*APPROVED

MAR 28 2006

AS A BASIS FOR PREPARATION OF DETAILED PLANS

*Subject to RR Approval

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		WILL		1
		TO STA.		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

BENCHMARK:

BM 3059 Square cut on top of 36 inch box culvert between I-55 and E. Frontage Road and about 100 feet north of a crossover and about 1200 feet north of CSXRR. El. 548.88

EXISTING STRUCTURE:

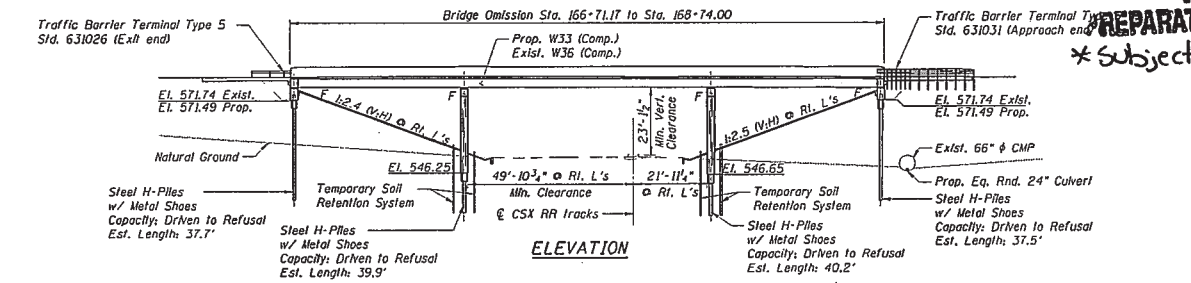
S.N. 099-0312 constructed in 1994. Three span, 202'-10" back to back of abutments, continuous steel multi-beam bridge on solid wall pile bent piers and integral abutments. Wide flange girders composite with deck. 40" between barriers.

SALVAGE:

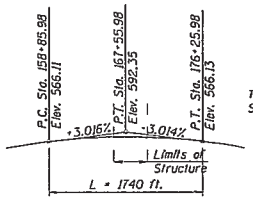
None.

STAGING:

Traffic to be maintained utilizing stage construction.

