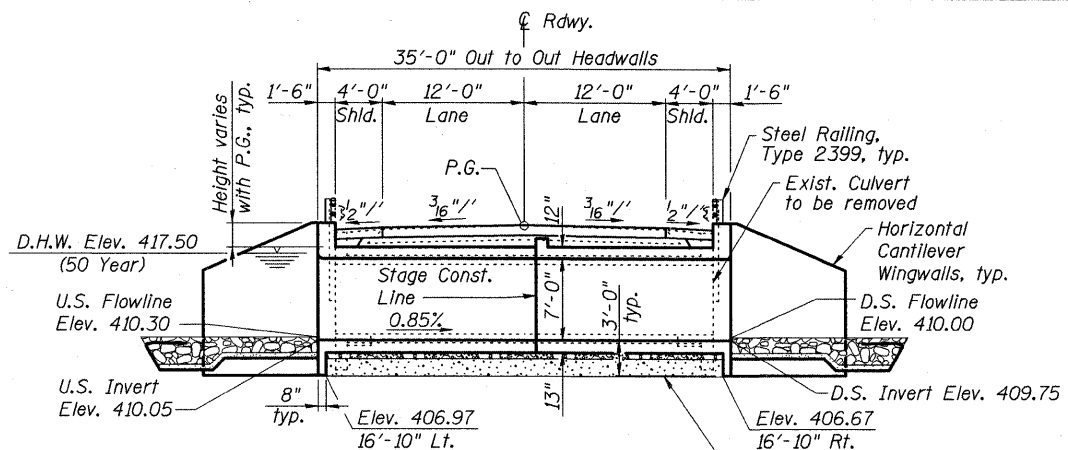


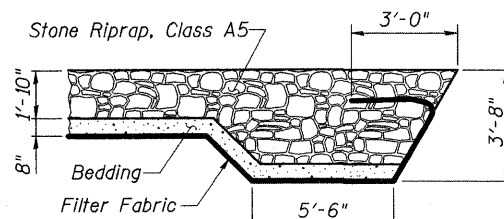
BENCHMARK: BM 101-RR spike in power pole Sta. 705+35, 35' Rt. southeast of Structure No. 076-2001. Elev. 414.90

EXISTING STRUCTURE: SN 076 2001 was originally built in 1923 as Route 34, Section 3B. It is a double barrel 12'S by 6'R reinforced concrete box culvert with L-Type wing walls and side mounted steel railing. The barrel length is 32'-0" o. to o. headwalls. The length along centerline roadway is 26'-6". There is no skew. Traffic shall be maintained utilizing stage construction.

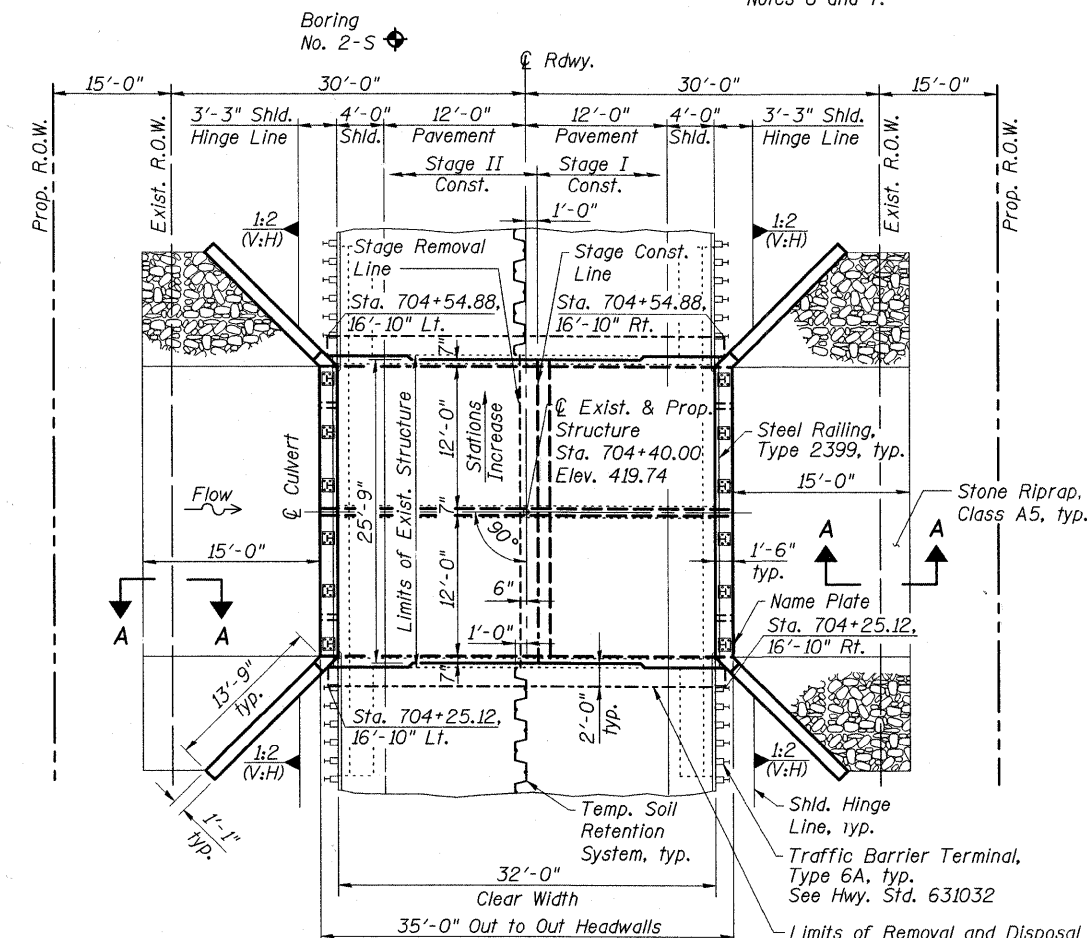
No salvage.



