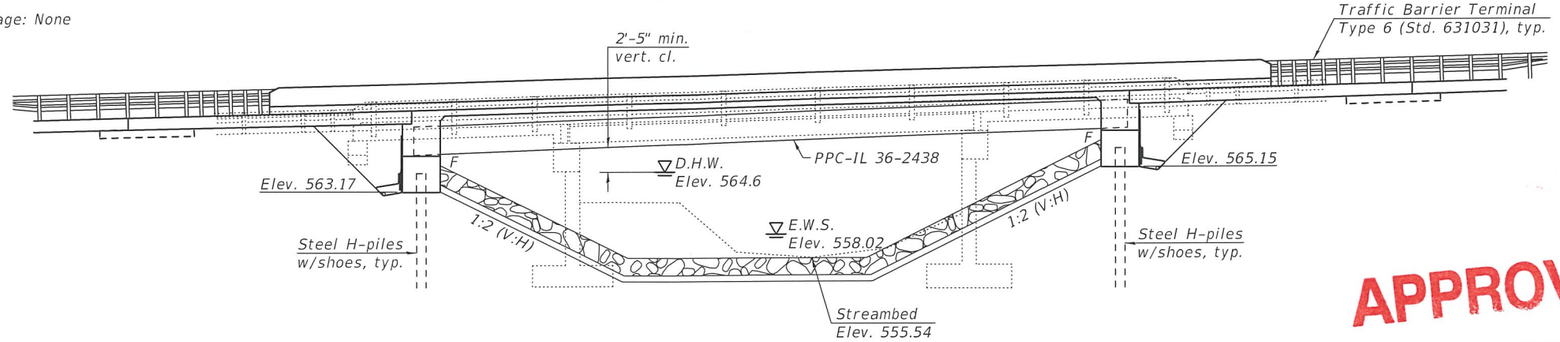
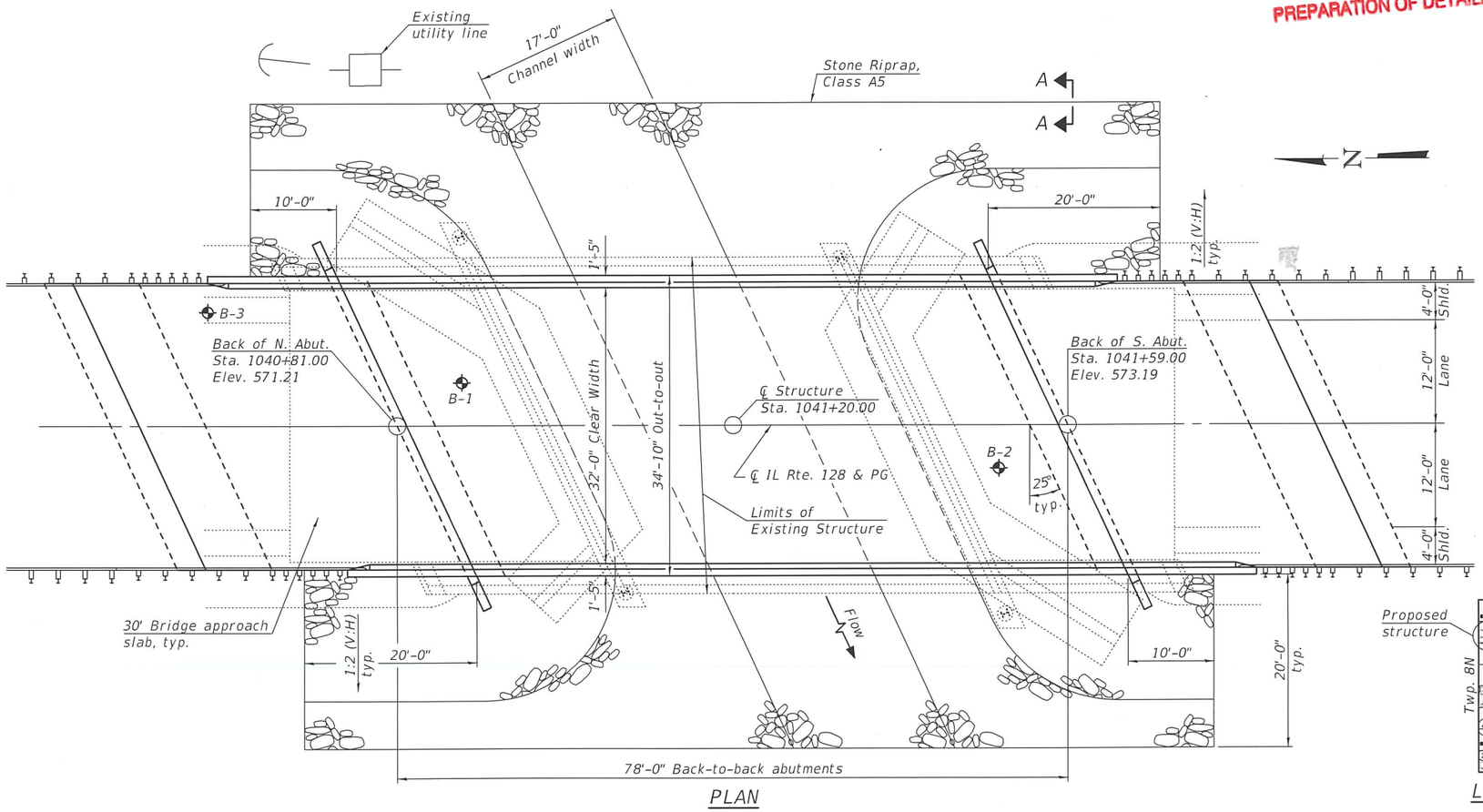
Benchmark: 526 Chiseled "□" on top of abutment cap at Southeast corner of Structure 025-0044, Station 385+52, 20.2' RT, Elevation = 567.70

