EXISTING STRUCTURE: S.N. 099-6471
Originally constructed in 1980 as the Armory Drive Extension, City Sec. 166-CS at Station 14+90, as a double barrel (72"x44") corrugated metal pipe arch culvert 69' long. In 1986 the structure was reconstructed under Project No. 85-0003-DR-CO-MS now called Barney Drive. The existing two culverts remained in place while a third (77"x52") corrugated metal elliptical pipe arch culvert 70' long was added.

To be Removed, No Salvage.

Road will be closed to traffic during construction & staged for pedestrians.

BENCH MARK: Chis. "□" on west headwall of existing structure #099-6471 over Trib. of Rock Run, El. 629.76

INDEX OF SHEETS

BILL OF MATERIAL - CULVERT

	ITEM	ITEM	TOTAL
	Channel Excavation	Cu. Yds.	160
*	Porous Granular Embankment	Cu. Yds.	168
	Fabric Formed Concrete Revetment Mat	Sq. Yds.	64
*	Removal of Existing Structures	Each	1
	Reinforcement Bars, Epoxy Coated	Lbs.	33,480
	Bar Splicers	Each	140
	Aluminum Railing, Type L	Foot	50
*	Pipe Handrail	Foot	95
	Name Plates	Each	1
*	Concrete Box Culverts	Cu. Yds.	200.8

GENERAL NOTES:

*See Special Provisions.

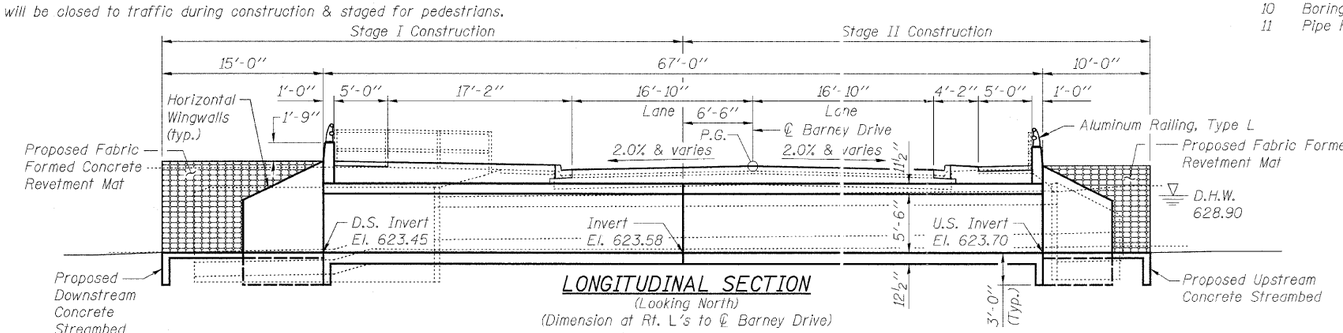
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

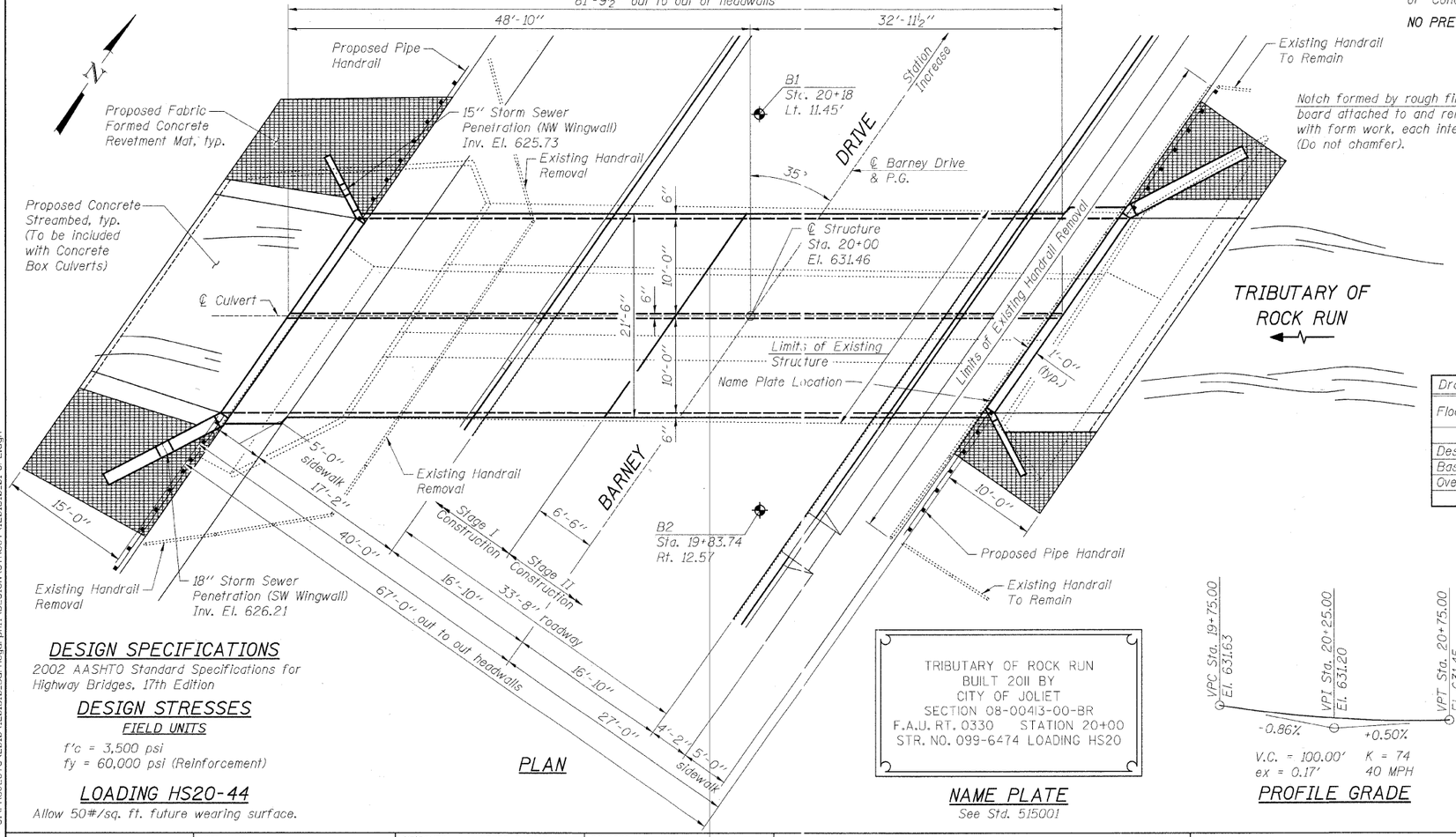
It shall be the responsibility of the Contractor to divert the storm flow during construction in order to keep the construction area free of water. The method of water diversion shall be subject to approval of the Engineer and the cost shall be included in the unit bid price of "Concrete Box Culverts."

