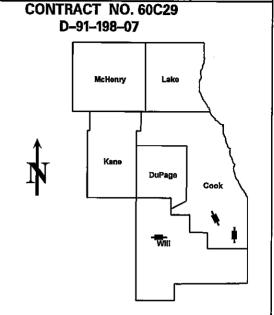
NI\PROJ\3329\3329\_40\Design\Structural\CAD\General\Sht\3329\_40\_01

			TOTAL	SHEET
ROUTE	SECTION	COUNTY	SHEETS	NUMBER
VARIOUS	2007-011 I	WILL & COOK	41	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE
PROPOSED HIGHWAY PLANS
VARIOUS ROUTES
VARIOUS BRIDGES
(OVER NAVIGABLE WATERWAYS)
SECTION: 2007-011 I
WILL AND COOK COUNTIES

BRIDGE FENDER REPAIR C-91-198-07



LOCATION OF IMPROVEMENT INDICATED THUS:

FOR INDEX OF SHEETS SEE SHEET 5



**CONTRACT NO: 60C29** 

IMPROVEMENT LOCATED IN
JOLIET, WORTH AND THORNTON TOWNSHIPS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED:

APRIL 17, 2008

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

20

ENGINEER OF DESIGN AND ENVIRONMENT

20

DIRECTOR, DIVISION OF HIGHWAYS

# PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

from date: 4/19/2001, rev 4/2/2008

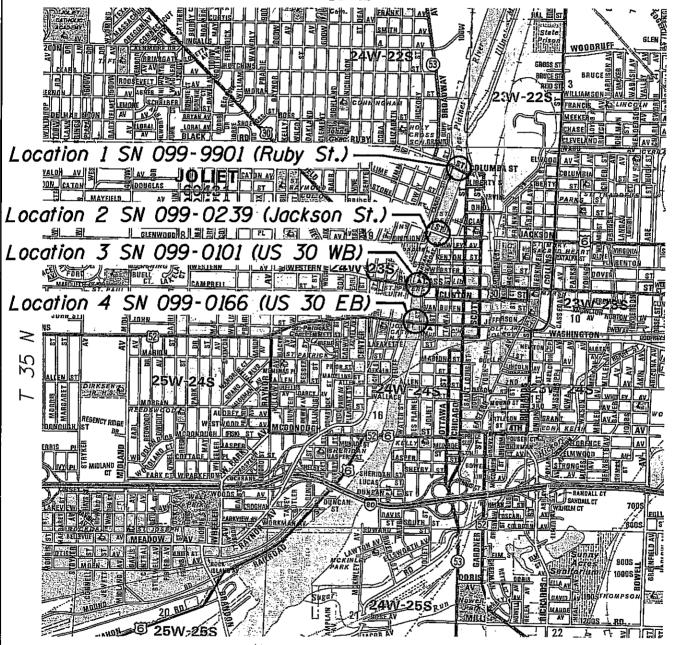
s:\gen\confracts-maintenance\wp\xiliplans\cover-2008.doc

IMPROVEMENTS ARE LOCATED IN THE CITY OF JOLIET

ROUTE NO.	SECTION		COUNTY		TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 !		WILL/COOK		41	2
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID P	ROJECT-	



R 10 E



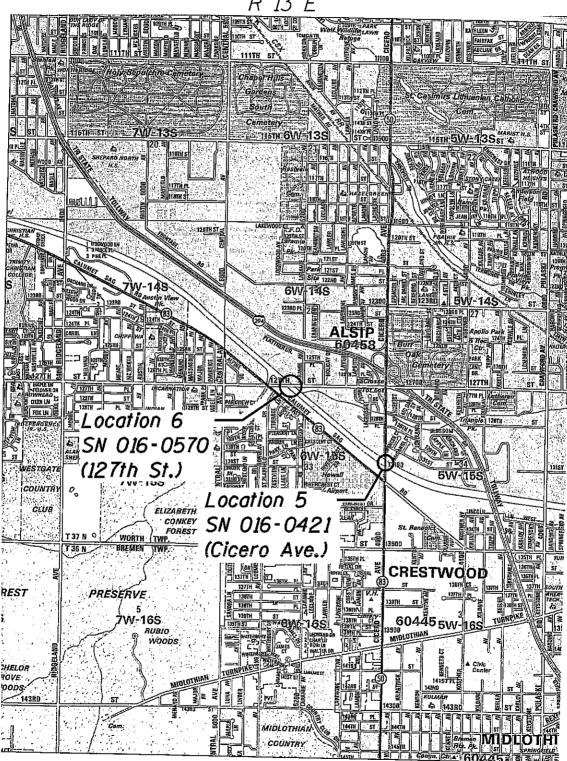
JOLIET TOWNSHIP

**LOCATION MAP 1** 

IMPROVEMENTS ARE LOCATED IN THE VILLAGE OF ALSIP

ROUTE NO.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 I		WILL/COOK		41	3
FED. ROAD DIST, N	ILLINOIS		FED. AID PI	ROJECT-		

R 13 E

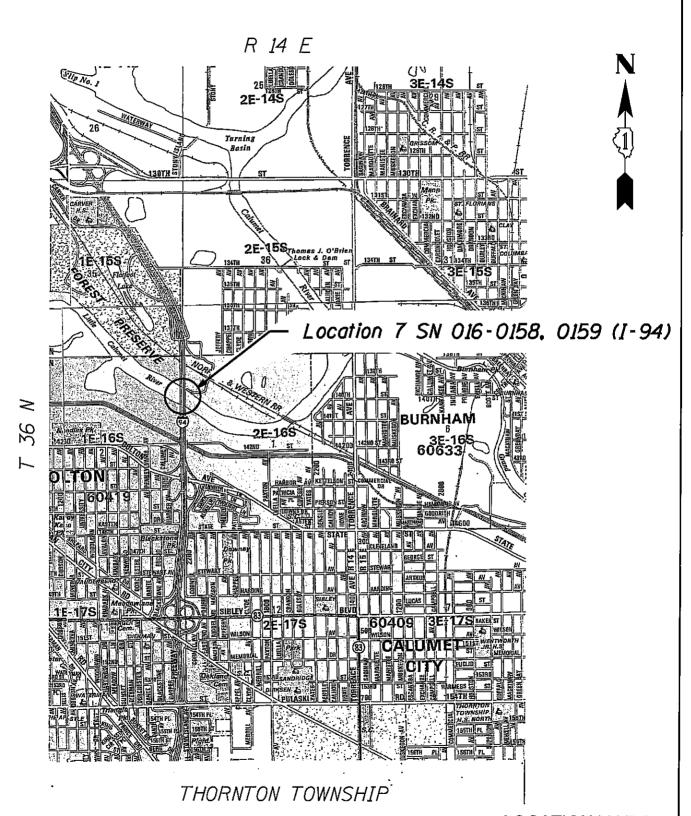


WORTH TOWNSHIP

**LOCATION MAP 2** 

IMPROVEMENTS ARE LOCATED IN CALUMET CITY

ROUTE NO.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 !			VILL/COOK	41	4
FED. ROAD DIST. N	ILLINOIS		FED, AID P	ROJECT-		



CONTRACT NO. 60C29

**LOCATION MAP 3** 

ROUTE NO.	SECTION		COUNTY		TOTAL SHEETS	SHEET NO.
VARIOUS	2007	2007-011 !		VILL/COOK	41	5
FED. ROAD DIST. N	ILLINOIS		FED. AID PI	ROJECT-		

# **INDEX OF SHEETS**

- 1 COVER SHEET
- 2 LOCATION MAP 1
- 3 LOCATION MAP 2
- 4 LOCATION MAP 3
- **5 INDEX OF SHEETS**
- **6 SUMMARY OF QUANTITIES**
- 7 SCHEDULE OF REPAIRS
- **8 GENERAL NOTES**
- 9-14 RUBY ST. OVER DES PLAINES RIVER; S.N.: 099-9901 LOC. 1
- 15-19 JACKSON ST. OVER DES PLAINES RIVER; S.N.: 099-0239 LOC. 2
- 20-26 CASS ST. OVER DES PLAINES RIVER; S.N.: 099-0101 LOC.3
- 27-30 JEFFERSON ST. OVER DES PLAINES RIVER; S.N.: 099-0166 LOC. 4
- 31-34 IL 50 (CICERO AVE.); S.N.: 016-0421 LOC. 5
- 35-37 127TH ST.; S.N.: 016-0570 LOC. 6
- 38-41 I-94; S.N.: 016-0158, 0159 LOC. 7

ROUTE NO.	SEC	TION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007	'-011 i	WILL / COOK	41	6
FED. ROAD DIST. NO.1 ILLINOIS		FED. AID PRO	IECT		

#### **SUMMARY OF QUANTITIES**

#### **CONSTRUCTION TYPE CODE SFTY-2A**

					WILL C	OUNTY	·	C	COOK COUNT	Υ
CODE NO.	IT,EM	UNIT .	URBAN 100% STATE TOTAL	LOCATION 1 S.N. 099-9901	LOCATION 2 S.N. 099-0239	LOCATION 3 S.N. 099-0101	LOCATION 4 S.N. 099-0166			LOCATION 7 S.N. 016-0158, 0159
50700105	TREATED TIMBER	F.B.M.	9811	3144	1505		417	2729		2016
67000400	ENGINEER FIELD OFFICE, TYPE A	CAL MO	2	0,3	0.3	0.3	0.3	0,3	0.2	0,3
67100100	MOBILIZATION	L Sum	1	0,14	0.14	0.14	0.15	0.14	0.14	0.15
X0326098	RUBBER ABSORBERS (LOC. 3)	EACH	5			5				
X0326099	RUBBER ABSORBERS (LOC. 6)	EACH	2			"			2	
X0326162	UNDERWATER INSTALLATION OF TREATED TIMBER	FBM.	3108	,				1092		2016

XXOOG486 TREATED GLUE FBM. 1680 LAMINATED TIMBER

1680

	ROUTE NO.	SECTION	1	COUNTY	TOTAL SHEETS	SHEET NO.
•	VARIOUS	2007-011	1 V	ILL / COOK	41	7
	FED. ROAD			FED, AID F		l
·			•			
SCHEDULE OF REPAIRS						
LOCATION 1 S.N. 099-9901			wid	th thickness	length	
RUBY STREET			(ft	) (in)	(ft)	(FBM)
9 - 12 x 12 TREATED OAK TIMBER		0" LONG	1	12	180.00	2160.0
3 - 12 x 12 TREATED OAK TIMBER 7 - 12 x 12 TREATED OAK TIMBER		0" LONG	1	12 12	12.00	144.0
141 - 1" DIA. 2'-1 1/2" LONG THREADED RODS	10 -	0" LONG	,	12	70.00	840.0
141 - 1 BIALE-1 IIZ EGNO TIMENDED NOBO		_			Total FBM	3144
LOCATION 2 S.N. 099-0239						
JACKSON STREET						
	10'	0" LONG	4	19	114.00	4280 A
6 - 12 x 12 TREATED OAK TIMBER 2 - 12 x 12 TREATED OAK TIMBER		6" LONG	1	12 12	114.00 9.00	1368.0 108.0
1 - 12 x 12 TREATED OAK TIMBER		4 1/8 " LONG	i	12	2.34	28.1
	_	20110	•	'-	Total FBM	1505
LOCATION 3 S.N. 099-0101						
CASS STREET						
14 - 9 1/4" x 11 1/2" LAMINATED OAK TIMBER	12' -	0" LONG	1	10	168.00	1680.0
98 - 3/4" DIA. 2'-0" LONG THREADED RODS						
5 - 12 x 12 RUBBER ABSORBERS "D" BORE	* -	0" LONG				
125 - 1" DIA. THREADED STUDS WWASHERS A	ND NO 19				Total FBM	1680
LOCATION 4 S N 000 04SS					TOTAL FEIN	1000
LOCATION 4 S.N. 099-0166						
JEFFERSON STREET  2 - 12 x 12 TREATED OAK TIMBER	AI	6" LONG	4	40	0.00	400.0
2 - 12 x 12 TREATED OAK TIMBER 2 - 12 x 12 TREATED OAK TIMBER		6" LONG	1	12 12	9.00 7.00	108.0 84.0
8 - 12 x 12 TREATED OAK TIMBER	-	4 1/8 " LONG	1	12	18.75	225.0
• • • • • • • • • • • • • • • • • • • •			•	,_	Total FBM	417
LOCATION 5 S.N. 016-0421		•			J	****
IL 50 (CICERO AVE.)						
11 - 6 x 12 TREATED OAK TIMBER	6' -	6" LONG	1	6	71.50	429.0
4 - 6 x 12 TREATED OAK TIMBER	6' -	11" LONG	1	6	27.67	166.0
10 - 6 x 12 TREATED OAK TIMBER		0" LONG	1	6	70.00	420.0
10 - 6 x 12 TREATED OAK TIMBER		9" LONG	1	6	87.50	525.0
8 - 6 x 12 TREATED OAK TIMBER		4" LONG	1	6	114.67	688.0
4 - 6 x 12 TREATED OAK TIMBER 2 - 10 x 10 TREATED OAK TIMBER		0" LONG 0" LONG	7 0.8:	6 3 10	64.00 14.00	384.0 116.7
96 - 3/4" DIA. DOME HEAD CARRIAGE BOLTS V	•				14.00	1 10.7
				]	Total FBM	2729
LOCATION 6 S.N. 016-0570				•		
127 TH STREET						
2 - 12 x 12 RUBBER ABSORBERS	6' -	0" LONG				
5 - 1/2" DIA. WIRE ROPE WITH SLINGS		0" LONG				Į
1 - 3/4 DIA, STEEL CHAIN	14" -	0" LONG				
8 COUPLING LINKS GRADE 80 ALLOY STEEL						1
LOCATION 7 S.N. 016-0158, 0159						
1-94						
21 - 6 x 12 TREATED OAK TIMBER	16' -	0" LONG	1	6	336.00	2016.0
21 "ON 12 THE HED ONK CHIDEN	10 -		J		Total FBM	2016.0
				ı		
	<del></del>	<del></del>			<del></del>	

