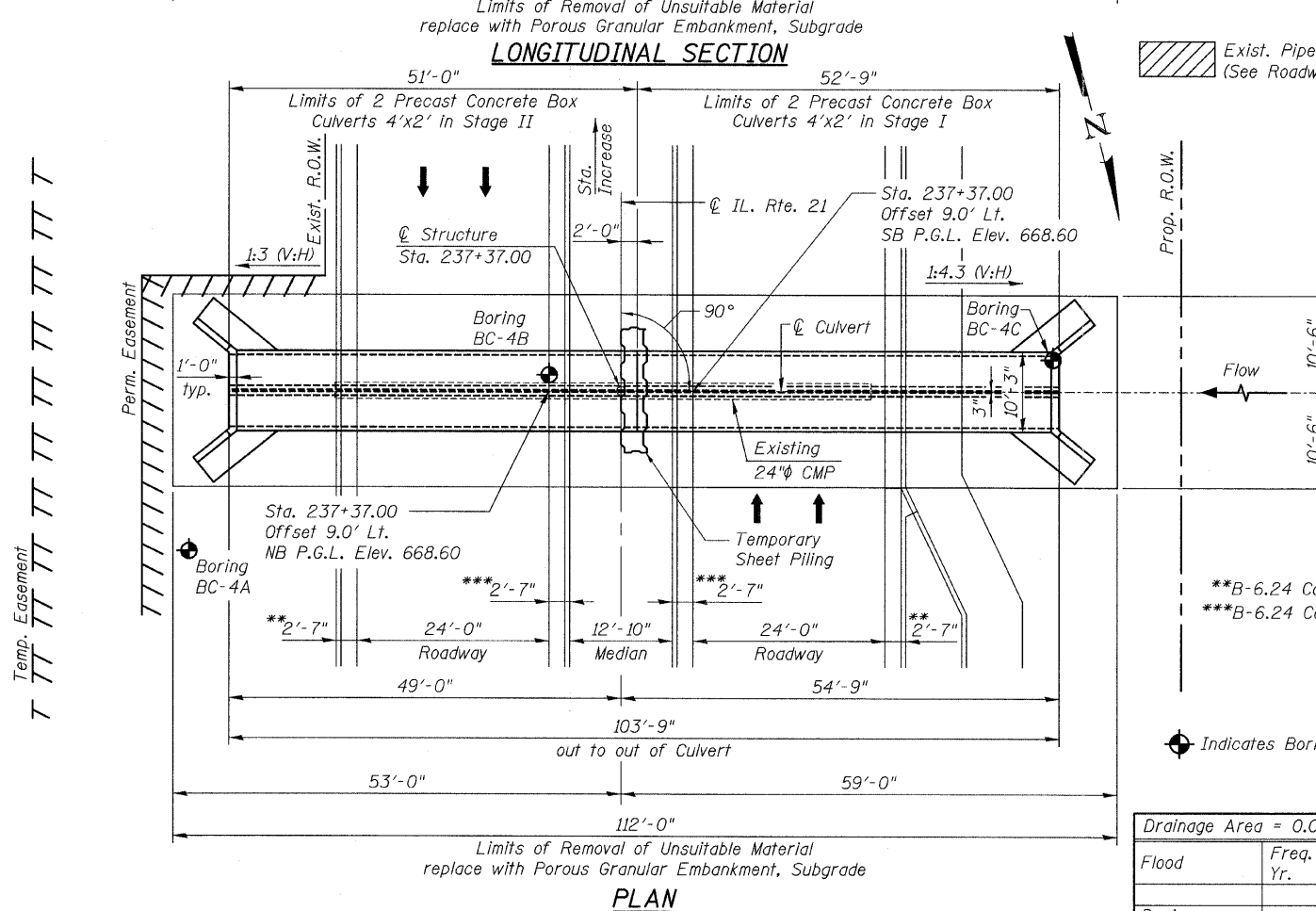
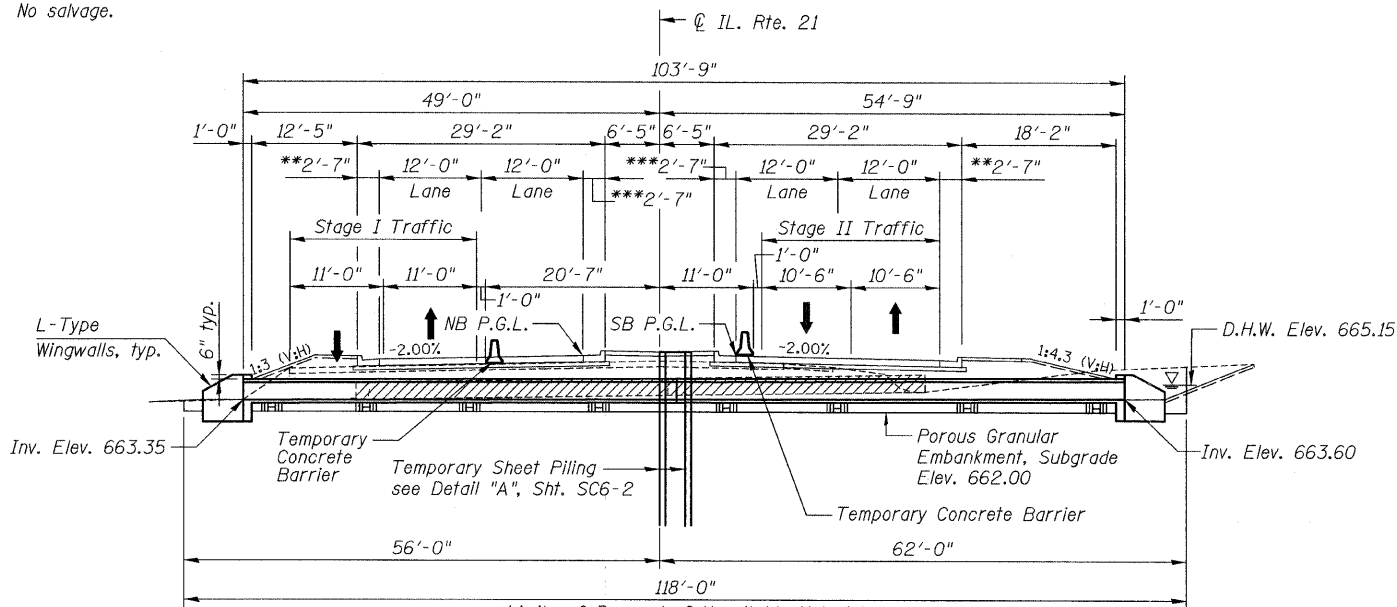


