

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Benchmark: BM 81, Pin with Cap, Sta. 46+13.38, 56.75 ft. Left, Elev. 500.46 ft.

Existing Structure: None

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 5 SHEETS
F.A.U. 8959	05-00016-03-BR	MADISON	129	82	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract # 97351

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 GR60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- All exposed concrete corners shall be chamfered 3/4" unless noted otherwise.
- For backfilling and embankment, see Standard Specifications.
- Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
- Precast alternate is not allowed.

TOTAL BILL OF MATERIALS

Stone riprap, Class A5	Sq. Yd.	221
Filter Fabric	Sq. Yd.	251
Reinforcement Bars	Pound	204,384
Reinforcement Bars, Epoxy Coated	Pound	320
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	935
Rock Fill - Foundation	Ton	344

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 (Concrete)  
fy 60,000 psi (Reinf.)  
Maximum Applied Bearing Pressure = 2,786 psf

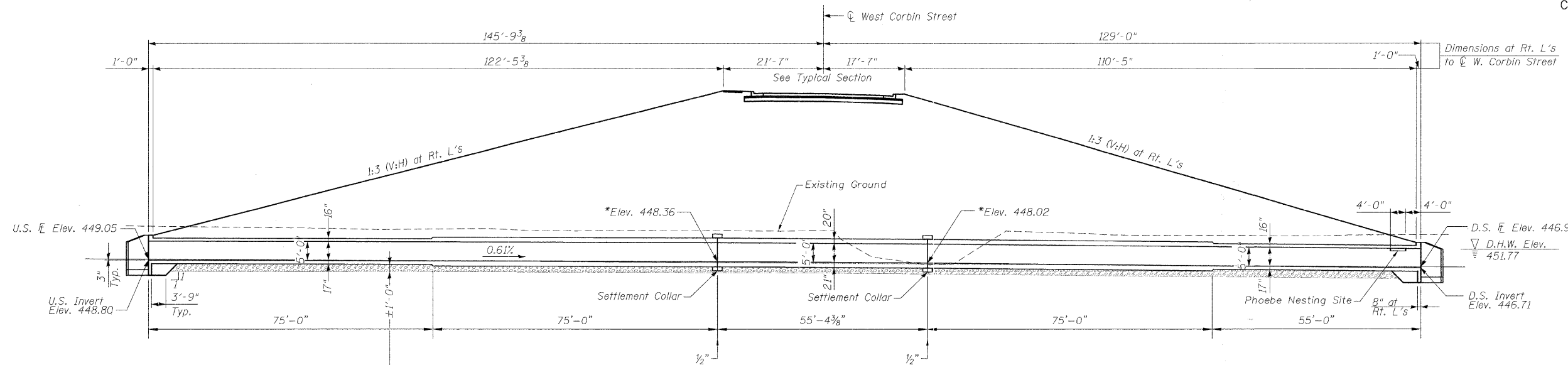
STATION 40+21.99  
BUILT 20\_\_ BY  
VILLAGE OF BETHALTO  
F.A.U. 8959 SEC. 05-00016-03-BR  
LOADING HS-20-44  
STR. NO. 060-6853

