



GOBIERNO DE PUERTO RICO
Departamento de Agricultura

PO Box 10163
San Juan, Puerto Rico 00908-1163

1 de agosto de 2001

Sr. Max L. Vidal Vázquez
Secretario
Junta de Planificación
PO Box 41119
San Juan, PR 00940-1119

Estimado señor Vidal Vázquez:

Vista Pública
Consulta 2000-51-0876-JPU
Palmas del Mar Properties
Bo. Buena Vista, Humacao

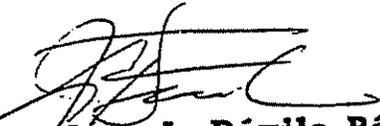
Respondiendo al Aviso de Vista Pública del día 3 de agosto de 2001, que se celebrará en el Salón de Asambleas de la Casa Alcaldía del Municipio de Humacao, procedemos a emitir nuestra recomendación.

Sobre el particular, acompañamos copia de comunicación del 10 de octubre de 2001, donde este Departamento expresó **tener objeción** al proyecto propuesto.

Luego de una revisión del caso, entendemos que las condiciones anteriores no han variado.

Tomando en consideración lo antes expuesto, este Departamento se reafirma en su recomendación de **objetar** el uso propuesto.

Cordialmente,


Agro. Juan L. Dávila Pérez
Director
Ofic. Preservación de Terrenos Agrícolas

JD/chh

A toda honra, produciendo para ti.

2001 AUG 14 PM 3:23
JUNTA DE PLANIFICACION
PUERTO RICO



GOBIERNO DE PUERTO RICO

Departamento de Agricultura

PO Box 10163

San Juan, Puerto Rico 00908-1163

19 de julio de 2001

Sr. Bijan Ashrafi Mahabadi
Funcionario Responsable
Junta de Planificación
P.O. Box 41119
San Juan, Puerto Rico 00940-1119

Estimado señor Ashrafi Mahabadi:

**DECLARACIÓN DE IMPACTO AMBIENTAL
CONSULTA DIA 2000-51-0876-JPU
BO. BUENA VISTA, HUMACAO**

En la consulta de referencia se propone la ubicación de un centro de mercadeo en una finca de 60.00 cuerdas. La misma localiza en el Bo. Buena Vista del municipio de Humacao, Carr. 9056, Km. 11.5 - 11.6.

En comunicación del 10 de octubre del 2000 (adjunto copia) este Departamento expresó objeción a la propuesta. En la ocasión se indicó que la aprobación de esta consulta representaría la fragmentación de una unidad agrícola valiosa.

Del análisis de la documentación suministrada y de los datos obtenidos, se desprende que las condiciones anteriores no han variado.

Por lo tanto, este Departamento se reafirma en la recomendación inicial, por lo que objeta la actual petición.

Cordialmente,

Agro Juan L. Dávila
Director
Oficina de Preservación
de Terrenos Agrícolas

NS/JD/grm

RECIBIDO
2001 JUL 23 AM 8:13
GOBIERNO DE PUERTO RICO
OFICINA DEL REGISTRADOR
CENTRO DE TRÁFICO REGISTRADO

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GOBIERNO DE PUERTO RICO

Departamento de Agricultura

PO Box 10163

San Juan, Puerto Rico 00908-1163

10 de octubre del 2000

Sr. Max L. Vidal Vázquez
Secretario
Junta de Planificación
P. O. Box 41119
San Juan, Puerto Rico 00940-1119

ASUNTO: 2000-51-0876-3P
PROPONENTE: Ing. Camilo Almeida
BARRIO: Buena Vista
PUEBLO: Humacao

Propuesta: Ubicar un proyecto comercial, en una finca de 60.00 cuerdas

Localización: Carr. Núm. 906, Km. 11.5 - 11.6, Bo. Buena Vista, Humacao

Uso Propuesto: Comercial

Suelos:	%	Serie	Declive	Capacidad
	65	Talante	0-2%	IVS-3
	18	Teja graviloso arcilloso lómico	(20-40%)	IVS-1
	15	Candelerero lómico	(0-2%)	IVe-1
	2	Reilly	(0-2%)	IVS-3

Descripción de los Suelos: Suelos que varían de llanos a inclinados, de drenaje muy pobre a bueno, capacidad de retención de agua baja a moderada y son adecuados para la producción de pastos o caña de azúcar.

Descripción General de la Finca y el Area Aledaña. La finca objeto de consulta posee amplia variedad de suelos propicios para actividades agropecuarias y topografía predominantemente llana, con porciones en lomas. Su vegetación se compone de algunos árboles. Tanto en la finca, como en terrenos colindantes, se observó ganado de carne en pastoreo. Además, en sus inmediaciones existen terrenos en pastos, carreteras principales y el Río Candelerero. El uso propuesto redundará en el desplazamiento de una actividad agrícola de envergadura, así como en la fragmentación de unidades valiosas para la agricultura. Tomando en consideración los factores antes descritos, este Departamento se opone al proyecto propuesto.

Recomendación del Departamento de Agricultura Sobre la Consulta de Referencia:

No Objetada Objetada Estudiada

AGRO. IVAN LOCKWARD
DIRECTOR
OFICINA DE PRESERVACION
DE TERRENOS AGRICOLAS

DV/IL/wit

A toda honra, produciendo para ti.

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SHPO 2652
Correspondence
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Tab 1

STATE HISTORIC PRESERVATION OFFICE
Office of the Governor

November 25, 2003

Mr. Luis R. Rodriguez
Director
Planning and Design
Palmas del Mar Properties, Inc.
Box 2020
Humacao, P.R. 00792-2020

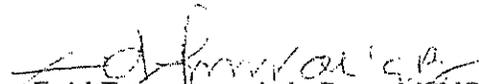
SHPO: 03-10-03 SHOPPING CENTER, PR #906, CANDELERO
WARD, HUMACAO, PUERTO RICO/200106183(IP-JR)

Dear Mr. Rodriguez:

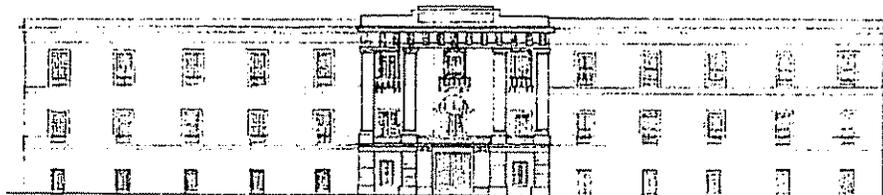
Our Office received correspondence on October 27, 2003, regarding the above referenced project. We have reviewed the archaeological survey titled "Informe de Investigación Arqueológica Fase IB" carried out by Marlene Ramos for the above referenced project. The assessment did not identify any historic properties; however, the Agency has not made a finding of **no historic properties** affected in its submission, as required in 36 CFR § 800.4 (d). While we believe that an Agency's finding of no historic properties affected is appropriate for this undertaking, the Federal Agency will need to submit an official determination for our review in order to complete the Section 106 review.

If you have any questions regarding our comments, please do not hesitate to contact our Office. We appreciate your interest in the rescue and preservation of our national historical heritage and we reiterate our commitment to assist you in this endeavor.

Sincerely,


Enid Torregrosa de la Rosa, MSHP
State Historic Preservation Officer

ETD/MB/img



Cuartel de Balajá

RECEIVED
Palmas Del Mar Properties, Inc.

DEC 14 2003

LUIS R. RODRIGUEZ, PP



Commonwealth of Puerto Rico

Apéndice C-d
Tab 1

STATE HISTORIC PRESERVATION OFFICE
Office of the Governor

March 13, 2003

Mr. Edwin Muñiz
Chief, Regulatory Section
U.S. Army Corps of Engineers
400 Fernández Juncos Ave.
San Juan, P.R. 00901-3299

SHPO: 03-10-03 SHOPPING CENTER, PR #906, CANDELERØ
WARD, HUMACAO, PUERTO RICO/200106183(IP-JR)

Dear Mr. Muñiz:

As part of our Office's responsibilities, we are to consult with and assist the Federal Agency regarding the identification of cultural resources within the undertaking's area of potential effects, in accordance with 36 CFR Part 800.4. After a review of the preliminary information submitted for the above referenced project, we have determined that a Cultural Resources Assessment (Stage I) is necessary. This study identifies the presence or absence of cultural resources of architectural, archaeological, and/or historic significance within the project's area of potential effects. In order to comply with the National Historic Preservation Act of 1966, as amended, and 36 CFR Part 800, efforts to identify historic properties should follow the Secretary's "Standards and Guidelines for Archaeology and Historic Preservation"(48 FR 44716) as well as our Office's guidelines.

We emphasize that construction and/ or earth movement shall not commence in the project area until, the Section 106-review process, as codified in 36 CFR Part 800, has concluded.

As soon as we receive the report, we will continue with the evaluation of the project. If you have any questions, please do not hesitate to contact our Office. We appreciate your interest in the rescue and preservation of our national historical heritage and we reiterate our commitment to assist you in this endeavor.

Sincerely,


Erid Torregrosa de la Rosa, MSHP
State Historic Preservation Officer

ETD/MB/img

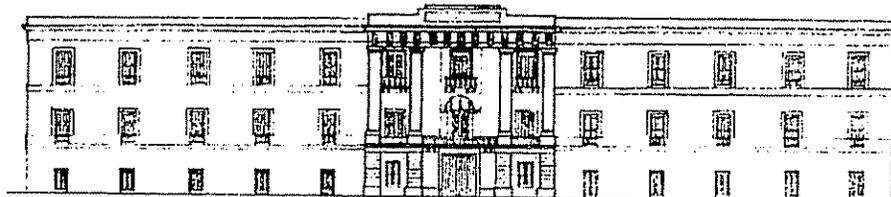
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Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP



Commonwealth of Puerto Rico





United States Department of the Interior



FISH & WILDLIFE SERVICE

Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

Apndice C-d
Tab 2
AUG 13 AM 9:17

August 8, 2003

Mr. Edwin Muffiz
Chief, Regulatory Section
US Army Corps of Engineers
400 Fernandez Juncos Ave
San Juan, Puerto Rico 00901-3299

Re: 2001-06-183 IP-JR, Palmas del Mar
Shopping Center

Dear Mr. Muffiz:

The interested agencies of the Department of the Interior have reviewed the above referenced alternatives analysis and proposed mitigation plan. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat.401, as amended; 16 U.S.C. 661 et seq.).

The applicant is proposing to about 6 acres of waters of the US for the development of a 55 acre parcel into a shopping center. The selected alternative will result in relocation or filling of some 1, 150 meters (1.15 Km or .71 miles) of stream channel and 5.7 acres of wetlands. The project has developed a mitigation plan for wetland impacts.

Given the array of expertise cited in the document the selected alternative is one of the most detrimental designs to the environment. The General Shopping Center Design Guidelines seem to favor development sprawl rather than wise use of space available.

The most environmentally sound alternative was not selected based on the following characteristics:

- 1) Need to bridge the streams and deposit fill material. These are not large streams and can easily be bridged. Fill material will be deposited regardless since the selected alternative will eliminate the streams.
- 2) Complex grading etc. This section is not completely explained but seems to imply that the area is not suitable for construction as is, because of elevations. Perhaps a less flood prone site should have been chosen.

3) Need to cross streams with utilities. Utilities will have to run throughout the Shopping Development regardless of design. Utilities can follow roadways and be attached to bridges crossing the streams.

4) Highly inefficient traffic pattern. While aesthetics are mentioned as a design criteria, it seems that driving over a landscaped stream and enhanced wetlands to different shopping nuclei is not aesthetically pleasing to the designers or would not be pleasing to the shoppers.

5) Parking fields. The document assumes that shoppers cannot figure out where to park. While parking may be irregular it can be resolved with multi level parking.

6) Poor pedestrian traffic. This can be resolved by cross walks, sky walks, moving sidewalks and other innovative engineering designs.

