

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

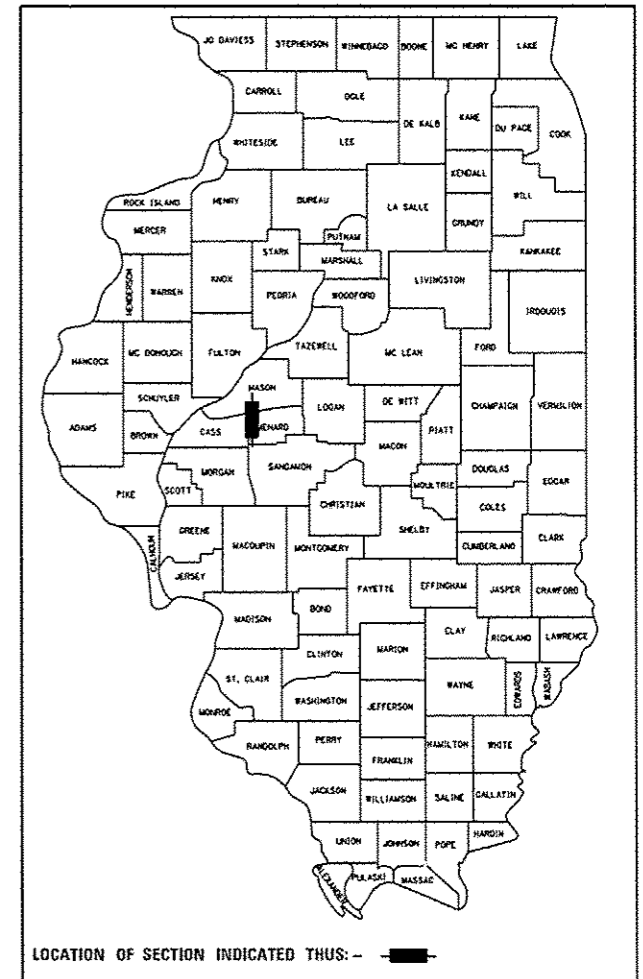
**PROPOSED
HIGHWAY PLANS**

FAP 34 (IL ROUTE 97)
SECTION (2) I-3
SCOUR COUNTERMEASURES
MENARD COUNTY

C-96-005-15

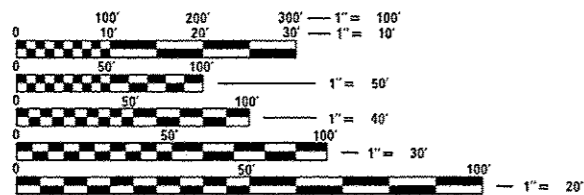
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34	(2) I-3	MENARD	5	1
		ILLINOIS	CONTRACT NO. 72H34	

D-96-005-15



FOR INDEX OF SHEETS, SEE SHEET NO. 2

SCOUR MITIGATION
AT SN 065-0002,
IL 97 OVER
SANGAMON RIVER,
N40.1238, W89.9844



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: K. FIELDS
PROJECT MANAGER

CONTRACT NO. 72H34

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED September 15, 2014
Brian Z. Ducky
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 20, 2015
John D. Baranzoni PE
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 20, 2015
Omer Osman PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL
20300100	CHANNEL EXCAVATION	CU YD	2124
28100207	STONE RIPRAP, CLASS A4	TON	1100
28100209	STONE RIPRAP, CLASS A5	TON	2211
28200200	FILTER FABRIC	SQ YD	1502
67100100	MOBILIZATION	L SUM	1
X7010216	TRAFFIC CONTROL & PROTECTION (SPECIAL)	L SUM	1

6

GENERAL NOTES

This section shall be constructed in accordance with the plans; the Standard Specifications for Road and Bridge Construction, Adopted January 1, 2012; the Supplemental Specifications and Recurring Special Provisions indicated on the checksheet; and the Special Provisions included in the proposal.

The work included in this project consists of scour mitigation, channel excavation and all other work necessary to complete this section.