Existing Structure: S.N. 025-0044 was originally built in 1930 as SBI Route 128, Section 103B, consisting of a reinforced concrete deck beam superstructure skewed at 25 degrees on closed abutments. In 1991, the bridge was reconstructed with a wider PPC deck beam superstructure and new abutment caps placed on the original closed abutments. The existing structure length is 46'-0¾" back-to-back abutment and 39'-0" out-to-out width. The existing ℄ of structure is at 1041+17.91. Traffic will be detoured during construction.

Salvage: None



ELEVATION



PLAN

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi (superstructure)
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 8,500 psi
f'ci = 6,500 psi
fpu = 270,000 psi (0.6" dia. low lax strands)
fpbt = 202,300 psi (0.6" dia. low lax strands)

HIGHWAY CLASSIFICATION

F.A.S. Rte. 2801 - IL Rte. 128
Functional Class: Major Collector
ADT: 1150 (2020); 1400 (2040)
ADTT: 195 (2020)
DHV: 132
Design Speed: 60 m.p.h.
Posted Speed: 55 m.p.h.
Two-Way Traffic
Directional Distribution: 51:49

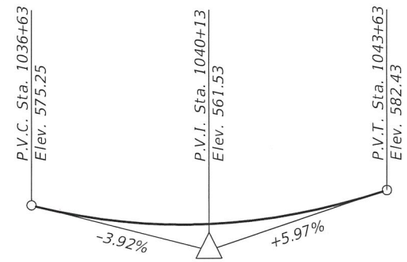
LOADING HL-93

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

SEISMIC DATA

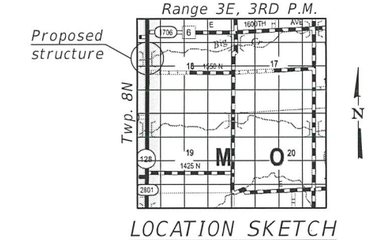
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.057 g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.097 g
Soil Site Class = C

APPROVED
AUG 08 2019
AS A BASIS FOR
PREPARATION OF DETAILED PLANS



V.C. Length = 700 ft.

PROFILE GRADE
(Along ℄ IL Rte. 128)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 128 OVER
LITTLE MOCCASIN CREEK
F.A.S. RTE. 2801 - SEC. (103BR-1)B-1
EFFINGHAM COUNTY
STATION 1041+20.00
STRUCTURE NO. 025-0109

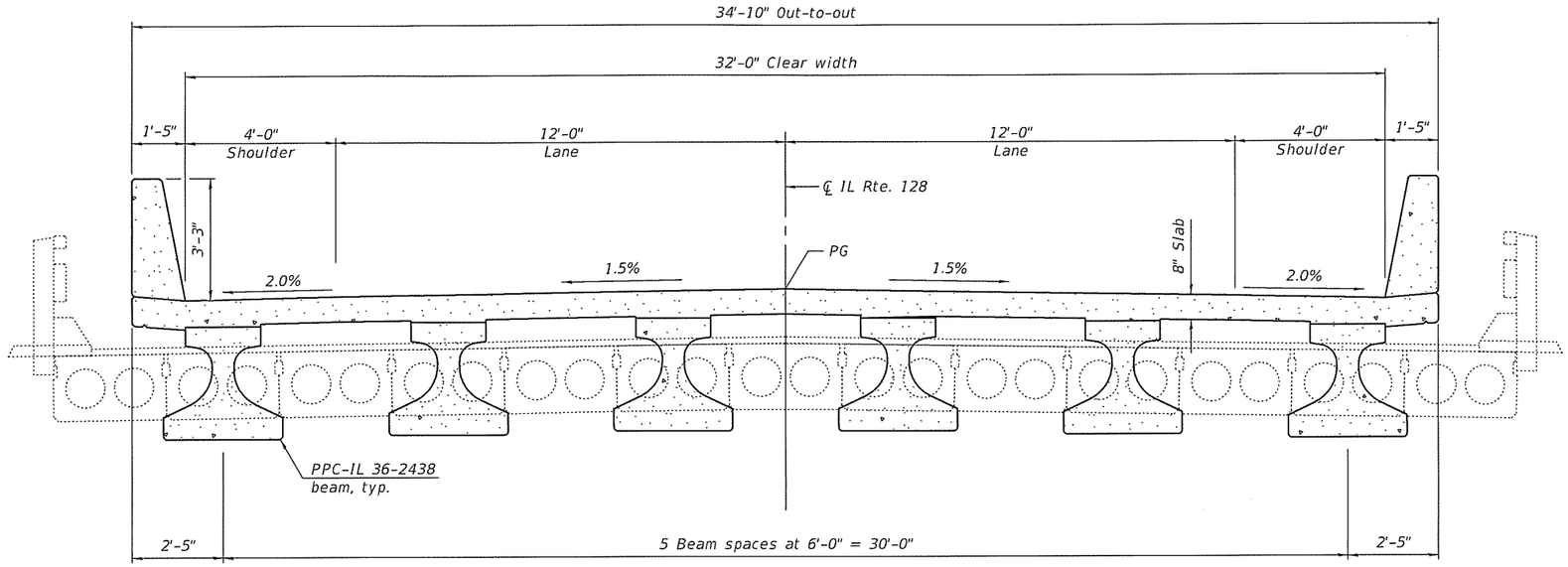
DESIGNED	AL-BARRAE R. SHEBIB
CHECKED	CRYSTAL D. STONE
DRAWN	JEREMY WALKER / D.A.P.
CHECKED	RICHARD J. CHAPUT

