STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

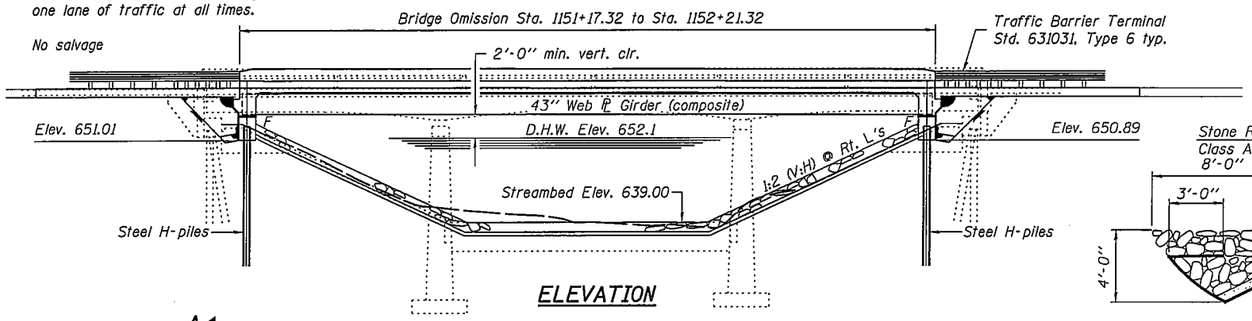
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 332	15R-B	IROQUOIS		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
2 SHEETS

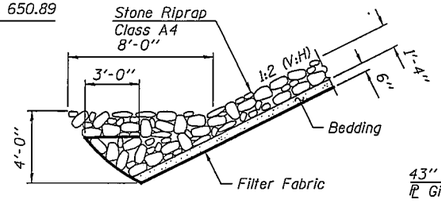
Contract #000022

Bench Mark: Chiseled "square" on S.E. wingwall ±Sta. 1152+25.75, ±18'-9" Lt., Elev. ±659.86

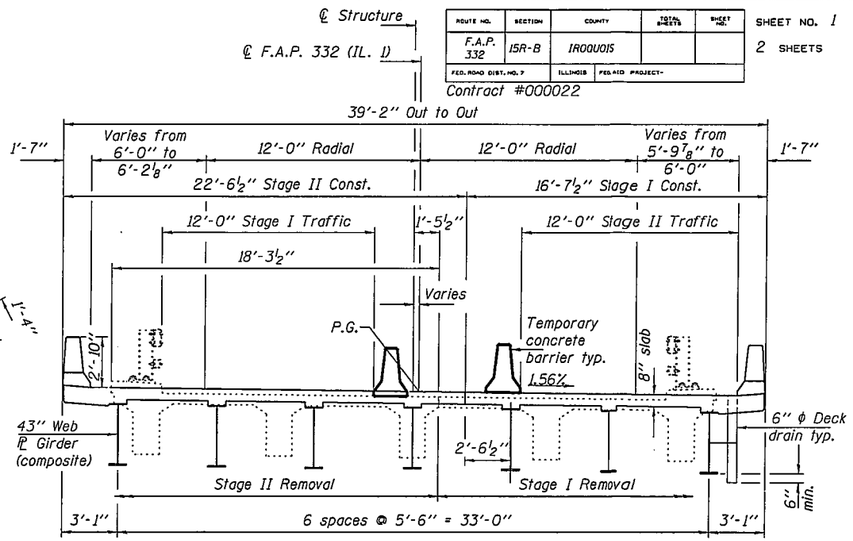
Existing Structure: S.N. 038-0023 was built in 1953 as S.B.I. Route 1, Section 15-R-B, at Station 1151+70. The existing three span structure consists of continuous cast-in-place concrete T-girders supported on pile bent abutments and solid wall piers. The structure is 118'-0" back to back of abutments and 33'-8" out to out of deck. The existing structure will be replaced. Stage construction will be utilized to maintain one lane of traffic at all times.



