#5	10'-10"	
u68(E)	14	#5	2'-10"	
Reinforcement Bars, Epoxy Coated			Pound	7300
Concrete Structures			Cu. Yd.	12.6
Precast Concrete Caps			Each	1
Concrete Sealer			Sq. Ft.	959

PIER 3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p65(E)	6	#8	34'-3"	
p67(E)	10	#5	47'-8"	
p80(E)	16	#11	47'-8"	
s82(E)	172	#5	12'-1"	
s83(E)	13	#5	5'-1"	
u81(E)	14	#5	4'-10"	
Reinforcement Bars, Epoxy Coated			Pound	7410
Precast Concrete Caps			Each	1

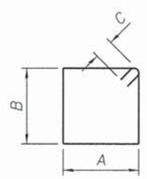
MIN. BAR LAP

Size	Lap
#5	3'-8"
#8	8'-11"



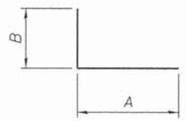
BARS s70(E), s83(E), s105(E), s106(E), u68(E) & u81(E), v89(E), v95(E), v114(E)

Bar	A	B	C
s70(E)	11"	1'-5"	11"
s83(E)	11"	3'-3"	11"
s105(E)	3-1"	2'-2"	3'-1"
s106(E)	2'-8½"	2'-2"	2'-8½"
u68(E)	10"	1'-1½"	10"
u81(E)	10¼"	3'-1½"	10¼"
v89(E)	11"	9"	11"
v95(E)	11"	2'-2"	11"
v114(E)	1'-0"	8"	1'-0"



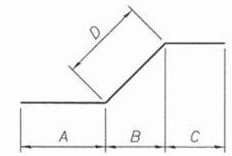
BAR s69(E), s77(E), s78(E), s79(E), s82(E)

Bar	A	B	C
s69(E)	1'-5"	3'-4½"	4"
s77(E)	1'-5½"	4'-9"	3"
s78(E)	1'-7¼"	4'-10¾"	3"
s79(E)	1'-5"	3'-4¾"	4"
s82(E)	2'-1½"	3'-4"	3"



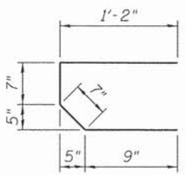
BAR p65(E), v92(E), v111(E), v113(E)

Bar	A	B
p65(E)	32'-9"	1'-6"
v92(E)	1'-0"	1'-6"
v111(E)	1'-10"	1'-8"
v113(E)	1'-0"	1'-2"

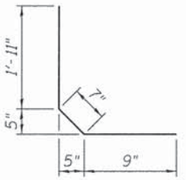


BAR c98(E), c110(E), v93(E)

Bar	A	B	C	D
c98(E)	1'-0"	1"	6"	8"
c110(E)	1'-6"	1"	1'-6"	6"
v93(E)	2'-0"	6"	1'-4"	8"



BAR s110(E)



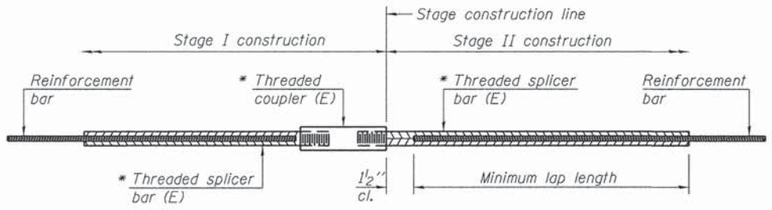
BAR v115(E)

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED - JDM	REVISED
	FILE NAME = 016-5005-051-AP.dgn	CHECKED - DAG	REVISED
	PLOT SCALE =	DRAWN - AT	REVISED
	PLOT DATE =	CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REINFORCEMENT SCHEDULE
STRUCTURE NO. 016-5005
SHEET NO. S-51 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	78
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

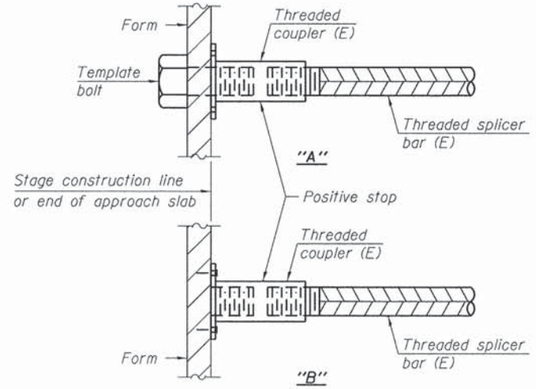
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

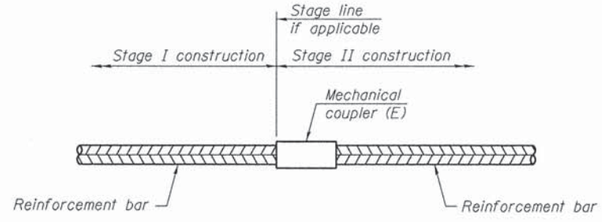
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



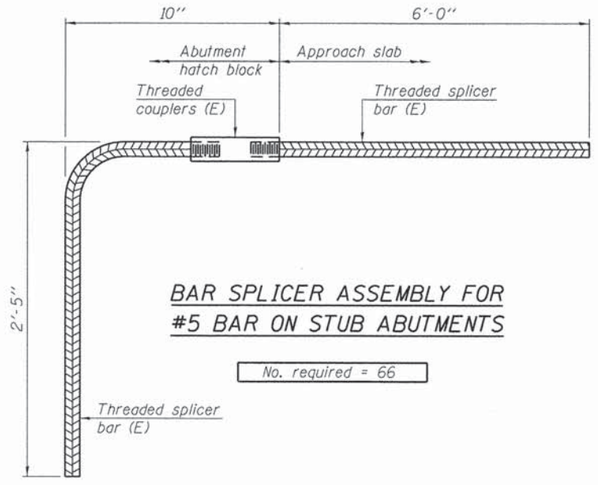
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1 Strut	#11	36
Pier 2 Strut	#11	36



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 66

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

I:\CIVIL\PROJ\00020036341\Structure\dgn\016-5005-052-BM.dgn

BSD-1 8-31-12

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED - JDM	REVISED
FILE NAME = 016-5005-052-BM.dgn		CHECKED - DAG	REVISED
PLOT SCALE =		DRAWN - JDM	REVISED
PLOT DATE =		CHECKED - DAG	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-5005
SHEET NO. S-52 OF 95 SHEETS

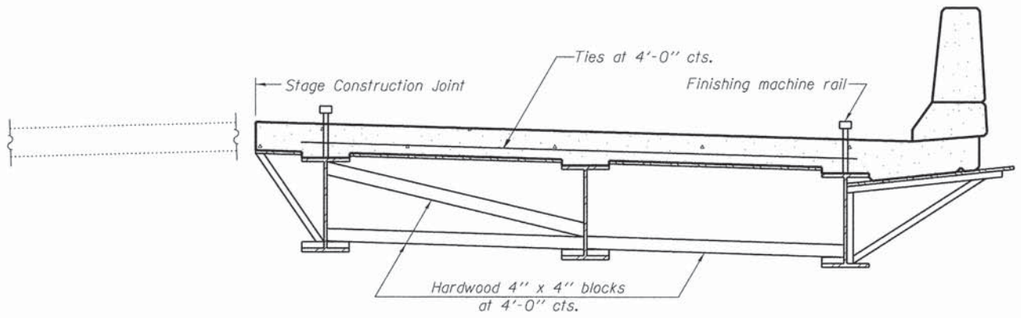
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	79
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

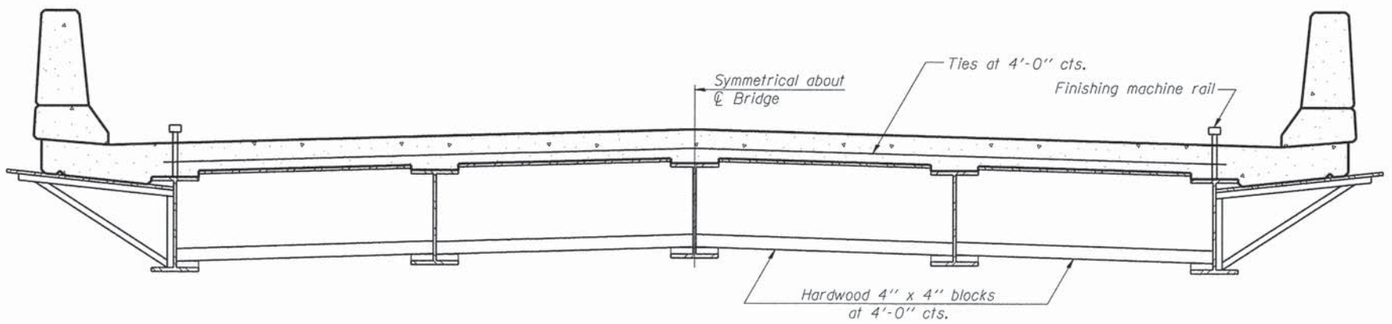
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

SB-1 7-1-10

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =		DESIGNED -	REVISED
FILE NAME = 016-5005-053-CF.dgn		CHECKED -	REVISED
PLOT SCALE =		DRAWN -	REVISED
PLOT DATE =		CHECKED -	REVISED

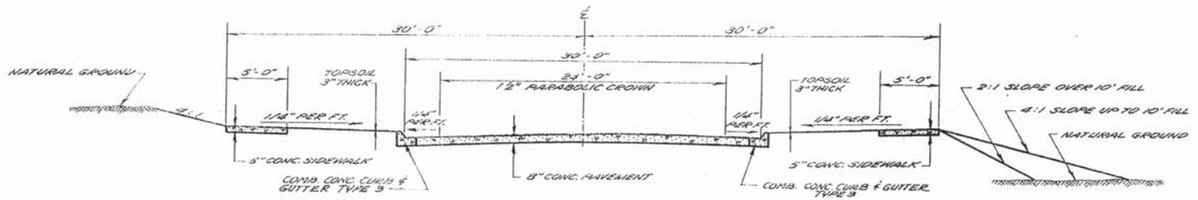
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH W27 BEAMS AND SMALLER
STRUCTURE NO. 016-5005
SHEET NO. S-53 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	80
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

I:\CHI\PRJ\000002634\Structural\dgn\016-5005-053-CF.dgn

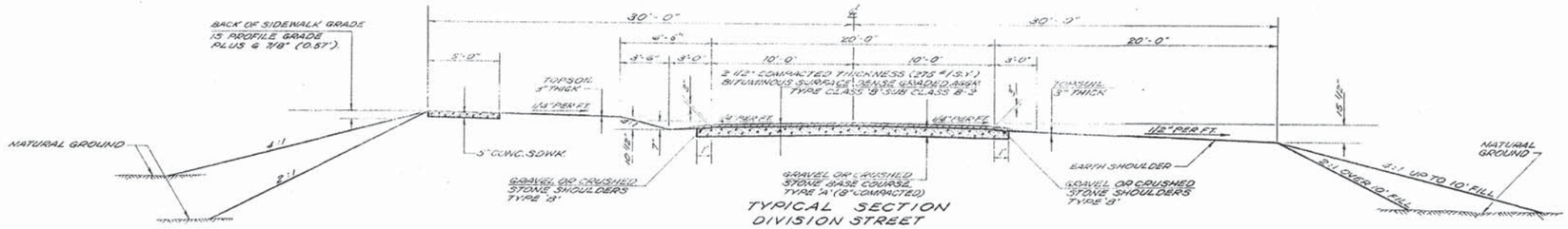
ARTERIAL ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8	46-V;VB & 46-VF	COOK	12	2
STA.	TO STA.			
F. A. R. REG. NO. 4	ILLINOIS	PROJECT		



TYPICAL SECTION
DIVISION STREET

STA. 22+90.32 TO STA. 25+57.00

SCALE: 1" = 5'



TYPICAL SECTION
DIVISION STREET

STA. 15+00.00 TO STA. 18+36.32

SCALE: 1/4" = 1'

TYPICAL SECTION
DIVISION STREET
SECTIONS 46-V;VB & 46VF
COOK COUNTY
SCALE: AS SHOWN

FILE NO. 9-R2 519

FOR INFORMATION ONLY

I:\CH\PRJ\020203634\Struct\dgn\816-5005-054-EP.dgn

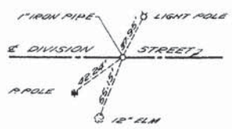
LOCHNER	USER NAME =	DESIGNED -	REVISED
H. W. LOCHNER, INC.	FILE NAME = 816-5005-054-EP.dgn	CHECKED -	REVISED
225 WEST WASHINGTON STREET	PLOT SCALE =	DRAWN -	REVISED
12 TH FLOOR	PLOT DATE =	CHECKED -	REVISED
CHICAGO, ILLINOIS 60606			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

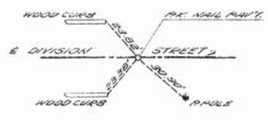
EXISTING PLAN 1 – DIVISION STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. 5-54 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	81
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

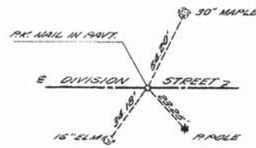
ARTERIAL ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8	46-V;VB & 46-VF	COOK	12	3
STA.	TO STA.			
F. A. P. R. REG. NO. 4	ILLINOIS	PROJECT		



P.O.T. STA. 11+34.62

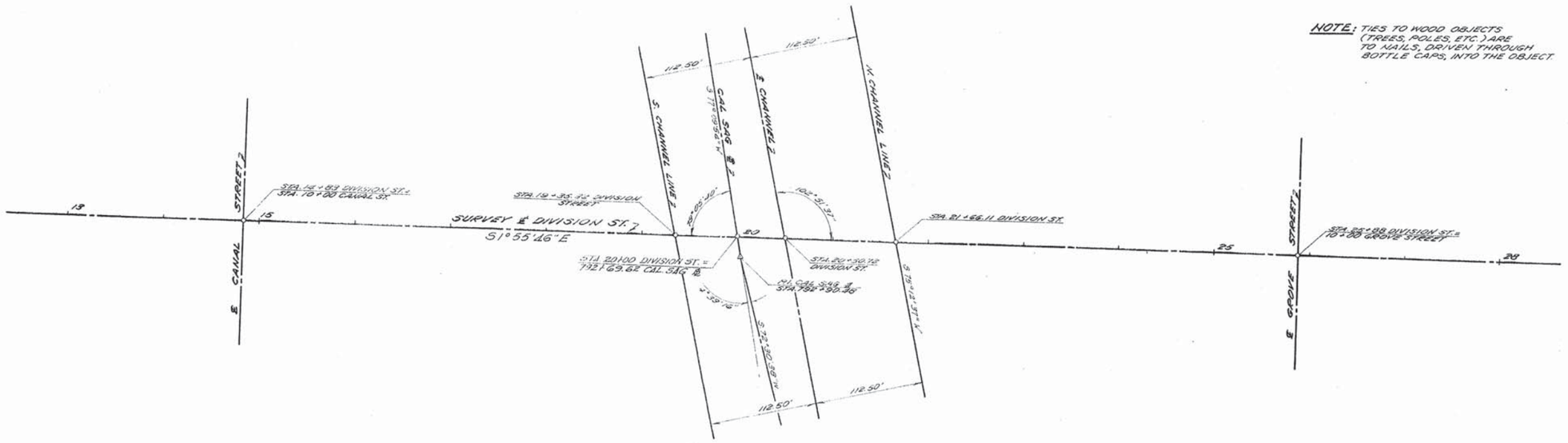


P.O.T. STA. 20+38.38



P.O.T. STA. 29+00

NOTE: TIES TO WOOD OBJECTS (TREES, POLES, ETC.) ARE TO NAILS, DRIVEN THROUGH BOTTLE CAPS, INTO THE OBJECT.



