

GENERAL  
MANAGEMENT PLAN/  
CONCEPTUAL  
DEVELOPMENT PLAN  
AND  
PROJECT IMPLEMENTATION  
PLAN

OAK  
MARR  
PARK

PREPARED BY  
FAIRFAX COUNTY PARK AUTHORITY  
PLANNING TEAM

APRIL 1993

AMENDED  
JUNE 24, 2009

GENERAL MANAGEMENT PLAN/  
CONCEPTUAL DEVELOPMENT PLAN  
AND PROJECT IMPLEMENTATION PLAN

for

OAK MARR PARK

Prepared for  
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GENERAL MANAGEMENT PLAN  
FOR OAK MARR PARK

I. INTRODUCTION

A. Park Description

Oak Marr Park is located in Oakton, Virginia, in the Providence Supervisory District. The park is 137 acres in size, 58.5 of which have been master planned. On the master planned acreage a baseball field, a softball field, two soccer fields, a parking lot, and a recreation center are built. Most of the undeveloped acreage is rolling and wooded. Oak Marr Park is located in the headwaters of the Difficult Runn watershed; Rocky Branch, a tributary of Difficult Run, runs through the northern part of the park. A small pond is located near the northwest boundary.

B. Purpose and Description of the Plan

The purpose of this General Management Plan (GMP) is to serve as a guide for all future planning and programming. This document should be referred to before future planning and design projects are started.

This GMP describes the existing natural and cultural resources of the park, as well as other existing conditions. For additional information and background, refer to the report by Pannell Kerr Forster, "Feasibility Study for Future Golf Development at Three Sites in Fairfax County, Virginia, March 1992". A copy of the report is available for review in the Planning and Land Management Division of the Park Authority.

Management zones have been established, with accompanying lists of potential uses for each zone. The uses are described in general terms, so that as visitor needs change, the uses provided can change also.

General Management Plans are meant to be flexible, to change with the changing needs of park visitors. Every GMP should be updated periodically, to reflect changes that have occurred both on and off-site.

B. Cultural Resources

The survey for historic and archaeological resources has been partially completed at Oak Marr. This survey must be completed to determine where these resources exist and how they would best be preserved and protected.

C. Wetlands

Portions of the park contain hydric soils. These soils are indicators of possible nontidal wetlands. They are mostly located along Rocky Branch, its tributaries, and the drainage from the recreation center toward the pond. A complete wetland delineation will be conducted before development plans are complete.

D. Soils

Most of the remaining soils have a high clay content, are low in fertility, and poor for septic fields. In addition, many of the soils have the potential to contain asbestos. Generally, the site's soils are suitable for active recreation development, though the shallow bedrock and low fertility may cause some problems.

E. Vegetation

Most of the undeveloped portion of the site consists of mixed age upland hardwood forest with the potential of some forested wetland along Rocky Branch.

F. Access

Access to the park is from Jermantown Road, opposite Arrowhead Drive. The entrance is between Route 123 and Oakton Road; new development will use this entrance.

G. Utilities

Though the undeveloped portion of the park is located outside the county's approved sewer service area, the portion of the park where the RECenter is built has sanitary sewer. Capacity of the sewer main for master plan build-out was reserved with the construction of the RECenter. Therefore, it is likely that sufficient capacity is allocated. If not, improvements to the main may be required, however, no extension of the sewer is planned.

A. Resource Protection Zone

Areas of valuable natural resources will be protected by a Resource Protection Zone (RPZ). The largest area encompasses the stream valley and associated buffer of Rocky Branch. Some of the other areas designated as RPZ at Oak Marr Park include forested wetlands. The RPZ also includes buffer areas along the property lines and the drainage area running along the back of the RECenter.

Human impact in this zone will be kept to a minimum. Some of the RPZ may include cultural resources as well. Management of the natural resources will be allowed, but degradation of this zone shall be prohibited.

Potential Uses:

Trails  
Wildlife and Habitat Management  
Research  
Interpretation and Education  
Passive Recreation

B. Cultural Resource Protection Zone

The Cultural Resource Protection Zone (CRPZ) has not been defined in this park. The survey of Cultural resources at Oak Marr Park is not completed. This survey is continuing; conclusions must be reached about the integrity of the sites. As sites are defined and evaluated, they may become the CRPZ.

Cultural resources shall be researched prior to any site design activity. Appropriate steps shall be taken to protect or mitigate any resources designated for action.

C. Entrance Zone

The existing entrance to the park, off Jermantown Road, will continue to be the main park entrance.

The Entrance Zone (EZ) draws visitors into the site and allows them to view the park as they enter.

