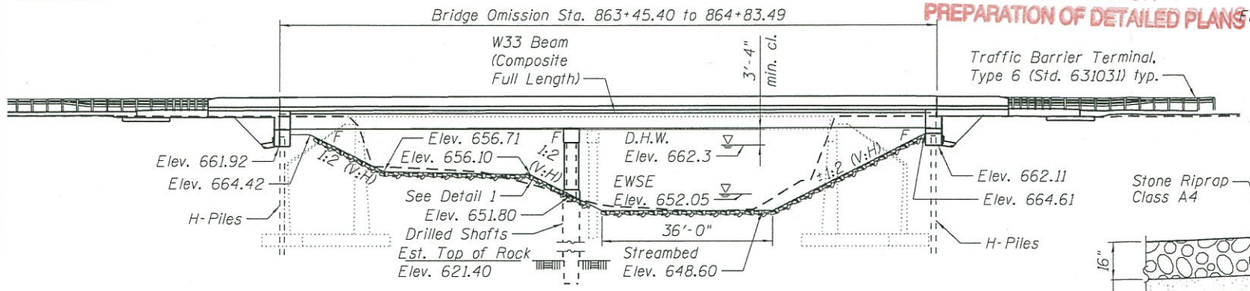
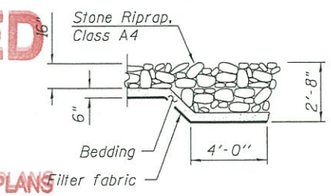
Bench Mark: Railroad Spike in first utility pole north of Structure No. 066-0003, East side of roadway. Elev. 659.74 (NAVD 88).

Existing Structure: S.N. 066-0003, built in 1931, under construction Route SBI-85, US Rt. 67, Sec. 103-BR. The structure is a two span precast prestressed concrete structure that replaced the original steel truss. The total length of the structure is 103'-4" from back to back of abutments, and it has a width of 33'-0". In 1971, the original superstructure was removed, the abutments were modified and a center pier was added to support the PPC deck beams. In 2001, the deck beams and substructures were repaired and 7" reinforced concrete overlay was placed over the deck beams. In 2008, temporary support beams were installed in both spans. Existing temporary steel beams and supports to be delivered to the E. Peoria Yard. Existing structure to be removed. Traffic to be maintained using staged construction.

