

MCPB Item # 9 10/03/02

### **MEMORANDUM**

DATE:

September 25, 2002

TO:

Montgomery County Planning Board

VIA:

Don Cochran, Director of Parks Migs Damiani, Project Manager

John Carter, Chief, Community-Based Planning Division

FROM:

Sue Edwards, I-270 Corridor Team Leader (301) 495-4518 SUL

**REVIEW TYPE:** 

Mandatory Referral

PROJECT NAME:

Germantown Indoor Aquatic Center at South Germantown Recreation

Park

APPLICANT:

Montgomery County Department of Public Works and Transportation,

Division of Facilities and Services

**CASE NUMBER:** 

02305-F&S-1

**REVIEW BASIS:** 

Article 28, Chapter 7-112 of the Regional District Act

LOCATION: MASTER PLAN:

18000 Central Park Circle Germantown Master Plan

FILING DATE:

September 18, 2002

STAFF RECOMMENDATION:

APPROVAL to transmit comments to Montgomery

County Department of Public Works and

Transportation.

### PROJECT DESCRIPTION

The Montgomery County Department of Recreation proposes to build an indoor aquatic facility to serve the needs of the Germantown, Clarksburg, and Damascus area. As a result of the rapid development of the South Germantown Recreation Park and citizen support for development of non-soccer elements of the Park come on-line in a timely fashion, the Department of Recreation identified a general location within the Park for the

indoor swim center (Figure 1). The swim center must be suitable for regional level high quality competitions and also appeal to the community needs on a daily basis.

South Germantown Recreation Park consists of nearly 555 acres of fields, forests, and stream valleys (Figure 2). Approximately 280 acres of upland, open areas provide the space needed for most of the active recreational development planned for this park. The remaining acreage (275 acres) includes streams, seeps, springs, steep slopes, and riparian forest which are less suitable for recreation development (South Germantown Recreation Park Amendment, page 53).

**Site Description** – The subject site occupies approximately 5 acres in the central portion of the South Germantown Recreation Park north of Schaeffer Road. Access to the aquatic center occurs from Central Park Cicle, a park roadway approximately 50 feet wide. The site is flat and cleared of vegetation from its earlier farming use.

Adjacent uses include: a future enterprise facility (tennis/fitness), a splash playground, and miniature golf course. Several soccer fields, parking, and comfort facilities are located across Central Park Circle.

**Building Concept-** The Germantown Indoor Aquatic Center is a two-story aquatic facility specially designed to accommodate competitive swimming and diving events, instruction, and recreational activities. The 62,646 square foot facility consists of five aquatic activity centers:

- Competitive pool with diving tower
- Multi-purpose pool for instruction, warm up, and general swimming
- Waterslides with splash down areas in several locations
- Leisure pool for youth play
- Two therapeutic pools

The remainder of the facility houses administrative areas, lockers rooms and support areas on two floors. The lower level contains the pools, classroom, staff room, first aid room, operator's office, and locker/shower rooms (Figure 3). The second level, shown in Figure 4, contains a lobby entrance, administrative space, observation gallery, party, room, and public restrooms. At the front entrance, the roof is 48 feet above street level to accommodate the 10 meter diving tower.

Access to the building is controlled through a single point of entry where once inside, the visitor has abroad view of available amenities. The interior circulation is simple and allows for easy access to each of the building areas. Creation of an upper level creates "U" shaped spectator seating to view the entire competitive swimming event from a variety of locations.

The shape and form of the natatorium are the most important factors in providing a well-performing swim center (Program of Requirements, page 19). The choice of materials for the interior is predominantly masonry supported by a structural frame. Brick veneer and

corrugated metal wall panels comprise the majority of exterior wall surfaces. The pitched and flat roof systems respond to the volumetric need of the spaces within. See Figures 5 and 6 for exterior elevations.

