Public Comment for:
1837½ El Camino de la Luz
MST2002-00214
(Attached correspondence received prior to 12/07/17 PC Hearing)

Public comment check for this item:

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<th>In Support</th>
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<tr>
<td>1. Rafael Franco</td>
<td>1. Stan Krome &amp; Joana Morgan (1)</td>
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<td>3. Joe &amp; Kim Finegold</td>
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<td>5. Bruce Peterson (1) w/ATTs</td>
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<td>11. Lou deBourbon</td>
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(And a request for copies of all rcvd public comment sent to Kathleen Kennedy & Barbara Shelton at KKennedy@SantaBarbaraCA.gov, bshelton@SantaBarbaraCA.gov, and the Applicant/Architect: RRM Design Group at dhpeikert@rrmdesign.com; actomasello@rrmdesign.com; Herb1701@gmail.com; rcmnk@hbsb.com; SAmerikaner@bhfs.com; pgutshall@cox.net; rgorman@earthsystems.com; )
25 November 2017

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Subject: Propose Final EIR and CDP Dec.7, 2017
1837.5 El Camino de la Luz

Honorable Commissioners:

Although I have not received formal notice of the subject hearing, I have learned that the proposed EIR and CDP for 1835.5 El Camino de la Luz will be an agenda item for Dec 7, 2017. Unfortunately I will not be able to attend that meeting and therefore offer the following comments and attachment previously submitted.

The first objection is to the short period allowed for review of the project and based on an anticipated MND for the project. By email, a neighbor was informed by Ms. Kathleen Kennedy that we will receive notice in the mail and the EIR will be available online next week. That would mean that the maximum allowed review period would be 10 days. I refer you to Title 14. California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 8. Time Limits Section 15105, Public review period for a Draft EIR or a Proposed Negative Declaration or Mitigated Negative Declaration. This section stipulates a minimum review period of 30 days and not to exceed 60 days. Clearly the proposed review period of 10 days does not meet the requirements for an MND nor the more than one year since the last hearing on the Draft EIR of Oct. 2016. I am not aware of any extensions adopted by the Planning Commission.

This project brought to light the age and inadequacy of the current LCP more than two years ago and generated the update of the LCP which is now in circulation for review. The revised and updated Proposed LCP deals with many of the issues of this project. Considering the expired time limits for review of the Draft EIR, and the Proposed LCP, I believe the Draft EIR has expired and should consider the new updated LCP and new CCP adopted Coastal Plan. There are several relevant project violations of the Proposed LCP, most notably the defined top of ocean bluff, required setbacks, encroachment into Lighthouse Creek, and slope stability.

On Dec. 1, 2016, Coastal Commission Program Analyst Megan Sinkula in her letter No. 2 to Kathleen Kennedy she reviewed the Draft EIR and listed a number of issues and questions. On Nov. 11, 2017, Kathleen Kennedy responded to this letter. Her response to the question of Public Access, “There is no evidence of a public beach access easement on the project site”, is false. Throughout the almost 30 year history of this project we have pointed out Document File No. 16515 recorded Dec. 10, 1947 page 3 that reads as follows:
Also reserving from Parcel One a right of way 5 ft. in with, for use in common with others, as a means of ingress and egress to and from the ocean beach, over upon and along the present existing beach trail located on the bluff bank in the southerly portion of land here in described, together with the right to enter said 5 foot strip for the purpose of repairing and maintaining said existing beach trail.

This citation was included in my Nov. 19, 2016 letter to the Commission attached hereto. All neighbors will testify to the continuing public use of this easement and witnessed by myself over the past 35 years.

Staff’s response goes on to say in the same paragraph, “The use of the path by the public would have the potential to result in significant erosion and/or safety impacts.” This is in fact the case, and historical photographs plot the changed directions of the path based on erosion and landslides. Not to be ignored, this is an impact and evidence ignored in the EIR. Staff’s conclusion that “The project would not be required to provide public access to the beach in accordance with Coastal Act Section 30212.” Is wrong. In this case, public access is protected by law and established easements that take precedence over the proposed project.

