

**CALIFORNIA COASTAL COMMISSION**

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**W 21c**

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Staff: FSY-LB FSY  
Staff Report: November 18, 2004  
Hearing Date: December 8-10, 2004  
Commission Action:

**STAFF REPORT: REGULAR CALENDAR****APPLICATION NUMBER:** 5-03-417**RECORD PACKET COPY****APPLICANTS:** Michael & Cynthia Talbott**PROJECT LOCATION:** 1900 Galaxy Drive, City of Newport Beach, County of Orange

**PROJECT DESCRIPTION:** Construction of a 5,073 square foot one-story single-family residence on an existing building foundation and site with an existing 718 square foot three-car garage on a blufftop lot adjacent to the Upper Newport Bay Ecological Reserve.

**SUMMARY OF STAFF RECOMMENDATION:**

The subject site is a coastal bluff top lot located between the first public road and the shoreline of Upper Newport Bay in Newport Beach. The primary issues addressed in this staff report are conformance of the proposed development with the geologic hazard, visual resource, water quality and sensitive habitat protection policies of the Coastal Act.

Commission staff is recommending **APPROVAL** of the proposed project with **Eight (8) Special Conditions** regarding: **1)** assumption of risk; **2)** revised project plans showing removal of hardscape located within 10-feet of the bluff edge; **3)** no future bluff protective devices; **4)** additional approvals for any future development; **5)** evidence of conformance with geotechnical recommendations; **6)** submittal of a final drainage and run-off control plan; **7)** submittal of a revised landscaping plan; and **8)** a deed restriction against the property, referencing all of the special conditions contained in this staff report.

**LOCAL APPROVALS RECEIVED:** Approval in Concept (#2474-2003) from the City of Newport Beach Planning Department dated September 29, 2003.

**SUBSTANTIVE FILE DOCUMENTS:** Coastal Development Permits #5-98-497-G-(Penfill), 5-98-524-G-(Penfill), 5-98-524-(Penfill), 5-98-469-G-(Ferber), 5-98-469-(Ferber), 5-98-240-G-(Patton) and 5-98-240-(Patton), 5-94-288-(Lewis), 5-93-308-(Pope Trust), 5-85-062-(Braman) and 5-93-367-(Rushton); #5-99-332 A1-(Frahm); 5-97-174-(Braeger); 5-99-338-(Braeger); P-80-7431-(Kinard); 5-93-254-G-(Arnold); 5-88-177-(Arnold); City of Newport Beach Land Use Plan; Letter from Commission staff to Michael and Cynthia Talbott dated October 31, 2003; Letter from Michael Talbott to Commission staff dated April 27, 2004; *Preliminary Foundation Soils Exploration at 1900 Galaxy Drive, Newport Beach, California 92660 (Job No. F-10074-03)* prepared by Geo-Etka, Inc. dated November 17, 2003; Letter from Michael Talbott to Commission staff dated April 28, 2004; Letter from Commission staff to Michael and Cynthia Talbott dated May 27, 2004; *Response to*

*Telephone Conversation (Job No. ENGR-10074A-04) prepared by Geo-Etka, Inc dated August 18, 2004; Letter from Commission staff to Michael and Cynthia Talbott dated September 17, 2004; and Limited Geotechnical Report of Coastal Bluff Investigation, 1900 Galaxy Drive, Newport Beach, California (PN 04113-00) Prepared by Zeiser Kling Consultants, Inc. dated October 7, 2004.*

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### **LIST OF EXHIBITS**

1. Location Map
  2. Assessor's Parcel Map
  3. Site Plans
  4. Floor Plan
  5. Elevations Plans
  6. Foundation Plan
  7. Site Plan Showing the 20-ft and 10-ft setback from the Bluff Edge
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### **STAFF RECOMMENDATION:**

Staff recommends that the Commission adopt the following motion and resolution:

### **MOTION:**

***"I move that the Commission approve Coastal Development Permit No. 5-03-417 pursuant to the staff recommendation."***

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.

### **I. APPROVAL WITH CONDITIONS**

The Commission hereby **GRANTS** 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

1. Notice of Receipt and Acknowledgment. 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. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. 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. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. 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. Terms and Conditions Run with the Land. 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.

## III. SPECIAL CONDITONS

### 1. Assumption of Risk, Waiver of Liability and Indemnify

By acceptance of this permit, the applicants acknowledge and agree (i) that the site may be subject to hazards from bluff and slope instability, erosion, landslides; (ii) to assume the risks to the applicants and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

### 2. Revised Project Plans

A. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall submit, for the Executive Director's review and approval, two (2) full size sets of revised project plans. The revised plans shall demonstrate that proposed hardscape will not be located within 10-feet from the bluff edge, which has been determined to generally follow the rear yard property line as generally depicted on Exhibit #7 of the November 18, 2004 staff report. Furthermore, no form of development (including but not limited to grading, hardscape and planters) shall occur seaward of the minimum 10-foot bluff edge setback or beyond the bluff edge.

- B. 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 a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

3. **No Future Bluff Protective Devices**

- A. By acceptance of this Permit, the applicants agree, on behalf of themselves and all other successors and assigns, that no bluff protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal Development Permit No. 5-03-417 including, but not limited to, the residence, pool, decks, patios, hardscape and any future improvements, in the event that the development is threatened with damage or destruction from bluff and slope instability, erosion, landslides or other natural hazards in the future. By acceptance of this permit, the applicants hereby waive, on behalf of themselves and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.
- B. By acceptance of this Permit, the applicants further agree, on behalf of themselves and all successors and assigns, that the landowner shall remove the development authorized by this permit, including but not limited to the residence, pool, decks, patios, and hardscape, if any government agency has ordered that the structure(s) is/are not to be occupied due to any of the hazards identified above. In the event that portions of the development fall to the bay before they are removed, the landowner shall remove all recoverable debris associated with the development from the bay and shoreline and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.
- C. In the event the edge of the bluff recedes to within ten (10) feet of the principal residence but no government agency has ordered that the structures are not to be occupied, a geotechnical investigation shall be prepared by a licensed coastal engineer and geologist retained by the applicant, that addresses whether any portions of the residence are threatened by bluff and slope instability, erosion, landslides or other natural hazards. The report shall identify all those immediate or potential future measures that could stabilize the principal residence without bluff protection, including but not limited to removal or relocation of portions of the residence. The report shall be submitted to the Executive Director and the appropriate local government official. If the geotechnical report concludes that the residence or any portion of the residence is unsafe for occupancy, the permittee shall, within 90 days of submitting the report, apply for a coastal development permit amendment to remedy the hazard which shall include removal of the threatened portion of the structure.

**4. Future Development**

This permit is only for the development described in Coastal Development Permit No. 5-03-417. Pursuant to Title 14 California Code of Regulations Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply to the development governed by Coastal Development Permit No. 5-03-417. Accordingly, any future improvements to the single family house authorized by this permit, including but not limited to improvements to the residence, pool, decks, patios, and hardscape, change in use from a permanent residential unit and repair and maintenance identified as requiring a permit in Public Resources Section 30610(d) and Title 14 California Code of Regulations Sections 13252(a)-(b), shall require an amendment to Permit No. 5-03-417 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

**5. Conformance with Geotechnical Recommendations**

- A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations contained in the geologic engineering investigations: *Preliminary Foundation Soils Exploration at 1900 Galaxy Drive, Newport Beach, California 92660 (Job No. F-10074-03)* prepared by Geo-Etka, Inc. dated November 17, 2003 and *Limited Geotechnical Report of Coastal Bluff Investigation, 1900 Galaxy Drive, Newport Beach, California (PN 04113-00)* Prepared by Zeiser Kling Consultants, Inc. dated October 7, 2004.
- B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall submit, for the Executive Director's review and approval, evidence that an appropriately licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all the recommendations specified in the above-referenced geologic engineering reports.
- C. 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 a Commission amendment unless the Executive Director determines that no amendment is required.

**6. Drainage and Runoff Control Plan**

- A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall submit, for review and approval of the Executive Director, a final drainage and run-off control plan. The drainage and run-off control plan shall show that all roof drainage, including roof gutters and collection drains, and sub-drain systems for all landscape and hardscape improvements for the residence and all yard areas, shall be collected on site for discharge to the street through piping without allowing water to percolate into the ground.

- B. The permittees shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.
- C. The applicants shall maintain the functionality of the approved drainage and run-off control plan to assure that water is collected and discharged to the street without percolating into the ground.

7. **Landscaping Plan**

- A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, in a form and content acceptable to the Executive Director, two (2) sets of a revised landscaping plan prepared by an appropriately licensed professional which demonstrates the following:
  - (1) The plan shall demonstrate that:
    - (a) All planting shall provide 90 percent coverage within 90 days and shall be repeated if necessary to provide such coverage;
    - (b) All plantings shall be maintained in good growing condition throughout the life of the project, and whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the landscape plan;
    - (c) Landscaped areas in the rear yard (bay and bluff-facing) areas shall be planted and maintained for erosion control and native habitat enhancement purposes. To minimize the need for irrigation and minimize encroachment of non-native plant species into the adjacent Upper Newport Bay Ecological Reserve, all landscaping in the rear yard shall consist of drought tolerant plants native to coastal Orange County and appropriate to the habitat type. Invasive, non-indigenous plant species that tend to supplant native species shall not be used.
    - (d) Landscaped areas in the front (street-facing) and side yards shall consist of native or non-invasive non-native drought tolerant plant species.
    - (e) No permanent in-ground irrigation systems shall be installed on site. Temporary above ground irrigation is allowed to establish plantings. The landscaping plan shall show all the existing vegetation and any existing irrigation system.
    - (f) The applicant shall submit written evidence from the California Department of Fish and Game (Department) demonstrating that the Department has approved the landscaping plan.