7) Extensive fencing. We do not see the need for extensive fencing.

The illustration of this concept consists of a bubble diagram shown in Exhibit 14. Other designs received more detailed analysis. This indicates that very little thought went into discarding the avoidance alternative and gave no thought to a hybrid that minimizes impacts. As a result the currently selected Alternative promotes full impact of all wetlands on the site, with little thought at avoidance and minimization.

The proposed construction of a new stream channel and 8,400 square meters of marsh is experimental at best. There are no assurances that the proposed channel will function as designed.

The mitigation plan is sketchy at best and does not come close to complying with the recent guidance on mitigation plans (COE RGL 02-02). The mitigation plan expounds the values of wetlands, none of which seem to apply to the wetlands on the project site according to the documentation enclosed. The proposed stream relocation channel is a typical vertical wall U shaped channel that will somehow attempt to recreate a natural stream using reno mattress and gabions. If the applicant wishes to recreate a natural stream it should be engineered using the techniques discussed in Applied River Morphology and the Stream Corridor Restoration Manual.

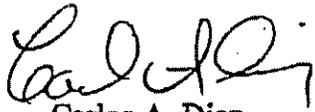
The proposed stream mitigation is in the same location marked "detention pond" in Exhibit 19 the selected alternative. We assume that this area will receive storm water runoff from the project and parking area. The parking area makes no effort to develop a parking with built in grassed retention swales, to improve water quality prior to discharging into the "mitigation" are. Enclosed is a cross section of a well designed parking lot with storm water detention swales. If the applicant insists on single level parking rather than concentrate all parking into a multi level structure, we recommend that storm water retention swales be incorporated into the project design.

Based on the above, we believe that the applicant's alternatives analysis and mitigation plan should be accepted by the Corps. The concept of avoiding impacts by building several shopping

nuclei should be further explored with onsite mitigation and enhancement.

Thank you for the opportunity to comment on this action, if you have any questions please contact Felix Lopez of my staff at 787 851-7297 x 26.

Sincerely,



Carlos A. Diaz
Assistant Field Supervisor

fhf encl (1)

cc:

PRPB, San Juan (2000-51-0876 JPU)

DNER, San Juan

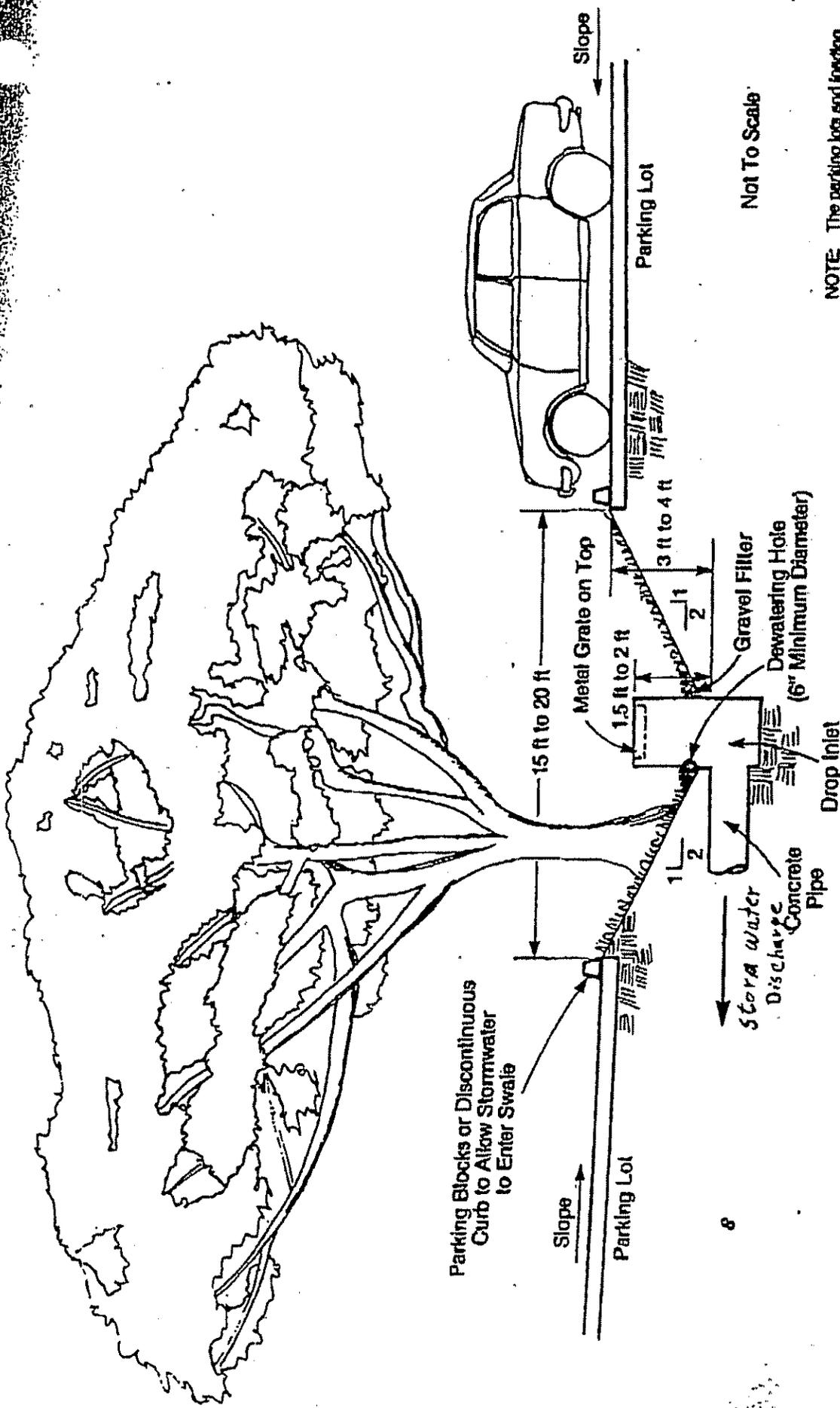
NMFS, Lajas

EPA, San Juan

EPA, New York

EQB, Environmental Assessment, San Juan

Appendix C-2
Tab 2



Not To Scale

NOTE: The parking lots and loading areas should generally be sloped so as to discharge stormwater into the grassed retention swales.

MINIMUM DESIGN CRITERIA

- Storage = 0.5 acre-in per acre of drainage area.
- Surface Area = 70.6 Q₂₅ ft² (using Equation 1-1 and assuming 51 percent Trap Efficiency for Cramer Soils).
- Inlets to be sized for 25 yr, 24 hr storm flow.
- All design criteria to be checked by engineer for appropriateness.

Typical Parking Lot Retention Swale



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Boqueron Field Office
P.O. Box 491
Boqueron, Puerto Rico 00622

April 3, 2003

Mr. Edwin Muñiz
Chief, Regulatory Section
US Army Corps of Engineers
400 Fernandez Juncos Ave
San Juan, Puerto Rico 00901-3299



Appendix C-d

RECEIVED
Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP

Re: 200106183 (IP-JR) Palmas del Mar

Dear Mr. Muñiz:

The interested agencies of the Department of the Interior have reviewed the above referenced public notice. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat.401, as amended; 16 U.S.C. 661 et seq.).

The applicant is proposing to construct a shopping center. As part of the construction activities about 6 acres of wetlands and riparian habitat will be impacted. The channelization or relocation of several streams, all tributaries to the Candelero River, is also being proposed. The applicant is proposing two mitigation areas, one in the proposed river channel and one off site.

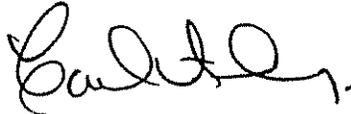
The Service does not believe that the channelization or placement in culverts of these streams is necessary and the project can be built around the existing stream systems. The proposed mitigation plan does not meet the criteria for mitigation plans as outline in Regulatory Guidance Letter 01-1. The plan lacks details regarding baseline information, goals, work plan, site protection, financial assurances, long term maintenance, etc.

The proposed stream mitigation will take place in an artificial channel that does not follow any of the criteria of natural stream design. The area will be confined by vertical gabion walls. This type of structure is subject to failure due to undermining of the gabions during high flows and flood conditions.

We recommend that the applicant should consider alternate designs for the project that incorporate the existing natural features into the project layout. Based on the above we recommend that a permit for this action not be issued until the

Thank you for the opportunity to comment on this action, if you have any questions please contact Felix Lopez of my staff at 787 851-7297 x 26.

Sincerely,

A handwritten signature in black ink, appearing to read 'Carlos A. Diaz', written in a cursive style.

Carlos A. Diaz
Assistant Field Supervisor

fhl

cc:

EQB, Water Quality, San Juan

PRPB, CZM, San Juan

DNER, San Juan

NMFS, Lajas

EPA, San Juan



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
9721 Executive Center Drive N.
St. Petersburg, Florida 33702
(727) 570-5317, FAX 570-5300

Appendix C-d
Tab 3

September 23, 2003 F/SER4:LC

J/L

Edwin E. Muñiz
Chief, Antilles Regulatory Section
Department of the Army, Corps of Engineers
400 Fernandez Juncos Avenue
San Juan, Puerto Rico 00901-3299

Dear Mr. Muñiz:

This is in response to your letter of September 12, 2003, requesting our comments regarding the response of Palmas del Mar Properties, Inc. to our comments regarding permit application number 200106183 for the construction of the Palmas del Mar Commercial Center in Candelero Abajo Ward, Humacao, Puerto Rico. The letter written by Palmas del Mar Properties to the U.S. Army Corps of Engineers (COE) dated July 1, 2003, responds to various agency comments in response to the public notice published for the project, including those of the National Marine Fisheries Service (NOAA Fisheries).

Based on our review of the applicant's response, the comments and recommendations submitted to you by the U.S. Fish and Wildlife Service by letters dated April 3 and August 8, 2003, continue to represent the position of NOAA Fisheries regarding the proposed project. NOAA Fisheries continues to believe the project could adversely affect resources for which we are responsible due to project impacts to the Candelero River and its associated wetland system. Avoidance and minimization of project impacts to wetlands and waters of the United States have not been considered by the applicant in the design of the project.

Thank you for the opportunity to provide comments on this project. Questions related to the proposed project and marine fishery resource issues should be directed to Dr. Lisamarie Carrubba in our Puerto Rico Field Office at 787/851-3700.

Sincerely,

Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE
 Southeast Regional Office
 9721 Executive Center Drive N.
 St. Petersburg, Florida 33702
 (727) 570-5317, FAX 570-5300

*Appendice C-d
 Tab 3*

April 1, 2003 F/SER4:LC

Edwin E. Muñiz
 Chief, Antilles Regulatory Section
 Department of the Army, Corps of Engineers
 400 Fernandez Juncos Avenue
 San Juan, Puerto Rico 00901-3299

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 Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP

Dear Mr. Muñiz:

We have reviewed the project plans as advertised in the following public notice.

In our assessment of the project, coordinated with the U.S Fish and Wildlife Service (FWS), we have concluded that the work could adversely impact fishery resources for which the National Marine Fisheries Service (NOAA Fisheries) is responsible. Therefore, comments and recommendations submitted to you by the FWS also represent those of NOAA Fisheries.

Should there be subsequent changes in the plans, please notify us directly so that we may reconsider our position on these matters.

<u>NOTICE NO.</u>	<u>COUNTY</u>	<u>APPLICANT</u>	<u>NOTICE DATE</u>	<u>DUE DATE</u>
200106183	Humacao	Palmas del Mar Properties, Inc.	3/6/03	4/5/03

Sincerely,

Ricky N. Ruebsamen
 Acting Assistant Regional Administrator
 Habitat Conservation Division

cc:
 NMFS-PR
 FWS-PR

JTL





United States
Department of
Agriculture

Forest
Service

International Institute of
Tropical Forestry

Tel: (787) 766-5335

Jardín Botánico Sur
1201 Calle Ceiba
San Juan PR 00926-1119
Fax: (787) 766-6302

*Apéndice C-d
Tab 4*

File Code: 1900
Date: March 24, 2003

Chief, Antilles Regulatory Section
U.S. Army Corps of Engineers
400 Fernández Juncos Avenue
San Juan, Puerto Rico 00901-3299

Permit Application No. 200106183(IP-JR)
(JPA#287)

RECEIVED
Palmas Del Mar Properties, Inc.

