

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1274	05-00627-00-BR	LASALLE	45	2
STA. 18+80.00 TO STA. 27+00.00				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

87351

**INDEX OF SHEETS**

- 1 COVER SHEET
- 2 INDEX OF SHEETS / LIST OF STANDARDS
- 3 SUMMARY OF QUANTITIES
- 4 GENERAL NOTES
- 5 - 6 TYPICAL SECTIONS
- 7 PLAN & PROFILES
- 8 REMOVAL PLAN
- 9 PAVEMENT MARKING AND SIGNAGE PLAN
- 10 ALIGNMENT TIES AND BENCHMARKS
- 11 - 12 SUGGESTED MAINTENANCE OF TRAFFIC
- 13 EROSION CONTROL PLAN
- 14 - 29 STRUCTURE PLANS
- 30 MISCELLANEOUS DETAILS
- 31 - 45 CROSS SECTIONS

46-49 EXISTING BRIDGE PLANS

Revised 2-20-08

**LIST OF STANDARDS**

- 280001-04 TEMPORARY EROSION CONTROL SYSTEMS
- 482001-02 HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
- 515001-02 NAME PLATE FOR BRIDGES
- 542401 METAL END SECTIONS FOR PIPE CULVERTS
- 630001-07 STEEL PLATE BEAM GUARDRAIL
- 630201-05 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-04 SHOULDER WIDENING FOR TYPE I(SPECIAL) GUARDRAIL TERMINALS
- 631031-06 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS
- 701001-01 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5m (15') AWAY
- 701006-02 OFF-ROAD OPERATIONS, 2L, 2W, 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
- 701011-01 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- 701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
- 701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 701321-09 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIERS
- 701901 TRAFFIC CONTROL DEVICES
- 704001-04 TEMPORARY CONCRETE BARRIER
- 720001 SIGN PANEL MOUNTING DETAILS
- 720006-01 SIGN PANEL ERECTION DETAILS
- 720011 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 780001-01 TYPICAL PAVEMENT MARKINGS
- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS

PLAN	DATE	BY
REVISIONS		
REVISED		
NOTED		
ALIGNED		
CHECKED		
DATE		
FILE NAME		

PROFILE	DATE	BY
REVISIONS		
REVISED		
NOTED		
GRADES CHECKED		
STRUCTURE		
NOTATIONS		
CHKD		

\\gis01\share\proj\1155227\1155227.dwg: 11/16/07 11:16:07 AM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**LASALLE STREET BRIDGE REPLACEMENT**

**INDEX OF SHEETS  
LIST OF STANDARDS**

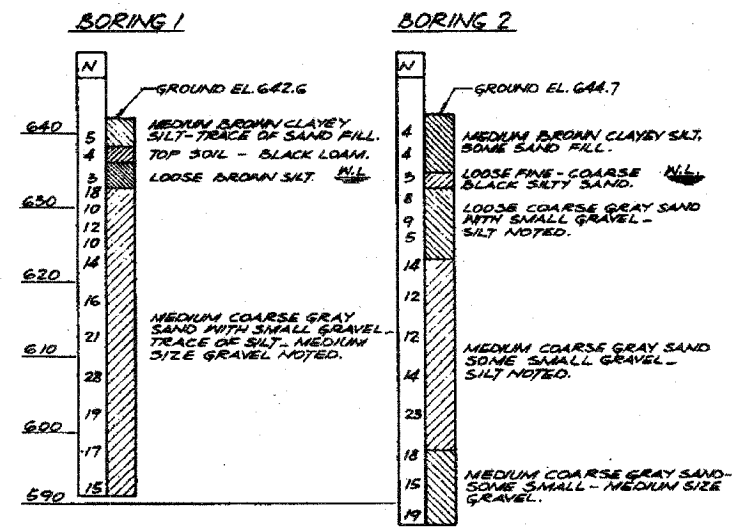
SCALE: VERT.  
HORIZ.  
DATE 11/16/07

DRAWN BY  
CHECKED BY

BENCH MARK: "X" CHISELED IN SOUTHEAST  
 WINGWALL OF EXISTING STRUCTURE, EL. 645.11  
 EXISTING STRUCTURE: WEST MASONRY ABUTMENT &  
 PORTION OF EAST ABUTMENT TO BE REMOVED BY  
 CONTRACTOR AS DIRECTED BY ENGINEER.

Contract 87351  
 SHEET 46 \*

SOIL TEST BORINGS

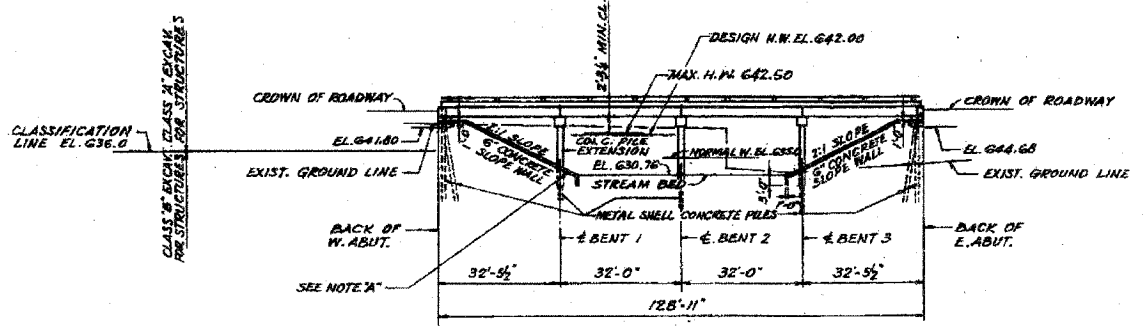


**BORING NOTES**  
 \*N\* INDICATES NUMBER OF BLOWS REQUIRED TO DRIVE A 2" O.D. SAMPLING PIPE ONE FOOT, USING A 140 POUND WEIGHT FALLING 30 INCHES.  
 \*W.L.\* INDICATES WATER LINE.  
 BORING DATA ARE SHOWN ONLY AS A GUIDE FOR BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED IN THE WORK.

