

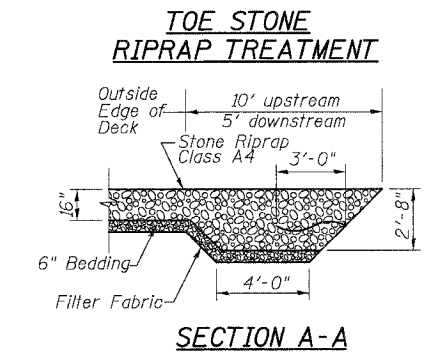
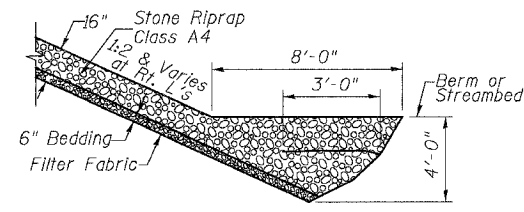
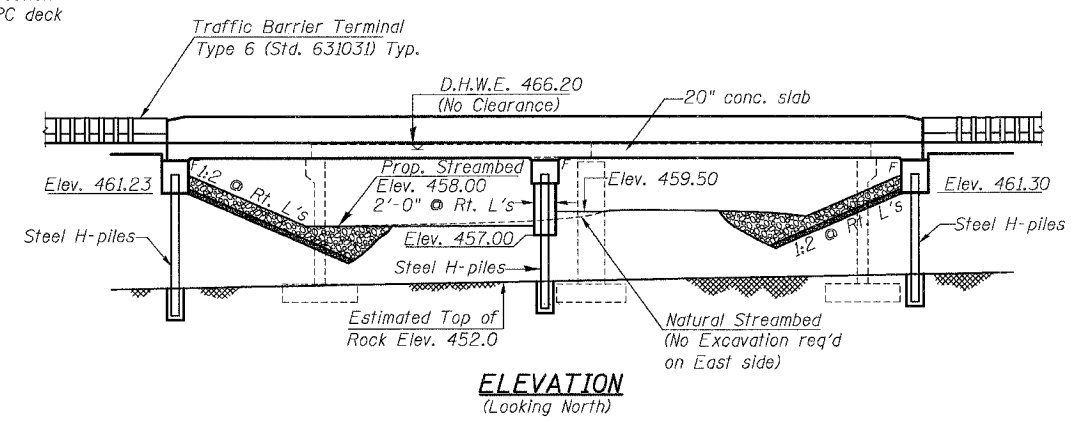
Benchmark: Chiseled "□" Top of Southeast Wingwall of SN 050-0030.
Elev. = 467.16

Existing Structure: SN 050-0030 built in 1970 as SBI Route 7A, Section U-BR at Station 99+40. Structure consists of two simple span PPC deck beams on closed abutments and solid pier. 61'-8" back-to-back abutments. 46'-6" out-to-out deck.

Structure to be removed and replaced using stage construction.
No Salvage.

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 627	U-BR	LA SALLE	38	16
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

