CALIFORNIA COASTAL COMMISSION SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4402 767-2370

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 Hearing Date:
 July 8-12, 2002

Agent: Patrick Owen

REGULAR CALENDAR STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-01-129

Applicant: SeaWorld Adventure Park

Tue 9a

Description: Construction of a splash down water ride, consisting of three towers (95, 89 and 83 feet high), interior and exterior sets with water effects, a 130,000 gallon exhibit tank for up to ten Commerson Dolphins, a gift shop, snack stand, restrooms, and several accessory structures, located on approximately 5.5 acres along and within the southern border of the enclosed theme park, east of the visitor entrance and adjacent to the main parking lot.

Site: 500 SeaWorld Drive, Mission Bay Park, San Diego, San Diego County. APN 760-037-01

Substantive File Documents: Certified Mission Bay Park Precise Plan; SeaWorld Master Plan Update; Rollercoaster Noise Surveys, dated 4/23/01; Final EIR for SeaWorld Master Plan Update, dated 5/31, 2001

STAFF NOTES:

<u>Summary of Staff's Preliminary Recommendation</u>: Staff is recommending approval with special conditions for the proposed ride attraction. Issues raised by this specific development were already analyzed to some degree during preparation, review and adoption of the SeaWorld Master Plan and its accompanying EIR. The primary issue raised by the proposal relates to views. Special conditions address the particular issues not fully resolved in those documents, namely, visual resource and public access concerns raised by this first Tier 1 development proposal.

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:



6-01-129 Page 2

<u>MOTION</u>: I move that the Commission approve Coastal Development Permit No. 6-01-129 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. Standard Conditions.

See attached page.

III. Special Conditions.

The permit is subject to the following conditions:

1. <u>Final Plans</u>. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit to the Executive Director for review and written approval, final site plans, building plans and elevations approved by the City of San Diego, which shall clearly delineate the ride in its approved location, and otherwise be in substantial conformance with the preliminary plans submitted by the applicant, titled <u>"2003 Expansion, SeaWorld San Diego</u>," dated August 10, 2001

The permittees shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. <u>Landscaping Plan</u>. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a detailed landscape plan for the long-term plantings that indicates the type, size, extent and location of all plant materials, the proposed irrigation system and other landscape features. Said plan shall be submitted to the Executive Director for review and written approval and include the following:

(a) Only drought tolerant native plant materials shall be utilized.

The permittees shall undertake development in accordance with the approved final landscaping plan. Any proposed changes to the approved landscaping plans shall be reported to the Executive Director. No changes to the approved landscaping plans shall occur without an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. <u>Construction Access/Staging Area/Project Timing</u>. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit plans showing all locations which will be used as staging and storage areas for materials and equipment during the construction phase of this project. The staging/storage plan shall be subject to review and written approval of the Executive Director. Use of public walkways and public parking areas, including on-street parking for the interim storage of materials and equipment shall not be permitted. If areas outside the leasehold are designated as staging/storage areas, or if construction will require any restrictions on traffic along Sea World Drive (such as lane closures), the plan shall also indicate that no work may occur during the summer months (Memorial Day weekend to Labor Day) of any year.

4. <u>Coloration of Structure</u>. To minimize visibility from outside SeaWorld, those portions of the approved splash down ride visible from outside SeaWorld shall not be finished in any solid white or bright color.

IV. Findings and Declarations.

The Commission finds and declares as follows:

1. <u>Detailed Project Description</u>. The applicant, SeaWorld, is proposing to add a new attraction to the existing theme park. This would consist of a splash down water ride themed as the Lost City of Atlantis, which is proposed as a multi-structure, and multi-level, complex. The proposed primary structures include one building with three towers (83, 89 and 95 feet in height), interior and exterior sets with water effects, a 130,000 gallon exhibit tank for up to ten Commerson Dolphins. Proposed accessory structures include a gift shop, snack stand, restrooms, and various operation and maintenance structures. The proposed ride would be located on approximately 5.5 acres along and within the southern border of the enclosed theme park, east of the visitor entrance and adjacent to the main parking lot.

This is the first application for development under the new SeaWorld Master Plan Update, which the Commission voted to certify in February, 2002. The new master plan addresses build-out of SeaWorld over the next 15-20 years, and is divided into Tier 1, Tier 2 and Special Projects. The splash down ride is a Tier 1 project, and has been described in detail in the master plan. An EIR was prepared, circulated for public review and approved by the City of San Diego for the master plan, which looked at the overall plan but also analyzed potential impacts and mitigation requirements for the identified Tier 1 projects. The issues addressed with regard to the splash down ride are visual resources, public access, and water quality.

SeaWorld is located within Mission Bay Park in the City of San Diego. It is situated adjacent to Mission Bay and is surrounded largely by City parklands consisting of grassy, open areas. Mission Bay Park is an area of deferred certification, where the Commission retains jurisdiction and Chapter 3 policies of the Coastal Act are the standard of review, with the certified master plan used as guidance.

