BETHLEHEM STEEL

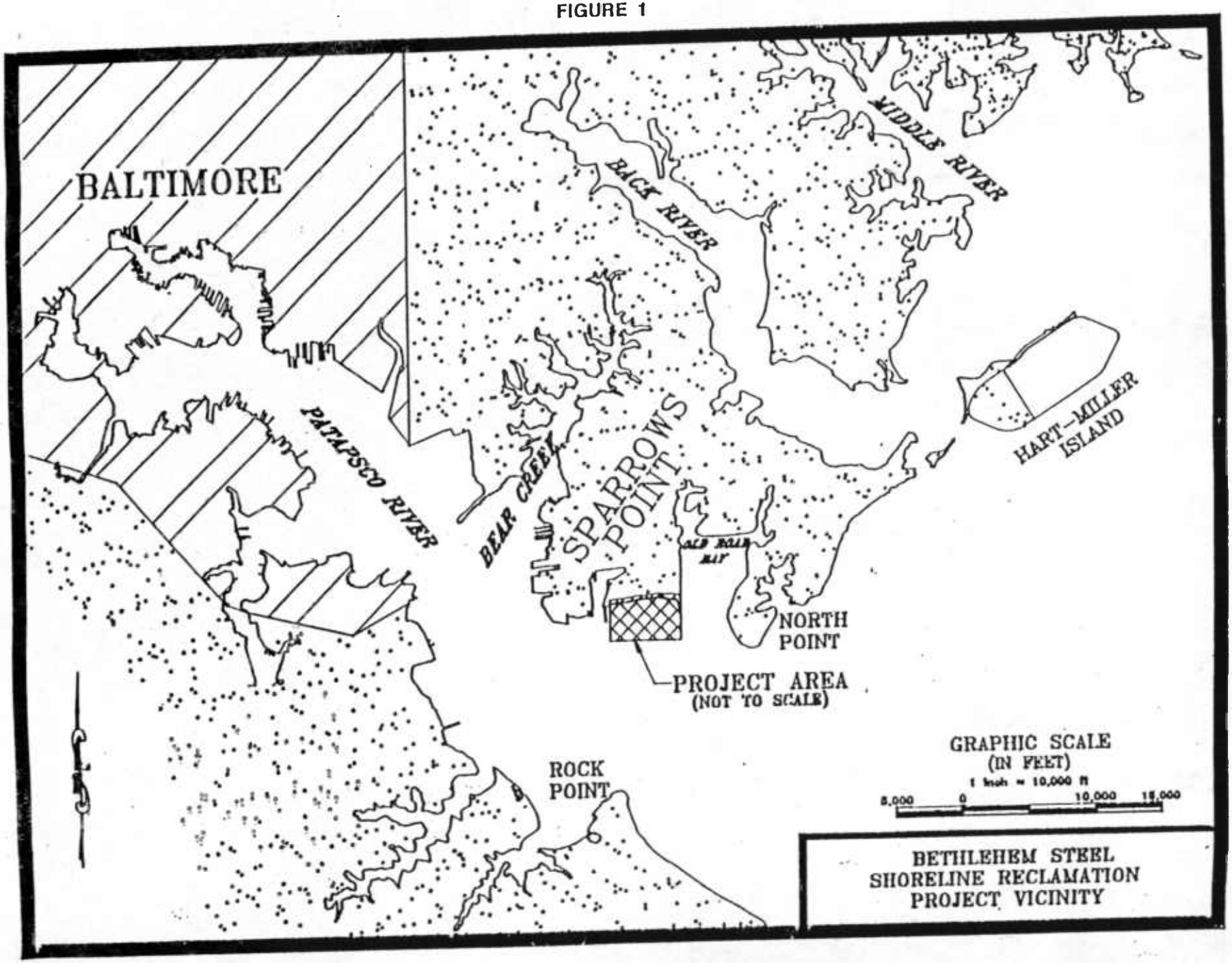
SHORELINE RECLAMATION

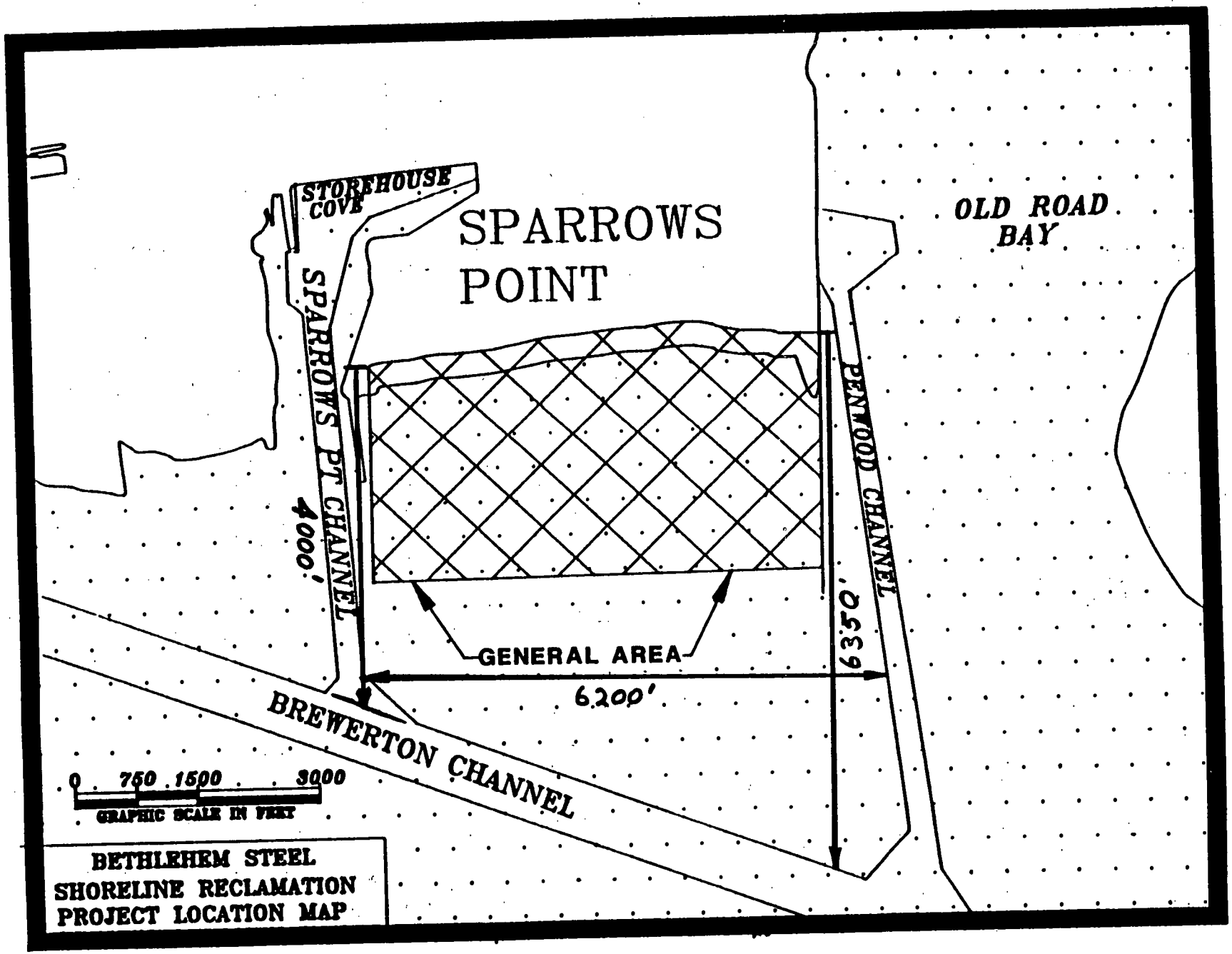
PROJECT SUMMARY

The Bethlehem Steel Shoreline Reclamation is an aggressive multi-year project proposed for utilizing clean dredged materials for the reclamation of the Bethlehem Steel shoreline. This unique beneficial use project would be executed in four phases; Project Development, Project Design, Project Construction, and Operations and Placement.

The proposed project site, owned by the Bethlehem Steel Corporation (BSC), is located on Sparrows Point on the Patapsco River downstream from Baltimore Harbor and is shown in Figure 1. The designated site for the reclamation project consists of approximately 5000 feet of shoreline and is bounded on three sides by the Brewerton, the Penwood, and the Sparrows Point Channels as shown in Figure 2. Preliminary capacity estimates range from 5 to 10 million cubic yards. Preliminary construction cost estimates are in the $20-30 million range. A 300 foot wide easement along the shoreline has been allocated for the project. BSC has agreed to participate with agencies of the State of Maryland to enhance the shoreline. The proposed project will use the sediments dredged from the harbor approach channels to create upland and wetland habitat for the wildlife along the river. Several hundred acres of habitat creation is planned.

FIGURE 1


BALTIMORE
PATAPSCO RIVER
BEAR CREEK
SPARROWS POINT
BACK RIVER
MIDDLE RIVER
HART-MILLER ISLAND
NORTH POINT
PROJECT AREA
(NOT TO SCALE)
ROCK POINT
GRAPHIC SCALE
(IN FEET)
1 inch = 10,000 ft
5,000
0
10,000
15,000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY


STOREHOUSE COVE
SPARROWS POINT
OLD ROAD BAY
SPARROWS PT CHANNEL
4000'
PENWOOD CHANNEL
6350'
GENERAL AREA
6200'
BREWERTON CHANNEL
0 750 1500 3000
GRAPHIC SCALE IN FEET
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT LOCATION MAP

The project will be executed in four phases. The goal of Phase One is to facilitate the completion of the following:

- o development of the reclamation concepts
- o development and execution of hydrodynamic model
- o development of the A/E scope of work for design phase
- o procurement of A/E for design phase
- o generate Agency and Public support of project.

The design of the project would be executed in Phase Two to include engineering and environmental studies which would yield the final plans and specifications for construction. The design will feature an onshore dewatering facility and an offshore wetlands area. The design will be sequenced such that the onshore facility would be operational as soon as possible.

The plans and specifications would be used to award a construction contract in Phase Three. The Construction Phase would also emphasize having the onshore facility operational as quickly as possible.

The placement of dredged sediments in Phase Four would closely follow the completion of the onshore dewatering facility and could continue for as much as 10 to 12 years as the capacity of the offshore containment facility is utilized. Operations of the site in this phase would be managed to ensure that maximum capacity is achieved. Placement sequencing would be utilized to facilitate the construction of the upland and wetland habitats. The dredged materials which have been dewatered would be used to construct a

berm at the shoreside boundary of the site. This berm would be planted with native species of shrubs, trees, etc. and developed into upland habitat which would act as a visual buffer between the river and the Sparrows Point industrial complex. The sediments in the offshore area of the site would be strategically placed and sculpted within the tidal zone. The area would be planted as wetland habitat.

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

June 20, 1994

RECEIVED
JUN 28 1994
HARBOR DEVELOPMENT

Mr. Frank Hamons, Manager
Harbor Development
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

RE: No Cost Extension; Contract No. 593917

Dear Mr. Hamons:

Maryland Environmental Service (MES) is requesting an extension to the term of the above referenced Contract for the Project entitled "Bethlehem Steel Shoreline Reclamation Phase I - Project Development". This is a no cost extension to allow MES to follow some additional work being done on the Hydrodynamic Model.

The Draft Final Report for the Hydrodynamic Model Study has been reviewed and satisfies the study requirements. MDE has chosen to initiate some additional model tests to further substantiate the results of the work done for the Sparrows Point Project and to better understand the circulation patterns of the Patapsco River system. MDE anticipates the additional work will be completed in July. We request an extension of the contract to August 31, 1994 to allow us to follow this work and incorporate the extra results or revise the Report as necessary to address the circulation in the vicinity of Sparrows Point.

Please indicate your agreement by signing on the line below and returning a copy to me.

Sincerely,

Keith D. Tate, P.E.
Program Director
Environmental Dredging Program

Approved:

Frank L. Hamons, Manager
Harbor Development

KDT/tms
cc: Nancy Balenske

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

SPARROWS POINT
SHORELINE ENHANCEMENT PROJECT

Public Information Meeting No. 1

DATE: May 19, 1993

LOCATION: Edgemere Knights of Columbus Hall

GROUPS: Edgemere/Millers Island Businessmen's Association and Baltimore County Waterman's Association

ATTENDANCE: Approximately 45 people (sign in sheet forthcoming)

OVERALL RESPONSE:

Attendees were very attentive to the needs of the Port as well the physical description of the proposed shoreline enhancement. The group as a whole committed to working with MPA and MES on the project. Senator Norman Stone concluded the discussion with "Let's keep an open mind about this project".

COMMENTS:

1. This is the first comprehensive approach that the state has taken on dredged material management. The state has a good team to address this issue in MPA/MES.

2. Can Baltimore County residents use Sparrows Point for their creek's dredged materials?

3. Are Pooles Island and Worton Point additional projects planned for implementation under the P.O.P program that we should worry about?

4. Filling 8 to 12 feet of water is not viewed as beneficial.

5. Be sure to consider the safety aspects of displacing recreational boating closer to the shipping channel.

6. Has anyone ever built large wetlands with dredged materials?

7. Large waves must be considered in the breakwater design due to ship traffic.

8. Will existing foundation support the project? Bethlehem Steel has had some failures of their fill materials.

9. Is current site bottom contaminated?

10. Where will contaminated material go if not to Sparrows Point?

11. When will we know the size of the site?

12. How will the structure differ from that at HMI? Will this project eliminate the use of the other inner harbor sites?

13. This group of state people working on the dredging program has done an excellent job at HMI.

14. Let's keep an open mind about this project.

BETHLEHEM STEEL SHORELINE RECLAMATION
FACT SHEET

I. BACKGROUND

Governor William Donald Schaefer's Task Force on Dredged Material Management (February 1991) report has recommended emphasis on beneficial uses of dredged material and development of an active and creative partnership of all parties concerned with dredge material management.

The Maryland Port Administration (MPA) is responsible to implement Task Force's recommendations. MPA with the assistance of the Maryland Environmental Service (MES) has developed a concept with Bethlehem Steel Corporation (BSC) to environmentally enhance a portion of shoreline and adjacent waters at BSC's Sparrows Point Facility using clean dredged material to construct wetland and upland habitat.

II. PROJECT DESCRIPTION

The project site is located at Bethlehem Steel's Sparrows Point Facility on the Patapsco River, as shown in Figure 1. The site is comprised of a portion of the Sparrows Point property and the adjacent waters. The property is currently used by Bethlehem Steel to stockpile ore for their manufacturing processes.

The project involves creating several hundred acres of wetlands using materials dredged from the approach channels to Baltimore Harbor. These wetlands will help stablize the shoreline, provide habitat for wildlife, and provide general beautification of the shoreline.

III. AGENCIES SUPPORTING THE PROJECT

The Maryland Port Administration will provide funds for environmental studies, engineering and design, and construction and maintenance. The Bethlehem Steel Corporation will provide necessary lands, easements and rights of way for the project. Key design input will be provided by the Maryland Departments of the Environment and Natural Resources. The U. S. Fish and Wildlife Service, National Marine Fisheries, Army Corps of Engineers and the Chesapeake Bay Foundation also will be providing input to the project.

The MES will manage the technical components of the project for the MPA as well as assist with the overall project administration.

IV. PUBLIC INVOLVEMENT

Briefings will be conducted early in the Project with local elected officials, community leaders and environmental interest groups to inform them about the Project. Meetings also will be conducted to address concerns from the general public. These meetings will be held throughout the Project.

Additionally, a Citizens Committee will be formed to help guide the Project. Meetings will be held on a regular basis to ensure local input to the Project's development.

V. PROCESS FOR IMPLEMENTATION OF PROJECT

The completion of this project depends on the execution of several phases, including initial assessment, environmental studies, engineering design, and construction.

An initial assessment will examine existing information and results from preliminary site studies to determine the feasibility of creating a wetland habitat at the proposed site.

Detailed environmental studies will be conducted to assess the impacts of the project on the existing environment. These studies will include a hydrodynamic study, investigating the effects of this Project on the circulation of the Patapsco River to ensure the health of the river and Baltimore Harbor. The results of the environmental studies will aid in obtaining the necessary permits from the U.S. Corps of Engineers, Maryland Department of the Environment, Department of Natural Resources, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service and National Marine Fisheries.

Engineering studies will produce the design for the wetlands project. Major portions of these studies will include the design of the retaining facility, developing methodologies for filling the site, and developing the habitat.

Three phases are involved in the construction of the project. The retaining facility will be constructed in the initial phase to hold the fill materials. Upon completion of the retaining structure, the site will be filled using materials dredged from the approach channels to Baltimore Harbor. The dredged materials will be placed in the site until the sediments reach an acceptable elevation for developing the wetland and upland habitat.

VI. STATUS OF PROJECT

MPA completed an initial assessment of the site in November, 1992 and has determined that wetlands creation is feasible.

The hydrodynamic study was initiated in November to investigate the effects of this Project on the circulation of the Patapsco River to ensure the health of the Patapsco River/Baltimore Harbor.

Design consultants will now be selected to assess the environmental impacts of the Project and provide the engineering design.

VII. SCHEDULE

o Environmental studies and engineering design	3/93-3/94
o Permits will be obtained	1/94-6/94
o Retaining structure construction	10/94-10/95
o Wetlands development	1995-2005

VIII. CONCLUSION

Detailed engineering and environmental studies will be performed to create several hundred acres of wildlife habitat consisting of aquatic, intertidal wetland, and upland habitat. The site will be filled and the wetlands will be constructed with materials dredged from the approach channels to Baltimore Harbor. A visual buffer will be created with trees and shrubs to enhance the aesthetics of the site and to shield the habitat from the industrial activities. The Maryland Port Administration and the Maryland Environmental Service have undertaken the Bethlehem Steel Shoreline Reclamation to demonstrate the benefits of wetland projects to the State of Maryland and its citizens.

December 1992

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SPARROWS POINT

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The Maryland Port Adminsitration (MPA) has requested the Maryland Environmental Service (MES) to develop concepts and schedules for implementing options for dredged material placement at site 2 and for a wetlands in Bear Creek. These two options are described below as separate projects and as an integrated plan.

Bear Creek Wetlands

The embayment on the western side of Sparrows Point encompasses approximately 70 acres. The concept for this site is to construct a small, intertidal wetland area as a proof-of-concept for beneficial use of dredged materials. Currently, there are no examples near Baltimore Harbor of wetlands created using dredged materials. The Bear Creek site would allow the local citizenry to closely follow the planning and construction of a beneficial use project. The MPA would have an opportunity to establish a record for providing environmental enhancements to the Baltimore Harbor.

The site, as seen in Figure 2, is small (about 70 acres) and shallow and could be constructed, filled, and planted within two to three years to quickly establish a viable marsh. Less than one million yards of dredged materials would be required for filling the site. When the marsh is fully established, the site could serve as an educational facility for local schools and civic groups. This project would also provide the MPA, MES, and the federal and state resource agencies an opportunity to assess the methodologies associated with constructing an intertidal wetland habitat.

The site is small and economical methods for constructing the wetland will be important. The shallow water and the confined nature of the site suggest a low-energy wave climate. Geotextile tubes, water-filled bags, and straw bales are low cost alternatives that may have applications for this site. Figure 3 presents a conceptual cross-section of the project site at three stages of construction. To provide an optimal foundation for the wetland plants, the materials would be placed in thin (~2 feet) lifts. Placement activities would be timed to allow the thin lifts to dewater and consolidate before the placement of the next lift. This timing would be established during the planning and design of the project. Minimal crust management is anticipated for this site. The marsh creation project at the Kenilworth Gardens, Washington, DC was constructed in a similar manner and would provide the model for developing this site.

The Bear Creek Wetlands Project would serve the MPA as a demonstration of the beneficial use of dredged material and would offer many public relations benefits. The wetlands will stand in contrast to the surrounding industrial landscape and will be quite visible from the northbound lane of I-695 just before crossing Bear Creek. This is expected to increase public awareness of the project and provide an opportunity to educate citizens in the beneficial use of dredged materials. Expanding the educational concept, the project may be a potential outdoor classroom opportunity to educate local school children about the Chesapeake Bay, its habitats, and environmental science.

The Bear Creek site has the potential to build public support for the original wetlands project proposed for the southern shoreline of Sparrows Point. This project has all the characteristics of the original project but on a smaller scale. Local interest groups can promote this project well. The outdoor classroom concept would further generate support through the school system and other organizations interested in educating people about the Bay and the environment.

The MPA has established a record for developing partnerships with the state and federal resource and regulatory agencies. The Bear Creek Wetlands Project would provide the MPA and the County an opportunity to develop new partnerships. Public and private organizations normally outside this area of interest may benefit by being associated with this educational project and provide funding or other support. Besides Beth Steel and Beth Ship, these organizations may include Baltimore Gas & Electric, State Highways Administration, and many private non-profit environmental groups.

Dredged Material Reclamation Facility - Site 2

Site 2 is an upland property with the abandoned pipe mill and is well suited for a dredged materials facility, but is within the five-mile non-containment zone. The MES has investigated some alternatives to traditional containment and proposes to assess a feasibility to recycle dredged materials as usable construction materials.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years, but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

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SPARROWS POINT SHORELINE RECLAMATION

MARYLAND
PORT
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MARYLAND
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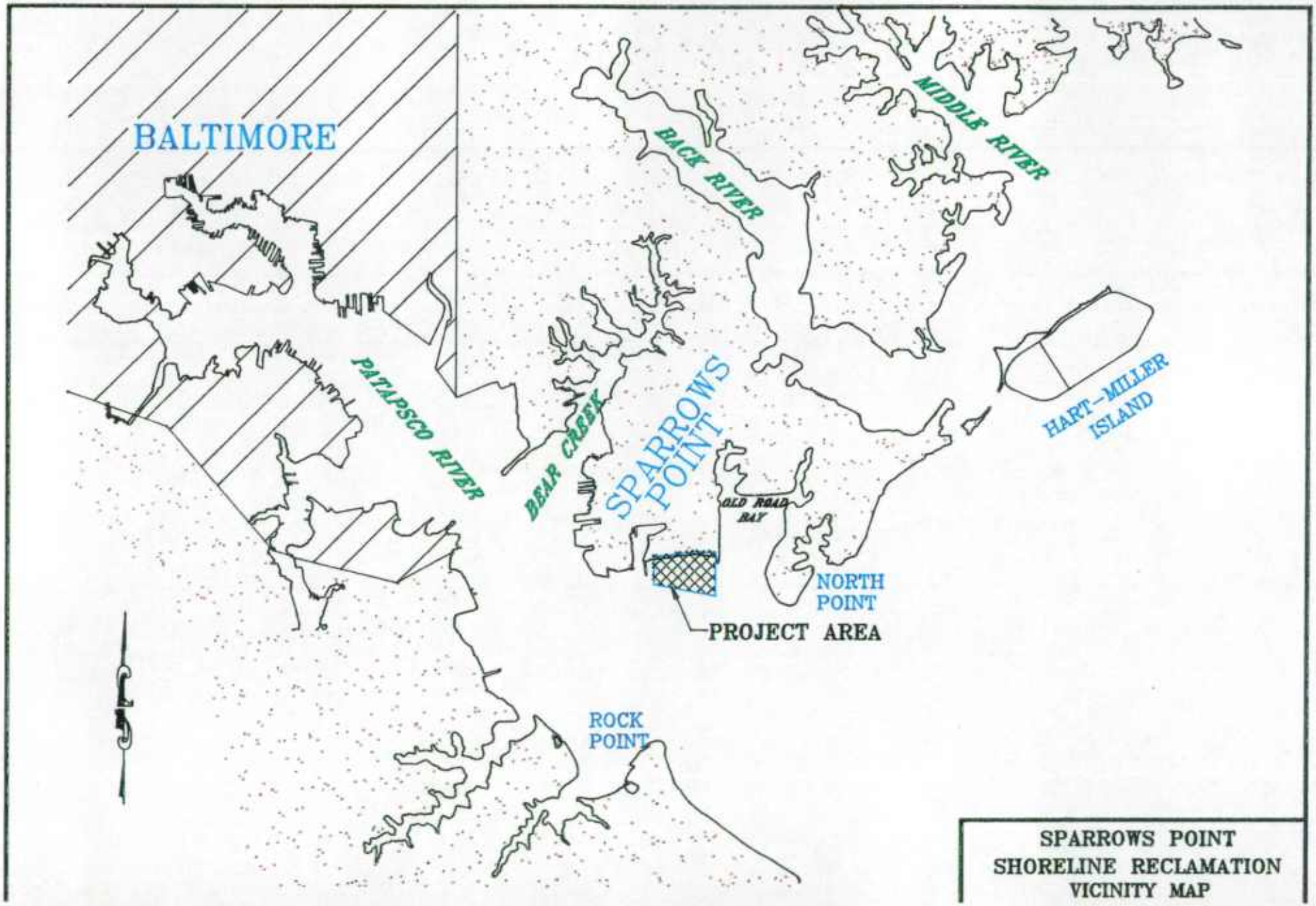
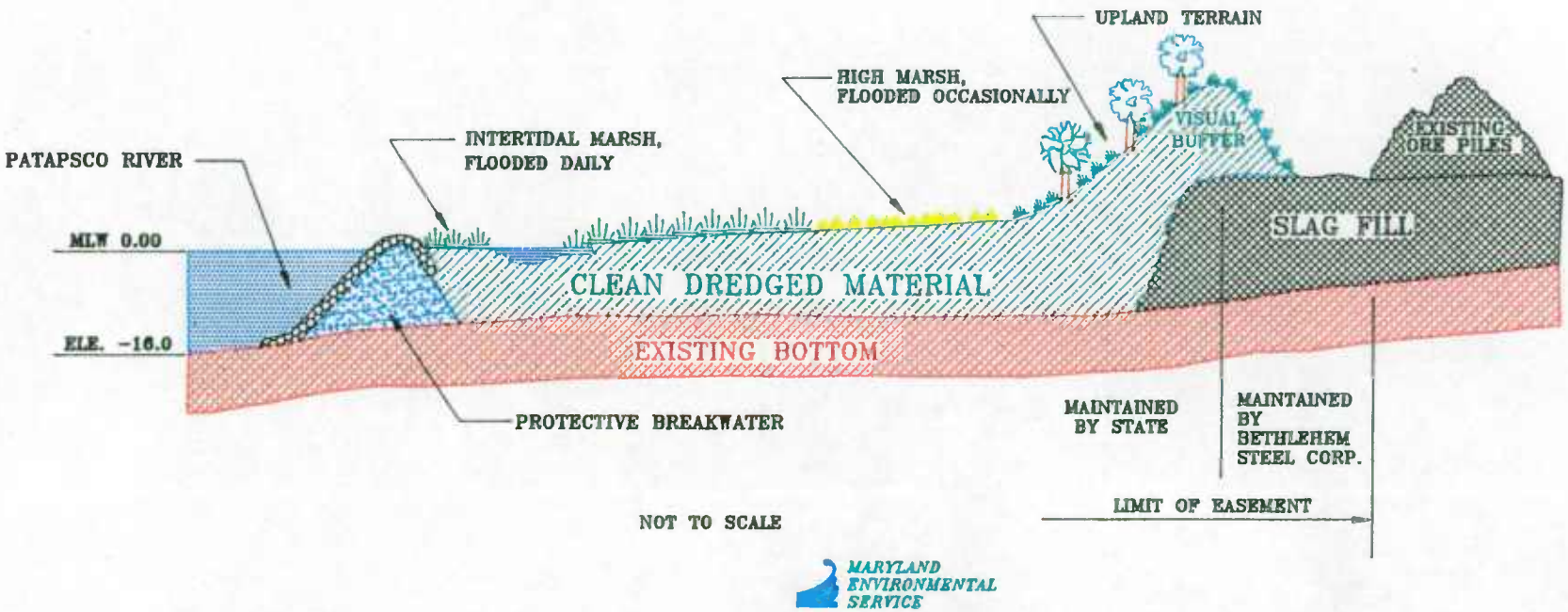
SPRING 1993

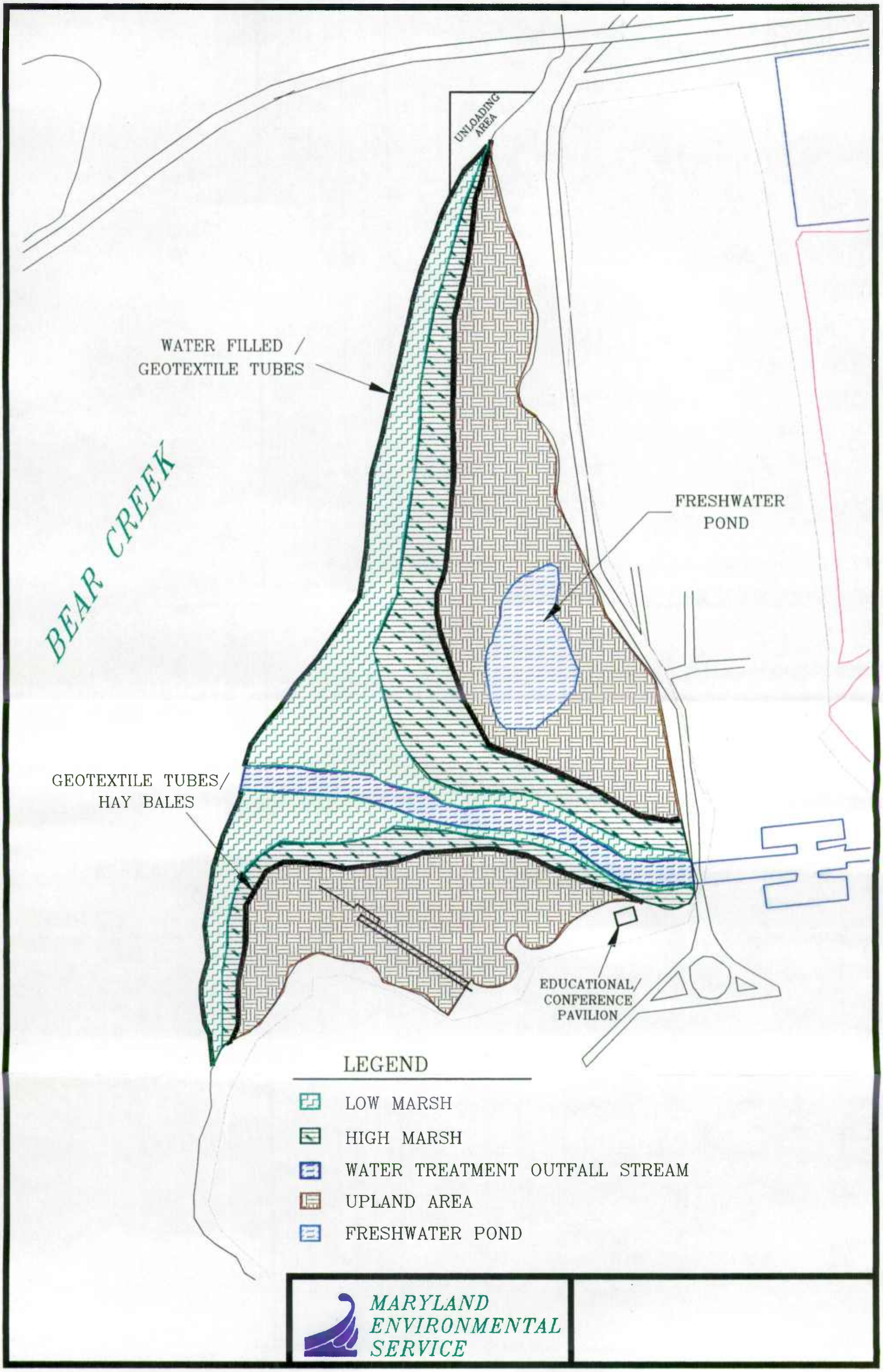


SPARROWS POINT
SHORELINE RECLAMATION
VICINITY MAP

SPARROWS POINT SHORELINE RECLAMATION PROJECT
CONCEPTUAL SKETCH



MARYLAND ENVIRONMENTAL SERVICE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SPARROWS POINT SHORELINE RECLAMATION

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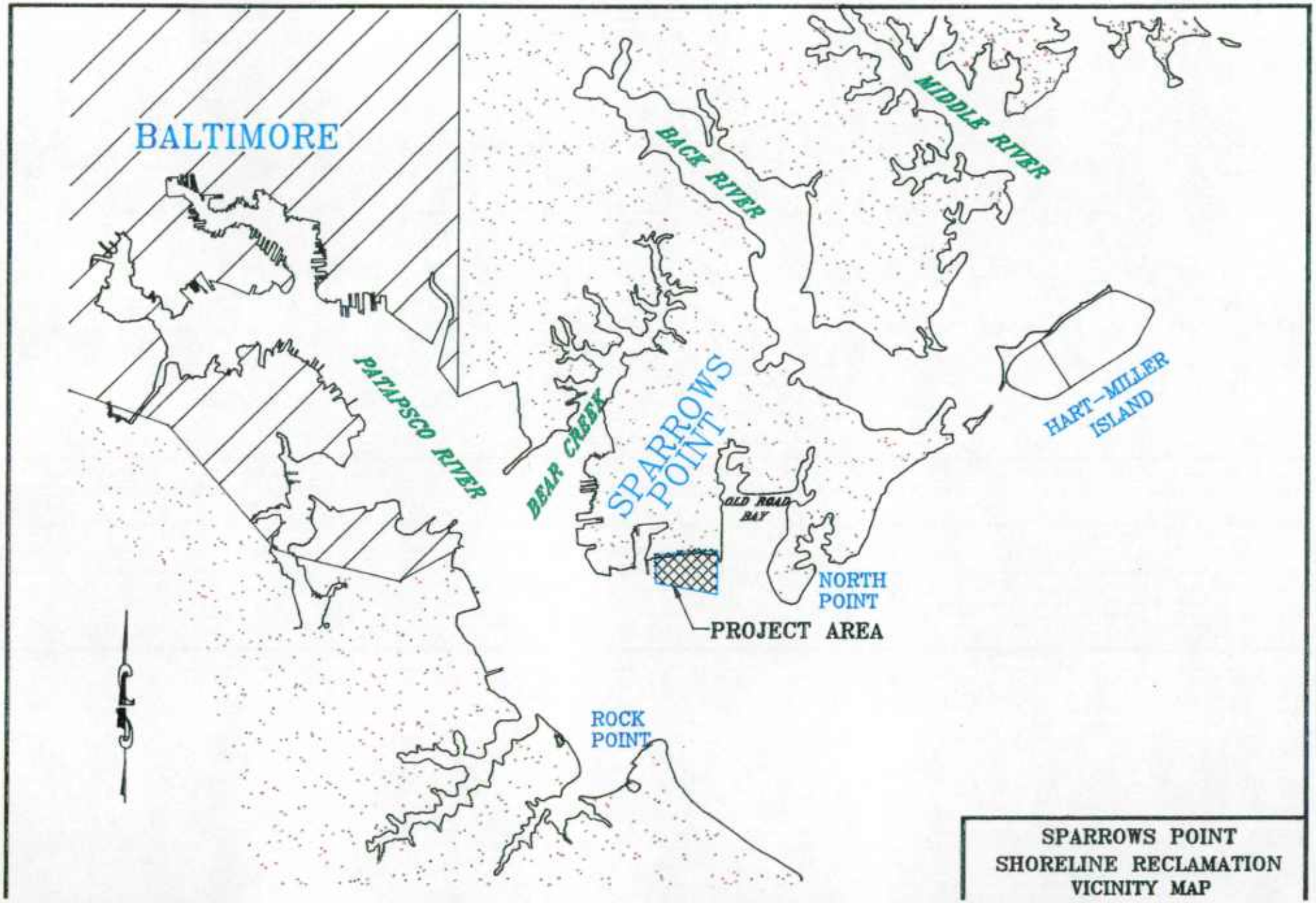

SPARROWS POINT
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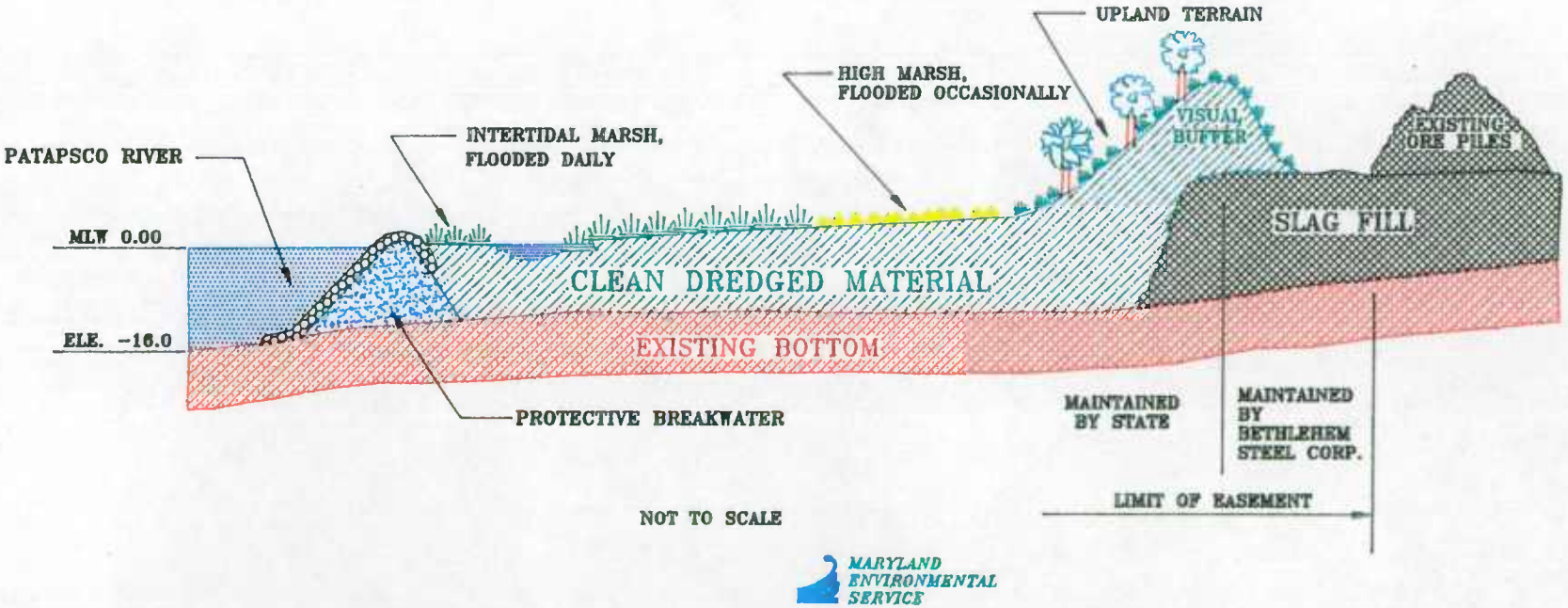
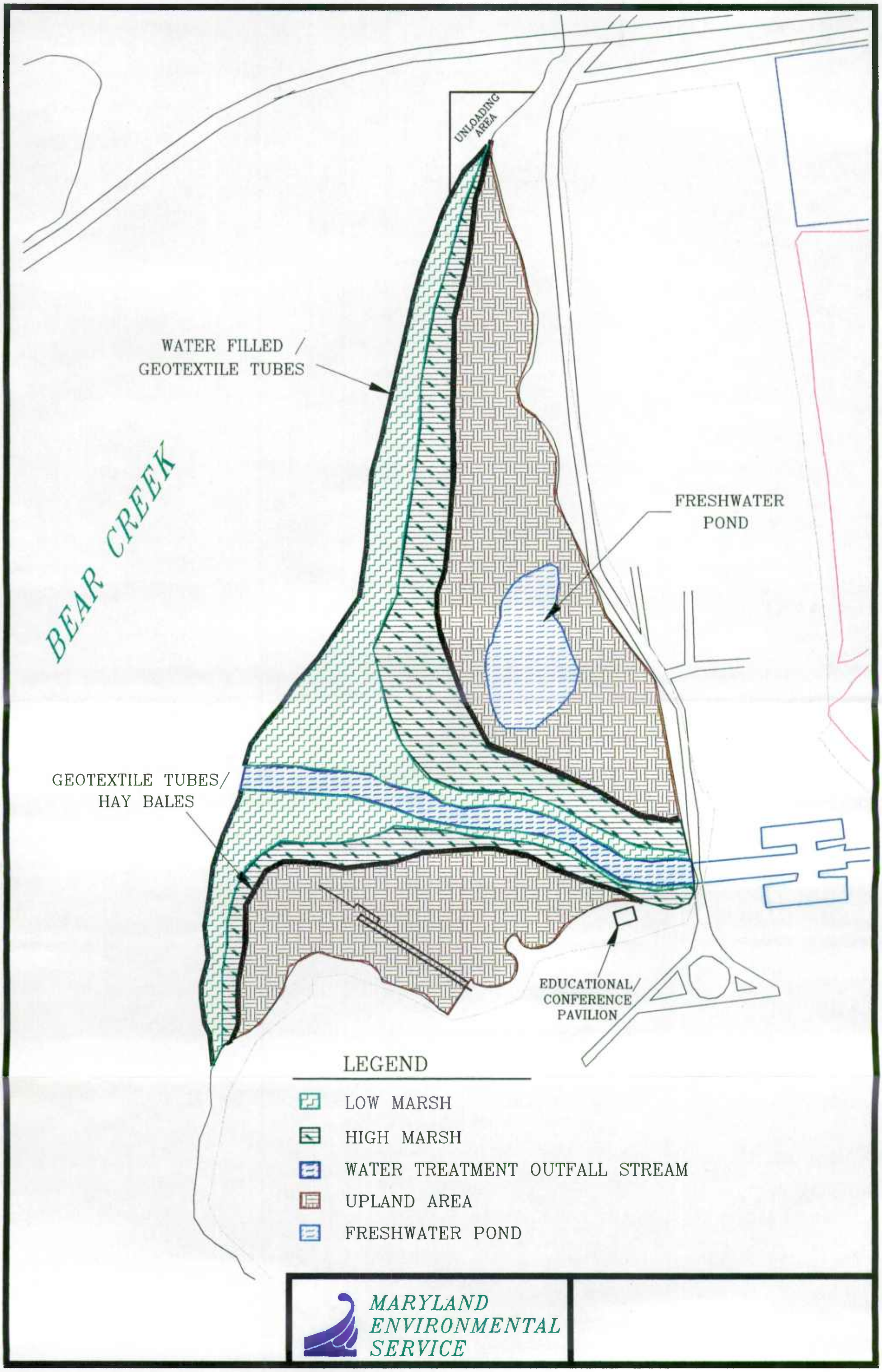


MARYLAND ENVIRONMENTAL SERVICE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The site is small and economical methods for constructing the wetland will be important. The shallow water and the confined nature of the site suggest a low-energy wave climate. Geotextile tubes, water-filled bags, and straw bales are low cost alternatives that may have applications for this site. Figure 3 presents a conceptual cross-section of the project site at three stages of construction. To provide an optimal foundation for the wetland plants, the materials would be placed in thin (~2 feet) lifts. Placement activities would be timed to allow the thin lifts to dewater and consolidate before the placement of the next lift. This timing would be established during the planning and design of the project. Minimal crust management is anticipated for this site. The marsh creation project at the Kenilworth Gardens, Washington, DC was constructed in a similar manner and would provide the model for developing this site.

The Bear Creek Wetlands Project would serve the MPA as a demonstration of the beneficial use of dredged material and would offer many public relations benefits. The wetlands will stand in contrast to the surrounding industrial landscape and will be quite visible from the northbound lane of I-695 just before crossing Bear Creek. This is expected to increase public awareness of the project and provide an opportunity to educate citizens in the beneficial use of dredged materials. Expanding the educational concept, the project may be a potential outdoor classroom opportunity to educate local school children about the Chesapeake Bay, its habitats, and environmental science.

The Bear Creek site has the potential to build public support for the original wetlands project proposed for the southern shoreline of Sparrows Point. This project has all the characteristics of the original project but on a smaller scale. Local interest groups can promote this project well. The outdoor classroom concept would further generate support through the school system and other organizations interested in educating people about the Bay and the environment.

The MPA has established a record for developing partnerships with the state and federal resource and regulatory agencies. The Bear Creek Wetlands Project would provide the MPA and the County an opportunity to develop new partnerships. Public and private organizations normally outside this area of interest may benefit by being associated with this educational project and provide funding or other support. Besides Beth Steel and Beth Ship, these organizations may include Baltimore Gas & Electric, State Highways Administration, and many private non-profit environmental groups.

Dredged Material Reclamation Facility - Site 2

Site 2 is an upland property with the abandoned pipe mill and is well suited for a dredged materials facility, but is within the five-mile non-containment zone. The MES has investigated some alternatives to traditional containment and proposes to assess a feasibility to recycle dredged materials as usable construction materials.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years, but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

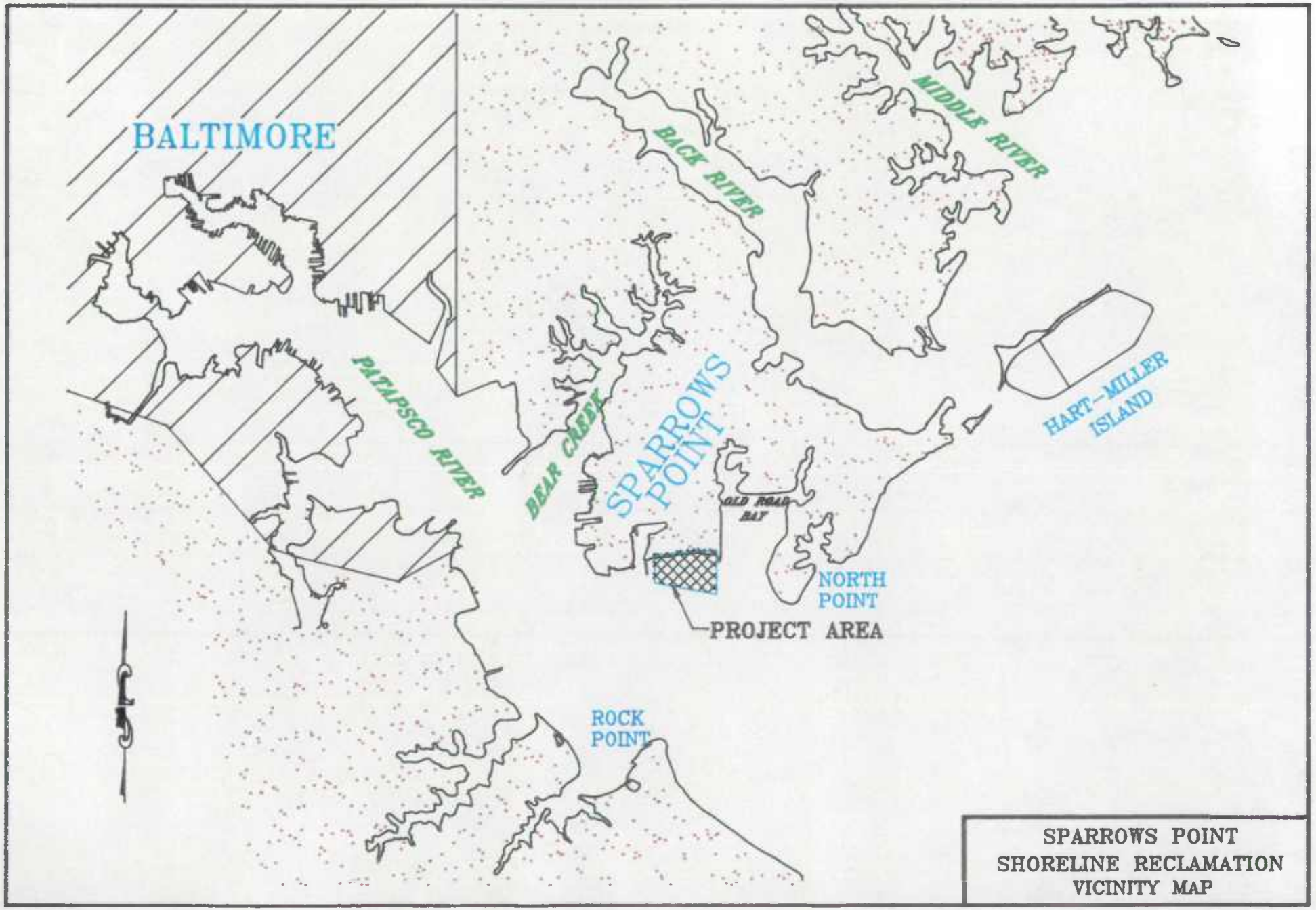
lear:bearconc

SPARROWS POINT SHORELINE RECLAMATION

MARYLAND
PORT
ADMINISTRATION

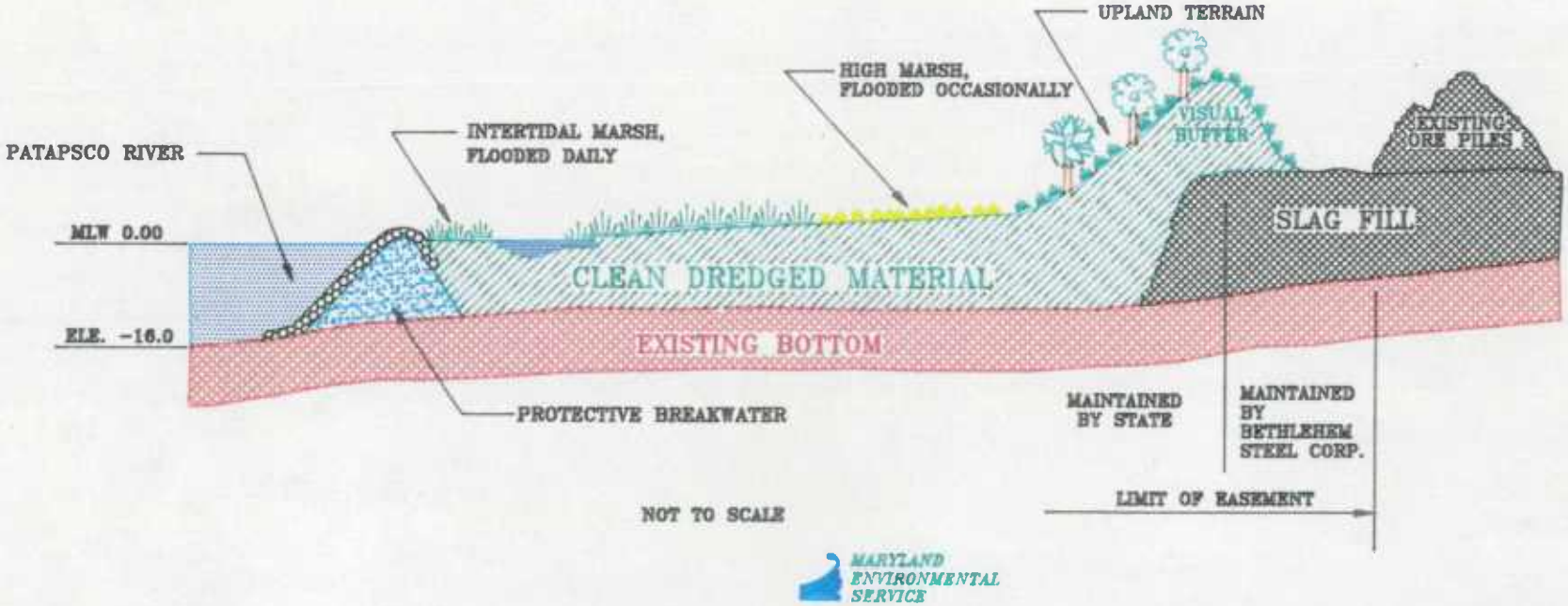
MARYLAND
ENVIRONMENTAL
SERVICE

SPRING 1993

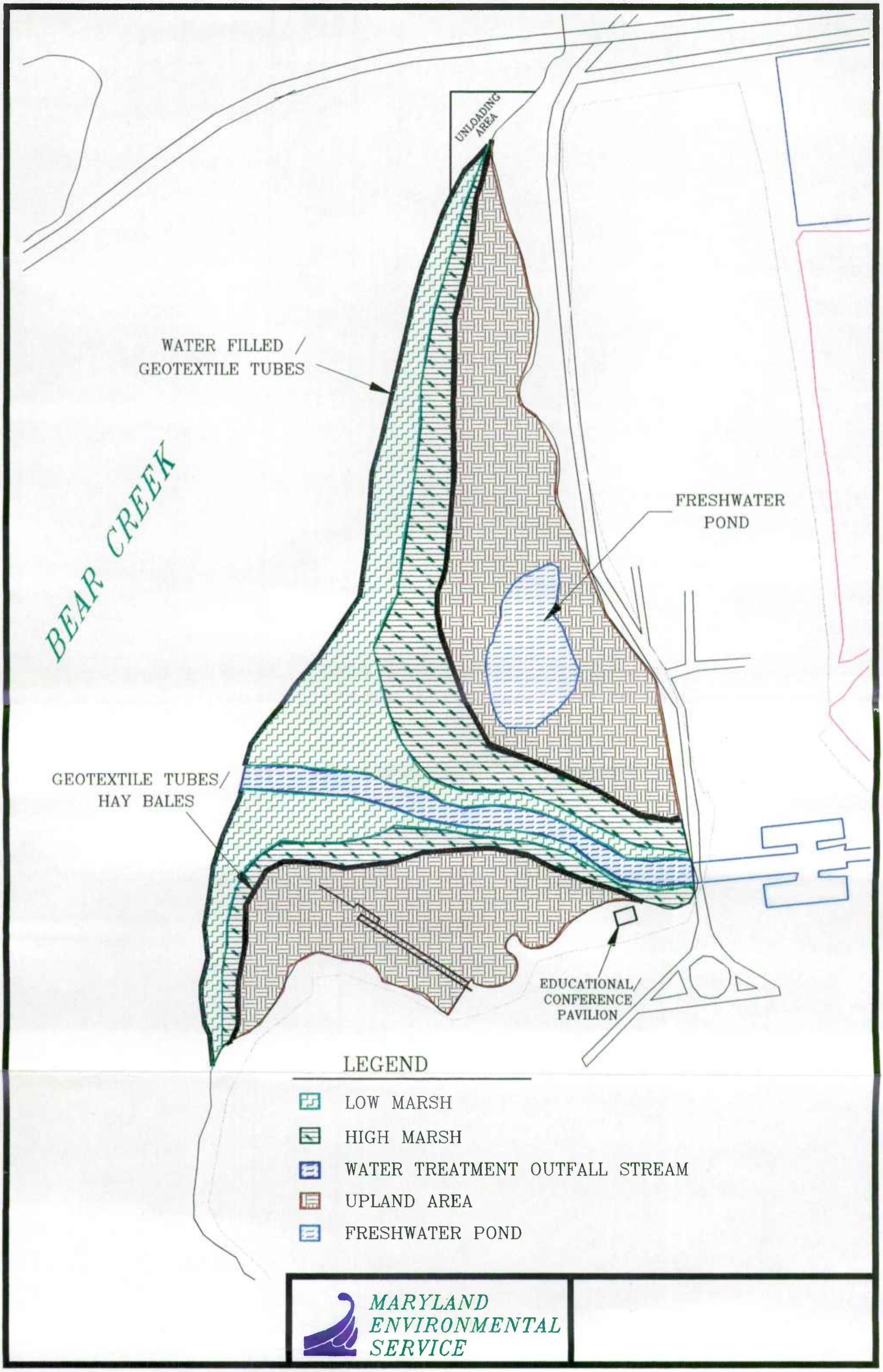


SPARROWS POINT
SHORELINE RECLAMATION
VICINITY MAP

SPARROWS POINT SHORELINE RECLAMATION PROJECT
CONCEPTUAL SKETCH



MARYLAND ENVIRONMENTAL SERVICE


UNLOADING AREA
WATER FILLED / GEOTEXTILE TUBES
BEAR CREEK
FRESHWATER POND
GEOTEXTILE TUBES/ HAY BALES
EDUCATIONAL/ CONFERENCE PAVILION
LEGEND
LOW MARSH
HIGH MARSH
WATER TREATMENT OUTFALL STREAM
UPLAND AREA
FRESHWATER POND
MARYLAND ENVIRONMENTAL SERVICE

DTT.1

MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT
LAND USE MAP

BETA STEEL

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

July 14, 1992

William Donald Schaefer
Governor

Maryland Port Commission
O. James Lighthizer
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
Milton H. Miller, Sr.
John M. Waltersdorf
Fred L. Wineland

Adrian G. Teel
Executive Director

Mr. Charles A. Byus
Geotechnical Explorations
2323 West Joppa Road
Brooklandville, Maryland 21022

RE: Bethlehem Steel Shoreline Reclamation Geotechnical Investigations Request for Proposal

Dear Mr. Byus:

This will confirm our discussion with Mr. John Snowberger of State Highway Administration concerning geotechnical investigations for the proposed shoreline reclamation project at Bethlehem Steel. We are requesting a cost estimate for your assistance in providing the following services:

Task 1, Field Investigations

Five sample locations approximately 2,500 ft. from the shoreline at approximately equidistant intervals on a line between the ore pier channel and the Pennwood Wharf channel:

- obtain two shelby tubes at (depths -30' MLW to -40' MLW and -50' MLW to -60' MLW) each location
- in-situ vane sheer tests at (depths -30' MLW to -40' MLW and -50' MLW to -60' MLW) each location
- probings to determine location of relative hard bottom (i.e. weight of rod)
- documentation of boring locations.

Laboratory Analyses:

- Atterberg Limits
- Water Content
- Unconfined Compression Tests

Reports:

- All field logs and laboratory results to be provided.

My telephone number is 410-631-1102

Fax: 1-410-631-_____

Task 2, Design Analyses

Review and analyze the results of the field investigations to determine:

- design concepts for the containment structure for dredged materials
- stability analyses for the concepts
- provide typical cross sections of design concepts

Reports:

- design concepts and analyses to be provided in a report format.

We would like to have a determination of SHA's capabilities to perform Tasks 1 and 2 within the next two weeks since this project is on a fast track. Please include a schedule and cost estimate for this work in your proposal.

If you need additional information, please call me.

Sincerely,

Frank L. Hamons

Frank L. Hamons
Manager
Harbor Development

FLH/kyj

cc: D. Bibo
W. Lear
A. Serio
K. Tate, MES
J. Snowberger, SHA

hamons:byus.dfb

SHA

7/15/92

SCOPE OF WORK

GEOTECHNICAL & ENGINEERING INVESTIGATIONS

The Contractor shall supply all labor, materials and equipment to conduct preliminary soils investigations at designated locations at Bethlehem Steel sites.

The work shall include but not be limited to:

- mobilization and demobilization of drilling equipment;

DAVE FYI

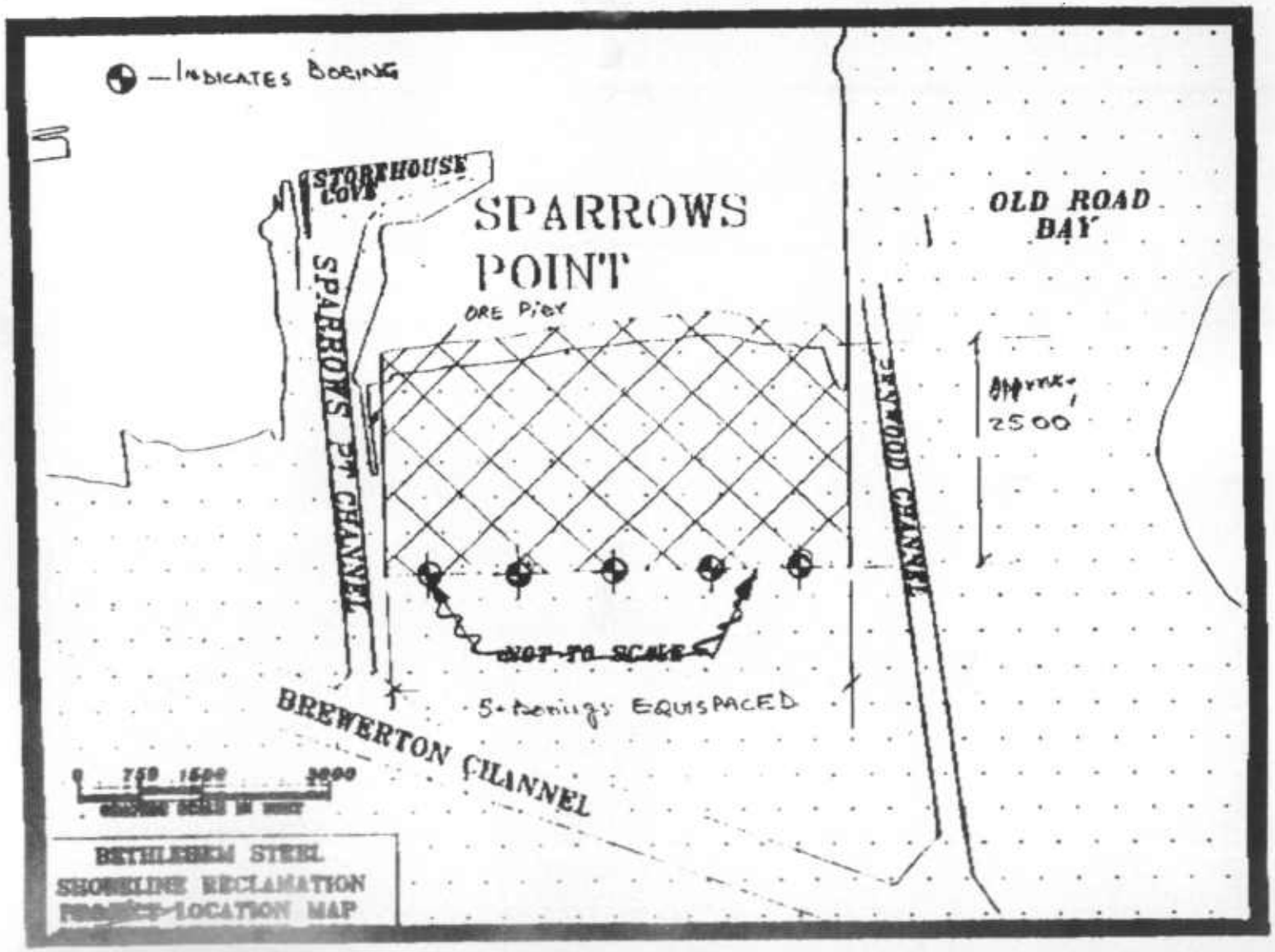
- perform borings at five locations to forty (40) feet below mud line. Two Shelby tubes and two vane shear tests will be obtained at random depths between 5 feet and 40 feet at each location;
- probings to determine location of relative hard bottom (i.e. weight on rod)
- testing of each sample for Atterberg limits, water contents and unconfined compression test;
- evaluate alternate method(s) for constructing the dike;
- evaluate innovative concepts for approach for designing the dike;
- stability analysis for the concepts;
- typical cross sections of each conceptual structure.

The approximate locations of borings shall be as shown on the sketch (attached).

Boring logs along the ore pier near Sparrows Point channel and fill area are available for inspection. Please call Keith Tate (telephone 410-974-7261) for appointment.

A report of investigations shall be prepared and conclusions recorded. The Contractor shall supply one original and nine copies of the report to MES.

The report shall include review and analyses of results of field investigations to determine: concepts for the containment structure for dredged material; stability analyses for the concepts; and typical cross sections of dike concept.


— INDICATES BORING
STORMHOUSE COVE
SPARROWS POINT
ORE PIER
SPARROWS PT CHANNEL
OLD ROAD BAY
SEAWOOD CHANNEL
APPROX. 2500
NOT TO SCALE
5 borings EQUISPACED
BREWERTON CHANNEL
0 750 1500 3000
BETHLEHEM STEEL
SHORELINE RECLAMATION
LOCATION MAP

BORINGS

Maryland Department of Natural Resources

Maryland Environmental Service
2020 Industrial Drive
Annapolis, Maryland 21401
(301) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

7/15/92
DATE

FACSIMILE TRANSMITTAL

COVER MEMORANDUM

TO: Dave Bibo

FROM: Keith Tate

TOTAL NUMBER OF PAGES (including cover memo) 4

We are transmitting from an Omnifax G66, Thermal Facsimile Transceiver (Telephone # 301-974-7236). If you have any questions or do not receive all the pages, please call 301-974-7254.

Thank you.

ADDITIONAL MESSAGE I don't think it will make any difference in the SHA time/cost estimate, however, a little better description of shelby tube & vane shear needs are described in attachment

REPORT TO MANAGEMENT COMMITTEE
PLACEMENT OPTIONS PROGRAM
SPARROWS POINT SHORELINE RECLAMATION

October 19, 1994

A. Working Group Meeting - 2/8, 3/1, 4/15, 5/10, 8/10, 12/2/93

B. Status of Project

1. Activities continue for the collection of blue crab, fish, benthics, and plankton to compare the project site to ecologically similar areas as well as to existing data.

2. The modelers at the Univ. of Maryland have completed the additional model tests to better understand the relationship of wind and tidal influences on the circulation. The additional results do not change the original conclusions that the flushing rates in Old Road Bay and Bear Creek are decreased by less than 1%. The results of these additional studies will be integrated, as an additional chapter, into the report for the Sparrows Point project.

3. Further assessment of the upland properties at Sparrows Point indicate three potential areas totaling almost 200 acres. This equates to about 320,000 cubic yards per foot of fill.

- NW. TO BE DIST TO WORKING GROUP -
- WORKING GROUP TO MEET IN DEC.
- WHAT IS POSIBLE OR WHEN -
  WILL IT BE OPERATIONAL.
-

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Pt. Public Concerns - EATS Task 5 MONTH: August 1994
CONTRACT NO. 294904 PIN: 600105P
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

ACTIVITIES:

- Collection activities for the biological studies are continuing. The fish and crab and the zooplankton sampling is over 50% complete. The benthics sampling is to occur in early September.
- Further conversations with Bethlehem Steel and Baltimore County Government indicate that the use of the other areas of Sparrows Point for dredged materials placement is looking more favorable. MES continued to advocate the use of the slag disposal area on the southwest corner of Sparrows Point and the possible expansion of one of the parcels to include the property of the abandoned pipe mill.
- MPA conducted a bathymetric survey of area off the southwestern point of the Sparrows Point property for use in developing concepts of another placement area.

ISSUES:

- None at this time

EXTRA WORK:

- None at this time

COMMENTS:

- None at this time

FUNDING:

- Total funding allocated to this project is $129,951.
- As of the last invoice dated June 30, 1994, expenditures for the Field Studies are $14,530.47.

Robert Smith
Project Manager

Sept 14, 1994
Date

orig-filed

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Pt. Public Concerns - EATS Task 5 **MONTH:** August 1994
CONTRACT NO. 294904 **PIN:** 600105P
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

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- None at this time

EXTRA WORK:

- None at this time

COMMENTS:

- None at this time

FUNDING:

- Total funding allocated to this project is $129,951.
- As of the last invoice dated June 30, 1994, expenditures for the Field Studies are $14,530.47.

Robert Smith
Project Manager

Sept 14, 1994
Date

Notes from Meeting with Baltimore County Departments of Economic Development and Environmental Protection and Resource Management on June 7, 1994

Attendees

Neil Jacobs - Director, Economic Development
Adam Wasserman - Economic Dev.
Jim Dieter - Director, Environmental Protection
Don Outen - Enviro. Protection
David Filbert - Enviro. Protection
John Hobner - Enviro. Protection
Lee Zeni - Maryland Environmental Service
Robert Smith - Maryland Environmental Service

Baltimore County has been discussing the exchange of the Sparrows Point property shown on the attached map.

Parcel 1A is a storage area for spare parts and odd pieces. The foundation is slag fill at an elevation of 20' MLW and is over 10 feet above the roadway to the north. This parcel is a good candidate for industrial development and a poor choice for a dredge material placement site.

Parcel 1B is an old fill site with partial dikes and drainage. It does have areas of standing water and would be suitable for a small (60 acre) placement site. Baltimore County is amenable to the use of 1B for placement.

Parcel 2 is approximately 70 acres situated east of an abandoned pipe mill (gutted) and north of an existing lagoon. The site is predominately a mud flat with a sparse distribution of trees.

Parcel 3A is the largest parcel under consideration. This parcel is the site of an old community (referred to as the bungalows) and is intended for industrial development and the County is not amenable to the use of 3A for a dredge material placement site.

Parcel 3B is the smallest parcel under consideration with less than 30 acres. It might be possible to use 3B for a material placement site, but its small area may preclude an economical site.

Baltimore County DEPRM has discussed the possibility of having Bethlehem Steel Corporation establish a mitigation bank at Sparrows Point to allow for future development without the traditional regulatory hurdles. The dredge material placement sites/wetland habitat creation may enhance mitigation bank for BSC and Baltimore County will suggest this approach in future discussions with BSC.

Environmental studies have been done on the 5 parcels under consideration. Results not discussed at the meeting.

