

Bench Mark: NMW bolt on bolt circle on fire hydrant 23.7' Lt. Sta. 1165+03, Elev. 572.80

Existing Structure: None

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 595	1-3-K	Rock Island	476	274
ILLINOIS				FED. AID PROJECT

7 SHEETS

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.

Exposed edges shall be beveled 3/4" unless otherwise noted.

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

All construction joints shall be bonded.

For backfilling and embankment see standard specifications.

Precast culvert alternate is not allowed.

At least 6'-9" of barrel shall be poured monolithically with wingwalls.

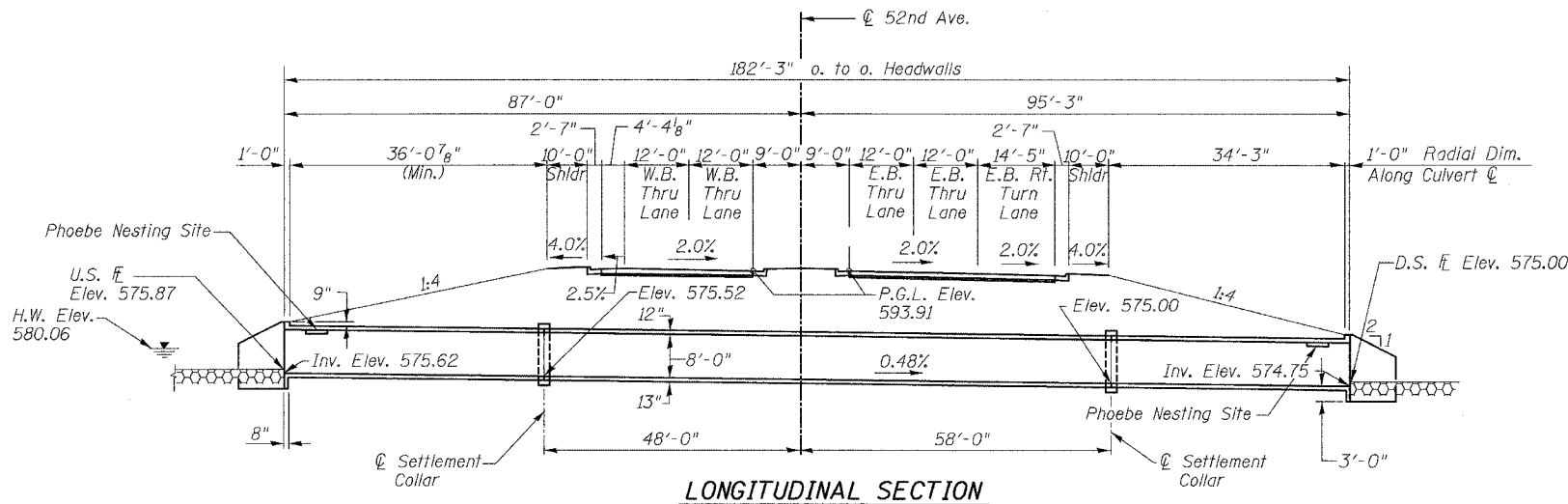
Bars indicated thus 12x4-#5 indicates 12 lines of #5 bars with 4 lengths per line.

INDEX OF SHEETS

- General Plan
- Culvert Details and Section
- Settlement Collar Details
- Wingwall Reinforcement Details
- Boring Logs

