

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2009	2010	2011	2012	2013
Capital Expenditures	\$65,975	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	(\$65,975)	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	<u>0</u>	_____	_____	_____	_____
# ADDITIONAL FTE POSITIONS (Cumulative)	_____	_____	_____	_____	_____
Is Item Included in Current Budget?	Yes _____		No <u>X</u>		
Budget Account No.:	Fund _____	Department _____	Unit _____	Object _____	
	Program _____				

B. Recommended Sources of Funds/Summary of Fiscal Impact:

SFWMD Indian River Lagoon License Plate Program \$65,975

C. Department Fiscal Review:

JF

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Dev. and Control Comments:

NO 6/15/09
 OFMB *SN 6/10/09 CN 6/10/09*

Ann J. Jacobson
 Contract Development and Control *6/16/09*

B. Legal Sufficiency:

This Contract complies with our contract review requirements.

Mark Joy *6-19-09*
 Assistant County Attorney

C. Other Department Review:

 Department Director

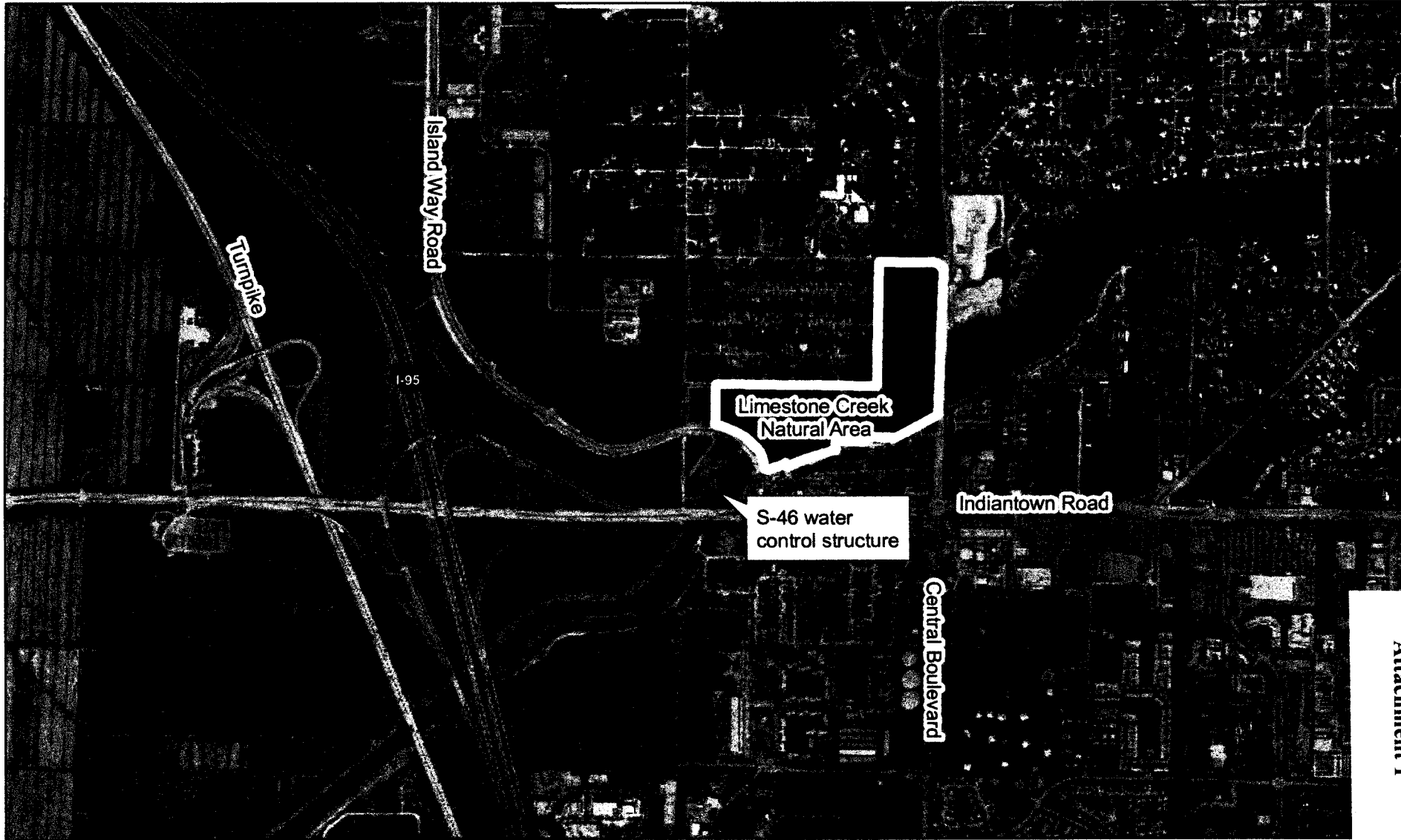
(Continued from page 1):

Background and Justification: The Limestone Creek Natural Area is a 53.4-acre natural area located in northeast Palm Beach County, east of I-95 and north of Indiantown Road. It encompasses a section of the historic south fork (C-18 canal) of the Loxahatchee River and is east of the S-46 water control structure. The natural area is managed by the Department of Environmental Resources Management (ERM). Approximately 22.3 acres of the site is owned by the County. The other 31.1 acres are owned by the District and managed by ERM pursuant to District Right of Way Occupancy Permit Number 013GP.

ERM is currently in the middle of a three phase project for the restoration of a portion of the Limestone Creek Natural Area. Phase I included efforts to slow and regulate water flow within a tributary of the historic south fork of the Loxahatchee River by constructing two weirs within the tributary. One weir serves as a salinity barrier while the other holds water for a longer period within the tributary thereby rehydrating the adjacent forested wetlands. Phase II of the restoration project, which was the subject of a previous IRLLP grant (R-2008-0220) for \$76,558, included the construction of an oxbow near the historic outflow of a second tributary to the east as well as the installation of public use facilities north of the C-18 Canal. Public use facilities constructed as part of the overall Phase II project included a small parking lot, an interpretive kiosk, nature trails, a fishing platform and an observation platform.

Phase III, which is the subject of this IRLLP grant, includes the construction of two additional oxbows on the south side of the C-18 Canal. The existing canal bank will be excavated and regraded to create intertidal mangrove wetlands and associated transitional and upland areas. This will help reduce erosive velocities of waters within the C-18 Canal, reduce sedimentation into the river, improve tidal flushing of mangrove wetlands, enhance estuarine habitat along the south fork of the river and help improve overall water quality. The restoration area will provide essential wildlife habitat, including habitat for fish, manatee, as well as listed migratory bird species. This project will also remove exotic vegetation from the site to enhance and maintain the native habitats.

The IRLLP grant will provide funds toward the third and final phase of an important three-phase environmental restoration project. Bids for the construction of Phase III have been received and a contract for the proposed work should be presented to the BCC within the next 1-2 months. The contract is not anticipated to have any ad valorem impact.



