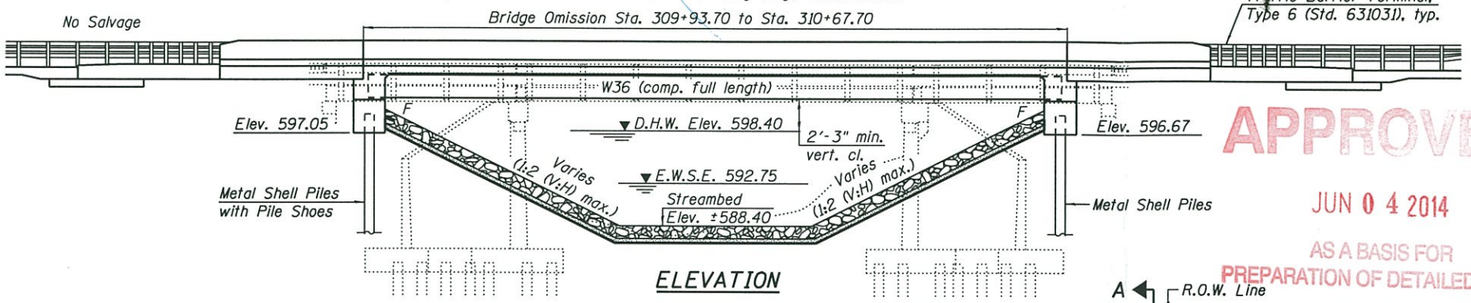
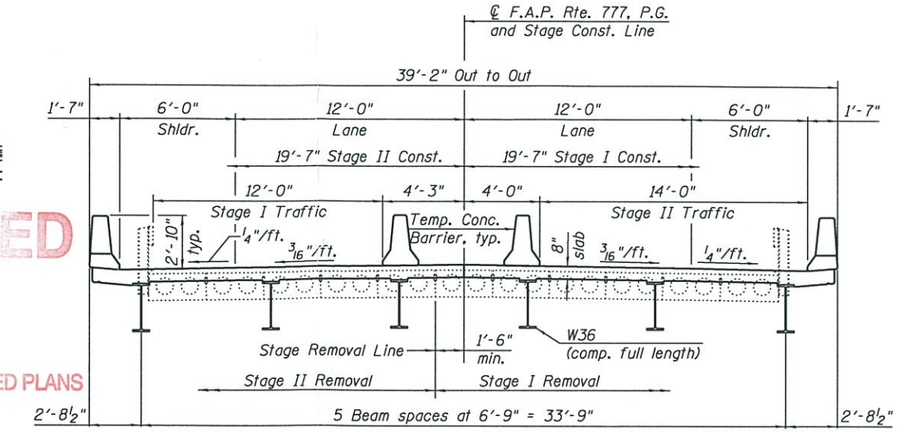
Bench Mark: Chiseled "□" in the north end of east concrete approach slab set in N.E. corner of bridge S.N. 068-0026. Elev. 604.176.

