

Bench Mark: Southeast Headwall of existing structure (SM 020-0039), Elevation 716.54

Existing Structure: S.M. 020-0039 built in 1931 as double 10' x 10' R.C. box culvert, 40'-0" face to face of curb, with culvert length of 42'-0"
Traffic to be maintained utilizing stage construction.

No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 of 7
FAP 760	124BR-1	DEWITT	64	38	7 SHEETS
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

CONTRACT NO. 70014

INDEX OF SHEETS

1. General Plan and Longitudinal Section
2. Stage Construction Details
3. Culvert Details
4. Culvert Details
5. Bar Splicer Assembly Details
6. Temporary Concrete Barrier for Stage Construction
7. Soil Boring Logs

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ~~AASHTO M31 or MS2 Grade 60~~ ASTM A 706 (IL MODIFIED).
See Special Provisions.

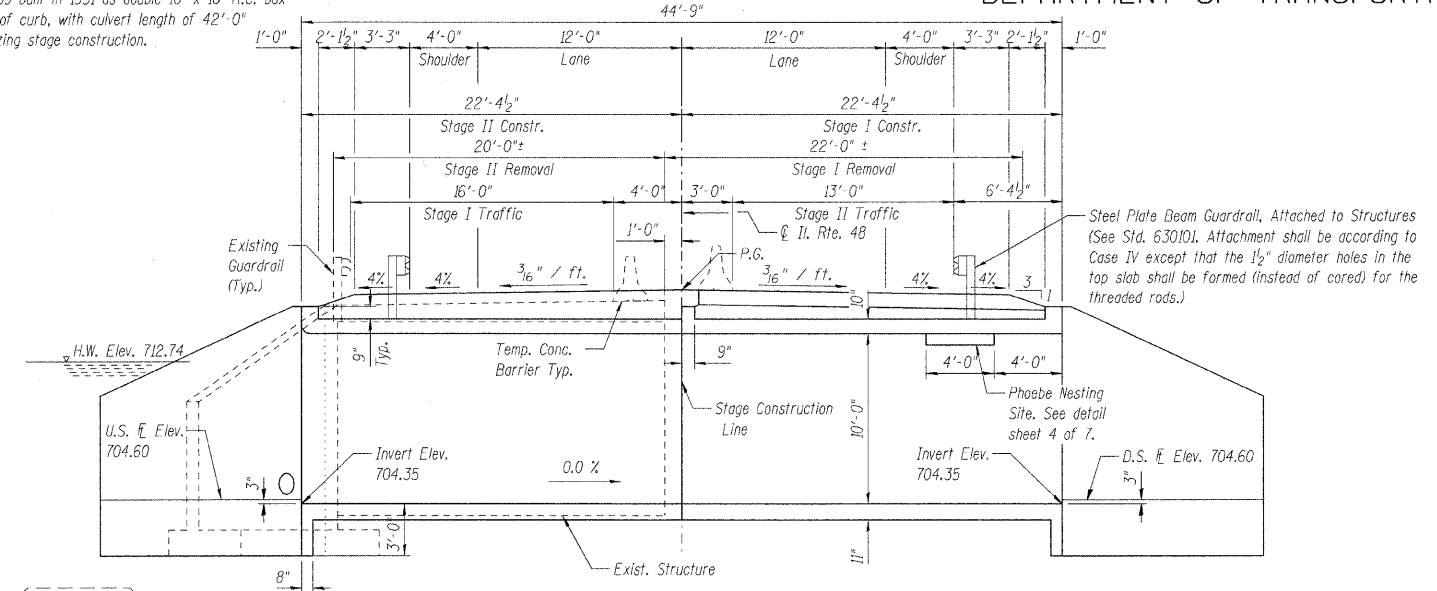
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Exposed edges shall have a 3/4" chamfer unless noted otherwise.

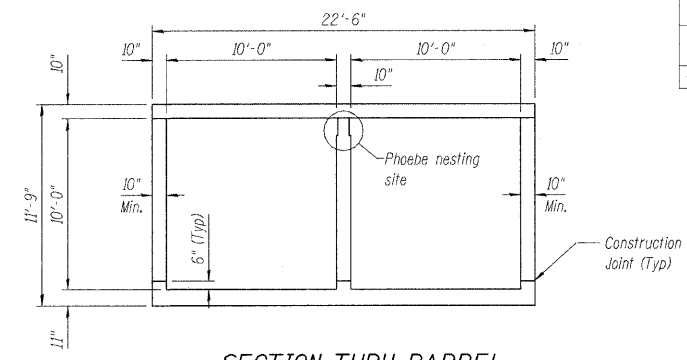
Precast culvert alternate is not allowed.

All construction joints shall be bonded.