Access and Parking- Two new entrances will be constructed for access from the western portion of Central Park Circle (Central Park Circle is a loop road which circles the interior of the park), One of the entrances is primarily for service; the second entrance brings visitors to the front entry and parking area. A future roadway between the tennis/fitness center and the swim center for access from the northern portion of Central Park Circle will be constructed.

There will be approximately 188 parking spaces (including 6 handicapped spaces) on site and the approximately 230 spaces in close proximity of the site. An additional 200 spaces will be added for the future tennis/fitness center.

Pedestrian access occurs from existing 5-foot sidewalks to the east, south, and west of the project. These paths will be extended into the site to connect the adjacent facilities to the aquatic center.

Landscaping- The landscape design for the new aquatic is based on helping visitors find, arrive, park, and visit the new tennis and aquatic facilities. A continuation of street trees on Central Park Circle define the site and supply a sense of scale while shading pedestrians on perimeter sidewalks. Ornamental plantings at the site entry points help visitors locate way-finding signage. Plantings within the site shade parking lots and create attractive exterior spaces. Screen plantings will limit views of service areas and provide privacy for the exterior sunbathing terrace.

**Operations**- The aquatic center will be open to the public approximately 340 days per year. Hours of operation are Monday through Friday from 5:00 am to 10:30 pm and Weekends and Holidays 6:00 am to 10:00 am. Staffing for the swim center include a Center Director and 5 additional fulltime staff. Part-time staff include lifeguards, swimming instructors, coaches, cashiers, and pool operators.

### **ANALYSIS**

Master Plan – The proposed development is considered to be within the Germantown Planning Area covered by the Germantown Master Plan, adopted and approved in 1989. The area Master Plan does not directly address a recreation park with the intensity of uses programmed for South Germantown. The South Germantown Recreational Park Master Plan Report, approved in 1995 and amended in 1999, is a general guide for the final development of future recreation facilities and conservation of natural areas within the park. The master and report serves as a vehicle for citizens, officials and planners work together to determine the future of the park.

The Master Plan Report identified an indoor swim center as one of the facilities top be

provided in the portion of the park north of Schaeffer Road. The swim center was intended to be located in proximity to a future tennis/fitness facility.

**Environmental Resources**- Water service is supplied through connectoon to the existing WSSC water main to the south of the site. Two fire hydrants ill be added to the water system.

Stormwater management for the project receives treatment comparable to a Special Protection Area. All impervious areas that have vehicle access are treated by a biofiltration system whereby surface flow enters from parking areas and is treated in sand filters planted by woody and herbaceous plant species. Each biofilter has a bypass inlet designed to pass the 10-year peak flow.

Roof drains and other impervious surfaces are conveyed via storm drain to the recharge trench sized to store the required water quality volume.

Historic Resources – There are no historic resources within the aquatic center site.

**Transportation-** The traffic study for the South Germantown Recreational Park Phase II development incorporates traffic generated by the Aquatic Center in the background traffic condition. (Transportation staff memo as Attachment A). The aquatic center is projected to generate a maximum of 1.775 vehicles per day on adjacent roadways on a typical activity day and a maximum of 300 vehicles per hour on adjacent roadways on a swim tournament weekend. Phase II of the Soccerplex operations were conditioned to restrict scheduling of swim tournaments and soccer tournaments on the same weekend.

### **COMMUNITY CONCERNS**

Notices of the Mandatory Referral hearing were recently mailed to 19 civic groups and individuals. No comments have been received.

### CONCLUSION

Staff recommends approval of the mandatory referral for the Germantown Indoor Aquatic Center.