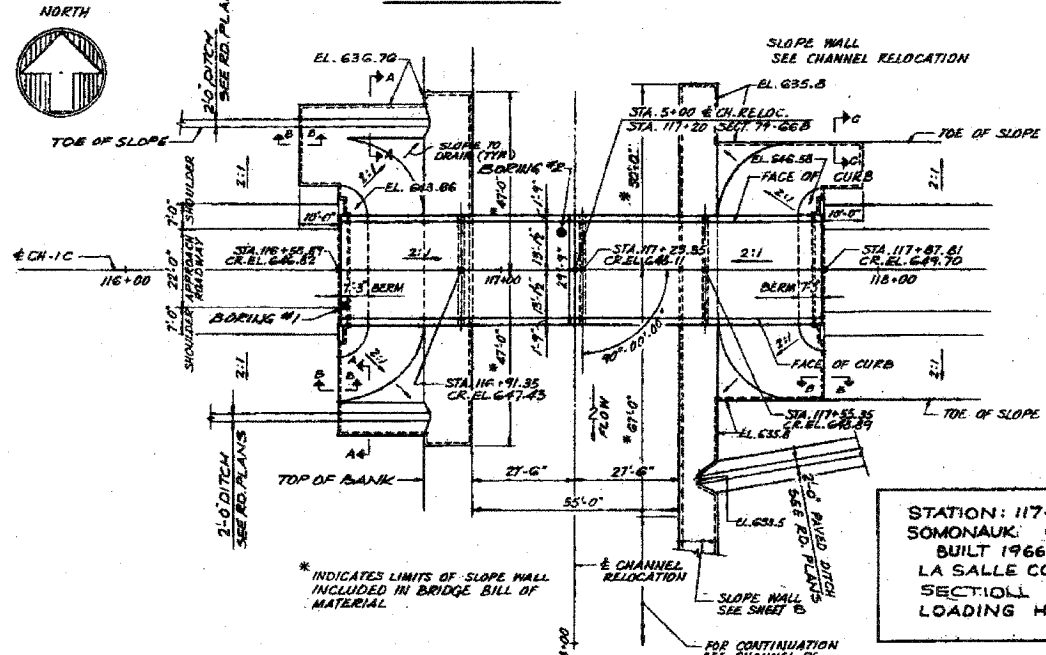
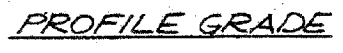
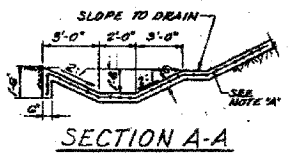
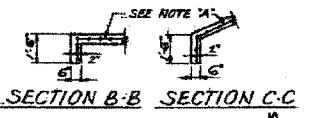
**GENERAL NOTES**  
 CLASS X CONCRETE SHALL BE USED THROUGHOUT EXCEPT AS SPECIFIED IN SECTION 51A OF THE STANDARD SPECIFICATIONS FOR PRECAST CONCRETE BRIDGE SLABS.  
 ALL REINFORCEMENT BARS SHALL BE LAPPED 20 DIAMETERS UNLESS OTHERWISE SHOWN.  
 THE CONTRACTOR SHALL DRIVE ONE METAL SHELL CAST-IN-PLACE CONCRETE TEST PILE IN A PERMANENT LOCATION AT THE WEST ABUTMENT AND AT BENT 2 BEFORE ORDERING THE REMAINDER OF THE METAL SHELLS.  
 METAL SHELL CAST-IN-PLACE CONCRETE PILES AT THE EAST ABUTMENT SHALL BE DRIVEN IN HOLES DRILLED TO THE NATURAL GROUND LEVEL AS SPECIFIED IN ARTICLE 401.9 (c) OF THE STANDARD SPECIFICATIONS.  
 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED BY THE DEPARTMENT OF PUBLIC WORKS AND BUILDINGS, JANUARY 2, 1938 SHALL APPLY.  
 THE SUPPLEMENTAL SPECIFICATIONS EFFECTIVE JANUARY 3, 1966 ALSO APPLY TO THIS WORK.

BILL OF MATERIAL (BRIDGE)

ITEM	UNIT	QUANTITY
SLOPE WALL, 6 INCH	SQ. YDS.	927
CLASS X CONCRETE	CU. YDS.	45
REINFORCEMENT BARS	LEBS.	5305
METAL PLATE BRIDGE RAIL	LIN. FT.	251
NAME PLATES	EACH	7
FURNISHING METAL PILE SHELLS	LIN. FT.	780
DRIVING & FILLING SHELLS	LIN. FT.	780
TEST PILES	EACH	2
CAST IN PLACE PILE EXTENSIONS	LIN. FT.	785
CLASS X EXCAVATION FOR STRUCTURES	CU. YDS.	27
CLASS X EXCAVATION FOR STRUCTURES	CU. YDS.	37
PRECAST CONCRETE BRIDGE SLAB	SQ. FT.	3808
BITUMINOUS CONCRETE SURFACE COURSE	TONS	400
SUBCLASS 2-11		
BITUMINOUS MATERIALS, PRIME COAT	GAL.	460



**NOTE 1**  
 REINFORCE WITH WELDED WIRE FABRIC  
 6" X 6" MESH #4 WIRES WT. 58 #/100 SQ. FT.  
 LAYOUT OF SLOPE WALLS MAY BE VARIED  
 TO SUIT GROUND CONDITIONS IN THE FIELD  
 AS DIRECTED BY THE ENGINEER.



