VIMS Shoreline Permit Application Report # 02-1521

APPLICANT: LINWOOD C. HANBURY
Immediate Waterway: Bennetts Creek
Locality: CITY OF SUFFOLK
Purpose: Erosion Control
Application Type: Wetlands
Site Inspection: 9/10/02
Report Date: 9/11/02

Type of Activity

<table>
<thead>
<tr>
<th>Proposed Extent</th>
<th>Project Location</th>
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</thead>
<tbody>
<tr>
<td><strong>Bulkhead (ft)</strong></td>
<td></td>
</tr>
<tr>
<td>Fill Saltmarsh Cordgrass Community (Type I) (ft²)</td>
<td>600</td>
</tr>
<tr>
<td>Impact Saltmarsh Cordgrass Community (Type I) (ft²)</td>
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</tr>
<tr>
<td><strong>Riprap (ft)</strong></td>
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Total Impacts (ft²) 850
Total Impacts (Wetlands) 850
Total Impacts (Subaqueous) 0
Total Impacts (Beach/Dune) 0
Total Fill (ft²) 850
NOTICE

The Virginia Institute of Marine Science (VIMS) is aware that regulatory or administrative bodies who weigh the overall potential public and private benefits and detriments in arriving at decisions must also consider other factors such as economics, aesthetics, zoning, or community desires. INFORMATION PROVIDED IN THIS REPORT IS, THEREFORE, ONLY THE ENVIRONMENTAL AND MARINE RESOURCES INPUT INTO THE DECISION MAKING PROCESS.

This assessment is based on biological, chemical, geological, and physical factors affecting the marine environment at and in the vicinity of the proposed activity. Parameters of the marine environment which may influence recreational, commercial, or industrial activities which are dependent on the marine environment are also considered where applicable.

Comments:

It is our opinion that the individual and cumulative adverse environmental impacts resulting from a portion of this project warrant careful consideration. The following report summarizes these impacts and, where appropriate, suggests alternatives to minimize environmental effects.

The applicant is proposing 145 linear feet of bulkhead along the cleared portion of his waterfront and 65 feet of riprap along the naturally vegetated shoreline segment. A fringing salt marsh cordgrass marsh has colonized in the intertidal zone and there does not appear to be significant erosive energy involved. The bulkhead is aligned two to eight feet into the wetlands and averages an estimated four feet. From an environmental perspective we would recommend starting the downstream end of the bulkhead at the inboard fence post (approximately 8 feet landward of the proposed starting point) rather than the most outboard one and running the alignment to the existing loblolly pine, as proposed. Such a modification will eliminate all but a few square feet of impact to the marsh.

The riprap also encroaches into the marsh by three to four feet and we would suggest that the slope for the filter cloth and stone be established by cutting the existing slope with no fill to be used. This will minimize loss of the fringe marsh due to riprap placement.

Thomas A. Barnard, Ph.D.
Marine Scientist
Hydrologic units represent smaller, isolated watersheds defined by topography and flow direction. These units can be thought of as insulated ecosystems or landscapes within which resources can be managed at a larger scale. The cumulative impact of a project to resources within a hydrologic unit may be significantly greater than the impact to the larger watershed above.
Project site

Lower James River (Tidal) watershed

Tidal Marsh Inventory - TMI
- Arrow Arum-Pickerelweed
- Big Cordgrass
- Black Needlerush
- Brackish Water Mixed
- Cattail
- Freshwater Mixed
- Reed Grass
- Saltbush
- Saltmeadow
- Saltmarsh Cordgrass
- Yellow Pond Lily

Roads
- Primary
- Secondary
- Tertiary

Intertidal flat

Open water

0 0.5 1 Miles

City of Suffolk
LOWER JAMES RIVER (TIDAL)
Bennetts Creek

Permit Site Study Area
To Wetlands Board: Please indicate Wetlands Board action on this sheet and return to VIMS

Application Number: 02-1521
Name: Linwood C. Hanbury
Locality: City of Suffolk
Waterway: Bennetts Creek

Please check here if this application was approved as proposed ____
Complete the form below if the application was modified.

<table>
<thead>
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<th>PROPOSED</th>
<th>PERMITTED</th>
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Comments: ____________________________________________________________________________________
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Certified by: __________________________________________