NOTE: Property information derived from plats & legal Descriptions on file with the F.C.P.A. & prepared by: Highlander Surveying Services PC Leesburg, VA; Hephart & Chan Alexandria, VA; Copeland Engineering Alexandria, VA; Copeland & Hephart Alexandria, VA. See Data Book 1983 Pg 118, D.R. 2033 Pg 250, D.B. 2943 Pg 123

Copeland Engineering # 531 6/12/18  
Copeland & Hephart # 531 12/30/15

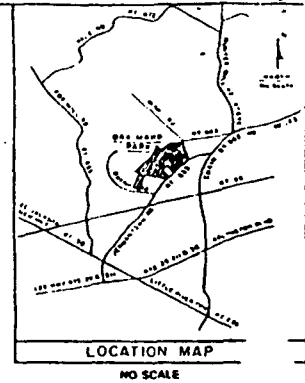
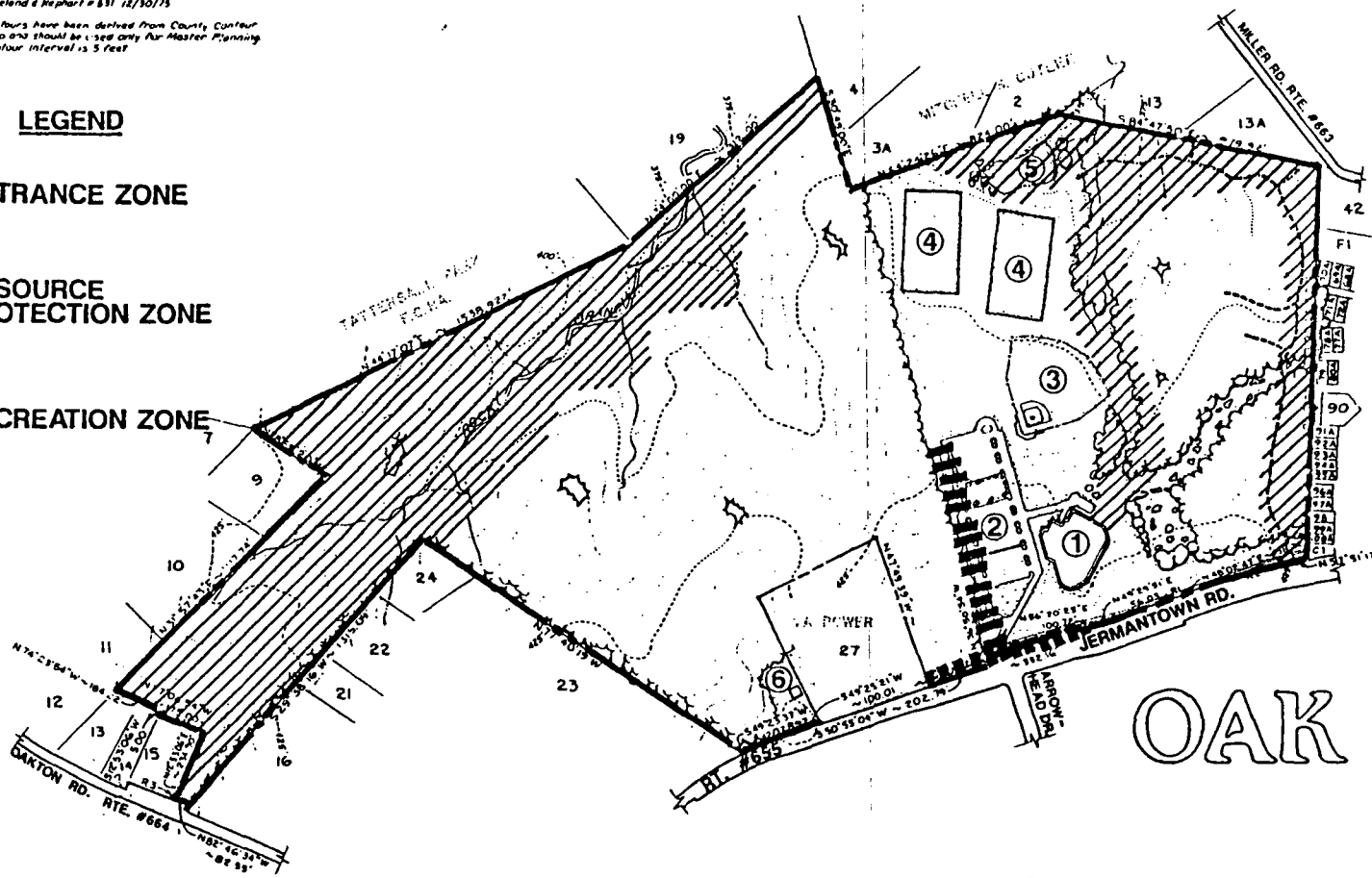
Contours have been derived from County Contour map and should be used only for Master Planning. Contour interval is 5 feet

