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DETAILED SITE PLAN

DSP-87048/41

Application	General Data
Project Name: Six Flags America Waterslides Location: North side of Central Avenue, approximately 6,308 feet east of its intersection with Enterprise Road. Applicant/Address: Tierco Maryland, Inc. 13710 Central Avenue Largo, MD 20775	Date Accepted: 5/9/2005
	Planning Board Action Limit: 7/18/2005
	Plan Acreage: 265.62
	Zone: R-A & R-S
	Dwelling Units: NA
	Square Footage: NA
	Planning Area: 74A
	Tier: Developing
	Council District: 06
	Municipality: NA
	200-Scale Base Map: 202NE11

Purpose of Application	Notice Dates
To add the "Mammoth" and "Tornado" waterslides.	Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-12-2003) 2/15/2005
	Sign(s) Posted on Site and Notice of Hearing Mailed: 5/17/05

Staff Recommendation		Staff Reviewer: Ruth Grover	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
	X		

June 3, 2005

MEMORANDUM

TO: Prince George's County Planning Board
VIA: Steve Adams, Urban Design Supervisor
FROM: Ruth Grover, Senior Planner
SUBJECT: Detailed Site Plan DSP-87048/41—The "Mammoth" and "Tornado" Waterslides

The Urban Design staff has reviewed the detailed site plan for the subject property and presents the following evaluation and findings leading to a recommendation of APPROVAL.

EVALUATION

The detailed site plan was reviewed and evaluated for conformance with the following criteria:

- a. The requirements of the Zoning Ordinance in the R-A & R-S Zone.
- b. The requirements of Detailed Site Plan DSP-87048 (with 40 revisions).
- c. The requirements of the final plat recorded at Liber 8941, Folio 731, Plat Book VJ 183, Plat 051.
- d. The requirements of Special Exception SE-2635 and Special Exception SE-3400 approved on November 15, 1992, for a commercial recreational attraction as Zoning Ordinance No. 11-1999 pursuant to Section 27-342 of the Zoning Ordinance.
- e. The requirements of the *Landscape Manual*.
- f. The requirements of the Prince George's County Woodland Conservation Ordinance.
- g. Referral comments.

FINDINGS

Based upon the analysis of the subject application, the Urban Design staff recommends the following findings:

- 1. **Request:** The subject application requests the addition of "The Mammoth" and "The Tornado" waterslides.

2. **Development Data Summary**

	EXISTING	PROPOSED
Zone	R-A & R-S	R-A & R-S
Use(s)	Amusement Park	Amusement Park
Acreage	265.62	265.62
Parcels	1	1
Building Square Footage/GFA	NA	NA

3. **Location:** The site is in Planning Area 74A, Council District 6. More specifically, it is located on the north side of Central Avenue, approximately 6,308 feet east of its intersection with Enterprise Road.

4. **Surroundings and Use:** The subject property is bounded to the north by the residential subdivision known as Woodmore Meadows, Section II; to the west by a PEPCO Transmission right-of-way, the Kettering residential subdivision and vacant land; to the east by Belt Woods, an area of historic and undisturbed forest; and to the south by Central Avenue (MD 214) and the Cameron Grove residential subdivision.

5. **Previous Approvals:** Previous approvals on the subject site include Final Plat, Liber 8941, Folio 731, Plat Book VJ 183@ Plat No. 051, Detailed Site Plan DSP-87048 (including revisions 1-40), stormwater management concept approval 8607-2005, TCPII/45/98, and Special Exception SE-2635 and Special Exception SE-3400 approved on November 15, 1992, for a commercial recreational attraction as Zoning Ordinance No. 11-1999, pursuant to Section 27-342 of the Zoning Ordinance.

6. **Design Features:** The improvements proposed in this revision to the detailed site plan include the addition of the Mammoth and Tornado waterslides. The two waterslides would be located in the southeastern corner of the amusement park, just north of a small area of wetlands and south of another small area of wetlands that extends from the westerly to easterly side of the part of Parcel B affected by the subject application.