Attachment 1

Legend

Location Map

White Outline = Natural Area Boundary



N

Palm Beach County
Department of Environmental
Resources Management

June 2009, lab/elm

ORIGINAL



**2009 SOUTH FLORIDA WATER MANAGEMENT DISTRICT
INDIAN RIVER LAGOON LICENSE PLATE
FUNDING AGREEMENT**

Recipient: Palm Beach County, Environmental Resources Management	Agreement Number: 4600001835
Recipient's Project Manager: Sandy Mann	District Funding Amount: \$65,975.00
Address: 2300 N. Jog Road, 4th Floor W. Palm beach, Fl 33411	
Telephone No: 561-233-2489	
Fax No: 561-233-2414	
SFWMD Project Manager: Bahram Charkhian	
Telephone No.: 561) 682-2284	
Fax No.:	
Email: bcharkh@sfwmd.gov	
Contract Specialist: Patrick Wiener	
Telephone No.: (561) 682-6220	
Fax No.: (561) 681-6275	
Email: pwiener@sfwmd.gov	
Address: P.O. Box 24680 3301 Gun Club Road West Palm Beach, FL 33416-4680	
Insurance: Not Applicable	
Federal Employer Identification Number: 59-6000785	
Project Title: Limestone Creek Natural Area Restoration-Phase 3: Oxbow Construction	
Description: Two oxbows will be constructed on the S.Bank of the S. Fork of the Loxahatchee River which should help improve water quality.	

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This **Agreement** is entered into between "the Parties", the South Florida Water Management **District**, (the "**District**"), and the undersigned Applicant, hereinafter referred to as the "**Recipient**". The **Recipient** warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms and conditions of this **Agreement**, and shall abide by all legal, financial, and reporting requirements, such as matching funds and final reports for all funding received by the **Recipient** from the **District**.

ARTICLE 1 – PROJECT

- 1.1 The **Recipient** shall, to the satisfaction of the **District**, fully and timely perform all work items described in the "Statement of Work," attached hereto as Exhibit "A", and made a part of this **Agreement**.
- 1.2 As part of the services to be provided by the **Recipient** under this **Agreement**, the **Recipient** shall substantiate, in whatever forum reasonably requested by the **District**, any supporting documentation utilized as a basis for payment by the **District**. This paragraph shall survive the expiration or termination of this **Agreement**.
- 1.3 Attached to this **Agreement** are the following exhibits which are incorporated herein:

Exhibit A	Statement of Work
Exhibit B	Schedule of Deliverables

ARTICLE 2 - TERM OF THE AGREEMENT

- 2.1 The period of performance of this **Agreement** shall commence on the last date of execution of this **Agreement** and shall continue for a period of one (1) year.
- 2.2 The Parties agree that time is of the essence in the performance of each and every obligation under this **Agreement**.

ARTICLE 3 - COMPENSATION/CONSIDERATION

- 3.1 As consideration for the Project required by this **Agreement**, the **District** shall pay the **Recipient** the funding amount as specified on page one of this **Agreement**. Such amount is a fixed amount and therefore, no additional consideration shall be authorized.
- 3.2 The **Recipient** assumes sole responsibility for all work, which is performed pursuant to Exhibit "A." By providing funding hereunder, the **District** does not make any warranty, guaranty, or any representation whatsoever regarding any of the work performed hereunder, including but not limited to the adequacy or sufficiency of all or any part of work described in Exhibit "A".
- 3.3 The **Recipient** hereby agrees that it shall use other sources of funding for all work associated with the design and permitting aspects of the Project. **District** funds shall only be used for the Project identified in Exhibit "A".

ARTICLE 4 – FUNDING PAYMENTS AND REPORTING

- 4.1 The **District** shall make payment to the **Recipient** upon completion and acceptance of the Project. The **Recipient** shall provide certification that the Project has been completed in accordance with Exhibit “A” of this **Agreement**.
- 4.2 The **Recipient’s** invoice shall reference the **District’s** Agreement Number and shall be sent to the Accounts Payable department at the following address:

South Florida Water Management District
ATTN: Accounts Payable
3301 Gun Club Road
West Palm Beach, FL 33406

The **Recipient** shall not submit an invoice to any other address at the **District**.

- 4.3 The **Recipient** shall submit the final report/deliverable(s), along with a copy of the invoice, to the Project Manager at the following address:

South Florida Water Management District
ATTN : Bahram Charkhian
3301 Gun Club Rd
West Palm Beach, FL 33406

- 4.4 The **District** shall have the right to inspect all work and review final reports before authorization of payment is made to the **Recipient**. It is the policy of the **District** that payment for all goods and services shall be made in a timely manner and that interest payments are made on late payments. In accordance with Florida Statutes, Section 218.70, Florida Prompt Payment Act, a “proper” invoice is defined as an invoice that conforms to all statutory requirements and all **District** requirements as set forth in the **Agreement** for invoice submission. The time at which payment shall be due from the **District** shall be forty-five (45) days from receipt of a proper invoice and acceptance of services and/or deliverables, based on compliance with the statutory requirements set forth in Section 218.70, F.S. and upon satisfaction of the **District** conditions as detailed in the **Agreement**.

Failure of the **Recipient** to follow the instructions set forth in the **Agreement** regarding a proper invoice and acceptable services and/or deliverables may result in an unavoidable delay in payment by the **District**. All payments due from the **District** for a proper invoice and acceptable services and/or deliverables and not made within the time specified in this section shall bear interest from thirty (30) days after the due date at the rate of one percent (1%) per month on the unpaid balance. The **Recipient** shall invoice the **District** for payment of any accrued unpaid interest.

Any disputes regarding invoice payments which cannot be resolved by the appropriate department of the **District** shall be concluded by final written decision of the **District** Leadership

Team not later than sixty (60) days after the date on which the proper invoice was received by the **District**.

ARTICLE 5 - PROJECT MANAGEMENT

- 5.1 The Parties shall direct all matters arising in connection with the performance of this **Agreement** to the attention of the Project Manager for attempted resolution or action. The Project Manager shall be responsible for overall coordination and oversight relating to the performance of this **Agreement**.
- 5.2 All notices, demands, or other communications regarding this **Agreement**, other than those set forth in paragraph 4.2 above, shall be in writing and forwarded to the attention of both the Project Manager and the Contract Specialist noted on the first page of this **Agreement** by certified mail, return receipt requested.
- 5.3 Should either Party change its address, written notice of such new address shall promptly be sent to the other Party.
- 5.4 All correspondence to the **District** under this **Agreement** shall reference the **District's** Agreement Number.