NAME PLATE

Refer to Std. 515001

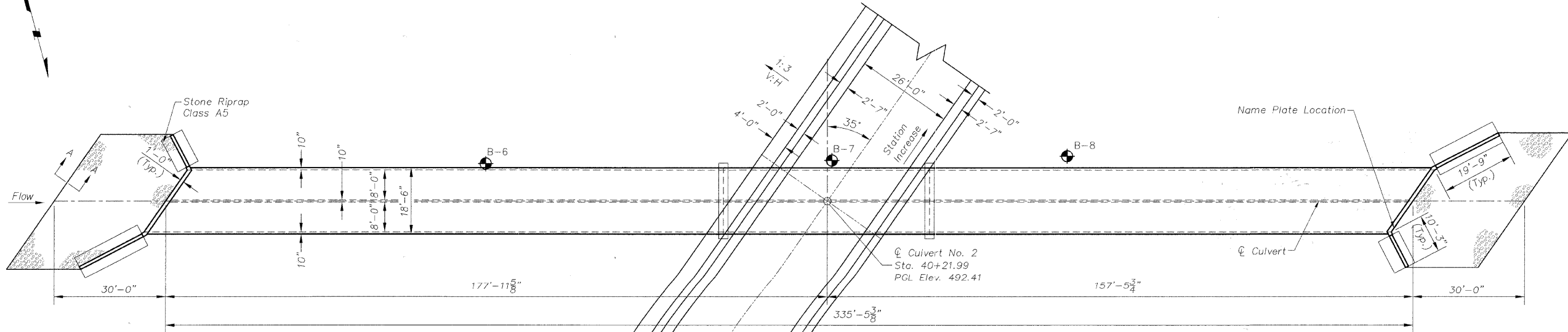
INDEX OF SHEETS

1. GENERAL PLAN
2. CULVERT BOTTOM SLAB PLAN
3. CULVERT TOP SLAB PLAN
4. CULVERT SECTIONS AND DETAILS
5. CULVERT DETAILS

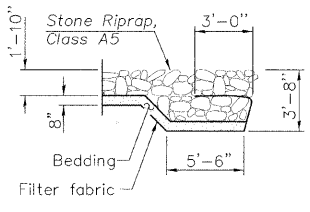


LONGITUDINAL SECTION  
Note: Roadway and Shoulder Slopes are Shown at Rt. L's

\*To allow for the anticipated settlement, the culvert is cambered and cast in segments. The individual segments are connected with each other by means of a settlement collar. See Sheet No. 4 of 5 for collar details.



PLAN



SECTION A-A

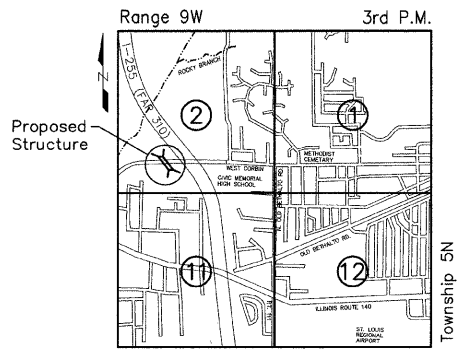
WATERWAY INFORMATION

Drainage Area = 0.63 SQ MI		Low Grade Elev. 458.73 at sta. 52+45.15							
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		# NAT. H.W.E.	HEAD - FT.		HEADWATER ELEV.	
			EXIST.	PROP.		EXIST.	PROP.	EXIST.	PROP.
Design	100	704	NA	80	457.01	NA	0.44	NA	457.45
Base	10	263	NA	36.3	451.27	NA	0.68	NA	452.25
Overtopping									
Max. calc.									

\* Upstream face of culvert

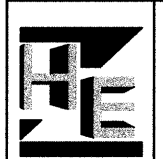
I certify that to the best of my knowledge, information and belief, this culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

C. M. Watkins 07/29/2008  
ILLINOIS STRUCTURAL NO. 5494



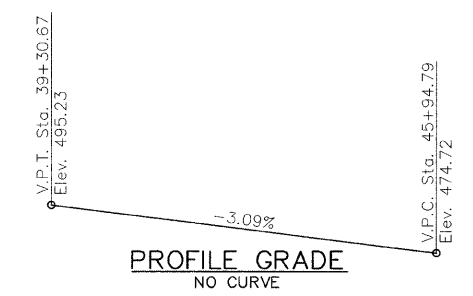
LOCATION SKETCH

DESIGNED	C.M.W.
CHECKED	J.S.A.
DRAWN	B.D.M.
CHECKED	C.M.W.



Hoelscher Engineering, P.C.

11 Executive Drive Suite 12  
Fairview Heights, Illinois 62208  
(618)624-8610 FAX (618)624-8611



PROFILE GRADE  
NO CURVE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
GENERAL PLAN  
WEST CORBIN STREET OVER WOOD RIVER TRIBUTARY  
F.A.P. 310 SECTION 05-00016-03-BR  
MADISON COUNTY  
STATION 40+21.99  
S.N.060-6853

REVISIONS	
NAME	DATE