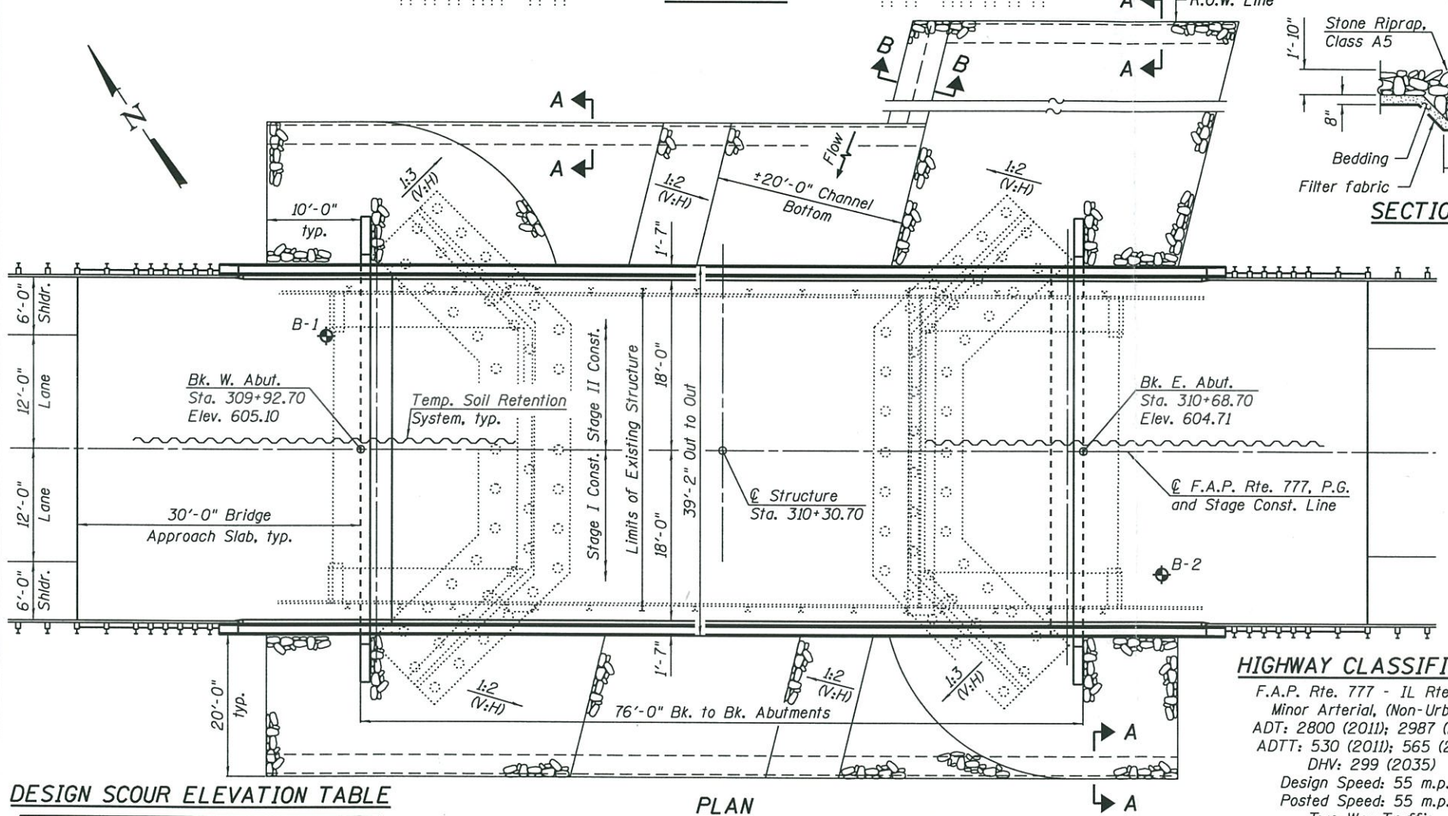
Existing Structure: S.N. 068-0026 was originally built in 1930 as SA RT9, Section 1-A.M.F.T. and reconstructed in 1982 as F.A. Route 777, Section 405 BR at Station 310+30.70. The existing structure consists of single span PPC deck beams on closed abutments. 43'-0" bk. to bk. of abutments and 33'-0" out to out of deck. The structure is to be removed and replaced. Traffic to be maintained utilizing stage construction.