(2) The plan shall include, at a minimum, the following components:

- (a) A map showing the type, size, and location of all plant materials that will be on the developed site, the irrigation system, topography of the developed site, and all other landscape features, and
- (b) a schedule for installation of plants.

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

8. **Deed Restriction**

**PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall submit to the Executive Director for review and approval documentation demonstrating that the landowners have executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

IV. **FINDINGS AND DECLARATIONS**

The Commission hereby finds and declares:

A. **Project Location, Project Description and Previous Commission Action On-Site and in Project Area**

1. **Project Location and Description**

The proposed project is located within an existing developed urban residential area at 1900 Galaxy Drive in the City of Newport Beach County of Orange (Exhibits #1-2). To the North and South of the project site are existing single-family residential development. To the West of the site is Galaxy Drive. To the East of the project site are bluffs, Upper Newport Bay and the Upper Newport Bay Ecological Reserve. The residence is located on a bluff top lot on Galaxy Drive, which is on the bayfronting side of Galaxy Drive, hence, the subject site is located between the nearest public roadway and the shoreline of Upper Newport Bay. Some bluff areas of Galaxy Drive have been known to be geotechnically active and have been prone to failure. The Commission has issued coastal development permits for

slope repairs on Galaxy Drive (CDP's: #5-98-497-G-(Penfil), 5-98-524-G-(Penfill), 5-98-524-(Penfill), 5-98-469-G-(Ferber), 5-98-469-(Ferber), 5-98-240-G-(Patton) and 5-98-240-(Patton), 5-94-288-(Lewis), 5-93-308-(Pope Trust), 5-85-062-(Braman) and 5-93-367-(Rushton)). According to a submitted geotechnical investigation entitled: *Limited Geotechnical Report of Coastal Bluff Investigation, 1900 Galaxy Drive, Newport Beach, California (PN 04113-00)* Prepared by Zeiser Kling Consultants, Inc. dated October 7, 2004, a bluff failure occurred at the rear of the adjacent property (1906 Galaxy Drive) to the north of the project site. The southern portion of this failure is located 20 feet north of the rear of the project site. It has been determined by the investigation that the failure did not encroach into the rear property boundary of the subject lot.

At the rear of the lot is a bluff face that is generally moderately to well vegetated and descends approximately 102 feet from the rear of the property to the tidal flats of Upper Newport Bay at an approximate gradient of 1:1 (horizon to vertical).

The subject property is located adjacent to the Upper Newport Bay Ecological Reserve (UNBER), which was created in 1975 to conserve and enhance 752 acres of saltwater marsh ecosystem in the upper reaches of Newport Bay, commonly referred to as the Back Bay. The reserve is managed by the California Department of Fish and Game (CDF&G). The reserve allows limited recreational and educational access as specified in the California Fish and Game code. The majority of the Upper Bay is an estuarine salt marsh system.

The proposed project consists of construction of a 5,073 square foot one-story single-family residence on an existing building foundation and site with an existing 718 square foot three-car garage (Exhibits #2-6). In addition to use of the existing concrete slab foundation, there will be poured new slab above existing grade for additional foundation areas for added habitable areas. The existing slab for the previous home is not being removed. The project also consists of: hardscape improvements, landscape improvements, new rear yard patios, fireplace, pool equipment room and demolition of an existing pool and construction of a new pool and spa in the rear yard. The drainage for the pool will be directed to the storm drain system and the pool will be double lined with an attached separate water meter for detection of leaks. Grading will consist of 277 cubic yards for recompaction purposes, which will balance on site.

## 2. Prior Commission Actions at Subject Site

On September 16, 2004, the California Coastal Commission approved Coastal Development Permit De Minimus Waiver #5-04-306-(Talbot). The De Minimus Waiver allowed demolition of the existing one-story single-family residence except for the existing foundation of the residence and the three (3)-car garage. No additional development or grading was proposed.

On December 6, 1976, the South Coast Regional Commission approved Coastal Development Permit #P-9166-(Bass) for the construction of a pool and spa. The permit was issued on December 22, 1976.

On January 5, 1976, the South Coast Regional Commission approved Coastal Development Permit #P-6643-(Brauccla) for the construction of a single-family residence. The permit was issued on January 19, 1976.



3. Prior Commission Actions at Subject Area

On June 9, 1997, a Coastal Development Permit Application #5-97-174-(Braeger) was submitted for a project located at 1906 Galaxy Drive in the City of Newport Beach (Orange County) for development consisting of gunite and landscaping improvements to the rear slope of the residence. The project was incompleated on July 9, 1997. On May 14, 1998, the application was returned to the applicants due to its' inactivity.

On September 19, 1999, a Coastal Development Permit Application #5-99-338-(Braeger) was submitted for a project located at 1906 Galaxy Drive in the City of Newport Beach (Orange County) for development consisting of an addition to an existing single-family dwelling, relocation of a swimming pool and grading of a bluff top. The project was incompleated on October 7, 1999. On December 22, 1999, the application was withdrawn.

**B. Geological Hazards**

Section 30253 of the Coastal Act states, in relevant part states:

*New development shall:*

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The findings in this section of the staff report include generalized findings regarding the susceptibility of coastal bluffs to erosion and site-specific findings from the geological report.

1. General Findings on Bluff Erosion

The proposed development is located on a coastal bluff, which is subject erosion, but not to wave attack due to the subject site's location within Upper Newport Bay. Coastal bluffs in California are located at the intersection of land and ocean, are composed of relatively recent uplifted geologic materials and are exposed to severe weathering forces.

Coastal bluff erosion is caused by a combination of inherent environmental factors and erosion caused by human activity. Environmental factors include gravity, seismicity, wave attack, wetting and drying of bluff face soils, wind erosion, salt spray erosion, rodent burrowing and piping, percolation of rain water, poorly structured bedding, surface water runoff and poorly consolidated soils.

Factors attributed to human activity include: improper irrigation practices; building too close to the bluff edge; improper site drainage; use of impermeable surfaces which concentrate runoff; use of water-dependent vegetation; pedestrian or vehicular movement across the bluff top, face and toe, and breaks in irrigation lines, water or sewer lines. In addition to

irrigation water or runoff at the bluff top, increased residential development inland leads to increased water percolating beneath the surface soils and potentially outletting on the bluff face along fracture lines in the bluff or points of contact of different geologic formations, forming a potential slide plane.

2. Site Specific Bluff Information

Site Stability and Erosion

The applicants have submitted a geotechnical investigation entitled *Limited Geotechnical Report of Coastal Bluff Investigation, 1900 Galaxy Drive, Newport Beach, California (PN 04113-00)* Prepared by Zeiser Kling Consultants, Inc. dated October 7, 2004. The geotechnical investigation states that bedrock underlying the vicinity of the subject site as belonging to the Capistrano Formation. Overlying the bedrock is approximately 1 foot of terrace deposits that consist of poorly indurated, silty sands, and shelly sands. Furthermore, this investigation states: *"The bluff slope [the top of bluff appears to be located at the rear of the property line] descending from the rear of the subject property currently has an approximate gradient of 1:1 (horizontal: vertical). The slope surface is generally uneven and covered with moderate vegetation consisting of wild grasses, shrubs, and cactus. Some crude pipe-and-board type improvements were observed in the upper third of the slope. These pipe-and-board structures consisted of wooden planks placed parallel to the slope face and are held in place with rebar. The pipe-and-board structures are inclined in the down-slope direction suggesting that slope creep has influenced them since installation. No irrigation systems were observed on the bluff slope descending from the subject property. An approximate 3-foot high chain link fence is located along the rear property line, near the top of the bluff face."*

As stated previously, this geotechnical investigation states that a bluff failure occurred at the present rear of the adjacent property (1906 Galaxy Drive) to the north of the project site. Additionally, it states: *"The bluff slope failure near the northeast corner of the subject property is apparent as a large scar on the slope face. The headscarp of this failure is up to approximately 15 feet high and predominantly located below the adjacent lot to the north of the subject property. The failure located on the adjacent property has propagated up to approximately 5 feet beyond the previous top of bluff. The southern limit of the failure extends approximately 20 feet south of a projection of the north property line of the subject property as depicted on Plate I. The headscarp of this portion of the failure is generally between 0 and 7 feet high at an approximate gradient of ½:1. Debris from the failure is visible to the toe of the bluff. Minor seepage was observed from the slide debris approximately 30 feet below the top of the bluff. Observations of the adjacent property in the top-of-bluff area indicate heavily irrigated landscape above the headscarp of the failure."*

As indicated above, there was an application (#5-97-174-(Braeger)) on the adjacent site at 1906 Galaxy Drive stabilization measures (i.e. gunite) and landscaping improvements along the bluff. Information found within the file point to water seepage as the cause of the erosion as discussed in geotechnical investigation.