Mar 21 2003

LUIS R. RODRIGUEZ, PP

This proposal does not contain sufficient information to sustain its allegations.

How would the new channel perform flood attenuation functions? How would it perform biofiltering and sediment retention functions? It appears the new channel is going to behave as a pond, which raises the question of how would the flow functions of the old channel be performed at the site?

The proposed compensation wetland appears to be disconnected from the hydrologic system of the site, and it is not clear that it will perform the functions of the more mature wetland it is displacing.

The importance of the argument about past modification of the primary tributary upstream from the project it is also not clear. Such prior modification might preclude further modification if cumulative impacts on the overall hydrologic system are considered.

It appears that this proposal requires further analysis before it is considered for a permit.

Sincerely,

Ariel E. Lugo

ARIEL E. LUGO
Director

Cc:

- L. Rodríguez, Secretary, DNER, San Juan, PR
- C. Torres Meléndez, Secretary, PB, Santurce, PR
- A. Rodríguez, President, PB, Santurce, PR
- C. Soderberg, Director, EPA, San Juan, PR
- J. Oland, Field Supervisor, USDWS, Boquerón, PR
- A. Vale, CDK, San Juan, PR

11 2 11 03 10 00
MAR 21 2003
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Apendice C-4

Apendice C-d
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Palmas Del Mar Properties, Inc.
Ta
APR 21 2003
LUIS R. RODRIGUEZ
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS, ANTILLES OFFICE
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299

REPLY TO
ATTENTION OF

Antilles Regulatory Section
200106183(IP-JR)

Mr Luis R. Rodríguez
Director, Planning and Design
Palmas del Mar Properties, Inc.
P.O. Box 2020
Humacao, Puerto Rico 00978

Dear Mr. Rodríguez:

Reference your Department of the Army permit application proposing to construct the Palmas del Mar Commercial Center, located at Candeleró Abajo Ward, Humacao, Puerto Rico. Please, refer to number 200106183(IP-JR) in future correspondence regarding this project.

A list of the comments received in response to the public notice is provided. Please review and provide a detailed written response to each of the issues raised on the letters.

The U.S. Fish and Wildlife Service (USFWS), by letter dated April 3, 2003, in response to the public notice, recommended that a permit not be issued until their comments are considered. The Service does not believe that the channeling or placement in culverts of the streams is necessary because the project can be built around the existing stream systems. They sustain the proposed mitigation plan does not meet the criteria established in the Regulatory Guidelines Letter 01-1, because the plan lacks details regarding baseline information, goals, work plan, site protection, financial assurance, long term maintenance, etc. The Service stated that the proposed stream mitigation would take place in an artificial channel that does not follow any of the criteria of natural stream design. They indicated that the proposed gabion wall is subject to failure due to the undermining of the gabions during high flows and flood conditions. The Service recommended the applicant should consider alternate designs for the project that incorporates existing natural features.

The National Marine Fisheries Service by letter dated April 1, 2003, the Habitat Conservation Division Service stated the comments and recommendations provided by the USFWS also represents those of the NMFS.

The U.S. Forest Service by letter dated March 24, 2003, indicated the proposal requires further analysis before it is considered for a permit. The Service questioned how the new channel would perform flood attenuation functions, biofiltering and sediment retention functions. The Service pointed out the new channel would act as a pond, that raises the question of how the flow functions of the old channel be performed at the site. They added that the proposed mitigation appears to be separated from the river, and that it is not clear if it will perform the functions of the more mature wetland being displaced. The Service also indicated the argument about past modifications of the tributary system it is not clear. This fact would preclude further modifications because of the cumulative impacts on the overall ecologic system.

The State Historic Preservation Office, by letter dated March 13, 2003, the Officer stated that after the review of the information provided, a Stage I archaeological study is necessary. They emphasized that construction and/or earth working activities shall not commence until Section 106-review process, as codified in 36 CFR Part 800, has concluded, and requested the report.

The Corps concurs with the above comments. Gabion structures do not last long and are subject to be damaged by flooding events. This could affect not only the flooding control capacity of the project but the mitigation site proposed. Alternatives to the project design, the buildings layout, the proposed mitigation site and channel design must be evaluated, in order to support the preferred alternative. The performance of the archaeological study prior to perform any work is important to comply with applicable regulations. The proposed mitigation plan should be prepared in detail accordingly.

A rebuttal on the above information must be provided for us to complete our public interest review. Any other information you feel may be helpful in order to fully justify the project should also be submitted at this time

In addition to the above, the following information will be required for reviewing this proposal:

- a. The public and/or private need for the project and the benefits to be derived.
- b. Why the proposed project, and the activities associated with it must be located on these aquatic resources? It is presumed other alternatives exist to locate a shopping center rather to place it within aquatic resources at this particular site. Please discuss alternate location sites that have been considered and why those alternatives are not practicable. A practicable alternative is defined as an alternative that is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. The purpose of this analysis is to demonstrate that a suitable alternate site, with less impact to aquatic

resources, was not found. The 404(b)(1) guidelines make the presumption that other alternative exists unless proven otherwise.

c. In order to consider the possibility to minimize the environmental impact of your project, by eliminating or reducing the project scope, sections, or dimensions; what could be the least acceptable plan modification that you could be able to accept? Minimization implies a reduction of its impacts. Therefore, we request that the avoidance and minimization analysis be provided at this time.

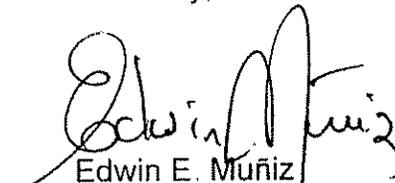
d. You must provide a detailed compensatory mitigation plan to compensate for the loss of wetlands and streams that are being directly impacted by the project. The plan may be proposed by creating wetlands from uplands, or enhancing a degraded wetland that was previously disturbed, to compensate for the unavoidable impacts, once you provide a satisfactory response to the previous sections. The purpose is to show how compensatory work will balance the project impacts. The possible implementation of a mitigation plan including exact location, surface area to be earth-worked, plan view and cross section drawings, planting scheme, monitoring plan, contingency plan in case of planting failure, or other impacts, etc.

e. What is the status of the Water Quality Certificate from the Puerto Rico Environmental Quality Board?

Your application will be held in abeyance for 30 days pending receipt of your response. If you wish to modify the application taking into account the information provided and need more than 30 days to do so, you may request deactivation of the application. If we do not obtain from you the requested information within 30 days, we will take final action on your Department of the Army permit application. Final action could be withdrawal from further processing, or denial of your application. If the case is withdrawn, an enforcement case will be initiated. The permit application file will be retained for one year.

Any questions regarding the application should be directed to Mr. José E. Rosario, at the letterhead address, or by telephone numbers 787-729-6905/6944.

Sincerely,



Edwin E. Muñiz
Chief, Antilles Regulatory Section

Enclosures

Comments received on Public Notice dated 6 March 2003
Permit Application Number 200106183 (IP-JR)

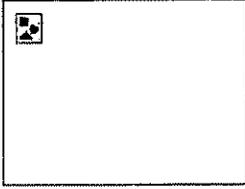
RECEIVED
Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP

- ✓ 1. U.S. Fish and Wildlife Service letter dated April 3, 2002
- ✓ 2. National Marine Fisheries Service letter date April 1, 2002
- ✓ 3. Institute of Tropical Forestry letter dated March 24, 2002
- ✓ 4. State Historic Preservation Office letter dated March 13, 2003

Encl 1



REGULATORY GUIDANCE LETTER

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APR 21 2003

LUIS R. RODRIGUEZ, PP

No. 01-1

Date: 31 October 2001

SUBJECT: Guidance for the Establishment and Maintenance of Compensatory Mitigation Projects Under the Corps Regulatory Program Pursuant to Section 404(a) of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899

1. Purpose and applicability

a. Purpose. Corps permits issued under Section 404(a) of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899 routinely contain conditions that relate to compensatory mitigation for resources that are going to be adversely affected or lost as a result of a permitted activity. The Corps is strongly committed to protection of the overall aquatic environment on a watershed basis, including fully mitigating authorized impacts to all aquatic resources, including wetlands. As discussed in the National Research Council (NRC) report, *Compensating for Wetland Losses Under the Clean Water Act*, (June, 2001), the Corps must increase the effectiveness and compliance of mitigation required for authorized impacts to the aquatic environment, including wetlands. This guidance letter provides direction concerning factors that affect compensatory mitigation success in a variety of contexts. This guidance adopts definitions that were developed for use in accounting for the types of mitigation used in Federal efforts to meet the national no overall net loss policy and to account for projects designed solely to increase the nation's wetland base. These terms were published on the U.S. Fish and Wildlife Service web page in July 2000, for use in reporting gains and losses by Federal resource management agencies.

The guidance also adopts the use of the terms "credit" and "debit". Acres have traditionally been used as the standard measure in discussions of compensatory mitigation as it relates to the national no overall net loss policy. This is primarily due to the difficulty in finding one standard for quantifying the different functional components considered during the evaluation of the ecological and physical parameters required for decision-making. The use of an accounting system based on credits and debits allows the program to demonstrate comparability of the mitigation being required for authorized impacts. The terms may change as methods and techniques evolve to better describe the relationship between an adverse effect and the compensatory mitigation required to offset or reduce that adverse effect. Nevertheless, the concepts embodied in the guidance below are intended to fully support the national no overall net loss policy for wetlands and to provide a basis for formulating decisions that will more effectively and fully mitigate impacts to other aquatic resources, such as flowing streams.

b. Applicability. This guidance applies to compensatory mitigation proposals submitted for approval on or after the effective date of this guidance and to those in the early stages of planning or development. These policies are not retroactive for mitigation projects that have already received approval

2. General Considerations.

All mitigation required by the Corps should be based on a consideration of regional aquatic resource requirements. Districts should take an ecosystem approach to the formulation of compensatory mitigation projects considering the resource needs of immediate and nearby watersheds. Mitigation that includes a mix of habitats such as open water (e.g., streams) as well as wetlands and adjacent uplands is normally more ecologically sustainable.

a. Debit/Credit assessment. The evaluation of adverse effects should be undertaken with a view toward being able to assign an identified debit to be offset by a credit. The method for assessing debits should be comparable to the method used for assigning credits. Corps regulatory program project managers are responsible for using district-approved methods (e.g., the Hydrogeomorphic Approach or acre-for-acre ratios) for assessing and assigning credits or debits in terms of amount, type and location. The definitions for "debit" and "credit" are provided (see attached definitions document).

b. Role of preservation. Credit may be given when existing wetlands and/or other aquatic resources are preserved (protected/maintained) in conjunction with establishment, restoration, rehabilitation, and enhancement activities and when it is demonstrated that the preservation will augment the functions of the established, restored, rehabilitated or enhanced aquatic resource. Such augmentation may be reflected in the amount of credit attributed to the entire mitigation project. In addition, the permanent preservation of existing wetlands and/or other aquatic resources may be authorized as the sole basis for generating credits in mitigation projects. In either case, consideration must be given to whether wetlands and/or other aquatic resources proposed for preservation perform physical, chemical and/or biological functions, the preservation of which is important to the region in which the mitigation site will be located. Aquatic areas, including wetlands, that are preserved as mitigation should also be under some documented level of threat for development, which is the case for most privately held wetlands or other aquatic areas.

