

BM #1  
Chiseled box on east headwall  
north side of IL 116 just north of culvert  
Sta 149+08.77, 41.85' Rt, Elev 674.16

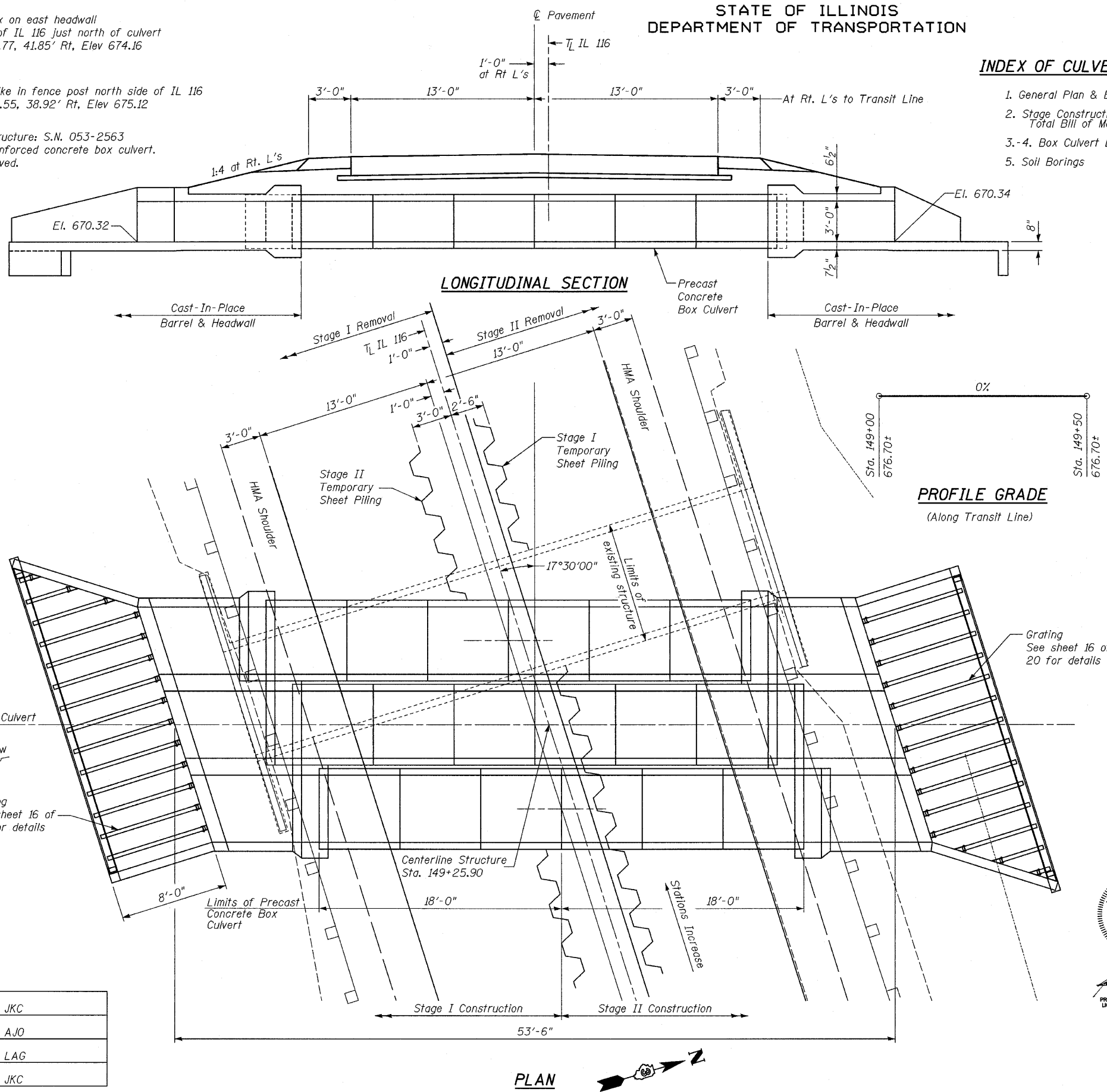
BM #2  
Railroad spike in fence post north side of IL 116  
Sta 152+46.55, 38.92' Rt, Elev 675.12