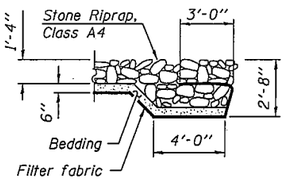
ELEVATION



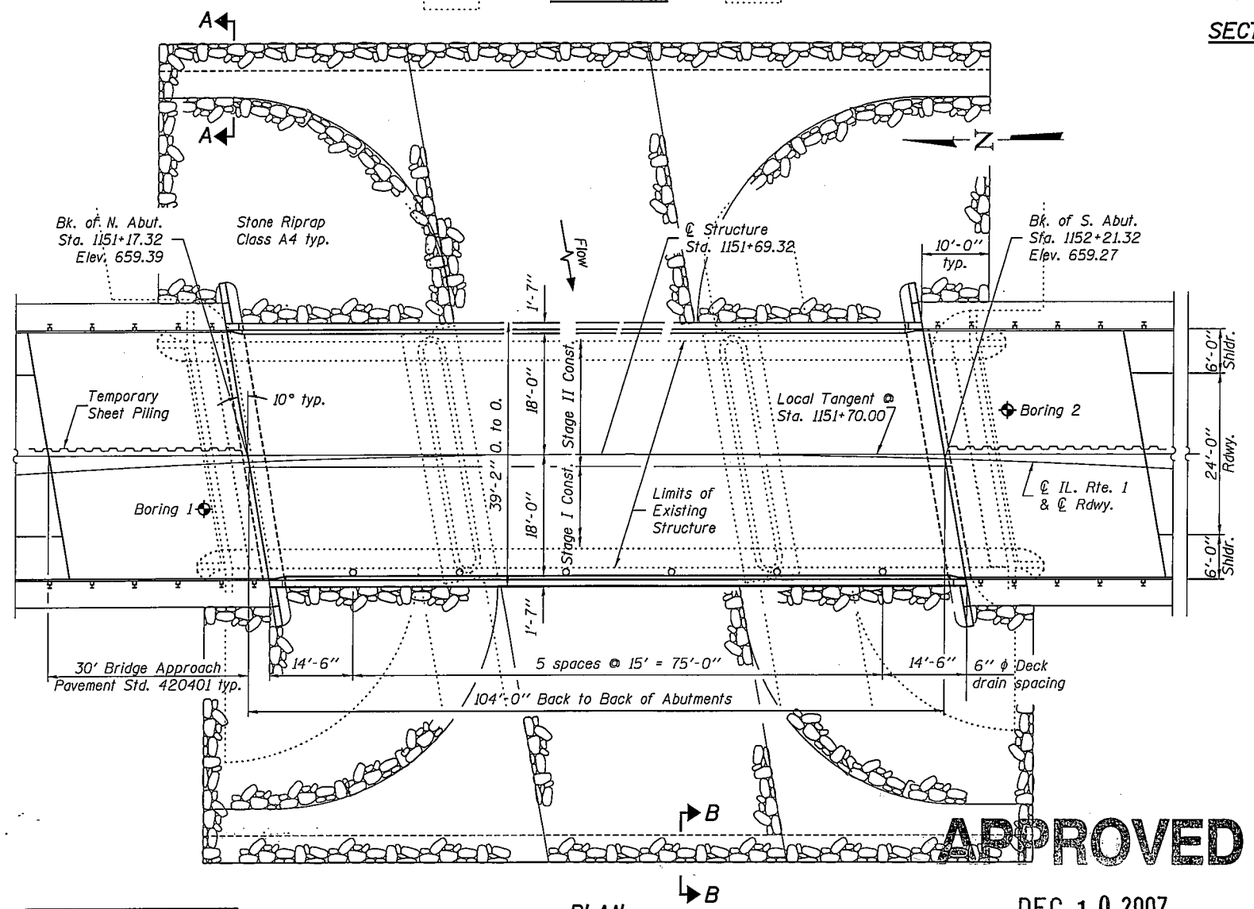
SECTION A-A



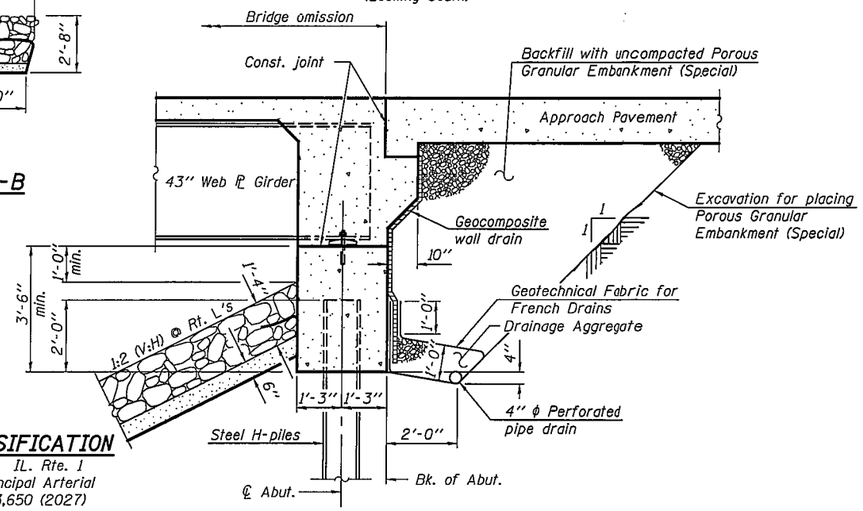
CROSS SECTION
(Looking South)



SECTION B-B



PLAN



SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)

HIGHWAY CLASSIFICATION

F.A.P. Rte. 332 - IL. Rte. 1
Functional Class: Principal Arterial
ADT: 2,750 (2005); 3,650 (2027)
ADTT: 13%
DHV: 275 (2027)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications, 4th Edition

DESIGN STRESSES

FIELD UNITS

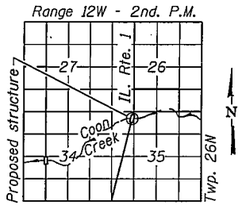
f'_c = 3,500 psi
f_y = 50,000 psi (M270 Grade 50W)
f_y = 60,000 psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	651.01	650.89



LOCATION SKETCH

GENERAL PLAN
IL. ROUTE 1 OVER COON CREEK
F.A.P. ROUTE 332 - SECTION 15R-BR
IROQUOIS COUNTY
STATION 1151+69.32
S.N. 038-0209

DESIGNED	J. Mann, C. Evoy
CHECKED	T.L. Kurtenbach
DRAWN	W.D. Collins
CHECKED	T.A. Craven

- 200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

APPROVED
DEC 10 2007