c. Inclusion of upland areas. Credit may be given for the inclusion of upland areas occurring within a compensatory mitigation project to the degree that the protection and management of such upland areas is an enhancement of aquatic functions and increases the overall ecological functioning of the mitigation project (e.g., vegetated buffers or a mix of habitats)

d. Vegetated buffers. Compensatory mitigation plans for projects in or near streams or other open waters should normally include a requirement for the establishment and maintenance of vegetated buffers next to open waters on the project site. In many cases, vegetated buffers will be the only compensatory mitigation required and may be wetland, upland or a composite mix of the two. Vegetated buffers should normally consist of native species. The width of the vegetated buffers should be determined based on documented water quality or aquatic habitat loss concerns. Vegetated buffers need not be required to be as wide as some technical literature would suggest since the literature addresses the pre-human colonization of North America. Normally, vegetated buffers will be 50 feet wide or less on each side of a stream or other open water area. All vegetated buffers should be designed to provide water quality or aquatic habitat functions (e.g., shading, habitat for

animals that require aquatic and adjacent upland areas as habitat) and ecological value.

e. Use of in-kind vs. out-of-kind mitigation. In the interest of achieving functional replacement, in-kind compensation of aquatic resource impacts will often be appropriate. However, because compensatory mitigation decisions should take into account the functions of the aquatic environment, including wetlands, within both the landscape mosaic as well as a watershed context, out-of-kind compensation may also be appropriate. Out-of-kind compensation should be practicable and environmentally equal or preferable to in-kind compensation (i.e., of equal or greater ecological value to a particular region). However, non-tidal aquatic areas including wetlands should typically not be used to compensate for the loss or degradation of tidal aquatic areas including wetlands, nor should the reverse be true. Decisions to require or allow out-of-kind mitigation are made on a case-by-case basis during the permit evaluation process and should also consider the location (e.g., surrounding land uses). Such decisions are usually based on the amount of debits assigned to the impact site in comparison to the credits assigned to the compensatory action (e.g., loss of a degraded site associated with the restoration of a particularly vulnerable or valuable aquatic habitat type).

f. Mitigation ratios. The Corps regulatory program allows for the use of ratios in determining the amount of compensation required when there is a difference between the kind of aquatic resource being impacted and the kind of mitigation being required. Ratios must be based on an identifiable rationale (e.g., use of an assessment methodology, rationale based on a regional aquatic resource context, or a case-by-case rationale briefly described in the decision document). Other factors affecting mitigation ratios include temporal losses between the time of impact and the time the mitigation site achieves a fully functional level and the likelihood of mitigation success. All use of ratios should be to ensure that the underlying policy of offsetting the authorized impacts will occur.

g. Types of compensatory mitigation. The types of mitigation projects used in compensating for the loss of aquatic resources including wetland impacts are listed below. A definition for each type of compensatory mitigation project is provided in the attached definitions document. The current view is that restoration efforts provide the best potential for success in terms of providing functional compensation; however, each type of mitigation has utility and may be used as compensatory mitigation. When assigning credit for a particular type or mix of mitigation types within a mitigation project, the credit for the entire mitigation project should be compared to the debit(s) formulated for the impact(s) being authorized.

1. **Establishment**
2. **Restoration (includes re-establishment and rehabilitation)**
3. **Enhancement**
4. **Protection/Maintenance.**

h. Timing of mitigation construction. Financial and ecological considerations play important roles in mitigation project development. It is generally appropriate, in cases where there is adequate financial assurance and/or where the likelihood of success of the project is high, to allow an impact to occur before the mitigation plan is implemented. In this regard, the following minimum requirements should normally be satisfied prior to any construction in aquatic areas under an issued permit: (1) the mitigation plans have been approved; (2) the mitigation project site has been secured; (3) a permanent source of adequate water is available; and (4) the appropriate financial assurances have been established. In addition, initial physical and biological improvements should typically be completed no later than the first full growing season following impacts to the aquatic environment by

issuance of a permit. If that is not practicable, then additional compensatory mitigation or other measures that reduce the risk of failure should be considered as part of the mitigation plan (e.g., use of a higher mitigation ratio or increased financial assurance). For compensatory mitigation involving in-lieu-fee arrangements or mitigation banking agreements, the guidance applicable to those forms of mitigation must be followed. After-the-fact mitigation may be required where permits are issued in response to emergencies or to resolve an enforcement action. If a mitigation project is implemented and documented to be successful before the impacts occur from an authorized project, the mitigation ratio necessary to offset the authorized impacts could be reduced, because there would be no temporal loss or risk for the success of the mitigation.

i. Watershed/holistic approach for mitigation. Increasingly, the Corps is taking a watershed approach in the regulatory program. Mitigation projects are most successful if a holistic approach is taken where a variety of aquatic resource types are protected in a mitigation project (whether mitigation bank, in-lieu fee, or project-specific mitigation), including open water, wetland and upland mixes. Where such mix of ecological factors is included in the mitigation, all of those features (open water, wetland, and upland resources which add to the aquatic functions) should be included in the "credits" established.

3. Compensatory mitigation project development

a. Compensatory mitigation plans. The compensatory mitigation plan should describe in detail the physical, biological and legal characteristics of the project, and how the project will be established and operated. Compensatory mitigation proposals submitted with permit applications or nationwide permit pre-construction notices may be either conceptual or detailed depending on how much mitigation credit is needed to ensure the project has minimal impact to the aquatic resource and depending on the reliability of the parties implementing the mitigation to successfully follow through on the effort. However, careful consideration of each component should ensure consistency and enforceability of mitigation plans.

At a minimum, the components listed below should be considered and included in the mitigation plan and/or special permit conditions. A definition for each component is provided in the attached definitions document.

- 1. Baseline Information;**
- 2. Goals of the Mitigation;**
- 3. Mitigation Work Plan;**
- 4. Success Criteria;**
- 5. Monitoring Plan;**
- 6. Contingency Plan;**
- 7. Site Protection;**
- 8. Financial Assurances;**
- 9. Responsible party for long-term maintenance.**

b. Siting compensatory mitigation projects. The selection of a site for a compensatory mitigation project requires consideration of numerous factors including, but not limited to, the following:

- 1. Geographic location.** A mitigation project should generally be located within the area (e.g., watershed, county) where a project can reasonably be expected to provide appropriate compensation for the impacts to aquatic resources, including wetlands, under consideration.

Mitigation in nearby watersheds may be appropriate and the rationale for this determination should be provided in the mitigation plans. The further removed geographically from the authorized impact the mitigation site is located, the more care must be taken to ensure that the mitigation will reasonably offset the authorized impacts. Ratios should generally increase as the distance between the impact and mitigation sites increase.

2. Air traffic. Compensatory mitigation projects that have the potential to attract waterfowl and other bird species that might pose a threat to aircraft should not be sited within the limits specified by the Federal Aviation Administration Advisory Circular on Hazardous Wildlife Attracts on or near Airports (AC No: 150/5200-33, 5/1/97) currently 10,000 feet from the airport and 5 statute miles if the attractant may cause hazardous wildlife movement into or across the approach or departure airspace.

c. Use of off-site compensatory mitigation vs. on-site compensatory mitigation. The Corps will carefully consider the use of off-site mitigation, particularly for habitat mitigation such as many wetland mitigation projects. This is particularly important when there is no practicable opportunity for on-site compensation, or when use of an off-site mitigation project is environmentally preferable to on-site mitigation. The 2001 NRC report on mitigation in the Corps Regulatory Program found that on-site mitigation may not be appropriate because of hydrologic alterations and development on-site which could compromise the quality of the mitigation. On-site mitigation is appropriate for vegetated buffers adjacent to open waters and water quality features such as storm water ponds.

d. Agency roles and coordination. The Corps will often choose to coordinate proposed mitigation plans with the Environmental Protection Agency, the U.S. Fish & Wildlife Service, the National Marine Fisheries Service, and/or the Natural Resources Conservation Service for technical adequacy. In addition, it is appropriate for representatives from tribal, state, and local regulatory and resource agencies to participate where an agency has authorities and/or mandates directly affecting or affected by the establishment, use or operation of a project. The opportunity for interagency review of the mitigation plan should be commensurate with the form of authorization being contemplated and the scope of the mitigation requirement (e.g., most nationwide permit compensatory mitigation plans only require review by the Corps). In all cases, however, the Corps will determine the amount and type of compensatory mitigation required by the permit to offset the impacts to be authorized, taking into consideration the other agencies' comments. Tribal, state and local rules and/or laws may independently require more or less mitigation than the Corps requires, but those rules or laws have no legally binding effect on the Corps (unless incorporated as a condition of a Section 401 water quality certification or comparable legal document)

e. Public review and comment. The public should be notified of, and have an opportunity to comment on, all proposed mitigation bank or in-lieu-fee arrangements during the development process. Compensatory mitigation projects associated with standard permit applications should be made available for public comment to the extent practicable within the evaluation process (i.e., if the applicant provides a mitigation plan with the application it should be included in the public notice). However, a mitigation plan is not required for issuance of a public notice. If the mitigation plan is detailed, a synopsis may be included in the public notice and detailed plans made available for inspection at the office. For forms of authorization other than standard permits, the opportunity to comment should be based on the scope and potential for impacts to the aquatic resource.

f. Role of the permit applicant. Permit applicants may propose the use of mitigation banks, in-lieu fee arrangements, or separate activity-specific compensatory mitigation projects. For

individual permits, the Corps will accept the applicant's proposed mitigation if the Corps determines that the proposed mitigation is appropriate and sufficient (i.e., in or reasonably close to the impact area watershed and sufficient to offset the impacts on a functional basis). For regional general permits associated with Special Area Management Plans or other watershed planning tools, the Corps can identify specific mitigation requirements (e.g., mitigation bank or in lieu fee arrangement). This approach allows the Corps to take a watershed approach in regulating and mitigating impacts.

g. Party responsible for compensatory mitigation project success. All permits that require compensatory mitigation will contain a provision that specifies the party responsible for planning, accomplishing and maintaining the mitigation project. The Corps, in accordance with the success criteria established for the project, will make the determination of project success.

4. Management of compensatory mitigation project sites.

a. Management and protection.

1. Real estate interests. The wetlands, uplands and/or other aquatic resources in a mitigation project should be permanently protected with appropriate real estate instruments (e.g., conservation easements, deed restrictions, transfer of title to Federal or state resource agencies or non-profit conservation organizations). The Corps may require third party monitoring if necessary to insure permanent protection. In no case will the real estate provisions require a signature by a Corps official. Also, the Corps cannot hold deed restrictions on any property. The real estate provisions will not commit the Corps to any interest in the property in question, unless proper statutory authority is identified that authorizes such an arrangement.

2. Funding. The permittee or party responsible for accomplishing and maintaining the mitigation project, including contingency funds for adaptive management, is responsible for securing adequate funds to accomplish those responsibilities associated not only with the development and implementation of the project, but also its long-term management and protection.

3. Enforcement. All mitigation required by Corps permits is permanent unless otherwise noted in the permit document. The Corps may take enforcement action even after the identified monitoring period has ended.

b. Monitoring requirements. The permittee or the party responsible for accomplishing and maintaining the mitigation project is responsible for monitoring the mitigation project in accordance with monitoring provisions identified in the project plan. Monitoring plans and the frequency of reporting will be designed to allow the Corps to determine the level of success and identify problems requiring remedial action. Monitoring will be required for an adequate period of time, normally 5-10 years, to ensure success.

c. Remedial action. The project plan should stipulate the general procedures for identifying and implementing remedial measures on a mitigation project. The Corps will determine the need for remediation.

5. Duration. This guidance remains effective unless revised or rescinded.

FOR THE COMMANDER:

Encl

/signed/
 ROBERT H. GRIFFIN
 Brigadier General, U.S. Army
 Director of Civil Works

Definition of Terms

1. Baseline Information: The mitigation plan should include a written statement which defines the location, size, type, functions and amount of debit associated with the aquatic and other resources to be impacted and the amount of credit resulting from the mitigation project. This baseline information should include a description of the location of the proposed mitigation site in relation to the aquatic resource area to be impacted. Baseline information may include quantitative sampling data for both the proposed mitigation site and the project impact area. In addition, the size (e.g., acreage of wetlands, length and width of streams) and timing of the mitigation should be articulated clearly.