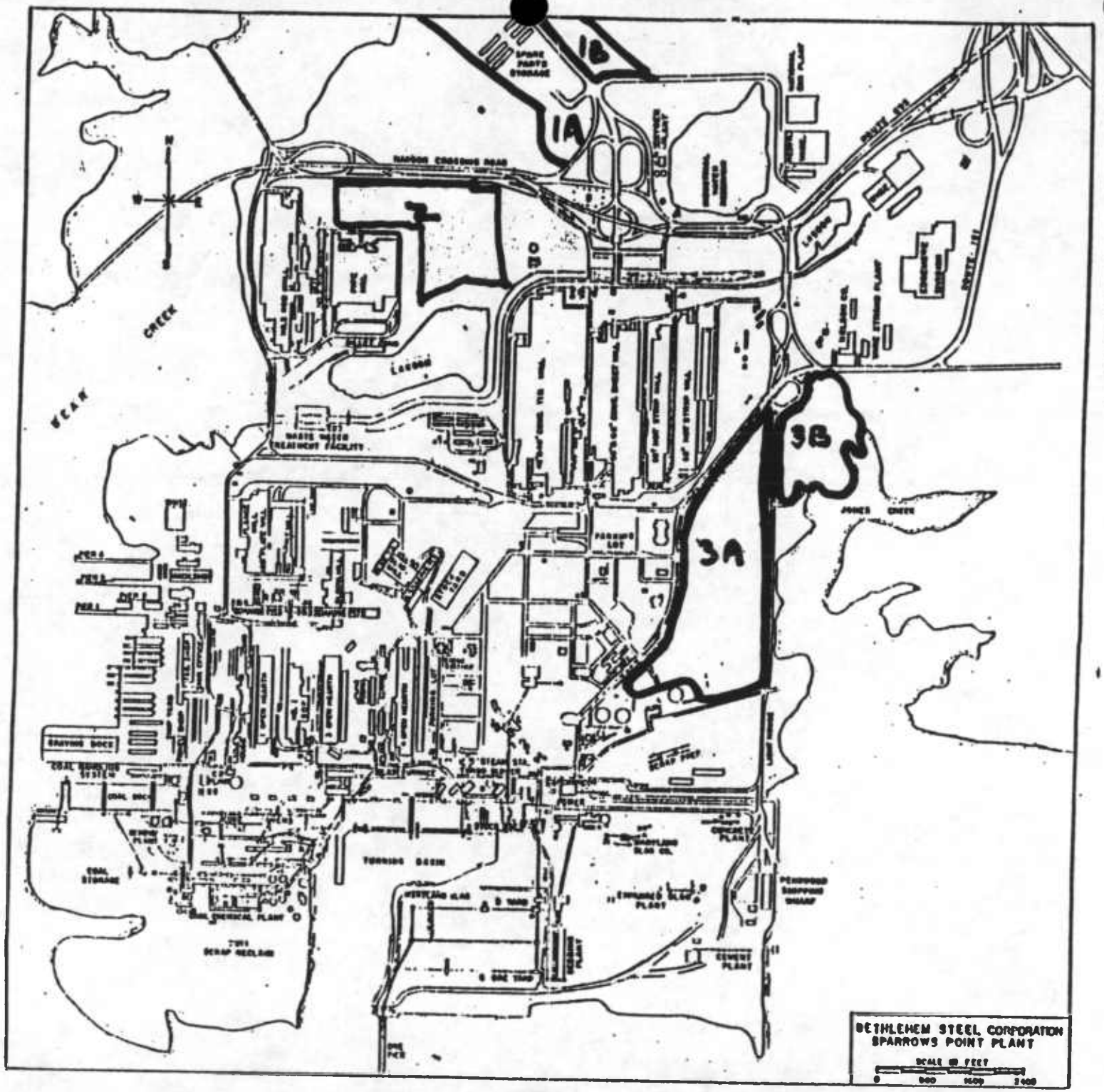
The property on the west side of the Sparrows Point channel (the western promontory) was also mentioned as part of MES inquiry to the amount of information on the property. DEPRM says there are no historical indications of contaminants but the parcels should be tested.

Summary: Three of the five sites can be investigated further for use as dredge material placement sites. 1B, 2 and 3B. Site 3B should take a low priority due to its small size. (30 acres- feet of material is only 48,400 cubic yards; 1 MCY would raise it 21 feet high)

1B has partial dikes and drainage and is adjacent to Bear Creek. Total area is over 45 acres. Small capacity but may be suitable for small dredging projects such as "inner harbor" material.

Site 2 is about 70 acres and again may be suitable for inner harbor projects. Another approach to using this site may be to investigate the use and inclusion of the area containing the abandoned pipe mill. The buildings have been gutted of the machinery and equipment and only the deteriorating buildings remain. Additional area could be 60-70 acres. ((Post meeting thought: Inquire about the use and inclusion of the lagoon to the south of the pipe mill. Another 60 acres could result in a 200 acre site))

MES should also pursue the use of the western promontory. It is in very close proximity to the Brewerton Channel but the upland area may provide an adequate capacity to limit the construction in the water


1B
1A
SPARE PARTS STORAGE
RAILROAD CROSSING ROAD
LAGOON
WEAK CREEK
WASTE WATER TREATMENT FACILITY
3B
3A
JONES CREEK
PARKING LOT
DRYING DOCK
COAL STORAGE
COAL CHEMICAL PLANT
SCRAP RECLAIM
TURNING BASIN
CEMENT PLANT
BETHLEHEM STEEL CORPORATION
SPARROWS POINT PLANT
SCALE IN FEET
0
800
1600
2400

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Pt. Public Concerns - EATS Task 5 MONTH: July 1994
CONTRACT NO. 294904 PIN: 600105P
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

ACTIVITIES:

- All contracts for the biological studies have been executed.
- The University of Maryland Center for Environmental and Estuarine Studies (UMCEES) conducted the July fish and crab sampling activities on 7/26/94.

ISSUES:

- None at this time

EXTRA WORK:

- None at this time

COMMENTS:

- The Project Management Report for June 1994 stated that the University of Maryland Center for Environmental and Estuarine Studies (UMCEES) conducted the May fish and crab sampling activities on 6/23/94. This should have read "June" instead of "May"

FUNDING:

- Total funding allocated to this project is $129,951.
- As of the last invoice dated June 30, 1994, expenditures for the Field Studies are $11,664.32.

Robert Smith
Project Manager

Aug 3, 1994
Date

FILE
FLH
TS
BL
DB

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Pt. Public Concerns - EATS Task 5 MONTH: May 1994
CONTRACT NO. 294904 PIN: 600105P
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

ACTIVITIES:

- A contract was developed with Maryland Department of the Environment for the zooplankton and benthics sampling. A letter of intent was issued to allow MDE to execute the sampling study along with their programs in May.
- A contract was issued to University of Maryland Center for Environmental and Estuarine Studies for the fish and crab sampling activities.
- Discussions with Bethlehem Steel Corp. have identified five areas designated for potential development by Baltimore County. A meeting to discuss these properties with the Baltimore County Department of Economic Development is scheduled for 6/7/94.

ISSUES:

- None at this time

EXTRA WORK:

- None at this time

COMMENTS:

- None at this time

FUNDING:

- Total funding allocated to this project is $129,951.
- As of the last invoice dated April 30, 1994, expenditures for the Field Studies are $3,082.81

Robert Smith
Project Manager

6/6/94
Date

FILE
FLH
TS
BL
DB

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point Shoreline Reclamation
CONTRACT NO. 593917
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

MONTH: May 1994
PIN: 600105V

ACTIVITIES:

- Received Final Report for the Hydrodynamic Model Study.

EXTRA WORK:

- No Extra Work is anticipated for this contract at this time.

COMMENTS:

- MDE has requested the modeler at the University of Maryland to conduct additional work on the Hydrodynamic Model to address some MDE questions and have requested to postpone the submission of the Final Report until the extra work is complete. The extra work is being funded by MDE.
- MES has requested to extend the term of the contract until the extra work on the Hydrodynamic Model Study is complete.

FUNDING:

- Total funding allocated to this project is $389,244.32
- As of the last invoice dated March 31, 1994, expenditures for the Reclamation Project are $334,984.79 or 86%.

Robert Smith
Project Manager

June 6, 1994
Date

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Pt. Public Concerns - EATS Task 5 MONTH: April 1994
CONTRACT NO. 294904 PIN: 600105P
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

ACTIVITIES:

- Further activities with MDE to include zooplankton and benthics sampling in upcoming programs to take advantage of upper Bay sampling activities for better assessment of Sparrows Point.
- Drafted contract with University of Maryland Center for Environmental and Estuarine Studies for the fish and crab sampling activities.
- Review of Federal Navigation Regulations found no regulations defining the placement of dike structures nor limiting the proximity of structures to channels.

ISSUES:

- None at this time

EXTRA WORK:

- None at this time

COMMENTS:

- None at this time

FUNDING:

- Total funding allocated to this project is $129,951.
- As of the last invoice dated March 31, 1994, expenditures for the Field Studies are $1049.22

Robert Smith 5/9/94

Robert Smith
Project Manager

Date

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point Shoreline Reclamation
CONTRACT NO. 593917
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

MONTH: April 1994
PIN: 600105V

ACTIVITIES:

- Received Draft Final Report for the Hydrodynamic Model Study for review by MES and MPA. Minor comments were submitted for final cleanup. Final Report due 5/1/94.

EXTRA WORK:

- No Extra Work is anticipated for this contract at this time.

COMMENTS:

- Final Report will included with Final Package on Project and submitted with final invoice in May.

FUNDING:

- Total funding allocated to this project is $389,244.32
- As of the last invoice dated March 31, 1994, expenditures for the Reclamation Project are $334,984.79 or 86%.

Robert Smith
Project Manager

5/9/94
Date

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point Shoreline Reclamation
MONTH: December 1993
CONTRACT NO. 593917
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

ACTIVITIES:

- The computational work for the Hydrodynamic Model Study was completed at the University of Maryland and the documentation of the study has begun.
- The Scope of Work for the activities addressing the public concerns was submitted for review and approval.

EXTRA WORK:

- No Extra Work is anticipated for this contract at this time.

COMMENTS:

- A meeting will be held in January to review the results of the computer model.
- The documentation for the model will be completed in February.

APPROVALS:

- MES requests MPA approval of the Scope of Work for addressing the Public Concerns (E,A,& TS - Task)

FUNDING:

- Total funding allocated to this project is $389,244.32
- As of the last invoice dated November 30, 1993, expenditures for the Prefeasibility Study are $295,671.12 or 76%.

Robert Smith
Project Manager

January 7, 1994
Date

FILE
PCH
BC

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point Shoreline Reclamation
CONTRACT NO. 593917
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

MONTH: March 1994
PIN: 600105V

ACTIVITIES:

- MES and MDE performed technical review of Draft Report for the Hydrodynamic Model Study. Comments were submitted to Univ. of MD on 3/29/94.

EXTRA WORK:

- No Extra Work is anticipated for this contract at this time.

COMMENTS:

- Draft Final Report is due by mid-April for review by MPA and MES

RECEIVED

FUNDING:

- Total funding allocated to this project is $389,244.32
- As of the last invoice dated February 28, 1994, expenditures for the Prefeasibility Study are $334,056.31 or 86%.

Robert Smith
Project Manager

4/7/94
Date

FILE
FCH
BC

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Pt. Public Concerns - EATS Task 5 MONTH: March 1994
CONTRACT NO. 294904 PIN: 600105P
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

ACTIVITIES:

- Discussions held with MDE to "piggy-back" zooplankton and benthics studies onto existing programs to take advantage of widespread sampling activities for better assessment of Sparrows Point site in reference to upper Bay.
- Continued to develop draft scope of work for the fish and crab sampling activities. No agency currently has a program online to allow "piggy-backing".
- MES met with Bethlehem Steel Corp. at Sparrows Point to bring BSC up to date and discuss property issues.

WILL NOT REVIEW

ISSUES:

- None at this time

EXTRA WORK:

- None at this time

COMMENTS:

- The biological sampling for all organisms is expected to begin in May and continue through September or October. This is in line with the recommendations of the resource agencies for sampling throughout the productive cycles of the Harbor.

FUNDING:

- Total funding allocated to this project is $129,951.
- As of the last invoice dated February 28, 1994, expenditures for the Prefeasibility Study are $67.19.

Robert Smith 4/7/94

Robert Smith
Project Manager

Date

FILE
FLH ___
BL

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point - Eval. of Public Concerns
CONTRACT NO. 294904
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

MONTH: February 1994
PIN: 600105P

ACTIVITIES:

- Developed draft scope of work for the biological sampling at the project site. Level of sampling and study generated discussion of obtaining as much information for the budget.
- Additional discussion held with other agencies to find ongoing studies on which to "piggy-back". MDE appears to be best positioned for these studies.
- MES arranged meeting with Bethlehem Steel Corp. at Sparrows Point in March to bring BSC up to date and discuss property issues
- Contacted USCG and USACE (Balt.) to identify regulations pertaining to construction and navigational safety.

FUNDING:

- Total funding allocated to this project is $129,951.
- No invoice has been submitted to date.

Robert Smith
Project Manager

March 11, 1994
Date

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point Shoreline Reclamation
CONTRACT NO. 593917
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

MONTH: February 1994
PIN: 600105V

ACTIVITIES:

- The modelers at the University of Maryland submitted a Draft Report for the Hydrodynamic Model Study on 2/28/94. MDE and MES to do initial review.
- No-Cost-Extension until April 29, 1994 approved by MPA 2/17/94

EXTRA WORK:

- No Extra Work is anticipated for this contract at this time.

FUNDING:

- Total funding allocated to this project is $389,244.32
- As of the last invoice dated November 30, 1993, expenditures for the Prefeasibility Study are $332,788.99 or 86%.

Robert Smith
Project Manager

March 11, 1994
Date

FILE
FLH
BL
~~DB~~

MONTHLY PROGRESS REPORT

PROJECT: Sparrows Point Shoreline Reclamation
CONTRACT NO. 593917
MPA PROJECT MANAGER: William Lear
MES PROJECT MANAGER: Robert Smith

MONTH: January 1994
PIN: ~~593917~~ 600105-✓

ACTIVITIES:

- The modelers at the University of Maryland presented the findings of the computational work for the Hydrodynamic Model Study at a meeting on 1/25/94. The documentation of the study continued.
- MPA issued a Notice to Proceed for Task 5 (the activities addressing the public concerns) on 1/12/94.
- MES is developing a schedule for Task 5 and a Scope of Work for the Field Studies. Future activities on Task 5 will be reported in separate monthly reports. PROCESS OF REVIEW

EXTRA WORK:

- No Extra Work is anticipated for this contract at this time.

COMMENTS:

- The documentation for the model will be completed in February.
- An comprehensive budget review revealed a billing error which occurred while converting from project accounting to task accounting. MPA requested MES to account for the contract by task after several months of project cost accounting. As a result, an invoice for $11,287.13 was erroneously billed twice. MPA paid both invoices. This amount was credited back to the project on the December 1993 invoice.

RECOMMENDATIONS:

- MES recommends a 60 day extension to retain MDE and the University of Maryland through the completion of the Final Report. OK

APPROVALS:

- MES has requested MPA approval for a 60 day extension to April 29, 1994.

FUNDING:

- Total funding allocated to this project is $389,244.32
- As of the last invoice dated November 30, 1993, expenditures for the Prefeasibility Study are $332,788.99 or 86%.

Robert Smith
Project Manager

Feb 4, 1994
Date

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

William Donald Schaefer
Governor

Maryland Port Commission
O. James Lighthizer
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
Milton H. Miller, Sr.
John M. Waltersdorf
Fred L. Wineland

Adrian G. Teel
Executive Director

January 12, 1994

Mr. Robert Smith
Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, MD 21401

Re: ~~Sparrows Point Shoreline Reclamation Project~~
Agreement No. 593917

Environmental Technical Adm.
cont. 294904
Rin. No. 600105P

Dear Mr. Smith:

This is your notice to proceed with Task 5, Evaluation of Public Concerns (attached) as part of the Sparrows Point Shoreline Project.

If you have additional questions please contact me at (410) 631-1102.

Sincerely,

Frank L. Hamons

Frank L. Hamons
Manager
Harbor Development

FLH/BL:pdr

attachment

cc: Dave Bibo
Tony Serio
Bill Lear

2:hamons:593917.bl

FLH
~~BL~~
FILE

REPORT TO MANAGEMENT COMMITTEE
PLACEMENT OPTIONS PROGRAM
SPARROWS POINT SHORELINE RECLAMATION

February 16, 1994

A. Working Group Meeting - December 2, 1993

B. Working Group Objectives

1. Develop an approach for addressing the public concerns and develop a consensus on the scope of field studies

B. Issues

1. Biological productivity at the project site.

2. Navigational issues

3. Use of alternative property

4. Hydrodynamic impacts of project on Baltimore Harbor

C. Discussions/ Resolutions

1. The Group discussed the public's concerns about the oysters, crabs, fish, and SAV and concluded that these concerns will be validated with small-scale field studies.

2. The Group identified the parameters of the field studies required to assess the biological value of the existing site. While there have been studies done on the Patapsco River, these have not specifically addressed Sparrows Point. The fact that rockfish and bluefish are caught at the mouth of the Patapsco River indicates a good possibility that these fish can be found at the project site. There is no argument that the project will displace some fish, but the group agrees that the proposed project will result in a larger variety of species and, ultimately, better fisheries

3. Field studies should address blue crab, invertebrate benthos, adult fish, and fish eggs and larvae. The field study should span four seasons with collection cruises in each season. The studies should be developed to maximize their application to future environmental evaluations on the site.

4. The navigational aspects of the projects should be addressed to the U.S. Army Corps of Engineers, Navigation Branch and by U.S. Coast Guard.

5. The computational portion of the Hydrodynamic Model Study was completed in December. The objective of the model study is to assess the project's impacts on circulation of the harbor and the flushing rates in the embayments near the project site. The preliminary result indicate that the harbor circulation is significantly dependent on the winds instead of the tides. Old Road Bay and Bear Creek will experience less than a 1% increase in the flushing rates, according to the model. The Final Report on the model study will be submitted in February 1994.

PLACEMENT OPTIONS PROGRAM
SPARROWS POINT SHORELINE RECLAMATION
WORKING GROUP MEETING

December 2, 1993

AGENDA

1. Public Participation
   - Initial public input
   - Other property at SP

2. Hydrodynamic Model
   - Baseline
   - Largest configuration
   - Completion by end of December.

3. Field Studies
   - Required to assess productivity of the site
   - MES inquiries to agencies resulted in no data
   - Input from Group

4. Schedule
   - Original schedule - 1997
   - Current schedule - 2000

5. Next Meeting

copy - DFB
FLH
file - Sparrows P

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

January 25, 1994

Mr. William Lear
Project Manager
Harbor Development
Maryland Port Administration
2310 Broening Highway
Baltimore, MD 21224

JAN 26 1994

Dear ~~Mr. Lear~~ Bill:

As scheduled, MES met with MDE and the modelers from the University of Maryland (UM) to discuss the results of the Hydrodynamic Model Study for Sparrows Point Shoreline Reclamation. This letter is intended as a record of the meeting for your files.

Shin-Yu Chao, UM, reported that the computational portion of the model study is complete and the report is in progress. The focus of the meeting was the completion of the three year simulation for 1984, 85, and 86. Mr. Chao compared the wind data and the surface current results and has concluded that the surface currents in the Baltimore Harbor are significantly dependent on the wind as opposed to being driven by the tides.

At the last meeting we discussed the flushing rates for the embayments adjacent to the project site. Mr. Chao reported that the site was divided into nine cells in a 3 X 3 grid with each cell measuring 360 meters square. Since then, the three year simulation was performed on three configurations for Sparrows Point. The three cells adjacent to the shoreline represent approximately half of the site as currently proposed. Six cells (two rows of three cells) represent the proposed site. And nine cells represent a site 1.5 times larger than proposed. As expected, the largest configuration with all nine cells had the greatest impact on the flushing rates and the smallest configuration had the least. The comparative flushing rates for Storehouse Cove were: 10%, 5%, 0 for the 9 cells, 6 cells, and 3 cells, respectively. The impacts to the flushing of Old Road Bay were less than 1%.

A Draft Report will be submitted in February for our review. If you have questions about the model or the report, please call me at (410) 974-7261.

Sincerely,

Bob

Robert Smith
Project Manager

cc: Keith Tate

SPARROWS POINT WORKING GROUP
MEETING MINUTES

December 2, 1993

Attendance:
Nick Carter, Department of Natural Resources
Visty Dalah, Maryland Department of the Environment
Bill Lear, Maryland Port Administration
John Nichols, National Marine Fisheries Service
Bob Smith, Maryland Environmental Service
Keith Tate, Maryland Environmental Service
Brian Walls, USACE, Baltimore District

This meeting was held to give the group an update and to discuss the field studies proposed for the Project.

1. The Group discussed the public's concerns about the oysters, crabs, fish, and SAV and concluded that these concerns will be validated with small-scale field studies.

2. The citizen's also suggested we assess the use of other property at Sparrows Point for upland placement sites as an alternative to the proposed concept. Bethlehem Steel has transferred some property to Baltimore County which may be available and usable as placement areas but the capacities of such sites are likely to be only a fraction of the original plan. The Group concurred that these areas should be assessed.

3. The computational portion of the Hydrodynamic Model Study is scheduled to be completed in December. The Final Report on the Model should be submitted in February 1994. A suggestion was made to run a scenario to simulate a site configuration with a semi-circular structure arching towards the main channel. The modelers at the University of Maryland indicate the additional configuration will require another month of computer work.

4. The Group identified the parameters of the field studies required to assess the biological value of the existing site. While there have been studies done on the Patapsco River, these have not specifically addressed Sparrows Point. The fact that rockfish and bluefish are caught at the mouth of the Patapsco River indicates a good possibility that these fish can be found at the project site. There is no argument that the project will displace some fish, but the group agrees that the proposed project will result in a larger variety of species and, ultimately, better fisheries

5. Field studies should address blue crab, invertebrate benthos, adult fish, and fish eggs and larvae. The field study should span four seasons with collection cruises in each season. The studies should be developed to maximize their application to future environmental evaluations on the site.

6. The Group briefly discussed the status of the public information activities. There appears to be more support in the Dundalk/Sparrows Point community than was apparent at the town meeting held in June 1993. MES will follow up on the suggested leads and will continue to pursue other approaches to public information.

Next Meeting:

The next meeting of the Working Group has not been scheduled.

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

November 17, 1993

Mr. William Lear
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-66211

Dear Lear:

The next meeting of the Sparrows Point Working Group is scheduled for December 2, 1993 at 9:00 a.m. in the Main Conference Room at Maryland Environmental Service. Enclosed for your review and information is a copy of the draft minutes from the August 10, 1993 meeting of the Working Group.

The focus of the meeting will be the biological productivity of the Sparrows Point site. Our inquiries to the participating P.O.P agencies reveal that there may be no existing information on the site. Please recheck your agency to verify the existence or non-existence of data. MES is submitting a Scope of Work to MPA for the collection of biological information and we will need input on the specifics of this exercise (e.g., type, quantity, frequency, etc.)

If you have any questions or are unable to attend the December 2 meeting, please call me at (410) 974-7261.

Sincerely,

Robert Smith

Robert Smith
Project Manager

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

SPARROWS POINT WORKING GROUP
MEETING MINUTES

August 10, 1993

Attendance:
Nick Carter, Department of Natural Resources
Bill Lear, Maryland Port Administration
John Nichols, National Marine Fisheries Service
Paul Slunt, Maryland Department of the Environment
Bob Smith, Maryland Environmental Service

This was a general project update meeting with emphasis on the concerns raised in the Public Information Activities and the new schedule for the project

Summary Notes

1. The Group discussed concerns about the oysters, crabs, fish, and SAV and concluded that the bulk of these can probably be addressed with existing data in DNR, MDE, UMD, etc. Some may need ground truthing. Small scale field studies are proposed for Sept-Oct. Group emphasized the need to hit target seasons for each species, especially a spring fish migrations.

2. Group concurred with idea of having MSSA address the fishing activity. DNR advocates the flyover method. Others suggested having MSSA also address the navigational questions.

3. MES introduced the issue of an upland site on other portions of Bethlehem Steel property. All agreed this could be beneficial in achieving public acceptance of the wetlands creation project.

4. The Hydrodynamic Model Study is ahead of schedule. Baseline and 1986 (average year) scenarios complete early July, presented to Project Managers on 7/15/93. Scenarios used three configurations, 1200, 2400, 3600 feet (approx.) out from shore. 3600 foot scenario produced less than a 10% change in the flushing rates of the adjacent embayments. The three year scenario anticipated in December; pushing for sooner.

5. The Group is concerned that this much negative feedback from public signifies a slim chance of ever getting this project online. MES Reminded them that our objective is to develop the best project we can.

6. New schedule shows Sparrows Point on-line in FY2000. Public participation should resume activities in October timeframe; A-E selection process set to begin in December- January.

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

November 19, 1993

Ms. Janice N. Ramsay
7613 Old Road Bay
Baltimore, MD 21219

Dear Ms. Ramsay:

Thank you for your interest in the Sparrows Point Shoreline Reclamation Project. As we discussed at the Citizens Committee meeting on November 3rd, that project is proposed to enhance the shoreline and re-create wildlife habitat along the Patapsco River.

As follow up to our meeting, I have added your name to our Working Group membership list for the project. The next meeting of the Sparrows Point Working Group is scheduled for December 2, 1993 at 9:00 a.m. in the Main Conference Room at Maryland Environmental Service.

The focus of the meeting will be the biological productivity of the Sparrows Point site. Our inquiries to the participating P.O.P agencies reveal that there may be no existing information on the site. MES has requested that each member recheck their agency to verify the existence or non-existence of data. We are submitting a Scope of Work to MPA for the collection of biological information and we will need input on the specifics of this exercise (e.g., type, quantity, frequency, etc.)

Enclosed for your review and information is a copy of the draft minutes from the August 10, 1993 meeting of the Working Group. I hope you can join us in developing a project which is beneficial for the river and acceptable to the citizens in the vicinity of Sparrows Point. If you have any questions or are unable to attend the December 2 meeting, please call me at (410) 974-7261.

Sincerely,

Robert Smith
Project Manager

Enclosure.

cc: Keith Tate, MES
Frank Hamons, MPA
William Lear, MPA

RECEIVED
NOV 29 1993
HARBOR DEVELOPMENT

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

SPARROWS POINT WORKING GROUP
MEETING MINUTES

August 10, 1993

Attendance:
Nick Carter, Department of Natural Resources
Bill Lear, Maryland Port Administration
John Nichols, National Marine Fisheries Service
Paul Slunt, Maryland Department of the Environment
Bob Smith, Maryland Environmental Service

This was a general project update meeting with emphasis on the concerns raised in the Public Information Activities and the new schedule for the project

Summary Notes

1. The Group discussed concerns about the oysters, crabs, fish, and SAV and concluded that the bulk of these can probably be addressed with existing data in DNR, MDE, UMD, etc. Some may need ground truthing. Small scale field studies are proposed for Sept-Oct. Group emphasized the need to hit target seasons for each species, especially a spring fish migrations.

2. Group concurred with idea of having MSSA address the fishing activity. DNR advocates the flyover method. Others suggested having MSSA also address the navigational questions.

3. MES introduced the issue of an upland site on other portions of Bethlehem Steel property. All agreed this could be beneficial in achieving public acceptance of the wetlands creation project.

4. The Hydrodynamic Model Study is ahead of schedule. Baseline and 1986 (average year) scenarios complete early July, presented to Project Managers on 7/15/93. Scenarios used three configurations, 1200, 2400, 3600 feet (approx.) out from shore. 3600 foot scenario produced less than a 10% change in the flushing rates of the adjacent embayments. The three year scenario anticipated in December; pushing for sooner.

5. The Group is concerned that this much negative feedback from public signifies a slim chance of ever getting this project online. MES Reminded them that our objective is to develop the best project we can.

6. New schedule shows Sparrows Point on-line in FY2000. Public participation should resume activities in October timeframe; A-E selection process set to begin in December- January.

Remit to:

STATEMENT OF ACCOUNT

MARYLAND ENVIRONMENTAL SERVICE
2011 Commerce Park Drive
Annapolis, MD 21401

(410) 974-7270

copy - year serio file

NOV 23 1993

TO: Bethlehem Steel Shoreline
ATTN: Frank Hammons
Maritime Center II
MD Port Administration
2310 Broening Highway
Baltimore
MD 21224-6621

Page: 1
Date: 10/31/93
Account #: 11989
Statement #: 3340

Invoice Number	Invoice Date	Description	Open Amount	Payments Received	Adjustments	Balance Due
RP 19179 000	09/30/93	Conversion From Harri	48,415.09	.00	.00	48,415.09
		TOTAL CURRENT BALANCE DUE				48,415.09

ACCOUNT AGING

Current	1 - 30	31 - 60	61 - 90	91 - 120	Over 120
.00	48,415.09	.00	.00	.00	.00

The information above is a recap of amounts on your account owed to MARYLAND ENVIRONMENTAL SERVICE. If your check for these amounts is in the mail, please accept our thanks. If not, you may pay from this statement referencing the invoice number on your check. PLEASE, if you have any questions concerning your account, don't hesitate to call us.

copy - file

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

November 17, 1993

RECEIVED
NOV 23
HARBOR DEVELOPMENT

Mr. William Lear
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-66211

Dear Lear:

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The focus of the meeting will be the biological productivity of the Sparrows Point site. Our inquiries to the participating P.O.P agencies reveal that there may be no existing information on the site. Please recheck your agency to verify the existence or non-existence of data. MES is submitting a Scope of Work to MPA for the collection of biological information and we will need input on the specifics of this exercise (e.g., type, quantity, frequency, etc.)

If you have any questions or are unable to attend the December 2 meeting, please call me at (410) 974-7261.

Sincerely,

Robert Smith

Robert Smith
Project Manager

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

SPARROWS POINT WORKING GROUP
MEETING MINUTES

August 10, 1993

Attendance:
Nick Carter, Department of Natural Resources
Bill Lear, Maryland Port Administration
John Nichols, National Marine Fisheries Service
Paul Slunt, Maryland Department of the Environment
Bob Smith, Maryland Environmental Service

This was a general project update meeting with emphasis on the concerns raised in the Public Information Activities and the new schedule for the project

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PLACEMENT OPTIONS PROGRAM
SPARROWS POINT SHORELINE RECLAMATION
WORKING GROUP MEETING

AUGUST 10, 1993

AGENDA

1. Public Participation

2. Hydrodynamic Model

3. Field Studies

~~CONSULTANT~~ ON BOARD
CONSULTANT

4. A-E Scope of Work

5. Schedule

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

MEMORANDUM

TO: Alvin Bowles, MDE
Nick Carter, DNR
Visty Dalah, MDE
J. Glenn Eugster, EPA
John Gill, USFWS
Dale Hilliard, MDOT
Bill Lear, MPA
Paul Massicot, DNR
John Nichols, NMFS
Martin Snow, GLD&D
Ed Stigall, EPA
Brian Walls, BCOE

FROM: Bob Smith, MES

DATE: July 30, 1993

The next meeting for the Sparrows Point Working Group is scheduled for Tuesday, August 10, at 1:30 PM at MES Headquarters, 2011 Commerce Park Drive, Annapolis, and coincides with the date of the Pooles Island Group meeting at 10:30 AM. This is to accommodate those participating in both Working Groups, to reduce the amount of travel and time away from your offices.

The focus of this meeting will be to bring you up to date on the Hydrodynamic Model, the Public Input, and the future of the Project. I will also be looking for input from this group addressing the following issues on the Sparrows Point site:

- the presence and extent of oysters, crabs, and SAV;
- extent of fishing activities;
- impacts to recreational navigation (boaters will have to run closer to the main channel)

In particular, I am interested in any available information or data your agencies may have on the Sparrows Point Site as well as the agency's capability for collecting additional data. If you are not able to attend, please take some time to fax me your comments on the above issues.

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

Dredging Need & Placement Options Program
SPARROWS POINT PROJECT WORKING GROUP

Name	Representing	Telephone No.	Fax No.
Bowles, Alvin	Maryland Department of the Environment (MDE)	(410) 631-3441	(410) 631-3321
Carter, Nick	Maryland Department of Natural Resources (DNR)	(410) 974-5780	(410) 974-3770
Gill, John	U.S. Fish & Wildlife Service (USFW)	(410) 269-5448	(410) 269-0832
Hilliard, Dale	Marland Department of Transportation (MDOT)	(410) 859-7951	(410) 859-7615
Dalah, Visty	Maryland Department of the Environment (MDE)	(410) 631-3680	(410) 631-3873
Lear, William	Maryland Port Administration (MPA)	(410) 631-1102	(410) 631-1140
Massicot, Paul	Maryland Department of Natural Resources (DNR)	(410) 974-2926	(410) 974-2600
Nichols, John	Nat'l Marine Fisheries Service (NMFS)	(410) 226-5771	(410) 226-5417
Snow, Martin	Great Lakes Dredge & Dock Co (GLDD)	(410) 771-0680	(410) 771-0686
Eugster, Glenn	Chesapeake Bay Program Environmental Protection Agency/Region III (EPA)	(800) 523-2281	(410) 267-0918
Smith, Robert	Maryland Environmental Service (MES)	(410) 974-7261	(410) 974-7236
Walls, Brian	U.S. Corps of Engineers Baltimore District (BCOE)	(410) 962-5632	(410) 962-0039

MINUTES

MPA Dredging Needs & Placement Option Program
Sparrows Point Shoreline Reclamation Working Group
May 10, 1993

Attendance:

Visty Dalah, MDE
J. Glenn Eugster, EPA
Bill Lear, MPA
Regina Rochez, MDE
Bob Smith, MES
Martin Snow, GLDD

A-E Scope of Work

As of this meeting, three sets of additional comments on the Scope of Work for the Design Phase have been submitted to Bob Smith. There was no discussion and no further comments offered at the meeting. It is assumed that those agencies which did not submit comments are satisfied with the requirements of the Scope of Work.

Hydrodynamic Model Study

The model setup for the Baltimore Harbor/Patapsco River system has been completed by the modeler at the University of Maryland and the model is ready for the baseline runs. The Corps of Engineers' Waterways Experiment Station will use the 3-D Chesapeake Bay Model to provide boundary conditions for the mouth of the Patapsco River. The river's major driving factors are the wind and storm run-off. Data for the wind speed, wind direction and the run-off flowrates have been obtained for 1984,1985, and 1986 (representing a wet year, a dry year, and an average year, respectively.)

The baseline will be performed using the data from 1986 (the average year) to allow the project to move ahead rapidly. The modelers have indicated that a 1986 configuration will be ready by September 1, 1993 with a 95% confidence level. This configuration will be used by the A-E for the project design. The modelers will continue the model study to verify the 1986 configuration with the data from 1984 and 1985. The final report from the model study is expected in February 1994.

Public Information

The project has received opposition from citizens apparently due to a lack of information. To alleviate this situation, MPA and MES are executing a 30-day public information blitz to disseminate information and generate support for Sparrows Point. At the end of the 30 day period, MPA will assess the level of support in the community and decide whether or not to move ahead with the project.

Other Items

Bill Lear informed the Group of the status of the other placement site within Baltimore Harbor/Patapsco River. The CSX/Cox Creek site is currently under negotiation with MPA and the owners. A 3-year study is presently being conducted on the Dead Ship Anchorage.

Next Meeting:

The next meeting of the Working Group will be held on **Monday, June 7, 1993 at 10:00 AM** in the Conference Room A at Maryland Port Administration, The Maritime Center II, 2310 Broening Highway, Baltimore.

SPARROWS POINT
SHORELINE ENHANCEMENT PROJECT

Public Information Meeting No. 1

DATE: May 19, 1993

LOCATION: Edgemere Knights of Columbus Hall

GROUPS: Edgemere/Millers Island Businessmen's Association and Baltimore County Waterman's Association

ATTENDANCE: Approximately 45 people (sign in sheet forthcoming)

OVERALL RESPONSE:

Attendees were very attentive to the needs of the Port as well the physical description of the proposed shoreline enhancement. The group as a whole committed to working with MPA and MES on the project. Senator Norman Stone concluded the discussion with "Let's keep an open mind about this project".

COMMENTS:

1. This is the first comprehensive approach that the state has taken on dredged material management. The state has a good team to address this issue in MPA/MES.

2. Can Baltimore County residents use Sparrows Point for their creek's dredged materials?

3. Are Pooles Island and Worton Point additional projects planned for implementation under the P.O.P program that we should worry about?

4. Filling 8 to 12 feet of water is not viewed as beneficial.

5. Be sure to consider the safety aspects of displacing recreational boating closer to the shipping channel.

6. Has anyone ever built large wetlands with dredged materials?

7. Large waves must be considered in the breakwater design due to ship traffic.

8. Will existing foundation support the project? Bethlehem Steel has had some failures of their fill materials.

9. Is current site bottom contaminated?

10. Where will contaminated material go if not to Sparrows Point?

11. When will we know the size of the site?

12. How will the structure differ from that at HMI? Will this project eliminate the use of the other inner harbor sites?

13. This group of state people working on the dredging program has done an excellent job at HMI.

14. Let's keep an open mind about this project.

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 2

DATE: May 21, 1993

LOCATION: Battle Grove Democratic Club Hall

GROUP: Battle Grove Democratic Club

ATTENDANCE: Approximately 100 people (sign in sheet forthcoming)

OVERALL RESPONSE:

Attendees were apprehensive that their community is being targeted for another project . The group's main opposition was towards Bethlehem Steel and its history with the community. The group is well aware of the Port's needs for dredging but are mindful of development in their community.

COMMENTS:

1. Is anyone investigating the use of other sites in the harbor? Are we the only community that gets hit?

2. Where is the funding coming from?

3. Has there been consideration given to restoring the shoreline of Kent Island and other bayfront properties?

4. What happens if the future studies determine this project affects the flow patterns in the adjacent tributaries?

5. Who will do the testing of the incoming materials?

6. Will the contractor be held responsible if the materials placed here are found to be contaminated?

7. Are we required to hold public hearings before this project is permitted?

8. Bethlehem Steel has continuously filled this area with slag - cutting off the flow through this area (Bear Creek) and the channel is getting smaller. How much farther into the river does this project extend?

9. Will there be a community committee for this project? Will the Wells-McComas Association be represented? How will the committee be informed?

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 3

DATE: June 7, 1993

LOCATION: Dundalk Church of the Brethren

GROUP: The Greening of Dundalk

ATTENDANCE: 16 people

OVERALL RESPONSE:

The Group had an overall positive attitude for this project and were very supportive of the efforts for improving the waters and shoreline of the Patapsco River. Several members like the concept and want to keep the group involved at some level of citizen input.

COMMENTS:

1. Coming to the public before the project is underway is the right way. Citizens want to have some involvement with projects generated outside the community.

2. Project should improve fishing and crabbing in that area. Hardly anyone fishes in front of Bethlehem Steel.

3. Will this project affect the water quality of the local creeks?

4. Recreational boaters and fishermen don't want to have to use the channel with the big ships. How far into the river does this project extend?

5. Since the breakwaters are so close to the ship channel, won't they have to be bigger to withstand the wake from the ships?

6. Has anyone ever built wetlands with dredged materials? Are there any close by that we can see?

7. Someone (from this group) should go to the upcoming town meeting to support this project.

SPARROWS POINT
SHORELINE RECLAMATION PROJECT

Public Information Meeting No. 4

DATE: June 10, 1993

LOCATION: Sparrows Point High School

GROUP: North Point Peninsula Community Coordinating Council & Millers Island Edgemere Businessmen's Association (Sponsors of Town Meeting)

ATTENDANCE: Approximately 75 people attended the town meeting (sign in sheet forthcoming)

OVERALL RESPONSE:

The attendees were steadfastly opposed to the project. Only three speakers addressed the project from a positive sense. In all the group felt the area was rebounding to a better state of environmental health and that they had had their share of "these type projects". Overlying these arguments was a great distaste of Bethlehem Steel and a mistrust of State government. Following a well orchestrated series of prepared speeches, Senator Stone and Delegate DePazzo spoke in support of those who were opposed to the project. Senator Stone was of the opinion that the project would not be allowed by law (HMI five mile rule) in its current form. Jim Dieter (DEPRM) and Don Mason noted the attendees reaction and were to report to County Executive Hayden and the County Council respectively.

COMMENTS:

1. The current law prohibits dikes within 5 miles of HMI.
2. Current bottom has habitat, it is not sterile.
3. There are oyster beds in the area.
4. Bethlehem Steel Corp. will get a tax break from this.
5. Where is the funding coming from?
6. Bethlehem Steel has the most to gain from the project.
7. This project is a containment area.
8. Shoreline Reclamation is a farce, this is a dump site.
9. Wetlands creation is good for the fish.

10. This site was not one of the 160 sites considered by MPA in the Masterplan. Why?

11. This site is a good location for wetlands.

12. Watermen oppose deep water dumping.

13. Why do we need all this dredging?

14. We do not trust Bethlehem Steel.

15. How far out will the project go.

16. Bethlehem Steel has gotten enough land.

17. We do not want to give up navigable waters.

18. Bethlehem Steel has gotten enough land.

19. The project will not solve the dust and dirt problem at Bethlehem Steel.

SPARROWS POINT WORKING GROUP
MEETING MINUTES

August 10, 1993

Attendance:
Nick Carter, Department of Natural Resources
Bill Lear, Maryland Port Administration
John Nichols, National Marine Fisheries Service
Paul Slunt, Maryland Department of the Environment
Bob Smith, Maryland Environmental Service

This was a general project update meeting with emphasis on the concerns raised in the Public Information Activities and the new schedule for the project

Summary Notes

1. The Group discussed concerns about the oysters, crabs, fish, and SAV and concluded that the bulk of these can probably be addressed with existing data in DNR, MDE, UMD, etc. Some may need ground truthing. Small scale field studies are proposed for Sept-Oct. Group emphasized the need to hit target seasons for each species, especially a spring fish migrations.

2. Group concurred with idea of having MSSA address the fishing activity. DNR advocates the flyover method. Others suggested having MSSA also address the navigational questions.

3. MES introduced the issue of an upland site on other portions of Bethlehem Steel property. All agreed this could be beneficial in achieving public acceptance of the wetlands creation project.

4. The Hydrodynamic Model Study is ahead of schedule. Baseline and 1986 (average year) scenarios complete early July, presented to Project Managers on 7/15/93. Scenarios used three configurations, 1200, 2400, 3600 feet (approx.) out from shore. 3600 foot scenario produced less than a 10% change in the flushing rates of the adjacent embayments. The three year scenario anticipated in December; pushing for sooner.

5. The Group is concerned that this much negative feedback from public signifies a slim chance of ever getting this project online. MES Reminded them that our objective is to develop the best project we can.

6. New schedule shows Sparrows Point on-line in FY2000. Public participation should resume activities in October timeframe; A-E selection process set to begin in December- January.

Next Meeting:

The next meeting of the Working Group will be scheduled after the resumption of the Public Participation.

ATTENDANCE ROSTER

SUBJECT: SPARROWS POINT WORKING GROUP

DATE/TIME: 7 JUNE 93

LOCATION: POINT BREEZE · ENG. CONF. RM.

(Please Print)

NAME	REPRESENTING	TELEPHONE #	FAX #
BILL LEAR	MPA	(410) 631-1102	(410) 631-1140
Bob Smith	MES	410-974-7261	974-7236
Vishy Walal	MDE	(410) 631-3694	(410) 631-3873
RUSSELL ZIMMERMAN	GREAT LAKES DREDGE & DOCK	(410) 771-0680	771-0686

NO AGENDA FOR THIS MEETING

TO : **RONALD NELSON**
DEPUTY SECRETARY
MARYLAND DEPARTMENT OF ENVIRONMENT.

THROUGH: **MIKE HAIRE, DIRECTOR**
PETE TINSLEY, ASST. DIRECTOR
NAUTH PANDAY, PROGRAM ADMINISTRATOR
CHESAPEAKE BAY AND WATERSHED MANAGEMENT ADMN.

FROM: **VISTY DALAL**
ENVIRONMENTAL ASSESSMENT PROGRAM
CHESAPEAKE BAY AND WATERSHED MANAGEMENT ADMN.

DATE: **MAY 28, 1993**

SUBJECT: **PROGRESS REPORT FOR SPARROWS POINT BENEFICIAL SITE**

As per your request, in our meeting held on Thursday, May 27th. 1993, the following is the progress report on Sparrows Point Beneficial Site Project.

Staff from Chesapeake Bay and Watershed Management Administration are participating in various work groups to evaluate potential disposal sites for dredged material. The Sparrows Point Beneficial Site (previously called The Bethlehem Steel Shoreline Reclamation Project) is one of the alternate sites.

The Sparrows Point Reclamation project is currently having legal problems for its proposed construction within the **5 mile radius** to the Hart-Miller Island. As per the regulations, two containment sites cannot be legally built within 5 miles distance from one another. Since the Sparrows Point site is not a 'containment site', rather a 'beneficial site', the Assistant Attorney Generals working for MPA, MES, and DNR are reviewing the regulations to see if exceptions can be made for beneficial sites as far as the 5-mile issue is concerned. **Only after the 5-mile issue is resolved the development and construction of the project site will be undertaken.**

The following pages present a brief description of the location, purpose, site development, and the current and future status of the project.

(I) INTRODUCTION

(A) SITE LOCATION:

The project site is located on the southerly shore of the ~~Sparrows Point Plant~~ of the Bethlehem Steel Corporation along the Patapsco River in Baltimore County, Maryland. The proposed wetland development area (the proposed beneficial site) consists of approximately 5000 feet of shoreline and is bounded by the Brewerton, Sparrows Point, and Pennwood Channels (figure 1).

(B) PURPOSE OF SITE CONSTRUCTION:

The specific purposes of Sparrows Point Reclamation Project are as follows:

(1) To create approximately **300 acres of tidal area** near the Bethlehem Steel Corporation that will accomodate **7.7 million cubic yards** of clean **(uncontaminated)** annual maintenance dredged material of the Baltimore Harbor navigation channels;

(2) At the end of 12 year time period, the above site will be converted to a **wetland**, due to the slow settlement of the subsurface material and the rate of filling from the Baltimore Harbor maintenance dredging program. The proposal is to create several hundred acres of aquatic and intertidal wetlands, and upland habitat for wildlife along the river;

(3) To create an upland buffer of approximately **33 acres to screen the industrial activities** along the Bethlehem Steel Corporation plant's shoreline.

(II) HISTORY AND CURRENT STATUS OF THE PROJECT.

(A) HISTORY OF THE PROJECT:

(1) A draft of the 'Scope of Work' for this project was submitted to the 'Working Group' members in April 1993. Their comments, suggestions and input will be incorporated in the revised scope of work that will be the guidelines for the Proposals submitted by the three prospective Architectural and Engineering firms.

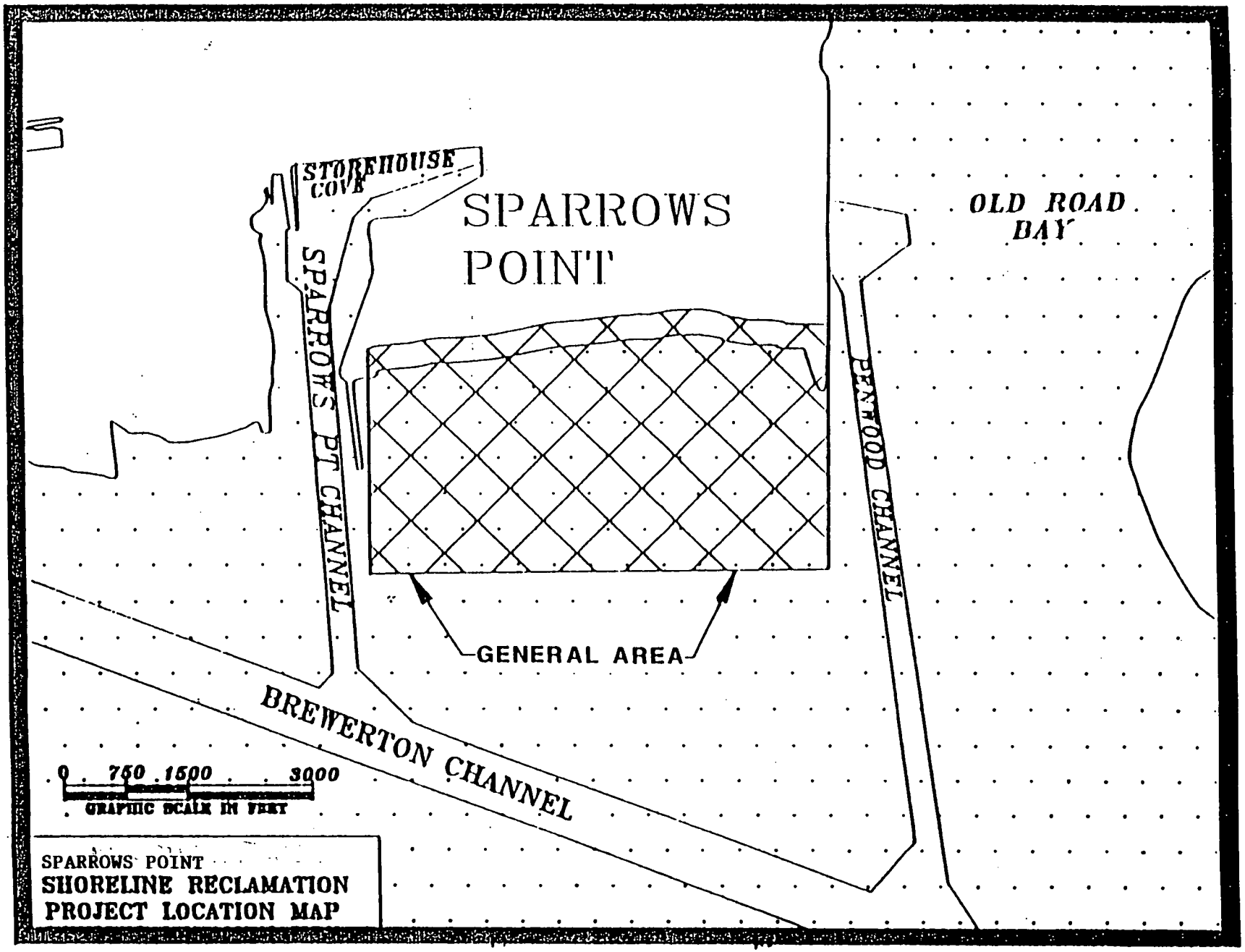


Figure 1: Location map of Sparrows Point Shoreline Reclamation Project.

(2) The 'Phase I' of the project was initiated in November/December 1992 and will extend till the end of 1993 (figure 2). This period will be utilized by the consultants to determine the feasibility of constructing and operating the project, and to develop the wetland and upland habitats using the maintenance dredged material.

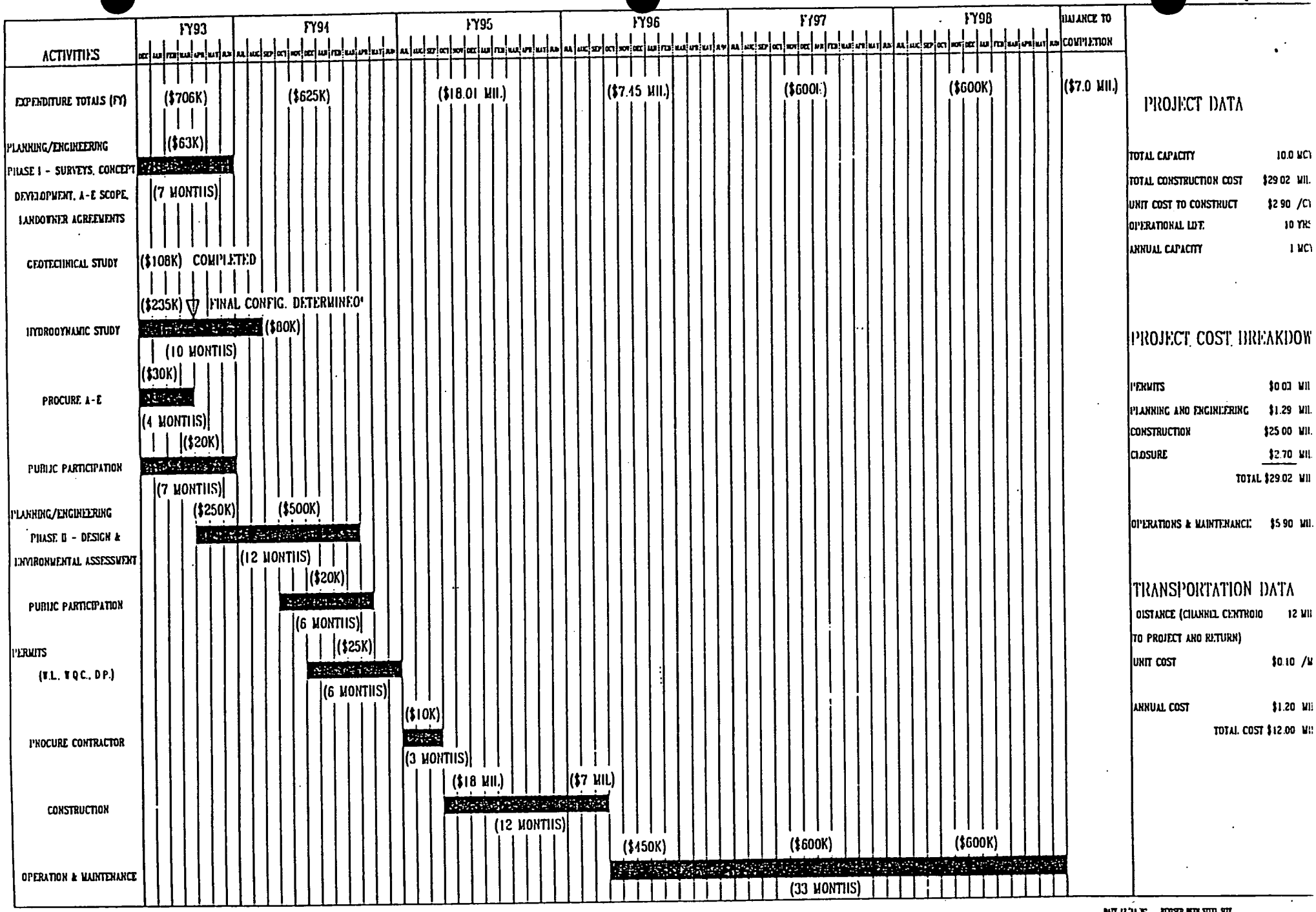
(B) CURRENT STATUS OF THE PROJECT:

(1) 'Phase II' will start in the middle of 1993 and last for one year (figure 2). The consultant is required to submit detailed plans, profiles, and cross sections for the project including, but not limited to, the developed wetland habitat, the vegetated upland berm, the retaining structures (both during construction and after the wetland development), the slope protection, spillways, and unloading facilities for handling and placing the dredged materials.

(2) By August 1993, results of the hydrodynamic model, currently being developed by the University of Maryland/Maryland Department of Environment, will be available to assess the effects of the project on Baltimore Harbor and the Patapsco River.

(3) In the next six months, several **'open forum'** meetings will be conducted by Maryland Environmental Services (MES), to inform and educate the general populous in the vicinity of the Bethlehem Steel Corporation Plant, about the proposed project and its beneficial uses. Such efforts create public awareness and participation in the activities around their neighbourhood.

(4) The Sparrows Point Reclamation project is currently having legal problems for its proposed construction within the **5 mile radius** to the Hart-Miller Island. As per the regulations, two containment sites cannot be legally built within 5 miles distance from one another. Since the Sparrows Point site is not a 'containment site', rather a 'beneficial site', the Assistant Attorney Generals working for MPA, MES, and DNR are reviewing the regulations to see if exceptions can be made for beneficial sites as far as the 5-mile issue is concerned. **Only after the 5-mile issue is resolved the development and construction of the project site will be undertaken.**



* CURRENT SCHEDULE TO DETERMINE FINAL CONFIGURATION MUST BE ADVANCED BY 5 MONTHS.

FIGURE 2: Proposed cost and time schedules for the activities to be conducted at the Sparrows Point Reclamation proj

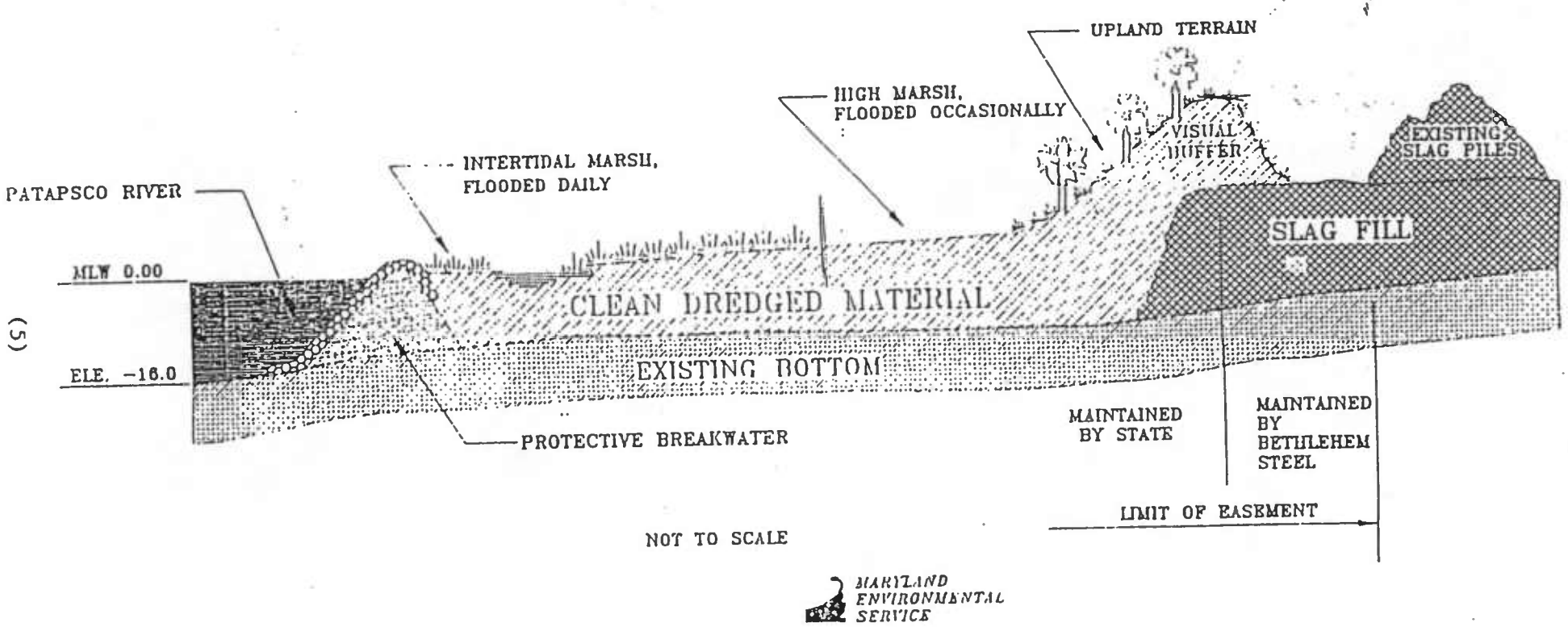


Figure 3: Conceptual sketch of the Sparrows Point Shoreline Reclamation Project showing the presence of wetland area, upland buffer area and the wetland dyke (from Gahagan & Bryant Associates, 1992).

(III) FUTURE PLANS

(1) The future of this project depends on the 5-mile issue being resolved, so that the consultant can complete work on Phase I, ascertaining the feasibility of the project.

(2) After the Phase I is successfully completed, plans are to start the preparation and construction of the wetland area, upland buffer area and the wetland containment dike (figure 3) by September 1995. The construction process will take about a year to complete and would cost around 25 million dollars (figure 2).

(3) The operation and maintenance process starts soon after the construction process is completed. This should start sometime in September 1995 and will continue for another 33 months at the estimated cost of 6 million dollars (figure 2).

PLACEMENT OPTION PROGRAM
SPARROWS POINT SHORELINE RECLAMATION WORKING GROUP

MAY 10, 1993

AGENDA

1. Minutes of last Meeting

2. A-E Scope of Work

3. Hydrodynamic Model Study

4. Public Participation

5. Other Items

ATTENDANCE ROSTER

SUBJECT: Sparrows Point Mtg.

DATE/TIME: 5/10 10 am

LOCATION:

NAME	REPRESENTING	TELEPHONE NO.	FAX NO.
BILL LEAR	MPA	631-1102	631-1140
J. Glenn Eugster	US EPA, Ches. Bay Prog.	410-267-0061	267-0282
Vicky Walsh	Maryland Dept of Environment	631-3674	631-3873
Regena Rocky	MDE - Waste Management	631-3338	631-3321
MARTIN SNOW	GREAT LAKES DREDGE & DOCK Co	771 0680	771 0686
Bob Smith	MES	974-~~7234~~ 7261	974-7236

MINUTES

MPA Dredging Needs & Placement Option Program
Sparrows Point Shoreline Reclamation Working Group
May 10, 1993

Attendance:

Visty Dalah, MDE
J. Glenn Eugster, EPA
Bill Lear, MPA
Regina Rochez, MDE
Bob Smith, MES
Martin Snow, GLDD

A-E Scope of Work

As of this meeting, three sets of additional comments on the Scope of Work for the Design Phase have been submitted to Bob Smith. There was no discussion and no further comments offered at the meeting. It is assumed that those agencies which did not submit comments are satisfied with the requirements of the Scope of Work.

Hydrodynamic Model Study

The model setup for the Baltimore Harbor/Patapsco River system has been completed by the modeler at the University of Maryland and the model is ready for the baseline runs. The Corps of Engineers' Waterways Experiment Station will use the 3-D Chesapeake Bay Model to provide boundary conditions for the mouth of the Patapsco River. The river's major driving factors are the wind and storm run-off. Data for the wind speed, wind direction and the run-off flowrates have been obtained for 1984,1985, and 1986 (representing a wet year, a dry year, and an average year, respectively.)

The baseline will be performed using the data from 1986 (the average year) to allow the project to move ahead rapidly. The modelers have indicated that a 1986 configuration will be ready by September 1, 1993 with a 95% confidence level. This configuration will be used by the A-E for the project design. The modelers will continue the model study to verify the 1986 configuration with the data from 1984 and 1985. The final report from the model study is expected in February 1994.

Public Information

The project has received opposition from citizens apparently due to a lack of information. To alleviate this situation, MPA and MES are executing a 30-day public information blitz to disseminate information and generate support for Sparrows Point. At the end of the 30 day period, MPA will assess the level of support in the community and decide whether or not to move ahead with the project.

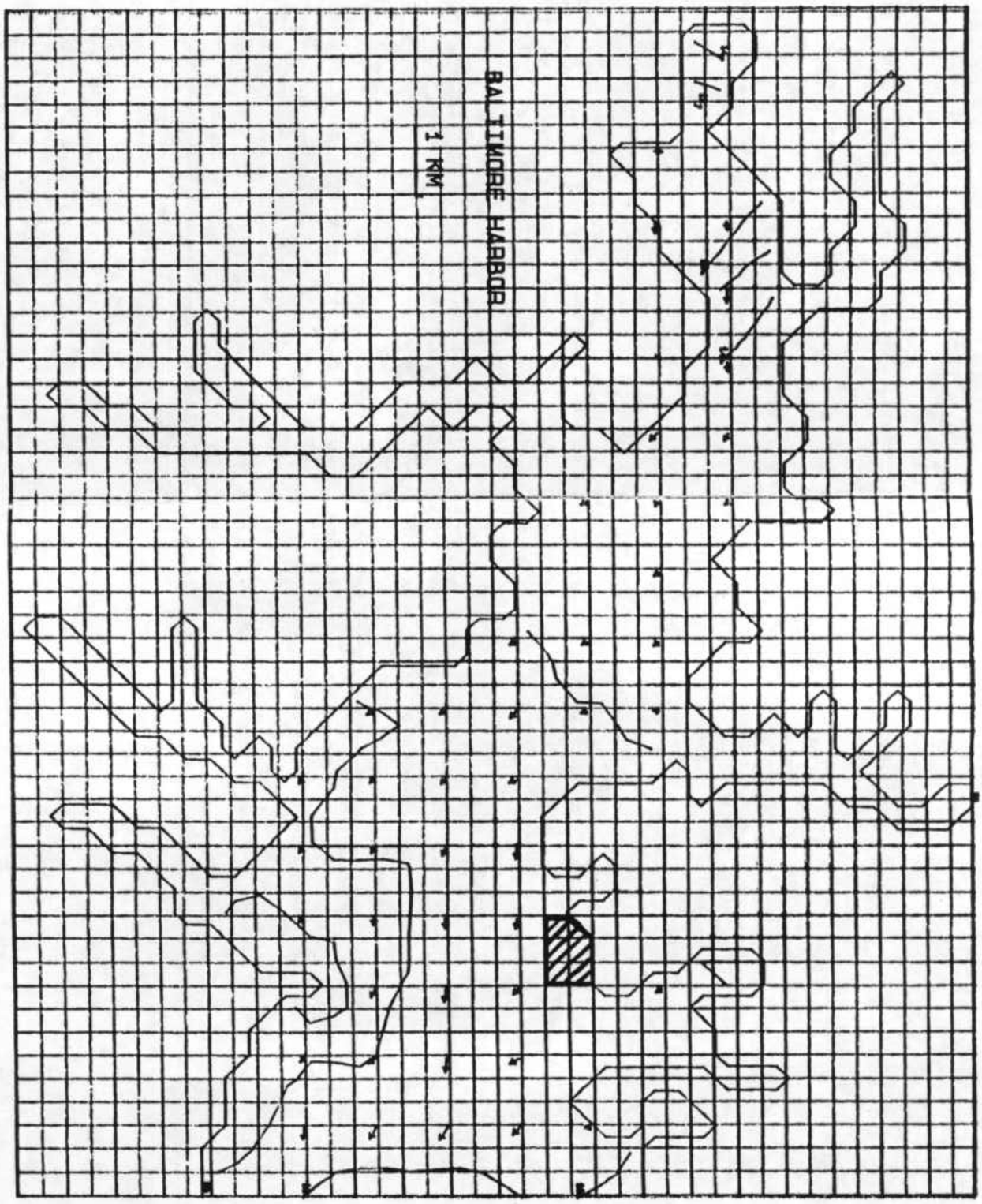
Other Items

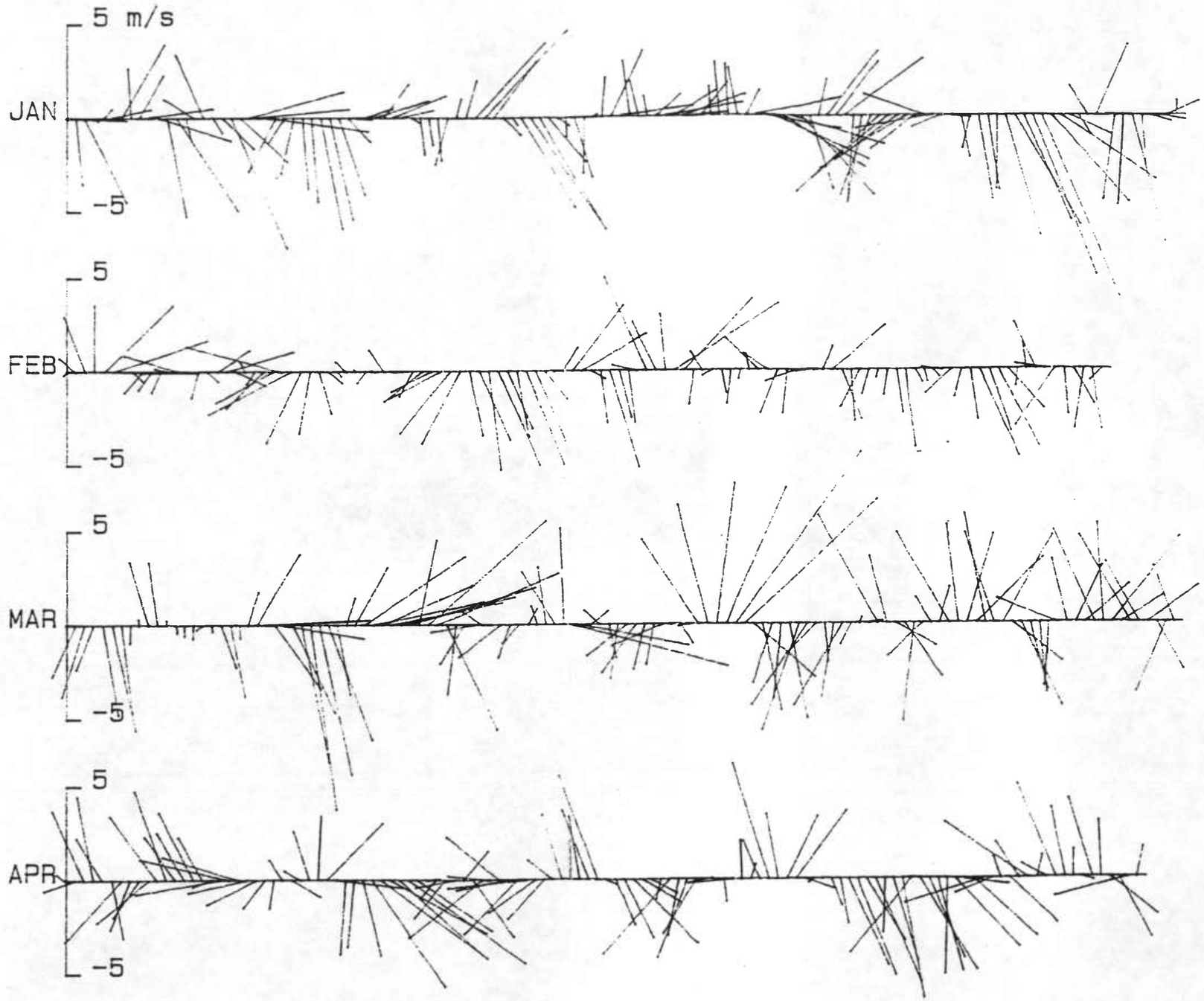
Bill Lear informed the Group of the status of the other placement site within Baltimore Harbor/Patapsco River. The CSX/Cox Creek site is currently under negotiation with MPA and the owners. A 3-year study is presently being conducted on the Dead Ship Anchorage.