STATION: 117+23.35  
 SOMONAUK CREEK  
 BUILT 1966 BY  
 LA SALLE COUNTY  
 SECTION 119 A  
 LOADING HS 20

NAME PLATE  
 SEE STANDARD 213-1

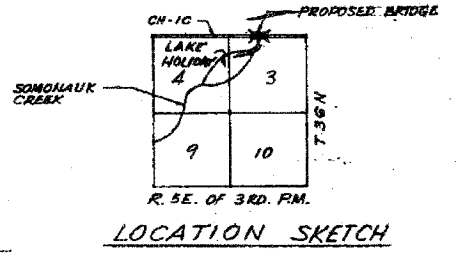
**WATERWAY DATA**  
 DRAINAGE AREA - 39,040 ACRES  
 CHARACTER - ROLLING, CULTIVATED  
 PRESENT OPENING - 790 SQ. FT.  
 REQUIRED OPENING (25 YR. FLOOD) - 820 SQ. FT.  
 PROPOSED OPENING - 827 SQ. FT.

**DESIGN DATA**  
**PRECAST SLAB UNITS**  
 f'c = 4500 psi  
 f'd = 1800 psi  
 f's = 20,000 psi  
 n = 8

**SUBSTRUCTURE**  
 f'c = 3500 psi  
 f'd = 1800 psi  
 f's = 20,000 psi  
 n = 10

LOADING - HS 20-44  
**PILES**  
 ABUTS. - 25 TON METAL SHELL CONCRETE PILES  
 BENTS - 30 TON METAL SHELL CONCRETE PILES BELOW STREAM BED WITH REINFORCED CONCRETE EXTENSIONS ABOVE STREAM BED

**INDEX OF SHEETS (BRIDGE)**  
 1. DETAIL OF STRUCTURE  
 10. DETAIL OF ABUTMENT SHEETS  
 11. DETAIL OF BENT SHEETS  
 12. DETAIL OF PILE

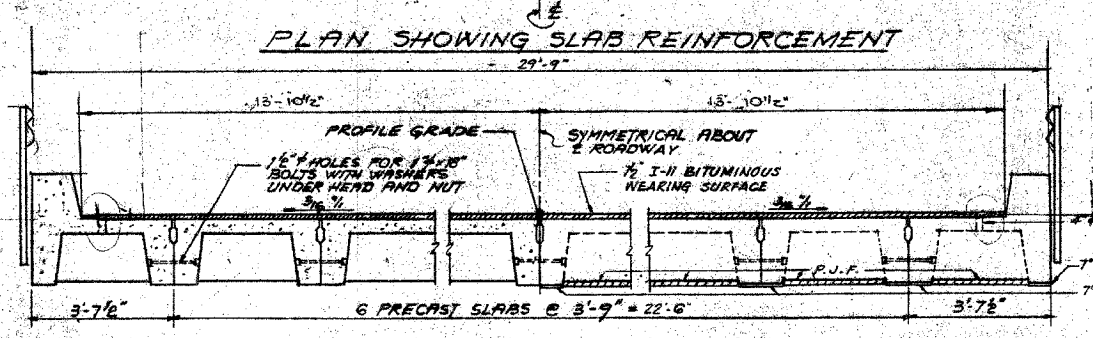
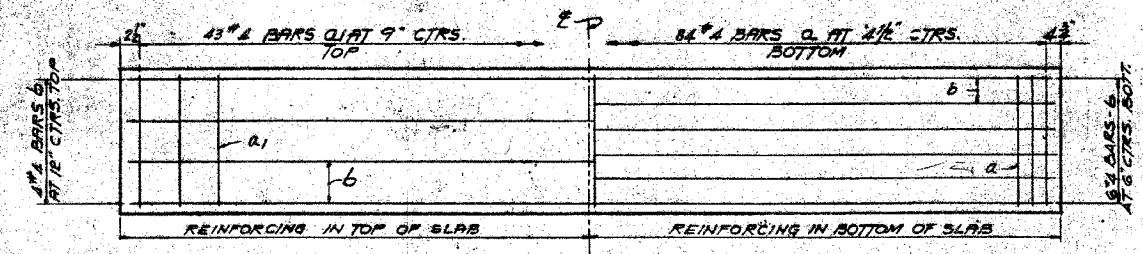
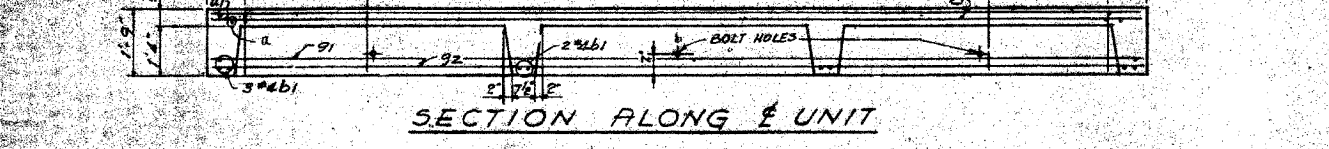
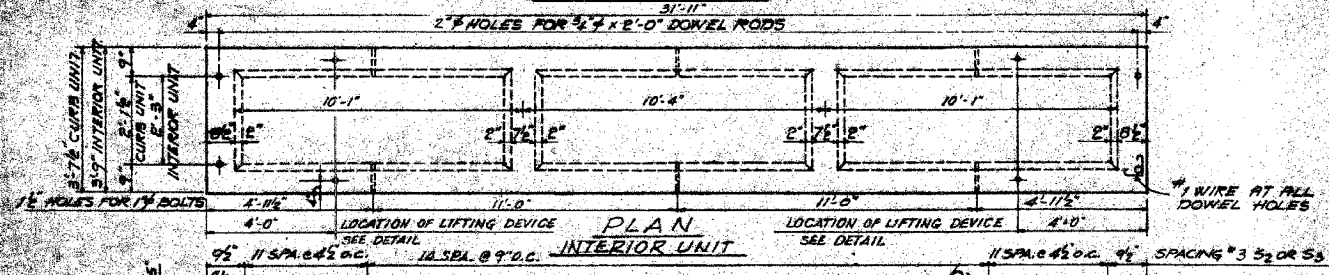
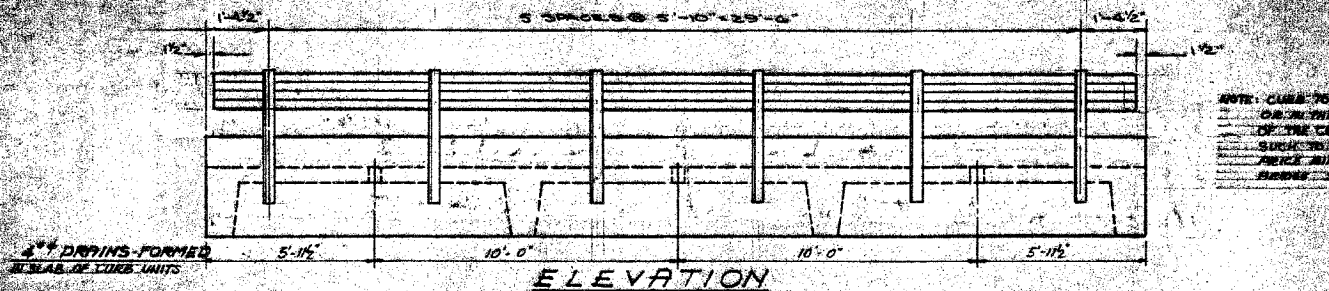


