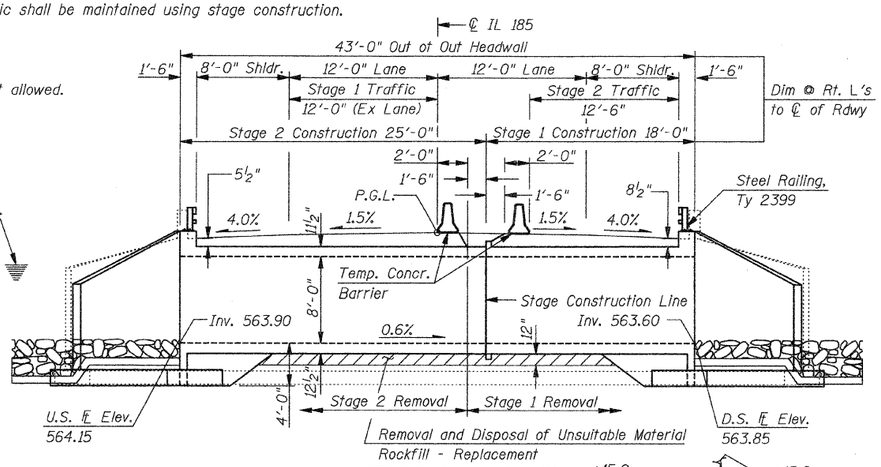
B.M. - Chiseled "□" on N.W. wingwall of bridge north of T.R. 700 N and 2450 E at sta. 939+75, 21.6' Rt.
Elev. 573.34

Existing Structure S.N. 026-0070 constructed in 1932 is a single span 21.5" reinforced concrete slab structure with a 4" wearing surface.The structure is 30'-0" Bk to Bk of abutments and provided 42'-2" roadway width. The structure was constructed with a 30° skew. The abutments are closed abutments on spread footings. Traffic shall be maintained using stage construction.

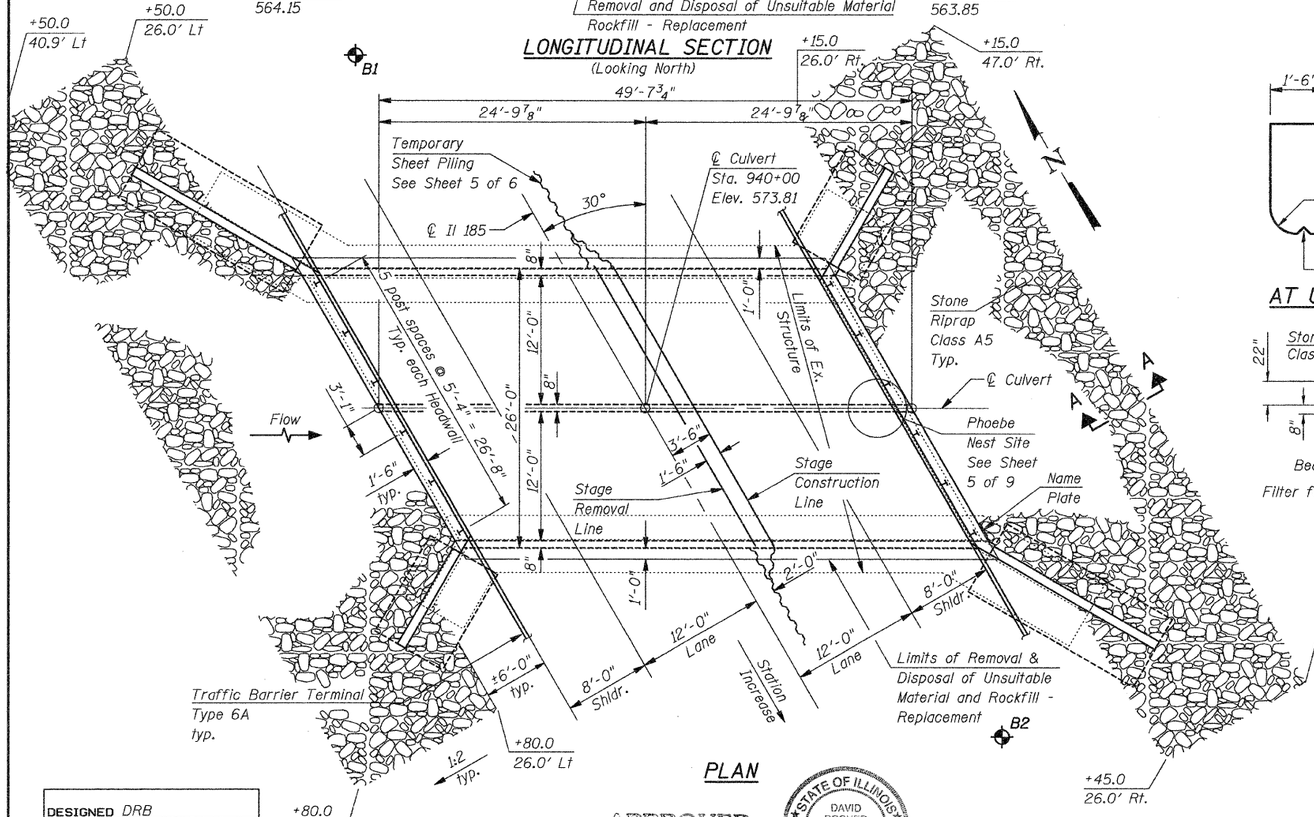
No Salvage.

