

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

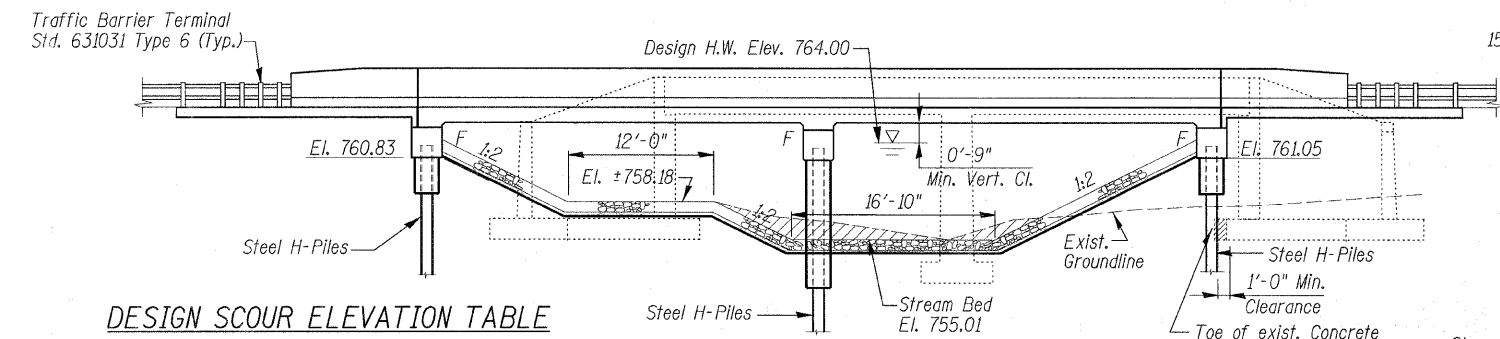
B.M. #401: Chiseled square on concrete lift station west side of manhole located S.E. of bridge. El. 772.498
Existing Structure: S.N. 101-0086 originally constructed in 1923. The bridge was reconstructed in 1971 and resurfaced in 1996. The existing structure is a two span 17" PPC deck bridge with a length of 49'-2 1/2" B-B of abutments and a width of 32'-4" F-F of steel railings. The bridge structure will be removed and replaced utilizing stage construction.
No Salvage.

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 Sec. (S₀₁) = 0.075g
Design Spectral Acceleration at 0.2 Sec. (S₀₅) = 0.119g
Soil Site Class = D

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
4th Edition with 2008 Interims

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface

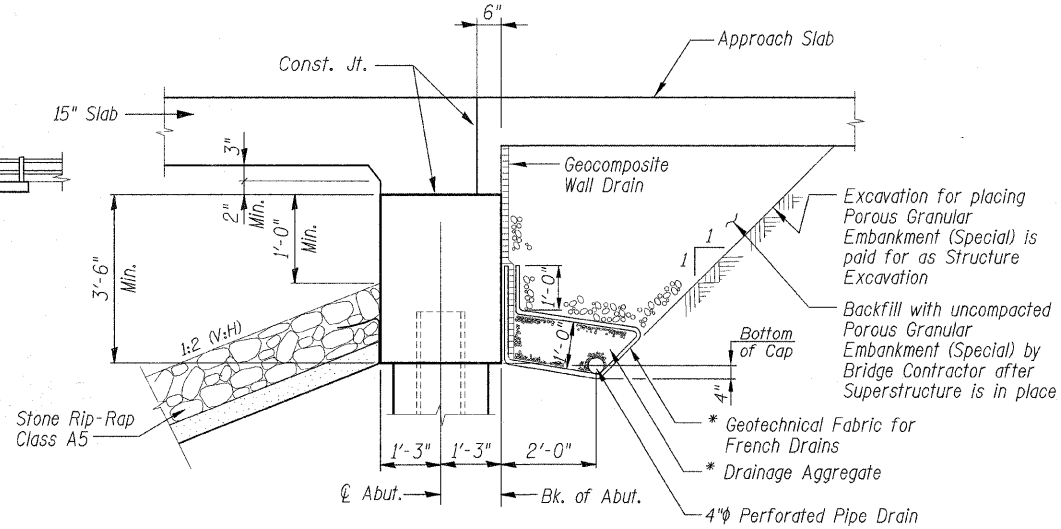
DESIGN STRESSES
Field Units
New Construction
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Pier	S. Abut.
	760.64	730.00	760.86

