

B.M.: #232; Chiseled Square on the Southeast Corner of SN 096-0023 Elevation 423.23

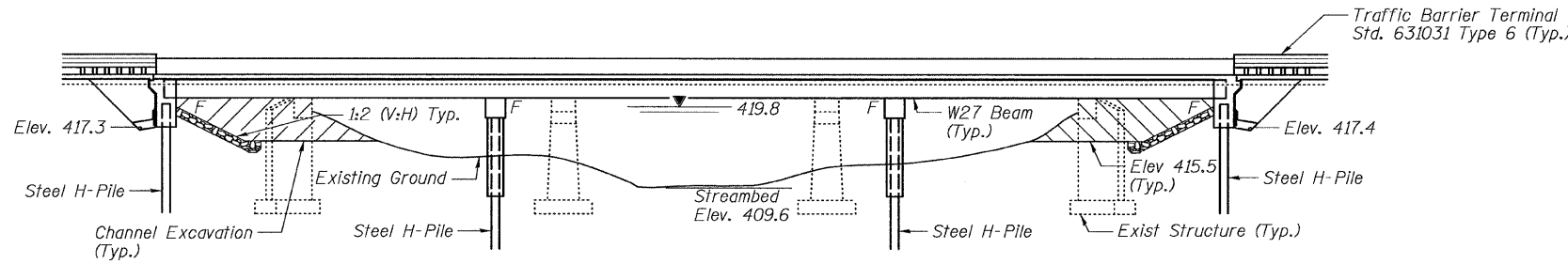
Existing Structure: Three-span PPC deck beam bridge built in 1923 on Rt. 25, Section 10-BR-2. Reconstructed in 1974 for widening to current 34'-0" out to out and 99'-0" back to back abutment length. The abutments and piers are spread footings on hard pan at elevation 406.3'. Existing structure to be removed and replaced. Traffic to be maintained with staged construction.

Salvage: None.

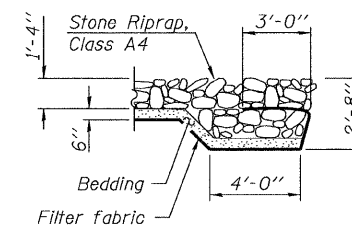
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 328	(10BR-2)B-1	WAYNE		100	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 74040



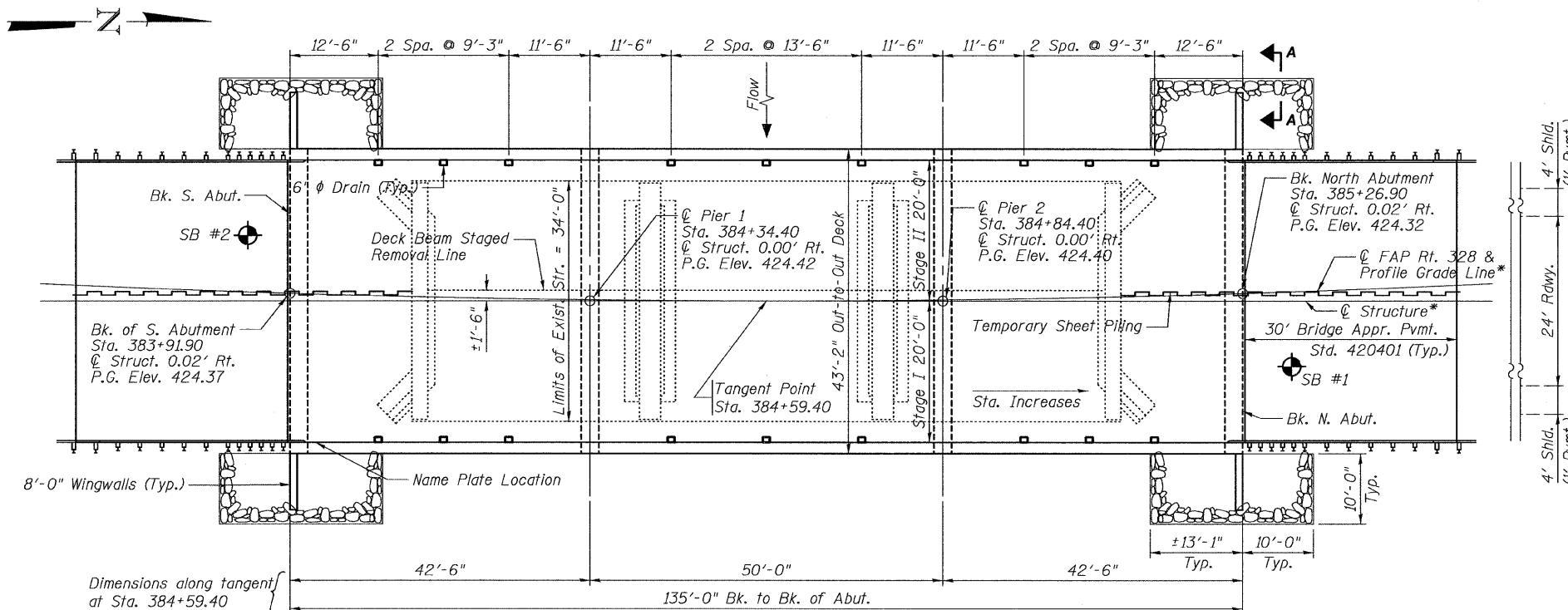
ELEVATION
(Along Tangent to Sta. 384+59.40)



