ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 656		TAZEWELL		
PROJECT				

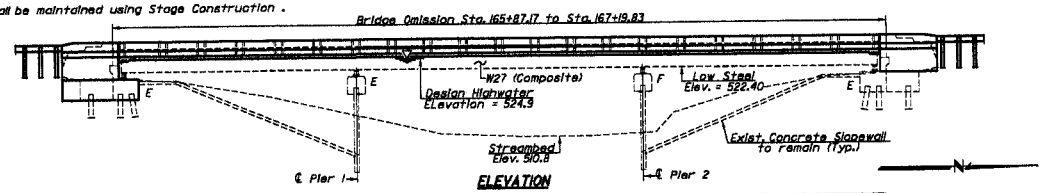
SHEET NO. 1 OF 1 SHEETS

Benchmark: Chiseled "□" on N.E. Wingwall of S.N. 090-0053 at Sta. 167+32 Elev. 527.57

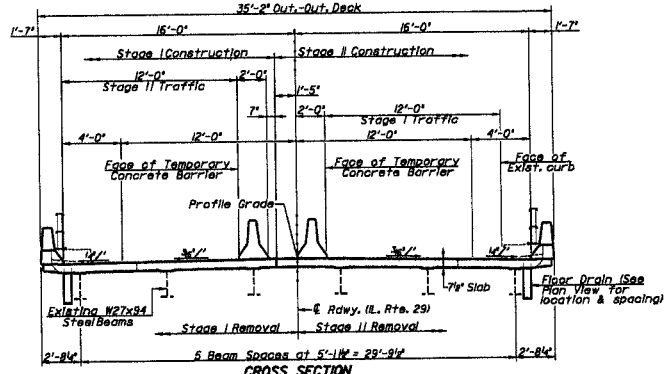
Existing Structure: S.N. 090-0053. Built as S.B.I. 24, Section HJ(W, RS) in 1961. The superstructure consists of a reinforced concrete deck supported by steel wide flange beams. The structure length is 132'-8" Bk.-Bk. Abutments and 33'-8" Out.-Out. Deck. The substructure consists of reinforced concrete pile bent piers and pile bent abutments.

One lane of traffic shall be maintained using Stage Construction.

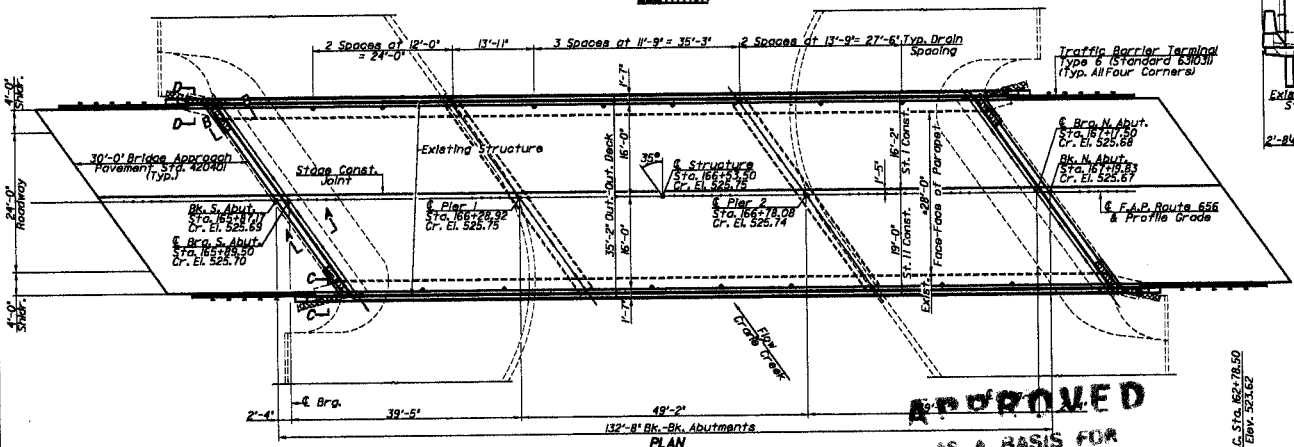
No salvage.



ELEVATION



CROSS SECTION
(Looking Upstation)
(Dimensions are at Rt. ∠'s to ℄ Rdwy.)