Figure 1: Concept Plan for the South Germantown Recreational Park

Figure 2: Vicinity Map

Figure 3: Lower Level Floor Plan Figure 4: Upper Level Floor Plan

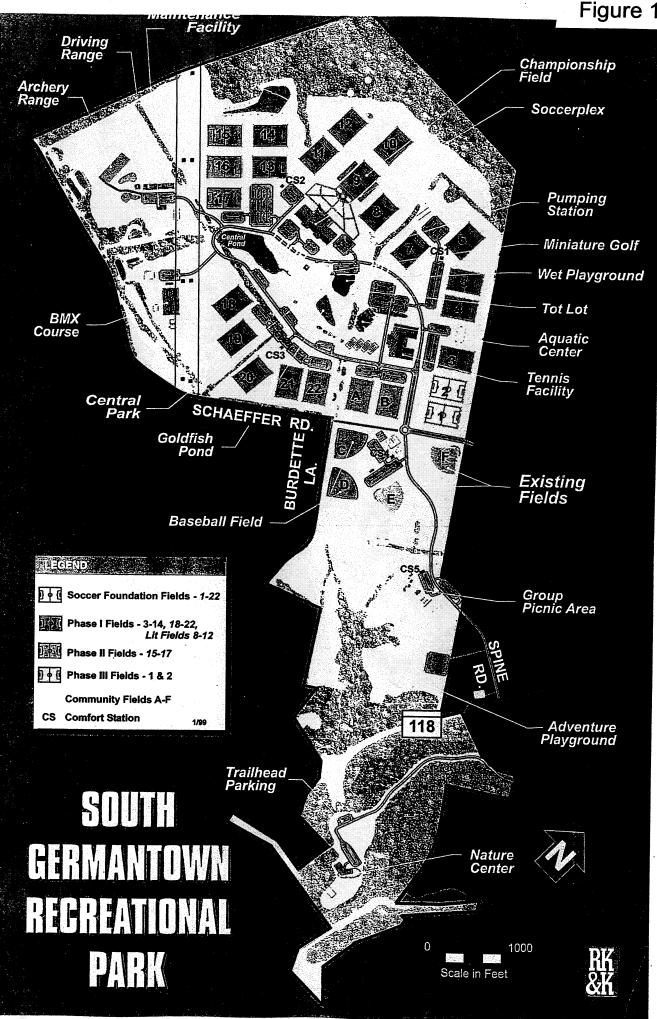
Figure 5: Main Entrance and South Elevations

Figure 6: Rear and North Elevations

Figure 7: Site Plan

Attachment A: Transportation Staff Memo

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## SOUTH GERMANTOWN RECREATIONAL PARK