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to the construction or ordering of material. Such variations shall not be cause for additional compensation or a change in the scope of work. The Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor shall be responsible for protecting utility property from construction operation as outlined in Article 107.31 of the Standard Specifications. The J.U.L.I.E. number is 800-892-0123. A minimum of 96 hours advance notice is requested.

G.N. - 281

The riprap gradation shall be in accordance with the gradation specified in the plans, or, with approval of the Engineer, a riprap gradation meeting a D50 greater than or equal to 0.8 feet for A4 & 1.1 feet for A5. D50 is defined as the mean rock size as described in the FHWA Hydraulic Engineering Circulars (HEC 11, HEC 14, AND HEC 15).

If gravel is used for the bedding material under riprap, the gravel shall be crushed as allowed under Article 1005.01.

The cost of bedding material will not be paid for separately but should be included in the cost of riprap.

Any disturbances to ditches, slopes or other areas within the work area shall be regraded and reseeded at the Contractor's expense at the completion of the contract.

INDEX OF SHEETS

- 1 Cover Sheet
- 2 Summary of Quantities, Highway Standards, General Notes & Index of Sheets
- 3-5 Scour Mitigation Plan Sheets

LIST OF HIGHWAY STANDARDS

- 000001-05 Standard Symbols, Abbreviations and Patterns
- 001006 Decimal of an Inch and of a Foot
- 701301-04 Lane Closure, 2L, 2W, Short Time Operations
- 701901-03 Traffic Control Devices

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6**

EXAMINED AUGUST 22ND 20 14
John C. Wagoner
ENGINEER OF OPERATIONS

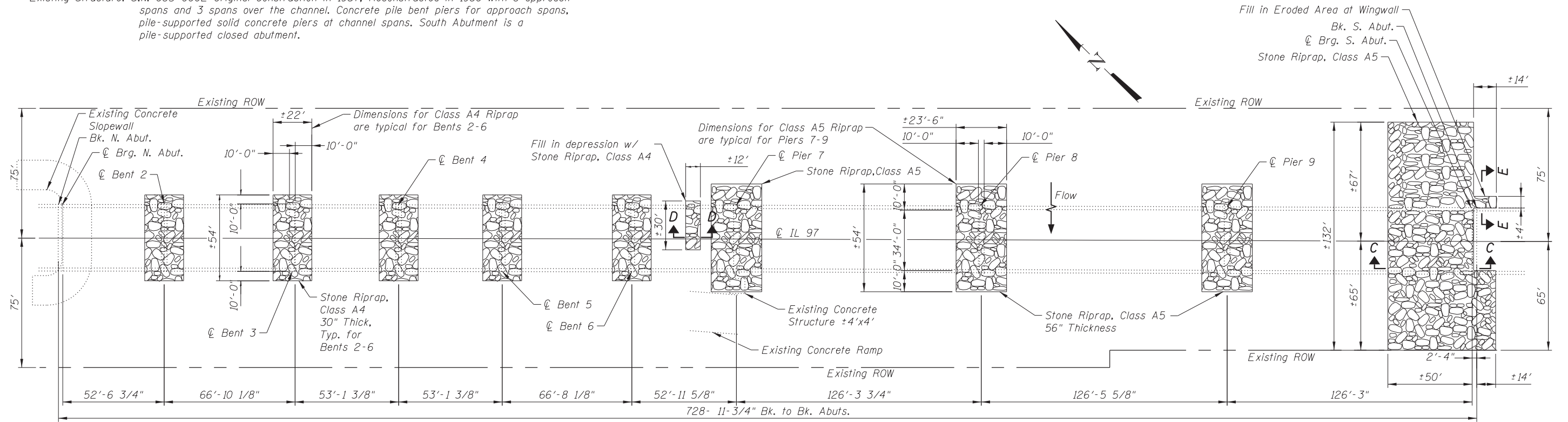
EXAMINED August 6 20 14
Ron Chapman
ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED August 6 20 14
Jeff P. [Signature]
ENGINEER OF PROGRAM DEVELOPMENT