ARTICLE 6 - TERMINATION/REMEDIES

- 6.1 It is the policy of the **District** to encourage good business practices by requiring recipients to materially perform in accordance with the terms and conditions of the **Agreement**. In accordance with **District** Rule 40E-7, Part II, F.A.C., "material breach" is defined as any substantial, unexcused non-performance by failing to perform an act that is an important part of the transaction or performing an act inconsistent with the terms and conditions of the **Agreement**.
- 6.2 If the **Recipient** materially fails to fulfill its obligations under this **Agreement**, the **District** will provide written notice of the deficiency by forwarding a Cure Notice citing the specific nature of the material breach. The **Recipient** shall have thirty (30) days to cure the breach. If the **Recipient** fails to cure the breach within the thirty (30) day period, the **District** shall issue a Termination for Default Notice. Once the **District** has notified the **Recipient** that it has materially breached its contract with the **District**, by sending a Termination for Default Notice, the **District's** Governing Board shall determine whether the **Recipient** should be suspended from doing future work with the **District**, and if so, for what period of time. The **District's** Governing Board will consider the factors detailed in Rule 40E-7, Part II, F.A.C. in making a determination as to whether a **Recipient** should be suspended, and if so, for what period of time.
- 6.3 The **District** may terminate this **Agreement** at any time for convenience upon thirty (30) calendar days prior written notice to the **Recipient**. The performance of work under this **Agreement** may be terminated by the **District** in accordance with this clause in whole, or from time to time in part, whenever the **District** shall determine that such termination is in the best interest of the **District**. Any such termination shall be effected by delivery to the **Recipient** of a Notice of Termination specifying the extent

to which performance of work under the **Agreement** is terminated, and the date upon which such termination becomes effective. In the event of termination for convenience, the **District** shall compensate the **Recipient** for all authorized and accepted work performed through the termination date. The **District** shall be relieved of any and all future obligations hereunder, including but not limited to, lost profits and consequential damages under this **Agreement**. The **District** may withhold all payments to the **Recipient** for such work until such time as the **District** receives an invoice showing the exact amount due to the **Recipient**.

6.4 In the event a dispute arises which the Project Managers cannot resolve between themselves, the Parties shall have the option to submit to non-binding mediation. The mediator or mediators shall be impartial, shall be selected by the Parties, and the cost of the mediation shall be borne equally by the Parties. The mediation process shall be confidential to the extent permitted by law.

ARTICLE 7 - RECORDS RETENTION

7.1 The **Recipient** shall maintain records and the **District** shall have inspection and audit rights as follows:

- A. Maintenance of Records. The **Recipient** shall maintain all financial and non-financial records and reports directly or indirectly related to the negotiation or performance of this **Agreement**, including supporting documentation for any service rates, expenses, research or reports. Such records shall be maintained and made available for inspection for a period of five (5) years from completing performance and receiving final payment under this **Agreement**.
- B. Examination of Records. The **District** or its designated agent shall have the right to examine in accordance with, generally accepted governmental auditing standards all records directly or indirectly related to this **Agreement**. Such examination may be made only within five (5) years from the date of final payment under this **Agreement** and upon reasonable notice, time and place.
- C. Extended Availability of Records for Legal Disputes. In the event that the **District** should become involved in a legal dispute with a third party arising from performance under this **Agreement**, the **Recipient** shall extend the period of maintenance for all records relating to the **Agreement** until the final disposition of the legal dispute, and all such records shall be made readily available to the **District**.

ARTICLE 8 - STANDARDS OF COMPLIANCE

8.1 The **Recipient**, its employees, subcontractors or assigns, shall comply with all applicable federal, state, and local laws and regulations relating to the performance of this **Agreement**. The **District** undertakes no duty to ensure such compliance, but will attempt to advise the **Recipient**, upon request, as to any such laws of which it has present knowledge.

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- 8.2 The laws of the State of Florida shall govern all aspects of this **Agreement**. In the event it is necessary for either party to initiate legal action regarding this **Agreement**, venue shall be in the Fifteenth Judicial Circuit for claims under state law and in the Southern District of Florida for any claims which are justifiable in federal court.
- 8.3 The **Recipient** shall allow public access to all Project documents and materials in accordance with the provisions of Chapter 119, Florida Statutes. Should the **Recipient** assert any exemptions to the requirements of Chapter 119 and related Statutes, the burden of establishing such exemption, by way of injunctive or other relief as provided by law, shall be upon the **Recipient**.
- 8.4 Pursuant to Section 216.347, Florida Statutes, the **Recipient** is prohibited from the expenditure of any funds under this **Agreement** to lobby the Legislature, the judicial branch, or another state agency.
- 8.5 The **Recipient** shall obtain, at its sole expense, all necessary licenses, authorizations and permits from the appropriate private party or federal, state, municipal or local agency, and other governmental approvals, prior to commencing performance of this **Agreement**. A delay in obtaining permits shall not give rise to a claim by the **Recipient** for additional compensation. If the **Recipient** is unable to obtain all necessary permits in a timely manner, either party may elect to terminate this **Agreement**, each party to bear its own costs, notwithstanding other provisions of this **Agreement** to the contrary.
- 8.6 The **Recipient** hereby assures that no person shall be excluded on the grounds of race, color, creed, national origin, handicap, age, or sex, from participation in, denied the benefits of, or is otherwise subjected to discrimination in any activity under this **Agreement**. The **Recipient** shall take all measures necessary to effectuate these assurances.
- 8.7 Pursuant to Section 287.133 of the Florida Statutes, a person or affiliate who has been placed on the convicted vendor list may not submit a bid, proposal, or reply to a request to provide any goods or services related to the construction of the Project contemplated herein. **Recipient** also assures that it is not on the District's Suspension of Contractors List. **Recipient** agrees to include a provision to this effect in all requests for proposals and subcontracts related to construction of this project.

ARTICLE 9 - RELATIONSHIP BETWEEN THE PARTIES

- 9.1 The **Recipient** shall be considered an independent contractor and neither party shall be considered an employee or agent of the other party. Nothing in this **Agreement** shall be interpreted to establish any relationship other than that of an independent contractor between the parties and their respective employees, agents, subcontractors, or assigns, during or after the performance on this **Agreement**. Both parties are free to enter into contracts with other parties for similar services.
- 9.2 The **Recipient** shall not assign, delegate, or otherwise transfer its rights and obligations as set forth in this **Agreement** without the prior written consent of the **District**. Any attempted assignment in violation of this provision shall be null and void.

- 9.3 It is the intent and understanding of the Parties that this **Agreement** is solely for the benefit of the **Recipient** and the **District**. No person or entity other than the **Recipient** or the **District** shall have any rights or privileges under this **Agreement** in any capacity whatsoever, either as third-party beneficiary or otherwise.