### **GENERAL NOTES**

- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM FIELD BRIDGE MAINTENANCE ENGINEERS.
- 2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE 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.
- 3. THE REPAIRS SHALL INCLUDE BUT NOT BE LIMITED TO AREAS SHOWN. THE ACTUAL AREAS TO BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 4. REMOVAL OF EXISTING TIMBERS AND HARWARE SHALL BE INCLUDED IN THE COST OF TREATED TIMBER.
- 5. REUSE EXISTING FASTENERS IF IN GOOD CONDITION. NEW FASTENERS SHALL BE AASHTO M164

  TYPE 1, MECHANICALLY GALVANIZED. COST OF NEW FASTENERS IS INCLUDED IN THE PAY ITEM "TREATED
  TIMBER", "TREATED GLUE LAMINATED TIMBER" OR RUBBER ABSORBERS".
- ALL STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M111, EXCEPT HIGH STRENGTH BOLTS SHALL BE MECHANICALLY GALVANIZED.
- 7. ALL TIMBERS, INCLUDING LAMINATED TIMBERS, SHALL BE WHITE OAK OR RED OAK WITH FB = 1,600 PSI (MIN.) AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT BOARD MEASURE.
- 8. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT...
- 9. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 10. THE CONTRACTOR SHALL OBTAIN COAST GUARD APROVAL TO OCCUPY NAVIGABLE WATERS, IF REQUIRED, FOR THE PROPOSED WORK. A WORK PLAN SHALL BE PREPARED BY THE CONTRACTOR, REVIEWED AND APPROVED BY THE ENGINEER AND BE SUBMITTED BY THE ENGINEER TO THE COAST GUARD AT THE ADDRESS LISTED BELOW FOR APPROVAL.
- II. EPOXY GROLITING TO BE OONE IN ACCORDANCE WITH ARTICLE 584 OF Locations down stream (South) of 16th St. Bridge in Lockport, IL: THE STANDARD SPECIFICATIONS.

BRIDGE ADMINISTRATOR US COAST GUARD EIGHTH COAST GUARD DISTRICT 1222 SPRUCE ST. ST. LOUIS, MO 63103-2832

Location upstream (North) of 16th St. Bridge in Lockport, IL:

BRIDGE ADMINISTRATOR
US COAST GUARD DISTRICT
1240 E. NINTH ST. "
CLEVELAND, OH 44199-2060

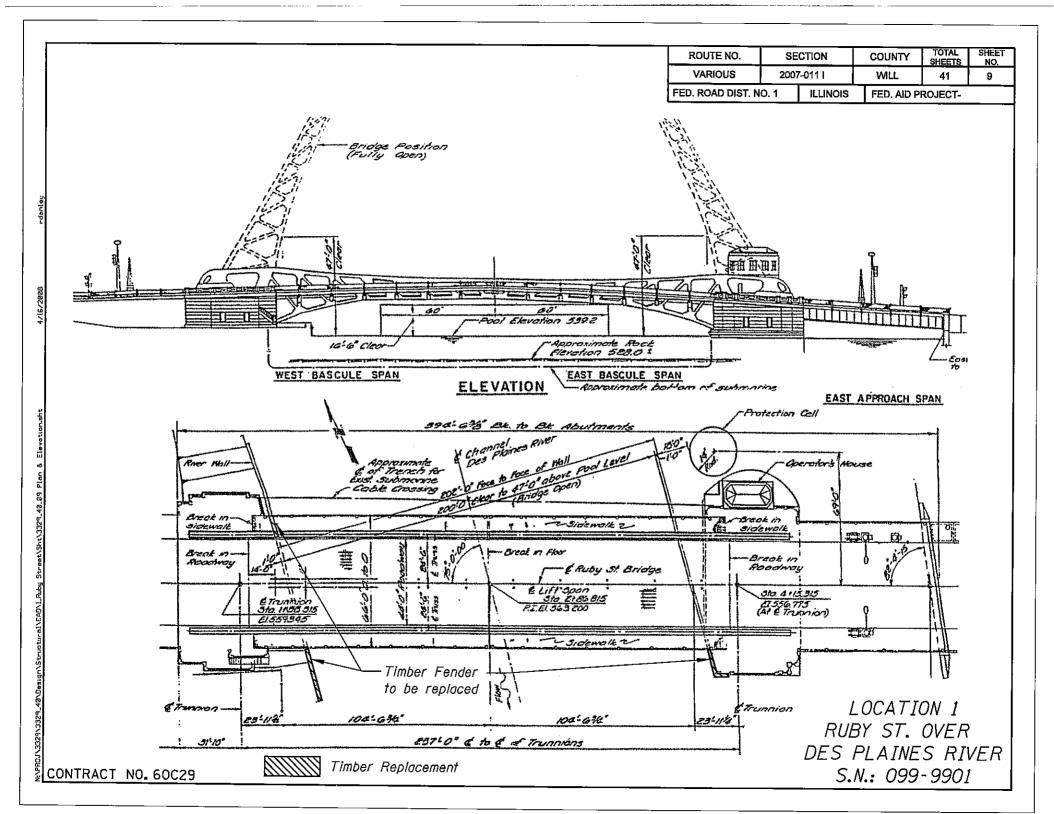
CONTRACT NO. 60C29

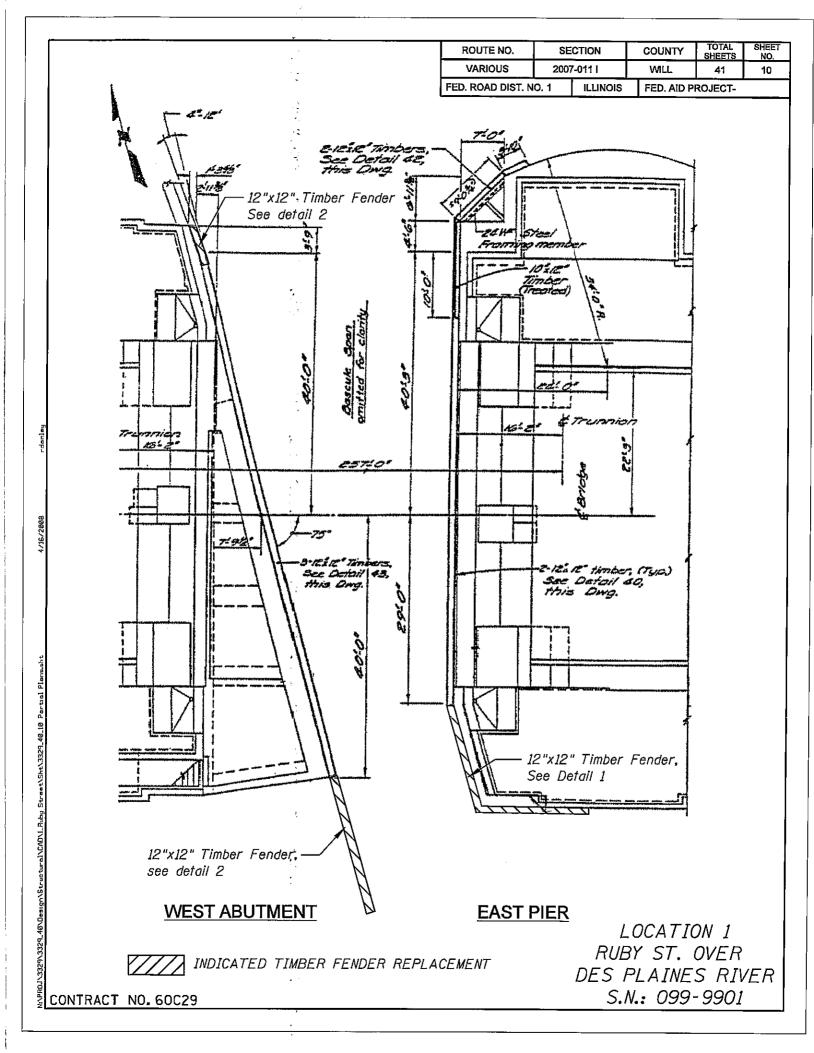
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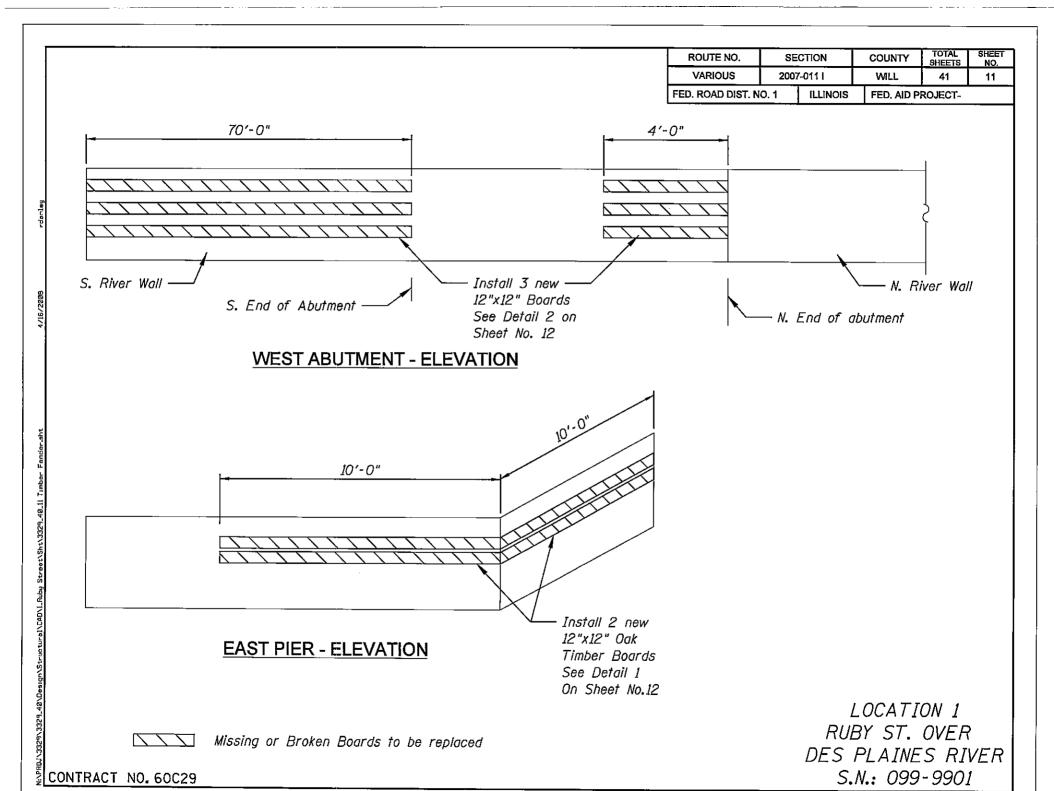
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Control (Sept. 2709 48 68 Control (Sept. 4)