Existing Structure: S.N. 053-2563  
8' x 3' Reinforced concrete box culvert.  
To be removed.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

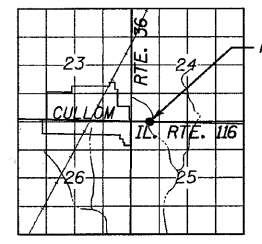
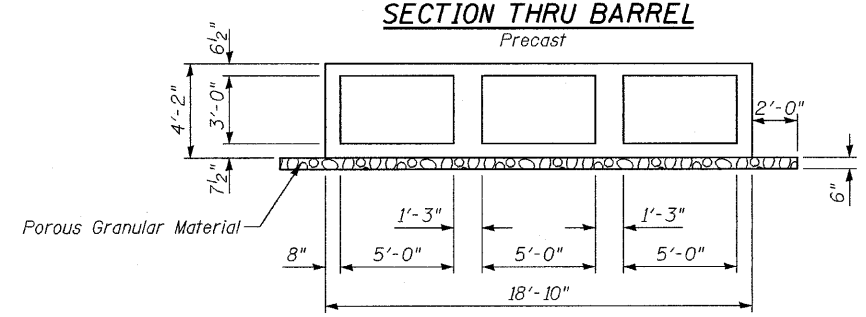
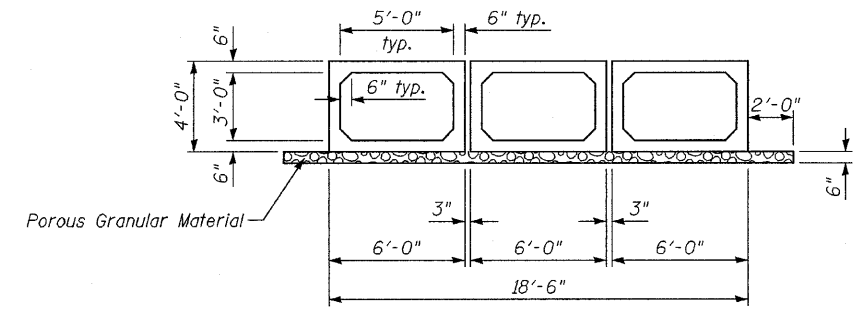
INDEX OF CULVERT PLANS

1. General Plan & Elevation
2. Stage Construction Details & Total Bill of Materials
- 3-4. Box Culvert Details
5. Soil Borings



GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
3. Other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
4. See sheet 17 of 20 for Backfill Details.
5. See sheet 2 of 5 for Total Bill of Materials.



PROJECT LOCATION  
**LOADING HS20-44**  
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

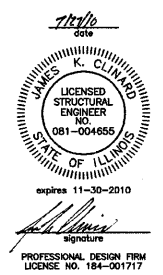
FIELD UNITS  
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 50,000 psi (M270 Grade 50)

WATERWAY INFORMATION

Drainage Area = 0.46 sq. mi. Low Grade Elev. = 676.62 @ Sta. 151+01

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	195	24	45	673.3	1.8	0.2	675.1	673.5	
Design	50	325	24	45	673.6	3.0	1.0	676.6	674.6
Base	100	384	24	45	673.7	2.9	1.5	676.6	675.2
Overtopping	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max. Calc.	500	529	24	45	674.0	2.9	2.5	676.9	676.5

GENERAL PLAN & ELEVATION  
**ILLINOIS ROUTE 116 OVER DRAINAGE DITCH**  
**F.A.P. RT. 681 SEC. (115)I**  
**LIVINGSTON COUNTY**  
**STATION 149+25.90**  
**STRUCTURE NO. 053-2576**



DESIGNED	JKC
CHECKED	AJO
DRAWN	LAG
CHECKED	JKC

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	681	(115)I	LIVINGSTON	20	10
5 SHEETS	CONTRACT NO. 66870			ILLINOIS FED. AID PROJECT	