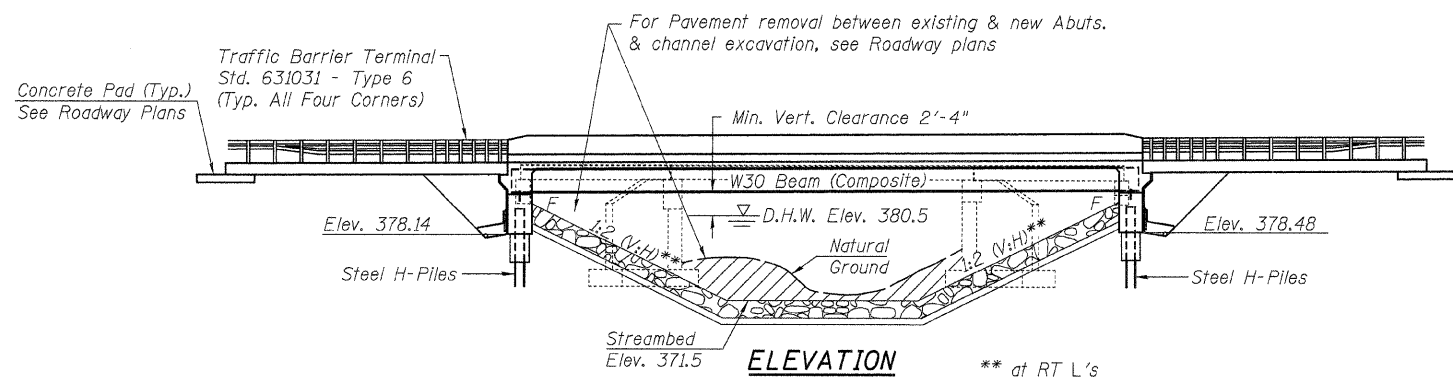


Bench Mark: Cut "□" on northwest headwall of box culvert at Sta. 74+10, Elev. 387.65

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

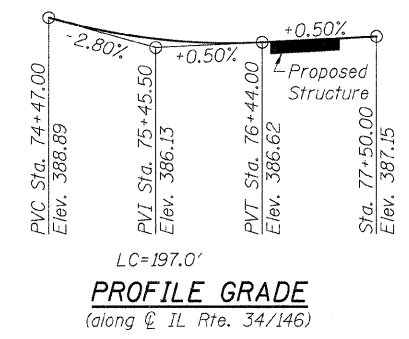
Existing Structure: S.N. 035-0009 was built in 1923 as S.B.I. 34, Section 5A, B, and C at Sta. 76+80.00. In 1978 under FA 885 Section 5B-DR-1, the superstructure was replaced and widened. Existing structure is a single span PPC deck beam bridge on closed abutments (top and bottom restrained), 32'-8" bk. to bk. abutments, 34'-0" out to out, with no skew. The contractor shall remove and replace the existing structure. Staged Construction shall be utilized to maintain one lane of traffic during construction.

No Salvage.



CURVE DATA

(Existing Curve IL 146)
 $\Delta = 12^\circ 57' 47''$
 $D = 1^\circ 56' 12''$
 $T = 336.10'$
 $L = 669.33'$
 $E = 19.03'$
 $R = 2958.41'$
 $S.E. = 0.039'/'$
 $P.C. = Sta. 73+59.55$
 $P.T. = Sta. 80+28.88$
 $P.I. = Sta. 76+95.65$



INDEX OF SHEETS

1. General Plan
2. General Notes & Details
3. Stage Construction Details
4. Deck Elevations
5. Approach Pavement Elevations
6. Superstructure
7. Superstructure Details
8. Concrete End Diaphragms
9. Framing Plan & Steel Details
10. West Abutment
11. East Abutment
12. Temporary Concrete Barrier
13. Bar Splicer Assembly Details
14. Steel Pile Details
15. Soil Borings-1
16. Soil Borings-2
17. Soil Borings-3
18. Soil Borings-4

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Bedrock Acceleration Coefficient (A) = 0.114g
 Site Coefficient (S) = 1.5

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications, with 2008 Interims

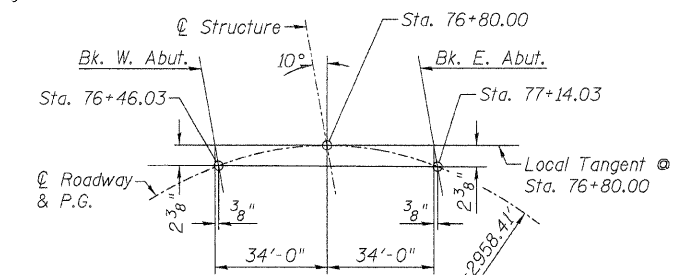
LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