ALIGNMENT DETAILS
DIVISION STREET
SECTIONS 46-V;VB & 46VF
COOK COUNTY
SCALE 1"=50'

FILE NO. 9-R2 / 51B

FOR INFORMATION ONLY

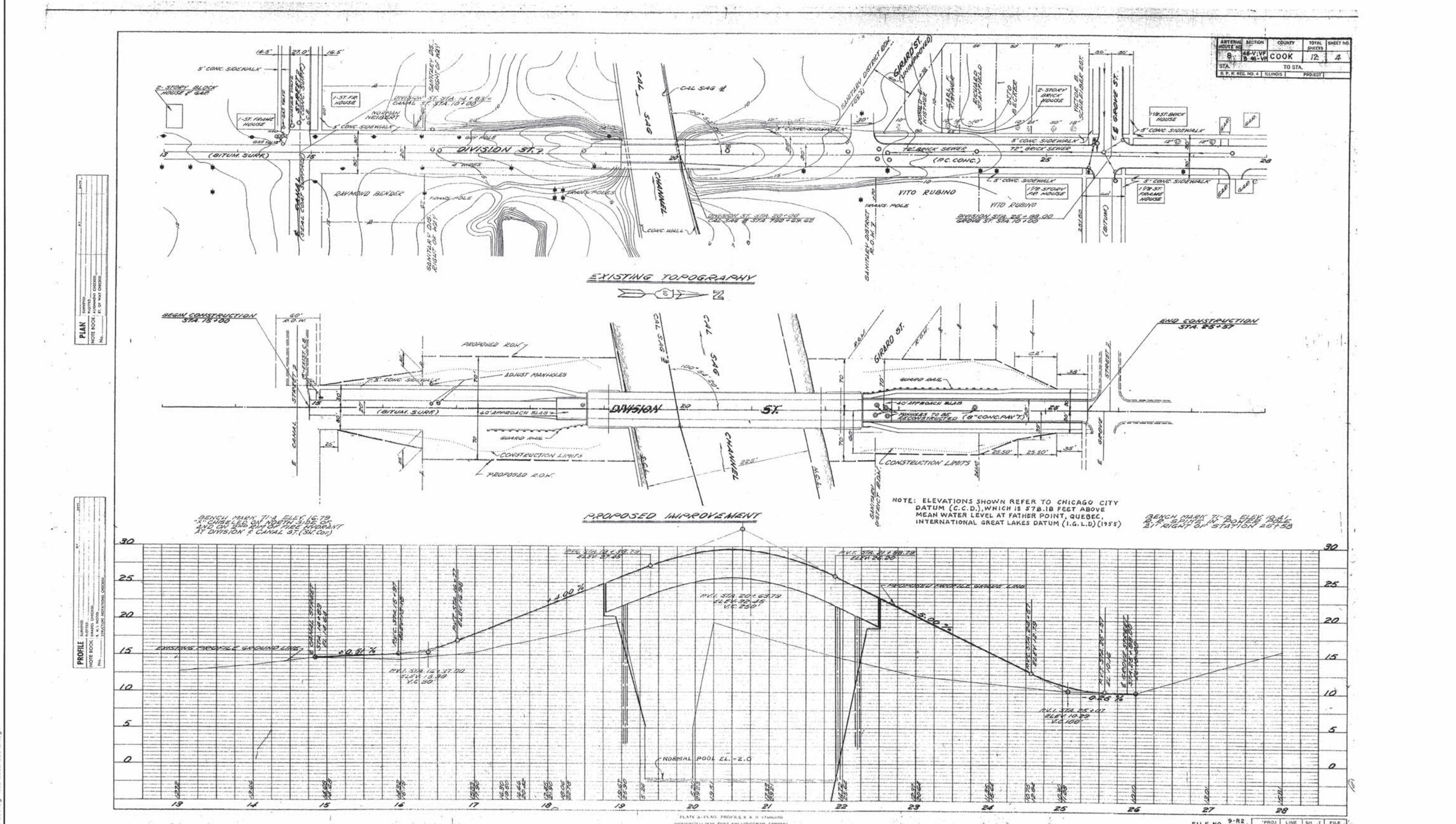
I:\CHI\PRJ\020202363A1\Struct\dgn\016-5005-055-EP.dgn

LOCHNER			
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-055-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 2 – DIVISION STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO. S-55 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	82
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		



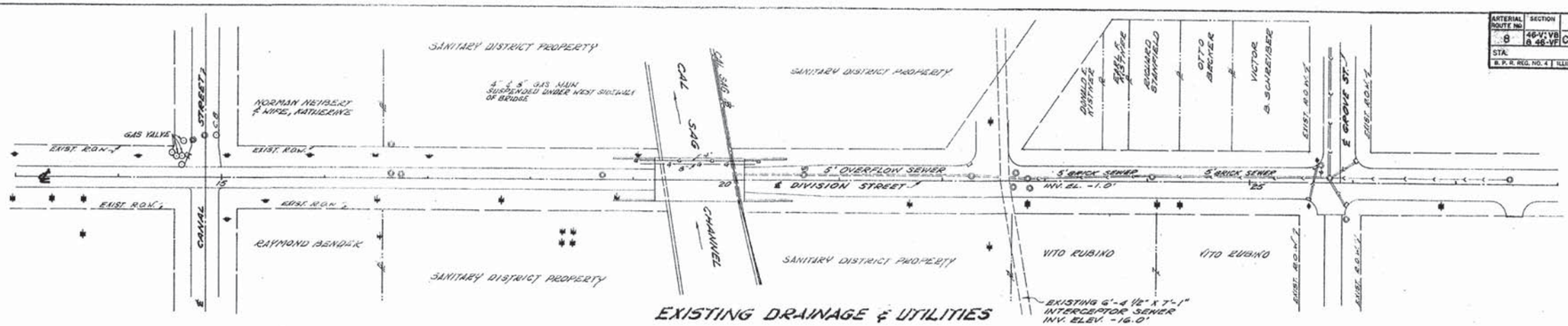
FOR INFORMATION ONLY

LOCHNER	USER NAME =	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLAN 3 – DIVISION STREET BRIDGE STRUCTURE NO. 016-5005	MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	FILE NAME = 016-5005-056-EP.dgn	CHECKED -	REVISED			1090	14-00164-00-BR	COOK	122	83
	PLOT SCALE =	DRAWN -	REVISED		SHEET NO. S-56 OF 95 SHEETS		CONTRACT NO. 61B58			
	PLOT DATE =	CHECKED -	REVISED				ILLINOIS FED. AID PROJECT			

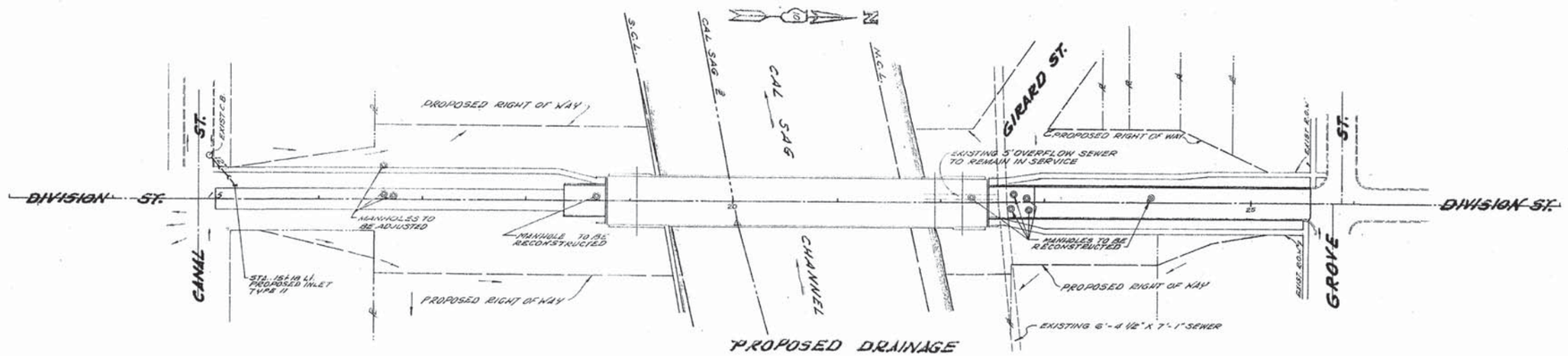
I:\CH\PRJ\00200363415\Struct\dgn\016-5005-056-EP.dgn

STATE HIGHWAY

ARTERIAL ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8	46-V; VB & 46-VF	COOK	12	5
STA.	TO STA.			
B. P. R. REG. NO. 4	ILLINOIS	PROJECT		



EXISTING DRAINAGE & UTILITIES



PROPOSED DRAINAGE

DRAINAGE & UTILITIES PLAN
DIVISION STREET
SECTIONS 46-V;VB & 46VF
COOK COUNTY
SCALE 1"=50'

PLATE 3 - PLAN - PROFILE 8 x 8 STANDARD
INDIANAPOLIS BLUE PRINT AND LITHOGRAPH COMPANY

FILE NO. 9-R2 51B | PROJ. | LINE | SHEET NO. 5 | FILE

FOR INFORMATION ONLY

PLAN — SURVEYED: ; DRAWN: ; NOTE BOOK: ; No.: ; ALIGNMENT CHECKED: ; P.I. OR R/W CHECKED: ; DATE:

PROFILE — SURVEYED: ; DRAWN: ; NOTE BOOK: ; No.: ; GRADES CHECKED: ; STRUCTURE NOS. CHECKED: ; DATE:

I:\CH\PRJ\00080363A\Structure\dgn\016-5005-057-EP.dgn

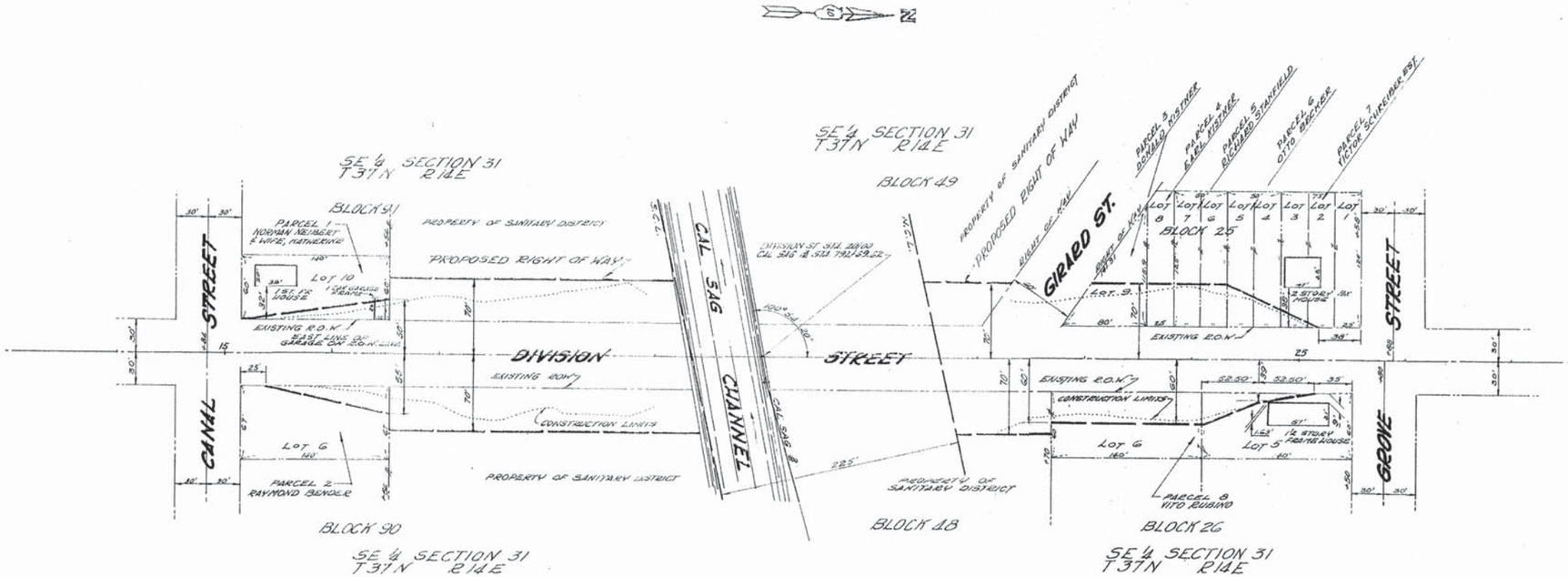
LOCHNER	USER NAME =	DESIGNED -	REVISED
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	FILE NAME = 016-5005-057-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 4 – DIVISION STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO. S-57 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	84
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		

ARTERIAL ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	46-V-VB & 46VF	COOK	12	6
STA.	TO STA.			
B. P. R. REG. NO. 4 | ILLINOIS |	PROJECT			



RIGHT OF WAY TAKING

PARCEL NO.	LOT NO.	BLK. NO.	TAKING
PARCEL 1	10	91	0.032 ACS.
PARCEL 2	6	90	0.033 "
PARCEL 3	8	25	0.041 "
PARCEL 4	7	"	0.021 "
PARCEL 5	6-7-8	"	0.046 "
PARCEL 6	5-4	"	0.053 "
PARCEL 7	3-2-1	"	0.007 "
PARCEL 8	1-2	26	0.156 "
PARCEL 9	SANITARY DIST.		0.652 "
	TOTAL TAKING		1.013 ACS.