B.M.: Chiseled box on top of S.E. wingwall of existing bridge over Bull Creek. Elevation 669.64

Existing structure is a 24" dia. corrugated metal pipe, to be removed.

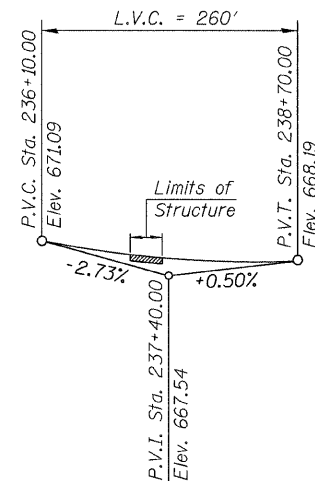
Traffic to be maintained using staged construction.

No salvage.



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	660.60	660.35



LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications For Highway Bridges

DESIGN STRESSES

FIELD UNITS

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

PRECAST UNITS

f'c = 5,000 psi
fy = 65,000 psi (Welded wire fabric)

GENERAL NOTES:

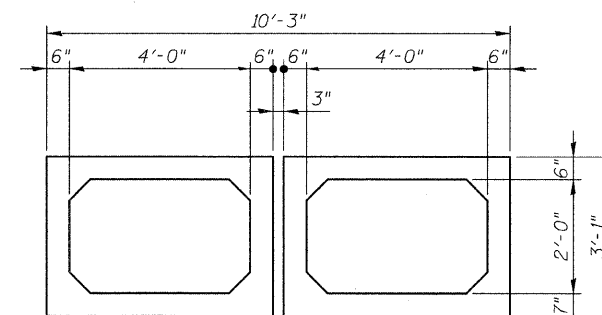
1. Reinforcement Bars shall conform to the requirements of ASTM A 706, Gr. 60. See Special Provisions.
2. All exposed concrete edges shall be chamfered 3/4" unless otherwise noted.
3. Reinforcement Bars designated (E) shall be Epoxy Coated.
4. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
5. The Porous Granular Embankment, Subgrade shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the Pay Item for "Porous Granular Embankment, Subgrade".

INDEX OF SHEETS

- SC6-1 GENERAL PLAN & ELEVATION
- SC6-2 STAGE CONSTRUCTION DETAILS
- SC6-3 CAST-IN-PLACE END SECTION DETAILS
- SC6-4 SOIL BORING LOGS

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	QUANTITY
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	480
Reinforcement Bars	Pound	430
Reinforcement Bars, Epoxy Coated	Pound	50
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	5.7
Precast Concrete Box Culverts 4'x2'	Foot	184
Temporary Sheet Piling	Sq. Ft.	480
Porous Granular Embankment, Subgrade	Cu. Yd.	129



Bhadrish N. Shah
BHADRISH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-12

GENERAL PLAN & ELEVATION

ILLINOIS ROUTE 21

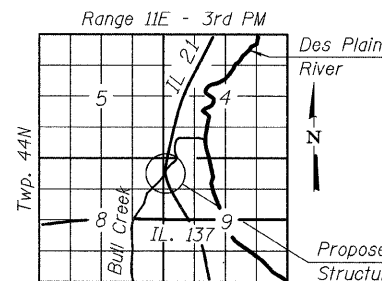
F.A.P. 330 SEC. 128R-3

LAKE COUNTY

STATION 237+37.00

STRUCTURE NO. 049-0242

OUTLET NO. 19



WATERWAY INFORMATION

Drainage Area = 0.045 Sq. Mi. Low Grade Elev. 668.09 @ Sta. 238+29.70

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	39	21.14	6.9	664.46	3.2	0.7	667.99	665.15
Base	100	52	25.14	7.3	664.52	3.2	1.0	668.02	665.48
Overtopping									
Max. Calc.									

FILE NAME = D168953-01-GPE.dgn	USER NAME =	DESIGNED - J.C.N./B.N.S.	REVISED -
		CHECKED - B.N.S.	REVISED -
		DRAWN - F.M.	REVISED -
		CHECKED - B.N.S./J.C.N.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 049-0242

SHEET NO. SC6-1 OF SC6-4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	128R-3	LAKE	518	376
CONTRACT NO. 60953				
ILLINOIS FED. AID PROJECT				

CHRISTIAN-ROGE & ASSOCIATES, INC.