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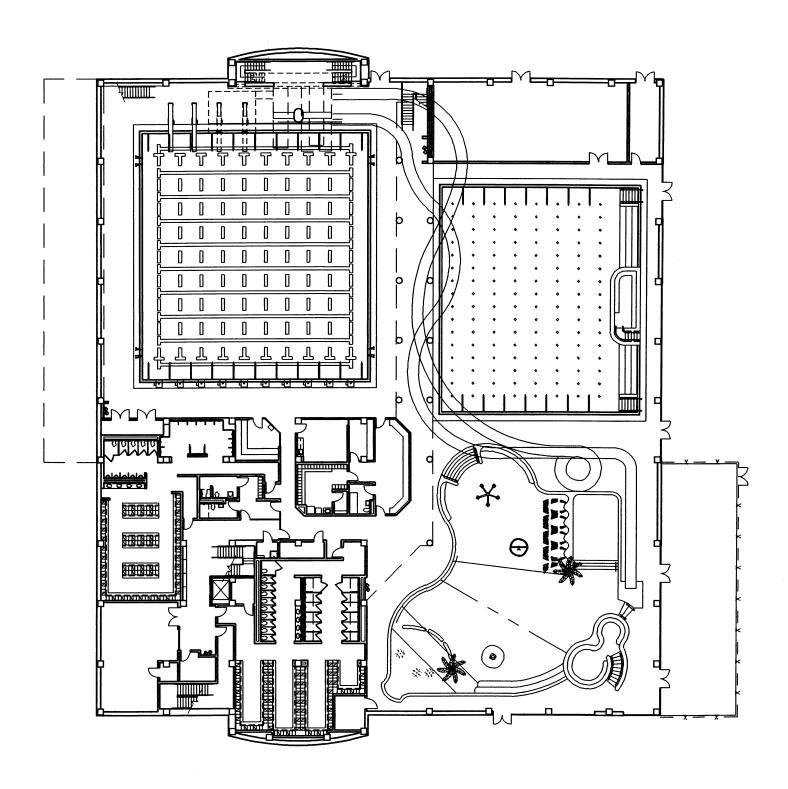
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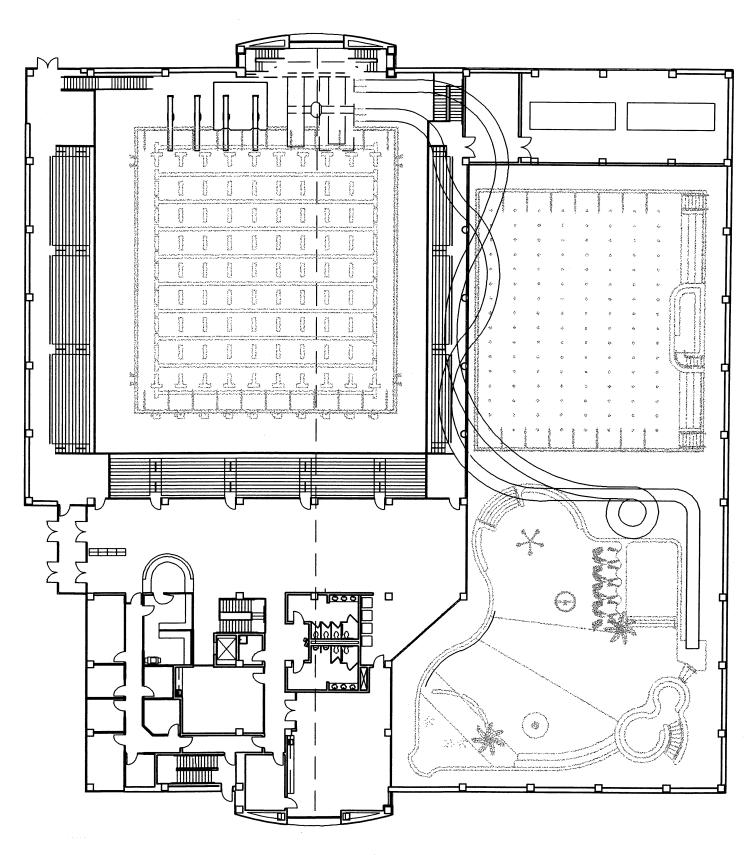