Staff’s responses to the top of bluff and setback issues are incorrect and misquote CCC Geologist Mark Johnson. The statement of stability ignores the Draft EIR’s findings. The Draft EIR was updated to indicate two southwesterly fractures in the underlying bedrock. No further study was conducted other than the visual identification of these fractures since they extend blow the property next door. This is a significant omission.

In the response letter, Staff uses a 1.02 inches per year retreat rate developed by the applicant’s consultant. This is incredulous and contrary to retreat rates previously stated in Draft EIRs, contrary to all recent evidence, and the Proposed LCP. The statement that “The Commission Geologist (Johnson 2013) reviewed and concurred with the bluff retreat analysis for the project site”. is false. The applicant’s analysis that concluded 1.02 inches per year rate was done well after 2013. Furthermore the retreat rate is based on a 52 year photometric analysis of the past which is no basis for what will happen over the project’s next 75 year life.

The Planning Commission initially voted for an EIR focused on four issues: Site Access, Geotechnical Stability, Coastal Bluff Setbacks and Visual Impacts. This study has evolved the study of a number of other significant impacts, including legal issues such as JUDICIAL ESTOPPEL, a plaintiffs cannot win a legal judgement, and then reverse their position and seek an opposite judgement. (Sneddon v. Torch Energy Services 2002). Such is the case with respect to site access. Some of these issues were noted in my response letter to the Draft EIR, letter dated 19 Nov. 2016 attached hereto.

Thank you for your consideration

Rafael Franco

cc: Megan Sinkula
Coastal Program Analyst

Attachment: Letter to the Santa Barbara Planning Commission 19 Nov., 2016Rafael Franco
19 November 2016

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Subject: Draft EIR October 2016
1837.5 El Camino de la Luz

Honorable Commissioners:

The following are additional comments and or answers to questions after the Planning Commission hearing Nov 17, 2016 for the subject project.

PUBLIC ACCESS EASEMENT

At the meeting Staff and the EIR consultant stated that there was NO PUBLIC ACCESS EASEMENT to the coastal trail. I refer them to Document File No. 16515 recorded Dec 10, 1947 page 3 that reads as follows:

Also reserving from Parcel One a right of way 5 ft in width, for use in common with others, as a means of ingress and egress to and from the ocean beach, over upon and along the present existing beach trail located on the bluff bank in the southerly portion of land here in described, together with the right to enter upon said 5 foot strip for the purpose of repairing and maintaining said existing beach trail.

Please note that the trail down the bluff has changed over the years following erosion of the bluff. A comparative exhibit of two different trail locations was submitted with my previous comments.

OWNERSHIP OF LIGHTHOUSE CREEK

Lighthouse Creek is property owned by the U. S. Federal Government. Please refer to Record of Survey and Filing Certificate No 14629 of July 1948 by Penfield and Smith. The applicant’s plans indicate deployment of storm water to property he does not own or have the right to.

STORM WATER MANAGEMENT

The proposed project or the Draft EIR do not indicate how the project will comply with the City’s adopted Storm Water Management Program (SWMP), the National Pollution Discharge System (NPDES) requirements, or how the project will comply with storm water pollution prevention plans (SWPPP) as required by Federal permits issued to the City of Santa Barbara.
LINES LOCATING TOP OF BLUFF AND CREEK BANK

There was significant discussion about this topic at the hearing. We think this was resolved and agreed upon that both of these lines were to follow the existing asphalt curb. This conclusion conforms to Coastal Commission Guidelines issued as Figure B of a CCC staff report dated 28 December 1979. This drawing is almost identical to the subject site and has been the basis of CCC judgement for 37 years. The drawing was submitted with our previous comments.

The interpretation of the CCC guidelines was submitted to the Planning Department as a record of survey and surveyor’s statement by Penfield and Smith on a survey dated July 27, 2007. This was further confirmed by CCC geologist Mark Johnson on his subsequent site visit, and now seems to be the agreed boundary.

GEOLOGY

The Slope Stability Analysis for the ocean bluff is incorrect and incomplete. There are various types of slides that have occurred on this and the adjacent site. The basic guidelines for analysis of possible landslides are listed in CCC Memorandum W11.5 dated January 16, 2003. They read as follows:

A slope stability analysis is performed by testing hundreds of potential slide surfaces. The surface with the minimal factor of safety will be the one on which failure is most likely to occur. Generally, as one moves back from top edge of the slope, the factor of safety against land sliding increases. Therefore to establish a safe setback for slope stability from the edge of the coastal bluff, one needs to find the distance from the bluff edge at which the factor of safety is equal to 1.5.