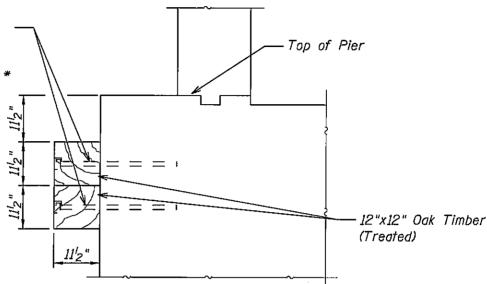






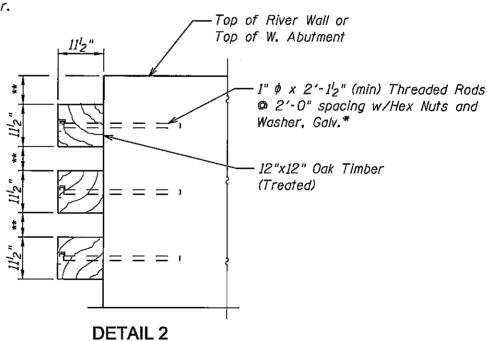
ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 I		WILL	41	12
FED, ROAD DIST, NO. 1		ILLINOIS	FED. AID P	ROJECT-	

 $1" \phi \times 2' - 1^{l}_{2}"$  (min)
Threaded Rod @ 2' - 0" cc w/Hex
Nufs Washer, Galv. \*



\* Rods to be epoxy grouted 15" (min) into 1'4" \$\phi\$ holes in sound concrete. Existing anchors to be cut flush with face of wall. Cost shall be included wit Treated Timber.

#### DETAIL 1 (East Pier)



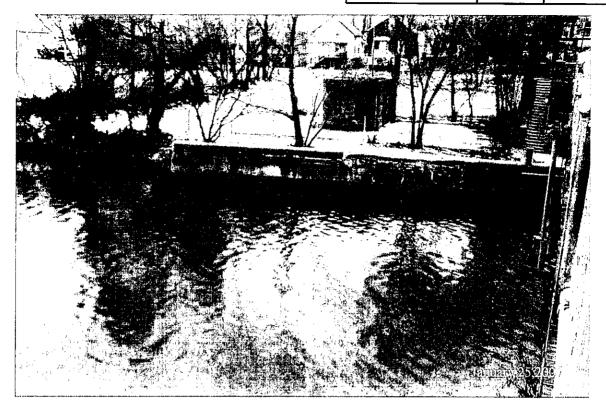
(West Abutment)

\*\* Match existing dimensions

LOCATION 1
RUBY ST. OVER
DES PLAINES RIVER
S.N.: 099-9901

E/2009

N:\PR0J\3329\3329\_40\Design\Structural\CAD\1\_Ruby Street\Sht\3329\_40\_12 Details.sht



Damaged and missing timbers at South sea wall of west abutment

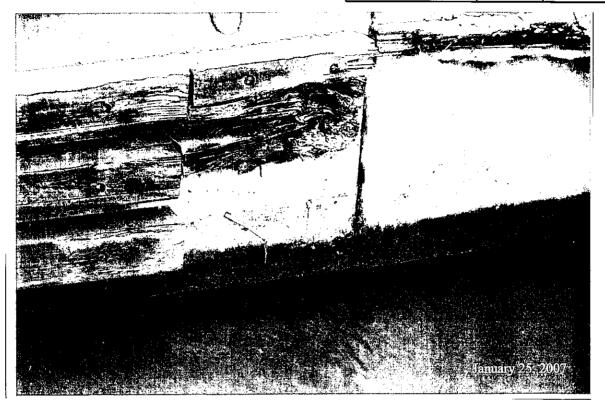


Damaged and missing timbers at North sea wall of west abutment

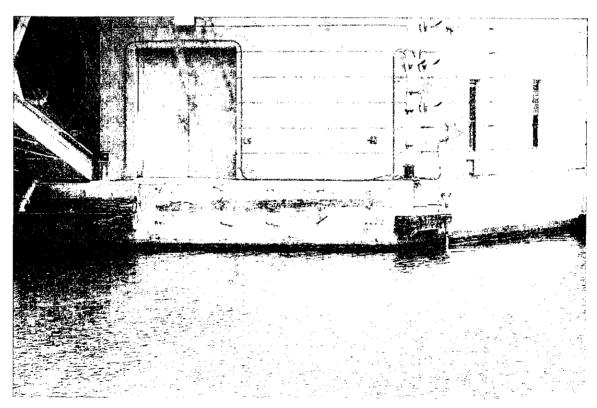
TOCATION 1
RUBY ST. OVER
DES PLAINES RIVER
S.N.: 099-9901

2008

ROUTE NO.	SE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 I			WILL	41	14
EED BOAD DIST NO 1		ILLINOIS		EED AID D	DO IDOT	

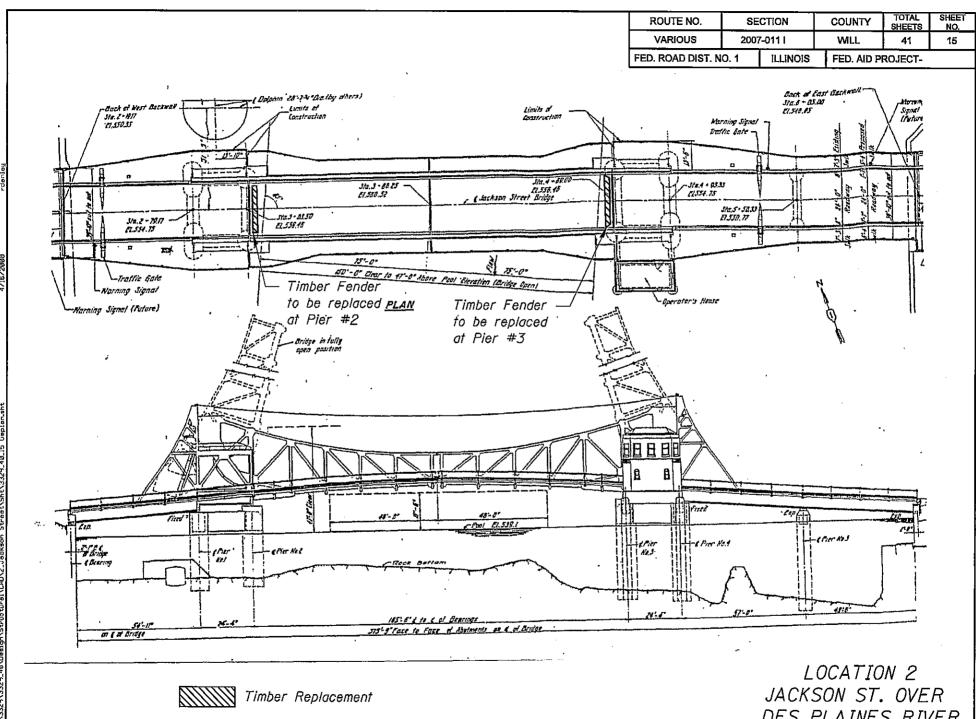


Damaged and missing timbers at nouth corner of west abutment



Missing timbers at the south east corner of east abutment (tender's house)

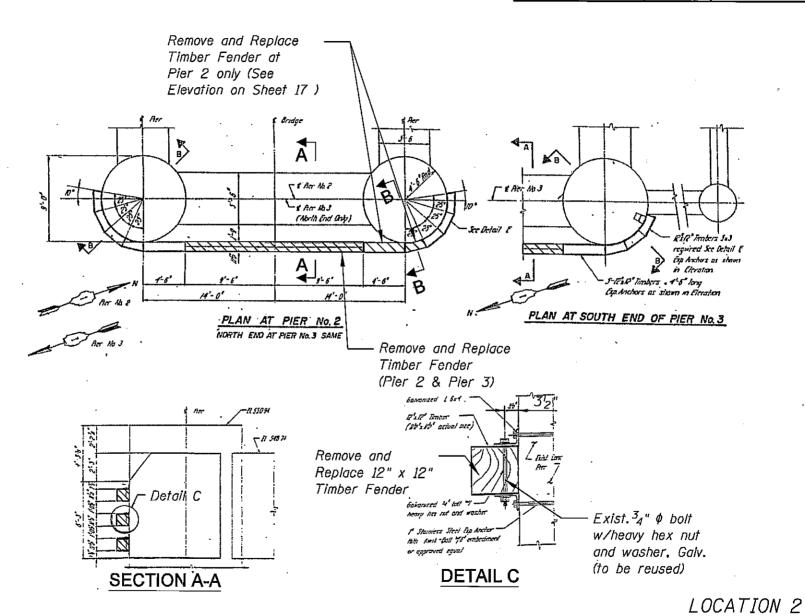
LOCATION 1
RUBY ST. OVER
DES PLAINES RIVER
S.N.: 099-9901



CONTRACT NO. 60C29

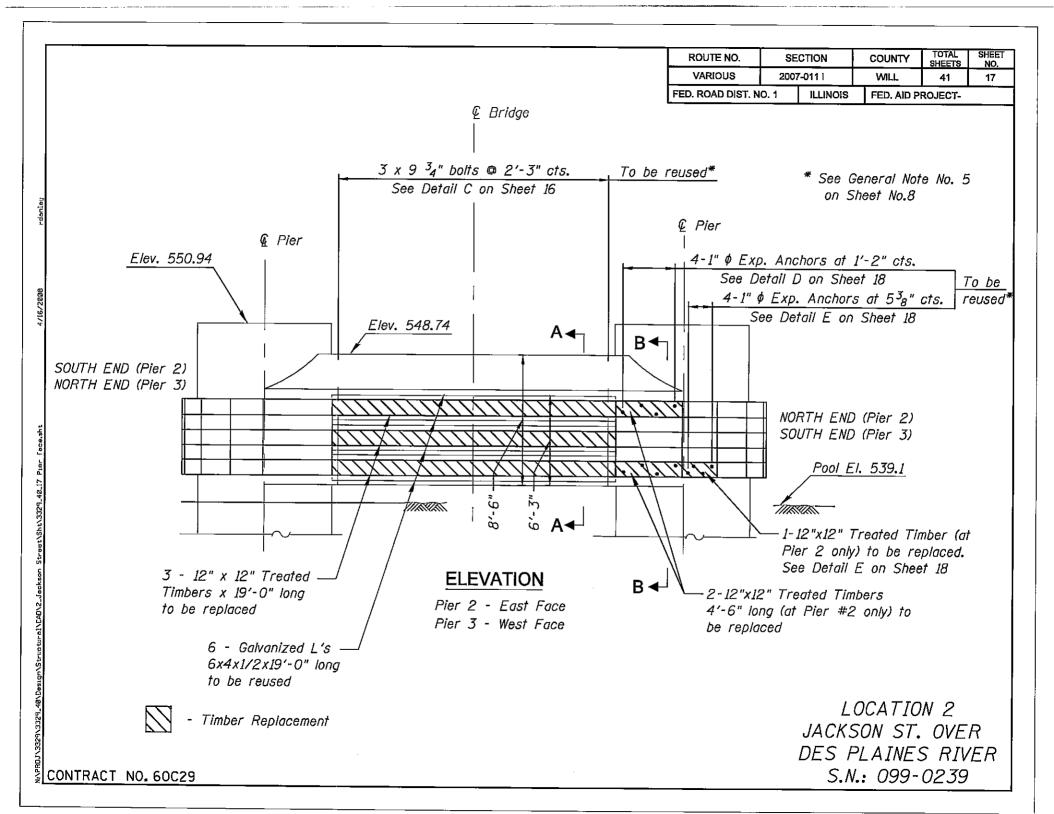
DES PLAINES RIVER S.N.: 099-0239

ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 [		WILL	41	16
FED. ROAD DIST. N	ILLINOIS	FED. AID PI	ROJECT-		

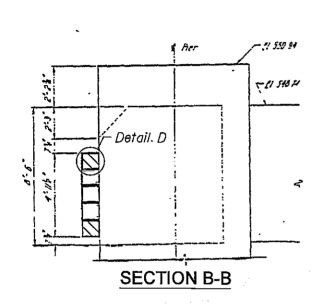


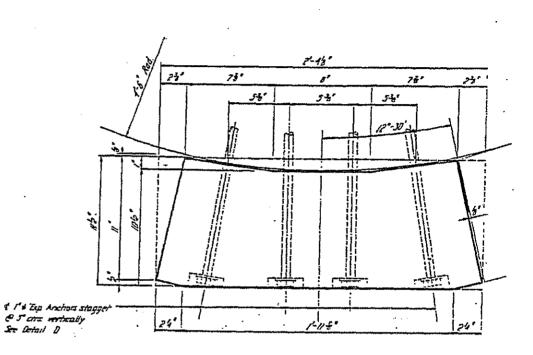
Timber Replacement

JACKSON ST. OVER DES PLAINES RIVER S.N.: 099-0239

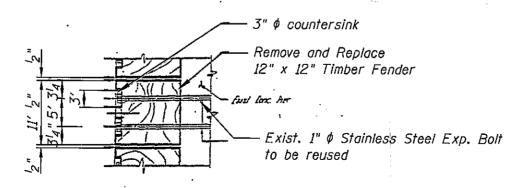


ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-0111		WILL	41	18
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID P	ROJECT-	