RIGHT OF WAY REQUIREMENTS
FOR
PUBLIC HIGHWAY PURPOSES
DIVISION STREET
SECTIONS 46-V;VB & 46VF
COOK COUNTY
SCALE 1" = 50'

FILE NO. 9-R2 / 51B

FOR INFORMATION ONLY

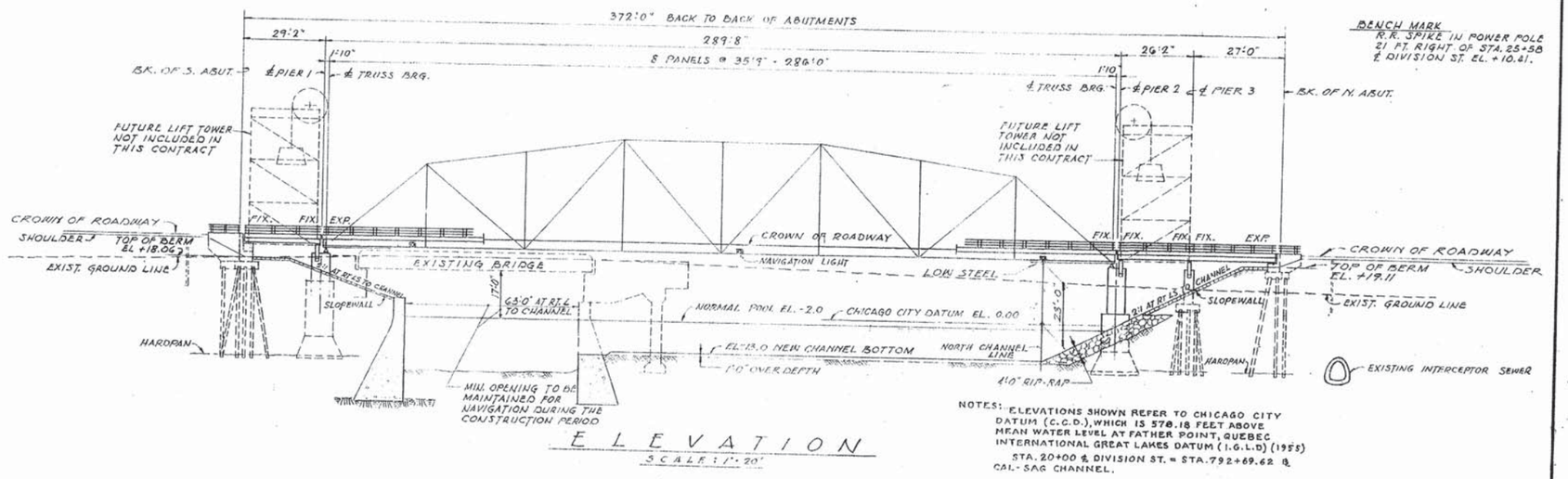
I:\CH1\PRJ\000003534\Structdgn\016-5005-058-EP.dgn

LOCHNER	USER NAME =	DESIGNED -	REVISED
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	FILE NAME = 016-5005-058-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

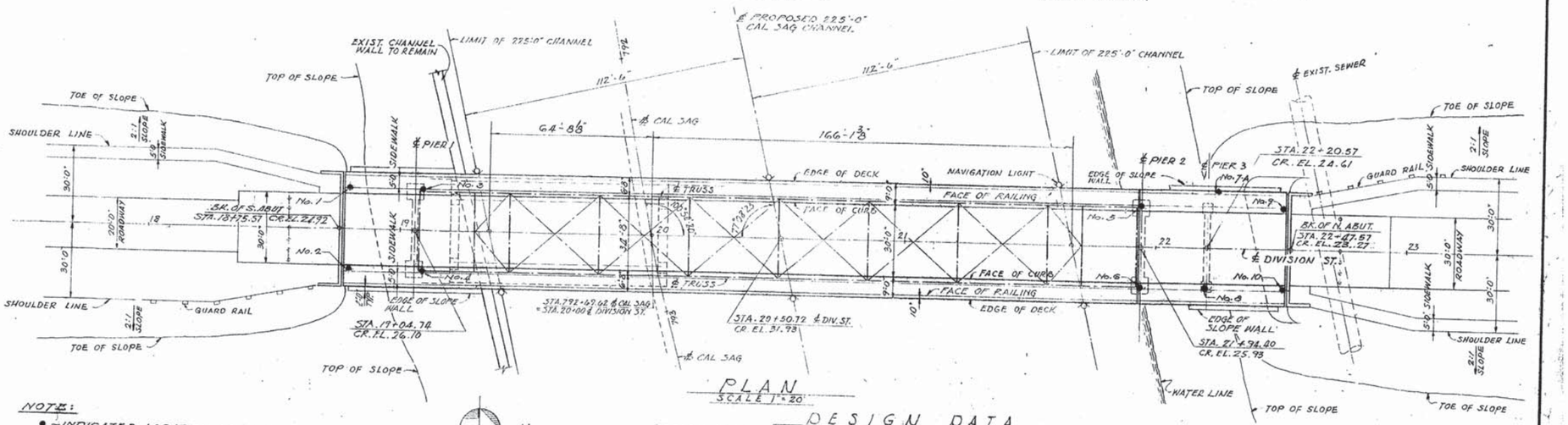
EXISTING PLAN 5 – DIVISION STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO. 5-58 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	85
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



ELEVATION
SCALE: 1" = 20'

NOTES: ELEVATIONS SHOWN REFER TO CHICAGO CITY DATUM (C.C.D.), WHICH IS 578.18 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT, QUEBEC INTERNATIONAL GREAT LAKES DATUM (I.G.L.D) (1955)
STA. 20+00 ℄ DIVISION ST. = STA. 792+69.62 ℄ CAL-SAG CHANNEL.



PLAN
SCALE 1" = 20'

NOTE:
● - INDICATES LOCATION OF BORINGS

DESIGN DATA

DESIGN LOADS
LIVE LOAD - H20-S16-44
FUTURE DEAD LOAD - 1½ BIT. WEARING SURFACE

DESIGN STRESSES
CONCRETE
f_c = 3500 P.S.I.
f_c = 1400 P.S.I.
f_c = 1000 P.S.I. (WITH EARTH PRESSURE)
v = 75 P.S.I. (FOOTINGS)
REINFORCING STEEL
f_s = 20,000 P.S.I.
STRUCTURAL STEEL
f_s = 18,000 P.S.I. (ASTM A-7)
f_s = 20,000 P.S.I. (ASTM A-36)
LOW ALLOY STEEL
f_s = 27,000 P.S.I. (3/4" THICK & UNDER)
f_s = 28,000 P.S.I. (3/4" TO 1 1/2" THICK)

FOUNDATION
ABUTMENTS & PIER 3 - 80 TON STEEL PILES
PIER 1 - FOOTINGS ON ROCK
PIER 2 - FOOTINGS ON HARD PAN
APPROACH PILES - 15 TON TREATED TIMBER PILES

DESIGN DESIGNATION
DIVISION STREET 1300 ADT - M - 30

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
DIVISION STREET HIGHWAY BRIDGE
GENERAL PLAN AND ELEVATION
FILE NO. 9-R2 518
SCALE: AS NOTED
DATE: OCT. 30, 1961

FOR INFORMATION ONLY

I:\CH\PRJ\808083\3A1Struct\dgn\816-5005-059-EP.dgn

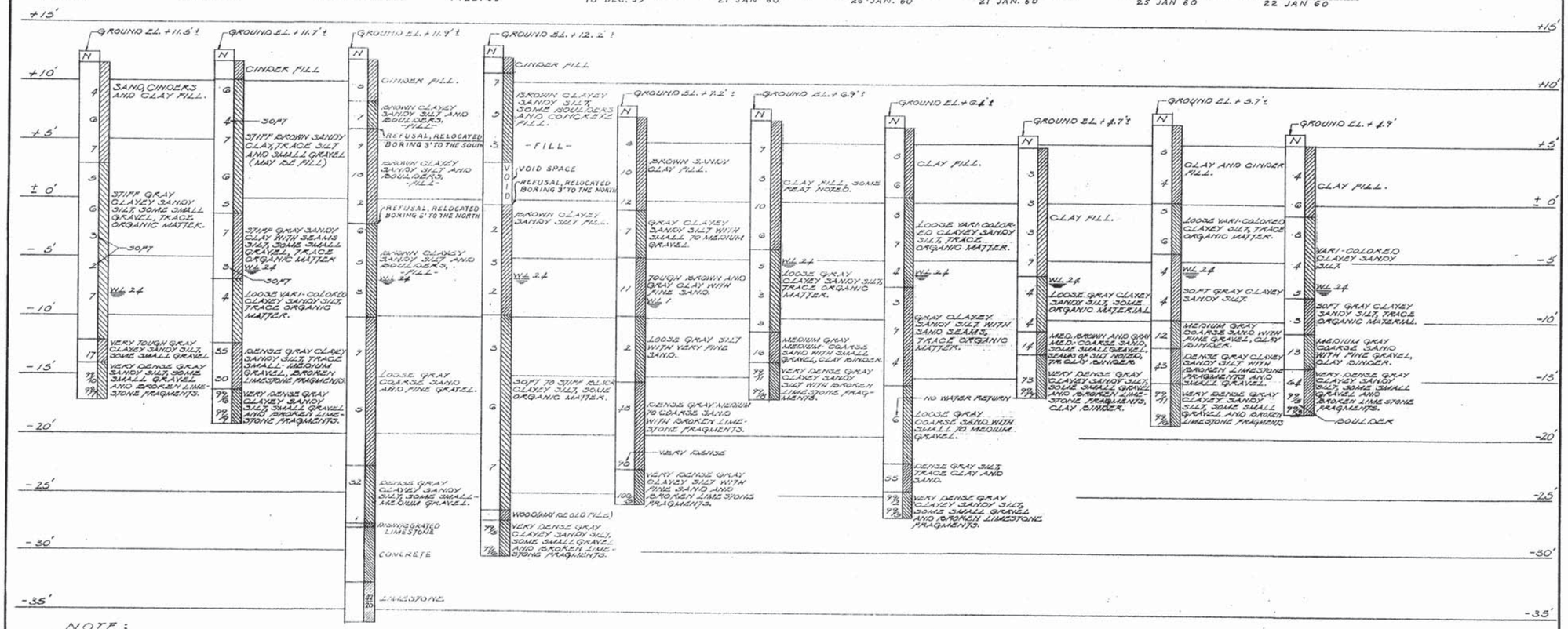
LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 816-5005-059-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 6 – DIVISION STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. 5-59 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	86
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

SOIL TEST BORINGS



NOTE:

FIGURES IN COLUMNS MARKED "N" INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE 2" O.D. SAMPLING PIPE ONE FOOT USING 140 LB. WEIGHT FALLING 30 INCHES.

BORING DATA SHOWN ARE ONLY A GUIDE TO THE BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED IN THE WORK.

FOR LOCATION OF BORINGS SEE GENERAL PLAN SHEET No. 8

FIGURES NOTED THUS [A/B] "A" INDICATES AMOUNT OF ROCK CORED IN INCHES. "B" INDICATES AMOUNT OF ROCK RECOVERED IN INCHES.

WL 24 INDICATES WATER LEVEL 24 HOURS AFTER COMPLETION OF BORING

UNCONFINED COMPRESSIVE TESTS WERE NOT MADE BECAUSE ALL CLAY SAMPLES TAKEN WERE TOO SILTY OR SANDY.

ALL BORINGS WERE DRILLED ON DATES SHOWN BY RAYMOND CONCRETE PILE CO., 111 W. MONROE STREET, CHICAGO 3, ILL. FOR ALFRED BENESCH & CO., CHICAGO 3, ILL.

CLASSIFICATIONS WERE MADE BY VISUAL INSPECTION BY THE SHIFT FOREMAN.

REFUSAL, WHICH MAY BE DUE TO BOULDERS OR CONCRETE, WAS ENCOUNTERED IN BORINGS NUMBERED 3 & 4. IN EACH CASE, SAMPLES WERE NOT TAKEN FROM THE RELOCATED HOLES UNTIL THE DEPTH OF THE REFUSED BORING HAD BEEN REACHED.

ELEVATIONS SHOWN REFER TO CHICAGO CITY DATUM (C.C.D.), WHICH IS 578.18 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT, QUEBEC INTERNATIONAL GREAT LAKES DATUM (I.G.L.D.) (1955)

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
DIVISION STREET HIGHWAY BRIDGE

LOG OF BORINGS

FILE NO. 9-R2 51B

SCALE: AS NOTED

DATE: OCT. 30, 1961

FOR INFORMATION ONLY

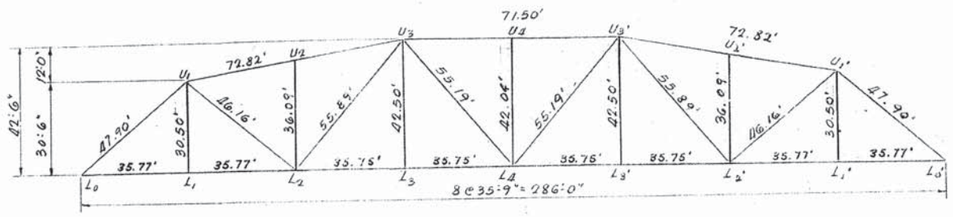
I:\CH1\PRJ\00200036341\Struct\dgn\016-5005-060-EP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-060-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 7 – DIVISION STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO.S-60 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	87
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



TRUSS LAYOUT

SCALE : 1"=20'0"

NOTE
LENGTHS ARE ADJUSTED FOR CAMBER AND VERTICAL CURVATURE

STRESS TABLE

MEMBER	SECTION	UNSUPPORTED LENGTH C.C. FEET	X-X Rx	Y-Y Ry	l/r MAX.	AREA SQ.IN. GROSS	NET	EFF. GROSS	STRESSES-KIPS DEAD LOAD D	LIVE LOAD L	IMPACT I	SIDE WALK S.W.	WIND STRESS-KIPS 75#/SQ.FT. W	100#/FT. WL	Σ STRESSES-KIPS D+L+I+SW A	D+W B	D+L+I+SW+.3WWL C	UNIT STRESS # KIPS PER SQ.IN. A	B	C	ALLOWED UNIT STRESS KIPS PER SQ.IN. A	B & C	DEFORM. IN INCH. DxL/AxE	TYPE OF STEEL	MEMBER
$L_0'-U_1'$	2-18 C 58 2 COV. PLS 15½x½ 2 PLS 18x½	47.90	6.56	6.87	88.0	67.46	—	61.46	-770	-172	- 21	- 40	- 26	- 6	- 1003	- 796	- 1017	18.04	22.53	20.64	17.67	22.10	.223	LOW ALLOY	L_0-U_1
$U_1'-U_3'$	2-18 C 58 2 COV. PLS 15½x½ 2 PLS 18x½	36.41	6.56	6.87	67.0	67.46	—	61.46	-850	-190	- 23	- 44	- 36	- 6	- 1107	- 886	- 1124	19.29	16.28	19.75	19.48	24.40	.381	"	U_1-U_3
U_3-U_4'	2-18 C 58 2 COV. PLS 15½x½ 2 PLS 18x 11/16	35.75	6.43	6.82	67.0	74.22	—	68.22	-953	-213	- 26	- 49	- 40	- 7	- 1241	- 993	- 1260	19.49	16.36	19.95	19.49	24.40	.193	"	U_3-U_4
$L_0'-L_2'$	2 PLS 18x¾ 1 PL 14½x 15/16 WELDED	35.77	4.94	6.86	97.0	36.97	30.97	—	+575	-129	+ 16	+ 30	+ 108	+ 26	+ 750	+ 683	+ 808	26.84	29.97	29.40	27.00	33.75	.452	"	L_0-L_2
L_2-L_4	2 PLS 18x 1⅜ 1 PL 13½x⅝ WELDED	35.75	4.52	6.90	95.0	64.42	53.42	—	+884	-198	+ 24	+ 46	+ 144	+ 37	+ 1152	+ 1028	+ 1232	24.15	23.06	26.03	24.00	30.00	.401	"	L_2-L_4
U_1-L_2	2 PLS 15 x⅝ 1 PL 14⅜x½ WELDED	46.16	3.68	6.89	151.0	26.13	21.13	—	+333	- 92	+ 14	+ 19	—	—	+ 458	—	—	26.40	—	—	27.00	—	.241	"	U_1-L_2
L_2-U_3	2-15 C 33.9 1 PL 15x½ WELDED	55.89	5.62	7.26	119.0	27.30	—	19.80	- 80	- 54	- 9	- 10	—	—	- 153	—	—	9.94	—	—	11.45	—	.082	CARBON	L_2-U_3
$U_3'-L_4$	2-PLS 15x½ 1 PL 15x⅜ WELDED	55.19	3.69	6.97	180.0	20.63	16.63	—	+107	+ 58	+ 11	+ 11	—	—	+ 187	—	—	16.76	—	—	18.00	—	.102	"	U_3-L_4
U_1-L_1	2 PLS 10x½ 1 PL 15x½ WELDED	30.50	2.29	6.52	160.0	17.50	14.50	—	+140	+ 65	+ 19	+ 7	—	—	+ 231	—	—	16.00	—	—	18.00	—	.110	"	U_1-L_1
U_2-L_2	2 PLS 10x½ 1 PL 15x⅜ WELDED	36.09	4.25	7.13	103.0	15.63	—	3.00	- 14	—	—	—	—	—	- 14	—	—	4.67	—	—	12.35	—	.014	"	U_2-L_2
U_3-L_3	2 PLS 10x½ 1 PL 15x½ WELDED	42.50	2.29	6.52	223.0	17.50	14.50	—	+140	+ 65	+ 19	+ 7	—	—	+ 231	—	—	16.00	—	—	18.00	—	.158	"	U_3-L_3
U_4-L_4	2 PLS 10x½ 1 PL 15x⅜ WELDED	42.04	4.25	7.13	120.0	15.63	—	3.00	- 14	—	—	—	—	—	- 14	—	—	4.67	—	—	11.40	—	.016	"	U_4-L_4

INCLUDES BENDING STRESS DUE TO WEIGHT OF MEMBER AND WIND ON MEMBER.