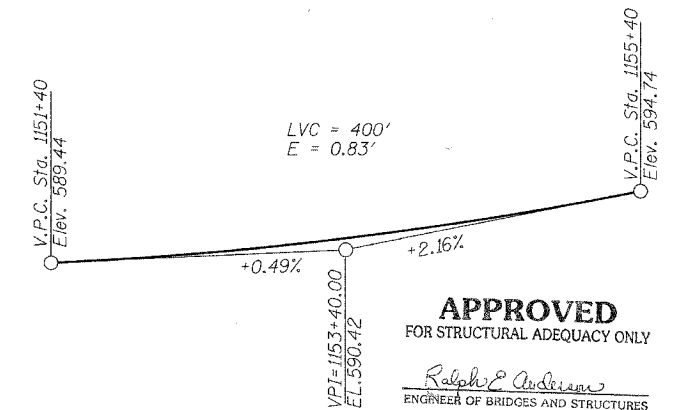
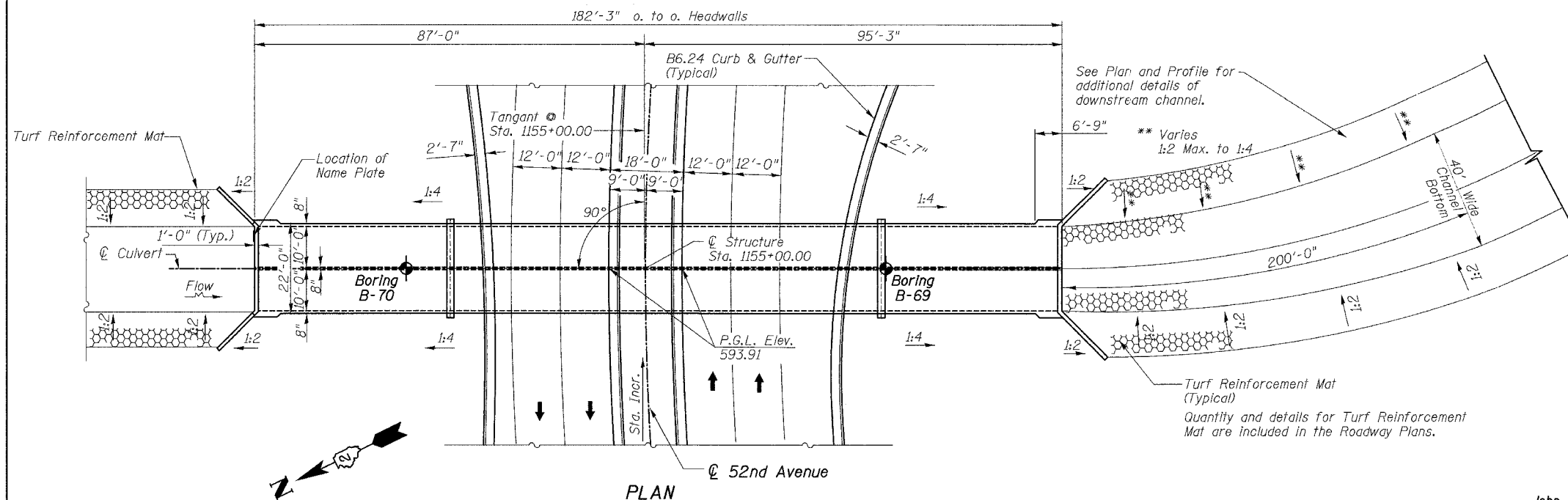
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Box Culverts	Cu. Yd.	480.9
Reinforcement Bars	Pound	76,280
Name Plates	Each	1



STATION 1155+00  
BUILT BY  
STATE OF ILLINOIS  
F.A.U. RT. 5822 SEC. 1-3  
LOADING HS20 & ALT.  
STR. NO. 081-2035

NAME PLATE  
See Std. 515001



PROFILE GRADE

Along median edge of pavement

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

Ralph J. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

WATERWAY INFORMATION

Drainage Area = 0.97 Sq. Mi. Low Grade Elev. 590.00 ft. @ Sta. 1151+75 (52nd Ave.)

Flood	Freq. Yr.	Q C.F.S.	Opening	Sq. Ft.	Nat. H.W.E.	Head-Ft. Exist.	Headwater E.L. Exist.
Design	10	775	N.A.	68.0	579.02	N.A.	1.96
Base	50	1239	N.A.	88.8	580.06	N.A.	2.99
Overtopping	100	1462	N.A.	97.2	580.48	N.A.	3.48
Max. Calc.	260	1832	N.A.	104.0	580.82	N.A.	3.48

10 - Year Velocity through Existing Structure = NA  
10 - Year Velocity through Proposed Structure = 11.84 fps

LOADING HS20-44

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

DESIGN SPECIFICATIONS

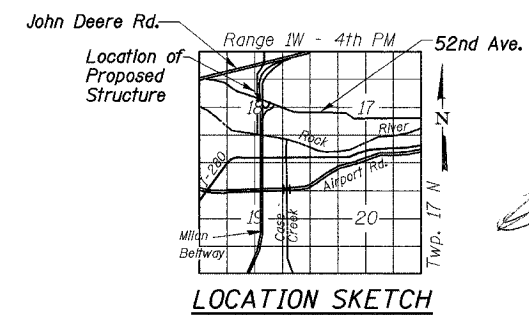
2002 AASHTO

DESIGN STRESSES

FIELD UNITS  
f<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinf.)

CURVE DATA

PI Sta. 1153+04.57  
Δ = 69°15'02" (RT)  
D = 7°45'00"  
R = 739.30'  
T = 510.49'  
L = 893.55'  
E = 159.12'  
SE = 0.02 FT./FT.  
P.C. Sta. 1147+94.08  
P.T. Sta. 1156+87.63  
S.E. Transition Begins Sta. 1156+37.63



LOCATION SKETCH



Brian D. Frickenstein  
11/30/04

GENERAL PLAN

52ND AVENUE EXTENSION  
OVER AN UNNAMED STREAM  
FAU ROUTE 5822 SECTION 1-3  
ROCK ISLAND COUNTY  
STATION 1155+00  
STRUCTURE NO. 081-2035



DESIGNED	-	JDC
CHECKED	-	BDF
DRAWN	-	RAP
CHECKED	-	BDF