The geotechnical investigation submitted for the subject site also examined bluff retreat and slope stability. The investigation states: "*Based on our reviews of aerial photographs and filed mapping it does not appear that the bluff toe is exposed to tidal forces or wave energy. Our measurements performed at high tide and our review of tide charts indicate that sea level may rise up to a maximum of approximately 3 vertical feet below the toe of the bluff at a minimum of approximately 30 horizontal feet from the toe of the bluff*". Furthermore, the investigation states that the bluff has a minimum factor of safety ranging from 1.896 to 3.178 for various types of failures and the corresponding pseudostatic (seismic) factors of safety range from 1.516 to 2.121.

This geotechnical investigation concludes by making several conclusions: "*... In its existing condition, it is our opinion that the bluff slope subject property is not in immediate danger of failing ... Since the construction of the subject property, slope creep, erosion, slumping, and the steepness of the coast bluff, combined with the geologic structure of the bedrock material and the terrace deposits indicated that future instability of the bluff is possible. Because of the many variables involved no one can predict the timing of the instability ... It is our opinion that the top-of-bluff coincides with the rear property line as illustrated on the subject plans (Reference 10 Plate D) ... At distances of greater than 5 feet or greater from the top of the bluff our analysis indicates that the bluff slope is considered grossly stable. It is our opinion that the existing 20-foot setback is satisfactory for the design life of the proposed structures.*" The investigation recommends that water should never be allowed to flow freely over the bluff edge and that any landscaping should employ minimal irrigation near the bluff edge.

The Commission's staff Geologist has reviewed these geotechnical investigations and has concurred that these investigations have adequately addressed concerns regarding bluff erosion and slope stability of the project site.

As stated previously, coastal bluff erosion is caused by a combination of inherent environmental factors and erosion caused by human activity. Some examples of environmental factors include percolation of rainwater and surface water runoff and poorly consolidated soils. Various factors attributed to human activity include improper irrigation practices; improper site drainage; use of impermeable surfaces which concentrate runoff; use of water-dependent vegetation; and breaks in irrigation lines, water or sewer lines. Therefore, drainage on site and any vegetation proposed should not contribute to any potential coastal bluff erosion. The applicants have stated that site drainage goes currently toward the street and that they intend to keep with this plan and they have also submitted a drainage and run-off control plan that shows that all water on site will be directed toward the street and treated before exiting property onto the street. Part of the proposed project also consists of demolition of an existing pool and construction of a new pool and spa in the rear yard. The applicants have stated that the drainage for the pool will be directed to the storm drain system and the pool will be double lined with an attached separate water meter for detection of leaks. The applicants have also submitted a landscaping plan detailing what the landscaping improvements involve. Commission staff reviewed the landscape plan and determined that the plan does contain invasive species and also contains some non-drought tolerant plants.

Lastly, the applicants have stated that a permanent underground irrigation system is proposed.

### Geotechnical Issues

To address geotechnical issues, the applicants have submitted a geotechnical investigation entitled *Preliminary Foundation Soils Exploration at 1900 Galaxy Drive, Newport Beach, California 92660 (Job No. F-10074-03)* prepared by Geo-Etka, Inc. dated November 17, 2003. The purpose for this investigation was: "...to determine the existing soil conditions at the site and to provide data and specific recommendations relative to the foundation design for the proposed structure(s) in accordance with our signed proposal dated 11/6/03." The geotechnical investigation concludes: "the site is suitable for its intended use, namely a swimming pool and an addition to an existing residential building. In designing the proposed structures, the criteria given in the design section should be adhered to."

This geotechnical investigation included recommendations for the proposed project. Among those recommendations are: 1) continuous footings, isolated pad footings or a combination of both may be utilized for the design of the foundation to support the proposed structures; 2) the slopes must be planted with drought tolerant vegetation and maintained throughout variable climatic conditions; and 3) swimming pools/spas should be provided with ground moisture-pressure relief valves to help prevent damage to the pool due to ground water.

In order to avoid adverse impacts of the proposed development on bluff erosion and instability, and prevent the necessity for bluff protective structures, as required by Section 30253 of the Coastal Act, **Eight (8) Special Conditions** are being imposed. These special conditions are more thoroughly discussed later in this report in Section 4 below.

### 3. Geologic Setback

Development on coastal bluffs is inherently risky due to the potential for slope failure. Bluff top development poses potential adverse impacts to the geologic stability of hillsides and the stability of residential structures. To meet the requirements of the Coastal Act, bluff top developments must be sited and designed to assure geologic stability and structural integrity for their expected economic lifespans while minimizing alteration of natural landforms. In order to assure that this is the case, a development setback line must be established that places the proposed structures a sufficient distance from unstable or marginally stable bluffs to assure their safety, and that takes into account bluff retreat over the life of the structures, thus assuring the stability of the structures over their design life. The goal is to assure that by the time the bluff retreats sufficiently to threaten the development, the structures themselves are obsolete. Replacement development can then be appropriately sited behind a new setback line.

The first aspect to consider in establishing development setbacks from the bluff edge is to determine whether the existing coastal bluff meets minimum requirements for slope stability. If the answer to this question is "yes," then no setback is necessary for slope stability considerations. If the answer is "no," then the distance from the bluff edge to a position where sufficient stability exists to assure safety must be found. In other words, we

must determine how far back from the unstable or marginally slope must development be sited to assure its safety. Assessing the stability of slopes against landsliding is undertaken through a quantitative slope stability analysis. In such an analysis, the forces resisting a potential landslide are first determined. These are essentially the strength of the rocks or soils making up the bluff. Next, the forces driving a potential landslide are determined. These forces are the weight of the rocks as projected along a potential slide surface. The resisting forces are divided by the driving forces to determine the "factor of safety." A value below 1.0 is theoretically impossible, as the slope would have failed already. A value of 1.0 indicates that failure is imminent. Factors of safety at increasing values above 1.0 lend increasing confidence in the stability of the slope. The industry-standard for new development is a factor of safety of 1.5.

In this case, the applicants has submitted slope stability analyses, supported by site-specific soil and rock strength parameters, that demonstrate that the bluff has a minimum factor of safety ranging from 1.896 to 3.178 for various types of failures. The corresponding pseudostatic (seismic) factors of safety range from 1.516 to 2.121. The Commission's staff Geologist has reviewed these calculations and concurs that the coastal bluff is safe from global instability, and that no setback is necessary for slope stability purposes. Staff notes however, that there has been a bluff slope failure near the northeast corner of the project site, which indicates that the slope is likely to be surficially unstable. Surficial failures are one means by which this bluff retreats through time.

The second aspect to be considered in the establishment of a development setback line from the edge of a coastal bluff is the issue of more gradual, or "grain by grain" erosion. In order to develop appropriate setbacks for bluff top development, we need to predict the position of the bluff edge into the future. In other words, at what distance from the bluff edge will bluff top development be safe from long-term coastal erosion?

At the subject property, the applicants' geological consultant reviewed aerial photographs from 1939, 1952, 1970, 1988, and 2001, and was unable to document any bluff retreat over that time interval. Accordingly, historic bluff retreat at the site must be very slow, and a minimal precautionary setback should suffice to assure stability of the site. The applicant's geotechnical consultant recommends a 20-foot setback, and Commission staff concurs that this is adequate to assure stability pursuant to section 30253 of the Coastal Act.

The Commission has traditionally required that structures be setback at least 25-feet from the bluff edge and hardscape features and other site appurtenances be setback at least 10-feet from the bluff edge to minimize the potential that the development will contribute to slope instability. The proposed residence will be setback a minimum of 37-feet from the bluff edge. However, some of the hardscape features and appurtenances will be located within the minimum 10-feet from the bluff edge (Exhibit #7). Therefore, the proposed development does conform to a 25-foot structural setback, however it does not conform to a 10-foot setback for hardscape and appurtenances.

The proposed project also consists of a replacing an existing pool and spa located in the rear yard setback 20 feet from the bluff edge. If water from the proposed pool and spa is not properly controlled there is a potential for bluff failure due to the infiltration of water into the bluff. To minimize the potential for potential infiltration into the bluff, the applicants have stated that the drainage for the pool will be directed to the storm drain system and the pool will be double lined with an attached separate water meter for detection of leaks.

Therefore, the proposed pool does conform to the to the 10-foot setback for hardscape and appurtenances and has proposed additional measures to prevent any adverse impacts to the bluff.

4. Conclusions and Special Conditions

Section 30253 of the Coastal Act states that new development shall minimize the impacts of the proposed development on bluff erosion and instability, and prevent the necessity for bluff protective structures. William Kockelman, U.S. Geological Survey, wrote an article entitled "Some Techniques for Reducing Landslide Hazards" that discusses several ways to minimize landslide hazards such as bluff erosion and instability, including:

- A. Require a permit prior to scraping, excavating, filling, or cutting any lands.
- B. Prohibit, minimize, or carefully regulate the excavating, cutting and filling activities in landslide areas.
- C. Provide for the proper design, construction, and periodic inspection and maintenance of weeps, drains, and drainage ways, including culverts, ditches, gutters, and diversions.
- D. Regulate the disruption of vegetation and drainage patterns.
- E. Provide for proper engineering design, placement, and drainage of fills, including periodic inspection and maintenance.