2. <u>Visual Impacts</u>. Section 30251 of the Coastal Act addresses visual resources, and states, in part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas....

Mission Bay Park is recognized nationally as a public resource providing a wide variety of passive and active recreational opportunities in a unique, visually-pleasing setting of rolling grassy areas, sandy beach and open water. Commercial leaseholds, including SeaWorld, are scattered throughout the park and include high-rise structures at four hotel sites, as well as the observation tower and gondola ride at SeaWorld. These few structures all predate the Coastal Act and the City's coastal zone height initiative which established a limit of 30 feet. No permanent structural improvements exceeding 30 feet in height have been approved anywhere in Mission Bay Park since passage of the Coastal Act and the City height initiative.

In 1998, SeaWorld secured passage of a new height initiative, exempting itself from the 30-foot limit. Following this, SeaWorld developed a detailed master plan, that established development sites and design criteria for future buildout of the park, and redevelopment of existing areas. The initiative made it clear that heights exceeding the 30-foot limit could be proposed within the SeaWorld leasehold, but the City Council and Coastal Commission would decide whether or not to approve the specific proposals. The currently developed portions of SeaWorld are heavily landscaped with a variety of mature trees, shrubs and groundcovers. Many existing trees are 60-80 feet tall and effectively screen the interior of the park from views from outside SeaWorld. In addition, the existing landforms and development in this area obscure any view of Mission Bay across the historic leasehold itself. Therefore, some taller elements in this area may be found consistent with Section 30251, depending on their exact location and design.

The appropriate height of any proposed structure must be thoroughly analyzed, taking into consideration the specific design details, siting, scale and bulk of the proposed development, the nature of surrounding development, and the potential for cumulative impacts from additional future development. The master plan, as modified by the Commission, identified a specific site for the proposed splash down ride within the developed area of the park close by the main parking lot. The proposed project site is the one the Commission approved in the master plan.

All of Mission Bay Park is a highly scenic public recreational resource, such that protection and enhancement of visual amenities is a critical concern in any proposed development in the park. The proposed ride is located within, but along the perimeter of, the existing enclosed Sea World theme park, adjacent to the main parking lot, but separated from it by a fence and existing landscaping. As the proposed ride is of the roller coaster variety, much of it will be higher than 30 feet, the typical height limit for the City of San Diego's coastal zone. It will occupy most of the delineated 5.5 acre site, but is not fully enclosed. Therefore, there will still be some views through/across the specific site, although such views are limited to persons already in the theme park, and there is no existing bay view in this location.

Although several separate structures are proposed to house the various elements of the ride and accessory facilities, only one structure is proposed to exceed 30 feet in height. Due to the existing mature vegetation throughout much of the developed park, buildings 30 feet or less in height cannot be readily seen from outside the park. Depending on the viewer's perspective, it is likely that some buildings over 30 feet in height may not significantly impact views from outside the park as well. The one proposed structure exceeding 30 feet in height houses the three ride towers necessary to create the ride experience: a lift tower, a drop tower and a stair tower, connected to each other by segments of track and portions of the building. The three towers are 95, 83 and 89 feet tall respectively, with approximate diameters of 50 feet, 36 feet and 24 feet.

The Commission's primary concern with respect to view preservation, is to assure that views currently available to the general public recreating at Mission Bay Park are not obscured or significantly degraded. The public recreational amenities at South Shores Park are located immediately east of the SeaWorld leasehold, but significantly distant from the proposed ride location. Across Pacific Passage to the north lies Fiesta Island. Along with South Shores, this is the last remaining large piece of undeveloped parkland designated for public recreational uses. Like South Shores, anticipated improvements include grassy picnic areas, open play areas, restrooms and parking lots. These two areas are the closest to the SeaWorld leasehold, and thus most likely to be affected by development within the theme park.

The applicant has submitted computer generated pictures (see Exhibit A) to show the views from a number of locations, including South Shores and Fiesta Island. From both locations, the splash down ride will be visible; however, in its current location, there is a significant amount of intervening development, mature vegetation, and space to soften

the views to the point where they are just another item in the background. Due to the roadside berm and distance across the parking lots, the ride is not readily discernable from Sea World Drive, based on the computer simulation. A couple photos were taken from more distant areas within Mission Bay Park, and the ride will appear as only a background object from both vantage points.

In summary, the applicant is proposing the splash down ride in an appropriate location, consistent with the SeaWorld Master Plan that the Commission voted to certify. It's visibility from outside SeaWorld will be primarily limited to the three towers, it will be quite distant from public viewing areas, and it will blend in with surrounding mature vegetation. As proposed, the structures are colored in various hues of beige, terra cotta, green and blue. Special Condition #4 provides that the portions of the attraction visible from outside SeaWorld not be finished in any white or bright solid color. Special Condition #2 requires submittal of a final landscaping plan, requiring use of drought-tolerant native vegetation. Therefore, as conditioned, the Commission finds the proposed new attraction will be consistent with Section 30251 of the Act.