2. Goals of the mitigation: The mitigation plan should include a written statement of environmental goals and objectives. The goals should discuss the aquatic resource type (e.g., Hydrogeomorphic (HGM) class of wetlands or Rosgen class for streams) and the functions of the aquatic resources anticipated to be impacted and to be developed at the mitigation site(s). For example, for tidal wetlands, mitigation may be designed to replace lost finfish and shellfish habitat, lost estuarine production, or lost water quality functions associated with tidal backwater flooding.

3. Resource Comparison:

a. Credit. A unit of measure (e.g., functional capacity units in HGM) representing the gain of aquatic functions at a compensatory mitigation site; the measure of function is typically indexed to the number of acres of resources restored, established, enhanced, rehabilitated or protected/maintained as compensatory mitigation.

b. Debit. A unit of measure (e.g., functional capacity units in HGM) representing the loss of aquatic functions at an impact or project site; the measure of function is typically indexed to the number of acres lost or impact by issuance of the permit.

4. Mitigation Work Plan: The mitigation work plan should include detailed written specifications and descriptions of the work to be performed, including, but not limited to:

a. Boundaries of proposed restoration, establishment, enhancement, rehabilitation or protected/maintained areas (e.g., maps and drawings);

b. Replacement ratios developed consistent with the known difficulty and risk of replacement. The risk of mitigation failure is greater where the source and frequency of hydrology are uncertain and/or where a greater plant diversity is required. Therefore, these mitigation projects may require a higher ratio than those aquatic systems with greater predictability;

c. Construction methods, timing and sequence;

d. Data indicating historic and existing hydrology, stream bottom and/or soil conditions;

e. Source of water supply and connections to existing waters and proximity to uplands. In some areas, a water budget may also be necessary;

f. Elevations of existing ground at mitigation site;

g. Plant materials and scheme for planting;

h. Methods and times of year for planting;

i. Plans for control of exotic vegetation;

j. Elevation(s) and slope(s) of the proposed mitigation area to ensure they conform with required elevation for target plant species. Survey data indicating final elevations of the area(s) to be planted should be provided prior to commencement of planting;

k. Erosion control measures to prevent upland erosion into site are indicated;

l. Stream or other open water geomorphology and features such as riffles and pools, bends, deflectors, etc.;

m. A plan outlining the short and long term management and maintenance of the mitigation site.

5. Ecologically based success criteria: Written criteria will be developed to measure success of the compensatory mitigation and included in the permit. The success criteria will be used to determine if the mitigation is in compliance with the terms and conditions of the permit. The criteria may set specific quantitative measurements that must be met (e.g., a minimum duration of soil saturation based on groundwater well data, 80 percent vegetative cover by target species by the end of the second growing season). The criteria can also be based on reference sites and should provide the flexibility necessary to allow, when environmentally desirable, unanticipated changes (e.g., natural stream channel adjustments or long-term drought conditions). This flexibility is critical because mitigation projects do not benefit from continuous requirements to replant target species that cannot survive in the restored, established or enhanced aquatic area as designed. Changing plant species or the physical design parameters should be undertaken early in the mitigation phase when remediation is required. Criteria for the operation of mitigation sites should be based on the following (the detail will depend on the size and ecological importance of the mitigation area):

a. Consider the hydrogeomorphic and ecological landscape and climate. Because landscapes have natural patterns that provide for sustainable levels of functions of individual aquatic areas including wetlands, permittees should locate mitigation sites in the comparable hydrogeomorphic class and/or the appropriate landscape setting. Sites with nearby wetlands will have natural recruitment sources for plants and animals resulting in more overall sustainability.

b. Adopt a dynamic landscape perspective. Mitigation site locations should be made resilient to disturbances that occur in the surrounding landscapes by, for example, preserving large buffers and connectivity to other aquatic areas and tapping into surrounding natural processes and energies.

c. Restore or develop naturally variable hydrological conditions. The hydrology of naturally

occurring wetlands and other aquatic areas often fluctuates in water level, flow distribution, and frequency and this variability should translate to mitigation sites. Preferably, hydrology should be restored without reliance on human intervention (e.g., pumping water) that requires continual maintenance.

d. Whenever possible, choose restoration over establishment. Restoration generally is more feasible and sustainable than establishment and has a greater likelihood of success. Restoration includes rehabilitation (e.g., removal of a chronic source of sediment to a stream with an excessive bedload).

e. Avoid over-engineered structures. Mitigation projects should be designed to require minimal long-term maintenance.

f. Pay particular attention to appropriate planting elevation, depth, soil type and seasonal timing and depth, duration and timing of water delivery.

g. Provide appropriately heterogeneous topography. Microtopography and topographic variation are needed to promote appropriate hydroperiods that plants and animals depend on for survival. Use adjacent or nearby natural systems as models for aquatic elevations and flooding regimes. Require as-built survey data from sites where changes in topographic elevations are proposed as part of the mitigation plan.

h. Pay attention to subsurface conditions, including soil and sediment geochemistry and physics, soil compaction, groundwater quantity and quality, and infaunal communities. An understanding of soil permeability, texture and stratigraphy is needed before mitigation takes place. Also, the chemical structure of soils, surface water, groundwater and tides will affect the long-term outcome of a mitigation site. If practical, use the topsoil from the impacted wetlands for construction of the new wetland, as it will contain a hydrophytic vegetation seed bank.

i. Consider complications associated with wetland and other area establishment or restoration in seriously degraded or disturbed sites. Disturbances associated with degraded wetlands in developed areas (e.g., subdivisions) can result in the extensive invasion by exotic

species requiring active long-term management to support native species and maintain natural processes.

j. Require early monitoring as part of adaptive management. Mitigation should incorporate a monitoring program that provides early indications of problems such as exotic plant infestations integrated with an adaptive management process.

k. Take a holistic watershed approach when requiring mitigation. Typically, a mix of habitats, including not only wetlands, streams and other open waters but also uplands, should be considered.

6. Contingency Plan: A contingency plan should be provided to allow for mid-course corrections, if necessary. A performance bond will be considered and implemented if appropriate.

7. Site Protection: A written discussion of the means of protecting the mitigation area(s) will be developed and the permit conditioned accordingly. Methods include, but are not limited to, conservation easements, deed restrictions, preservation areas, etc. Generally, conservation easements

held by state or local government, other Federal agencies such as the Fish and Wildlife Service, or non-governmental groups such as The Nature Conservancy or land trusts, are preferable to deed restrictions. Using homeowner's associations as the grantee in a deed restriction or conservation easement or simply relying on rules that govern homeowner's associations has had mixed results nationwide. Consequently, homeowner's associations should be used for these purposes only in exception circumstances.

8. Financial Assurances: Sufficient funds or other financial assurances need to be present to cover contingency actions in the event of default by the party responsible for mitigation success or failure to meet the success criteria. Accordingly, projects posing a greater risk of failure (e.g., no naturally occurring hydrology) should have comparatively higher financial sureties in place than those where the likelihood of success is more certain. This is especially important in situations where the impacts occur prior to construction and complete functioning of the mitigation site. Financial assurances may be in the form of performance bonds, irrevocable trusts, escrow accounts, casualty insurance, letters of credit, legislatively enacted dedicated funds for government operated banks or other approved instruments. Such assurances may be phased-out or reduced, once it has been demonstrated that the project is functionally mature and/or self-sustaining in accordance with success criteria.

9. Mitigation Types: These are standard definitions for wetlands. Similar criteria and approaches should be used for streams and other open water areas.

a. Establishment: The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a wetland did not previously exist. Establishment results in a gain in wetland acres.

b. Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:

1. Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland acres.

2. Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres.

c. Enhancement: The manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for a specified purpose(s) such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. This term includes activities commonly associated with enhancement, management, manipulation, and directed alteration.

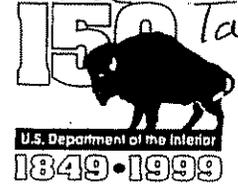
d. Protection/Maintenance: The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. Includes purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. This term also includes activities commonly associated with the term preservation. Protection/Maintenance does not result in a gain of wetland acres.

Apéndice C-d
Tab 5



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Boqueron Field Office
P.O. Box 491
Boqueron, Puerto Rico 00622



April 3, 2003

Mr. Edwin Muñiz
Chief, Regulatory Section
US Army Corps of Engineers
400 Fernandez Juncos Ave
San Juan, Puerto Rico 00901-3299

RECEIVED
Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP

Re: 200106183 (IP-JR) Palmas del Mar

Dear Mr. Muñiz:

The interested agencies of the Department of the Interior have reviewed the above referenced public notice. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat.401, as amended; 16 U.S.C. 661 et seq.).

The applicant is proposing to construct a shopping center. As part of the construction activities about 6 acres of wetlands and riparian habitat will be impacted. The channelization or relocation of several streams, all tributaries to the Candelerero River, is also being proposed. The applicant is proposing two mitigation areas, one in the proposed river channel and one off site.

The Service does not believe that the channelization or placement in culverts of these streams is necessary and the project can be built around the existing stream systems. The proposed mitigation plan does not meet the criteria for mitigation plans as outline in Regulatory Guidance Letter 01-1. The plan lacks details regarding baseline information, goals, work plan, site protection, financial assurances, long term maintenance, etc.

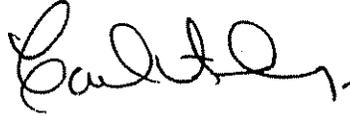
The proposed stream mitigation will take place in an artificial channel that does not follow any of the criteria of natural stream design. The area will be confined by vertical gabion walls. This type of structure is subject to failure due to undermining of the gabions during high flows and flood conditions.

We recommend that the applicant should consider alternate designs for the project that incorporate the existing natural features into the project layout. Based on the above we recommend that a permit for this action not be issued until the

4

Thank you for the opportunity to comment on this action, if you have any questions please contact Felix Lopez of my staff at 787 851-7297 x 26.

Sincerely,

A handwritten signature in black ink, appearing to read 'Carlos A. Diaz', with a stylized flourish at the end.

Carlos A. Diaz
Assistant Field Supervisor

fhl

cc:

EQB, Water Quality, San Juan

PRPB, CZM, San Juan

DNER, San Juan

NMFS, Lajas

EPA, San Juan



United States
Department of
Agriculture

Forest
Service

International Institute of
Tropical Forestry

Tel: (787) 766-5335

Jardin Botánico Sur
1201 Calle Ceiba
San Juan PR 00926-1119
Fax: (787) 766-6302

Apéndice C-d
Tab 5

File Code: 1900
Date: March 24, 2003

Chief, Antilles Regulatory Section
U.S. Army Corps of Engineers
400 Fernández Juncos Avenue
San Juan, Puerto Rico 00901-3299

**Permit Application No. 200106183(IP-JR)
(JPA#287)**

RECEIVED
Palmas Del Mar Properties, Inc.

MAR 24 2003

LUIS R. RODRIGUEZ, PP

This proposal does not contain sufficient information to sustain its allegations.

How would the new channel perform flood attenuation functions? How would it perform biofiltering and sediment retention functions? It appears the new channel is going to behave as a pond, which raises the question of how would the flow functions of the old channel be performed at the site?

The proposed compensation wetland appears to be disconnected from the hydrologic system of the site, and it is not clear that it will perform the functions of the more mature wetland it is displacing.

The importance of the argument about past modification of the primary tributary upstream from the project it is also not clear. Such prior modification might preclude further modification if cumulative impacts on the overall hydrologic system are considered.

It appears that this proposal requires further analysis before it is considered for a permit.