**LEGEND**

 **ENTRANCE ZONE**

 **RESOURCE PROTECTION ZONE**

 **RECREATION ZONE**

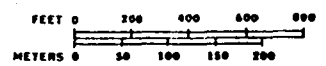


**GENERAL  
MANAGEMENT  
FRAMEWORK**  
**OAK MARR  
PARK**

FAIRFAX COUNTY, VA



MAP SECS: 47-1, 47-2, 47-3 AS OF 4/91



CONCEPTUAL DEVELOPMENT PLAN  
FOR OAK MARR PARK

I. INTRODUCTION

The purpose of this Conceptual Development Plan (CDP) is to describe what facilities should be developed, how they fit into the established management framework, where they will be constructed, and how these facilities will be operated in conjunction with other portions of the park and existing uses.

These decisions are based on public input, previous development in the park, and needs assessments as stated in the "Feasibility Study for Future Golf Development at Three Sites in Fairfax County, Virginia, March 1992".

II. DESIGN CONCERNS

A. Sanitary Sewer Extension

There will be no extension of the existing sanitary sewer into the previously undeveloped western portion of the park.

B. Lighted Facilities

All facilities to be lighted will be located as far from adjacent homes as possible. Innovative lighting techniques and screening of these facilities will further reduce spill-over lighting to the nearby community.

C. Parking

Adequate parking should be provided for all new activities. Additional parking should also be constructed to help with overflow parking from existing uses.

D. Traffic Control

A traffic consultant will be hired to do a study of traffic on Jermantown Road unless a study has been completed or is planned by VDOT as part of the Jermantown Road widening. If the study warrants the addition of a traffic light at the park entrance, and if VDOT approves the installation, a light will be erected.



### III. DESCRIPTION OF CONCEPT PLAN ELEMENTS

#### A. Golf Course

A nine-hole par three golf course should be located in the Golf Course Development area. The client golfer is a public course player who is either looking for practice or a beginner or elderly player who does not wish the challenge of a full size course.

Environmental sensitivity is of the utmost importance. Minimal grading and clearing is a goal, with tree preservation a priority.

#### B. Driving Range

A 60-station lighted driving range should include 30 covered all-weather mats and 30 grass stations.

The range should be sited to minimize the impact on the nearby residential community and to minimize clearing. Lights should be as low as possible, and shrouded. Bunkered ground lights should be used for the landing areas.

Additional facilities associated with the driving range include:

- \* A 7000 plus square foot chipping green
- \* A 7000 plus square foot practice green
- \* Practice bunkers

#### C. Maintenance Shop

The maintenance shop should be multi-functional. Areas should be provided for equipment storage, equipment repair, fertilizer storage, and chemical storage.

An employee area with showers, bathrooms, lockers, and lunch room should be provided for the employees working out of the shop. In addition there should be an office.

Outside space should be provided for the following:

- \* Employee parking
- \* Tractor trailer deliveries
- \* Dumpsters
- \* Concrete material storage bins
- \* Wash rack and containment tank
- \* Above ground fueling station
- \* Spray tank fill area

I. Building Expansion

Space has been reserved for a future potential expansion of the RECenter. This expansion is planned to include a gymnasium with spectator bleachers, associated locker rooms, and additional storage areas.

J. Playground/Tot Lot

A playground and tot lot should be located in the Active Recreation area in view of the tennis courts, soccer fields, and miniature golf course if possible. They should provide a wide range of play events for children ages 2 through 12.

Seating areas should be provided in the best possible locations to provide visual access to the other active recreation facilities. Both play areas should be accessible to people with disabilities. Shade trees should be provided for the play areas, and for viewing areas.

K. Trails

An 8'-wide asphalt trail, meeting standards for countywide multi-use trails, will be constructed along Jermantown Road. An additional segment of countywide trail will connect the trail along Jermantown Road with Miller Road. The trail should wind through the woods between the Oak Marr Courts property line and the golf course development.

A natural surface trail should connect the countywide trail system with Tattersall Park to the northwest of the RECenter. This trail should skirt the golf course and Rocky Branch and also connect with the countywide trail on the western portion of Jermantown Road.

Both trail types should be staked in the field before construction to avoid any large trees in the development area. Trail slopes should not exceed 5% unless no other route is possible.

L. Fencing and Required Screening

Application for a waiver of the 35 foot transition yard screening fencing requirement should be made for the common property line with Oak Marr Courts. Additional peripheral fencing may be provided surrounding the golf course as required and as desired by the community. The transitional screening will be provided as required.

PRELIMINARY  
PROJECT IMPLEMENTATION PLAN FOR  
OAK MARR PARK

I. INTRODUCTION AND OVERVIEW

The purpose of this Project Implementation Plan (PIP) is to provide scope definitions, cost estimates, approximate schedule for completion, and funding recommendations for the projects described in the Conceptual Development Plan (CDP).

