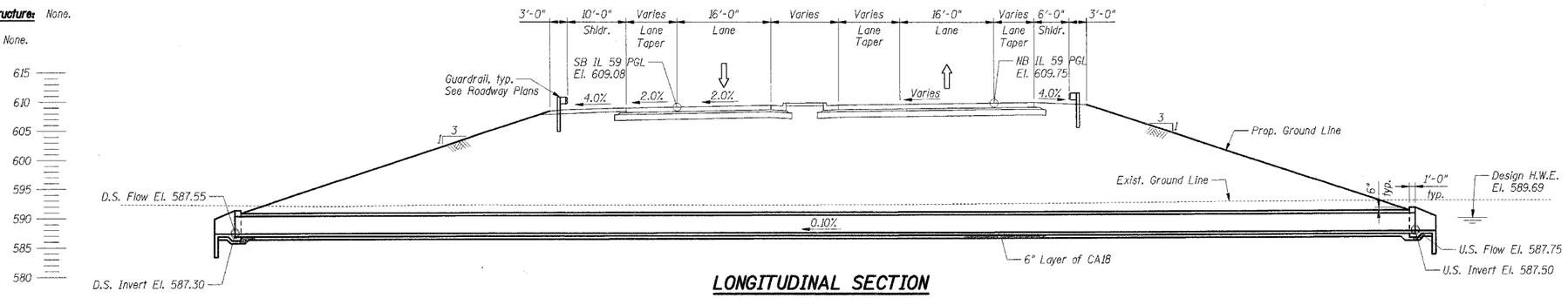
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
59	*	WILL	608	392
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (26, 26HB-1 & 114) R-2
CONTRACT NO. 60363

Benchmark: TBM#6: Square cut on top of concrete foundation (@ it's west edge) for the high mast light pole on west side of I-55 near Station 124+00. Elev. 592.98

Exist. Structure: None.

Staging: None.