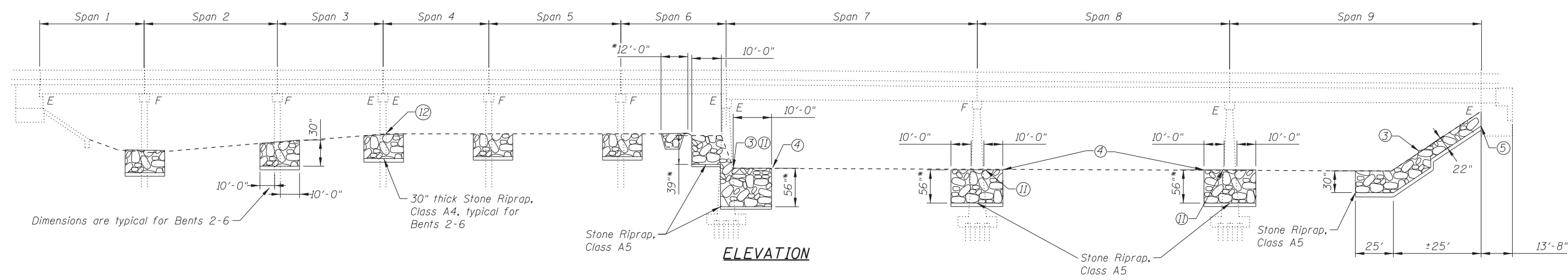
**FAP 34 (IL 97) OVER
SANGAMON RIVER
MENARD COUNTY
STRUCTURE NO. 065-0002**

FILE NAME *	USER NAME *	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES, HIGHWAY STANDARDS, GENERAL NOTES & INDEX OF SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -	REVISED			34	(2) 1-3	MENARD	5	2
		PLOT SCALE *	REVISED							
		PLOT DATE *	REVISED		SHEET NO. 2 OF 5					
[ILLINOIS] FED. AID PROJECT CONTRACT NO. 72H34										

Existing Structure: S.N. 065-0002 Original Construction in 1937, Reconstructed in 1980 with 6 approach spans and 3 spans over the channel. Concrete pile bent piers for approach spans, pile-supported solid concrete piers at channel spans. South Abutment is a pile-supported closed abutment.