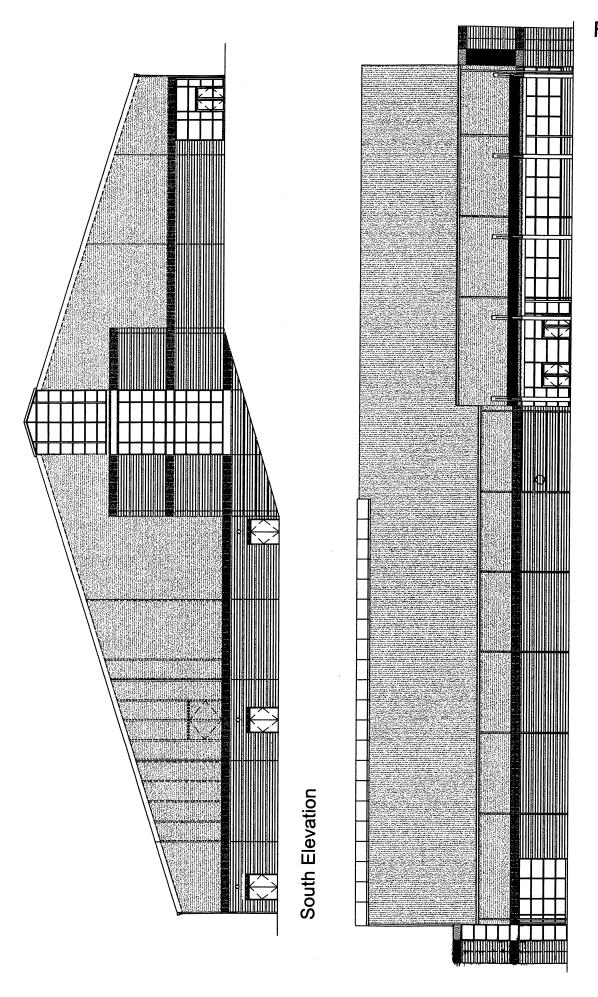
Lower Level Floor Plan

Figure 4

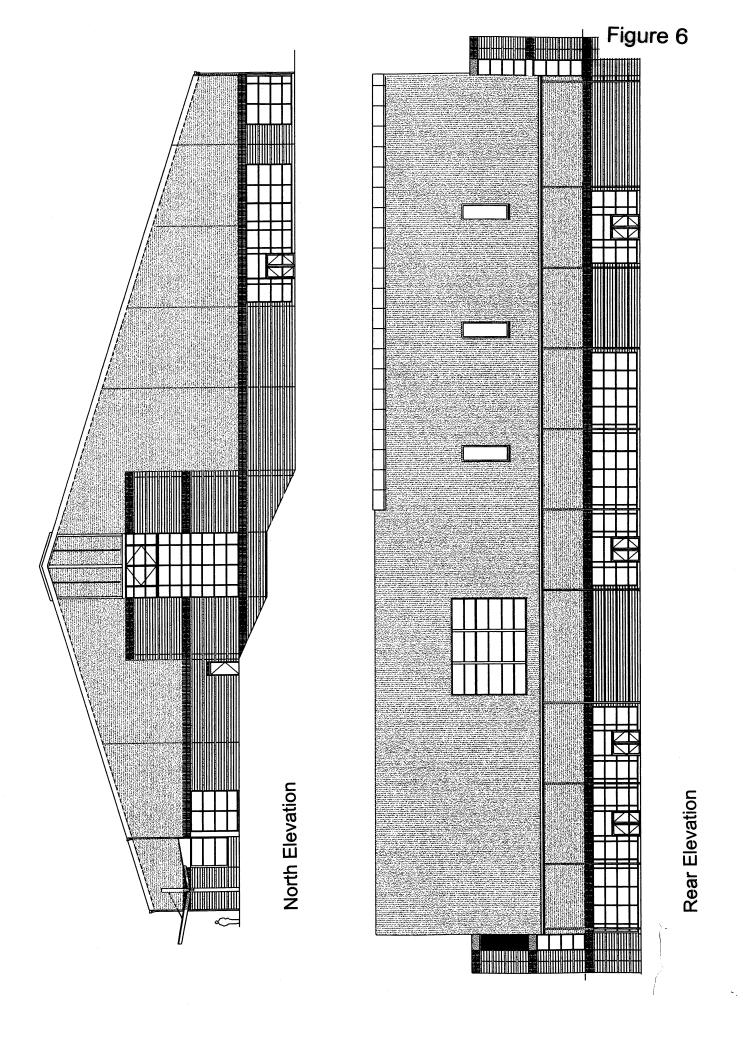


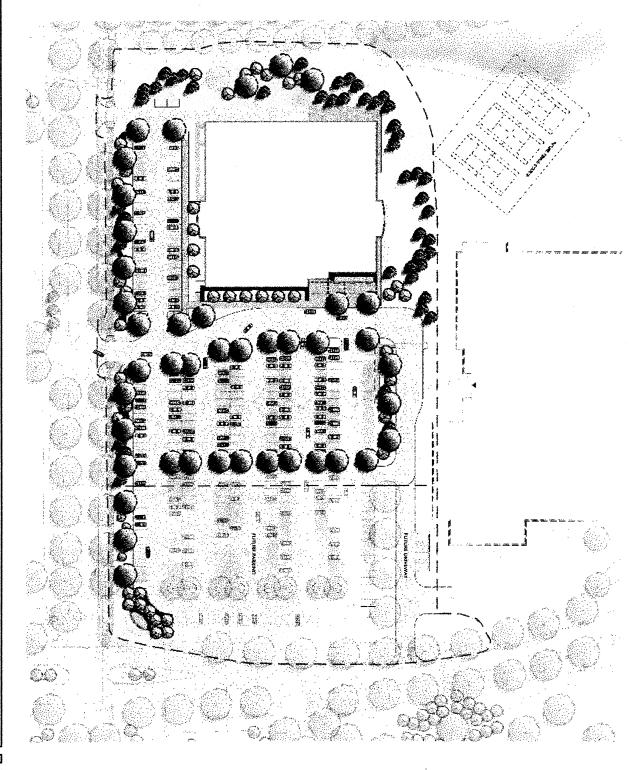
Upper Level Floor Plan

Figure 5



Entrance Elevation





Site Plan

COMMANITY P

SEP 23

2002

PARK AND PLANNING COUNTRY



July 26, 2002

### **MEMORANDUM**

TO:

Terry Brooks, Special Projects Coordinator

Office of the Director of Parks

VIA:

Ronald C. Welke, Supervisor

Transportation Planning

FROM:

Ki H. Kim, Planner

Transportation Planning

SUBJECT: Traffic Study for South Germantown Recreational Park - Phase II

This memorandum presents 1) a summary of the traffic surveys that were conducted on local roadways adjacent to the South Germantown Recreational Park during several major soccer tournaments, and 2) the findings of a traffic study for the South Germantown Recreational Park Phase II development.

### **FINDINGS**

- 1. The traffic surveys indicate that the daily and peak-hour traffic volumes that were collected on all roadways adjacent to the park are substantially less than each roadway's "desirable" daily or peak-hour volume. This indicates that the projected traffic volumes from area growth and the South Germantown Recreational Park Phase I development are being handled safely and adequately on the adjacent roadways. (Table I)
- 2. The traffic study for the South Germantown Recreational Park Phase II development includes traffic generated by the Aquatic Center in the background traffic condition. The Aquatic Center is projected to generate a maximum of 1,775 vehicles per day on adjacent roadways on a typical daily activity and a maximum of 300 vehicles per hour on adjacent roadways on a swim tournament weekend.