GENERAL PLAN & ELEVATION  
 SOMONAUK CREEK BRIDGE  
 OVER SOMONAUK CREEK  
 SECTION 119 A  
 LASALLE COUNTY  
 STA. 117+23.35

APPROVED COUNTY SUPERINTENDENT OF HIGHWAYS  
 EXAMINED ENGINEER OF BRIDGE & TRAFFIC STRUCTURES  
 PASSED ENGINEER OF DESIGN  
 APPROVED CHIEF HIGHWAY ENGINEER

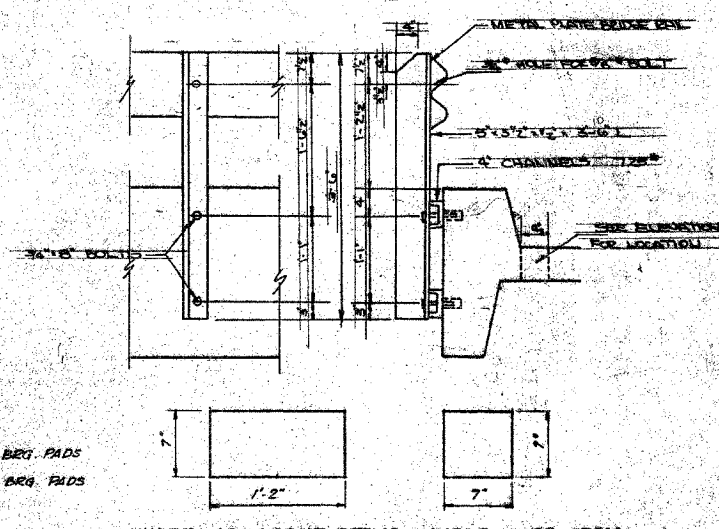
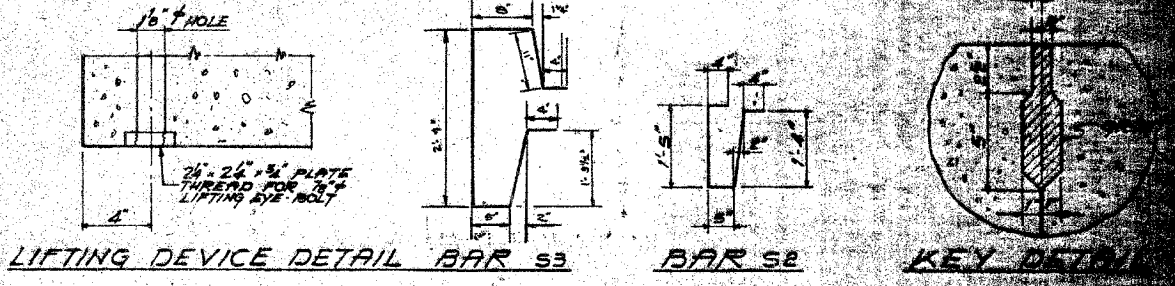
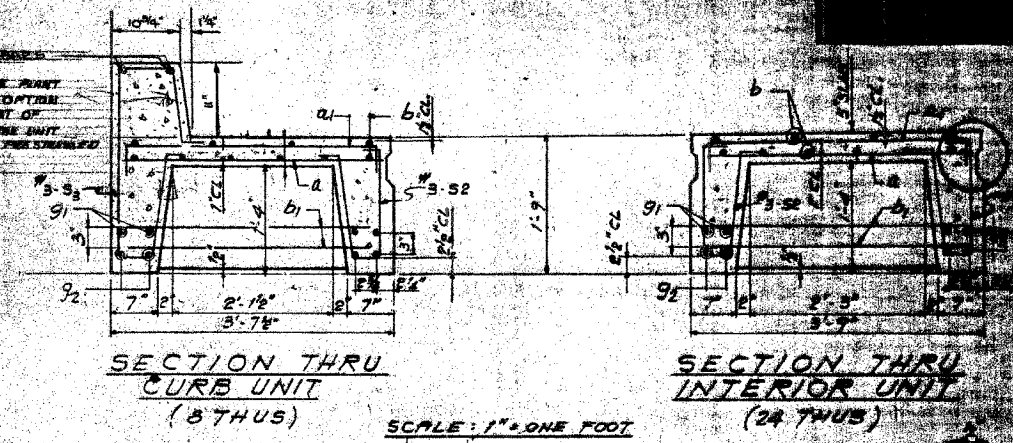
ALFRED BENESCH & COMPANY  
 CONSULTING ENGINEERS  
 100 S. WABASH AVE. CHICAGO, ILLINOIS

\* Added 2-20-08



HALF SECTION SCALE 1/2" = 1'-0"  
 HALF END ELEVATION

NOTE: CURB TO BE SET IN THE FRONT OR REAR AS SHOWN BY THE OPTION OF THE CONTRACTOR. THE COST OF SUCH WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