Implementation of the approved CDP for Oak Marr Park involves the funding, planning, design, and construction of a nine-hole par three golf course, driving range, clubhouse, maintenance shop, parking lot, and other recreational facilities. The project will be coordinated by the Manager of the Golf Enterprises Division. The project team that created the conceptual development plan should continue to act as resource to the effort. Project Manager for the implementation will be the Park Authority golf course landscape architect. Staff from golf courses, Facility Development Division, and Park Management Division should also participate.

All facilities and amenities shall be fully accessible to persons with disabilities and meet all requirements of the Americans with Disabilities Act.

The project cost for the golf facilities is estimated at \$1.6 million. (See Appendix A taken from the Feasibility Study for Future Golf Development at Three Sites in Fairfax County, Virginia by Parnell Kerr Forster). Total project buildout would be over \$2 million.

Once funding has been obtained, the success of the project hinges on the careful supervision of design and construction. Timely completion will insure the availability of revenue flows to fund repayment of the bonds.

II. PROJECT SCOPE DEFINITIONS

A. Golf Courses

The course is envisioned as a nine-hole par three layout. Each hole should have multiple tees to allow for a range of yardages. Holes should vary from 100 to 200 plus yards in length. The client golfer is a public course player who is either looking for practice or a beginner or elderly golfer who does not wish the challenge of a full size course. The course will provide a synergy with the proposed driving range.

B. Driving Range

The range is intended to be approximately 60 stations, lighted. Approximately 30 stations are to be covered and with synthetic surface while the remainder will be grassed. The entire range is to be irrigated. Target greens are to be incorporated at appropriate distances. Additional facilities associated with the range include:

- \* 7000 plus square foot chipping green
- \* 7000 plus square foot practice green
- \* Practice bunkers

The driving range should be sited to minimize impacts on the nearby residential community. Clearing should be restricted as much as possible. Lighting should be as low possible and shrouded. Bunkered ground lights should be used for the landing areas.

C. Maintenance Shop

The shop should encompass approximately 2000 square feet of building, plus additional covered equipment storage ports (700 sq. ft.). A fertilizer storage shed (500 sq. ft.) and chemical storage building (400 sq. ft.) are also required.

The shop should have a minimum of two bays (one drive through). Ceilings must be high to accommodate an equipment repair lift. Lighting should be augmented with sky lights. All surfaces are to be washable and floor drains are to be installed.

A separate employees area should include showers, bathroom, lockers and lunch room that can serve the expected number of employees (10 total, 4 full-time). In addition there should be one office. The office should have a view of the entire shop floor and a window to the outside. It will have sensitive equipment (irrigation computer, copier, etc.) and must be secured and protected from dust and shop noise.

Outside space should be provided for the following:

- \* Employee parking
- \* Tractor trailer deliveries
- \* Dumpsters
- \* Concrete material storage bins
- \* Wash rack and containment tank
- \* Above ground fueling station
- \* Spray tank fill area

E. Miniature Golf Course

An 18 hole miniature golf course should be built near the clubhouse and parking lot. The administrative office of the clubhouse will control admissions to the mini golf. The course should have a minimum of 9 holes accessible to persons with disabilities.

The course should be as natural as possible. Naturalized plantings and surfacing should be used throughout. The course may be lighted.

F. Parking

An additional 250 lighted asphalt parking spaces should be provided for the new facilities, as well as for overflow from the existing facilities. The new lot should be located as near the existing lot as possible.

The new lot should be screened by vegetation from the view of Jermantown Road and neighboring homes.

G. Athletic Fields

Two rectangle fields should be located north of the RECenter, south of the existing field locations. These fields may be lighted.

They should meet all standards for rectangle field construction as approved by FCPA.

H. Tennis and Multi-use Courts

Four tennis courts, one tennis practice court, and three multi-use courts should be built in the area immediately adjacent to the RECenter. (Space should be reserved for the planned expansion of the center.)

The tennis courts should have player-activated lights, to be deactivated when the RECenter closes for the night. The multi-use courts should not be lighted.

All courts should be constructed following FCPA standards for court construction and should be accessible for persons with disabilities.

Approximately 3600 linear feet of natural surface trail, either bluestone dust or other gravel, should connect this trail system with Tattersall Park to the northwest of the RECenter. This trail should skirt the golf course and Rocky Branch.

Another segment of the natural surface trail, 2200 linear feet, should run from the Tattersall trail and follow the western park property line. Again, a minimum buffer of 50 feet should be maintained between the park and the private property. This trail should connect with the countywide trail along the western portion of Jermantown Road, completing a loop.

All trails should be staked in the field before construction to avoid any large trees in the development area. Trail slopes should not exceed 5% unless no other route is possible.