The Mammoth waterslide would consist of a six-person tube accessed via a six-foot-wide sidewalk that passes beneath the Tahiti Twist slide to the catch pool. The sidewalk leads to the Mammoth catch pool where riders pick up a six-person inflated rubber/vinyl tube. From that point, the riders proceed to the base of the approximately 47-foot-tall steel tower with cantilevered stairs and landings. Riders carry the tube and climb the steel stairs to the top landing. The top landing is equipped with launching equipment, where a Six Flags employee, who is a trained ride operator, will assist riders into the tube and onto the tube launcher. The tube launcher will release the tube with its riders into a half-moon-shaped fiberglass trough (or possibly an enclosed trough). The riders descend through the trough, which includes both curved and straight sections in a downward direction with ultimate discharge into a catch pool that measures 10 feet by 15 feet by 2.5 feet deep at its deepest point. The fiberglass trough would be supported by wood trestles on a concrete foundation. The new pool pump and treatment equipment are to be housed in a new 10-foot by 25-foot, one-story structure with a subbasement addition to the existing Tahiti Twister mechanical building. The application states “part of the ride may be enclosed as part of a tunnel effect.”

The Tornado ride would be accessed by a concrete walkway leading to the catch pool at the east side of the Black Lagoon Ride and is a four-man tube waterslide ride. The tubes would be distributed to the riders and the riders would carry them up the 50-foot tower via cantilevered

tower access stairs. The stairs would be located on all four sides of the tower and punctuated periodically with landings. At the top of a tower, with the help of trained park personnel, riders board and would then be released down an enclosed 110-foot-long fiberglass trough directly into a 65-foot diameter funnel, 45 feet in length, set on a 30-degree angle to the funnel's equator or center line, and narrowing to a 14-foot diameter outlet that discharges into a half-moon, 14-foot wide trough that directs the tube and riders to a 60-foot by 24-foot catch pool with a 15-foot by 24-foot by 3.5-foot catch area to receive the manned tubes. The access stair to the tower elevates the riders and observers to a 6-foot by 36-foot long observation deck located approximately 8 feet above the finished grade allowing the observer to look into the funnel, with a bottom entrance lip approximately 6 feet above finished grade. The funnel is a fiberglass-panel-lined geodesic steel framed structure. The stairways, observation deck, and the tower would be equipped with five-foot steel safety railing. A 20-foot by 30-foot one-story mechanical building constructed of masonry with a wood truss roof is included in the project to house the pump, filtering, and electrical equipment and service for the Tornado ride.

COMPLIANCE WITH EVALUATION CRITERIA

7. **Zoning Ordinance:** The subject application has been reviewed for compliance with the requirements in the R-A and R-S Zones and the site plan design guidelines of the Zoning Ordinance and is in conformance with applicable requirements.
8. **Detailed Site Plan DSP-87048, as revised:** Staff has reviewed the requirements of DSP-87048 and its subsequent revisions and found the proposed project to be generally in compliance with the requirements of its approval.
9. **Final Plat recorded at Liber 8941, Folio 731, Plat Book VJ 183Plat No. 051:** Staff has reviewed the requirements of the above final plat and found the proposed project to be generally in compliance with the requirements of its approval.
10. **The requirements of Special Exception SE-2635 and Special Exception SE-3400 approved on November 15, 1992 for a commercial recreational attraction as Zoning Ordinance No. 11-1999 pursuant to Section 27-342 of the Zoning Ordinance:** Staff has reviewed the requirements of the above approvals and found the proposed waterslides to be generally in accordance with the requirements of their approval.
11. **Landscape Manual:** The proposed development is exempt from the provisions of the *Landscape Manual* as it does not involve the creation of gross floor area in excess of ten percent of the floor area already on the site.
12. **Woodland Conservation Ordinance:** This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet; there are more than 10,000 square feet of existing woodland on site; and there are prior tree conservation plan approvals for this site. This application has been evaluated for consistency with the prior TCP approvals and was found to conform to those approvals. This application does not propose any woodland clearing or woodland conservation area impacts that would require a revision to the previously approved tree conservation plans. Therefore, no revisions to TCPI/8/00 or TCPII/45/98 have been required by the Environmental Planning Section as a result of approval of the subject application.
13. **Referral Comments:** The subject application was referred to the concerned agencies and divisions. The referral comments are summarized as follows:

Historic Preservation Planning—In a memorandum dated June 13, 2005, the Historic Preservation and Public Facilities Planning Section offered the following comments on the proposed project:

“Background

“The subject application surrounds the Partnership Historic Site (74A-15), located at 13710 Central Avenue, Largo.