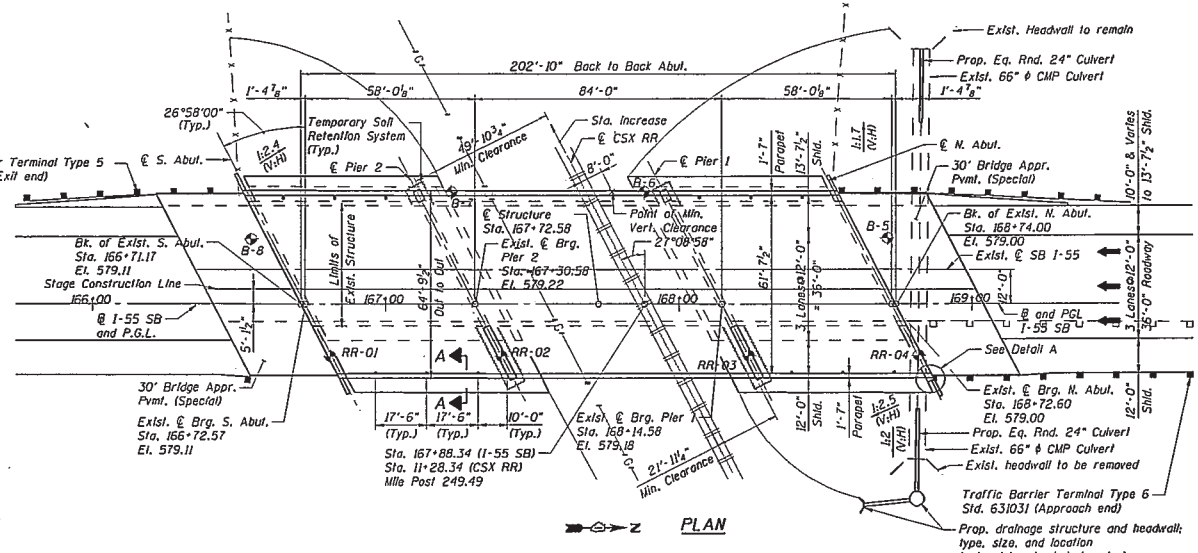


ELEVATION

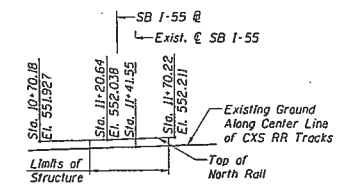


SB I-55 PGL

(Developed from survey data)



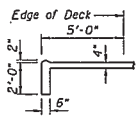
PLAN



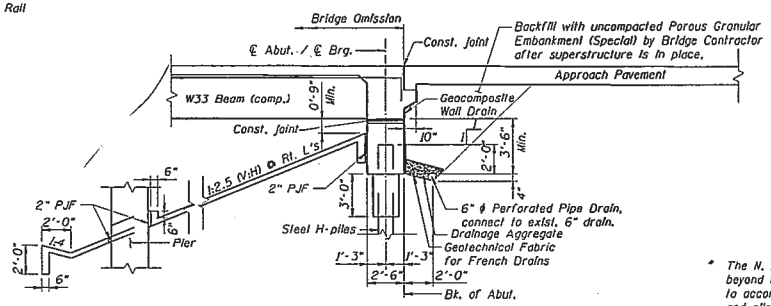
PROFILE GRADE

CSX RR

(From Survey)

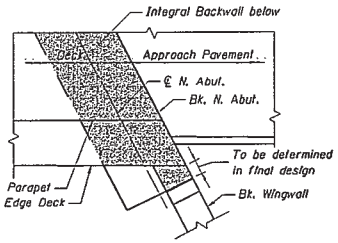


SECTION A-A



SECTION B-B

(Section thru proposed abutment widening)



DETAIL A

(East end of North Abutment)

* The N. Abut. will be widened beyond the proposed deck width to accomodate the outside pile and pile encasement, which will clear the culvert below.

DESIGN SPECIFICATIONS:

2002 AASHTO Standard Specifications for Highway Bridges.

DESIGN LOADING:

Roadway Live Load: HS-20-44 & Military All.
Future Wearing Surface: 50 psf

DESIGN STRESSES:

Concrete, f'c = 3,500 psi
Reinforcement, fy = 60,000 psi
Structural Steel, fy = 50,000 psi (M 270 Grade 50)

SEISMIC DATA:

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

HIGHWAY CLASSIFICATION:

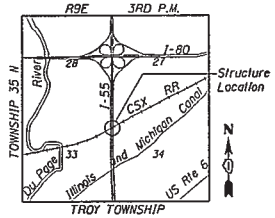
F.A.I. 55 (Interstate 55)
Interstate
ADT: 50,700 (2002), 64,000 (2030)
ADTT (MU): 16%
ADTT (SU): 4%
DHV: 2,530 (2002)
Design Speed: 65 MPH
Posted Speed: 65 MPH

Notes:

1. No deck drains will be permitted in the span over tracks or within 10' of cross arms of a railroad pole line.
2. Formed concrete repair and epoxy crack injection will be performed at abutments and piers in accordance with BCR.
3. Anti-graffiti surface treatment will be applied to exposed substructure and wingwall concrete surfaces.
4. Substructure elevations have been adjusted down 0.35 ft. from the 1994 plans to account for datum change.

