The bridge (S.N. 032-0076) was built as F.A. Route 8, Section Q-BR in 1974. The structure is a two-span precast, prestressed concrete box beam bridge with a bituminous overlay and a total length back to back of abutments of 119'-0". The deck is 33'-0" out to out and carries two traffic lanes. The structure skew is 34°00′00" left. The bridge is supported by stub abutments and a solid pier founded on steel piles. The bridge will be replaced utilizing stage construction maintaining one lane of traffic in each direction at all times. No salvage.

See Roadway Plans for detailed drainage, utility, R.O.W. and easement information. limits shall be backfilled in accordance with Article 502.10 of the Std. Specs. Cost Included with Removal of Existing Structures. See Roadway Plans

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Design H.W. El. 530.4 (50 Yr.)

Streambea

El. 522.2

Long. Bonded. Stage Constr.

Existing R.O.W.

Temp. Easement ---/

* EWSE=526.9

Existing Pier

to be removed

53'-0" Channet Bott. @ Rt. L's



① 0-BR

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 thru 2002 Interims

LOADING HS20

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

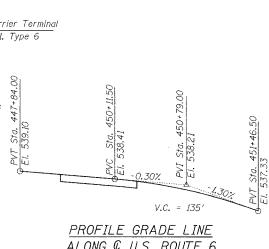
f' = 3,500 psi

fy = 60,000 psi (reinforcement)

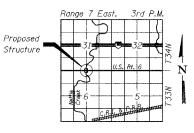
 $f_y = 36,000 \ psi \ (Structural \ Steel$ M270 Grade 36)

SEISMIC DATA

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



ALONG & U.S. ROUTE 6



LOCATION SKETCH

GENERAL PLAN & ELEVATION

U.S. ROUTE 6 OVER NETTLE CREEK FAU 5952-SEC. Q-BR

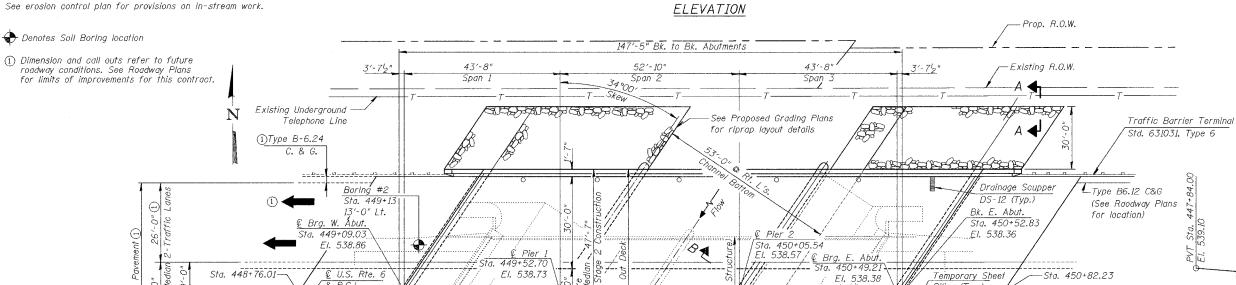
GRUNDY COUNTY STATION 449+79.12

S.N. 032-0107

EXISTING STRUCTURE DESCRIPTION:

See Sheet S3 for Section A-A, Section B-B and Existing Cross Section. Floor drains and scuppers shall be located clear of all diaphragms. Portions of existing structure removed below proposed channel excavation for limits of Channel Excavation.

See erosion control plan for provisions on in-stream work.



-EL. 531.00

Drilled Shafts w/ Rock Sockets

(Typ. @ Piers)

Floor Drains (Typ.)

PLAN

— W27 (Composite)

4'-3" min. =

© Nettle Creek Sta. 449+79.12

EI. 538.65 77

Traffic Barrier Terminal Std. 631031, Type 6

(Typ. Both EB Corners) Wall #2 --See Retaining Wall Plans 36" Storm Sewer

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WATERWAY INFORMATION

relocated by utility, see

El. 538.87

Boring #2A...

Sta. 448+99-:0" Rt.

See Drainage Plans

El. 531.28

Drainage Area = 43.6 mi² Low Grade Elev. = 535.374 ♥ Sta. 453+51.19									
Flood	Freq.	a	Opening ft≥		Nat.	Head-ft		Headwater El.	
	Yr.	ft³/s	Exist.	Prop.	HWE-ft	Exist.	Prop.	Exist.	Prop.
	10	1802	416	420	529.1	0.4	0.1	529.5	529.2
Design	50	2626	<i>51</i> 6	520	530.4	0.5	0.1	530.9	530.5
Base	100	2948	556	561	530.9	0.5	0.2	531.4	<i>531.1</i>
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	3718	639	651	531.9	0.6	0.2	532.5	532.1

STATION 449+79 BUILT 200 BY STATE OF ILLINOIS FAU 5952 SEC. Q-BR LOADING HS20 STR. NO. 032-0107

> NAME PLATE See Std. 515001

BOWMAN, BARRETT & ASSOCIATES INC. B CONSULTING ENGINEERS 130 E. RANDOLPH STREET CHICAGO, ILLINOIS 60601

Steel HP 10x42

(Typ. @ Abutments)

* EWSE = Estimated Water Surface Elevation

Boring #1

Sta. 450+42

Date:

License

Expires:

-24" Storm Sewer

See Drainage Plans

Telephone Line

Existing Underground

BRIGHT.

UMBRIGHT

081-009584

March 19, 2007

November 30, 2008

S/Mmerl

√¶ Ø

-Wall #3

See Retaining Wall Plans

APPROVED

FOR STRUCTURAL ADEQUACY ONLY Rolph & anderson FTD

-0" Bridge Appr.

Std. 420401 Typ.

CHECKED DRAWN CHECKED DATE: 3/19/07

DESIGNED