

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
575	(B&I) R-3	WILL.	390	234

STA. TO STA.  
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT  
 CONTRACT NO. 60961

**DESIGN SPECIFICATION**

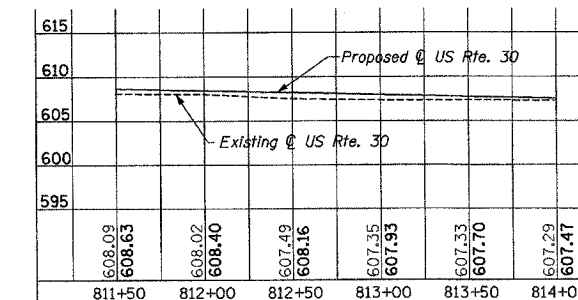
AASHTO Standard Specifications  
 For Highway Bridges, 17th Edition

**DESIGN STRESSES**

Field Units

$f'_c = 3,500$  psi  
 $f'_y = 60,000$  psi

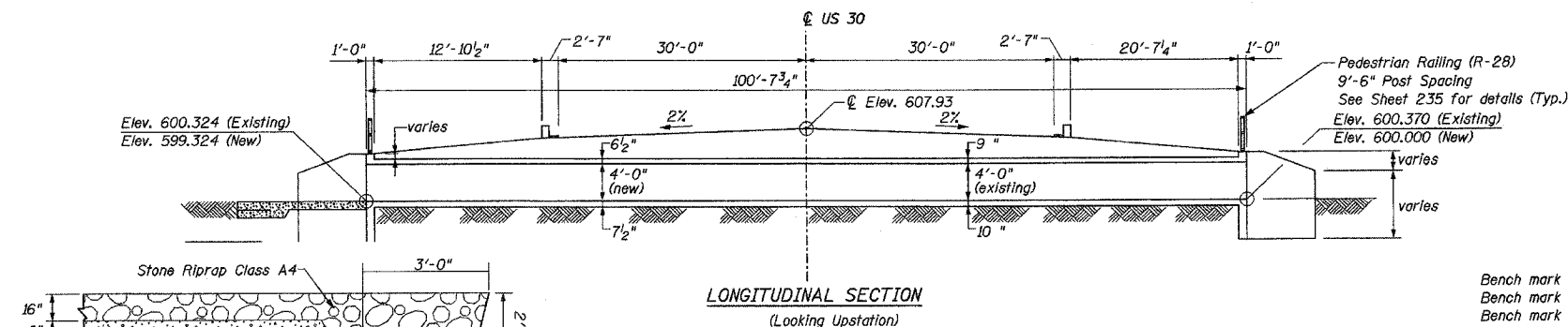
**WINGWALL SECTION (TYPICAL)**



**US 30 PROFILE GRADE (Along Rdwy.)**

**BILL OF MATERIAL**

Concrete Box Culvert	Cu. Yd.	82.2
Reinforcement Bars	Pound	16,381
Pedestrian Railing	Foot	38
Temporary Sheet Piling	Sq. Ft.	270
Extension Bolts 3/4 inch	Each	40
Slapewalk Removal	Sq. Yd.	6
Structural Excavation	Cu. Yd.	44
Stone Riprap, Class A4	Sq. Yd.	51
Filter Fabric for Riprap	Sq. Yd.	51



Bench mark No.1: CP2-Chiseled "X", Station 818+84.12, 58.64' left, elevation 605.390  
 Bench mark No.2: CP3-Iron Rod, Station 812+10.81, 28.45' right, elevation 607.695  
 Bench mark No.3: CP4 -Pk Nail, Station 808+55.66, 12.65' left, elevation 609.900

Traffic will be maintained during the duration of the project by stage construction. See Maintenance of Traffic Plans.

**GENERAL INFORMATION:**

**LOCATION:** U. S. Route 30 at Sunnyland Drain, Will County  
**STRUCTURE NUMBER:** None  
**STRUCTURE TYPE:** Reinforced Concrete Box Culvert  
**SIZE:** One - 7' wide x 4' high x 104' long (proposed)  
 One - 10' wide x 4' high x 104' long (existing with extension)

