Benchmark: Chiseled "□" in corner of bridge curb at expansion joint, SW corner SN 032-3100, Elev. 514.00

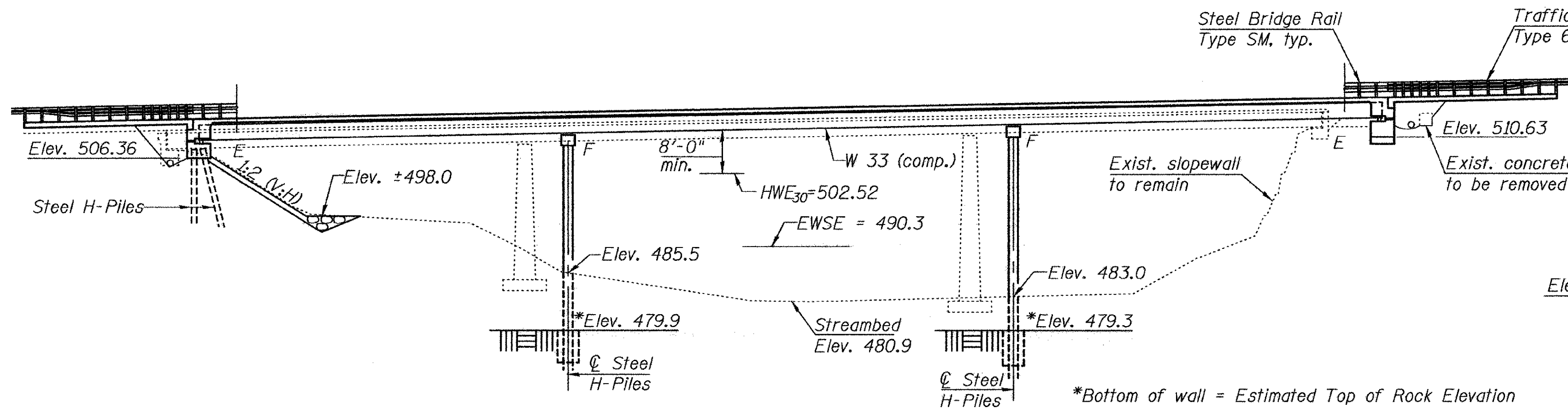
Existing Structure: The existing structure, SN 032-3100, was built in 1958 as part of F.A.S. Rte. 287, Section 39-8. The existing superstructure consists of 5-noncomposite wide flange beams supporting a 6½" deck. The existing W. abutment is supported by piles while the existing solid wall piers with footings and existing E. abutment are keyed into rock. The existing structure is 214' back to back of abutments and 31'-8" out to out of deck. The existing structure is to be removed and replaced using staged construction to maintain one lane of traffic at all times.

No salvage

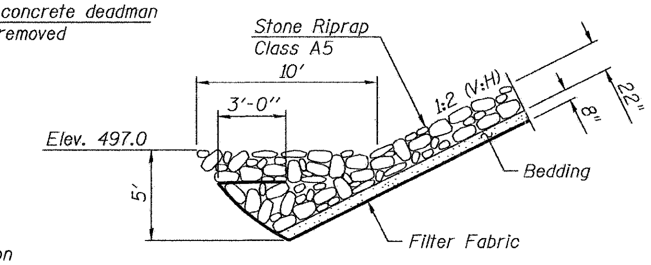
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 287	*	GRUNDY	33	6
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
25 SHEETS