L. Fencing and Required Screening

Application for a waiver of the 35 foot transition yard screening fencing requirement should be made for the common property line with Oak Marr Courts. Additional peripheral fencing may be provided surrounding the golf course as required and as desired by the community. The transitional screening will be provided as required.

III. FINANCING

Based on recommendations contained in A Feasibility Study for Future Golf Development in Fairfax County, Virginia, March, 1992 by Pannell, Kerr, Forster, Inc. and approved by The Park Authority Board, Oak Marr Golf Course is to be financed by issuance of revenue bonds. Repayment of these bonds will be from existing and future revenue streams of the Park Authority's Trust Fund. All costs associated with development of the Oak Marr golf facilities will be accomplished without use of tax monies.

The revenue bonds will be authorized by both Fairfax County Park Authority Board (PAB) and the Board of Supervisors (BOS). The issuance will be structured, underwritten, and marketed utilizing resources provided to the County by financial advisors to the Office of Management and Budget (OMB).

In addition to the consultant's fiscal analysis, it will be necessary to provide OMB and their advisors up-to-date fund statements and projections. This will be coordinated by Fairfax County Park Authority administration.

#### IV. CONSULTANT SERVICES

A golf course architect will be necessary for this project. A request for qualifications was issued in March 1993, and is to be followed by a request for proposals to the top rated firms and individuals. Criteria for selection of a consultant will center on a proven track record with high use municipal golf design; a proven sensitivity towards, and experience with environmental issues; demonstrated ability to minimize maintenance costs; and experience with golf course renovation and redesign.

Selection of all design, construction, and any other necessary consulting services will be according to all required FCPA and Fairfax County procurement procedures. A project team of FCPA staff will work with the design consultants through the design and construction process to insure the project is completed according to design specifications and legal requirements.

#### V. PHASING/OPERATIONAL CONCERNS

Consideration should be given to completing the driving range and support facilities first in order to bring them into operation prior to the "grow-in" period for the golf course. This will allow for the establishment of a customer base that will patronize the future course. In addition, this will encourage the earliest possible initiation of new revenue streams.

Existing natural habitats should be preserved and incorporated into the golf course to the greatest extent possible. Care must be taken to ensure no adverse affects on the Rocky Branch during construction.

Archeological resources will be protected and/or mitigated as prescribed by the design. Both environmental and archeological resources require "in the field" siting and special attention during all phases of construction. As discussed in the CDP, wetlands delineation will be completed during the design phase.

A grow-in period must be provided to prepare the golf course for play. This process will be supervised by the Twin Lakes Golf Course Superintendent with support from the Extension Office and Fairfax County Park Authority Turfgrass Specialist. Under no circumstances should the grow-in period be altered to allow play before the course is ready.

The trail system should be completed as the first phase of construction so that access along the periphery and to Tattersall Park are maintained.

APPENDIX

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**PROPOSED OAK MARR GOLF CENTER  
ESTIMATED DEVELOPMENT COSTS**

Golf Course Development:

|  |                    |
|--|--------------------|
| Driving Range                                      | \$ 210,000         |
| Par-3 Golf Course                                  | 315,000            |
| Miniature Golf Course                              | 180,000            |
| Practice Greens                                    | 50,000             |
| Engineering, Design, Survey and Permit Costs       | 55,000             |
| Parking and Interior Roads                         | 90,000             |
| Clubhouse and Surrounding Grounds' Landscaping (1) | <u>210,000</u>     |
| Total Golf Course Development Cost                 | <u>\$1,110,000</u> |

Facilities:

|  |                             |
|--|-----------------------------|
| Clubhouse (2)                              | \$ 171,000 - 259,000        |
| Maintenance Building (3)                   | 40,000 - 110,000            |
| <del>Maintenance and Range Equipment</del> | <u>100,000</u>              |
| Total Facility Cost                        | <u>\$ 311,000 - 469,000</u> |

**Total Proposed Oak Marr Golf Course Development Cost**      **\$1,421,000 - 1,579,000**

- Note: (1) Includes the cost for a chain link fence encircling the property.  
 (2) Denotes average to above average construction.  
 (3) Range depicts prefabricated metal and masonry construction, respectively.