## **DETAIL E**



Timber Replacement

DETAIL D

LOCATION 2 JACKSON ST. OVER DES PLAINES RIVER S.N.: 099-0239

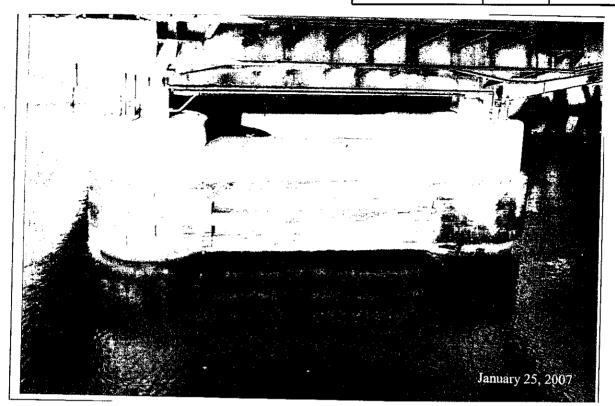
CONTRACT NO. 60C29

4/16/2

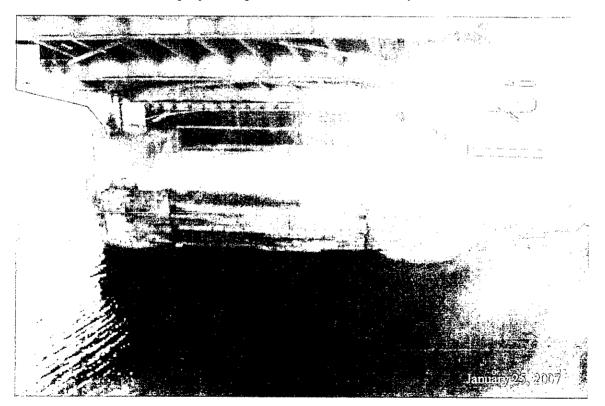
.CAD\2\_Jackson Street\Sht\3329\_40\_[8 Detail.sh

N:NPR0JN33

ROUTE NO.	SE	CTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	200	7-011 I	WILL	41	19
FED. ROAD DIST. N	0.1	ILLINOIS	FED. AID PROJECT-		



Slightly damaged timbers at the west pier



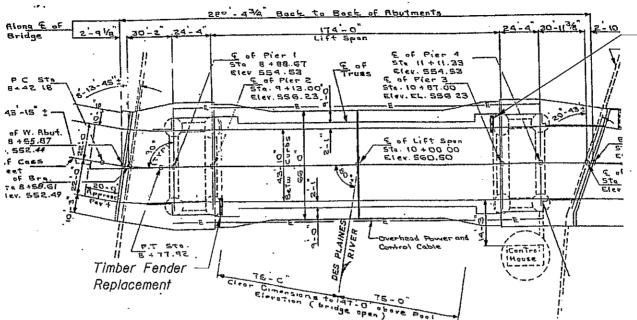
Slightly damaged timbers at the east pier

NiVPROJN332913329\_40NDesign\Structural\CAD\2\_Jackson Street\8

 ROUTE NO.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

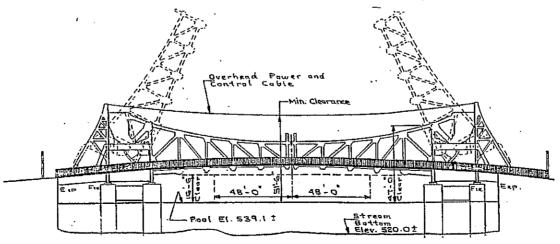
 VARIOUS
 2007-011 I
 WILL
 41
 20

 FED. ROAD DIST. NO. 1
 ILLINOIS
 FED. AID PROJECT



-Timber Fender Replacement

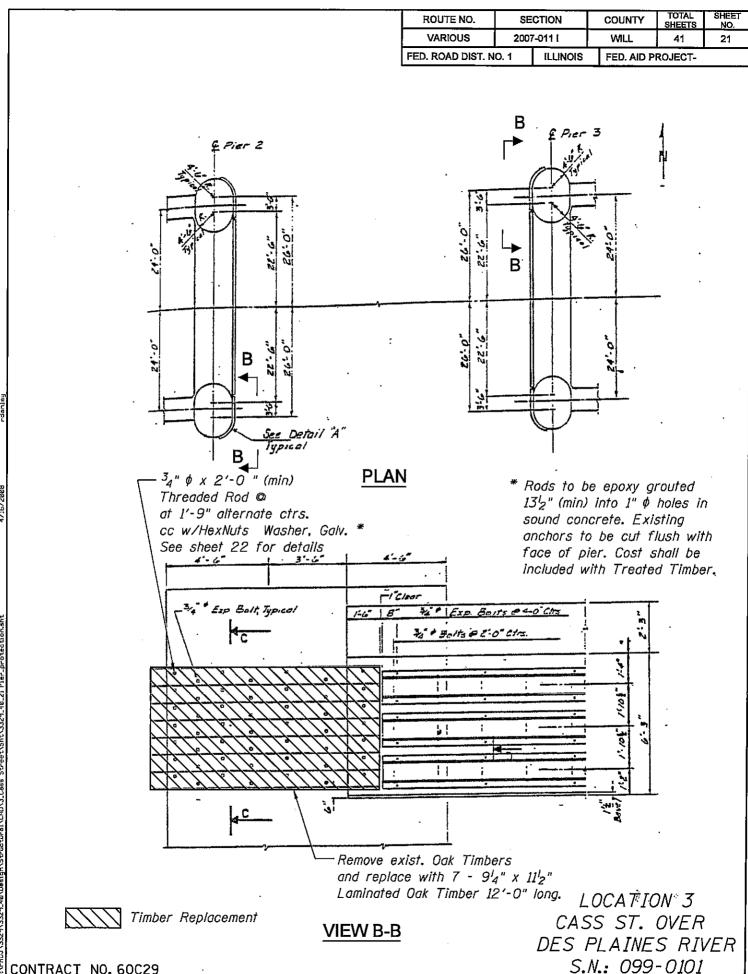




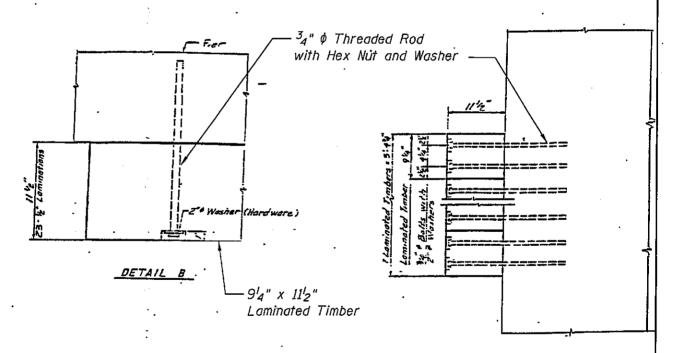
Timber Replacement

**ELEVATION** 

LOCATION 3
CASS ST. OVER
DES PLAINES RIVER
S.N.: 099-0101



ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 !		WILL	41	22
FED. ROAD DIST. N	NO.1 ILLINOIS		FED AID P	FED AID PROJECT-	

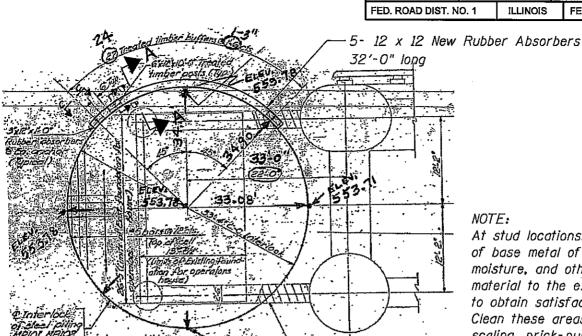


SECTION C-C

CONTRACT NO. 60C29

4/16/2008

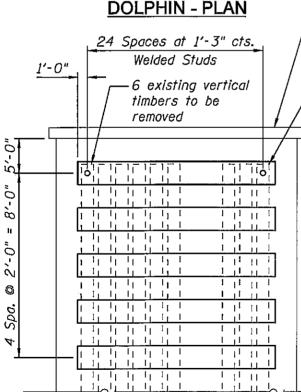
N3\_Dess Street\Sht\3329\_40\_22 Details.sht



ROUTE NO. SECTION COUNTY **VARIOUS** 2007-011 I WILL 41 ILLINOIS FED. AID PROJECT-

NOTE:

At stud locations, clean the areas of base metal of scale, rust. moisture, and other deleterious material to the extent necessary to obtain satisfactory welds. Clean these areas by wire brushing, scaling, prick-punching, or grinding. The cost is included with Rubber Absorbers (Loc. 3) pay item.



spaced @ ± 1'-3" horizontally, Automatically end welded to Sheet Piling. Touch up

> Galvanizing. The cost is Absorbers (Loc. 3)

stud w/Galv. washer & nut

included with Rubber pay item.

### **SECTION A-A**

LOCATION 3 CASS ST. OVER DES PLAINES RIVER S.N.: 099-0101

12x12x(6x6)"D" Bore Absorber, (Typ.)

3 existing vertical

timbers to be

Top of

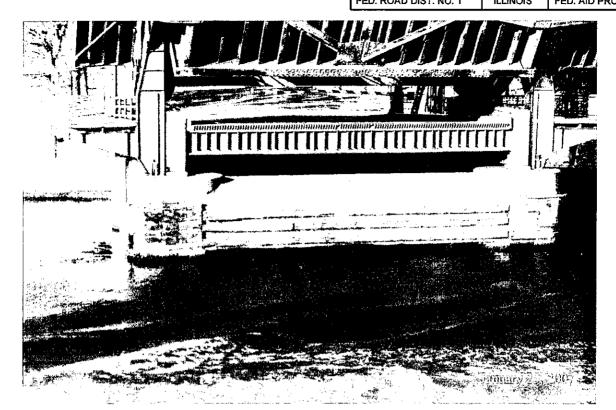
Protection Cell

removed

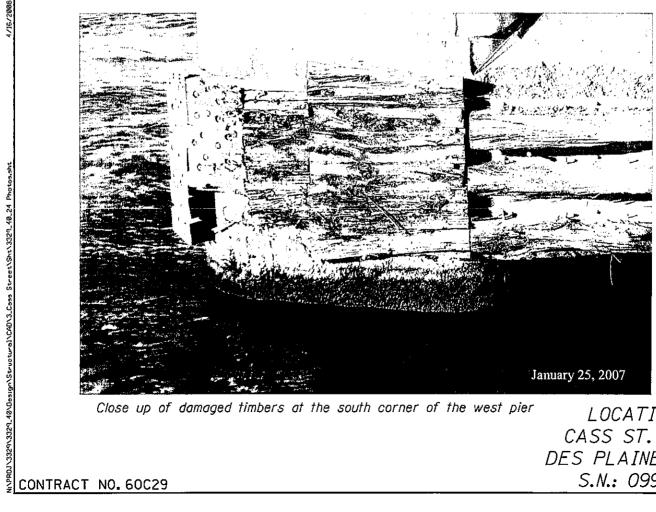
[頃 Sheet Piling

DOLPHIN ELEVATION

ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 i		WLL	41	24
EED BOAD DICT N	IO 4 III INOIS		EED AID D	DO IFOT	