3. <u>Public Access/Parking</u>. The following Coastal Act policies are most pertinent to the proposed development, and state, in part:

Section 30211

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby.

Section 30604(c)

(c) Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).

6-01-129 Page 7

Section 30252

The location and amount of new development should maintain and enhance public access to the coast by...(4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, [and] (5) assuring the potential for public transit for high intensity uses....

SeaWorld is a private commercial leasehold within Mission Bay Park, a public park built primarily on tidelands granted to the City of San Diego. The site is located between the first coastal roadway and the bay. Although public lateral access is available along most of the Mission Bay shoreline, there is no public access through the fenced SeaWorld facilities, which extend to or beyond the waterline in places. Pedestrian and bicycle traffic can cross through the parking areas and rejoin the bayside pathway on either side of the leasehold. Vertical access is available at those same two locations and informally elsewhere along the shore depending upon parking or transit availability. The Certified Mission Bay Park Master Plan cites a complete pedestrian access pathway around the bay as a future goal. In its recent action to certify the SeaWorld Master Plan, the Commission determined that additional pedestrian or bicycle access through the SeaWorld leasehold was not required to mitigate for the detailed Tier 1 projects identified in the plan, although additional access may be required for some or all of the Tier 2 projects in the future, as these are only identified as potential redevelopment sites. The proposed splash down ride is one of the five Tier 1 projects.

One reason no additional access mitigations is required at this time is that one of the Tier 1 projects actually is to improve public access. Access amenities, in the form of a promenade will be built along portions of SeaWorld's shoreline and the area of South Shores nearest Mission Bay, and the existing bike path, which goes around the leasehold perimeter, will be widened and improved. Improvements within the leasehold will enhance park visitor's experiences of the bay; and public promenade improvements near the South Shores shoreline, which also provide seating and viewing opportunities, will enhance the general public's recreational experience in that location. The applicant is currently preparing a permit application for that development and it should be coming before the Commission this fall. The other Tier 1 projects, which were all conceptually endorsed in the master plan, include educational facilities, front gate renovations and an enlarged and relocated special events center.

In addition to all this, the proposed ride will have no effect on current access patterns in this part of Mission Bay Park, since it is located within the already developed and enclosed portion of SeaWorld. Although the location originally proposed location in the master plan, which was along the perimeter of the bay, raised concerns that ride noise would affect the recreational experience of persons in nearby public park areas, the currently proposed site is within the already developed portion of the park, much further removed from public park areas. The Commission finds that construction and operation of the proposed splash down ride will not diminish any existing access opportunities or recreational experiences, and adequate lateral and vertical access is available to serve the demonstrated needs of the public in this area of Mission Bay Park, as specifically required in Section 30604(c) of the Coastal Act.

Another issue of great concern to the Commission is the traffic circulation problem, which currently exists in the area and is anticipated to worsen with future growth. Sea World Drive and Ingraham Street serve as major coastal access routes for all areas of Mission Bay Park, and the public beaches at Pacific Beach, Mission Beach and Ocean Beach, and serve as a popular commuter route as well. These are the only roadways serving SeaWorld. The lease between SeaWorld and the City of San Diego calls for phased traffic improvements based on the expected increase in attendance at the park. Improvements to Sea World Drive and Sea World Way intersections were required to occur when attendance levels reached 3.6 million. Although attendance had not yet reached that point, those specific mitigation measures were implemented several years ago. The next improvements are not required until attendance reaches 4 million, which is designated as the maximum anticipated attendance at full buildout.

In addition, the City did a full traffic study for the Master Plan EIR. It identified a number of traffic improvements that will be needed in the future if the master plan is fully implemented. However, none of the improvements are required for Tier 1 projects, which are not anticipated to increase traffic beyond the existing road system capacities. The proposed project is expected to create a brief but noticeable increase in park attendance when it first opens, but is not expected to retain that increase over the long term, after the initial novelty wears off. Moreover, this potential increase in attendance was anticipated in the traffic studies conducted and conclusions reached.

With respect to the adequacy of on-site parking, SeaWorld currently provides a total of 8,350 parking spaces for visitors, staff, and employees; parking spaces have not been specifically allocated for individual uses, but most employee parking occurs in the lots nearest the administrative facilities and, during times of heaviest park use, in the parking lot nearest the Hubbs Research laboratories, aquaculture tanks, and associated research and administrative functions, located northwest of SeaWorld proper, but within the overall leasehold boundaries. Although it is difficult to accurately analyze exactly how much parking a theme park such as Sea World normally requires, there is no indication that on-site parking facilities are currently inadequate. In addition to on-site parking accommodation and fairly recent circulation improvements, Sea World is served by two public transit (bus) routes, #9 and #27. The master plan update which the Commission recently voted to certify requires SeaWorld to provide financial incentives for visitors to take public transportation to SeaWorld.

