Contract 63601
Sheet 51

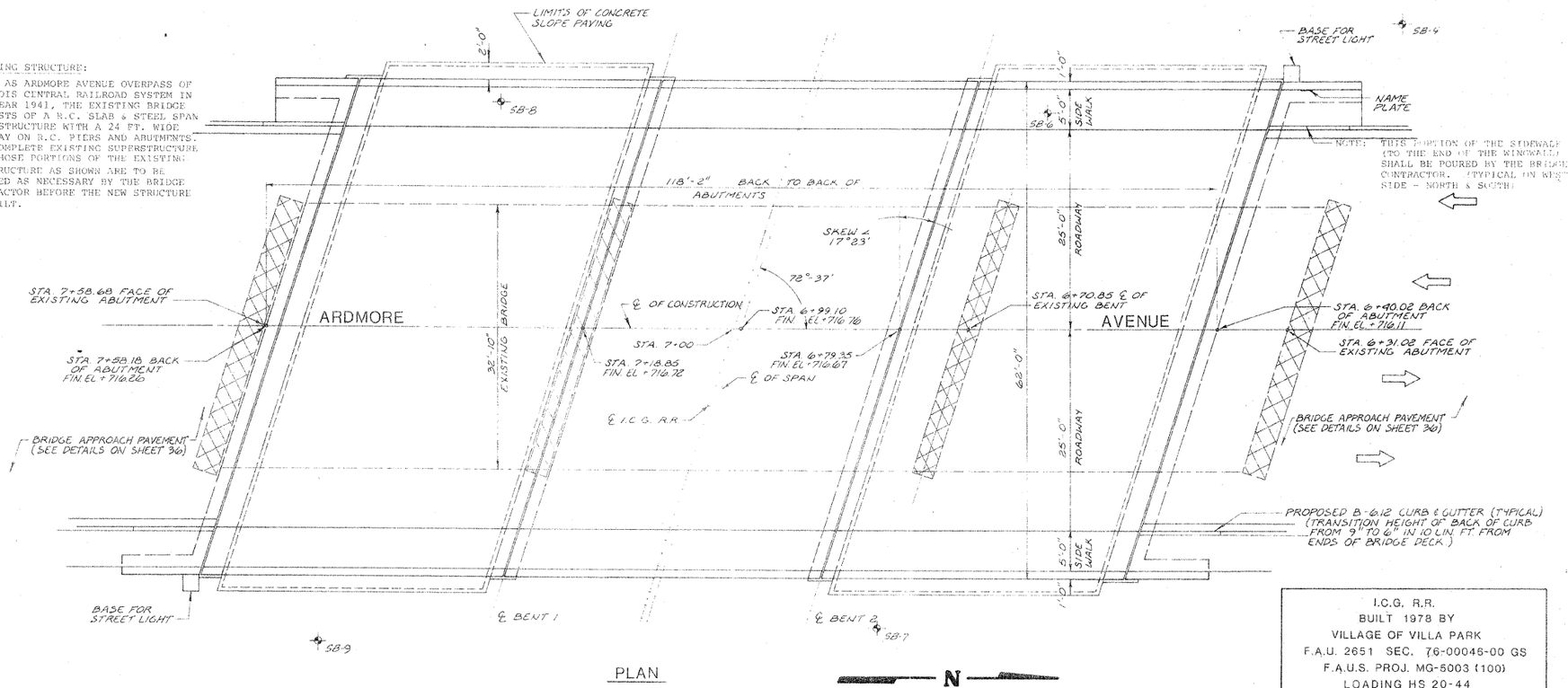
0115-N

BENCHMARK: SOUTHEAST FLANGE BOLT ON HYDRANT @ SOUTHEAST CORNER OF ARDMORE & SUNSET. ELEVATION 696.56

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2651	76-00046-00-GS	DUPAGE	36	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT MG-5003(100)	

EXISTING STRUCTURE:

BUILT AS ARDMORE AVENUE OVERPASS OF ILLINOIS CENTRAL RAILROAD SYSTEM IN THE YEAR 1941, THE EXISTING BRIDGE CONSISTS OF A R.C. SLAB & STEEL SPAN SUPERSTRUCTURE WITH A 24 FT. WIDE ROADWAY ON R.C. PIERS AND ABUTMENTS. THE COMPLETE EXISTING SUPERSTRUCTURE AND THOSE PORTIONS OF THE EXISTING SUBSTRUCTURE AS SHOWN ARE TO BE REMOVED AS NECESSARY BY THE BRIDGE CONTRACTOR BEFORE THE NEW STRUCTURE IS BUILT.