LONGITUDINAL SECTION (Looking South)



SECTION A-A



PLAN

STATION 704+40  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
F.A. RT. 778 SEC. 3B-1  
LOADING HS20-44  
STR. NO. 076-2006

NAME PLATE (See Hwy. Std. 515001)

APPROVED FOR STRUCTURAL ADEQUACY ONLY  
ENGINEER OF BRIDGES AND STRUCTURES

STRUCTURE INDEX OF SHEETS

General Plan	Sheet No. 1 of 7
Stage Construction Details	Sheet No. 2 of 7
Box Culvert Details (1 of 2)	Sheet No. 3 of 7
Box Culvert Details (2 of 2)	Sheet No. 4 of 7
Steel Railing, Type 2399	Sheet No. 5 of 7
Bar Splicer Assembly and Mechanical Splicer Details	Sheet No. 6 of 7
Boring Logs	Sheet No. 7 of 7

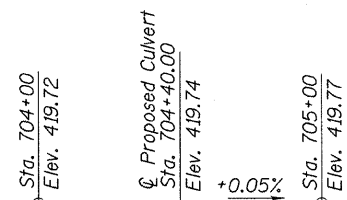
GENERAL NOTES

- 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 the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- For backfilling and embankment, see Standard Specifications. Backfill culvert excavation with Porous Granular Embankment, except the outer 3' at each end of the culvert shall be backfilled with impervious material. See sheet 2 of 7 for limits of PGE.
- Precast alternate is not allowed.
- The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
- The Rock Fill shall be capped with 6 in. of CA 7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock Fill - Replacement.
- The elevation of Top of Rock varies between the soil borings taken at the site. If rock is encountered within the plan limits of the bottom slab of the box culvert it shall be excavated to 6" below the bottom of the slab and replaced with the capping material for Rock Fill - Replacement. Rock encountered within the plan limits of the cut-off walls and wingwalls shall be excavated according to Article 502.05 of the Standard Specifications.
- The plan quantity of Rock Excavation for Structures is based on an assumed Top of Rock elevation of 407.7. The final quantity, if any, will be measured for payment according to Article 502.12(b)(2) of the Standard Specifications.
- Modify existing channel to match culvert at each end as directed by the Engineer, cost included in the pay item for Stone Riprap, Class A5.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Porous Granular Embankment	Yd.	283
Stone Riprap, Class A5	Yd.	132
Filter Fabric	Sq. Yd.	132
Removal of Existing Structures No. 1	Each	1
Rock Excavation for Structures	Cu. Yd.	3
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	84
Reinforcement Bars, Epoxy Coated	Pound	20,900
Bar Splicers	Each	139
Steel Railing, Type 2399	Foot	53
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	121.3
Temporary Soil Retention System, (Location 1)	Sq. Ft.	280
Rock Fill - Replacement	Ton	172

See Roadway Plans for quantities of Temporary Concrete Barrier, Earth Excavation, and Pavement Removal.



PROFILE GRADE (Along Centerline Roadway)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (Ft.)	Downstream	Upstream
	406.75	407.05

WATERWAY INFORMATION

Flood Yr.	Freq.	Opening - Sq. Ft.		Nat. Head-Ft.		Headwater El.	
		C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.
Design	10	825	132.7	141.6	416.2	0.9	0.7
Exist. Overtopping	50	1330	144.0	168.0	417.5	1.9	1.2
Base	70	1440	144.0	-	417.6	2.3	-
Prop. Overtopping	100	1550	144.0	168.0	417.9	2.3	1.7
	110	1620	-	168.0	418.0	-	1.9

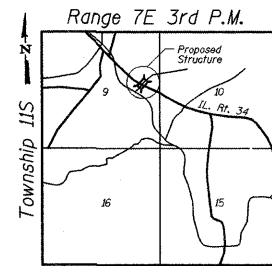
10 year velocity = 6.2 fps (Exist.); 5.8 fps (Prop.)

DESIGN SPECIFICATIONS

2002 AASHTO  
LOADING HS20-44  
Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS  
f'c = 3,500 psi  
fy = 60,000 psi (Reinf.)



LOCATION SKETCH



EXPIRES 11-30-2012

Michael J. Dooly  
SIGNATURE

12-30-2010  
DATE

GENERAL PLAN  
IL 34 OVER UNNAMED STREAM  
FAP ROUTE 778 - SECTION 3B-1  
POPE COUNTY  
STATION 704+40.00  
STRUCTURE NO. 076-2006

FILE NAME = 0762006-98854-01-GenPln.dgn

USER NAME = HAS

DESIGNED - MTD 06/10

REVISÉ -

CHECKED - MJW 09/10

REVISÉ -

PLOT SCALE = 0.1" = 1' IN.

DRAWN - DWH 06/10

REVISÉ -

PLOT DATE = 12/27/2010 1:08:52 PM

CHECKED - MTD 12/10

REVISÉ -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
778	3B-1	POPE	50	30

CONTRACT NO. 98854

ILLINOIS FED. AID PROJECT AID