

Benchmark:
Chiseled "□" on top of the NE Wing Wall at the north abutment of the Metra bridge.
Elev. = 692.86

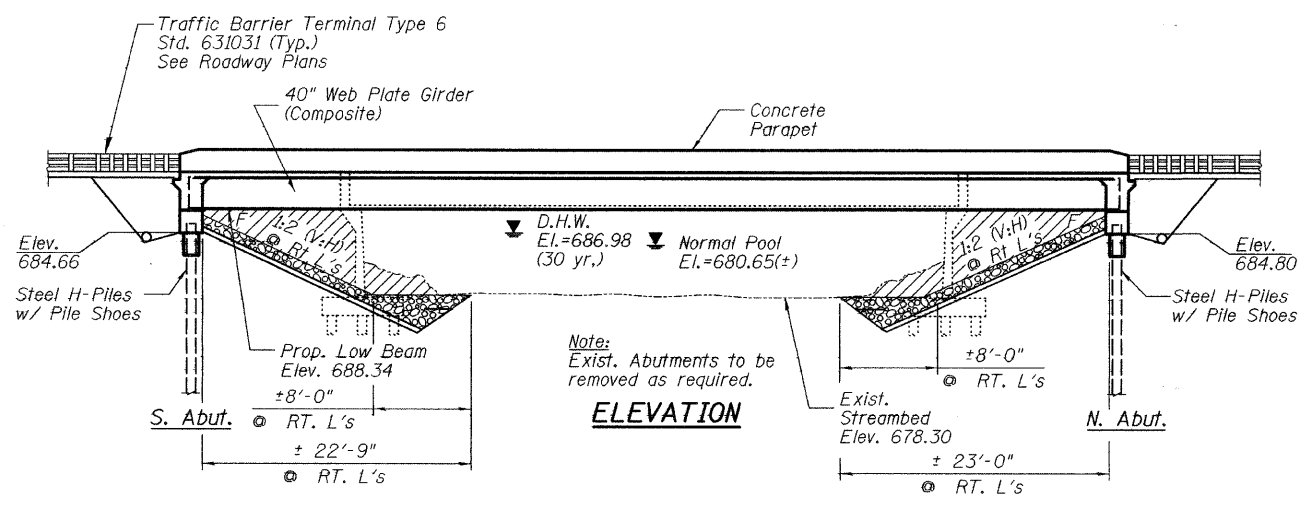
Existing Structure: S.N. 099-3026 built as S.A.R. 4 Sec. 56-B-15D in 1948 by Will County. The superstructure consists of a single span reinforced concrete tee beams measuring 28'-4" out to out of deck and 69'-2" bk. to bk. abutments. The substructure consists of reinforced concrete closed abutments supported on untreated timber piling. The existing structure is to be removed and replaced while the bridge is closed to traffic.

See Roadway Plans for detour route.

No Salvage

INDEX OF SHEETS

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ELEVATION

Note:
Exist. Abutments to be removed as required.

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications - 17th Ed.

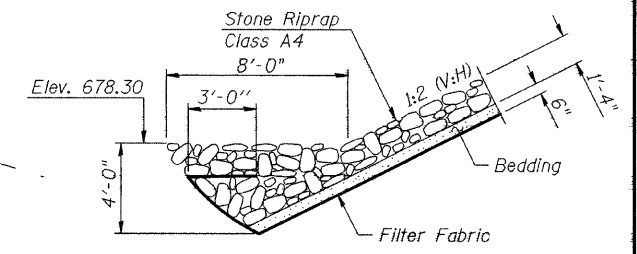
DESIGN STRESSES

FIELD UNITS

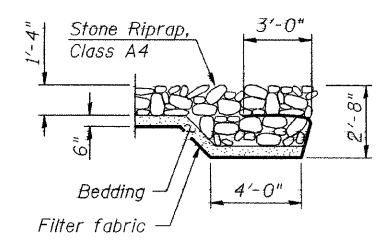
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SEISMIC DATA

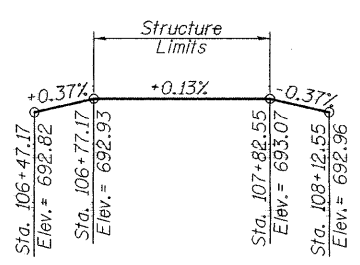
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4%
Site Coefficient (S) = 1.0



