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LETTER REGARDING PERMIT APPLICATION 199604865 (IP-EJ) FOR SHORELINE  
PROTECTION SYSTEM AT FLEMING KEY NAS KEY WEST FL

2/4/1997

BECHTEL ENVIRONMENTAL INC

# Bechtel

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FEB 4 1997

Department of the Army  
U. S. Army Corps of Engineers  
Regulatory Division  
South Permits Branch CESAJ-R-D-SP  
400 West Bay St., Rm 201  
Jacksonville, FL 32232-32201

Attn: Esteban Jimenez

SUBJECT: Bechtel Job No. 22567  
Department of the Navy Contract No. N62467-93-D-0936  
**PERMIT APPLICATION 199604865 (IP-EJ)**  
**DO-0004, SHORELINE PROTECTION SYSTEM (SPS) AT FLEMING KEY,**  
**NAVAL AIR STATION KEY WEST FL**  
Subject Code: 7550

Dear Mr. Jimenez:

Reference is made to U. S. Department of Commerce, National Marine Fisheries Service (NMFS) letter dated 22 January 1997 concerning the subject permit application.

The NMFS identifies a number of resources for which it has stewardship responsibility and expresses concern that these resources "will be eliminated by the proposed project." The Navy, in planning the project, has been particularly concerned about its potential impact on wetlands and the communities supported along the shoreline.

While the primary purpose of the project is to protect the landfill from further erosion by wave action and tidal currents, a natural outcome of the project is protection of vegetation and fish living near the shoreline. These resources are currently exposed to the potentially harmful effects of landfill debris which is being deposited in the wetland area by the erosion process. A representative of Florida's Department of Environmental Protection noted that current conditions at the site are probably hostile to the establishment of native vegetation.

We have noted in visits to the site that there are only a few mangroves growing in isolated locations, while other populations of concern appear to cover less than five percent of the shoreline area. For this reason we proposed to improve vegetation and habitat by planting approximately 900 mangroves in the area where they have the greatest chance of survival. This was determined to be the 300-foot section on the northwest end of the site. Additionally, the project will plant three rows of sea purslane along the entire 1800 feet of the structure. We have not observed any sea purslane growing along the shoreline at the present time.

As required by the State of Florida permit, construction will avoid damage to vegetation such as sea grass in the tidal zone. This will be accomplished by keeping the excavation line inland of the vegetation line. Turbidity barriers at the edge of the excavation will prevent secondary impact from silt. Boulders placed on the toe of the structure should provide habitat and protection for a variety of aquatic species currently not able to survive along the shore line.



**Bechtel Environmental, Inc.**

Mr. Esteban Jimenez  
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During the planning phase, we considered planting red mangroves along the entire length of the structure as suggested by NMFS, but decided not to do so because the likelihood of survival is low along the south facing portion of the shoreline. Even with the improved conditions provided by the SPS, seedlings there would be subject to wave action from boats and fast-flowing tidal currents; therefore, the estimated \$25,000 to implement the additional planting was not considered a good use of funds. We believe the new mangrove community to be established at the northwest end of the project will spread to the south along the rip-rap toe of the structure as far as conditions are favorable.

The NMFS letter states that removal of exotics is part of developing and managing the landfill and should not be considered mitigation for wetland impacts. The landfill, however, is an abandoned site, and there is no requirement to manage or remove exotics. On the other hand, wetlands impact caused by construction of this project is extremely low, while mitigation actions, such as increasing the mangrove population by a factor of several hundred plants, are substantial.

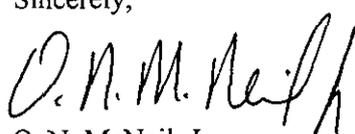
For these reasons the Navy considers the project as planned to provide not only mitigation but also substantial improvement to the wetlands at Fleming Key. Upon completion we anticipate a thriving colony of mangroves and sea purslane and a developing aquatic community among the boulders, as opposed to the current barren and debris-strewn shoreline which now exists.

The State of Florida has issued its permit, finding that the Navy's planned actions are sufficient. It is therefore requested that the Corps of Engineers permit be issued as quickly as possible. The Navy may consider additional actions as suggested by the NMFS after completion of the SPS, but further delays in the project will only add to the wetlands deterioration caused by landfill debris.

Photos of current site conditions are attached as supporting information.

Please give me a call at (423) 220-2745 if you would like to discuss this letter or the construction plan in more detail. I am submitting this response as Agent for, and on behalf of the Naval Air Station Key West.