Next Meeting:

The next meeting of the Working Group will be held on **Monday, June 7, 1993 at 10:00 AM** in the Conference Room A at Maryland Port Administration, The Maritime Center II, 2310 Broening Highway, Baltimore.

BHARBR 01-Apr-93





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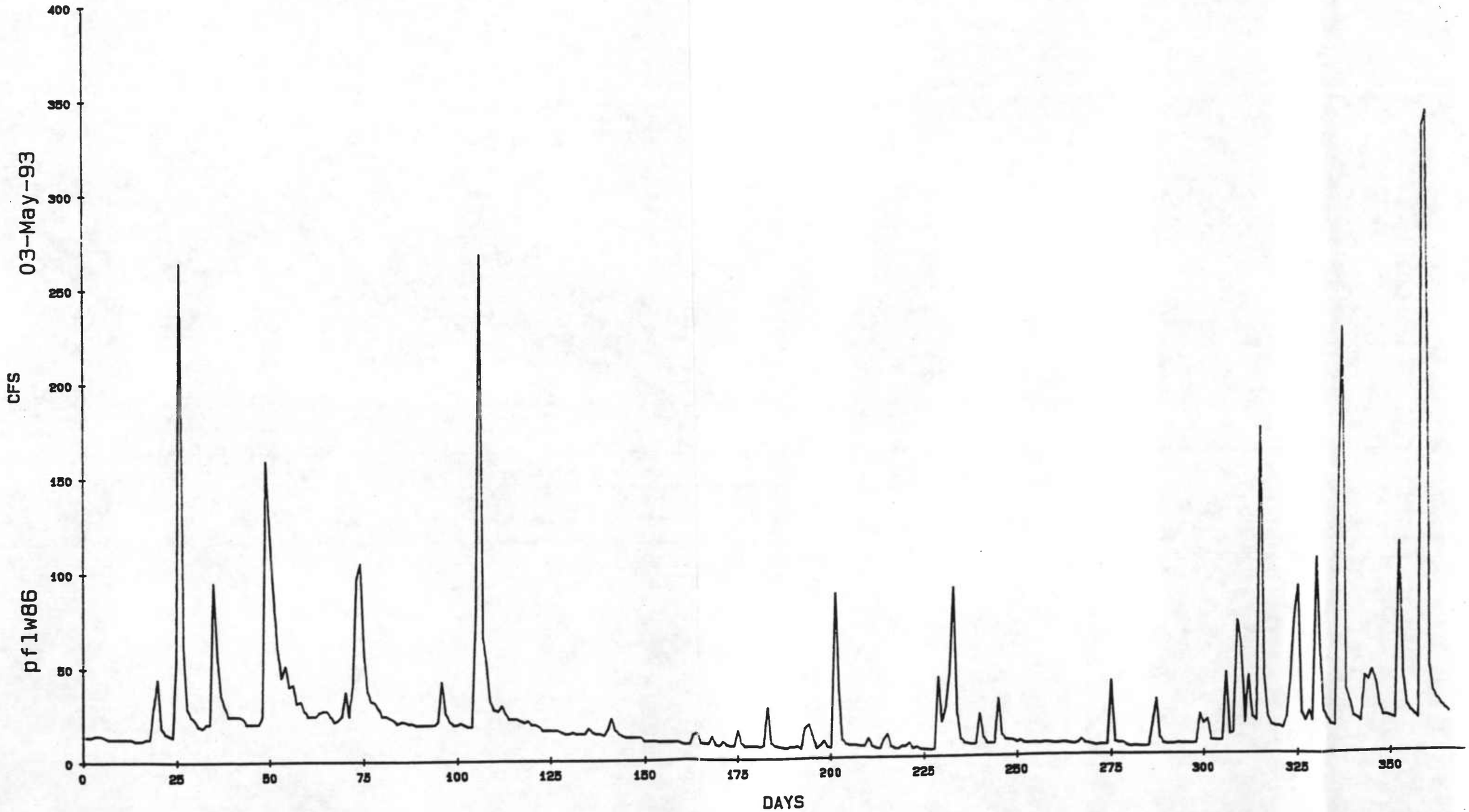
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#4

PLACEMENT OPTIONS PROGRAM
SPARROWS POINT SHORELINE RECLAMATION
WORKING GROUP MEETING

April 15, 1993

AGENDA

1. Status of 5-Mile Issue

2. Model for Other Wetlands Creation Projects

3. Scope of Work

4. Other Items

ATTENDANCE ROSTER

SUBJECT: SPARROWS POINT WORKING GROUP
MEETING # 4

DATE/TIME: 15 APR 93 9:00AM

LOCATION: POINT BREEZE CONF. RM. A

(Please Print)

NAME	REPRESENTING	TELEPHONE #	FAX #
BILL LEAR	MPA	(410) 631-1102	(410) 631-1140
John Gill	USFWS	(410) 269-5448	(410) 269-0832
John Nichols	NMFS	(410) 226-5771	(410) 226-5417
JEFF MCKEE	US ACOE	(410) 962-5632	(410) 962-0039
BRIAN WALLS	USACE	(410) 962-5632	(410) 962-0039
J. Glenn Eugster	US EPA Ches. Bay Ofc.	410-267-0061	410-267-0282
N. Panday	MDE	410-381-3680	410-381-3873
Starr Belsky	MDE, WQCD	410-631-3609	410-631-4883
Visty Dalal	MDE, CBWMA	631-3694	631-3873
MARTIN SNOW	GREAT LAKES DREDGE & DOCK CO	771 0680	771 0686
Bob Smith	MES	(410) 974-7261	974-7236
Alvin Bowles	MDE	631 3441	631 3321

MEETING #3

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

RECEIVED
APR - 6 1993
HARBOR DEVELOPMENT

April 2, 1993

Mr. William Lear
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

Dear Mr. Lear:

I am forwarding a summary of the minutes and discussion from the March 30, 1993 meeting for the Permit Pre-Application Consultation with regulators from the federal agencies.

An item for the Working Group to follow up on is to include the monitoring for this project into current and proposed monitoring conducted by the agencies. I encourage each of you to check with your agency about incorporating this monitoring to facilitate the use of this site as a model for other beneficial use projects.

The next meeting of the Working Group is scheduled for Monday, April 19, 1993 at 10:00 AM in the Conference Room at Maryland Port Administration, Maritime Center II, 2310 Broening Highway, Baltimore.

If you have questions about the project or need additional information, please contact Mr. Bill Lear or me.

Sincerely,

Robert L. Smith

Robert L. Smith
Project Manager

Enclosure
cc: Keith Tate

MEETING MINUTES

Bethlehem Steel Shoreline Reclamation Project
Federal Permits Pre-Application Consultation
March 30, 1993

Attendance:

Working Group

Visty Dalah, MDE
Ed Stigall, EPA
Brian Walls, BCOE
Bob Smith MES
Keith Tate, MES

Regulators

Steve Harman, BCOE
Erica Hieber, BCOE
Rob Kelsey, USFWS
Ralph Spagnolo, EPA
John Nichols, NMFS

Summary of Discussions:

The purpose of this meeting was to obtain preliminary input from the regulatory agencies on the permit requirements for the project at Sparrows Point. The meeting was attended by the Bethlehem Steel, Working Group as well as the normal regulatory review personnel.

Keith Tate gave an overview of MPA's Placement Options Program which has identified the dredging requirements of the Port of Baltimore and the Phase I Bay Enhancement Program which targets the beneficial use of dredged materials for four placement sites. An explanation of the Working Group functions was also described.

A major issue of the regulatory representatives was the availability of documentation of the process which led to the four proposed locations. Ed Stigall (EPA) interjected the point that the four sites are designated for the beneficial use of dredged materials and that the regulations do not accommodate beneficial projects. Keith Tate stated that alternatives analysis and "least damaging option" philosophy would be inappropriate for beneficial use projects. The group identified the need to discuss the general tradeoffs made with upland, open water, and nearshore aquatic sites. It was also agreed that it would be advantageous to document the facts and rational which lead to pursuance of the Bethlehem Steel project, for NEPA purposes, especially in light of public review.

The meeting was refocused on the Bethlehem Steel Shoreline Reclamation Project. Bob Smith discussed the activities which have been accomplished to date; namely, the preliminary geotechnical investigation's conclusion of a feasible project, and the start of the hydrodynamic model study to determine the impacts to the circulation of the harbor. The breakwater alignment and the anticipated acreage was presented to lend the magnitude of the project to the discussions.

The existing bottom conditions at the project site generated several comments. The bottom is comprised of very soft sediments which reportedly do not support submerged aquatic vegetation (SAV) nor benthic communities. Approximately 75 percent of the bottom is 14 to 16 feet deep with less than 15 percent above -10 feet. John Nichols (NMFS) stated that although the bottom did not support life, there are indications of increases in some fish populations which migrate through the project vicinity. He recommended surveying the area and suggested specific periods for the spring, summer, and fall trawl activities. Steve Harman (Corps) raised the concern about constructing a breakwater on these soft materials and the possibility of failures and generation of mudwaves. Sites with similar bottom conditions were discussed. Successful sites in Virginia and Delaware employed sand aprons at the toe to help consolidate the materials in front of the structures and prevent rotational failure and mud waves. This approach should be investigated during the engineering design.

Fill materials for the site were also addressed. Sources (federal or local) and nature of the materials was questioned. Ralph Spagnolo (EPA) inquired as to the possibility of MPA developing a strategy to test and identify the sediments in the each section of the approach channels and target designate specific sediments to specific sites. He suggested Tier 1 testing (at a minimum) to insure that no contaminated sediments be placed in the Bethlehem Steel site. Brian Walls (Corps) reminded the group that the Corps is responsible for testing the sediments on Federal work and that Tier 1 is the minimum they do. He also questioned the need for intensive testing pointing out the likelihood that the contaminant levels in the existing bottom sediments are much higher than levels in the materials dredged from the approach channels. Measures will be taken to ensure clean materials will be used to fill the site.

In the discussion of the wetlands, observations were made that this site is to be used as a model for other beneficial use/wetlands creation projects. The Corps indicated they will require a monitoring and management plan for this project. John Nichols inserted that as a pilot project it would be important for MPA to collect baseline data on the local ecological system and to evaluate the success of the project's habitat enhancement. As part of the evaluation, the site should be compared to other similar wetland creation sites in Virginia, Delaware, etc. Brian Walls stated that it is the responsibility of the State and federal resource agencies to incorporate these monitoring programs into their existing and ongoing programs, thereby evaluating the success of beneficial use projects. Keith Tate stated that he would discuss this with MPA, approaching the agencies through the Placement Options Program to modify there ongoing monitoring programs to accomplish this.

Another wetlands related issue was the ratio of wetland to upland. The project has been designed to facilitate a large area of wetlands. John Nichols felt that the majority of the site should be wetlands. Bob Smith stated that the design of the wetland/upland ratio must be appropriate to ensure the survival and flourishment of the habitat.

The meeting was concluded by Keith Tate emphasizing the need to coordinate closely with the regulatory agencies on this project. The state will continue to utilize the agency representatives to assist with ensuring that the permitting issues are defined and addressed as soon as possible. The shortfall of dredged material management sites for the Port of Baltimore shipping channels will occur in 1994 if no new options are available. Steve Harman stated that pre-application meetings are not limited, therefor the State could request as many as necessary. An early action item should be for the State to prepare the documentation of the Bethlehem Steel site selection.

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

MEMORANDUM

NOTE: Bill - see if this can be rescheduled when you are present - Done
Tom PCN

DATE: March 22, 1993

TO: Working Group for Bethlehem Steel
Shoreline Reclamation Project

Alvin Bowles - MDE	Paul Massicot - DNR
Nick Carter - DNR	John Nichols - NMFS
Visty Dalah - MDE	Nauth Panday - MDE
John Gill - USFWS	Martin Snow - Great Lakes
Dale Hillard - MDOT	Ed Stigall - EPA
Bill Lear - MPA	Brian Walls - BCOE

FROM: Bob Smith - MES BS

Our next Work Group Meeting is scheduled for March 30, 1993 at 1:00 PM. This meeting is being held in conjunction with a Pre-Application Consultation at the Corps of Engineers, Baltimore Office at 111 Market Place, 5th Floor, Baltimore. I need to give the Corps a list of expected attendees, so if you plan to attend please call Ms. Katrina Jones (410) 631-1102 by Friday, March 26, 1993.

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

March 10, 1993

Mr. William Lear
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

Dear Mr. Lear:

I am forwarding a summary of the minutes and the discussion from the March 1, 1993 meeting of the Bethlehem Steel Shoreline Reclamation Work Group.

Our next meeting has not been scheduled but will be held in conjunction with a Pre-Application Consultation with the Corps of Engineers. I will notify you of the date, time, and place for the meeting.

If you have questions about the project or need additional information, please contact Mr. Bill Lear or me. I look forward to seeing you at our next meeting.

Sincerely yours,

Robert L. Smith

Robert L. Smith
Project Manager

MINUTES

MPA Dredging Needs & Placement Option Program
Bethlehem Steel Shoreline Reclamation Working Group
Meeting #2 at Point Breeze
March 1, 1993

Attending:

Alvin Bowles, MDE
Visty Dalah, MDE
Nauth Panday, MDE
Nick Carter, DNR
Ed Stigall, EPA
Marty Snow, GLD&D
Dale Hilliard, MDOT
Bill Lear, MPA
Bob Smith MES

Absent:

John Gill, USFWS
Brian Walls, BCOE
Polly Wirth, ACB
Paul Massicot, DNR

Summary:

1. Bob Smith presented a brief overview of the project and discussed the status of the project schedule as it relates to the Working Group. The project is well underway with the Scope and RFP ready for distribution to potential contractors. Since the Group's charge is to guide the project through the input of the members, Mr. Smith suggested the Group help navigate the permit process by contributing information from each of the member's particular arena.

2. The Regulatory Group of the Corps of Engineers (Baltimore) is arranging a Pre-Application Consultation for this project. The Work Group will be involved in the Consultation Meeting to insure the interface between this project and the regulators.

3. Nick Carter inquired about the potential use of this site in it's early years for disposal of materials dredged inside the North Point/Rock Point line. MES (Smith) and MPA (Lear) responded that this site is designated for the placement of materials from out side the line. Bill Lear also informed the group that MPA is in the process of acquiring previously used disposal sites currently owned by CSX and Cox Creek Refinery for the disposal of the materials inside the line.

   The group requested Mr. Lear to obtain information on the status of the properties regarding the current and proposed capacities.

4. Dale Hilliard inquired as to the status of the Public Information process, particularly as it pertained to local public officials. Bill Lear informed the group that MPA was finalizing plans to brief legislators and public officials. He also told the group that the HMI Citizen Oversight Committee has received an overview of this project.

5. The Group discussed the issue of the existing soft bottom material. It was noted that facilities in Virginia and Delaware were built on similar materials. These facilities used sand or other materials to construct an apron at the base of the dike structures and were successful in reducing the occurence of heaving and/or mud waves in the material adjacent to the structure. The Group recommended that this approach be addressed by the geotechnical consultant during the design study.

Action Items:

1. Bill Lear is to obtain information on the status of the properties regarding the current and proposed capacities.

2. Bob Smith is to coordinate the Pre-Application Consultation meeting with Corps and the Group.

Next Meeting:

The next meeting will be held in conjunction with the Pre-Application Consultation. Bob Smith will notify all members as soon as the date is set.

DREDGED MATERIAL
PLACEMENT OPTION PROGRAM

BETHLEHEM STEEL SHORELINE RECLAMATION
WORKING GROUP

MEETING #2 AGENDA

1. *Overview*
2. *Update*
3. *Function of Working Group*

ATTENDANCE ROSTER

SUBJECT: BETH STEEL WORKING GROUP MEETING # 2

DATE/TIME: 1 MARCH 93 10:00 AM

LOCATION: POINT BREEZE CONF RM A

(Please Print)

NAME	REPRESENTING	TELEPHONE #	FAX #
BILL LEAR	MPA	(410) 631-1102	(410) 631-1140
Bob Smith	MES	(410) 974 7261	(410) 974-7236
Visty Dalal	MDE	(410) 631-3680	
N. Pandey	MDE	(410) 631-3680	
Nick Carter	DNR	410 974-5780	410-974-3370
Ed Stigall	EPA	(410) 267-0061	(410) 267-0282
Alvin Bowles	MDE	(410) 631-3441	
MARTIN R. SNOW	GREAT LAKES DREDGE & DOCK CO	(410) 771 0680	(410) 771 0686
Dale Hilliard	MDOT	(410) 859-7951	(410) 859-7615

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

MEMORANDUM

TO: Working Group for Bethlehem Steel
Shoreline Reclamation Project

Alvin Bowles - MDE
Nick Carter - DNR
John Gill - USFWS
WILL BE LATE — Dale Hillard - MDOT
→ Bill Lear - MPA
NOT ATTEND ← Paul Massicot - DNR A

John Nichols - NMFS A
Nauth Panday - MDE
Martin Snow - Great Lakes
Ed Stigall - EPA
Brian Walls - BCOE A
Polley Walker Wirth - Alliance for Chesapeake Bay A

FROM: Bob Smith - MES

DATE: February 24, 1993

Our next Work Group Meeting is scheduled for March 1, 1993 at 10:00 AM to 12:00 noon in Conference Room ~~B~~ at the Maryland Port Administration, Maritime Center II, 2310 Broening Highway. I look forward to seeing you at the meeting to discuss the direction of the project. If you are unable to attend this meeting, please call Ms. Katrina Jones (410) 631-1102.

M[illegible]and Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

February 18, 1993

William Donald Schaefer
Governor

Maryland Port Commission
O. James Lighthizer
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
Milton H. Miller, Sr.
John M. Waltersdorf
Fred L. Wineland

Adrian G. Teel
Executive Director

Mr. Alvin Bowles
Program Administrator
Hazardous Waste Program
Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224

Dear Mr. Bowles:

For your information and review, I have enclosed an agenda, attendance roster, project summary, project chart and summary minutes concerning Bethlehem Steel Reclamation Project, which were discussed at our February 8th Placement Options Program (POP) work session.

Our next scheduled work session meeting will be held on February 24th at 10:00 AM to 12:00 PM in Conference Room B (2nd floor) at the Maryland Port Administration, Maritime Center II, 2310 Broening Highway.

In order for the work group to proceed with this project, I am requesting that if you would like to continue as a member of this group, please notify Ms. Katrina Jones (410) 631-1102 to verify your participation. I anxiously await your response to the request. Your participation in the project is essential to its success.

If you have any questions or comments, please let me know.

Sincerely,

MEMBERS DID NOT REC'V THIS LETTERS

FLH/kyj
enclosures

cc: B. Smith, M
dnpop:lbethmin.20

My telephone number is 410-631-1102

Fax: 1-410-631-_____

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

February 18, 1993

William Donald Schaefer
Governor

Maryland Port Commission
O. James Lighthizer
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
Milton H. Miller, Sr.
John M. Waltersdorf
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If you have any questions or comments, please let me know.

Sincerely,

Bill Hun For

Frank L. Hamons
Manager
Harbor Development

FLH/kyj
enclosures

cc: B. Smith, MES
dnpop:lbethmin.208

My telephone number is 410-631-1102

Fax: 1-410-631-_____

Bill Lear

Maryland Department of Natural Resources

Maryland Environmental Service
2011 Commerce Park Drive
Annapolis, Maryland 21401
(410) 974-7281

William Donald Schaefer
Governor

Torrey C. Brown, MD
Secretary

George G. Perdikakis
Director

FACSIMILE TRANSMITTAL COVER

DATE: FEBRUARY 11, 1993

TO: STEERING GROUP FOR BETHLEHEM STEEL
SHORELINE RECLAMATION PROJECT

ALVIN BOWLES - MDE
NICK CARTER - DNR
JOHN GILL - USFWS
DALE HILLARD - MDOT
PAUL MASSICOT - DNR
JOHN NICHOLS - NMFS
NAUTH PANDAY - MDE
MARTIN SNOW - GREAT LAKES
ED STIGALL - EPA
BRIAN WALLS - BCOE
POLLEY WALKER WIRTH - ALLIANCE FOR CHESAPEAKE BAY

FROM: ROBERT SMITH - MES B

THE PAGES THAT FOLLOW ARE A SCOPE OF WORK FOR THE DESIGN PHASE OF THIS PROJECT AND THE SUMMARY FROM A PRE-FEASIBILITY STUDY CONDUCTED FOR THE MARYLAND PORT ADMINISTRATION. THIS PROJECT IS MUCH FURTHER ALONG THAN THE OTHER PROJECTS IN THE PLACEMENT OPTIONS PROGRAM AND WE ARE NOW IN THE PROCESS OF FINALIZING A REQUEST FOR PROPOSAL FOR THE DESIGN PHASE. TO ENABLE US TO ADDRESS THE CONCERNS OF YOUR AGENCY, PLEASE REVIEW THE SCOPE AND SUBMIT COMMENTS TO ME BY FRIDAY, FEBRUARY 19, 1993.

IF YOU HAVE QUESTIONS OR DO NOT RECEIVE 10 PAGES, PLEASE CALL ME AT (410) 974 - 7254.

MPA Dredging Needs And Placement Options Program
Bethlehem Steel Shoreline Reclamation Project
Work-Group Meeting At The World Trade Center
February 8, 1993

Attendance:	Bob Smith, MES	Absent:	Alvin Bowles, MDE
	Dale Hillard, MDOT		Nick Carter, DNR
	John Nichols, NOAA/NMFS		John Gill, USFW
	Ed Stigall, EPA		Paul Massicot, DNR
	Naught Panday, MDE		Marty Snow, GLDD
	Bill Lear, MPA		Brian Walls, BCOE
			Polley Walker Wirth, ACB

Summary Notes:

1. Bob Smith of MES will serve as the work-group facilitator for this project.

2. An overview of the history of the project was provided by Bob Smith. A general description (attached) was uses for reference. Proposed features include the development of a wildlife area and a buffer area to improve shoreline ascetics. The application of slag material for dike construction is not desirable. Alternate sources will be investigated (i.e. sand, geo-textile fabric, rip-rap etc.)

3. The committee discussed the following concerns which should be addressed in the feasibility phase:

   engineering - the containment structure must have the capabilities to retain the sediment dredged from the channels;
   environmental - a monitoring plan should be developed to cover the water quality impacts. This plan would cover pre-construction, during construction and operations phases. These water quality impacts may include turbidity plume monitoring due to the displacement of on-site sediments as well as nutrient releases into the water column; a demonstration project's feasibility; dewatering of dredged sediment as part of operations (crust management).

4. A request for proposal (RFP) will be finalized by 2/25/93.

5. Members will be provided a scope of work by 2/12/93. It was requested that comments be forwarded to Bill Lear by 2/19/93.

6. Mr. John Nichols mentioned that Allied Signal proposed a shoreline stabilization for their property in the inner harbor. Apparently, this component of Signals decontamination plan was unacceptable.

7. Ed Stigall will contact Waterways Experimental Station (WES) by 2/19/93 to inquire about a model for studying structures on soft sediments in the proposed site.

8. The vicinity of Old Road Bay, Sparrows Point, and Bear Creek has experienced contaminated discharges which may be detected in the local sediments.

9. The next meeting is to be announced.

Assignments:

1. The scope of work is to be provided all members by 2/12/93. Work-group members are requested to deliver their comments to Bob Smith (MES) by 2/19/93.

2. John Nichols will contact Allied for a representative to discuss their proposal at the next work-group meeting.

3. A copy of the Bethlehem Steel pre-feasibility study will be provided, if requested.

4. The work-group facilitator will provide a status update at the next management committee meeting on 2/17/93.

5. Ed Stigall will contact WES by 2/19/93 to obtain the stability analysis information. No deadline was established.

6. MES will check for existing information on the contaminant conditions of the sediment in the Sparrows Point vicinity.

dnpop:minsbeth.208

Dredging Need Placement Options Program
Working Groups - Joint Meeting #1

World Trade Center - Maryland Room, 21st Floor
February 8, 1993 - 9:00 AM

AGENDA

I. Introduction - Frank Hamons
   A. Program Overview, Status
   B. Charge to the Work Groups
   C. Support Services
   D. Discussion

II. Individual Work Group Sessions
   A. Selection of Group Leader
   B. Review of Project Status, Schedules
   C. Identification of Work Assignments, Milestones

III. Summary Session - Frank Hamons
   A. Review of Purpose, Resolution of Questions About Work Group Functions
   B. Adjournment

dnpop:agen208

BETHLEHEM STEEL

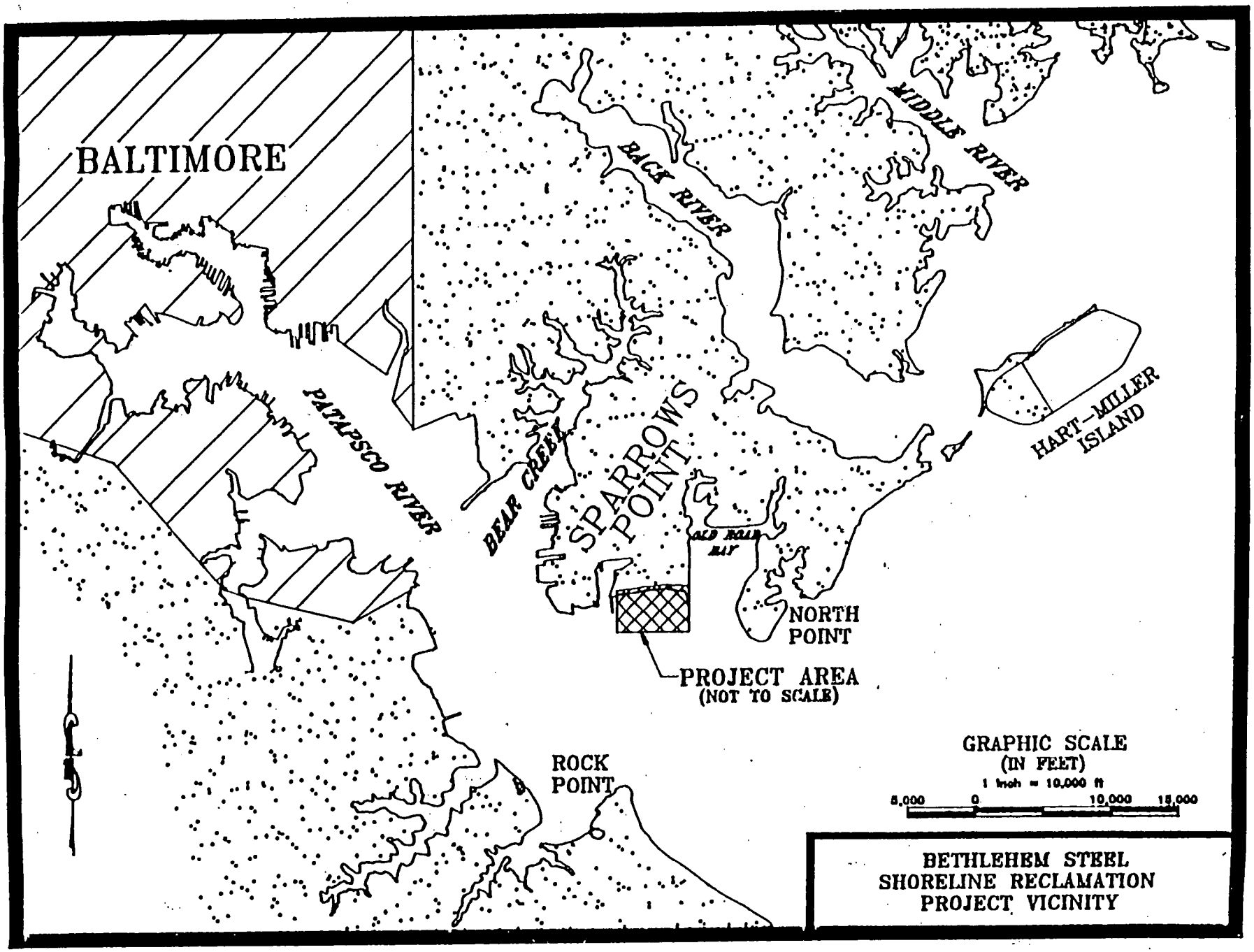
SHORELINE RECLAMATION

PROJECT SUMMARY

The Bethlehem Steel Shoreline Reclamation is an aggressive multi-year project proposed for utilizing clean dredged materials for the reclamation of the Bethlehem Steel shoreline. This unique beneficial use project would be executed in four phases; Project Development, Project Design, Project Construction, and Operations and Placement.

The proposed project site, owned by the Bethlehem Steel Corporation (BSC), is located on Sparrows Point on the Patapsco River downstream from Baltimore Harbor and is shown in Figure 1. The designated site for the reclamation project consists of approximately 5000 feet of shoreline and is bounded on three sides by the Brewerton, the Penwood, and the Sparrows Point Channels as shown in Figure 2. Preliminary capacity estimates range from 5 to 10 million cubic yards. Preliminary construction cost estimates are in the $20-30 million range. A 300 foot wide easement along the shoreline has been allocated for the project. BSC has agreed to participate with agencies of the State of Maryland to enhance the shoreline. The proposed project will use the sediments dredged from the harbor approach channels to create upland and wetland habitat for the wildlife along the river. Several hundred acres of habitat creation is planned.

FIGURE 1


BALTIMORE
PATAPSCO RIVER
BEAR CREEK
BACK RIVER
MIDDLE RIVER
SPARROWS POINT
OLD BOAT RAMP
NORTH POINT
HART-MILLER ISLAND
PROJECT AREA
(NOT TO SCALE)
ROCK POINT
GRAPHIC SCALE
(IN FEET)
1 inch = 10,000 ft
5,000
0
10,000
15,000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

The project will be executed in four phases. The goal of Phase One is to facilitate the completion of the following:

- o development of the reclamation concepts
- o development and execution of hydrodynamic model
- o development of the A/E scope of work for design phase
- o procurement of A/E for design phase
- o generate Agency and Public support of project.

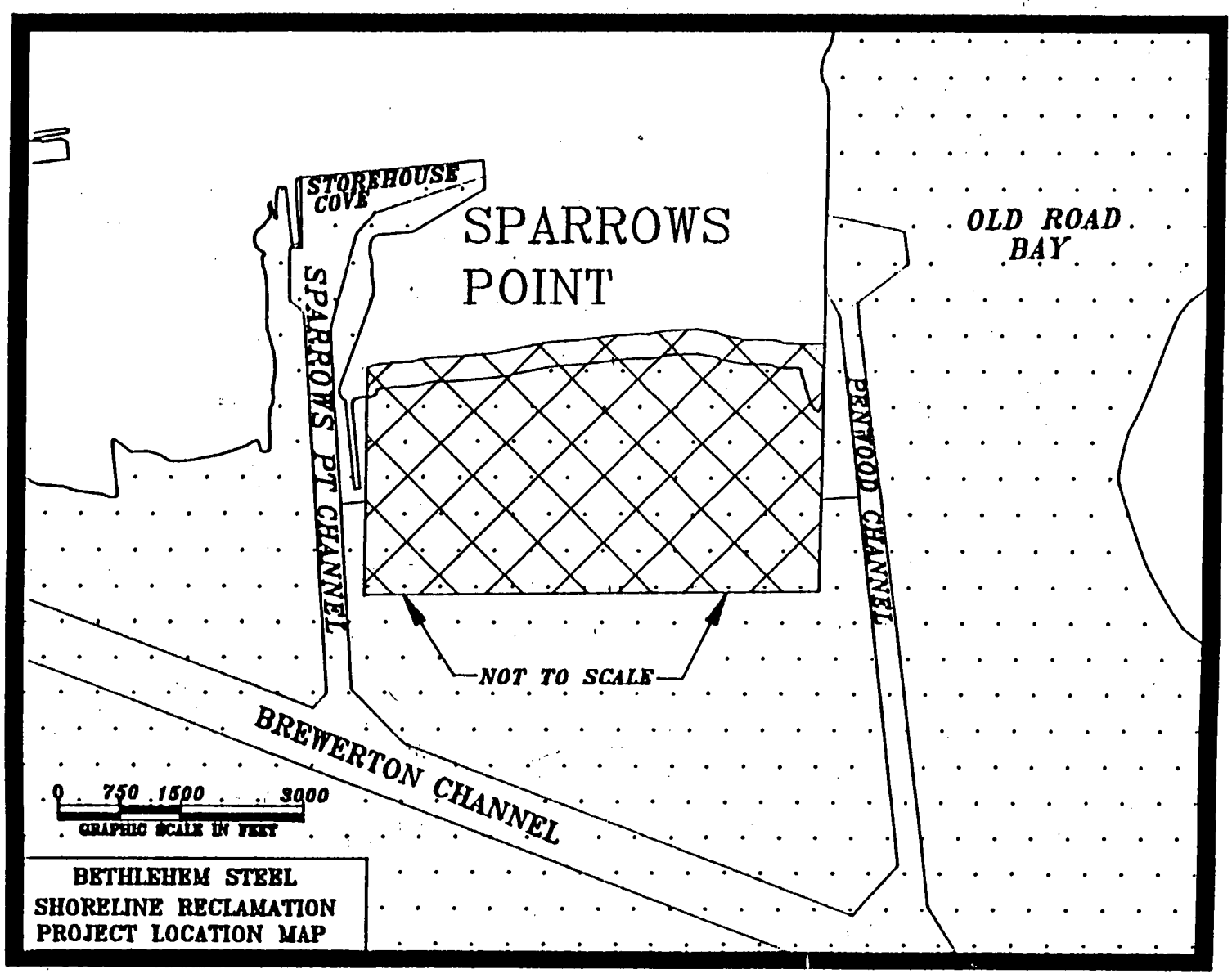
The design of the project would be executed in Phase Two to include engineering and environmental studies which would yield the final plans and specifications for construction. The design will feature an onshore dewatering facility and an offshore wetlands area. The design will be sequenced such that the onshore facility would be operational as soon as possible.

The plans and specifications would be used to award a construction contract in Phase Three. The Construction Phase would also emphasize having the onshore facility operational as quickly as possible.

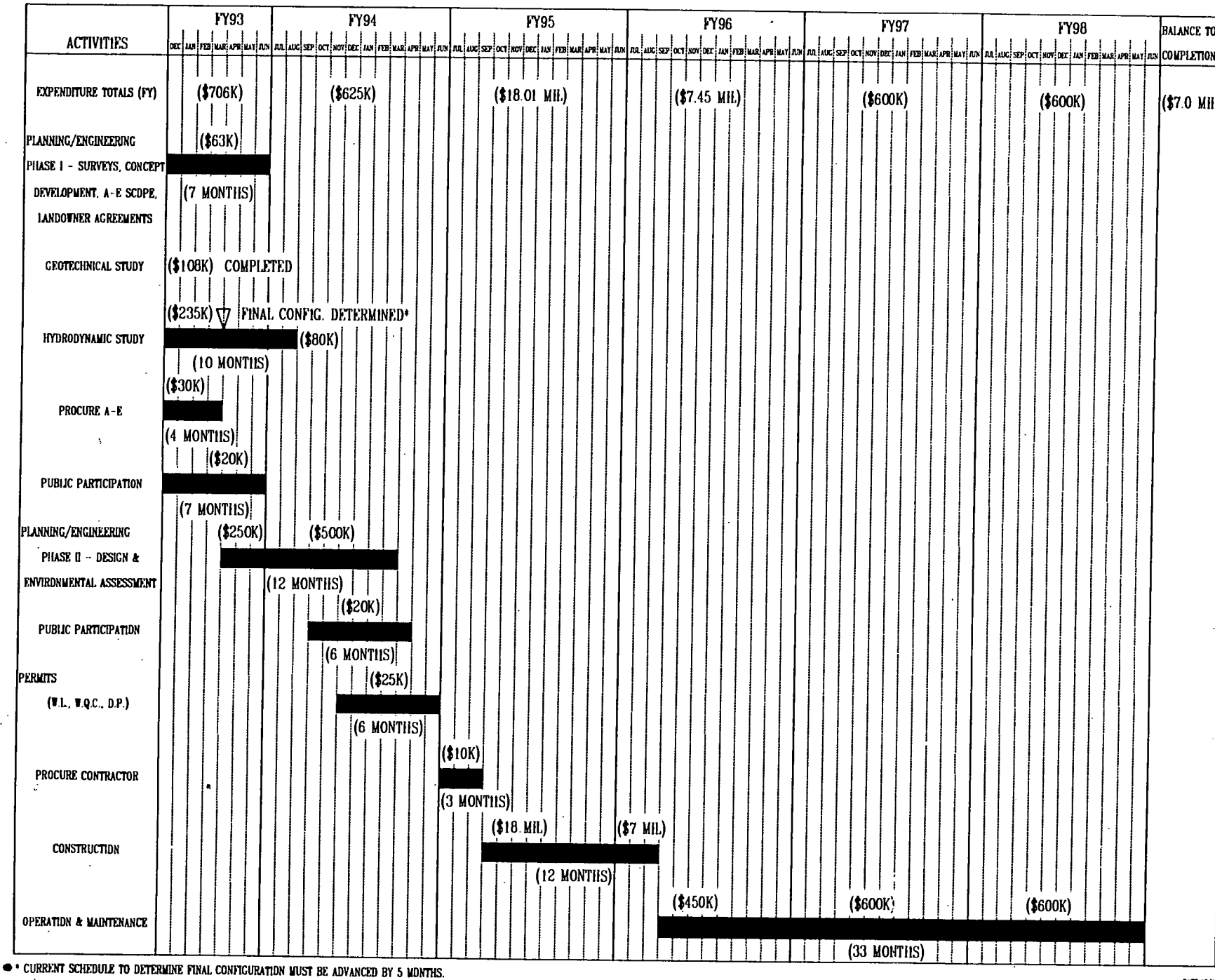
The placement of dredged sediments in Phase Four would closely follow the completion of the onshore dewatering facility and could continue for as much as 10 to 12 years as the capacity of the offshore containment facility is utilized. Operations of the site in this phase would be managed to ensure that maximum capacity is achieved. Placement sequencing would be utilized to facilitate the construction of the upland and wetland habitats. The dredged materials which have been dewatered would be used to construct a

berm at the shoreside boundary of the site. This berm would be planted with native species of shrubs, trees, etc. and developed into upland habitat which would act as a visual buffer between the river and the Sparrows Point industrial complex. The sediments in the offshore area of the site would be strategically placed and sculpted within the tidal zone. The area would be planted as wetland habitat.

FIGURE 2


STOREHOUSE COVE
SPARROWS POINT
OLD ROAD BAY
SPARROWS PT CHANNEL
PENWOOD CHANNEL
NOT TO SCALE
BREWERTON CHANNEL
0 750 1500 3000
GRAPHIC SCALE IN FEET
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT LOCATION MAP

BETHLEHEM STEEL SITE



PROJECT DATA

TOTAL CAPACITY	10.0 MCY
TOTAL CONSTRUCTION COST	$29.02 MIL
UNIT COST TO CONSTRUCT	$2.90 /CY
OPERATIONAL LIFE	10 YRS
ANNUAL CAPACITY	1 MCY/YR

PROJECT COST BREAKDOWN

PERMITS	$0.03 MIL
PLANNING AND ENGINEERING	$1.29 MIL
CONSTRUCTION	$25.00 MIL
CLOSURE	$2.70 MIL
TOTAL	$29.02 MIL
OPERATIONS & MAINTENANCE	$5.90 MIL

TRANSPORTATION DATA

DISTANCE (CHANNEL CENTROID TO PROJECT AND RETURN)	12 MILES
UNIT COST	$0.10 /MI/CY
ANNUAL COST	$1.20 MIL
TOTAL COST	$12.00 MIL

* CURRENT SCHEDULE TO DETERMINE FINAL CONFIGURATION MUST BE ADVANCED BY 5 MONTHS.

DATE 12/14/92 REVISED BETH STEEL SITE

ATTENDANCE ROSTER

SUBJECT: DREDGING NEED PLACEMENT OPTIONS PROGRAM WORKING GROUPS - JOINT MEETING II 1

DATE/TIME: 8 FEBRUARY 1993 9:00 AM

LOCATION: WORLD TRADE CENTER MARYLAND ROOM, 21ST FLOOR

(Please Print)

NAME	REPRESENTING	TELEPHONE #	FAX #
LEE ZENI	MES	410-974-7261	974-3762
RICHARD OWEN	MD. PILOTS	410 276 1337	276-1364
RUSSELL ZIMMERMAN	GREAT LAKES DREDGE & DOCK	410 771-0680	771-0686
PETER S. TINSLEY	MD. DEPT OF ENVIRO.	410-631-3572	
Anthony P. SERIO	Md. PORT ADM.	410-631-1104	631-1140
Peter DUNBAR	MD-DNR-(MASSICOT)	410 974-2761	974-3770
TIM GOODYEAR	NOAA/NMFS	(410) 226-5771	226-5417
John Nichols	NOAA/NMFS	" "	" "
Dale Hilliard	MDOT	(410) 859-7951	859-7615
Ed Stigall	EPA	(410) 267-0061	267-0282
BILL LEAR	MPA	(410) 631-1102	631-1140
N. Panday	MDE	(410) 631-3680	
Robert Smith	MES	(410) 974-7254	974-7236
BRIAN WALLS	USAED, Baltimore	(410) 974-5632	974-0039
John Gill	USFWS	(410) 269-5448	

ATTENDANCE ROSTER

SUBJECT: DREDGING NEED PLACEMENT OPTIONS PROGRAM WORKING GROUPS - JOINT MEETING II 1

DATE/TIME: 8 FEBRUARY 1993 9:00 AM

LOCATION: WORLD TRADE CENTER MARYLAND ROOM, 21ST FLOOR

(Please Print)

NAME	REPRESENTING	TELEPHONE #	FAX #
David Bibo	MPA	410 631-1102	(410) 631-1104
Nick Carter	Md DNR	410 974-3780	410 974-3770
Sean Smith	DNR - Tidewater Adm.	974-2788	974-3770
PAUL W. SLUNT, JR.	MDE - CBWMA	410-631-3572	410-631-3873
Tom Reed	MES	410-974-7261	410-974-7236
Bud Nixon	Rukert Terminals	410-276-1013	276-5237
EDWARD W CHRISTOFFERS	NOAA CHESAPEAKE BAY OFFICE	410 280-1871	280-1870
Keith Tate	Maryland Environmental Service	410 974-7254	974-7236
J. Glenn Evgster	USEPA Ches. Bay Prog Ofc.	410-267-0061	410-267-0282

Slawinski

BALTIMORE COUNTY, MARYLAND
INTER-OFFICE CORRESPONDENCE

TO: C.A. Dutch Ruppersberger

FROM: Robert R. Staab Bob Staab

DATE: June 14, 1995

SUBJECT: Maryland Port Authority/Bethlehem Steel Property

Merreen Kelly, Jim Dieter and I met on June 12, 1995, with members of the Maryland Port Authority and Maryland Environmental Service regarding potential utilization of Bethlehem Steel Property for harbor dredge spoils. The operation would reclaim the spoil along with sludge compost to form a usable topsoil. A similar process is being utilized in Toledo with success.

MPA / AND MES!

~~M.E.S.~~ would like to establish a pilot project on Site 2 which is 56 acres. The property would be left in the same or better condition as found, and the pilot program would run two to three years.

If we were able to start on the infrastructure support today for marketing the industrial use of the property, it would take approximately three years according to estimates from Economic Development.

We mentioned to M.P.A. and M.E.S. that it appeared to be a viable proposition contingent on several caveats before any further progression.

1. We will need to discuss the idea with Economic Development Director Bob Hannon and the County Executive.

2. After consideration by the County Executive, it will be necessary for M.P.A./M.E.S. to network with the elected officials and communities through meetings and hearings. <u>At no time during this period of time should it be construed that the County Executive or any part of the administration has approved the site for dredge spoils.</u>

3. If an arrangement is made to eventually utilize the site, it would need to be understood that the County has a high financial interest in the property and any arrangements would need to be made on short range uses of the property pending future industrial development of the site.

I met with Bob Hannon on June 13 to brief him regarding the meeting with M.P.A. and M.E.S. I would suggest we get together with you and all internal staff as soon as you can be available.

Robert R. Staab

RRS:mab
Att.
c: Michael Davis w/attachment
Jim Dieter
David Fields
Bob Hannon w/ attachment
Merreen Kelly
Tricia Slawinski, M.P.A.
Michelle Vargo, M.E.S.

MARYLAND
ENVIRONMENTAL
SERVICE

Sear

Parris N. Glendening
Governor

James W. Peck
Director

June 13, 1995

RECEIVED
JUN 14 1995
HARBOR DEVELOPMENT

Mr. Frank L. Hamons
Manager, Harbor Development
Maryland Port Administration
The Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224

RE: Contract No. 294904/Pin No. 600105P
Environmental, Administrative and Technical Services
Task 5 - *Sparrows Point Reclamation Project: Evaluation of Public Concerns*

Dear Mr. Hamons:

With reference to the MPA/MES pre-meeting for the Sparrows Point uplands placement options meeting on June 9, 1995, and the meeting with Baltimore County representatives on June 12, 1995, the Maryland Environmental Service (MES) requests a modification to the term of Contract Number 294904, PIN No. 600105P, for the task entitled EATS Task 5, *Sparrows Point Reclamation Project, Evaluation of Public Concerns*. The duration for this amendment would be June 30, 1995 to August 31, 1995.

The purpose of the requested term extension is to allow for (1) exploration of public support of upland and wetland placement options at Sparrows Point that was requested by Baltimore County representatives, (2) preparation of the proposal that you requested for a pilot study to evaluate the option of manufacturing soil from dredged material as a result of the aforementioned pre-meeting and meeting, and (3) for provision of sufficient time for MPA to review and markup draft biological, navigational and hydrodynamic modeling studies that will be delivered in June and for subsequent MES inclusion of MPA requested refinements into a final report.

It is estimated that Fiscal Year 1995 funds that were budgeted for Task 5 will be sufficient to complete action on deliverables as well as the two additional subtasks. However, unexpended Fiscal Year 1995 funds will need to be rolled over into Fiscal Year 1996 to enable completion of the project, as modified. The rollover will be reflected in our FY 95 closeouts for Task 5.

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

Please indicate your agreement for the requested term extension by signing on the line below and returning a copy to me.

Sincerely,

Wayne Young
Program Director
Environmental Dredging

Approved: _____
Frank L. Hamons, Manager
Harbor Development
Maryland Port Administration

cc: Robert Miller
Anthony Serio
Nancy Balenske
William Lear
Michelle Vargo
Robert Smith
Pam McDonagh

From The Desk Of . . .

Frank Hamons

TO: Bob Smith
Michele Vargo
Bill Lear

For your information in case you don't already have a copy.

ROUTING AND TRANSMITTAL SLIP

Date 05/04/95

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Frank Hammons		
2. Maryland Port Administration		
3.		
4.		
5.		

RECEIVED MAY - 5 1995 MARD DEVELOPMENT

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

Dear Frank —

Here is an application of NUSOIL (combined D.M. + remediated sewage sludge) which was done in OHIO + is being investigated by WES (Dr. Dick Lee). It may provide an opportunity for additional capacity at Hart-Miller. Call me if you have any questions.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Carol A. Coch	1917
D.M. Program Mgr CENAD	Phone No. (212) 264-7535

Carol

5041-102

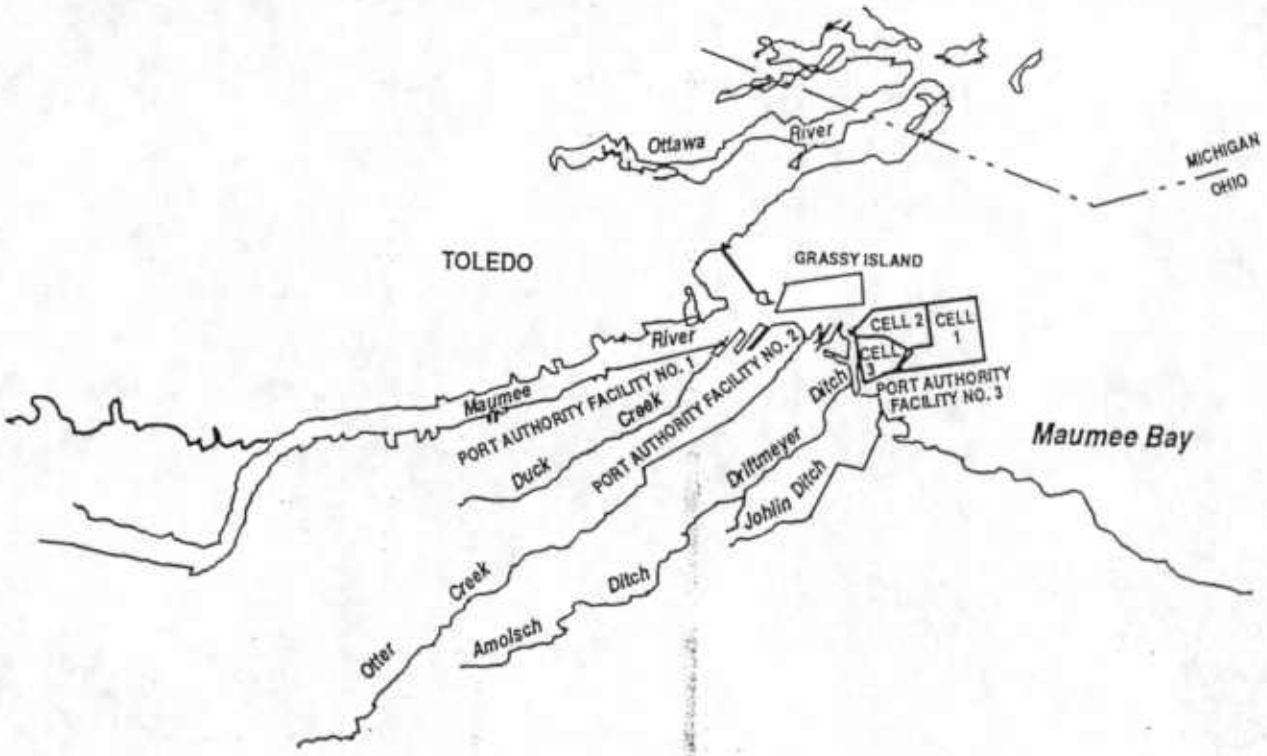
☆U.S. G.P.O. 1983-4[illegible]

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

Long-Term Dredged Material Management Plan
within the context of
Maumee River Watershed Sediment Management Strategy

Executive Committee Phase 3 Report with Environmental Assessment

Toledo Harbor, OH



December 1993
(Revised Sept. 94)

ble A.1 - Summary of Screening (Phase 1 - 3)

Options	Phases			Rationale for Elimination Problem Areas			
	PH-1	PH-2	PH-3	Engrg	Envir	Econ	Time
A. SEDIMENT LOAD REDUCTION:							
1. Crop Residue Management;	C	C	C				
2. Conservation Cropping Sequence;	C	E	-			X	X
3. Alternative Crops;	C	E	-			X	
4. Grassed Waterway;	C	C	E	X		X	
5. Wetland Sediment Ponds;	C	C	C				
6. AgriRunoff Retention Reservoir	C	C	C				
7. Filter Strip;	E	-	-	X	X		
8. Streambank Erosion Control;	E	-	-			X	
9. Market for Canola Crop.	C	E	-	X		X	
B. CONTAMINANT LEVEL REDUCTION:							
1. Nutrient Management;	C	E	-	X			X
2. Animal Waste Management;	C	E	-	X			X
3. Pest Management.	E	-	-		X		
BENEFICIAL USES:							
1. Manufactured Soils;	C	C	C				
2. Environ. Restoration / Protection (Woodtick);	C	C	C				
3. Shallow Water Habitat;	C	E	-	X	X	X	
4. Grassy Island;	C	C	C				
5. Recreational Hill	C	E	-			X	X
6. Strip-Mine Reclamation	NC	NC	E			X	
D. CONFINED DISPOSAL FACILITIES:							
1. Expansion of CDFs;	C	C	C				
2. CDF Reuse Management (Dewatering);	C	C	C				
3. Recycling CDFs;	C	C	C				
4. Construction of Nearshore CDFs;	C	C	C				
5. Up-Land and Offshore CDFs.	C	C	C				
E. OPEN-WATER DISPOSAL:							
1. Existing site;	C	C	C(1)				
2. New site.	C	C	C				
F. NO-ACTION:	C	C	C				

C : Carried through
E : Eliminated
Not Considered
(1) Open-lake disposal at the existing site will be eliminated at the end of the intermediate period in 1998.

discharge from the CDFs would be controlled by setting the existing CDF discharge weirs to provide for required particulate settling time to meet effluent water quality discharge requirements (usually limited to no more than 100 mgl or ppm particulate). When the previously disposed of dredge material reaches favorable consolidation levels, it would be excavated (maintaining necessary drainage slopes) down to the saturation line by excavation equipment (i.e., dragline, dozer, front-end-loader, earth mover, truck, etc.); then transported to the CDF reuse processing area. Initially, about 150,000 (130,000 consolidated cubic yards of material would be progressively removed from about 25 to 30 acre excavation section of the CDF to about a 4 or 5-foot depth. Low level vegetation cover (grasses, legumes, small shrubs, etc.) would be maintained on the non-active portions of the CDF. Initial and on-going vegetation removal would also be processed (mulches, composed, mixed) at the CDF reused processing area. These operation would be expanded to facilitate increased reuse of deposited dredged material to the extent possible in the future. Federal CDFs namely Grassy Island 18, CDF (Cell 1), and CDF (Cell 2) would be utilized in about 20 to 10 year cycles for dredge material dewatering excavation, processing, and beneficial reuse as well as for dredged material disposal reuse. During the 5-year Intermediate Plan (1994-1998) implementation period, it is expected that excavation and reuse processing measures would be initiated on Grassy Island 18, while drainage measures would be initiated at CDF (Cell 1). CDF (Cell 2) will be utilized for on-going dredged material disposal. These dewatering and excavation, processing, and reuse operations will be monitored to confirm LTMP feasibility.

D. Processing and Beneficial Use (Manufactures Soils) Component - Substantial beneficial use of dredged material from CDFs would be initiated and further evaluated during the 5-year Intermediate Plan implementation period (1994-1998), with the intent of eventually significantly expanding the operations after 1999 for the Long-Term Sediment Management Plan (LTMP). Dewatering and consolidation of dredged material was previously discussed in paragraph C. Figure 8 provides existing Toledo Harbor CDF (Cell) locations. Figures 9, 10, and 11 provide a generalized scheme for reuse processing and dewatering. Figure 12 represents a general idea of a potential "Reuse Processing Area Scheme" for a CDF. Each of the CDFs has a dredged material reuse capacity of about 4 million cubic yards. A good portion of the excavated and dried dredged material may have potential use directly as fill or soil additive material. Although dredged material contaminant levels may not be suitable for unrestricted open-lake disposal relative to clean water parameters, such material may have suitability for use in other areas. Testing during processing measures would determine characteristics and suitability of dredged material for various uses. Other portions of the excavated and dried dredged material may be treated for minor decontamination (if any), and/or mixed with nutrient or process by-products (i.e., waste water treatment sludge, water treatment lime, cement kiln dust, etc.) to form processed or manufactures soils utilized as topsoil or topsoil additive.

Although the Island 18 CDF (Grassy Island) is the preferred site for the beneficial use operation during the intermediate period (prior to the year 2000), the goal is to use all three existing CDFs in sequence for eventual long-term operation and management at Toledo Harbor. Some material may be utilized from CDF Cell 1 during the intermediate period. Paragraphs (a) through (d) below further expand upon the concept of processing and beneficial uses of dredged material as follows:

(a) With regard to manufactured soils, during the 5-year intermediate period, dredged material in the Island 18 CDF or CDF Cell 1 would be processed to produce manufactured soil for beneficial use. As previously mentioned, other admixtures (i.e., lime, etc.) would be added to the dredged material and processed into soil. A maximum of about 150,000 cubic yards of soft or wet material would be removed from the CDF, which would then be processed on Island 18 to generate a maximum of 130,000 cubic yards of manufactured soil. Admixtures would be brought to the CDF site by truck and/or barges, and the final soil product then shipped off-site for authorized use, as appropriate. mining of the estimated 3.8 million cubic yards of dredged material above the maximum water level of +4.0 from the CDF site, could take up to 20 years - depending on future expansion of the dredged material market. Figures 13 and 14 show potential local sources of processing additives and potential beneficial use sites, respectively.

(b) It should be noted that sheer processing and movement of these mass volumes of material would be a formidable task. Movement of 150,000 to 750,000 cubic yards of material equates to about 4,167 truck-loads (36 cy/truck) to 20,833 truck-loads per year or about 16 to 80 truckloads per day for a 260 day work year. Therefore, it appears that use of trucks to transport more than several hundred thousand cubic yards of material per year from one point would be a problem and not practical. Measures involving use of mass material transport vehicles (i.e., trains, barges, ships), and/or decentralization of processing/distribution centers, appear more practical.

(c) It is anticipated that processed soils would be provided and/or sold for various area or regional project uses. The Toledo Metropolitan Area Council of Governments (TMACOG) has pursued potential beneficial uses as indicated in their document entitled "Toledo Harbor Dredged Material Beneficial Reuse Alternatives Status and Needs Report." Beneficial use project identified in the TMACOG report, and/or similar projects including processed dredged material uses, would be pursued during the Intermediate Plan period (1994-1998). Beneficial use planning assessment and evaluation will likely concentrate on beneficial use processing transport and overall likely marketability/feasibility. Whereas site-use plans (of others) would need to comply independently with any needed planning, zoning and permit requirements.

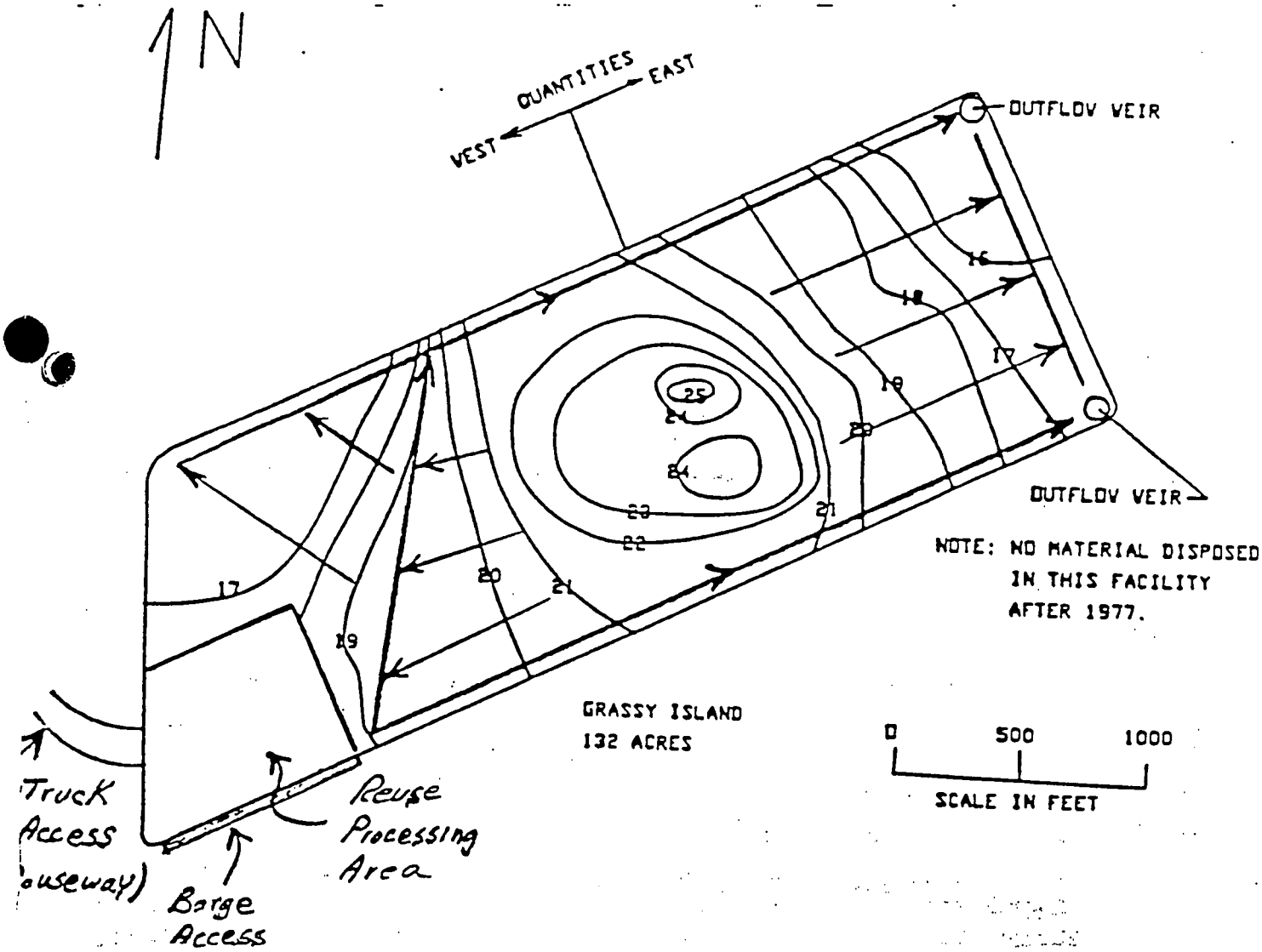
(d) Beneficial use of manufactured soil would probably be utilized by the Ohio Lake Commission Agencies namely, Ohio

Environmental Protection Agency, Ohio Department of Natural Resources, Ohio Department of Health, Ohio Department of Agriculture, Ohio Department of Development and Ohio Department of Transportation, and the City of Toledo, for landfill cover fill or topsoil.

E. Evaluation Component - Implementation of the CDF Management, Sediment Load Reduction and Beneficial Use Components would be monitored to measure their effectiveness. As a result of such monitoring, adjustments or recommendations (as needed) would then be made as to the applicability of each aforementioned component, for further use in the formulation of a Long-Term sediment Management Plan (LTMP). There would be no "open-lake" discharge of dredged material under Alternative Plan 1b; therefore, no monitoring of an open-lake disposal site could be pursued if this plan was implemented. However, monitoring would still be done for the CDF Management Component, Sediment Load Reduction Component and Beneficial Use (Manufactures Soils) Component, if the selected 5-Year Intermediate Plan is implemented.

3.3.3 Alternative Plan 2a (The Selected Plan) - - Except for the dredged material placement component of Alternative Plan 2a, all the other components of this alternative are the same as those for Alternative Plan 1b. In this alternative the dredged material would be placed in both existing CDFs and into the existing open lake disposal site. Specifically, material dredged from Lake Mile 5 riverward to River Mile 7 would be placed in CDFs, while materials dredged from Lake Mile 5 lakeward to Lake Mile 19 would be placed in the open-lake site. Under this alternative plan, an estimated 5-year average volume of 543,000 cubic yard of material would be placed in CDFs, wile an estimated 5-year average volume of 223,000 cubic yards would be placed in the open-lake. This would result in a **5-year average volume of 766,000 cubic yards** of material dredged from Toledo Harbor during the five-year intermediate period. The plan substantially reduces the amount of dredge material that is normally placed in the lake.

3.3.4 Alternative Plan 2b - - Components of Alternative Plan 2b are the same as for Alternative Plan 2a, except that the breakpoint between the zone of dredged sediment to be placed at the open-lake disposal site and the zone of sediment to be placed in a CDF is at Lake Mile 2. Therefore, material dredged from Lake Mile 2 riverward to River Mile 7 would be placed in CDFs, while materials dredged from Lake Mile 2 lakeward to Lake Mile 19 would be placed in the open-lake. Under this alternative plan, an estimated average annual volume of 360,000 cubic yards of material would be placed in CDFs, while an estimated average volume of 406,000 cubic yards would be placed in the open-lake. This would result in an **estimated average volume of 766,000 cubic yards** of material dredged from Toledo Harbor during the five-year intermediate period. The plan slightly reduces the amount of dredged material that is normally placed in the lake.



ISLAND 18 DISPOSAL SITE
REUSE PROCESSING AREA AND
DEWATERING SCHEME

FIGURE 9

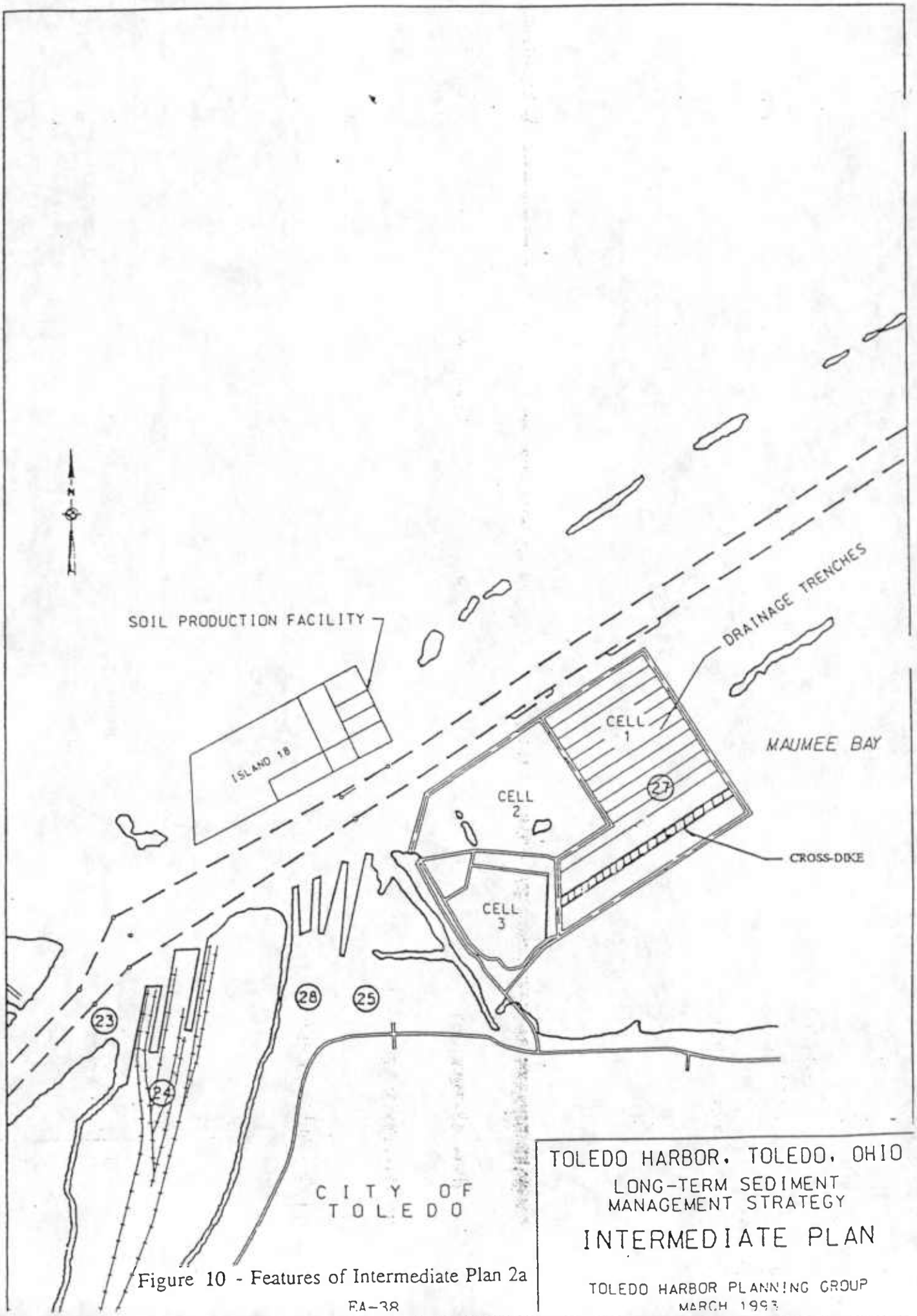
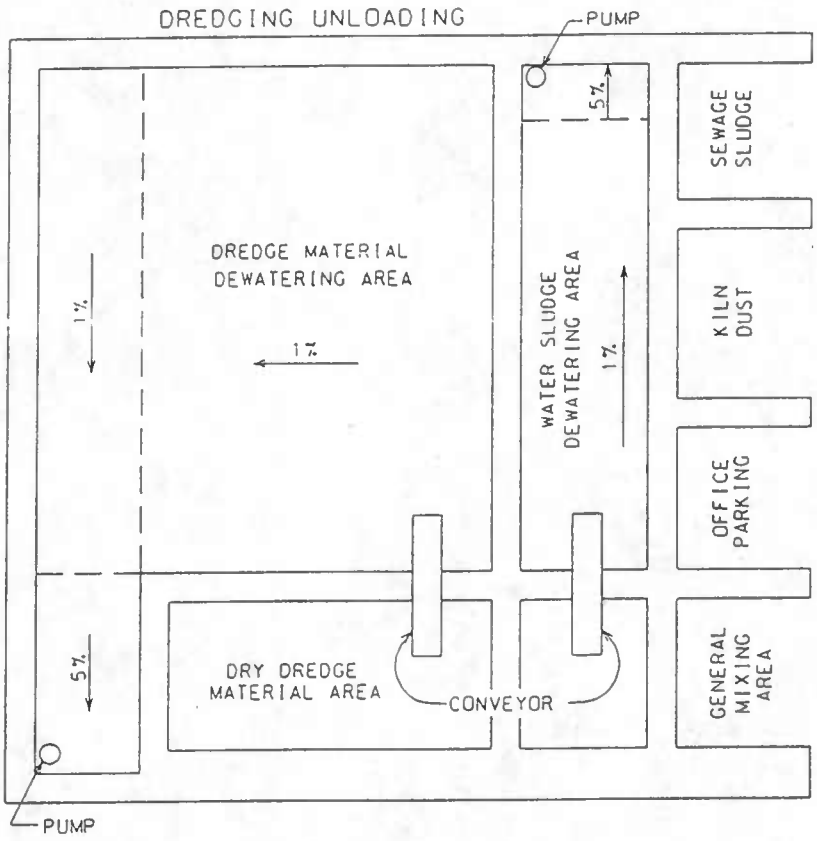


Figure 10 - Features of Intermediate Plan 2a

RECYCLING REUSE FACILITY



TOLEDO HARBOR, TOLEDO, OHIO

LONG-TERM SEDIMENT MANAGEMENT STRATEGY

RECYCLING REUSE FACILITY

TOLEDO HARBOR PLANNING GROUP

DECEMBER 1993

Table B1.2 - 5-Year Average Cost for Crop Residue Management - Plan 1b

October 1993 Price Levels

Program Component	Annual Cost ($)
County Committees	31,000
Educational Grants	100,000
Grants	100,000
Landowner Funds and Equipment Buydown	1,004,000
Technical Assistance (SWCDs)	65,000
Technical Assistance (SCS)	300,000
	1,600,000

5-Year Average Cost: $1.6 million

* Includes cost for evaluation the result of this crop residue management test project.