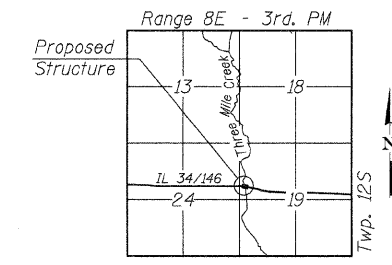
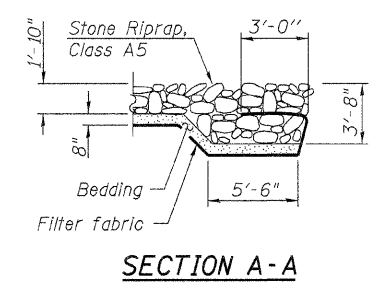
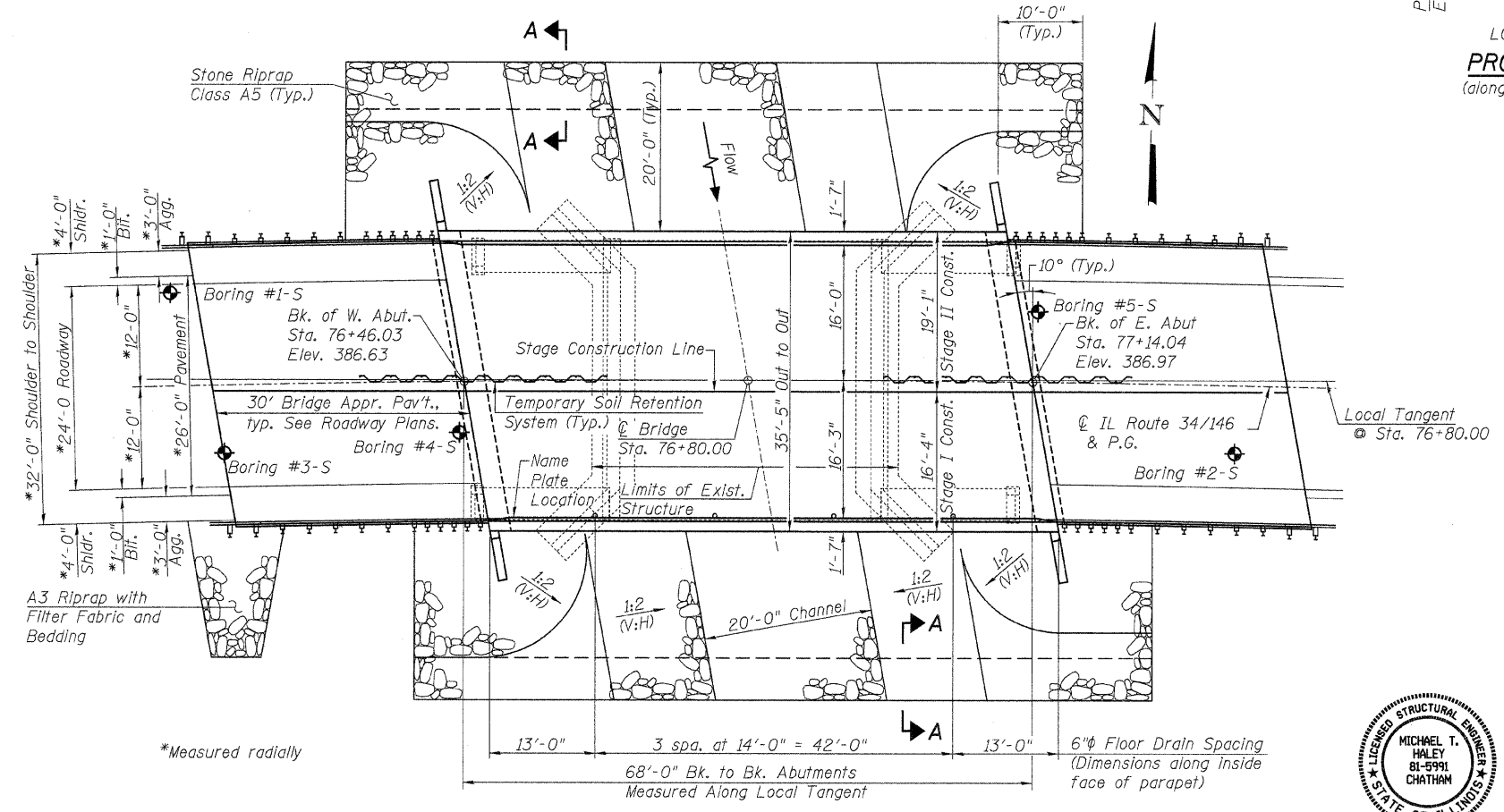
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel, M270 Grade 50)



WATERWAY INFORMATION

		Existing Low Grade Elev. 386.57 @ Sta. 76+50		Proposed Low Grade Elev. 386.65 @ Sta. 76+50		Head - Ft.		Headwater El.	
Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Not. H.W.E.	Exist.	Prop.	Exist.	Prop.
Flood	Main Channel	10	1690	1860	166.9	270.0			
	Overflow	10	170	-	17.1	0.0		379.2	1.3
	Total		1860		184.0	270.0		380.5	380.2
Design	Main Channel	50	2510	2890	208.9	345.9			
	Overflow	50	380	-	31.4	0.0		380.5	2.3
	Total		2890		240.3	345.9		382.8	381.9
Base	Main Channel	100	2870	3340	221.6	370.5			
	Overflow	100	470	-	36.9	0.0		381.0	2.8
	Total		3340		258.5	370.5		383.8	382.7
Over-topping	Main Channel	500	3800	4520	245.8	419.4			
	Overflow	500	720	-	45.7	0.0		381.8	4.1
	Total		4520		291.5	419.4		385.9	384.1

Existing 10-yr Velocity = 10.1 ft/s Proposed 10-yr Velocity = 6.9 ft/s



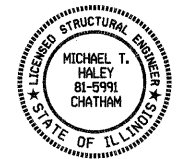
GENERAL PLAN
IL 34/146 OVER
THREE MILE CREEK
STATION 76+80.00

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	378.14	378.48

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

3/21/09
Date

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

SHEET NO. 1
18 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	5B-1	Hardin	48	14
S.N. 035-0015		CONTRACT NO. 98949		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				