8/8/2019

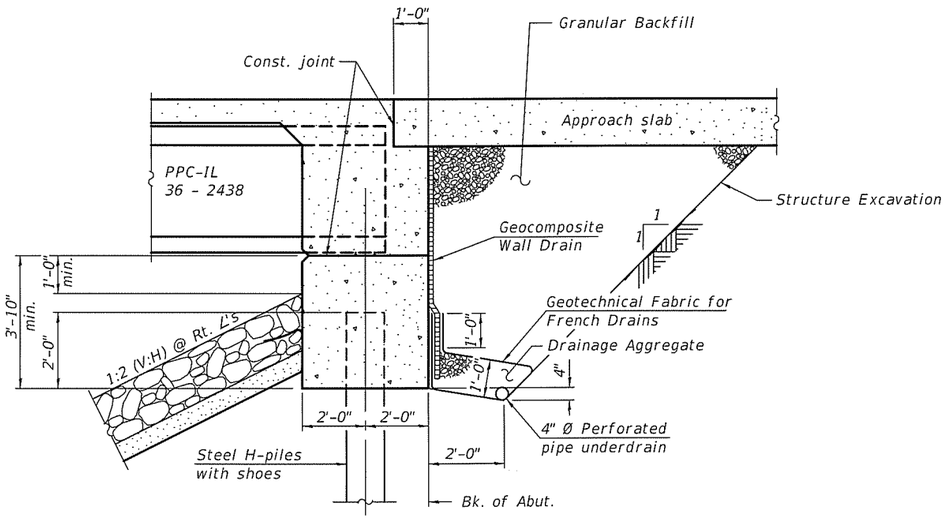
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 2 SHEETS

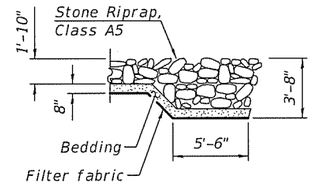
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2801	(103BR-1)B-1	EFFINGHAM		
		CONTRACT NO. 74366		
	ILLINOIS FED. AID PROJECT			



CROSS SECTION
(Looking South)



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



SECTION A-A

WATERWAY INFORMATION

Existing Low Grade Elev. 567.68 @ Sta. 1040+00
Drainage Area = 5.61 sq. mi. Proposed Low Grade Elev. 569.93 @ Sta. 1039+50

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	1210	194	241	563.5	0.7	0.3	564.2	563.8
Design	50	1940	235	296	564.6	1.4	0.6	566.0	565.2
Base	100	2260	246	311	564.9	1.8	0.8	566.7	565.7
Overtopping	215	2700	261		565.3	2.4		567.7	565.3
Max. Calc.	500	3060	272	349	565.6	3.3	1.3	568.9	566.9

10 Year velocity (Existing) = 6.24 c.f.s.
10 Year velocity (Proposed) = 5.02 c.f.s.

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.) N. Abut.	S. Abut.	Item 113
Q100	563.17	565.15	8
Q200	563.17	565.15	
Design	563.17	565.15	
Check	563.17	565.15	

DETAILS
ILLINOIS ROUTE 128 OVER LITTLE MOCCASIN CREEK
F.A.S. RTE. 2801 - SEC. (103BR-1)B-1
EFFINGHAM COUNTY
STATION 1041+21.75
STRUCTURE NO. 025-0109

DESIGNED -	AL-BARRAE R. SHEBIB
CHECKED -	CRYSTAL D. STONE
DRAWN -	JEREMY WALKER / D.A.P.
CHECKED -	RICHARD J. CHAPUT

8/8/2019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 2 OF 2 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2801	(103BR-1)B-1	EFFINGHAM	____	____
		CONTRACT NO. 74366		
	ILLINOIS FED. AID PROJECT			