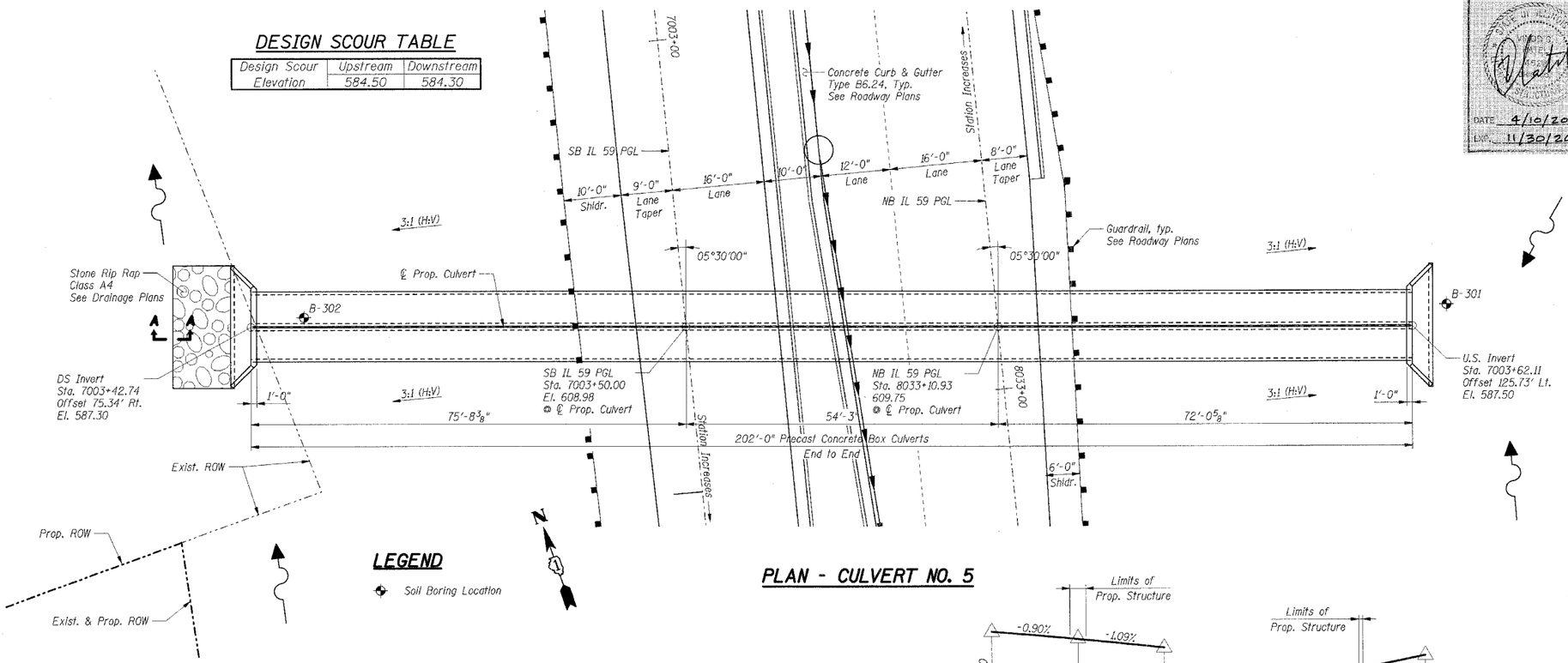


LONGITUDINAL SECTION

(All dimensions and slopes given at right angles to centerline U.N.O.)

DESIGN SCOUR TABLE

Design Scour	Upstream	Downstream
Elevation	584.50	584.30



PLAN - CULVERT NO. 5

LEGEND

Soil Boring Location

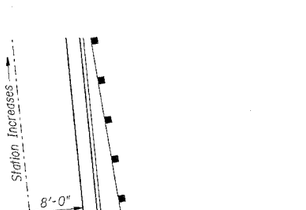
WATERWAY INFORMATION

Drainage Area = 60.94 Acres — Low Grade Elev. 607.01 @ Sta. 8030+50

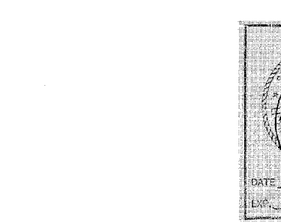
Flood	Freq. Yr.	Q C.F.S.	Opening - Sq. Ft. Exist.	Opening - Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	38.9	n/a	10.20	588.77	n/a	0.39	n/a	589.16
Design	50	63.6	n/a	13.47	589.10	n/a	0.59	n/a	589.69
Base	100	83.0	n/a	15.60	589.31	n/a	0.74	n/a	590.05
Max. Calc.	500	141.3	n/a	20.77	589.82	n/a	1.19	n/a	591.01

INDEX OF SHEETS

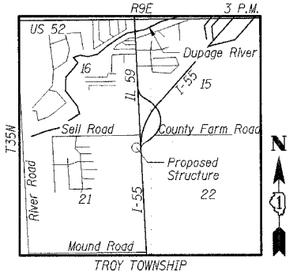
BCF-1 GENERAL PLAN AND ELEVATION
BCF-2 BOX CULVERT END SECTIONS
BCF-3 SOIL BORING LOGS



PROFILE GRADE SB ILLINOIS ROUTE 59



PROFILE GRADE NB ILLINOIS ROUTE 59



LOCATION MAP

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

Allow 50 psf for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinforcement bars)

PRECAST UNITS

f'c = 3,500 psi
fy = 60,000 psi (welded wire fabric)

DESIGN FILL HEIGHT

Maximum Fill Height = 18.9'

GENERAL NOTES:

Cast-in-Place Concrete

All exposed concrete edges shall have a $\frac{3}{4}$" chamfer unless noted otherwise. Chamfer on vertical edges shall be continued a minimum of one foot below finished ground level.

Reinforcement Bars

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60 (IL Modified). See Special Provisions..

Construction

For backfilling and embankment, see Standard Specifcations.

Precast Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 259.

Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	240
Box Culvert End Section, Culvert No. 5	Each	2
Precast Concrete Box Culvert 5' X 3' (M259)	Ft.	404

DATE 4/10/2008
LIC. 11/30/2008

SHT. BCF-1 OF BCF-3

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 338 (ILLINOIS ROUTE 59)
IL 59 DOUBLE BOX CULVERT
SECTION (26, 26HB-1 & 114) R-2
STUCTURE NUMBER 099-0351
STATION 7003+50.00 (SB IL 59), WILL COUNTY

GENERAL PLAN & ELEVATION

DRAWN BY: MDB
DATE: 03/14/08 CHECKED BY:

TENG

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/ PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE 312/616-0500

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