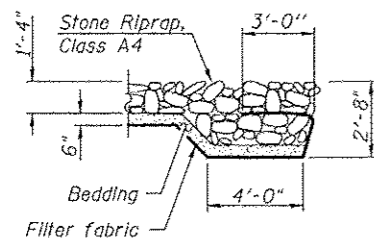
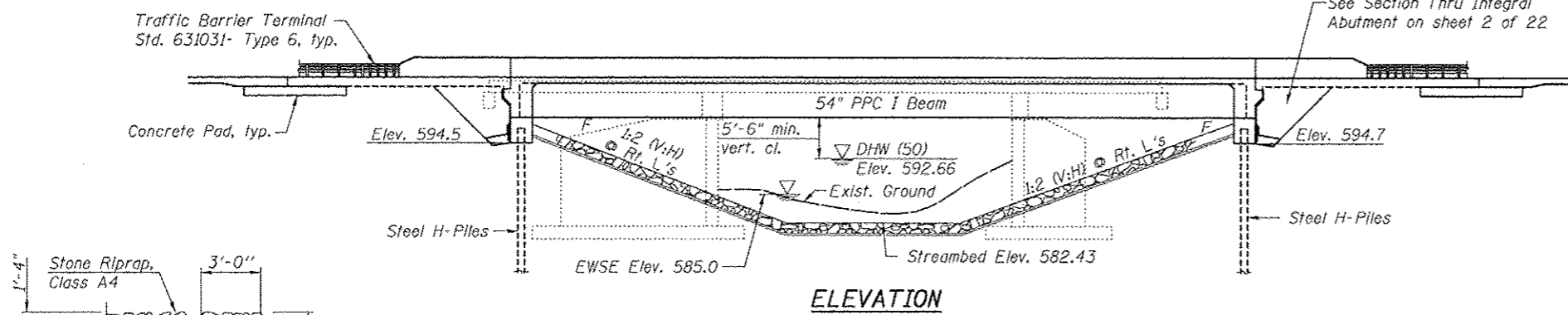


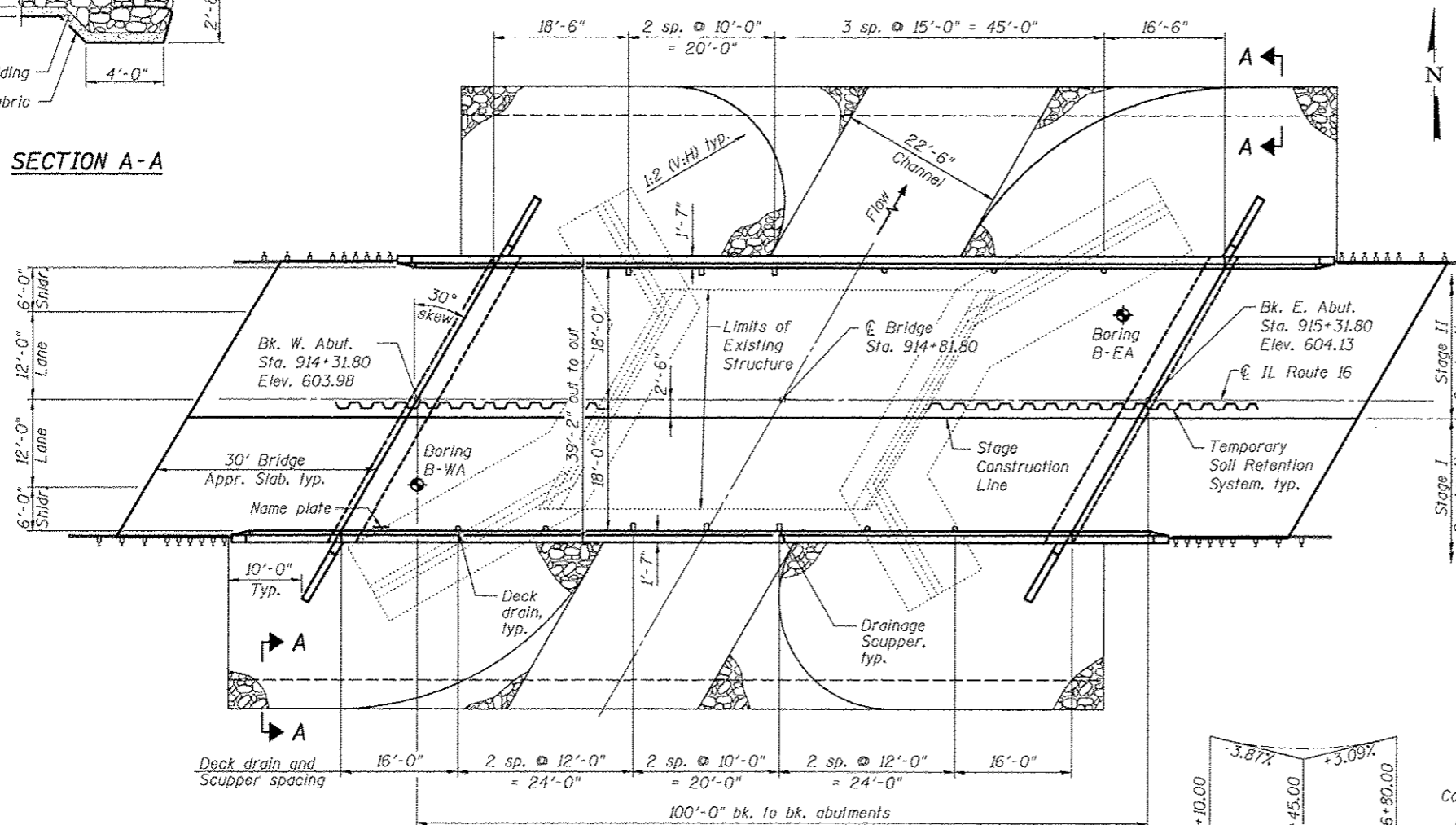
B.M.: Chiseled square on NW wingwall SN 059-0003, Elev. 603.39