“Partnership is a large, two-story, brick plantation house built in the eighteenth century and the 1840s. The house has a Georgian plan, a flared gable roof and walls of flemish bond; the main and rear facades have glazed header bricks. This building may incorporate parts of an early eighteenth-century Hall family home; on the grounds is a single Hall family tombstone dating from the early eighteenth century. The house has undergone several rebuildings, including a major renovation during the residence of the Berry family in the mid-nineteenth century. It is presumed that remnants of a brick kitchen building known to have existed at the end of the eighteenth century may exist under the nineteenth century frame kitchen. Partnership exhibits features of both the Federal and Greek Revival styles, and is an important county landmark.

“The house has not been inhabited for many years. In 1998, the owner, Adventure World/Premier Parks, Inc., initiated a project aimed at stabilizing the house. A wooden, interior/exterior structural reinforcing system was erected, and damaged roof elements were removed and replaced by temporary coverings. The nineteenth-century frame kitchen wing, which was substantially deteriorated and beyond reasonable repair, was removed. The stabilization project was reviewed and approved by the Historic Preservation Commission and has been carried out under Historic Area Work Permit (HAWP) #11-98.

“A chronological list of all the conditions that refer to the house follows:

“November 1972

“Special exception 2635 was approved for a commercial recreation attraction on 280± acres. This approval initiated the development of the facility known as the Wildlife Preserve, a theme park with a combination of amusement rides and animal displays. This special exception included two findings regarding the Partnership Mansion:

“1. Proper green space retention and usage of the historic mansion on the property.

“12. That a means of using or maintaining the historic mansion on the subject property be indicated, so that it will not fall into disrepair or neglect.

“Two conditions were added:

“1.a. Include gravestone located west of the historic mansion within the fenced area off limits to the public as per attached sketch.

“1.b. Development plan approval is required prior to building permit whenever any improvements are undertaken in the historic building other than those covered in the maintenance plan, taking the following into consideration:

proposed use, access, hours of operation, façade and internal treatment in relation to the historic character to be preserved.

“November 1981

“A revision to Special Exception 2635 was approved with an amendment to the official concept plan subject to 24 conditions for Wild Country owned by Mr. Jim Fowler. The revamped park opened as Wild World in the spring of 1982. The previous conditions were carried forward.

“June 1985

“The District Council approved an amendment to the general concept plan for SE-2635 and SE-3400. The plan was revised to update and clarify the existing concept plan by showing the existing structures and uses at Wild World and to show the general location of future structures.

“The conditions regarding the Partnership Mansion were removed during this revision. There seems to no explanation as to why the conditions were deleted.

“February 1993

“The District Council amended SE-2635 and SE-3400 to approve a change of location for the ‘Antique Car Ride’ and add a ride known as ‘Shuttle Loop.’ Another condition was added to indicate the boundaries of the area owned by Tierco Maryland, Inc. A total of 48 conditions were adopted. There were no conditions regarding the Partnership Mansion.

“November 1998

“The HPC approved HAWP #11-98 for the stabilization of Partnership. The stabilization consisted of the construction of a steel and wood bracing system to stabilize structurally deficient elements of the building. The work was concluded by April 1999. On July 8, 1999, a structural failure was discovered; part of the rear (north) elevation (which had not been braced) collapsed.

“July 1999

“The plan was revised to update and clarify the existing concept plan by showing the existing structures and uses at Six Flags and to show the general location of seven future rides. The Planning Board recommended approval of the revised concept plan on April 22, 1999 (PGCPB Nos. 99-62 and 99-63). The District Council approved the revised concept plan on July 29, 1999 (Zoning Ordinance No. 11-1999).