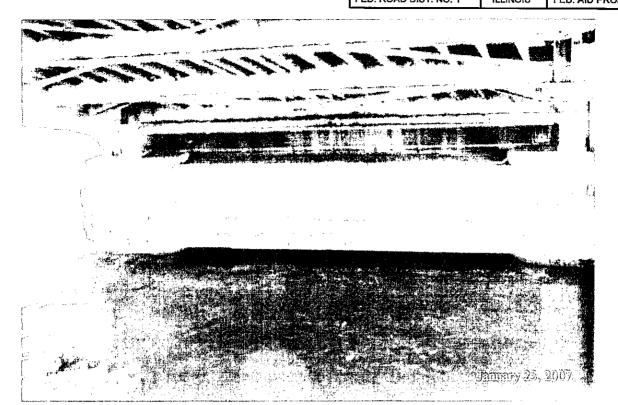


Damaged timbers at the south corner of the west pier

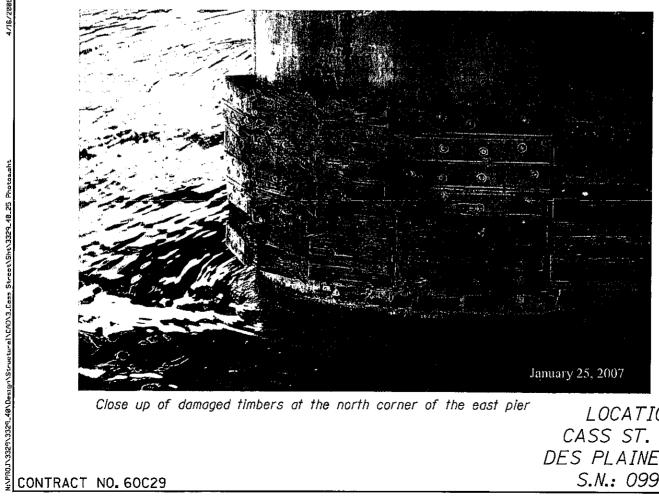


Close up of damaged timbers at the south corner of the west pier

ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
VARIOUS	2007-011 I		WILL	41	25	
EED ROAD DIST NO 1		ILLINOIS	EED AID B	PO IECT		

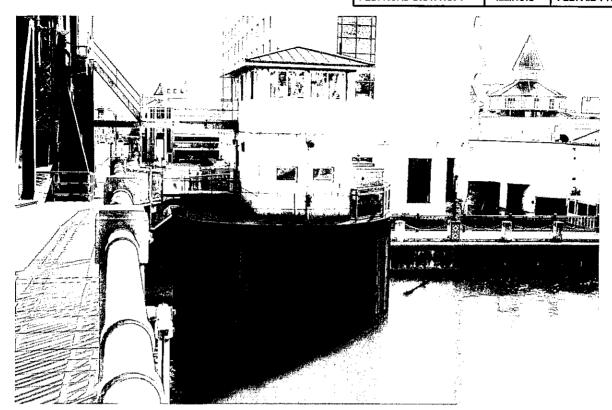


Damaged timbers at the north corner of the east pier

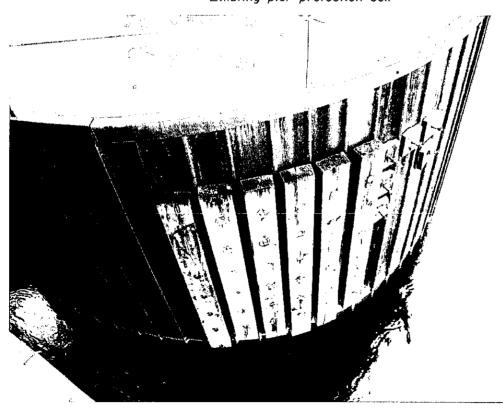


Close up of damaged timbers at the north corner of the east pier

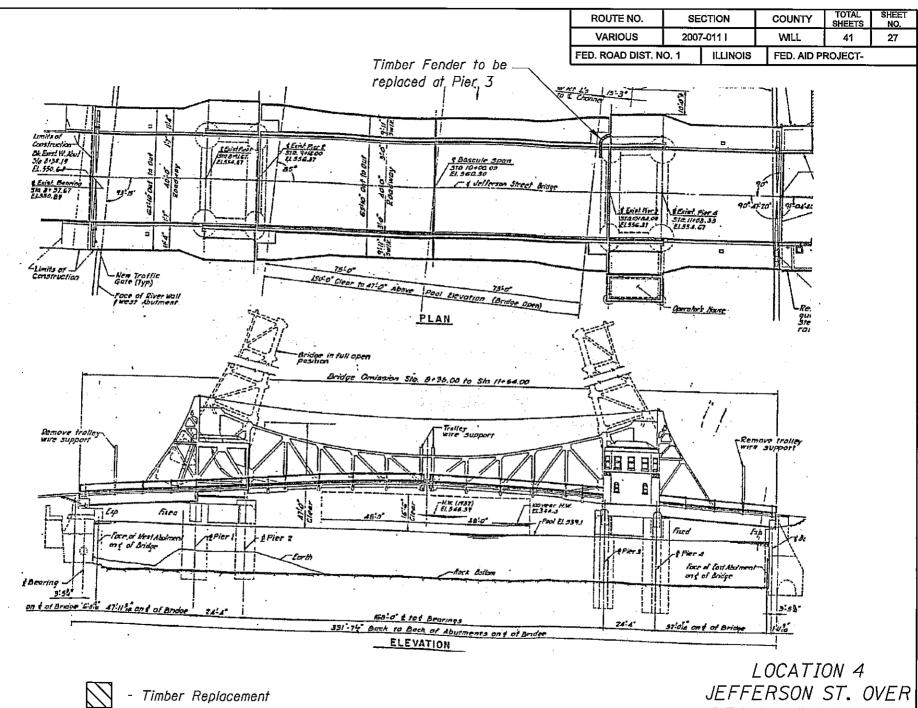
ROUTE NO.	SE	CTION	TION COUNTY		SHEET NO.
VARIOUS	2007-011 I		WILL	41	26
EED DOAD DIOT N	- 1				



Existing pier protection cell



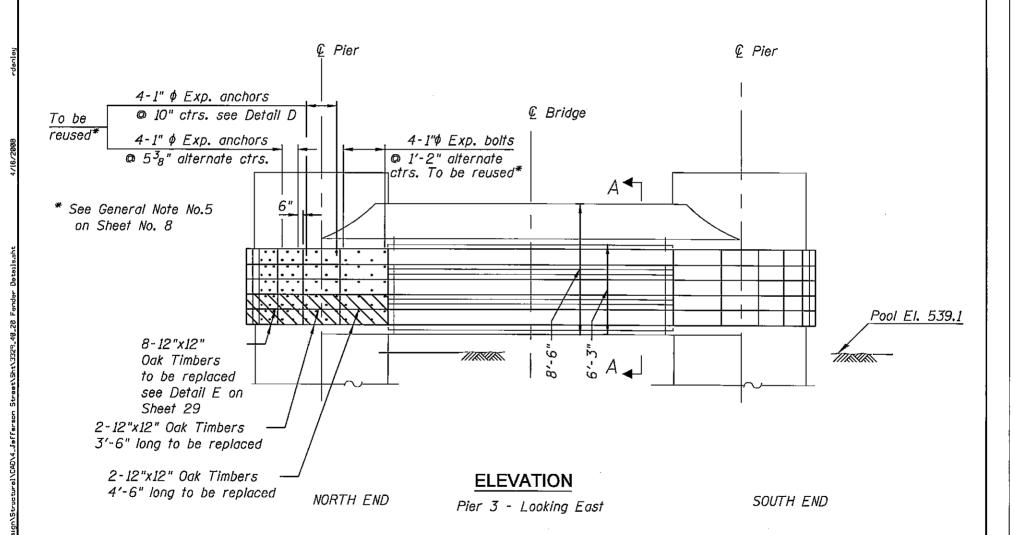
Damaged fender system



CONTRACT NO. 60C29

DES PLAINES RIVER S.N.: 099-0166

ROUTE NO.	\$E	CTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007	7-011 i		WILL	41	28
FED. ROAD DIST. N	O. 1	ILLINOIS	FED. AID PROJEC		ROJECT-	



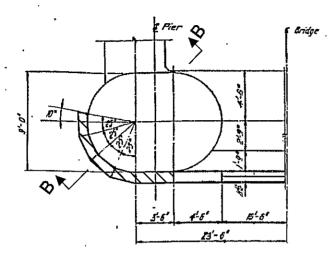
- Timber Replacement

LOCATION 4
JEFFERSON ST. OVER
DES PLAINES RIVER
S.N.: 099-0166

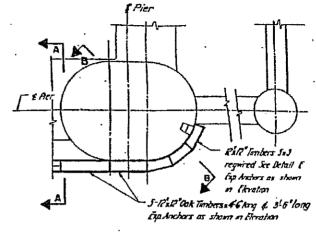
 ROUTE NO.
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 VARIOUS
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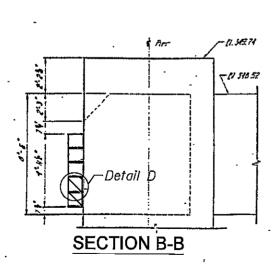
 FED. ROAD DIST. NO. 1
 ILLINOIS
 FED. AID PROJECT



PLAN AT PIER No. 3



PLAN AT SOUTH END OF PIER No. 3



Pier No.3

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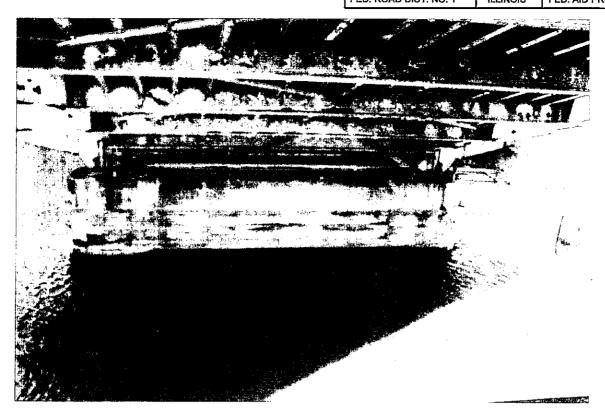
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**DETAIL E** 

LOCATION 4
JEFFERSON ST. OVER
DES PLAINES RIVER
S.N.: 099-0166

Note: For Detail D, see Sheet 18.