The project geologist did not do this. He concluded that because his pseudostatic analysis of potential planar failure factor of safety exceeded the code requirement (1.14 vs 1.1) he did not have to do the analysis of the much higher static factor of safety requirement of 1.5. This is an erroneous assumption. Other selective and more accurate variables in his equation would have yielded different results.

The fact is that the strike and dip of the Mesa Bluffs is very similar and thus produced a history of landslides including the historic 1978 landslide. This history is why the US Geological Survey and other studies have designated El Camino de la Luz Bluffs a HAZARDOUS ZONE (USGS Professional Paper1693).

Dr. Donald W Weaver was the geotechnical analyst hired by the City to study the cases and type of landslide that occurred in 1978, just three houses from the subject site. In 1978 he mapped the slide and concluded that it was a classic rotational slide. subsequently and after further exploration and study, he changed his opinion and concluded on May 6, 1982 that this massive slide was a planar slide along the same dip and strike as our subject site. The planar slide was caused by the weakening of planar surfaces and by the undercutting of the supporting toe of the slope by wave action.

These same conditions exist east of the 1978 landslide. Three older homes between the landslide and the subject site sit perilously on Marine Terrace alluvium above Monterrey Shale waiting for the next slide. There is no avoidance, it is just a matter of time.
WHY 100 FOOT CAISSONS?

On the drawing submitted on November 17th I projected the location of the 17 caissons stated in the EIR. I noted a depth of 100 ft as a minimum depth for base bearing caissons. This conclusion was to establish a base at sea level; they may be deeper if they are to penetrate bedrock at least 5 ft. Friction piles this close to the shoreline will not work when the toe of the slope is eroded by wave action.

EROSION RATE AND BLUFF SETBACK

At the site meeting prior to the hearing, the EIR author/consultant stated that “wave action is not a determination of bluff top retreat”. This unbelievable statement ignores the most significant impact on our coast, WAVE ACTION. It was the cause of the 1978 landslide 200 ft away. Every professional technical study of ocean bluffs lists wave action as the most important consideration in ocean bluff landslide geotechnical slope stability analyses generally are performed on the status quo at the time of the calculation. The problem with this practice is that they do not reflect the stability of the slope in this dynamic environment, in 10, 20, 50 or 75 years. The history of slope failures and existing bedrock fractures on this site are proof of this deficiency.

Based on the revised edge of bluff determination, the proposed house does not meet any of the setback requirements. Even if a new slope stability analysis concludes that the slope is stable, the CCC and the Creeks Division will require a 25 ft setback from the ledge.

CREEK SIDE EROSION

The project and the EIR ignore the current location of Lighthouse Creek and the erosion rates for the creek banks. There has been no survey since 1947 that defines the creek. The 1958 survey submitted for the subdivision that created the parcel excludes the easterly boundary of the parcel and the creek. A current survey of the subject parcel and Lighthouse Creek should be included in the EIR.

SITE ACCESS

At the hearing, the applicant’s attorney asserted that the conditions of proof of access of the Conditional Certificate of Compliance had been met and approved by the City Engineer and Fire Department. This is contrary to the historical interpretations of City Attorneys and City Engineers. He provides no written evidence of this approval. He makes no reference to the contrary letter written to the applicant by the City Engineer on June 27, 1989. This letter was one of the basis for the applicant’s complaint against the title companies. Superior Court file number 186256 DEPOSITION OF HERBERT E. BARTHELS on February 11, 1992 in the case of Joanna K Morgan vs HERBERT E. BARTHELS clarifies the issues of site access and claims thereof.

