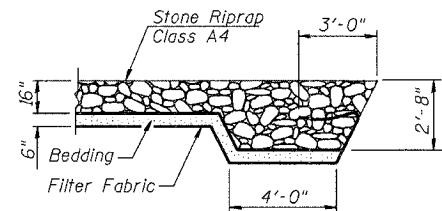


B.M. #403 Chiseled Square on the Northeast Wingwall of Structure 041-0027, 17.5' Lt of Sta. 130+90, Elev. 455.235

Existing Structure: S.N. 041-0027, Built in 1957 as SBI-15 Section 15-2B at Station 129+81. The existing structure is a Three Span Non-Composite Continuous Wide Flange Beam Bridge supporting a R.C. Slab on concrete pile bent piers and abutments. Overall length is 168'-0" back to back of abutments. Bridge width is 34'-5" out to out of deck with two 14'-0" traffic lanes measured face to face curbs. The contractor will remove and replace the existing concrete deck, widen substructure, add new beam lines and complete other work as described in the plans.

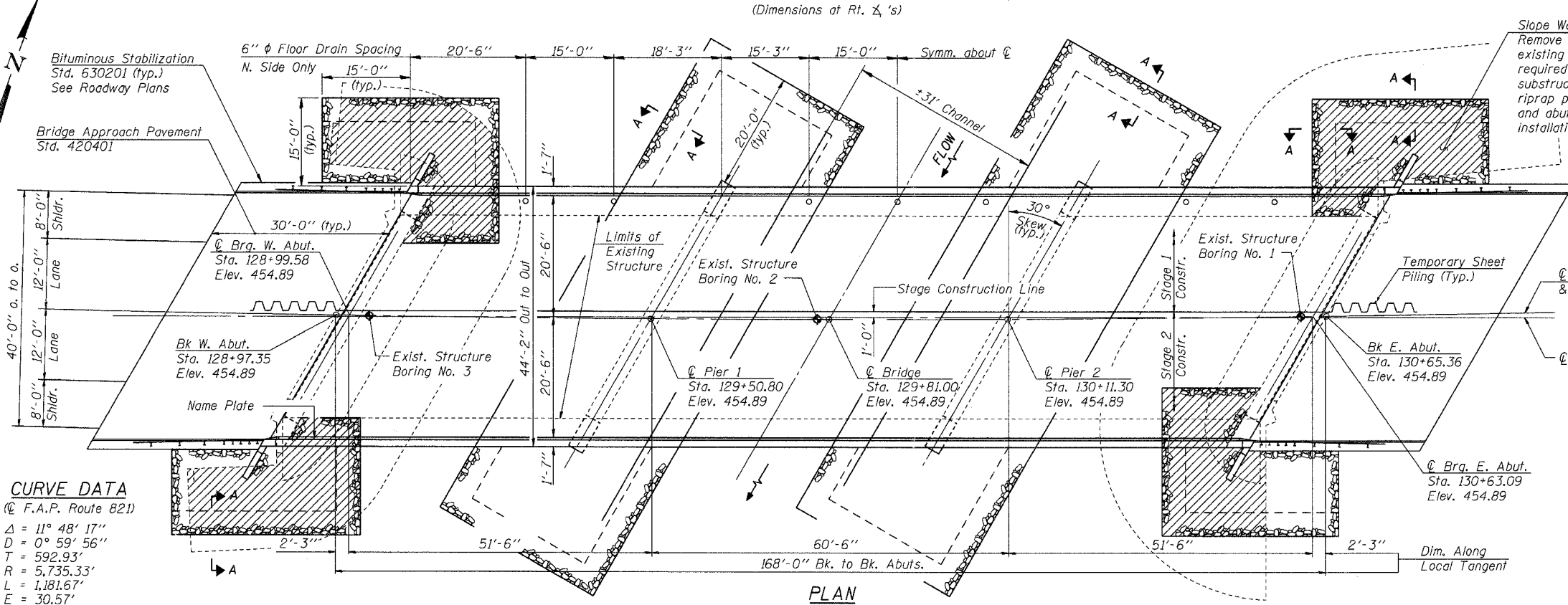
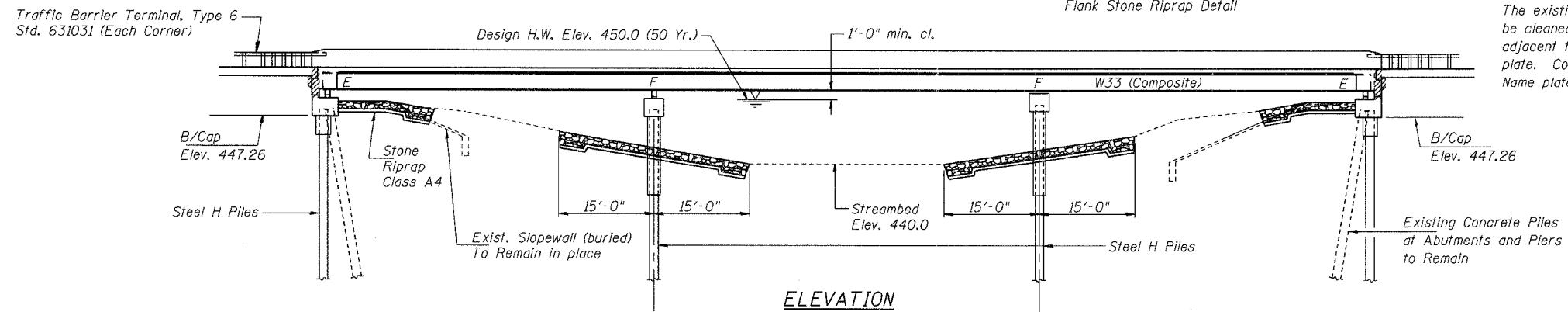
Traffic shall be maintained at all times utilizing Stage Construction.