UNDER ADJACENT STEMS UNDER CURB STEM  
 5G REQ'D 1G REQ'D  
 FABRIC BEARING PAD DETAILS  
 (SEE SPECIAL PROVISIONS)

**BILL OF MATERIAL**

BAR	No	SIZE	LENGTH	SHAPE	
a	2028	#4	3'-3"		
a1	1376	#4	2'-0"		
b	820	#4	31'-6"		
b1	320	#4	3'-5"		
g	16	#4	31'-6"		
g1	128	#10	31'-6"		
g2	128	#11	31'-6"		
S2	2072	#3	5'-10"		
S3	296	#3	5'-11"		
PRECAST CONCRETE BRIDGE SLAB				59.77	3508

APPROVED COUNTY SUPERINTENDENT OF HIGHWAYS  
 EXAMINED ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES  
 PASSED ENGINEER OF DESIGN  
 APPROVED CHIEF HIGHWAY ENGINEER

ALFRED BRONKH & COMPANY  
 ENGINEERS  
 111 N. 3rd St. St. Paul, Minn.

PRECAST BRIDGE SLAB  
 SUNDNAK CREEK BRIDGE  
 OVER SUNDNAK CREEK  
 SECTION 119.5  
 LA SALLE COUNTY  
 ILLINOIS

Contract 87351  
 SHEET 47  
 Added 2-20-08

Contract 87351  
 BILL OF MATERIAL  
 (2 ABUTMENTS)

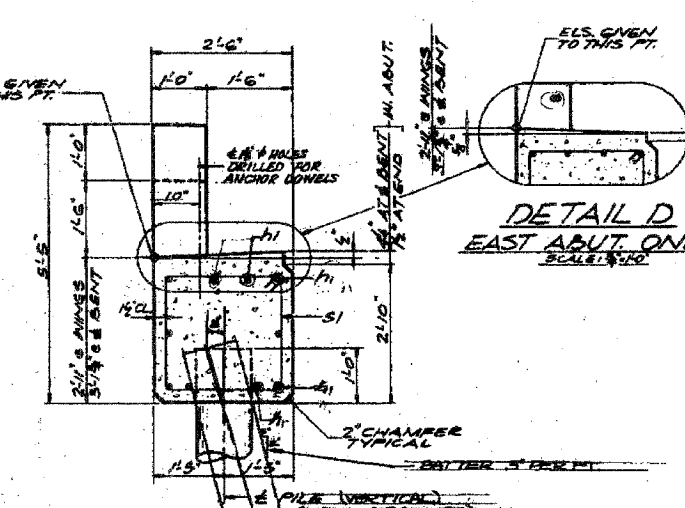
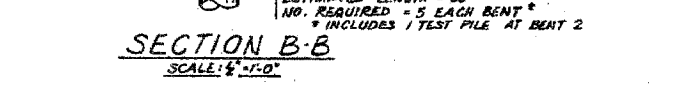
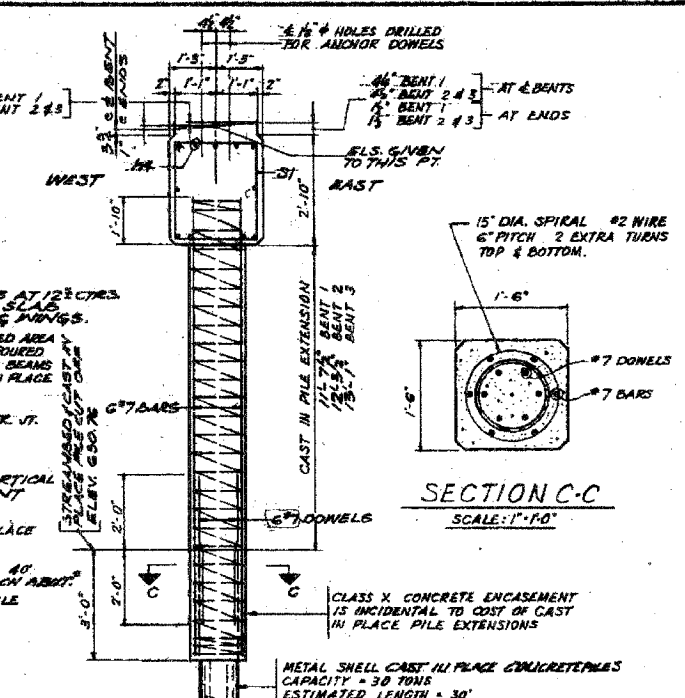
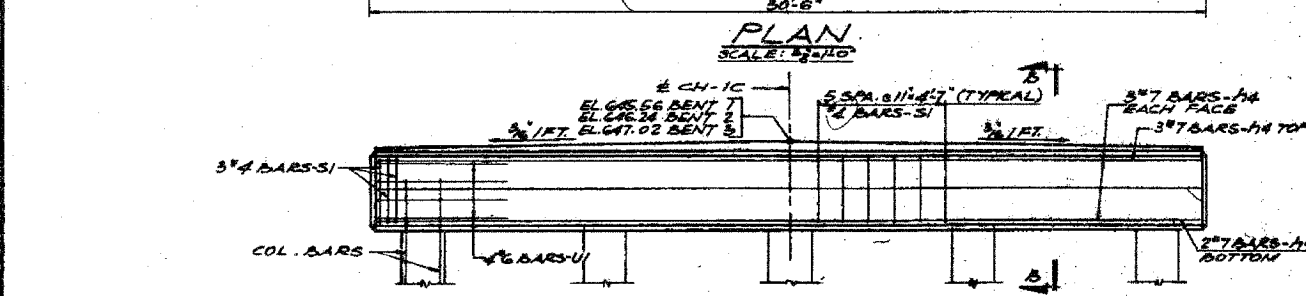
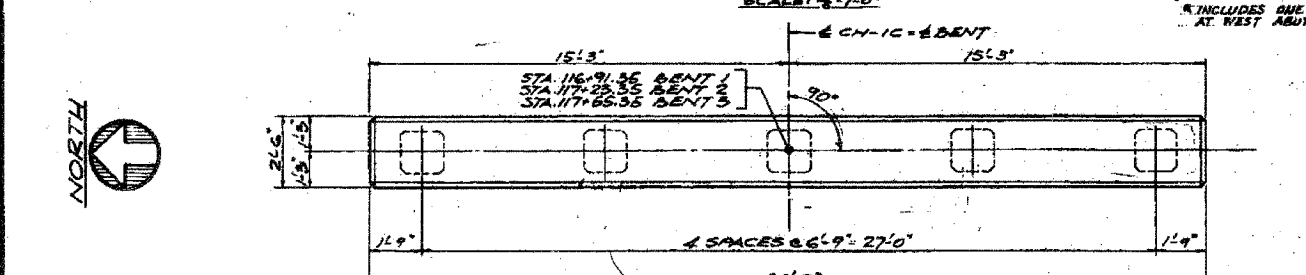
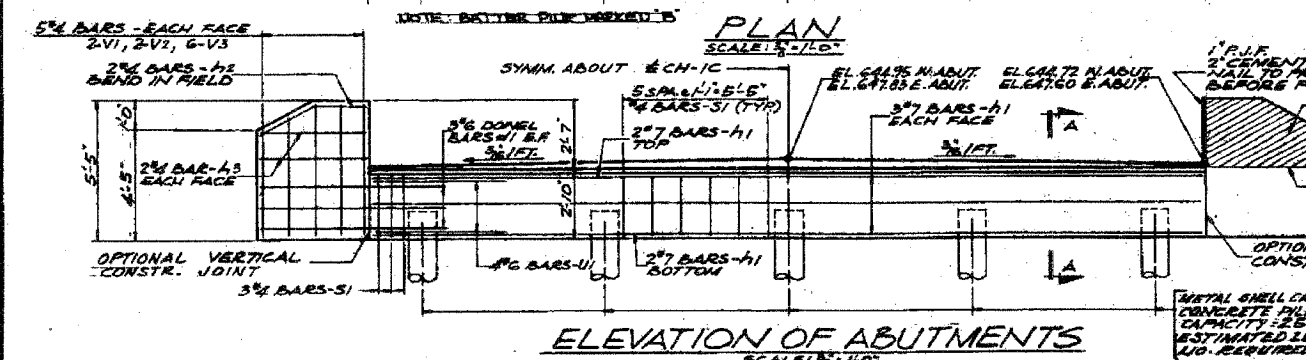
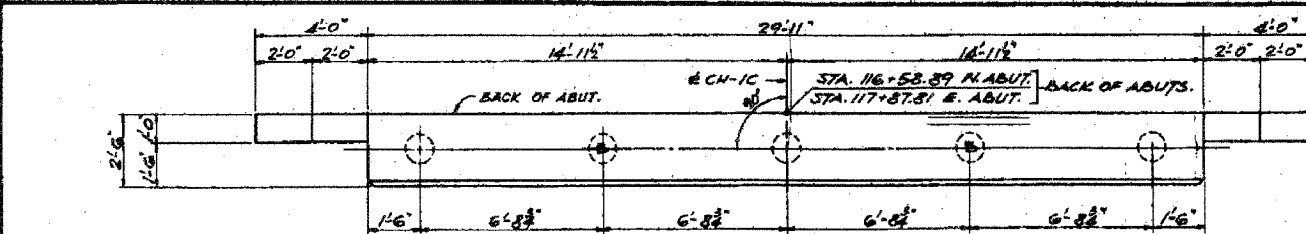
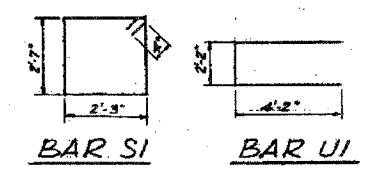
BAR NO.	SIZE	LENGTH	SHAPE
H1	20	27	27'-0"
H2	8	4	4'-0"
H3	16	4	5'-9"
V1	3	4	4'-3"
V2	8	4	4'-9"
V3	24	4	5'-3"
d1	24	6	6'-0"
U1	16	6	10'-6"
S1	40	4	10'-6"