EASEMENTS

The Staff Report for the November 17th hearing included a brief prepared by the office of the
applicant’s attorneys Hollister & Brace and signed by attorney Richard C. Monk and architect Detlev Peikert. This brief makes the following **libelous statement:**

*In 2007 and 2008 Rafael Franco and some other residents of the subject stretch of El Camino de la Luz denied the City’s retained geologist, Dr. Anikouchine access to the Barthels property for the purpose of performing certain geological investigations which Mr. Franco and said other residents had demanded be performed.*

Statements of fact:

1. I was not there

1. Neither Mr. Monk or Mr. Peikert were there

1. Neither I nor the neighbors “demand” that this exploration be done. The work was done at the direction of the applicant and paid for by the applicant directly to explore the existence of a rock fracture extending to the base of the cliff. The applicant was admonished by Planning Department and he responded that his attorney “told me to do it”. Payment checks to the excavation company are included in the EIR.

Dr. Anikouchine’s report concluded that he could not locate the fracture and that he compacted the excavation to 95% using a sheep’s foot compactor and water. Neighbors witnessed and photographed the re-compaction to which there was no water available. During this process the excavating equipment trespassed to gain access to and from the site. Photographic evidence of this fiasco was presented to the Planning Commission at the Draft EIR hearing of April 5, 2012.

Based on what we perceived to be a destabilization of the slope by the excavation of an 8 ft deep X 45 ft trench at the top of the bluff, we filed suit against the applicant, Dr. Anikouchine and the excavator. We dropped the suit after repeated responses that Dr. Anikouchine was too ill to be deposed and the excavator responded that he was just doing what he was told.

1. At the hearing and in his brief Mr Monk referred to the Superior Court’s stipulated access order of September 9, 2009 which states that we “shall not block , impede or limit access to the Benefited Property…..” paragraph (b) states

   a. **Shall sign any paperwork required by government agencies relating to or conforming access rights, as long as the paperwork accurately describes all easement terms.**

Mr. Monk omitted mention of the SETTLEMENT AND RELEASE AGREEMENT signed by all neighbors, the applicant and attorneys. The first paragraph of this document reads:
A. Stipulated judgement to confirm easement per survey, subject to minor existing encroaching improvements”.

A. EXISTING ENCROACHMENTS ARE:

Franco wall segment
Wright planter
Sloan planter and landscaping

The applicant’s easement across my property is 7.5 ft. The encroachment of my wall reduces access to 7.0 ft. Mr Monks admonishment to me at the November 15 site visit was....”TEAR DOWN THAT WALL”.

Thank you for your attention

Rafael Franco
26 November 2017

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Subject: Proposed Final EIR and CDP Dec.7, 2017, 1837.5 El Camino de la Luz

Honorable Commissioners:

Unfortunately, due to serious health issues, Joanna nor I will not be able to attend the December 7, 2017 meeting. I am schedule to be in Cottage Hospital that entire afternoon for a procedure and therefore offer the following comments:

First of all, we have lived at 1843 El Camino de la Luz since we purchased the house in 1988. We strongly object to this project and the proposed Final EIR for the following reasons.

1. NO ACCESS - Lack of Required 15-foot Easement.

No permission was ever granted by owners of the 4 homes on the private drive of El Camino de la Luz for access to subject property.

“No Legal Access to Property” 1997 letter from the city attorney, Stephen Wylie, directing that no decision be made on this property until there is a legal easement.

The total legal access is located only on the Peterson property at 1837 El Camino de la Luz, far from the main street. This access is limited to 9 feet due to a Prescriptive Fence Easement running most of the length of the Peterson’s property. Confirmation can be found in the 1995 Settlement Agreement with Barthels/Morgan. Quit Claim Deed #95-0666679 of 11/17/95: recorded 11/3//95.

More Information on Access The lot split creating 1837.5 El Camino de la Luz was done without obtaining legal access from the neighbors and illegally subdivided in 1963. No one noticed anything until Dr. Barthels claimed 7.5 feet of easement from our home at 1843 El Camino de la Luz in 1990. His lot sits at the end of a private driveway where 5 homes were built from 1948 to the early 50’s according to the original Neighborhood Plan.

A title search was done in 1990 and it was discovered that owner of 1837 split the lot and granted a 15’ easement to the property from the street. It looked good on paper and was approved. Without a site visit, no one realized that none of the neighbors had granted the easement only the owner of said property. In fact, our house is sitting in the middle of this illegal easement.
Dr. Barthels, seeing that his lot was unbuildable without legal access, sued his Title Co. and won. We were forced to spend our own money to sue Barthels to remove the cloud from our title.
   * See Settlement Agreement of 11/17/95

The Settlement Agreement also grants an additional one-foot prescriptive fence easement for Joanna Morgan of 1843 El Camino de la Luz. This easement runs along the entire fence between 1837 and 1843 and is signed by both Barthels and Peterson.