ARTICLE 10 - GENERAL PROVISIONS

- 10.1 Notwithstanding any provisions of this **Agreement** to the contrary, the Parties shall not be held liable for any failure or delay in the performance of this **Agreement** that arises from fires, floods, strikes, embargoes, acts of the public enemy, unusually severe weather, outbreak of war, restraint of Government, riots, civil commotion, force majeure, act of God, or for any other cause of the same character which is unavoidable through the exercise of due care and beyond the control of the Parties. Failure to perform shall be excused during the continuance of such circumstances, but this **Agreement** shall otherwise remain in effect. This provision shall not apply if the "Statement of Work" of this **Agreement** specifies that performance by the **Recipient** is specifically required during the occurrence of any of the events herein mentioned.
- 10.2 Any inconsistency in this **Agreement** shall be resolved by giving precedence in the following order:
- (a) Terms and Conditions outlined in Articles 1-11
 - (b) Exhibit "A" Statement of Work
 - (c) All other exhibits, attachments, and documents specifically incorporated herein by reference
- 10.3 Failures or waivers to insist on strict performance of any covenant, condition, or provision of this **Agreement** by the Parties, their successors and assigns shall not be deemed a waiver of any of its rights or remedies, nor shall it relieve the other Party from performing any subsequent obligations strictly in accordance with the terms of this **Agreement**. No waiver shall be effective unless in writing and signed by the Party against whom enforcement is sought. Such waiver shall be limited to provisions of this **Agreement** specifically referred to therein and shall not be deemed a waiver of any other provision. No waiver shall constitute a continuing waiver unless the writing states otherwise.
- 10.4 Should any term or provision of this **Agreement** be held, to any extent, invalid or unenforceable, as against any person, entity or circumstance during the term hereof, by force of any statute, law, or ruling of any forum of competent jurisdiction, such invalidity shall not affect any other term or provision of this **Agreement**, to the extent that the **Agreement** shall remain operable, enforceable and in full force and effect to the extent permitted by law.
- 10.5 This **Agreement** states the entire understanding and **Agreement** between the Parties and supersedes any and all written or oral representations, statements, negotiations or **Agreements** previously existing between the Parties with respect to the subject matter of this **Agreement**. The **Recipient** recognizes that any representations, statements or negotiations made by **District** staff do not suffice to legally bind the **District** in a contractual relationship unless they have

been reduced to writing and signed by an authorized **District** representative. This **Agreement** shall inure to the benefit of and shall be binding upon the parties, their respective assigns, and successors in interest. This **Agreement** may be amended only with the written approval of the Parties.

ARTICLE 11 - INDEMNIFICATION AND INSURANCE

- 11.1 The following indemnification clause shall only be applicable to Investor-owned Utilities or Private Entities:

For value received, which is hereby acknowledged, the **Recipient** shall defend, indemnify, save and hold the **District**, its officers, directors, board members, agents, assigns, and employees, harmless from liabilities, damages, losses, and costs including, but not limited to reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentionally wrong conduct of the **Recipient** and other persons employed or utilized by the **Recipient** in the performance of the **Agreement**. The **District** shall have the right to approve counsel selected by the **Recipient** to defend the **District** in the event the **District** is named in any legal action.

- 11.2 Government entities will be responsible for their own acts of negligence up to the amounts in Section 768.28, Florida Statutes. The entity assumes any and all risks of personal injury, bodily injury and property damage attributable to negligent acts or omissions. This in no way means that an agency consents to be sued. It should warrant and represent that it is self-funded for Worker's compensation and liability insurance, covering at a minimum bodily injury, personal injury and property damage with protection being applicable to the officers, employees, servants and agents while acting within the scope of their employment during performance under this **Agreement**. It is further agreed that nothing contained herein shall be construed or interpreted as (1) denying to either party any remedy or defense available to such party under the laws of the State of Florida; (2) the consent of the State of Florida or its agents and agencies to be sued; of (3) a waiver of sovereign immunity of the State of Florida beyond the waiver provided in Section 768.28, Florida Statutes.

- 11.3 The following shall only apply if the work is being performed on **District** property:

The **Recipient** shall procure and maintain, through the term of this **Agreement**, insurance coverage, which will be determined after the evaluation of the Statement of Work as to the amounts and conditions. The coverage required shall extend to all employees and subcontractors of the **Recipient**. The Certificate of Insurance shall be completed in full, indicating the producer, insured, carrier's name and Best rating, policy numbers, effective and expiration dates of each type of coverage required. The insurance carrier's authorized representative shall sign the Certificate.

IN WITNESS WHEREOF, the Parties or their duly authorized representatives hereby execute this **Agreement** on the date written below.

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SOUTH FLORIDA WATER MANAGEMENT DISTRICT

By: _____
Frank Hayden, Procurement Director

Date: _____

Recipient's Legal Name: _____

By Authorized Official: _____

Title: _____

Date: _____

SFWMD Office of Counsel Approved

By: Ms Barilla Date: 5/29/09

SFWMD Procurement Approved

By: Patricia W... Date: 5-27-09

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COUNTY:

Date of Execution by County:

_____, 2009

ATTEST:
SHARON R. BOCK
CLERK AND COMPTROLLER

PALM BEACH COUNTY, a
Political Subdivision of the State of
Florida

By: _____
Deputy Clerk

By: _____
John F. Koons, Chairman

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

APPROVED AS TO TERMS AND
CONDITIONS:

By: _____
Assistant County Attorney

By: Richard E. Walesky
Richard E. Walesky, Director
Environmental Resources Management

EXHIBIT "A"

STATEMENT OF WORK

**Palm Beach County
Environmental Resources Management**

**Limestone Creek Restoration
Phase III**

- 1.0 Introduction
- 2.0 Benefits to the Indian River Lagoon
- 3.0 Location of Project
- 4.0 Scope of Work
- 5.0 Work Breakdown Structure
- 6.0 Cost Breakdown and Task / Deliverable Schedule (Exhibit "B")

1.0 Introduction

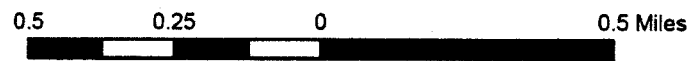
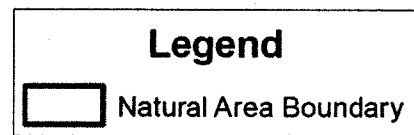
The Limestone Creek Natural Area (Figure 1) is a 53.4 acre property managed by Palm Beach County Department of Environmental Resources Management (ERM). Approximately 22.3 acres of the site is owned by Palm Beach County. The other 31.1 acres is owned by the South Florida Water Management District (SFWMD) and managed by ERM pursuant to SFWMD Right of Way Occupancy Permit Number 013GP. The Natural Area is named for the area's Limestone Creek, which was a small blackwater creek that traveled through a forested flood plain and emptied into the South Fork of the Loxahatchee River. Smaller tributaries also once flowed out from the Limestone Creek and connected to the Loxahatchee River. The Limestone Creek Natural Area contains two of these remnant tributaries, visible on the aerial photograph from 1940 (Figure 2).

