Bench Mark: Chiseled "□" on S.E. corner of wingwall of structure 060-0149, Elevation 480.08.

Existing Structure: 060-0149 Built as S.A. Rt. 6 Sec. 54-15d at Station 281+40 as a 8 span 341'-5" Bk.-Bk. abutments, supported on concrete piles. Bridge widening, and superstructure replacement with PPC deck beams in 1971. Existing bridge to be removed and replaced. Traffic to be maintained utilizing stage construction.

No salvage

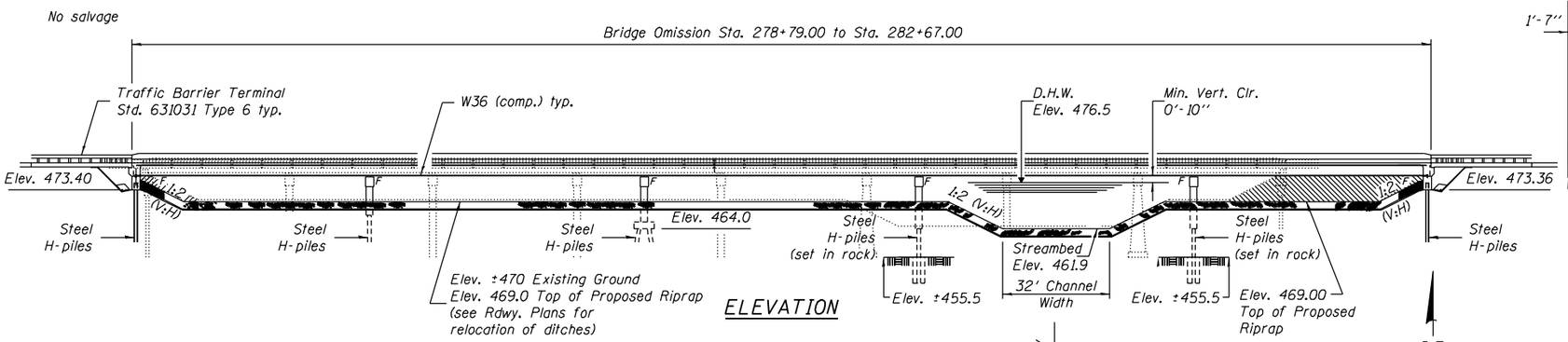
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED
AS A BASIS FOR
PREPARATION OF DETAILED PLANS
JAN 06 2006

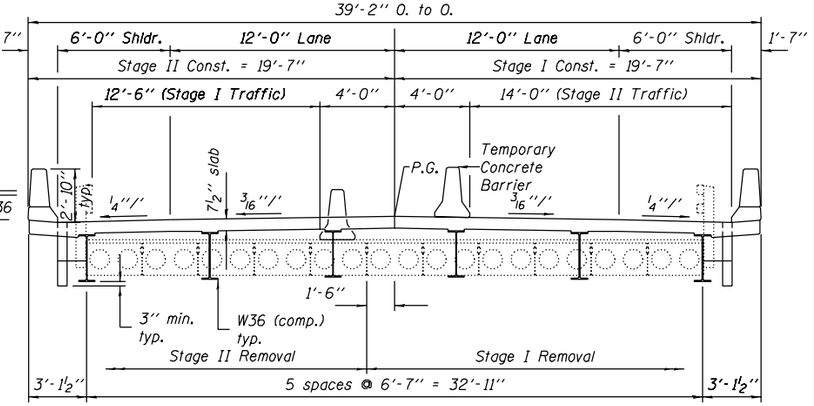
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	-	-		
FED. ROAD DIST. NO. 7		FED. AID PROJECT-		