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
DIVISION STREET HIGHWAY BRIDGE

TRUSS LAYOUT & STRESS TABLE

FILE NO. 9-R2 / 518

SCALE AS NOTED

DATE: OCT. 30, 1961

FOR INFORMATION ONLY

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

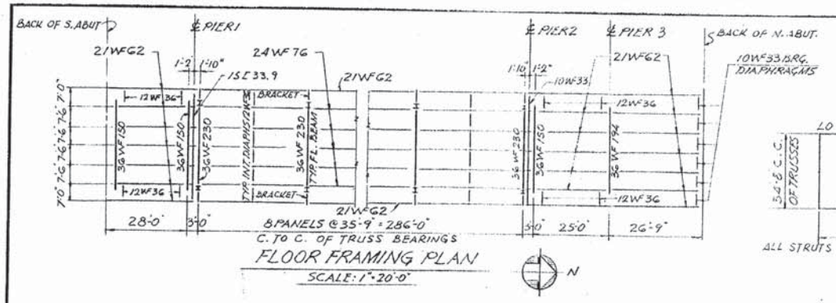
USER NAME =		DESIGNED -	REVISED
FILE NAME = 016-5005-061-EP.dgn		CHECKED -	REVISED
PLOT SCALE =		DRAWN -	REVISED
PLOT DATE =		CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 8 – DIVISION STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. S-61 OF 95 SHEETS

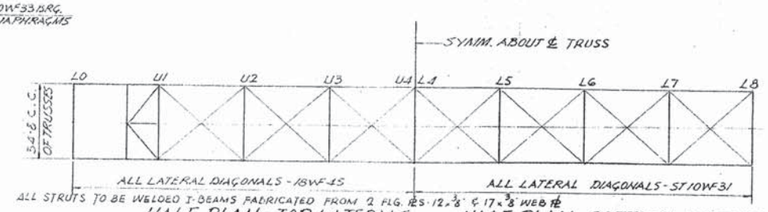
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	88
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

I:\CH1\PRJ\0020023634\Struct\dgn\016-5005-061-EP.dgn



FLOOR FRAMING PLAN

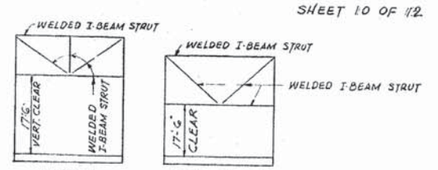
SCALE: 1"=20'-0"



ALL STRUTS TO BE WELDED I-BEAMS FABRICATED FROM 2 FLG. PLS - 12 x 3/8" ℄ 17 x 3/8" WEB PL.

HALF PLAN - TOP LATERALS

HALF PLAN - BOTTOM LATERALS

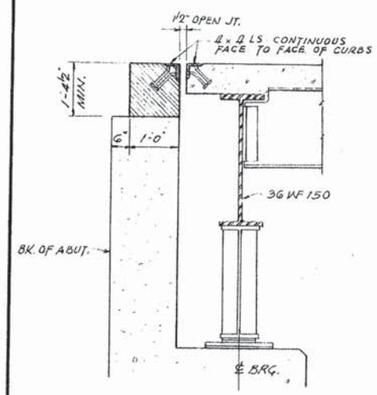


PORTAL
L0-U1 & U7-L8

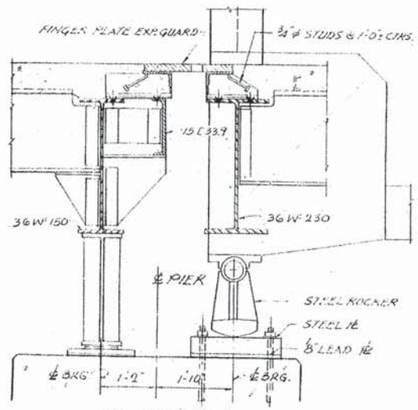
SWAY FRAME
L3-U3 & L5-U5

ELEVATION OF PORTAL & SWAY FRAME

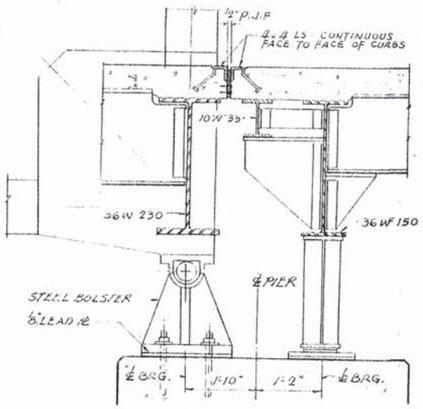
NOTE! ALL WELDED I BEAM STRUTS TO BE FABRICATED FROM 2 FLG. PLS - 12 x 3/8" ℄ 17 x 3/8" WEB PL.



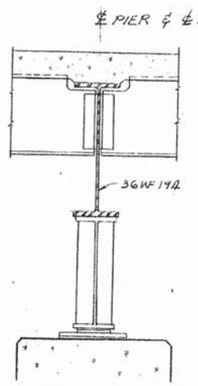
AT SOUTH ABUT.



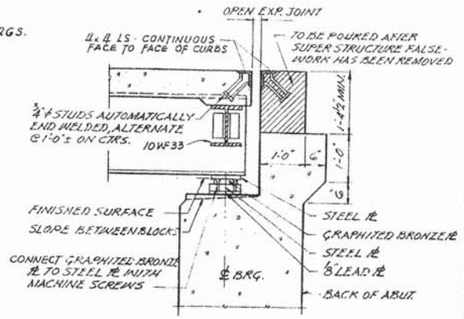
AT PIER 1



AT PIER 2



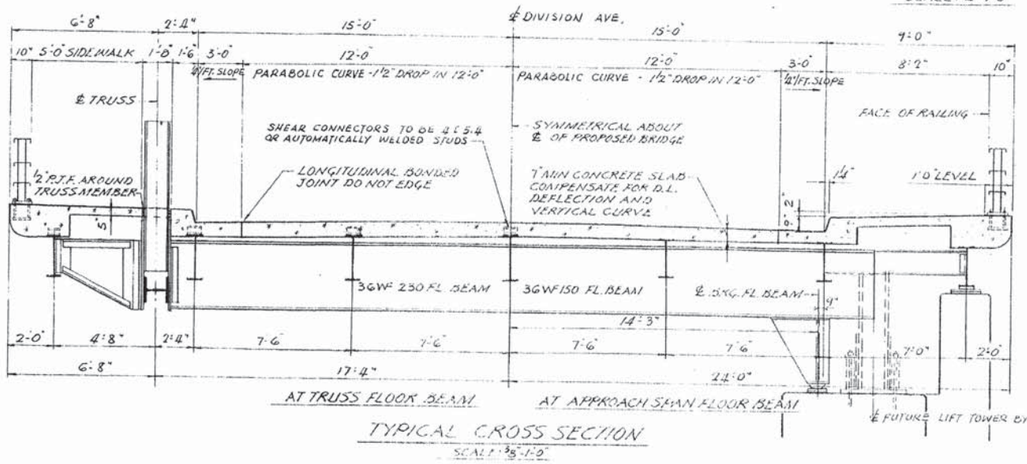
AT PIER 3



AT NORTH ABUT.

TYPICAL BEARINGS AND EXPANSION DEVICES

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

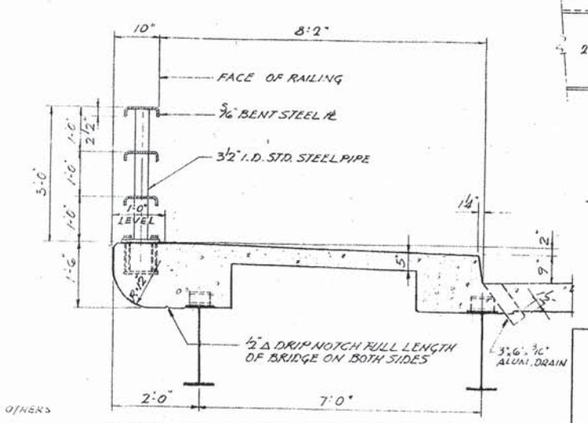


AT TRUSS FLOOR BEAM

AT APPROACH SPAN FLOOR BEAM

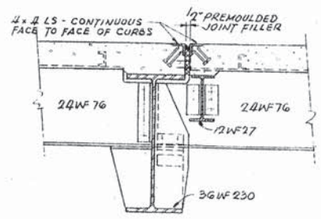
TYPICAL CROSS SECTION

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



DETAIL OF CURB, RAIL POST & FLOOR DRAIN

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



DETAIL AT L3 & L5

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

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
DIVISION STREET HIGHWAY BRIDGE

FRAMING PLAN AND DETAILS

SCALE AS NOTED

FILE NO. 9-62 518

DATE: OCT. 30, 1961

FOR INFORMATION ONLY

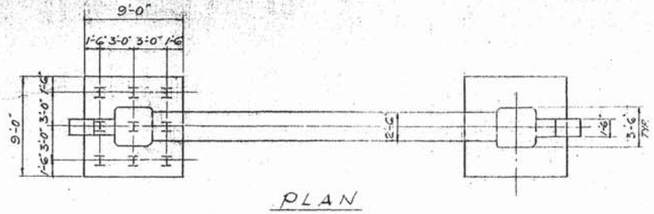
I:\CH\PRJ\2020203634\Structr\dgn\016-5005-062-EP.dgn

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-062-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

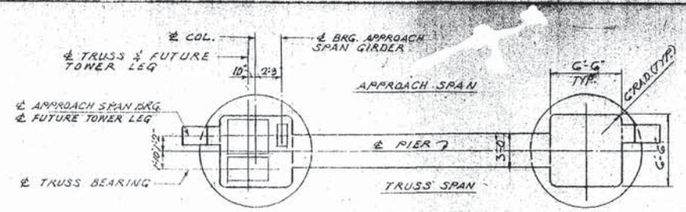
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 9 – DIVISION STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO. S-62 OF 95 SHEETS

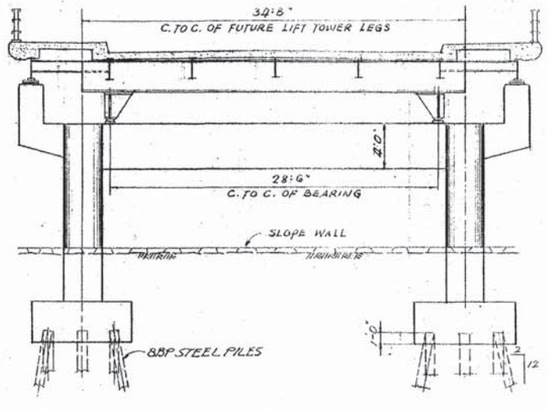
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	89
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			



PLAN

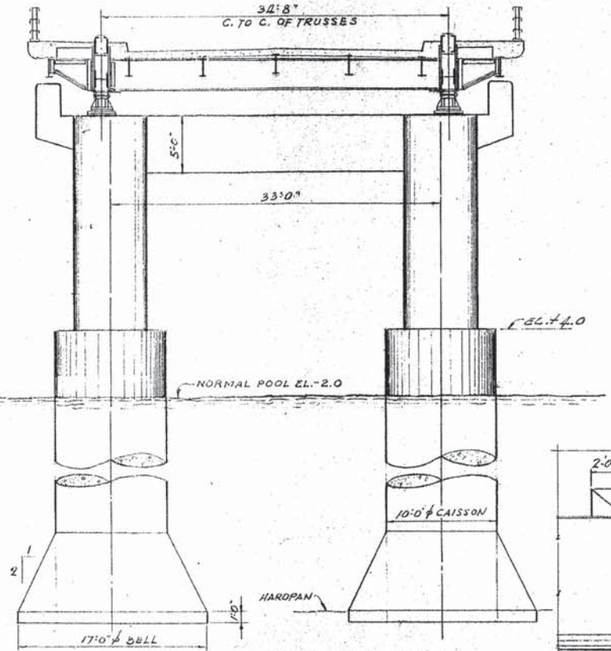


PLAN



ELEVATION - PIER 3

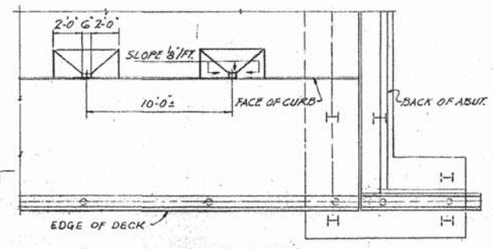
SCALE: 3/16"=1'-0"



ELEVATION - PIER 2

PIER 1 - SIMILAR

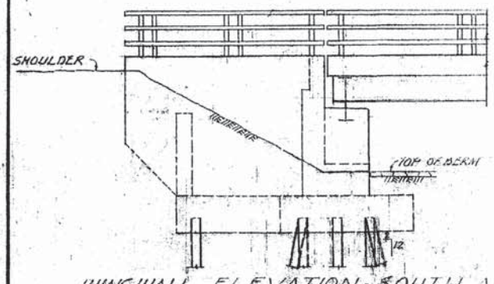
SCALE: 3/16"=1'-0"



CORNER PLAN

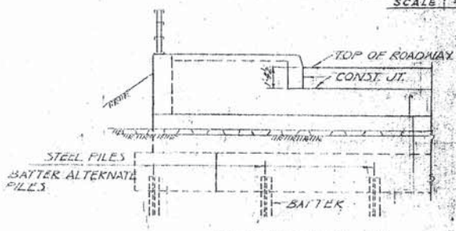
SCALE: 4"=1'-0"

NOTE: ELEVATIONS SHOWN REFER TO CHICAGO CITY DATUM (C.C.D.), WHICH IS 578.18 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT, QUEBEC, INTERNATIONAL GREAT LAKES DATUM (I.G.L.D.) (1955)



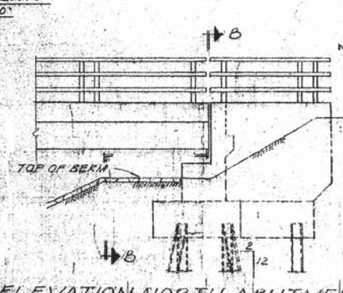
WINGWALL ELEVATION - SOUTH ABUTMENT

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



SECTION B-B

SCALE: 3/16"=1'-0"



WINGWALL ELEVATION NORTH ABUTMENT

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

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
DIVISION STREET HIGHWAY BRIDGE

SUBSTRUCTURE DETAILS

FILE NO. 9-82 518

SCALE AS NOTED DATE: OCT. 30, 1981

FOR INFORMATION ONLY

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-063-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 10 – DIVISON STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO.S-63 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	90
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

[\Chi\PRJ\8000836341\Struct\dgn\816-5005-063-EP.dgn

SCHEDULE OF CONSTRUCTION

ITEM	DESCRIPTION OF WORK	CONSTRUCTION PERIOD DESIGNATED BY SUCCESSIVE MONTHLY INTERVALS
		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
A	REMOVE EXISTING BRIDGE	
B	EXCAVATE FOR PIERS 2 & 3	
C	DRIVE PILES FOR PIER 3	
D	CONSTRUCT CAISSONS FOR PIER 2	
E	CONSTRUCT PIERS 2 AND 3	
F	EXCAVATE FOR PIER 1	
G	CONSTRUCT CAISSONS FOR PIER 1	
H	CONSTRUCT PIER 1	
I	REMOVE EXISTING DIVISION ST. PAVEMENT WITHIN DESIGNATED LIMITS	
J	PLACE EMBANKMENTS FOR ABUTMENTS AND APPROACH PAVEMENTS	
K	DRIVE PILES FOR ABUTMENTS	
L	CONSTRUCT ABUTMENTS	
M	ERECT TRUSSES AND FLOOR SYSTEM FOR CHANNEL SPAN	
N	ERECT STRUCTURAL STEEL FOR APPROACH SPANS	
O	FORM AND PLACE CONCRETE FLOOR SLAB	
P	CONSTRUCT NORTH APPROACH PAVEMENT	
Q	CONSTRUCT SOUTH APPROACH PAVEMENT	
R	INSTALL NAVIGATION LIGHTS	

ILLINOIS DIVISION OF HIGHWAYS
CALUMET SAG NAVIGATION PROJECT
DIVISION STREET HIGHWAY BRIDGE

SCHEDULE OF CONSTRUCTION

SCALE: AS NOTED

FILE NO. 9-82 515

DATE: OCT 30, 1981

FOR INFORMATION ONLY

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED -	REVISED
FILE NAME = 016-5005-064-EP.dgn	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 11 – DIVISON STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO. S-64 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	91
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

I:\CH\PROJ\00020263A\Struct\dgn\016-5005-064-EP.dgn

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

PLANS FOR PROPOSED STATE BOND ISSUE HIGHWAY

DISTRICT 10

CALUMET-SAG NAVIGATION PROJECT

BRIDGE CONSTRUCTION
(CHATHAM STREET) C.H. ROUTE 259
SECTION 2590404-V;VB
COOK COUNTY

GROSS LENGTH: 1167 LIN. FT. = 0.221 MILES
NET LENGTH: 1167 LIN. FT. = 0.221 MILES

C.H. No.	SEC	COUNTY	SHEET	SHEET
259	2590404 V-VB	COOK	50	1
STA	TO STA			

LOCATION OF SECTION INDICATED THUS:—

IMPROVEMENT BEGINS
SECTION 2590404-V;VB
STATION 12+47.00
ON CHATHAM ST. (C.H. ROUTE 259)

IMPROVEMENT ENDS
SECTION 2590404-V,VB
STATION 24+14.00
ON CHATHAM ST. (C.H. ROUTE 259)

SECTION 2590404-V, VB CONSISTS OF THE CONSTRUCTION, INCLUDING THE FURNISHING, FABRICATING, SHOP PAINTING AND DELIVERY OF STRUCTURAL STEEL, OF A 300 FOOT FIXED THROUGH TRUSS BRIDGE WITH A 30'-3"W-BEAM APPROACH SPAN ON THE SOUTH AND 25'-0" AND 20'-9"W-BEAM APPROACH SPANS ON THE NORTH CARRYING CHATHAM STREET (C.H. ROUTE 259) OVER THE CALUMET-SAG CHANNEL. THIS SECTION ALSO INCLUDES THE EARTH FILL EMBANKMENT AND CONCRETE PAVEMENT FOR THE APPROACHES AT STATION 20+10.68

CONTRACT NO. B8269

M C Beaumont 10/2/63

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
SUBMITTED 10-2-63 Special Bridge Engr.
RECOMMENDED October 11 '63 Division Engineer
PASSED October 11 '63 Secretary
APPROVED October 11 '63 Director
APPROVED October 11 '63 Governor

ALFRED BENESCH & COMPANY CONSULTING ENGINEERS	U. S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS CHICAGO, ILLINOIS

CALUMET SAG NAVIGATION PROJECT
CALUMET SAG CHANNEL
CHATHAM STREET HIGHWAY BRIDGE

APPROVED ____ ASST. CHIEF, ENG. DIVISION
APPROVED ____ CHIEF, ENGINEERING DIVISION
DATE: ____ 24 ____
APPROVED ____ COLONEL, CORPS OF ENGINEERS DISTRICT ENGINEER
SCALE ____ INV NO ____
SHEET 1 OF 50

FOR INFORMATION ONLY

COOK COUNTY SECTION 2590404 V;VB;VF C.H. ROUTE 259

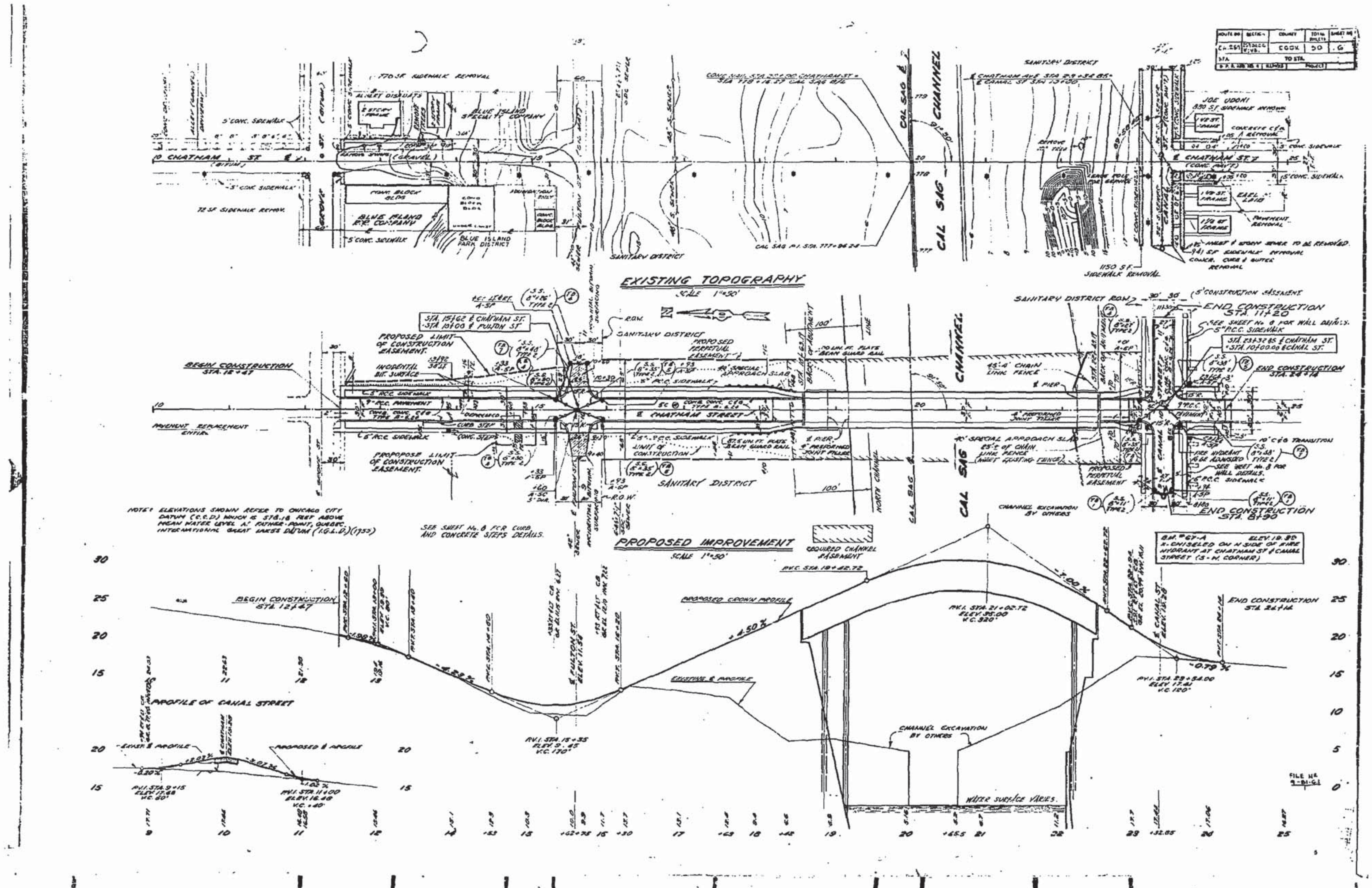
LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-065-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 12 – CHATHAM STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO.S-65 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	92
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

I:\CHI\PROJ\020202\3634\Structure\dgn\016-5005-065-EP.dgn

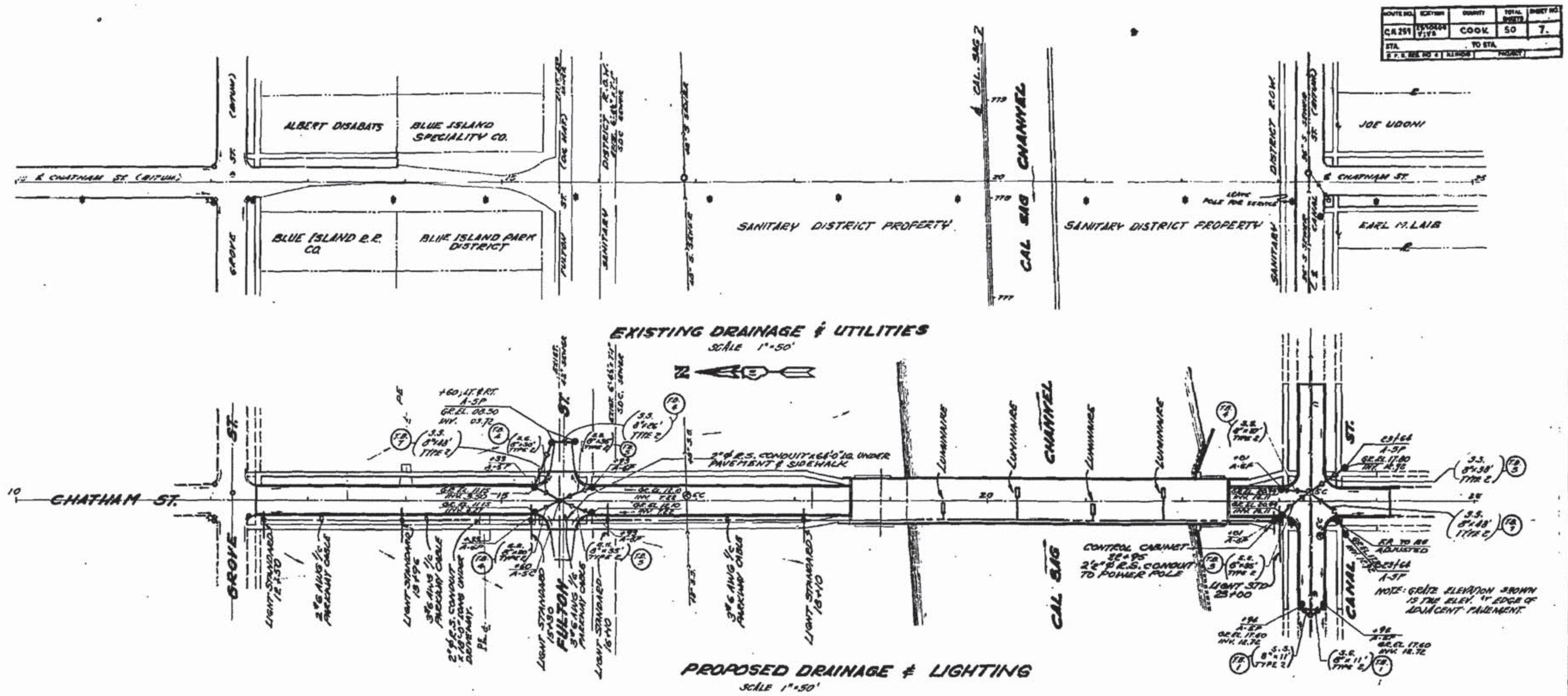


FOR INFORMATION ONLY

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	FILE NAME = 016-5005-066-EP.dgn	CHECKED -	REVISED	
	PLOT SCALE =	DRAWN -	REVISED	
	PLOT DATE =	CHECKED -	REVISED	

EXISTING PLAN 13 – CHATHAM STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. S-66 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	93
CONTRACT NO. 61B58				
ILLINOIS FED. AID PROJECT				



DRAINAGE & UTILITIES PLAN
CHATHAM STREET
SECTIONS 2590404-V & VB
COOK COUNTY
SCALE: 1" = 50'

FILE No. 9-81-G.1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 259	2590404 V,VB	COOK	50	7

FOR INFORMATION ONLY

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLAN 14 – CHATHAM STREET BRIDGE STRUCTURE NO. 016-5005
	FILE NAME = 016-5005-067-EP.dgn	CHECKED -	REVISED		
	PLOT SCALE =	DRAWN -	REVISED		
	PLOT DATE =	CHECKED -	REVISED		SHEET NO.S-67 OF 95 SHEETS

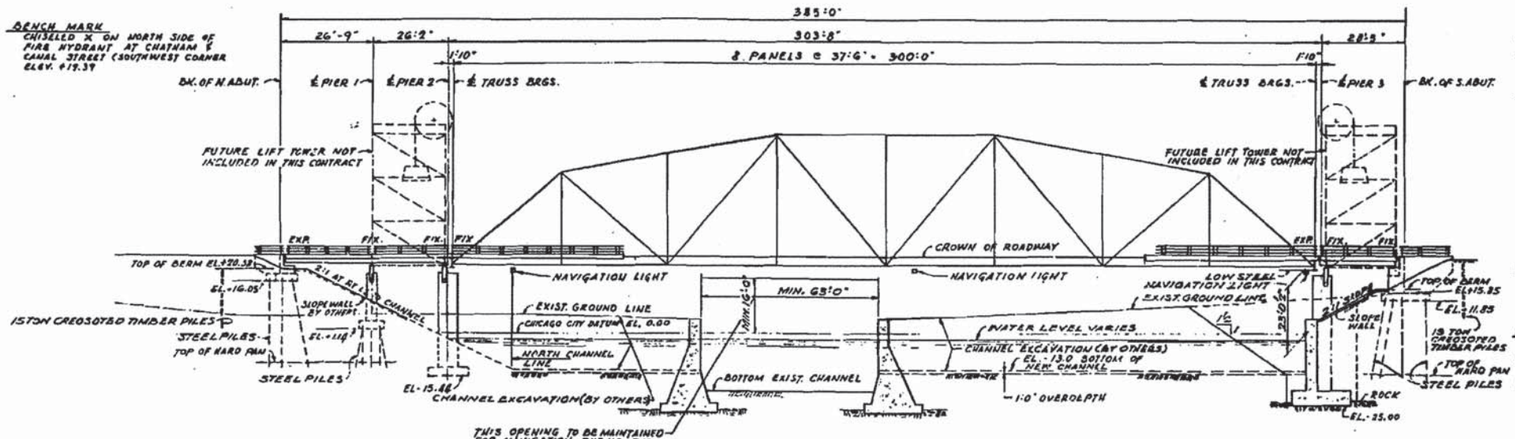
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	94
		CONTRACT NO. 61B58		
		ILLINOIS FED. AID PROJECT		

