

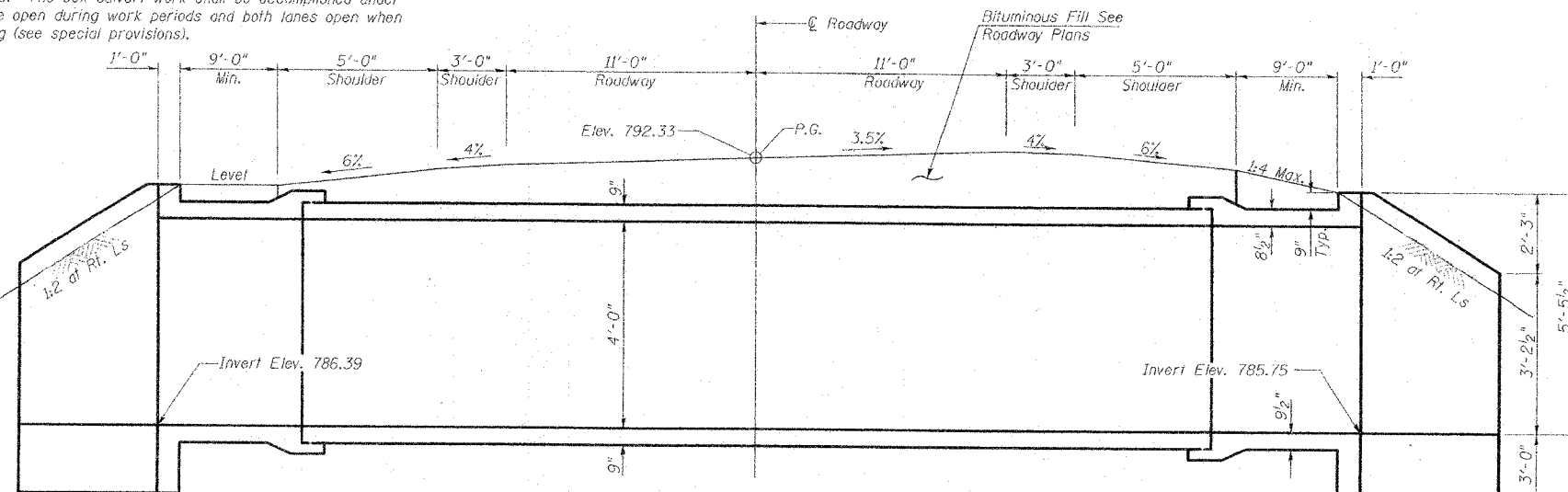
Bench Mark: Chiseled square West end of north cross road culvert headwall
Sta. 442+74.22, 23.85' Lt., Elev. 791.16

Existing Structure: No Structure Number. Existing Structure is a 5'x3.3' Concrete Elliptical Pipe at Sta. 442+78. The box culvert work shall be accomplished under traffic with at least one lane open during work periods and both lanes open when the Contractor is not working (see special provisions).

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
1517	(2)RS-3 (3)RS-4	MCLEAN	223	98	3 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