In summary, the Commission finds that adequate vertical and lateral access exists around the Sea World leasehold for the currently demonstrated needs of visitors to this portion of Mission Bay Park. In addition, the on-site parking reservoir continues to be adequate for the facilities needs to date even with the proposed ride attraction and other Tier 1 projects. Special Condition #3 requires identification of all construction staging and storage areas, prohibiting the use of public areas for this purpose. If use of public areas cannot be avoided altogether, then work must occur outside the summer season. Therefore, as conditioned, the Commission finds the proposal consistent with all of the cited public access policies of the Coastal Act.

3. <u>Water Quality</u>. The following Coastal Act policies addressing water quality are most applicable to the subject proposal, and state, in part:

Section 30230

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for longterm commercial, recreational, scientific, and educational purposes.

Section 30231

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum population of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff ...

Over the years, concerns have been raised regarding SeaWorld's land and water operations with respect to maintaining optimum water quality. In particular, the manner in which surface runoff from the parking lots is discharged has been raised as a significant issue. This issue was addressed in detail in review of the master plan, and SeaWorld's grading, drainage, erosion and stormwater requirements were reviewed and found acceptable by the Commission's water quality unit. The proposed project is identified and fully described in the master plan, and is designed to be a part of the existing stormwater improvements. Moreover, the proposed splash down ride will not increase impermeable surfaces or significantly change existing patterns of runoff. In fact, since the specific project site is fully paved at this time, there will be a net decrease in impermeable surfaces as a result of this project, which includes the removal of some paving and replacement with landscape features. The subject proposal does not modify any of SeaWorld's existing water treatment, collection or discharge facilities. These facilities currently process runoff from some of SeaWorld's paved parking lots and nearly all of its developed venues; this treatment will continue. Therefore, as conditioned to address other concerns, the Commission finds the proposed development consistent with the cited policies of the Coastal Act.

4. <u>Noise/Marine Mammals</u>. Section 30230 of the Coastal Act, cited in the previous finding, protects marine resources and is the most applicable Coastal Act policy with regard to marine mammals that are held in captivity at SeaWorld. At the Commission hearing for the SeaWorld Master Plan, a number of citizens and Commissioners raised

concerns over how the captive marine mammals at SeaWorld would be affected by noise generated by the ride. Of particular concern are the Commerson's Dolphins, which are proposed to be exhibited within the overall project site. The applicant has submitted a study of roller coaster noise conducted at two other Busch facilities (Orlando and Tampa), which indicates that proper design will assure that noise will not exceed current ambient levels experienced by the dolphins in their existing exhibit tank. Exhibit #1 is the two-page summary of that report and includes specific design recommendations which have been incorporated into the project plans.

5. <u>Local Coastal Planning</u>. Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

Mission Bay Park is primarily unzoned. As a whole, Mission Bay Park is a dedicated public park, and SeaWorld is designated as Lease Area in the presently-certified Mission Bay Park Master Plan (land use plan). Although the Commission has certified the recent Mission Bay Park Master Plan amendment, incorporating the SeaWorld Master Plan as a component, it did so with suggested modifications that have not yet been adopted by the City. The proposed development is consistent with the designation in the Mission Bay Park Master Plan, and has been found consistent with all applicable Chapter 3 policies of the Coastal Act. No modifications to SeaWorld's lease with the City of San Diego, or other local discretionary actions, are required as a result of the improvements proposed herein. The master plan update addresses the height limit ballot measure, which approves greater-than-thirty-foot heights within the SeaWorld leasehold, but leaves final oversight to the City Council and Coastal Commission, who will review each proposed development on a case by case basis. Therefore, the Commission finds that approval of the project, as conditioned, will not prejudice the ability of the City of San Diego to prepare a fully certifiable LCP for its Mission Bay Park/segment.

6. <u>California Environmental Quality Act (CEQA)</u>. Section 13096 of the Commission's Code of Regulations requires Commission approval of coastal development permits to be supported by a finding showing the permit to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

As discussed herein, the proposed project will not cause significant adverse impacts to the environment. Specifically, the project, as conditioned, has been found consistent with the public access and recreation, visual resource, and water quality policies of the Coastal Act. There are no feasible alternatives or mitigation measures available which would substantially lessen any significant adverse impact which the activity might have on the environment and still achieve the purpose of the project. Therefore, the Commission finds that the proposed project is the least environmentally damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

STANDARD CONDITIONS:

- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration</u>. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

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MEMORANDUM

то:	JIM ANTRIM, JIM MCBAIN AND PAT OWEN	RECERVED
FROM:	ANN BOWLES	MAY 1 0 2002
DATE:	4/19/01	CALIFORNIA COASTAL COMMISSION
RE:	SAN DIEGO COAST DISTRICT NOISE LEVELS FROM ROLLER COASTERS AT SWO/BUSCH GARDENS	
CC:	TOM GOFF, JACK PEARSON, DON KENT AND PAM YOCHEM,	

Gentlemen:

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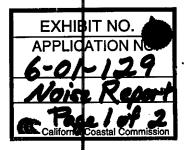
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I've read Larry Wolski and Rindy Anderson's report regarding the noise from the 'Journey to Atlantis' and other roller-coaster rides at Sea World of Orlando (SWO) and Busch-Gardens Tampa (BGT). A copy is attached for your review. The results are encouraging, as it should be possible to *improve* the noise environment for the Commerson's dolphins, and to prevent undue disturbance at the OSPER facility with some simple modifications to the construction plans.