NO PRECAST ALLOWED.



LONGITUDINAL SECTION

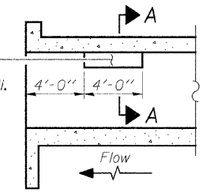
(Looking North)
(Dimension at Rt. L's to ℄ Barney Drive)
81'-9½" out to out of headwalls



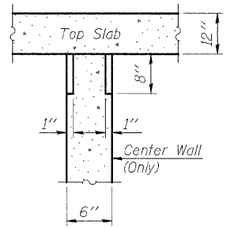
PLAN

TRIBUTARY OF ROCK RUN

Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).



LONGITUDINAL SECTION



SECTION A-A

PHOEBE NESTING SITE DETAILS

(Downstream End Only)

WATERWAY INFORMATION

Drainage Area = 0.88 sq. mi. Low Grade Elev. 631.36 @ Sta. 20+38.24

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	465	-	-	628.74	2.26	-0.08	631.00	628.66
Design	30	505	59	109	628.90	2.60	-0.05	631.50	628.85
Base	100	580	61	110	629.19	2.80	0.05	631.99	629.24
Overtopping									

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

DESIGN STRESSES

FIELD UNITS

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

LOADING HS20-44

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

TRIBUTARY OF ROCK RUN
BUILT 2011 BY
CITY OF JOLIET
SECTION 08-00413-00-BR
F.A.U. RT. 0330 STATION 20+00
STR. NO. 099-6474 LOADING HS20

NAME PLATE

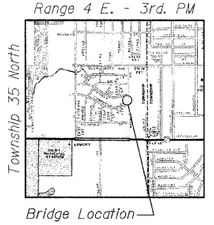
See Std. 515001

PROFILE GRADE

STATE OF ILLINOIS
BRIAN K. CONVERSE
081-005213
DIXON, IL
LICENSED STRUCTURAL ENGINEER

Brian K. Converse
DATE: March 24, 2011
EXPIRES 11/30/12

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS, THE DESIGN IS AN ECONOMICAL ONE COMPLIES WITH REQUIREMENTS OF THE CURRENT 'AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES'."



LOCATION SKETCH

FILE NAME = S:\PROJECTS\2010\12010I0_Barney\dgn\1\DESIGN\STRUCT\12010I0_01 GPE.dgn

USER NAME =	DESIGNED - PETER PASCUA	REVISED -	
	CHECKED - BRIAN CONVERSE	REVISED -	
PLOT SCALE =	DRAWN - RON ALLEN	REVISED -	
PLOT DATE =	CHECKED - BRIAN CONVERSE	REVISED -	

ILLINOIS DEPARTMENT OF TRANSPORTATION
BARNEY DRIVE OVER TRIBUTARY OF ROCK RUN
STATION 20+00

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 099-6474
STRUCTURAL SHEET NO. 1 OF 11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0330	08-00413-00-BR	WILL	33	15
	WHA* 12010I0	CONTRACT NO. 63571		
	ILLINOIS FED. AID PROJECT BRM-9003(162)			