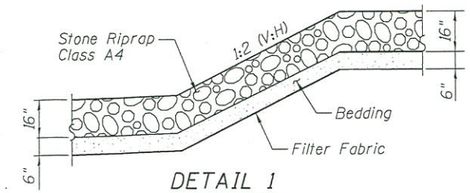
APPROVED
AUG 05 2015
AS A BASIS FOR PREPARATION OF DETAILED PLANS



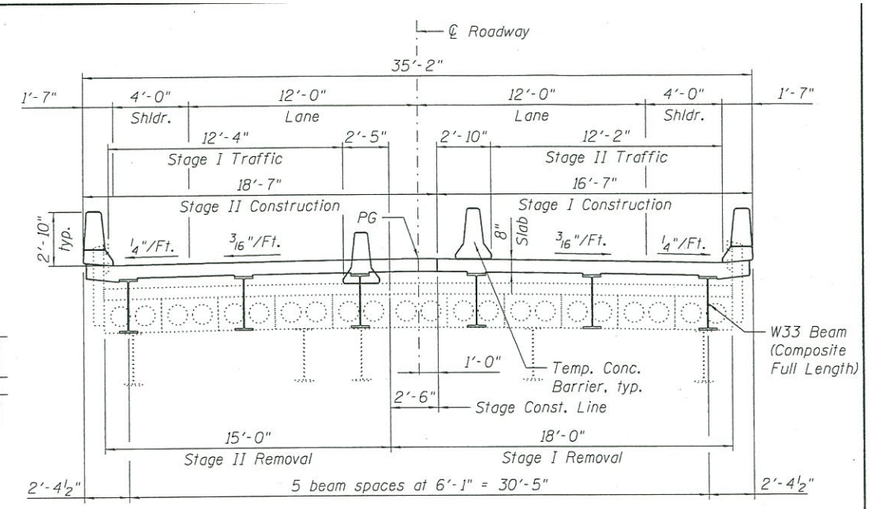
ELEVATION



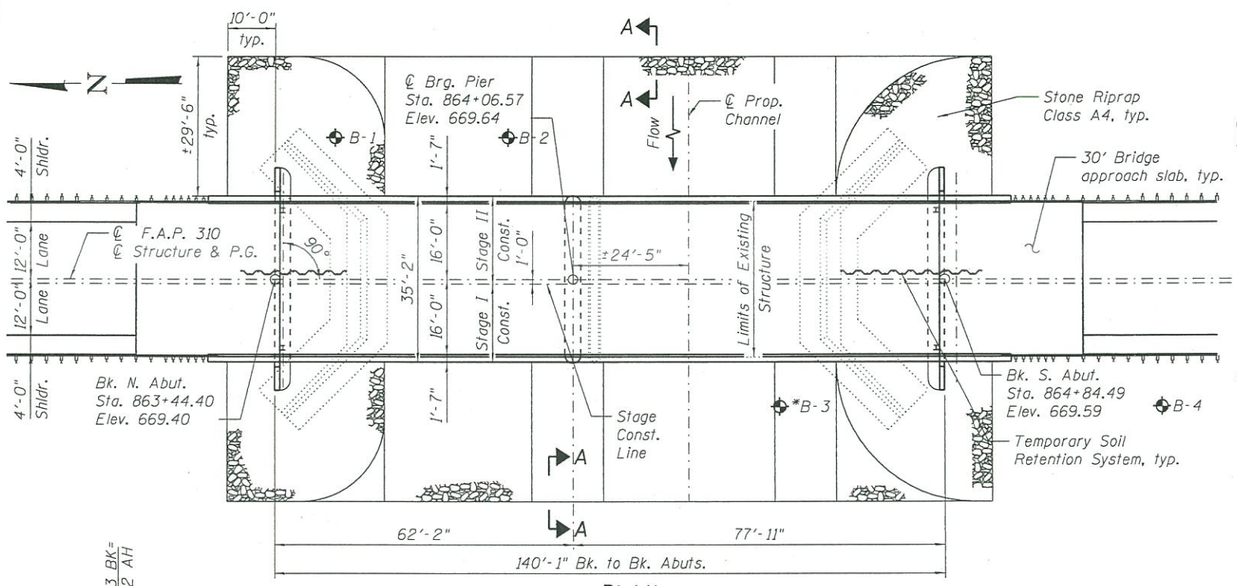
SECTION A-A



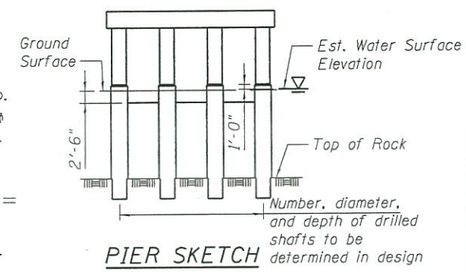
DETAIL 1
N.T.S.