PLAN



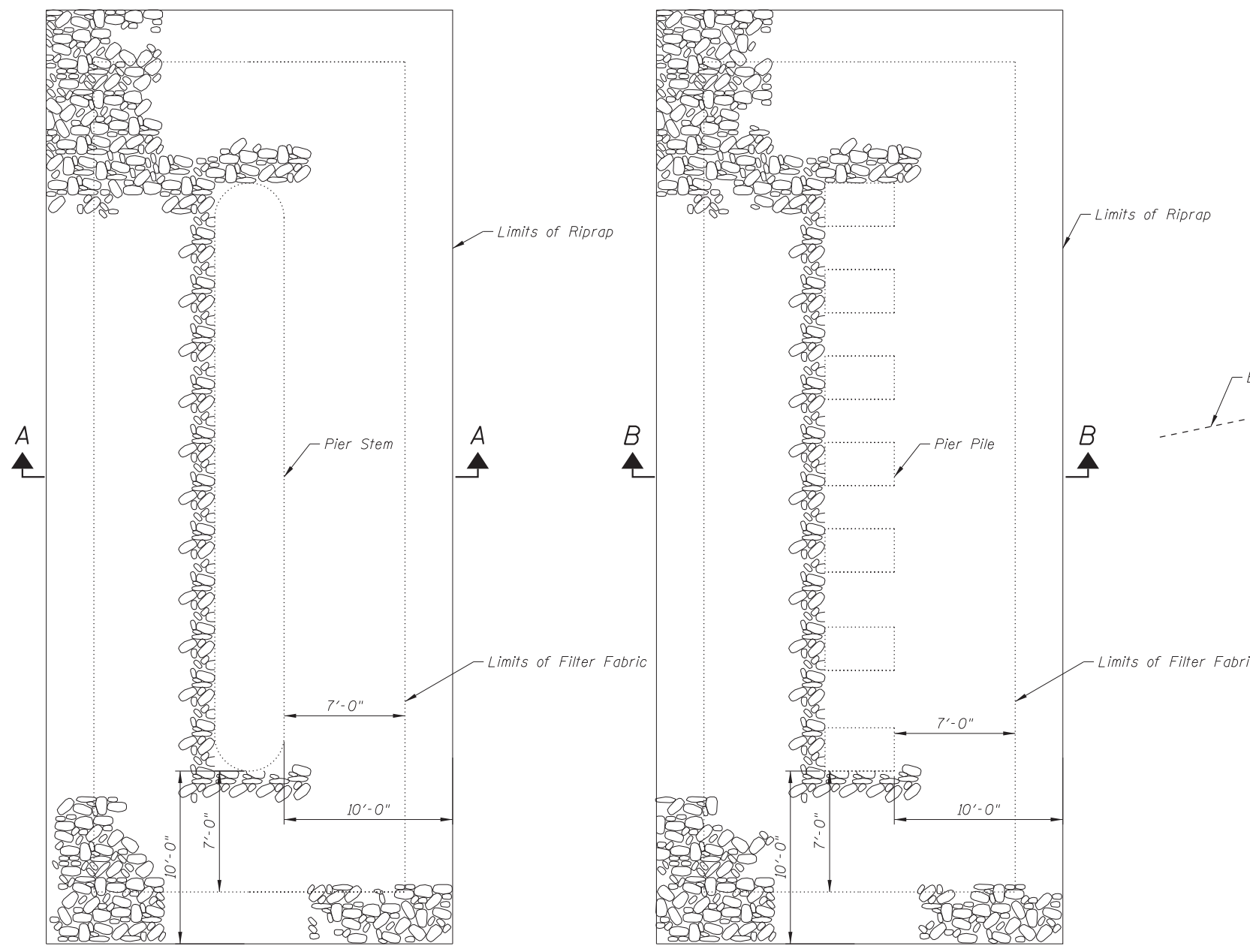
ELEVATION

- Notes:
1. For Section C-C & D-D See Sheet 4 of 5.
 2. For Section E-E See Sheet 5 of 5.
 3. The designation ③, etc. refers to a note number. See Sheet 5 of 5 for numbered notes.

*Thickness of Riprap required at Piers 7-9 is 56" when placed under water.

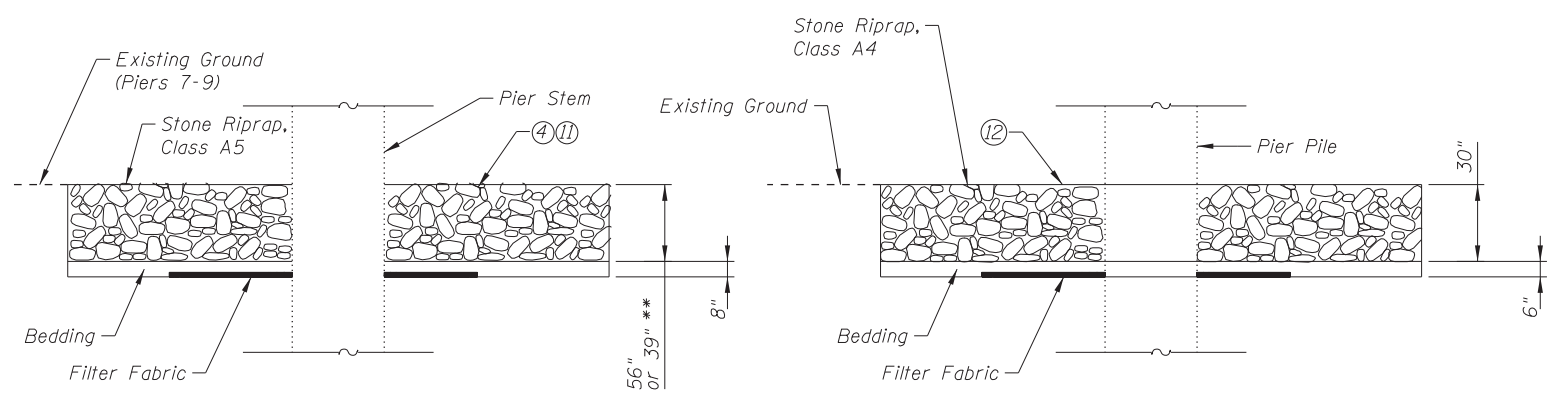
PLAN & ELEVATION
FAP 34 (IL 97) OVER
SANGAMON RIVER
MENARD COUNTY
STRUCTURE NO. 065-0002