PLAN

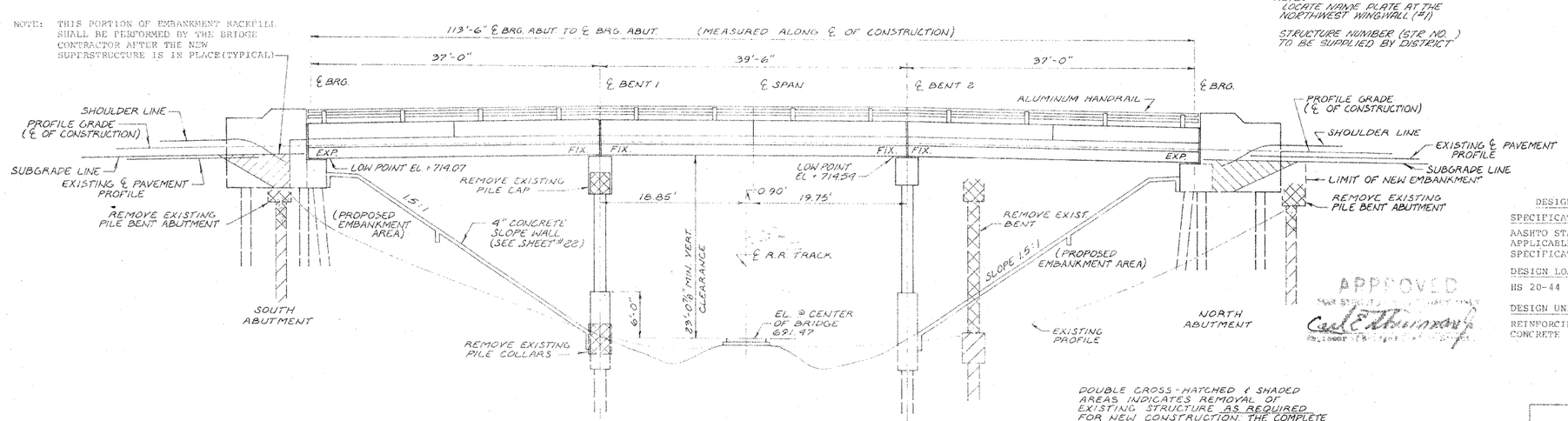
I.C.G. R.R.
BUILT 1978 BY
VILLAGE OF VILLA PARK
F.A.U. 2651 SEC. 76-00046-00 GS
F.A.U.S. PROJ. MG-5003 (100)
LOADING HS 20-44
STR. NO.

NAME PLATE
SEE ST'D 2113

NOTE: LOCATE NAME PLATE AT THE NORTHWEST WINGWALL (#1)

STRUCTURE NUMBER (STR NO.) TO BE SUPPLIED BY DISTRICT

NOTE: THIS PORTION OF EMBANKMENT BACKFILL SHALL BE PERFORMED BY THE BRIDGE CONTRACTOR AFTER THE NEW SUPERSTRUCTURE IS IN PLACE (TYPICAL)



ELEVATION

DOUBLE CROSS-HATCHED & SHADED AREAS INDICATES REMOVAL OF EXISTING STRUCTURE AS REQUIRED FOR NEW CONSTRUCTION. THE COMPLETE EXISTING SUPERSTRUCTURE IS ALSO TO BE REMOVED.