Over the last century, the Limestone Creek and its tributaries were impacted by the construction of canals. In the 1920s, a small canal was excavated in the channel of the Limestone Creek, diminishing the natural flow of the creek to a trickle. In the late 1950s, the C-18 canal was excavated, straightening and channeling the South Fork of the Loxahatchee River. The Limestone Creek Canal was used as the footprint for the 200-foot wide C-18 canal and spoil dumped on the sides during the construction of the canal blocked the water flowing from the smaller tributaries. The western tributary within the natural area still received enough drainage from the adjacent Limestone Creek neighborhood to be able to flow over the spoil bank and to cut a new channel to the canal.

Stormwater improvements over the last 20 years have attempted, in part, to return water flow to both tributaries within the natural area while improving drainage of the adjacent neighborhoods and roads. These improvements have had mixed results. Stormwater improvements in the 1990s unintentionally decreased the water supply to the western tributary, drying it up. The same stormwater sewer system was designed to allow runoff to once again enter the eastern tributary. While this diversion did work, there were problems with excessive turbidity in the runoff water. In 2004, as part of the construction of Island Way Road to the southwest, the stormwater management system was designed to provide treated stormwater to the western end of the western tributary through a small pipe and bubble up structure. However, this did not provide sufficient wet season water flow to the western tributary and the water moved too quickly through the area to rehydrate the adjacent forested wetland.

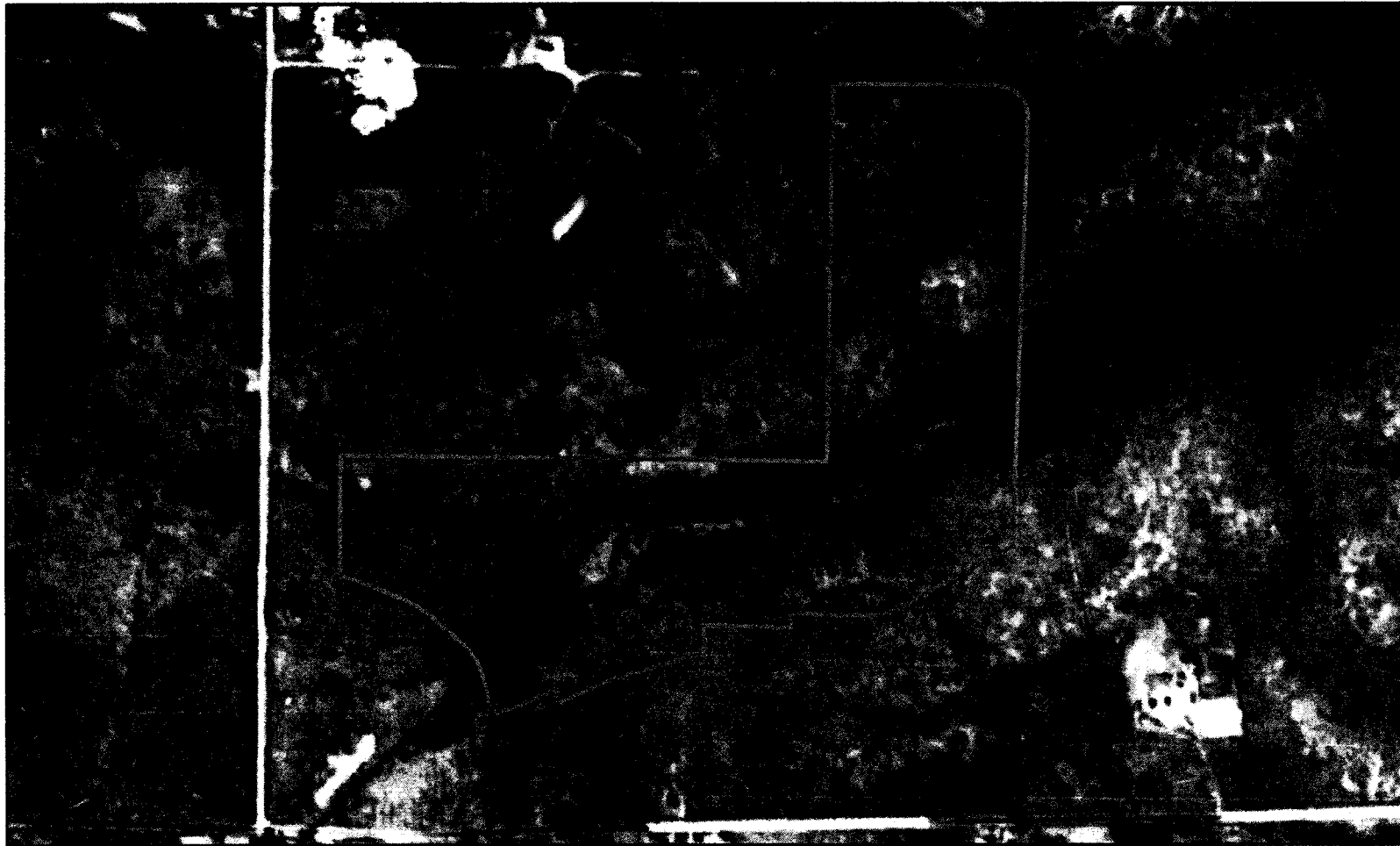
ERM is conducting a three phase project to continue restoration efforts to the Limestone Creek Natural Area. Phase III is the focus of this application. Phase I, which was completed in March of 2008, included efforts to slow and regulate the water flow within the western tributary by the construction of two weirs within the tributary. Both weirs hold water for a longer period within the tributary and allow it to rehydrate the adjacent forested wetland. The lower weir also serves as a salinity barrier for high water storm events. Phase II included the construction of an oxbow near the point where the eastern tributary of the Limestone Creek historically flowed into the South Fork of the Loxahatchee River. This project was completed in October of 2008. Phase III includes the construction of two oxbows on the south side of the river (Figure 3).

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Palm Beach County
 Department of Environmental
 Resources Management
 February 2009. lab

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 Figure 1. Location of Limestone Creek Natural Area in Palm Beach County, Florida

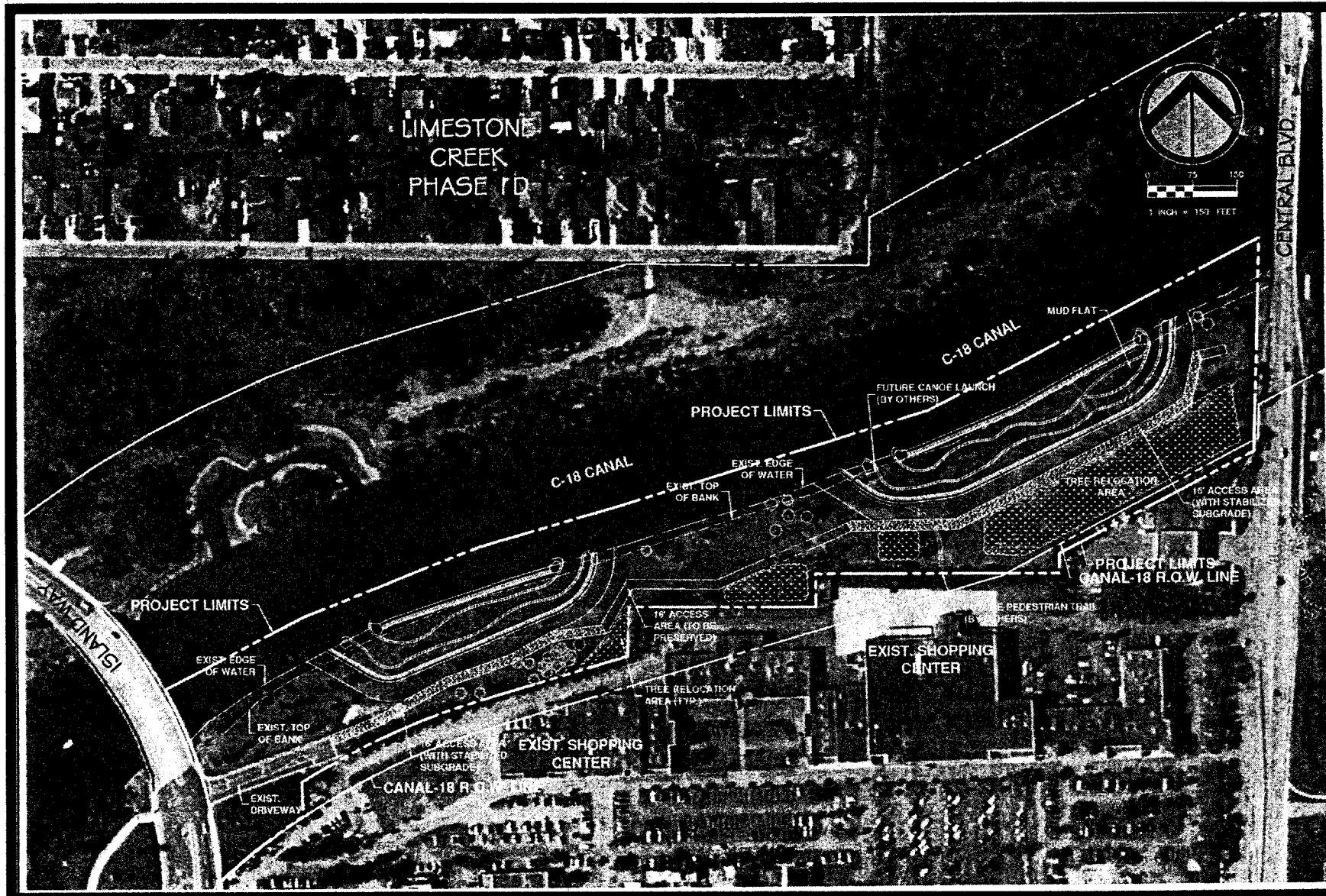


Legend
Natural Area Boundary



Palm Beach County
Department of Environmental
Resources Management
February 2009. lab

8 / Figure 2. 1940 aerial photograph of Limestone Creek Natural Area



69 Figure 3. Location of southern oxbow construction, Phase III of the Limestone Creek Restoration Project.

One significant loss to the area from the construction of the C-18 canal and the associated spoil bank is the loss of wetland habitat associated with the meandering character of the historic Loxahatchee River. The Limestone Creek Restoration Phase III (Project) will help return wetland habitat to the area through the construction of two oxbows along the south bank of the C-18 canal. The existing canal bank, currently a disturbed upland community (Figure 4), will be excavated and graded to create intertidal mangrove wetlands with associated transitional and upland areas.

The Loxahatchee River will directly benefit from the Project by the improvement of water quality and the increase in wetland habitat. As the oxbow receives water from the C-18 canal, the velocities of the water will be slowed, allowing sediments and nutrients to be retained within the shallow water system. The estuarine wetland created by the oxbow will provide critical habitat for fish, wading birds, and other wildlife, creating an oasis within the urban landscape. Fish and wildlife observed at the phase II oxbow already include common snook (*Centropomus undecimalis*), mullet (*Mugil* sp.), sheepshead (*Archosargus probatocephalus*), West Indian manatee (*Trichechus manatus*), snowy egret (*Egretta thula*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), and belted kingfisher (*Megaceryle alcyon*).

The Project enhances the other restoration activities already completed on the north side of the canal. In addition to the weir construction completed in Phase I and northern oxbow construction completed in Phase II, the exotic vegetation has been and will continue to be removed from the entire Project site. Native plantings are also planned for the area. Public use facilities, including an ADA accessible canoe/kayak launch and paved pathway, are also planned for the Phase III Project area.

As part of Phase I of the Limestone Creek Restoration Project, ERM hired contractors to secure all appropriate permits for the construction of the Project. The permits were modified to include Phase III of the project in 2008. The required permits and dates the modified permits were obtained are shown in Table 1.

Table 1. Permits required and obtained for the Project.

Permit	Agency	Permit Number	Date modified permit was obtained
Dredge and Fill	USACOE	SAJ-2006-7221 (NW-JWH)	May 02, 2008
Environmental Resource	SFWMD	50-07809-P	August 26, 2008
Right of Way	SFWMD	MOD 013-G.P.	September 23, 2008

2.0 Benefits to the Indian River Lagoon

The project is part of a water-shed based effort to protect the Loxahatchee River. The construction of the oxbows will perpetually improve the overall water quality by significantly reducing sediments and nutrients within the eastern portion of the C-18 canal. The project will also mimic the role of the historic backwater streams in providing essential estuarine habitat for fishes, West Indian manatee and various invertebrates as well as listed migratory bird species.

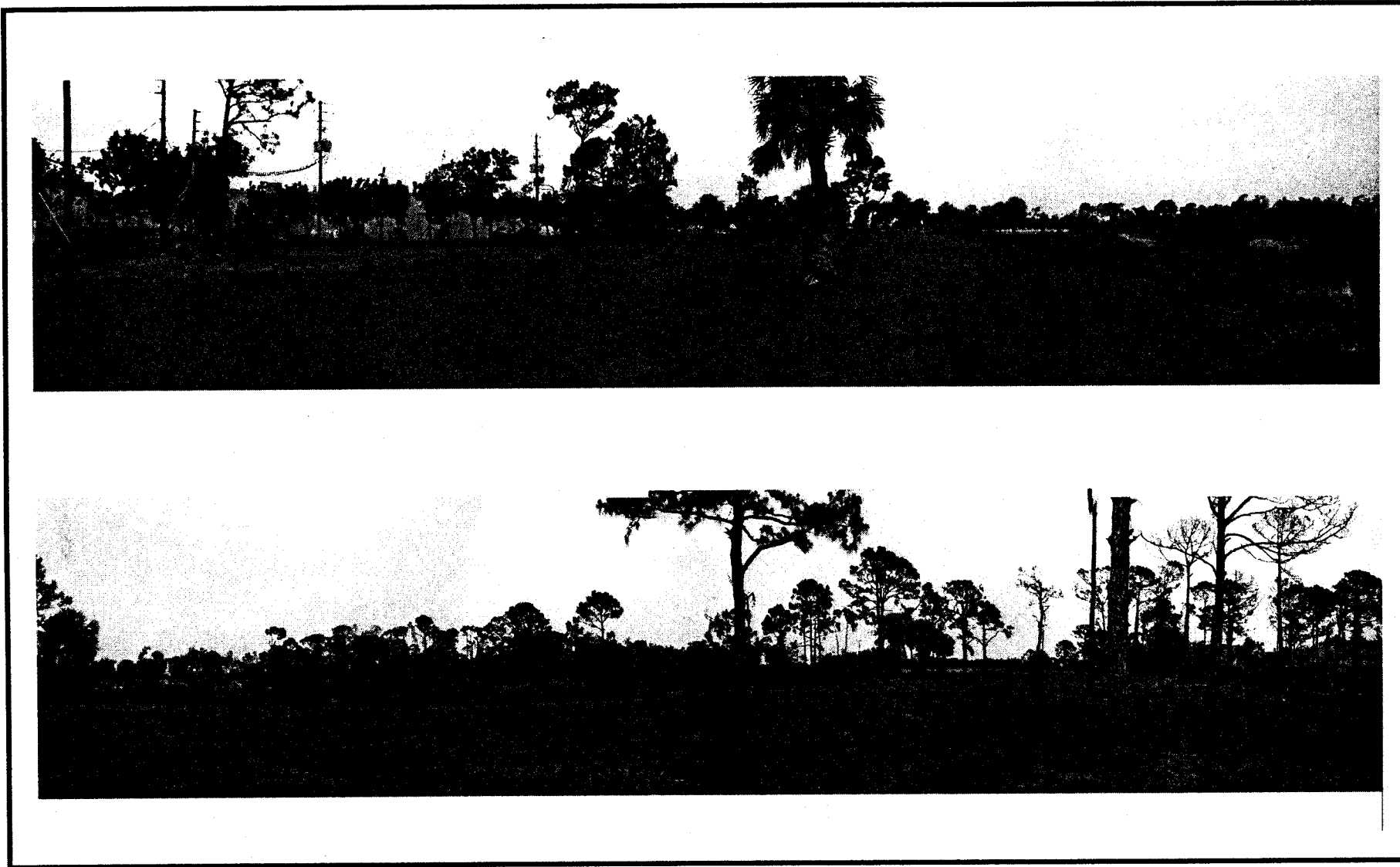


Figure 4. Location of the future oxbows, as viewed in the top photo from the east side of the west oxbow and in the bottom photo, from the southwest corner of the east oxbow.

3.0 Location of Project

The project is located in Limestone Creek Natural Area in northeast Palm Beach County, east of I-95, west of Central Boulevard and north of Indiantown Road (Figure 1). Limestone Creek encompasses a section of the historic south fork (C-18 canal) of the Loxahatchee River located just east of the S-46 water control structure.

4.0 Scope of Work

The proposed Project focuses on the construction of two oxbows along the south fork of the Loxahatchee River (Figure 4). The existing canal bank will be excavated and regraded to create two shallow water oxbows with intertidal mangrove wetlands (Figures 5 and 6). The oxbow will add additional estuarine habitat to the area, reduce erosion along the canal bank, and improve overall water quality of the river.

5.0 Work Breakdown Structure

Task 1: Construction Bid Process

ERM will prepare bid documents, advertise, receive, and evaluate bids for the construction of the Project along with the public use facilities component of the Phase III project. The contractor will be selected, contracts will be issued between Palm Beach and the selected contractor, and a notice to proceed will be issued. This work is expected to be completed on or before July 1, 2009.

Deliverables: ERM shall provide the South Florida Water Management District (the District) with a copy of the construction contract with a notice to proceed given to the awarded contractor by August 1, 2009.

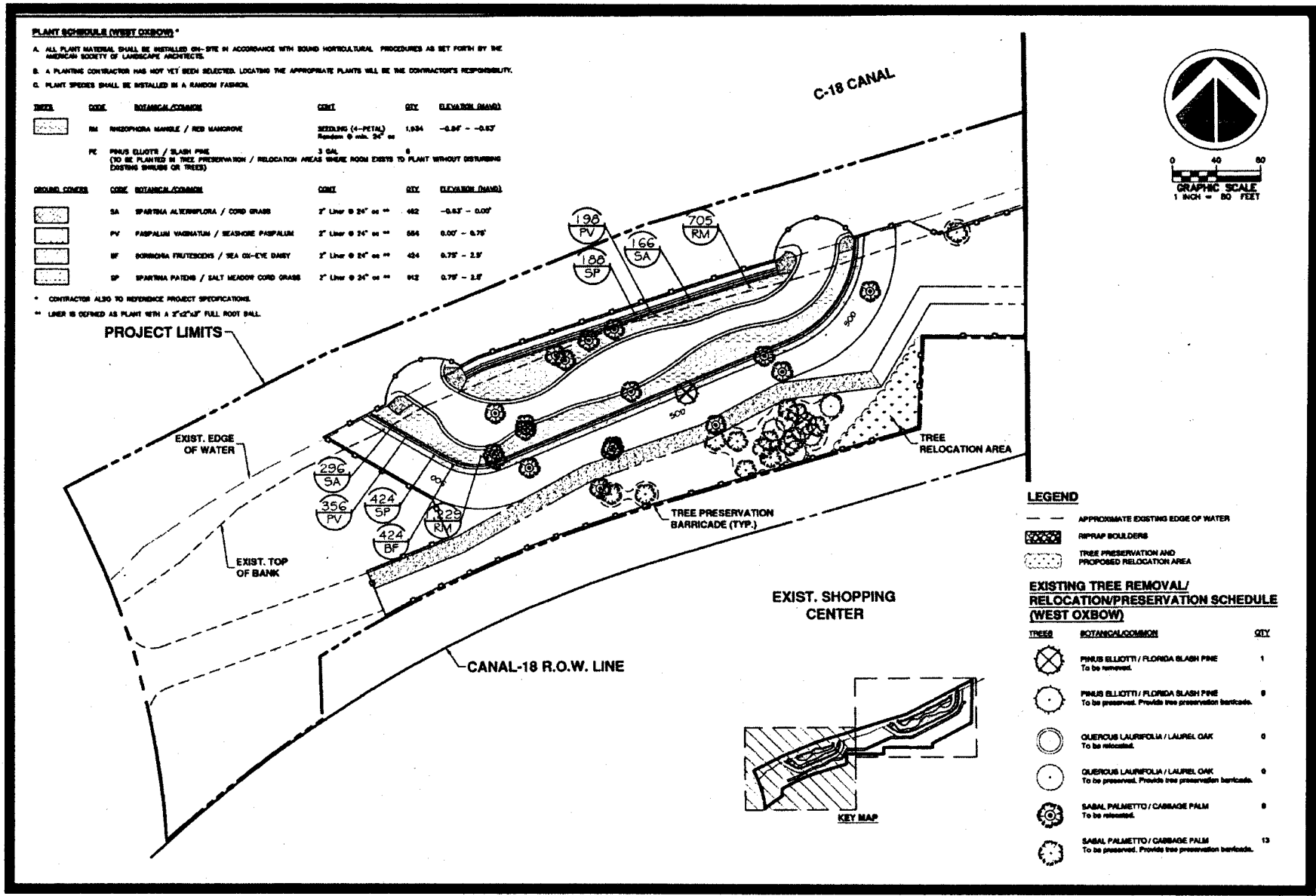
Task 2: Tree Relocation

Approximately 22 cabbage palm (*Sabal palmetto*), and 2 laurel oak (*Quercus laurifolia*) trees located within the actual excavation area will be relocated to other areas within the Limestone Creek Natural Area (Figures 5 and 6). The relocations will take place prior to the excavation and construction of the oxbow. ERM will oversee tree removal activities by the selected contractor. This work is expected to be completed on or before August 31, 2009.

Deliverables: ERM shall provide the District with photographs documenting the tree relocation by September 30, 2009.

Task 3: Excavation of Fill and Grading

The contractors will excavate the site using best construction practices. Floating turbidity curtains will be installed at the locations of the oxbows openings and will remain in place until the completion of the excavation and turbidity



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Figure 5. West oxbow vegetation plan.

levels have returned to background levels. Staging will occur in open areas and will not impact native trees or shrubs (other than those slated for removal, see Figures 5 and 6). The soil will be graded to the elevations shown on the construction plans, with the backfilling of muck as required. ERM will oversee excavation of the fill and the grading. This work is expected to be completed on or before October 31, 2009.

Deliverables: ERM shall provide the District with photographs documenting the excavation of fill and grading by November 30, 2009.

Task 4: Rubble Riprap with Bedding Stone

Riprap rubble and bedding stones will be placed at both entrances of both oxbows in accordance with the construction plans. This material will help prevent erosion of the oxbows and adjacent shoreline. ERM will oversee and installation of the riprap. This work is expected to be completed on or before 11/30/2009.

Deliverables: ERM shall provide the District with photographs documenting the installation of riprap by December 31, 2009.

Task 5: Native Planting

The construction plans include the planting of approximately 4,383 red mangrove seedlings (*Rhizophora mangle*), 1,082 smooth cord grass (*Spartina alterniflora*) plugs, 1,297 seashore paspalum (*Paspalum vaginatum*), 968 sea ox-eye daisy (*Borrchia frutescens*), 1,421 saltmeadow cordgrass (*Spartina patens*) and 36 slash pines. Plant survival rates and warranties will be outlined in the construction contracts. ERM will oversee planting activities. This work is expected to be completed on or before 1/31/2010.

Deliverables: ERM shall provide copies of the as-built drawings and certification of construction completion by February 28, 2010.

6.0 Cost Breakdown and Task/Deliverable Schedule (Exhibit "B")

The Project is anticipated to cost \$486,705. Palm Beach County, with money obtained from other grants and the operating budget, will pay \$420,730 of the total project costs and is requesting \$65,975 for the IRL grant for the remaining funding. The breakdown of costs, funding sources, and specific start and finish dates are shown in Exhibit "B".

Exhibit "B"

Cost Breakdown and Task/Deliverable Schedule

Task	Deliverable	Date Initiated	Date Completed	Funding amount per Source		Total
				PBC	IRL Grant	
Construction bid process	Copy of contract & notice to proceed	4/1/2009	7/1/2009	\$20,000	-	\$20,000
Relocation of native trees	Photo of trees relocated	7/15/2009	8/31/2009	-	\$10,325	\$10,325
Excavation of fill & grading	Photo of excavation & grading	9/1/2009	10/31/2009	\$289,467	\$20,650	\$310,117
Riprap	Photo showing riprap	11/1/2009	11/30/2009	\$111,263	\$10,000	\$121,263
Native planting	As built drawings & certification of completion	12/1/2009	1/31/2010	-	\$25,000	\$25,000
Total				\$420,730	\$65,975	\$486,705

Funding Proposal

The total estimated cost for the Phase III oxbow construction project is \$486,705. Palm Beach County is requesting \$65,975 from the Indian River Lagoon License Plate Program. The project proposed in this application is the last phase of a 3-phase project for the area that includes construction of two oxbows on the south bank of the Loxahatchee River (C-18 canal), pedestrian trails, and an ADA accessible canoe/kayak launch. The attached budget shows that money is available for all portions of the project including the public use facilities.

2009 - 1137

BGEX - 380-06030900000000001823
 BGRV - 380-06030900000000000682

BOARD OF COUNTY COMMISSIONERS
 PALM BEACH COUNTY, FLORIDA

BUDGET AMENDMENT

3654 - Environmental Resources Capital Projects Fund

ACCOUNT NAME AND NUMBER	ORIGINAL	CURRENT	INCREASE	DECREASE	ADJUSTED ENCUMBERED	REMAINING
	BUDGET	BUDGET			BUDGET / Expended	
					6/3/2009	
<u>REVENUES</u>						
381-E441 Limestone Creek Greenway 4399 Oth Phys Environment Rev	0	0	65,975	0	65,975	
TOTAL RECEIPTS & BALANCES	0	22,363,307	65,975	0	22,429,282	
<u>EXPENDITURES</u>						
381-E441 Limestone Creek Greenway 6504- Iotb Non Infrastructure	0	0	65,975	0	65,975	65,975
TOTAL APPROPRIATIONS & EXPENDITURES	0	22,363,307	65,975	0	22,429,282	

Environmental Resources
 Management

INITIATING DEPARTMENT/DIVISION
 Administration/Budget Department Approval
 OFMB Department - Posted

Signatures & Dates

Richard E. Walerly 6/8/09
M. J. ... 6/15/09

SN 6/10/09
 (110)
 6/10/09

BY BOARD OF COUNTY COMMISSIONERS
 AT MEETING OF

July 7, 2009
 Deputy Clerk to the
 Board of County Commissioners