Kockelman also discusses the option of disclosure of hazards to potential buyers by the recordation of hazards in public documents. The recordation of hazards via the assumption of risk is one means the Commission utilizes to inform existing and future buyers of property of the potential threat from soil erosion and slope failure (landslide) hazards. Several of these recommendations are routinely required by local government, including requiring permits for grading, minimizing grading, and requirements for proper engineering design.

The Commission has imposed many of these same recommendations, including requiring the consulting geologist to review foundation and drainage plans in order to confirm that the project conforms to the policies of the Coastal Act. The findings in the staff report regarding the general causes of bluff erosion and the specific findings from the geotechnical report confirm that the coastal bluff at this location is eroding and that measures to minimize bluff erosion are necessary. The following special conditions will mitigate the impacts of the proposed development on bluff erosion and instability, and prevent the necessity for bluff protective structures, as required by Section 30253 of the Coastal Act.

a. Assumption of Risk

Coastal bluffs in southern California are recently emergent landforms in a tectonically active environment. Any development on an eroding coastal bluff involves some risk to development.

Although adherence to the geotechnical consultant's recommendations will minimize the risk of damage from erosion, the risk is not entirely eliminated. The findings in sections 1-3 above, including site-specific geologic information, support the contention that development on coastal bluffs involves risks and that structural engineering can minimize some of the risk but cannot eliminate it entirely. Galaxy Drive has been prone to bluff failures on a consistent basis. Therefore, the standard waiver of liability condition has been attached via **Special Condition No. 1**.

By this means, the applicants and future buyers are notified that the proposed development is located in an area that is potentially subject to bluff erosion that can damage the applicants' property. In addition, the condition insures that the Commission does not incur damages as a result of its approval of the Coastal Development Permit.

b. Revised Plans

As indicated above, the Commission has traditionally required that structures be setback at least 25-feet from the bluff edge and hardscape features and appurtenances be setback at least 10-feet from the bluff edge to minimize the potential that the development will contribute to slope instability. The same reasoning applied in those previous cases applies equally here. The proposed residence will be setback a minimum of 37-feet from the bluff edge. However, some of the hardscape features and appurtenances (i.e. concrete mow strip, paved patio and fence) will be located within the minimum 10-foot bluff-edge setback. Therefore, the proposed development does conform to the 25-foot structural setback, however it does not conform to the 10-foot bluff edge setback for hardscape and appurtenances. Therefore, the Commission is imposing **Special Condition No. 2**, which requires the applicants to submit revised project plans showing relocation of all hardscape and appurtenances at least 10-feet from the bluff edge.

c. Bluff Protective Devices

Bluff top lots are inherently hazardous. It is the nature of bluffs to erode. Bluff failure can be episodic, and bluffs that seem stable now may not be so in the future. Even when a thorough professional geotechnical analysis of a site has concluded that a proposed development is expected to be safe from bluff retreat hazards for the life of the project, it has been the experience of the Commission that in some instances, unexpected bluff retreat episodes that threaten development during the life of a structure sometimes do occur (e.g. coastal development permit files #5-98-497-G-(Penfil), 5-98-524-G-(Penfill), 5-98-524-(Penfill), 5-98-469-G-(Ferber), 5-98-469-(Ferber), 5-98-240-G-(Patton) and 5-98-240-(Patton), 5-94-288-(Lewis), 5-93-308-(Pope Trust), 5-85-062-(Braman) and 5-93-367-(Rushton); #5-99-332 A1-(Frahm);5-97-174-(Braeger); 5-99-338-(Braeger)). In the Commission's experience, geologists cannot predict with absolute certainty if or when bluff failure on a particular site may take place, and cannot predict if or when a residence or property may become endangered.

Section 30253 of the Coastal Act requires that new development shall not require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The proposed development could not be approved as being consistent with Section 30253 of the Coastal Act if projected bluff retreat would affect the proposed development and necessitate construction of a protection device.

No bluff protection device is proposed. However, because the proposed project includes new development and is located in an area where bluff failures have occurred, more specifically on the northern adjacent lot, it can only be found consistent with Section 30253 of the Coastal Act if a bluff protective device is not expected to be needed in the future. Therefore, the Commission imposes **Special Condition No. 3**, which states that no bluff protective devices shall be permitted to protect the proposed development.

d. Future Development

The development is located within an existing developed area and is compatible with the character and scale of the surrounding area. However, without controls on future development, the applicants could construct amenities to the proposed home that would have negative impacts on coastal resources, and could do so without first acquiring a coastal development permit, due to the exemption for improvements to existing single-family residences in Coastal Act Section 30610 (a). In order to prevent the current authorization from allowing such future negative effects, it is necessary to ensure that any future development -- including the development of amenities that would otherwise normally be exempt -- will require a permit. To assure that future development is consistent with the Chapter 3 policies of the Coastal Act, the Commission imposes **Special Condition No. 4**, which is a future improvements special condition. As conditioned the development conforms with the Chapter 3 policies of the Coastal Act relating to geologic hazards.

e. Conformance with Geologic Recommendations

The geotechnical consultants have found that the proposed development is feasible provided the recommendations contained in the geotechnical reports prepared by the consultants are implemented in regards to the design and construction of the project. The geotechnical recommendations address foundations, excavation, and footings. In order to insure that risks of development are minimized, as per Section 30253, the Commission imposes **Special Condition No. 5**, which states that the geotechnical consultants' recommendations should be incorporated into the design of the project. As a condition of approval the applicants shall submit for the review and approval of the Executive Director foundation plans reviewed and signed by a consulting geologist.

f. Drainage and Runoff and Landscaping Special Conditions

In approving development on a coastal bluff the Commission must condition the development to minimize potential erosion or, as it is stated in Section 30253 "*...to neither create nor contribute significantly to erosion...*"



Along the urbanized seacliffs of southern California, geologic instability has been increased through the addition of large volumes of irrigation water required to maintain lawns and non-native vegetation in the yards of cliff top homes. Landscape irrigation alone is estimated to add the equivalent of 50 to 60 inches of additional rainfall each year to garden and lawn areas. This irrigation has led to a slow, steady rise in the water table that has progressively weakened cliff material and lubricated joint and fracture surfaces in the rock along which slides and block falls are initiated. In addition to these effects, surface runoff discharged through culverts at the top or along the face of the bluffs leads to gullying or failure of weakened surficial materials.

The Commission has acted on many coastal development permits in which an applicant has applied for bluff protective measures following the failure of irrigation lines, water or sewer lines which then cause slope failure. It is extremely difficult to discover breaks in in-ground irrigation lines until after a certain period of time passes and plants start to die. By then the slope may have become saturated.

It is also difficult to assess the long-term damage caused by the accumulation of water on bluff topsoils due to watering of lawns and other water intensive vegetation that are water-dependent. It is estimated that watering a lawn on a regular basis is the equivalent of 60 inches of rainfall a year. The average rainfall in southern California is 12 to 20 inches per. In fact, although the consulting geologists routinely make recommendations concerning landscaping and site drainage, geologists do not review landscaping plans. In this respect the Commission fills an important role in minimizing landsliding and erosion.

The geotechnical investigation states that water should be directed away from the top of bluff and the applicants have stated that site drainage goes currently toward the street and that they intend to keep with this plan and they have also submitted a drainage and run-off control plan that shows that all water on site will be directed toward the street and treated before exiting the property onto the street, which will assist in preventing any damage to the structural stability of the bluff. However, portions of this plan could not be read. Therefore, the Commission is imposing **Special Condition No. 6**, which requires the applicants to submit a final drainage and run-off control plan.

The proposed project also consists of a replacing an existing pool and spa located in the rear yard. If water from the proposed pool and spa is not properly controlled there is a potential for bluff failure due to the infiltration of water into the bluff. For this reason, the potential for infiltration into the bluff should be minimized. This can be achieved by various methods, including having the pool double lined and installing a pool leak detection system to prevent the infiltration of water into the bluff due to any possible pool or spa problems. The applicants have stated that the drainage for the pool will be directed to the storm drain system and the pool will be double lined with an attached separate water meter for detection of leaks. These protective measures will assist in preventing any damage to the structural stability of the bluff

Because of the fragile nature of coastal bluffs and their susceptibility to erosion, the Commission requires a special condition regarding the types of vegetation to be planted. The applicants have submitted a landscaping plan detailing what the landscaping improvements involve. The submitted landscaping plan proposes use of the following vegetation: *Strelitzia nicholai*, *Camellia s. Yuletide*, *Camellia j. White*, *Buxus m. j. Green Beauty*, *Nandina Gulf Stream*, *Nandina Harbor Dwarf*, *Liriope gigantea*, *Bergenia cordifolia*, *Strelitzia regenea*, *Rosa Iceberg*, *Phormium Jack Spratt*, *Musa acuminata*, *Pittosporum tennuifolium*, *Tibouchina urvilleana*, *Zantedeschia aethiopica*, *Colocasia esculenta*, *Zingiger officinale* and *Trachelspermum jasminoides*. Use of non-native vegetation that is invasive can have an adverse impact on the existence of native vegetation. Invasive plants are generally those identified by the California Invasive Plant Council (<http://www.caleppc.org/>) and California Native Plant Society ([www.CNPS.org](http://www.CNPS.org)) in their publications. Commission staff reviewed the landscape plan and determined that the plan does contain invasive species: *Nandina Gulf Stream*, *Nandina Harbor Dwarf*, *Phormium Jack Spratt*, *Tibouchina urvilleana*, *Zantedeschia aethiopica*, and *Colocasia esculenta*. As discussed previously, any plants in the landscaping plan should be drought tolerant to minimize the use of water. The term "drought tolerant" is equivalent to the terms 'low water use' and 'ultra low water use' as defined and used by "A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California" prepared by University of California Cooperative Extension and the California Department of Water Resources dated August 2000 available at <http://www.owue.water.ca.gov/landscape/pubs/pubs.cfm>. Commission staff reviewed the submitted landscaping plan for drought tolerant vegetation and determined that *Strelitzia regenea*, *Rosa Iceberg*, *Musa acuminata*, and *Zingiger officinale* are not drought tolerant. Lastly, the applicants have stated that a permanent underground irrigation system is proposed.