Source: National Golf Foundation, Marshall and Swift, and PKF Consulting

FAIRFAX COUNTY PARK AUTHORITY  
TRUST FUND COMPLETION  
Revenue Bond Issue/Lease Purchase Option  
Front Funding of Cash Deficits

|                                   | 1991                | 1992                | 1993                | 1994                | 1995                | *1<br>1996          | *2<br>1997          | 1998                | 1999                | 2000                | 2001                | 2002                | 2003                | 2004                | 2005                | 2006                |
|-----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>REVENUE:</b>                   |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| *3Golf Courses (Existing)         | \$4,207,661         | \$4,802,862         | \$4,600,000         | \$4,800,000         | \$4,992,000         | \$4,602,226         | \$4,006,315         | \$4,166,568         | \$4,333,230         | \$4,506,560         | \$4,686,822         | \$4,874,295         | \$5,069,267         | \$5,272,037         | \$5,482,919         | \$5,702,235         |
| *4Proposed Tw Lakes G.C.          |                     |                     |                     |                     |                     |                     | \$1,234,782         | \$2,475,392         | \$3,146,500         | \$3,569,847         | \$3,712,640         | \$3,861,147         | \$4,015,593         | \$4,176,217         | \$4,343,265         | \$4,516,996         |
| Proposed R. Jones G.C.            |                     |                     |                     |                     |                     |                     | \$432,567           | \$1,384,213         | \$1,727,498         | \$1,983,744         | \$2,063,094         | \$2,145,618         | \$2,231,442         | \$2,320,700         | \$2,413,528         | \$2,510,069         |
| Proposed Oak Marr G.C.            |                     |                     |                     |                     |                     |                     | \$580,933           | \$1,510,425         | \$1,822,177         | \$2,058,431         | \$2,140,769         | \$2,226,399         | \$2,315,455         | \$2,408,073         | \$2,504,396         | \$2,604,572         |
| Other Facilities                  | \$9,962,621         | \$10,631,876        | \$9,965,000         | \$10,790,000        | \$11,183,800        | \$11,593,156        | \$12,032,686        | \$12,489,314        | \$12,963,713        | \$13,456,584        | \$13,968,658        | \$14,500,689        | \$15,053,468        | \$15,627,814        | \$16,224,577        | \$16,844,644        |
| <b>TOTAL</b>                      | <b>\$14,170,282</b> | <b>\$15,434,738</b> | <b>\$14,565,000</b> | <b>\$15,590,000</b> | <b>\$16,175,800</b> | <b>\$16,195,382</b> | <b>\$18,287,283</b> | <b>\$22,025,912</b> | <b>\$23,993,118</b> | <b>\$25,575,166</b> | <b>\$26,571,983</b> | <b>\$27,608,148</b> | <b>\$28,685,225</b> | <b>\$29,804,841</b> | <b>\$30,968,685</b> | <b>\$32,178,516</b> |
| <b>EXPENDITURES:</b>              |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| *3Golf Courses (Existing)         | \$3,059,383         | \$3,036,784         | \$2,930,000         | \$3,381,000         | \$3,516,240         | \$3,608,418         | \$2,993,555         | \$3,113,297         | \$3,237,829         | \$3,367,342         | \$3,502,036         | \$3,642,117         | \$3,787,802         | \$3,939,314         | \$4,096,887         | \$4,260,762         |
| *4Proposed Tw Lakes G.C.          |                     |                     |                     |                     |                     |                     | \$958,617           | \$1,771,579         | \$1,885,154         | \$1,983,680         | \$2,063,026         | \$2,145,549         | \$2,231,370         | \$2,320,625         | \$2,413,450         | \$2,509,988         |
| Proposed R. Jones G.C.            |                     |                     |                     |                     |                     |                     | \$281,581           | \$1,141,164         | \$1,206,213         | \$1,262,637         | \$1,318,343         | \$1,371,077         | \$1,425,920         | \$1,482,957         | \$1,542,275         | \$1,603,966         |
| Proposed Oak Marr G.C.            |                     |                     |                     |                     |                     |                     | \$239,529           | \$913,601           | \$972,023           | \$1,025,617         | \$1,066,642         | \$1,109,307         | \$1,153,680         | \$1,199,827         | \$1,247,820         | \$1,297,733         |