Sincerely,

ARIEL E LUGO
Director

Cc:

- L. Rodríguez, Secretary, DNER, San Juan, PR
- C. Torres Meléndez, Secretary, PB, Santurce, PR
- A. Rodríguez, President, PB, Santurce, PR
- C. Soderberg, Director, EPA, San Juan, PR
- J. Oland, Field Supervisor, USDWS, Boquerón, PR
- A. Vale, CDK, San Juan, PR

11 24 03 11 11





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE
 Southeast Regional Office
 9721 Executive Center Drive N.
 St. Petersburg, Florida 33702
 (727) 570-5317, FAX 570-5300

*Appendix C-d
 Tab 5*

April 1, 2003 F/SER4:LC

RECEIVED
 Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP

Edwin E. Muñiz
 Chief, Antilles Regulatory Section
 Department of the Army, Corps of Engineers
 400 Fernandez Juncos Avenue
 San Juan, Puerto Rico 00901-3299

Dear Mr. Muñiz:

We have reviewed the project plans as advertised in the following public notice.

In our assessment of the project, coordinated with the U.S Fish and Wildlife Service (FWS), we have concluded that the work could adversely impact fishery resources for which the National Marine Fisheries Service (NOAA Fisheries) is responsible. Therefore, comments and recommendations submitted to you by the FWS also represent those of NOAA Fisheries.

Should there be subsequent changes in the plans, please notify us directly so that we may reconsider our position on these matters.

<u>NOTICE NO.</u>	<u>COUNTY</u>	<u>APPLICANT</u>	<u>NOTICE DATE</u>	<u>DUE DATE</u>
200106183	Humacao	Palmas del Mar Properties, Inc.	3/6/03	4/5/03

Sincerely,

Ricky N. Ruebsamen
 Acting Assistant Regional Administrator
 Habitat Conservation Division

cc:
 NMFS-PR
 FWS-PR

JR



Apéndice C-d
Tab 5

STATE HISTORIC PRESERVATION OFFICE
Office of the Governor

March 13, 2003

Mr. Edwin Muñiz
Chief, Regulatory Section
U.S. Army Corps of Engineers
400 Fernández Juncos Ave.
San Juan, P.R. 00901-3299

SHPO: 03-10-03 SHOPPING CENTER, PR #906, CANDELERØ
WARD, HUMACAO, PUERTO RICO/200106183(IP-JR)

Dear Mr. Muñiz:

As part of our Office's responsibilities, we are to consult with and assist the Federal Agency regarding the identification of cultural resources within the undertaking's area of potential effects, in accordance with 36 CFR Part 800.4. After a review of the preliminary information submitted for the above referenced project, we have determined that a Cultural Resources Assessment (Stage I) is necessary. This study identifies the presence or absence of cultural resources of architectural, archaeological, and/or historic significance within the project's area of potential effects. In order to comply with the National Historic Preservation Act of 1966, as amended, and 36 CFR Part 800, efforts to identify historic properties should follow the Secretary's "Standards and Guidelines for Archaeology and Historic Preservation"(48 FR 44716) as well as our Office's guidelines.

We emphasize that construction and/ or earth movement shall not commence in the project area until, the Section 106-review process, as codified in 36 CFR Part 800, has concluded.

As soon as we receive the report, we will continue with the evaluation of the project. If you have any questions, please do not hesitate to contact our Office. We appreciate your interest in the rescue and preservation of our national historical heritage and we reiterate our commitment to assist you in this endeavor.

Sincerely,

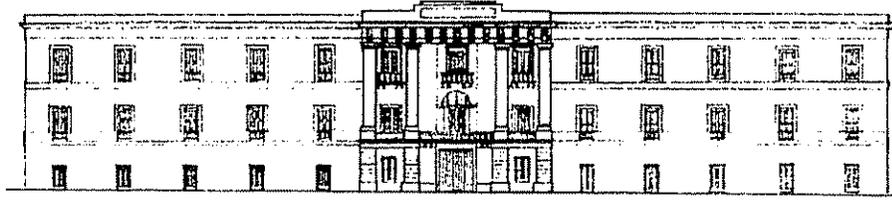

Enid Torresosa de la Rosa, MSHPO
State Historic Preservation Officer

ETD/MB/img

RECEIVED
Palmas Del Mar Properties, Inc.

APR 21 2003

LUIS R. RODRIGUEZ, PP



Rio Candeleiro Palmas del Mar

Hydrologic & Hydraulic Analysis for Channel Modifications

FEMA Submittal and Letters

Gregory L. Morris & Assoc.
San Juan, PR
2000

Gregory L. Morris & Assoc.

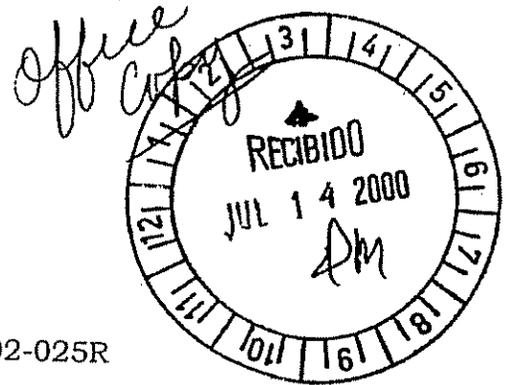
265 San Francisco St.
P.O. Box 9024157
Old San Juan, Puerto Rico 00902-4157 USA

Tel (787) 723-8005
Fax (787) 721-3196
email: gmorris@caribe.net

♦ Hydraulics ♦ Hydrology ♦ Environmental Engineering ♦ Sedimentation Engineering ♦ Environmental Analysis ♦

14 de Julio del 2000

Honorable José Caballero
Presidente de la Junta de Planificación
Estado Libre Asociado de P.R.
Junta de Planificación
Oficina del Gobernador
Santurce, P.R.



Caso Núm: Río Candelero, Palmas del Mar, Humacao, 99-02-025R

Re: Análisis Hidrológico-Hidráulico para la Modificación del Canal del Río Candelero, Palmas del Mar.

Honorable Ingeniero José Caballero:

Por este medio y en representación de Palmas del Mar, se somete ante la Junta de Planificación el análisis de referencia con el objeto de solicitar el permiso final al cambio de los mapas de FEMA del caso Núm. 99-02-025R. Para tales efectos acompaño en los siguientes documentos:

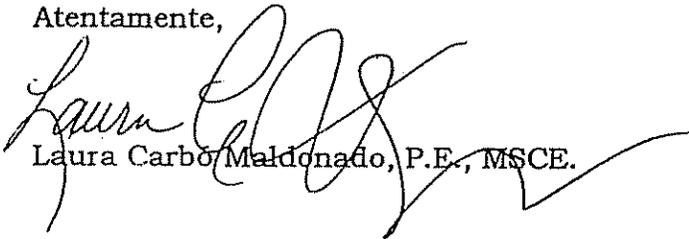
1. Cartas de FEMA aprobando el CLOMAR para el proyecto. En las mismas se enlista los documentos a someterse para la solicitud final.
2. El Estudio Hidrológico Hidráulico sometido ante FEMA el 9 de abril de 1999 modificado con los datos obtenidos del As-built de la canalización.
3. Apéndice A: Formas de FEMA tanto para la solicitud original (CLOMAR) como para la solicitud actual (LOMAR).
4. Apéndice B: Hidrología HEC-1
5. Apéndice C: Modelo Existente HEC-RAS
6. Apéndice D: Condición propuesta por el HEC-RAS
7. Apéndice E: Condición futura propuestas HEC-RAS
8. Mapa de Localización de secciones transversal.



9. As-built Plan de la canalización
10. Copia del mapa de FEMA 0252C y 0255D de 2 de junio de 1999 señalando la condición existente y la propuesta.
11. Carta de certificación de responsabilidad de mantenimiento y limpieza del canal.
12. Carta de los dueño a afectarse con esta solicitud.

Le solicitamos que con esta documentación presentada a la Junta se trámite el permiso final para la revisión de mapa solicitada para este caso. De necesitar alguna información adicional o de tener algún comentario favor comunicarse con nuestras oficinas al 723-8005.

Atentamente,



Laura Carbo Maldonado, P.E., MSCE.



Federal Emergency Management Agency

Washington, D.C. 20472

SEP 16 1999

The Honorable Pedro J. Rossello
Governor of Puerto Rico
Post Office Box 9020082
San Juan, Puerto Rico 00902-0082

IN REPLY REFER TO:

Case Number: 99-02-025R
Community Name: Commonwealth of
Puerto Rico
Community Number: 720000

(104)

Dear Mr. Rossello:

This is in reference to a December 1, 1998, letter from Mr. José R. Caballero-Mercado, Chairman of the Puerto Rico Planning Board, requesting a conditional Letter of Map Revision (LOMR) for the proposed developments in Palmas Del Mar, in the Municipality of Humacao, along the Río Candelero. The proposed project, which will be located from a point approximately 600 meters (1,970 feet) upstream of the Atlantic Ocean to a point approximately 3,000 meters (9,840 feet) upstream of the Atlantic Ocean, will consist of two phases (Phase 1 and Phase 2). This conditional LOMR will serve to provide determinations for both phases of the proposed project. The determination for Phase 2 will be contingent upon Phase 1 being built as proposed, and reflected in the form of an as-built LOMR in follow up to the determination for Phase 1, presented in this conditional LOMR. Phase 1 will consist of channelization and the placement of fill along the Río Candelero. Additionally, fill will be used to construct a levee along the south bank of the Río Candelero. However, the levee will not be shown to protect an area from the 1% annual chance (100-year) flood because it will be constructed outside the 1% annual chance floodplain. Phase 2 will consist of the replacement of the existing temporary low crossing at Academy Drive with a conventional highway bridge and the construction of a new bridge for the Club House Drive crossing. The area of the proposed project is shown on the Commonwealth of Puerto Rico Flood Insurance Rate Map (FIRM) number 720000, panels 0252 C and 0255 D, both dated June 2, 1999.

We received the following data, prepared by Gregory L. Morris & Associates, in support of this request:

- two HEC-1 hydrologic models, both dated March 29, 1999, of the 10% (10-year), 2% (50-year), 1%, and 0.2% (500-year) annual chance flood discharges for the Río Candelero, one representing existing conditions and reflecting proposed conditions for the completion of Phase 1, and one reflecting proposed conditions for the completion of Phase 2;
- a HEC-RAS hydraulic model, dated April 5, 1999, of the 10%, 2%, 1%, and 0.2% annual chance floods for a portion of the Río Candelero, representing existing conditions;
- a HEC-RAS hydraulic model, dated April 6, 1999, of the 10%, 2%, 1%, and 0.2% annual chance floods for a portion of the Río Candelero, reflecting proposed conditions for the completion of Phase 1;

- a HEC-RAS hydraulic model, dated April 7, 1999, of the 10%, 2%, 1%, and 0.2% annual chance floods for a portion of the Río Candelero, reflecting proposed conditions for the completion of Phase 2;
- uncertified topographic mapping, dated April 19, 1999, titled Flood Zone Limits, Río Candelero – Palmas Del Mar, at a scale of 1:6,000, with a contour interval of 0.5 meter (1.9 feet), showing the location and orientation of the cross sections used in the aforementioned HEC-RAS hydraulic models, the proposed 1% annual chance floodplain reflecting the completion of Phase 1, and the proposed 1% annual chance floodplain reflecting the completion of Phase 2;
- a letter, dated June 17, 1999, from Gregory L. Morris, P.E., Ph.D., of Gregory L. Morris Associates, certifying that no structures will be impacted by the proposed project, and evaluating the alternatives to the proposed project and explaining why these are not feasible;
- a letter, dated June 29, 1999, from Mr. Carlos Cacéres, Director of Engineering, Construction & Environmental, Palmas del Mar Properties Inc., certifying that Palmas del Mar Properties Inc. has no objection to the proposed increase in the 1% annual chance water-surface elevations; and
- completed application/certification forms, including commonwealth concurrence with this request.