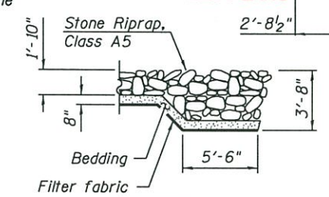
ELEVATION



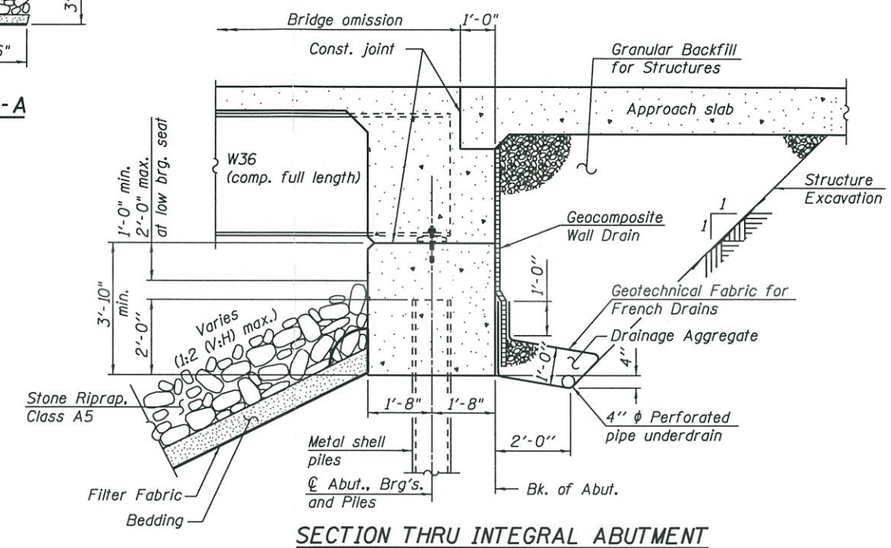
CROSS SECTION
(Looking East)



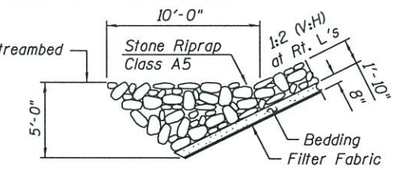
PLAN



SECTION A-A



SECTION THRU INTEGRAL ABUTMENT



SECTION B-B

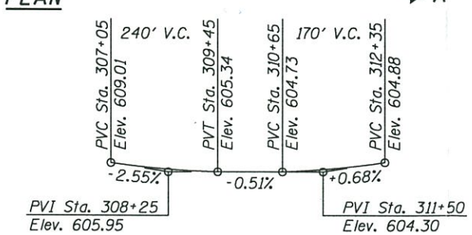
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)		
	W. Abut.	E. Abut.
Q100	597.05	596.67
Q500	597.05	596.67

WATERWAY INFORMATION

Drainage Area = 4.8 sq. mi.
Exist. Low Grade Elev. = 604.35 @ Sta. 311+00
Prop. Low Grade Elev. = 604.40 @ Sta. 311+00

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.
	10	1540	220	280	597.30	0.7	0.4	598.00	597.70
Design	50	2510	265	340	598.40	1.4	0.7	599.80	599.10
Base	100	2950	280	370	598.80	1.8	0.9	600.60	599.80
Max. Calc.	500	4050	320	420	599.80	4.5	2.3	604.30	602.10



PROFILE GRADE
(Along ℄ of roadway)

APPROVED
JUN 04 2014
AS A BASIS FOR PREPARATION OF DETAILED PLANS

HIGHWAY CLASSIFICATION

F.A.P. Rte. 777 - IL Rte. 185
Minor Arterial, (Non-Urban)
ADT: 2800 (2011); 2987 (2035)
ADTT: 530 (2011); 565 (2035)
DHV: 299 (2035)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.
Two-Way Traffic
Directional Distribution: 50/50

LOADING HL-93

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

DESIGN SPECIFICATIONS

2013 Interim Revisions to AASHTO LRFD Bridge Design Specifications, 6th Edition

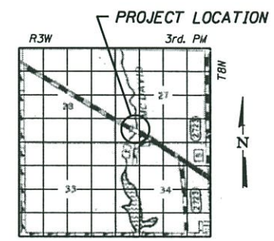
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.305g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.694g
Soil Site Class = E



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 185 OVER McDAVID BRANCH
F.A.P. RTE. 777 - SEC. 405B-1
MONTGOMERY COUNTY
STATION 310+30.70
STRUCTURE NO. 068-0512

design firm no. 184001036
whks
engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED - BRD	REVISED	
FILE NAME = 0680026-72D08_tsl.dgn	CHECKED - CWC	REVISED	
PLOT DATE = 0:2 '1' / in.	DRAWN - DLH	REVISED	
PLOT DATE = 5/27/2014	CHECKED - BRD	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
STRUCTURE NO. 068-0512
SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
777	405B-1	MONTGOMERY	1	1
		CONTRACT NO. 72D08		
		ILLINOIS FED. AID PROJECT		