I:\CHI\PRJ\000003634\Struct\dgn\016-5005-067-EP.dgn

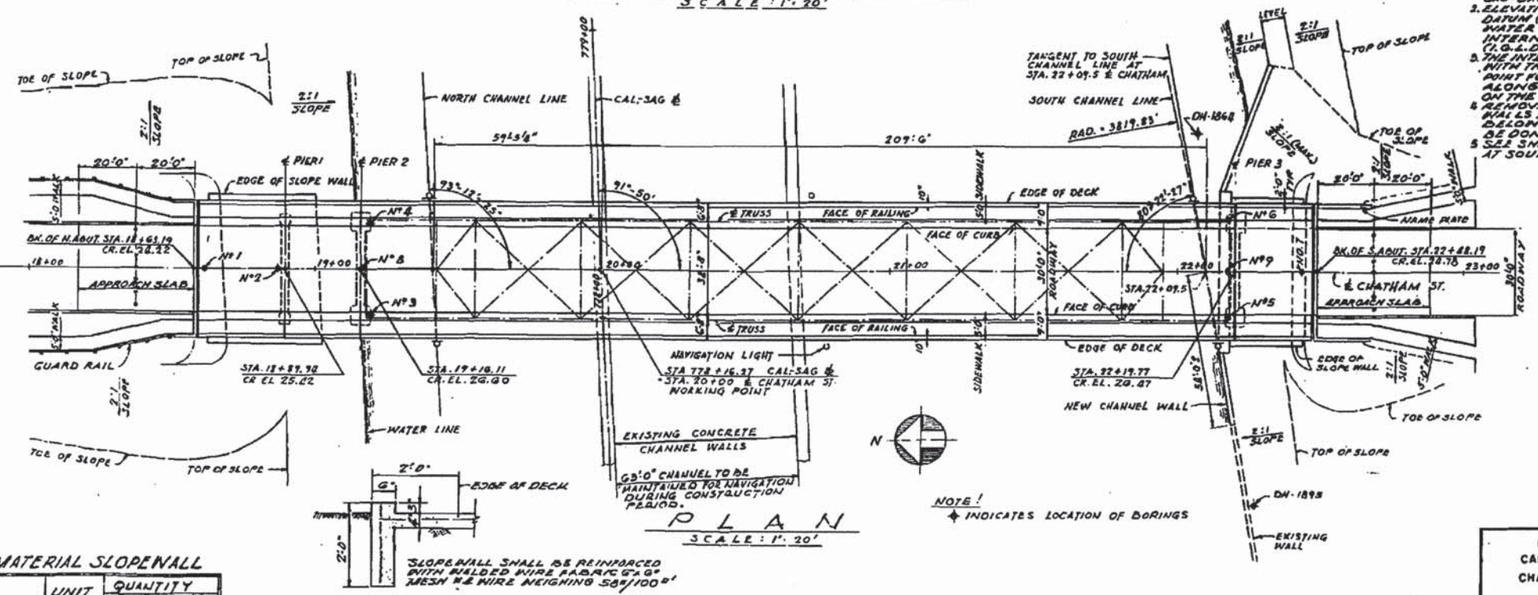
ROUTE NO.	DIRECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 269	EAST-BOUND WEST	COOK	50	11
STA.		TO STA.		
F.A.P. RTE. NO. 4	ILLINOIS	PROJECT		

SHEET 1 OF 28

BENCH MARK
CHISELLED X ON NORTH SIDE OF FIRE HYDRANT AT CHATHAM & CANAL STREET (SOUTHWEST CORNER)
ELEV. +19.39



ELEVATION
SCALE: 1" = 20'



PLAN
SCALE: 1" = 20'

BILL OF MATERIAL SLOPEWALL

ITEM	UNIT	QUANTITY SOUTH BANK
SLOPEWALL - 4"	SQ.YD.	175

DETAIL OF EDGE OF SLOPEWALL
NOTE: THE 2'0" x 6" EDGEWALL IS CONSIDERED 3.0 SQ.FT. OF 4" SLOPEWALL
SCALE: ½" = 1'0"

SLOPEWALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" - W4 x W4 MESH W.R. WIRE WEIGHING 58 #/100 S.F.

DESIGN DATA

DESIGN LOADS
LIVE LOAD - H 20-S 16-44
FUTURE DEAD LOAD - 1½" BIT. WEARING SURFACE

DESIGN STRESSES
CONCRETE
f'c = 3600 P.S.I.
fc = 1400 P.S.I.
fc = 1000 P.S.I. (WITH EARTH PRESSURE)
v = 75 P.S.I. (FOOTINGS)
REINFORCING STEEL
fs = 20,000 P.S.I.
STRUCTURAL STEEL
CARBON STEEL
fs = 20,000 P.S.I. (ASTM A-36)
LOW ALLOY STEEL
fs = 27,000 P.S.I. (¾" THICK & UNDER)
fs = 24,000 P.S.I. (¾" TO 1½" THICK)

FOUNDATION
ABUTMENTS & PIER 1 : 30 TON STEEL PILES
PIER 2 : FOOTING ON HARDPAN 12,000 P.S.F.
PIER 3 & CHANNEL WALL: FOOTING ON ROCK

EARTH PRESSURE
EQUIVALENT FLUID PRESSURE = 40 LBS. P.S.F.

DESIGN DESIGNATION
CHATHAM STREET 3125 ADT - M-30

DESIGN SPECIFICATIONS
DESIGN: A.A.S.H.O. SPECIFICATIONS FOR HIGHWAY BRIDGES, 1961 ED.
CONSTRUCTION & MATERIALS: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1962; AND SUPPLEMENTAL SPECIFICATIONS, 1965 OF THE STATE OF ILLINOIS.
WELDING: A.W.S. STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

NOTES:
1. STA. 20+00 CHATHAM ST. SURVEY = STA. 778+16.37 CAL-SAG ℄.
2. ELEVATIONS SHOWN REFER TO CHICAGO CITY DATUM (C.C.D.) WHICH IS 578.18 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT, QUEBEC, INTERNATIONAL GREAT LAKES DATUM (I.G.L.D.) (1955).
3. THE INTERSECTION OF THE ℄ OF CHATHAM STREET WITH THE CAL-SAG BASE LINE WILL BE THE WORKING POINT FOR THIS PROJECT. ALL STATIONINGS ALONG CHATHAM STREET SHALL BE BASED ON THE STATION EQUATION AT THIS POINT.
4. REMOVAL OF UPPER PORTION OF CHANNEL WALLS AND EXCAVATION OF CHANNEL BELOW AND ADJACENT TO ℄ RIDGE TO BE DONE BY OTHERS.
5. SEE SHEET 2G FOR DETAILS OF EXCAVATION AT SOUTH CHANNEL WALL.

ALFRED BENESCH & COMPANY
10 SOUTH WABASH AVE
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
CHATHAM STREET HIGHWAY BRIDGE

GENERAL PLAN AND ELEVATION

SCALE: AS NOTED DATE: 24 JUNE 1968

FILE NO. 1-5-10-01

FOR INFORMATION ONLY

I:\CH\PRJ\000003634\Structr\dgn\016-5005-068-EP.dgn

LOCHNER			
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-068-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 15 – CHATHAM STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO. S-68 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	95
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 259	2590404 VIVB	COOK	30	12
STA.		TO STA.		

SHEET 2 OF 28

INDEX OF SHEETS (BRIDGE)

SHEET NO.	TITLE
1	GENERAL PLAN AND ELEVATION
2	INDEX OF SHEETS, GENERAL NOTES AND SUMMARY OF QUANTITIES
3	LOG OF BORINGS
4	DECK REINFORCEMENT PLAN - SPANS 1, 2 AND 4
5	DECK REINFORCEMENT PLAN - SPAN 3
6	CONCRETE FILLERS
7	CROSS SECTION & DETAILS - SPANS 1, 2 AND 4
8	FRAMING PLAN AND BEARING DETAILS - SPANS 1, 2 AND 4
9	TRUSS ELEVATION & STRESS TABLE
10	FRAMING PLAN & TOP OF STRINGER ELEVATIONS - SPAN 3
11	CROSS SECTION - FLOOR BEAM AND STRINGER CONNECTION
12	MISCELLANEOUS TRUSS DETAILS
13	TRUSS DETAILS - L_0 - L_2
14	TRUSS DETAILS - L_2 - L_4
15	TRUSS BEARING DETAILS
16	EXPANSION DEVICE
17	HANDRAIL DETAILS
18	NAVIGATION LIGHTS
19	NAVIGATION LIGHT DETAILS
20	NORTH ABUTMENT
21	SOUTH ABUTMENT
22	PIER 1
23	PIER 2
24	PIER 3 & SOUTH CHANNEL WALL
25	PIER 3 & SOUTH CHANNEL WALL
26	EXCAVATION DETAILS
27	REINFORCEMENT BAR LISTS
28	TOP OF SLAB ELEVATIONS

GENERAL NOTES (BRIDGE)

CLASS X CONCRETE SHALL BE USED THROUGHOUT. CONCRETE FOR FLOOR SLABS TO BE PLACED IN ONE CONTINUOUS OPERATION BETWEEN CONSTRUCTION JOINTS SHOWN, AND SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS.

COARSE AGGREGATE TO BE USED IN WINGWALLS OF ABUTMENTS MUST BE ABSOLUTELY FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.

PERMANENT FORMS WILL NOT BE PERMITTED IN FORMING THE CONCRETE FLOOR.

ALL REINFORCEMENT BARS SHALL BE LAPPED 20 DIAMETERS UNLESS OTHERWISE SHOWN.

ALL STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A36 EXCEPT AS OTHERWISE SHOWN OR NOTED.

WELDING SHALL BE IN ACCORDANCE WITH CURRENT SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES OF THE AMERICAN WELDING SOCIETY AND AS NOTED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

ALL SHOP CONNECTIONS FOR STRUCTURAL STEEL SHALL BE 7/8" DIAMETER RIVETS IN 15/16" DIAMETER HOLES EXCEPT AS OTHERWISE SHOWN OR NOTED ON THE PLANS.

ALL FIELD CONNECTIONS SHALL BE 7/8" DIAMETER HIGH STRENGTH FRICTION TYPE BOLTS IN 15/16" DIAMETER HOLES EXCEPT AS OTHERWISE SHOWN OR NOTED.

HOLES FOR RIVETS OR BOLTS FOR ALL MAIN TRUSS CONNECTIONS, BOTH SHOP AND FIELD AND ALL FLOOR BEAM CONNECTIONS TO TRUSSES SHALL BE SUB-PUNCHED AND REAMED TO PROPER SIZE OR DRILLED FROM SOLID METAL WITH ALL MATERIAL ASSEMBLED IN THE SHOP IN ITS PROPER POSITION. LEAVE ASSEMBLED FOR INSPECTION.

ENDS OF FLOOR BEAMS SHALL BE MILLED TO EXACT LENGTH SHOWN ON DRAWINGS, AFTER CONNECTION ANGLES ARE RIVETED IN PLACE. THE MAXIMUM AMOUNT OF MILLING ON OUTSTANDING LEG OF CONNECTION ANGLES SHALL BE 1/8".

ALL CAST STEEL ROCKERS AND SHOES, BEARING PLATES, BRONZE PLATES, LEAD PLATES AND ANCHOR BOLT ASSEMBLIES SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 51.15 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN THE QUANTITY OF STRUCTURAL STEEL AND STRUCTURAL STEEL (LOW ALLOY). ESTIMATED WEIGHT: CAST STEEL 7,220 LBS.; BEARING PLATES, ANCHOR BOLT ASSEMBLIES, BRONZE PLATES AND LEAD PLATES 5,710 LBS.; BASE PLATES (LOW ALLOY) 2,190 LBS.

ROADWAY EXPANSION ANGLES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 51.13(d) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN THE QUANTITY OF STRUCTURAL STEEL. ESTIMATED WEIGHT: 4,160 LBS.

THE ROADWAY EXPANSION PLATES SHALL BE FABRICATED AND ERECTED TO FIT THE CROWN OF ROADWAY. THE EXPANSION GUARD SHALL BE ASSEMBLED IN THE SHOP IN THE PROPER POSITION WITH THE ADJACENT ENDS IN PLACE AND SHALL BE LEFT ASSEMBLED FOR SHOP INSPECTION. PLATES SHALL BE FLAME CUT AS PROVIDED IN ARTICLE 54.5(1) OF THE STANDARD SPECIFICATIONS. EXPANSION GUARDS ARE INCLUDED IN THE QUANTITY OF STRUCTURAL STEEL. ESTIMATED WEIGHT 9,090 LBS.

ANCHOR BOLTS SHALL BE SET BEFORE RIVETING DIAPHRAGMS OVER PIERS AND ABUTMENTS.

STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT EXCEPT AS OTHERWISE SPECIFIED. ALL PAINT TO BE FURNISHED AND APPLIED BY THE CONTRACTOR. SEE ARTICLES 56.1 TO 56.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.

THE EXPOSED SURFACES OF THE EXPANSION ANGLES AND PLATES, AND ALL INACCESSIBLE SURFACES, SHALL BE GIVEN TWO SHOP COATS OF RED LEAD PAINT; THE CONTACT SURFACES SHALL BE GIVEN ONE SHOP COAT OF RED LEAD PAINT. ANCHOR STUDS SHALL NOT BE PAINTED.

SHOP INSPECTION OF STRUCTURAL STEEL SHALL BE BY ILLINOIS DIVISION OF HIGHWAYS BEFORE PAINTING.

THE CONTRACTOR SHALL DRIVE STEEL TEST PILES IN PERMANENT LOCATIONS AT EACH ABUTMENT AND AT PIER 1, AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE STEEL PILES.