We received all data necessary to process this request by July 7, 1999.

The June 2, 1999, FIRM shows a portion of the flooding effects from the Río Candelero as an approximate Zone A, with detailed riverine and coastal flooding in the vicinity of the confluence with the Atlantic Ocean. The aforementioned existing conditions HEC-RAS hydraulic model, dated April 5, 1999, reflects more detailed information than that shown on the FIRM and establishes 1% annual chance water-surface elevations for a portion of the Río Candelero. Therefore, the existing conditions model was used as the baseline model against which to compare the effects of the proposed project.

When we compared the existing conditions model to the proposed conditions model reflecting the completion of Phase 1, we determined that the completion of Phase 1 would cause increases and decreases in the 1% annual chance water-surface elevations. A maximum increase of 0.33 meter (1.08 feet) would occur at a point approximately 560 meters (1,840 feet) upstream of the confluence with the Atlantic Ocean. A maximum decrease of 0.02 meter (0.07 foot) would occur at a point approximately 80 meters (260 feet) upstream of the confluence with the Atlantic Ocean.

When we compared the proposed conditions model reflecting the completion of Phase 1 to the proposed conditions model reflecting the completion of Phase 2, we determined that Phase 2 would cause increases and decreases in the 1% annual chance water-surface elevations. A maximum increase of 0.39 meter (1.28 feet) would occur at a point approximately 1,350 meters (0.84 mile) upstream of the confluence with the Atlantic Ocean. A maximum decrease of 1.46 meters

(4.79 feet) would occur at a point approximately 2,210 meters (1.37 miles) upstream of the confluence with the Atlantic Ocean.

We have reviewed the submitted data and determined that both Phase 1 and Phase 2 meet the minimum floodplain management criteria of the National Flood Insurance Program (NFIP). If Phase 1 is built as proposed, a revision to the Flood Insurance Study (FIS) and FIRM for your commonwealth will be warranted. This revision will show the reclassification of an area of approximate Zone A flooding to an area of detailed Zone AE flooding with established Base (1% annual chance) Flood Elevations (BFEs), as shown by the aforementioned data. The floodplain will narrow by a maximum of 1,600 meters (1.0 mile) at a point approximately 1,255 meters (0.8 mile) upstream of the confluence with the Atlantic Ocean.

Additionally, if Phase 1 is built as proposed and reflected in the form of an as-built LOMR request in follow-up to the portion of this conditional LOMR that provides a determination for the completion of Phase 1, then the completion of Phase 2, if built as proposed, will warrant a further revision to the FIS and FIRM for your commonwealth. This revision will show increases and decreases in the 1% annual chance water-surface elevations. The maximum increase of 0.39 meter (1.28 feet) will occur at a point approximately 1,350 meters (0.84 mile) upstream of the confluence with the Atlantic Ocean. The maximum decrease of 1.46 meters (4.79 feet) will occur at a point approximately 2,210 meters (1.37 miles) upstream of the confluence with the Atlantic Ocean, as shown by the aforementioned data. Because Phase 1 includes the channelization of a portion of the Río Candelero, and the 1% annual chance flood will be contained within that channel, the increases and decreases in the 1% annual chance water-surface elevations due to Phase 2 will not result in a revision to the 1% annual chance floodplain.

However, if Phase 1 is not built as proposed, then the data submitted in support of this conditional LOMR can not be used to request an as-built LOMR in follow-up to the portion of this conditional LOMR that provides a determination for the completion of Phase 1. Instead, you will be required to request a LOMR based on as-built conditions to reflect the completion of Phase 1. Additionally, if you would like to request a conditional LOMR to provide an accurate determination based on the completion of Phase 2, you should submit a request for a conditional LOMR, using the information from the effective as-built LOMR reflecting the completion of Phase 1 as the effective and existing conditions. Future revisions to the FIS and FIRM, or restudies of the flood hazards in this area, could modify this determination.

We based these determinations on the 1% annual chance flood discharges computed in the aforementioned HEC-1 hydrologic models. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your commonwealth's flood hazards would consider the cumulative effects of development on flood discharges and could, therefore, establish greater flood hazards in the area.

Your commonwealth must approve all proposed floodplain development, including this proposed project, and ensure that permits required by other Federal agencies and/or Commonwealth and local agencies have been obtained. Commonwealth officials may set standards for construction that are more restrictive than the minimum NFIP standards or may limit development in floodplains, based on knowledge of local conditions and in the interest of safety. If the Commonwealth of Puerto Rico or the Municipality of Humacao have adopted more restrictive or

comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

The submitted data demonstrated compliance with NFIP regulations Paragraph 65.12(a), which is necessary when a community proposes to permit encroachments upon an adopted floodway that will result in any increase in flood levels within the community during the base (1% annual chance) flood. Upon completion of the project, we will require evidence of compliance with NFIP regulations Paragraphs 65.12(b) and (c) before revising your commonwealth's FIS and FIRM.

NFIP regulations Section 65.3 states that when a community's BFEs increase or decrease because of physical changes that affect flooding conditions, the community must submit technical or scientific data to the Federal Emergency Management Agency (FEMA) that substantiate these changes. The community must submit such data as soon as possible, but no later than 6 months after such data become available, so that FEMA can base risk premium data and floodplain management requirements on current information.

Channel modifications will fail to function as designed without proper maintenance, such as regular clearing of the channelized area. To avoid such failures, we require participating communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained according to NFIP regulations Subparagraph 60.3(b)(7). Therefore, upon completion of the project, your commonwealth must submit documentation ensuring that the modified channel will be maintained to preserve its design function. We may request that your commonwealth submit a description and schedule of its channel maintenance, as outlined in Subparagraph 65.6(a)(12) of the NFIP regulations.

If fill is placed in your community to raise the ground surface to or above the BFE, your commonwealth must meet the criteria of NFIP regulations Subparagraph 65.5(a)(6), which require that the commonwealth's NFIP permit official, a registered professional engineer, or a soils engineer, certify the following:

- that the fill has been compacted to 95% of the maximum density obtainable, as measured by the Standard Proctor Test method for fill pads prepared for residential or commercial structure foundations;
- that fill slopes for granular materials are not steeper than one vertical to one-and-one-half horizontal (steeper slopes must be justified); and
- that adequate erosion protection is provided for fill slopes exposed to moving floodwaters (slopes exposed to flows with velocities of up to 5 feet per second [fps] during the 1% annual chance flood must, at minimum, be protected by a cover of grass, vines, weeds, or similar vegetation; slopes exposed to flows with velocities greater than 5 fps during a 1% annual chance flood must, at minimum, be protected by stone or rock riprap).

We remind you of the elevation and floodproofing requirements contained in NFIP regulations Subparagraphs 60.3(c)(2) through (4). These requirements apply to the construction of new residential and nonresidential structures, as well as to the substantial improvement of existing

structures, located within the 1% annual chance floodplain. Further, in accordance with Subparagraph 65.5(a)(4), for a structure to be removed from the 1% annual chance floodplain, both the lowest adjacent grade (the lowest ground touching the structure) and the lowest floor (including the basement) of the structure must be at or above the BFE.

Instead of issuing a LOMR, we may incorporate the effects of the completed project (Phase 1 and Phase 2) into the FIS and FIRM through a physical map revision, which entails revising and republishing the FIS and FIRM. A physical map revision, because it involves preparing preliminary versions of the revised FIS and FIRM for community review, takes considerably longer than the issuance of a LOMR; however, it provides due process to property owners who may be affected by increased BFEs, 1% annual chance floodplains, or floodways.

Upon completion of Phase 1, your commonwealth should request a revision to the FIS and FIRM. The revision request should be submitted to our Regional Office in New York, New York, and include the data listed below.

1. Evidence of compliance with NFIP regulations Paragraph 65.4(b), which states that "all requests for changes to effective maps...must be made in writing by the community's Chief Executive Officer (CEO) or an official designated by the CEO. Should the CEO refuse to submit the request on behalf of another party, we will agree to review the request only if written evidence is provided indicating the CEO or designee has been requested to do so."
2. As-built plans of the project, including the placement of fill along the Río Candeleró, certified by a registered professional engineer.
3. HEC-RAS hydraulic models of the 10%, 2%, 1%, and 0.2% annual chance floods and floodway for the Río Candeleró, representing as-built conditions for Phase 1.
4. Delineation of the 1% annual chance floodplain and floodway, and the locations and alignments of the cross sections and flow lines used in the hydraulic models. Please show this information on a certified map of suitable scale and topographic definition to provide reasonable accuracy.
5. A copy of the Commonwealth of Puerto Rico FIRM number 720000, panels 0252 C and 0255 D, both dated June 2, 1999, annotated to show the 1% annual chance floodplain and floodway representing as-built conditions.
6. Evidence of compliance with NFIP regulations Subparagraph 65.5(a)(6) regarding fill placement, and Subparagraph 60.3(b)(7) regarding channel maintenance, as previously discussed.
7. Written acceptance of the proposed revision by any landowner affected by the increased 1% annual chance water-surface elevations. Without such acceptance, finalizing a revision to reflect the effects of the completed project may be delayed to allow for public review and comment.

If Phase 1 is built as proposed, you do not have to resubmit items 3 through 5; otherwise, please resubmit them. If the effects of the project are incorporated into the FIS and FIRM through a physical map revision, you do not need to submit property owner acceptance because the physical map revision process includes a comment period during which property owners can submit their concerns about the revision to the FIS and FIRM.

Upon completion of Phase 2, your community should request an additional revision to the FIS and FIRM. The revision request should be submitted to our Regional Office in New York, New York, and include items 1 and 3 through 7, for Phase 2, as outlined above. Additionally, the submittal should include as-built plans of the project, including the construction of the new bridge for the Club House Drive crossing and the replacement of the temporary low crossing at Academy Drive with a conventional highway bridge.

If Phase 2 is built as proposed, you do not have to resubmit items 3 through 5, as related to Phase 2; otherwise, please resubmit them. If the effects of the project are incorporated into the FIS and FIRM through a physical map revision, you do not need to submit property owner acceptance because the physical map revision process includes a comment period during which property owners can submit their concerns about the revision to the FIS and FIRM.

We have enclosed a copy of our application/certification forms for your reference. Typically, we do not require these forms if the project is completed as proposed. The enclosed document, titled Requirements for Submitting Application/Certification Forms to Support Requests for NFIP Map Revisions describes in detail the circumstances under which the forms are required.

The NFIP is not funded by taxes; rather, its expenses are borne by policyholders. To minimize the financial burden on our policyholders, FEMA has established a flat processing fee for review of proposed projects and requests for revisions to published flood information and maps. Currently the fee for an as-built LOMR request in follow-up to this conditional LOMR is \$3,400, which must be received before we can begin processing. This fee represents the new fee schedule effective March 1, 1999. Please note that the fees are subject to change, and the fee for the follow-up LOMR may change between the date of this letter and the date that the follow-up LOMR is submitted. If items 3 through 5 listed above must be resubmitted following the completion of either Phase 1 or Phase 2, the review and processing fee could be higher. Your payment must be a check or money order made payable to the National Flood Insurance Program and should be forwarded to:

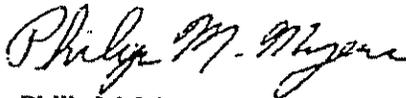
Federal Emergency Management Agency
Fee Charge System Administrator
P.O. Box 3173
Merrifield, Virginia 22216

Once we receive the items listed above, including the processing fee, complete our review, and verify that the completed project meets all applicable NFIP standards, we will revise your community's FIS and FIRM to incorporate the effects of the completed project, as appropriate.

Part 65 of the NFIP regulations further describes the nature and extent of the material needed to support a request to revise a FIS and FIRM. Your compliance with the criteria outlined in this document will streamline our review, allowing us to expeditiously revise your community's FIS and FIRM.