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 332	15R-B	IROQUOIS		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

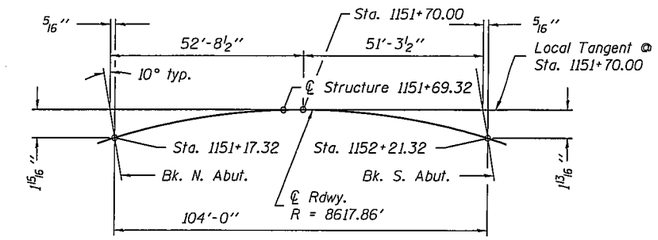
SHEET NO. 2
2 SHEETS

Contract #000022

WATERWAY INFORMATION

Drainage Area = 39.6 sq. mi. Low Grade Elev. 658.0 @ Sta. 1158+04

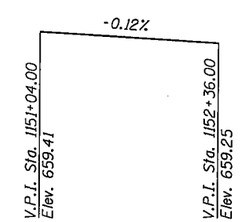
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	4312	840	840	652.1	0.3	0.3	652.4	652.4
Base	100	4893	880	880	652.5	0.4	0.4	652.9	652.9
Overtopping									
Max. Calc.	500	6254	970	970	653.4	0.6	0.6	654.0	654.0



OFFSET SKETCH

HORIZONTAL CURVE DATA

PI Sta. = 1144+19.85
Δ = 14°-07'-42" (RT)
R = 8617.86'
T = 1067.94'
L = 2125.05'
E = 65.92'
P.C. Sta. = 1133+51.91
P.T. Sta. = 1154+76.96
S.E. = 1.56%
S.E. attained from Sta. 1131+91.91 to Sta. 1134+31.91
S.E. removed from Sta. 1153+96.91 to Sta. 1156+36.91



PROFILE GRADE

(℄ IL. Rte. 1)

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DETAILS
IL. ROUTE 1 OVER COON CREEK
F.A.P. ROUTE 332 - SECTION 15R-BR
IROQUOIS COUNTY
STATION 1151+69.32
S.N. 038-0209