U.S. = Up Stream
D.S. = Down Stream



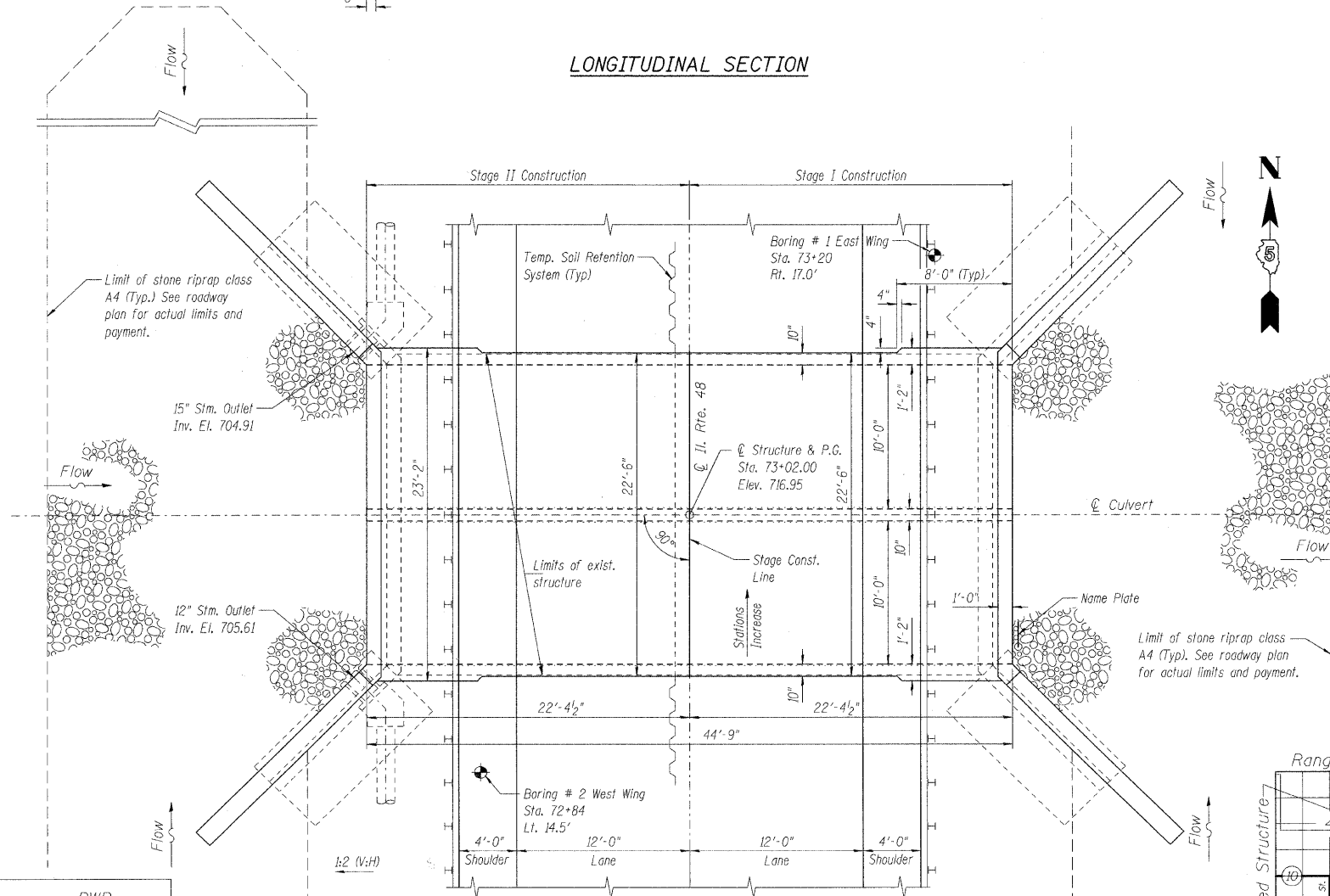
LONGITUDINAL SECTION



SECTION THRU BARREL

STATION 73+02.00
BUILT 20 -- BY
STATE OF ILLINOIS
FAP RTE. 760 SEC. 124BR-1
LOADING HS20
STR. NO. 020-2011

NAME PLATE
See Std. 515001



PLAN

WATERWAY INFORMATION

Drainage Area = 4.237 sq. mi. Low Grade Elev. 716.84 @ Sta. 73+12.7 Max. Rec. H.W.E. = Unk.									
Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head-Ft.		Headwater El.	
Design	50	608	Exisl.	Prop.	712.74	Exisl.	Prop.	Exisl.	Prop.
Base	100	696	145	167	712.97	0.66	0.63	713.63	713.60
Overlapping									
Max. Calc.	500	906	154	175	713.39	0.96	0.91	714.35	714.30

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 2	Each	1
Temporary Soil Retention System	Sq. Ft.	423
Concrete Box Culverts	Cu. Yd.	153.3
Reinforcement Bars	Pound	32470
Bar Splicers	Each	132
Name Plates	Each	1
Steel Plate Beam Guardrail, Attached to Structures	Foot	45

DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

SEISMIC DATA

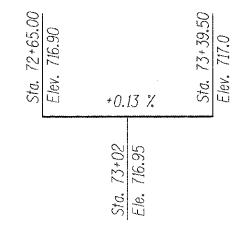
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.7% g
Site Coefficient (S) = 1.5

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO



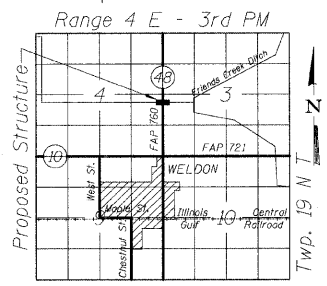
PROFILE GRADE
(along roadway)



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

Michael Avellano
Illinois Structural No. 081-005084
Exp. 11/30/04
Date 4/20/04



LOCATION SKETCH

PLANS PREPARED BY:
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
IL ROUTE 48 OVER
TRIBUTARY TO FRIENDS CREEK DITCH
FAP 760 - SECTION 124BR-1
DEWITT COUNTY
STATION 73+02.00
STRUCTURE No. 020-2011
GENERAL PLAN & LONGITUDINAL SECTION

DESIGNED	-	BWB
CHECKED	-	MAA
DRAWN	-	RMR
CHECKED	-	BSC