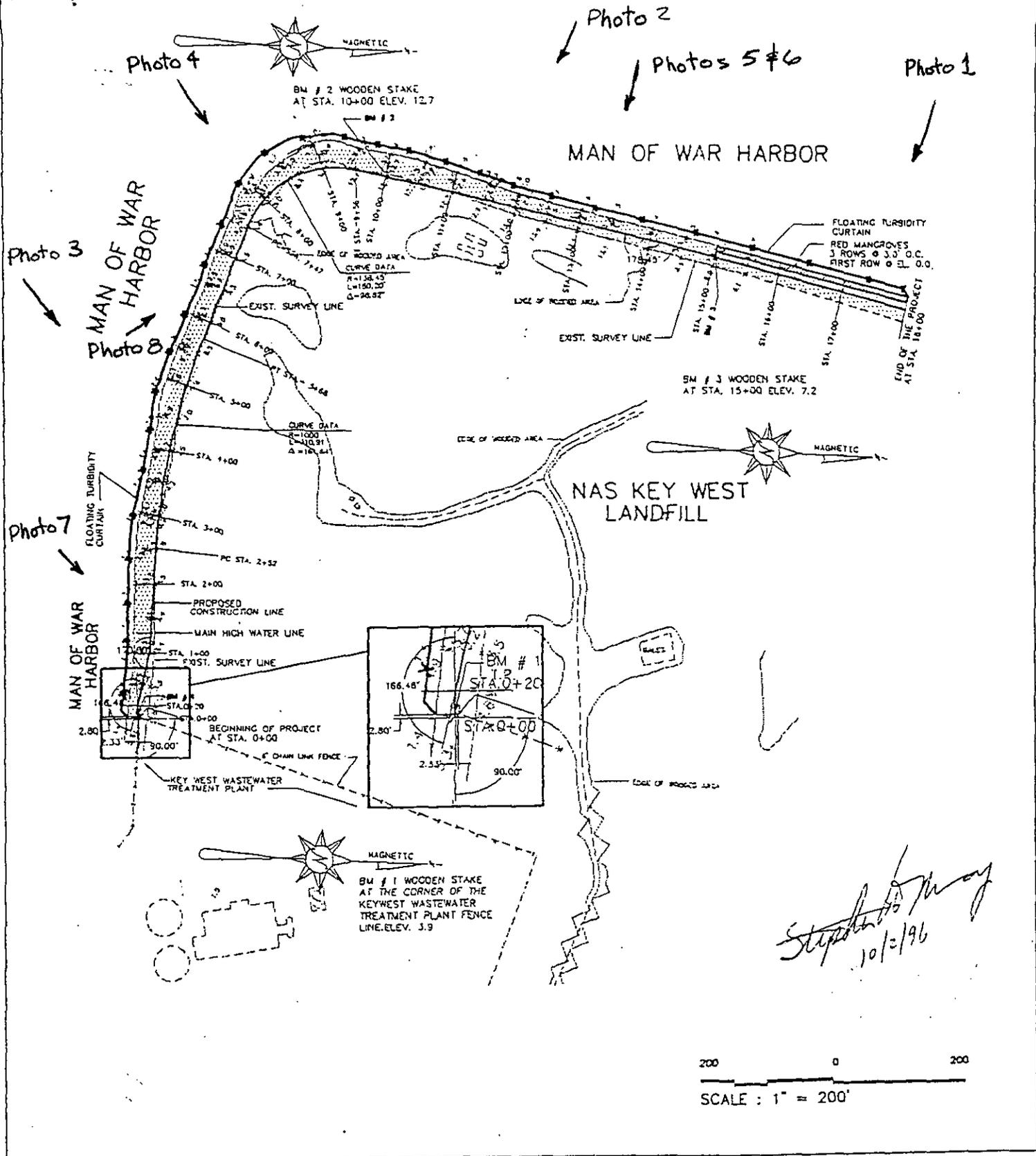
Sincerely,



O. N. McNeil, Jr.  
Project Manager

ONM:rcs:LR1080  
Attachments: As stated

cc: D. Patick (SDIV)  
R. Demes (NASKW PWD)  
P. Williams (NASKW PWD)  
M. Ewing (NASKW ROICC)  
J. Iliff (NMFS)  
R. Grau (FDEP)



DESIGNER'S PROJECT NO.: 0903  DRAWN BY: M.S.  ISSUR DATE: 09/13/96	<b>DHA</b> DELON HAMPTON & ASSOCIATES 600 WEST PEACHTREE ST. N.W. SUITE 1470 ATLANTA, GA 30308 TEL: (404) 872-5514 FAX: (404) 872-5893	DRAWING TITLE:	ATTACHMENT 3a	SKETCH NO.:
			SITE PLAN	
			KEY WEST NAVAL STATION	



Photo 1. Fleming Key Landfill - View east at north end of proposed Shoreline Protection System



Photo 2. Fleming Key Landfill - View Southeast toward the point.



Photo 3. Fleming Key Landfill - View Northeast toward southern end of proposed Shoreline Protection System



Photo 4. Fleming Key Landfill - View Northeast toward the point.



Photo 5. Fleming Key Landfill - Close-up of existing shoreline and debris.



Photo 6. Fleming Key Landfill - Close-up of existing shoreline and debris.



Photo 7. Fleming Key Landfill - View toward sewage treatment plant on south end of the proposed Shoreline Protection System.



Photo 8. Fleming Key Landfill - Close-up of shoreline showing erosion