FILE NAME =	USER NAME =	DESIGNED -	REVISD	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 065-0002 PLAN & ELEVATION	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISD			34	(2) 1-3	MENARD	CONTRACT NO. 72H34		
PLOT SCALE =		DRAWN -	REVISD			SHEET NO. 3 OF 5 SHEETS					
PLOT DATE =		CHECKED -	REVISD			ILLINOIS FED. AID PROJECT					



PLAN AT PIERS 7-9

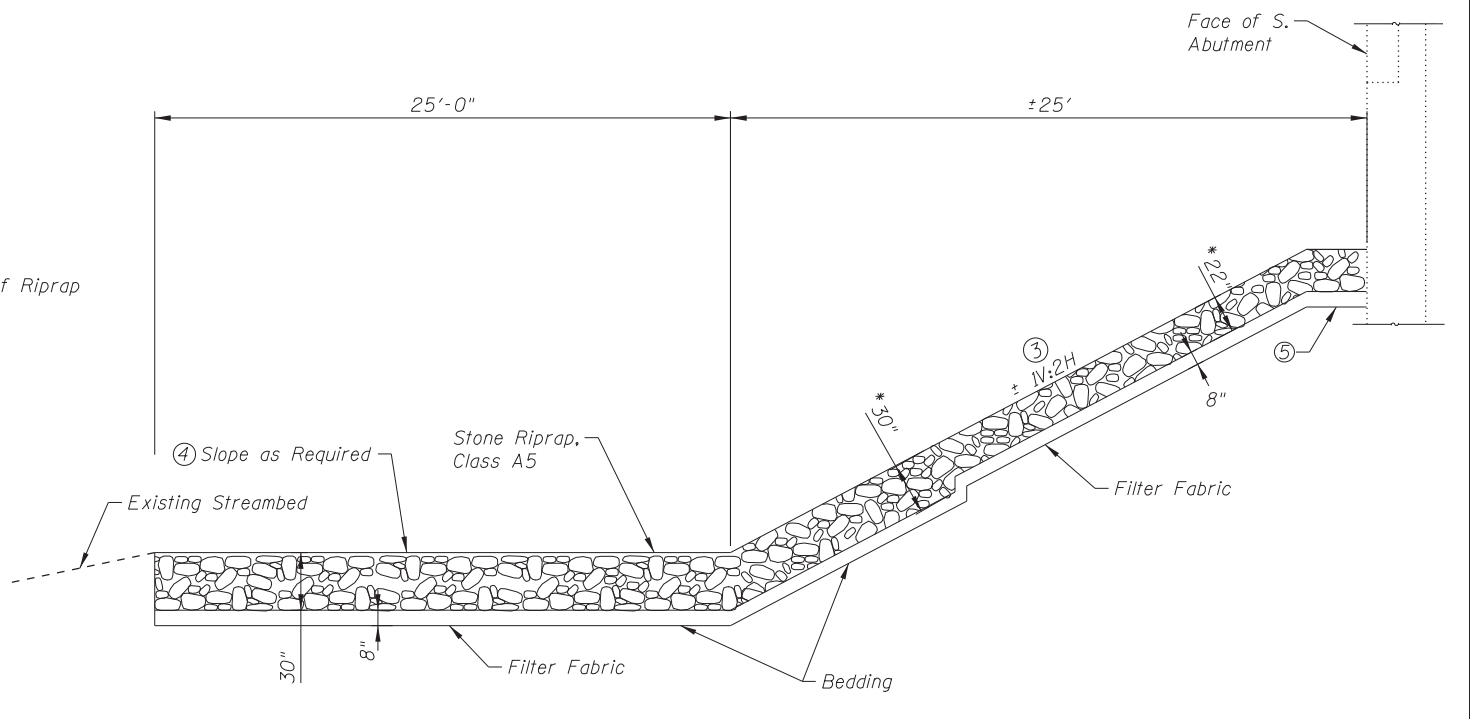
PLAN AT BENTS 2-6