CROSS SECTION
Looking South

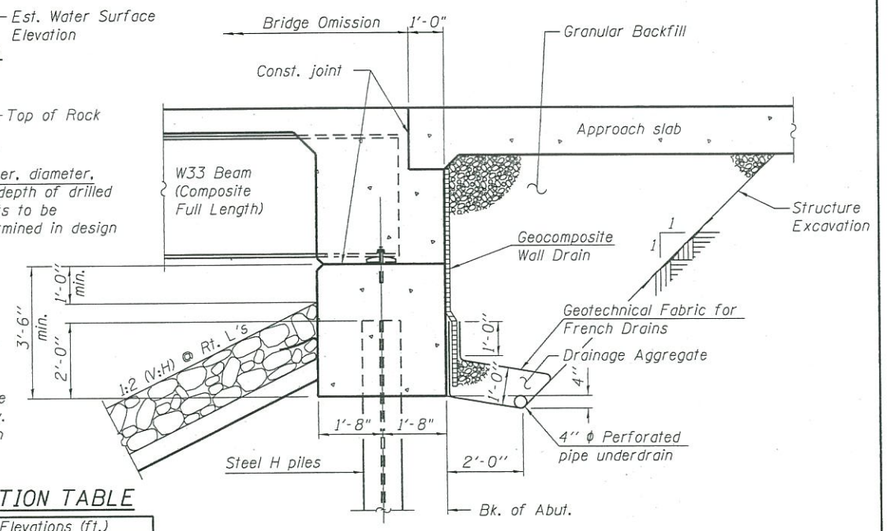


PLAN

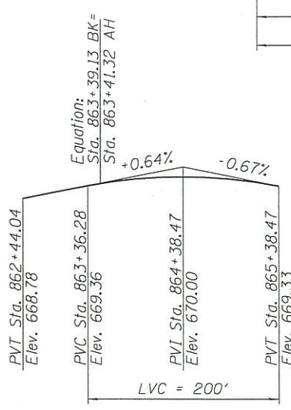


PIER SKETCH

* The location of this boring is uncertain. The surveyed ground elevation at the location shown on the boring log is approximately 16' below the ground surface elevation shown in the boring. The geotechnical engineer and drilling contractor were contacted but were unable to clear up this discrepancy. The boring is shown in the location noted on the boring log.



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



PROFILE GRADE
Along ℄ FAP 310 (US 67)

LOADING HL 93

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

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, with 2015 Interims

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'c = 4,000 psi (superstructure concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.094g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.137g
Soil Site Class = D

HIGHWAY CLASSIFICATION

F.A.P. Rte. 310 - US 67
Functional Class: Other Principal Arterial-NHS
AADT: 2750 (2013); 2550 (2033)
ADTT: 470 (2013); 434 (2033)
DHV: 128

Speed: 55 m.p.h. (posted); 55 m.p.h. (design)
Two-way traffic Directional Dist. 50:50

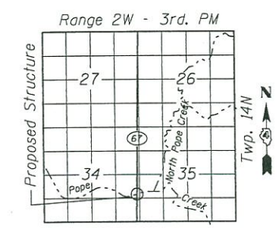
DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)			
	N. Abut.	Pier	S. Abut.	Item 113
Q100	661.92	620.59	662.11	5
Q200	661.92	620.02	662.11	
Design	661.92	620.59	662.11	
Check	661.92	620.02	662.11	

WATERWAY INFORMATION

Drainage Area = 88.8 Sq. Mi. Low Grade Elev. 668.0 @ Sta. 867+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	4670	816	892	661.3	1.3	1.2	662.6	662.5
Design	50	6940	914	1007	662.3	2.2	2.0	664.5	664.3
Base	100	7960	944	1042	662.6	2.5	2.3	665.1	664.9
Scour Design Check	200	8980	983	1090	663.0	2.9	2.7	665.9	665.7
Overtop Existing	NA								
Overtop Proposed	NA								
Max. Calc.	500	10300	1022	1138	663.4	3.5	3.2	666.9	666.6



LOCATION SKETCH

GENERAL PLAN & ELEVATION
US 67 OVER POPE CREEK
F.A.P. RTE 310 - SECTION (103)BR-1
MERCER COUNTY
STATION 864+14.45
STRUCTURE NO. 066-0019

FILE NAME = P:\P98072\US 67-Pope\4.CADD\4.3-STYTSL\D468B804-TSL-001.dgn

THOUVENOT, WADE & MOERCHEN, INC.
SWANSEA • WATERLOO • EDWARDSVILLE • ST. LOUIS • ST. CHARLES

USER NAME = mjoost	DESIGNED - MJJ	REVISED	
	CHECKED - ALN	REVISED	
PLOT SCALE = 0.17 ' / in.	DRAWN - MJJ/TJP	REVISED	
PLOT DATE = 7/22/2015	CHECKED - ALN/MJJ	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 066-0019
SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	(103)BR-1	MERCER		
		CONTRACT NO. 68804		
		ILLINOIS FED. AID PROJECT		