GENERAL NOTES

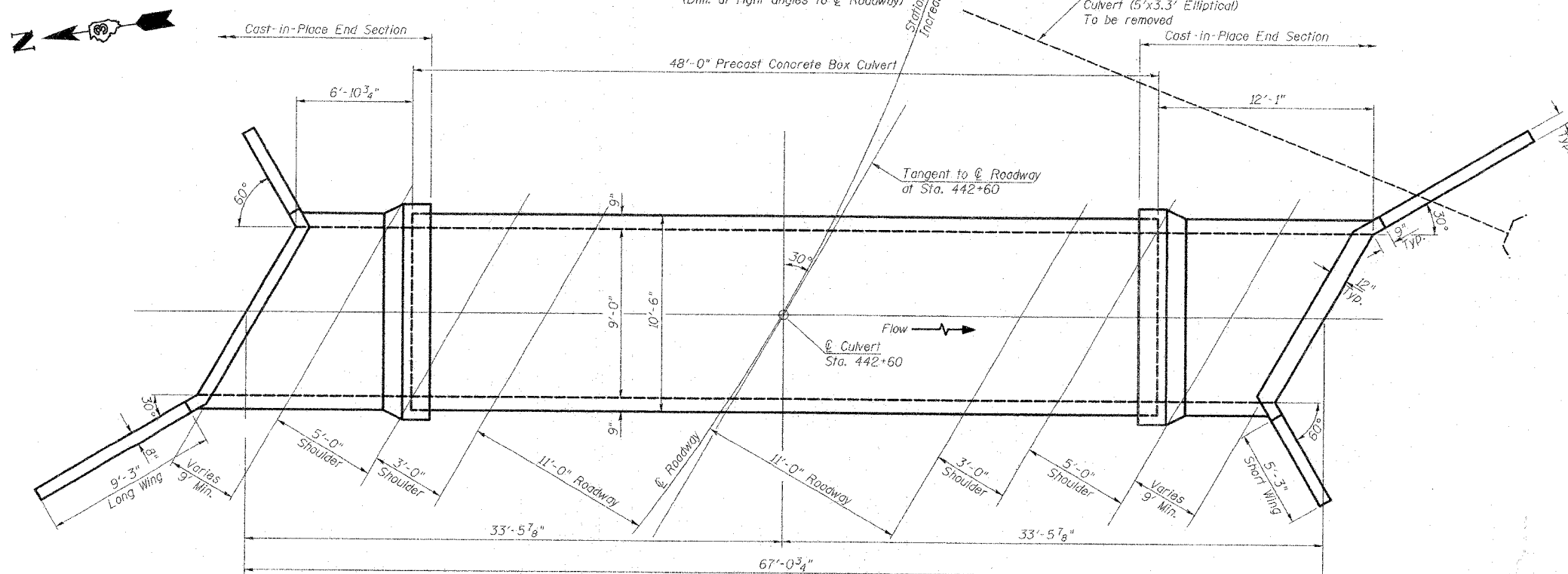
- 1.) See Roadway Plans for Erosion Control and Porous Granular Bedding Layout.
- 2.) Cast-In-Place Concrete Exposed Edges Shall Be Beveled $\frac{3}{4}$ ".
- 3.) Class SI Concrete Shall Be Used Throughout the cast-in-place end sections.
- 4.) Reinforcement Bars Shall Conform To The Requirements of AASHTO M-31 or M-322, Grade 60.
- 5.) It Shall Be The Responsibility Of The Contractor To Divert The Stream Flow During Construction In Order To Keep The Construction Area Free Of Water. The Method Of Water Diversion Shall Be Subject To The Approval Of The Engineer And The Cost Shall Be Included With The Cost of "Concrete Box Culverts"
- 6.) Structural Seal Is For Cast-In-Place Portion Of Structure Only.
- 7.) For Backfilling And Embankment. See Special Provisions.
- 8.) Outside End of Precast Sections Shall Not Have A Bell Or Spigot.
- 9.) Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 273 (ASTM C850).
- 10.) Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
- 11.) Cast-in-Place End Sections shall be paid for as Concrete Box Culverts.
- 12.) Smooth transitions shall be graded between the ends of the culvert and the normal foreslope.



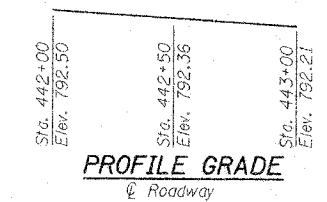
LONGITUDINAL SECTION
(Dim. at right angles to Roadway)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Remove Existing Culverts	Each	1
Concrete Box Culverts	Cu Yd	23.9
Reinforcement Bars	Pound	5310
Precast Concrete Box Culvert 9' x 4'	Foot	48



PLAN



PROFILE GRADE
of Roadway

WATERWAY INFORMATION

Drainage Area = 0.45 mi² Low Grade Elev. 792.3 @ Sta. 442+60

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Head Ft.		Headwater E.L.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	50	248	13	20.7	788.65	3.55	2.35	792.2	791.0
Base	100	282	13	22.5	788.89	3.41	2.61	792.3	791.5
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	-	-	-	-	-	-	-	-

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

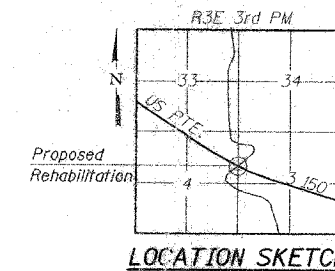
PRECAST UNITS
 $f'_c = 5,000$ psi
 $f_y = 60,000$ psi (Welded Wire Fabric)

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO



LOCATION SKETCH

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: CULVERT PLAN

PROJECT: FAS ROUTE 1517 SECTION (2)RS-3 (3)RS-4 MCLEAN COUNTY STATION 442+60

PROJECT NO. 03064
 DATE: 5/19/05
 DRAWN BY: TFG
 CHECKED BY: CME/REG/MCB
 DRAWING NO. 1

COOMBE-BLOXDORF P.C.
 Engineers / Land Surveyors
 Springfield, Illinois
 Design Firm License No. 184-002703

OF 2 SHTS