From my perspective, the important points are as follows (I refer you to Figure 4 in the report):

- The underwater ambient noise in the pools where the Commerson's dolphins are being held at SeaWorld San Diego is relatively high because their pool is coupled to the pumping and filtration. This noise is broad band, extending well up into the range of frequencies that Commerson's dolphins are thought to hear well (>1000 Hz). It is also continuous noise (as opposed to transient noise, which only lasts for brief periods).
- The worst-case underwater exposure at the JTA ride in Orlando was in the splashdown pool. While levels were high briefly during splashdown events (transient levels reached 124.1 dB re 1 μPa), the ambient in the pool was actually lower than the levels currently experienced by the Commerson's dolphins.
- 3. Exposure in a pool adjacent to the ride was very moderate, particularly at the frequencies that Commerson's dolphins hear best. This was true of both ambient levels and splashdown events.



Thus, simply isolating the new Commersons pool from the complex consisting of the ride and water management system will do much to reduce noise. Based on the plans I saw before Christmas, this is exactly how the new pool has been designed.

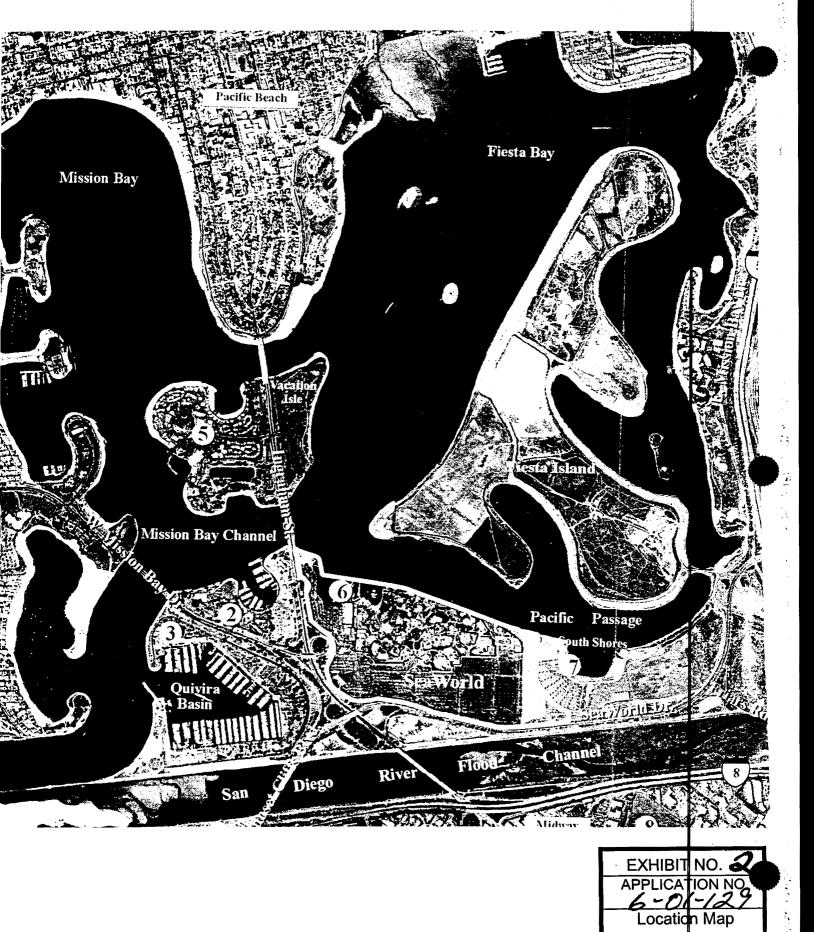
I also concur with the gist of the suggestions made in the report. My recommendations:

- 1. Put as much concrete between the new pool and the splashdown areas as possible. Sound is attenuated most effectively by mass. For example, peep holes in a solid wall attenuate noise more effectively than an acrylic wall.
- 2. Keep noisy sources such as loudspeakers either away from the pool or oriented away from the pool. Visitor noise will come and go, but loudspeakers will raise the ambient in the pool continuously.
- 3. Protect the surface of the pool from direct line-of-sight to the noisiest parts of the ride (splashdown, visitor entrance) with a wall. As the report shows in several places, sound transmits easily from air to water in shallow pools, but may be dramatically attenuated by a simple and fairly low barricade.

As I mentioned when we first talked about this, I'm also concerned about the noise and disturbance generated by increased traffic around the OSPER facility. I would suggest putting a wall around it that would block noise and traffic both from the people coming in to the ride and from the ride itself.

