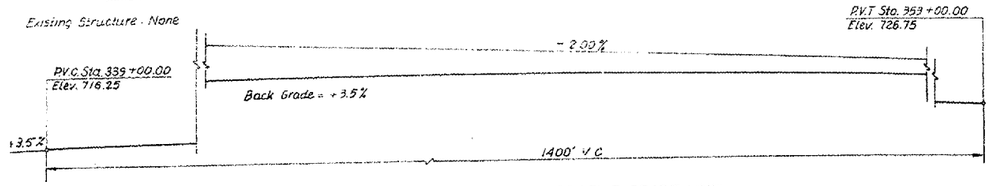
CONTRACT NO. 66577

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	50(1HB-2,1HB)BP	LASALLE	17	13
	ILLINOIS			

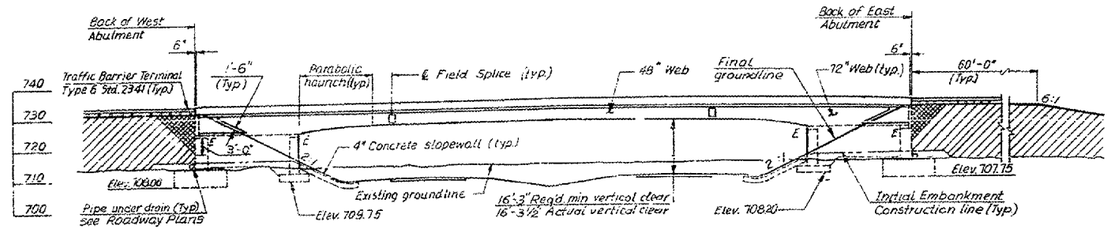
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Bench Mark: Benchmark #7 is a railroad spike in the power pole at the proposed southwest corner of the intersection of Illinois Route 18 and F.A.P. Route 412 Elevation 717.177.

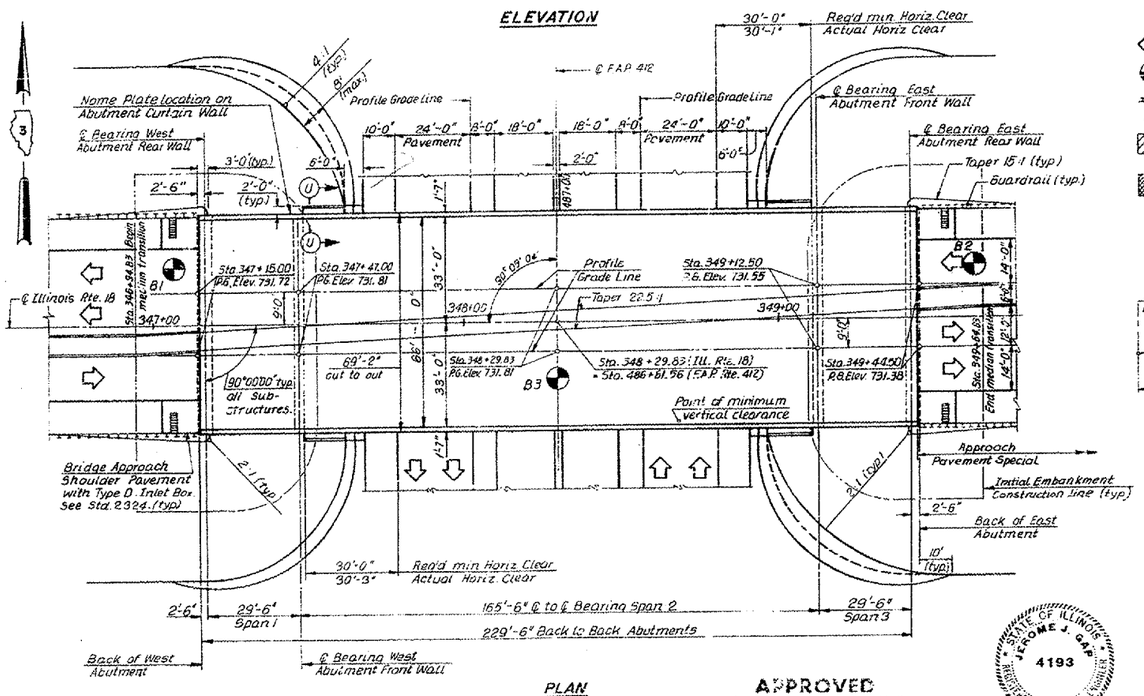
Existing Structure - None



ILLINOIS ROUTE 18 PROFILE GRADE LINE



ELEVATION



PLAN

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

STATE OF ILLINOIS
JEROME J. GAP
4193
REGISTERED STRUCTURAL ENGINEER

SPECIFICATIONS

DESIGN SPECIFICATIONS: American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 1983, with 1984, and 1985 Interim Specifications.

