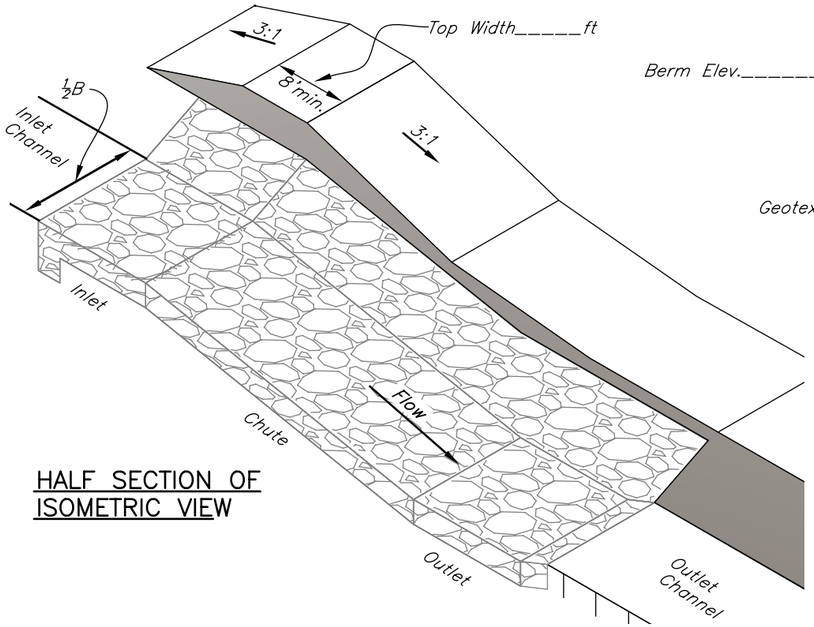
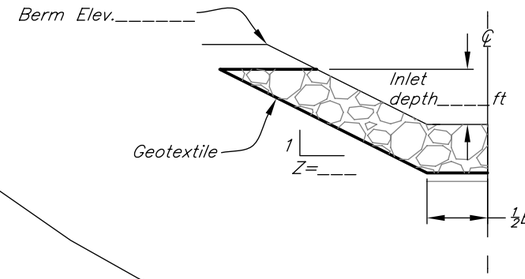
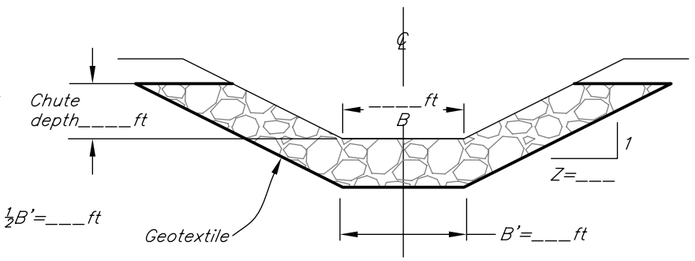


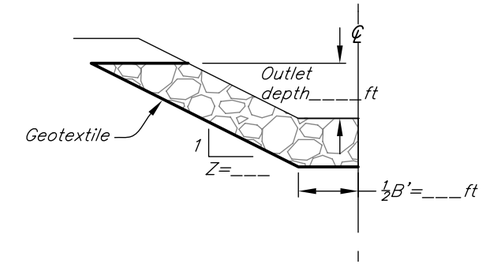
HALF SECTION OF ISOMETRIC VIEW



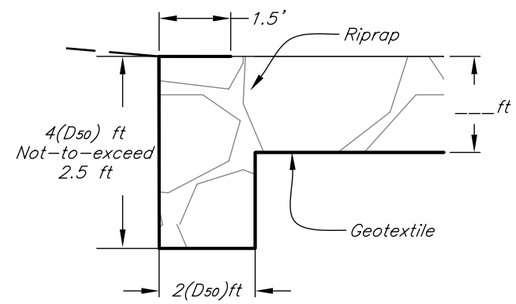
HALF SECTION OF INLET SECTION
(AT CENTERLINE OF DIKE)



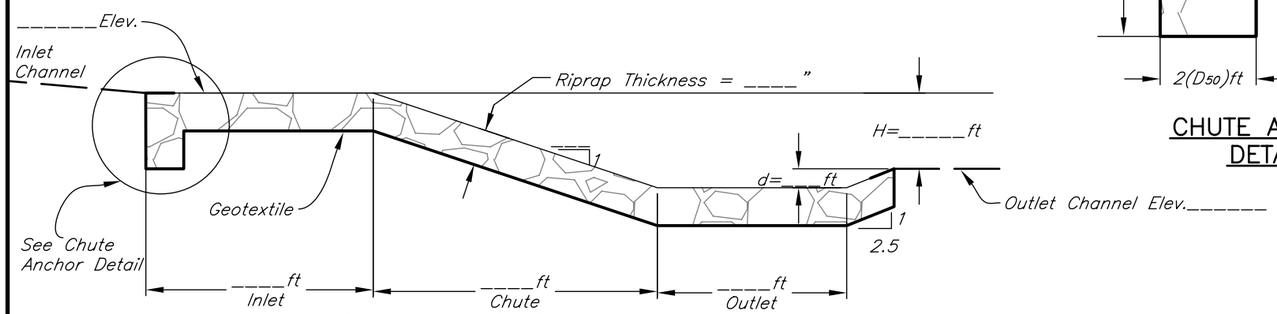
CROSS SECTION OF CHUTE SECTION



HALF SECTION OF OUTLET SECTION



CHUTE ANCHOR DETAIL



PROFILE ALONG CENTERLINE

NOTES:

1. Minimum riprap thickness shall be 2.0 times D_{50} or 12" whichever is larger. B' is the constructed bottom width = B + (Rock Thickness/Z). B is the design bottom width.
2. Riprap thickness is measured perpendicular to the slope.
3. Geotextile Fabric shall be installed under all riprap. Geotextile shall conform to Iowa NRCS Construction Specification IA-95 – GEOTEXTILE, Non-woven, Class I.
4. Wrap geotextile a minimum of 18" over all riprap edges.
5. The length of the inlet section shall be a minimum of 10 ft. The slope shall be a continuation of the upstream waterway slope but shall not exceed 4%.
6. The maximum chute slope in the direction of flow shall be 3:1. The maximum side slopes of the chute shall be 2:1.
7. The outlet section shall be flat (0% grade).
8. Chute Anchor Detail is not needed where a bedrock foundation is present.

GRADATION OF RIPRAP		
Percent Passing	Design Envelope	Size (Inches)
100	1.5(D50) – 2.0(D50)	
50–85	1.3(D50) – 1.8(D50)	
20–60	1.0(D50) – 1.5(D50)	
10–40	0.8(D50) – 1.3(D50)	

TABLE OF QUANTITIES		
Item	Quantity	Unit
Riprap		cu.yd.
Geotextile		sq.yd.
Excavation		cu.yd.
Earthfill		cu.yd.
Seeding		acres

BENCHMARK		
No.	Elev.	Description

STANDARD DWG. NO. IA-1400

DATE June 2008 | SHEET 1 OF 1

Date

Designed

Drawn

Checked

Approved

DETAILS OF ROCK LINED CHUTE

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File No.

Drawing No.

Sheet of