“Finding 8 states:

“The Historic Preservation Section (Rothrock to Srinivas, telephone conversation and field visit, March 29, 1999 and memorandum from Berger to Srinivas, April 2, 1999) has stated that a ‘Memorandum of Understanding’ is being finalized between the applicant and the Historic Preservation Commission regarding the County historic site on the property. The memorandum will revise the historic setting

boundaries and establish guidelines for the Historic Preservation Commission's authority and the applicant's responsibilities toward the historic site. The Historic Preservation Section has requested a condition of approval for ensuring compliance of the project and the overall concept plan with the requirements of the Historic Preservation Commission and the approved 'Memorandum of Understanding'. Proposed Condition 36.a below is suggested to fulfill this purpose.

:Condition 36.a:

“a. Provide information to the M-NCPPC staff regarding compliance of the County Historic Site (the Partnership Mansion – Historic Site 74A-15) located in the amusement park with the requirements of the Historic Preservation Section and the ‘Memorandum of Understanding’ approved by the Historic Preservation Commission.

“March 2000

“The District Council Order (adopted March 13, 2000) affirmed the Planning Board's decision in Resolution No. 99-236 to approve the new Superman Roller Coaster.

“Finding 5 states:

“The applicant has sent a letter to the Historic Preservation Section (Gibbs to Rothrock, October 25, 1999) stating that the exterior walls of the ‘Partnership Mansion’ historic site fell after the stabilization work was undertaken. Therefore according to the applicant, the restoration of the building is no longer feasible and ‘Memorandum of Understanding’ between Six Flags and the Historic Preservation Commission is not being entered into at this time. Since the circumstances that required this condition have changed, the applicant has filed a Detailed Site Plan application for the roller coaster. The letter to the Historic Preservation Section explains the situation regarding compliance with this condition and provides information regarding compliance with this condition.

“However, the Historic Preservation Section (Rothrock to Srinivas, telephone conversation, November 4, 1999) has stated that although the Memorandum of Understanding required by the above condition may not be applicable, the applicant should work with the Historic Preservation Section toward a mutually agreeable solution regarding the historic site. A condition of approval has been added to require the applicant to work with the Historic Preservation Section on this issue.

Condition 2 states:

“Prior to submission of any subsequent Detailed Site Plan for Six Flags America which requires a public hearing before the Planning Board, the applicant shall confer with the Historic Preservation Commission regarding the ultimate disposition of the historic site known as Partnership, which is located on the park property.

“The applicant discussed this condition with the Historic Preservation Section at the Planning Board Hearing and it was mutually agreed that this wording was acceptable.

“December 2000

“The Planning Board approved the 2001 roller coaster on January 11, 2001 (PGCPB No. 00-232). Finding 13 states:

“The applicant has submitted a letter dated December 8, 2000 describing the procedure for compliance with Condition 2 of SP-87048/34. The Historic Preservation Section (Higgins to Srinivas, December 8, 2000) has also stated that the applicant is currently in negotiations with the Historic Preservation Commission regarding the future of Historic Site 74A-015, thereby meeting the above condition.

“January 2001

“The applicant applied for a Historic Area Work Permit (HAWP # 9-00) to demolish Partnership. However, the applicant withdrew the application for demolition prior to the Historic Preservation Commission’s meeting (January 16, 2001) and sent a letter to the Historic Preservation Section (Gibbs to Rothrock, February 5, 2001) regarding his client’s position on the ultimate disposition of the structure, which was that the building cannot and will not be preserved or restored.

“Findings

- “1. The General Notes of the site plan do not note the location of historic site “Partnership and Cemetery, Historic Site 74A-015,” and that the historic site is within the detailed site plan.
2. The approved environmental setting is not delineated on the site plan or relevant sheets.
3. A type D bufferyard, adjacent to the environmental setting of the historic site, is required. The bufferyard requires a 40-foot landscape buffer and 50-foot building setback.
4. Prior to the applicant withdrawing HAWP #9-00 to demolish the Partnership Mansion, they had proposed to take measures to preserve the history of the property where Partnership sits as follows (Porter to Rothrock, March 10, 2000):

““1) Six Flags America will submit, for permanent record, level two HABS documentation of Partnership to be completed by Kann and Associates.