CLASS X CONCRETE	CU.YDS.	19.4
REINFORCEMENT BARS	LBS.	2292
METAL SHELL CAST IN PLACE CONCRETE PILES	LIN. FT.	360
TEST PILES	EACH	1

BILL OF MATERIAL  
 (3 BENTS)

BAR NO.	SIZE	LENGTH	SHAPE
H4	30	27	30'-0"
U1	24	6	10'-6"
S1	20	4	10'-6"

CLASS X CONCRETE	CU.YDS.	25.6
REINFORCEMENT BARS	LBS.	3023
METAL SHELL CAST IN PLACE CONCRETE PILES	LIN. FT.	630
TEST PILES	EACH	1
CAST IN PLACE PILE EXTENSIONS	LIN. FT.	180



SECTION A-A EAST ABUT. SAME EXCEPT AS SHOWN OR NOTED

NOTE:  
 CONTRACTOR SHALL DRILL HOLES FOR DONNELLS IN PILE CAPS AFTER PRECAST BRIDGE SLAB UNITS ARE IN PLACE. SPACE REINFORCEMENT BARS TO AVOID INTERFERENCE WITH HOLES.

APPROVED \_\_\_\_\_ COUNTY SUPERINTENDENT OF HIGHWAYS  
 EXAMINED \_\_\_\_\_ ENGINEER OF BRIDGE & TRAFFIC STRUCTURES  
 PASSED \_\_\_\_\_ ENGINEER OF DESIGN  
 APPROVED \_\_\_\_\_ CHIEF HIGHWAY ENGINEER

ABUTMENTS & BENTS  
 SOMONAUK CREEK BRIDGE  
 OVER SOMONAUK CREEK  
 SECTION 119A  