DESIGN LOADING: Live load is AASHTO HS 20-44. Allowance for future wearing surface is 25 psf. All other loads are as prescribed in AASHTO.

UNIT STRESSES:

Concrete:	f'c =	3,500 psi	
Reinforcing Steel:	fy =	60,000 psi	
Structural Steel:	fy =	50,000 psi	M223, Gr 50
	fy =	36,000 psi	M183
Prestressing rods:	fpu =	150,000 psi	

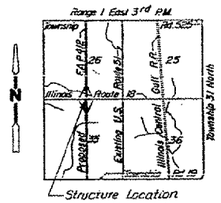
GENERAL NOTES

ABBREVIATIONS:

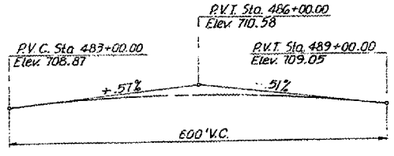
E.F.	denotes each face	Min.	denotes minimum
B.F.	denotes back face	Brg.	denotes bearing
F.F.	denotes front face	℄	denotes center line
O.F.	denotes outside face	Clr.	denotes clearance
I.F.	denotes inside face	P.J.F.	denotes preformed joint filler
Bott.	denotes bottom		

LEGEND

- indicates direction of traffic lane.
- indicates boring location
- indicates guardrail
- E indicates expansion bearing
- indicates embankment placement after construction of Abutment Rear Wall
- indicates porous granular embakment to be placed after construction of the deck and superstructure



LOCATION MAP



F.A.P. 412 PROFILE GRADE LINE

PLATE GIRDER ERECTION SEQUENCE

1. Erect the girders in 3 segments supported by the permanent bearings and temporary supports.
2. Erect the girder splices.
3. Install tiedown devices.
4. Remove temporary supports.
5. Pour concrete deck in sequence as shown on Dwg. No. I7.

Notes:
For section U-U see Dwg. No. I2
Temporary supports shall be incidental to structural Steel.

GENERAL NOTES (CONT'D)

REINFORCEMENT: Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60. The concrete cover over the reinforcement shall be 2" clear unless otherwise shown. Bars shown thus 8x7 #4 etc. indicate 8 lines of bars with 7 lengths per line. Reinforcement bars designated (E) shall be epoxy coated. All dimensions relating to reinforcing bars are to center of bars unless otherwise shown. Dimensions relating to bending of bars are out to out of the bar.

STRUCTURAL STEEL: Fasteners shall be high strength bolts having 7/8" diameter with 15/16" diameter open holes unless otherwise noted. All high strength bolted connections shall conform to the requirements of the latest issue of the Specifications for Structural Joints using ASTM A325 (M164) or A490 (M253) bolts for slip critical connections except tightening methods using either the load indicating washers or the calibrated wrench method are not allowed. Calculated weight of AASHTO M223, Grade 50 structural steel = 549,550 pounds. Calculated weight of AASHTO M183 structural steel = 78,170 pounds. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material of the steel girders.

PAINTING: The zinc-silicate and vinyl paint system shall be used for shop and field painting of structural steel except where otherwise noted.

FIELD WELDING: Field welding of construction accessories will not be permitted to the bottom flange of girders nor to the top flange of girders in Spans 1 and 3, nor to the top flange of girders in Span 2 for a distance equal to one-fourth the span length from the abutment front walls. Field welding in other areas will be permitted only when approved by the Engineer.

BORING DATA: See proposal for boring data, or Dwg. No. I 17

ANCHOR BOLTS: Anchor bolts shall be set before bolting cross frames over abutment front walls.

CONCRETE: Exposed edges of concrete shall be chamfered 3/4 inch unless otherwise shown.

BEARING SEATS: Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims of the dimensions shown in Drawing I11 shall be provided for each bearing in addition to all other plates or shims and placed if necessary.

UTILITIES: The Contractor is responsible for making his own determinations as to the type and location of underground and other utilities as may be necessary to avoid damage thereto.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS FOR INFORMATION ONLY BRIDGE LOCATION 2

S.N. 050-0215

SCALE: VERT.
HORIZ.
DATE 04/18/05

DRAWN BY RW
CHECKED BY

Date: 04/18/05
project: c:/projects/cmain05/cm3078/details.dgn