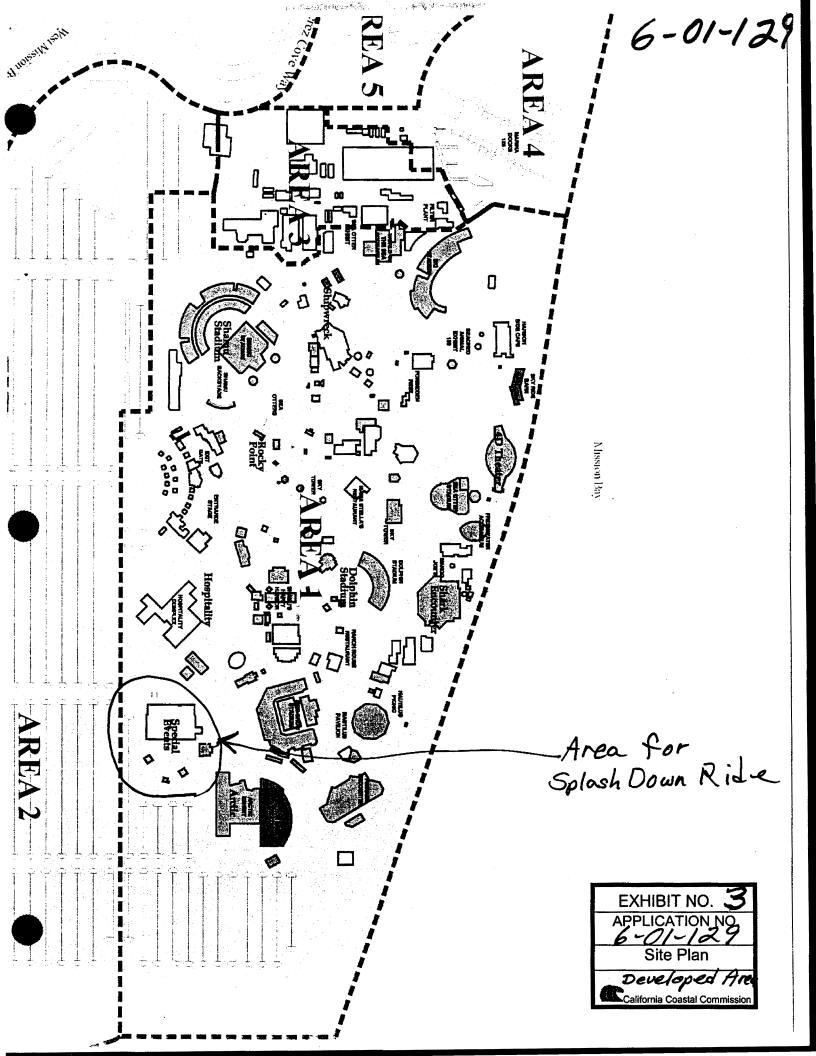


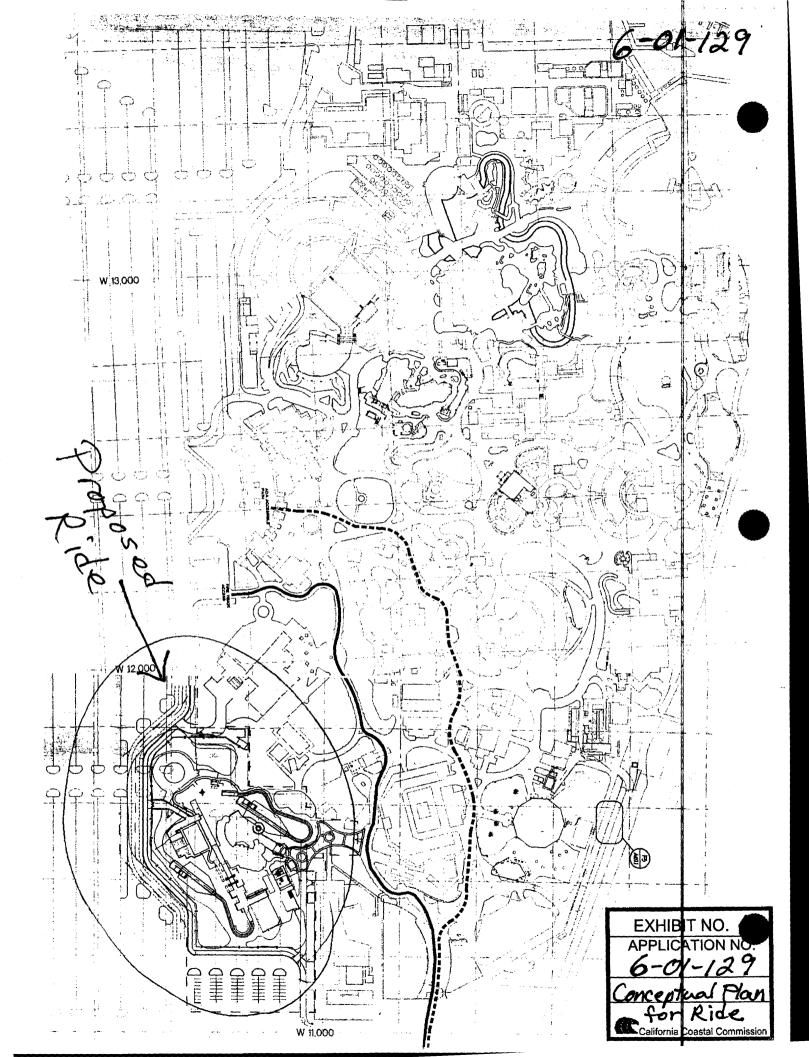
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California Constal Commission