BILL OF MATERIAL (BRIDGE)

PAY ITEM	UNIT	TOTAL	SUB-STRUCTURE	SUPER-STRUCTURE
EARTH EXCAVATION	CU.YD.	8544	8544	
EMBANKMENT	CU.YD.	7956	7956	
POROUS GRANULAR EMBANKMENT	CU.YD.	1612	1616	
CLASS A EXCAVATION FOR STRUCTURES	CU.YD.	1,930	1,930	
CLASS B EXCAVATION FOR STRUCTURES	CU.YD.	2,979	2,979	
ROCK EXCAVATION FOR STRUCTURES	CU.YD.	205	205	
CLASS X CONCRETE	CU.YD.	1,738.1	1,228.8	509.3
PROTECTIVE COAT	SQ.YD.	2,123		2,123
FURNISHING AND ERECTING STRUCTURAL STEEL (CARBON)	POUND	478,760	3,400	475,340
FURNISHING AND ERECTING STRUCTURAL STEEL (LOW ALLOY)	POUND	479,750		479,750
FURNISHING AND ERECTING METAL HANDRAIL	LIN.FT.	816		816
REINFORCEMENT BARS	POUND	257,780	145,190	112,540
FURNISHING CREOSOTED PILES 20.1 TO 30 FEET	LIN.FT.	300	300	
DRIVING TIMBER PILES	LIN.FT.	300	300	
FURNISHING STEEL PILES 8BP36	LIN.FT.	1,207	1,207	
TEST PILE STEEL 8BP36	EACH	3	3	
DRIVING STEEL PILES	LIN.FT.	1,207	1,207	
NAME PLATES	EACH	1		1
PERFORATED CORRUGATED METAL PIPE 6"	LIN.FT.	180	180	
SLOPE WALL 4 INCH	SQ.YD.	175	175	
BRIDGE SEAT SEALANT	LUMP SUM	1	1	
NAVIGATION LIGHTING SYSTEM, COMPLETE	LUMP SUM	1		1

CHATHAM STREET BRIDGE
BUILT 19 BY
STATE OF ILLINOIS
C.H. ROUTE 259
SEC. 2590404-
LOADING H20-S16

SEE STATE OF ILLINOIS STD. 2113- "NAME PLATE DETAILS"

LETTERING FOR NAME PLATE

REVISED 12 AUG 1965

FILE No 9-01-G.1

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
CHATHAM STREET HIGHWAY BRIDGE

INDEX OF SHEETS, GENERAL NOTES AND SUMMARY OF QUANTITIES

SCALE: NONE DATE: 24 JUNE 1965

ALFRED BENESCH & COMPANY
10 SOUTH WABASH AVE
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

FOR INFORMATION ONLY

LOCHNER
H. W. LOCHNER, INC.
225 WEST WASHINGTON STREET
12 TH FLOOR
CHICAGO, ILLINOIS 60606

USER NAME =	DESIGNED -	REVISED
FILE NAME = 016-5005-069-EP.dgn	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 16 - CHATHAM STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. S-69 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	96

CONTRACT NO. 61B58

ILLINOIS FED. AID PROJECT

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
C.H.754	25(0404) W-VR	COOK	50	15
STA.		TO STA.		
F.A.P. SEC. NO.	ILLINOIS	PROJECT		

SHEET 3 OF 28

SOIL TEST BORINGS

BORING No. 1
2-11-60

GROUND ELEV. 13.9'±

N		
4		
3	WL 2'	30/T SANDY LOAM.
1		VERY LOOSE MEDIUM SAND.
43		DENSE GRAY CLAYEY SANDY SILT, TRACE SMALL GRAVEL AND BROKEN LIME-STONE FRAGMENTS.
64		
61		VERY DENSE GRAY CLAYEY SILT, SOME SMALL GRAVEL AND BROKEN LIME-STONE FRAGMENTS.
99/12		
99/3		

BORING No. 2
2-12-60

GROUND ELEV. 13.5'±

N		
3		SOFT SANDY LOAM
3	WL 2'	
5		LOOSE BROWN MEDIUM SAND.
47		DENSE GRAY CLAYEY SILT, TRACE MEDIUM SAND & SMALL GRAVEL
63		[REFUSAL ENCOUNTERED BORING 3 FEET NORTH]
99/12		VERY DENSE GRAY CLAYEY SANDY SILT, SOME SMALL GRAVEL AND BROKEN LIME-STONE FRAGMENTS.
99/3		

BORING No. 3
2-24-60

GROUND ELEV. 13.7'±

N		
3		SOFT BLACK SANDY LOAM.
6	WL 2'	
4		LOOSE BROWN MEDIUM SAND.
5		SOFT GRAY CLAYEY SILT.
74		VERY DENSE GRAY CLAYEY SILT, SOME SAND, SMALL AND BROKEN LIME-STONE
100/4		[REFUSAL RELOCATED BORING 3 FEET SOUTH]
100/1		VERY DENSE GRAY CLAYEY SILT, SOME SAND, SMALL TO LARGE GRAVEL.
100/1		ROCK OR BOULDER.

BORING No. 4
2-17-60

GROUND ELEV. 13.9'±

N		
4		SOFT BLACK SANDY LOAM.
5	WL 2'	
5		LOOSE BROWN MEDIUM SAND.
6		LOOSE GRAY SANDY SILT, TRACE ORGANIC MATTER.
52		DENSE GRAY CLAYEY SILT, TRACE SAND [REFUSAL, RELOCATED BORING 3 FEET SOUTH]
41		BOULDER.
57		DENSE GRAY SANDY CLAYEY SILT WITH SMALL-LARGE GRAVEL.
100		VERY DENSE (SAME AS ABOVE)

BORING No. 5
2-25-60

GROUND ELEV. +10.0'±

N		
		TOP SOIL.
5		LOOSE BROWN MEDIUM SILTY SAND, CLAY BINDER.
6		STIFF VARI-COLORED VERY SILTY CLAY, TRACE SAND.
6	WL 1'	
5		SOFT GRAY PEAT, SOME MARINE SHELLS.
3		
99		VERY DENSE GRAY CLAYEY SILT, SOME SAND AND PEBBLES.
99/10		
64		VERY DENSE GRAY SANDY CLAYEY SILT, SOME SMALL GRAVEL.
55		DENSE GRAY SANDY CLAYEY SILT WITH SMALL-LARGE GRAVEL.

BORING No. 6
2-19-60

GROUND ELEV. +10.4'±

N		
		TOP SOIL.
6		BLACK SANDY SILT.
5		STIFF VARI-COLORED VERY SILTY CLAY, TRACE SAND AND PEBBLES.
9		
7		BLACK PEAT.
2		SOFT GRAY PEAT, SOME MARINE SHELLS.
6	WL 1'	
5		VERY DENSE GRAY CLAYEY SILT, SOME SMALL GRAVEL AND BROKEN LIME-STONE FRAGMENTS.
64		VERY DENSE GRAY CLAYEY SILT.
46		DENSE GRAY CLAYEY SANDY SILT, SOME SMALL GRAVEL AND BROKEN LIME-STONE FRAGMENTS.

BORING No. 7
2-22-60

GROUND ELEV. +11.3'±

N		
6		SANDY TOP SOIL FILL.
5		
6		
4		SOFT BLACK SANDY SILT, SOME PEAT.
3		SOFT GRAY PEAT, SOME MARINE SHELLS.
64	WL 1'	
61		VERY DENSE GRAY CLAYEY SILT, SOME SAND, TRACE SMALL GRAVEL AND BROKEN LIME-STONE FRAGMENTS.
67		
72		

BORING DH-1864
10-8 and 9-58

GROUND EL. +9.2'±

N		
9		SANDY SILT
8		
12		CLAY
13		
15		CLAY, SILTY SAND
27		
37		
33		
27		CLAY, PEAT AND ORGANIC SILT [WATER LEVEL AT COMPLETION OF DRILLING EL. -2.8]
15		
15		[DRIVE BARREL REFUSED ON ROLLER ROCK BIT FROM 15.5' TO 38.4' (NO SAMPLES OBTAINED)]
4		
4		
63		SANDY CLAY WITH BOULDERS CASING SET TO 38.4'
63		

[BEGAN "NX" CORE BARREL AT EL. -26.0, RAN 5.3', REC. 5.3' DOLOMITE, WHITE TO GRAY, MASSIVE, CALCAREOUS, MODERATELY HARD, BEDDING FLAT, UNWEATHERED, SOLID, CONTAINING NO VOIDS, NON-SWELLING AND NON-SLAKING.

BORING DH-1895
6-1-59

GROUND EL. +11.0'±

	SANDY CLAY
	BOULDERS
	CANDY CLAY [WATER LEVEL AT COMPLETION OF DRILLING E.C. "NX" = 2.8']
	SANDY ORGANIC CLAY
	SANDY ORGANIC SILT 0
	ORGANIC SILT
	CLAY, SAND WITH GRAVEL, COBBLES & BOULDERS
	RAN ROLLER ROCK BIT FROM 15.6' TO 31.0' AND NO SAMPLES TAKEN -10
	SAND, SILT WITH GRAVEL COBBLES & BOULDERS
	BEGAN "NX" CORE BARREL AT EL. -21.17 C. RAN 10.0' REC. 8.9'
	-20
	DOLOMITE, GRAY-WHITE MOTTLED, MASSIVE, CALCAREOUS, MODERATELY HARD, DENSE, BEDDING FLAT, UNWEATHERED, SOLID, NON-SWELLING AND NON-SLAKING, EXCEPT TOP 1.7' IS THIN TO MED. BEDDED WITH FRACTURES SCATTERED AND OPEN.
	-30

BORING No. 8
4-22-60

GROUND ELEV. 13.4'±

N		
4		SOFT SANDY LOAM.
4	WL 1'	
5		LOOSE BROWN MEDIUM SAND.
3		
23		VERY STIFF GRAY CLAYEY SILT, SOME SMALL GRAVEL.
62		VERY HARD GRAY CLAYEY SILT, SOME SMALL GRAVEL.
63		VERY DENSE FINE-COARSE GRAY SILTY SAND, SOME SMALL GRAVEL.
61		
99/9		VERY HARD GRAY CLAYEY SILT, SOME SMALL TO MEDIUM GRAVEL, LIME-STONE FRAGMENTS.
77/3		[REFUSAL ROCK OR BOULDER.]

BORING No. 9
4-5-60

GROUND ELEV. +11.3'

N		
5		SANDY TOP SOIL FILL.
6		
5		
3		PEAT
28	WL	
3		SOFT BROWN SILT AND SHELLS.
30		HARD GRAY CLAYEY SILT, TRACE SAND AND SMALL GRAVEL, LIME-STONE FRAGMENTS.
65		
99		VERY HARD GRAY CLAYEY SILT.
99/11		
99/11		VERY HARD GRAY CLAYEY SILT, TRACE SAND AND SMALL GRAVEL, LIME STONE FRAGMENTS.
79/4		
79/6		

NOTES:

FIGURES IN COLUMNS MARKED 'N' INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE 2" O.D. SAMPLING PIPE ONE FOOT USING 140 LB. WEIGHT FALLING 30 INCHES. BORING DATA SHOWN ARE ONLY A GUIDE TO THE BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED IN THE WORK.

FIGURES NOTED THUS [A/B] "A" INDICATES AMOUNT OF ROCK CORED IN INCHES "B" INDICATES AMOUNT OF ROCK RECOVERED IN INCHES

WL 28 INDICATES WATER LEVEL 28 HOURS AFTER COMPLETION OF BORING.

UNCONFINED COMPRESSIVE TESTS WERE NOT MADE BECAUSE ALL CLAY SAMPLES TAKEN WERE TOO SILTY OR SANDY.

FOR LOCATION OF BORINGS SEE GENERAL PLAN SHT. 1 BORINGS NUMBERED 1 THRU 9 INCL. WERE DRILLED BY THE DATES SHOWN BY THE RAYMOND CONCRETE PILE CO., 111 W. MONROE STREET, CHICAGO 3, ILL., FOR THE ALFRED BENESCH & CO., CHICAGO 3, ILL.

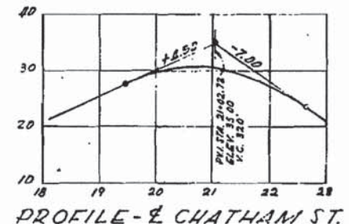
CLASSIFICATIONS WERE MADE BY VISUAL INSPECTION BY THE SHIFT FOREMAN.

REFUSAL, WHICH MAY BE DUE TO BOULDERS OR CONCRETE, WAS ENCOUNTERED IN BORINGS NUMBERED 2, 3 & 4 AND THE HOLES WERE RELOCATED, IN EACH CASE SAMPLES WERE NOT TAKEN FROM THE RELOCATED HOLES UNTIL THE DEPTH OF THE REFUSED BORING HAD BEEN REACHED.

BORINGS NUMBERED DH-1864 & DH-1895 WERE DRILLED ON THE DATES SHOWN BY THE CORPS OF ENGINEER'S PERSONNEL. FIGURES IN THE COLUMN MARKED "N" INDICATE THE NUMBER OF BLOWS REQUIRED TO ADVANCE THE DRIVE BARREL ONE FOOT, USING 370 POUND WEIGHT FALLING 1.7 FEET. UNDISTURBED SOIL SAMPLES (SHELBY TUBE SAMPLES) WERE TAKEN IN DH-1895 FROM 0' TO 13.6'.

NOTES:

ELEVATIONS SHOWN REFER TO CHICAGO CITY DATUM (C.C.D.) WHICH IS 578.18 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT, QUEBEC, INTERNATIONAL GREAT LAKES DATUM (I.G.L.D.) (1935).



PROFILE - E CHATHAM ST.

SCALE: VERT. 1"=10' HORIZ. 1"=100'

FILE NO. 9-B1-G.1

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
CHATHAM STREET HIGHWAY BRIDGE

LOG OF BORINGS

ALFRED BENESCH & COMPANY CONSULTING ENGINEERS
10 SOUTH WABASH AVE CHICAGO, ILLINOIS

SCALE: AS NOTED DATE: 24 JUNE 1965

FOR INFORMATION ONLY

[N:\CH\PROJ\000003634\Structure\dgn\016-5005-070-EP.dgn]

LOCHNER	USER NAME =	DESIGNED -	REVISED
H. W. LOCHNER, INC.	FILE NAME = 016-5005-070-EP.dgn	CHECKED -	REVISED
225 WEST WASHINGTON STREET	PLOT SCALE =	DRAWN -	REVISED
12 TH FLOOR	PLOT DATE =	CHECKED -	REVISED
CHICAGO, ILLINOIS 60606			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

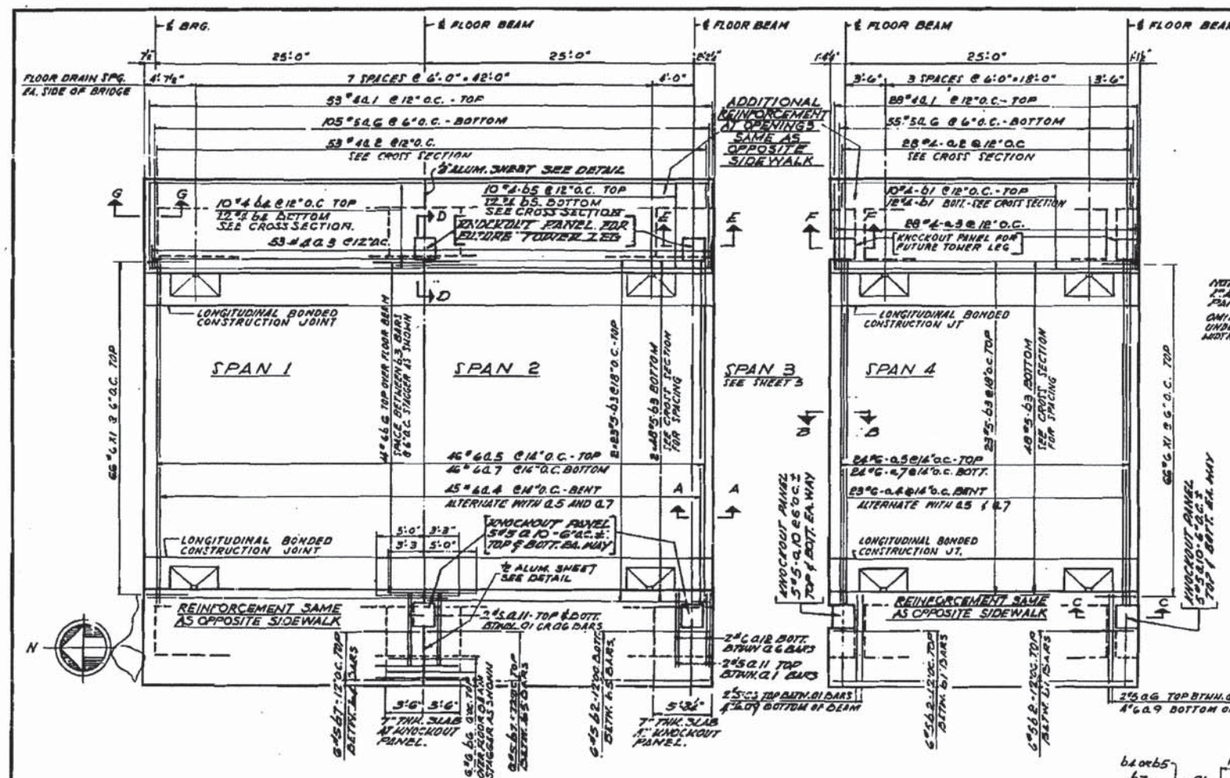
EXISTING PLAN 17 – CHATHAM STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO.S-70 OF 95 SHEETS