No Salvage.



STATION 129+81
REBUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 821 SEC. (15-2)BR
F.A. PROJ.
LOADING HS20
STR. NO. 041-0027

LETTERING FOR NAME PLATES
See Std. 515001
The existing name plate shall be cleaned and relocated adjacent to the new name plate. Cost included with Name plates.



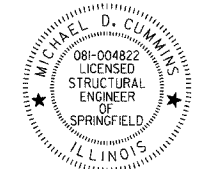
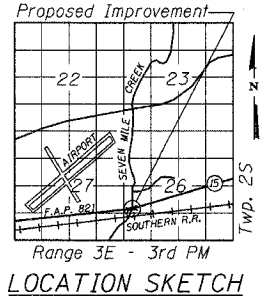
CURVE DATA
(@ F.A.P. Route 821)
Δ = 11° 48' 17"
D = 0° 59' 56"
T = 592.93'
R = 5,735.33'
L = 1,181.67'
E = 30.57'
P.C. Sta. = 120+72.65
P.I. Sta. = 126+65.59
P.T. Sta. = 132+54.32
S.E. = 0.02'/ft.

WATERWAY INFORMATION

Drainage Area = 21.10 Sq. Mi. Low Grade Elevation: 454.7 ft. @ Sta. 128+00

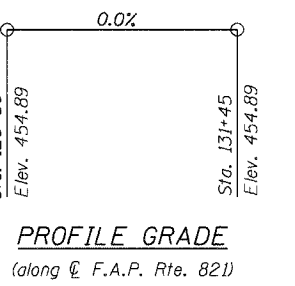
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	2090	651	651	449.5	0.9	0.9	450.4	450.4
Base	50	3030	714	714	450.0	1.5	1.5	451.5	451.5
Overtopping	100	3440	741	741	450.2	1.7	1.7	451.9	451.9
Max. Calc.	500	4355	794	794	450.6	2.4	2.4	453.0	453.0

DESIGNED Ruben V. Boehler
CHECKED Tim S. Howard
DRAWN TSH / RVB
CHECKED Michael D. Cummins



Michael D. Cummins (8-9-06)
(Expires 11/30/2006)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES



PROFILE GRADE
(along @ F.A.P. Rte. 821)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 821	(15-2)BR	JEFFERSON	33	13
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT			Sheet 1 of 19 CONTRACT #98958	

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes and Total Bill of Material
3. Stage Construction Details
- 4.-5. Top of Slab Elevations
6. Superstructure
7. Superstructure Details
8. Diaphragm Details
- 9.-10. Structural Steel
- 11.-12. Bearing Details
13. Abutment Concrete Removal Details
14. Abutments
15. Abutment Details
16. Piers
17. Bar Splicer Assembly Details
18. Anchor Bolt Details
19. Temporary Concrete Barrier

DESIGN SPECIFICATIONS

2002 AASHTO
1995 Seismic Retrofitting Manual for Highway Bridges FHWA-RD-94-052

LOADING HS20-44

Allow 25#/Sq. Ft. for future wearing surface

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.098g
Site Coefficient (S) = 1.2

DESIGN STRESSES

New Construction
f_c = 3,500 psi
f_y = 36,000 psi (Structural Steel)
f_y = 60,000 psi (Reinforcement)

Existing Structure
f_c = 1,400 psi (Superstructure)
f_c = 800 psi (Substructure)
f_s = 20,000 psi (Reinforcement)
f_s = 18,000 psi (Structural Steel)

GENERAL PLAN & ELEVATION

IL ROUTE 15 OVER SEVEN MILE CREEK
F.A.P. ROUTE 821 SECTION (15-2)BR
JEFFERSON COUNTY
STA. 129+81.00
S.N. 041-0027

CUMMINS ENGINEERING CORPORATION

JOB # 2175
FILE: 2175gpe
DATE: 8/7/06