Timber Replacement

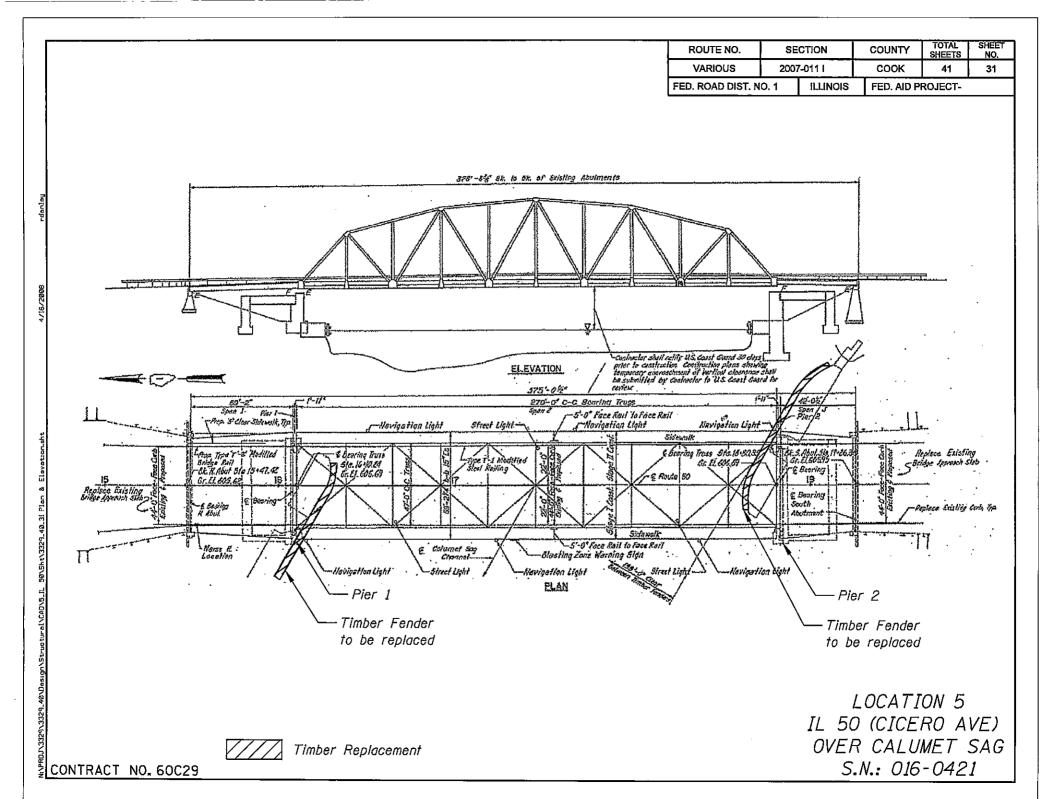


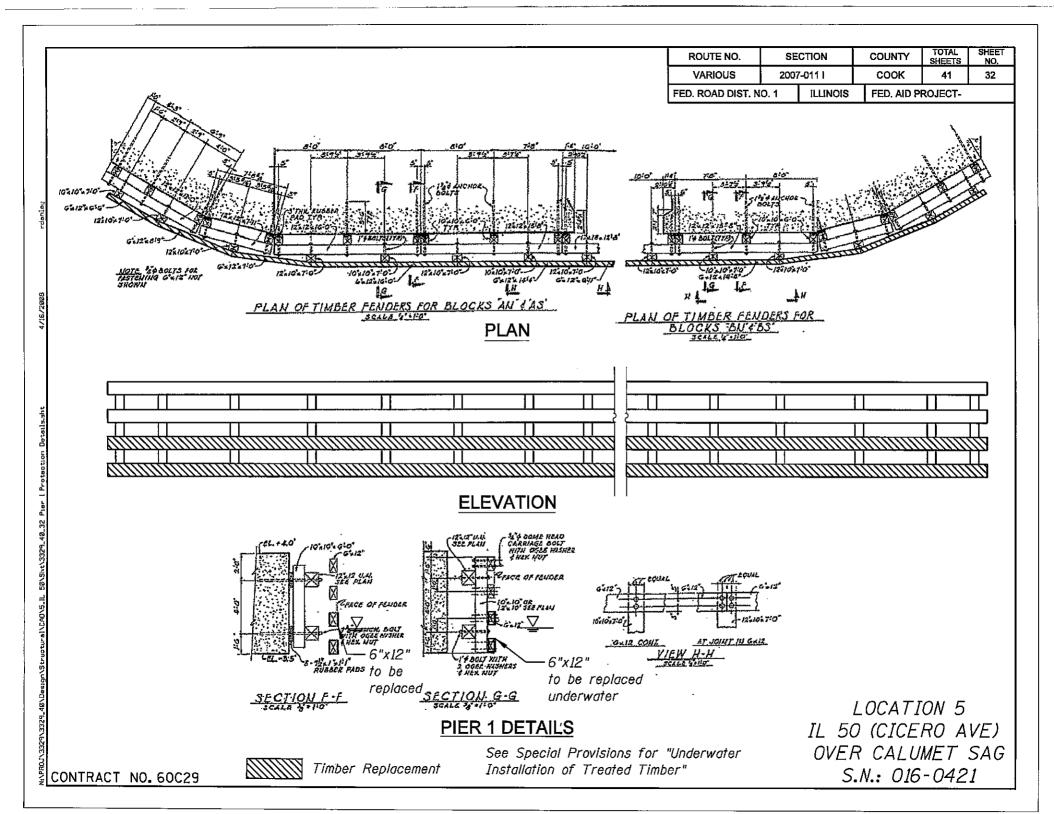
Damaged timbers at the north corner of the east pier

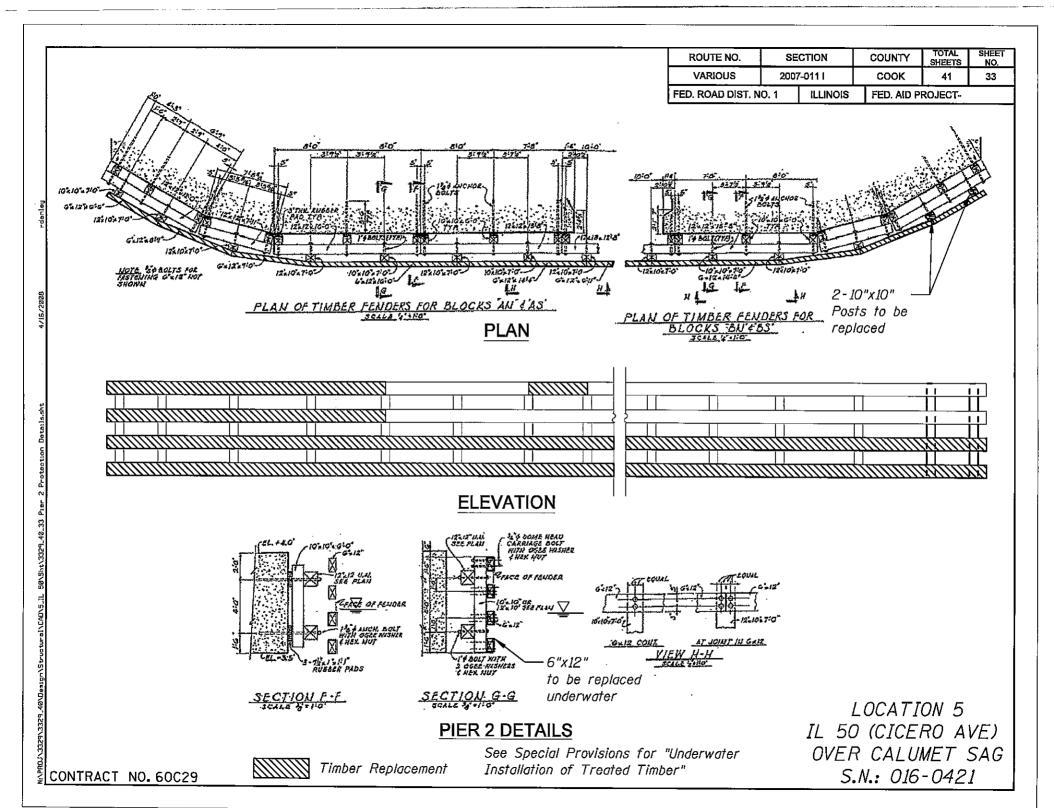
LOCATION 4 JEFFERSON ST. OVER DES PLAINES RIVER S.N.: 099-0166

16/2008

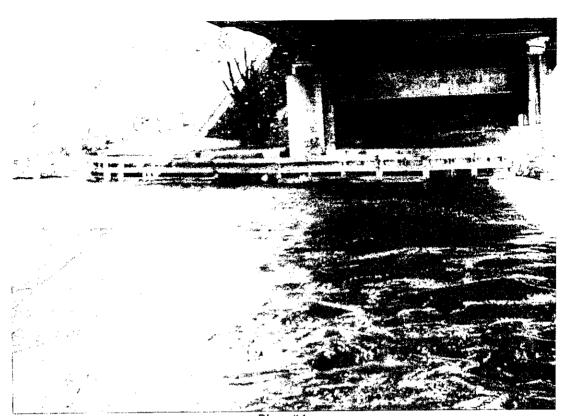
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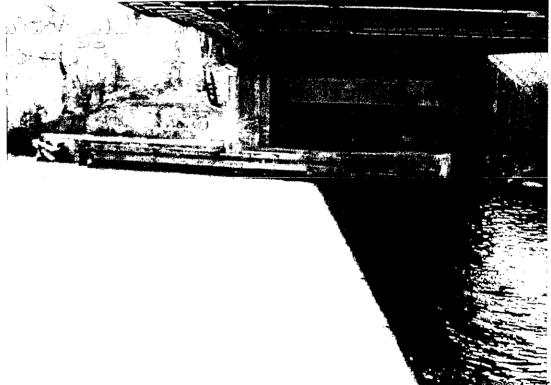




	ROUTE NO.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
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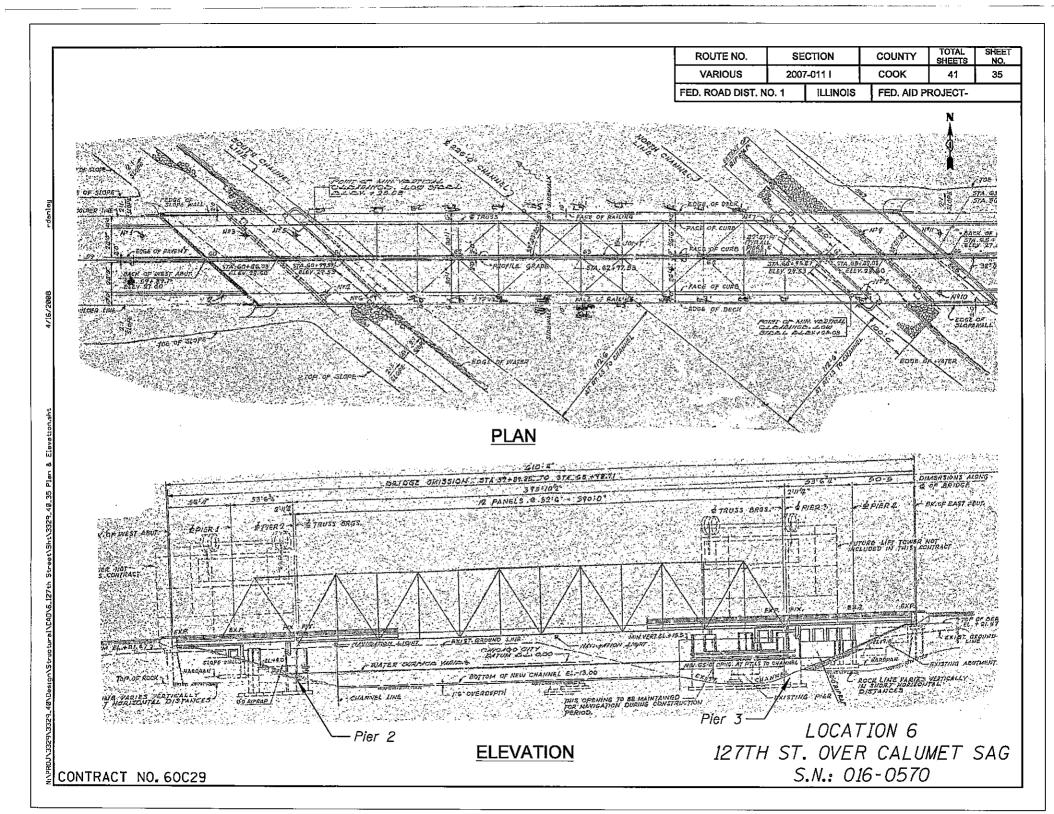
Pier #2