(3) Cost for Component 3 of Plan 1b: Manufactured Soils:

The blending and processing of the dredged material with admixtures to produce manufactured soils would take place on Grassy Island (Island 18). The manufactured soils would be transported to a distribution center within a 35 mile radius of the recycling CDF site. The estimated cost to produce the manufactured soils includes the cost of the admixtures, processing, and upfront capital cost to build staging areas, and cost of 115,00 cy/yr of manufactured soil at $7.15/cy is estimated at $.8 million.

(4) Cost for Component 4 of Plan 1b: CDF Management:

The intermediate CDF management test project involves management of surface water in Cell 1 or possibly in Cell 2 to facilitate dewatering, consolidation, and surface desiccation for increased storage capacity, as well as improved site mobility. The cost for implementing this CDF management test project is presented in Table B1.3 below. The strip drain technique for the dewatering project would be initially demonstrated over a 10-acre site. Estimated costs shown in Table B1.3 are total costs to implement the interim CDF management program. The 5-year average cost is derived from the total estimated costs.

IV. CONCLUSIONS AND RECOMMENDATION(S):

Acting on directives from the Secretary of the Army and the Water Resources Development Act of 1992 to develop a Long-Term sediment Management Strategy (LTMS) for Toledo Harbor, the Executive Committee concludes and recommends that:

A. CONCLUSION(S):

Since the initiation of this LTMS Study, an array of measures have been considered by the Toledo Harbor Planning Group to address the issues of sediment management, sediment dredging and disposal, and associated concerns over water quality and proliferation of CDFs. Some of the considered measures were eliminated or delayed from further consideration for economic, engineering, and/or environmental reasons. However, some of the measures that are still being pursued are untested from a point of view of engineering and economic efficieny. The need for a test period and/or transition period became apparent.

It also became apparent that the issue of elimination of open-lake disposal can be viewed as a means of addressing the water quality issue or water pollution problem in Maumee Bay. While open-lake disposal may be one of the factors affecting water quality, no convincing, and/or complete technical information has been introduced to the scientific community to fully verify this concern.

The issue of non-proliferation of CDF can be viewed as a means of addressing the issue of destruction of shallow water habitat and scarcity of land. While both means - elimination of open-lake disposal and non-proliferation of CDFs - are well-intentioned, they should be carefully balanced against the need for disposal facilities (confined and unconfined). However, the Planning Group is striving toward beneficial use of the dredge material to minimize the need for further CDFs. These disposal practices provide for the continued and safe operation and maintenance of the Port of Toledo, and at the same time, contribute to the local need for economic opportunity through waterborne commerce, and above all, must fulfill the national interest in the competitive global market economy by producing affordable, cheaper, and efficient waterborne transportation of goods and commodities.

The Planning Group evaluated the concerns of all the partner agencies regarding water quality, fish and wildlife habitat, and Coastal Zone Management in developing a joint Action Plan. The Executive Committee realizes that these concerns are beyond the abilities of the Planning Group to resolve. Also, new Water Quality Criteria and sediment testing procedures are being developed that will have an effect on these issues, particulary the discharge of dredge material on the aquatic environment and sensitive areas.

Based on the above and with the support of technical data gathered during this study, the Planning Group identified Alternative Intermediate Plan 2a as the best overall intermediate plan for implementation during the period 1994-98. During this intermediate period, an innovative conservation effort would be undertaken, monitored, evaluated; and results used to develop a 30-year or more Long-Term Management Plan (LTMP) to:

. reduce the quantity of dredged material entering Toledo Harbor via Maumee River, thereby extending the useful life of available disposal resources;

. actively dewater existing disposal facilities, differently manage new disposal facilities to consolidate the dredged material, and restore storage capacity for extending the useful life of these facilities; and

. remove from filled CDFs the consolidated, desiccated dredged material for the production of manufactured soils, thereby restoring storage capacity and extending the useful life of these disposal facilities.

The useful life of the new CDF (Cell 2) would be reevaluated by comparing simulations of past filling rates with field monitoring data and projections of future filling rates with a surface elevation of + 23.5 feet above Low Water Datum (LWD). The filling rates would be estimated using a mathematical model that considers both consolidation and desiccation of the dredged material.

Manufactured Soil, although restricted in its use, has been produced by combining three waste products. It offers excellent potential for contributing to the effort underway to differently manage the less-polluted sediments. Presently there is limited knowledge in the demand for this product and there is a need to demonstrate that there is a substantially strong dredged-material market to insure the economic feasibility and long-term use of the manufactured soil process. The anticipated market for manufactured soil, considering the existing landfill sites needing topsoil cap, is approximately 100,000 cy/yr. The full potential of the process of manufacturing this soil, will not be reached until a more extensive manufacturing program is implemented. Island 18, with a capacity of 3-4 million cubic yards of dredged material which can be removed using proper techniques, offers the opportunity of an extensive manufacturing program. However, the dredged material must meet current environmental agencies' standards for acceptable contamination level before it can be released for use by others.

It is expected that once the Phase 3 Report, which includes the EA and the Finding of No Significant Impact (FONSI) is reviewed and concurred in by agencies it would be coordinated for a 30-day review with Federal/State agency and the general public in accordance with the NEPA. After approval to go into Phase 4 by the Assistant Secretary of the Army for Civil Works, the Planning Group would initiate implementation of the Action Plan. The selected

Intermediate Plan will provide for testing and assessment of its components to facilitate evaluation and selection of an LTMP in 1998 or earlier. Appropriate planning and NEPA documentation will be prepared and coordinated for the LTMP at that time.

B. RECOMMENDATION(S):

• It remains the goal of the LTMS to eliminate the practice of open lake disposal. However, the Executive Committee realizes that funding issues and cost sharing cannot be determined at this level, and instead, has devoted its attention to an overall plan. Funding and cost sharing must be taken up as a separate issue in the future.

To that end, the Executive Committee recommends:

• Eliminate open-lake disposal. The 30-year **Long-Term Management sediment Strategy (LTMS)** must depend on alternative methods of sediment disposal and sediment management. Those methods that the Executive Committee believes could be successfully implemented in the Toledo Harbor Project include:

1. Vertically expanding present CDFs,
2. Re-use of confined sediments,
3. Implementing erosion control measures in the Maumee River Watershed,
4. Environmental Restoration/Shoreline Protection, and
5. Actively managing sediment dewatering in CDFs.

• That a 5 year interim plan (designated Intermediate Plan 2a) be adopted. This plan satisfied the requirements for the 5 year strategy required under the Water Resources Act. The Executive Committee recognized that components of the LTMS could be implemented in the intermediate plan. Others would require additional studies or time to implement. This interim plan will govern the 1994-1998 dredging seasons. Milestones were established to gauge progress towards implementing the LTMS.

• The construction of new nearshore CDF at Toledo Harbor will be avoided unless other environmental or wildlife benefits can be achieved.

• That additional authority(ies) and funding sources for implementing the LTMS be explored upon approval of the Phase III report.

BENEFICIAL USES:

"Evaluation of Dredged Material for Golf Course and Parkland Construction Toledo, Ohio," Investigator: Dr. Karl Danneberger, November 19, 1985

Toledo Harbor sediment needs nutrients and organic matter amendments to improve its properties for growing grass.

"Evaluation of Woodtick Peninsula Restoration and Recreational Hill/Upland Disposal Alternatives, Addendum I, Preliminary Geotechnical Investigation of the Proposed Upland Disposal Site, Erie TWP., Monroe Co., Michigan," Toledo Metropolitan Area Council of Governments, November 1989

Approximately 6 million cu. yd. of dredged material could be used for this project.

"Evaluation of Woodtick Peninsula Restoration and Recreational Hill/Upland Disposal Alternatives using Toledo Harbor Dredge Spoil Material," Toledo-Lucas County Port Authority, July 1989

"Toledo Harbor Dredge Material, Beneficial Reuse Alternatives Status and Needs Report," Toledo Metropolitan Area Council of Governments, May 1990

Describes quantities of soil material needed by landfills.

"Dredged Material Filled Fabric Tubes" C. J. Sprague, Sprague & Sprague Consulting Engineers, February 9, 1993.

Describes the design and applications of fabric tubes filled with dredged material. Applications include river, estuaty and coastal environments. Details are given for the site preparation, and the positioning and filling of tubes.

CONFINED DISPOSAL FACILITY EVALUATIONS:

"The Analysis of Water Samples from the Toledo Confined Disposal Facility," Technical Report No. G0176-04, Aqua Tech Environmental Consultants, Inc., January 1986

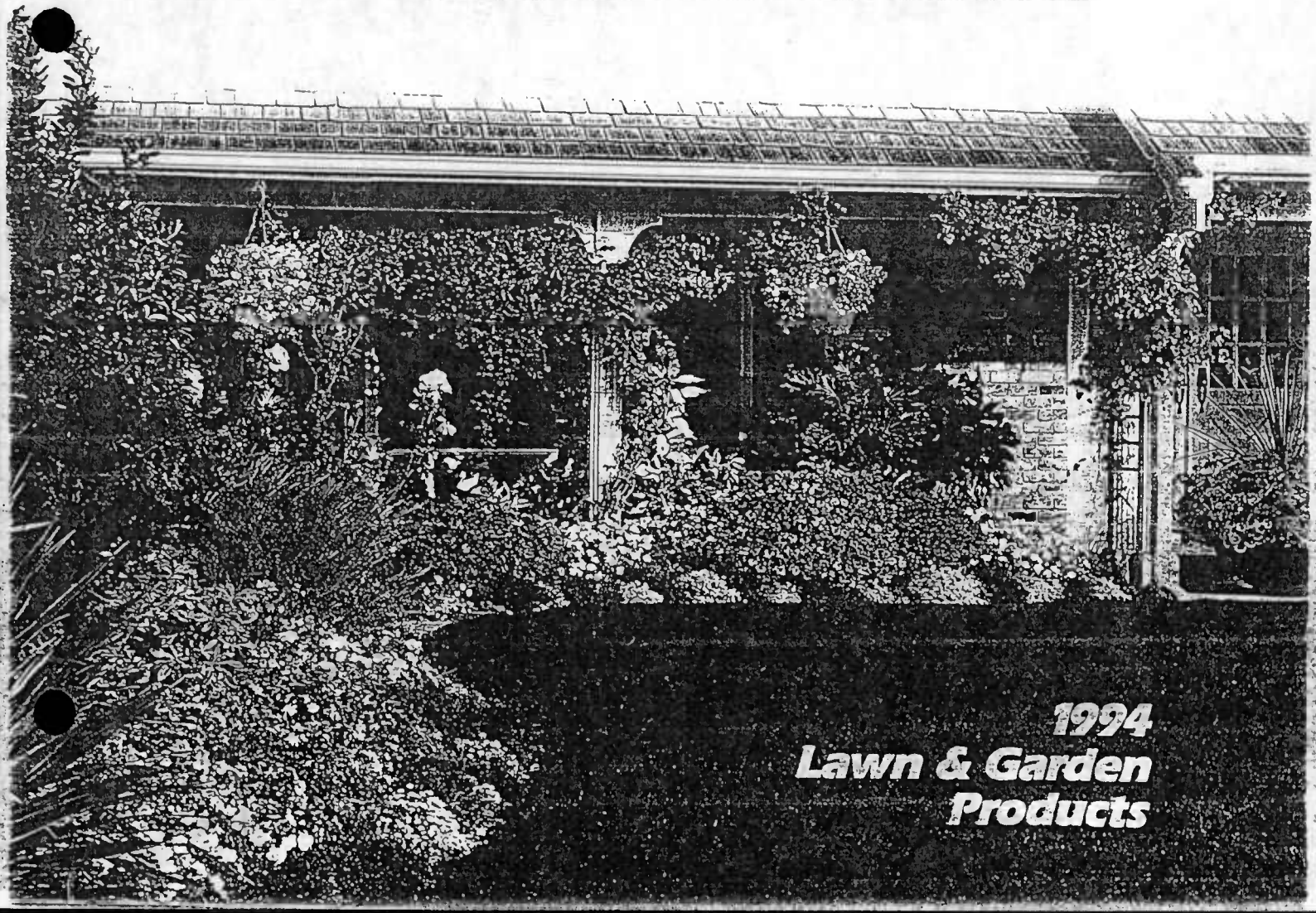
Five water samples were collected in December 1985 from the CDF. Analysis included metals nutrients, SS, nutrients, metals, and organics.

"The Analysis of Water Samples from the Toledo Confined Disposal Facility Overflow - Toledo, OH," Technical Report No. G0176-13, Aqua Tech, October 1986

Samples were collected in August 1986 from the overflow area of the CDF.

Scotts

...dedicated to a beautiful world.



1994 Lawn & Garden Products

The Scotts Difference™: premium quality and consumer value in potting soils

The Scotts® name on this new line of products is your guarantee — and your customers' — that these potting soils are agronomically and physically superior to any run-of-the-mill brand you've seen in the past. These blends of rich organic

GROWN IN SCOTTS® POTTING SOIL — GROWN IN COMPETITIVE PRODUCT

materials and additives have been specially formulated to grow bigger and more beautiful plants with:

- High percentage of sphagnum and perlite for excellent porosity and drainage — to help prevent disease, root rot, sickly plants
- Only premium composted pine bark and high-organic-humus peats are used
- Particle size closely controlled to provide excellent water movement and drainage characteristics
- Wetting agent provides even wetting of the soil, less dry spots
- Phosphorus added for good root initiation and growth after transplanting or starting
- pH adjusted for optimum growing conditions

In addition to top-quality ingredients and carefully selected formulations, Scotts potting soils present a breakthrough in soil packaging technology, with a new flat-bottom, "square" bag that stands upright and offers these qualities:

- Structural integrity — a single piece of puncture-resistant film with no air-holes, thereby eliminating leaking
- Tightly sealed to control moisture content
- Easy-open, resealable top for consumer convenience
- Ideal form for on-shelf merchandising

NEW! Premium Potting Soil

- Premium blend of rich organic materials
- Ideally suited for foliage and flowering houseplants as well as potted vegetables and herbs
- Contains phosphorus to ensure good root development
- Wetting agent provides even wetting of soil

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-29797-1	72979	10 qts.		160	national
0-32247-29867-1	72986750	16 qts.		120	national
0-32247-29517-5	72951750	1 cu.ft.		75	national

NEW! Premium Potting Soil Plus Fertilizer .07-.01-.03

- Premium blend of rich organic materials plus ScottKote™ polymer-encapsulated fertilizer
  - — Feeds plants for up to 7 months
  - — Won't burn plants—sphagnum peat and perlite added to provide excellent porosity and drainage
  - — No need to fertilize immediately after repotting or planting
- Ideally suited for foliage and flowering houseplants as well as potted vegetables and herbs

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-07797-9	70779	10 qts.		160	national
0-32247-07867-9	70786750	16 qts.		120	national
0-32247-07517-3	70751750	1 cu.ft.		75	national

NEW! African Violet Potting Soil

- Premium blend of rich organic and inorganic materials specicifically designed to grow African violets
- Slightly acidic pH — ideal for African violets
- Wetting agent provides even wetting of soil
- Phosphorus added for good root development

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-06797-0	70679	10 qts.		160	national

NEW! Seed Starter Potting Soil

- Premium blend of rich organic and inorganic materials specicifically designed to germinate and grow seeds
- Gets vegetable, herb, and flower seeds off to a good start
- Also ideal for establishing root and stem cuttings
- Reduces the chance of moisture-borne diseases such as phytophthora and pythium damping-off
- Wetting agent provides even wetting of soil
- Phosphorus added for good root development

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-50797-1	75079	10 qts.		160	national

NEW! Rose Planting Soil Plus Bone Meal and Iron

- For fuller, more beautiful roses
- Premium blend of organic materials fortified with bone meal which is vitally important to good root growth
- Iron is added to prevent leaf yellowing (from chlorosis) and poor growth

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-79517-3	79751750	1 cu.ft.	1	60	national

NEW! Bulb Planting Soil Plus Bone Meal

- A blend of organic materials plus bone meal
- Provides a natural source of phosphorus to improve bloom quality as well as bulb division and generation
- For spring-flowering bulbs such as tulips, hyacinth, daffodils as well as summer-flowering bulbs and corms such as gladiolus

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-96517-0	79651750	1 cu.ft.	1	60	national

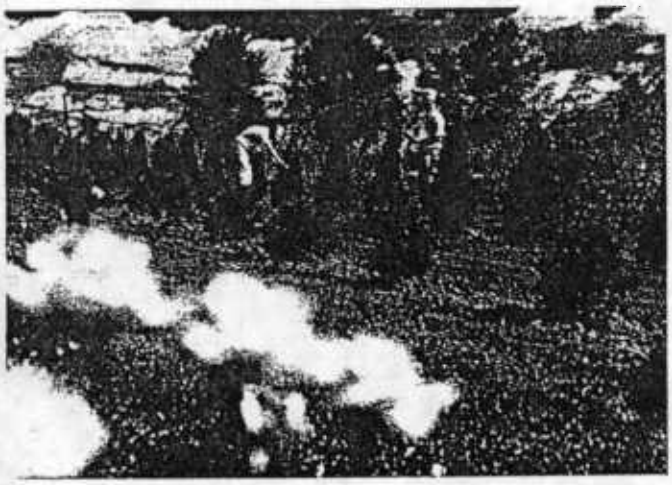
NEW! 3-in-1 Organic Mix

- A blend of quality composted ingredients that replaces peat, topsoil, and manure mixtures
- For planting, topdressing, or mulching vegetables, flowers, trees, shrubs, and grass
- Increases water movement into the soil mixture, abosrbs water quickly and thoroughly

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-28517-9	72851750	1 cu.ft.	1	60	national

The Scotts Difference™: premium quality and consumer value in planting soils

Like the new Scotts® potting soils, Scotts new planting soils are agronomically and physically superior to any low-priced "commodity" soil products. The Scotts name is our guarantee of good results that will keep your customers coming back for more.



Scotts planting soils are blended and tested by Scotts' horticultural researchers to meet the growing needs of specific types of plants such as roses, trees, and shrubs. No one in the organics business has made a greater commitment to helping homeowners achieve better results with their plantings. Scotts planting soils also offer retailers excellent cross-merchandising opportunities when displayed with live goods and Scotts granular or liquid plant foods for those varieties. Scotts market research studies show that planting soils merchandised with live goods will sell at up to 4 times the rate of soils displayed alone!

NEW! Azalea, Camellia, & Rhododendron Planting Soil

- A blend of organic materials specially formulated for acid-loving plants
- High in organic matter to help loosen hard soil, improve water-holding capacity of sandy soil, and get plants off to a good start

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-21517-6	72151750	1 cu.ft.	1	60	national

NEW! Tree & Shrub Planting Soil 0-.5-0

- A blend of quality organic ingredients plus 0.5% phosphorus and a wetting agent
- Helps newly planted trees, shrubs, roses, and lawns get off to a fast start
- Contains 0.1% iron to help prevent yellowing

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-23517-0	72351750	1 cu. ft.	1	60	national

NEW! Flower Planting Soil

- A premium lightweight growing medium
- Retains moisture to aid vigorous growth of flowering plants
- For annuals and perennials as well as for starting seeds

UPC No.	Stock No.	Size	Pack	Pallet Quan.	Availability
0-32247-37517-7	73751750	1 cu.ft.	1	60	national

SCOTTS ORGANIC FACILITIES

*Portland plant is not company owned.

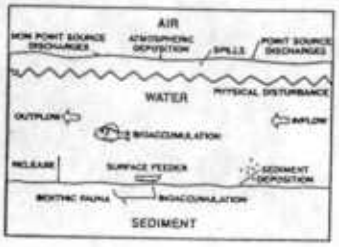
Blue = Hyponex Organic Plants
1 = Scotts Select Blends
2 = Scotts Potting Soil
3 = Compost Facilities

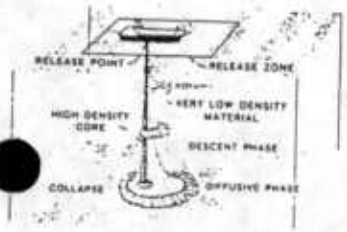
Red = Grace-Sierra Organic Plants

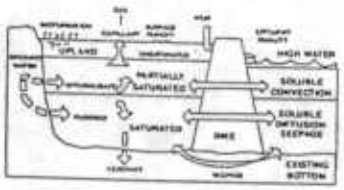
Green = Compost Facilities

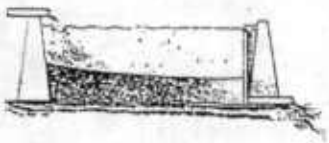
2/23/94

US Army Corps of Engineers









ENVIRONMENTAL LABORATORY

DREDGING OPERATIONS TECHNICAL SUPPORT PROGRAM

MISCELLANEOUS PAPER D-91-1

GENERAL DECISIONMAKING FRAMEWORK FOR MANAGEMENT OF DREDGED MATERIAL

EXAMPLE APPLICATION TO COMMENCEMENT BAY, WASHINGTON

by

Charles R. Lee, Henry E. Tatem, Dennis L. Brandon
Stratford H. Kay, Richard K. Peddicord, Michael R. Palermo
Norman R. Francingues, Jr.

Environmental Laboratory

DEPARTMENT OF THE ARMY
Waterways Experiment Station, Corps of Engineers
3909 Halls Ferry Road, Vicksburg, Mississippi 39180-6199

June 1991

Final Report

Approved For Public Release; Distribution Unlimited

Prepared for State of Washington
Department of Ecology
Olympia, Washington 98504

Under Intra-Army Orders for Reimbursable Services
Numbers E86-84-3049 and E85-85-3220

Monitored by US Army Engineer District, Seattle
Seattle, Washington 98124-2255

Table C11

Background Levels and Allowable Applications of Several Heavy Metals for US Cropland Soils*

Parameter	Background Concentration in Surface Soils, mg/kg			No Effect Allowed Addition** kg/ha	Median + Allowed Application mg/kg	EPA 503 REGS
	5 percentile	median	95 percentile			
Lead	4.000	11.00	27.00	1,000	511.0	300
Zinc	7.300	54.00	129.00	500	304.0	2800
Copper	3.700	19.00	96.00	250	144.0	1500
Nickel	3.800	19.00	59.00	125	82.0	420
Cadmium	0.035	0.20	0.78	5	2.7	39
pH	4.600	6.10	8.1	--	--	

* Holnigren et al. (1987) and Table C8.
** Allowed application is mixed into the 0-15 cm (0-6 in.) surface layer of soil.

Table C12

Recommended or Regulated Limitations on Potentially Toxic Constituents in Surface (0-15 cm) Soils

Basis for Limitation	Contaminant	Soil Concentration	Reference	EPA 503 REG.
Soil ingestion	Lead	500.00 mg/kg	EPA (1977)	300
	Mercury	5.00 mg/kg		17
	PCBs, etc.	2.00 mg/kg	Fries (1982)	
Plant uptake	Cadmium	2.50 mg/kg (pH 5.5)	EPA (1979)	39
Phytotoxicity	Zinc	250.00 mg/kg	Logan and Chaney (1983)	2800
	Copper	125.00 mg/kg		1500
	Nickel	62.00 mg/kg		420
	Cobalt	62.00		
Leaching	Cr (VI)	0.05 mg/ℓ	EPA drinking water standard (Table C4)	

BENEFICIAL USE	CONTAMINANT LEVEL
1. LANDFILL COVER	MORE
2. LANDSCAPING - HIGHWAYS - BUILDINGS - HOMES (SHRUBS, TREES)	MORE
3. BAGGED SOIL - POTTING MEDIA - HOME - NURSERY	DECREASES
4. AGRICULTURAL	DECREASES
5. GOLF COURSES	DECREASES
6. PARKS/HOME LAWNS	LEAST
7. RECREATIONAL - BALL FIELDS PICNIC AREAS REC. HILL	LEAST
8. HOME GARDENS	LEAST
9. PLAYGROUNDS	LEAST

THE LOCAL AND REGIONAL ECONOMIC IMPACTS GENERATED BY THE PORT OF BALTIMORE

PREPARED FOR THE
MARYLAND PORT ADMINISTRATION
APRIL 5, 1994

MARTIN O'CONNELL ASSOCIATES
2938 COLUMBIA AVE., SUITE 602
LANCASTER, PENNSYLVANIA 17603

from the survey results, the incremental impacts estimated by the model can be defended with the same degree of defensibility as the baseline measures.

4. IMPACT SUMMARY

The economic impacts generated by the public and private marine terminals at the Port of Baltimore are presented in Exhibit I-2. It is to be emphasized that the business revenue, personal income and tax impacts are not additive, since the revenue impact includes the personal income impact (excluding re-spending) and the tax impacts. Double counting of the impacts would result if the personal income and tax impacts were added together with the business revenue impacts.

Exhibit I-2
Summary of Economic Impacts Generated By Port Activity in 1992

Job Impacts	
Direct	18,051
Induced	6,625
Related	62,500
Total Jobs	87,176
Personal Income (Billion $)	
Direct	$0.60
Total	$1.10
Business Revenue (Billion $)	$1.30
State and Local Taxes (Billion $)	$0.14

Exhibit II-2 shows the direct jobs by detailed job category. As this exhibit shows, the largest number of direct jobs is with the dependent shippers and consignees, followed by truckers, ship repair yards and marine construction (excluding the Coast Guard which is included with the government category), longshoremen, and railroads.

Exhibit II-2
Direct Employment Impacts By Job Category

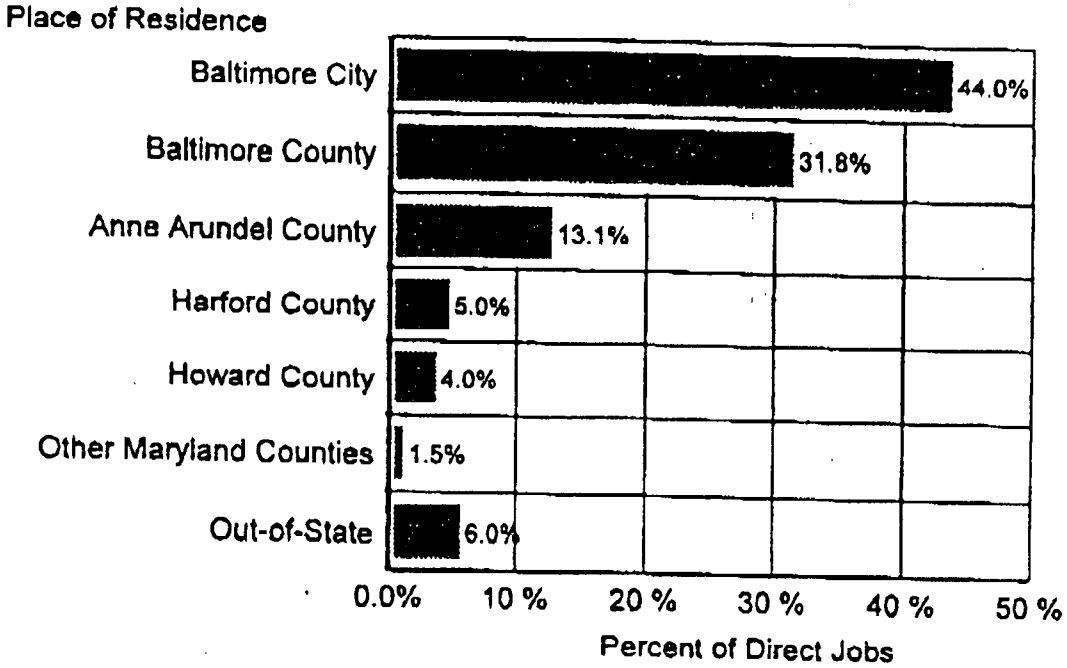
Surface Transportation Sector	
Rail	1,044
Truck	1,844
Maritime Service Sector	
Terminal Operators	1,202
International Longshoremen	1,048
Towing	48
Pilots	105
Steamship Agents/Lines*	372
Surveyors	128
Forwarders	498
Warehousemen	424
Container Repair	138
Government	1,151
Marine Construction	1,435
Linehaul Barge	74
Shippers/Consignees	8,135
Maryland Port Administration	347
Banking/Insurance/Law	58
Total	18,051

*The category Steamship Agents/Lines includes steamship line personnel based in Baltimore.

2.2. Direct Job Impacts By Residency

Exhibit II-3, on the following page, demonstrates the Port's geographical impact in the state of Maryland. As this exhibit indicates, the majority of the direct jobs is held by residents of Baltimore City, followed by residents of Baltimore County and Anne Arundel County.

Exhibit II-3
Distribution Of Direct Jobs
By Place of Residency



2.3. Direct Job Impacts By Commodity

Most of the 18,051 direct jobs can be associated with the handling of specific commodities or commodity groups. Certain employment categories such as shipyards, state, Federal and local government agencies (excluding the MPA), and the banking, insurance and legal sector are extremely difficult to assign to specific commodity groups, and if such an assignment is made, it is often done arbitrarily. As a result, direct jobs generated by port activity in shipyards, with non-MPA government agencies, and with banks, law firms and insurance companies (which totaled 2,644 jobs) are not allocated to commodity groups.

In the remainder of this section, the number of employees that were assigned to commodity groups–15,407–are detailed. Exhibit II-4, on the following page, indicates that in 1992, the three general cargo–containerized cargo, automobiles, and breakbulk cargo are responsible for generating about one-third of the direct jobs, while these same commodities represent about 20 percent of the total tonnage handled via the Port.

MARYLAND PORT ADMINISTRATION
OFFICE OF HARBOR DEVELOPMENT
FACSIMILE TRANSMITTAL

TO: CLIFF THE KIDD

FAX NO: 962-4698

FROM: BILL LEAR

DATE:

There are 5 pages, including this cover sheet. If there are any problems, please call me at (410) 631-1102. My fax number is (410) 631-1057.

Comments/Special Instructions:

CLIFF-

FYI

Please copy to:

MARYLAND PORT ADMINISTRATION
OFFICE OF HARBOR DEVELOPMENT
FACSIMILE TRANSMITTAL

TO: MICHELE VARGO | BOB SMITH

FAX NO:

FROM: BILL LEAR

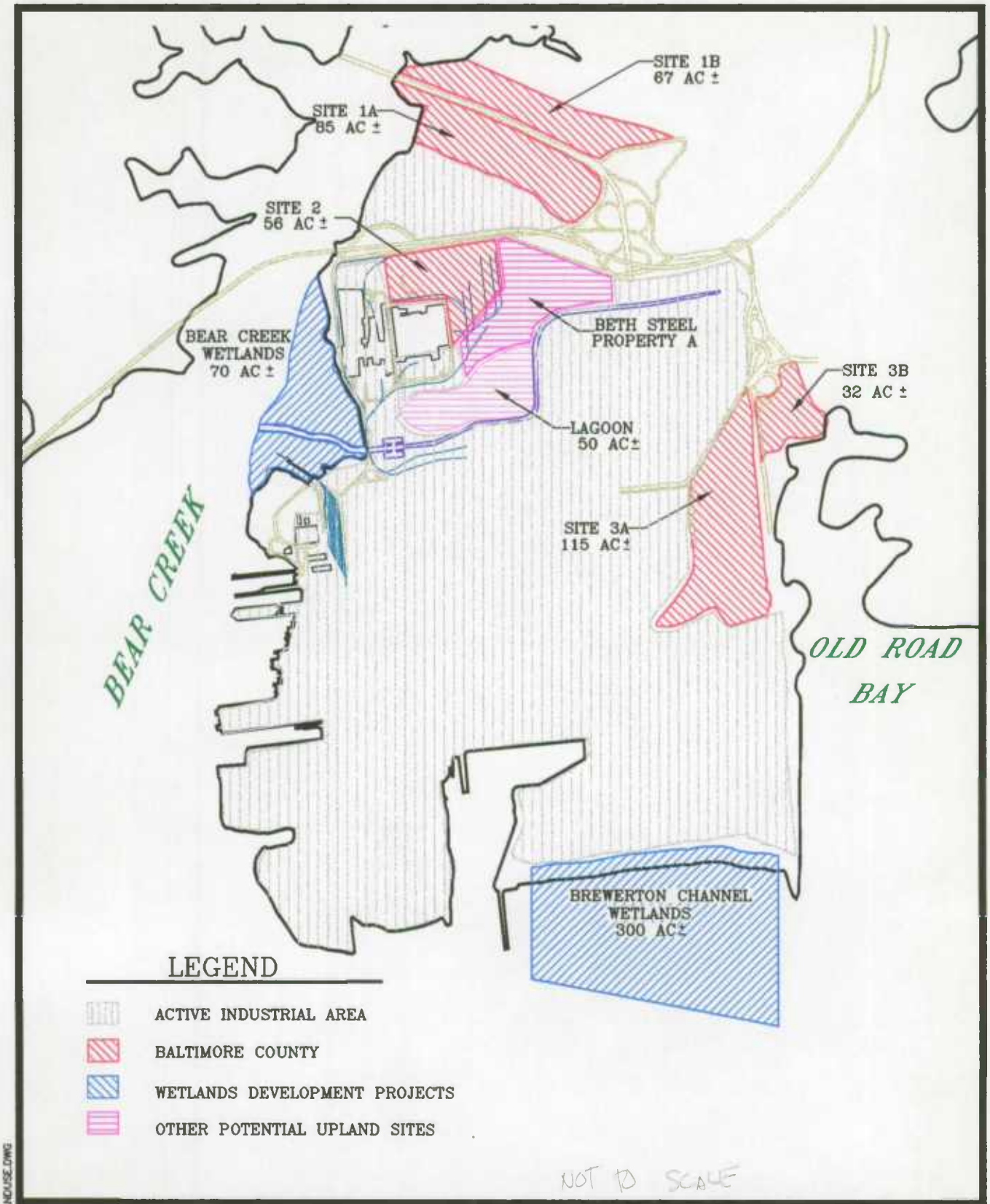
DATE:

There are 5 pages, including this cover sheet. If there are any problems, please call me at (410) 631-1102. My fax number is (410) 631-1057.

Comments/Special Instructions:

MICHELE / BOB
THE ATTACHED INFO. WAS OBTAINED
BY TRICA, WILL BE USED AS A
SELLING POINT TO BALTO COUNTY
REGARDING THE SP PT PROJECT

Please copy to:



NOT TO SCALE

MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT
PROJECT MAP
JUNE 7, 1995

J:\SPARROWPT\DRWG\LANDUSE.DWG

Brief of Findings
for Manufacture of Soil from Dredged Materials
at Sparrows Point
(6/12/95)

Status of the Technology

- There is a dredged material recycling operation in place in the Toledo, Ohio area. Funded by the Toledo Metropolitan Area Council of Governments, the Toledo-Lucas County Port Authority and the Ohio EPA, a pilot study was performed by the S&L Fertilizer Company that resulted in the creation of NU-SOIL.

  S&L has been manufacturing NU-SOIL using dewatered fine-grained dredged materials, spent lime from water treatment and biosolids recovered from wastewater treatment since 1988. The biosolids and lime are transported to an old 12 acre disposal site where they are spread and mixed with the dried dredged material using conventional construction and farm machinery. S&L "manufactures" 25,000 cubic yards per year. The city of Toledo has first rites to the purchase of the product and has used on average 97% of the material produced.

- Dr. Dick Lee of the Waterways Experiment Station (a research laboratory of the US Army Corps of Engineers) is working with Mr. Paul Adam under a cooperative research and development agreement to recycle dredged material. Terrafirma Custom Soils was developed for the purpose of implementing soil recycling technology invented by Mr. Adam in 1992. Mr Adam's process involves portable self-powered blending factories that could produce up to 500 ton of recycled material per day. Details of his process are sketchy and there are not any operations utilizing his process in place at this time.

  The Sparrows Point site was discussed with Mr. Adam as a possible site for his process. He indicated that such a site would be ideal. His technology is available for licensing although he would also consider finding venture capital on his own and setting up and running a facility at this site.

- A Long-Term Dredged Material Management Plan for the Toledo, Ohio area has identified manufactured soils as a potential use of dredged materials. The plan is to initiate and evaluate implementation of such a process during the period 1994-1998. The evaluations will concentrate on processing, marketability and overall feasibility of the process. The intent is to significantly expand these operation to an estimated 150,000 cubic yards if the studies prove them feasible after 1999.

  Dr. Dick Lee and the US EPA are working on a cooperative agreement to research the establishment of a processing plant for the manufacture of bagged and bulk soil products using

dredged material. Scotts (a commercial bagged soil producer, headquartered in Ohio) has shown some interest, however, agreements are not yet in place to get started on the project.

Process Limitations

- All current technologies appear to be in the research phase outside of the NU-SOIL operation. NU-SOIL manufacturing capacity is limited.

- None of the processes address issues related to marine sediments; specifically salinity and potential acidity.

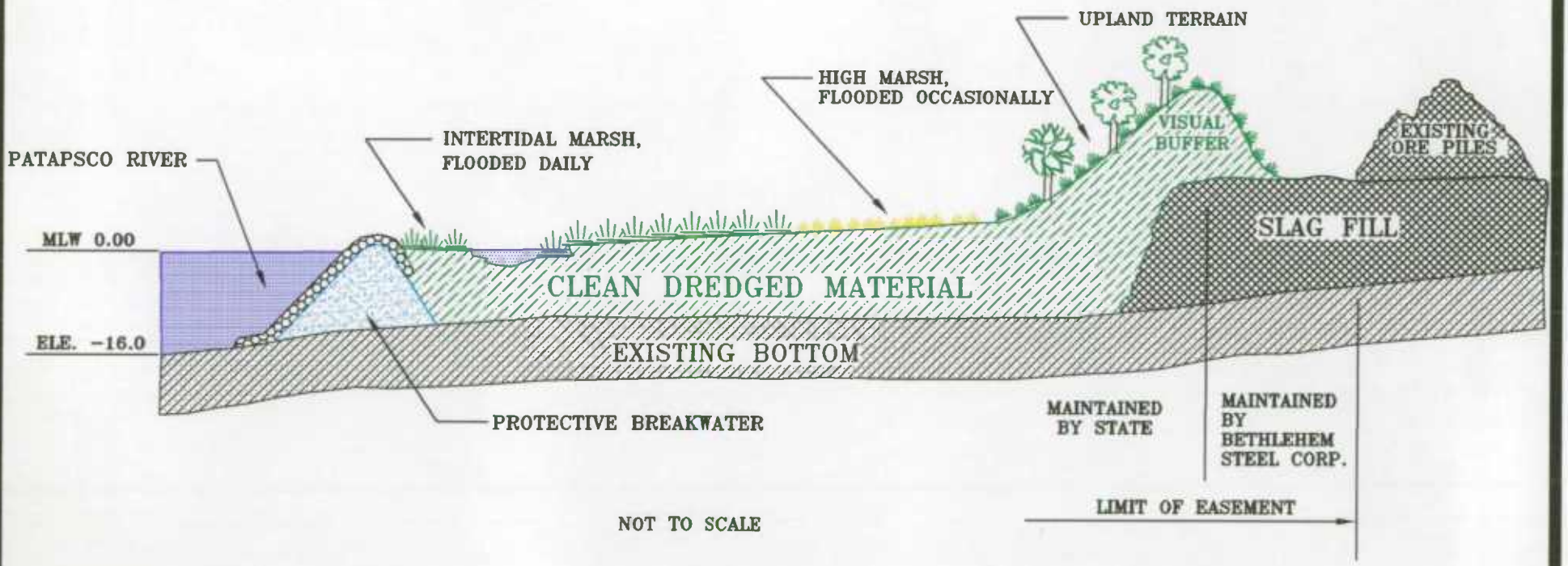
Next Steps

- An analysis is underway to determine economic feasibility of implementing a soil manufacturing facility and to identify products and market potential.

- The US Army Corps of Engineers is being asked to provide Dr. Lee's services to assist in the project. His involvement could prevent time or money wasted on processes that have already been tried. He also has contacts throughout the industry.

Current Conclusions

- Some promise exists here for leveraging off these projects to create a process for Baltimore Harbor approach channels' dredged materials. However, some basic research still needs to be performed.



MARYLAND
ENVIRONMENTAL
SERVICE

BREWERTON CHANNEL
WETLANDS CONCEPT

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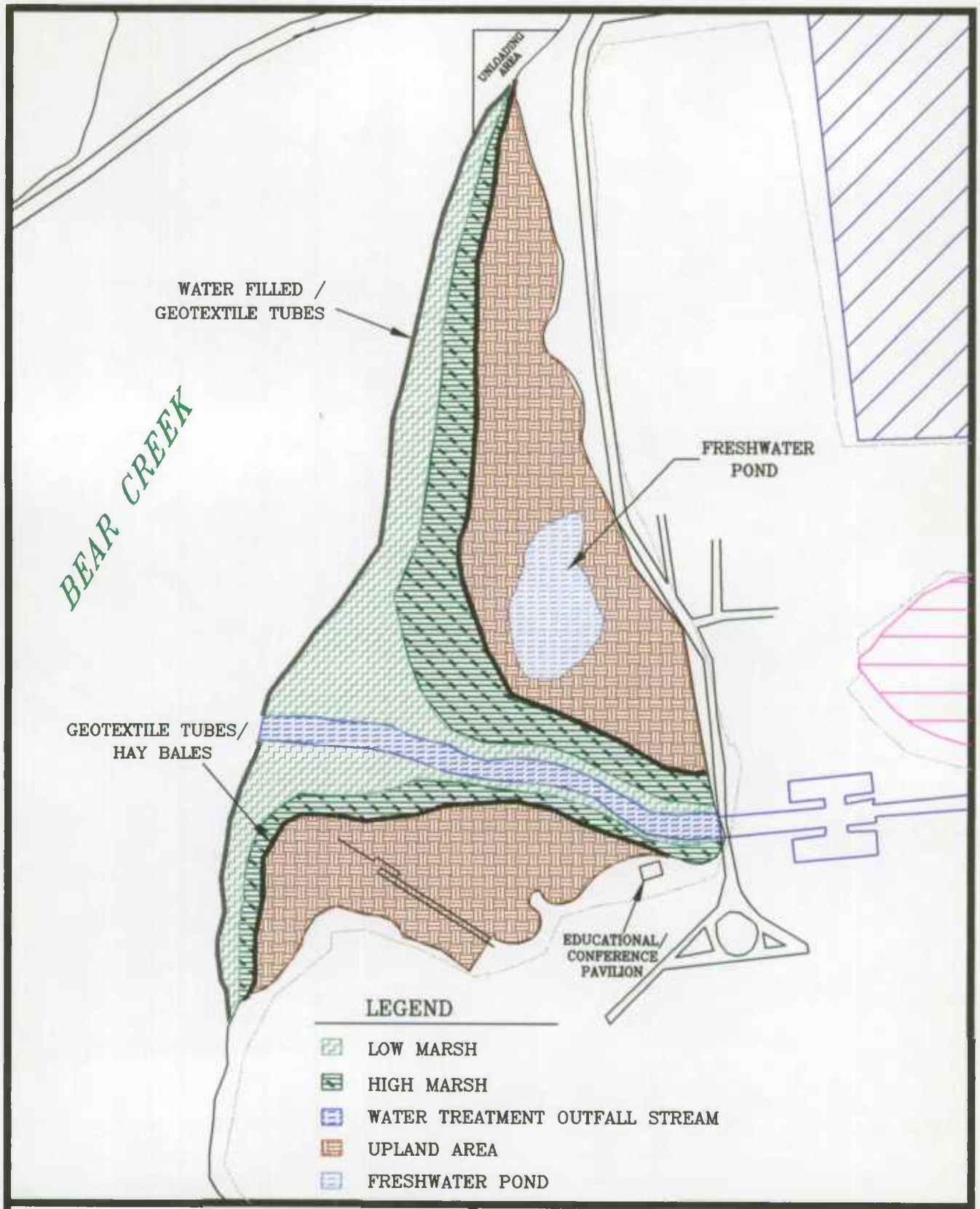

MARYLAND ENVIRONMENTAL SERVICE

BEAR CREEK CONCEPT

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approximately 50 acres and is a disposal site for sediment from the onsite cooling/processing ponds. Incorporation of the lagoon with Site 2 would improve the efficiency of a dredged material placement site. MPA may require an environmental assessment of the sediments previously placed in the lagoon

Beth Ship tentatively offered Lloyd Point for MPA's consideration. The property is on the north end of the Beth Shipyard and has apparently been a stockpile area for shipyard operations. Spare parts, equipment, and other items onsite would require removal or disposal. The property would also require an environmental assessment to protect MPA. Whether or not MPA obtains this property, the north shoreline of Lloyd Point is of interest for a beneficial use project.

The Bear Creek shoreline from Lloyd Point to the I-695 is approximately one mile long and forms a small embayment of about 60 acres. Beth Steel and Beth Ship each own parts of the shoreline. The shore has been delineated as Shoreline A and Shoreline B to represent ownership of Beth Steel and Beth Ship, respectively. These properties would be very small and would most likely consist of access easements of 150-300 feet for project use.

Of the eight properties described above, only three show significant potential for use by MPA. These are Site 2, the lagoon, and the shoreline on Bear Creek and for the purpose of this report on of the projects joins Site 2 and the lagoon. MES has developed preliminary concepts for two projects; a small wetland creation project and a reclamation facility. The following section describes the projects.

CONCEPTS

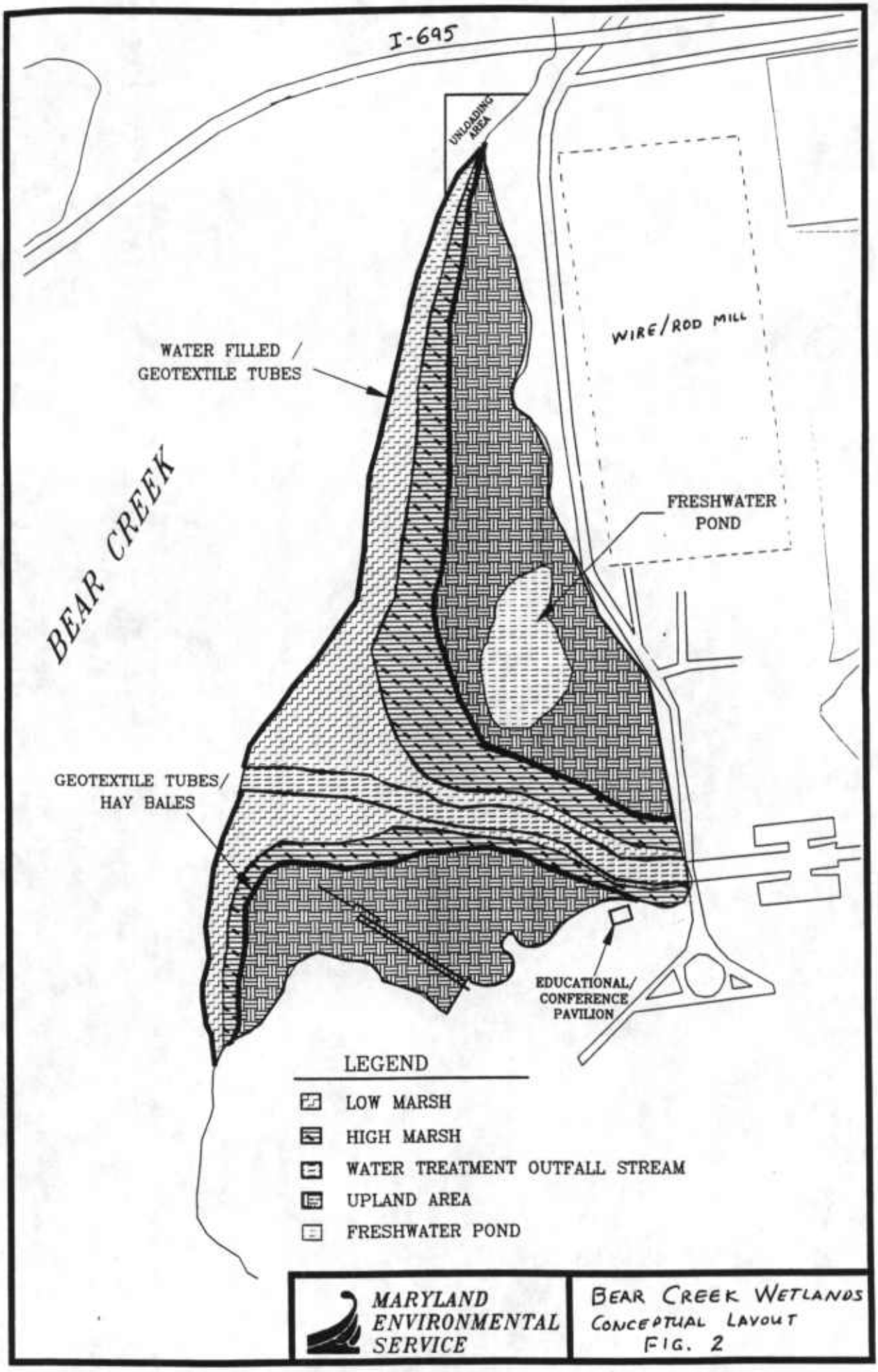
The MPA has requested the Maryland Environmental Service to develop concepts and schedules for implementing options for dredged material placement at site 2 and for a wetlands in Bear Creek. These two options are described below as separate projects and as an integrated plan.

Bear Creek Wetlands

The embayment on the western side of Sparrows Point encompasses approximately 70 acres. The concept for this site is to construct a small, intertidal wetland area as a proof-of-concept for beneficial use of dredged materials. Currently, there are no examples near Baltimore Harbor of wetlands created using dredged materials. The Bear Creek site would allow the local citizenry to closely follow the planning and construction of a beneficial use project. The MPA would have an opportunity to establish a record for providing environmental enhancements to the Baltimore Harbor.

The site, as seen in Figure 2, is small (about 70 acres) and shallow and could be constructed, filled, and planted within two to three years to quickly establish a viable marsh. Less than one million yards of dredged materials would be required for filling the site. When the marsh is fully established, the site could serve as an educational facility for local schools and civic groups. This project would also provide the MPA, MES, and the federal and state resource agencies an opportunity to assess the methodologies associated with constructing an intertidal wetland habitat.

The site is small and economical methods for constructing the wetland will be important. The shallow


I-695
UNLOADING AREA
WIRE/ROD MILL
WATER FILLED / GEOTEXTILE TUBES
BEAR CREEK
FRESHWATER POND
GEOTEXTILE TUBES/ HAY BALES
EDUCATIONAL/ CONFERENCE PAVILION
LEGEND
LOW MARSH
HIGH MARSH
WATER TREATMENT OUTFALL STREAM
UPLAND AREA
FRESHWATER POND
MARYLAND ENVIRONMENTAL SERVICE
BEAR CREEK WETLANDS
CONCEPTUAL LAYOUT
FIG. 2

water and the confined nature of the site suggest a low-energy wave climate. Geotextile tubes, water-filled bags, and straw bales are low cost alternatives that may have applications for this site. Figure 3 presents a conceptual cross-section of the project site at three stages of construction. To provide an optimal foundation for the wetland plants, the materials would be placed in thin (~ 2 feet) lifts. Placement activities would be timed to allow the thin lifts to dewater and consolidate before the placement of the next lift. This timing would be established during the planning and design of the project. Minimal crust management is anticipated for this site. The marsh creation project at the Kenilworth Gardens, Washington, DC was constructed in a similar manner and would provide the model for developing this site.

The Bear Creek Wetlands Project would serve the Maryland Port Administration as a demonstration of the beneficial use of dredged material and would offer many public relations benefits. The wetlands will stand in contrast to the surrounding industrial landscape and will be quite visible from the northbound lane of I-695 just before crossing Bear Creek. This is expected to increase public awareness of the project and provide an opportunity to educate citizens in the beneficial use of dredged materials. Expanding the educational concept, the project may be a potential outdoor classroom opportunity to educate local school children about the Chesapeake Bay, its habitats, and environmental science.

The Bear Creek site has the potential to build public support for the original wetlands project proposed for the southern shoreline of Sparrows Point. This project has all the characteristics of the original project but on a smaller scale. Local interest groups can promote this project well. The outdoor classroom concept would further generate support through the school system and other organizations interested in educating people about the Bay and the environment.

The MPA has established a record for developing partnerships with the state and federal resource and regulatory agencies. The Bear Creek Wetlands Project would provide the MPA and the County an opportunity to develop new partnerships. Public and private organizations normally outside this area of interest may benefit by being associated with this educational project and provide funding or other support. Besides Beth Steel and Beth Ship, these organizations may include Baltimore Gas & Electric, State Highways Administration, and many private non-profit environmental groups.

Dredged Material Reclamation Facility - Site 2

Site 2 is an upland property with the abandoned pipe mill and is well suited for a dredged materials facility but is within the five-mile noncontainment zone. Maryland Environmental Service has investigated some alternatives to traditional containment and proposes to assess a feasibility to recycle dredged materials as usable construction materials.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

CONCEPTS

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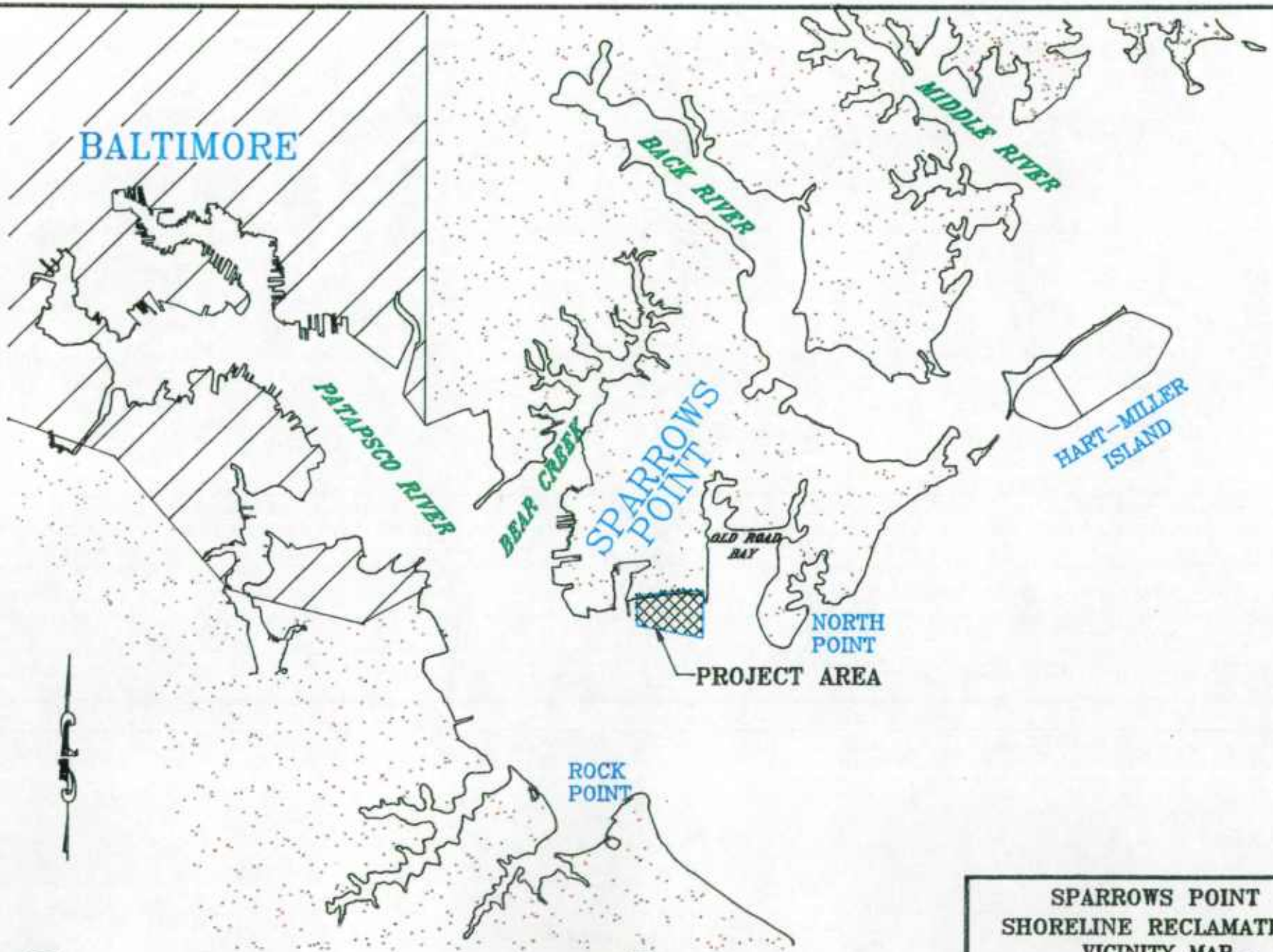
lear:bearconc

SPARROWS POINT SHORELINE RECLAMATION

MARYLAND
PORT
ADMINISTRATION

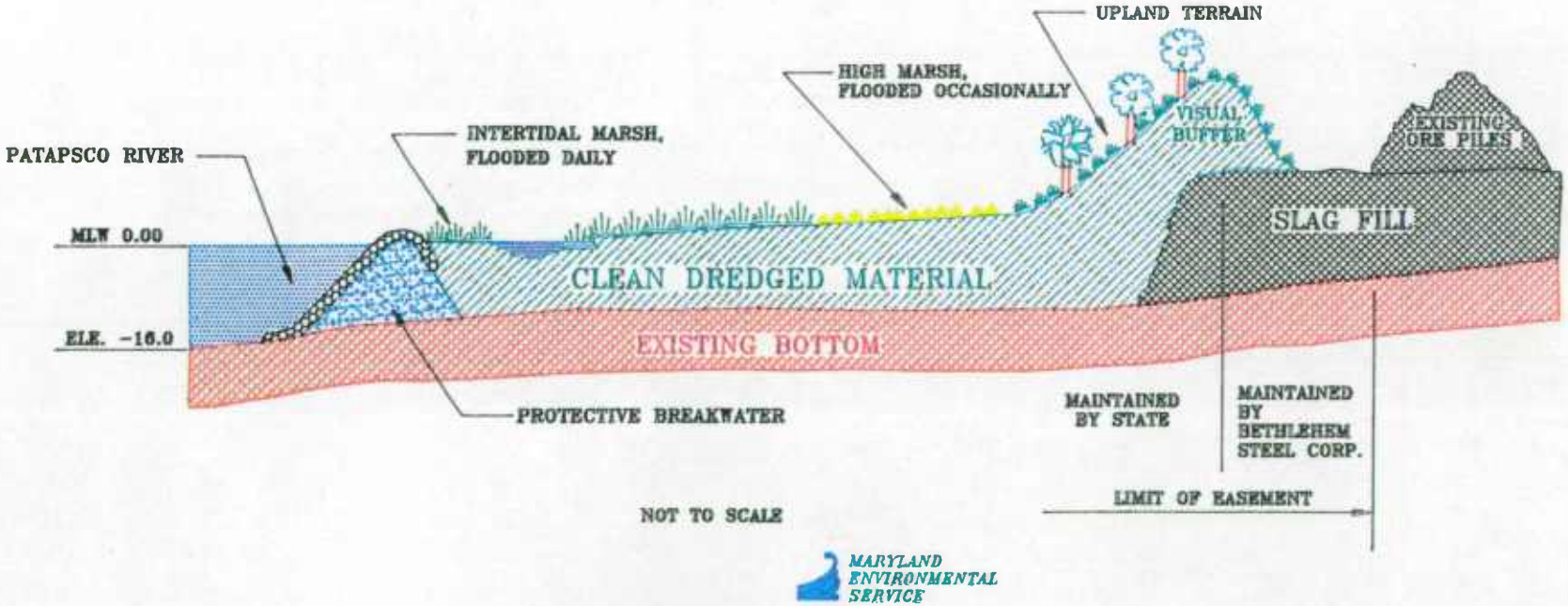
MARYLAND
ENVIRONMENTAL
SERVICE

SPRING 1993

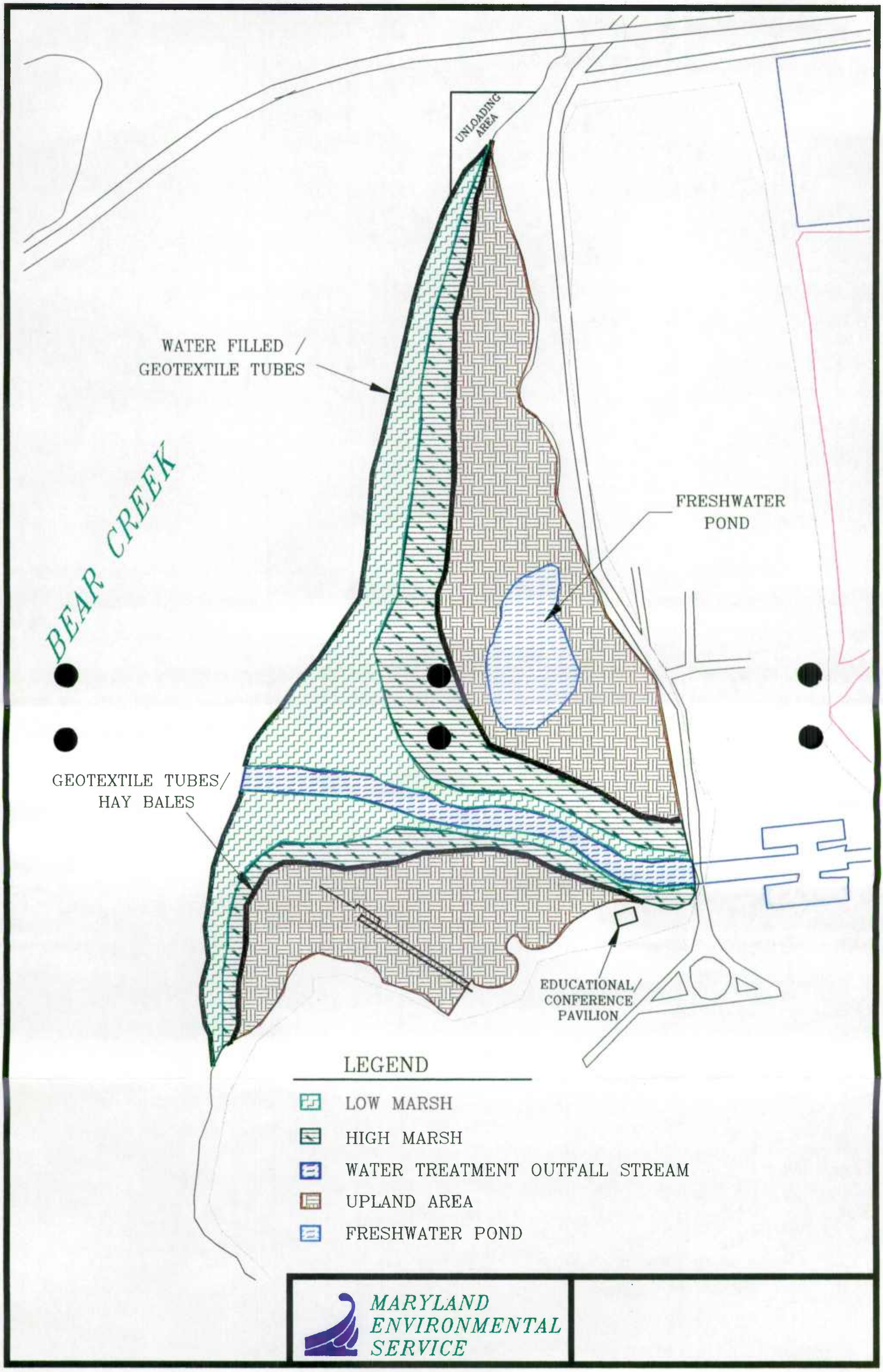


SPARROWS POINT
SHORELINE RECLAMATION
VICINITY MAP

SPARROWS POINT SHORELINE RECLAMATION PROJECT
CONCEPTUAL SKETCH



MARYLAND ENVIRONMENTAL SERVICE


UNLOADING AREA
WATER FILLED / GEOTEXTILE TUBES
BEAR CREEK
FRESHWATER POND
GEOTEXTILE TUBES/ HAY BALES
EDUCATIONAL/ CONFERENCE PAVILION
LEGEND
LOW MARSH
HIGH MARSH
WATER TREATMENT OUTFALL STREAM
UPLAND AREA
FRESHWATER POND
MARYLAND ENVIRONMENTAL SERVICE

MARYLAND
ENVIRONMENTAL
SERVICE

Parris N. Glendening
Governor

James W. Peck
Director

FAX TRANSMITTAL

DATE:	June 1, 1995		
TO:	Bill Lear	MPA	fax: 631-1057
FROM:	Bob Smith BS	MES	fax: 974-7236

The following are the organizations and contacts for the Public Information Program on the Sparrows Point Project.

Organization: Edgemere / Millers Island Businessman's Association
Baltimore County Waterman's Assoc
Contact: Carl Hobson - 477-8811

Organization: Battle Grove Democratic Club
Contact: Thomas Baldwin - 477-1928

Organization: The Greening of Dundalk
Contact: Diane Pinter - 288-5295

Organization: North Point Peninsula Community Coordinating Council
Contact: Pearl Gintling - 477-2370
Janice Ramsey - 477-5051
Virginia Tolbert - 477-4214

If Tricia needs them, I can get copies of the meeting summaries from the four meetings. Other people she should start with are: Guido Guarniccia - 388-0684 (He is an environmental advocate in the SP/Dundalk area and is well respected by the community)

Councilman DePazzo - 887-7174
Janet Wood (Sen. Stone) - 285-6034

Number of pages (including this cover sheet) 1

MARYLAND PORT ADMINISTRATION
OFFICE OF HARBOR DEVELOPMENT
FACSIMILE TRANSMITTAL

TO: TRICA SLAWINSKI

FAX NO: 385-4485

FROM: BILL LEAR

DATE: 2 JUNE 95

~~~~~~

There are 2 pages, including this cover sheet. If there are any problems, please call me at (410) 631-1102. My fax number is (410) 631-1057.

Comments/Special Instructions:

TRICA

PER YOUR REQUEST, I HAVE ENCLOSED ORGANIZATIONS & CONTACTS FOR THE SPARROWS POINT PROJECT

Please copy to:
~~~~~~

2 MAY 97

TO: FILE

FROM: BILL LEAR

SUBJECT: FLIGHT TO PENNSYLVANIA STATE UNIVERSITY

ATTENDEES: BOB SMITH (MES)
MICHELE VARGO (MES)
BILL LEAR (MPA)

THE PURPOSE OF THE MEETING AT PENNSYLVANIA STATE UNIVERSITY WAS TO MEET WITH MR PAUL ADAM WHO IS THE INVENTOR OF A PATENTED DESIGN TO RECLAIM DREDGED MATERIAL AND DEVELOP THE MATERIAL INTO ARTIFICIALLY CREATED SOILS WHICH IS CURRENTLY BEING USED FOR LANDSCAPING, PARKS, HOME LAWNS, RECREATIONAL FACILITIES AND LANDFILLS. THIS PROCESS OF RECYCLING DREDGED MATERIAL OPERATION IS BEING CONSIDERED AT THE SPARROWS POINT LOCATION. TRANSPORTATION WAS BY AIRCRAFT THAT WAS PROVIDED BY DNR AT A COST OF ABOUT $1,000.00. THE FLIGHT THAT WAS APPROVED BY FRANK HAMONS TOOK APPROXIMATELY 1 HOUR COMPARED TO 5 HOURS (ONE WAY) BY MOTOR VEHICLE.