- 3. It is projected that the Phase II development of the park, i.e. three additional soccer fields would generate a maximum of 870 vehicles per day on adjacent roadways on a typical soccer league weekend and a maximum of 160 vehicles per hour on adjacent roadways on a soccer tournament weekend.
- 4. The traffic analysis for Phase II development indicates that traffic can be handled safely and adequately on the adjacent roadways (i.e., existing traffic plus the projected traffic from area growth including the Aquatic Center plus the proposed South Germantown Recreational Park Phase II development) except the peak-hour traffic condition on MD 118 north of Richter Farm Road. (Total Traffic Condition with Aquatic Center, Table 2) The peak-hour traffic volume on MD 118 under the total traffic condition with the Aquatic Center exceeds the desirable maximum hourly volume for this roadway link. (Total Traffic Condition without Aquatic Center, Table 2)
- 5. Staff recommends that due to constraints on parking lot and roadway capacity, the Soccerplex coordinate with the Aquatic Center to avoid scheduling weekend soccer and swim tournaments to be held on the same day or days.

### **SUMMARY OF TRAFFIC ANALYSIS**

In order to assess the traffic impact of the South Germantown Recreational Park Phase II development on the surrounding roads, traffic conditions were analyzed for (1) the existing traffic condition, (2) background traffic condition (existing plus traffic from the area's growth including the Aquatic Center), and (3) total traffic condition (background plus park Phase II traffic) on MD 118, Schaeffer Road, Richter Farm Road, Burdette Lane/Black Rock Road and White Ground Road. Table 2 is a summary of the roadway (link) traffic volume analysis for daily and peak-hour volumes on adjacent roadways. The following is a summary of the analysis and discussion related to traffic projections associated with the park traffic.

