

Bench Mark: Square cut in center of 13' Headwall, 21' West of IL Route 59, North of Sunrise Drive. Elevation 598.12.

Existing Structure: Single Reinforced Concrete Box Culvert, 6' wide by 5 high by 85' long. To be removed and replaced with the road open to two (2) lanes of traffic at all times by utilizing staged construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 338	114R-1	WILL	355	275
FED. PROJ. DIST. NO.	ILLINOIS	FED. AID PROJECT		

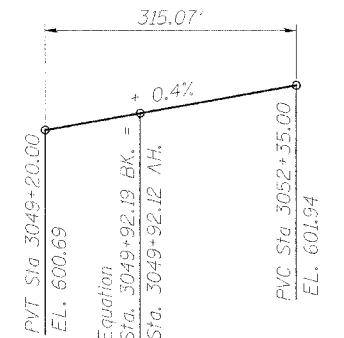
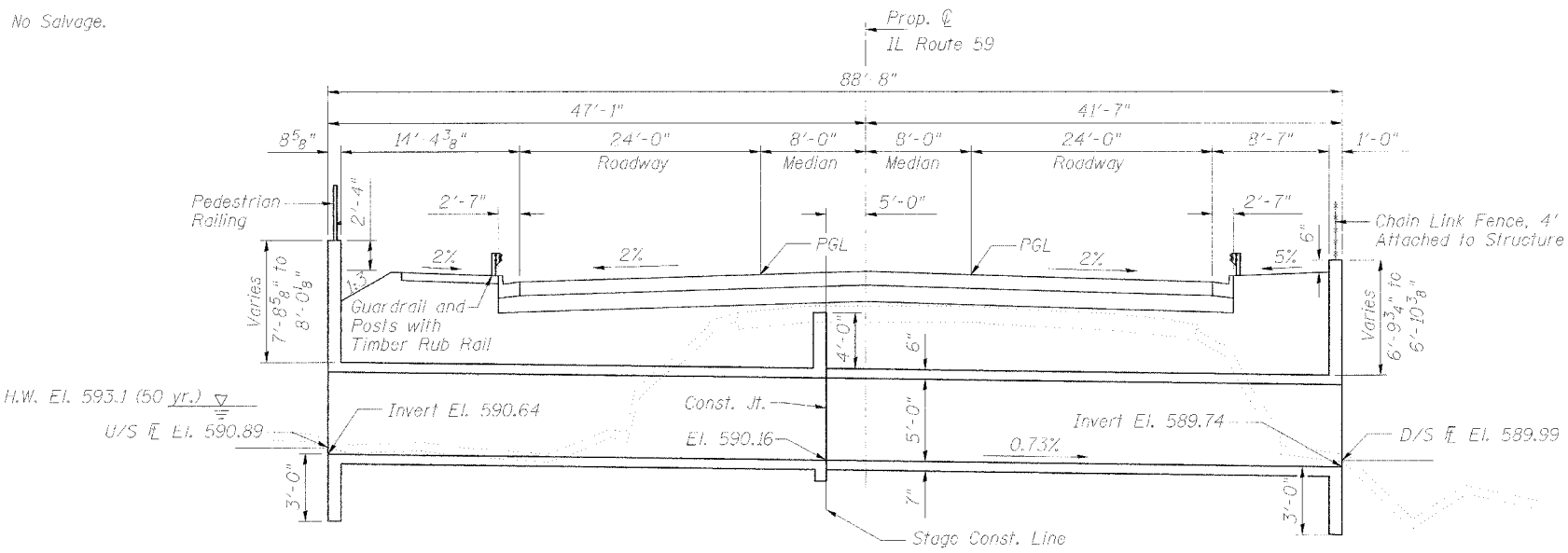
Contract # 62416

TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment, Special	Cu. Yd.	23
Reinforcement Bars	Pound	12,990
Bar Splicers	Each	41
Pedestrian Railing	Foot	13
Concrete Box Culverts	Cu. Yd.	74.0
Geocomposite Wall Drain	Sq. Yd.	16
Pipe Underdrains for Structures 4"	Foot	29
Chain Link Fence, 4' Attached to Structure	Foot	14
Temporary Soil Retention System	Sq. Ft.	362
Box Culvert Removal	Foot	85

GENERAL NOTES

1. Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provision.
2. Reinforcement Bars designated (E) shall be epoxy coated.
3. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the horizontally cantilevered wingwalls.
4. All construction joints shall be bonded.
5. For backfilling and embankment, see Standard Specifications.
6. Exposed concrete edges shall have standard 3/4" chamfer unless otherwise noted.
7. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.



INDEX OF SHEETS

- S3-1 GENERAL PLAN
- S3-2 CONSTRUCTION STAGING
- S3-3 CULVERT PLAN AND ELEVATION
- S3-4 CULVERT SECTIONS AND DETAILS
- S3-5 PEDESTRIAN RAILING
- S3-6 BAR SPLICER ASSEMBLY DETAILS
- S3-7 BORING LOGS

DESIGN SPECIFICATIONS

AASHTO 2002 "Standard Specifications for Highway Bridges".