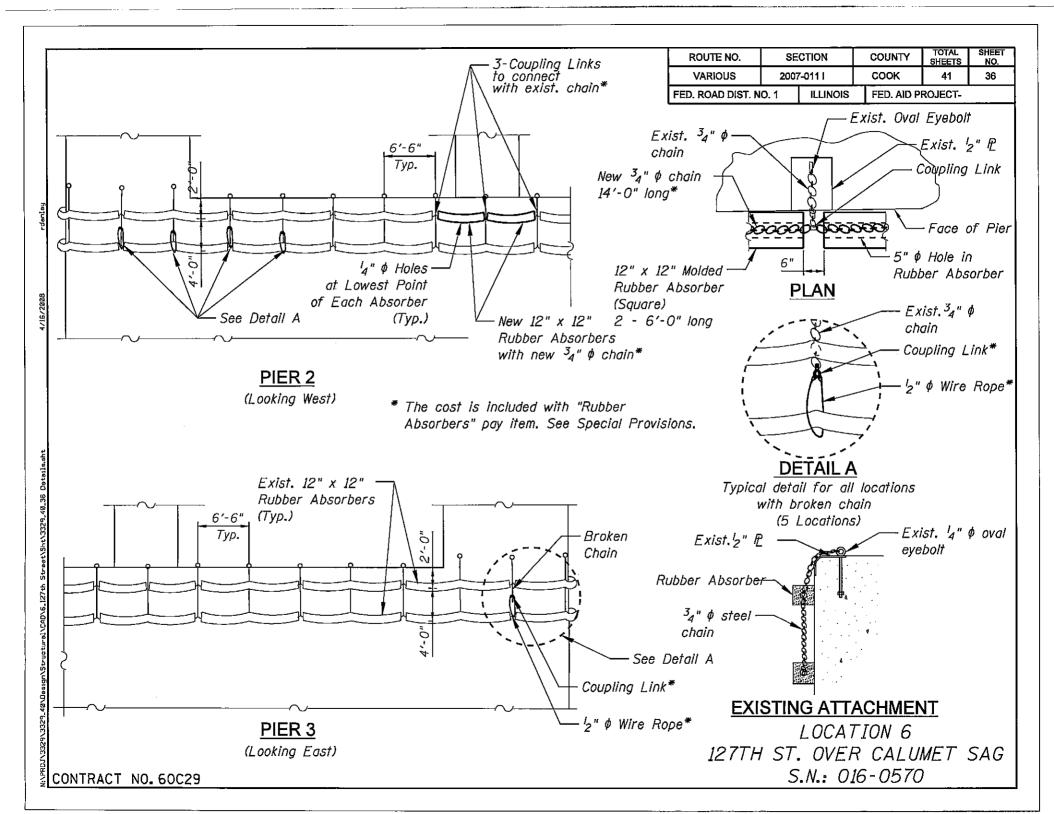
IL 50 (CICERO AVE)
OVER CALUMET SAG
S.N.: 016-0421

CONTRACT NO. 60C29

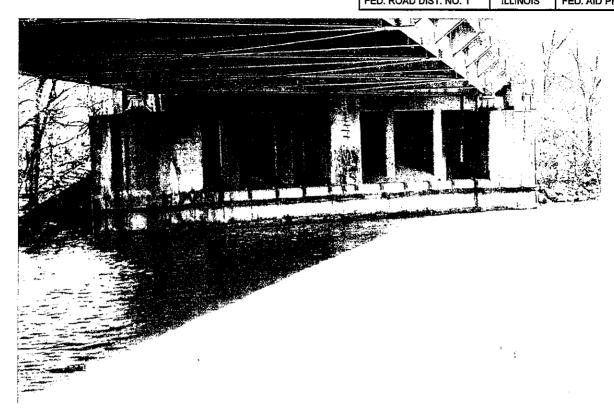
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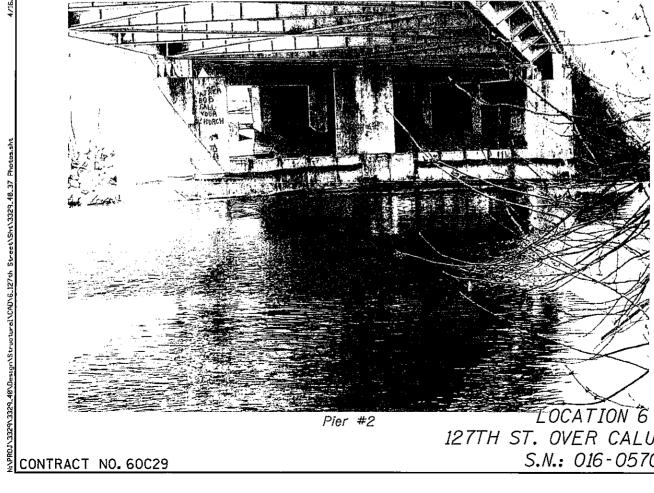




ROUTE NO.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
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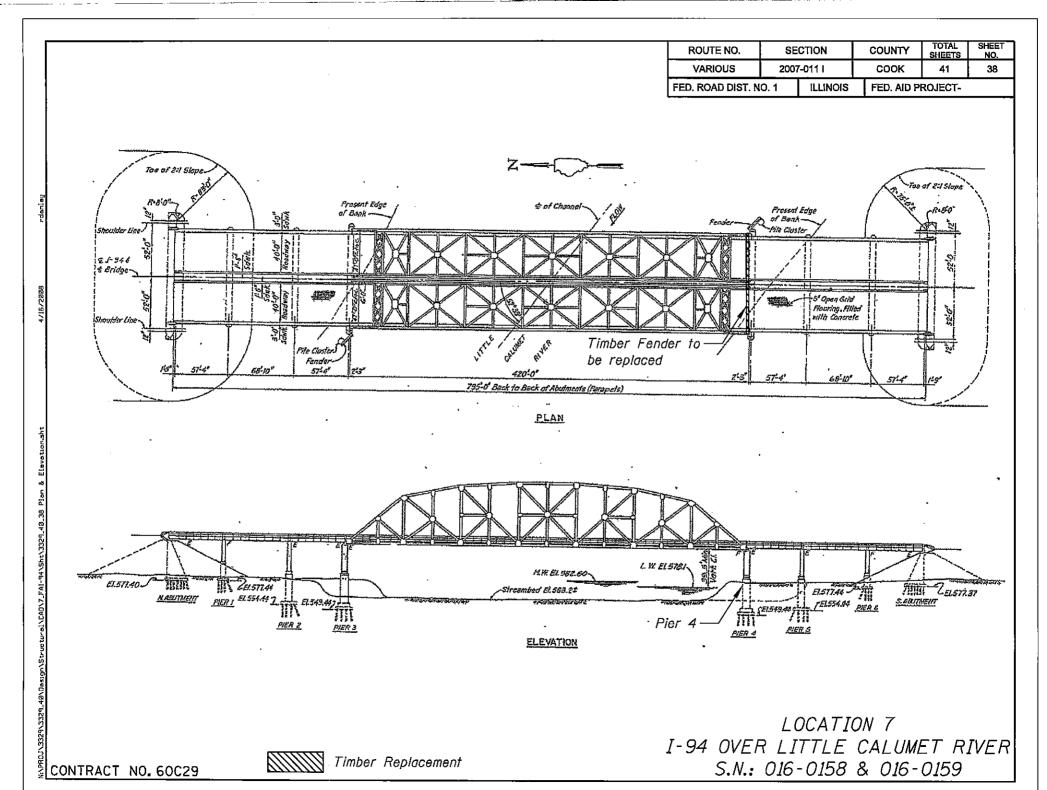


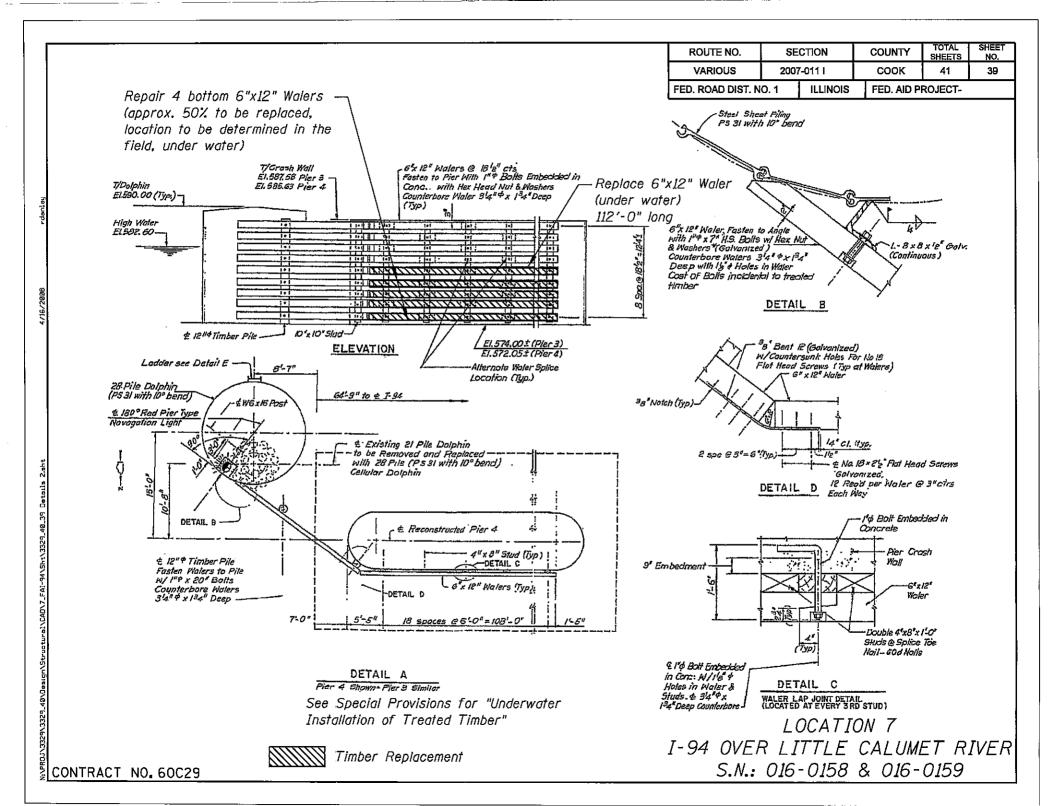


Pier #2

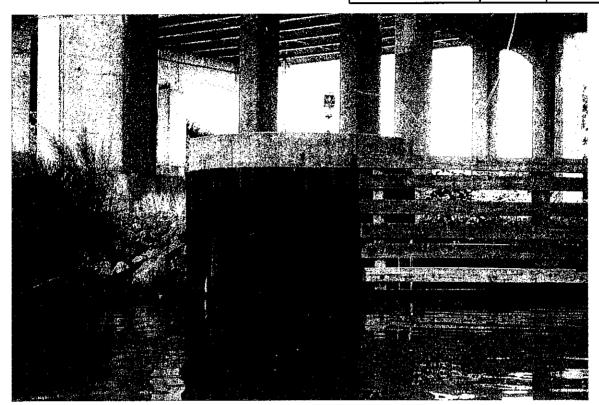
LOCATION 6

127TH ST. OVER CALUMET SAG S.N.: 016-0570

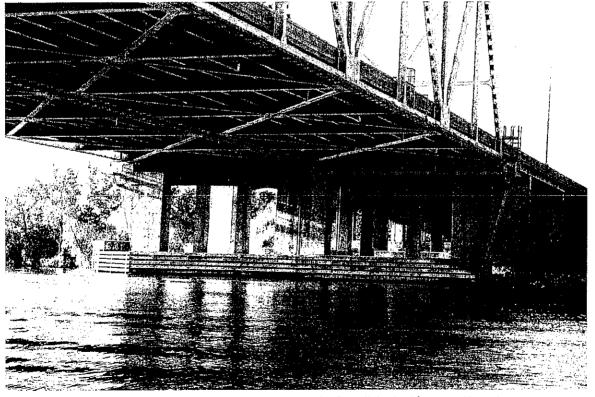




ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
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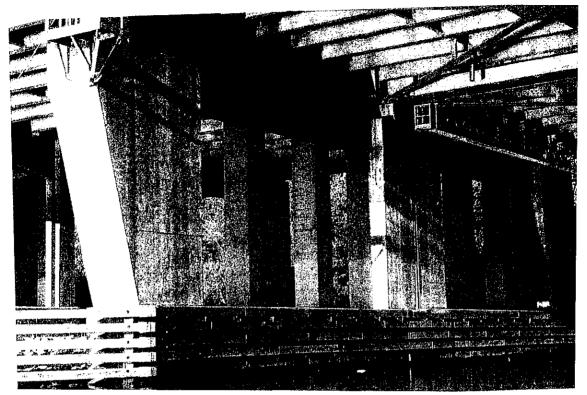
View of north pier protection cell, looking northeast