| Other Facilities                  | \$10,627,175        | \$10,955,888        | \$11,030,000        | \$11,399,000        | \$11,854,960        | \$12,329,158        | \$12,822,325        | \$13,335,218        | \$13,868,627        | \$14,423,372        | \$15,000,306        | \$15,600,319        | \$16,224,331        | \$16,873,305        | \$17,548,237        | \$18,250,166        |
| <b>TOTAL</b>                      | <b>\$13,686,558</b> | <b>\$13,992,672</b> | <b>\$13,960,000</b> | <b>\$14,780,000</b> | <b>\$15,371,200</b> | <b>\$15,937,576</b> | <b>\$17,295,607</b> | <b>\$20,274,859</b> | <b>\$21,169,846</b> | <b>\$22,062,648</b> | <b>\$22,950,353</b> | <b>\$23,868,369</b> | <b>\$24,823,103</b> | <b>\$25,816,028</b> | <b>\$26,848,669</b> | <b>\$27,922,615</b> |
| Revenue Exceeding Expend          | \$483,724           | \$1,442,066         | \$605,000           | \$810,000           | \$804,600           | \$257,806           | \$991,676           | \$1,751,052         | \$2,823,272         | \$3,512,517         | \$3,621,630         | \$3,739,778         | \$3,862,121         | \$3,988,813         | \$4,120,016         | \$4,255,901         |
| Transfers to Subfund 950          | (\$2,486,860)       | (\$601,000)         | (\$1,082,843)       | (\$675,000)*5       | (\$675,000)*5       | (\$675,000)*5       | (\$500,000)         | (\$500,000)         | (\$500,000)         | (\$500,000)         | (\$1,000,000)       | (\$1,000,000)       | (\$2,000,000)       | (\$2,000,000)       | (\$2,500,000)       | (\$2,500,000)       |
| <b>INCREASED BOND SALE AMOUNT</b> |                     |                     |                     |                     |                     |                     | \$2,500,000         |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| (Support of PA cash shortfall)    |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| <b>Debt Service:</b>              |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Debt Service (Bond)               | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       | (\$1,031,524)       |
| Lease Payment                     | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         | (\$936,506)         |
| Debt Service for Incr. Amt        |                     |                     |                     |                     |                     | \$0                 | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         | (\$250,000)         |
| <b>BEGINNING FUND BALANCE</b>     | <b>\$3,021,147</b>  | <b>\$1,018,011</b>  | <b>\$1,859,077</b>  | <b>\$1,381,234</b>  | <b>\$1,516,234</b>  | <b>\$1,645,834</b>  | <b>\$2,792,134</b>  | <b>\$1,065,780</b>  | <b>\$98,802</b>     | <b>\$204,045</b>    | <b>\$998,532</b>    | <b>\$1,402,132</b>  | <b>\$1,923,880</b>  | <b>\$1,567,972</b>  | <b>\$1,338,755</b>  | <b>\$740,741</b>    |
| <b>ENDING FUND BALANCE</b>        | <b>\$1,018,011</b>  | <b>\$1,859,077</b>  | <b>\$1,381,234</b>  | <b>\$1,516,234</b>  | <b>\$1,645,834</b>  | <b>\$2,792,134</b>  | <b>\$1,065,780</b>  | <b>\$98,802</b>     | <b>\$204,045</b>    | <b>\$998,532</b>    | <b>\$1,402,132</b>  | <b>\$1,923,880</b>  | <b>\$1,567,972</b>  | <b>\$1,338,755</b>  | <b>\$740,741</b>    | <b>\$278,612</b>    |
| <b>RESERVES NEEDED:</b>           |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Cash Flow                         | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           | \$500,000           |
| Golf Course Sinking Fund          |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Prior Years                       |                     |                     | \$0                 | \$500,000           | \$1,000,000         | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 |
| Current Year                      |                     |                     | \$500,000           | \$500,000           | \$500,000           | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 |
| <b>FUND BALANCE AVAILABLE</b>     | <b>\$518,011</b>    | <b>\$1,359,077</b>  | <b>\$381,234</b>    | <b>\$16,234</b>     | <b>(\$354,166)</b>  | <b>\$2,292,134</b>  | <b>\$565,780</b>    | <b>(\$401,198)</b>  | <b>(\$295,955)</b>  | <b>\$498,532</b>    | <b>\$902,132</b>    | <b>\$1,423,880</b>  | <b>\$1,067,972</b>  | <b>\$838,755</b>    | <b>\$240,741</b>    | <b>(\$221,388)</b>  |