REPORT TO THE CITIZEN'S COMMITTEE
PLACEMENT OPTIONS PROGRAM
SPARROWS POINT

May 17, 1995

1. Investigations are continuing to identify alternative uses for dredged material at upland sites on Sparrows Point.

   - MPA and MES have been talking with the US Army Corps of Engineers, Waterways Experiment Station and private consultants about the feasibility of recycling dredged material and other waste to create soil products.

   These technologies show some promise for the future however the amount of material utilized is small and the processes utilized do not appear to be "mature" enough to allow for short-term implementation.

2. A small embayment north of Lloyd Point along Bear Creek is being screened as a possible location for a wetland creation. The estimated size of the site is 70 acres and would use approximately 700,000 CY of material. Additional studies are required to determine the feasibility of the project.

Maryland Port Administration
The World Trade Center
Baltimore, Maryland 21202-3041

Parris N. Glendening
Governor

Maryland Port Commission
David L. Winstead
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
Milton H. Miller, Sr.
George P. Stamas
Fred L. Wineland

Michael P. Angelos
Executive Director

May 17, 1995

Diane L. Gilbert
Education Liaison
Baltimore County
Executive Office
Courthouse Mezzanine
Towson, Maryland 21204

Dear Diane:

It was great seeing you at Dutch's fundraiser and I look forward to having lunch with you on May 23rd. It's great to have the opportunity to work with you and Dutch again.

As promised, I am forwarding you some briefing materials regarding the Maryland Port Administration's (MPA) proposed Bear Creek Wetlands Beneficial Use Project at Sparrows Point. I am specifically interested in speaking with you regarding the proposed education/environment exhibit facility for the shoreline near Lloyd Point (see map shoreline A & B). The enclosed materials will give you a good overview of this project.

I've made lunch reservations at Stouffer's Harborplace for noon on May 23rd. Please park directly across the street from the World Trade Center in the indoor parking lot, which can be approached by turning left from Pratt Street to Gay Street. Remember to take your parking ticket with you so it can be validated by the MPA.

My office is located on the 19th floor of the World Trade Center. As confirmed, I look forward to seeing you around 11:45 A.M.

Best regards

Tricia

Tricia L. Slawinski

My telephone number is 410-385-4481
TDD/TT: 410-684-6919 Fax: 410-333-1126

Copy - Bills

From: TRICIA L. SLAWINSKI (STLS)
To: MPA1:SFLH
Date: Monday, May 8, 1995 2:24 pm
Subject: Sparrows Point

FYI:

I wanted to let you know that I scheduled a meeting with Bill Lears and Michele Vargo to discuss the Bear Creek shoreline site for educational/environmental projects with Baltimore County schools. I 've scheduled a meeting with Diane Gilbert who is Dutch Ruppersberger's educational assistant . I wanted to entertain the issue of implementing possible educational projects with Baltimore County schools. The meeting with Bill and Michele will be to develop the best package of info material regarding Bear Creek to give to Diane. Lou Pickney will also join me. After the meeting (around 3:00) Bill Michelle and I are taking Lou out to see Sparrows Point. If interested, let me know.

CC: MPA1:SKYJ

1 Need to develop a curriculum.

2 MDE Discussed potential capping project in this area.

3 Project too early.

Agenda for Sparrows Point Discussion
26 April 1995

E.A.T.S. Task 5

- Executive summary of biological studies of the Brewerton Channel wetlands.
- Navigation issue: Does the Brewerton Channel wetland design present a hazard to navigation due to its encroachment on the Channel?
- Upland placement options.
- Plan/schedule to brief elected officials, civic and community groups on status of Sparrows Point projects.

Other Tasks

- Pursue upland property for soil manufacturing with Baltimore County.
- Draft language for legislation amendment to allow wetland development inside the "five-mile rule" boundary. ?
- Continue talks with Bethlehem Steel to develop Bear Creek wetlands.

Next FY

- Feasibility, design and possible implementation of Bear Creek wetlands.
- Work towards amendment for rule change.
- Continue public participation/education for all Sparrows Point sites.
- Develop plans for soil manufacturing site if initial studies warrant it.

Briefings List

State Senate:	Norman R. Stone, Jr.
House of Delegates:	John Arnick Joseph Minnick Jacob J. Mohorovic, Jr.
County Officials:	Baltimore County Exec. County Council
Working Group:	All members
Citizens:	Thomas Kroen, Greater Dundalk Community Council Robert Christopher, Back River Neck Road Association Janice Ramsey, North Point Community Coordinating Council Pearl Gintling POP Citizens Committee

631.11.79

DEPARTMENT OF TRANSPORTATION
MARYLAND PORT ADMINISTRATION
COMPTROLLER'S OFFICE
Maritime Center at Point Breeze
2310 Broening Highway
Baltimore, Maryland 21224-6621

Invoice 13901

Date APRIL 18, 1995

#02037
BETHSHIP SPARROWS POINT YARD
BETHLEHEM STEEL CORPORATION
SPARROWS POINT, MD 21219

ATTN: G.A. KEIGLER

AMOUNT DUE

PERMIT #395005

THE FOLLOWING CHARGES ARE MADE IN ACCORDANCE WITH THE PERMIT AGREEMENT AND COMAR 11:05:06 FOR DEPOSITING DREDGED MATERIALS AT HART-MILLER ISLAND SPOIL DISPOSAL SITE.

234,672 CUBIC YARDS OF DREDGED MATERIALS AT HART-MILLER ISLAND DISPOSAL SITE @ $2.00 PER CUBIC YARD.

AMOUNT DUE..... $469,344.00

FOR THE PERIOD 011995 THRU 021495

DR	1211	796	0000	ID#NONE $469,344.00
CR	7335	796	3796	ID#NONE $469,344.00-

Bills due when rendered except as specified in Terminal Services Tariff

122-2

MARYLAND PORT ADMINISTRATION
OFFICE OF HARBOR DEVELOPMENT
FACSIMILE TRANSMITTAL

TO: BOB SMITH

FAX NO: 974-7236

FROM: BILL LEAR

DATE: 20 APR 95

There are 2 pages, including this cover sheet. If there are any problems, please call me at (410) 631-1102. My fax number is (410) 631-1057.

Comments/Special Instructions:

BOB -

CAN YOU REACH INTO YOUR POCKET AND PAY THIS INVOICE FOR YOUR GOOD PALS AT THE SHIPYARD?

Please copy to:

Bill Leas

M[redacted]nd Port Administration
The World Trade Center
Baltimore, Maryland 21202-3041

Parris N. Glendening
Governor

Maryland Port Commission
David L. Winstead
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
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George P. Stamas
Fred L. Wineland

Michael P. Angelos
Executive Director

VOID

March 21, 1995

Robert Staab
Chief of Operating Policy
Executive Office
Baltimore County Court House
400 Washington Avenue
Towson, Maryland 21204

Dear Mr. Staab,

On behalf on the Maryland Port Administration (MPA) I would like to extend my sincere thanks for your prompt willingness to meet with us concerning the purchase of 120 acres of property, located at Bear Creek - Sparrows Point. The MPA is investigating this property for the placement of clean dredged material and the development of a beneficial use project.

During the former administration, discussions with the Office of Economic Development and the Department of Environmental Protection and Resource Management were initiated. The County tentatively agreed that the MPA should investigate this property which is identified on the enclosed map as Site 2 as well as additional sites 1A, and 1B, for clean dredged material placement.

The MPA contracted the Maryland Environmental Service (MES) to pursue an investigation for constructing a project at Sparrows Point. MES has completed its preliminary assessment of this project and has concluded that site 1B and 2 are best suited for use as clean dredged material placement.

Our meeting with you and your staff has been arranged for Wednesday, March 29, 2:30pm in the County Executive Office. During this time MPA and MES officials will present its preliminary assessment of the properties as well as the overall proposed Sparrows Point - Beneficial Use Project.

Sincerely,

Tricia L. Slawinski

Enclosure

My telephone number is 410-385-4481
TDD/TT: 410-684-6919 Fax: 410-333-1126

DREDGED MATERIAL PLACEMENT OPTIONS
FOR
UPLAND PROPERTIES

SPARROWS POINT, MARYLAND

BACKGROUND

The Maryland Port Administration (MPA) is responsible for providing placement sites for over three million cubic yards of materials dredged annually from the Federal Navigation Channels in Maryland waters of the Chesapeake Bay. This task is becoming increasingly difficult as tighter environmental regulations are reducing the potential for open water placement and continued development along the Chesapeake Bay has minimized property available for upland containment. Public opposition to dredged material placement projects further increases the challenge to maintain the shipping channels.

The MPA contracted the Maryland Environmental Service (MES) to initiate an investigation for constructing a project at Sparrows Point. Maryland law currently prohibits the construction of a dredged material containment facility in Baltimore County with five miles of the Hart-Miller-Pleasure Island chain. Sparrows Point lies within this five-mile zone, so a containment facility is prohibited for this site. However, Sparrows Point, as a beneficial use site, should not be considered a containment facility.

The proposed project envisions both wetlands and upland habitat constructed with several million cubic yards of dredged materials along the shoreline of the Patapsco River. Development along the Patapsco River has destroyed the majority of previously existing wetlands. The proposed project would create 200 acres of productive wetlands to enhance the river's environment. State and federal resource agencies cooperated with MPA and MES to develop an environmentally effective project. The habitat project would provide benefits to the local environment such as improving the water quality, decreasing nutrient loadings and providing a visual screen to the industrial activities of Bethlehem Steel.

The citizens of the Sparrows Point community suggested investigating the potential use of upland property at Sparrows Point. It was their view that industrial development at Sparrows Point had significantly intruded on the river and that further encroachment should be stopped. They specifically identified property which Bethlehem Steel was conveying to Baltimore County for potential use for economic development.

MES met with the Office of Economic Development and the Department of Environmental Protection and Resource Management (the County, collectively) to discuss the possibility of using the upland properties for dredged material placement. Development was initiated on at least one parcel, but some of the property may be usable as placement sites. The County tentatively agreed that MPA should investigate sites 1A, 1B and 2 for dredged material placement.

The properties consist of five parcels and are shown on Figure 1. Site 1A is an 85-acre pad constructed from processing slag, and currently is used as a spare parts storage for Beth Steel. Site 1B has been prepared for use as a containment area for ash by-products, but has not been used. It is approximately 65 acres. Site 2 is about 125 acres and is located adjacent to the lagoon. It consists of about 100 acres of "mudflats" and the skeletal buildings of an abandoned pipe mill. Site 3A is the location of a previously existing community now overgrown with large trees and other vegetation. The County has initiated development activities on site 3A and will not consider use of this site for dredged materials. Site 3B is a semi-active rail yard of about 30 acres. It is a small area and may be uneconomical for use.

MES conducted a preliminary assessment of the properties and site 1B and site 2 are best suited for use as dredged material placement sites. Site 1B has been partially constructed as a containment site for ash by-products. The site is adjacent to Bear Creek and has dikes on a portion of the perimeter. The site is small, about 65 acres, and would hold about 100,000 cubic yards of material per foot of lift. This site would also require the dredging of the channel to the railroad bridge over Bear Creek. Site 2 has the most potential for use as a dredged materials placement site and MES has focused most of the development efforts on this site.

RECENT ACTIVITIES

The channel into the Bethlehem Shipyard on Bear Creek was recently dredged and Bethlehem Shipbuilding (Beth Ship) negotiated with MPA to deposit the material into Hart-Miller Island without paying the "tipping fee" for 90 days. Beth Ship and MPA are evaluating options for allowing Beth Ship to compensate MPA. One of the options is to transfer property for use as a dredged material placement site.

MPA met with representatives from Beth Ship and Beth Steel to discuss the options for using portions of the properties of both Beth Ship and Beth Steel for dredged materials. The discussion focused primarily on the use of Site 2 which the County and Beth Steel previously agreed to consider for dredged material placement.. The site is located adjacent to an existing lagoon which is meant to receive the sediment from the cooling/processing ponds onsite. A dredged materials facility at Site 2 becomes more efficient if the lagoon to the south of the site is incorporated into the facility. MPA and MES are in the process of developing concepts and schedules for implementing options for dredged material placement at Site 2.

CONCEPT

Site 2 is an upland property with the abandoned pipe mill and is well suited for a dredged materials facility but is within the five-mile non-containment zone. MES has investigated some alternatives to traditional containment and proposes to assess the feasibility of a facility to recycle dredged materials as usable construction materials on the site.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years, but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

Site 2, as currently delineated for Baltimore County, has approximately 120 acres. About 100 acres is a closed mud pit fill area. The remaining 20 acres has the abandoned buildings of an old pipe mill. The mudflat area would be the primary focus of interest for developing a reclamation facility. These abandoned building may provide housing for a facility to process the dredged materials for construction materials.

To further enhance Site 2, the lagoon to the south of the site should be incorporated into the dewatering basin. The lagoon was constructed by Beth Steel as a disposal site for dredged materials from the on-site processing ponds. Incorporating the lagoon would provide an additional 50 acres (approx.) bringing the total area of the dewatering basin to about 175 acres.

The concept for the site is a dewatering/drying basin with simple, low dikes (6-8 ft. high). A thin layer of dredged material (between 1 and 2 feet thick) would be hydraulically pumped into the basin and held undisturbed to allow the solids to settle. The water would be drained from the basin and the dredged materials would be dried using conventional methods for turning soils (e.g., tractors, discs, etc.). When dry, the materials would be excavated and removed from the basin and recycled as construction aggregates (topsoil, sand, and gravel), processed into other construction materials (engineered aggregate, rock wool, etc.) or off-site disposal (topsoil, landfill cover, etc.). This site would handle an estimated 500,000 cubic yards of material annually using conventional dewatering techniques.

With the existing markets for topsoil, sand, and gravel, the cost for reclaiming these components from dredged materials may be competitive with other containment options. In a recent pilot project, about 14,000 cubic yards of sandy materials were excavated from Hart-Miller Island and transported to the Mid-Shore Regional Landfill to cover the landfill liner. The pilot project proved to be more economical than traditional sources of sand.

The fine grained materials (mostly silts and clays) pose more of a challenge for dredged material recycling. Studies have been conducted to evaluate the use of dredged materials as top soil or have it processed into engineered aggregates, bricks or other vitrified building materials. The technical and economic feasibility remains to be investigated.

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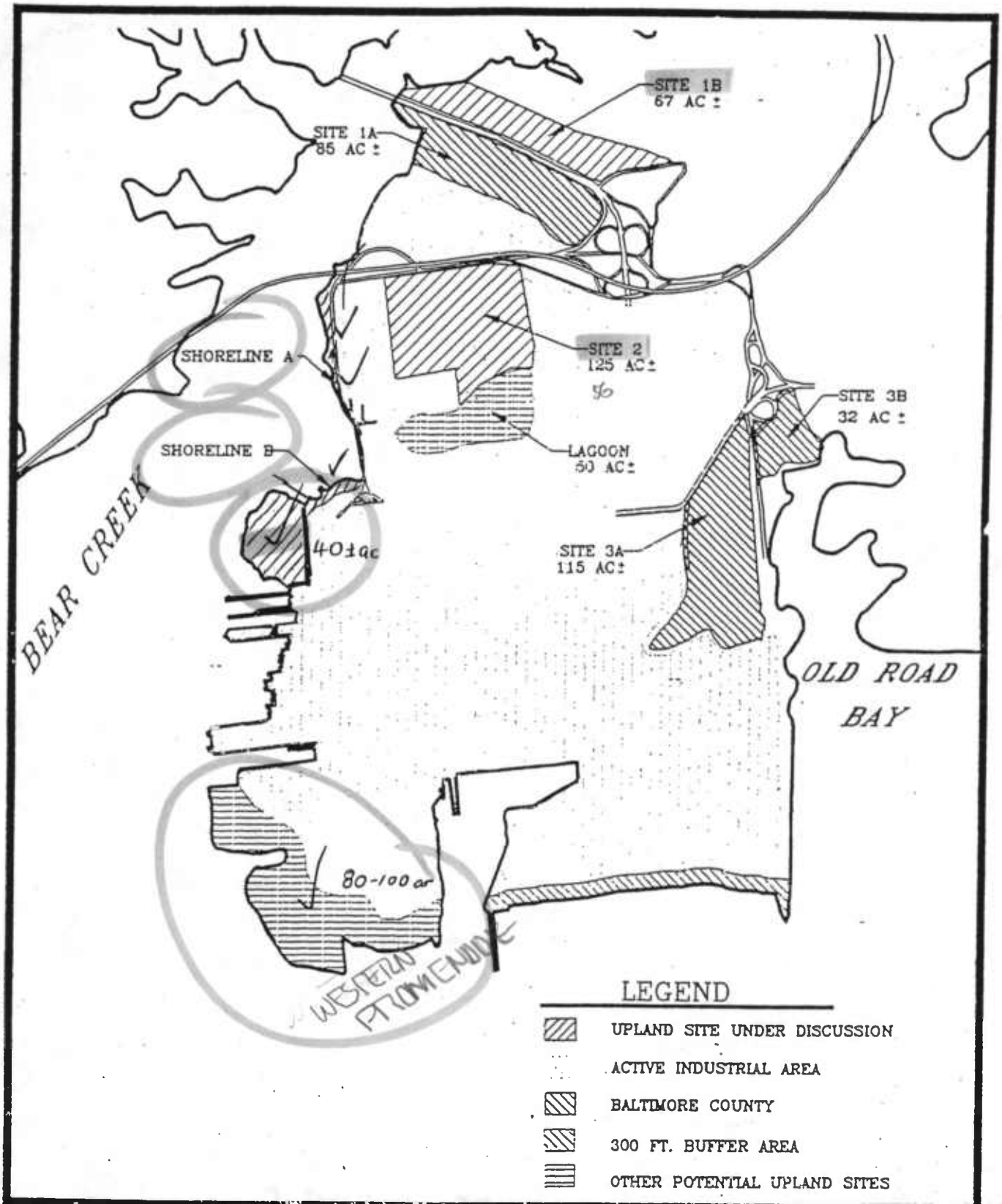

MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT LANDUSE MAP
FIGURE 1

C:\HUA\DC\DRWG\040793.DWG

bcc: Steve Feller
Frank Hamons
Bill Lear
Bob Smith
Wayne Young

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MARYLAND ENVIRONMENTAL SERVICE

RECEIVED MAR 16 1995 HARBOR DEVELOPMENT

William Donald Schaefer
Governor

George G. Perdikakis
Director

3/16/95

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* Frank Please review Thanks Gwen

3/16/95
DATE

FACSIMILE TRANSMITTAL

COVER MEMORANDUM

TO: Tricia Hawinski

FROM: Lee Zeni

TOTAL NUMBER OF PAGES (including cover memo) 2

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ADDITIONAL MESSAGE Please note the replacement line 2 in paragraph 2 and the additional bottom line in paragraph 2.

Thanks!

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267

DREDGED MATERIAL PLACEMENT OPTIONS FOR UPLAND PROPERTIES

SPARROWS POINT, MARYLAND

BACKGROUND

The Maryland Port Administration (MPA) is responsible for providing disposal sites for the estimated three million cubic yards of materials dredged annually from the Federal Navigation Channels in the Chesapeake Bay. This task is becoming more difficult. Tighter environmental regulations are reducing the acceptability of open water placement and continued development along the Chesapeake Bay has minimized the available property for upland containment. Public opposition to dredged materials disposal projects further increases the challenge to maintain the shipping channels.

The MPA contracted the Maryland Environmental Service to initiate an investigation for constructing a project at Sparrows Point. Maryland law currently prohibits the construction of a dredged material containment facility in Baltimore County within five miles of Hart-Miller Island. Sparrows Point lies within this five-mile zone, so a containment facility is prohibited for this site. However, Sparrows Point, as a beneficial use site, should not be considered a containment facility.

The proposed project envisioned a wetlands habitat constructed with several million cubic yards of dredged materials along the shoreline of the Patapsco River. Development along the Patapsco River has destroyed the majority of the wetlands. The proposed project would create 200 acres of productive wetlands to enhance the river's environment. State and federal resource agencies cooperated with MPA and MES to develop an environmentally effective project. The habitat project would provide benefits to the local environment such as improving the water quality, decreasing nutrient loadings and providing a visual screen to the industrial activities of Bethlehem Steel.

The citizens of the Sparrows Point community suggested investigating the potential use of upland property at Sparrows Point. The citizens specifically identified property which Bethlehem Steel was conveying to Baltimore County for potential use as economic development.

MES met with the Office of Economic Development and the Department of Environmental Protection and Resource Management (the County, collectively) to discuss the possibility of using its upland properties for dredged material placement. Development was initiated on at least one parcel but some of the property may be usable as placement sites. The County tentatively agreed that MPA should investigate sites 1A, 1B and 2 for dredged material placement.

The properties consist of five parcels and are shown on Figure 1. Site 1A is an 85-acre pad constructed from processing slag and currently used as a spare parts storage for Beth Steel.

abandoned pipe mill. Site 3A is the location of a previously existing community now overgrown with large trees and other vegetation. The County has initiated development activities on site 3A and will not consider use of this site for dredged materials. Site 3B is a semi-active rail yard of about 30 acres. It is a small area and may be uneconomical for use.

MES conducted a preliminary assessment of the properties and site 1B and site 2 are best suited for use as dredged material placement sites. Site 1B has been partially constructed as a containment site for ash by-products. The site is adjacent to Bear Creek and has dikes on a portion of the perimeter. The site is small, about 65 acres, and would hold about 100,000 cubic yards of material per foot of lift. Site 2 has the most potential for use as a dredge materials placement site and MES has focused most of the development efforts on this site. A dredged material facility at Site 2 becomes more efficient if the lagoon to the south of the site is incorporated. The MPA and MES are in process of developing concepts and schedules for implementing options for dredged material placement at site 2.

PROJECT DESCRIPTION

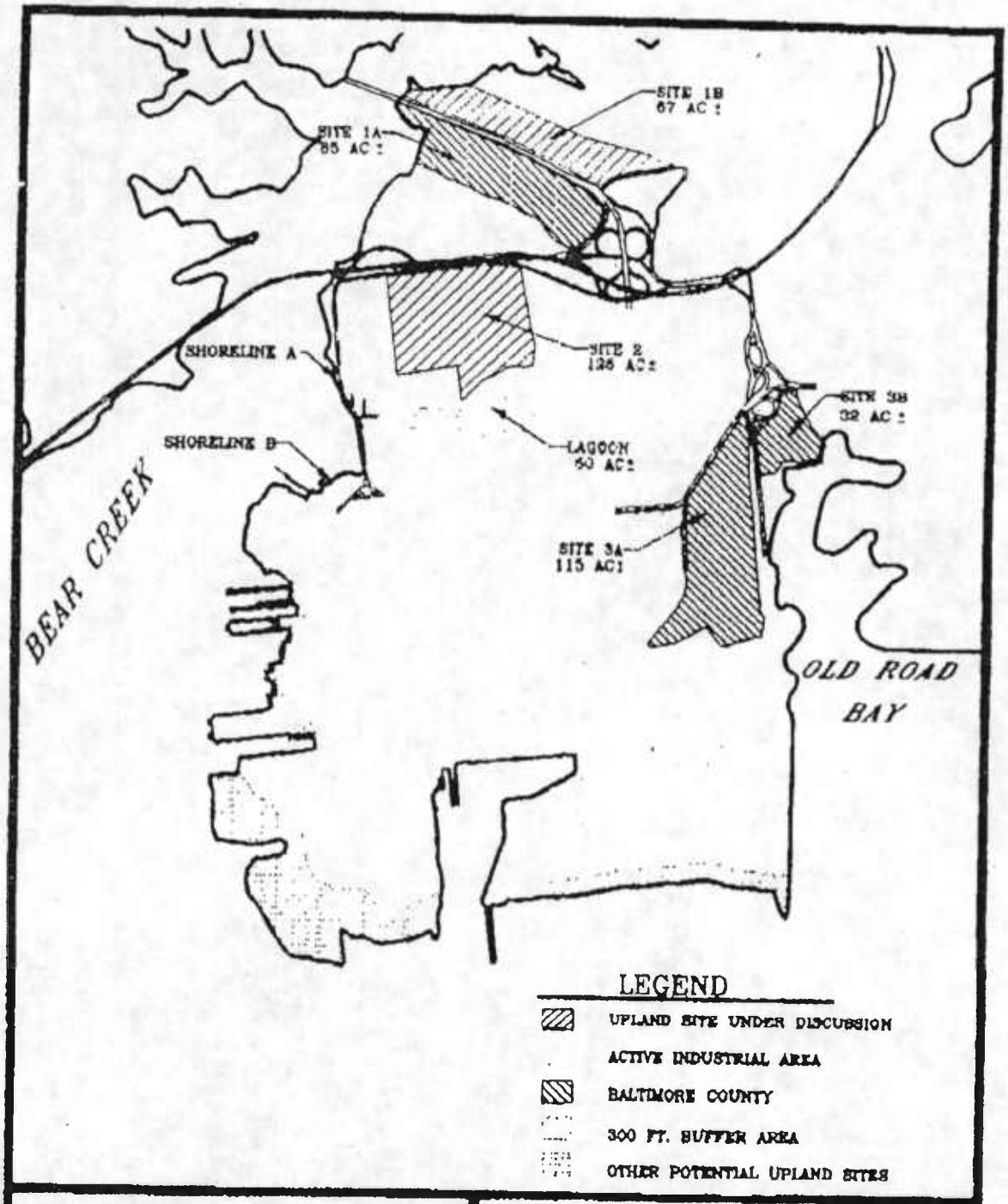
Site 2 is an upland property with the abandoned pipe mill and is well suited for a dredged materials facility but is within the five-mile noncontainment zone. Maryland Environmental Service has investigated some alternatives to traditional containment and proposes to assess a feasibility to recycle dredged materials as usable construction materials.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

Site 2, as currently delineated for Baltimore County, has approximately 120 acres. About 100 acres is a closed fill area of a mud pit. The remaining 20 acres has the abandoned buildings of an old pipe mill. The mudflat area would be the primary focus of interest for developing a reclamation facility. These abandoned building may provide housing for a facility to process the dredged materials for construction materials.

To further enhance Site 2, the lagoon to the south of the site should be incorporated into the dewatering basin. The lagoon was constructed by Beth Steel as a disposal site for the dredged materials from the on-site processing ponds. Incorporating the lagoon would provide an additional 50 acres (approx.) bringing the total area of dewatering basin to about 175 acres.

The concept for the site is a dewatering/drying basin with simple, low dikes (6-8 ft. high). A thin layer of dredged material (between 1 and 2 feet thick) would be hydraulically pumped into the basin and held undisturbed to allowed the solids to settle. The water would be drained from the basin and the dredged materials would be dried using conventional methods for turning soils (e.g., tractors, discs, etc). When dry, the materials would be excavated and



MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT
LANDUSE MAP
FIGURE 1

removed from the basin and recycled as construction aggregates (topsoil, sand, and gravel), processed into other construction materials (engineered aggregate, rock wool, etc.) or off-site disposal (topsoil, landfill cover, etc.). This site would handle an estimated 500,000 cubic yards of material annually using conventional dewatering techniques.

With the existing markets for topsoil, sand, and gravel, the cost for reclaiming these components from dredged materials may be competitive with other containment options. In a recent pilot project, about 14,000 cubic yards of sandy materials were excavated from Hart Miller Island and transported to the Mid-Shore Regional Landfill to cover the landfill liner. The pilot project proved to be more economical than traditional sources of sand.

The fine grained materials (mostly silts and clays) pose more of a challenge for dredged material recycling. Studies have been conducted to evaluate the use of dredged materials as top soil or have it processed into engineered aggregates, bricks or other vitrified building materials. The technical and economic feasibility remains to be investigated.

ADDITIONAL ISSUE

The channel into the Bethlehem Shipyard on Bear Creek was recently dredged and Bethlehem Shipbuilding (Beth Ship) negotiated with MPA to deposit the material into Hart Miller Island. without paying the "tipping fee" for 90 days. Beth Ship and MPA are evaluating options for allowing Beth Ship to compensate MPA. One of the options is to transfer property for use as a dredged material placement site.

MPA met with representatives from Beth Ship and Beth Steel to discuss the options for using portions of the properties of both Beth Steel and Beth Ship for dredged materials. The discussion focused primarily on the use of Site 2 which Beth Steel was transferring to the county.

MARYLAND
ENVIRONMENTAL
SERVICE

William Donald Schaefer
Governor

George G. Perdikakis
Director

DATE

FACSIMILE TRANSMITTAL

COVER MEMORANDUM

TO: Bill Lear 631-~~HD~~ 10547

FROM: Bob Smith

TOTAL NUMBER OF PAGES (including cover memo) 2

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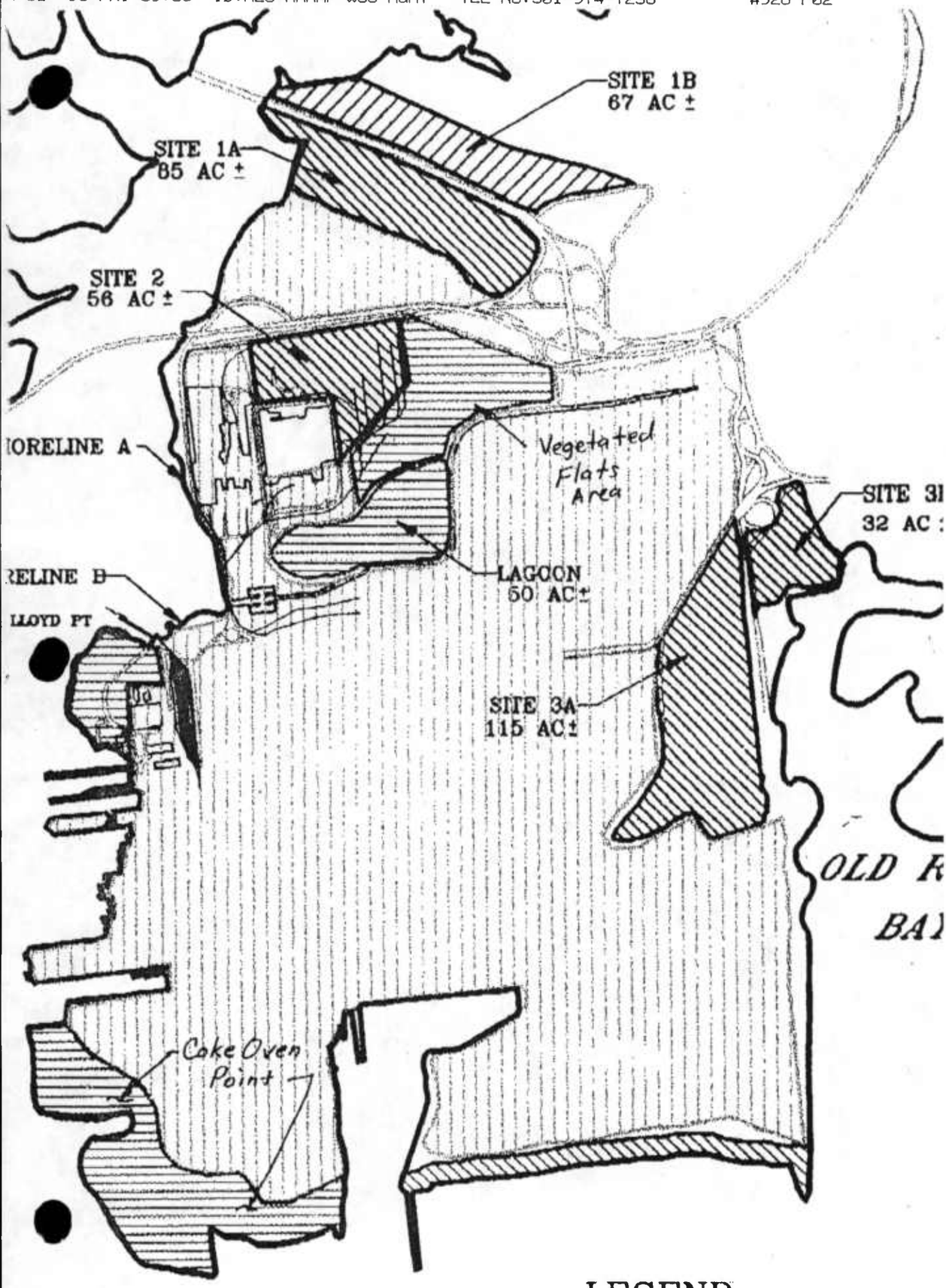
Thank you.

ADDITIONAL MESSAGE Since County's Site 2 area is only 56 ac. suggest appraising the rest of the vegetated flats area, (its about 72 acres) There is also the 20 ac or so for the pipe mill, if we want to go for it.

2011 Commerce Park Drive • Annapolis, Maryland 21401 • 410/974/7281 • Fax 410/974/7267



LEGEND

- UPLAND SITE UNDER DISCUSSIOI
- ACTIVE INDUSTRIAL AREA
- BALTIMORE COUNTY
- 300 FT. BUFFER AREA
- OTHER POTENTIAL UPLAND SITE

DREDGED MATERIAL PLACEMENT OPTIONS
FOR
UPLAND PROPERTIES

SPARROWS POINT, MARYLAND

BACKGROUND

The Maryland Port Administration (MPA) is responsible for providing disposal sites for an estimated three million cubic yards of materials dredged annually from the Federal Navigation Channels in the Chesapeake Bay. This task is becoming more difficult. Tighter environmental regulations are reducing the acceptability of open water placement and continued development along the Chesapeake Bay has reduced the available property for upland containment. Public opposition to dredged materials disposal projects further increases the challenge to maintain the shipping channels.

The MPA contracted the Maryland Environmental Service to initiate an investigation for constructing a project at Sparrows Point. Maryland law currently prohibits the construction of a dredged material containment facility in Baltimore County if the facility is within five miles of Hart Miller Island. Hart Miller Island was constructed to contain dredged materials with excessive contaminants or otherwise unsuitable for placement in open water because of impacts to the environment. Sparrows Point lies within this five-mile zone and constructing a containment facility at this site is prohibited under Maryland law.

The proposed project envisioned a wetlands habitat constructed with several million cubic yards of dredged materials placed along the shoreline of the Patapsco River. Development along the Patapsco River has destroyed a large portion of the historic wetlands. The proposed project would create 200 acres of productive wetlands to enhance the river's environment. State and federal resource agencies cooperated with MPA and MES to develop an environmentally effective project. A habitat project would provide benefits to the local environment such as improving the water quality, decreasing nutrient loadings, and providing a visual screen to the industrial activities of Bethlehem Steel.

The citizens of the Sparrows Point community suggested investigating the potential use of upland property at Sparrows Point instead of developing the wetland habitat in the Patapsco River. It was their view that industrial development at Sparrows Point had significantly intruded on the River and that further encroachment should be stopped. The citizens specifically identified property that Bethlehem Steel was conveying to Baltimore County for potential economic development in return for utility/tax incentives for Beth Steel. The County has previously investigated the use of the land for development. Recently, the County Executive established a new committee to reassess the economic potential of all available County property including that at Sparrows Point. A description and overview of these properties are provided in another section of this report.

The channel into the Bethlehem Shipyard on Bear Creek was recently dredged and Bethlehem Shipbuilding (Beth Ship) negotiated with MPA to deposit the material into Hart Miller Island without paying the "tipping fee" for 90 days. Beth Ship and MPA are evaluating options for allowing Beth Ship to compensate MPA. One option is for Beth Ship/ Beth Steel to provide property for use as dredged material placement sites.

MPA met with representatives from Beth Ship and Beth Steel to discuss the options for using portions of the properties for dredged materials. The discussion focused primarily on the use of Site 2 that the County and Beth Steel previously agreed to consider for dredged material placement.

A representative of Beth Ship suggested another option for a beneficial use site. There is an embayment in Bear Creek just north of Beth Ship as shown in Figure 1. It is shallow and would take a small quantity of clean material to construct an intertidal marsh. The shoreline for the embayment includes property from Beth Ship and Beth Steel. A description of the potential dredged material projects on these properties appears in a subsequent section of this report.

PROPERTY DESCRIPTIONS

The properties under consideration include the five parcels that are to be conveyed to the County, the lagoon near the abandoned pipe mill, and the Bear Creek shoreline from Lloyd Point to I-695. Figure 1 presents the parcels of land. Each parcel is described below with respect to a physical description, ownership, and current use.

Site 1A is an 85-acre plateau with an elevation of approximately 12 feet above mean low water. It was constructed as a fill area for slag materials generated by the steel manufacturing process. It is currently used as a spare parts storage for Beth Steel but is supposed to be conveyed to the County.

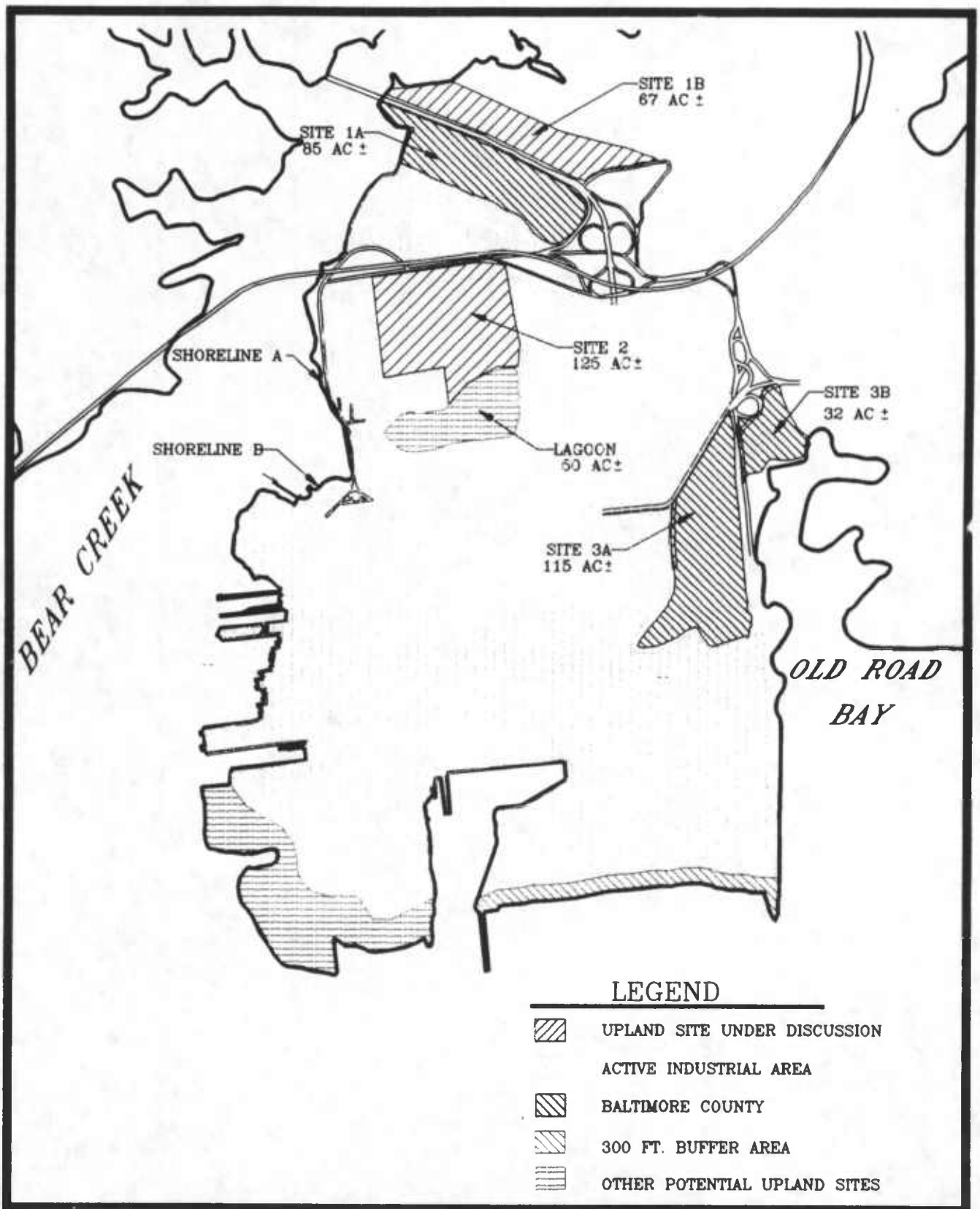
Site 1B was prepared for use as a containment area for ash byproducts but has not been used to date. It is approximately 65 acres with an elevation of about 5 feet MLW. Site 1B is next to Bear Creek and has dikes on part of the perimeter. The site is small and would hold about 100,000 cubic yards of material per foot of lift. This site would also require dredging the channel to the railroad bridge over Bear Creek.

Site 2 is about 125 acres of "mudflats" and the skeletal buildings of an abandoned pipe mill. This site is to be conveyed to the County and the County has tentatively identified this site for use as a dredged material placement site. Site 2 has the most potential as a placement site and MES has focused the development efforts on this site.

Site 3A is the location of a previously existing community now overgrown with large trees and other vegetation. This property was conveyed to the County and new industrial activity has been initiated on site 3A. This site is not under consideration for dredged material placement.

Site 3B is a semi-active rail yard of about 30 acres and is also not under consideration for placement.

A lagoon, currently owned by Beth Steel, is located to the south of Site 2. The lagoon is



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MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT
LANDUSE MAP
FIGURE 1

approximately 50 acres and is a disposal site for sediment from the onsite cooling/processing ponds. Incorporation of the lagoon with Site 2 would improve the efficiency of a dredged material placement site. MPA may require an environmental assessment of the sediments previously placed in the lagoon

Beth Ship tentatively offered Lloyd Point for MPA's consideration. The property is on the north end of the Beth Shipyard and has apparently been a stockpile area for shipyard operations. Spare parts, equipment, and other items onsite would require removal or disposal. The property would also require an environmental assessment to protect MPA. Whether or not MPA obtains this property, the north shoreline of Lloyd Point is of interest for a beneficial use project.

The Bear Creek shoreline from Lloyd Point to the I-695 is approximately one mile long and forms a small embayment of about 60 acres. Beth Steel and Beth Ship each own parts of the shoreline. The shore has been delineated as Shoreline A and Shoreline B to represent ownership of Beth Steel and Beth Ship, respectively. These properties would be very small and would most likely consist of access easements of 150-300 feet for project use.

Of the eight properties described above, only three show significant potential for use by MPA. These are Site 2, the lagoon, and the shoreline on Bear Creek and for the purpose of this report on of the projects joins Site 2 and the lagoon. MES has developed preliminary concepts for two projects; a small wetland creation project and a reclamation facility. The following section describes the projects.

CONCEPTS

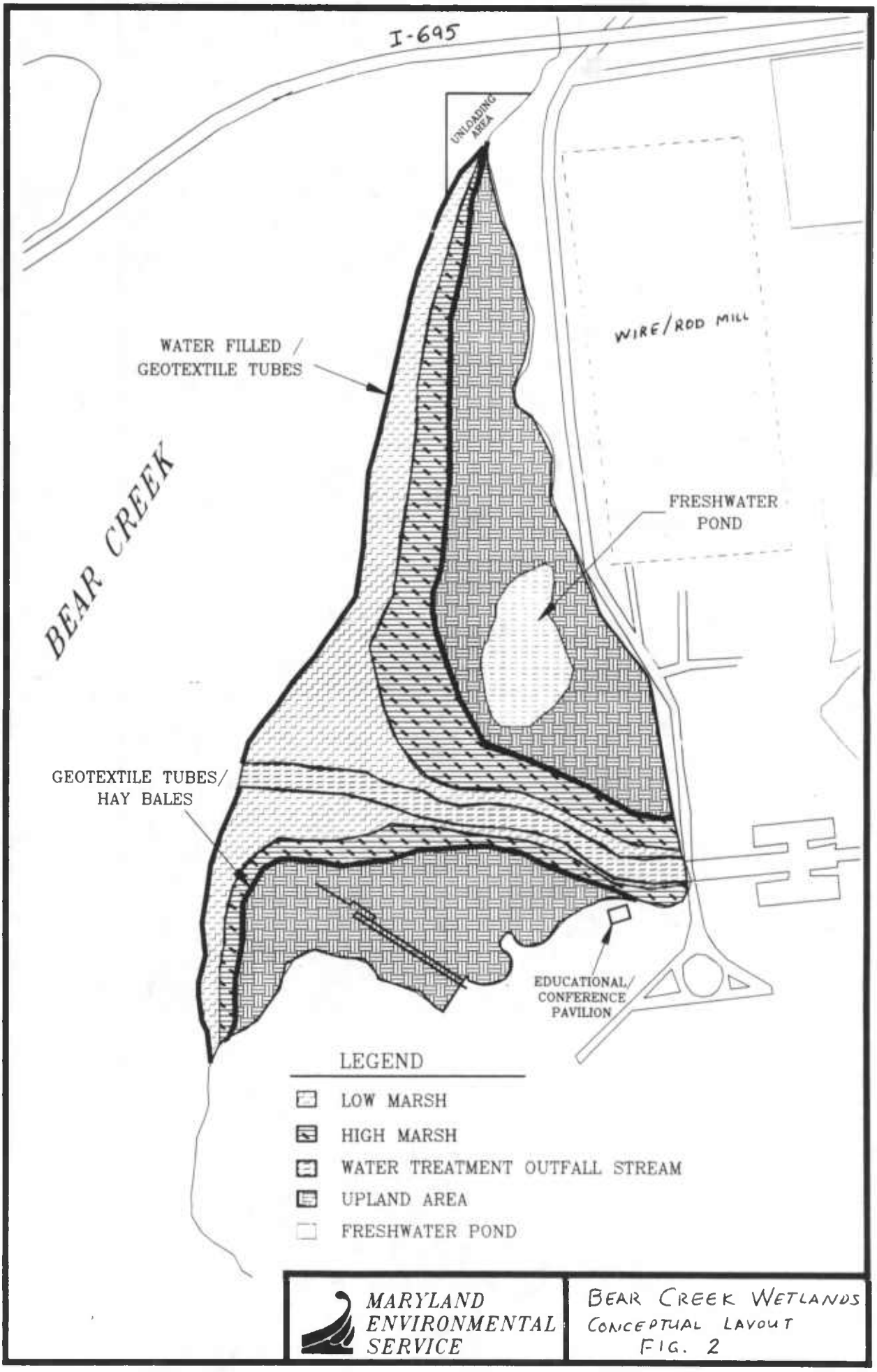
The MPA has requested the Maryland Environmental Service to develop concepts and schedules for implementing options for dredged material placement at site 2 and for a wetlands in Bear Creek. These two options are described below as separate projects and as an integrated plan.

Bear Creek Wetlands

The embayment on the western side of Sparrows Point encompasses approximately 70 acres. The concept for this site is to construct a small, intertidal wetland area as a proof-of-concept for beneficial use of dredged materials. Currently, there are no examples near Baltimore Harbor of wetlands created using dredged materials. The Bear Creek site would allow the local citizenry to closely follow the planning and construction of a beneficial use project. The MPA would have an opportunity to establish a record for providing environmental enhancements to the Baltimore Harbor.

The site, as seen in Figure 2, is small (about 70 acres) and shallow and could be constructed, filled, and planted within two to three years to quickly establish a viable marsh. Less than one million yards of dredged materials would be required for filling the site. When the marsh is fully established, the site could serve as an educational facility for local schools and civic groups. This project would also provide the MPA, MES, and the federal and state resource agencies an opportunity to assess the methodologies associated with constructing an intertidal wetland habitat.

The site is small and economical methods for constructing the wetland will be important. The shallow



BEAR CREEK WETLANDS
CONCEPTUAL LAYOUT
FIG. 2

water and the confined nature of the site suggest a low-energy wave climate. Geotextile tubes, water-filled bags, and straw bales are low cost alternatives that may have applications for this site. Figure 3 presents a conceptual cross-section of the project site at three stages of construction. To provide an optimal foundation for the wetland plants, the materials would be placed in thin (~ 2 feet) lifts. Placement activities would be timed to allow the thin lifts to dewater and consolidate before the placement of the next lift. This timing would be established during the planning and design of the project. Minimal crust management is anticipated for this site. The marsh creation project at the Kenilworth Gardens, Washington, DC was constructed in a similar manner and would provide the model for developing this site.

The Bear Creek Wetlands Project would serve the Maryland Port Administration as a demonstration of the beneficial use of dredged material and would offer many public relations benefits. The wetlands will stand in contrast to the surrounding industrial landscape and will be quite visible from the northbound lane of I-695 just before crossing Bear Creek. This is expected to increase public awareness of the project and provide an opportunity to educate citizens in the beneficial use of dredged materials. Expanding the educational concept, the project may be a potential outdoor classroom opportunity to educate local school children about the Chesapeake Bay, its habitats, and environmental science.

The Bear Creek site has the potential to build public support for the original wetlands project proposed for the southern shoreline of Sparrows Point. This project has all the characteristics of the original project but on a smaller scale. Local interest groups can promote this project well. The outdoor classroom concept would further generate support through the school system and other organizations interested in educating people about the Bay and the environment.

The MPA has established a record for developing partnerships with the state and federal resource and regulatory agencies. The Bear Creek Wetlands Project would provide the MPA and the County an opportunity to develop new partnerships. Public and private organizations normally outside this area of interest may benefit by being associated with this educational project and provide funding or other support. Besides Beth Steel and Beth Ship, these organizations may include Baltimore Gas & Electric, State Highways Administration, and many private non-profit environmental groups.

Dredged Material Reclamation Facility - Site 2

Site 2 is an upland property with the abandoned pipe mill and is well suited for a dredged materials facility but is within the five-mile noncontainment zone. Maryland Environmental Service has investigated some alternatives to traditional containment and proposes to assess a feasibility to recycle dredged materials as usable construction materials.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

Site 2, as currently delineated for Baltimore County, has approximately 120 acres. About 100 acres is a closed fill area of a mud pit. The remaining 20 acres has the abandoned buildings of an old pipe mill. The mudflat area would be the primary focus of interest for developing a reclamation facility. These abandoned building may provide housing for a facility to process the dredged materials for construction materials.

To further enhance Site 2, the lagoon to the south of the site should be incorporated into the dewatering basin. The lagoon was constructed by Beth Steel as a disposal site for the dredged materials from the on-site processing ponds. Incorporating the lagoon would provide an additional 50 acres (approx.) bringing the total area of dewatering basin to about 175 acres.

The concept for the site is a dewatering/ drying basin with simple, low dikes (6-8 ft. high). A thin layer of dredged material (between 1 and 2 feet thick) would be hydraulically pumped into the basin and held undisturbed to allowed the solids to settle. The water would be drained from the basin and the dredged materials would be dried using conventional methods for turning soils (e.g., tractors, discs, etc). When dry, the materials would be excavated and removed from the basin and recycled as construction aggregates (sand and gravel), processed into other construction materials (engineered aggregate, rock wool, etc.) or off-site disposal (topsoil, landfill cover, etc.). This site would handle an estimated 500,000 cubic yards of material annually using conventional dewatering techniques.

With the existing markets for sand and gravel, the cost for reclaiming these components from dredged materials may be competitive with other containment options. In a recent pilot project, about 14,000 cubic yards of sandy materials were excavated from Hart Miller Island and transported to the Mid-Shore Regional Landfill to cover the landfill liner. The pilot project proved to be more economical than traditional sources of sand.

The fine grained materials (mostly silts and clays) pose more of a challenge for dredged material recycling. Studies have been conducted to evaluate the use of dredged materials as top soil or have it processed into engineered aggregates, bricks or other vitrified building materials. The technical and economic feasibility remains to be investigated.

SUMMARY

Maryland Port Administration (MPA) and the Maryland Environmental Service (MES) have initiated discussions about using upland property at Sparrows Point for dredged material placement. Parties involved in these discussions were Baltimore County Economic Development Commission (the County), Bethlehem Steel Corporation (Beth Steel) and Bethlehem Shipbuilding (Beth Ship). The need to find equitable compensation for disposing of materials dredged from the channel leading to Beth Ship, prompted the discussions. MPA authorized the disposal of the dredged materials in Hart Miller Island and waived the disposal fees for 90 days. MPA and Beth Ship are studying the possibility of obtaining property at Sparrows Point in lieu of payment for the disposal fee.

Eight parcels of land have been offered for evaluation. Three of these appear to qualify for further consideration. Two properties, Site 2 and the lagoon, are next to one another and offer a combined 175 acres. The other potential property consists of shoreline along Bear Creek with access easements of 150 to 300 feet inland.

The parties have agreed to cooperate in developing equiatble solutions for the disposal fees and the dredged material placement options. MPA will convene the necessary meetings to expedite a resolution of these issues. Towards that end, MES has prepared the attached summary table of the properties under consideration.

SPARROWS POINT PROPERTY SUMMARY

Property	Size	Description/ Comments	Status
Site 1A	85 acres	- being conveyed to the County - plateau with elevation of approximately 12 feet above mean low water (MLW) - constructed as a fill area for slag materials generated by the steel manufacturing process - currently used as a spare parts storage for Beth Steel - groundwater may be contaminated beneath site	Not recommended for use by MPA
Site 1B	65 acres	- being conveyed to the County - prepared for use as a containment area for ash byproducts but has not been used to date - elevation of about 5 feet MLW - has dikes on a portion of the perimeter - site would hold about 100,000 cubic yards of material per foot of lift - would require dredging a channel up Bear Creek	Potentially usable for dredged materials from inner harbor or as a stockpile area for raw materials used in processing dredged materials
KEY-SITE Site 2 COUNTY USE PROPERTY	125 acres	- being conveyed to the County - "mudflats" and the skeletal buildings of an abandoned pipe mill - tentatively identified by the County for dredged material placement site - has the most potential as a placement site - major focused for development efforts - more efficient with addition of lagoon (see below) - concepts focused on recycling and reclamation of dredged materials (not containment) - buildings may be suitable for housing processing equipment, but may need to be razed.	Under consideration by the County for use as placement site **ACTION: get affirmation from County for use of Site 2 as a placement site**
Site 3A	115 acres	- owned by the County - previously existing community now overgrown with large trees and other vegetation - new industrial activity has been initiated on site	NOT under consideration for use as placement site
Site 3B	32 acres	- owned by the County - semi-active rail yard	NOT under consideration for use as placement site
Lagoon	50 acres (approx)	- owned by Bethlehem Steel - located to the south of Site 2 - disposal site for sediment from the cooling/processing ponds onsite - may contain contaminants from previous placement activities - environmental assessment should be performed to protect MPA - incorporation with Site 2 would improve efficiency of a dredged material placement site.	Owned by Beth Steel **ACTION: obtain the property for use as part of the placement facility at Site 2**

Lloyd Point	50 acres (approx)	- tentatively offered by Beth Ship - property is on the north end of Beth Ship Yard - apparently used for many years as a stockpile area for shipyard operations - all equipment, spare parts, etc would require removal and possible disposal - environmental assessment of the property is probably necessary to protect MPA - the shoreline on the north edge of this property is the main interest.	Owned by Beth Ship **ACTION: further consideration by MPA is required for this property**
Shoreline	150-300 foot easement	- a beneficial use option - embayment is just north of Beth Ship from Lloyd Point to I-695 - includes properties from Beth Ship and Beth Steel. - property would consist of access easement along shoreline - suggested by representative of Beth Ship - construct small wetland project in embayment	Parts of shoreline owned by either Beth Steel of Beth Ship **ACTION: obtain the easement for constructing a beneficial project**

DREDGED MATERIAL PLACEMENT OPTIONS FOR UPLAND PROPERTIES

SPARROWS POINT, MARYLAND

BACKGROUND

The Maryland Port Administration (MPA) is responsible for providing disposal sites for the estimated three million cubic yards of materials dredged annually from the Federal Navigation Channels in the Chesapeake Bay. This task is becoming more difficult. Tighter environmental regulations are reducing the acceptability of open water placement and continued development along the Chesapeake Bay has minimized the available property for upland containment. Public opposition to dredged materials disposal projects further increases the challenge to maintain the shipping channels.

The MPA contracted the Maryland Environmental Service to initiate an investigation for constructing a project at Sparrows Point. Maryland law currently prohibits the construction of a dredged material containment facility in Baltimore County within five miles of Hart Miller Island. Hart Miller Island was constructed to contain dredged materials with excessive contaminants or otherwise unsuitable for placement in open water because of impacts to the environment. Sparrows Point lies within this five-mile zone so a containment facility is prohibited for this site.

The proposed project envisioned a wetlands habitat constructed with several million cubic yards of dredged materials along the shoreline of the Patapsco River. Development along the Patapsco River has destroyed the majority of the wetlands and the proposed project would create 200 acres of productive wetlands to enhance the river's environment. State and federal resource agencies cooperated with MPA and MES to develop an environmentally effective project. The habitat project would provide benefits to the local environment such as improving the water quality, decreasing nutrient loadings, providing a visual screen to the industrial activities of Bethlehem Steel.

The citizens of the Sparrows Point community suggested investigating the potential use of upland property at Sparrows Point instead of developing the wetland habitat in the Patapsco River. It was their view that industrial development at Sparrows Point had significantly intruded on the River and that further encroachment should be stopped. The citizens specifically identified property which Bethlehem Steel was conveying to Baltimore County for potential use as economic development.

Bethlehem Steel Corporation (Beth Steel) and Baltimore County (the County) are in the process of conveying several parcels of land to the County in return for utility/tax considerations. The County has previously investigated the use of the land for development and a new committee was recently established by the County Executive to reassess the economic potential of all available County property including that at Sparrows Point.

The properties consist of five parcels and are shown on Figure 1. Site 1A is an 85-acre pad constructed from processing slag and currently used as a spare parts storage for Beth Steel. Site 1B has been prepared for use as a containment area for ash byproducts but has not been used. It is approximately 65 acres. Site 2 is about 125 acres and is located adjacent to a lagoon. It consists of about 100 acres of "mudflats" and the skeletal buildings of an abandoned pipe mill. Site 3A is the location of a previously existing community now overgrown with large trees and other vegetation. The County has initiated some activities on site 3A. Site 3B is a semi-active rail yard of about 30 acres.

MES discussed the use of the upland property at Sparrows Point with Bethlehem Steel and the County. All parties agreed to allow MPA and MES to investigate using sites 1A, 1B and 2 for dredged material placement. Site 3A and 3B are not candidates for dredged materials.

MES conducted a preliminary assessment of the properties and site 1B and site 2 are best suited for use as dredged material placement sites. Site 1B has been partially constructed as a containment site for ash by-products. The site is adjacent to Bear Creek and has dikes on a portion of the perimeter. The site is small, about 65 acres, and would hold about 100,000 cubic yards of material per foot of lift. This site would also require the dredging the channel to the railroad bridge over Bear Creek. Site 2 has the most potential for use as a dredge materials placement site and MES has focused most of the development efforts on this site.

RECENT ACTIVITIES

The channel into the Bethlehem Shipyard on Bear Creek was recently dredged and Bethlehem Shipbuilding (Beth Ship) negotiated with MPA to deposit the material into Hart Miller Island. without paying the "tipping fee" for 90 days. Beth Ship and MPA are evaluating options for allowing Beth Ship to compensate MPA. One of the options is property for use as a dredged material placement site.

MPA met with representatives from Beth Ship and Beth Steel to discuss the options for using portions of the properties of both Beth Steel and Beth Ship for dredged materials. The discussion focused primarily on the use of Site 2 which the County and Beth Steel previously agreed to consider for dredged material placement. The site is located adjacent to an existing lagoon which is meant to receive the sediment from the cooling/processing ponds onsite. A dredged materials facility at Site 2 becomes more efficient if the lagoon to the south of the site is incorporated.

One of the representatives of Beth Ship suggested another option for a beneficial use site. There is an embayment in Bear Creek just north of Beth Ship as shown in Figure 1. It is relatively shallow and would take a small quantity of clean material to construct a intertidal marsh. The shoreline for the embayment includes property from Beth Ship and Beth Steel.

CONCEPTS

The MPA has requested the Maryland Environmental Service to develop concepts and schedules for implementing options for dredged material placement at site 2 and for a wetlands in Bear Creek. These two options are described below as separate projects and as an integrated plan.

Bear Creek Wetlands

The embayment on the western side of Sparrows Point encompasses approximately 70 acres. The concept for this site is to construct a small, intertidal wetland area as a proof-of-concept for beneficial use of dredged materials. Currently, there are no examples in the vicinity of Baltimore Harbor of wetlands created using dredged materials. The Bear Creek site would allow the local citizenry to closely follow the planning and construction of a beneficial use project and allow the MPA to establish a record for providing environmental enhancements to the Baltimore Harbor.

As presented in Figure 2, the site is small (about 70 acres) and relatively shallow and could be constructed, filled, and planted within two to three years to quickly to establish a viable marsh. Less than one million yards of dredged materials would be required for filling the site. When the marsh is fully established, the site could serve as an educational facility for local schools and civic groups. This project would also provide the MPA, MES, and the federal and state resource agencies an opportunity to assess the methodologies associated with constructing a wetland habitat.

The site is small and economical methods for constructing the wetland will be important. The shallow water and the confined nature of the site suggest a low-energy wave climate. Geotextile tubes, water-filled bags, and straw bales are low cost alternatives which may have applications for this site. Figure 3 presents a conceptual cross-section of the project site at three stages of construction. To provide an optimal foundation for the wetland plants, the materials would be placed in thin (~ 2 feet) lifts. Placement activities would be timed to allow the thin lifts to dewater and consolidate prior to the placement of the next lift. This timing would be established during the planning and design of the project. Minimal crust management is anticipated for this site. The marsh creation project at the Kenilworth Gardens, Washington, DC were constructed in a similar manner and would provide the model for developing this site.

The Bear Creek Wetlands Project would serve the Maryland Port Administration as a demonstration of the beneficial use of dredged material and would offer many public relations benefits. The wetlands will stand in contrast to the surrounding industrial landscape and will be quite visible from the north-bound lane of I-695 just before crossing Bear Creek. This is expected to increase public awareness of the project and provide an opportunity to educate citizens in the beneficial use of dredged materials. Expanding on the educational concept, the project may be a potential outdoor classroom opportunity to educate school children from surrounding urban areas about the Chesapeake Bay, its habitats, and environmental science in general.

The Bear Creek site has the potential to build public support for the original wetlands project proposed for the southern shoreline of Sparrows Point. This project has all the characteristics of the original project but on a smaller scale. The project would be best promoted through local interest groups. Further support would be generated with the outdoor classroom concept through the school system and other organizations interested in educating people about the Bay and the environment.

The MPA has established a record for developing partnerships with the state and federal resource and regulatory agencies. The Bear Creek Wetlands Project would provide the MPA and the County an opportunity to develop new partnerships. Public and private organizations normally outside of this area of interest may benefit by being associated with this educational project and provide funding or other support. In addition to Beth Steel and Beth Ship, these organizations may include Baltimore Gas & Electric, State Highways Administration, and many private non-profit environmental groups.

Dredged Material Reclamation Facility

The upland property with the abandoned pipe mill (Site 2) is well suited for a dredged materials facility but is within the five mile non-containment zone. Maryland Environmental Service has investigated some alternatives to traditional containment and proposes to assess an feasibility to recycle dredged materials as usable construction materials.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years but the costs for reclaiming material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost effective option.

Site 2, as currently delineated for Baltimore County, has approximately 120 acres. About 100 acres is a closed fill area of a mud pit. The remaining 20 acres is occupied by the abandoned buildings of an old pipe mill. The mudflat area would be the primary focus of interest for developing a reclamation facility. The abandoned building may provide housing for a facility to process the dredged materials for construction materials.

To further enhance Site 2, the lagoon to the south of the site should be incorporated into the dewatering basin. The lagoon has been targeted by Beth Steel as a disposal site for the dredged materials from the on-site processing ponds. Incorporating the lagoon would provide an additional 50 acres (approx.) bringing the total area of dewatering basin to about 175 acres.

The concept for the site is a dewatering/ drying basin with simple, low dikes (6-8 ft. high). A thin layer of dredged material (between 1 and 2 feet thick) would be hydraulically pumped into the basin and held undisturbed to allowed the solids to settle. The water would be

drained from the basin and the dredged materials would be dried using conventional methods for turning soils (e.g., tractors, discs, etc). When dry, the materials would be excavated and removed from the basin and recycled as construction aggregates (sand and gravel), processed into other construction materials (engineered aggregate, rock wool, etc) or off-site disposal (topsoil, landfill cover, etc.). It is estimated that this site would handle 500,000 cubic yards of material annually using conventional dewatering techniques.

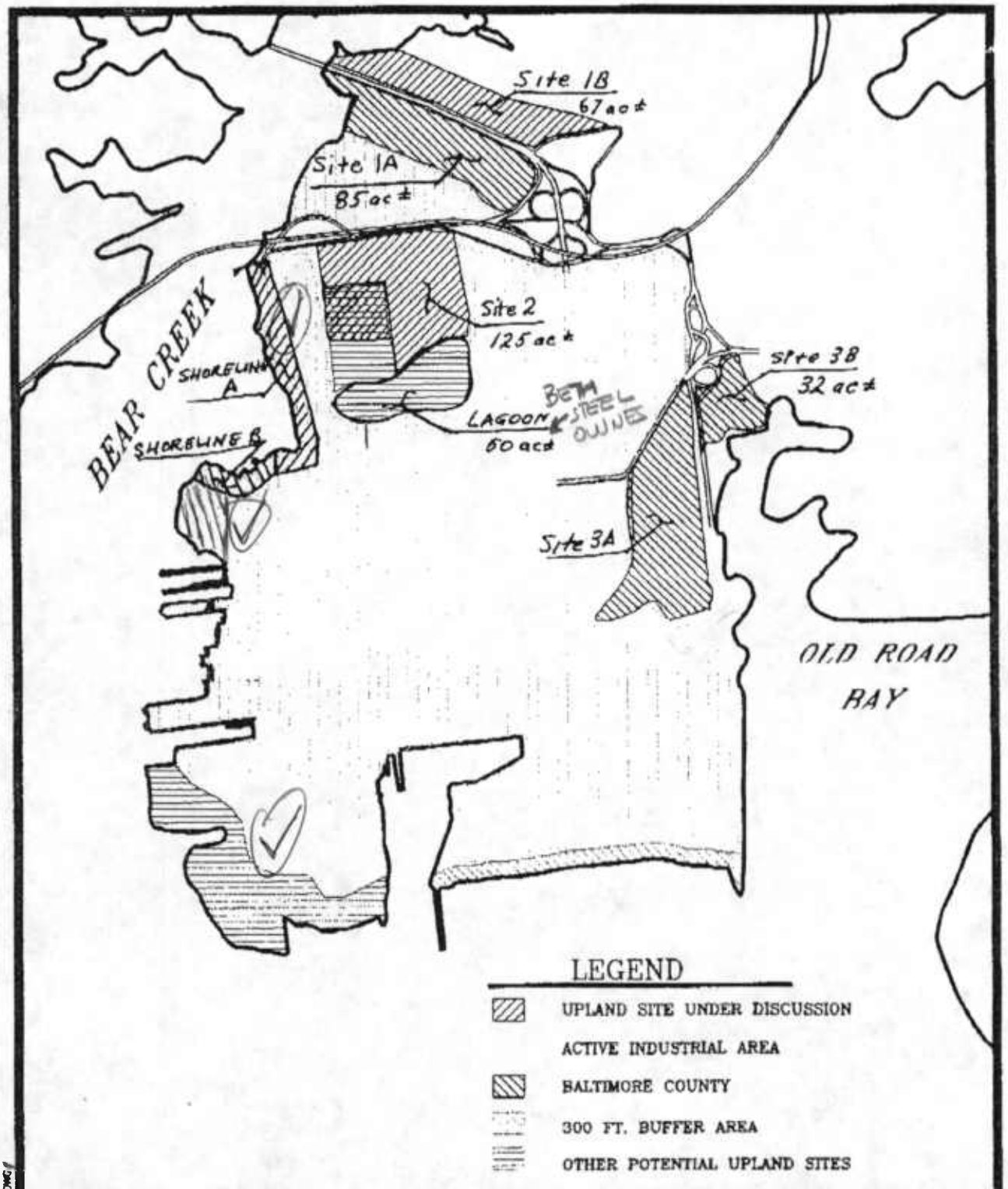
With the existing markets for sand and gravel, the cost for reclaiming these components from dredged materials may be competitive with other containment options. A recent pilot project excavated and transported about 14,000 cubic yards of sandy materials from Hart Miller Island to the Mid-Shore Regional Landfill. The materials were used to cover the landfill liner. The pilot project using dewatered dredged materials proved to be more economical than traditional sources of sand.