- 1. As shown on Table 2, the projected total traffic volumes on the roadway segments do not exceed the roadways desirable maximum daily or peak-hour volumes except the peak-hour volumes on MD 118. (Line 1 of Table 2) If the Aquatic Center tournament traffic is not included as recommended, the project total peak-hour volume is 1,715, which is less than the desirable maximum peak-hour volume (1,800).
- 2. The "desirable daily/hourly volume" represents a safe and reasonable maximum volume for a given roadway, given its classification, number of lanes, posted speed limit and adjacent land use.
- 3. The "background" traffic condition includes traffic generated by the area growth including the Aquatic Center development which is scheduled to open in September, 2004 according to the County's CIP. Also included in the background traffic condition is traffic generated by the Miniature Golf Courses and the Splash

Playground, which opened in May 2002 as their traffic, was not reflected in the existing traffic condition.

- 4. The "total" traffic condition includes traffic generated by the background development plus Phase II development that includes three additional soccer fields. The traffic volumes projected for Phase II development of the park represent high estimates since all Phase I and Phase II facilities were assumed to be used at the same time, which is unlikely to occur.
- 5. The traffic volumes associated with the Phase II development were projected for a typical soccer league weekend and a tournament weekend and the highest traffic volumes were incorporated into the total traffic analysis. Based on projected traffic volumes, the league weekend activity will generate the highest daily traffic volume on adjacent roadways while the highest hourly traffic volume is generated by the tournament weekend activity. The same assumptions previously developed for the initial traffic analysis of the Soccerplex were used in projecting the traffic associated with the Phase II development, except as noted below.\*

Typical Soccer League Weekend Assumptions:

5 games per field 10 teams per field 14 vehicles per team 6 referees per field (3 per game, 2 sets) 2 trips per vehicle

### **Tournament Weekend Assumptions:**

6 games per field
12 teams per field
12 vehicles per team
6 referees per field (3 per game, 2 sets)
\*3 trips per vehicle (2.25 trips assumed for initial traffic study)
6 weekends per year

6. The following assumptions were used in projecting the traffic associated with the Aquatic Center. Based on projected volumes, the daily activity will generate the highest daily traffic volume on adjacent roadways while the highest hourly traffic volume is generated by the weekend tournament activity. The traffic volumes projected for the Aquatic Center represent high estimates since the following assumptions are based on the highest expected number of users.

For daily activity:

100 persons per hour from 5:00 am to 10:00 pm except 150 persons per hour from 7:00 pm to 8:30 pm 2 persons/vehicle

### 2 trips/vehicle

For weekend tournaments (2 days per tournament and 6 times per year):

800 persons per session, 2 sessions per day First arrival during 6:00 - 8:00 am Second arrival during 5:30 - 7:30 pm 3 persons per vehicle 2 trips/vehicle

- 7. The projected park traffic volumes were assigned to the roadway network using the same directional distribution developed in the initial traffic analysis for the Soccerplex.
- 8. During the Phase I development of the park, there were major roadway improvements completed in the vicinity of the park, which improved the area traffic conditions significantly. Schaeffer Road between Richter Farm Road and the Park entrance was widened to a four-lane divided roadway by the County and Richter Farm Road was completed as a four-lane arterial between MD 118 and Schaeffer Road by the developer of Kingsview Village subdivision. Also a traffic signal was installed at the intersection of MD 118 and Richter Farm Road. These improved roadways and South Germantown Park Road function as local access roads to the park from major highways I-270, Germantown Road (MD 118), Clopper Road (MD 117), and Great Seneca Highway (MD 119).
- 9. The proposed change of use of the Discovery Sport Center, to permit meetings or conferences during the weekdays, is not projected to affect the safe and efficient operation of the local roadways either during weekdays or on weekends as analyzed for the Phase II traffic conditions.