**APPENDIX C**

\*1 Existing Twin Lakes revenue and expenditures for 1996 reduced because construction of new course will limit operations to 9 holes.  
\*2 Opening of Twin Lakes, Oak Marr Center and R.Jones  
\*3 Includes Twin Lakes (1991-1996), Jefferson, Greendale, Pincrest, and Burke Lake Golf Courses  
\*4 Assumes Consolidated Twin Lakes Operation. Figures include existing golf course.  
\*5 Includes yearly lease payment for SIMS

FAIRFAX COUNTY PARK AUTHORITY  
TRUST FUND COMPIATION

OTHER FACILITIES

|                         | 1991                | 1992                | 1993                | 1994                | 1995                | *1<br>1996          | *2<br>1997          | 1998                | 1999                | 2000                | 2001                | 2002                | 2003                | 2004                | 2005                | 2006                |
|-------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>VENUE:</b>           |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Conservation            | \$42,955            | \$83,665            | \$20,000            | \$20,000            | \$20,400            | \$20,808            | \$21,224            | \$21,649            | \$22,082            | \$22,523            | \$22,974            | \$23,433            | \$23,902            | \$24,380            | \$24,867            | \$25,365            |
| Historic Preservation   | \$164,813           | \$187,615           | \$170,000           | \$180,000           | \$183,600           | \$187,272           | \$191,017           | \$194,838           | \$198,735           | \$202,709           | \$206,763           | \$210,899           | \$215,117           | \$219,419           | \$223,807           | \$228,284           |
| Managed Parks           | \$978,959           | \$829,154           | \$700,000           | \$700,000           | \$700,000           | \$700,000           | \$714,000           | \$728,280           | \$742,846           | \$757,703           | \$772,857           | \$788,314           | \$804,080           | \$820,162           | \$836,565           | \$853,296           |
| Recreation Centers      | \$8,452,730         | \$9,193,686         | \$8,800,000         | \$9,600,000         | \$9,984,000         | \$10,383,360        | \$10,798,694        | \$11,230,642        | \$11,679,868        | \$12,147,063        | \$12,632,945        | \$13,138,263        | \$13,663,793        | \$14,210,345        | \$14,778,759        | \$15,369,909        |
| Administration          | \$323,164           | \$337,756           | \$260,000           | \$270,000           | \$275,400           | \$280,908           | \$286,526           | \$292,257           | \$298,102           | \$304,064           | \$310,145           | \$316,348           | \$322,675           | \$329,128           | \$335,711           | \$342,425           |
| OMI                     |                     |                     | \$15,000            | \$20,000            | \$20,400            | \$20,808            | \$21,224            | \$21,649            | \$22,082            | \$22,523            | \$22,974            | \$23,433            | \$23,902            | \$24,380            | \$24,867            | \$25,365            |
| <b>TOTAL</b>            | <b>\$9,962,621</b>  | <b>\$10,631,876</b> | <b>\$9,965,000</b>  | <b>\$10,790,000</b> | <b>\$11,183,800</b> | <b>\$11,593,156</b> | <b>\$12,032,686</b> | <b>\$12,489,314</b> | <b>\$12,963,713</b> | <b>\$13,456,585</b> | <b>\$13,968,658</b> | <b>\$14,500,690</b> | <b>\$15,053,469</b> | <b>\$15,627,814</b> | <b>\$16,224,577</b> | <b>\$16,844,644</b> |
| <b>EXPENDITURES:</b>    |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Historic Preservation   | \$183,371           | \$173,516           | \$160,000           | \$202,000           | \$210,080           | \$218,483           | \$227,223           | \$236,311           | \$245,764           | \$255,594           | \$265,818           | \$276,451           | \$287,509           | \$299,009           | \$310,970           | \$323,409           |
| Managed Parks           | \$0                 | \$0                 | \$310,000           | \$334,500           | \$347,880           | \$361,795           | \$376,267           | \$391,318           | \$406,970           | \$423,249           | \$440,179           | \$457,786           | \$476,098           | \$495,142           | \$514,947           | \$535,545           |
| Recreation Centers      | \$9,739,352         | \$9,818,462         | \$9,400,000         | \$9,700,000         | \$10,088,000        | \$10,491,520        | \$10,911,181        | \$11,347,628        | \$11,801,533        | \$12,273,594        | \$12,764,538        | \$13,275,120        | \$13,806,125        | \$14,358,370        | \$14,932,704        | \$15,530,013        |
| Administration          | \$704,452           | \$963,910           | \$490,000           | \$451,500           | \$469,560           | \$488,342           | \$507,876           | \$528,191           | \$549,319           | \$571,292           | \$594,143           | \$617,909           | \$642,625           | \$668,330           | \$695,064           | \$722,866           |
| OMI                     | \$0                 | \$0                 | \$380,000           | \$403,000           | \$419,120           | \$435,885           | \$453,320           | \$471,453           | \$490,311           | \$509,924           | \$530,321           | \$551,533           | \$573,595           | \$596,538           | \$620,400           | \$645,216           |
| Programming & Marketing | \$0                 | \$0                 | \$290,000           | \$308,000           | \$320,320           | \$333,133           | \$346,458           | \$360,316           | \$374,729           | \$389,718           | \$405,307           | \$421,519           | \$438,380           | \$455,915           | \$474,152           | \$493,118           |
| <b>TOTAL</b>            | <b>\$10,627,175</b> | <b>\$10,955,888</b> | <b>\$11,030,000</b> | <b>\$11,399,000</b> | <b>\$11,854,960</b> | <b>\$12,329,158</b> | <b>\$12,822,325</b> | <b>\$13,335,218</b> | <b>\$13,868,626</b> | <b>\$14,423,371</b> | <b>\$15,000,306</b> | <b>\$15,600,319</b> | <b>\$16,224,331</b> | <b>\$16,873,305</b> | <b>\$17,548,237</b> | <b>\$18,250,166</b> |

# GOLF COURSES DESIGN AND CONSTRUCTION SCHEDULE