Existing Structure: S.N. 059-0003 at Sta. 914+80 originally built in 1934 as SBI Rte 110, Section 116-B. In 1978, the superstructure was removed, replaced and widened under F.A. Rte 91, Section 116BR. The existing structure consists of single span P.C. deck beams on closed concrete abutments. The existing structure is 45'-2 1/2" back to back of abutments and 33'-0" out to out of beams. The existing structure is to be removed and replaced with a new structure utilizing stage construction to maintain one lane of traffic.

No Salvage.



SECTION A-A

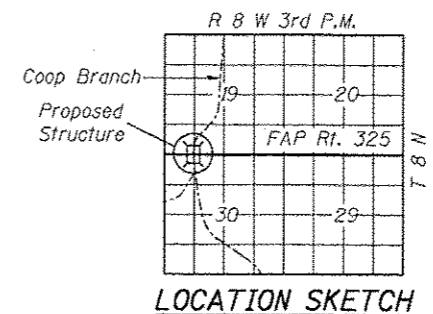
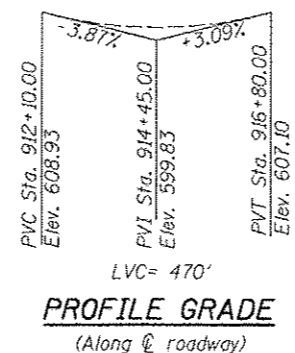


WATERWAY INFORMATION

Drainage Area = 4.5 sq. mi.		Low Grade Elev. 603.9 ft. @ Sta. 914+71		Nat.		Head - Ft.		Headwater El.	
Flood Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10	1150	270	440	590.97	0.1	0.1	0.1	591.11	591.05
Design	50	1890	330	440	592.66	0.3	0.2	592.95	592.83
Base	100	2240	350	480	593.18	0.4	0.2	593.56	593.38
Max. Calc.	500	3080	390	550	594.14	0.6	0.3	594.78	594.42

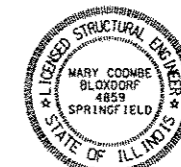
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	594.5	594.7



APPROVED For Structural Adequacy Only

Mary Anne Blodgett
Engineer of Bridges & Structures



Mary Anne Blodgett
ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/14
DATE: 10/18/2012

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 16 OVER COOP BRANCH
F.A.P. RTE. 325 SECTION 116BR-1
MACOUPIN COUNTY
STATION 914+81.80
STRUCTURE NO. 059-0515

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Data
- 3 Stage Construction Details
- 4 Temporary Concrete Barrier
- 5-6 Top of Slab Elevations
- 7 Top of W. Approach Slab Elevations
- 8 Top of E. Approach Slab Elevations
- 9 Superstructure
- 10 Superstructure Details
- 11 Diaphragm Details
- 12-13 Bridge Approach Slab Details
- 14 Drainage Scupper, DS-33
- 15 Framing Plan
- 16-17 PPC I-Beam Details
- 18 West Abutment
- 19 East Abutment
- 20 HP Pile Details
- 21 Bar Splicer Assembly and Mechanical Splicer Details
- 22 Boring Logs

STATION 914+81.80
BUILT BY
STATE OF ILLINOIS
F.A.P. ROUTE 325 SEC. 116BR-1
LOADING HL 93
STRUCTURE NO. 059-0515

NAME PLATE
See Std. 515001

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES
FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
PRECAST PRESTRESSED UNITS
f'c = 7,000 psi
f'ci = 6,000 psi
fpu = 270,000 psi (1/2" low lax. strands)
fpbt = 201,960 psi (1/2" low lax. strands)

LOADING HL 93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S₀₁) = 0.137g
Design Spectral Acceleration at 0.2 sec. (S₀₅) = 0.311g
Soil Site Class = C

FILE NAME: 10101815-7219-001-001-001.dgn
PROJECT NO: 10101815-7219-001-001-001

Coombe-Bloxdorf P.C.
CIVIL ENGINEERS
STRUCTURAL ENGINEERS
LAND SURVEYORS
Design Firm License No. 184-002793

USER NAME = .CFC.	DESIGNED - CME	REVISED -
CHECKED - MCB <td>REVISOR - <td></td> </td>	REVISOR - <td></td>	
DRAWN - MML <td>REVISOR - <td></td> </td>	REVISOR - <td></td>	
CHECKED - MCB <td>REVISOR - <td></td> </td>	REVISOR - <td></td>	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	37

SHEET NO. 1 OF 22 SHEETS

ILLINOIS FED. AID PROJECT