Therefore, Barthels’ only legal easement to his property is over the Peterson property. It is composed of easements of 7.5 feet + 2.5 feet [minus the 1 foot both parties gave up for the fence easement] and totals merely nine (9) feet across.

The Settlement also includes an easement for beach access for the owners of 1843 El Camino de la Luz. In direct violation of that settlement, Dr. Barthels has parked his boat in our easement, not honoring the court decision, so we are forced to walk over the center of his property. We might possibly claim this new pathway as a prescriptive easement for the neighborhood.

Because of this Settlement Agreement and the fact that no easements were ever granted, legally, Dr. Barthels has access only to maintain his property. This means he does not have access to bring construction workers, materials or vehicles over any of our properties on to his already crumbling bluff.

2.) **DR. Barthels PREVIOUSLY SUED his Title Company**
Dr. Barthels, owner of 1837.5 El Camino de la Luz, has already sued his Title Co. claiming his lot as “unbuildable” and had been paid for both lot and expenses by Santa Barbara Title Co 1994 Santa Barbara Judgment by Santa Barbara Court.

3. **NEIGHBORHOOD CC & R’s**
The proposed construction is inconsistent with the original Neighborhood Plan that shows 8’ setbacks for each home. An additional house will unfairly burden this fragile neighborhood cluster and private driveway where difficult situations already exist in the form of no place to turn around, too much traffic and insufficient parking. The proposed construction is inconsistent with the original Neighborhood Plan that shows 8’ setbacks for each house.

The CC&R’s for this subdivision clearly state "that each such main building, house or other mains structure shall be built prior to or concurrently with any other appurtenant building structures." All of these houses were built concurrently in 1948. The CC&R’s also indicate that the original subdivision did not contemplate or allow further subdivision or construction of other structures.

In conclusion we feel that the proposed Final EIR is incomplete, does not address our issues nor concerns and therefore we ask that you and the Planning Commission deny this submittal.

Thank you for taking our comments into account when considering the viability of this project.
Sincerely

Stan Krome and Joanna Morgan
1843 El Camino de la Luz
Santa Barbara, CA 93109
Santa Barbara Planning Commission  
630 Garden Street  
Santa Barbara, CA 93101  
pcesecretary@SantaBarbaraCa.gov  
KGoo@SantaBarbaraCA.gov

Subject: Proposed Final EIR and CDP Dec.7, 2017  
1837.5 El Camino de la Luz

November 27, 2017

Honorable Commissioners:
As a member of *Citizens to Preserve and Protect the Mesa’s Coastal Bluffs*, I’d like to refresh your memory about some issues relating to the 1837.5 El Camino de la Luz project. The following bullets are a summary of my letter to the Planning Commission in December 2016 responding to the 2nd Draft EIR. Please view the Aerial Access Photo at the bottom of this document. It may help you visualize the comments with more ease.

**COMMENTS:**

- The cul-de-sac at the end of El Camino de la Luz is a well-known public access area to get on and off the popular Lighthouse bridge. This bridge leads into La Mesa park and up to Shoreline Drive and vice versa. El Camino de la Luz and the cul-de-sac act as a traffic corridor and convergence point for the whole Mesa community. Everyday, all day long, Mesa residents funnel to and from the cul-de-sac using El Camino de la Luz. The street is a well-used and friendly community thoroughfare for women with babies in strollers, families with toddlers and young children, runners, dog walkers, bicyclists, skateboarders, older people, young people and lovers. Construction of the 1837.5 project would place an unnecessary burden, hardship and inconvenience on the whole Mesa community for 1-2 years, not just for the immediate neighbors.