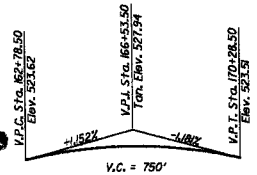


PLAN

▨ - Indicates Abutment Concrete Removal

APPROVED AS A BASIS FOR PREPARATION OF DETAILED PLANS

MAY 22 2002



PROFILE GRADE
(@ ℄ Prop. Roadway)

SEISMIC DATA

Seismic Performance Category = A
Bedrock Acceleration Coefficient = 0.04g
Site Coefficient = 1.20

HIGHWAY CLASSIFICATION

F.A.P. Route 656
Functional Class: Minor Arterial (Rural)
A.D.T. 1400(1998), 1750(2020)
Design Speed: 55 mph
Posted Speed: 55 mph

DESIGN SPECIFICATIONS

1996 A.A.S.H.T.O. Specifications with 1997 thru 2000 Interim Specifications.

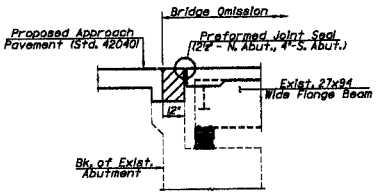
LOADING HS 20-44

DESIGN STRESSES

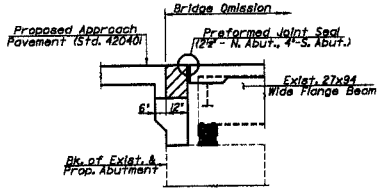
FIELD UNITS
f'c = 3500 psi
fy = 60000 psi (Reinf.)
fy = 36000 psi (A-36) (Existing Structural Steel)

SCOPE OF WORK

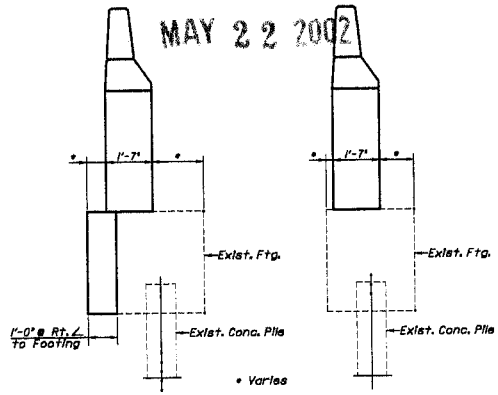
1. Remove and replace existing deck utilizing Stage Construction.
2. Install shear studs in the positive moment regions of the existing beam lines.
3. All existing structural steel, including bearings, shall be cleaned and painted under a seperate paint contract.
4. Remove and replace existing approach slabs.
5. Remove existing wingwalls and modify the abutments as shown.
6. Modify existing concrete slopewalls to accomodate modified abutments and wingwalls.
7. Install new preformed expansion seals.



SECTION A-A
(Dimensions are at Rt. ∠'s)



SECTION B-B
(Dimensions are at Rt. ∠'s)



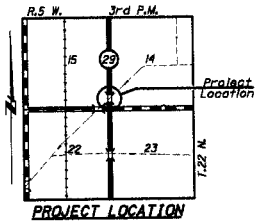
SECTION C-C

SECTION D-D

WATERWAY INFORMATION

Drainage Area = 38.9 mi² | Low Grade Elev. = 520.5 ft. | @ Sta. 174+00

Flood	Freq. Yr.	Q ft³/s	Opening ft.² Exist.	Opening ft.² Prop.	** Nat. H.W.E.	Head - ft. Exist.	Head - ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	5860	655	655	524.9	0.2	0.2	525.1	525.1
Base	100	6800	655	655	525.3	0.2	0.2	525.5	525.5
Overtopping	20	4500	655	655	524.5	0.1	0.1	524.6	524.6
Max. Calc.									



PROJECT LOCATION

GENERAL PLAN
IL. ROUTE 29 OVER CRANE CREEK
F.A.P. ROUTE 656 - SECTION (1)BR
TAZEWELL COUNTY
STA. 166+53.50
S.N. 090-0053

Designed:	M.A.H.
Checked:	A.P.H.
Drawn:	J.R.P.
Checked:	M.A.H.

F.E. NUMBER 2315 DATE 5/2/02