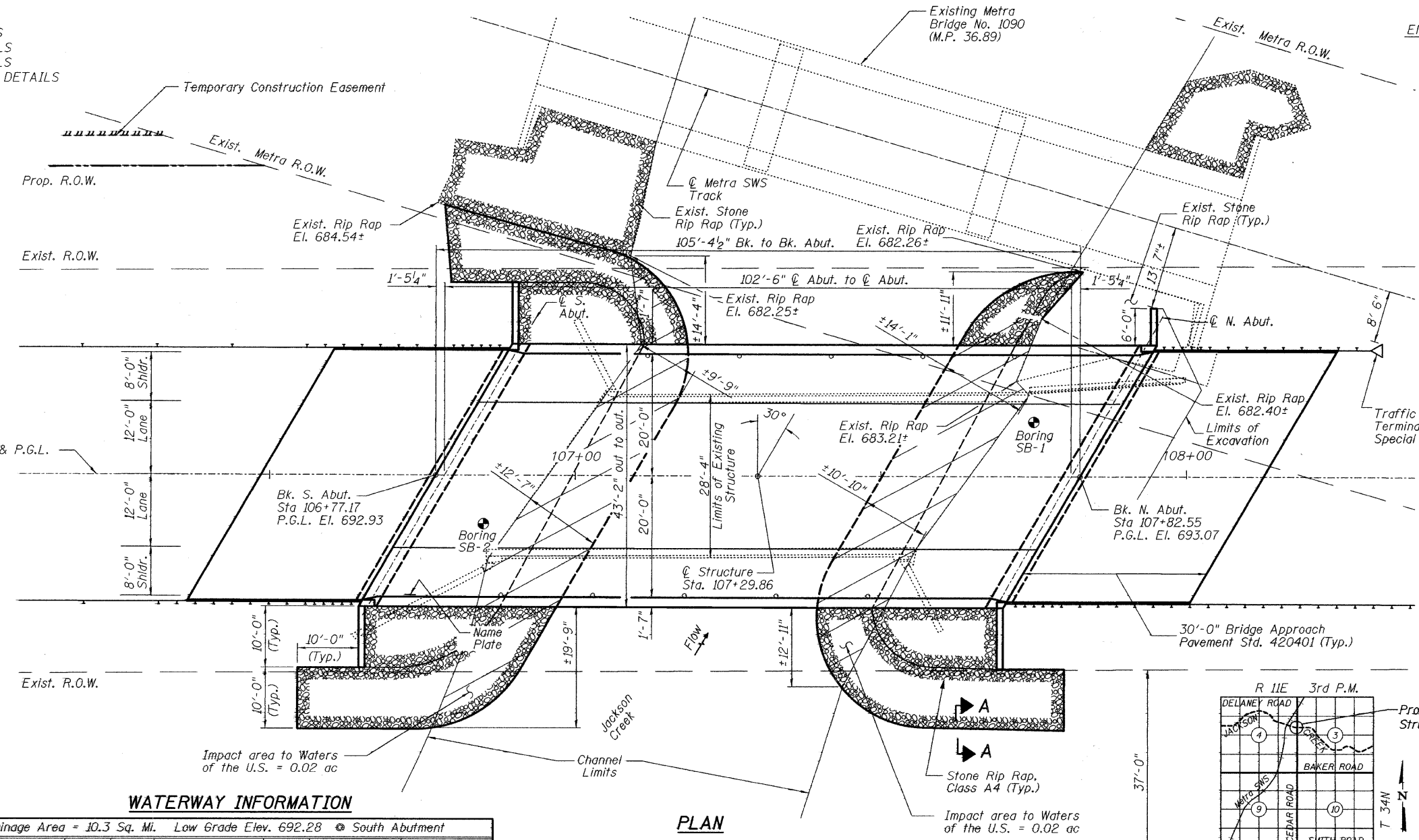
STONE RIPRAP ANCHOR DETAIL



SECTION A-A



PROFILE GRADE
(Along Cedar Road)



PLAN

LEGEND

Impact area to Waters of the U.S. Total Area = 0.04 ac

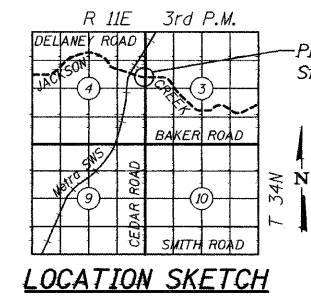
JACKSON CREEK
BUILT 200- BY
WILL COUNTY
SEC 01-00056-15-BR
F.A.U. RT. 369 STA. 107+29.86
STR. NO. 099-3381 LOADING HS20

NAME PLATE
See Std. 515001-02

WATERWAY INFORMATION

Drainage Area = 10.3 Sq. Mi. Low Grade Elev. 692.28 @ South Abutment

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	967	286	316	686.45	0.06	0.00	686.51	686.45	687.15
Design	30	1,588	313	362	686.98	0.61	0.17	687.59	687.15	687.84
Design	50	1,985	332	394	687.35	1.15	0.49	688.50	687.84	688.34
Base	100	2,478	360	441	687.90	1.46	0.44	689.36	688.34	



LOCATION SKETCH

Protect existing Railroad Signal and Gates. See Roadway Plans for locations



To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Robert G. Davies
Robert G. Davies
Licensed Structural Engineer
License Expires November 30, 2010
Date 4/20/2009

WILL COUNTY DEPARTMENT OF HIGHWAYS

GENERAL PLAN AND ELEVATION
CEDAR ROAD OVER
JACKSON CREEK
WILL COUNTY
SECTION NO. 01-00056-15-BR
STRUCTURE NO. 099-3381

DATE 4-10-2009

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COMPANY NAME, SEC GROUP, INC.
 PROJECT NO., 01-00056-15-BR
 SHEET NO., S-13
 DATE, 4/20/09