

Living Shorelines and the Homeowner

Examples of Design Options

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Considerations Regarding Design

- I Homeowner goals
 - Shoreline protection, appearance, cost, water access
- I Landscape considerations
 - Site assessment, physical constraints
- I Plant selection and optimizing success
 - Selection of appropriate species, long term maintenance
- I Implementation of design
 - Constructability



Options for Living Shorelines

- | Marsh creation
- | Rock groins with marsh plantings
- | Biolog based designs
- | Rock sill with marsh plantings



Marsh Creation



VIMS Center for Coastal Resources Management

Marsh Creation



VIMS Center for Coastal Resources Management

Marsh Creation



NOAA Restoration Center

Marsh Creation



NOAA Restoration Center

Benefits of Marshes in Erosion Control

- | Inexpensive
- | Effective - ~50% of wave energy absorbed in first 8 feet of marsh
- | Increase needed habitat in estuaries
- | Improvement of water quality



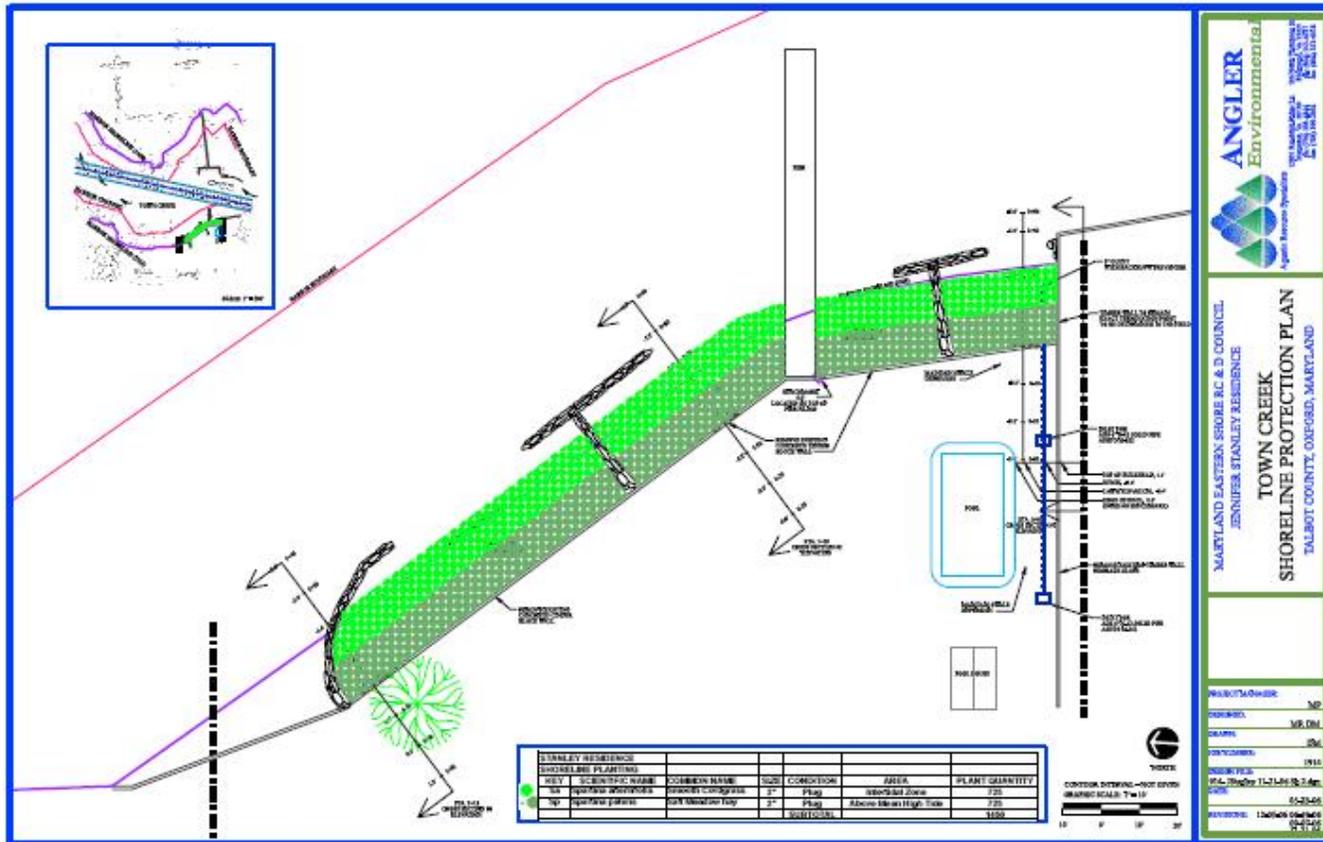
Groins with Marsh Plantings

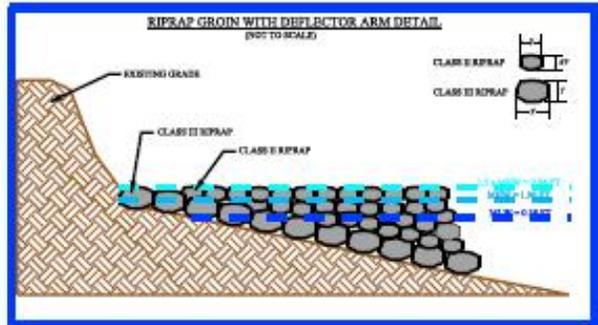
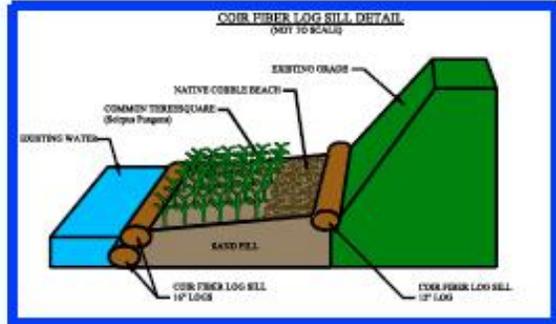
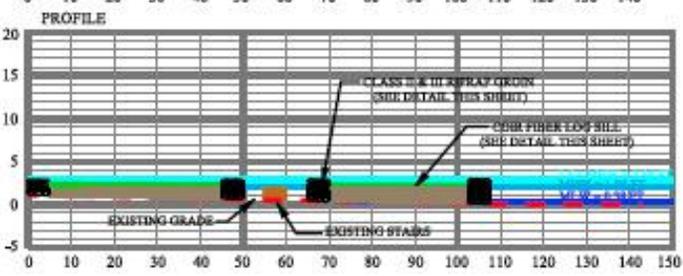
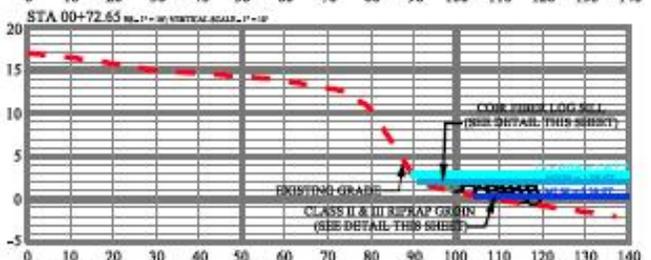
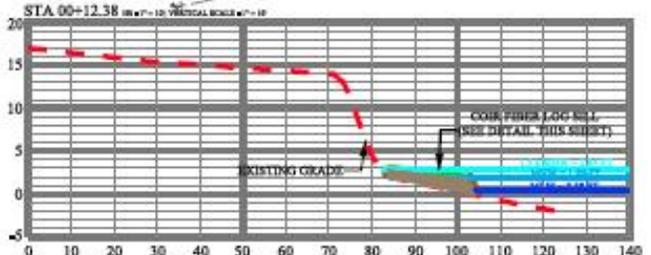
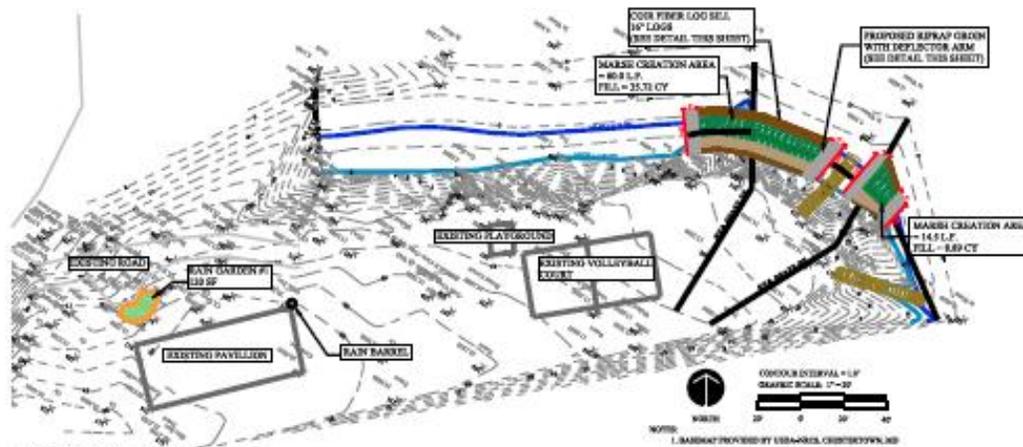


