

U.S. Department  
of Agriculture

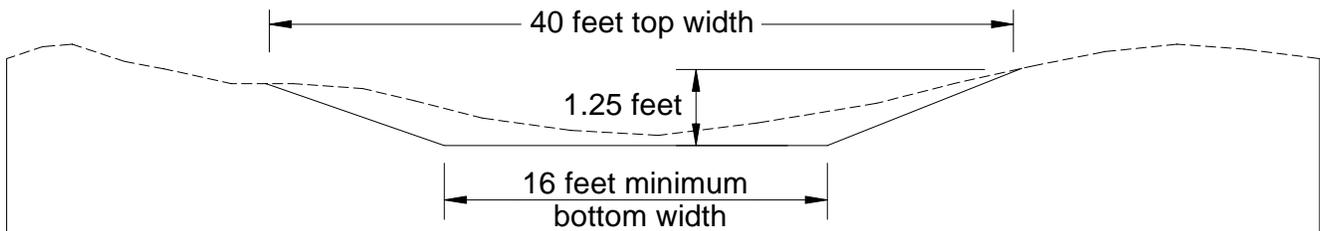
Natural  
Resources  
Conservation  
Service

Auburn, Alabama

# GRASSED WATERWAY

Drainage area 0 to 10 acres  
Used for channel slopes of  
1 through 10 percent  
South Alabama and Blackland Prairie

AL-ENG Worksheet 16-3  
March 2004



## Seeding area

Length (Linear feet) \_\_\_\_\_ x 0.00092 = \_\_\_\_\_ Acres

## Construction

The waterway shall be constructed with a top width of 40 feet, a depth of 1.25 foot, and a bottom width of 16 feet. The final parabolic shape may be obtained by dishing the corners with a small disk during seedbed preparation. The waterway shall be constructed with a constant grade throughout each reach. A break in grade is required when there is a change in land shape.

## Approval

Cooperator \_\_\_\_\_

Approved \_\_\_\_\_ Date \_\_\_\_\_

## Location

Field number, description of sketch

Seeding Rates			
Materials	Kind	Rate	Total
Seed	Bermuda grass, common	10 lb per acre	
	Bahiagrass	40 lb per acre	
	Tall fescue	40 lb per acre	
Sprigs	Bermuda grass	____ bu per acre	
Fertilizer	Nitrogen	100 lb per acre	
	P <sub>2</sub> O <sub>5</sub>	100 lb per acre	
	K <sub>2</sub> O	100 lb per acre	
Lime	Ground limestone (agricultural lime)	2 tons per acre	
Mulch (if needed)	Hay or straw	1 ½ ton per acre	

### Vegetation establishment

Seed permanent grass or temporary cover immediately after construction on a firm seedbed. Prepare a good seedbed, mixing fertilizer and lime into the soil during seed preparation. The seedbed should be prepared at least 8 inches deep. Use a chisel plow as needed to breakup hard, restrictive soil.

Seed perennial grass during the recommended planting dates. With late fall seeding, use a small grain companion crop such as wheat or rye. Use temporary cover of sudan-sorghum hybrid or millet in constructed waterways shaped in the spring or early summer, which are to be fall seeded to fescue.

Use a cultipacker seeder, a grassland drill, grain drill with press wheel or broadcast and compact before and after seeding. Do not seed deeper than ¼ to ½ inch except small grain (companion crop) that should be seeded 1-inch deep. Mulch should be applied immediately after seeding. Also mulch may be anchored by running back and forth over the area with a mulch anchoring tool or disk harrow with the disc set to run straight.

### Operation and maintenance

1. Avoid grazing the waterway grass to shorter than 3 inches.
2. Protect the waterway from damage by farm equipment and vehicles. Avoid using it as a roadway and practice care in crossing to prevent tillage marks or wheel tracks.
3. Maintain the constructed width by lifting or disengaging tillage equipment properly and avoid farming operations along the waterways which would hinder water entry.
4. Avoid spraying herbicides such as atrazine and crossing waterways during spray operations unless the equipment is completely shut off.
5. Fertilize waterways the first spring after seeding and as necessary thereafter to maintain a vigorous stand of grass.
6. Mow waterways regularly to maintain a healthy and vigorous sod. Time the first mowing after ground nesting birds have hatched (about August 15). Remove excess top growth. (Do not burn.)
7. Repair damage to waterways immediately. Repair all broken subsurface drain lines or blowouts adjacent in the waterway when first observed. Construct water bars if needed to force water into the waterway.

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### As constructed

Width \_\_\_\_\_ Depth \_\_\_\_\_ Length \_\_\_\_\_

Certified correct by \_\_\_\_\_ Date \_\_\_\_\_