TOTAL BRIDGE BILL OF MATERIALS

ITEM	UNIT	SUPER-STRUCTURE	SUB-STRUCTURE	TOTAL
BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I.	TON	110		110
REMOVAL OF EXISTING STRUCTURE	LUMP SUM			1
PROTECTIVE COAT	SQ. YD.	200		200
CLASS X CONCRETE	CU. YD.	68	307	375
PRECAST PRESTRESSED CONCRETE DECK BEAMS (17")	SQ. FT.	7,103		7,103
ALUMINUM RAILING, TYPE L	LIN. FT.	230		230
REINFORCEMENT BARS	POUNDS	545	32,675	33,220
REINFORCEMENT BARS, EPOXY COATED	POUNDS	5,235	380	5,615
FURNISHING METAL PILE SHELLS, 12"	LIN. FT.		462	462
FURNISHING METAL PILE SHELLS, 14"	LIN. FT.		2372	2372
DRIVING AND FILLING SHELLS	LIN. FT.		2834	2834
TEST PILE METAL SHELLS	EACH		3	3
NAME PLATES	EACH	1		1
SLOPE WALL, 4 INCH	SQ. YD.		600	600
WATERPROOF MEMBRANE SYSTEM	SQ. YD.	650		650
EXPANSION JOINT, SEALS 2 1/2"	LIN. FT.	130		130
PORTLAND CEMENT MORTAR PARAPET CURB	LIN FT.	1600		1600

GENERAL NOTES

1. SEE SPECIAL PROVISIONS FOR BORING DATA.
2. ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH TWO COATS OF BASIC LEAD SILICO CHROMATE PAINT.
3. EXPANSION GUARDS WHICH ARE NOT CAST IN THE PRECAST UNIT SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 503.07(c) OF THE STANDARD SPECIFICATIONS. THE COST SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PRECAST PRESTRESSED CONCRETE BRIDGE DECK.
4. SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" MESH, WEIGHING 58# PER 100 SQ.FT.
5. THE CONTRACTOR SHALL DRIVE 1 METAL SHELL TEST PILE IN A PERMANENT LOCATION AT THE NORTH ABUTMENT AND 1 METAL SHELL TEST PILE IN A PERMANENT LOCATION AT BENTS #1 AND #2 AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.
6. CONCRETE PILES AT ABUTMENTS SHALL BE DRIVEN IN HOLES PRECORED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 513.09(c) OF THE STANDARD SPECIFICATIONS.
7. THE TOP SURFACE OF THE BEAMS SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 505.06 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE SURFACE SHALL NOT BE ROUGHENED BY BROOMING. THE FINISHED SURFACE SHALL BE FREE OF DEPRESSIONS OR HIGH SPOTS WITH SHARP CORNERS.
8. THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM ENBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.
9. THE CONCRETE RAIL SECTION ABOVE THE MANDATORY CONSTRUCTION JOINT AT THE TOP OF THE SIDEWALK SHALL BE CONSTRUCTED OF CLASS X CONCRETE, EXCEPT THE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL CONCRETE.
10. PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATERPROOFING MEMBRANE SYSTEM IS APPLIED.

DESIGN DATA

SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES - 1973
APPLICABLE INTERIMS AND ALL APPLICABLE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - 1976

DESIGN LOADING

HS 20-44

DESIGN UNIT STRESSES

REINFORCING STEEL fs = 20,000 P.S.I.
CONCRETE (CAST IN PLACE) fc = 3,500 P.S.I.
fc = 1,400 P.S.I.
n = 8.5

PRECAST PRESTRESSED CONCRETE DECK BEAMS

PRESTRESSING STRANDS 1/2" (7-WIRE)
f'ci = 270,000 P.S.I.
f'si = 189,000 P.S.I.
f'c = 5,000 P.S.I.
f'ci = SEE INDIVIDUAL BEAM DETAILS

APPROVED
State of Illinois
Carl E. Thurnau

REVISIONS	
NAME	DATE
D.C.N.	1-30-78
Added	7-21-11

ILLINOIS DIVISION OF HIGHWAYS

GENERAL BRIDGE PLAN

ARDMORE AVENUE BRIDGE

SCALE: 5 0 5

DRAWN BY: D.C.N.

DATE: 12-28-77

CHECKED BY: G.A.S.

0115-14