Groins with Marsh Plantings



Groins with Marsh Plantings





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JOB NUMBER:	200
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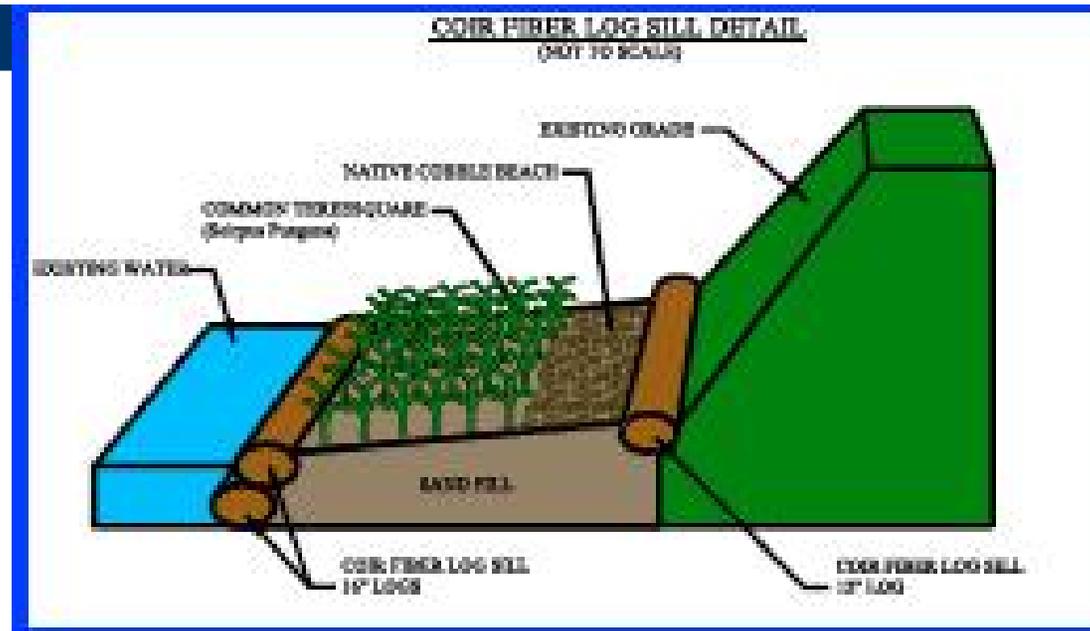
DRAFT

APPLICANT: MARYLAND EASTERN SHORE
 RC&D COUNCIL
 PROJECT: TURNERS CREEK SHORELINE
 STABILIZATION
 SHORELINE STABILIZATION
 PLAN
 KENT COUNTY, MARYLAND



CNST DETAIL FIG 1

Biolog Based Designs



Biolog Based Designs



NOAA Restoration Center

Biolog Based Designs

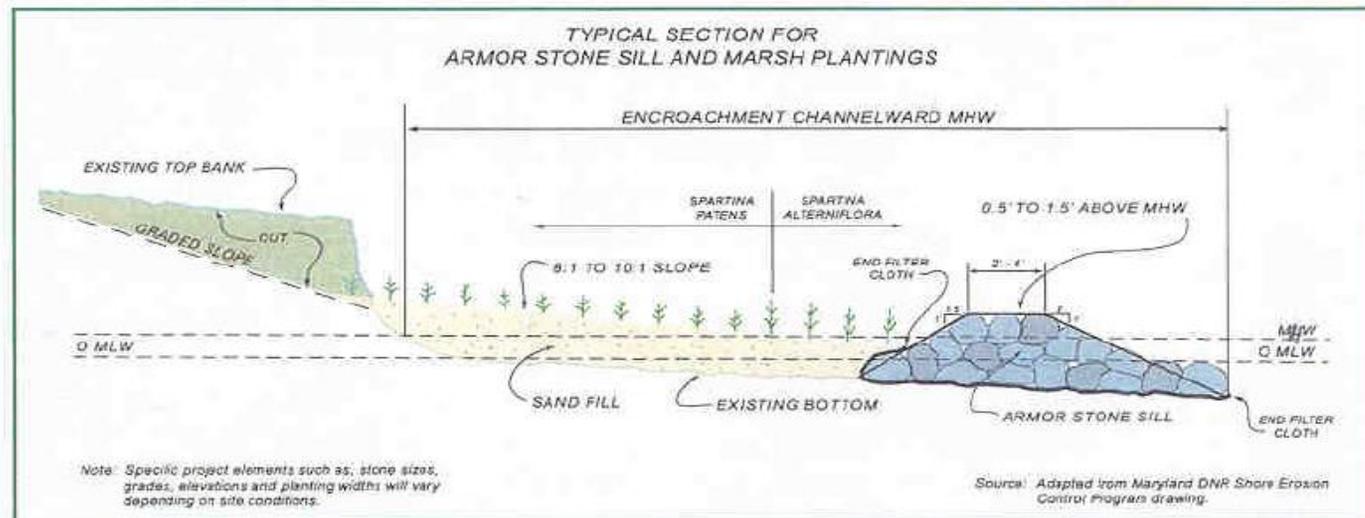


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Biologs Integrated into Designs



Sill Design



S. alterniflora is planted from mean low water to mean high water

S. patens is planted above mean high water

Sills with Marsh Plantings



Gwen Shaughnessy - DNR

Sills with Marsh Plantings



D. Burke and Associates

Major Factors in Selecting Design

- I Energy absorbed by shoreline
 - Fetch – distance wind travels over surface of water
 - Fetch directly correlates to wave size
- I Depth of water
- I Existing shoreline
- I Cost