““2) Six Flags America will locate and have reproduced the most recent HABS photos of the building.

““3) Six Flags America will produce a photo exhibit complete with a brief history of Partnership. Six Flags America will seek the technical assistance of the Prince George’s Historic Preservation Commission in this endeavor. This photo exhibit will remain on display at either our Guest Relations Building or our administration building.

““4) Six Flags America will donate (free of charge) to a qualified candidate portions of the Partnership interior to include the banister, remaining mantle pieces, and any brick of interest. A qualified candidate should be identified by the Prince George’s County Historic Preservation Commission. Any costs for this endeavor

which are in excess of the normal cost of demolition will be the responsibility of the donee.'

- “5. HAWP #9-00 was recommended for denial, but if the HPC were to find contrary to staff’s recommendation, the following conditions were provided:

“that the HPC condition its approval of the demolition application upon the acceptance of the offers listed in Six Flags America’s letter of March 10, and further upon a requirement for archeological investigations for the entire knoll to determine the location of the original barns, outbuildings, and other historic features. The archeological investigations should follow the requirements outlined in the Maryland Historical Trust’s Guidelines for Archeological Investigations in Maryland, specifically:

“The applicant shall conduct Phase I archeological survey of the Environmental Setting, followed by Phase II evaluations, prior to release of the Department of Environmental Resources raze permit. Phase III, data recovery, should be completed, upon review of the results of the Phase II work by the M-NCPPC historic preservation and archeological staffs, within six months of release of the raze permit.

- “3. If the HPC determines that the HAWP application should be approved, staff further recommends that the HAWP be approved for partial demolition, so that an archeological record will be maintained in the following manner:

“The applicant shall retain the foundation perimeter, to a height of about 2 feet, and at the southeast corner of the building, one bay of the first story, generally as sketched on the attachment.

“This archeological remnant would then be available for future examination and interpretation.’

“Conclusions

- “1. Partnership and Cemetery Historic Site (#74A-015) should be shown on all appropriate sheets of the detailed site plan.
- “2. The environmental setting of the historic site should be delineated and noted on all appropriate sheets.
- “3. Type D bufferyard should be provided around the environmental setting of the historic site.
- “4. The applicant has previously proffered, through the HAWP process, documentation of Partnership.
- “5. Partnership, through neglect of the owners, continues to deteriorate.”

The Historic Preservation and Public Facilities Planning Section’s concerns have been addressed in the recommended conditions below.

Transportation—In an e-mail dated June 3, 2005, the Transportation Planning Section stated that they had no comment on the proposed project.

Permits—The Permit Review Section has verbally stated that they have no comments on the proposed project.

Environmental Planning—In a memorandum dated May 12, 2005, the Environmental Planning Section offered the following:

1. A detailed forest stand delineation (FSD) was submitted and approved during the review and approval of Type I Tree Conservation Plan, TCPI/8/00.

Discussion: No further information with respect to the detailed FSD is required with this application.

2. This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet; there are more than 10,000 square feet of existing woodland on site; and there are prior tree conservation plan approvals for this site. This application has been evaluated for consistency with the prior TCP approvals and was found to conform to those approvals. This application does not propose any woodland clearing or woodland conservation area impacts that would require a revision to the previously approved tree conservation plans. Therefore, no revisions to TCPI/8/00 or TCPII/45/98 are required with this application.

Discussion: No further information with respect to the Type II Tree Conservation Plan is required.

3. Although this property is not subject to transportation-related noise impacts, it was identified as a noise generator during the review and approval of SE-2635 and SE-3400. To address this concern, SE-2635 and SE-3400 included the following condition.

2. **“A noise study shall be submitted with the Detailed Site Plan for each new ride or activity that will demonstrate to the satisfaction of the Planning Board that noise levels from any sounds (including any crowd noise) will not exceed 55 dBA at all property lines, except as permitted in Condition 19 herein.”**

Condition 19, as referenced above, generally mandates that the 55dBA noise levels continue to be implemented and that some legally enforceable agreements including nondisturbance setbacks be established.