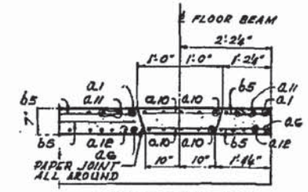
MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	97
		CONTRACT NO. 61B58		
	ILLINOIS FED. AID PROJECT			

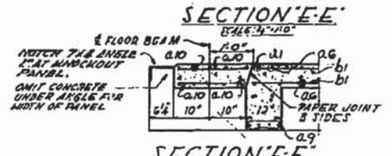
COUNTY NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Cd 299	14-00164-00-BR (1 YR.)	COOK	90	15
STA.		TO STA.		
S.F.A. ROUTE NO. 2	ILLINOIS	PROJECT		

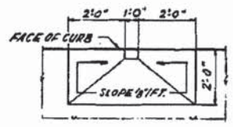
SHEET 4 OF 2.8

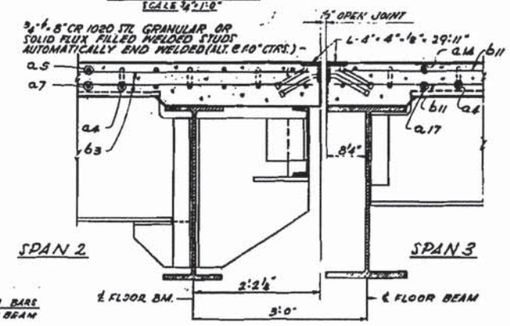
NOTES
BARS INTERFERING WITH KNOCKOUT PANELS TO BE CUT IN FIELD
BARS INDICATED THUS 2-23"@ ETC. INDICATES 2 LENGTHS OF BARS PER LINE WITH 23 LINES OF BARS
FOR SPAN 3 SEE SHEET 5
FOR REINFORCEMENT BAR LIST SEE SHEET 27
FOR SECTION B-B SEE SHEET 16

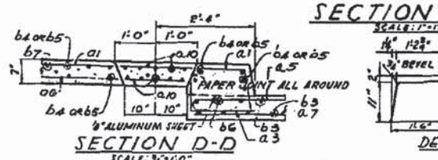


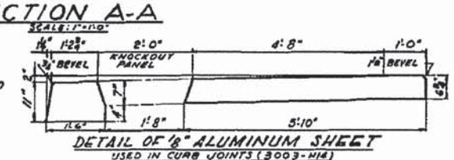


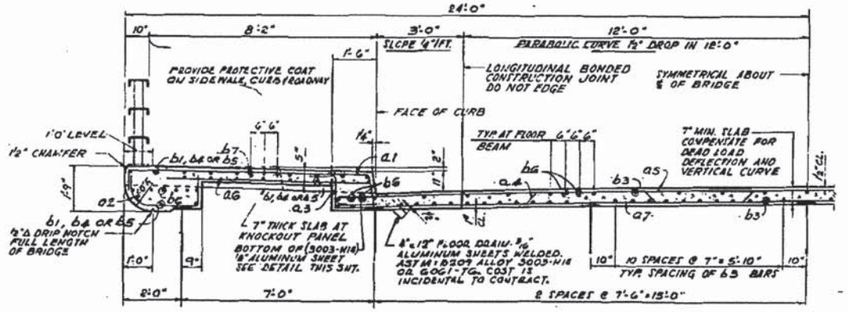


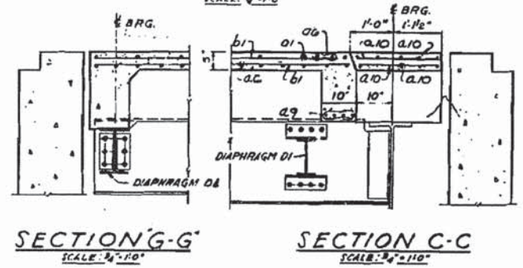












BILL OF MATERIAL

ITEM	UNIT	QUANTITY SPANS 1 & 2	QUANTITY SPAN 4
CLASS X CONCRETE	CU. YD.	71.1	37.7
REINFORCEMENT BARS	LBS.	17,010	8,860
PROTECTIVE COAT	SQ. YD.	295	185

FILE NO. 4-D1-Q1

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
CHATHAM STREET HIGHWAY BRIDGE
DECK REINFORCEMENT PLAN SPANS 1, 2 AND 4

SCALE: AS NOTED DATE: 24 JUNE 1965

ALFRED BENESCH & COMPANY CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

FOR INFORMATION ONLY

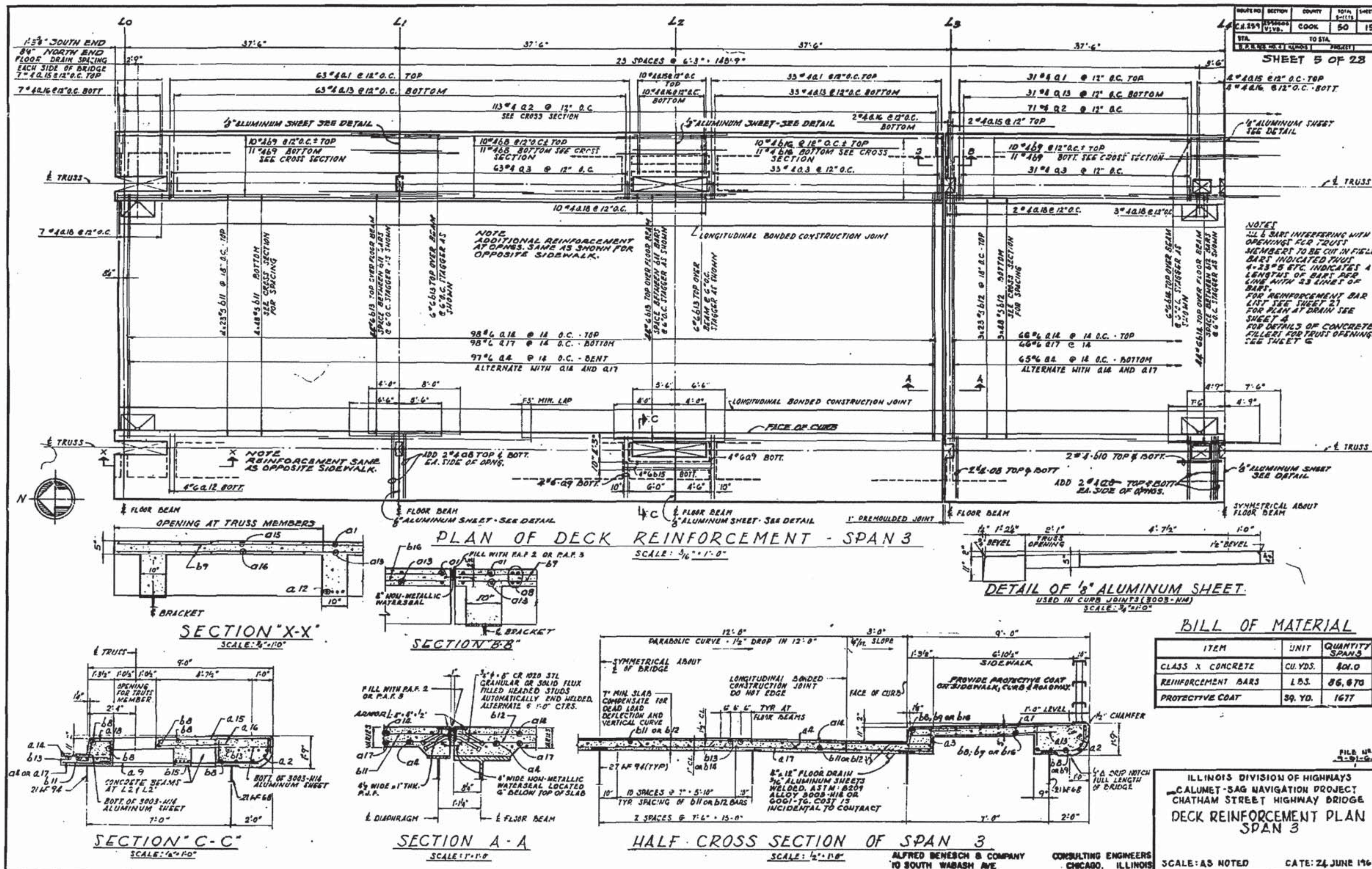
I:\CHI\PROJ\000020634\Struct\dgn\816-5005-071-EP.dgn

LOCHNER	USER NAME =	DESIGNED -	REVISED
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	FILE NAME = 816-5005-071-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 18 – CHATHAM STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. S-71 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	98
		CONTRACT NO. 61B58		
	ILLINOIS	FED. AID PROJECT		



BILL OF MATERIAL

ITEM	UNIT	QUANTITY SPAN 3
CLASS X CONCRETE	CU. YDS.	401.0
REINFORCEMENT BARS	LBS.	86,670
PROTECTIVE COAT	SQ. YD.	1677

ILLINOIS DIVISION OF HIGHWAYS
CALUMET-SAG NAVIGATION PROJECT
CHATHAM STREET HIGHWAY BRIDGE

DECK REINFORCEMENT PLAN SPAN 3

SCALE: AS NOTED DATE: 24 JUNE 1963

FOR INFORMATION ONLY

LOCHNER H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	USER NAME =	DESIGNED -	REVISED
	FILE NAME = 016-5005-072-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

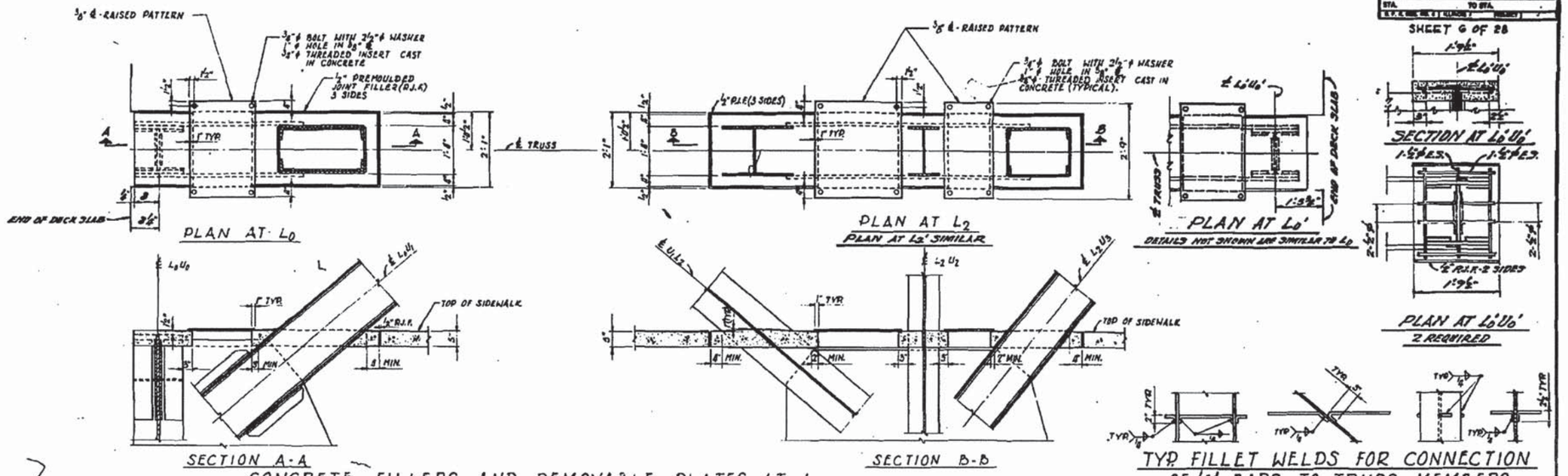
EXISTING PLAN 19 - CHATHAM STREET BRIDGE
STRUCTURE NO. 016-5005
SHEET NO. S-72 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	99

CONTRACT NO. 61B58
ILLINOIS FED. AID PROJECT

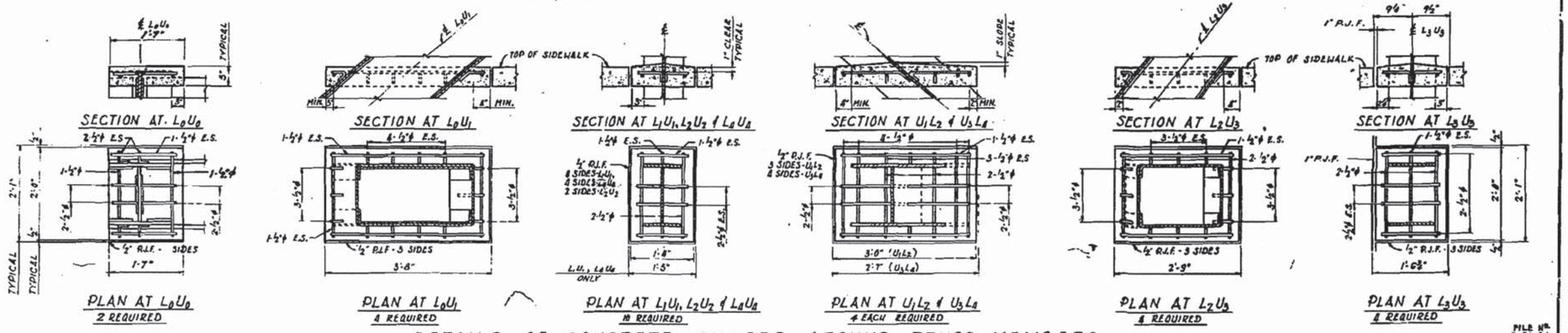
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 259	BY LOCAL AUTH.	COOK	50	16
STA.		TO STA.		

SHEET 6 OF 28



CONCRETE FILLERS AND REMOVABLE PLATES AT L0

SCALE: ¾"=1'-0"



DETAILS OF CONCRETE FILLERS AROUND TRUSS MEMBERS

FILLERS AT L3' TO L1' SIMILAR

REQUIRED NUMBER OF FILLERS SHOWN INCLUDES ALL FILLERS FROM L0 TO L0' INCLUSIVE

SCALE: 1"=1'-6"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
*STRUCTURAL STEEL	LBS	1320

*½"ϕ BARS IN CONCRETE FILLERS & ½" FLOOR B'S.

Notes!
FOR LOCATION OF CONCRETE FILLERS SEE SHEET 5.
PLACE ½" PREMOULDED JOINT FILLER (P.J.F.) BETWEEN SIDEWALK CONCRETE & CONCRETE FILLERS.

ALFRED BENESCH & COMPANY
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

ILLINOIS DIVISION OF HIGHWAYS
CALUMET - SAG NAVIGATION PROJECT
CHATHAM STREET HIGHWAY BRIDGE
CONCRETE FILLERS

SCALE: AS NOTED DATE: 24 JUNE 1968

FILE NO. 5-B1-61

FOR INFORMATION ONLY

I:\CH\PRJ\020202363A\Struct\dgn\016-5005-073-EP.dgn

LOCHNER	USER NAME =	DESIGNED -	REVISED
H. W. LOCHNER, INC. 225 WEST WASHINGTON STREET 12 TH FLOOR CHICAGO, ILLINOIS 60606	FILE NAME = 016-5005-073-EP.dgn	CHECKED -	REVISED
	PLOT SCALE =	DRAWN -	REVISED
	PLOT DATE =	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN 20 – CHATHAM STREET BRIDGE
STRUCTURE NO. 016–5005
SHEET NO.S-73 OF 95 SHEETS

MS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090	14-00164-00-BR	COOK	122	100
		CONTRACT NO. 61B58		
ILLINOIS	FED. AID PROJECT			