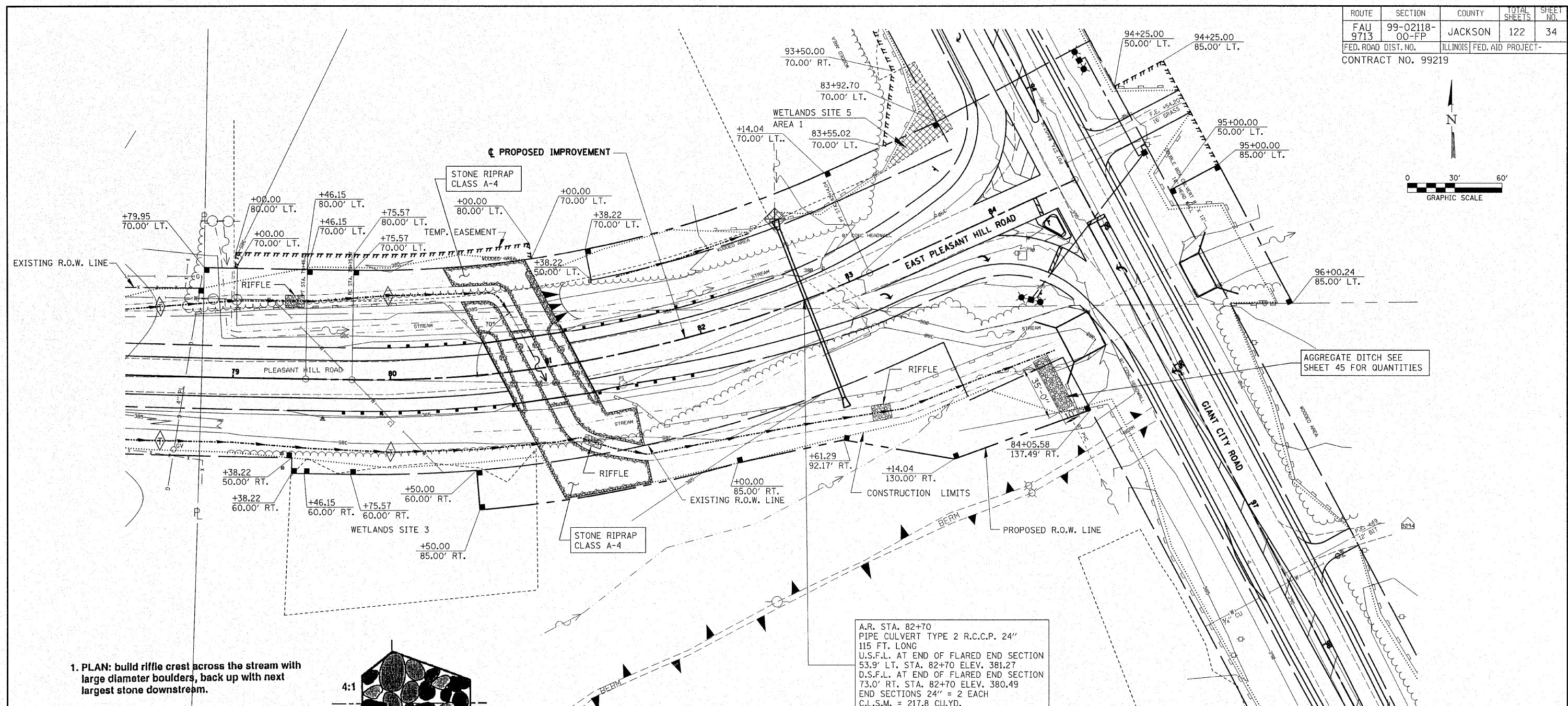
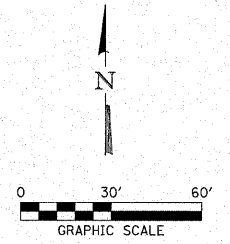
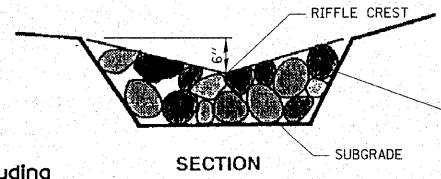
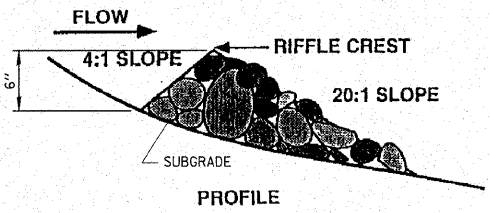
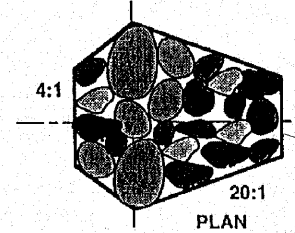


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 9713	99-02118-00-FP	JACKSON	122	34
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	
CONTRACT NO. 99219				



A.R. STA. 82+70
 PIPE CULVERT TYPE 2 R.C.C.P. 24"
 115 FT. LONG
 U.S.F.L. AT END OF FLARED END SECTION
 53.9' LT. STA. 82+70 ELEV. 381.27
 D.S.F.L. AT END OF FLARED END SECTION
 73.0' RT. STA. 82+70 ELEV. 380.49
 END SECTIONS 24" = 2 EACH
 C.L.S.M. = 217.8 CU.YD.

- 1. PLAN:** build riffle crest across the stream with large diameter boulders, back up with next largest stone downstream.
- 2. PROFILE:** construct downstream face of riffle at 20:1 slope and upstream face at 4:1 slope.
- 3. CROSS-SECTION:** V-shape crest down towards the centre of channel.
- 4. SURFACE:** space large surface rocks 8" to 12" apart on the downstream face of the riffle to form low flow fish passage channels.
- 5. BANKS:** rip-rap banks with embedded rock to the floodplain level on both sides of the riffle.
- 6. RIFFLES:** construction of riffles including stone riprap class A4 is to be considered as incidental to Earth Excavation.



STONE RIPRAP CLASS A4
 RIFFLE AREA

RIFFLE LOCATION
STA. 79+38.00 LT.
STA. 81+20.00 RT.
STA. 82+87.00 RT.

STONE RIPRAP CLASS A4

HLR
 Rice, Berry and Associates
 A Division of Hampton,
 Lenzi and Renwick, Inc.
 Civil & Structural Engineers
 801 S. Durkin Drive
 Springfield, Illinois 62704
 217-546-3400

Account Number
 03-47-0001-1
 Date: 03-19-07
 DESIGNED: L.F.S. CHECKED: S.W.M. DRAWN: W.J.S.

STREAM PLAN
 SECTION 99-02118-00-FP
 F.A.U. 9713 / EAST PLEASANT HILL ROAD
 JACKSON COUNTY