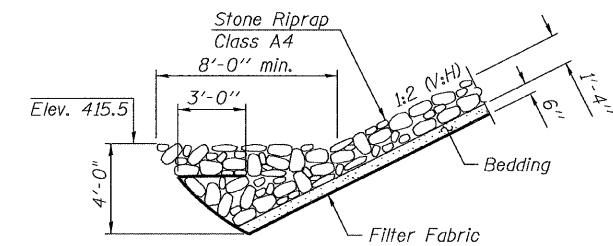
SECTION A-A

SHEET INDEX

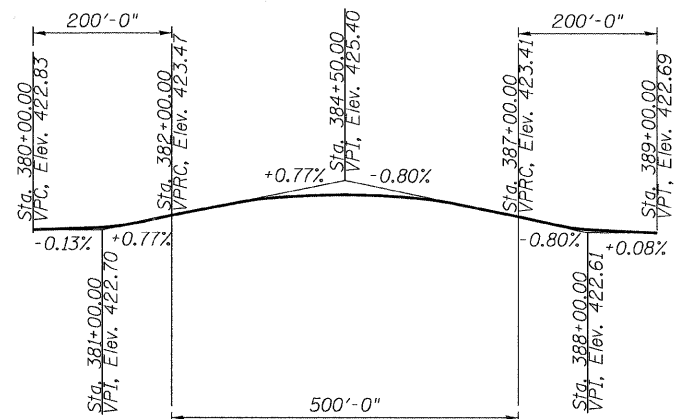
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PLAN



STONE RIPRAP ANCHOR DETAIL



PROFILE GRADE

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abutment	Pier 1	Pier 2	N. Abutment
	417.3	396.0	395.8	417.4

WATERWAY INFORMATION

Drainage Area = 15.85 sq. mi. Proposed Low Grade Elev. = 422.69 @ Sta. 389+00

Flood	Freq. Yr.	Q C.F.S.	Opening	Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
			Exist.	Prop.	Exist.	Prop.	Exist.
Design	50	3809	513	631	418.9	1.6	420.5
Base	100	4449	531	655	419.1	2.7	421.8
Overtopping (Existing)	500	6016	584	729	419.7	3.0	422.7
Max. Calc.	500	6016	584	729	419.7	3.0	422.7

CURVE DATA

P.I. STA. 388+08.00
D = 0° 02' 30"
R = 137,509.26'
L = 1,000'
T = 500'
E = 0.91'
P.C. STA. 383+08.00
P.T. STA. 393+08.00

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = .09
Site Coefficient (S) = 1.0

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications - 17th ed.

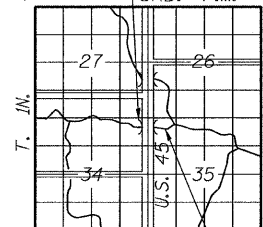
DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 50,000 psi (M270 Grade 50)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

Existing Structure (To be replaced) 3RD. P.M.



LOCATION SKETCH



Reginald H. Benton
11/28/07
Exp 11/30/08



BENTON & ASSOCIATES, INC.
Consulting Engineers / Land Surveyors
1970 West Lafayette Ave. Jacksonville, IL 62650
Phone: 217-245-4146 Fax: 217-245-4149
IL Design Firm Registration No. 184-000852

PLAN AND ELEVATION
US 45 / DEER CREEK

F.A.P. RT. 328
SEC. (10BR-2)B-1
WAYNE COUNTY
STA. 384+59.40
SN. 096-0068

BENTON & ASSOCIATES, INC.

DESIGNED	MBH
CHECKED	NRF
DRAWN	MBH
CHECKED	NRF