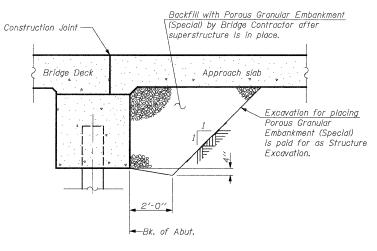
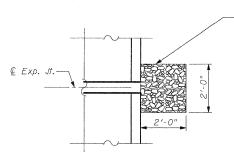
## GENERAL NOTES

- 1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60, See Special Provisions.
- 2. Reinforcement bars designated (E) shall be epoxy coated.
- 3. Concrete Sealer shall be applied to the designated areas of the Expansion Bent Caps. See Sheet SA21, SA22, SA23, SA24, and SA25 for Locations.
- 4. The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach
- 5. Piles shall be driven through 18" diameter precored holes extending to elevations shown on sheets SA21, SA23, SA24, and SA25 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.
- 6. Refer to Roadway Plans for type and quantity of fill material required within the limits of Dry Land Bridge.
- 7. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.



### SECTION THRU APPROACH BENT

(IL RTE 53 Approach Bents Shown, Norwood Ave. Similar)



CA5 or CA7 Coarse Aggregate 1'-0" above to 1'-0" below top of Bent Cap. The Coarse Aggregate shall be wrapped completely in geotechnical fabric for french drains. Cost for coarse aggregate and geotechnical fabric is included with Concrete Structures.

### END OF EXPANSION JOINT DETAIL

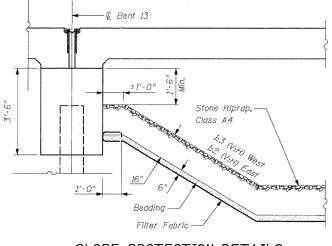
(At Bents 5, 9, 13, & 17)





## INDEX OF SHEETS

- SA 1 General Plan & Elevation
- SA 2 General Notes and Total Bill of Material
- SA 3 Construction Staaina
- SA 4 Temporary Concrete Barrier
- SA 5 Top of Slab Elevations I
- SA 6 Top of Slab Elevations II
- SA 7 Top of Slab Elevations III
- SA 8 Top of Approach Slab Elevations
- SA 9 West Approach Slab Elevations
- SA 10 East Approach Slab Elevations
- SA 11 Deck Plan & Cross-Section (End Units)
- SA 12 Deck Plan & Cross-Section (Interior Units)
- SA 13 Superstructure Reinforcing Details
- SA 14 IL 53 Approach Slab I SA 15 IL 53 Approach Slab II
- SA 16 Norwood Avenue West Approach Slab Details
- SA 17 Norwood Avenue East Approach Slab Details
- SA 18 Norwood Avenue Approach Slab Sections
- SA 19 Preformed Joint Strip Seal
- SA 20 Drainage Scupper DS-12M10
- SA 21 Typical Bent Details I
- SA 22 Typical Bent Details II
- SA 23 Bents 13 & 14 Details
- SA 24 Norwood Ave. West Approach Bent
- SA 25 Norwood Ave. East Approach Bent
- SA 26 Metal Shell Pile Details
- SA 27 Bar Splicer Assembly
- SA 28 Soil Borings I
- SA 29 Soil Borings II
- SA 30 Soil Borings III
- SA 31 Soil Borings IV
- SA 32 Soll Borings V
- SA 33 Soil Borings VI
- SA 34 Soil Borings VII SA 35 Soil Borings VIII
- SA 36 Soil Borings IX
- SA 37 Soil Borinas X



# SLOPE PROTECTION DETAILS

Symmetric about the @ between Bents 13 and 14 Length of slope protection = 110' (Looking upstream)

# TOTAL BILL OF MATERIAL

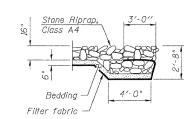
ITEM	UNIT	SUPER	SUB	TOTAL
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	-	251	251
STONE RIPRAP, CLASS A4	SQ YD	-	318	318
FILTER FABRIC	SQ YD	-	318	318
STRUCTURE EXCAVATION	CU YD	-	2,763	2,763
CONCRETE STRUCTURES	CU YD	-	798.3	798.3
CONCRETE SUPERSTRUCTURE	CU YD	3,480.5	-	3,480.5
BRIDGE DECK GROOVING	SQ YD	7 <b>,</b> 195	-	7,195
PROTECTIVE COAT	SQ YD	7,378	-	7,378
REINFORCEMENT BARS, EPOXY COATED	POUND	1,022,690	89,190	1,111,880
BAR SPLICERS	EACH	1,751	252	2,003
FURNISHING METAL SHELL PILES 14" X 0.312"	F00T	- '	20,006	20,006
DRIVING PILES	FOOT	-	20,006	20,006
TEST PILE METAL SHELLS	EACH	-	14	14
NAME PLATES	EACH	1	-	1
PREFORMED JOINT STRIP SEAL	FOOT	688.5	-	688.5
CONCRETE SEALER	SQ FT	-	6340	6340
DRAINAGE SCUPPERS, DS-12M10	EACH	14	-	14
DRAINAGE SYSTEM	L SUM	1	-	1

### WATERWAY INFORMATION

Drainage Area = 3	31.8 acre	S	Existing Low Grade Elev. 716.10 © Sta. 243+00.00 Proposed Low Grade Elev. 715.81 © Sta. 243+00.00						
Flood	Freq.	Q	Opening Sq. Ft. Nat.		Nat.	Head - Ft.		Headwater El.	
	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
	10	62	7	40.2	712.9	0.8	0.0	713.7	712.9
Design	50	88	8	52.7	713.4	1.3	0.0	714.7	713.4
Base	100	102	9	60.0	713.7	1.8	0.0	715.5	713.7
Overtop Existing	>100								
Max. Calc.	500	172	14	80.9	715.4	4,5	0.0	719.9	715.4
Overtop Proposed	>500								

### DESIGN SCOUR ELEVATION TABLE

Design Scour	Bent 13	Bent 14
Flevation (ft.)	708 43	710 53



STATION 244+88.87 BUILT 201\_ BY STATE OF ILLINOIS FAP RTE 2578, SEC. 532B LOADING HL-93 STRUCTURE NO. 022-0012

NAME PLATE

#### SECTION THRU END OF OPEN DITCH

Typical at West and East end of ditch between Bents 13 and 14

> GENERAL NOTES AND TOTAL BILL OF MATERIAL STRUCTURE NO. 022-0012



PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISE II 60532 patrickengineering.com

SHEET NO. SA2 OF SA37

TOTAL SHEET SHEETS NO. SECTION COUNTY RTE. 2578 532B DUPAGE 781 606 CONTRACT NO. 60477 12/3/2010 ILLINOIS FED. AID PROJECT