The fine grained materials (mostly silts and clays) pose more of a challenge for dredged material recycling. Studies have been conducted to evaluate the use of dredged materials as top soil or have it processed into engineered aggregates, bricks or other vitrified building materials. The technical and economic feasibilities remain to be investigated.

TARGETED PROPERTIES

The properties of interest to the MPA are presented below and include parcels belonging to Beth Steel, Beth Ship, and Baltimore County.

Property	Area	Owner
Site 2	125 ac	County
Lagoon	50 ac	Beth Steel
Shoreline A		Beth Steel
Shoreline B		Beth Ship



MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT LAND USE MAP

DREDGED MATERIAL PLACEMENT OPTIONS
FOR
UPLAND PROPERTIES

SPARROWS POINT, MARYLAND

BACKGROUND

The Maryland Port Administration (MPA) is responsible for providing disposal sites for the over three million cubic yards of materials dredged annually from the Federal Navigation Channels in the Chesapeake Bay. This task is becoming increasingly difficult as tighter environmental regulations are reducing the potential for open water placement and continued development along the Chesapeake Bay has minimized property available for upland containment. Public opposition to dredged materials placement projects further increases the challenge to maintain the shipping channels.

The MPA contracted the Maryland Environmental Service to initiate an investigation for constructing a project at Sparrows Point. Maryland law currently prohibits the construction of a dredged material containment facility in Baltimore County within five miles of Hart-Miller Island. Sparrows Point lies within this five-mile zone, so a containment facility is prohibited for this site. However, Sparrows Point, as a beneficial use site, should not be considered a containment facility.

The proposed project envisions both wetlands and upland habitat constructed with several million cubic yards of dredged materials along the shoreline of the Patapsco River. Development along the Patapsco River has destroyed the majority of previously existing wetlands. The project would create 200 acres of productive wetlands to enhance the river's environment. State and federal resource agencies cooperated with MPA and MES to develop an environmentally effective project. The habitat project would provide benefits to the local environment such as improving the water quality, decreasing nutrient loadings and providing a visual screen to the industrial activities of Bethlehem Steel.

The citizens of the Sparrows Point community suggested investigating the potential use of upland property at Sparrows Point. It was their view that industrial development at Sparrows Point had significantly intruded on the river and that further encroachment should be stopped. The citizens specifically identified property which Bethlehem Steel was conveying to Baltimore County for potential use as economic development.

MES met with the Office of Economic Development and the Department of Environmental Protection and Resource Management (the County, collectively) to discuss the possibility of using its upland properties for dredged material placement. Development was initiated on at least one parcel but some of the property may be usable as placement sites. The County tentatively agreed that MPA should investigate sites 1A, 1B and 2 for dredged material placement.

The properties consist of five parcels and are shown on Figure 1. Site 1A is an 85-acre pad constructed from processing slag and currently used as a spare parts storage for Beth Steel. Site 1B has been prepared for use as a containment area for ash byproducts but has not been used. It is approximately 65 acres. Site 2 is about 56 acres of vegetated "mudflats" located near the skeletal buildings of an abandoned pipe mill. Site 3A is the location of a previously existing community now overgrown with large trees and other vegetation. The County has initiated development activities on site 3A and will not consider use of this site for dredged materials. Site 3B is a semi-active rail yard of about 30 acres. It is a small area and may be uneconomical for use.

MES conducted a preliminary assessment of the properties and site 1B and site 2 are best suited for use as dredged material placement sites. Site 1B has been partially constructed as a containment site for ash by-products. The site is adjacent to Bear Creek and has dikes on a portion of the perimeter. The site is small, about 65 acres, and would hold about 100,000 cubic yards of material per foot of lift. Site 2 has the most potential for use as a dredge materials placement site and MES has focused most of the development efforts on this site.

RECENT ACTIVITIES

The channel into the Bethlehem Shipyard on Bear Creek was recently dredged and Bethlehem Shipbuilding (Beth Ship) negotiated with MPA to deposit the material into Hart Miller Island. without paying the "tipping fee" for 90 days. Beth Ship and MPA are evaluating options for allowing Beth Ship to compensate MPA. One of the options is property for use as a dredged material placement site.

MPA met with representatives from Beth Ship and Beth Steel to discuss the options for using portions of the properties of both Beth Steel and Beth Ship for dredged materials. The discussion focused primarily on the use of Site 2 which the County and Beth Steel previously agreed to consider for dredged material placement. To the east of Site 2 is a parcel of land which appears to be a similar vegetated flats. This parcel is about 75 acres amd is marked as Beth Steel Property A on the attached figure. The combination of Site 2 with Property A will provide up to 130 acres for dredged material and creates a more efficient site. The MPA and MES are in the process of developing concepts and schedules for implementing options for dredged material placement at Site 2.

CONCEPT

Site 2 is well suited for a dredged materials facility but is within the five-mile noncontainment zone. Maryland Environmental Service has investigated some alternatives to traditional containment and proposes to assess the feasibility to recycle dredged materials as usable construction materials on the site.

A recycling approach to dredged materials has the potential to utilize smaller sites or to extend the useful life of existing facilities. This alternative involves drying and reclaiming the materials. Interest in this approach has existed for many years but the costs for reclaiming

material were not competitive with traditional placement methods. Although costs have continued to rise, the number of available options has decreased and reclamation may now be a cost-effective option.

The concept for the site is a dewatering/drying basin with simple, low dikes (6-8 ft. high). A thin layer of dredged material (between 1 and 2 feet thick) would be hydraulically pumped into the basin and held undisturbed to allowed the solids to settle. The water would be drained from the basin and the dredged materials would be dried using conventional methods for turning soils (e.g., tractors, discs, etc). When dry, the materials would be excavated and removed from the basin and recycled as construction aggregates (topsoil, sand, and gravel), processed into other construction materials (engineered aggregate, rock wool, etc.) or off-site disposal (topsoil, landfill cover, etc.). This site would handle an estimated 500,000 cubic yards of material annually using conventional dewatering techniques.

With the existing markets for topsoil, sand, and gravel, the cost for reclaiming these components from dredged materials may be competitive with other containment options. In a recent pilot project, about 14,000 cubic yards of sandy materials were excavated from Hart Miller Island and transported to the Mid-Shore Regional Landfill to cover the landfill liner. The pilot project proved to be more economical than traditional sources of sand.

The fine grained materials (mostly silts and clays) pose more of a challenge for dredged material recycling. Studies have been conducted to evaluate the use of dredged materials as top soil or have it processed into engineered aggregates, bricks or other vitrified building materials. The technical and economic feasibility remains to be investigated.

Site 2, as currently delineated for Baltimore County, has approximately 56 acres. To further enhance Site 2, the Beth Steel Property A should be incorporated into the dewatering basin. The property appears to be similar in nature to Site 2. Incorporating the additional parcel would provide an additional 75 acres (approx.) bringing the total area of dewatering basin to about 130 acres. MPA proposes to obtain the use of Beth Steel Property A as compensation of the tipping fee for the disposal of dredged materials in Hart-Miller Island.

Sparrows Point Property Under Consideration by MPA

1. County Property

   a. Site 1B - (partially diked)
      - 67 acres
      - has potential for small quantity of dredged materials
      - lies within HMI 5-mile zone
      - appropriate near term use - stockpile are for reclamation site

   b. Site 2 - (near old pipe mill)
      - 56 acres
      - lies within HMI 5-mile zone
      - proposed use - dewatering/drying area for recycling dredged materials

   c. Environmental assessment of property has been conducted by the County Neither the County nor Beth Steel has not indicated and environmental problems with either site (conversations with Don Outen, County Dept. of Enviro. Protection and Joe Mendelson, Beth Steel, Environ. Office)

2. Bethlehem Steel Property

   a. Beth Steel Property A - (east of Site 2)
      - approx 75 acres
      - appears to be vegetated flats similar to Site 2
      - will require environmental assessment but discussions with Environ. offices at Balt. County and Beth Steel have not revealed significant concerns.
      - candidate property to compensate MPA for "tipping fee" at HMI

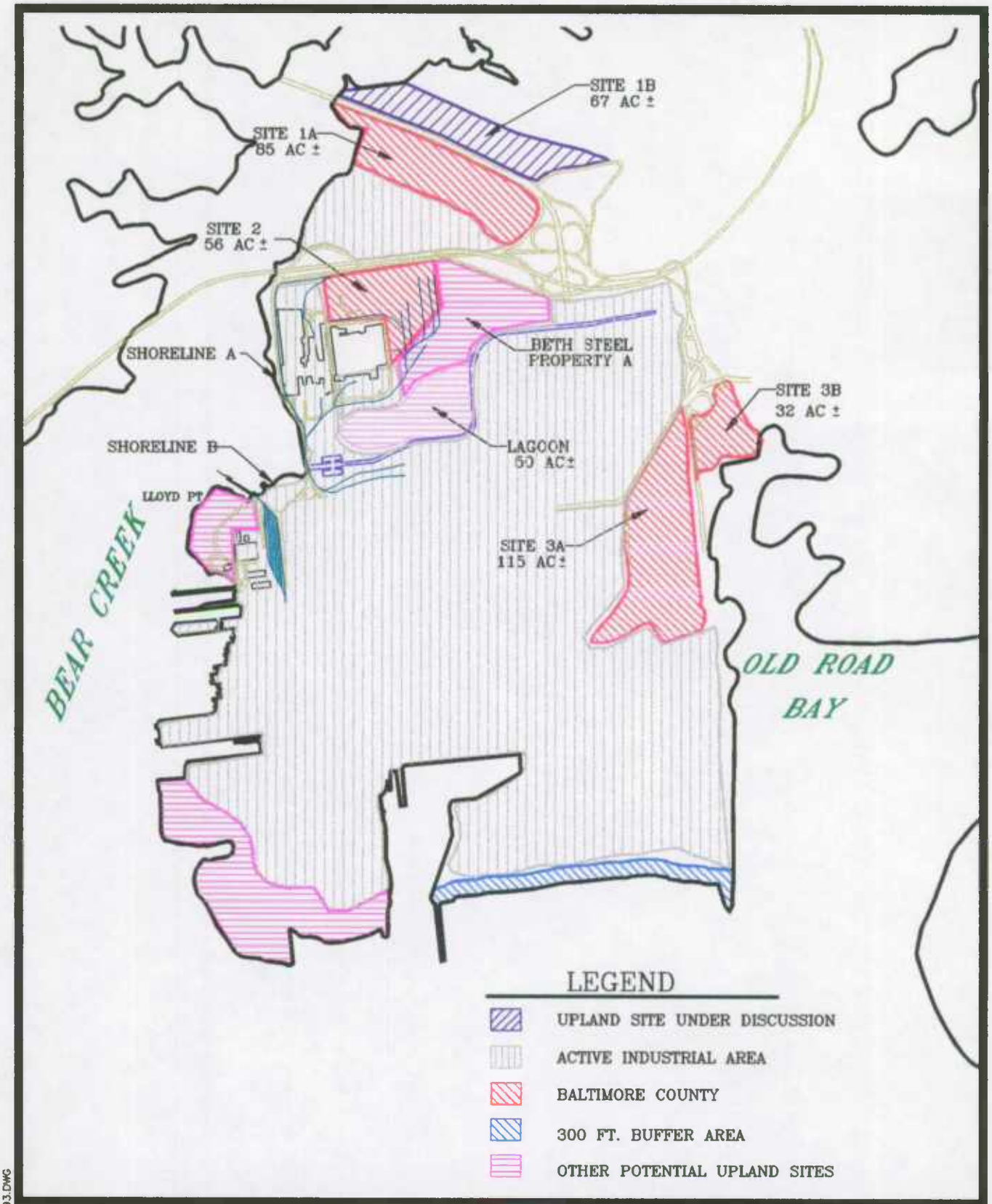
   b. Bear Creek Shoreline
      - adjacent to road fronting Wire-Rod Mill
      - requires access easement for beneficial use project
      - potential location for unloading (pumpout) area

   c. Lagoon
      - receives materials dredged from onsite ponds
      - may contain questionable materials
      - potential candidate site for capping with clean dredged materials

3. Bethlehem Shipbuilding Property

   a. Lloyd Point
      - approx. 50 acres
      - appears to be stockpile area for shipyard activities
      - requires environmental assessment
      - may be usable as a stockpile area or other non-dredging use

   b. Lloyd Point Shoreline (Bear Creek)
      - requires access easement for beneficial use project



MARYLAND ENVIRONMENTAL SERVICE

SPARROWS POINT
LANDUSE MAP
FIGURE 1

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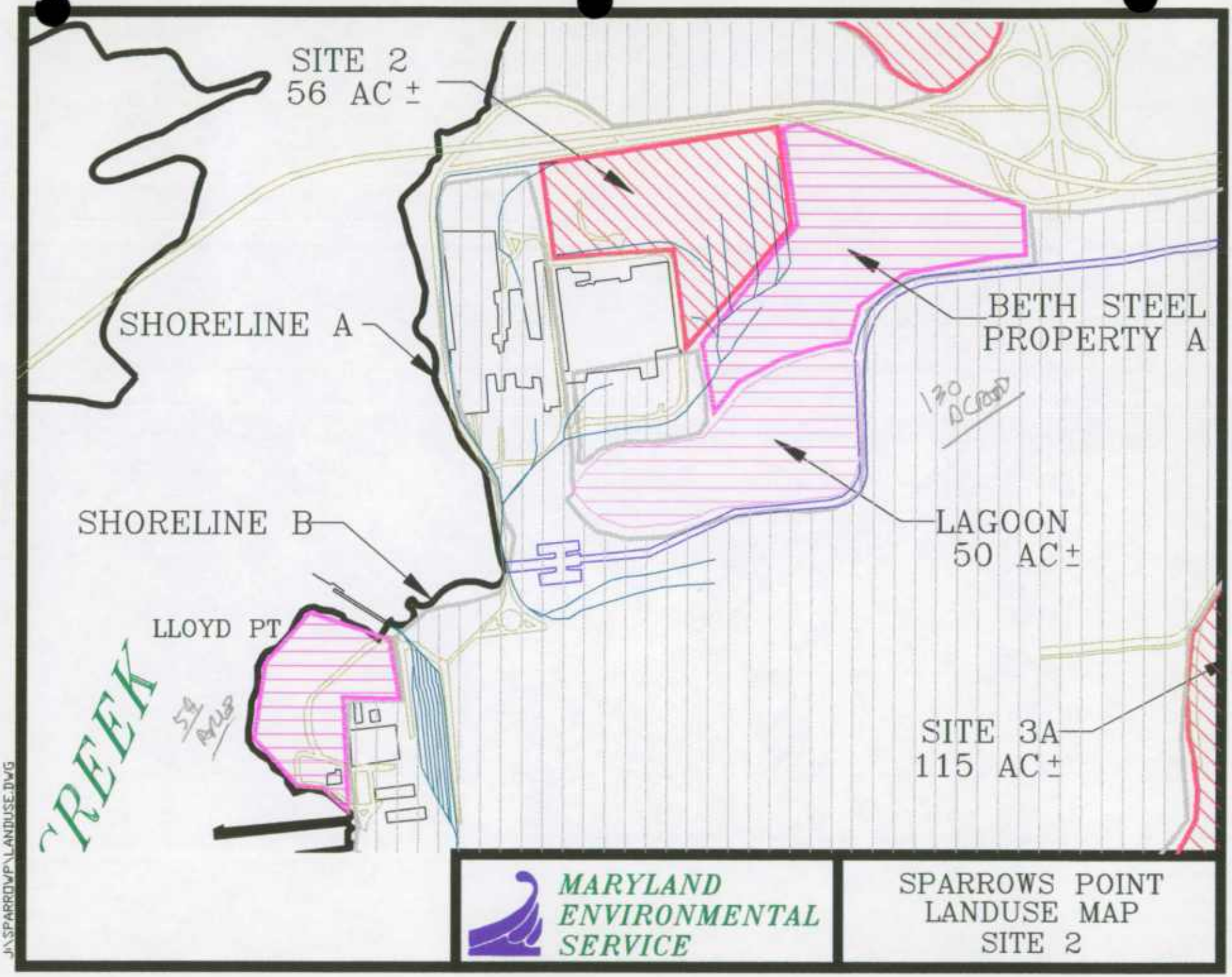
SITE 2
56 AC ±
SHORELINE A
BETH STEEL
PROPERTY A
130 ACRES
SHORELINE B
LAGOON
50 AC ±
LLOYD PT
CREEK
54 ACRES
SITE 3A
115 AC ±
MARYLAND
ENVIRONMENTAL
SERVICE
SPARROWS POINT
LANDUSE MAP
SITE 2
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PLAN OF ACTION
FOR SECURING PROPERTY
AT SPARROWS POINT

1. County Property

MES met with Mr. Adam Wasserman (Economic Development Commission) to discuss the use of the properties by MPA. The new County administration has appointed a committee to reassess the economic potential of all available County property including that at Sparrows Point. Mr. Wasserman agreed to address the property issue with the committee. The schedule for the committee's decision is unknown.
ACTION: MPA/MES should approach the committee (or the County Executive) for a decision about the Sparrows Point property being conveyed to the County. (Site 2 and possibly 1B)

2. Beth Steel Property

Two parcels of Beth Steel property are of interest to MPA; 1) the lagoon to the south of the abandoned pipe mill; 2) the shoreline of Bear Creek near the wire/rod mill.
ACTION: MPA/MES should initiate discussions with Beth Steel for the conveyance of these properties to MPA.

3. Beth Ship Property

Beth Ship has tentatively offered the parcel of property to the north of Beth Ship Yard known as Lloyd Point. A brief site visit revealed that the parcel is used (apparently for many years) as a stockpile area for the operations of the shipyard. An environmental assessment of the property is probably necessary if MPA wishes to use the entire site. The shoreline of this parcel, adjacent to the Bear Creek Wetlands site, is the main interest.
ACTION: MPA/MES should initiate discussions with Beth Ship for the conveyance of the shoreline property to MPA.

SCHEDULE

The 90-day grace period for Beth Ship ends April 17, 1995, thus providing less than five weeks for getting decisions from these groups. MPA/MES should set up a meeting with the County's committee on economic development this week (March 14 - 17) if possible or early next week (March 20-24) at the latest. Don Outen (DEPRM) has suggested working through the County Administration Officer (Morine Kelly). Check spelling.

Discussions with Beth Steel about the lagoon are dependent upon the decision of the County's committee but should be arranged for late next week (March 20-24).

Discussions with Beth Steel and Beth Ship about the shoreline property is independent of the County. Meetings could be scheduled prior to the meeting with the County, but should be arranged no later than next week (March 20-24).

Upland Property Under Consideration by MPA

1. County Property

   a. Site 1B - (Partially diked)
      - 67 acres
      - lies within HMI 5-mile zone
      - has potential for small quantity of dredged materials
      - appropriate near term use - stockpile area for Site 2

   b. Site 2 - (Old Pipe Mill)
      - 125 acres
      - lies within HMI 5-mile zone
      - target use - dewatering and drying area for dredged material recycling

   c. Environmental assessment of property has been done by the County
      - County has not indicated any environmental problems with either site (conversations with Don Outen, County Dept. of Enviro. Protection)

2. Bethlehem Shipbuilding Property

   a. Lloyd Point
      - approx 50 acres
      - stockpile for shipyard activities
      - requires environmental assessment & APPRAISAL
      - may be usable as a product stockpile area of non-dredging use for MPA

   b. Lloyd Point Shoreline (Bear Creek)
      - requires access easement for beneficial use project

3. Bethlehem Steel Property

   a. Lagoon (south of Site 2)
      - approx 50 acres
      - receives materials dredged from onsite ponds
      - requires environmental assessment
      - increased area with Site 2 (175 acres)

   b. Bear Creek Shoreline
      - APPROX 70 ACRES
      - adjacent to road fronting Wire/Rod Mill
      - requires access easement for beneficial use project
      - potential location of unloading (pumpout) area

2-28-94
FRANK
FOR YOUR INFO
BILL

TRIP REPORT

FROM: Bob Smith

PROJECT: Sparrows Point Shoreline Enhancement

DATE: February 8, 1995 19 APR 95

Bill - when is the 90 day period up?
Frank

ATTENDEES: Steve Feller, MPA
Bill Lear, Project Manager, MPA
Matt Ruch, Director, Financial Services, Beth Steel
Dave Watson, President, Beth Ship
Cal Thompson, Beth Ship
Guy Ritterman, Beth Ship
Hank Jones, Beth Ship

SITUATION: Beth Ship negotiated with MPA to deposit over 200,000 cubic yards of material into Hart-Miller Island. MPA waived the "tipping fee" ($2/cy) for 90 days. In return, Beth Ship is to repay MPA within 90 days with in-kind services, real property, or something with an equivalent value of over $400,000+.

Beth Steel is in the process (since 1989) of conveying five parcels of land to Baltimore County for potential industrial development (see attached for Areas 1-4). The County has indicated that at least two of the parcels are not going to be developed and may be better suited for use as dredged materials sites. Balt. County DEED and DEPRM have discussed the possibility of allowing MPA access to these parcels through conveyance or sale. A brief inspection of the property by MES resulted in only two parcels which look favorable for placement sites: Area 1b and Area 2.

Beth Ship has engaged Beth Steel in negotiating Sparrows Point property for the $400K debt. Beth Steel appears to be willing to discuss property options to cover Beth Ship's burden.

Steve Feller (MPA), Bill Lear (MPA) and I went to Bethlehem Ship Yard to discuss the options for using portions of the Bethlehem Steel property for a dredged materials facility. We described the intentions to use Areas 1b and 2. 1b is about 43 acres with a drainage swale and partial dikes already in place. This site is suitable to a small quantity of material, maybe for the Harbor material.

Area 2 is about 87 acres (maybe 100 acres with the pipemill) and is an existing mud reservoir. It looks like a good candidate site for upland placement or a recycling process. This site becomes more efficient if the lagoon to the south of the parcel is incorporated. The lagoon is meant to receive the sediment from the cooling/processing ponds onsite. These onsite sediments may be acceptable for the dredged material processing. Nothing has been ruled out at this point.

Beth Ship suggested another option for a beneficial use site. There is an embayment on the property just north of Beth Ship. It is relatively shallow and would take a small quantity of

clean material to make a wetland marsh. It would also provide a location for an unloading facility which could be utilized to pump materials to Area 2.

MISSION. Provide the ground work for securing this property for MPA. MPA has less than 90 days to determine if this property can be acquired for a dredged material facility. This will include the following:

1. opening discussions with the following groups:
   newly appointed heads of Baltimore County DEED and DEPRM;
   elected officials and the County and State levels
   local citizens
2. gathering information on the Five Mile Law
3. determining the volume/capacity of the prospective areas
4. develop schedules for achieving this

SEE ATTACH. 1

2-28-94
FRANK
FOR YOUR INFO
BILL

TRIP REPORT

FROM: Bob Smith

PROJECT: Sparrows Point Shoreline Enhancement

DATE: February 8, 1995

ATTENDEES: Steve Feller, MPA
Bill Lear, Project Manager, MPA
Matt Ruch, Director, Financial Services, Beth Steel
Dave Watson, President, Beth Ship
Cal Thompson, Beth Ship
Guy Ritterman, Beth Ship
Hank Jones, Beth Ship

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   local citizens
2. gathering information on the Five Mile Law
3. determining the volume/capacity of the prospective areas
4. develop schedules for achieving this

Bill
FYI
D

BethShip Sparrows Point Yard

D. Watson
PRESIDENT

RECEIVED
MAR - 1
HARBOR DEVELOPMENT

234672 cy
V2/cy
#469,354

February 28, 1995

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, MD 21224-6621

Attn: Mr. David Bibo, Harbor Development

Re: Disposal Permit Agreement #395005

Dear Mr. Bibo:

Per Para. 4 of the subject Agreement, please be advised that Great Lakes Dredge & Dock Co. has dredged the channels and ship berths within the shipyard. The work was performed from 1/19/95 to 2/14/95, with 234,672 cubic yards deposited at Hart-Miller Island. Great Lakes has provided Bethlehem with the following data to support the yardage calculation:

- Volume Summary (FINAL QUANTITIES - 2/23/95)
- Before Dredge Soundings
- After Dredge Soundings
- Before Dredge Volume Calculations
- After Dredge Volume Calculations

A copy of the Volume Summary is enclosed. If additional information is needed, I can be reached at 410-388-4642.

Sincerely,

G. A. Keigler
Facilities Engineer

SPARROWS POINT, MD 21219-2599 TEL: 410 388-7701 FAX: 410 388-6687 TELEX: 84-7417 BETHSCO BETM

BETH SHIP

(Final Quantities - 2/23/95)

	UNIT	CANVAS QTY	BD QTY	REMOVED	BUDGET REVENUE	ACTUAL REVENUE	VARIANCE
MOB/DEMOB	L.S.	1			$30,000	$30,000.00	0
ENT. CH.(AA&BB)	$7.25	111,500	106,015	104,599	$808,375	$758,343	$50,032
TURN. BASIN(LL&MM)	$7.25	77,000	90,312	85,144	$558,250	$617,294	($59,044)
PIER 3(FF)	$6.75	44,000	38,034	36,427	$297,000	$245,882	$51,118
PIER 1(DD)	$7.50	5,000	8,599	8,502	$37,500	$63,765	($26,265)
		237,500	242,960	234,672	$1,731,125	$1,715,284.00	$15,841

Maryland Port Administration
Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621

William Donald Schaefer
Governor

Maryland Port Commission
O. James Lighthizer
Chairman

J. Owen Cole
William K. Hellmann
Thomas T. Koch
Milton H. Miller, Sr.
Fred L. Wineland

Michael P. Angelos
Executive Director

January 19, 1995

Mr. David Watson
President
Bethship-Sparrows Point Yard
Bethlehem Steel Corporation
Sparrows Point, MD 21219

Re: Permit Agreement No. 395005

Dear Mr. Watson:

I am returning an extended copy of permit agreement no. 395005 for the proposed dredging of an estimated 238,000 cubic yards from the Bethship-Sparrows Point Yard facility for placement at the Maryland Port Administration's Hart-Miller Island property.

We will be working with your company to determine if the "placement fee" will be in the form of an exchange of property, goods, services or legal tender as discussed in the January 18th correspondence (C.J. Thompson to Stephen M. Feller). The time period for reaching this decision will be three (3) months, ninety (90) days.

Your notice to proceed with the placement operations at Hart-Miller Island and the start of the three months period to reach a decision on the "placement fee" will be effective after the Maryland Port Administration receives acknowledgement by Bethship to these terms.

If you have any questions concerning this information please call me.

Sincerely,

Frank L. Hamons

Frank L. Hamons
Manager
Harbor Development

David Watson

David Watson

FLH/pdr
attachment
cc: Steve Feller
G. Gregory Russell
Donald Krach
Dave Bibo
William Lear

TDD/TT: (410) 684-6919
My telephone number is (410)- _____
Fax: 1-410-631- _____

(1) LSP LAND - STEEL SIDE ENVIRONMENTAL EVAL - PREP. OF LAND

(2) BOAT REPAIR

(3) MANUFACTURING ITEMS FROM STEEL (PIPING, WELDING)

USING CRANES FOR REPAIR ?

WAREHOUSING FACILITIES

Permit 395005
Agreement no.

BethShip Sparrows Point Yard

D. Watson
PRESIDENT

January 18, 1995

Stephen M. Feller
Director of Administration
Maryland Port Administration
World Trade Center - 20th Floor
401 E. Pratt Street
Baltimore, Maryland 21202

Dear Steve,

The attached Permit Agreement for Placement at Hart-Miller Island Containment addresses the $2.00 per cubic yard user charges in paragraph 4, page 3.

Pursuant to discussions with Messrs. Greg Russell, Art Drea, Steve Feller from the State and Dave Watson, Hank Jones and Cal Thompson from Bethlehem, we understand that we have up to three months to complete the user charge payment.

Very truly yours,

C. J. Thompson
Controller

Attachment

SPARROWS POINT, MD 21219-2599 TEL: 410 388-7701 FAX: 410 388-6687 TELEX: 84-7417 BETHSCO BETM

Permit No. 395005

Effective Date 1/18/95

Expiration Date 3/31/95

PERMIT AGREEMENT

FOR PLACEMENT AT

HART-MILLER ISLAND CONTAINMENT SITE

This Permit Agreement, made this _____ day of _____, 19 ____, by and between the MARYLAND PORT ADMINISTRATION, of the Maryland Department of Transportation, an agency of the State of Maryland (hereinafter called "MPA"), as Permitter, and BethShip - Sparrows Point Yard, Bethlehem Steel Corporation, a Corporation fully authorized to do business in this state, (hereinafter call "Permittee"), witnesseth:

WHEREAS, MPA is the owner of a tract of land in Baltimore County, Maryland, known as Hart-Miller Islands Containment Site, which said tract comprises 1,050 acres, more or less (the "Property"); and

WHEREAS, MPA is willing to make available portions of the Property to Permittee for placement of dredged material, operated by the Maryland Environmental Service, an agency of the State of Maryland (hereinafter call "Operator"); and

WHEREAS, Permittee is desirous of obtaining from MPA the permit, right and privilege of placing dredged material on the Property.

NOW, THEREFORE, for and in consideration of the mutual covenants herein contained, the parties hereto covenant and agree as follows:

1. The MPA hereby gives and grants the Permittee and the Permittee hereby accepts, the permit right and privilege to enter upon and have ingress and egress in respect of the Property and Site, including only the unloading facilities, as designated on "Exhibit A" (hereinafter "Facility"), for the only and limited purpose of placing, at Permittee's sole expense, up to 238,000 cubic yards of dredged material to be dredged from areas known as BETHSHIP - SPARROWS POINT YARD, on the terms and conditions and in accordance with the rules and covenants and agreements hereinafter set forth, and in accordance with the Hart-Miller Islands Rules and Regulations, in accordance with Permittee's placement operations plan, and in accordance with applicable permits, laws, and rules and regulations.

2. Permittee shall not interfere with, hinder or delay any activity being performed by the MPA or other authorized persons in the vicinity of or on the property affected by this Agreement.

3. Permittee may place up to 238,000 cubic yards of dredged material within the Site, plus a reasonable allowance for swelling of the dredged material, provided that such placement shall not exceed estimated remaining capacity in the area of placement, and shall not violate the conditions, requirements or regulations of any permits and licenses pertaining thereto. Permittee shall notify the MPA and MES (Operator) at least ten working days prior to commencing placement of dredged material at the site. Failure to make notification as specified is as breach of this Permit Agreement and, at the options of the MPA, may result in the immediate termination of the right of placing dredged material at the Site. Permittee shall notify the MPA and MES at least five

working days prior to terminating placement of dredged material at the Site. Permittee shall provide a survey to determine the "cut volume" of material deposited within the Facility. The type of survey is to be approved by MPA.

4. Permittee shall pay the MPA two dollars ($2.00) per cubic yard of material placed within the Facility ("user charges"). Such payments for user charges shall be payable monthly, by the Permittee. During each month a copy of the dredger's estimate shall be forwarded for the previous month's work by the Permittee to the Comptroller. The MPA will forward an invoice for payment based on the dredger's estimate. All payments shall be directed to the attention of the Comptroller, Maryland Port Administration. Payments shall be due within thirty (30) calendar days of the first of each month for the duration of this Agreement. Failure to provide the dredger's estimate and to make payment as specified is a breach of this Permit Agreement, and at the option of the MPA, may result in the immediate cancellation of the right, license, and privilege granted hereby. If Permittee designates a third party to pay user charges, the Permittee shall continue to be responsible for payment of user charges.

5. Permittee shall have until March, 31, 19 95 to completely terminate its operations and activities on the Property, vacate and remove any and all of its equipment and other property therefrom, unless specifically altered or amended by a written instrument signed by the MPA and the Permittee.

6. No assignment by Permittee in whole or in part of this Permit Agreement or of the license herein granted and not sublicense shall be made or granted by Permittee without the prior written consent of the MPA, which consent shall not be unreasonably withheld;

provided, however, that nothing herein shall prevent Permittee from contracting with a third party or third parties to provide placement or other services at the Property as permitted or required by this Permit Agreement.

7. Permittee shall indemnify and hold the MPA and its contractors, including MES, harmless from and against any and all claims, actions, causes of action, demands, rights, damages, and costs whatsoever arising from Permittee's use or occupation of the Property and the Site, or from any activity, work or things done, permitted, of suffered in or about or in connection with the Property, the Site or the Facility or their use, or arising from any breach or default in the performance of any obligation on Permittee's part to be performed under the terms of this Permit Agreement, or arising from any negligence of Permittee or any of its agents, contractors or employees, and from and against all costs, attorney's fees, and expenses incurred in the defense of any such action or proceeding brought thereon.

8. Permittee shall obtain and keep in force, or shall cause its contractors to obtain and keep in force during the term of this Permit the following insurance:

A. Workers' Compensation

1. Workers' Compensation insurance as required by the laws for the State of Maryland, which shall include Employer's Liability coverage with a minimum limit of $500,000.

2. Such policy or policies of insurance mentioned above shall also include coverage for the benefits set forth under the U. S. Longshoremen and Harborworkers Compensations Act, the Jones Act and other Federal laws

where applicable.

B. Liability Insurance - Occurrence forms of comprehensive general liability insurance covering the full scope of this Agreement with limits not less than $1,000,000 per occurrence and $2,000.000 aggregate for personal or bodily injuries and $1,000,000 per occurrence and aggregate for property damage. A combined single limit per occurrence of $2,000,000 is acceptable. All policies issued shall include permission for partial or total occupancy of the premises by or for the MPA within the scope of this Agreement. Such insurance shall include but shall not be limited to the following:

1. Comprehensive general liability insurance including a comprehensive broad form endorsement and covering: a) all premises-operations; b) completed operations; c) independent contractors; d) liability assumed by oral or written contract or agreement, including this Agreement; e) additional interests or employees; f) notice of occurrence; g) knowledge or occurrence by specified official; h) unintentional errors and omissions; i) incidental (contingent) medical malpractice; j) extended definition of bodily injury; k) personal injury coverage (hazards A and B) with no exclusions for liability assumed contractually or injury sustained by employees of Permittee; l) broad form coverage for damage to property of the MPA, as well as other third parties resulting from completion of the Permittee's services.

2. Comprehensive business automobile liability insurance covering use of any

motor vehicle to be used in conjunction with this Agreement, including hired automobiles and non-owned automobiles.

If any operations performed within the scope of this Agreement by Permittee or its subcontractors require the use of any aircraft or watercraft (owned or non-owned), Permittee shall maintain liability insurance satisfactory to the MPA to cover such activities. Such coverage must be included as underlying insurance in any umbrella policies carried by the Permittee.

C. Marine Protection and Indemnity with minimum limits of $2,000,000 bodily injury and property damage each occurrence, including master and crew. Coverage shall also extend to include ship collision.

All insurance policies required in this Permit shall be so endorsed as to provide that the insurance carrier will be responsible for giving immediate and positive notice to MPA in the event of cancellation or modification of the insurance policy by either the insurance carrier or Permittee at least thirty (30) days prior to any such cancellation or modification. If Permittee or its contractors shall fail to procure and maintain said insurance, the MPA may, at its discretion, procure and maintain the same, but at the expense of Permittee. Permittee shall deliver to the MPA, certificates evidencing the existence and amount of such insurance.

9. In the event either party fails to observe or perform any of the covenants, conditions or provisions of this Permit Agreement to be observed or performed and fails within ten (10) days, or such shorter period as may be required by law, after receipt of written notice to correct or commence any such failure, this Agreement shall, at the option of

such other party, be terminated.

10. This Permit Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto, but except as in this agreement otherwise provided, no other party shall have or acquire any right hereunder.

11. All notices required to be given hereunder shall be in writing and shall be personally hand-delivered or mailed by certified mail, return receipt requested, to the following address or to such other address as either party may hereafter direct in writing:

If to MPA:

Maryland Port Administration
Pt. Breeze Maritime Center II
2310 Broening Highway
Baltimore, Maryland 21224-6621
ATTN: Frank L. Hamons, Manager
Harbor Development

If to Permittee:

BethShip - Sparrows Point Yard
Bethlehem Steel Corporation
Sparrows Point, Maryland 21219

Attn: David Watson
President

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate by their duly authorized officers as of the day and year first written above.

Approved as to Form and
Legal Sufficiency

Assistant Attorney General
1-29-95

WITNESS:

MARYLAND PORT ADMINISTRATION

BY:
Executive Director

WITNESS:

PERMITTEE

BY:
David Watson
President

1:permits:2agreemt.hmi

Revised 11/94

Title 11
DEPARTMENT OF TRANSPORTATION

Subtitle 05 MARYLAND PORT ADMINISTRATION

Chapter 06 Deposit of Dredged Materials on Administration Property

Authority: Transportation Article, §6-204, Annotated Code of Maryland

.01 Scope.

These regulations govern the deposit by any person of dredged material on property owned, leased, or operated by the Maryland Port Administration.

.02 Intent.

These regulations are intended to enable the Maryland Port Administration to enhance the flow of international and interstate commerce through the Port of Baltimore by making available certain portions of its property for use, to the extent available, as containment sites for dredged material generated by maritime businesses located in the Port of Baltimore.

.03 Definitions.

A. "Administration" means the Maryland Port Administration.

B. "Director" means the Administration's Director of the Office of Planning and Research.

C. "Dredged material" means material excavated or dredged from the waters of the Port of Baltimore.

D. "Facility" means a diked structure intended for the confinement of dredged material, located on property owned, leased, or operated by the Administration.

E. "Person" has the meaning provided in COMAR 11.01.01.01C.

F. "Port of Baltimore" means the Patapsco River and its tributaries lying west of a line extending from Rock Point in Anne Arundel County to North Point in Baltimore County.

.04 Deposit of Dredged Material.

A. Before depositing dredged material in a facility, a person shall:

(1) Obtain, at his own cost and expense, and keep in force until depositing is completed, all permits and certifications necessary for dredging or deposit of dredged material.

(2) Submit to the Director for approval plans and specifications detailing the proposed construction or depositing to be performed. The plans and specifications shall contain, at a minimum:

(a) The quantity of material to be deposited;

(b) The method of delivery of the material;

(c) The method of depositing and spreading the material;

(d) Any dike construction, reconstruction, or sloping made necessary by the depositing;

(e) Any seeding or mulching of the dike, if necessary; and

(f) Any other information reasonably required by the Director to evaluate the proposed construction or depositing.

(3) Submit to the Director a complete chemical and physical analysis of the material to be deposited in the facility.

(4) Submit to the Director an accounting system capable of calculating, in a manner satisfactory to the Administration, the quantity of dredged material being deposited.

(5) Execute an agreement in a form satisfactory to the Administration.

B. Material containing any substance in sufficient concentration to be designated as hazardous by applicable federal, State or local law or regulation may not be deposited in a facility.

C. The Administration shall inspect, monitor, and approve or disapprove the methods of disposal of dredged material in a facility.

.05 Fee.

The fee for depositing dredged spoil in a facility shall be a reasonable fee, to be determined by the Administration, of not less than $2 per cubic yard.

.06 Exceptions.

The requirements of these regulations do not apply to the Administration or its contractors or subcontractors, the federal government, or other agencies of the State.

Administrative History

Effective date: June 7, 1982 (9:11 Md. R. 1128)
Regulation .05 amended effective August 27, 1984 (11:17 Md. R. 1492)

Subtitle 05 Maryland Port Administration

11.05.06 Deposit of Dredged Materials on Administration Property

Authority: Transportation Article, §6-204, Annotated Code of Maryland

Notice of Proposed Action

[90-225-P]

The Executive Director of the Maryland Port Administration proposes to amend Regulations .03 — .05 under COMAR 11.05.06 Deposit of Dredged Materials on Administration Property.

Statement of Purpose

This action clarifies that the Administration's Director, as referenced in these regulations, should be the Director of Development instead of the Director of Planning and Research. This action also adds the language "as a condition of and before" as a modifier as to time for depositing dredged material in a facility, and further provides that final acceptance of dredged materials going into a facility is at the sole discretion of the Administration. Finally, these amendments propose the word "material" to replace the word "spoil", and provide that the fee assessed for depositing dredged materials will be in the sole discretion of the Administration and if the fee is in the form of an exchange of property, goods, and/or services, that such an exchange shall be approved by the Maryland Port Commission.

Estimate of Economic Impact

The proposed action has no economic impact.

Opportunity for Public Comment

Written comments may be sent to Isaac Shafran, Director of Development, Maryland Port Administration, 2000 World Trade Center, Baltimore, Maryland 21202-3041, or call (301) 333-4394, Monday through Friday, 8:30 to 4:30 p.m. These comments must be received by July 31, 1990.

.03 Definitions.

A. In these regulations, the following terms have the meanings indicated.

B. Terms Defined.

[A.] *(1)* (text unchanged)

[B.] *(2)* "Director" means the Administration's Director of [the Office of Planning and Research] *Development.*

[C.] *(3)* — [D.] *(4)* (text unchanged)

[E.] *(5)* ["Person" has the meaning provided in COMAR 11.01.01.01G.] *"Person" means:*

(a) An individual or a corporation, government or governmental subdivision or agency, business trust, estate, trust, partnership, or association;

(b) Two or more persons having a joint or common interest; or

(c) Any other legal or commercial entity.

[F.] *(6)* (text unchanged)

.04 Deposit of Dredged Material.

A. [Before] *As a condition of and before* depositing dredged material in a facility, a person shall:

(1) — (5) (text unchanged)

B. — C. (text unchanged)

D. Final acceptance of dredged material going into a facility is at the sole discretion of the Administration.

.05 Fee.

The fee for depositing dredged [spoil] *material* in a facility shall be a reasonable fee, to be determined by, *and in the sole discretion of,* the Administration, of not less than $2 per cubic yard. *If the fee is in the form of an exchange of property, goods, or services, or all of these, it requires the approval of the Maryland Port Commission.*

BRENDAN W. O'MALLEY
Executive Director
Maryland Port Administration

Title 21
STATE PROCUREMENT REGULATIONS

Notice of Proposed Action

[90-240-P]

The Board of Public Works proposes the following actions:

Amend Regulation .07 under COMAR 21.05.08 Mandatory Written Solicitation Requirements.

Amend Regulation .25 under COMAR 21.07.01 Mandatory Contract Provisions — All Contracts (except as provided under COMAR 21.05.07, 21.07.02, and 21.07.03).

Adopt new Regulation .25 under COMAR 21.07.03 Mandatory Terms and Conditions for Purchase Orders Over $10,000.

Adopt new Regulations .01 — .06 under a new chapter, COMAR 21.11.08 Drug and Alcohol Free Workplace.

Statement of Purpose

The purpose of these actions is to implement regulations requiring State contractors to make a good faith effort to eliminate unlawful drug use and drug and alcohol abuse from their workplaces.

Estimate of Economic Impact

I. Summary of Economic Impact. These actions seek to require State contractors to take cognizance of unlawful drug use and drug and alcohol abuse in their workplaces and to make a good faith effort to eliminate these problems from their workplaces.

Drug and alcohol abuse in the workplace leads to a decrease in productivity, economy, and the maximum benefit to be derived from the State's purchasing power, thereby decreasing and undermining public confidence in the State procurement system. In addition, the State has an interest in ensuring that recipients of funds under State procurement contracts are not using these monies to maintain or foster, directly or indirectly, workplaces where drug or alcohol abuse occurs.

II. Types of Economic Impacts.	Revenue (+) Expense (−)	Magnitude
A. On issuing agency:	NONE	
B. On other State or local agencies:	NONE	

REQUEST FOR TECHNICAL PROPOSAL
CONTRACT NO. 593949
ENVIRONMENTAL AND ENGINEERING INVESTIGATION AND DESIGN
FOR
BETHLEHEM STEEL SHORELINE RECLAMATION

I. GENERAL

The Maryland Port Administration (MPA) with the assistance of the Maryland Environmental Service (MES) is seeking professional environmental and engineering services to perform an Environmental and Engineering Evaluation and Design for Bethlehem Steel Shoreline Reclamation to develop wetland and upland habitat at Sparrows Point, Maryland using dredge material from the approach channels to Baltimore Harbor. Early efforts of the Consultant services will include, but are not limited to, environmental and engineering investigations to the level of Preliminary Engineering Design and Draft Permit Applications. These efforts will be the basis for subsequent preparation of Final Permit Applications and Construction Plans and Specifications.

II. SCOPE OF SERVICES

Consultant shall furnish all labor, supervision, materials and equipment necessary to perform the work specified in the attached Scope of Work.

All such work performed under this Contract shall be done in accordance with the specifications and terms specified herein and Maryland Department of Transportation (MDOT) General Conditions for Consultant Agreements 1989 and Amendments 1 and 2 appended hereto and made part hereof.

III. CONSULTANT'S RESPONSIBILITY

Consultant shall assign personnel to perform environmental and engineering investigations in the areas mentioned hereinabove. Such work shall be performed under the supervision of the MPA or the MES Project Manager as designated by the MPA. All work performed under this Contract shall be done in a manner and method to the complete satisfaction of the MPA.

The work shall be comprised of detailed environmental and engineering studies in general areas outlined on the attached Scope of Work. Based on the results of these efforts, the Consultant may be requested to prepare Detailed Construction Plans and Final Permit Applications. The Consultant shall prepare cost estimates for construction, develop the methodologies for filling the facility, and developing the wetland and upland habitats. The Consultant shall also assist in obtaining all required Permits.

IV. PROJECT TERM

The term for the Project is fifteen (15) months, beginning approximately June 1993 and ending about September 1994. The Consultant, MES, and MPA will mutually agree upon completion times for various phases of the Project. It is understood, however, that the conduct of all or any of the tasks and phases will be as prompt as possible, based upon an approved schedule.

V. COST RANGE

The estimated total cost for services sought is between $1.1

million and $1.8 million.

VI. METHOD OF PAYMENT

Compensation will be on the basis of cost plus fixed fee.

VII. PROJECT ADMINISTRATION

A. The MPA will issue a written Notice to Proceed to the Consultant. The MPA will designate a Project Manager from MES in the Notice to Proceed. All work performed by the Consultant shall be supervised by the Project Manager.

B. Within one (1) week after receipt of a written Notice to Proceed issued by the MPA, the Consultant will initiate the Project and will prosecute the work in accordance with the tasks specified and to the satisfaction of the Project Manager, unless otherwise directed by the MPA or MES.

C. At all meetings attended by the Consultant and pertaining to the Project, the Consultant shall be responsible for taking the minutes on all topics discussed and dispositions or conclusions reached. The Consultant shall submit a formal set of meeting minutes to the Project Manager for approval within one week after the meeting.

D. All telephone conversations relative to instructions and/or authorizations from MPA or MES to the Consultant

must be confirmed in writing by the Consultant and submitted to the Project Manager for approval.

E. No modification to the Scope of Work or extra work will be authorized unless approved in writing by the MPA.

F. Copies of all written correspondence between the Consultant and any party pertaining specifically to the project shall be submitted to the Project Manager for his records within one (1) week of the receipt or transmission of such correspondence, with a copy to MPA.

G. The Consultant shall conduct monthly progress meetings with MPA and MES which shall be scheduled within five (5) working days after the submittal of the monthly progress report to the Project Manager with a copy to MPA. The monthly progress reports will describe the activities for the reporting period, including work performed on each work element, problems encountered, man hours expended by each member of the Consultant's firm, and the total dollar expenditure on the Project by work element and assignment. Progress reports shall be submitted within five (5) working days of the close of the reporting period. Copies of applicable progress reports shall be attached to the invoices when submitted for payment.

H. The Consultant's work shall be under the direction and control of the key personnel identified in the Technical Proposal. Any changes in the key personnel shall be subject to review and written approval by the MPA.

VIII. MINORITY BUSINESS ENTERPRISES

It is the goal of the Maryland Department of Transportation (MDOT) that certified minority business enterprises participate in a minimum of thirteen percent (13%) of the total dollar value of this Contract.

XI. PROPOSAL SUBMISSIONS

Eight (8) copies of the Technical Proposal must be submitted not later than 4:00 PM, local time, Monday, April 12, 1993 addressed to:

S. Donald Sherin, Chief
Bureau of Consultant Services
Room 414
707 North Calvert Street
Baltimore, Maryland 21202

Proposals received after this time will not be considered.

X. PRE-PROPOSAL MEETING

All firms on the reduced candidate list are required to attend a pre-proposal conference scheduled on Tuesday, April 6, 1993 at 2:00 PM at the Maryland Port Administration, Office of Harbor Development, Point Breeze Maritime Center II, 2310 Broening Highway, Baltimore, Maryland 21224. If you have any questions, contact Frank Hamons, Manager of Harbor Development. The purpose of this conference is to answer any questions that such firms might have regarding the project or the proposal to be submitted.

XI. PROPOSAL EVALUATION

Proposals will be evaluated for conformance with the Request

for Proposal (RFP) and to determine which firm is considered most qualified to perform the services. Each element required in Section XII. of this RFP will be evaluated separately, but the elements may not carry equal weight, but are listed in order of importance for evaluation purposes.

Technical Proposals will also be reviewed for consistency with the firm's Letter of Interest submitted earlier by each firm indicating the prime participant or participants, and the areas of involvement of each of the named subcontractors. Any substantial modification in either composition or areas of involvement from that shown in the firm's earlier statement is grounds for disqualification of the proposal. However, upon a showing of compelling justification, the Consultant Selection Committee may accept the proposal, as modified, if this is determined, at the Committee's discretion, as necessary.

The selection shall be based on an evaluation of the Technical Proposals, oral interviews, and subsequent price negotiations which will be initiated with the firm which has submitted the highest rated Technical Proposal. Oral interviews will be held on Friday, April 16, 1993 at 10:00 AM at Maryland Port Administration, Point Breeze Maritime Center II, Conference A (2nd floor), 2310 Broening Highway, Baltimore, Maryland 21224.

XII. REQUIREMENTS OF THE TECHNICAL PROPOSAL

The Technical Proposal shall include an Understanding of this RFP discussing the extent of work being sought by the MPA, and the

firm's ability to perform the work required in a timely manner. The proposal shall also include examples of previous similar work. The major factors/criteria for selection of the Consultant for this project, in descending order of importance, will be:

- Detailed qualifications and experience of principals and key staff assigned to the project. (Prime Participant(s) and Subcontractor(s).)
- Technical approach, including methodology. (By specific tasks and overall.)
- Management approach, including organization and key staff assignments. (By specific task and overall.)
- Work plan and schedules. (By specific tasks and overall.)
- Comments on scope of services and estimates of the percentages assigned to each of the tasks of the scope of services.
- Availability of key staff. (Prime participant(s) and Subcontractor(s).)

XIII. ADDITIONAL REQUIREMENTS/INFORMATION

- An executed "Bid/Proposal Affidavit" is required. (Prime Participant(s)).
- Evidence must be furnished for financial capacity to provide the services and to protect the State from errors and omissions. (Prime Participant(s)).
- All applicable MBE requirements will be enforced.

- All applicable Federal and other requirements will be enforced.
- The Consultant shall set forth his understanding of the project, specifications, and produces to be furnished and MPA's Scope of Services need not be repeated in the technical proposal.
- All firms submitting proposals grant to the State a non-exclusive right to use, or cause others to use, the contents of the technical proposal or any part thereof for any purpose.
- Compliance is required with the "General Conditions for Consultant Contracts - 1989 " included hereinafter. These "Conditions" promulgated by the MDOT, will be made part of a contract agreement with the successful Consultant.
- An executed Minority Business Affirmative Action Certification (attached) is required.

XIV. CONSISTENCY WITH LETTER OF INTEREST

The Technical Proposal will be reviewed for consistency with the Letter of Interest statement submitted earlier by the Consultant indicating the prime participant or participants, and the areas of involvement of each of the proposed subcontractors. Any substantial modification in either composition or areas of involvement from that shown in the Consultant's earlier statement is ground for disqualification of the proposal. However, upon a

showing of compelling justification, the Consultant Screening Committee may accept the proposal as modified, if the reasons set forth for such modification are, at the MPA's determination, adequate to properly justify the change. The justification shall be set forth in the Transmittal Letter for the Technical Proposal (i.e., XVI, below).

If the Consultant includes additional firms in his Technical Proposal that were not included in the Expression of Interest, the Consultant must include a standard SF 254 Form for the added firm(s).

XV. MANAGEMENT & ADMINISTRATION OF PROJECT

A. Transmittal Letter

The Consultant shall prepare a letter of transmittal, as a part of the Technical Proposal, to transmit the Technical Proposal to the MPA. This letter shall be signed by the person or persons required to legally bind the Consultant to the proposal.

The Technical Proposal transmittal letter shall specifically state that the Consultant shall complete all Project services, within the proposed time estimate, to the satisfaction of the MPA. Also, any justification or explanatory material relevant to the Technical Proposal shall be set forth in this letter. The letter shall be concise and not repeat any of the detailed information found elsewhere in the Technical Proposal.

B. Technical Proposal Outline

This section shall outline and describe method and procedure proposed to comply with and respond to the MPA's request to administrate this project. This section shall not exceed four (4) pages.

The Technical Proposal shall be structured to the following outline:

1. Title Page
2. Transmittal Letter
3. Table of Contents
4. Scope of Services - The Consultant shall set forth how he proposes to accomplish the scope of services, indicating any unique methodology, or any special innovations or concepts that he is proposing for the project. The Consultant shall document how he proposed to use computer services, if applicable, and list the advantage of said services. If a joint venture or multiple subcontractors are involved, the proposal shall clearly set forth what work will be assigned to whom, what the lines of responsibility will be and who will have management authority. This section shall contain work schedules and shall not exceed ten (10) pages.

The Consultant shall set forth his

understanding of what work is to be accomplished. Special requirements of the project should be discussed and any unique circumstances or suggestions should be presented. The Scope of Services should be summarized sufficiently to demonstrate the Consultant's understanding of the project and shall not exceed eight (8) pages.

The Consultant shall set forth how he proposes to accomplish the scope of services. Specifically, the Consultant shall address the methodology, techniques and processes he proposed to use. This section shall contain work schedules.

5. Example of Similar Work

   a. Prime

   b. Subcontractors

   Similar projects shall be limited to eight (8), including value of work performed on two (2) standard pages for all projects.

6. Key Staff

   a. Prime

   b. Subcontractors

   Key staff is defined as the productive staff which have major project responsibilities. The <u>total</u> key staff

proposed shall not exceed eight (8) individuals for the project. On the first page of this section, the Consultant shall indicate the key staff anticipated to be assigned to the project. Following each key staff individual listed, the Consultant shall set forth the specific responsibilities of each individual within the Project. The Consultant shall submit a one (1) page resume for each key staff individual, showing both general experience and specific experience related do the subject project.

The Consultant may show an organization chart of proposed personnel in this Section. The Consultant may also include in this Section a listing of support personnel proposed, including items such as names, degrees, registrations and expertise, limited to three (3) lines for each individual. Resumes of support personnel are not to be included.

7. Manpower Estimates - Manpower estimates expressed as a percentage of specific categories of effort compared to the total, e.g. principles, project management, technical, drafting, administrative, etc. (by

specific tasks and overall).

XVI. INSURANCE REQUIREMENTS

The requiring of any and all insurance as set forth in this document, or elsewhere, shall be in addition to and not in any way in substitution for all the other protection provided under the Contract Documents.

No acceptance and/or approval of any insurance by the Maryland Port Administration, and/or the Project Manager, shall be construed as relieving or excusing the Consultant, from any liability or obligation imposed upon either or both of them by the provisions of the Contract Documents.

The Consultant shall at all times during the term of this contract, and until it has received Notice of Final Acceptance by the Maryland Port Administration, maintain in full force and effect the policies of insurance required by this Section. The Consultant, if requested by the Maryland Port Administration, shall provide certified true copies of any or all of the policies of insurance to the Maryland Port Administration.

The Consultant shall not commence work under this contract until he has obtained all the insurance required under this section and such insurance has been approved by the Administration, nor shall the Consultant allow any Subcontractor to commence work on his subcontract until the insurance required of the Subcontractor has been so obtained and approved.

All insurance policies required by this Section, or elsewhere

in the Contract Documents, shall be so endorsed as to provide that the insurance carrier will be responsible for giving immediate and positive notice to the Administration in the event of cancellation or restriction of the insurance policy by either the insurance carrier or the Consultant, at least thirty (30) days prior to any such cancellation or modification.

A. Workmen's Compensation

1. The Consultant shall maintain Workmen's Compensation insurance as required by the laws of the State of Maryland, and shall include Employer's Liability coverage with a minimum limit of $500,000 each accident, $500,000 disease - each employee and $500,000 disease - policy limit.

B. Comprehensive General Liability

The Consultant shall maintain Comprehensive General Liability insurance in the following limits: $1,000,000 each occurrence for Bodily Injury Liability including death; and $1,000,000 each occurrence for Property Damage Liability.

Such insurance shall also include the following coverage in the limits specified herein:

1. Contractual Liability to cover liability assumed under this contract.

2. Products/Completed Operations Liability

C. Comprehensive Automobile Liability

Limits of Liability: $500,000/$1,000,000 Bodily Injury

$1,000,000 Property Damage

In addition to Owned Automobiles, the coverage shall include Hired Automobiles and Non-Owned Automobiles with the same limits of liability.

D. Scope of Insurance and Special Hazards

The insurance required under sub-paragraphs (A), (B) and (C) above shall provide adequate protection for the Consultant against claims which may arise form operations performed by the Consultant or by anyone directly or indirectly employed by him, and also against any special hazards which may be encountered in the performance of this contract.

E. Subcontractor's Insurance

If any of the work under this Contract is subcontracted, the Consultant shall require the subcontractors, or anyone directly or indirectly employed by any of them to procure and maintain the same coverage in the same amounts specified above.

F. Other Coverages Required

Architect's/Engineer's Professional Liability (Errors & Omissions) amount to be negotiated with the MPA, but in no case less than $1,000,000.00.

Evidence that the required insurance coverage has been obtained may be provided by Certificates of Insurance duly issued and certified by the insurance company or companies furnishing such insurance. Such

evidence of insurance must be delivered to the office of the Project Manager before the start of any work under this Contract. The Project Manager may request at any time, and the Consultant shall promptly furnish upon such request, true and exact copies of all policies of insurance affording the coverage required herein, and any endorsements or changes thereto.

SPECIAL NOTE

If the Consultant recommends any additions which, in its opinion, should be included in the scope of work of this project, the Consultant is encouraged to include a discussion of the recommended additional work in its proposals. The recommendation must be described in the same detail as the other portions of the Project. The Consultant must include the recommended additional work as an "add-on" to be included or disregarded by the MPA, at the sole discretion of the MPA.

March 24, 1993

ENVIRONMENTAL/ENGINEERING INVESTIGATIONS AND DESIGN
FOR
BETHLEHEM STEEL SHORELINE RECLAMATION

SCOPE OF WORK

INTRODUCTION

The purpose of this contract is to determine the feasibility and design of wetlands and upland habitat to environmentally enhance a portion of shoreline and adjacent waters at Bethlehem Steel Corporation's (BSC) Sparrows Point Facility using maintenance dredged materials to construct. The project site located at Sparrows Point, Maryland on the Patapsco River consists of approximately 5000 feet of shoreline and is bounded on three sides by the Brewerton, the Pennwood, and the Sparrows Point Channels. The project will use sediments dredged from the harbor approach channels to create several hundred acres of aquatic and intertidal wetlands, and upland habitat for wildlife along the river.

Information on the project site including topographic and bathymetric surveys, and preliminary geotechnical assessment has been assembled and is available for review by Consultants by contacting Mr. Frank Hamons, Manager, Harbor Development, Maryland Port Administration, 2310 Broening Highway, Baltimore, Maryland 21224, telephone (410) 631-1102. A hydrodynamic modelling is currently underway to assess the effects of the project on Baltimore Harbor and the Patapsco River. These results will be available to consultants when modelling is completed in approximately 3-5 months (June - August 1993).

The following outline is intended to define the scope of work to be performed by the Consultant and not to establish the sequence of work. The Consultant will be responsible for developing and maintaining a more detailed scope of work and progress schedule for the project which shall be subject to the approval of the Maryland Port Administration. The Consultant shall develop the project to the level of preparing an integrated plan for dredged material placement, facility operations and site layout, wetlands and upland vegetated berm development, final permit applications, dike construction plans, specifications and cost estimates, and schedules for awarding a contract for the construction of the facility.

The Consultant will be required to use a two phase approach. Phase I is to determine the feasibility to construct and operate the Project, and to develop the wetland and upland habitats using maintenance dredged material. Phase II will be to produce a design for dike construction, complete with plans and specifications. Phase II may not be executed if Phase I determines that the project is not feasible. The anticipated services for Phase I and Phase II are described below.

PHASE I.

TASK I. Scope Refinement and Inventory

A. The Consultant shall attend an initial conference with the Maryland Port Administration (MPA) and the Maryland Environmental Service (MES) to finalize the schedule, scope of services and administrative procedures for the

coordination of the project.

B. The Consultant shall assemble physical data concerning the project site. At the initial conference, the Consultant will be provided topographic and bathymetric surveys data, an aerial photograph of the site, and preliminary geotechnical assessment and foundation analysis. Results from the hydrodynamic model study will be available within approximately three (3) months after the initial conference.

C. The Consultant shall identify the necessary permits required for the construction and maintenance of the wetland and upland habitat.

TASK II. Site Development

The Consultant shall determine the schedule for development, desired wetlands and uplands habitat characteristics, estimated capacity of the facility, the types of dredged materials available for site development, and integrated plan for site layout and operation to maximize dredged material placement efficiency and site capacity, including the sequence and method of placement of dredged material, procedures for managing the project site, and for achieving the desired site characteristics of the developed wetlands and upland habitat after the completion of dredged material placement operations.

TASK III. Alternative Dike Designs to be Evaluated

A. The Consultant shall evaluate the following three dike design alternatives* and determine the effectiveness of each with respect to the site performance requirements:

(a) Sand base (to elevation .6) with oyster shells dike on top geotextile on bottom.

(b) All oyster shells with geotextile.

(c) All light weight slag with geotextile.

In order to be acceptable, the slope stability factor of safety for any recommended dike design alternative must exceed 1.2

B. The Consultant shall further review the performance of each alternative design in consultation with MPA staff, prior to recommending the layout to be developed.

TASK IV. Field Investigations

A. The Consultant shall conduct on-site engineering investigations necessary to develop the design and cost estimates for the selected dike alternative and site layout. The design will be based upon existing conditions as determined by these new engineering investigations which will include topographic and hydrographic surveys and geotechnical analysis of the site.

B. The Consultant shall conduct an environmental assessment

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* Gahagan & Bryant Associates' Feasibility Evaluation of the Bethlehem Steel Shoreline Enhancement Project. November 1992

the project site. The survey shall be performed in accordance with NEPA guidelines and shall include, but not limited to, the following:

(a) Sediment Quality - Composites of samples from the geotechnical investigations (two shallow, two deep) to be analyzed for priority pollutants, nutrients, oil and grease, and iron.

(b) Water Quality - Vertically-composited samples to be analyzed for the same constituents as (a) above.

(c) Aquatic Ecology - Surveys (Spring, Summer, and Autumn) to address:

-benthic invertebrates (four stations)

-ichthyoplankton (two stations)

-fish (two seines and two trawl stations)

-submerged aquatic vegetation (species present and locations of each within the project site)

At each station, in-situ measurements of pH, dissolved oxygen, temperature and salinity shall be performed at the water surface, at mid-depth and at the bottom. At each benthic station substrate characteristics (including sand, silt, clay, water, and organic content) shall be determined. Data analysis should include relative abundance, diversity, and distribution of benthos, ichthyoplankton and fish.

(d) Terrestrial Ecology - Survey to address flora and

fauna present and delineation of tidal and non-tidal wetlands.

TASK V. Preliminary Dike Design and Site Layout

A. The Consultant shall prepare preliminary designs for the selected dike design and site layout including, but not limited to, the developed wetland habitat and the vegetated upland berm habitat, the retaining structures (both during construction and after habitat development), the slope protection, spillways, and unloading facilities for handling and placing the dredged materials.

B. The Consultant shall also develop preliminary construction cost estimates.

TASK VI. Reports

The Consultant shall prepare a comprehensive report presenting the results of the environmental and engineering investigations.

A. The engineering portion of the report shall contain plans, profiles, and cross-sections in sufficient detail for selecting the dike design and site layout, developing the cost estimates, and preparing the permit applications.

B. The environmental assessment report shall include, but is not limited to the following:

(a) description of the proposed action, purpose and need;

(b) environmental setting (i.e., natural and human

environment including protected species, and archeological/historical features) including a magnetometer survey of project area;

(c) effect of proposed action and wetland and upland alternatives (construction, operations, and maintenance); and,

(d) identify acceptable mitigation options for unavoidable impacts.

C. The Consultant shall submit ten (10) copies of the comprehensive report presenting the environmental and engineering results of the above work.

TASK VI. Cost Estimates

The Consultant shall prepare cost estimates for all aspects of the project including construction, operations, wetland development, vegetated upland berm development, and maintenance. The Consultant shall submit the cost estimates as part of the comprehensive report in Task V.B.

TASK VII. Permit Applications

The Consultant shall prepare Draft Permit Applications which shall include, but not limited to, the Department of the Army Permit (Section 10, Section 404), Maryland State Wetlands License, and Water Quality Certificate.

PHASE II.

TASK I. Design

The Consultant shall prepare detailed plans, profiles, and cross sections for the project including, but not limited to, the developed wetland habitat, the vegetated upland berm, the retaining structures (both during construction and after the wetland development), the slope protection, spillways, and unloading facilities for handling and placing the dredged materials.

The Consultant shall develop the construction cost estimates.

TASK II. Reports, Plans and Specifications

The Consultant shall prepare and submit one (1) reproducible set and four (4) copies of the Construction Plans and Specifications for the Project.

TASK III. Permits

The Consultant shall prepare the Final Permit Applications for MPA's signature and support MES in obtaining the permits.

March 19, 1993

BID/PROPOSAL AFFIDAVIT

STATE OF _____ Solicitation Number _____
(if applicable)

COUNTY (CITY) OF _____

A. (ANTI-BRIBERY AFFIRMATION). I HEREBY CERTIFY THAT

(1) I am the [title] _____ and the duly authorized representative of [vendor] _____ and that I possess the legal authority to make this Affidavit on behalf of myself and the vendor for which I am acting.

(2) Except as described in paragraph 3 below, neither I, nor to the best of my knowledge, information, and belief, the above vendor, nor any of its officers, directors, or partners, nor any of its employees directly involved in obtaining contracts with the State or any county, bi-county, multicounty agency or subdivision of the State has been convicted of, or has pleaded nolo contendre to a charge of, or has during the course of an official investigation or other proceeding, admitted in writing or under oath acts or omissions committed after July 1, 1977, which constitute bribery, attempted bribery, or conspiracy to bribe under the provisions of Article 27 of the Annotated Code of Maryland or under the laws of any state or federal government.

(3) State "none" or, as appropriate, list any conviction, plea or admission described in paragraph 2 above, with the date; court, official, or administrative body; and the sentence or disposition, if any:

_____

_____

_____

(4) I ACKNOWLEDGE THAT this Affidavit is to be furnished to the Procurement Officer, and may be furnished to the Board of Public Works and the Attorney General pursuant to Sections 16-201, et seq., of the State Finance and Procurement Article of the Annotated Code of Maryland. I acknowledge that if the representations set forth in this Affidavit are not true and correct, the State may terminate any contract awarded and take any other appropriate action. I further acknowledge that I am executing this Affidavit in compliance with Sections 16-201 through 16-208 of the State Finance and Procurement Article of the Annotated Code of Maryland, which provide that certain persons who have been convicted of or have admitted to bribery, attempted bribery, or conspiracy to bribe may be disqualified, either by operation of law or after a hearing, from entering into contracts with the State or any of its agencies or subdivisions.

B. (NON-COLLUSION AFFIRMATION). I HEREBY FURTHER AFFIRM THAT neither I nor, to the best of my knowledge, information and belief, the above firm nor any of its other representatives I here represent have:

(1) Agreed, conspired, connived or colluded to produce a deceptive show of competition in the compilation of the bid or offer being submitted herewith;

(2) In any manner, directly or indirectly, entered into any agreement, participated in any collusion to fix the bid price or price proposal of the bidder or offeror herein or any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the within bid or offer is submitted.