LEGEND:

- B-5 Soil Boring (1991)
- RR-01 Soil Boring (2006)
- —G— Gas
- —x—x— Fence
- • Floor Drain
- F Fixed
- Temporary Soil Retention System



TROY TOWNSHIP

LOCATION SKETCH

SHT. 1 OF 2

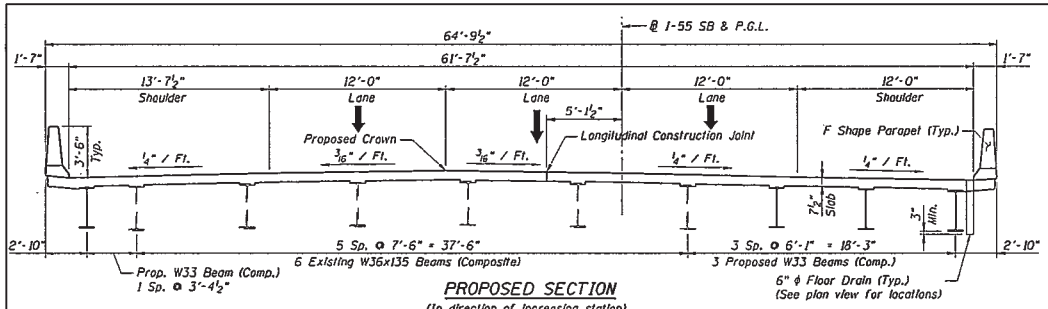
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAI ROUTE 55 (I-80 TO U.S. 30)
SB I-55 OVER CSX RAILROAD, S.N. 099-0312
STA. 167+72.58, SECTION 86 (VB-1-R, B-R-1, B-1-BRI)
WILL COUNTY

TYPE, SIZE, AND LOCATION
GENERAL PLAN & ELEVATION

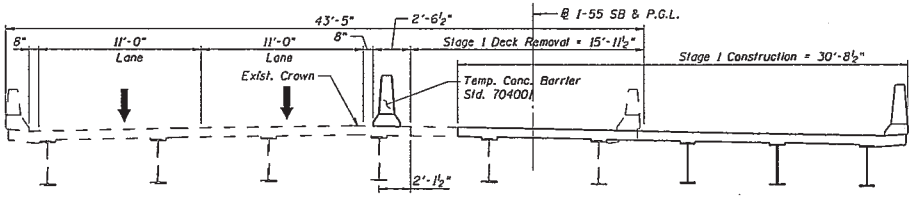
SCALE: NONE — DRAWN BY: MDB
DATE: 03/06/2006 — CHECKED BY: MJK

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55		WILL		2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



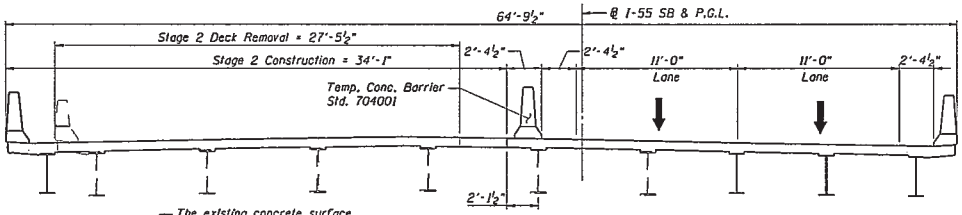
PROPOSED SECTION

(In direction of increasing station)



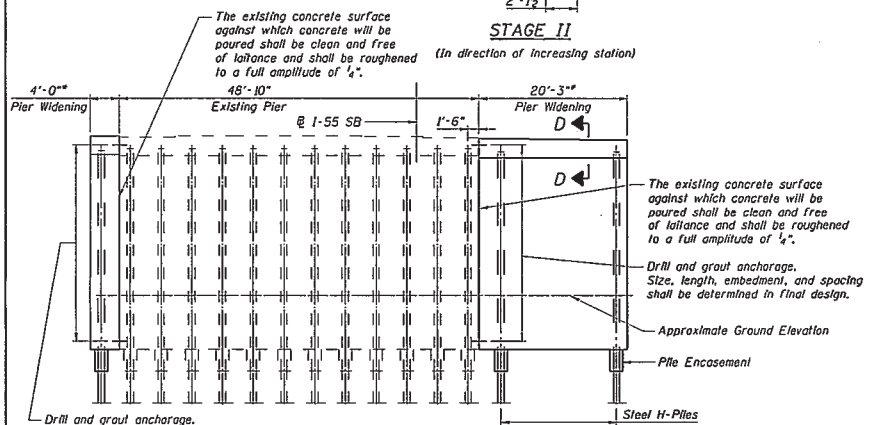
STAGE I

(In direction of increasing station)