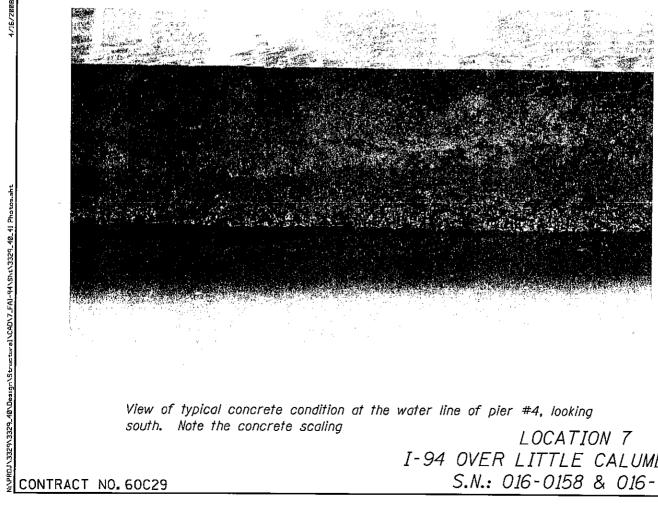
View of northbound and southbound pier #4, looking southeast

LOCATION 7 I-94 OVER LITTLE CALUMET RIVER S.N.: 016-0158 & 016-0159

ROUTE NO.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS	2007-011 !		СООК	41	41
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID P	ROJECT-	



View of northbound and southbound pier #4, looking southwest



View of typical concrete condition at the water line of pier #4, looking south. Note the concrete scaling

LOCATION 7 I-94 OVER LITTLE CALUMET RIVER S.N.: 016-0158 & 016-0159

### **TABLE OF CONTENTS**

LOCATION OF IMPROVEMENT	
DESCRIPTION OF IMPROVEMENT	1
HARDWARE	2
RUBBER ABSORBERS	2
UNDERWATER INSTALLATION OF TREATED TIMBER	2
TREATED GLUE LAMINATED TIMBER	3
ENGINEER'S FIELD OFFICE TYPE A (BDE)	3
EQUIPMENT RENTAL RATES (BDE)	5
PAYMENTS TO SUBCONTRACTORS (BDE)	6
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)	7
WORKING DAYS (BDE)	8
STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)	

## STATE OF ILLINOIS

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#### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of Various Routes; Section 2007-011 I; Will and Cook Counties; and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Route: Various Routes Section: 2007-011 I County: Will and Cook Contract No.: 60C29

#### **LOCATION OF IMPROVEMENT**

This improvement is located at the following four structures, each over the Des Plaines River, City of Joliet, Joliet Township, Will County:

- 1. ILL 53 (Ruby St.); SN: 099-9901
- 2. Jackson St.; SN: 099-0239
- 3. US 30 EB (Cass St.); SN 099-0101
- 4. US 30 WB (Jefferson St); SN 099-0166

It is also located at the following two structures, each over the Calumet Sag Channel in Village of Alsip, Worth Township, Cook County:

- 5. IL 50 (Cicero Ave); SN 016-0421
- 6. 127<sup>th</sup> St; SN 016-0570

And at the following structure, over the Little Calumet River in Calumet City, Thornton Township, Cook County:

7. I-94 (Bishop Ford Expy.); SN 016-0158, -0159

#### **DESCRIPTION OF IMPROVEMENT**

The work included in this contract shall consist of replacement of timber and rubber fenders at various substructure locations and all incidental and collateral work necessary to complete the improvements as shown on the plans or described herein.

#### **HARDWARE**

The work shall be done in accordance with the applicable portions of Section 507 of the Standard Specifications, except that any existing hardware found to be in good usable condition may be utilized in the replacement of the treated timbers. If the Engineer determines that any hardware is not usable, the new hardware will not be paid for separately and the cost of any new hardware shall be considered as included in the contract unit price for TREATED TIMBER or TREATED GLUE LAMINATED TIMBER.

#### **RUBBER ABSORBERS**

<u>Description</u>. This work shall consist of furnishing all the necessary labor, tools, equipment and incidentals for safely furnishing, transporting, storing and installing the RUBBER ABSORBERS as shown on the Plans, specified herein or as directed by the Engineer. This shall include the following:

- Removal of existing fender system as shown on the Plans.
- Furnishing and installation of new rubber absorbers "D" Bore with hole spacing for attachment along the existing dolphin at Location 3 (Cass Street) as shown on the Plans.
- Furnishing and installation of all hardware.
- Furnishing and installation of new rubber absorbers at Pier 2 at Location 6 (127<sup>th</sup> Street) as shown on the Plans and as directed by the Engineer.
- Furnishing and installation of all hardware, chains and wire ropes to repair existing rubber fenders at Location 6 (127<sup>th</sup> Street) attached to Pier 1 and Pier 2.

<u>Materials</u>. The square rubber absorbers shall be Longwood Standard Fender Rectangular Type 12x12x5 (12. nominal depth) at Location 6 and 12x12x(6x6) at Location 3 or approved equal.

All hardware, chains, wire rope, bolts, nuts, washers, and plate washers shall be galvanized in accordance with AASHTO M 121 (ASTM A 153).

Method of Measurement. RUBBER ABSORBERS, as shown on the drawings, as specified in this Section and as accepted in the final work, shall be measured for payment in place as EACH per Location. This measurement shall include all galvanized hardware, stainless steel bolts, nuts and washers, chains and wire ropes and any miscellaneous or incidental materials necessary for completion of the work.

<u>Basis of Payment.</u> The work under this item will be paid for at the contract unit price per EACH for RUBBER ABSORBERS (LOC.3) and RUBBER ABSORBERS (LOC.6), as indicated on the Plans, specified herein or as directed by the Engineer.

#### UNDERWATER INSTALLATION OF TREATED TIMBER

<u>Description</u>. This work shall consist of furnishing all the necessary labor for underwater repairs, special tools and equipment for underwater work and incidentals for safely removing and installing the treated timber below water as shown on the Plans, specified herein or as directed by the Engineer.

The Contractor shall have demonstrated experience with underwater repairs.

<u>Method of Measurement</u>. This work will be measured for payment by the foot of installed treated timber below the water elevation at the time of installation.

<u>Basis of Payment.</u> The work under this item will be paid for at the contract unit price per FOOT BOARD MEASURE for UDERWATER INSTALLATION OF TREATED TIMBER, as indicated on the Plans, specified herein or as directed by the Engineer. The cost of treated timber and hardware is included with TREATED TIMBER pay item.

#### TREATED GLUE LAMINATED TIMBER

The work shall be done in accordance with the applicable portions of Section 507 of the Standard Specifications.

Individual laminations shall not exceed two inches in net thickness. Lamination dimensions shall be within the tolerances specified in ANSI/AITC A190.1.

The treated glue laminated timber shall possess the ability to be bent to the radius as shown on the drawings.

Preservative treatment shall be according to the American Institute of Timber Construction (AITC) Standard 109 "Pressure Preservative Treatment of Structural Glued Laminated Timber", which covers preservative treatment for laminations prior to gluing and for treatment of finished members after gluing. All elements shall be cur to exact dimensions and holes for fasteners shall be predrilled before pressure treating. Any field cutting or drilling shall be retreated to protect the exposed wood material.

Treated Glue Laminated Timber shall be trademarked with the APA EWS stamp and must be bonded with waterproof adhesives conforming to ANSI A190.1.

The work under this item will be paid for at the contract unit price per FOOT BOARD MEASURE for TREATED GLUE LAMINATED TIMBER.

#### **ENGINEER'S FIELD OFFICE TYPE A (BDE)**

Effective: April 1, 2007 Revised: August 1, 2008

Revise Article 670.02 of the Standard Specifications to read:

"670.02 Engineer's Field Office Type A. Type A field offices shall have a minimum ceiling height of 7 ft (2 m) and a minimum floor space 450 sq ft (42 sq m). The office shall be provided with sufficient heat, natural and artificial light, and air conditioning.

The office shall have an electronic security system that will respond to any breach of exterior doors and windows. Doors and windows shall be equipped with locks. Doors shall also be equipped with dead bolt locks or other secondary locking device.

Windows shall be equipped with exterior screens to allow adequate ventilation. All windows shall be equipped with interior shades, curtains, or blinds. Adequate all-weather parking space shall be available to accommodate a minimum of ten vehicles.

Suitable on-site sanitary facilities meeting Federal, State, and local health department requirements shall be provided, maintained clean and in good working condition, and shall be stocked with lavatory and sanitary supplies at all times.

Sanitary facilities shall include hot and cold potable running water, lavatory and toilet as an integral part of the office where available. Solid waste disposal consisting of two waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

In addition, the following furniture and equipment shall be furnished.

- (a) Four desks with minimum working surface 42 x 30 in. (1.1 m x 750 mm) each and five non-folding chairs with upholstered seats and backs.
- (b) One desk with minimum working surface 48 x 72 in. (1.2 x 1.8 m) with height adjustment of 23 to 30 in. (585 to 750 mm).
- (c) One four-post drafting table with minimum top size of 37 1/2 x 48 in. (950 mm x 1.2 m). The top shall be basswood or equivalent and capable of being tilted through an angle of 50 degrees. An adjustable height drafting stool with upholstered seat and back shall also be provided.
- (d) Two free standing four drawer legal size file cabinet with lock and an underwriters' laboratories insulated file device 350 degrees one hour rating.
- (e) One 6 ft (1.8 m) folding table with six folding chairs.
- (f) One equipment cabinet of minimum inside dimension of 44 in. (1100 mm) high x 24 in. (600 mm) wide x 30 in. (750 mm) deep with lock. The walls shall be of steel with a 3/32 in. (2 mm) minimum thickness with concealed hinges and enclosed lock constructed in such a manner as to prevent entry by force. The cabinet assembly shall be permanently attached to a structural element of the field office in a manner to prevent theft of the entire cabinet.
- (g) One refrigerator with a minimum size of 16 cu ft (0.45 cu m) with a freezer unit.
- (h) One electric desk type tape printing calculator.
- (i) A minimum of two communication paths. The configuration shall include:
  - (1) Internet Connection. An internet service connection using telephone DSL, cable broadband, or CDMA wireless technology. Additionally, an 802.11g/N wireless router shall be provided, which will allow connection by the Engineer and up to four Department staff.

- (2) Telephone Lines. Three separate telephone lines.
- (j) One plain paper copy machine capable of reproducing prints up to 11 x 17 in. (280 x 432 mm) with an automatic feed tray capable of storing 30 sheets of paper. Letter size and 11 x 17 in. (280 x 432 mm) paper shall be provided.
- (k) One plain paper fax machine with paper.
- (I) Two telephones, with touch tone, where available, and a digital telephone answering machine, for exclusive use by the Engineer.
- (m) One electric water cooler dispenser.
- (n) One first-aid cabinet fully equipped.
- (o) One microwave oven, 1 cu ft (0.03 cu m) minimum capacity.
- (p) One fire-proof safe, 0.5 cu ft (0.01 cu m) minimum capacity.
- (q) One electric paper shredder.
- (r) One post mounted rain gauge, located on the project site for each 5 miles (8 km) of project length."

Revise the first sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"The building or buildings fully equipped as specified will be paid for on a monthly basis until the building or buildings are released by the Engineer."

Revise the last sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"This price shall include all utility costs and shall reflect the salvage value of the building or buildings, equipment, and furniture which become the property of the Contractor after release by the Engineer, except that the Department will pay that portion of the monthly long distance telephone bills that, when combined, exceed \$150."

#### **EQUIPMENT RENTAL RATES (BDE)**

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
  - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

#### PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

#### SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other

work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

#### **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 40 working days.

#### STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004 Revised: April 1, 2007

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of steel cost adjustments.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), frames and grates, and other miscellaneous items will be subject to a steel cost adjustment when the pay item they are used in has a contract value of \$10,000 or greater.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.

(c) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = CBP_M - CBP_L$ 

Where:  $CBP_M =$  The average of the Consumer Buying Price indices for Shredded Auto

Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per lb (kg).

CBP<sub>L</sub> = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM

for the day the contract is let. The indices will be converted from dollars per

ton to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $CBP_M$  will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

<u>Basis of Payment</u>. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the  $CBP_L$  and  $CBP_M$  in excess of five percent, as calculated by:

Percent Difference =  $\{(CBP_L - CBP_M) \div CBP_L\} \times 100$ 

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

#### Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

#### Return With Bid

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of steel cost adjustments. After award, this form, when submitted shall become part of the contract.

Contract No.:					
Company Name:					_
Contractor's Optio	<u>n</u> :				
Is your company opt	ing to inclu	ude this spec	cial prov	vision as part of the contract plans?	
Yes		No			
Signature:				Date:	