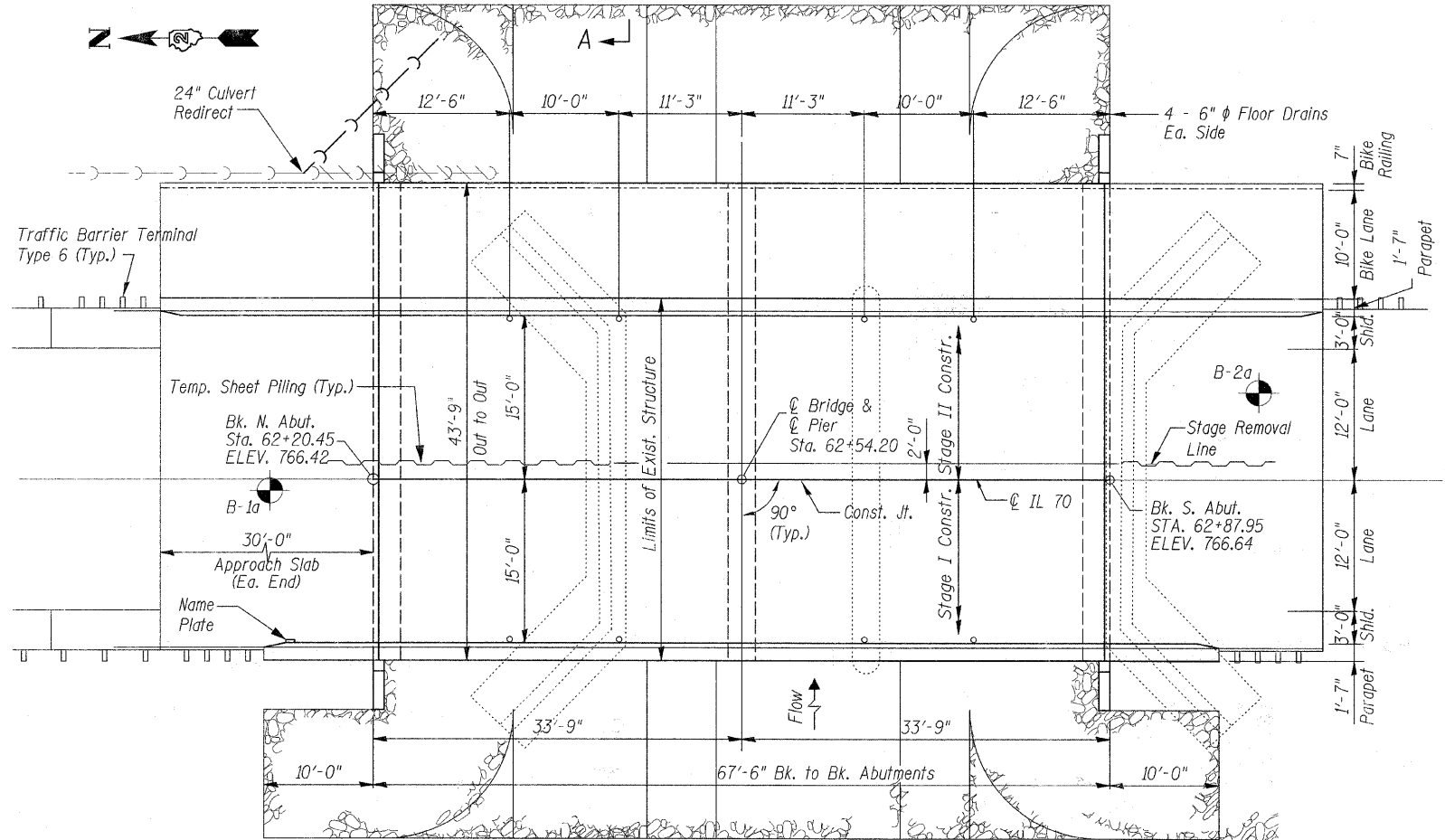
ELEVATION



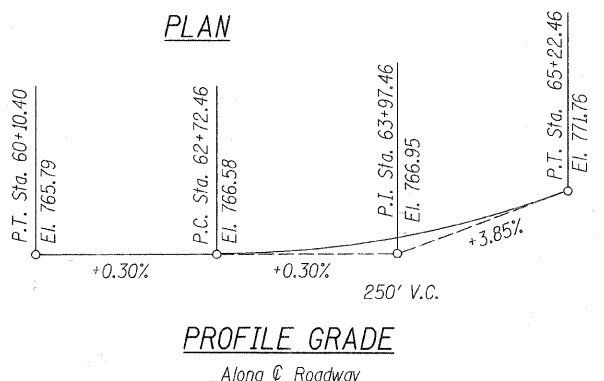
SECTION THRU INTEGRAL ABUTMENT

* Included in the cost of Pipe Underdrains for Structures.

NOTE:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



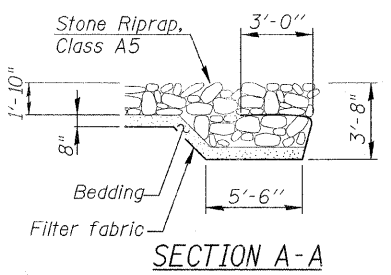
PLAN



PROFILE GRADE
Along & Roadway

STATION 62+54.20
BUILT 2009 BY
STATE OF ILLINOIS
F.A.S. 55 - SEC. W-1-15d-BR-1
LOADING HL93
STR. NO. 101-0191

NAME PLATE
See Std. 515001

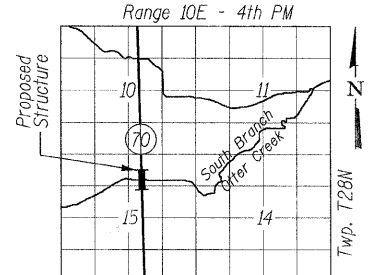


SECTION A-A

WATERWAY INFORMATION

Drainage Area = 16.1 sq. mi. Low Grade Elev. 765.70 @ Sta. 59+80.40

Flood	Freq. Yr.	Discharge C.F.S.	Opening Sq. ft.		Nat. H.W.E. ft.		Head - ft.		Headwater Elev. - El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	3240	329	344	764.0	3.7	3.4	767.7	767.4	
Base	100	3800	343	344	764.3	3.0	3.1	767.3	767.4	
Exist. Overtop	15	2200	301		763.4	3.0		766.4		
Prop. Overtop	20	2300	321		763.6	2.8		766.4		



LOCATION SKETCH

GENERAL PLAN
AND ELEVATION
IL 70 OVER SOUTH BRANCH
OF OTTER CREEK
FAS ROUTE 55 (IL70)
SEC. (W-1-15d)BR-1
WINNEBAGO COUNTY
STA. 62+54.20
STRUCTURE NO. 101-0191

SHEET NO. 1	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
21 SHEETS	55	(W-1-15d)BR-1	WINNEBAGO	59	21
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 64D22		

LEGEND:
B-1a = Boring No. 1 a

DESIGNED	MMH
CHECKED	RAD
DRAWN	R.VEJAR
CHECKED	RAD

HOH
ENGINEERS, INC.
55 E. Jackson Blvd.
Chicago, Illinois 60604
312.346.8131
PROJECT # 2945

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Relax E. Anderson (TDP)
ENGINEER OF BRIDGES AND STRUCTURES

11-30-09
date
STATE OF ILLINOIS
MOHAMMAD M. HUSAIN
0081-005529
STRUCTURAL ENGINEER
expired 11-30-2010
signature