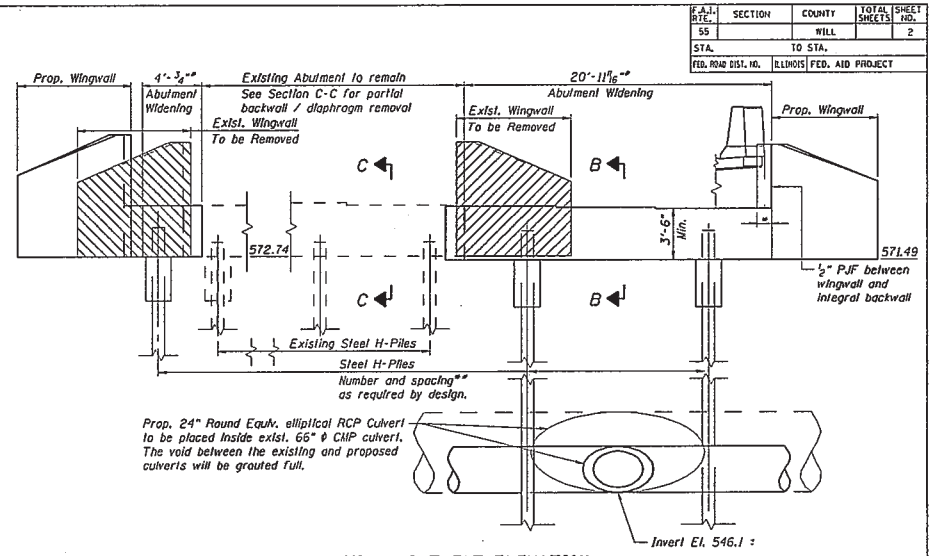
STAGE II

(In direction of increasing station)



TYPICAL PIER SKETCH

(Looking North)



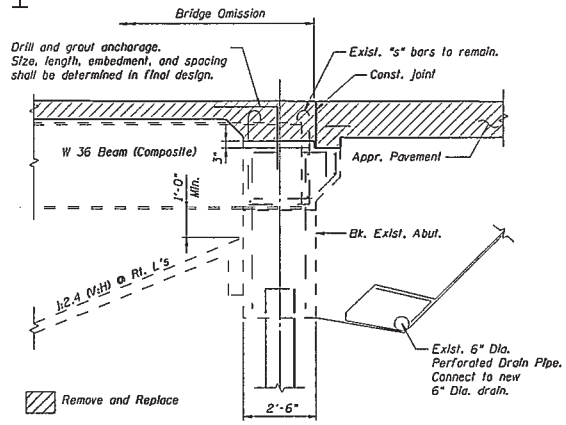
PARTIAL ABUTMENT ELEVATION

North Abutment Shown
South Abutment Similar

Notes:

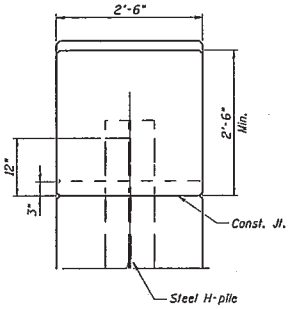
1. ** Pile spacing at north abutment (east side) will exceed 8'-0" in order to clear proposed culvert.
2. For Section B-B, see Sheet 1.
3. * Denotes dimension to be determined in final design.

Concrete Removal



SECTION C-C

(Section thru Exist. Abutment)



SECTION D-D

(Section Through Pier Cap)

SHT. 2 OF 2

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STA. 167+72.58, SECTION 86 (VB-1-R, B-R-1, D-1-BR)
WILL COUNTY

TYPE, SIZE, AND LOCATION DETAILS

SCALE: NONE — DRAWN BY: MDB
DATE: 03/06/2006 — CHECKED BY: MJK