SHEET NO. 1
1 SHEETS

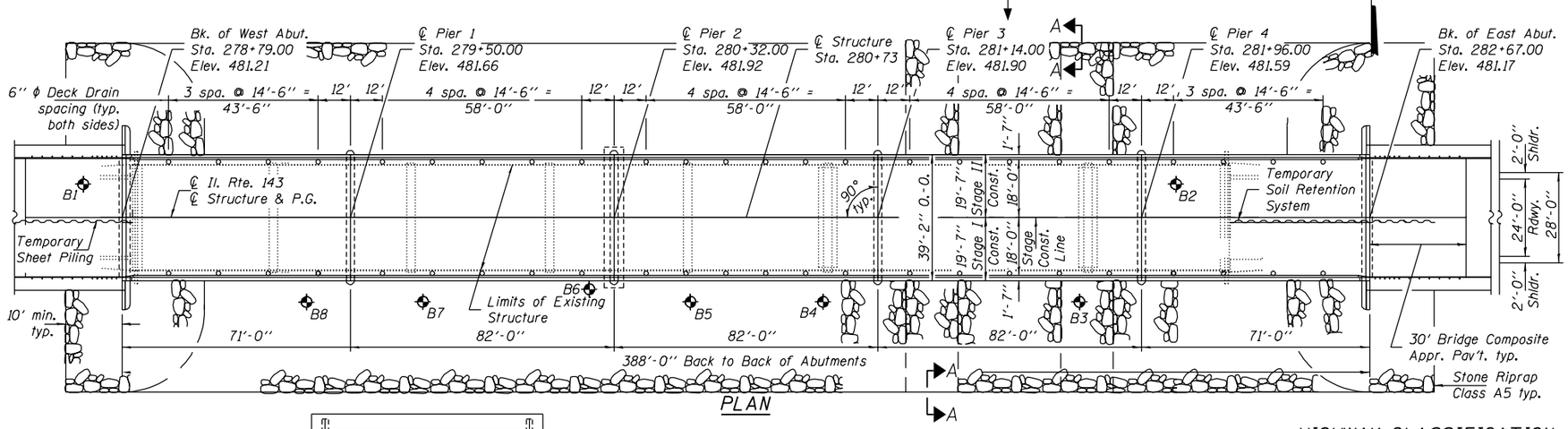
Contract #



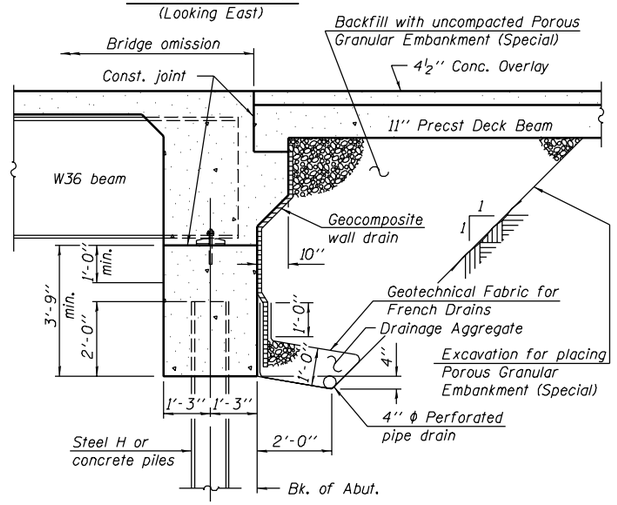
ELEVATION



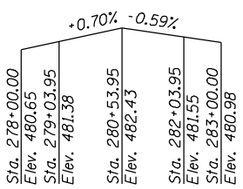
CROSS SECTION
(Looking East)



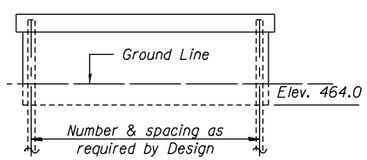
PLAN



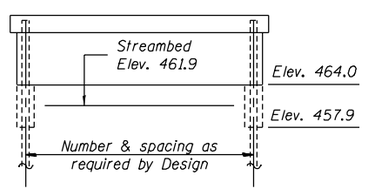
SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



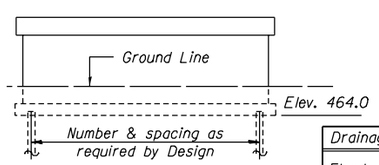
PROFILE GRADE
(along ℄ roadway)



PIER 1 SKETCH



PIER 3 & 4 SKETCH



PIER 2 SKETCH

PROPOSED CURVE DATA

PI Sta. = 285+61.90
Δ = 15°-19'-00" (LT)
D = 3°-42'-00"
R = 1,548.54'
T = 208.22'
L = 413.97'
E = 13.94'
e =
T.R. =
S.E. RUN =
P.C. Sta. = 283+53.68
P.T. Sta. = 287+67.64

HIGHWAY CLASSIFICATION

F.A.P. Rte. 789 - Il. Rte. 143
Functional Class - Other Principal Arterial
A.D.T. 3350 (2003) 4590 (2023)
D.H.V. = 230
Design Speed: 55 mph
Posted Speed: 45 mph

LOADING HL-93

Allow 50 psf for future wearing surface

DESIGN SPECIFICATIONS

A.A.S.H.T.O. LRFD Bridge Design Specifications
U.S., 3rd. Edition - 2004 w/ 2005 Interims

DESIGN STRESSES

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (structural steel M270, GR50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Bedrock Acceleration Coefficient (A) = 0.10g
Site Coeffficient (S) = 1.5

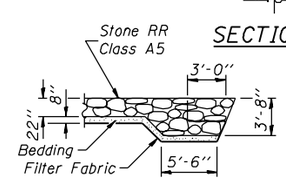
WATERWAY INFORMATION

Exist. Low Grade Elev. 479.1 ft. @ Sta. 277+00
Drainage Area = 113.0 sq. mi. Prop. Low Grade Elev. 479.2 ft. @ Sta. 275+00

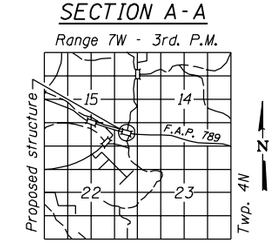
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	3930	1264	1443	475.7	1.3	1.3	477.0	477.0
Design	50	5640	1523	1742	476.5	1.6	1.5	478.1	478.0
Base	100	6283	1612	1845	476.8	1.7	1.6	478.5	478.4
Overtop(Exist.)	333	7545	1769		477.3	1.9		479.2	
Overtop(Prop.)	450	7850		2069	477.4		1.8		479.2

10 year velocity through Existing Bridge = 3.1 fps
10 year velocity through Proposed Bridge = 2.7 fps

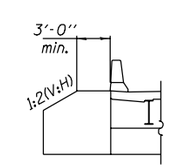
Design Scour Elevation feet	W. Abutment	Pier 1	Pier 2	Pier 3	Pier 4	E. Abutment
	473.5	456.0	456.0	456.0	456.0	473.5



SECTION A-A



LOCATION SKETCH



WINGWALL DETAIL

GENERAL PLAN
IL. RTE. 143 OVER SILVER CREEK
F.A.P. RTE. 789 - SEC. 54BR-I
MADISON COUNTY
STATION 280+73
STRUCTURE NO. 060-0340

DESIGNED	R.J. Chaput
CHECKED	
DRAWN	W.D. Collins
CHECKED	M.K. Christensen B.V. Garde

- 200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES