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SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
INDIVIDUAL CONSTRUCTION
PERMIT NO. 431170.01

TRANSFERRED TO
OPERATION PHASE

EXPIRATION DATE: August 26, 2002

PERMIT ISSUE DATE: August 26, 1997

This permit, issued under the provisions of Chapter 373, Florida Statutes and Florida Administrative Code Rule 40D-4 authorizes the Permittee to perform the work outlined herein and shown by the application, approved drawing(s), plans, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: Lake Grady Dam and Spillway Rehabilitation Project

GRANTED TO: Lake Grady Road and Bridge District of Hillsborough County Florida
Care of Anderson and Occutt, P.A.
SunTrust Financial Center
401 East Jackson Street, Suite 2400
Tampa, FL 33602

ABSTRACT: The project involves the rehabilitation of the Lake Grady dam and spillway facility located approximately two (2) miles upstream of the Alafia River on Bell Creek. A portion of Shadow Run Boulevard currently extends across the existing dam.

The original dam was constructed in the late 1960's as an earthen embankment across Bell Creek. Due to structural problems with the dam and outfall structure, the lake was drained in 1983, and the present outfall system was constructed in 1986.

The current dam structure is approximately 20 feet high and 1,200 feet long with side slopes of approximately 3H:1V. The current outfall structure consists of a w-shaped inlet spillway with two 13' x 8' box culverts discharging into Bell Creek. The dam impounds a 200 acre area that is used for recreation. During 1987, significant erosion and seepage problems resulted in significant soil material loss within the dam. In response to these problems, in 1988, the gate on the structure was opened to draw down the lake level, and the road on top of the dam was closed to vehicular traffic. The structure gate has remained open, and the roadway has remained closed since that time.

The proposed rehabilitation of the dam includes constructing a new spillway structure with an emergency drawdown orifice and gate, and adding two additional 13' x 8' box culverts. The proposed structure will consist of a w-shaped drop inlet, larger but similar in shape to the existing structure. Rehabilitation of the dam itself includes removing the existing roadway pavement and guard rail system, filling in the existing emergency spillway saddle to raise the elevation

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to 45.5', construction of a soil-bentonite slurry cut-off wall along the dam alignment and the installation of a grout curtain under the two existing box culverts. Clearing and grubbing of the existing dam slopes and reshaping the slopes will also be performed, along with seeding or sodding to stabilize the cleared and reshaped areas.

Approximately 0.02 acre of herbaceous and shrubby wetland areas will be impacted by the reconstruction of the dam facility. To compensate for the loss of wetland habitat and function, the Permittee shall create 0.06 acre of a combination of herbaceous and forested wetlands.

The modeling submitted in support of the dam design indicates there will not be adverse changes in flood levels or flow rates downstream of the dam for storm events up to and including the 500 year - 24 hour design storm event. In the event of a storm resulting in levels within the impoundment higher than those anticipated for the 500 year event, or if any significant structural problems with the dam are observed, emergency notification measures are proposed. These measures include notification of the Sheriff's Department, the downstream homeowners and Hillsborough County.

OP. & MAINT. ENTITY: Lake Grady Road and Bridge District of Hillsborough County Florida

PROPERTY LOCATION: Hillsborough County

SEC/TWP/RGE: 26/30S/20E

TOTAL ACRES OWNED: 5.50

PROJECT SIZE: 5.50 Acres

LAND USE: Government

DATE APPLICATION FILED: March 7, 1997

AMENDED DATE: N/A

I. Water Quantity/Quality

POND #	AREA ACRES @ T.O.B.	TREATMENT TYPE
1	205.00	N/A
TOTAL	205.00	

Mixing Zone required: YES () NO (X)
 Variance required: YES () NO (X)

II. 100-Year Floodplain

Encroachment (ac-ft):	Compensation (ac-ft):
0.00	0.00

III. Environmental Considerations

Wetland Information:				
WETLAND #	TOTAL AC.	NOT IMPACTED AC.	TEMPORARILY DISTURBED AC.	PERMANENTLY DESTROYED AC.
1	0.02	0.00	0.00	0.02
TOTAL	0.02	0.00	0.00	0.02

Mitigation Information:					
AREA #	CREATED/RESTORED AC.	UPLAND PRESERVED AC.	ENHANCED WETLANDS AC.	WETLANDS PRESERVED AC.	MISC. MIT. AC.
A	0.06	0.00	0.00	0.00	0.00
TOTAL	0.06	0.00	0.00	0.00	0.00
NET CHANGE	+0.04	OTHER MITIGATION TOTAL			0.00

Comments:

The majority of wetland impacts will be to the herbaceous littoral zone of Lake Grady (Wetland 1). Typical species include Panicum hemitomon, Panicum repens, and Cyperus. Wetland 2 is a forested wetland in the floodplain of Bell Creek. Species include Acer rubrum, Liquidambar styraciflua, Salix caroliniana, Sabal Palmetto, Quercus laurifolia, and Magnolia virginiana.

To offset the loss of wetland habitat and function, the Permittee shall create 0.06 acre of a combination of herbaceous and forested wetlands. All mitigation will be planted inside the limits of Lake Grady.

Conservation easement required: YES () NO (X)

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Rule

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40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.

2. This modification, Construction Permit No. 431170.01, amends the previously issued Construction Permit No. 401170.00, and all conditions are replaced by the conditions herein.
3. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Permit Data Section - Records & Data Department
Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34609-6899

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.

4. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.
5. The following boundaries, as shown on the approved construction drawings, shall be clearly delineated on the site prior to initial clearing or grading activities:

- (X) wetland preservation;
- (X) limits of approved wetland impacts.

The delineation shall endure throughout the construction period and be readily discernible to construction and District personnel.

6. The Permittee shall, within 180 days of initial wetland impact and prior to beneficial use of the site, complete all aspects of the mitigation plan, including the grading, mulching, and planting, in accordance with the design details in the final approved construction drawings received by the District on May 7, 1997, and information submitted in support of the application submitted by Bromwell and Carrier, Inc. on March 7, 1997.
7. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Tampa Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form

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identified in Chapter 40D-1, F.A.C., and signed, dated, and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.

8. Written notification of completed wetland mitigation construction shall be submitted to the District within 30 days of achieving final grade and/or mulch or plant installation, as applicable, in each mitigation site. Following District inspection and written approval, the monitoring period shall begin as detailed in the Wetland Mitigation Success Criteria (Condition 15 the Monitoring and Maintenance Plan submitted on March 7, 1997.
9. Wetland buffers shall remain in an undisturbed condition except for approved drainage facility construction/maintenance.
10. Copies of the following documents in final form, as appropriate for the project, shall be submitted to the Tampa Service Office:
 - a. Homeowners, property owners, master association or condominium association articles of incorporation, and
 - b. Declaration of protective covenants, deed restrictions or declaration of condominium.

The Permittee shall submit these documents prior to any lot or unit sales within the project served by the surface water management system, or upon completion of construction of the surface water management system, whichever occurs first.

11. The Permittee shall monitor and maintain the wetland mitigation area(s) until the Wetland Mitigation Success Criteria set forth in Condition 15 are met.
12. The Permittee shall undertake required maintenance activities within the wetland mitigation area(s) as needed at any time between mitigation site construction and termination of monitoring, with the exception of the final year. Maintenance shall include the manual removal of all nuisance and exotic species, with sufficient frequency that their combined coverage at no time exceeds the Wetland Mitigation Success Criteria (Condition 15). Herbicides shall not be used without the prior written approval of the District.
13. A Wetland Mitigation Completion Report shall be submitted to the District within 30 days of completing construction and planting of the wetland mitigation area(s). Upon District inspection and approval of the mitigation area(s), the monitoring program shall be initiated with the date of the District field inspection being the construction completion date of the mitigation area(s). Monitoring events shall occur between March 1 and November 30 of each year. An Annual Wetland Monitoring Report

shall be submitted upon the anniversary date of District approval to initiate monitoring.

Annual reports shall provide documentation that a sufficient number of maintenance inspection/activities were conducted to maintain site(s) in compliance according to Condition Number 15. Note that the performance of maintenance inspections and maintenance activities will normally need to be conducted more frequently than the collection of other monitoring data to maintain the mitigation site(s) in compliance with Condition Number 15.

Monitoring Data shall be collected annually.

14. WETLAND MITIGATION SUCCESS CRITERIA
 MITIGATION AREA LAKE GRADY DAM

Mitigation shall be deemed successful when the following criteria have been met continuously for a period of at least one year without intervention, including but not limited to irrigation, removal of undesirable vegetation, or replanting of desirable vegetation.

Successful wetland mitigation provided as a requirement of this construction permit shall be preserved in perpetuity and maintained as part of the surface water management system.

- a. The mitigation area is classified as Palustrine Emergent Marsh/Palustrine Forested (Pem/Pfo) according to the United States Fish and Wildlife Service's Classification of Wetlands and Deepwater Habitats of the United States.
- b. Soil conditions, topography, water depth, and water level fluctuations in the mitigation area are similar to conditions in the permitted wetlands impact area, producing proportional habitat zonation.
- c. The dominant and sub-dominant species of desirable wetland plants and associated coverage comprising each vegetation zone and stratum of each mitigation area shall be as follows:

ZONE	STRATUM	PERCENT COVER	DOMINANT SPECIES
1	Herb.	85	<u>Juncus effusus</u>
1	Herb.	85	<u>Sagittaria spp.</u>
1	Herb.	85	<u>Pontederia cordata</u>
2	Canopy	85	<u>Acer rubrum</u>
2	Canopy	85	<u>Taxodium distichum</u>

- d. Coverage by desirable wetland vegetation within each zone and stratum shall equal or exceed percent cover as referenced in "c"

above. For canopy stratum, only trees greater than ten feet in height may be used to estimate percent cover.

- e. Density of trees surviving at least three years in the mitigation area shall be as follows:

ZONE	DENSITY (trees/acre)
2	15 trees/acre

- f. Coverage by nuisance and exotic species shall not exceed 10 percent of the mitigation area.
- g. Coverage by uplands vegetation shall not exceed ten percent of the mitigation area during the wet season (June-September).

15. The Permittee shall coordinate termination of monitoring for wetland mitigation sites with the District by:

- a. Notifying the District in writing when the Wetland Mitigation Success Criteria (Condition 15) have been initially achieved.
- b. Upon District acknowledgement, suspending all maintenance activities including but not limited to irrigation and addition or removal of vegetation.
- c. After one year, submitting a monitoring report to the District.

The District will evaluate the wetland mitigation site(s) to determine if the Wetland Mitigation Success Criteria have been maintained, and will notify the Permittee in writing of the evaluation results. The District reserves the right to require that corrective action be performed by the Permittee if any of the Wetland Mitigation Sites fail to maintain the success criteria.

16. The District reserves the right to require the Permittee to identify and perform corrective actions if the District issues a wetland mitigation deficiency determination.

17. This permit does not constitute certification of compliance with state water quality standards pursuant to Section 401, Public Law 92-500, 33 USC Section 1341.

- ~~18.~~ The Emergency Notification System must be in place prior to the re-filling of the reservoir area. Evidence of the formalization of the proposed coordination agreement with the Sheriff's Department must be submitted to the Tampa Regulation Department prior to the beneficial use of the dam facility.

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19. The earthen embankment areas shall be protected from erosion by appropriate vegetation, such as Bermuda grass. Inappropriate vegetation such as trees and shrubs shall be removed from the dam embankment. The vegetation on the embankments must be maintained in a fashion that will not obscure inspection of the embankment, or interfere with the operation and maintenance of the dam.
20. The District shall have the right to conduct inspections of this facility as it may deem necessary. For this purpose, the employees of the District, or any authorized representative shall have the right to enter at reasonable times on any property, public or private, for the purpose of investigating the condition, construction, or operation of the dam and associated facilities. After any such visual inspection, and upon finding that the dam is not in compliance with any provision of this permit or District Rules, the District may require the owner of the dam to undertake, at the owner's expense, such corrective measures as may be necessary to bring the site into compliance with District Rules.
21. Based upon a visual inspection of the dam, if the District determines that the dam is not in compliance with this permit or District Rules, the District may immediately take such measures as may be deemed necessary to provide emergency protection to life and property, including lowering the reservoir level or remove in whole or in part the dam facility and impoundment.
22. Refer to GENERAL CONDITION No. 15 herein.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.



Authorized Signature