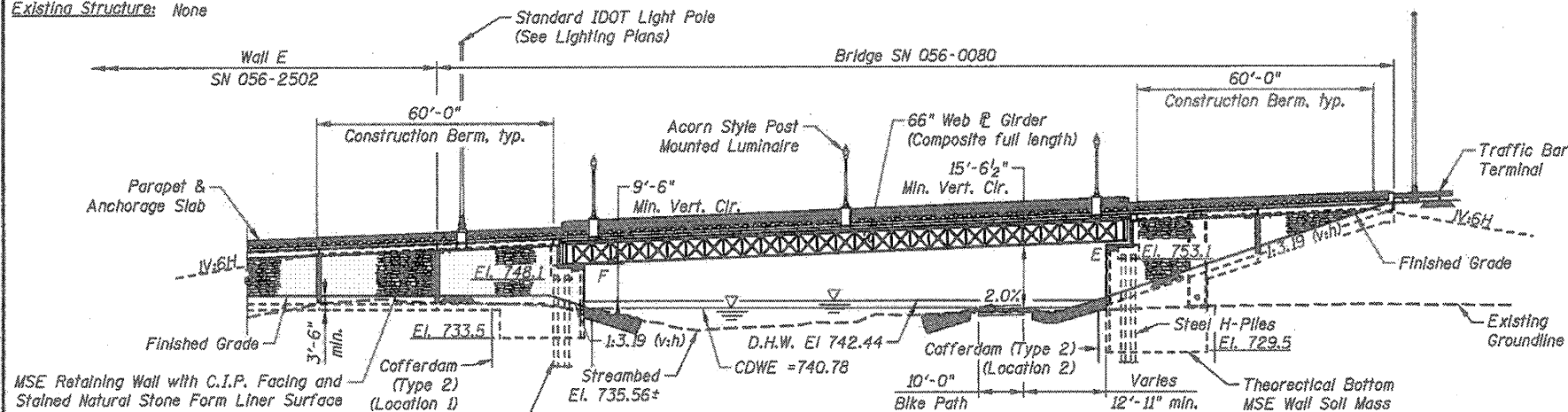


Benchmark: Control Point CP43, Mag Nail Set, Station 10+30.54, Offset 94.55' Rt.
Elev. 820.0

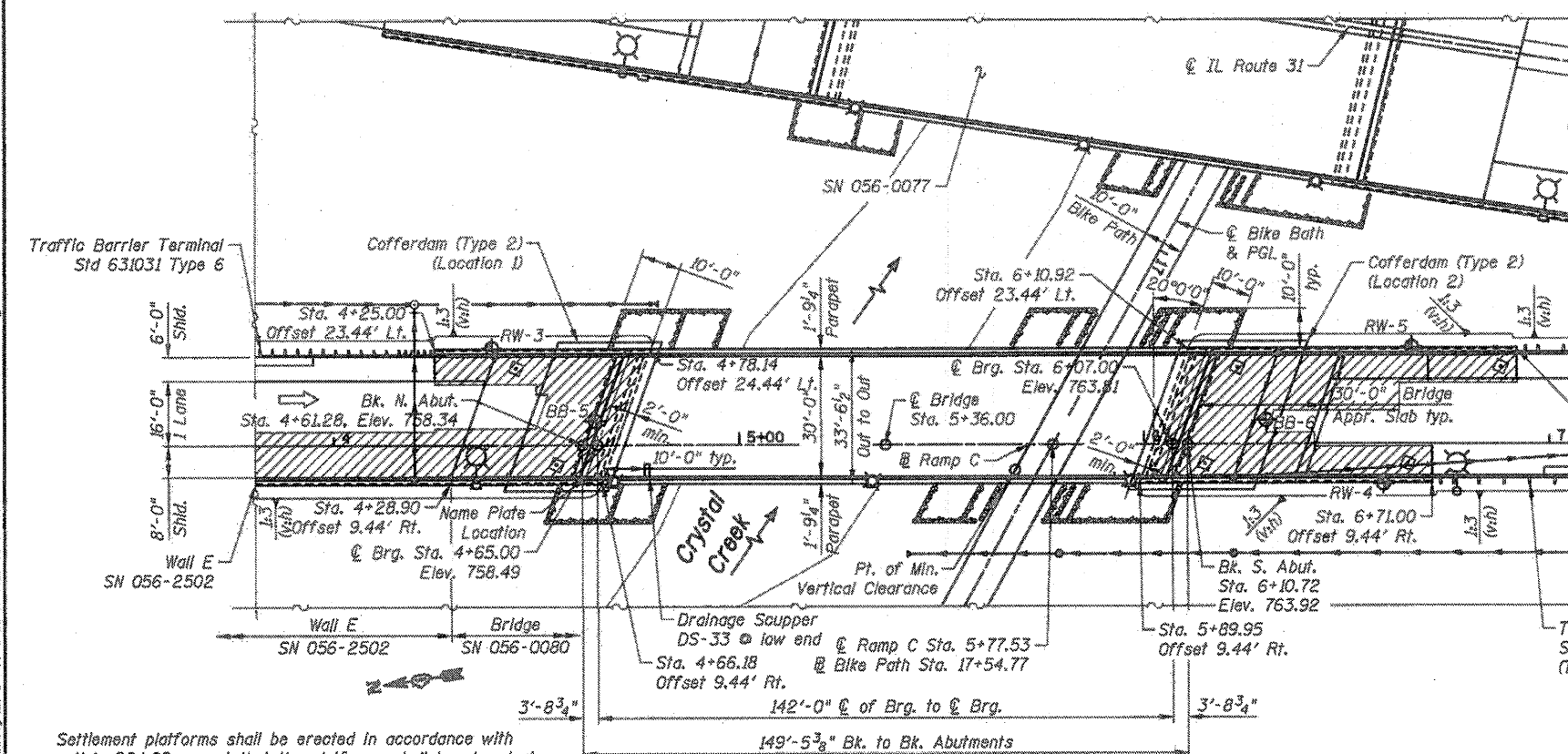
Existing Structure: None



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	N. Abut.
	731.85	735.81

ELEVATION
(Looking East)



PLAN

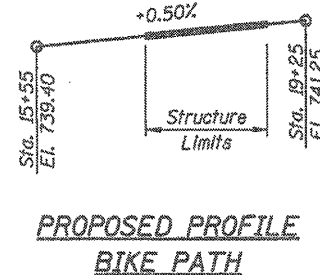
WATERWAY INFORMATION

Drainage Area = 26.5 Square Miles		Low Grade Elev. 751.09 @ Sta. 7+80.8		
Flood	Yr.	Q C.F.S.	Head - Ft.	Headwater El.
			Exlst. Prop.	Exlst. Prop.
Design	50	2647	547.6 742.44	0.64 742.44 743.08
Base	100	3518	619.0 742.99	0.89 742.99 743.88
Overtopping				
Max. Calc.	500	5209	735.0 743.88	1.09 743.88 744.97

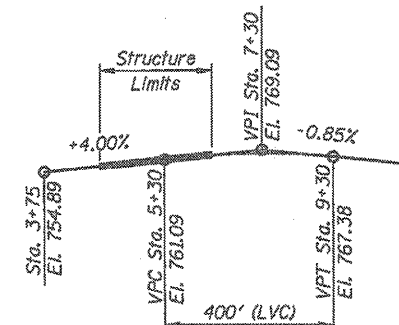
Note: MSE Abutment wall offsets are measured from the @ Ramp C to the front face of the MSE wall.

Settlement platforms shall be erected in accordance with article 204.06 except that the platforms shall be placed at the bottom of the MSE soil mass. Cost shall be included in the cost of Mechanically Stabilized Earth Retaining Wall.

- Settlement Platforms
- Sta. 4+45, 19-ft. Left
- Sta. 4+55, 5-ft. Right
- Sta. 6+15, 5-ft. Right
- Sta. 6+23, 19-ft. Left
- Sta. 6+65, 5-ft. Right
- Sta. 6+88, 19-ft. Left



PROPOSED PROFILE
BIKE PATH



PROPOSED PROFILE
IL RTE. 31 RAMP C

STATION 5+36.00
BUILT 2011 BY
STATE OF ILLINOIS
O.R. 0003 SEC. 18A-2
LOADING HL-93
STRUCTURE NO. 056-0080

NAME PLATE
See Std. 515001

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.



GREGORY J. HATLESTAD, S.E.
081-005562

EXP 11/30/12

DATE 3/15/12

APPROVED
For Structural Adequacy Only

Gregory J. Hatlestad
Engineer of Bridges & Structures

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications
With 2010 Interims

DESIGN STRESSES

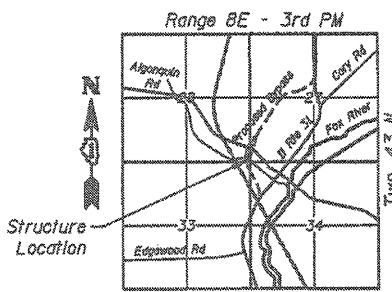
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M270 Gr. 50-Main Girders)
fy = 36,000 psi (AASHTO M270 Gr. 36 - Secondary Members)

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.081
Design Spectral Acceleration at 0.2 sec. (S_{D2}) = 0.142
Soil Site Class = D



LOCATION SKETCH

GENERAL PLAN & ELEVATION
SB. ENTR. RAMP (RAMP C) OVER CRYSTAL CREEK
O.R. 0003 SECTION 18A-2
McHENRY COUNTY
STATION 5+36.00
STRUCTURE NO. 056-0080

CIVILTECH
450 E Devon Ave, Suite 300
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3976
www.civiltechinc.com

DRAWN - M. LANGE	REVISED -
DESIGNED - D. ATKINS	REVISED -
CHECKED - G. HATLESTAD	REVISED -
DATE - 3/23/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
SB ENTR. RAMP (RAMP C) OVER CRYSTAL CREEK
STRUCTURE NO. 056-0080
SHEET NO. SD 1 OF SD30 SHEETS

O.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0003	18A-2	MCHEMRY	825	555
			CONTRACT NO. 60F72	
ILLINOIS FED. AID PROJECT				