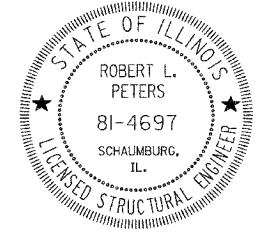
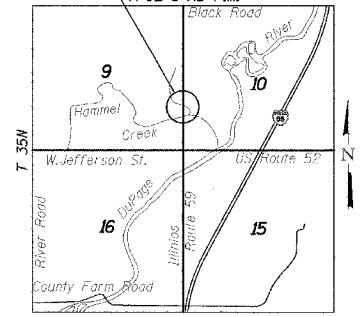
LOADING HS20-44

Allow 50 lb/sq ft for future wearing surface.

DESIGN STRESSES

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

Proposed Structure



ROBERT L. PETERS, P.E., S.E.
NO. 081-04697
EXP. DATE 11/30/08

WATERWAY INFORMATION

Drainage Area = 0.166 sq. mi. Low Grade Elev. = 601.00 Sta. 3051+05

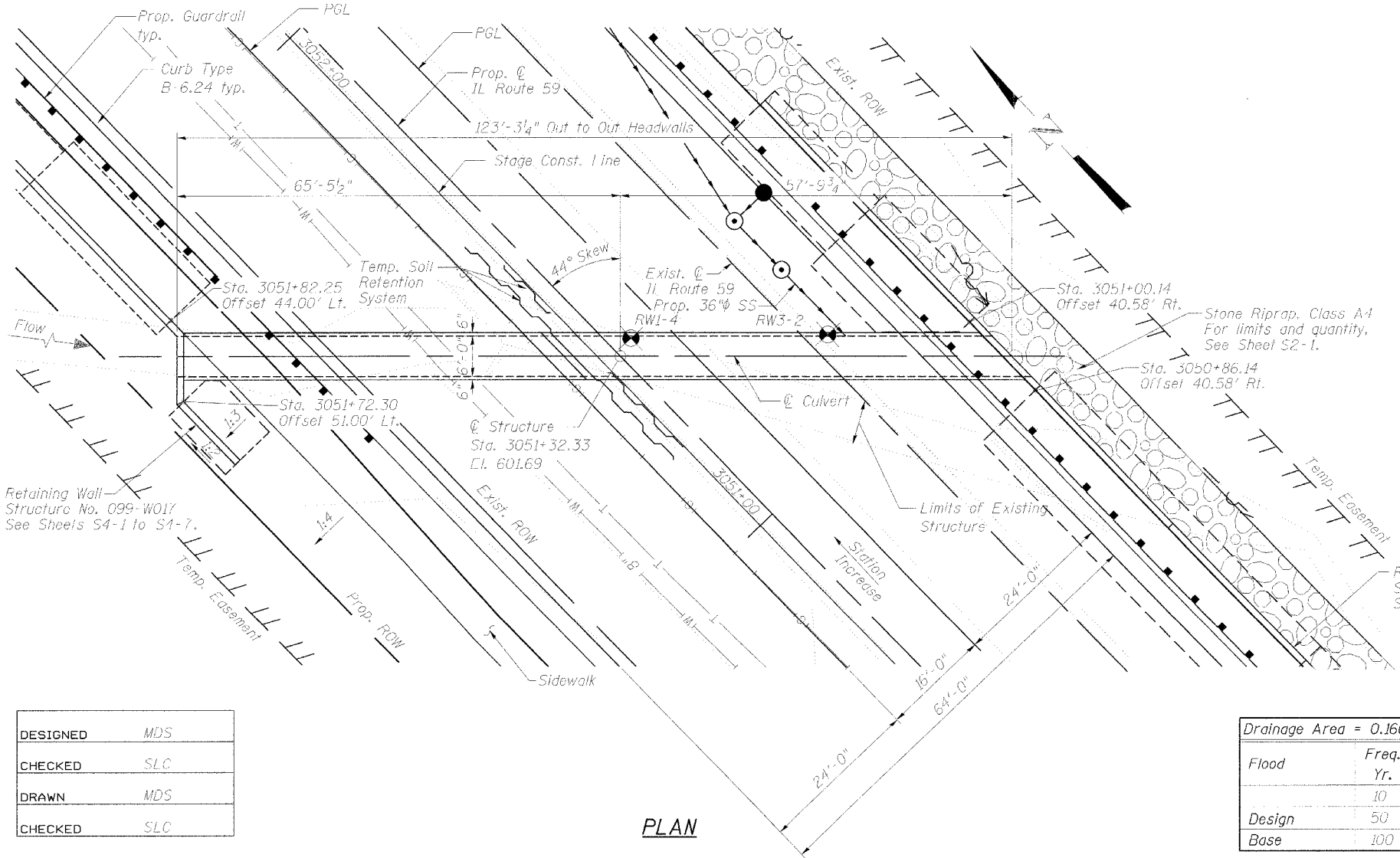
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural Head-Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	10	69.4	13.0	13.0	592.80	1.00	1.00	593.80	593.80
Base	50	95.9	14.8	14.8	593.10	1.45	1.45	594.55	594.55
	100	106.6	15.7	15.7	593.25	1.55	1.55	594.70	594.70

GENERAL PLAN

IL ROUTE 59 OVER DRAINAGE DITCH
F.A.P. ROUTE 338 SECTION 114R-1
WILL COUNTY
STATION 3051+32.33



3251 PFLUMPTER DRIVE, SUITE 1025
SCHAMBERG, IL 60173-5088
TEL (847) 605-9600
FAX (847) 605-9610



DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

8151348
8101158
8 TIME 8
G:\PROJECTS\0002\STRUCTURE\shoos\sgd\tech.sh