SECTION A-A

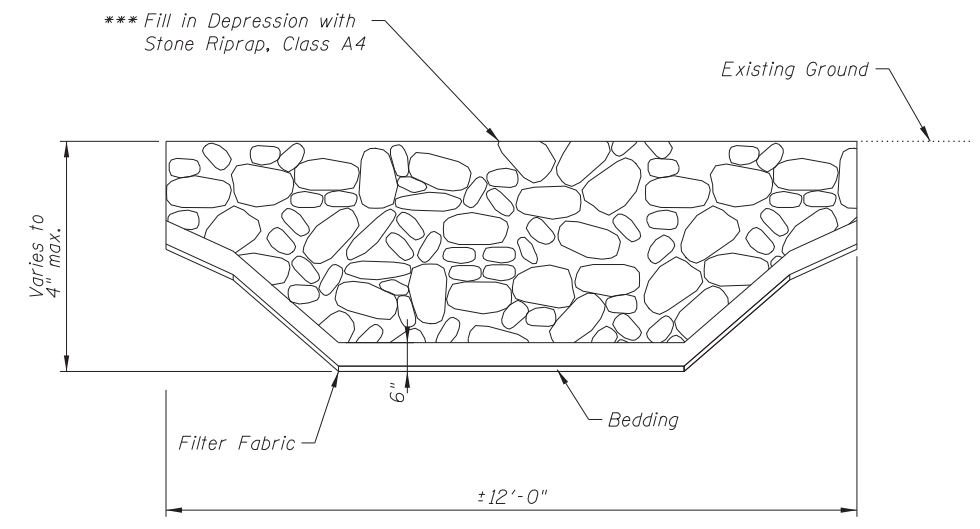
SECTION B-B

**Thickness of riprap required is 56" when placed under water.



SECTION C-C @ S. ABUTMENT

*Thickness of riprap required is 30" when placed under water.



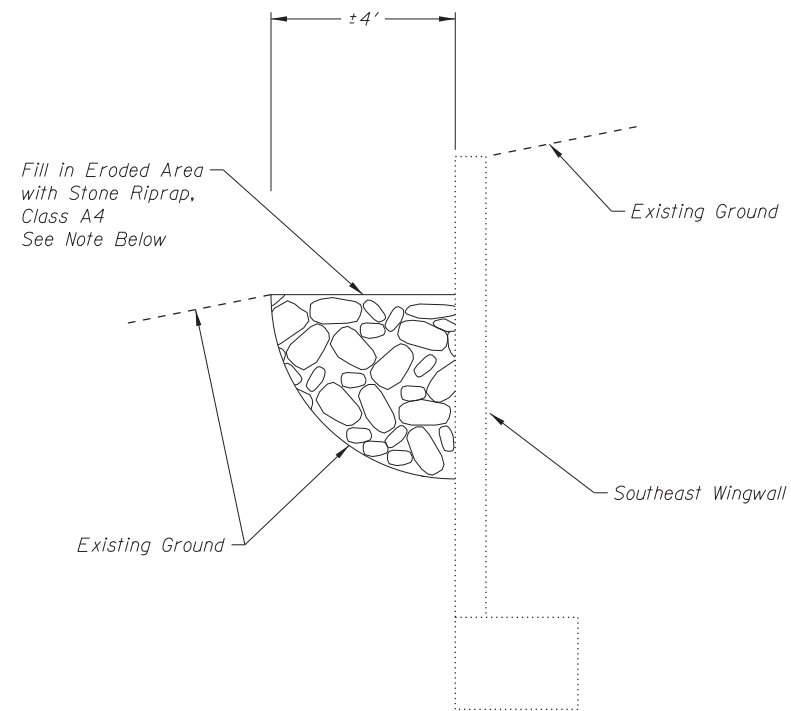
SECTION D-D

***Excavate sides of depression to a slope that will provide a stable base for riprap. Depth/thickness of riprap varies with ground conditions.