CONTRACT NO. 66544

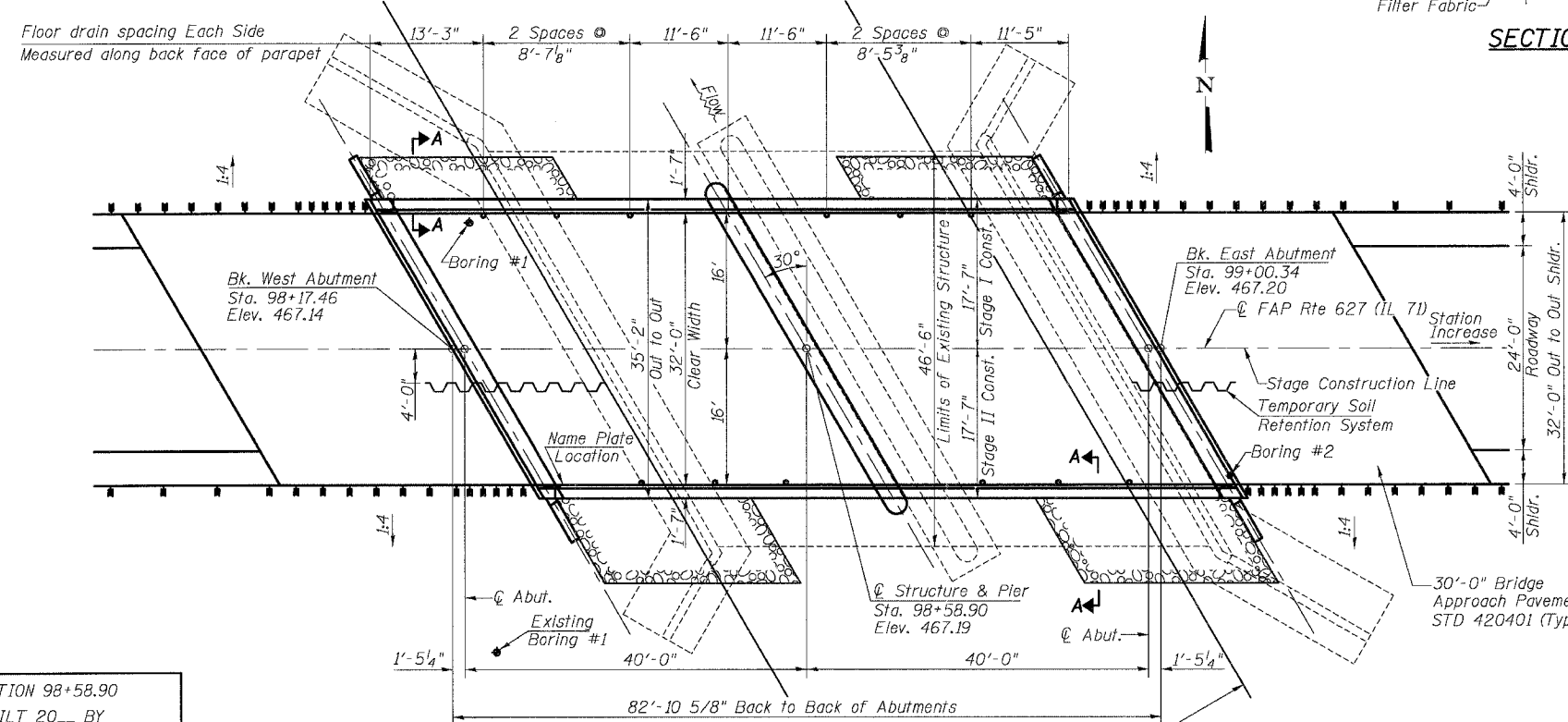


GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.
Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before Stage I removal.
All construction joints shall be bonded.
Rock cores are available for inspection upon request.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.			140
Concrete Superstructure	Cu. Yd.	202.5		202.5
Protective Coat	Sq. Yd.	360	5	365
Concrete Structures	Cu. Yd.		56.9	56.9
Reinforcement Bars, Epoxy Coated	Pound	41710	7090	48800
Furnishing Steel Piles HP 10x42	Foot		198	198
Furnishing Steel Piles HP 12x63	Foot		96	96
Name Plates	Each	1		1
Stone Riprap Class A4	Sq. Yd.			234
Filter Fabric	Sq. Yd.			234
Floor Drains	Each	12		12
Bar Splicers	Each	136	34	170
Temporary Soil Retention System	Sq. Ft.		240	240
Bridge Deck Grooving	Sq. Yd.	273		273
Underwater Structure Excavation Protection, Location 1	Each		1	1
Setting Piles in Rock	Each		18	18
Porous Granular Embankment (Special)	Cu. Yd.		78	78
Pipe Underdrains for Structures 4"	Foot		191	191
Geocomposite Wall Drain	Sq. Yd.		37	37



STATION 98+58.90
BUILT 20__ BY
STATE OF ILLINOIS
FAP RTE 627 (IL 71) SEC. U-BR
LOADING HS20
STR. NO. 050-0243
NAME PLATE
See Std. 515001