The Commission imposes **Special Condition No. 7**, which requires that the applicants shall prepare prior to issuance of this permit a revised landscape plan, which shall be submitted for the review and approval of the Executive Director. To minimize the potential for the introduction of non-native invasive species and to minimize the potential for future bluff failure, a revised landscaping plan shall be prepared by a licensed landscape architect and shall incorporate the following criteria: 1) to minimize the introduction of water into the ground, no permanent in-ground irrigation shall be permitted, temporary above ground irrigation to establish the plantings is permitted; 2) landscaping shall consist of native or deep rooted drought tolerant non-native plants which are non-invasive. Invasive, non-indigenous plant species which tend to supplant native species shall not be used; and 3) to assure that the landscaping plan will be compatible with the Upper Newport Bay Ecological reserve, it shall be reviewed and approved by the California Department of Fish and Game.

g. Deed Restriction

To ensure that any prospective future owners of the property are made aware of the applicability of the conditions of this permit, the Commission imposes **Special Condition No. 8** requiring that the property owners record a deed restriction against the property, referencing all of the above special conditions of this permit

and imposing them as covenants, conditions and restrictions on the use and enjoyment of the Property. Thus, as conditioned, any prospective future owners will receive actual notice of the restrictions and/or obligations imposed on the use and enjoyment of the land including the risks of the development and/or hazards to which the site is subject, and the Commission's immunity from liability.

h. Conclusion

The Commission has required several **Eight (8) Special Conditions**, which are intended to bring the proposed development into conformance with Section 30253 of the Coastal Act. These special conditions include: **1)** assumption of risk; **2)** revised project plans showing removal of hardscape located within 10-feet of the bluff edge; **3)** no future bluff protective devices; **4)** additional approvals for any future development; **5)** evidence of conformance with geotechnical recommendations; **6)** submittal of a final drainage and run-off control plan; **7)** submittal of a revised landscaping plan; and **8)** a deed restriction against the property, referencing all of the special conditions contained in this staff report. Only as conditioned to comply with the provisions of these special conditions does the Commission find that the proposed development conforms with Section 30253 of the Coastal Act.

C. Scenic Resources

Section 30251 of the Coastal Act pertains to visual resources. It states:

*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...*

Section 30251 of the Coastal Act requires that scenic and visual qualities of coastal areas be protected. The project is located on a blufftop lot overlooking Upper Newport Bay. The site is visible from a variety of public vantage points around the bay, including from Back Bay Drive. Because the new residence will potentially affect views from public vantage points any adverse impacts must be minimized. Consequently, it is necessary to ensure that the development will be sited to protect views to and along Upper Newport Bay and minimize the alteration of existing landforms.

Establishing a limit of development and setting development further back from the edge of the coastal bluff decreases a development's visibility from public vantage points. For these reasons, the Commission typically imposes some type of bluff top set back.

City Setback

The plans submitted by the applicants show that the project conforms to the City zoning setback requirement of 20-feet, but conformance to the City required setback however does not address the potential visual scenic resource impacts that the seaward encroaching development will have on the project site. Adhering to the City setback of 20-feet for development located on the bluff face would not achieve the objectives of Coastal Act Section 30251.

### Stringline

Since the City's setback cannot be used to evaluate the potential impacts that the seaward encroaching development will have on the project site, the applicability of the structural and deck stringlines will be evaluated. Two types of string lines are applied to evaluate a proposed project—a structural string line and a deck string line. A structural string line refers to the line drawn from the *nearest* adjacent corners of adjacent structures. Similarly, a deck string line refers to the line drawn from the *nearest* adjacent corners of adjacent decks. Considering the applicability of a stringline, there is a residence immediately north and south of the project site. Therefore, a stringline can be applied this case. However, applicability of this stringline with this project is not necessary since the applicant is proposing a 37-foot bluff edge setback for the house, which is consistent with the pattern of development in the area and will cause no seaward encroachment compared with existing conditions; furthermore the Commission is imposing **Special Condition No. 2**, which requires the applicants to submit revised project plans showing relocation of all hardscape and appurtenances at least 10-feet from the bluff edge.

In addition, the future development restriction will ensure that improvements are not made at the blufftop which could affect the visual appearance of the coastal bluff or affect the stability of the bluff. The landscaping condition requires that the applicant install native and/or drought tolerant non-invasive plants throughout the site. The established vegetation on the bluff face will remain undisturbed.

Therefore, the Commission finds that, as proposed and conditioned, the project will not obstruct significant coastal views from public vantage points and is consistent with the visual resource protection policies of Section 30251 of the Coastal Act.

### **D. Environmentally Sensitive Habitat Areas**

The project site is immediately adjacent to the Upper Newport Bay Ecological Reserve managed by the California Department of Fish and Game. The Ecological Reserve is a 752 acre wetland habitat sanctuary. In 1968 the California State Legislature authorized the Fish and Game Commission to establish ecological reserves for the purpose of protecting rare and endangered wildlife, aquatic organisms, and critical habitat. Upper Newport Bay Ecological Reserve was established for the principal purpose of preserving and enhancing a saltwater marsh ecosystem. Section 30240(b) of the Coastal Act states:

- (b) *Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Upper Newport Bay (hereafter 'the Bay') is one of the last major estuarine habitats remaining in a near natural condition in southern California. The Department of Fish and Game notes that the Bay is ecologically valuable due to the fact that it supports many resident and migratory birds; many species of plants and animals; and that the Bay is a nursery for numerous marine organisms. The Upper Newport Bay Regional Park, Existing Conditions Report (May 30, 1990) identifies a total of 22 natural communities within Upper Newport Bay. Furthermore, the Bay is an important recreation area and supports nature study, bird watching, and fishing. According to the

Los Angeles Times (Monday, July 22, 1996) over two million persons per year visit the Ecological Reserve. Thus, the Ecological Reserve is an important coastal visitor destination because of its ecological value and for its recreational benefits such as open space, and bird watching. Human activity, in the form of increasing urban development adjacent to the Ecological Reserve has had significant adverse effects on the Bay. Major adverse effects include increased sediment flowing into the Bay, the elimination of natural vegetation, and the elimination of habitat adjoining the Bay.

Concerning ESHA degradation, Commission staff noted in a working paper for the San Diego County Regional Coastal Wetlands Workshop (July 20 and 21, 1978) that: "*Excessive sedimentation is probably the biggest problem facing Upper Newport. The lack of proper watershed management and in particular poor grading practices have accelerated erosion and sediment transport. This process is endangering ecological habitats.*" As re-emphasis of sedimentation as a problem, the Los Angeles Times (April 6, 1992) wrote that urban development adjacent to Upper Newport Bay has caused silt to flow into the Bay. The Bay is dredged on an on-going basis to remove accumulated sediments.

Maintaining the Bay's biological productivity and ESHA values is a critical concern since estuaries are one of the most productive areas of the world. Tidal action allows acres of saltwater, spreading over mudflats to reach sunlight and air. This stimulates the growth of algae and plankton that begins the food chain essential to wildlife and commercial ocean fishing. Coastal mudflats support seventy percent of the birds using the Pacific Flyway. Birds known to frequent the Ecological Reserve include the light-footed clapper rail and Beldings Savannah sparrow, Brown Pelican, California least tern. The intertidal mud flats support cordgrass, pickleweed, jaumea and the endangered salt marsh bird's beak. Some ocean dwelling fish such as the California halibut and barred sandbass use Upper Newport Bay for spawning and as a nursery.

Vegetation patterns in the watershed have been altered considerably by human activity. These changes have resulted from agricultural use, increasing urbanization, commercial development, and industrial development. Undeveloped areas still contain arid scrub vegetation that is typical of southern California. According the Upper Newport Bay Regional Park, Existing Conditions Report (May 30, 1990) exotic species, both plant and animal have invaded Upper Newport Bay. These include non-native grassland species, which are infiltrating native habitat such as wild oats, barely, fennel, and artichoke thistle. Introduced birds include English sparrows and rock doves. Introduced mammals include the house mouse and Virginia opossum.