- Notes:
1. For locations of Sections C-C & D-D See Sheet 3 of 5.
 2. The designation (3), etc. refers to a note number. See Sheet 5 of 5 for numbered notes.

RIPRAP DETAILS
FAP 34 (IL 97) OVER
SANGAMON RIVER
MENARD COUNTY
STRUCTURE NO. 065-0002

FILE NAME =	USER NAME =	DESIGNED -	REVISOR -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RIPRAP DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISOR -			34	(2) 1-3	MENARD	CONTRACT NO. 72H34		
PLOT SCALE =		DRAWN -	REVISOR -			SHEET NO. 4 OF 5 SHEETS					
PLOT DATE		CHECKED -	REVISOR -			ILLINOIS FED. AID PROJECT					



SECTION E-E AT SE WINGWALL

Note: Excavate eroded area down to firm soil and to a slope that will provide a stable base for riprap. Excavated material may include concrete, brick, block and other loose materials as may be encountered. Set top of riprap to match into existing grade as directed by the Engineer. Depth/thickness of riprap varies with ground conditions.

- Notes:
- ① The Contractor shall field verify existing dimensions, details, and conditions affecting new construction and make necessary approved adjustments prior to construction ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
 - ② Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer. Slope protection system shall be placed in a manner that does not reduce the total waterway opening.
 - ③ Grade channel bank to a slope that will provide a stable base for riprap as directed by the Engineer. Cost included in Channel Excavation.
 - ④ Grade streambed so that the top of the Stone Riprap approximately matches the existing stream profile as directed by the Engineer. Filling of scour holes may be required.
 - ⑤ At the abutment face, the filter fabric shall not be lower than the top of footing.
 - ⑥ Additional excavation and reshaping of channel and bank may be required to facilitate proper placement of Stone Riprap as directed by the Engineer. Cost to be included as Channel Excavation.
 - ⑦ Channel Excavation shall include the cost of removing and disposing of existing riprap, concrete, brick, block, rubble, or other material as encountered.
 - ⑧ Contractor to locate existing underground utilities. Where existing underground utilities conflict with riprap placement, the Contractor shall adjust the layout as directed by the Engineer.
 - ⑨ Vertical clearance from groundline to bottom of superstructure varies between 10 and 12 feet for Bents 2-6. Actual conditions may vary.
 - ⑩ Estimated quantities. Actual quantities to be determined in the field.
 - ⑪ Under no circumstances are the bridge pier footings to be uncovered. If pier footings are encountered during excavation, riprap thickness will be as required above footing as required to match into the existing streambed profile and as directed by the Engineer.
 - ⑫ Set top of Stone Riprap such that it approximately matches the existing grade around Bents 2-6. Filling of scour holes may be required.

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
CHANNEL EXCAVATION	CU YD	2124
STONE RIPRAP, CLASS A4	TON	1100
STONE RIPRAP, CLASS A5	TON	2211
FILTER FABRIC	SQ YD	1502

RIPRAP DETAILS
FAP 34 (IL 97) OVER
SANGAMON RIVER
MENARD COUNTY
STRUCTURE NO. 065-0002

FILE NAME =	USER NAME =	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RIPRAP DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISED			34	(2) 1-3	MENARD			
		DRAWN -	REVISED			CONTRACT NO. 72H34					
		CHECKED -	REVISED			SHEET NO. 5 OF 5 SHEETS					
				ILLINOIS FED. AID PROJECT							