Precast Culvert Option not allowed.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



LONGITUDINAL SECTION
(Looking North)



PLAN

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

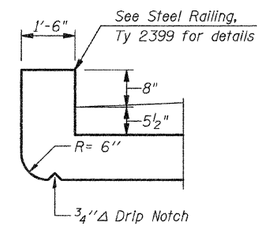
WATERWAY INFORMATION

Drainage Area = 2.27 SQ MI Low Grade Elev. 573.78 @ Sta. 936+70

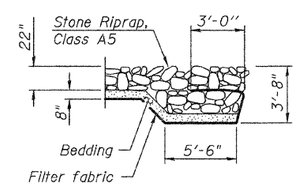
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	488	112	126	570.4	0.1	0.1	570.5	570.5
Design	50	770	129	143	571.1	0.9	0.4	572.0	571.5
Base	100	895	133	150	571.4	0.9	0.5	572.3	571.9
Overtopping									
Max. Calc.	500	1195	133	162	571.9	1.4	0.9	573.3	572.8

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	245
Porous Granular Embankment	Cu. Yd.	222
Removal of Existing Structures No. 1	Each	1
Reinforcement Bars	Pound	26,570
Reinforcement Bars, Epoxy Coated	Pound	570
Bar Splicers	Each	178
Concrete Box Culverts	Cu. Yd.	177.8
Temporary Sheet Piling	Sq. Ft.	690
Steel Railing, Type 2399	Foot	56
Stone Riprap, Class A5	Sq. Yd.	346
Filter Fabric	Sq. Yd.	346
Removal & Disposal of Unsuitable Material	Cu. Yd.	52
Rockfill - Replacement	Ton	106
Name Plates	Each	1



AT UPSTREAM END



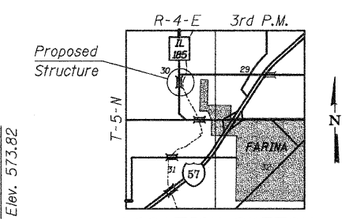
SECTION A-A

DESIGN SCOUR ELEVATION TABLE

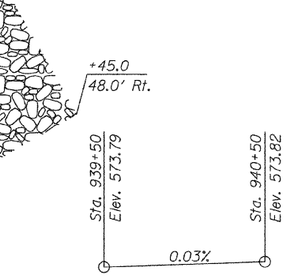
Design Scour Elevation (ft.)	Upstream	Downstream
	559.90	559.60

STATION 940+00.00
BUILT 2010 BY
STATE OF ILLINOIS
FAP ROUTE 750 - SECTION 114B-1(1)
LOADING HS20
STRUCTURE NO. 026-2020

NAME PLATE
See Std. 515001



LOCATION SKETCH



PROFILE GRADE LINE
IL RTE 185

INDEX OF SHEETS

1. GENERAL PLAN & ELEVATION
2. STAGE CONSTRUCTION DETAILS & TEMPORARY SHEET PILING
3. STAGE CONSTRUCTION DETAILS
4. STAGE 1 CULVERT DETAILS
5. STAGE 2 CULVERT DETAILS
6. STEEL RAILING, TYPE 2399
7. BAR SPLICER ASSEMBLY DETAILS
8. TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
9. SOIL BORING LOGS

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

LOADING HS-20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

GENERAL PLAN
IL ROUTE 185 OVER
EAST FORK KASKASKIA RIVER
F.A.P RTE. 750 - SECTION 114B-1(1)
FAYETTE COUNTY
STA. 940+00
S.N. 026-2020

DESIGNED	DRB
CHECKED	-
DRAWN	THW
CHECKED	SCD

ie consultants
IE CONSULTANTS, INC
6420 SOUTH SIXTH STREET
SPRINGFIELD, ILLINOIS 62712
TEL. (217) 529-8027
FAX (217) 529-4543
IESPRINGFIELD@IE-CONSULTANTS.COM
WWW.IE-CONSULTANTS.COM

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (for)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DAVID BOOHER
4775
LICENSED STRUCTURAL ENGINEER
SPRINGFIELD, ILL.

David Booher, Illinois S.E. 081-004775
Expires 11-30-2010
11-20-09
Date

SHEET NO. 1 OF 9 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	*	114B-1(1) & 114B-1(2)	FAYETTE	54	19
	* F.A.P. RTE. 750, F.A.S. RTE. 719		CONTRACT NO. 74110		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		