The applicants have submitted landscape plan. However, it has been determined that the plan consists of invasive and non-drought tolerant species. To assure that development on property adjacent to Ecological Reserve is consistent with Section 30240(b) of the Coastal Act, the Commission imposes **Special Condition No. 7**, which requires that the applicants shall prepare prior to issuance of this permit a revised landscape plan, which shall be submitted for the review and approval of the Executive Director. To minimize the potential for the introduction of non-native invasive species and to minimize the potential for future bluff failure, a landscaping plan shall be prepared by a licensed landscape architect and shall incorporate the following criteria: 1) to minimize the introduction of water into the ground, no permanent in-ground irrigation shall be permitted, temporary above ground irrigation to establish the plantings is permitted; 2) landscaping shall consist of native or deep rooted drought tolerant non-native plants which are non-invasive. Invasive, non-indigenous plant species which tend to supplant native species shall not be used; and 3) to assure that the landscaping plan will be compatible with the Upper Newport Bay

Ecological reserve, it shall be reviewed and approved by the California Department of Fish and Game.

Through this special condition, the Commission finds that the project is consistent with Section 30240(b) of the Coastal Act which requires that development adjoining environmentally sensitive habitat areas and parks and recreation areas shall be designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.

**E. Water Quality**

Section 30230 of the Coastal Act states, in pertinent part:

*Marine resources shall be maintained, enhanced, and where feasible, restored.*

Section 30231 of the Coastal Act states:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations 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, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Single-family residences have the potential to increase local runoff due to the creation of impervious areas. This runoff could carry with it pollutants such as suspended solids, oil and grease, nutrients, and synthetic organic chemicals. This is especially of a concern in locations that are adjacent to sensitive habitat areas, such as the proposed project. The project is located adjacent to the Upper Newport Bay Ecological Reserve, which is one of the last major estuarine habitats remaining in a near natural condition in southern California. As a result, any runoff should be directed away from the reserve, which is adjacent to the rear of the site. In addition, to preventing runoff to adversely impact the ecological reserve, drainage directed away from the rear of the lot will minimize any adverse impacts to the bluff. The applicants have stated that site drainage goes currently toward the street and that they intend to keep with this plan and they have also submitted a drainage and run-off control plan that shows that all water on site will be directed toward the street and treated before exiting the property onto the street. However, portions of this plan could not be read. Therefore, the Commission imposes **Special Condition No. 6**, which requires the applicants to submit a final drainage and runoff control plan. Only as conditioned for additional infiltration of site runoff does the Commission find the proposed development to be consistent with Sections 30230 and 30231 of the Coastal Act.

**F. Public Access and Recreation**

Section 30212 of the Coastal Act states, in relevant part states:

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

(2) *adequate access exists nearby.*

Section 30252 of the Coastal Act states, in relevant part states:

*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...*

The proposed development is located on a lot with an existing single-family dwelling. The proposed development will not change the use or intensity of use of the site. Public access opportunities exist through Galaxy View Park, which overlooks the Bay and North Star Beach. The proposed development, as conditioned, will not result in any adverse impacts to existing public access or recreation in the area. Upon completion of the project, the development will remain as a single-family residence. The proposed development would provide adequate parking based on the Commission's regularly used parking standard of two (2) parking spaces per individual dwelling unit. Therefore, the Commission finds that the proposed development would be consistent with Section 30212 and 30252 of the Coastal Act regarding public access.

#### **G. Local Coastal Program**

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Development Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

The Newport Beach Land Use Plan was effectively certified on May 19, 1982. The certified LUP was updated on January 9, 1990. The City currently has no certified implementation plan. Therefore, the Commission issues CDP's within the City based on the development's conformance with the Chapter 3 policies of the Coastal Act. The LUP policies may be used for guidance in evaluating a development's consistency with Chapter 3.

The City of Newport Beach certified Land Use Plan includes policies regarding the development on coastal bluffs. Pages 25-27 of the LUP contain policies regarding definition of a bluff, grading, provision of geologic reports, setbacks and building in hazardous areas.

The policy on grading requires that the alteration of natural coastal landforms be minimized and that waivers of liability are required in areas of geologic hazard. Another LUP requirement is the submittal of a site-specific geologic report to assess areas of potential geologic instability.

The certified LUP includes a discussion of hazard areas, which it defines as areas where natural processes can pose a threat to the public health, safety, and welfare. It further defines specific geologic hazards as earthquake faults, existing or potential landslides, areas with expansive or collapsible soil, excessive settlement and subsidence, flood hazard areas, and areas subject to potential erosion and siltation. Coastal bluffs qualify as areas of geologic hazard and areas subject to erosion.

The certified LUP also contains a discussion of bluff top setbacks. However, the setback policies pertain only to all new tracts and subdivisions, residential developments greater than four residences, and commercial development. This policy states: "*As a general guideline, the property line setback from the edge of a bluff should be no closer to the edge of the bluff than the point at which the top of the bluff is intersected by a line drawn from the solid toe of the bluff at an angle of 26.6 degrees to the horizontal.*"

The intent of this policy section, as stated in the certified LUP, is to require setbacks in new subdivision development for public access purposes. Because the proposed development is a single-family residence it is exempt from this policy. Therefore, there are no specific LUP policies, which would provide guidance as to bluff setbacks in this instance.

Approximately 227 cubic yards of grading will be required for recompaction purposes, which will balance on site. The amount does not result in extensive landform alteration. As per the LUP requirements, an assumption of risk special condition is being required and a comprehensive geological report was supplied with the application. Therefore, the proposed development is consistent with the certified LUP policies.

The proposed development, as conditioned, is consistent with Chapter 3 of the Coastal Act and with the certified Land Use Plan for the area. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3.

#### **H. California Environmental Quality Act**

Section 13096(a) of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, 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 further feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project is located in an urban area. All infrastructure necessary to serve the site exists in the area. As conditioned, the proposed project has been found consistent with the hazard, visual resource, water quality and sensitive habitat protection policies of Chapter 3 of the Coastal Act. Mitigation measures include special conditions requiring conformance with geotechnical recommendations and setback requirements, submittal of a final drainage and run-off control plan and submittal of a revised landscaping plan.

As conditioned, there are no feasible alternatives or additional feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