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THE MASTER PLAN

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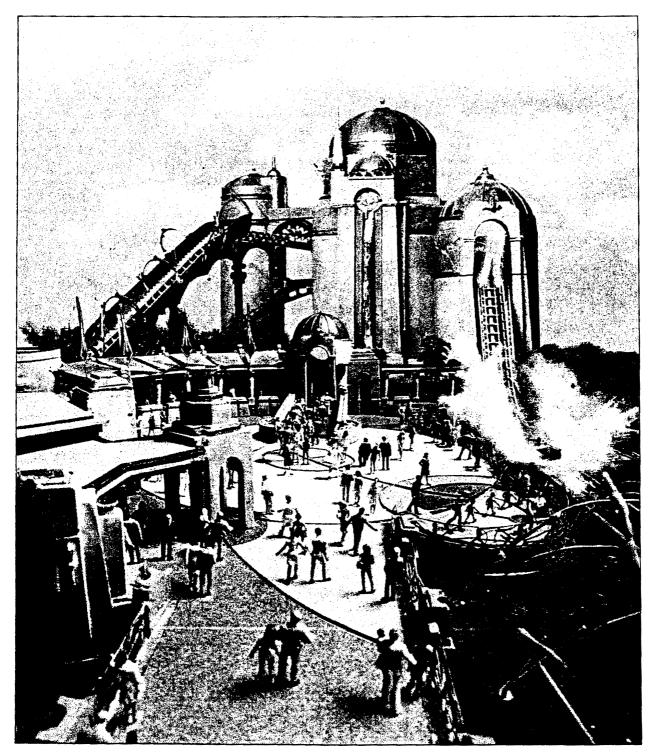
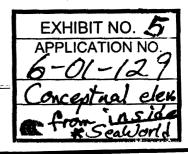
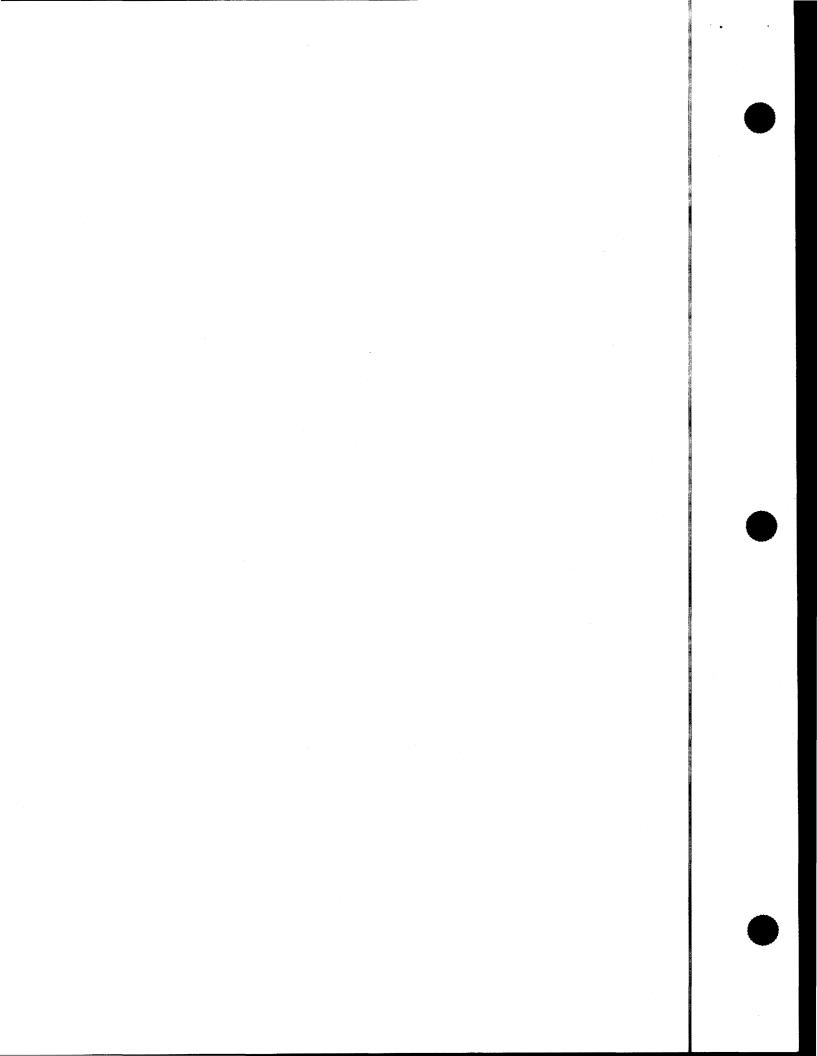