 LA SALLE COUNTY  
 STA. 117+23.35

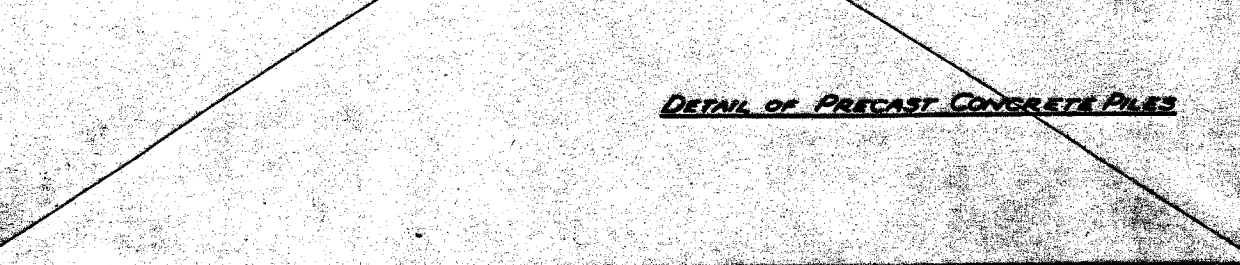
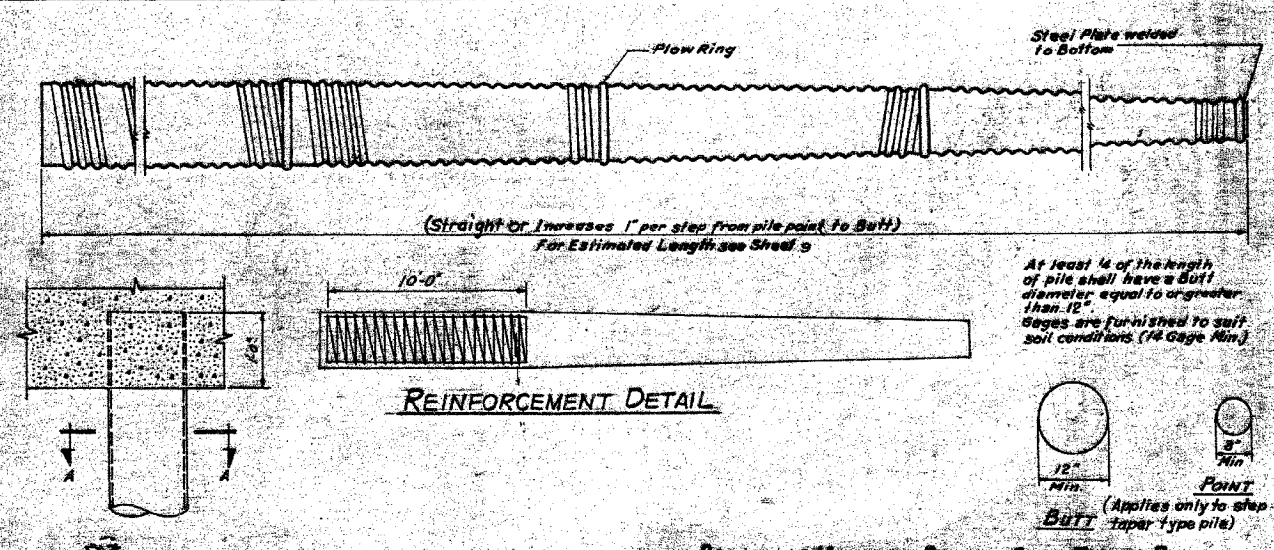
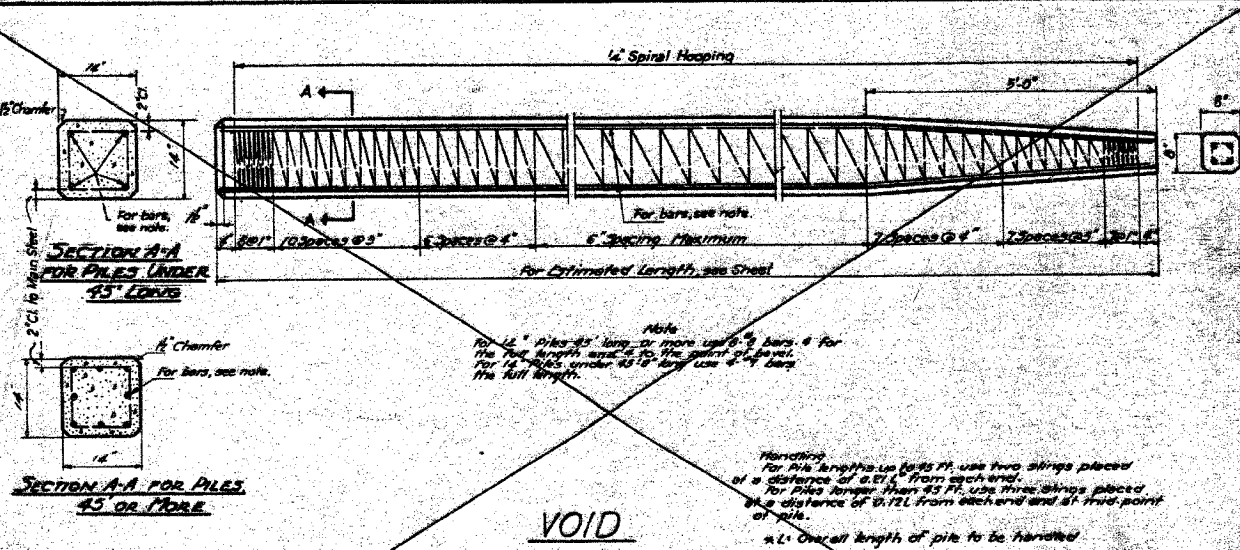
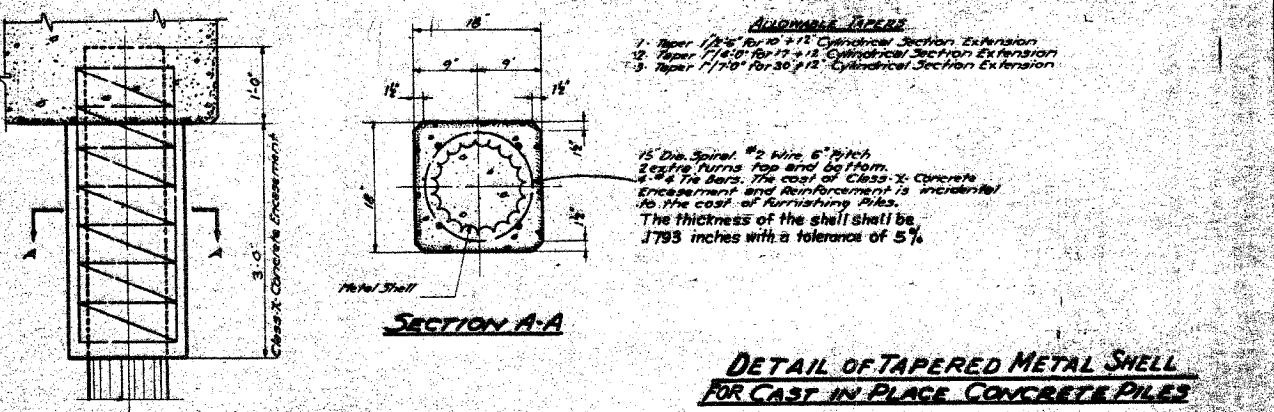
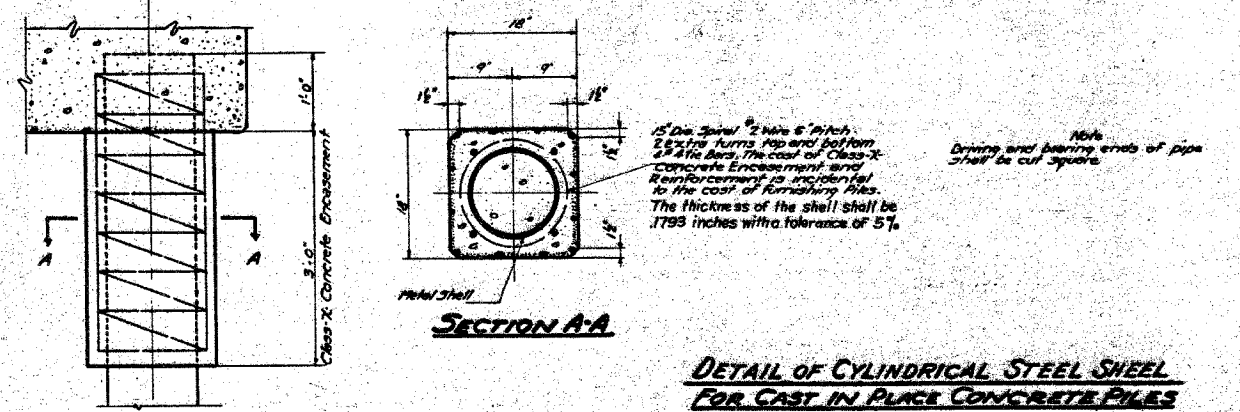
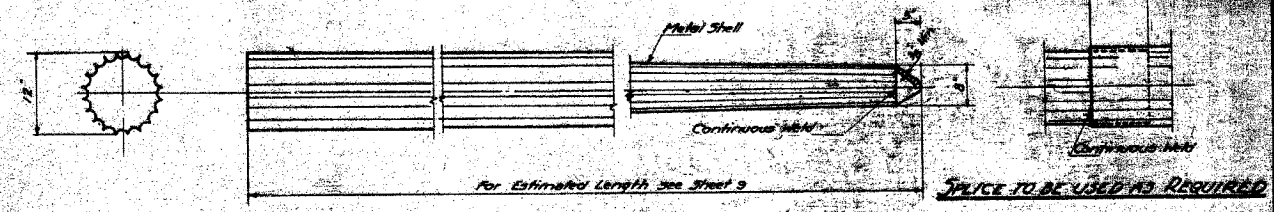
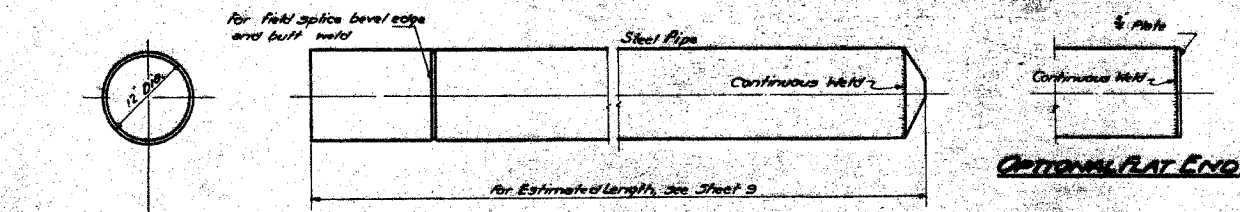
ALFRED BENECH & COMPANY  
 CONSULTING ENGINEERS  
 1199 N. WASHINGTON ST. CHICAGO, ILLINOIS

1199

\*Added 2-20-08

**PILES**  
 PILING TO BE USED AT THE  
 ABUTTS AND BENTS SHALL BE ONE OF THE  
 VARIOUS KINDS SHOWN BELOW

PROJECT	DATE	SHEET
NO. 119A	L.P.E.P.	49
STA. 117+23.35	TO STA.	
S. P. S. REC. NO. 4 ALABAMA PROJECT		



**PILE DETAILS**  
**SOMONAUK CREEK BRIDGE**  
**OVER SOMONAUK CREEK**  
 SECTION 119A  
 LASALLE COUNTY  
 STA. 117+23.35

ALFRED BENECH & ASSOCIATES CONSULTING ENGINEERS  
 16 SOUTH WABASH AVENUE CHICAGO, ILLINOIS

Contact 87351  
 SHEET 49  
 Added 2-20-08