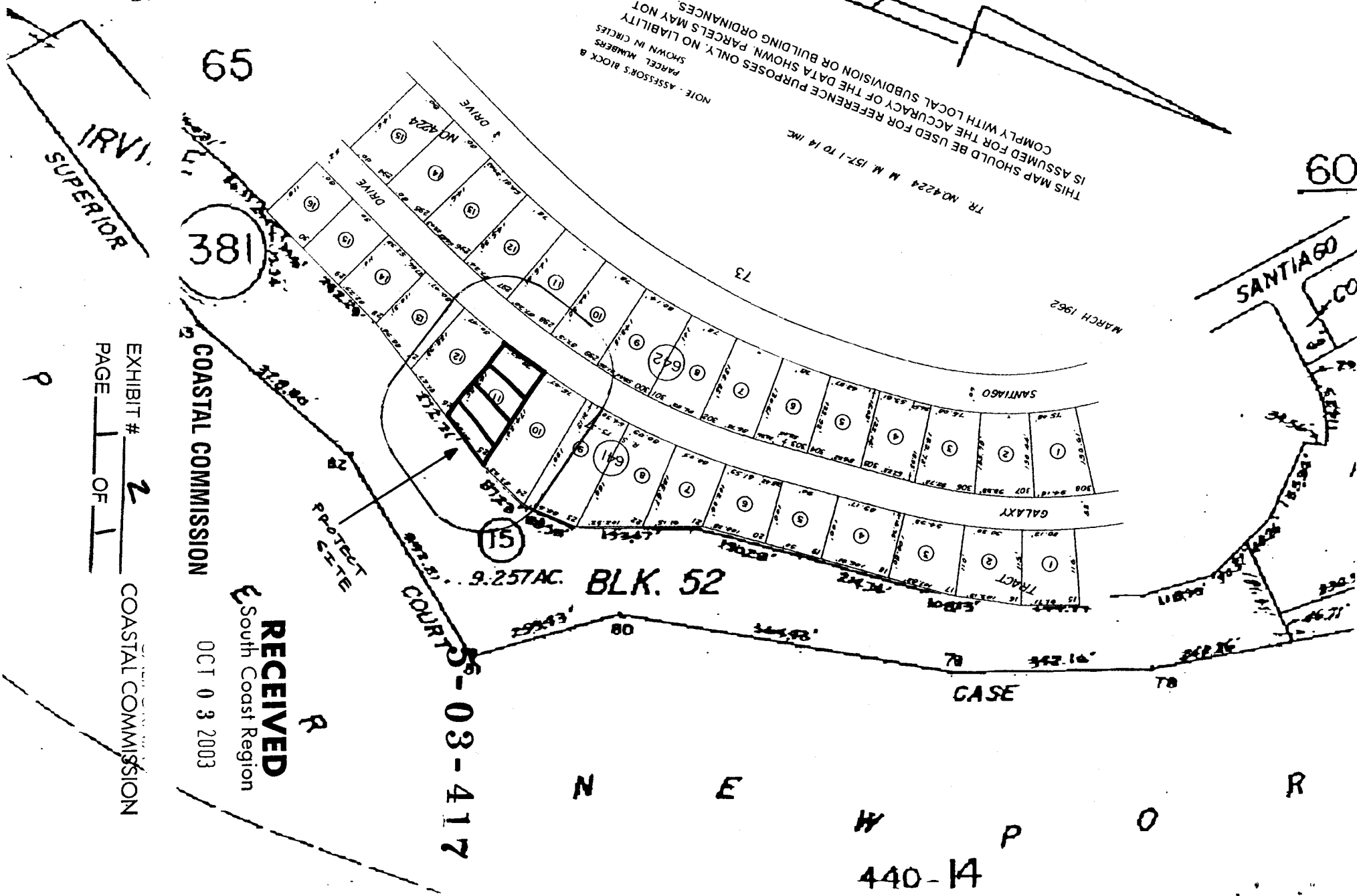




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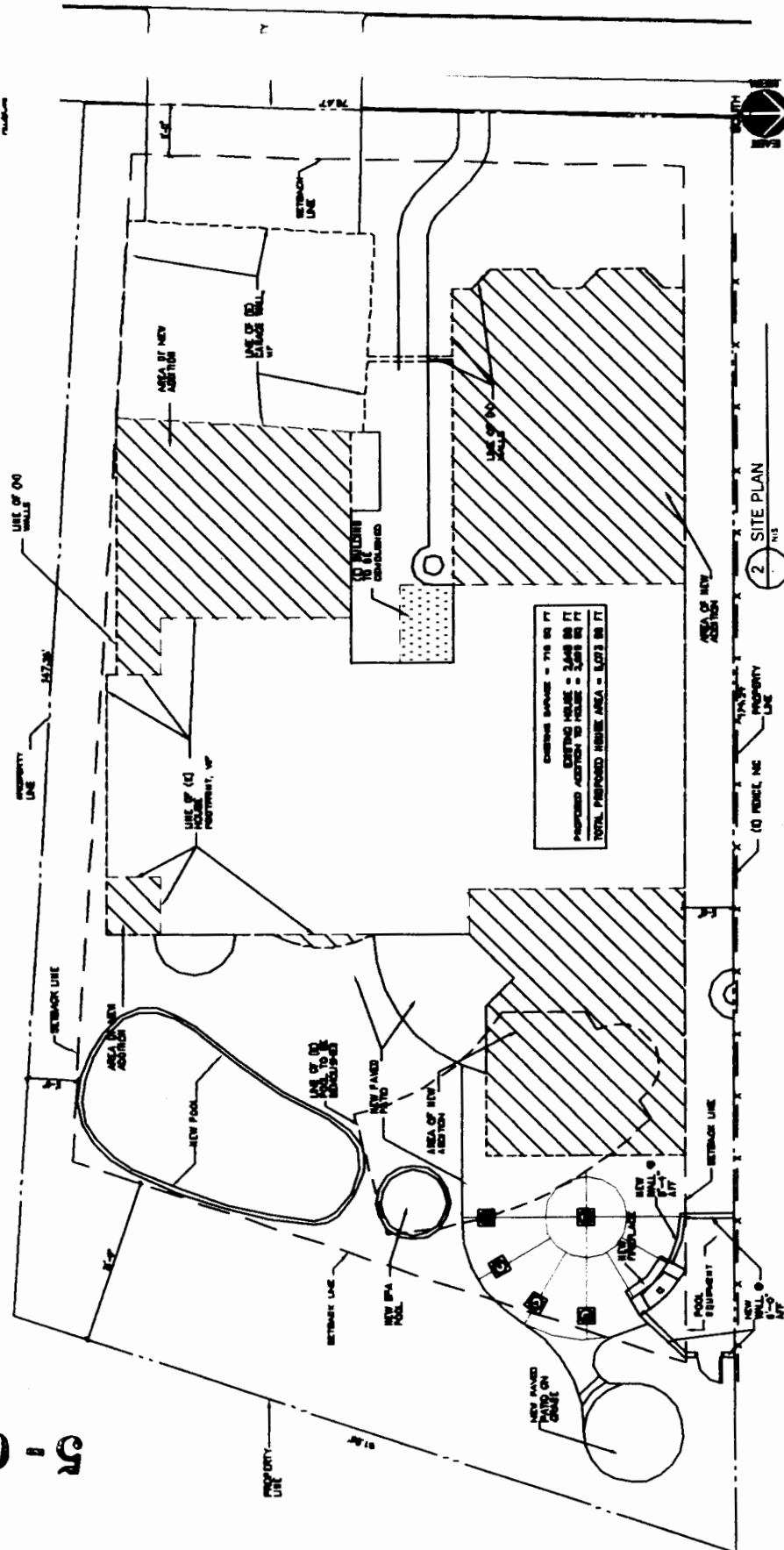
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2 SITE PLAN