C. (PROCUREMENT AFFIRMATION). I HEREBY FURTHER AFFIRM THAT

(1) Neither the above business nor, to the best of my knowledge, information, and belief, any officer, controlling stockholder, partner, principal, or other person substantially involved in the contracting activities of the business has in the past five (5) years; (a) been convicted under state or federal statute of a criminal offense incident to obtaining or attempting to obtain or performing a public or private contract, fraud, embezzlement, theft, forgery, falsification or destruction of records, or receiving stolen property; (b) been found civilly liable under state or federal antitrust statutes for acts or omissions in connection with the submission of bids or proposals for a public or private contract; (c) been convicted of any violation of a state or federal antitrust statute; (d) been convicted under the provisions of Title 18 of the United States Code for violation of the Racketeer Influenced and Corrupt Organizations Act, 18 USC {{1961 et seq.; or (e) the Mail Fraud Act, 18 USC {{1341 et seq., for acts arising out of the submission of bids or proposals for a public or private contract; (f) been criminally convicted of conspiring to commit any act or omission that would constitute grounds for conviction or liability under any statute described in subsection (1) (a), (b), (c), (d), or (e) above; or (g) admitted in writing or under oath, during the course of an official investigation or other proceeding, acts or omissions that would constitute grounds for conviction or liability under any statute described above. Also, the undersigned vendor was not founded or established or is not operated in a manner designed to evade the application or defeat the purpose of the Debarment Regulations, COMAR 21.08; is not currently suspended or debarred pursuant to COMAR 21.08 or by the action of any other public entity; and is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business.

(2) (a) If the affirmation described in subsection (1) cannot be given, and debarment proceedings have not been instituted against the business pursuant to COMAR 21.08, indicate the reasons why the affirmation cannot be given, including any conviction or admission described in subsection (1), above, with the date, court

and sentence or disposition, if any; the name(s) of the person(s) involved, and their current positions and responsibilities with the business; the activity specified in COMAR 21.08 in which each person was involved; and the details of the person's participation in the activity, including the name(s) of an entity involved and the person's positions and responsibilities with the entity. (Attach additional sheets as necessary).

_____

_____

_____

(2) (b) If the affirmation described in subsection (1) cannot be given, and debarment proceedings have been instituted against the business pursuant to COMAR 21.08, indicate the status of such proceedings.

_____

_____

_____

D. (FINANCIAL DISCLOSURE AFFIRMATION). I FURTHER DECLARE AND AFFIRM THAT I am aware of and that the above firm will comply with the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland, which requires that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate $100,000 or more, shall within 30 days of the time when the aggregate value of these contracts, leases or other agreements reaches $100,000, file with the Secretary of the State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

E. (POLITICAL CONTRIBUTION DISCLOSURE AFFIRMATION). I FURTHER DECLARE AND AFFIRM THAT I am aware of and that the above firm will comply with the provisions of Article 33, Sections 30-1 through 30-4 of the Annotated Code of Maryland, which require that every person that enters into contracts, leases, or other agreements with the State of Maryland or a political subdivision of the State, including its agencies, during a calendar year under which the person receives in the aggregate $10,000 or more, shall on or before February 1 of the following year file with the Secretary of the State of Maryland certain specified information to include disclosure of political contributions in excess of $100 to a candidate for elective office in any primary or general election.

F. (DRUG AND ALCOHOL FREE WORKPLACE). (Applicable to all contracts unless the contract if for a law enforcement agency and the agency head or the agency head's designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency's undercover operations.)

I FURTHER DECLARE AND AFFIRM as follows:

(1) Terms defined in COMAR 21.11.08 shall have the same meaning when used in this certification.

(2) By submission of its bid or offer, the vendor, if other than an individual, certifies and agrees that, with respect to its employees to be employed under a contract resulting from this solicitation, the vendor shall:

(a) Maintain a workplace free of drug and alcohol abuse during the term of the contract;

(b) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the vendor's workplace and specifying the actions that will be taken against employees for violation of these prohibitions;

(c) Prohibit its employees from working under the influence of drugs or alcohol;

(d) Not hire or assign to work on the contract anyone whom the vendor knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;

(e) Promptly inform the appropriate law enforcement agency of every drug-related crime that occurs in its workplace if the vendor has observed the violation or otherwise has reliable information that a violation has occurred;

(f) Establish drug and alcohol abuse awareness programs to inform its employees about:

(i) The dangers of drug and alcohol abuse in the workplace,

(ii) The vendor's policy of maintaining a drug and alcohol free workplace,

(iii) Any available drug and alcohol counseling, rehabilitation, and employee assistance programs, and

(iv) The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;

(g) Provide all employees engaged in the performance of the contract with a copy of the statement required by §F(2) (b), above;

(h) Notify its employees in the statement required by §F(2)(b) above, that as a condition of continued employment on the contract, the employee shall:

(i) Abide by the terms of the statement, and

(ii) Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after a conviction:

(i) Notify the procurement officer within 10 days after receiving notice under §(2)(h)(ii), above, or otherwise receiving actual notice of a conviction;

(j) Within 30 days after receiving notice under §F(2)(h)(ii), above, or otherwise receiving actual notice of a conviction, impose either of the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:

(i) Take appropriate personnel action against an employee, up to and including termination, or

(ii) Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation program; and

(k) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of §F(2)(a)-(j), above.

(3) If the vendor is an individual, the individual shall certify and agree, as set forth in §I below, that the individual shall not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or the abuse of drugs or alcohol in the performance of the contract.

(4) I acknowledge and agree that:

(a) The award of the contract is conditional upon compliance with COMAR 21.11.08 and this certification;

(b) The violation of the provisions of COMAR 21.11.08 or this certification shall be cause to suspend payments under, or terminate the contract for default under COMAR 21.07.01.11 or 21.07.03.15, as applicable; and

(c) The violation of the provisions of COMAR 21.11.08 or this certification in connection with the contract may, in the exercise of the discretion of the Board of Public Works, result in the vendor's suspension and debarment under COMAR 21.08.06.

I ACKNOWLEDGE THAT this Affidavit is to be furnished to the Procurement Officer and may be distributed to units of: (1) the State of Maryland; (2) counties or other subdivision of the State of Maryland; (3) other states; and (4) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland or any unit of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the laws of Maryland in respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above firm in respect to (1) this Affidavit, (2) the contract, and (3) other Affidavits comprising part of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: _____

By: _____
(Affiant)

Title: _____

For: _____
(Firm)

State of _____:

County (City) of _____:

On this _____ day of _____, 19___, before me, _____ _____, the undersigned officer, personally appeared _____, known to me to be the person described in the foregoing Affidavit and acknowledged that he (she) executed the same in the capacity therein stated and for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires _____ (Seal)

Revised: October 1, 1990

(See Appendix II)

MINORITY BUSINESS AFFIRMATIVE ACTION CERTIFICATION

(Must be completed, signed, and submitted with Bid Submittal Forms)

Contract No. _____

I hereby certify as true, accurate and complete that I am the _____

_____ and duly authorized representative
(Title)

of _____ business, address
(NAME OF PRIME CONTRACTOR)

_____ and

represent that:

1. The prime Contractor will take affirmative action to seek out and consider minority business enterprises and affirmatively solicit their interest, capability, and prices. The same will be effected through, but not necessarily be limited to, the use of the Maryland Department of Transportation Minority Business Enterprise Directory, other community resources, and our previous experiences with minority firms.

2. It is understood that the requirement set forth in Paragraph I will also apply to that Contract work which the prime Contractor proposes to subcontract after award of the Contract.

3. It is further understood that the failure of the prime Contractor to submit this Certification, or its submission of a false certification, shall render his bid nonresponsive.

4. It is further understood that all documentation relative to affirmative action taken by the prime Contractor to seed out and consider the use of minority business enterprises will be made available for inspection by the Maryland Department of Transportation.

_____ (DATE)

_____ (SIGNATURE)

Sworn to and subscribed to before me this _____ day of

_____, 19 _____.

_____ (NOTARY PUBLIC)

My commission expires _____ (SEAL)

ADDENDA 1 & 2

Maryland
Department of
Transportation

GENERAL CONDITIONS FOR

CONSULTANT CONTRACTS 1989

January, 1989

Addendum #1
to
General Conditions for Consultant Contracts - 1989 dated January 1989

The General Conditions for Consultant Contracts - 1989, Section II of the Specifications for Consulting Engineers' Services, is modified as follows:

1. Paragraph "11", Remedies and Termination, subparagraph "D", Termination for Default, is hereby expanded to include:

   "Termination hereunder, including determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.11B."

2. Paragraph "11", Remedies and Termination, subparagraph "E", Termination for Convenience of the State, is hereby expanded to include:

   "Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.11B."

3. Paragraph "13", Disputes, subparagraph "D", is hereby voided with the following paragraph substituted in its place.

   "A claim shall be made in writing and submitted to the procurement officer for decision in consultation with the Office of the Attorney General. Unless a lesser period is provided by applicable statue, regulation, or this contract, the Consultant must file a written notice of claim with the procurement officer within 30 days after the basis for the claim is known or should have been known, whichever is earlier. Contemporaneously with or within 30 days of the filing of a notice of claim, but no later than the date of final payment under the contract, the Consultant must submit to the procurement officer its written claim containing the information specified in COMAR 21.10.04.02."

May 11, 1990

Addendum #2
to
General Conditions for Consultant Contracts - 1989
dated January 1989

The General Conditions for Consultant Contracts - 1989, Section II of the Specifications for Consulting Engineers' Services, is modified as follows:

Paragraph 7, Responsibility for Claims and Liability, is deleted and replaced with the following:

"7. Indemnification and Insurance

A. Responsibility for Claims and Liability

The Consultant shall indemnify and save harmless the Department of Transportation, the Administration, their officers, agents and employees from and against all claims, suits, judgments, expenses, actions, damages and costs of every name and description arising out of or resulting from errors, omissions, negligent acts, negligent performance or nonperformance of the services of the Consultant or those of his subcontractors, agents or employees under this contract, or arising from or based on the violation of applicable federal, state or local law, ordinance, regulations, order or decree, whether by himself or his employees or subcontractors.

Further, the Consultant shall pay any claims for personal injury, bodily injury or property damage which the Consultant is legally obligated to pay and shall indemnify the State against such claims. The Consultant shall undertake to defend any third party claim seeking those damages.

B. Insurance Requirements

The Consultant shall carry and maintain in full force and effect for the duration of this contract, and any supplement thereto, the insurance coverage specified below, and any other coverage specified by the Administration, in the amounts specified elsewhere in the contract documents. The Consultant shall submit to the Administration a certificate of insurance indicating the existence of the coverage required by this provision. Policies shall be issued by an insurance company authorized to do business in the State of Maryland and approved by the Administration.

(1) Comprehensive General Liability Insurance

Occurrence Form of Comprehensive General Liability Insurance with Comprehensive Broad Form endorsement including, but not limited to, coverage for damage to persons or property arising out of or relating to the performance of work under this contract by the Consultant, its subcontractors, employees and agents.

(2) Professional Liability Insurance

Professional Liability Insurance Policy which covers the Indemnification Clause of this contract (paragraph 7.A. above) as it relates to errors, omissions, negligent acts or negligent performance in the work performed under this contract by the Consultant, its subcontractors, employees and agents.

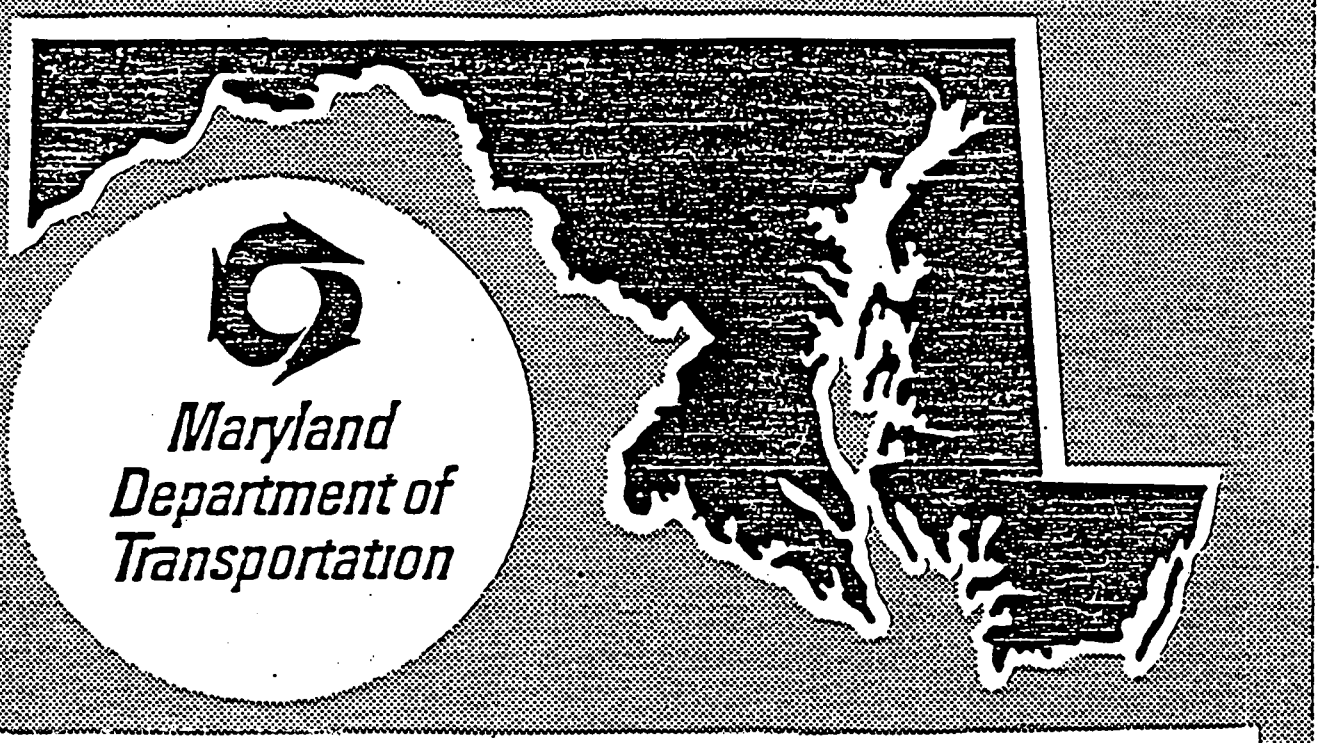
(3) Workers' Compensation Insurance

Workers' compensation as required by the laws of the State of Maryland, including Employer's Liability Coverage and coverage for the benefits set forth under the US Longshoremen and Harbor Workers Compensation Act, the Jones Act and other federal laws where applicable.

(4) Comprehensive Automobile Liability Insurance

Comprehensive Business Automobile Liability covering use of any motor vehicle to be used in conjunction with this contract, including hired automobiles and non-owned automobiles. Loading and unloading of any motor vehicle must be covered by endorsement to the automobile liability policy or policies."

July 20, 1990



GENERAL CONDITIONS FOR

CONSULTANT CONTRACTS 1989

MARYLAND DEPARTMENT OF TRANSPORTATION

GENERAL CONDITIONS FOR CONSULTANT CONTRACTS

TABLE OF CONTENTS

Section	Subject	Page
1	Definitions	1
2	Proposal Guaranty	5
3	Public Information Act Notice	5
4	Contract Administration	5
5	Authority of the Procurement Officer	5
6	Initiation of Work	6
7	Indemnification and Insurance	6
8	Assignment and Subcontracting	6
9	Changes, Alterations or Modifications in the Services	6
10	Delays and Extensions of Time	6
11	Remedies and Termination	7
12	Responsibility of Consultant	9
13	Disputes	9
14	Professional Registration	10
15	Availability of Data	10
16	Ownership of Documents	11
17	Retention of Records	11
18	Data Processing Services	11
19	Dissemination of Information	11
20	Non-Discrimination in Employment	11
21	Financial Disclosure	13
22	Political Contribution Disclosure	14
23	Personal Liability of Public Officials	14
24	Minority Business Enterprise and Affirmative Action	14
25	Non-Hiring of Employees	14
26	Contingent Fee Prohibition	15
27	Conflict of Interest Law	15
28	Sanctions Upon Improper Acts	15
29	Corporate Registration and Tax Payment Certification	16
30	Multi-Year Contracts Contingent Upon Appropriations	16
31	Cost and Price Certification	16
32	Truth-In-Negotiation Certification	17
33	Patents and Copyrights	17
34	Compliance with Laws	18
35	Maryland Law Prevails	18
36	Conflicts Between Federal Regulations and These General Conditions	18
37	General Conditions Controlling	18

Section	Subject	Page
38	Bid Award - For Competitively Bid Contracts - Resident Business	19
39	Payment of State Obligations	19
40	Suspension of Work	20
41	Pre-Existing Regulations	20

January, 1989

MARYLAND DEPARTMENT OF TRANSPORTATION

GENERAL CONDITIONS
CONSULTANT CONTRACTS

1. Definitions

A. Wherever in these General Provisions or in other contract documents the following terms or abbreviations are used, the meaning shall be as follows:

B. Organizational Structure

The Maryland Department of Transportation is composed of the following Administrations:

(i) Maryland Port Administration
(ii) Mass Transit Administration
(iii) State Highway Administration
(iv) State Aviation Administration
(v) Motor Vehicle Administration
(vi) State Railroad Administration, and
(vii) Office of Assistant Secretary, Administration

C. Organizational Definitions

Administration - any one of the units within the Maryland Department of Transportation.

Department - the Maryland Department of Transportation.

Procurement Officer - Any person authorized by a State agency in accordance with law or regulations to formulate, enter into, or administer contracts or make written determinations and findings with respect to them. The term also includes an authorized representative acting within the limits of authority.

Secretary - The chief executive officer of the Maryland Department of Transportation.

D. General Definitions

Agreement - Means contract.

Award - the decision by a procurement agency to execute a purchase agreement or contract after all necessary approvals have been obtained.

Bid - a statement of price, terms of sale, and description of the supplies, services, or construction offered by a vendor to the State.

Board - The Board of Public Works of the State of Maryland.

Business - A corporation, partnership, individual, sole proprietorship, joint venture, or any other legal entity through which commercial activity is conducted.

Change Order - A written order signed by the responsible procurement officer, directing a Consultant to make changes which the changes clause of a contract authorizes the procurement officer to order with or without the consent of the Consultant.

COMAR - means Code of Maryland Regulations.

Construction - The process of building, adding, altering, converting, relocating, renovating, replacing, or restoring of real property in which the State has an interest.

Consultant - any person, firm or business having a consulting contract with a State agency or seeking to perform consulting services for a State agency.

Contract - Any agreement entered into by a State agency for the procurement of supplies, services, construction, or any other item and includes:

(1) Awards and notices of award;

(2) Contracts of a fixed-price, cost-reimbursement, cost-plus-fixed-fee, fixed-price incentive, or cost-plus incentive fee type;

(3) Contracts providing for the issuance of job or task orders;

(4) Leases;

(5) Letter contracts;

(6) Purchase orders;

(7) Supplemental agreements with respect to any of these;

(8) Orders; and

(9) Grants.

Contract does not include:

(1) Collective bargaining agreements with employee organizations; or

(2) Medicaid, Medicare, Judicare, or similar reimbursement contracts for which user eligibility and cost are set by law or regulation.

Contract Modification - Any written alteration in the specifications, delivery point, date of delivery, contract period, price, quantity, or other provision of any existing contract, whether accomplished in accordance with a

contract provision, or by mutual action of the parties to the contract. It includes change orders, extra work orders, supplemental agreements, contract amendments, reinstatements, or options/renewals.

Contractor - Any person having a contract with a State agency. Contractor does not include employees with labor contracts (collective bargaining agreements).

Day - Calendar day unless otherwise designated.

Extension - as applied to contracts for the performance of architect/engineer services, means a change in the scope of the services to be performed by the architect/engineer by including in the contract a requirement for the performance of phases of services not previously included.

Extra Work Order - Change order.

Firm - Business

Invitation for Bids - Any document, whether attached or incorporated by reference, used for soliciting bids under procurement by competitive sealed bidding and small procurement procedures including requests for quotations.

Minority Business Enterprise - Any legal entity, other than a joint venture, organized to engage in commercial transactions, which is at least 51 percent owned and controlled by one or more minority persons, or a nonprofit entity organized to promote the interests of the physically or mentally disabled.

Minority Person - A member of a socially or economically disadvantaged minority group, including Blacks (not of Hispanic origin), Hispanics, American Indians, Alaska natives, Asians, Pacific Islanders, women, and the physically or mentally disabled.

Notice to Proceed - A written notice to the Consultant of the date on or before which he shall begin the prosecution of the work to be done under the contract.

Person - Means business.

Procurement - Includes all functions that pertain to the obtaining of any public procurement, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.

Procurement Agency - Any State agency which is authorized by law or regulations to procure or contract.

Proposal - means the response by an offeror to a solicitation of the State for a supply or service. The response may include but is not limited to an offeror's price and terms for the proposed contract, a description of technical expertise, work experience and other information as requested in the solicitation.

Public Improvement - means the construction, maintenance and repair of any building, structure or other public work now or hereafter constructed or acquired by the State or any State agency.

Quotation - Bid.

Request for Proposals - Any document, whether attached or incorporated by reference, used for soliciting proposals under procurement by competitive negotiations, noncompetitive negotiations, multi-step and small procurement procedures.

Responsible Bidder or Offeror - A person who has the capability in all respects to perform fully the contract requirements, and the integrity and reliability which will assure good faith performance.

Services - The rendering of a person's time, effort or work, rather than the furnishing of a specific physical product other than reports incidental to the required performance of services. It includes but is not limited to the professional, personal and/or contractual services provided by attorneys, accountants, physicians, consultants, appraisers, land surveyors, and property management, where the service is associated with the provision of expertise and/or labor.

"Services" does not include the work normally associated with the repair and/or maintenance of facilities, structures, or building systems defined as "maintenance."

Solicitation - Invitation for bids, request for quotations, request for proposals, or any other method or instrument used to provide public notice and advertisement of a State agency's intent to procure supplies, services, and construction.

State - The State of Maryland acting through its authorized representative.

State Agency - Any administration, agency, association, authority, board, bureau, college, commission, committee, council, foundations, fund, department, institute, institution, public corporation, service, trust, university, or other unit of the Executive Branch of the state government and includes any subunit within any of these units.

Supplemental Agreement - Any contract modification which is accomplished by the mutual action of the parties.

Transportation Board - The Transportation Professional Services Selection Board (TPSSB).

Using Agency - Any State agency which uses any supplies, services, or construction procured under this Title.

Work - Work shall be understood to mean the furnishing of all labor, materials, equipment, and other incidentals necessary to the successful completion of the project and the carrying out of all the duties and obligations imposed by the contract.

2. Proposal Guaranty

A. If required for a procurement in excess of $50,000 a proposal will not be considered unless accompanied by proposal security in an amount not less than 5% of the amount proposed, and made payable to the State of Maryland.

B. Acceptable security for proposal guaranty shall be as stated in COMAR 21.06.07.01.

3. Public Information Act Notice

Offerors should give specific attention to the identification of those portions of their proposals which they deem to be confidential, proprietary information or trade secrets and provide any justification of why such materials, upon request, should not be disclosed by the State under the Maryland Public Information Act, Section 10-611 et seq. of the State Government Article of the Annotated Code of Maryland.

4. Contract Administration

This agreement will be administered on behalf of the Department or Administration as the case may be, by the procurement officer.

5. Authority of the Procurement Officer

A. The procurement officer shall decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of said work; all questions which may arise as to the interpretation of any or all plans and/or specifications; and all questions as to the acceptable fulfillment of the contract on the part of the Consultant.

B. The procurement officer shall determine the amount of work performed to be paid for under the contract.

C. The procurement officer shall determine the amount of work performed to be paid for under the contract.

D. The procurement officer may authorize progress payments for work satisfactorily completed, subject to such retainage that the procurement officer deems appropriate.

6. Initiation of Work

The Consultant shall not commence performance of the services until it receives from the Administration a formal written notice to proceed.

7.

SEE PAGES 6A, 6B

8. Assignment and Subcontracting

The benefits and obligations hereunder shall inure to and be binding upon the parties hereto and their respective successors, provided any such successor to the Consultant, whether such successor be an individual, a partnership or a corporation, is acceptable to the Administration, and neither this agreement nor the services to be performed thereunder shall be subcontracted, or assigned or otherwise disposed of, either in whole or in part, except with the prior written consent of the Administration.

9. Changes, Alterations or Modifications in the Services

The Administration shall have the unilateral right, at its discretion, to change, alter or modify in writing the services provided for in the agreement, and such changes, alterations or modifications may be made even though it will result in an increase or decrease in the services of the Consultant or in the contract cost thereof.

Contract modifications are effective only when approved by the Board or consistent with COMAR 21.02.01.04.

10. Delays and Extensions of Time

The Consultant agrees to prosecute the work continuously and diligently and no charges or claims for damages shall be made by it for any delays or hindrances from any cause whatsoever during the progress of any portion of the work specified in this contract.

Time extensions will be granted only for excusable delays that arise from unforeseeable causes beyond the control and without the fault or negligence of the Consultant, including but not restricted to, acts of God, acts of the public enemy, acts of the State in either its sovereign or contractual capacity, acts of another contractor in the performance of a contract with the

7. Indemnification and Insurance

A. Responsibility for Claims and Liability

The Consultant shall indemnify and save harmless the Department of Transportation, the Administration, their officers, agents and employees from and against all claims, suits, judgments, expenses, actions, damages and costs of every name and description arising out of or resulting from errors, omissions, negligent acts, negligent performance or nonperformance of the services of the Consultant or those of his subcontractors, agents or employees under this contract, or arising from or based on the violation of applicable federal, state or local law, ordinance, regulations, order or decree, whether by himself or his employees or subcontractors.

Further, the Consultant shall pay any claims for personal injury, bodily injury or property damaged which the Consultant is legally obligated to pay and shall indemnify the State against such claims. The Consultant shall undertake to defend any third party claim seeking those damages.

B. Insurance Requirements

The Consultant shall carry and maintain in full force and effect for the duration of this contract, and any supplement thereto, the insurance coverage specified below, and any other coverage specified by the Administration, in the amounts specified elsewhere in the contract documents. The Consultant shall submit to the Administration a certificate of insurance indicating the existence of the coverage required by this provision. Policies shall be issued by an insurance company authorized to do business in the State of Maryland and approved by the Administration.

(1) Comprehensive General Liability Insurance

Occurrence Form of Comprehensive General Liability Insurance with Comprehensive Board Form endorsement including, but not limited to, coverage for damage to persons or property arising out of or relating to the performance of work under this contract by the Consultant, its subcontractors, employees and agents.

(2) Professional Liability Insurance

Professional Liability Insurance Policy which covers the Indemnification Clause of this contract (paragraph 7.A. above) as it relates to errors, omissions, negligent acts or negligent performance in the work performed under this contract by the Consultant, its subcontractors, employees and agents.

(3) Worker's Compensation Insurance

Workers' compensation as required by the laws of the State of Maryland, including Employer's Liability Coverage and coverage for the benefits set forth under the US Longshorement and Harbor Workers Compensation Act, the Jones Act and other federal laws where applicable.

(4) Comprehensive Automobile Liability Insurance

Comprehensive Business Automobile Liability covering use of any motor vehicle to be used in conjunction with this contract, including hired automobiles and non-owned automobiles. Loading and unloading of any motor vehicle must be covered by endorsement to the automobile liability policy or policies.

Changed 7/20/90 by
Procurement Advisory No. 90-6

State, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of either the Consultant or the subcontractors of suppliers.

11. Remedies and Termination

A. Correction of Errors, Defects and Omissions

The Consultant agrees to perform work as may be necessary to correct errors, defects, and omissions in the services required under this agreement without undue delays and without cost to the Administration. The acceptance of the work set forth herein by the Administration shall not relieve the Consultant of the responsibility of subsequent correction of such errors.

B. Set-Off

The Administration may deduct from and set-off against any amounts due and payable to the Consultant any back-charges or damages sustained by the Administration by virtue of any breach of this agreement by the Consultant or by virtue of the failure or refusal of the Consultant to perform the services or any part of the services in a satisfactory manner. Nothing herein shall be construed to relieve the Consultant of liability for additional construction costs resulting from a failure to satisfactorily perform the services.

C. Termination of Contract by Board of Public Works

(1) The Board of Public Works may terminate without liability a contract for architectural or engineering services and may deduct from the contract price or otherwise recover the full amount of any fee, commission, percentage, gift, or consideration paid in violation of this condition, if:

a. There has been any conviction of a crime arising out of or in connection with the procurement of any work to be done or any payment to be made under the contract; or

b. There has been any breach or violation of any provision of Title 18 of State Finance and Procurement Article; or the contract provision against contingent fees required by § 13-319 of State Finance and Procurement Article of the Annotated Code of Maryland.

(2) Payments on termination of contract. If a contract is terminated under this general condition, after the State deducts any amount under Subsection C (1) above, the Consultant:

a. May be paid only the earned value of the work done to the date of termination, plus termination costs;

b. Shall refund all profits or fixed fees realized under the contract; and

c. Is liable for any costs incurred over the maximum amount payable to the Consultant under the contract for the State to complete the work undertaken.

D. Termination for Default

If the Consultant fails to fulfill its obligations under this contract properly and on time, or otherwise violates any provisions of the contract, the State may terminate the contract by written notice to the Consultant. The notice shall specify the acts of omission relied on as cause for termination. All finished or unfinished supplies and services provided by the Consultant shall, at the State's option, become the State's property. The State shall pay the Consultant fair and equitable compensation for satisfactory performance prior to receipt of notice of termination, less the amount of damages caused by Consultant's breach. If the damages are more than the compensation payable to the Consultant, the Consultant will remain liable after termination and the State can affirmatively collect damages. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.11B.

E. Termination for Convenience of the State

The performance of work under this contract may be terminated by the State in accordance with this clause in whole, or from time to time in part, whenever the State shall determine that such termination is in the best interest of the State. The State will pay all reasonable costs associated with this contract that the Consultant has incurred up to the date of termination and all reasonable costs associated with termination of the contract. However, the Consultant shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of COMAR 21.07.01.11B.

F. Obligations of Consultant Upon Termination

Upon notice of termination as provided in Paragraphs C. D. and E. above, the Consultant shall:

(1) Take immediate action to achieve orderly discontinuation of its work and demobilize its work force to minimize the incurrence of costs.

(2) Take such action as may be necessary to protect the property of the State of Maryland, place no further orders or subcontracts, assign to the Department in the manner and to the extent directed by the Department all of the right, title and, if ordered by the Department, possession and interest of Consultant under the orders or subcontracts terminated.

(3) Transfer title to the Department of all materials, equipment, data, drawings, specifications, reports, estimates and such other information accumulated by the Consultant in performing this contract, for the cost of which the Consultant has been or will be reimbursed under this contract.

G. Remedies Not Exclusive

The rights and remedies contained in this General Condition are in addition to any other right or remedy provided by law, and the exercise of any of them is not a waiver of any other right or remedy provided by law.

12. Responsibility of Consultant

A. The Consultant shall perform the services with that standard of care, skill, and diligence normally provided by a Consultant, architect or engineer in the performance of services similar to the services hereunder.

B. Notwithstanding any review, approval, acceptance or payment for the services by the Administration, the Consultant shall be responsible for professional and technical accuracy of its work, design, drawings, specifications and other materials furnished by the Consultant under this agreement.

C. If the Consultant fails to perform the services, or any part of the services, in conformance with the standard set forth in Paragraph A. above, and such failure is made known to the Consultant within two years after expiration of this agreement, it shall, if required by the Administration, perform at its own expense and without additional cost to the Department, those services necessary for the correction of any deficiencies or failure. This obligation is in addition to and not in substitution for any other remedy available to the Administration under Section 11.

D. The Consultant shall furnish proof that he has the financial capacity to provide the services and that he is financially able, through his own resources or through a qualified surety, to protect the Administration from errors and omissions that might arise from the direct performance of the services or the performance of the services by third parties relying on the completed design or work product.

E. Consultant agrees to include on the face of all invoices billed to the Administration, his Federal Tax Identification or Social Security Number.

13. Disputes

A. This contract is subject to the provisions of Title 15, Subtitle 2, State Finance and Procurement Article (Dispute Resolution) of the Annotated Code of Maryland and COMAR 21.10 (Administrative and Civil Remedies).

B. Except as otherwise may be provided by law, all disputes arising under or as a result of a breach of this contract that are not disposed of by mutual agreement shall be resolved in accordance with this clause.

C. As used herein, "claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract.

A voucher, invoice, or request for payment that is not in dispute when submitted is not a claim under this clause. However, if the submission subsequently is not acted upon in a reasonable time, or is disputed either as to liability or amount, it may be converted to a claim for the purpose of this clause.

D. SEE PAGE 10-A

E. When a claim cannot be resolved by mutual agreement, the Consultant shall submit a written request for final decision to the procurement officer. The written request shall set forth all the facts surrounding the controversy.

F. The Consultant, at the discretion of the procurement officer, may be afforded an opportunity to be heard and to offer evidence in support of his claim.

G. The procurement officer shall render a written decision on all claims within 180 days of receipt of the Consultant's written claim, unless the procurement officer determines that a longer period is necessary to resolve the claim. If a decision is not issued within 180 days, the procurement officer shall notify the consultant of the time within which a decision shall be rendered and the reasons for such time extension. The decision shall be furnished to the consultant, by certified mail, return receipt requested, or by any other method that provides evidence of receipt. The procurement officer's decision shall be deemed the final action of the State.

H. The procurement officer's decision shall be final and conclusive unless the Consultant mails or otherwise files a written appeal with the Maryland State Board of Contract Appeals within 30 days of receipt of the decision.

I. Pending resolution of a claim, the Consultant shall proceed diligently with the performance of the contract in accordance with the procurement officer's decision.

14. Professional Registration

If the services covered by this agreement include the preparation of contract plans and documents for construction or maintenance contracts, the plans and documents prepared shall be reviewed and approved by architects or engineers registered to practice in the particular professional field in the State of Maryland.

15. Availability of Data

Each party hereto shall make available to the other party, without cost, all non-proprietary technical data under its control reasonably necessary to the performance of the services required under this agreement.

13. Disputes

D. Unless a lesser period is provided by applicable statute, regulation, or this Contract, the Contractor must file a written notice of claim with the Procurement Officer within 30 days after the basis for the claim is known or should have been known, whichever is earlier. Contemporaneously with or within 30 days of the filing of a notice of claim, but no later than the date of final payment under the Contract, the Contractor must submit to the Procurement Officer its written claim containing the information specified in COMAR 21.10.04.02.

16. Ownership of Documents

The Consultant agrees that all data including, but not limited to, reports, drawings, studies, specifications, estimates, maps, photographs and computations prepared by or for him under the terms of this agreement shall at any time during the performance of the services be made available to the Administration upon request by the Administration and shall become and remain the property of the Administration upon termination or completion of the services. The Administration shall have the right to use same at any time without restriction or limitation and without compensation to the Consultant other than that provided in the agreement.

17. Retention of Records

The Consultant shall retain and maintain all records and documents relating to this contract for three years after final payment by the State hereunder or any applicable statute of limitations, whichever is longer, and shall make them available for inspection and audit in accordance with COMAR 21.06.05 by authorized representatives of the State, including the Procurement Officer or his designee, or by the US Department of Transportation and any other appropriate federal agency, at all reasonable times. The accounting records and all supportive documentation shall be maintained in such a manner that will provide for a separation between direct and indirect costs. A similar provision shall be included in all subcontracts.

18. Data Processing Services

The Department shall review and approve the use of data processing in connection with the services under this agreement and may require that such services be provided by the Department. In the event that the Department allows the Consultant to provide these services, it will approve the computer installation to be utilized, the hardware configuration, the operating system, and the software package. The Department reserves the right to shift the site of such operations upon giving 15 days prior written notice and the amount payable to the Consultant may be adjusted to reflect any change in cost which may result from such a shift.

19. Dissemination of Information

During the term of this Agreement, the Consultant shall not release any information related to the services or performance of the services under this Agreement nor publish any final reports or documents without the prior written approval of the Administration.

20. Non-Discrimination in Employment

A. Compliance with State Law and Regulations

The Consultant agrees: (a) not to discriminate in any manner against an employee or applicant for employment because of race, color, religion, creed, age, sex, marital status, national origin, ancestry, or physical or mental handicap unrelated in nature and extent so as reasonably to

preclude the performance of such employment; (b) to include a provision similar to that contained in subsection (a) above, and in any subcontract except a subcontract for standard commercial supplies or raw materials; and (c) to post and to cause subcontractors to post in conspicuous places available to employees and applicants for employment, notices setting forth the substance of this clause.

B. Compliance with Federal Law

The Consultant will comply with the regulations of the Federal Department of Transportation relative to non-discrimination in federally-assisted programs of said Department of Transportation (Title 49, Code of Federal Regulations, Part 21, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this agreement.

Consultants providing services to the State under this contract herewith assure the State that they are conforming to the provision of the Civil Rights Act of 1964, and Section 202 of the Executive Order 11246 of the President of the United States of America as amended by Executive Order 11375, as applicable.

C. Non-Discrimination in Selection of Subcontractors

The Consultant, with regard to the work performed by it after award and prior to completion of the agreement, will not discriminate on the grounds race, color, age or national origin in the selection and retention of subcontractors, including the procurements of materials and leases of equipment. The Consultant will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.

D. Solicitations for Subcontractors, Including Procurements of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the Consultant of the Consultant's obligations under this agreement and the Regulations relative to non-discrimination on the grounds of race, color or national origin.

E. Information and Reports

The Consultant will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Administration or the federal agency to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Consultant is in the

exclusive possession of another who fails or refused to furnish this information, the Consultant shall so certify to the Administration or the federal agency as appropriate and shall set forth what efforts it has made to obtain the information.

F. Sanctions for Non-Compliance

In the event of the Consultant's non-compliance with the non-discrimination provisions of this Agreement, the Department shall impose such sanctions as it may determine to be appropriate, including but not limited to:

a. Withholding of payment to the Consultant under the Agreement until the Consultant complies, and/or

b. Cancellation, termination or suspension of the Agreement in whole or in part.

G. Incorporation of Provisions

The Consultant will include the provisions of Paragraphs A. through F. in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, order or instructions issued pursuant thereto. The Consultant will take such actions with respect to any subcontract or procurement as the Department or the federal Government may direct as a means of enforcing such provisions including sanctions for non-compliance, provided, however, that in the event a Consultant becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Consultant may request the State to enter into such litigation to protect the interests of the State and, in addition, the Consultant may request the United States to enter into such litigation to protect the interest of the United States.

H. Non-Discrimination - Subcontractors

Prior to the Department's issuance of written approval for the subcontracting of any portion of the services covered by this agreement, the Consultant must submit certification to the Department that the required Equal Employment Opportunity provisions, as set forth hereinbefore in this Section, are actually incorporated into the subcontract(s). Failure on the part of the Consultant to submit said certification shall be construed as non-compliance on the part of the Consultant and justification for the Department to impose such sanctions as set forth in Paragraph F. above.

21. Financial Disclosure

The Consultant shall comply with the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland, which requires that every business that enters into contracts, leases or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate $100,000 or more, shall, within 30 days of the time when the aggregate value of these contracts,

leases or other agreements reaches $100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

22. Political Contribution Disclosure

The Consultant shall comply with the provisions of Article 33, Sections 30-1 through 30-4 of the Annotated Code of Maryland, which requires that every business that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies or a political subdivision of the State, during a calendar year under which the person receives in the aggregate $10,000 or more, shall on or before February 1 of the following year file with the Secretary of the State of Maryland certain specified information to include disclosure of political contributions in excess of $100 to a candidate for elective office in any primary or general election.

23. Personal Liability of Public Officials

In carrying out any of the provisions of the contract, or in exercising any power or authority granted to them by or within the scope of the contract, there shall be no liability upon the Administration, procurement officer or other authorized representatives, either personally or as officials of the State, it being understood that in all such matters they act solely as agents and representatives of the State.

24. Minority Business Enterprise and Affirmative Action

A. This contract is subject to Executive Order 01.01.1970.15, December 9, 1970; amended by Order 01.01.1976.05, July 9, 1976 (Code of Fair Practices), and COMAR 21.11.04 Consultant's Affirmative Action Plan Review/Approval and Compliance Monitoring Process - DOT. This contract is also subject to the applicable provisions of Title 14, Subtitle 3 of State Finance and Procurement Article of the Annotated Code of Maryland; COMAR 21.11.03 Minority Business Enterprise Policies; and the provisions of COMAR 11.01.10 which incorporates by reference the current revision of the Minority Business Enterprise Program. Copies of the Minority Business Enterprise Program may be obtained from the Department of Transportation Fair Practices Officer, P.O. Box 8755, BWI Airport, Maryland 21240. This contract is also subject to all applicable federal and State law and regulations pertaining to Minority Business Enterprise and Affirmative Action.

B. To the extent any of the above laws or regulations are applicable to this contract they are specifically incorporated herein.

25. Non-Hiring of Employees

No employee of the State of Maryland or any unit thereof, whose duties as such employee include matters relating to or affecting the subject matter of this contract, shall, while so employed, become or be an employee of the party or parties hereby contracting with the State of Maryland, or any unit thereof.

Unless waived in writing by both the Department and appropriate federal agencies prior to award of the agreement, no member, officer, or employee of the Maryland Department of Transportation or of a local public body, whether elected or appointed, during his tenure or for one year thereafter shall have any interest, direct or indirect, in this agreement or the proceeds thereof. In this paragraph, local public body means the State of Maryland, any political sub-division of the State, or any agency of the State or political sub-division.

No member of or delegate to the Congress of the United States shall be admitted to any share or part of this agreement or to any benefit arising therefrom.

26. Contingent Fee Prohibition

A. The Consultant, architect or engineer (as applicable) warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Consultant, architect or engineer, as applicable, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any fee or any other consideration contingent on the making of this Agreement.

B. For breach or violation of this warranty the Administration shall have the right to terminate this agreement without liability and, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

27. Conflict of Interest Law

It is unlawful for any State officer, employee, or agent to participate personally in his official capacity through decision, approval, disapproval, recommendation, advice, or investigation in any contract or other matter in which he, his spouse, parent, minor child, brother or sister, has a financial interest or to which any firm, corporation, association, or other organization in which he has a financial interest or in which he is serving as an officer, director, trustee, partner, or employee is a party, or to which any person or organization with whom he is negotiating or has any arrangement concerning prospective employment is a party, unless such officer, employee, or agent has previously complied with the provisions of Article 40A, Section 3-101 et seq. of the Annotated Code of Maryland.

28. Sanctions Upon Improper Acts

In the event the Consultant or any of its officers, partners, principals or employees, is convicted of a crime arising out of, or in connection with, the procurement of work to be done or payment to be made under this contract, the contract may, in the discretion of the Department, be terminated.

Section 16-203 of State Finance and Procurement Article of the Annotated Code, and COMAR 21.08.01, which relate to contracts with persons convicted of bribery, attempted bribery or conspiracy to bribe are incorporated in this contract by reference.

Section 11-205 of State Finance and Procurement Article and COMAR 21.08.03 relating to collusion for purposes of defrauding the State are incorporated into this contract by reference.

Subtitle 08 of Title 21 of COMAR, "Disqualification, Suspension, Debarment, Reinstatement and Sanctions" is incorporated into this contract by reference.

29. Corporate Registration and Tax Payment Certification

Corporations are required to execute a Certification of Corporation Registration and Tax Payment.

30. Multi-Year Contracts Contingent Upon Appropriations

If the General Assembly fails to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be cancelled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either the State's rights or the Contractor's rights under any termination clause in this Contract. The effect of termination of the Contract hereunder will be to discharge both the Consultant and the State from future performance of the Contract, but not from their rights and obligations existing at the time of termination. The Consultant shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the Contract. The State shall notify the Consultant as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

31. Cost and Price Certification (Applicable to Non-Architectural and Non-Engineering Services Contracts)

A. The Consultant by submitting cost or price information certifies that, to the best of its knowledge, the information submitted is accurate, complete, and current as of a mutually determined specified date prior to the conclusion of any price discussions or negotiations for:

(1) A negotiated contract, if the total contract price is expected to exceed $100,000, or a smaller amount set by the procurement officer; or

(2) A change order or contract modification, expected to exceed $100,000, or a smaller amount set by the Procurement Officer.

B. The price under this Contract and any change order or modification hereunder, including profit or fee, shall be adjusted to exclude any significant price increase occurring because the Consultant furnished cost or price information which, as of the date agreed upon between the parties, was inaccurate, incomplete, or not current.

32. Truth-In-Negotiation Certification (Applicable to Architectural and Engineering Services Contracts)

The Consultant, by submitting cost or price information, including wage rates or other factual unit costs, certifies to the best of its knowledge, information and belief, that:

A. The wage rates and other factual unit costs supporting the firm's compensation, as set forth in the proposal, are accurate, complete and current as of the contract date;

B. If any of the items of compensation were increased due to the furnishing of inaccurate, incomplete or noncurrent wage rates or other units of costs, the State is entitled to an adjustment in all appropriate items of compensation, including profit or fee, to exclude any significant sum by which the price was increased because of the defective data. The State's right to adjustment includes the right to a price adjustment for defects in costs or pricing data submitted by a prospective or actual subcontractor; and

C. If additions are made to the original price of the contract, such additions may be adjusted to exclude any significant sums where it is determined the price has been increased due to inaccurate, incomplete or noncurrent wage rates and other factual costs.

33. Patents and Copyrights

A. Patent Rights

Any patentable result arising out of this agreement, as well as all information, designs, specifications, know-how, data, and findings shall be made available to the United States Government for public use, unless the U.S. Government, in a specific case, where it is legally permissible, determines that it is in the public interest that it not be so made available.

B. Patent and Copyright Indemnity

Consultant shall indemnify, protect and save harmless the State, its officers, agents and employees from all claims, growing out of any patent or copyright infringements or claims thereof pertaining to any design, drawings, specifications or other patentable or copyrighted items used by the Consultant.

34. Compliance with Laws

The Consultant hereby represents and warrants that:

A. It is qualified to do business in the State of Maryland and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;

B. It is not in arrears with respect to the payment of any monies due and owing the State of Maryland, or any department or unit thereof, including, but not limited to the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract;

C. It shall comply with all federal, State and local laws, regulations and ordinances applicable to its activities and obligations under this Contract; and

D. It shall obtain, at its expense, all licenses, permits, insurance, and governmental approval, if any, necessary to the performance to its obligations under this Contract.

35. Maryland Law Prevails

The parties hereby agree that:

A. This agreement was made and entered into in Maryland, and under the laws of Maryland.

B. The law of Maryland shall govern the resolution of any issue arising in connection with this agreement, including, but not limited to, all questions concerning the validity of this Agreement, the capacity of the parties to enter therein, any modification or amendment thereto and the rights and obligations of the parties hereunder.

36. Conflicts Between Federal Regulations and These General Conditions

All requirements set forth in federal assistance instruments applicable to contracts let by the State under a federal assistance program shall be satisfied. Therefore, to the extent that the requirements which are specified in the assistance instrument conflict with regulations adopted under Title 21 of COMAR, the former shall control.

37. General Conditions Controlling

In event of a conflict between these General Conditions and any other provision of the contract documents, these General Conditions shall prevail unless such other provision expressly provides to the contrary.

38. Bid Award - For Competitively Bid Contracts - Resident Business

A. When awarding a contract by competitive bidding, the Department may give a preference to the lowest responsive and responsible bid from a Maryland firm over that of a non-resident firm if the State in which the non-resident firm is located gives a resident business preference.

B. The percentage of preference given under this section shall be identical to the preference given to its residents by the State in which the nonresident firm is located.

C. This provision shall not apply if it conflicts with any federal grant or regulation affecting this contract, or if the procurement is made pursuant to COMAR 21.05.03 Procurement by Competitive Sealed Proposals or COMAR 21.12 Procurement of Architectural Services and Engineering Services.

39. Payment of State Obligations

A. Payments to the Consultant pursuant to this Contract shall be made no later than 30 days after the State's receipt of a proper invoice from the Consultant. Charges for late payment of invoices, other than as prescribed by Title 15, Subtitle 1, of the State Finance and Procurement Article, Annotated Code of Maryland, or by the Public Service Commission of Maryland with respect to regulated public utilities, as applicable, are prohibited.

B. A proper invoice shall include a description of the items or services provided; the date the goods were received or the inclusive dates the services were rendered; the contract price(s); retention, if any; the basis for the billing; the contract or purchase order number; the Consultant's Federal Tax Identification Number or Social Security Number; the name and address of the proper invoice recipient.

C. In order to receive payment of interest, the Consultant must submit a proper invoice for accrued interest within 30 calendar days after the payment date of the amount on which the interest is claimed to have accrued. Interest may not be claimed if it accrues more than one year following the 31st calendar day after the date that a proper invoice was received, or on amounts representing unpaid interest, or if a claim has been filed under State Finance and Procurement Article Section Title 15, Subtitle 2 of the Code.

D. For the purposes of this contract an amount will not be deemed due and payable if:

(1) The amount invoiced is inconsistent with the contract.

(2) The proper invoice has not been received by the party or office specified in the contract.

(3) The invoice or performance under the contract is in dispute or the Consultant has failed to otherwise comply with the provisions of the contract.

(4) The item or services have not been accepted.

(5) The quantity of items delivered is less than the quantity ordered.

(6) The items or services do not meet the quality requirements of the contract.

(7) If the contract provides for progress payments, the proper invoice for the progress payment has not been submitted pursuant to the schedule contained in the agreement.

(8) If the contract provides for withholding a retainage and the invoice is for the retainage, all stipulated conditions for release of the retainage have not been met.

(9) The Consultant has not submitted satisfactory documentation or other evidence reasonably required by the procurement officer or by the contract concerning performance under the contract and compliance with its provisions.

40. Suspension of Work

The Procurement Officer unilaterally may order the Consultant in writing to suspend, delay, or interrupt all or any part of the work for such period of time as he may determine to be appropriate for the convenience of the State.

41. Pre-Existing Regulations

In accordance with the provisions of Section 11-206 of the State Finance and Procurement Article, Annotated Code of Maryland, the regulations set forth in Title 21 of the Code of Maryland Regulations (COMAR Title 21) in effect on the date of execution of this Contract are applicable to this Contract.

AGREEMENT

THIS AGREEMENT, dated the 25 day of SEPTEMBER, 1992, by and between the Maryland Port Administration of the Maryland Department of Transportation, hereinafter called "MPA" and

Gahagan & Bryant Associates
111 Market Place
Suite 1001
Baltimore, Maryland 21202

hereinafter called "Consultant".

WHEREAS, it is the desire of MPA to employ the Consultant to provide professional engineering and environmental services to perform a geotechnical evaluation of foundation or bottom soils conditions and characteristics, and the capability of that bottom to support structures such as but not limited to an earthen berm, and determination of the proximate costs and feasibility of construction of such a berm or other structure to secure wetlands and other types of habitat at the site using dredged material for construction of that habitat as hereinafter set forth in this Agreement (Contract No. 593927) and shown on the chart marked as Exhibit A, and;

WHEREAS, the Consultant has been informed as to the scope of the Project in the Request for Proposal conveyed to him by the Manager of Harbor Development of the Maryland Port Administration, hereinafter called "Manager", and has been further informed pursuant to the Scope of Services section of this Agreement.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH; That for and in consideration of the mutual covenants set forth herein, the parties agree as follows:

I. GENERAL

A. The Consultant agrees to perform work under this Agreement in accordance with the terms, covenants and provisions set forth herein and in GENERAL CONDITIONS FOR CONSULTANT AGREEMENTS, which is attached and marked Exhibit B, hereinafter

called "General Conditions", which General Conditions being a document of twenty (20) pages attached together at the left hand corner, and are by this reference incorporated into this Agreement and made part hereof as though fully set forth herein.

B. The Notice to Proceed issued by the MPA Manager will designate a Project Manager. All worked performed by the Consultant shall be under the supervision and direction of the Project Manager. The Project Manager is the representative of the MPA for the Project. While it is expected that the Consultant shall seek and receive advice from various Federal, State, regional and local agencies, the final direction on all matters of the Project remains with the Project Manager.

The Consultant shall designate a liaison officer(s) to supervise and coordinate all work performed under this Agreement.

The Consultant's work shall be under the direction and control of the key personnel identified in the Technical Proposal. Any changes in the key personnel shall be subject to review and written approval by the MPA.

C. The Consultant and his staff shall be available to attend meetings or make presentations at the request of the MPA. At all meetings between the MPA and the Consultant held in connection with the Project, the Consultant shall take minutes of all topics discussed and the dispositions or conclusions reached if any. Within one (1) week, the Consultant shall prepare a formal set of meeting minutes and submit same to the Project Manager for approval. In addition to the preparation of a set of formal meeting minutes, all telephone conversations between the MPA and the Consultant relative to instructions and/or authorizations must be confirmed in writing by the Consultant and submitted to the Project Manager for approval.

Copies of all written correspondence between the Consultant and any party pertaining specifically to the project shall be provided to the MPA for its records within one (1) week of the receipt or sending of such correspondence.

II. PROJECT DESCRIPTION

The Agreement is for the providing of assessment of professional environmental and engineering services to perform a geotechnical evaluation of foundation or bottom soils

conditions and characteristics, and the capability of that bottom to support structures such as but not limited to an earthen berm, and determination of approximate costs and feasibility of construction of such a berm or other structure to secure wetlands and other types of habitat at the site using dredged material for construction of that habitat, and determination of the feasibility of construction of a berm or other structure to secure wetlands at the site. To accomplish these tasks, the Consultant shall among other things, perform the following:

1. Review of existing data
2. Field investigations and geotechnical evaluation
3. Develop site plan
4. Configure upland and tidal wetland areas
5. Develop dredging schedules, volumes and material types available
6. Conceptual Design
7. Site feasibility analysis

III. TERM

This Agreement shall be in effect for forty-five (45) days from the date affixed on page 1 of this Agreement. The Agreement may be extended at the sole option of MPA, but in no event shall exceed sixty (60) days from the date affixed on page one (1) of this Agreement. The prices used for such extensions shall not increase from the prices upon which the award of contract is based.

IV. SCOPE OF SERVICES

A. The Consultant will be requested by the Manager to perform services to include but not be limited to the Environmental and Engineering Evaluation to the level of Conceptual Engineering Design more particularly included in the Paragraph II, Project Description of this Agreement, and the Technical Proposal dated August 21, 1992, submitted by the Consultant (copy attached and marked Exhibit C, which is to be taken as a part hereof as if set forth at length).

V. BASIS OF PAYMENT

The parties understand and agree that the basis of payment for all services performed

by the Consultant shall be as follows:

A. Reimbursement for actual salary costs paid to productive technical personnel engaged directly and proximately in the performance of the services. The term "actual salary costs" as used herein, is actual salaries paid to productive technical employees before tax and other deduction and does not include overhead expenses, principals' administrative time, payroll taxes, workmen's compensation and/or other insurance paid on behalf of the employee, allowances for vacation, holidays or such leave, bonuses, other incentives, or any other non-salary benefits.

For the purposes of V.A., above, a "Principal" is defined as any individual owner, partner of a partnership, any officer or director of a corporation.

Reimbursement for direct technical time expended on the Project by all employees, including principals, shall be the actual salary rate paid with payroll burdens and overhead rate allowed, but in no instance shall total reimbursement for actual salary for any individual exceed Forty-Five Dollars ($45) per hour during the term of this Agreement. Said hourly amount may be increased to conform to MPA policy, if same is modified in writing during the term of this Agreement.

Where the basis of payment is cost plus fixed fee, the fixed fee will be apportioned and paid monthly, in accordance with the ratio of that month's direct and indirect costs to the total direct and indirect costs. Any unpaid balances of the fixed fees set forth in paragraph V, will be paid upon the completion of the services to the satisfaction of the Maryland Port Administration.

The Consultant shall submit for approval of MPA prior to assignment of personnel to any phase of the work, a schedule of personnel by name, classification, and rate of pay proposed to be utilized on the Project. All changes to this schedule, as approved, must have prior written approval of the Project Manager before being authorized for billing.

B. Reimbursement for payroll burdens and indirect or overhead costs shall be as enumerated on Exhibit D. For purposes of monthly billing, a provisional rate for payroll burden and indirect or overhead costs is established at 120% of actual salaries, which rate is subject to audit. Final payment will be based upon the actual overhead rate, not to exceed 120%.

C. No overtime work, or payment thereof, shall be performed without prior authorization from MPA. Whenever overtime is required and authorized, and payment therefore may involve premium costs, there shall be no payroll additives applied to the premium cost portion of the overtime payment cost.

D. Reimbursement for direct non-salary costs incidental and directly attributable to the Project, such as travel expenses, computer time, reproduction and printing and such other miscellaneous direct expenses as approved by the Project Manager.

E. Reimbursement for local travel costs shall be at the rate of Twenty-Four Cents ($.24) per mile and shall be allowable for official business (related to this contract) only. Reimbursement for distance travel expenses shall be in accordance with the most recent issue of the State Travel Regulations allowance.

F. Reimbursement for the Consultant Gahagan & Bryant Associates shall not exceed Ninety-Nine Thousand, Five Hundred Five Dollars ($99,505), inclusive of that amount paid on account of work performed by the designated sub-consultants. Maximum fixed fee shall be for Four Thousand, Six Hundred Twenty-Seven Dollars ($4,627) to cover profit. The derivative of the fee submitted shall be based on the rates submitted as part of the Price Proposal as enumerated on Exhibit D. These rates include all payroll burdens and profit.

G. Reimbursement for two (2) sub-consultants are as follows: E2SI, Inc., Thirty-Nine Thousand, Five Hundred Dollars ($39,500) and the Environmental Concerns, Inc., Three Thousand, Eight Hundred Dollars ($3,800).

H. Mandatory provision to hold records for audition purposed for period of three (3) years from the completion of this work.

VI. EXTRA OR ADDITIONAL WORK

Extra or additional work may be authorized only when a change occurs in the scope, magnitude or complexity of the project set forth in the Consultant Agreement. Extra work and additional work are defined as follows:

A. Extra Work

Any services or actions required of the Consultant, above and beyond the

scope of work set forth in the original agreement, including services requested by MPA which are beyond the Project limits (i.e., location limits) set forth in the Agreement, specific definable tasks which are not set forth in the scope of work, or tasks specifically deleted from the scope of work.

B. Additional Work

Any services or actions required of the Consultant, which are quantitatively more of the same task functions or services set forth in the original Agreement and which are within the Project limits (i.e., location limits). For extra work, additional fee is usually allowed. For additional work, addition fee is not usually allowed unless extenuating circumstances are considered valid for allowing same. In general, no additional fixed fee is deserved by the Consultant for their accomplishment of the same work contracted for, just because additional time is needed to complete the required services. However, extenuating circumstances such as very lengthy time delays, promulgation of new State or Federal requirements, or a much more detailed work involvement of the previously defined tasks, etc., could override the position. Every request for a contract adjustment will be reviewed in detail with respect to consideration of additional fee, the additional fee will not be arbitrarily allowed.

C. Extra or Additional Work Without Extension of Time

When extra or additional work is required to be performed within the original contract time period, the Consultant shall be reimbursed in accordance with the terms of the original agreement.

D. Extensions of Time, With or Without Extra or Additional Work

In the event that delays with or without extra work occurs through no fault of the Consultant, the contract period may be extended by the MPA. Such an extension of time is not a reason by itself for contract modification. When work set forth in the original contract is performed significantly beyond the term of the contract or when extra or additional work is performed beyond the term of the contract, the Consultant shall be reimbursed in accordance with the

terms of the contract, except for the following. MPA shall establish a limitation for payroll burdens and overhead which is either fifteen percentage points over the provisional rate established in the Agreement or the Consultant's latest documented audited payroll burden and overhead rate, whichever is less. The upset limit, and in the case of substantial time extensions the fixed fee(s), shall be adjusted accordingly and as necessary.

VII. METHOD OF PAYMENT

MPA shall pay the Consultant monthly, on the basis of certified invoices accompanied by supporting documents and affidavits as required by MPA, but only if MPA finds that progress for the month is satisfactory and that during the month, work of sufficient quantity and quality has been accomplished.

The fee for authorized extra or additional work will be paid monthly, following approval of the work by MPA.

At the time of final settlement, if under-payments or over-payments have, at any time been made to the Consultant in connection with the Project, appropriate adjustments will be made. MPA will pay to the Consultant any additional fees or expenses due, the Consultant will return to the MPA funds in the amount of any overpayment which has been made.

The Consultant agrees that MPA is entitled to an adjustment, and has the authority to decrease any cost functions or amounts set forth in the Agreement, due to the furnishing of inaccurate, incomplete, or non-current wage rates or other unit costs at the time of Proposal submission. The authority for MPA to receive the aforesaid adjustment is set forth in the Truth-In-Negotiation Certification (Exhibit E), Bid Proposal Affidavit (Exhibit F), and Minority Business Affirmative Action Certification (Exhibit G), signed by the Consultant and made a part of his Price Proposal. To this end, the Consultant acknowledges that MPA will perform a post-audit for the Project at the completion of the Consultant's performance of services. If the audit reveals that over-payments have, at any time, been made to the Consultant in connection with the Project, the Consultant shall promptly reimburse MPA.

The Consultant shall cooperate with MPA's Office of Finance and Program Management in their performance of invoice, annual and post contract audits of the

Consultant and Project.

The Consultant agrees that if the services are performed within the time frame and conditions set-forth within the Agreement, that increases of salary costs would not be sole justification for an increase in the maximum amount(s) payable. It is the responsibility of the Consultant to exercise cost management and control of the Project to stay within the stated maximum amount(s).

The Consultant agrees to submit, with its monthly invoices, a narrative progress report setting forth the status of the Project, delays resulting from lack of sufficient data or lack of liaisons, and other pertinent factors salient to the prosecution of the work.

All invoices are to be submitted in an approved MPA format which shall include classification, rates, over burden, fixed fee and expenses. Failure to submit billing in this fashion will result in a return of the same to the client for corrections.

VIII. INDEMNIFICATION OF THE MARYLAND PORT ADMINISTRATION

The Consultant shall indemnify and save harmless the Maryland Port Administration, its agents and employees, against and from suits, actions, claims, demands, damages, losses, expenses and/or costs of every kind and description to which the Maryland Port Administration may be subjected or put by reason of injury (including death) to persons or damage to property, or other loss resulting from Consultant's performance of this Agreement, or any part thereof, or the performance of Consultant's agents or employees, whether such suits, actions, claims, demands, damages, losses, expenses and/or costs be against, suffered or sustained by the Maryland Port Administration, its agents and employees, may become liable therefore. The whole, or so much of the moneys due, or to become due to the Consultant, under the Agreement, as may be considered necessary by the Manager, may be retained by the Maryland Port Administration until such suits of claims or claims for damages shall have been settled, or otherwise disposed of and satisfactory evidence to the effect furnished to the Director.

IX. INSURANCE REQUIREMENTS

The requiring of any and all insurance as set forth in these specifications, or

elsewhere, shall be in addition to and not in any way in substitution for all other protection provided under the Agreement.

No acceptance and/or approval of any insurance by the Administration, and/or Manager shall be construed as relieving or excusing the Consultant from any liability or obligation imposed upon him by the Agreement.

The Consultant shall at all times during the term of this Agreement, and until it has received final payment by the Maryland Port Administration, maintain in full force and effect the policies of insurance issued by MPA approved insurance companies that are required by this Section. The Consultant, if required by the Maryland Port Administration, shall provide certified true copies of any and all of the policies of insurance to the Maryland Port Administration.

The Consultant shall not commence work under this Agreement until he has obtained all the insurance required under this Section and such insurance has been approved by the Maryland Port Administration.

Evidence that the required insurance coverage has been obtained may be provided by Certificates of Insurance daily issued and certified by the insurance company or companies furnishing such insurance. Such evidence of insurance must be delivered to the Associate Administrator before the start of any work under this Agreement.

The Insurance Certificate mentioned hereinabove must be received by the MPA within ten (10) days of the date of the notice of award. In the event the Insurance Certificate is not received within ten (10) days after the date of the notice of award, or if such certificate is insufficient respecting the limits and scope specified herein, then the MPA reserves the right to cancel the award because of breach of contract and award the Agreement to the next higher responsive and responsible bidder. Time is of the essence.

All insurance policies required by this Section, or elsewhere in the Agreement, shall be so endorsed as to provide that the insurance carrier will be responsible for giving immediate and positive notice to the Maryland Port Administration in the event of cancellation or modification of the insurance policy by either the insurance carrier or the Consultant at least thirty (30) days prior to any such cancellation or modification.

A. Workmen's Compensation Insurance

1. The Consultant shall maintain Workmen's Compensation Insurance as required by the laws for the State of Maryland, and shall include Employer's Liability coverage with a minimum limit of $500,000.

B. Comprehensive General Liability

Limits of Liability: $1,000,000 Bodily Injury
$1,000,000 Property Damage

1. Contractual Liability to cover liability assumed under this contract.
2. Products/Completed Operations Liability.
3. Broad Form Property Damage Liability.

C. Comprehensive Auto Liability

Limits of Liability: $50,000/$1,000,000 Bodily Injury
$1,000,000 Property Damage

In addition to Owned Automobiles, the coverage shall include Hired Automobiles and Non-Operated Automobiles with the same limits of liability.

D. Other Coverage Required

1. The Consultant shall furnish proof that he is financially able to complete this Contract or must furnish a Performance Bond written by an acceptable surety in an amount sufficient to meet this Contract.

~~2. The Consultant shall provide professional liability coverage at limits not less than $1,000,000 Combined Single Limit.~~ deleted MA

MPA

F. Sub-Consultant's Insurance

If any of the work under this Agreement is subcontracted, the Consultant shall require the subcontractors, or anyone directly or indirectly employed by any of them, to procure and maintain the same coverages in the same amounts specified above, and with insurance companies approved by MPA.

X. DISPUTES

Time For Filing Written Notice of Claim

This Agreement shall be subject to the provisions of State Finance and Procurement Article, Title 15, Subtitle 2, Annotated Code of Maryland, and COMAR 21.10

(Administrative and Civil Remedies). Pending resolution of a claim, the Consultant shall proceed diligently with the performance of the Agreement in accordance with the procurement officer's decision.

Unless a lesser period is provided by applicable statute, regulation, or this Agreement, the Consultant must file a written notice of claim with the Procurement Officer within 30 days after the basis for the claim is known or should have been known, whichever is earlier. Contemporaneously with or within 30 days of the filing of a notice of claim, but no later than the date of final payment under the Agreement, the Consultant must submit to the Procurement Officer its written claim containing the information specified in COMAR 21.10.04.02.

XI. SOLE AGREEMENT

The Consultant and MPA understand and agree that this is the sole Agreement of the parties and that there is no other agreement thereto. The Consultant and MPA further understand and agree that if this Agreement is to be amended, such must be agreed to by both parties in writing.

In WITNESS WHEREOF, the parties hereto have caused these presents to be executed in duplicate.

