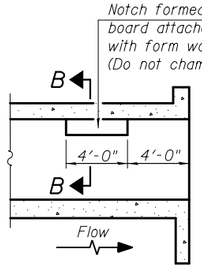
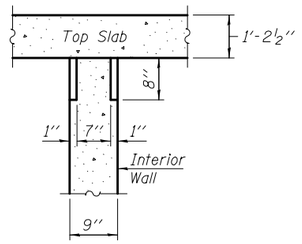


LONGITUDINAL SECTION



SECTION B-B

PHOEBE NESTING SITE DETAILS
(Downstream End Only)

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
All construction joints shall be bonded.
Precast alternate is not allowed.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	U.S.	D.S.
	522.46	522.36

WATERWAY INFORMATION

Drainage Area = 4.06 sq. mi.

Existing overtopping Elev. 536.31 ft. @ Sta. 1147+50
Proposed overtopping Elev. 536.31 ft. @ Sta. 1147+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	1070	227	270	534.82	0.89	0.00	535.71	534.82
Design	50	1730	227	270	535.73	1.14	0.52	536.87	536.25
Base	100	2030	227	270	536.05	1.49	1.32	537.54	537.37
Overtopping (E)	15	1180	227	-	535.10	1.26	-	536.36	-
Overtopping (P)	55	1750	-	270	535.76	-	0.59	-	536.35
Max. Calc.	500	-	-	-	-	-	-	-	-

10 year outlet velocity from existing structure = 6.90 fps
10 year outlet velocity from proposed structure = 3.96 fps

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.		168	168
Stone Riprap, Class A5	Sq. Yd.		453.2	453.2
Filter Fabric	Sq. Yd.		453.2	453.2
Removal of Existing Structures	Each			1
Concrete Superstructure	Cu. Yd.	7.8		7.8
Reinforcement Bars, Epoxy Coated	Pound		38,140	38,140
Parapet Railing	Foot	69		69
Name Plates	Each			1
Concrete Box Culverts	Cu. Yd.		238.2	238.2
Rock Fill - Foundation	Cu. Yd.		59	59

DESIGNED - SEAN CHAU	EXAMINED	DATE - FEBRUARY 1, 2013	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 060 – 2051	F.A.P. RTE. 785 / SECTION 136-BR / COUNTY MADISON / TOTAL SHEETS 58 / SHEET NO. 35
CHECKED - PAUL GURKLYS					CONTRACT NO. 76D49
DRAWN - MICHAEL B. MOSSMAN	PASSED	REVISED		SHEET NO. 2 OF 12 SHEETS	ILLINOIS FED. AID PROJECT
CHECKED - S.C. / P.G.	ACTING ENGINEER OF BRIDGE DESIGN / ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			