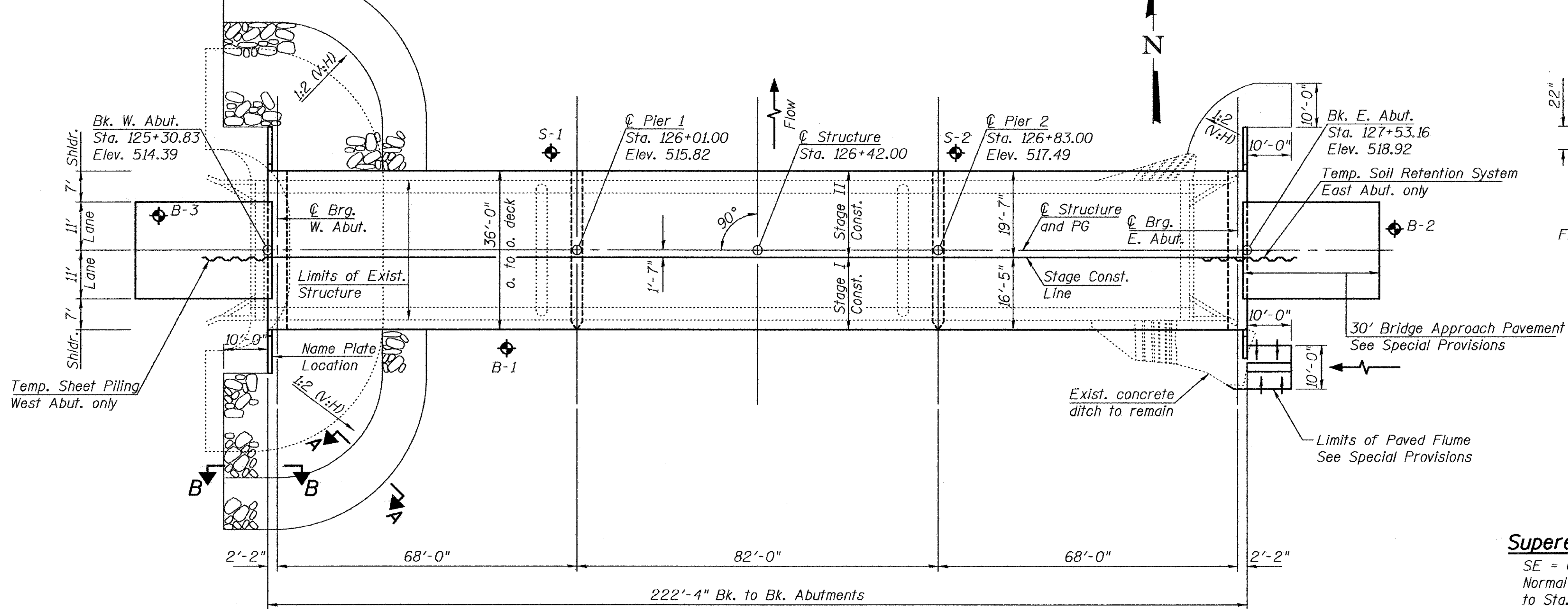
Contract #87376 *05-00039-03-BR



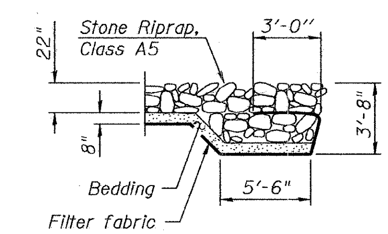
ELEVATION



SECTION A-A



PLAN



SECTION B-B

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50) for primary structural members
fy = 36,000 psi (M270 Grade 36)

LOADING HS 25

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

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.0

INDEX OF SHEETS

Superelevation Transitions

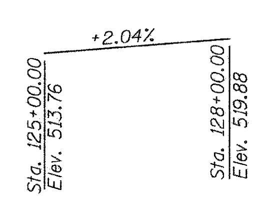
SE = 0.058 ft/ft at Sta. 123+78
Normal Crown at Sta. 125+78 to Sta. 127+75
SE = 0.058 ft/ft at Sta. 129+25

MAZON RIVER
BUILT 20__ BY
GRUNDY COUNTY
SECTION 05-00039-03-BR
F.A.S. RT. 287 STA. 126+42.00
SN 032-3101 LOADING HS25

NAME PLATE
See Std. 515001

WATERWAY INFORMATION

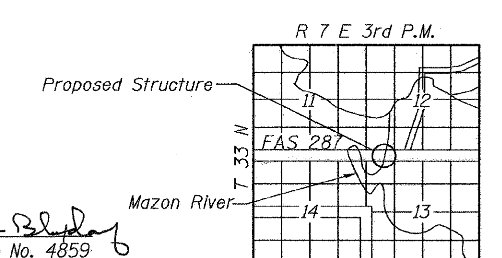
Drainage Area = 486.0 Sq. Mi. Low Grade Elev. 506.6 @ Sta. 119+50									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	17,776	2684	2726	502.52	0.34	0.31	502.86	502.83
	100	22,334	2902	2947	503.71	0.60	0.54	504.31	504.25
Max. Calc.	500	27,886	3139	3186	504.98	1.15	0.99	506.13	505.97



PROFILE GRADE
(Along ℄ Roadway)

LICENSED STRUCTURAL ENGINEER
MARY COOMBE BLOXDORF
4859
SPRINGFIELD
STATE OF ILLINOIS

Illinois Structure No. 4859
Expires: 11/30/10
Date: 10/22/09



LOCATION SKETCH

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
GENERAL PLAN & ELEVATION

PROJECT
F.A.S. RT. 287 (C.H. 29)
SECTION 05-00039-03-BR
GRUNDY COUNTY
STATION 126+42.00
STRUCTURE NO. 032-3101

PROJECT NO. 05042
DATE 10/21/09
DRAWN BY TFG
CHECKED BY CME/MCB
DRAWING NO. 1
OF 25 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

PLOT DATE = 10/21/2009
PLOT SCALE = 160.0000 '/' / IN.
USER NAME = CFC.