FUNDS AVAILABLE;

G. Gregory Russell

G. Gregory Russell
Director of Finance

9/23/92
Date

ATTEST:

By: R F Thomas
Gahagan & Bryant Associates

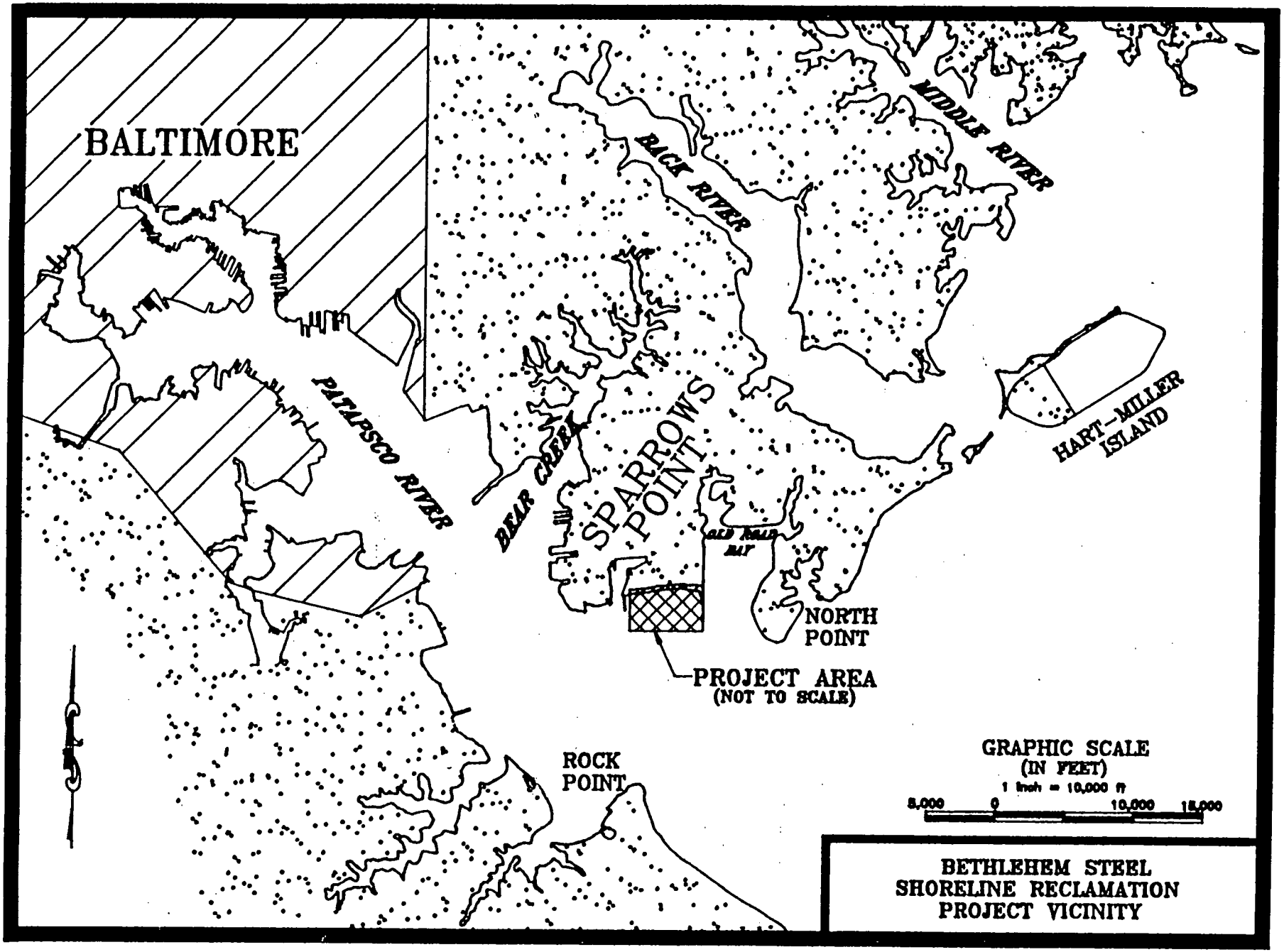
Approved as to Form and Legal Sufficiency:

Donald Krach
Assistant Attorney General

9/25/92
Date

ATTEST:

By: Michael P. Angelo
Adrian G. Teel
Executive Director


BALTIMORE
PATAPSCO RIVER
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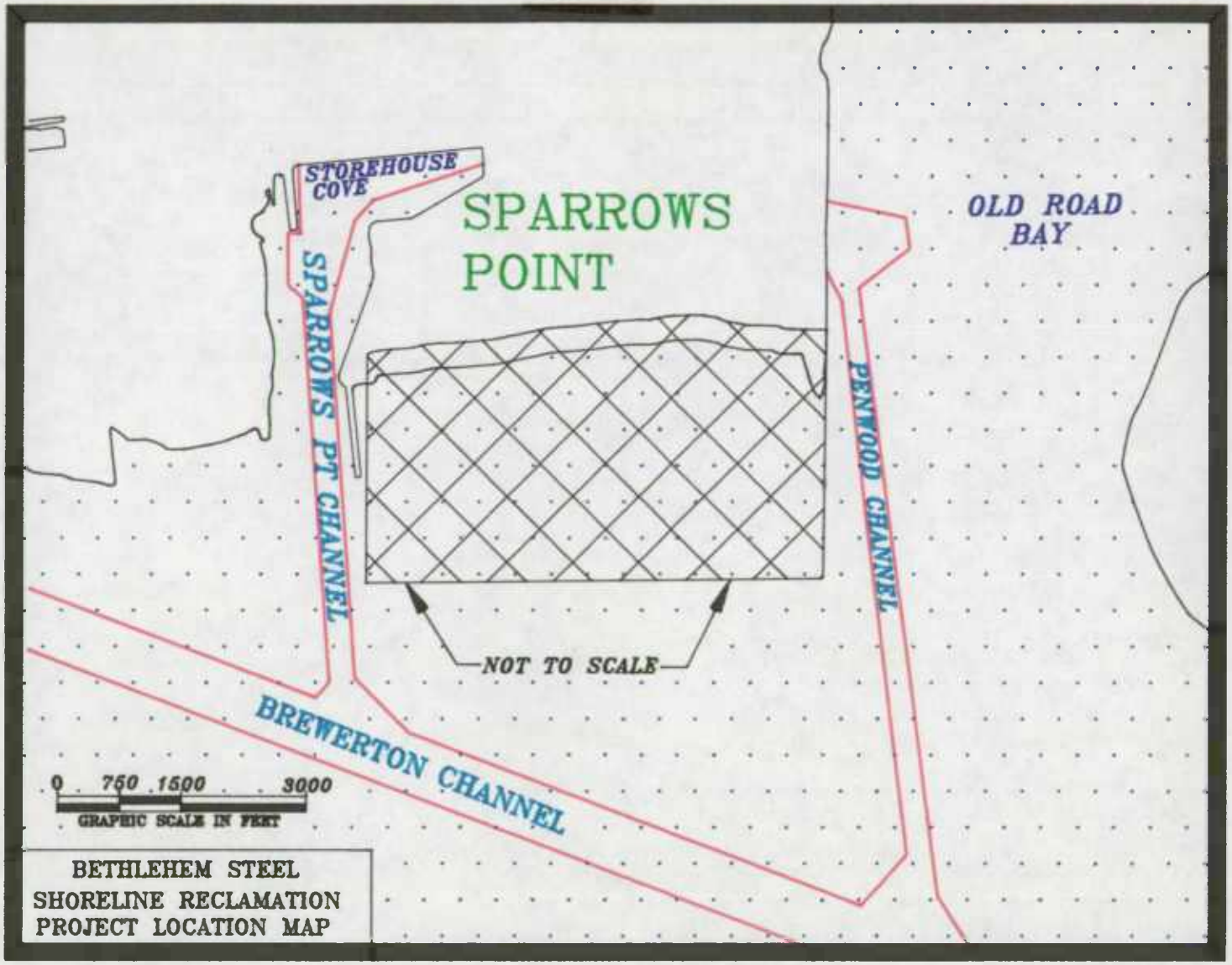
GRAPHIC SCALE
(IN FEET)
1 inch = 10,000 ft
5,000
0
10,000
15,000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

EXHIBIT A

FIGURE 2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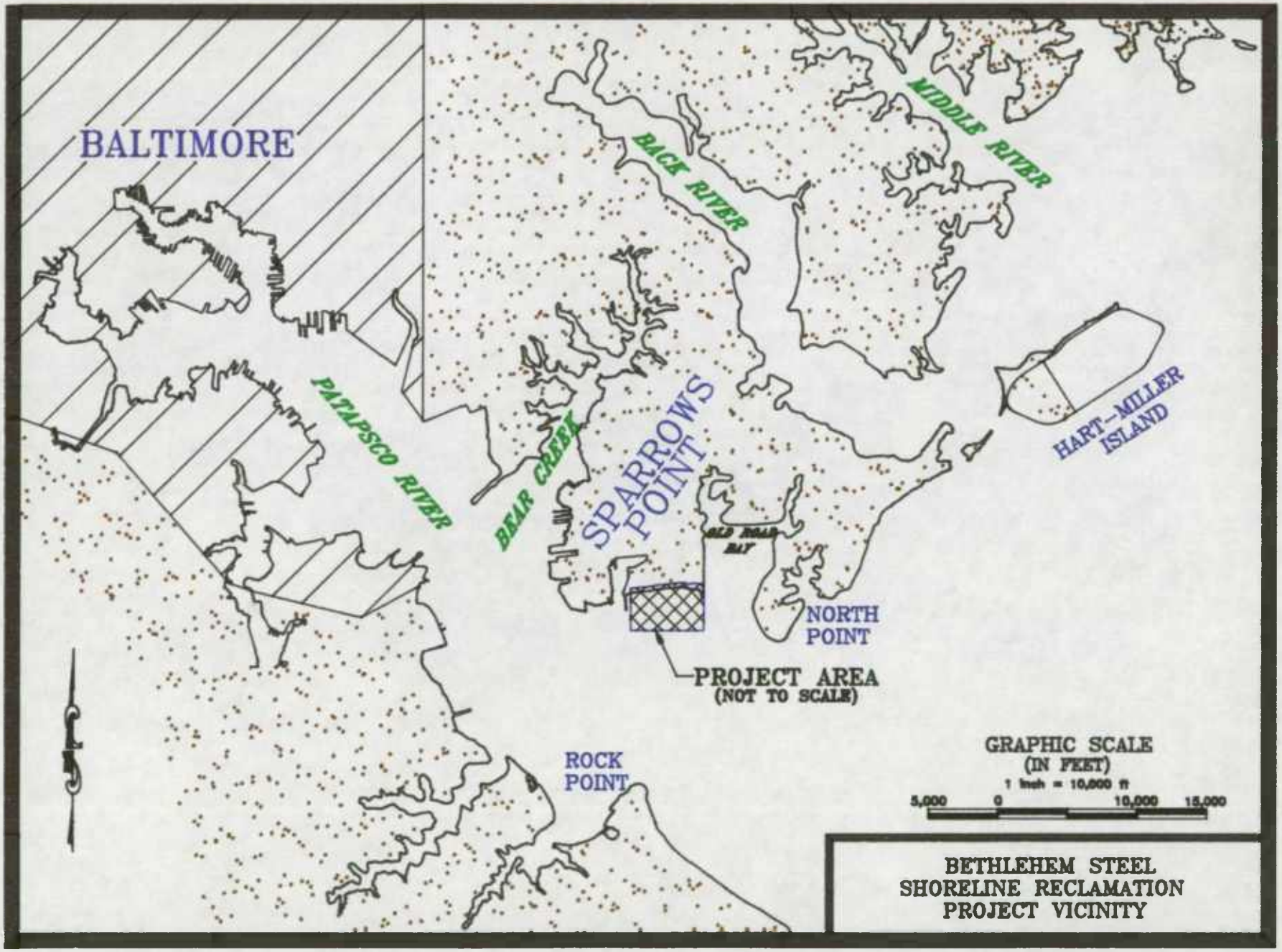
GRAPHIC SCALE IN FEET
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT LOCATION MAP

FIGURE 1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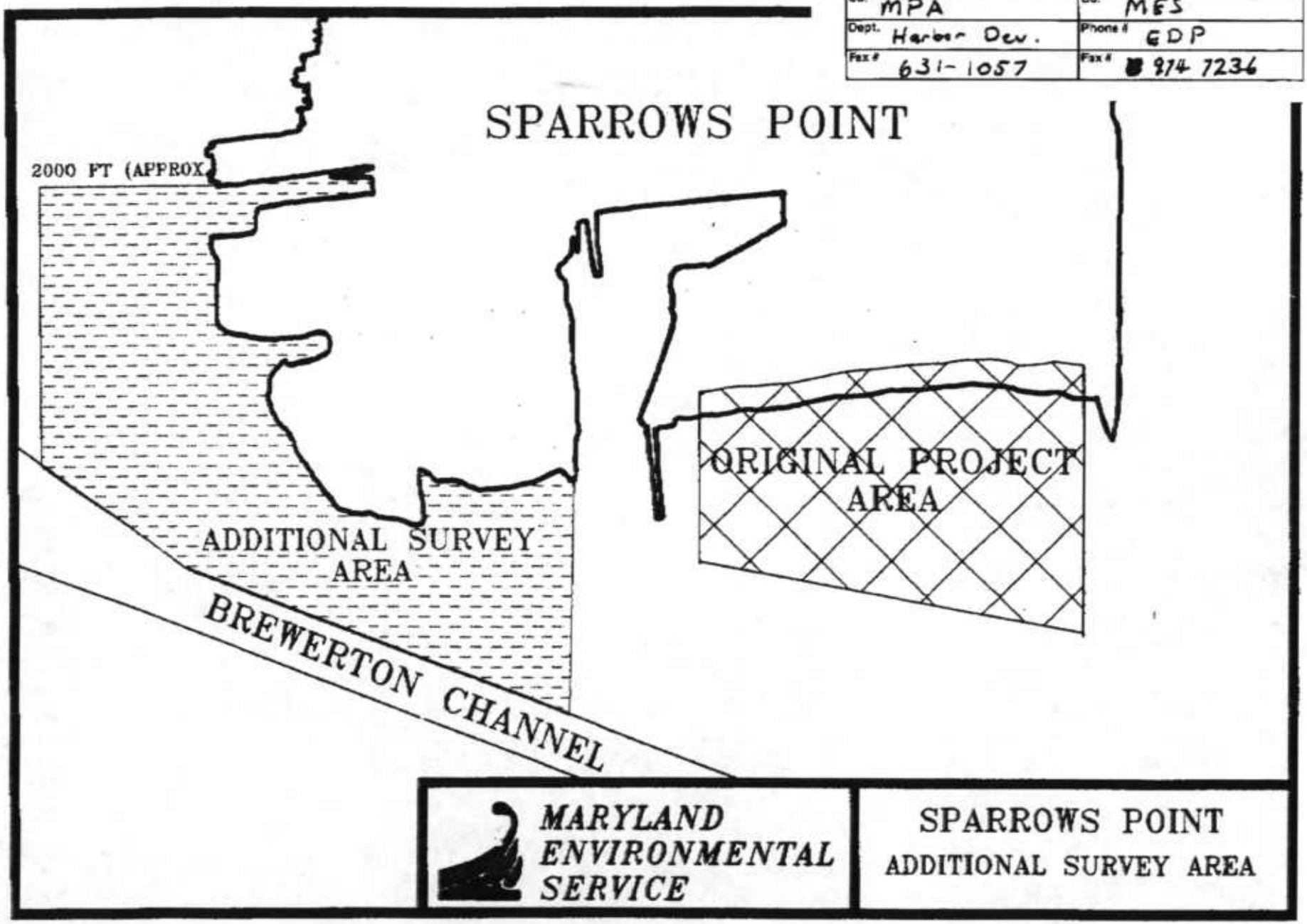
10,000
15,000
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

Post-It™ brand fax transmittal memo 7671 | # of pages ▸

To Bill Lear	From Bob Smith
Co. MPA	Co. MES
Dept. Harbor Dev.	Phone # EDP
Fax # 631-1057	Fax # 974 7236



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BETHLEHEM STEEL SHORELINE RECLAMATION BRIEFING

I. Governor's Task Force Recommendations

(G.T.F. REPORT)

Governor's Task Force (GTF) on Dredged Material Management in its report of February 1991 recommended:

(a) to create active and creative partnership of all parties, e.g., federal, state, and local governments: public interest groups, etc.

(b) to consider dredge material as a resource and use for beneficial projects such as habitat/wetland creation, Island reclamation, etc.

II. Dredged Material Placement Options Program (POP)

1. (P.O.P Cost Summary)

The POP is developed by the Maryland Port Administration as a 20 year comprehensive plan to match yearly dredging needs to specific sites, present or future. Approximately ~~$400~~ $300 million will cost over several years to accomplish this program. POP Cost Summary Chart (chart included) shows the anticipated yearly costs which will be required to accomplish each project during the life of the Program.

Major habitat/wetland creation, shoreline protection projects, have been identified in the Phase I Bay Enhancement under POP.

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Beneficial use projects such as Worton Point for wetlands development, Pooles Island, and Poplar Island for habitat/wetland development. The wetlands will be created using dredged material to serve twofold purpose, one to meet the dredging needs, and two to create ~~wetlands.~~ habitat.

Bethlehem Steel Shoreline Reclamation and Cox Creek Site have been identified for immediate action. Cox Creek Site is an existing dredge disposal site which will be acquired, modified and used for (contaminated) dredge material from the Inner Harbor. Bethlehem Steel Site will be constructed with dredge material from the Approach Channels and ~~subsequently~~ developed into wetlands and upland habitat.

2. (P.C.P. Project Description)

3 (Committees Structure)

Advisory and Management function committees ~~will be~~ have been formed to interact and advise working group(s) for the smooth execution of the process. A chart showing interaction among the various groups is attached.

III. Shoreline Reclamation Project

4. 5. (Project Vicinity Plan / Project Location Plan)

Bethlehem Steel Shoreline Reclamation Project is the first unique beneficial use project in the Chesapeake Bay which will be constructed from the dredged material from the Baltimore Harbor approach channels and developed into intertidal wetlands and upland habitat. (Sketch attached.)

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5. (Existing Conditions Aerial Photo)

Bethlehem Steel Site was used for storage and processing of iron ore for manufacturing by the Bethlehem Steel Corporation (BSC), as seen on the attached photograph.

7. (Artist's Rendering Conceptual Sketch)

MPA with the help of MES proposed to develop a 300 - 400 acre site into intertidal wetlands and upland habitat. Wetlands created as such will enhance the shoreline and upland habitat will ~~be~~ act as a visual buffer to the manufacturing plant behind. Artist's rendering shows the concept of finished product. Approximately 50 percent area will be created as wetlands and 50 percent area as upland habitat. (Sketch attached.)

Approximately ten million cubic yards of dredged material would be placed to create wetlands and upland habitat at a cost of nearly $25 million. The expected operational life of the project would be ten years or so.

IV. Status of the Project to Date

As of December 22, 1992, initial assessment of the site with respect to geotechnical and other investigations have been completed. It is concluded that the project is feasible to construct and is cost effective.

Hydrodynamic study will be initiated in the near future. This study will have twofold purpose, one to ensure that circulation of water in the area is not affected due to construction of this project, two to determine

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the final configuration of the proposed project. MDE will help conduct this study.

V. Project Support

MPA/MES has the support of Bethlehem Steel Corporation, Chesapeake Bay Foundation, Department of Natural Resources and Department of the Environment. The U. S. Fish and Wildlife Service supports the creation of wetlands and upland habitat.

VI. Public Participation

a) Community Relations Plan

8. (Public Participation)

- MES/MPA will meet with area elected officials such as Baltimore County Councilmen, State delegates, State senators, Congressmen, U. S. Senators and other appropriate personnel to inform them about the beneficial use project.

- MES/MPA will also meet with the interested environmental groups in and around the area to inform them about the Bethlehem Steel Project, and to involve them in the process at an early stage so that their concerns can be addressed.

- MES/MPA will also meet with the community groups in and around the area to address their concerns and gain their support for the project.

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b) Oversight Committee

- An oversight committee for the project will be formed at the early stage. The committee will include individuals from the community who will act as a conduit for project development input as well as to disseminate information back to the community. ~~all walks of life, e.g., community leaders, federal, State and local government representatives, environmental interests, dredging and shipping concerns, special interest groups, private citizens.~~

- It is hoped that early involvement of the committee in the process will keep the committee apprised of the progress and difficulties of the project. The committee suggestions would be an asset and would aid in solving the problems if any.

- MES/MPA will hold meetings at regular intervals with the Oversight Committee to inform them and have their feedback for the progress and concerns of the project.

c) Public Information

- MES/MPA will hold a general public meetings at the ~~end~~ beginning of Phase II to inform the public and address their concerns about the Project.

- MES/MPA will prepare and distribute information literature regarding the project to educate the public. It is

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hoped that this process will generate public support for the Project.

VII. Project Schedule - Bethlehem Steel

(Schedule Attached)

9. (Project Schedule)

o	Environmental Studies and Engineering Design	5/93 - 5/94
o	Secure Permits	3/94 - 8/94
o	Construct Retaining Structure	12/94 - 12/95
o	Wetlands Development	1996 - 2006

~~The project is anticipated to start conducting Environmental Studies and Engineering Design in May 1993. The project is expected to be completed by year 2006 when all the wetlands and upland habitat are in place.~~

January 28, 1993

LIST OF CHARTS / GRAPHICS.

	Gov's Task Force Report	8½ x 11		
1.	P.O.P – COST SUMMARY	" " 8½ x 11	and	2' x 3'
2.	P.O.P. – PROJECT DESCRIPTION	8½ x 11		"
3.	P.O.P. – COMMITTE STRUCTURE	"		"
4.	Beth Steel – Project Vicinity	"	}	2 x 3 NOAA CHART 12278 OR CADD MAPS
5.	Beth steel – Project Location	"		
6.	Beth Steel – Photo, Existing Conditions	" (B & W)		2 x 3 (Color
7.	Beth Steel – Shoreline Enhancement	"		2 x 3
8.	Public Participation	"		2 x 3
9.	Project Schedule	"		2 x 3

RECOMMENDATIONS OF

GOVERNOR WILLIAM DONALD SCHAEFER'S

TASK FORCE ON

DREDGED MATERIAL MANAGEMENT

February 1991

Maryland Department of Transportation

O. James Lighthizer, Secretary

PLACEMENT OPTIONS PROGRAM
CONSTRUCTION – OPERATIONS COST[1]
SUMMARY BY YEAR*

Project	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	BTC[2]	Project Total	Capacity Gained	Cost Cubic Yard
HMI	$ 1,975	$ 1,931	$ 1,737	$ 1,624	$ 1,887	$ 1,890	$ 3,600	$ 15,044	14.3mcy	$ 1.05
CSX	4,730	4,774	774	1,234	774	1,234	3,096	16,616	6.2mcy	2.68
Pooles "G" West	325	260	207	138	0	0	0	930	4.0mcy	0.23
Bethlehem Steel	706	625	18,010	7,450	600	600	7,000	34,991	10.0mcy	3.50
Bay Enhancemant Phase I										
(a) Poplar Island	115	510	275	775	7,760	6,500	38,500	54,435	7.0mcy	7.76[3]
(b) Poolas Island Beneficial Use	200	130	663	272	18,500	18,500	10,750	49,015	7.0mcy	7.00
(c) Worton Point	100	125	413	1,022	29,500	6,850	9,000	49,010	7.0mcy	7.00
(d) Dobbins Island	50	325	1,485	10,000	500	500	600	13,460	1.5mcy	8.97
Bay Enhancement Phase II										
(a) Planning Studies	250	675	2,400	4,920	19,200	1,500	1,500	30,445	6.0mcy	5.07
(b) LTMS – Innar Harbor Sita	0	225	911	3,040	14,000	13,000	2,500	33,676	6.0mcy	5.61
– Subaquaous Mining	80	450	1,040	3,500	5,000	5,000	0	15,070	7.0mcy	2.15
TOTAL	$ 8,531	$10,030	$27,915	$34,175	$97,721	$57,574	$76,746	$312,692	76.0mcy	$ 4.11
CTP BUDGETED	$ 6,345	$ 6,109	$10,981	$ 9,123	$11,324	$ 3,314	——	$ 51,196		
ADDITIONAL FUNDING NEEDED	$ 186	$ 1,921	$16,934	$25,052	$86,397	$54,260	$76,746	$261,496		

(1) Dredging, Transportation costs not included; primarily Fedeal expense.

(2) BTC – Balance to Complete

(3) Much longer Transportation distances for this project may increase state costs.

* All Annual, BTC, Project Total Costs in thousands of dollars.

PRODUCED BY MPA CADD

Date: 12/14/92 PLACEMENT OPTIONS PROGRAM
CONSTRUCTION – OPERATIONS COST
SUMMARY BY YEAR*

PLACEMENT OPTIONS PROGRAM

PROJECT DESCRIPTIONS

HMI

- Dewatering and consolidation of existing dredged material
- Additional capacity gained

CSX/COX CREEK

- Acquire existing site to gain additional containment capacity
- Modifications to be made for capacity and water quality

POOLES ISLAND 'G' WEST

- Overboard site for additional capacity
- Comprehensive monitoring being performed

BETHLEHEM STEEL

- Major shoreline enhancement
- Wetlands and upland habitat creation

BAY ENHANCEMENT PHASE I

POPLAR ISLAND

- Preservation of existing wildlife habitat
- Island reclamation - wetlands and habitat creation

POOLES ISLAND - BENEFICIAL USE

- Shoreline erosion control/island protection
- Wetlands and aquatic habitat creation

WORTON POINT

- Wetlands development/aquatic habitat creation
- Shoreline protection

DOBBINS ISLAND

- Island preservation
- Wetlands development/habitat creation

BAY ENHANCEMENT PHASE II

PLANNING STUDIES

- Identify, evaluate and qualify additional sites for implementation

LTMS

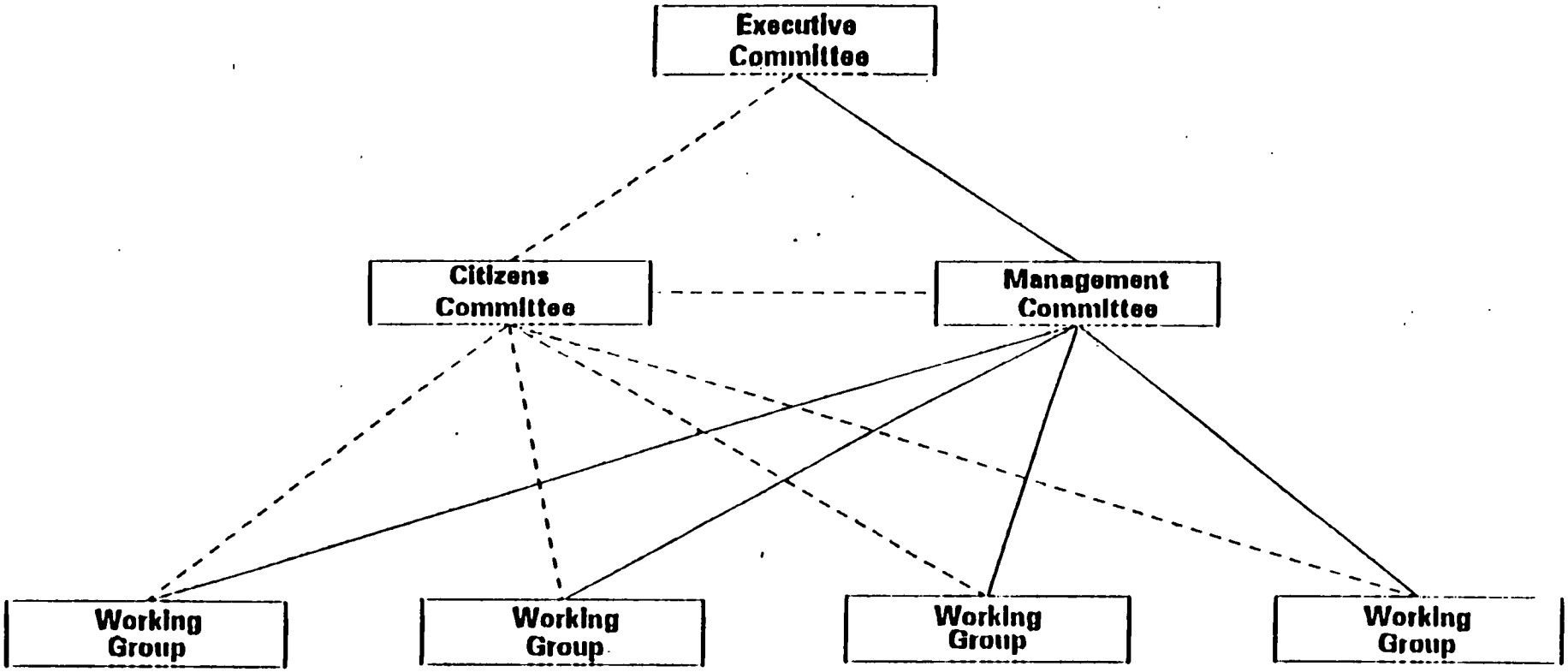
INNER HARBOR SITE

- Create containment capacity for inner harbor sediments

SUBAQUEOUS MINING

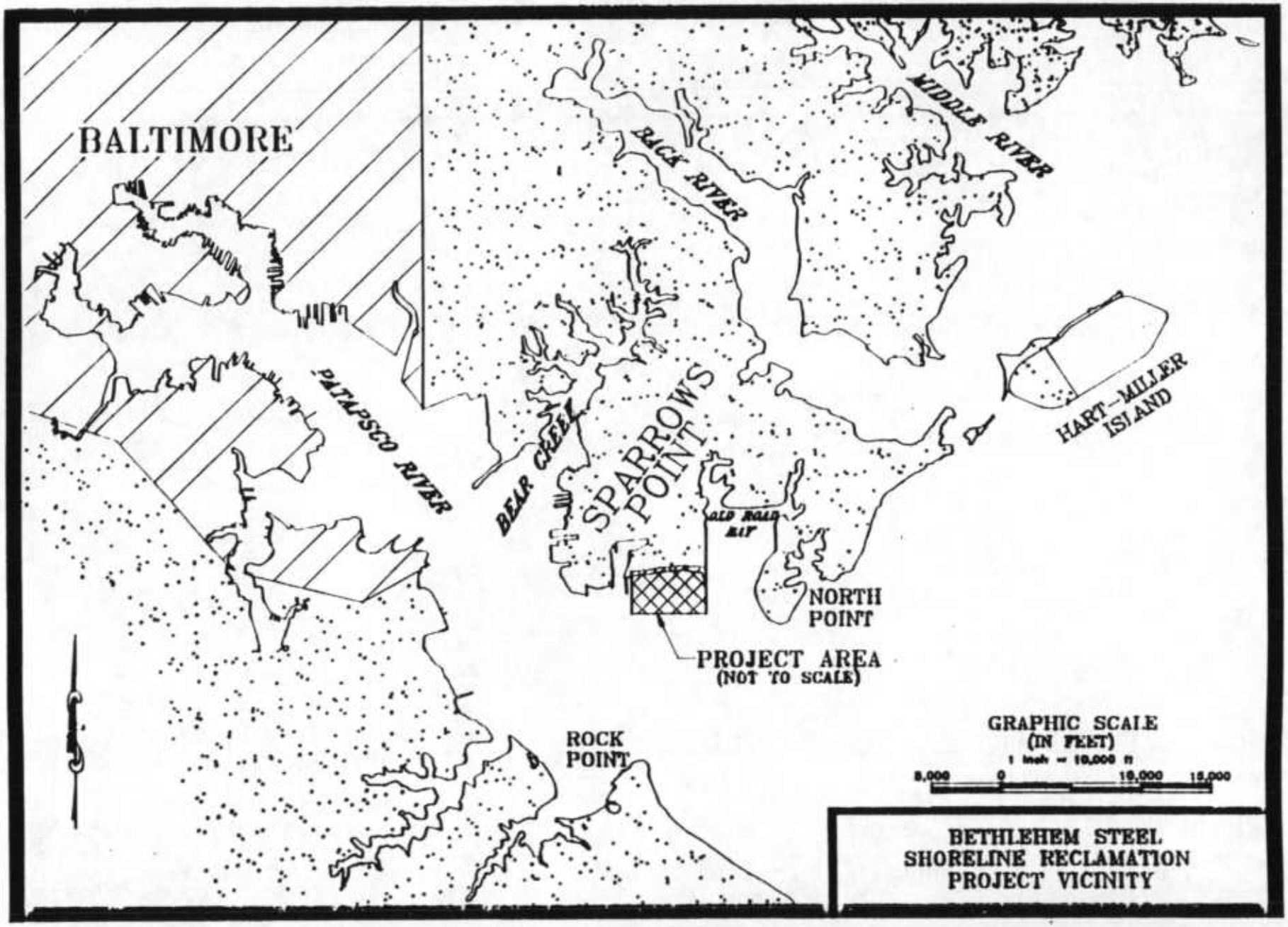
- Mine sandy material for construction purposes
- Create underwater capacity for dredge material

Dredging Needs Placement Options Program
Committee Structure Diagram
October 1992



——————— Management Function
- - - - - - - - - Advisory Function

FIGURE 1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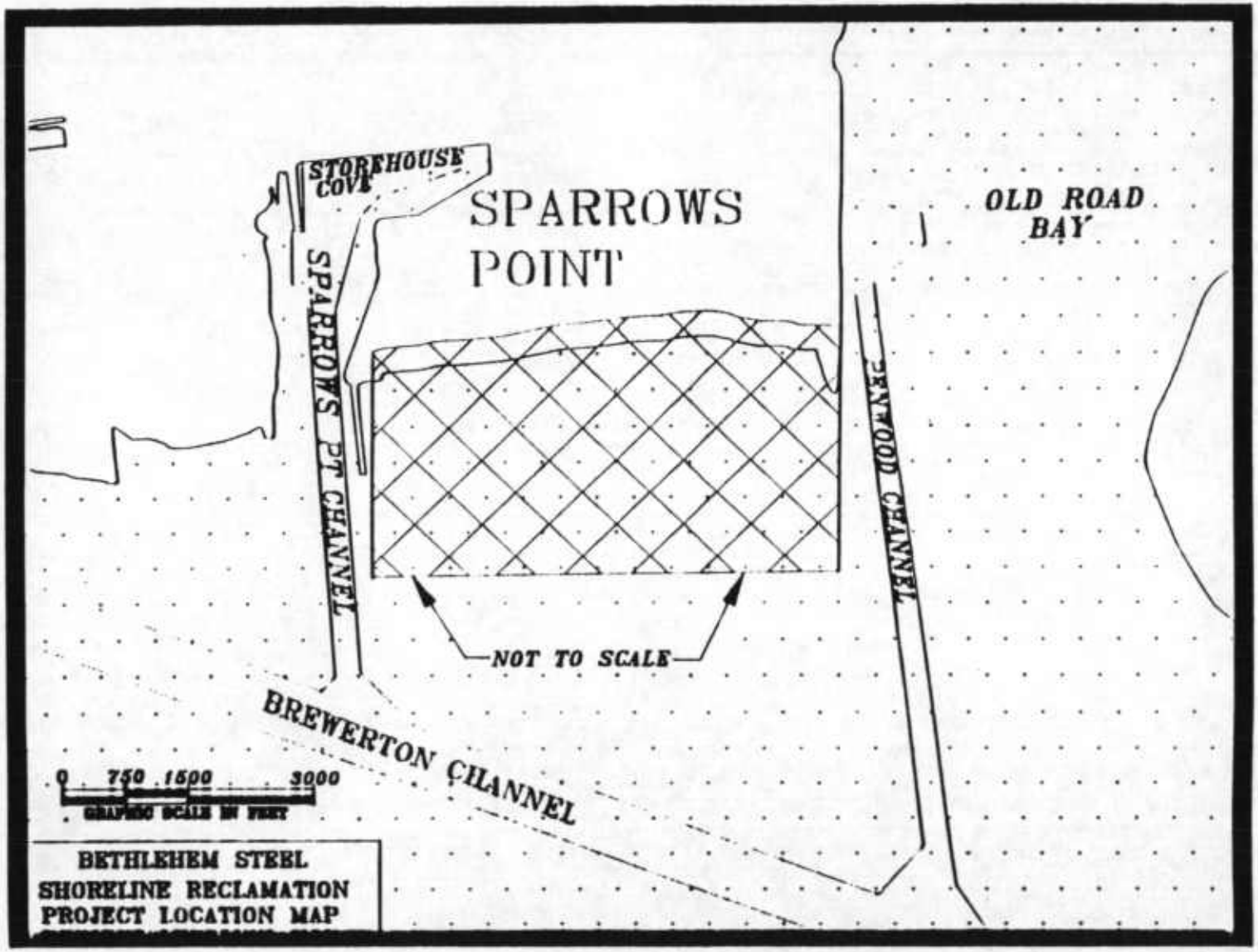
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT VICINITY

14

FIGURE 2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GRAPHIC SCALE IN FEET
BETHLEHEM STEEL
SHORELINE RECLAMATION
PROJECT LOCATION MAP

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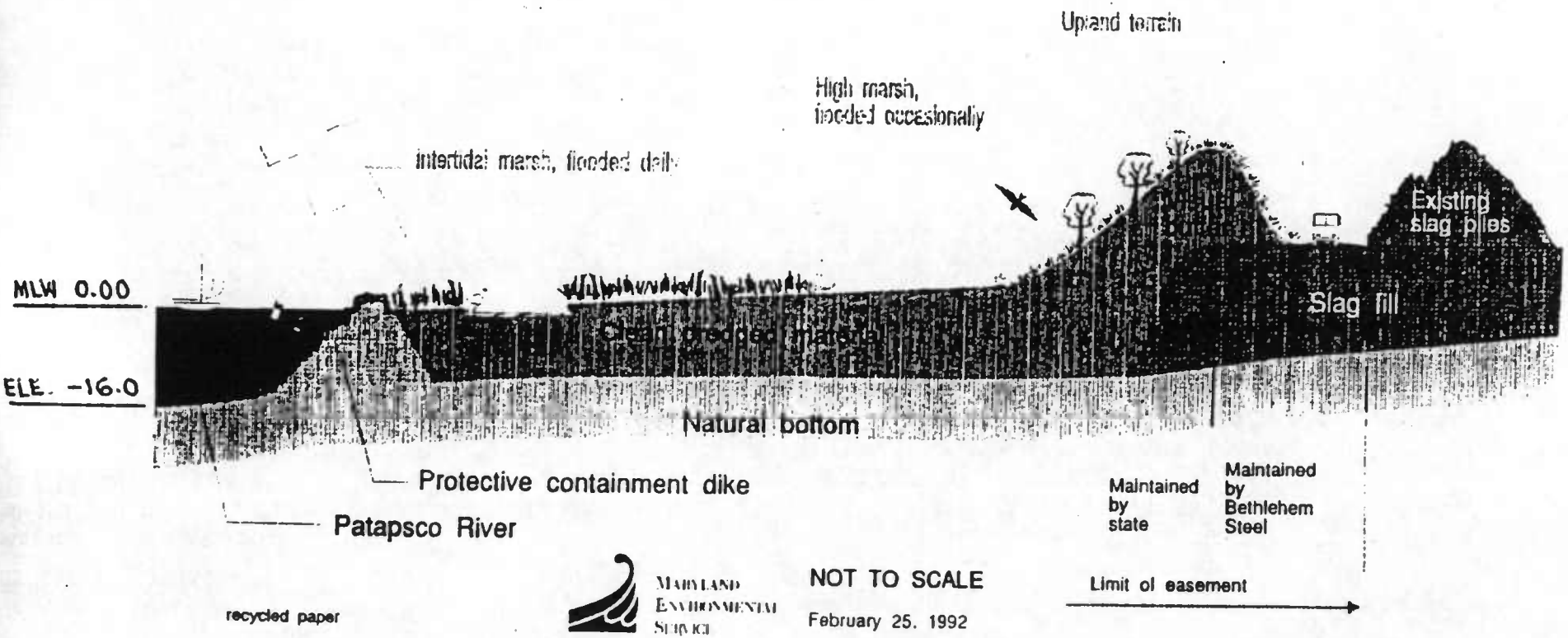
Conceptual sketch

Bethlehem Steel Shoreline Enhancement Project

looking west, facing Key Bridge from Chesapeake Bay



NOT TO SCALE

February 25, 1992

Maryland Environmental Service

recycled paper

PUBLIC PARTICIPATION

Maryland Environmental Service

Community Relations Plan

- o Area Elected Officials
- o Concerned Environmental Groups
- o Concerned Community Groups

Oversight Committee

- o Form Oversight Committee
- o Early involvement in process
- o Regular Interval Meetings

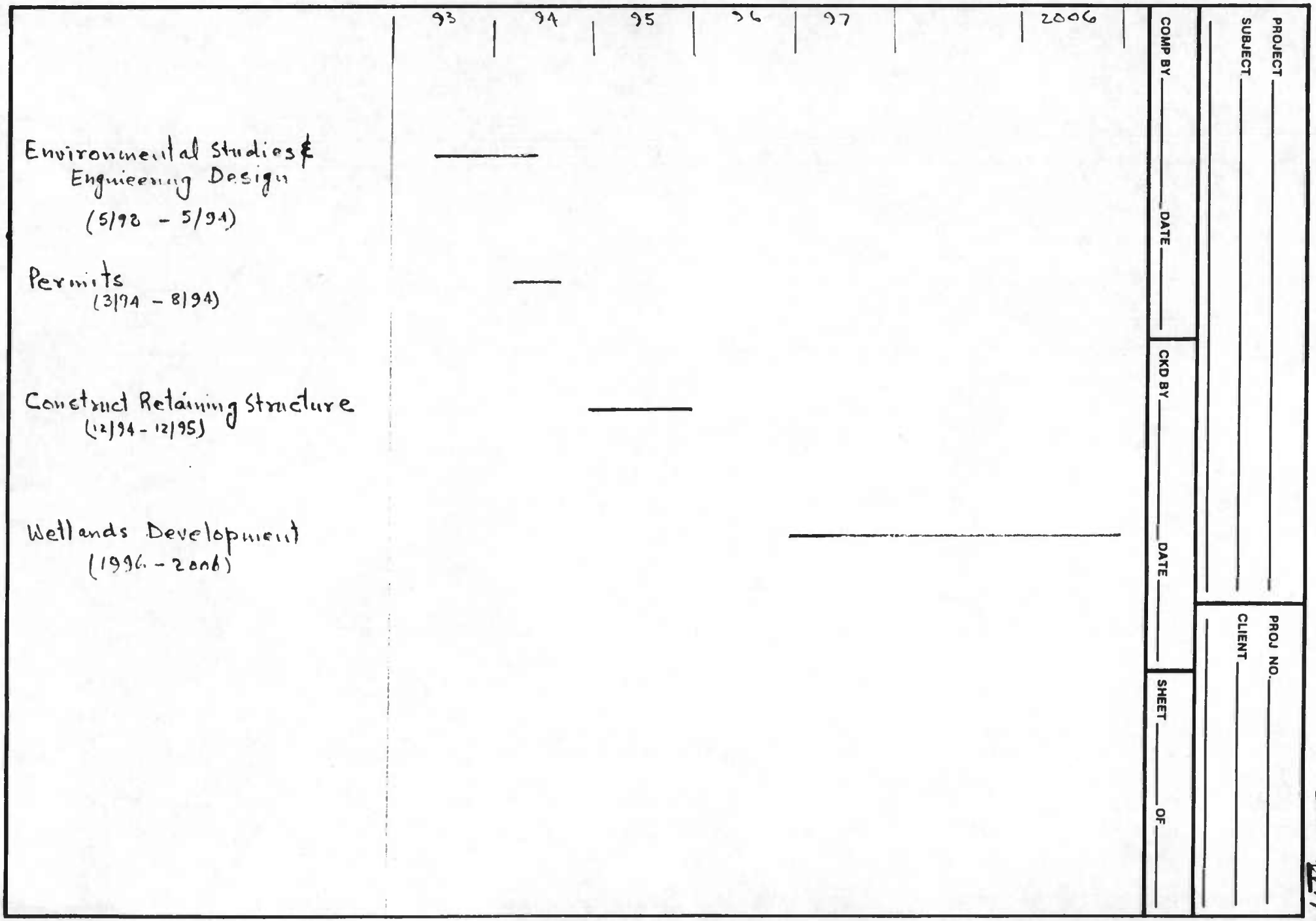
Public Information

- o General Public Meetings
- o Information Pamphlets

Bethlehem Steel Shoreline Reclamation
Project Schedule

2x3 and 8 8½x11

MARYLAND ENVIRONMENTAL SERVICE



SPARROWS POINT SHORELINE RECLAMATION

BRIEFING
SPRING 1993

MARYLAND
ENVIRONMENTAL
SERVICE

MARYLAND
PORT
ADMINISTRATION

SPARROWS POINT SHORELINE RECLAMATION BRIEFING

SPRING 1993

LIST OF FIGURES

Figure 1. P.O.P. - Cost Summary

Figure 2. P.O.P. - Committee Structure

Figure 3. Sparrows Point - Project Vicinity

Figure 4. Sparrows Point - Conceptual Sketch

Figure 5. Public Participation

SPARROWS POINT SHORELINE RECLAMATION

BRIEFING

INTRODUCTION

The Governor's Task Force (GTF) on Dredged Material Management (February 1991) report has recommended emphasis on beneficial uses of dredged material and development of active and creative partnerships of all parties concerned with dredge material management.

The State was searching for possible sites, in compliance with the Task Force recommendations, which could be developed into beneficial use projects. Torrey C. Brown, M.D., Secretary of the Maryland Department of Natural Resources (DNR), a member of the Task Force conceived the idea of using the Sparrows Point site, owned by Bethlehem Steel Corporation, as a beneficial use project for shoreline enhancement and wetland habitat development. Soon after a site visit, by representatives from DNR, U.S. Fish and Wildlife Service (USFWS) and Chesapeake Bay Foundation (CBF) was made and the idea of a beneficial use project at Sparrows Point was well supported. The State presented the idea of shoreline enhancement to Bethlehem Steel Corporation (BSC). The concept was well received and BSC granted easement rights to the State for this project.

The concept is to create several hundred acres of wetlands using clean materials dredged from the approach channels to Baltimore Harbor. These wetlands will help stabilize the shoreline, provide habitat for wildlife, and provide general beautification of the shoreline.

I. Governor's Task Force Recommendations

Governor's Task Force (GTF) on Dredged Material Management in its report of February 1991 recommended:

(a) to create active and creative partnership of all parties, e.g., federal, state, and local governments: public interest groups, etc.

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The POP is developed by the Maryland Port Administration as a 20 year comprehensive plan to match yearly dredging needs to specific sites, present or future. This program will cost approximately $300 million over several years. POP Cost Summary Chart (Figure 1) shows the anticipated yearly costs which will be required to accomplish each project during the life of the Program.

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(2) BTC – Balance to Complete

(3) Much longer Transportation distances for this project may increase state costs.

* All Annual, BTC, Project Total Costs in thousands of dollars.

PRESENTED BY MPA CADD

FIGURE 1

Date: 12/14/92 PLACEMENT OPTIONS PROGRAM CONSTRUCTION – OPERATIONS COST SUMMARY BY YEAR*

The Phase I Bay Enhancement under the Placement Options Program identify projects which create habitat or wetlands, and/or protect the shoreline from erosion. Such projects include Worton Point for wetlands development, Pooles Island and Poplar Island, for habitat/wetland development, and Dobbins Island for island preservation. (See Attachment "A".) The Bay Enhancement projects will serve a twofold purpose; to create habitat to benefit wildlife, and to meet the dredging needs of the Port of Baltimore.

A Working Group will be formed for each project being considered in the program. The groups will be comprised primarily of technical representatives from State and federal resource agencies, and private sector.

Advisory and Management committees have been formed to interact with and advise working groups for the smooth execution of the process. Figure 2 shows the interaction among the various groups.

Dredging Needs Placement Options Program
Committee Structure Diagram
October 1992

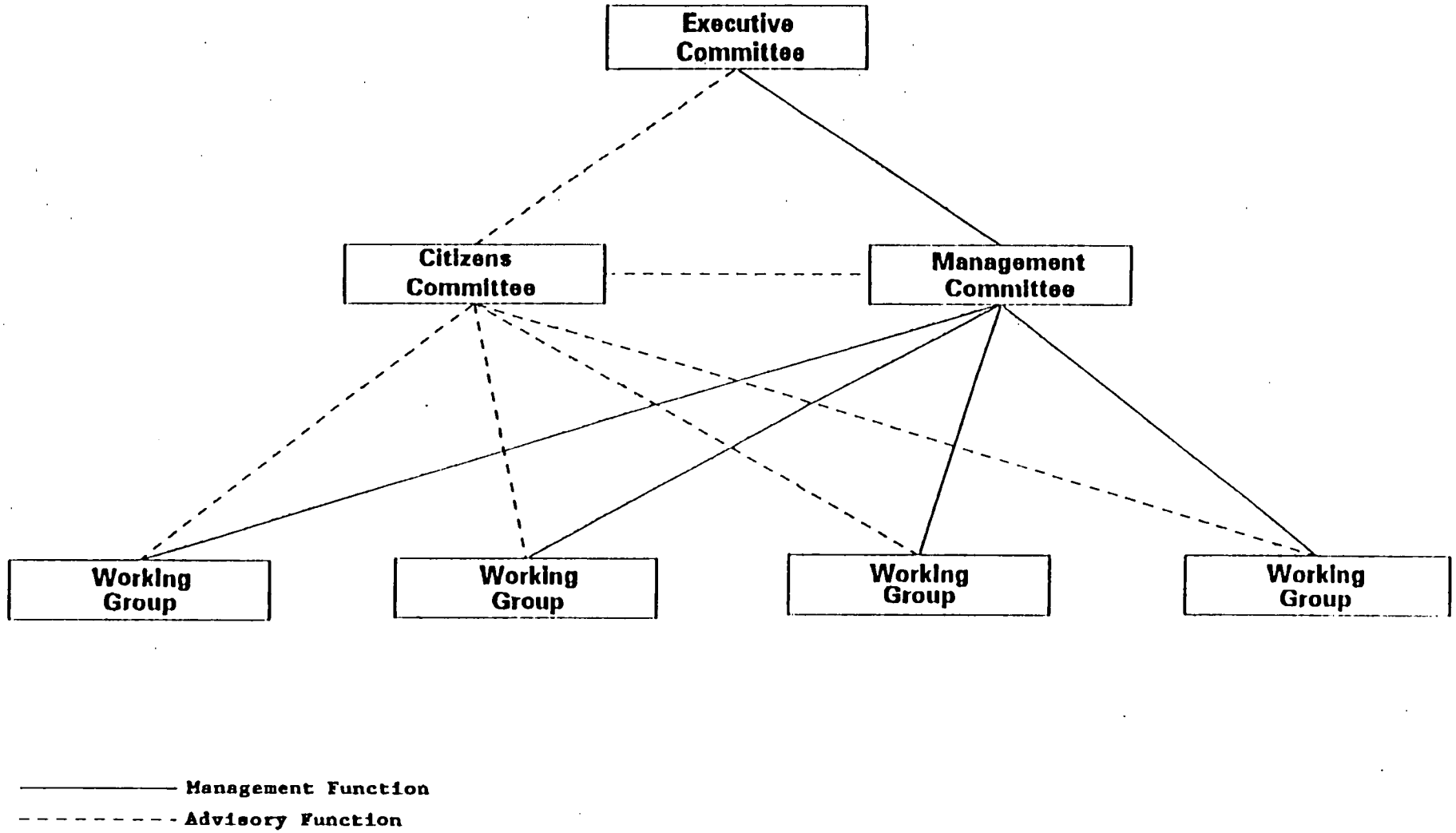


FIGURE 2

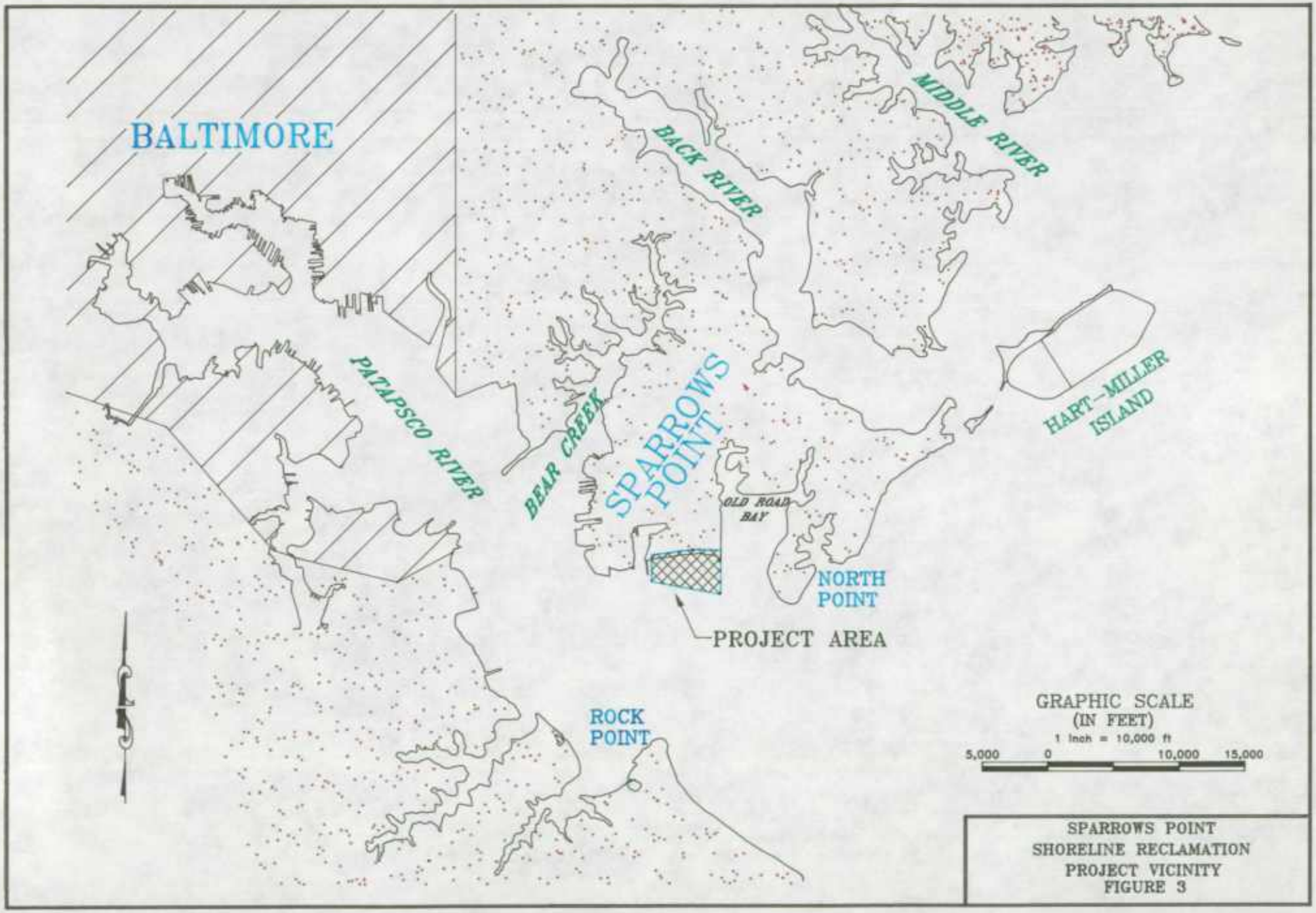
III. Shoreline Reclamation Project

Sparrows Point Shoreline Reclamation Project is the first beneficial use project in the Chesapeake Bay which will be constructed from the clean dredged material from the Baltimore Harbor approach channels and developed into intertidal wetlands and upland habitat.

Bethlehem Steel Corporation uses the shoreline site for storage and processing of iron ore for manufacturing purposes.

MPA, with the help of MES, proposes to develop a 300 - 400 acres of intertidal wetlands and upland habitat at Sparrows Point (Figures 3 & 4). Wetlands will enhance the shoreline and upland habitat and will provide a visual buffer to the industrial site behind. The Artist's rendering shown on the cover of this briefing document depicts the concept of the completed site.

Approximately ten million cubic yards of clean dredged material would be placed to create wetlands and upland habitat at a cost of about $25 million. There would be no cost to acquire the property and cost per cubic yard of dredge material in place would be low due to the large capacity of the site. The expected operational life of the project is about ten years.



SPARROWS POINT
SHORELINE RECLAMATION
PROJECT VICINITY
FIGURE 3

SPARROWS POINT SHORELINE RECLAMATION PROJECT
CONCEPTUAL SKETCH

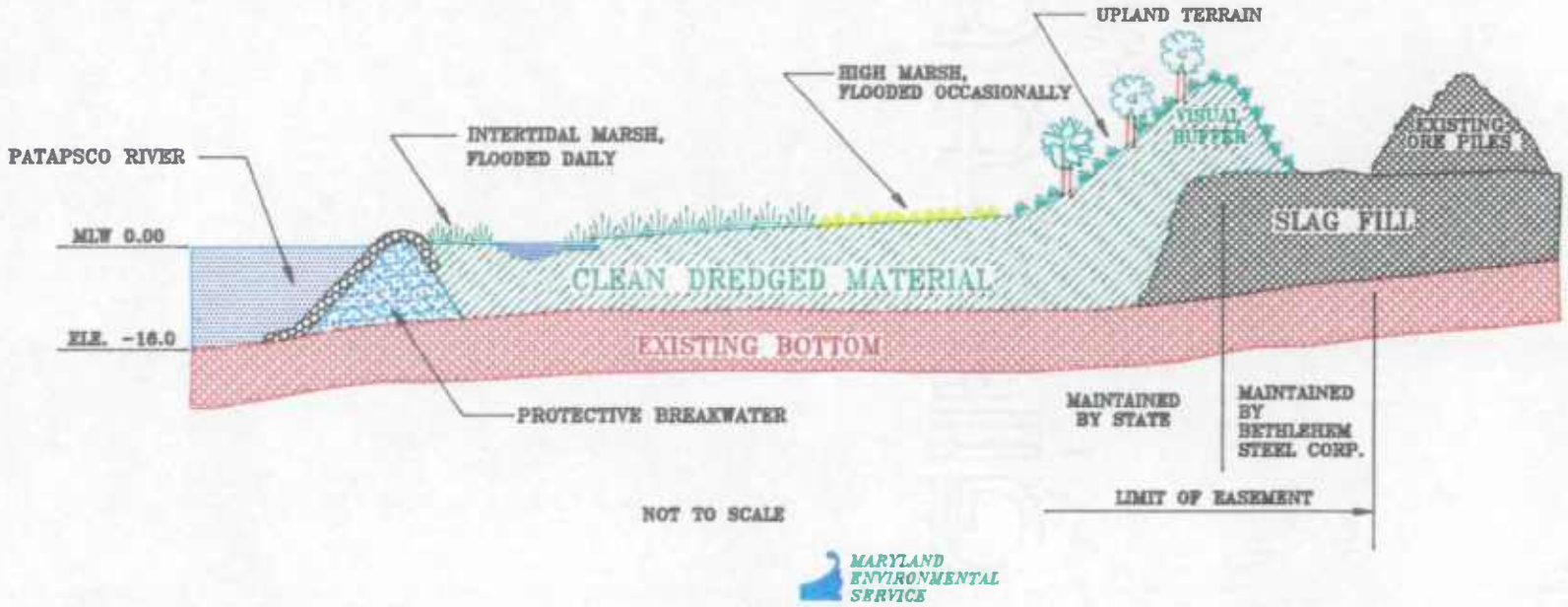


FIGURE 4

IV. Status of the Project to Date - Phase I

As of December 22, 1992, initial assessment of the site with respect to geotechnical and other investigations has been completed.

A Hydrodynamic Model study was initiated in November 1992 to ensure that circulation of water in the harbor is not affected due to construction of this project. The University of Maryland (UM) is conducting the model study under the direction of the Maryland Department of the Environment.

Selection of a firm to conduct engineering and environmental feasibility study including design and preparation of plans and specifications for the construction contract is in progress. The contract will be awarded when selection of the firm is made (May 1993).

V. Project Support

MPA/MES has the support of Bethlehem Steel Corporation, Chesapeake Bay Foundation, Department of Natural Resources and Department of the Environment. The U. S. Fish and Wildlife Service supports the creation of wetlands and upland habitat.

VI. **Public Participation** (Figure 5)

a) Community Relations Plan

- MES/MPA will meet with area elected officials such as Baltimore County Councilmen, State delegates, State senators, Congressmen, U. S. Senators and other appropriate personnel to inform them about the beneficial use project.

- MES/MPA will also meet with the interested environmental groups in and around the area to inform them about the Sparrows Point Project, and to involve them in the process at an early stage so that their concerns can be addressed.

- MES/MPA will also meet with the community groups in and around the area to address their concerns and gain their support for the project.

b) Oversight Committee

- An oversight committee for the project will be formed at the early stage. The committee will include individuals from the community who will act as a conduit for project development input as well as to disseminate information back to the community.

- It is hoped that early involvement of the committee in the process will keep the committee apprised of the progress and difficulties of the project. The committee suggestions would be an asset and would aid in solving the problems if any.

- MES/MPA will hold meetings at regular intervals with the Oversight Committee to inform them and have their feedback for the progress and concerns of the project.

c) Public Information

- MES/MPA will hold a general public meeting at the beginning of Phase II to inform the public and address their concerns about the Project. Phase II includes final design of the breakwater and wetland habitat development plan, preparation of plans and specifications for the construction contract.

- MES/MPA will prepare and distribute information literature regarding the project to educate the public. It is hoped that this process will generate public support for the Project. Figure 5 represents the approach for gathering and disseminating information for elected officials and the general public.

PUBLIC PARTICIPATION

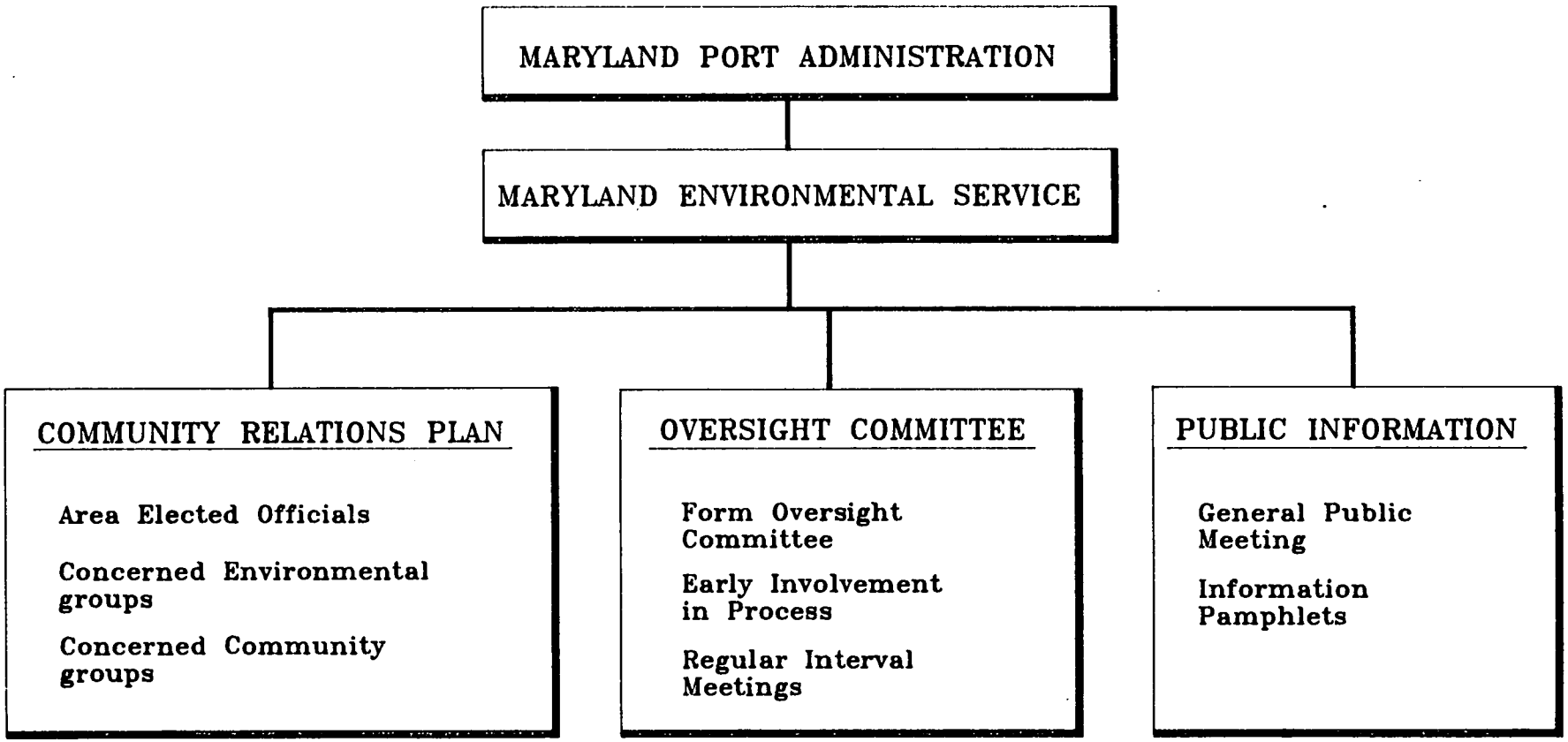


FIGURE 5

VII. **Project Schedule - Sparrows Point** (Attachment B)

o	Environmental Studies and Engineering Design	5/93 - 5/94
o	Secure Permits	3/94 - 8/94
o	Construct Retaining Structure	12/94 - 12/95
o	Wetlands Development Initiation	1996
o	Phased Development for Early Wetlands Usage	

ATTACHMENT A

SPARROWS POINT SHORELINE RECLAMATION

FUTURE DREDGED MATERIAL PLACEMENT SITES

PROJECTS DESCRIPTION

FUTURE DREDGED MATERIAL PLACEMENT SITES

In order to manage the dredging needs of the Port of Baltimore channels, multiple sites will be required. The projects under consideration for concurrent utilization are presented below with their major attributes.

HMI

- Dewatering and consolidation of existing dredged material
- Additional capacity gained

CSX/COX CREEK

- Acquire existing site to gain additional containment capacity
- Modifications to be made for capacity and water quality

POOLES ISLAND 'G' WEST

- Overboard site for additional capacity
- Comprehensive monitoring being performed

SPARROWS POINT

- Major shoreline enhancement
- Wetlands and upland habitat creation

BAY ENHANCEMENT PHASE I

POPLAR ISLAND

- Preservation of existing wildlife habitat
- Island reclamation - wetlands and habitat creation

POOLES ISLAND - BENEFICIAL USE

- Shoreline erosion control/island protection
- Wetlands and aquatic habitat creation

WORTON POINT

- o Wetlands development/aquatic habitat creation
- o Shoreline protection

DOBBINS ISLAND

- o Island preservation
- o Wetlands development/habitat creation

BAY ENHANCEMENT PHASE II

PLANNING STUDIES

- o Identify, evaluate and qualify additional sites for implementation

LTMS

INNER HARBOR SITE

- o Create containment capacity for inner harbor sediments

SUBAQUEOUS MINING

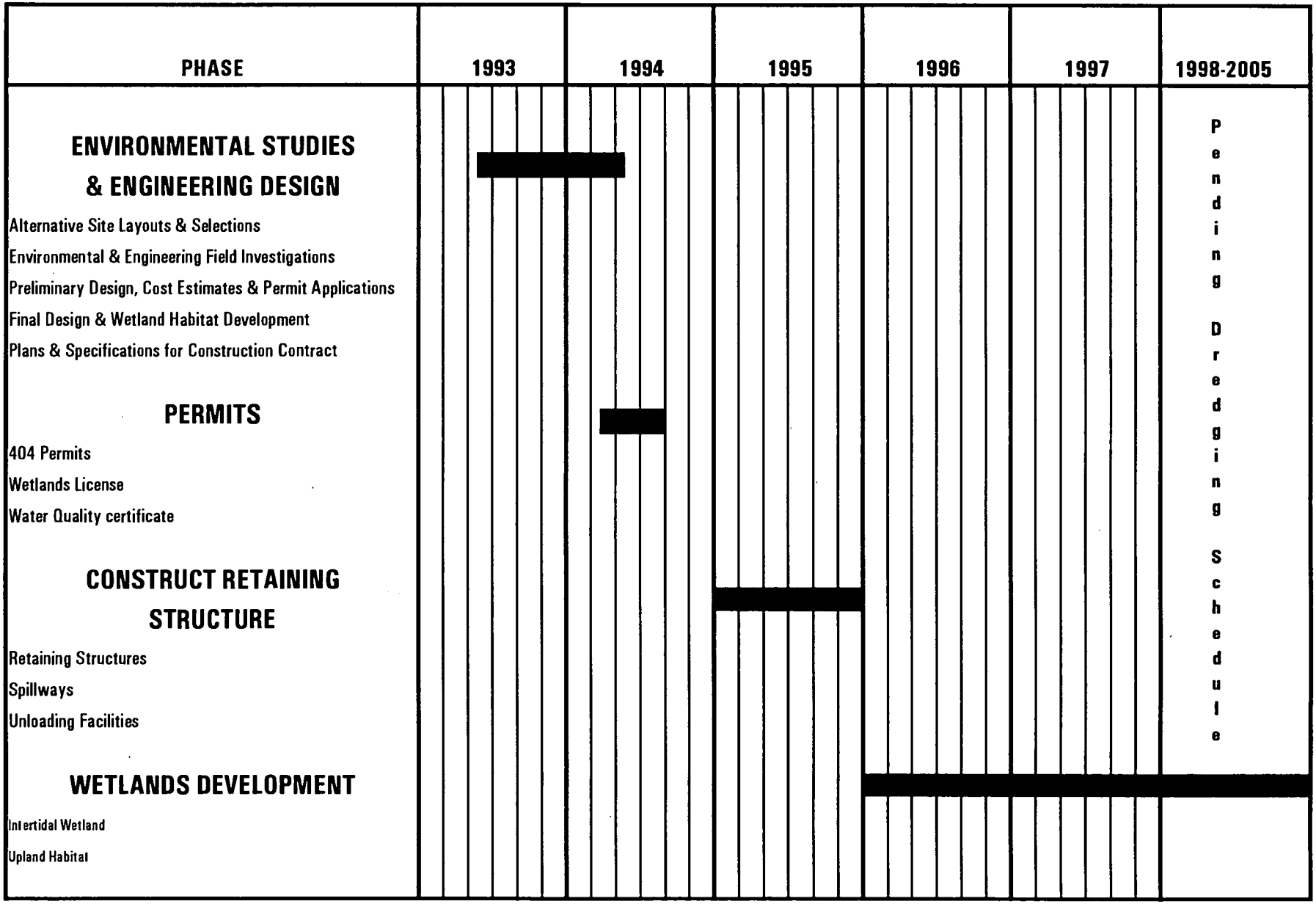
- o Mine sandy material for construction purposes
- o Create underwater capacity for dredge material

ATTACHMENT B

SPARROWS POINT SHORELINE RECLAMATION

PROJECT SCHEDULE

SPARROWS POINT SHORELINE RECLAMATION
PROJECT SCHEDULE



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