A noise analysis, dated January 4, 2005, prepared by Phoenix Noise and Vibration, LLC, was submitted with the application for the proposed new water rides:

“Two rides are proposed for the park entitled “Mammoth” and “Tornado.” Both are similar in nature involving water raft rides. Riders walk up sets of stairs to a loading platform where they board four-person rafts which slide down large tubes through a series of hills and turns to a pool below. The “Tornado” ride is characterized by a large funnel shaped flue, which sits on its side. The slide portion of both rides is partially covered. The rides are to be located near the

existing water rides “Tahiti Twister” and “ Black Lagoon.” Heights and distances of each ride are as follows:

Ride	Distance to Nearest Property Line	Height above Ground
Tornado	1,170 feet	45 feet
Mammoth	796 feet	50 feet

“The dominant noise from these rides will be from riders screaming while in the raft. Water is pumped from the ground to the top of the ride by pumps mounted at ground level so machinery noise is expected to be minimal. As an example of the noise level calculations, two riders screaming at 90 dBA at a distance of 3 feet would produce 93 dBA. The distance at which this noise level is reduced to 55 dBA is 238 feet based upon unobstructed noise propagation at the standard 6 dBA per doubling of distance. Based upon the above table, this distance is clearly within the limits of the park. Note that this example is considered a worst case scenario since it ignores reduction from the walls and covering of the slide and assumed two people screaming at the exact same time, loudness and location.”

As a result of this evaluation, the consultants provides the following conclusions:

“Per your request, Phoenix Noise & Vibration has reviewed and analyzed the plans for two new water rides proposed for the Six Flags America theme park near Mitchellville, Maryland. Based upon this analysis, Phoenix NV concludes that the noise level from these rides will not exceed 55 dBA at receiving property lines, thereby meeting covenants established by the park regarding noise impacts.”

Discussion: No further information with respect to the noise generation by the proposed ride is required.

4. A Stormwater Management Concept Approval Letter (8607-2005-00) was submitted with this application. The redevelopment requirement will be addressed through water quality management provided in three stormceptors, which replaces an existing inlet.

Discussion: No further information with respect to stormwater management is required.

Department of Environmental Resources (DER)—In comments dated May 12, 2005, DER stated that the site plan for Six Flags America—Waterslide, DSP-87048/41, is consistent with approved stormwater concept 8607-2005.

Fire Department—At the time of this writing, staff has not received comment from the Prince George’s County Fire Department.

Maryland State Highway Administration (SHA)—In a letter dated May 18, 2005, SHA stated that they have no objection to Detailed Site Plan DSP-87048/41 approval as presented.

Maryland Department of Natural Resources (DNR)—In a letter dated May 25, 2005, DNR stated they have no objections or concerns regarding the project with respect to the adjacent state-owned Belt Woods property. As an aside, however, they noted that the base plans should be

revised to accurately reflect existing conditions surrounding the project site for future development proposals.

Western Shore Conservancy—At the time of this writing, staff has not received comment from the Western Shore Conservancy.

14. As required by Section 27-285(b) of the Zoning Ordinance, the detailed site plan represents a reasonable alternative for satisfying the site design guidelines of Subtitle 27, Part 3, Division 9, of the Prince George's County Code without requiring unreasonable cost and without detracting substantially from the utility of the proposed development for its intended use.

RECOMMENDATION

Based upon the foregoing evaluation and analysis, the Urban Design staff recommends that the Planning Board adopt the findings of this report and APPROVE Detailed Site Plan DSP-87048/41 to add two additional rides at the existing Six Flags America commercial recreational attraction, subject to the following conditions:

1. Prior to certificate approval of this detailed site plan, Partnership Historic Site (#74A-015) and its environmental setting will be appropriately shown on all appropriate sheets of the DSP and the D bufferyard shall also be shown.
2. Prior to future submissions, the applicant should take measures to preserve the history of the property where Partnership sits according to proffers made for HAWP #9-00 as well as to address the conditions enumerated by Historic Preservation Section staff for the same application. A HAWP, approved by the HPC, would be required for the demolition of Partnership.