WATERWAY INFORMATION

Drainage Area = 7.0 Sq. Mi. Exist. Low Grade Elev. 466.6 @ Sta. 97+24 Prop. Low Grade Elev. 466.5 @ Sta. 96+79

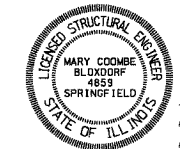
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	10	1370	257	329	465.5	466.2	0.6	0.7	466.1	465.9
Base	100	2420	257	329	466.5	466.5	0.6	0.5	467.1	467.0
Overtopping	20	1690	257	329	465.8	465.8	0.8	-	466.6	-
Max. Calc.	30	1830	257	329	465.9	465.9	-	0.7	466.6	466.6

10 Year Velocity Through Existing Bridge = 5.3 Fps
10 Year Velocity Through Prop. Bridge = 4.2 Fps

PROP. CURVE PROPCL-1
PI STA. = 95+41.64
 $\Delta = 6^\circ 22' 48''$
T = 160.00'
R = 2,870.85'
L = 319.67'
D = $1^\circ 59' 45''$
E = 4.46'
S.E. = 0.041 ''
P.C. STA. = 93+81.64
P.T. STA. = 97+01.31
ATTAIN S.E. STA. 92+73.31 TO STA. 94+35.81 (66/33)
REMOVE S.E. STA. 96+36.31 TO STA. 97+98.81 (60/40)

PROP. CURVE PROPCL-2
PI STA. = 101+13.05
 $\Delta = 4^\circ 20' 20''$
T = 100.00'
R = 2,639.83'
L = 199.90'
D = $2^\circ 10' 14''$
E = 1.89'
S.E. = 0.044 ''
P.C. STA. = 100+13.05
P.T. STA. = 102+12.96
ATTAIN S.E. STA. 99+15.55 TO STA. 100+78.05 (60/40)
REMOVE S.E. STA. 101+58.79 TO STA. 103+21.29 (66/33)

PROFILE GRADE
(Along Centerline Roadway)



Mary Coombe Bloxdorf
ILLINOIS STRUCTURAL NO. 4859
EXPIRES: 11/30/06
DATE: 5-18-06

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS
2002 AASHTO

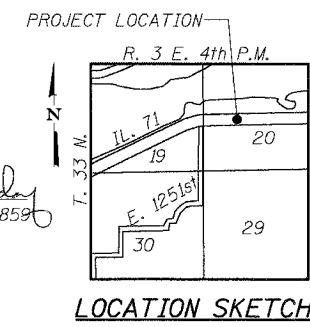
DESIGN STRESSES
Field Units
f'c = 3,500 psi (Substructure)
f'c = 3,500 psi (Superstructure)
fy = 60,000 psi (reinforcement)

SEISMIC DATA
Seismic Performance Category (S.P.C.) = A
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.0

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TSO)
ENGINEER OF BRIDGES AND STRUCTURES

INDEX OF SHEETS

- 1) GENERAL PLAN & ELEVATION
- 2) STAGE CONSTRUCTION
- 3) TEMPORARY CONCRETE BARRIER FOR STAGED CONSTRUCTION
- 4) TOP OF SLAB ELEVATIONS
- 5) SUPERSTRUCTURE
- 6) SUPERSTRUCTURE DETAILS
- 7) WEST ABUTMENT
- 8) EAST ABUTMENT
- 9) PIER
- 10) BAR SPLICER ASSEMBLY DETAILS
- 11-12) BORING LOGS



ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: GENERAL PLAN & ELEVATION

PROJECT: FAP ROUTE 627 (IL 71) OVER UNNAMED STREAM SECTION U-BR LA SALLE COUNTY STATION 98+58.9 STRUCTURE NUMBER 050-0243

PROJECT NO. 05025-1
SCALE: AS SHOWN
DATE: 12/17/05
DRAWN BY: TFG
CHECKED BY: KPS/BD/MCB
DRAWING NO. 1

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

OF 12 SHTS