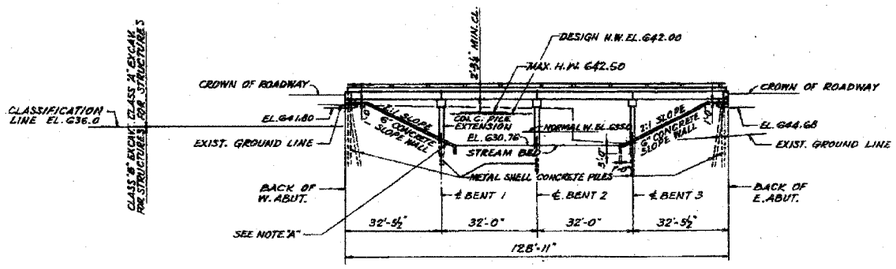
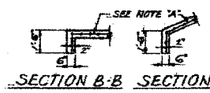
BENCH MARK : "X" CHISELED IN SOUTHEAST WINGWALL OF EXISTING STRUCTURE. EL. 645.11
EXISTING STRUCTURE: WEST MASONRY ABUTMENT & PORTION OF EAST ABUTMENT TO BE REMOVED BY CONTRACTOR AS DIRECTED BY ENGINEER.

Contract 87351
SHEET 46 *

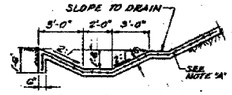


ELEVATION
SCALE: 1" = 20'

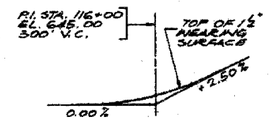
NOTE "A"
REINFORCE WITH WELDED WIRE FABRIC 6'-6" MESH #4 WIRES WT. 58 9/100 SQ. FT. LAYOUT OF SLOPEWALLS MAY BE VARIED TO SUIT GIRDING CONDITIONS IN THE FIELD AS DIRECTED BY THE ENGINEER.



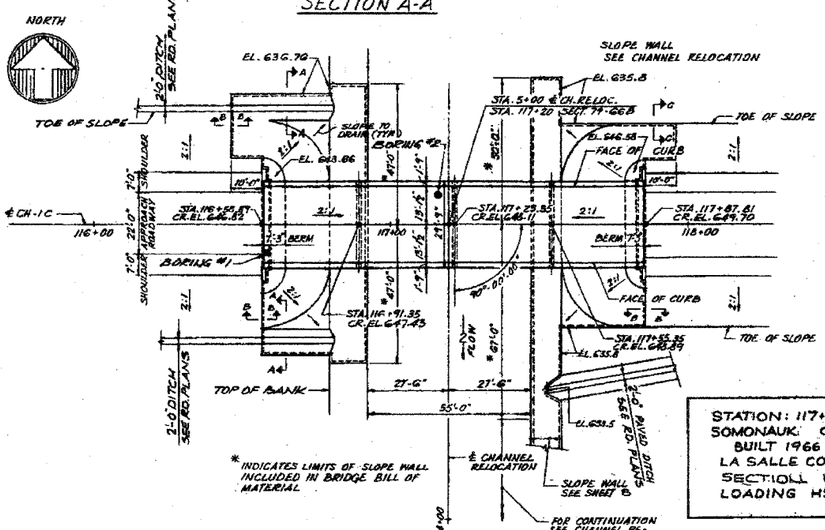
SECTION B-B SECTION C-C



SECTION A-A



PROFILE GRADE



* INDICATES LIMITS OF SLOPE WALL INCLUDED IN BRIDGE BILL OF MATERIAL

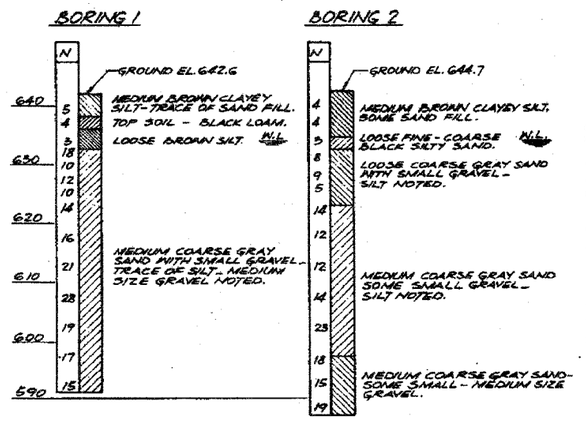
PLAN
SCALE: 1" = 20'

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

NAME PLATE
SEE STANDARD 2113-1

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

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.

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 #/in²
fc = 1800 #/in²
fs = 20,000 #/in²
n = 8

SUBSTRUCTURE
fc = 3500 #/in²
fc = 1400 #/in²
fs = 20,000 #/in²
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

Samuel Ramos
#1451

INDEX OF SHEETS (BRIDGE)
9. DETAIL OF STRUCTURE
10. DETAIL OF ABUT. & PIERS
11. DETAIL OF BENTS
12. DETAIL OF PILE

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 30 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.

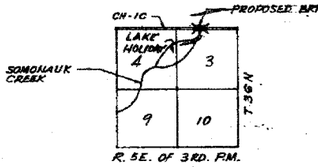
METAL SHELL CAST-IN-PLACE CONCRETE PILES AT THE EAST ABUTMENT SHALL BE DRIVEN IN HOLES DRILLED TO THE NATURAL GROUND LEVEL AS SPECIFIED IN ARTICLE 60.9 (a) OF THE STANDARD SPECIFICATIONS.

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED BY THE DEPARTMENT OF PUBLIC WORKS AND BUILDINGS, JANUARY 2, 1936 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	LBS.	5305
METAL PLATE BRIDGE RAIL	LIN. FT.	251
NAME PLATES	EACH	1
FURNISHING METAL PILE SHELLS	LIN. FT.	760
DRIVING & FILLING SHELLS	LIN. FT.	760
TEST PILES	EACH	2
CAST IN PLACE PILE EXTENSIONS	LIN. FT.	785
CLASS 'A' EXCAVATION FOR STRUCTURES	CU. YDS.	21
CLASS 'B' EXCAVATION FOR STRUCTURES	CU. YDS.	37
PRECAST CONCRETE BRIDGE SLAB	SQ. FT.	3808
BITUMINOUS CONCRETE SURFACE COURSE, SUBCLASS I-11	TONS	AO
BITUMINOUS MATERIALS, PRIME COAT	GAL.	AO



LOCATION SKETCH

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

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

119

* Added 2-20-08