COASTAL COMMISSIO

EXHIBIT # 3  
PAGE 1 OF 2

5-03-412

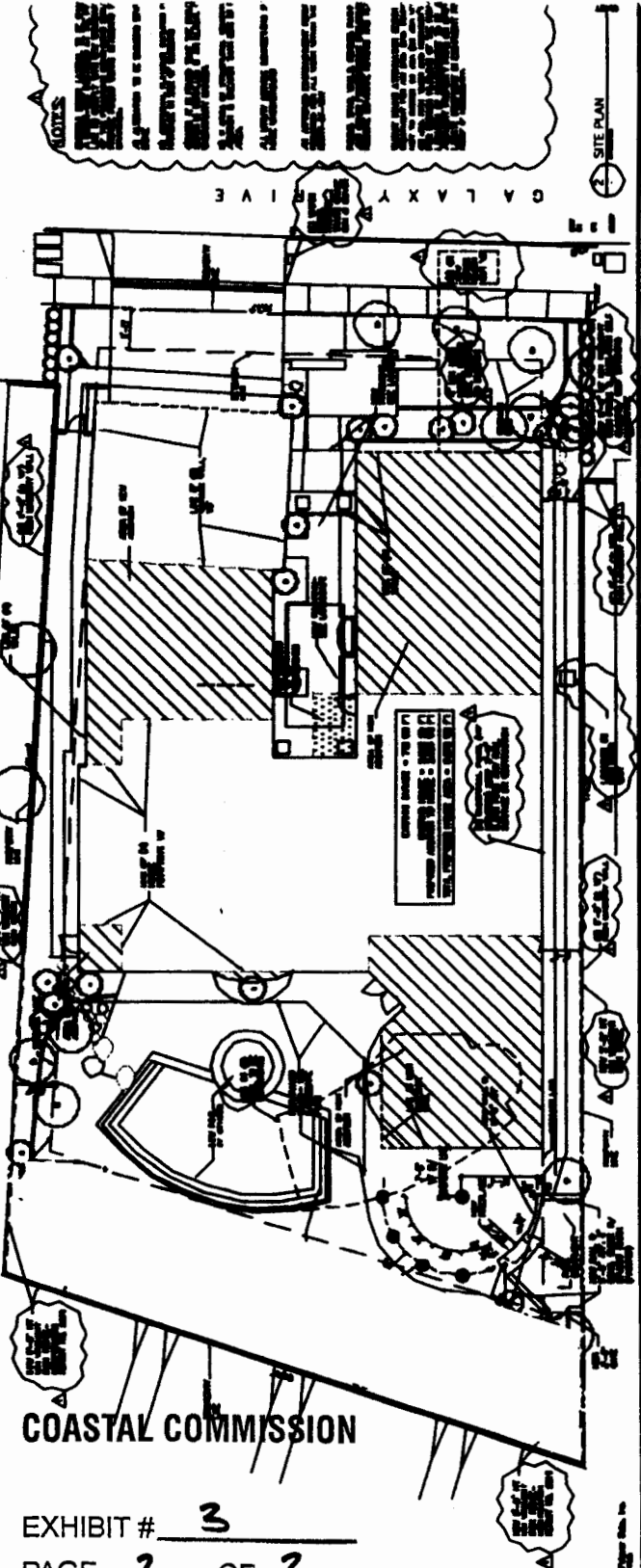
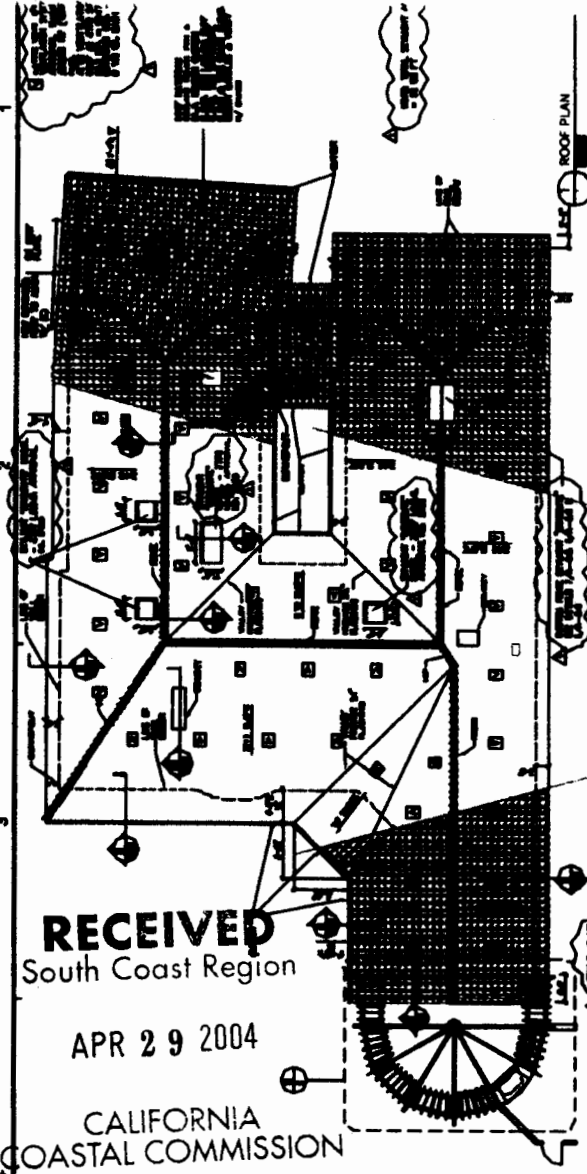
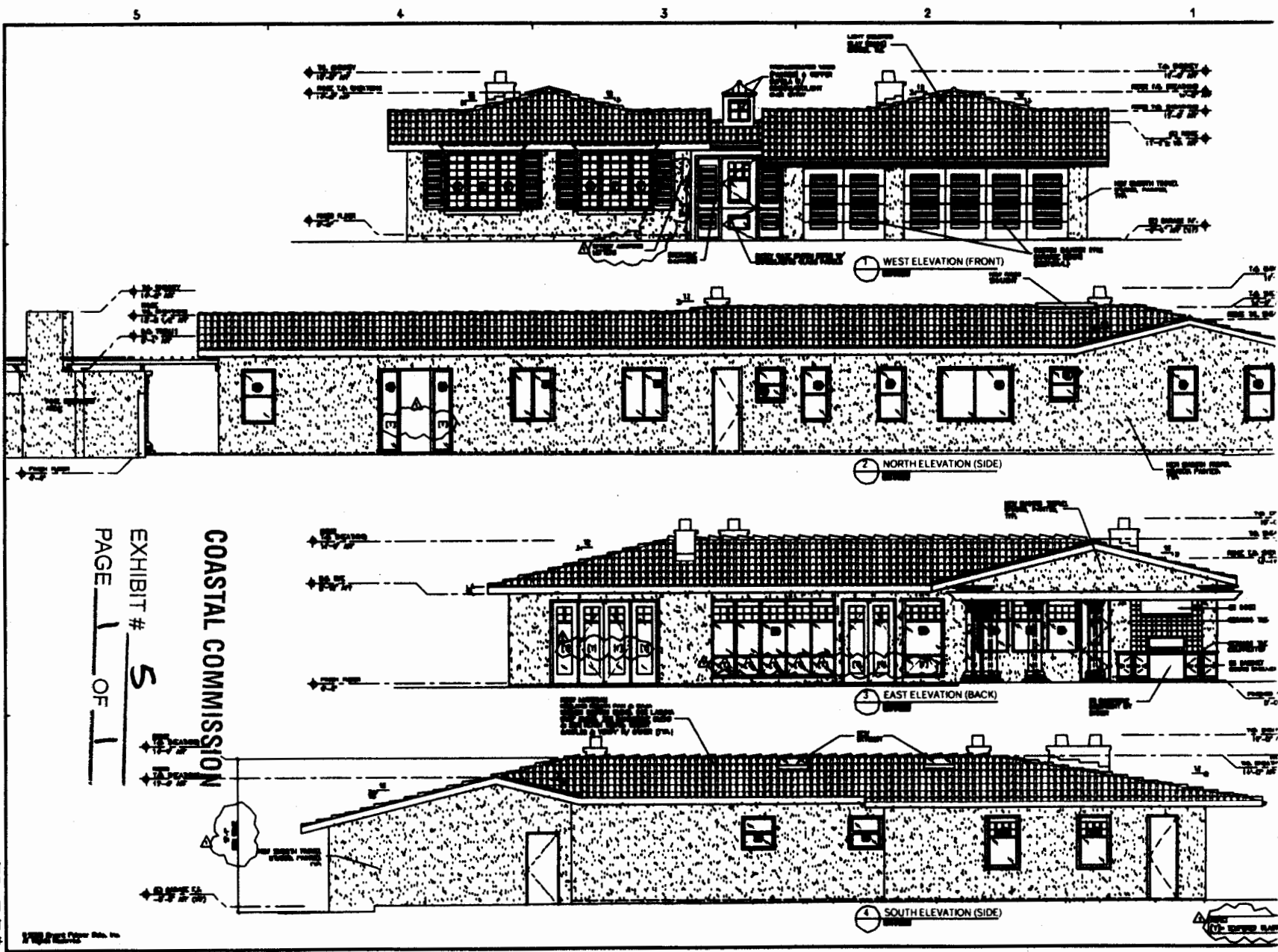


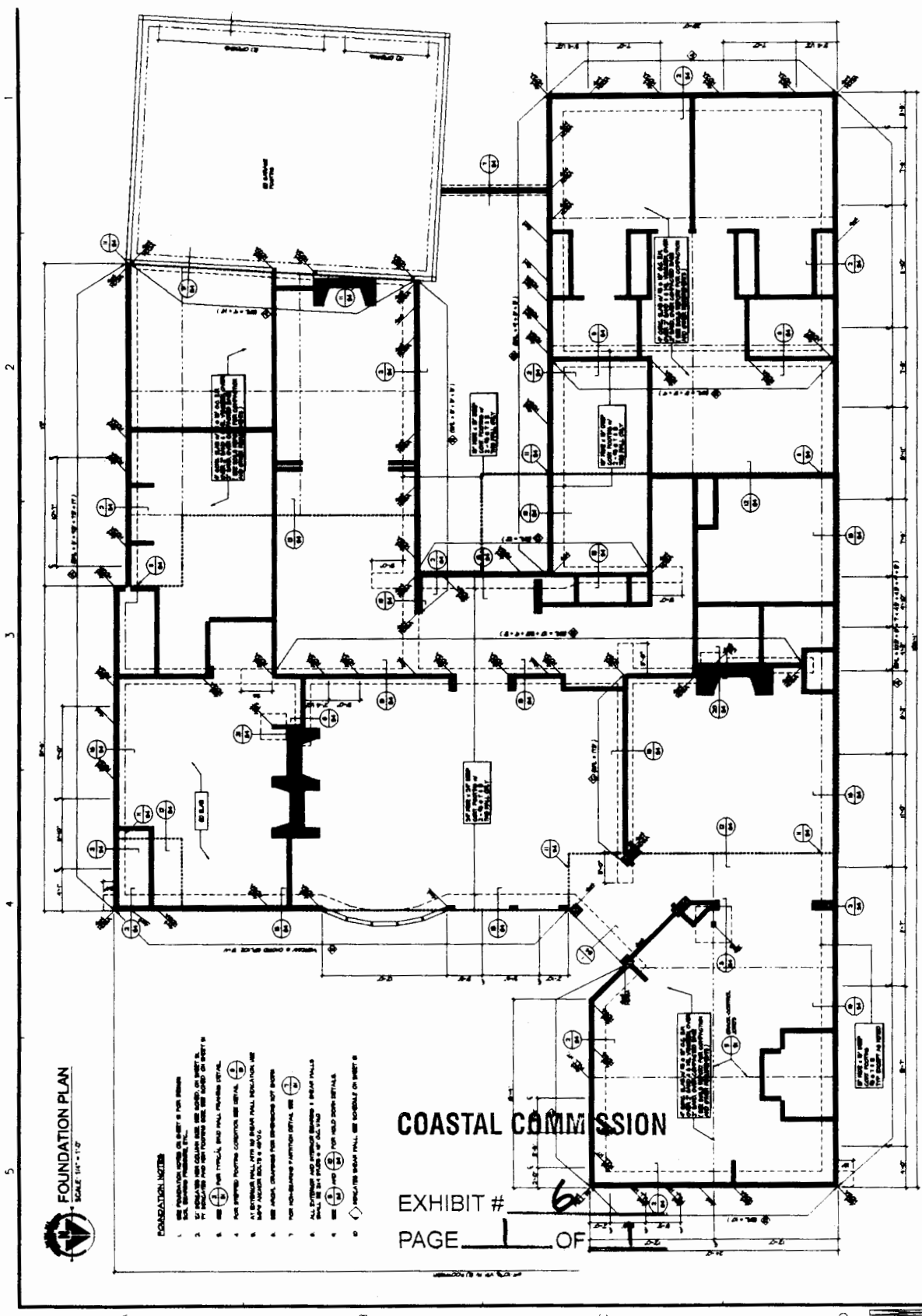
EXHIBIT # 3  
 PAGE 2 OF 2





COASTAL COMMISSION  
 EXHIBIT # 5  
 PAGE 1 OF 1

Project Name	Architect	Scale	Date
Project Address	Project No.	Sheet No.	Sheet Total
ELEVATIONS			
Job No.	Drawn By	Checked By	Date
A-2.0			



**FOUNDATION PLAN**  
SCALE 1/4" = 1'-0"

- FOUNDATION NOTES**
1. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  2. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  3. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  4. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  5. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  6. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  7. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  8. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  9. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.
  10. FOUNDATION WALLS TO BE SET IN TYPICAL CONCRETE.

**COASTAL COMMISSION**

EXHIBIT # **6**  
PAGE **1** OF **1**