Figure II-5 Conceptual Splashdown Ride Elevation



SeaWorld Master Plan Update

* Views from Outside Seaworld are attached as Exhibit A





Site Location Map

LEGEND

Fiesta Island

(1)

2

3

4

5

- West Mission Bay Dr. (KVP3)
- Pacific Hwy Gateway (KVP8 8)
- Sea World Drive
- South Shores Beach
- SplashDown Ride



Source: SeaWorld

EXHIBIT A



Photosimulation of Splashdown Ride From Fiesta Island - Site 1_____

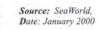


Photosimulation of Splashdown Ride From West Mission Bay Bridge - Site 2 (KVP 3)

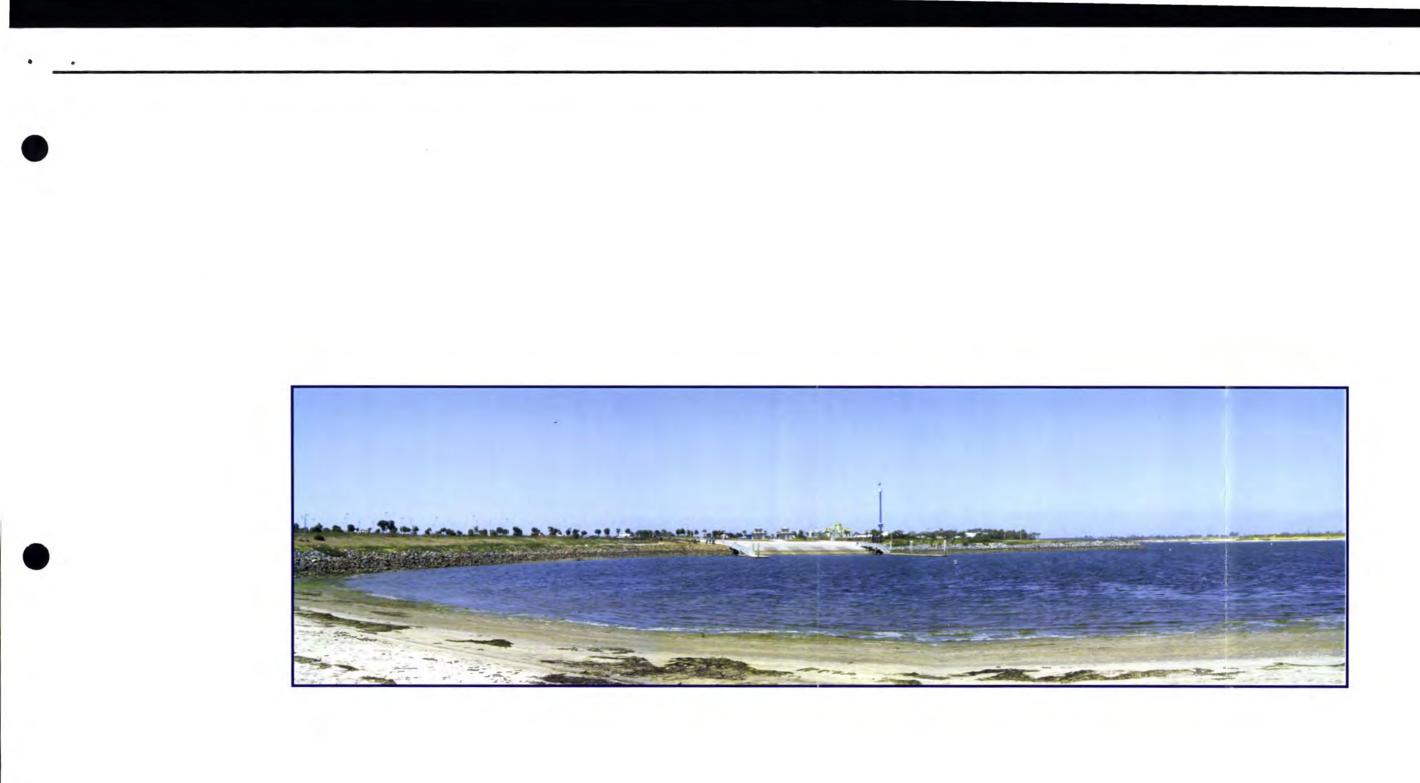


Photosimulation of Tier 1 Projects From Pacific Highway Gateway - Site 3 (KVP 8)





Photosimulation of Splashdown Ride From Sea World Drive - Site 4_____



Photosimulation of Splashdown Ride South Shores Beach / East Side of Embayment - Site 5