If you have any questions, please do not hesitate to contact the Director, Mitigation Division of FEMA in New York, New York, at (212) 225-7200, or me at our Headquarters Office in Washington, D.C., at (202) 646-2755, or by facsimile at (202) 646-4596.

Sincerely,



Philip M. Myers
Project Engineer
Hazards Study Branch
Mitigation Directorate

For: Matthew B. Miller, P.E., Chief
Hazards Study Branch
Mitigation Directorate

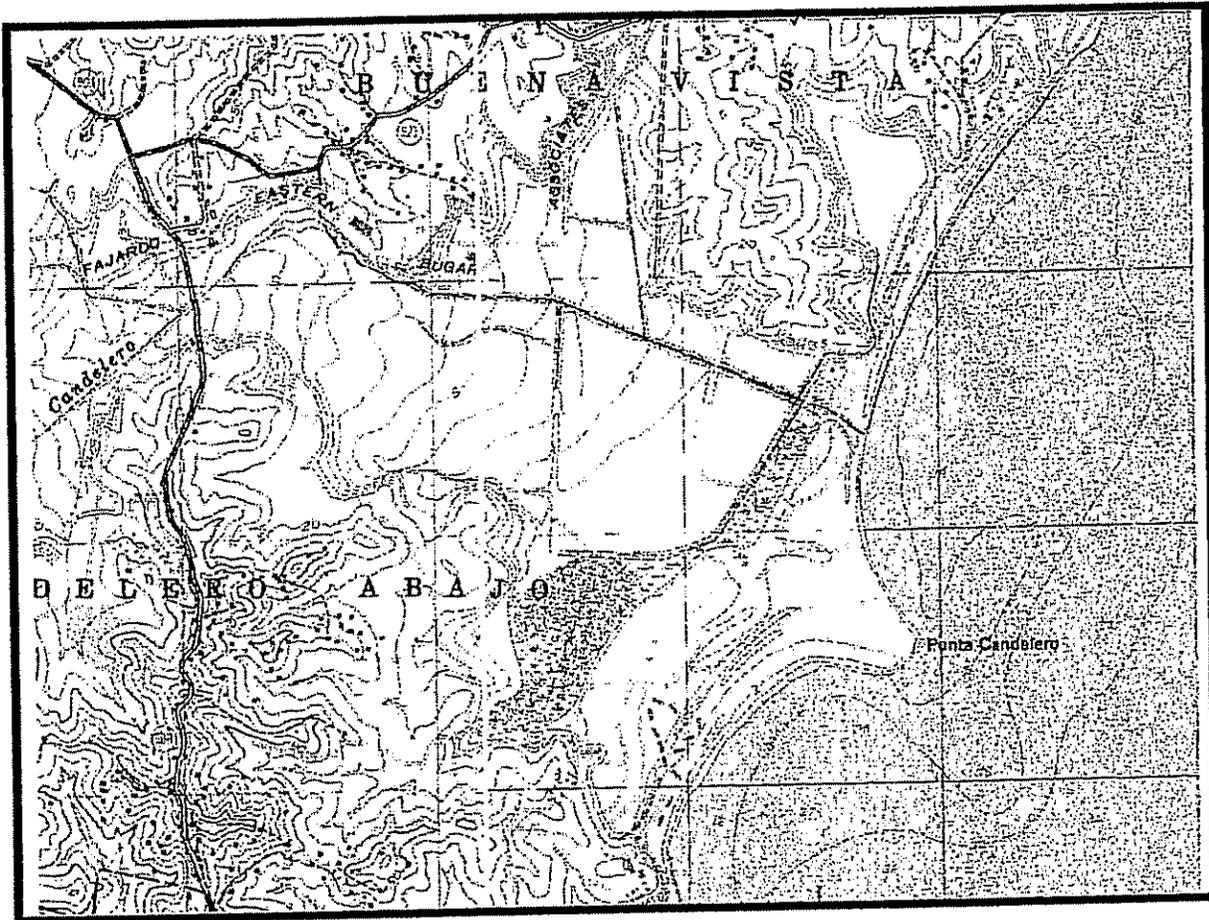
Enclosures

cc: Mr. José R. Caballero-Mercado
Ms. Iris Delgado, FEMA Caribbean Area Office
Gregory L. Morris, P.E., Ph.D.
Mr. Carlos Cacéres
Commonwealth Coordinator

Hydrologic and Hydraulic Analysis :

Palmas del Mar Interior Drainage

Humacao, Puerto Rico



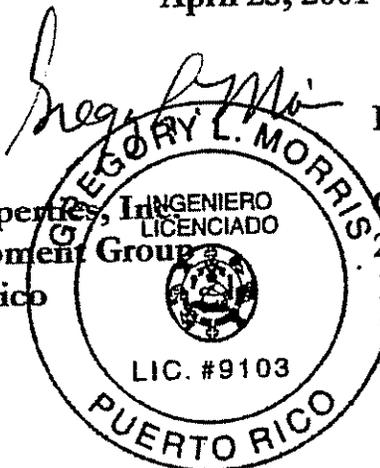
April 23, 2001

Prepared for:

Palmas del Mar Properties, Inc.
Real Estate Development Group
Humacao, Puerto Rico

Prepared by:

Gregory Morris & Associates
265 San Francisco Street
P. O. Box 9024157
San Juan, Puerto Rico



Gregory L. Morris & Associates.

COPY

OFFICE COPY

265 San Francisco St.
P.O. Box 9024157
Old San Juan, Puerto Rico 00902-4157 USA

Tel. (787) 723-8005
Fax (787) 721-3196
email: gmorris@caribe.net

• Hydraulics • Hydrology • Environmental Engineering • Sedimentation Engineering • Groundwater Analysis • Civil Design •

April 24, 2001

Dr. Carlos Padín
Secretary
Department of Natural and Environmental Resources
P.O. Box 9066600
Pta. de Tierra Station
P.R. 00906-6600

Dr. Padín:

Enclosed please find two copies of each of the following reports, for your review and endorsement:

- "Stormwater Detention Storage Analysis: Punta Candler Area of Palmas del Mar, Humacao, Puerto Rico", dated August 30, 1999
- "Hydrologic and Hydraulic Analysis: Palmas del Mar Interior Drainage, Humacao, Puerto Rico", dated April 23, 2001

Please note that these two reports should be analyzed together. If you have any comments or questions, feel free to contact our office.

DRNA
26 APR 2001
OFICINA DE SECRETARIA

Sincerely,
Gregory L. Morris
Gregory L. Morris

COPY

COPY



ESTADO LIBRE ASOCIADO DE PUERTO RICO
DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

04 OCT 2002

ING GREGORY L MORRIS
GREGORY MORRIS & ASSOCIATES
265 SAN FRANCISCO STREET
PO BOX 9024157
SAN JUAN PR

Estimado ingeniero Morris:

**Hydrologic and Hydraulic Analysis
Palmas del Mar Interior Drainage
Humacao**

**C-5-2001-394
(2003015250)**

Hemos evaluado los documentos sometidos en relación al asunto descrito en epígrafe.

El estudio de referencia preparado por usted con fecha del 23 de abril de 2001, evalúa el drenaje de una finca de 1086 acres dividida en 34 subcuencas, la parte norte de la finca se encuentra en Zona I con la mayor extensión en Zona 2. En el estudio se establece que un dique al sur del Río Candelero sacará el área de la zona inundable. El dique fue propuesto en un estudio previo que propone una revisión a los mapas de FEMA.

El estudio propone un conglomerado de 16 parcelas que drenarán a un sistema de lagunas de detención interconectadas por atarjeas y canales que eventualmente descargarán al Río Candelero. Se establece que en un futuro en estas parcelas se desarrollarán complejos residenciales cuyos drenajes internos tendrán que atenerse a la delimitación de áreas consideradas, así como a los niveles de inundación.

El estudio presentado es aceptable desde el punto de vista técnico. No obstante, según se vayan proponiendo proyectos en las 16 parcelas identificadas en el estudio, cada uno deberá realizar el estudio hidrológico-hidráulico correspondiente tomando como base el estudio evaluado bajo esta consulta.

Cordialmente,

Guillermo M. Riera
Subsecretario

GMR/CRT/LNG/IMC/nm

RECEIVED

OCT 15 2002 SBA
GREGORY MORRIS & Assoc.



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DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES

COPY

Post-it® Fax Note	7671	Date	2/24/03	# of pagos	1
To	JAIME LAFUENTE		From	ELSIE PARRILLA	
Co./Depl.	PDMPI		Co.		
Phone #			Phone #	787-723-8005	
Fax #	787-285-2210		Fax #	787-721-3196	

21 ENE 2003

ING ELSIE PARRILLA CASTELLAR
GREGORY L. MORRIS & ASSOCIATES
250 TANCA STREET
PO BOX 9024157
OLD SAN JUAN PR 00902-4157

Estimada ingeniera Parrilla:

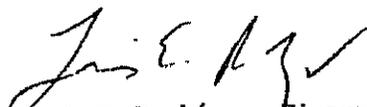
**Aclaración carta al Estudio Hidrológico-Hidráulico
Palmas del Mar Interior Drainage
Palmas del Mar, Humacao**

**C-5-2001-394
(200304059)**

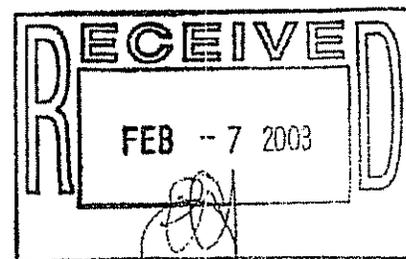
Hemos evaluado los documentos sometidos en relación al asunto descrito en epígrafe.

La mención de 16 parcelas en nuestra carta de aceptación del 4 de octubre de 2002, se debió a un error de tipografía que pasó inadvertido en la revisión de las mismas. Efectivamente las parcelas revisadas fueron 17 y no 16 como mencionamos en nuestra comunicación del 4 de octubre de 2002. Este error no afecta, el endoso emitido por este Departamento.

Cordialmente,


Luis E. Rodríguez Rivera
Secretario

LERR/CRT/LNG/CSD/nm



Appendice D-b

RECEIVED
Palmas Del Mar Properties, Inc

OCT 15 2002

LUIS R. RODRIGUEZ, PP



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS, ANTILLES OFFICE
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299

OCT -7 2002

Antilles Regulatory Section
200106183(IP-JR)

Mr. Antonio Vázquez
Environmental Consultant
HC 3, Box 15092
Corozal, Puerto Rico 00783-9810

APPROVED JURISDICTIONAL DETERMINATION

Dear Mr. Vázquez:

Reference the Jurisdictional Determination (JD) submitted for the construction of the Palmas del Mar Commercial Center, Candelerero Abajo Ward, Humacao, Puerto Rico. The action has been assigned number 200106183(IP-JR). Please, refer to this number in future correspondence.

A first site inspection was performed on February 14, 2002, to verify the JD submitted. A second site inspection was performed on September 19, 2002, to verify updated information, as well as project site boundaries containing a proposed mitigation site. Several borings were made to verify the updated report. The Corps understands the JD was properly delineated. The jurisdictional lines clearly depict the extent of regulated wetlands and waters of the United States on the site. A Department of the Army permit will be required if work related to the discharge and/or placement of fill material or any construction, and/or land clearing on areas identified as wetlands, navigable waters and/or waters of the United States.

The Corps accepts the submitted property survey for this **approved jurisdictional determination**.

This jurisdictional determination reflects current policy and regulations and is valid for a period no longer than five years from the date of this letter, unless new information warrants revision of the determination before that date. If after the five-year period, this determination has not been specifically revalidated by the Corps, it shall automatically expire. This letter constitutes an approved jurisdictional determination.

You may accept or appeal the approved JD, or provide new information. If the JD is accepted you do not need to notify the Corps to accept an approved JD. If you disagree