### CONCLUSION

Based on the results of the traffic survey for the Phase I development and the traffic analysis for the Phase II development, staff concludes that the local area roadway network will accommodate the projected traffic volumes from the area growth and the South Germantown Recreational Park Phase II development, including the proposed Aquatic Center development. Staff recommends that the Soccerplex coordinate with the Aquatic Center to avoid scheduling weekend soccer and swim tournaments on the same day of days.

KHK:cmd

Attachments

Traffic Study for Sourth Germantown Recretational Park.doc

	Table I: Summa	le I: Su	Table I: Summary of Daily and Peak-Hour Traffic Count Data 2000 November 18, 2000, March 17, 2001 and November	f Daily ar	nd Peak-	Hour Tra	iry of Daily and Peak-Hour Traffic Count Data	t Data mber 1	8, 2001			-
	Estimate Fall	Fall	October 7, 2000	7, 2000	November 18, 2000	ser 18,	March 17, 2001	, 2001	November 18, 2001	er 18, I	Maxi Desirabi	Maximum Desirable Volume
	Daily	Peak	Daily	Peak Hour	Daily	Peak Hour	Daily	Peak Hour	Daily	Peak Hour	Daily	Peak Hour
Schaeffer Road between Richter Farm Road and Park Entrance	3,910	006	10,475*	1,450	8,680*	1,290	5,390***	·			24,000	2,400
Schaeffer Road between Richter Farm Road and MD 117	3,200	365	3,865*	525	1,200*	80	2,890***		3,100***		000'6	006
Schaeffer Road south of Park Entrance	096	140	3,050*	435	-¥500'1		740***		1,185***		5,000	200
Richter Farm Road between Schaeffer Road and MD 118	5,040	935	7,500*	1,110	8,160*	1,295	4,510***		7,430***		31,000	3,100
MD 118 north of Richter Farm Road	7,570	840	11,460*	1,560	12,270*	1,570	,				18,000	1,800
Park Circle Drive	3,800	920	7,575**	995			3,605**	530	7,270**	-	000'6	006

## Montgomery County Park and Planning Department

\* 10-hour total (8:30 a.m. to 6:00 p.m.) \*\* 12-hour total (7:00 a.m. to 7:00 p.m.) \*\*\* 24-hour total

TABLE I-Summary of Traffic Data S.GTown Rec Park.doc

**TABLE 2** 

# SUMMARY OF ROADWAY (LINK) TRAFFIC VOLUME ANALYSIS

	Desirable Maximu Volume	ible Maximum Volume	Existing	Existing Traffic	Background Traffic	od Traffic	Total w/Aquat	Total Traffic w/Aquatic Center	Total Traffic w/o Aquatic Center	affic w/o Center
	Dally	Hourly	Daily	Hourly	Daily	Hourly	Daily	Hourly	Daily	Hourly
1. MD 118 North of Richter Farm Road	18,000	1,800	11,460	1,560	12,740	1,800	13,265	1,905	12,200	1,725
2. Schaeffer Road MD 117-Richter Farm Road	9,000	006	3,865	525	4,035	260	4,105	575	3,965	550
3. Schaeffer Road Richter Farm Road-Park Entrance	24,000	2,400	10,475	1,450	11,930	1,725	12,525	1,850	11,325	1,645
4. Richter Farm Road Schaeffer Road - MD 118	31,000	3,100	8,160	1,295	8,360	1,350	8,840	1,450	7,865	1,285
5. White Ground Road	2,000	200	009	60	685	80	720	06	650	80
6. Burdette Lane/ Black Rock Road	2,000	200	400		465	55	490	99	440	50
			8	, , , , , , , , , , , , , , , , , , ,						

TABLE II-Traffic Volume Analysis S.GTown Rec Park.doc

A CANON