**WATERWAY INFORMATION TABLE**

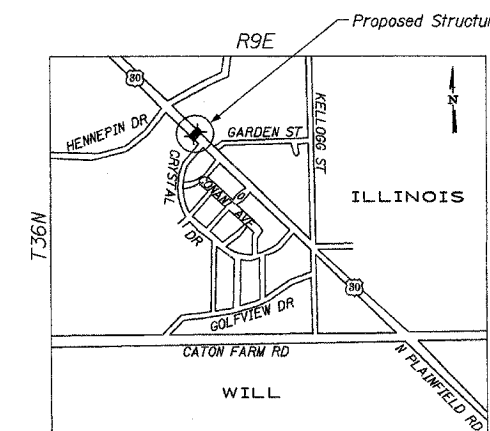
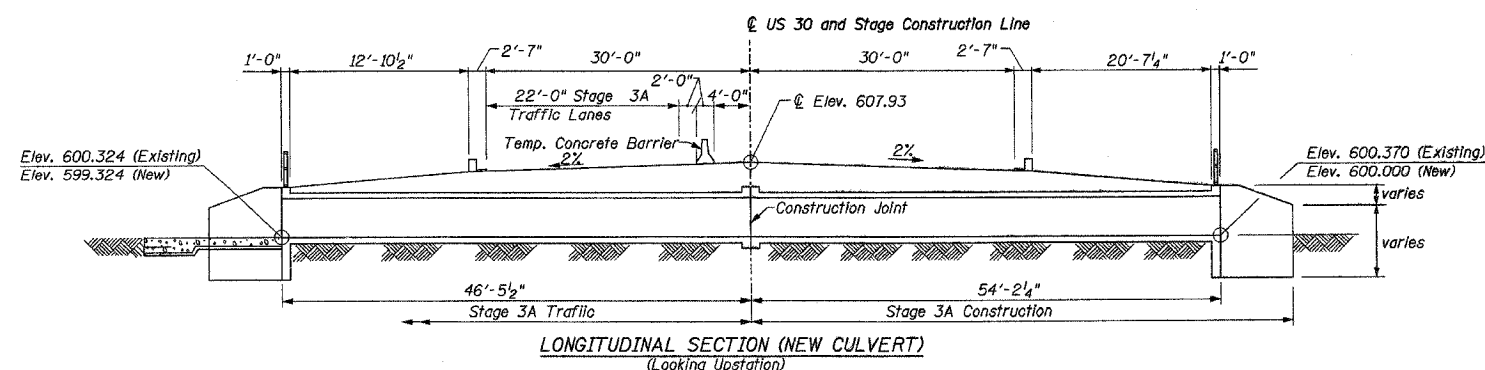
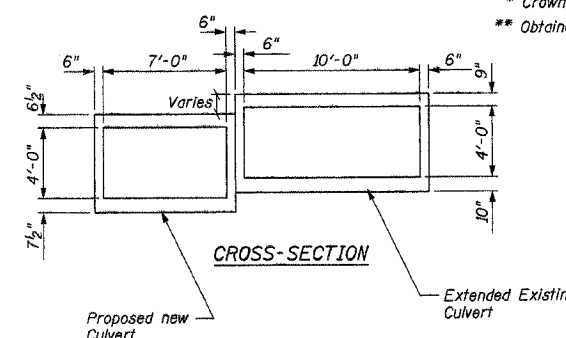
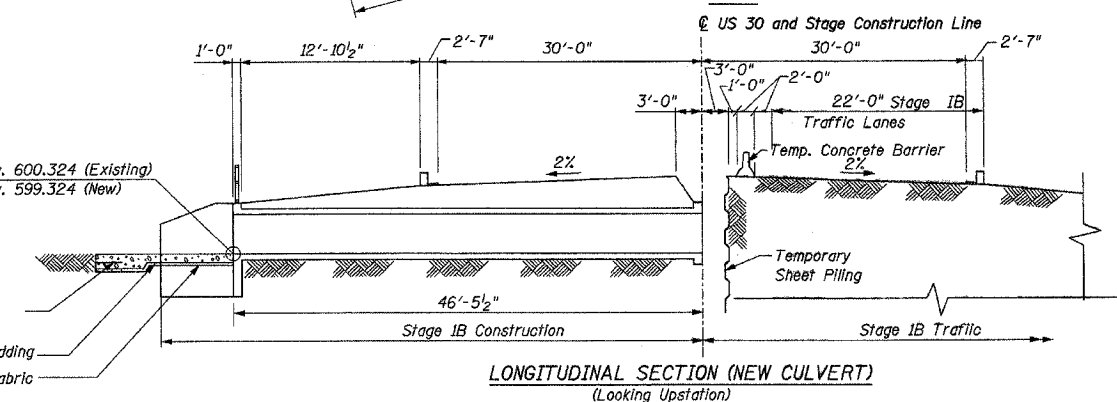
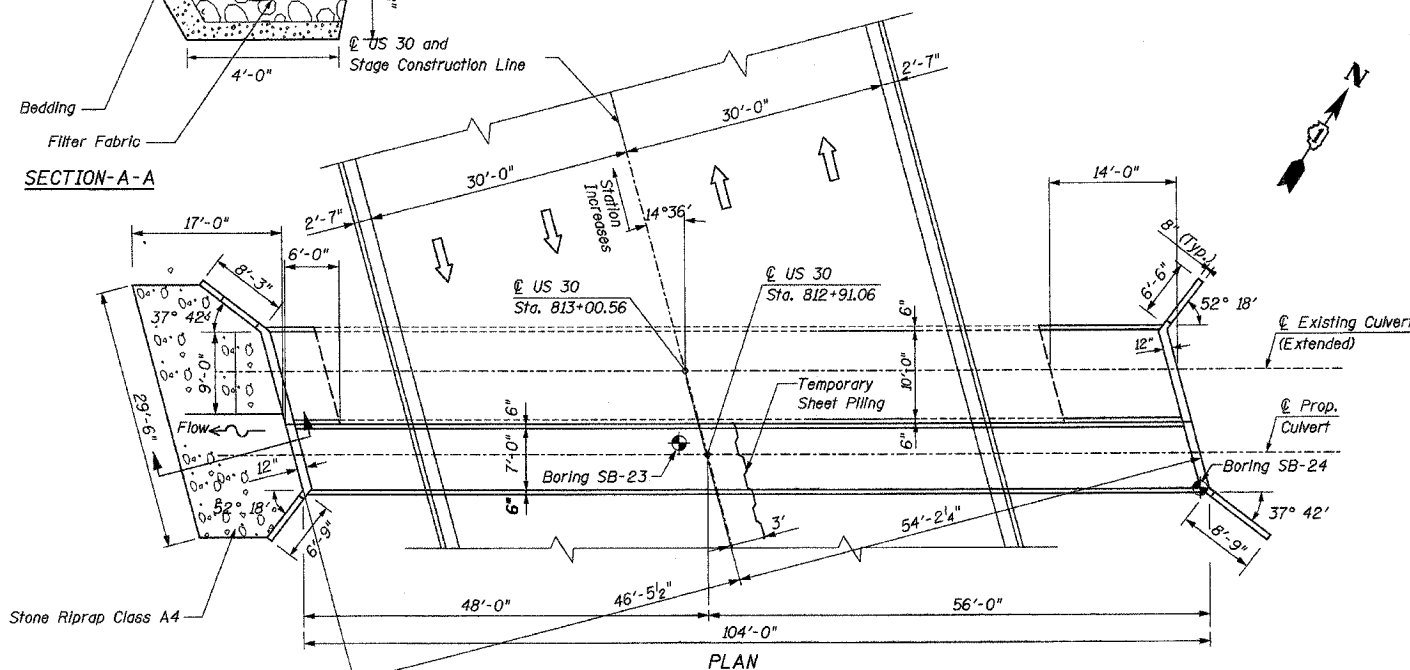
TO BE USED FOR FLOODPLAIN ENCROACHMENT EVALUATION

Drainage Area: 1.44 Sq. Mi. \*\* Low Grade Elev.: 607.4\* @ Sta. 812+90.74

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	172	16.5	38.3	602.2	0	0	602.2	602.2
Design	50	297	27.5	55.5	603.3	0	0	603.3	603.3
Base	100	390	35.5	63.5	604.1	1.2	0	605.3	604.1
Max. Calc.	500	730	40	68	605.3	2.2	0.9	607.5	606.2

**NOTE:** Datum is highways. F.I.S. datum is 0.19 feet higher than highway datum.

\* Crown grade elevation.  
 \*\* Obtained from F.I.S. study



**LOCATION MAP**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 US ROUTE 30 AT SUNNYLAND DRAIN

STA. 812+91.78  
 BOX CULVERT - GENERAL PLAN  
 SHEET 1 OF 3

SCALE: NONE  
 DATE: MARCH 2005  
 DRAWN BY: MD  
 CHECKED BY: SL/PKC



Pijush K. Chatterjee  
 Pijush K. Chatterjee  
 Registered Structural Engineer  
 State of Illinois  
 Expires: 11-30-2006