- At the proposed construction site there is no room for large trucks to turn around. Even if the developer could find the access, construction-related trucks would have to park on the cul-de-sac creating congestion at this public recreational hub. If the project is approved, the cul-de-sac would become blocked with various kinds of construction-related trucks, construction material deliveries and the staging of heavy machinery. Overcrowding in the small cul-de-sac would make it difficult and possibly dangerous for the public to navigate. Is the City prepared to close off access to the Lighthouse bridge for public safety reasons just so this project, already fraught with problems, can be built? Even regular cars parked in the cul-de-sac reduce its approximate fifty-five foot diameter to approximately forty-two feet.
• Visually, El Camino de la Luz with its cul-de-sac looks like a thermometer; a straight line with a bulb at the end. At the circumference of the cul-de-sac you’ll see: a yellow fire hydrant, the Mesa community access path onto and off of the Lighthouse bridge, and the easement driveway which leads to the proposed construction site. Three other easement driveways funnel on to the cul-de-sac, as well. Altogether, the four driveways contain eleven parcels. Everything is sitting on top of each other at this convergence point.

• Sandwiched in between the project’s easement driveway and the Lighthouse bridge lies the City’s Main Sewer Line and Pump Station for the whole Mesa neighborhood. Five sewer manholes dot the cul-de-sac. Sewage needs to be pumped to a higher elevation because the neighborhood sits so low. Sewage problems and emergencies occur, as well as regular sewer maintenance. Congestion from construction parking would affect the City’s access to the five manholes and the pump.

• Just two of the City’s maintenance trucks for the Main Sewer Line and Pumping Station can create ingress/egress congestion at the cul-de-sac. Larger trucks can barely turn around, if at all. Their length takes up the entire width of the cul-de-sac even when no regular cars are parked there.

• This project, if approved, affects the entire Mesa community, yet a Notice of Development sign has only been placed in a location where the public cannot see it. There hasn’t been any notice posted at the cul-de-sac for the proposed development or the impact it would have on users of the bridge.

• If approved, the 1837.5 proposed house would sit in the middle of the ocean view from La Mesa park and the Lighthouse bridge. Visitors congregate on the park benches and the bridge to enjoy the view of the Channel Islands, boats, dolphins and whales.

• Please do the right thing. After twenty-seven years of due process for the developer and the neighbors, please deny a permit and declare this parcel unbuildable. It may be possible to build this house, but should it be built is the question.

Thank you for your thoughtful and concerned attention.

Sincerely,
Judith Smith
1839 El Camino de la Luz
Santa Barbara, CA 93109
Aerial Access Photo of Whole Area
29 November 2017
Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101
Subject: Proposed Final EIR and CDP Dec.7, 2017, 1837.5 El Camino de la Luz

Honorable Commissioners:

Unfortunately, due to serious health issues, Joanna nor I will not be able to attend the December 7, 2017 meeting. I am schedule to be in Cottage Hospital that entire afternoon for a procedure and therefore offer the following comments:

First of all, we have lived at 1843 El Camino de la Luz since we purchased the house in 1988. We strongly object to this project and the proposed Final EIR for the following reasons.

1. NO ACCESS - Lack of Required 15-foot Easement.

No permission was ever granted by owners of the 4 homes on the private drive of El Camino de la Luz for access to subject property.

“No Legal Access to Property” 1997 letter from the city attorney, Stephen Wylie, directing that no decision be made on this property until there is a legal easement.

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A title search was done in 1990 and it was discovered that owner of 1837 split the lot and granted a 15’ easement to the property from the street. It looked good on paper and was approved. Without a site visit, no one realized that none of the neighbors had granted the easement only the owner of said property. In fact, our house is sitting in the middle of this illegal easement.

Dr. Barthels, seeing that his lot was unbuildable without legal access, sued his Title Co. and won. We were forced to spend our own money to sue Barthels to remove the cloud from our title.

* See Settlement Agreement of 11/17/95

The Settlement Agreement also grants an additional one-foot prescriptive fence easement for Joanna Morgan of 1843 El Camino de la Luz. This easement runs along the entire fence between 1837 and 1843 and is signed by both Barthels and Peterson.

Therefore, Barthels’ only legal easement to his property is over the Peterson property. It is composed of easements of 7.5 feet + 2.5 feet [minus the 1 foot both parties gave up for the
fence easement] and totals merely nine (9) feet across. The Settlement also includes an easement for beach access for the owners of 1843 El Camino de la Luz. In direct violation of that settlement, Dr. Barthels has parked his boat in our easement, not honoring the court decision, so we are forced to walk over the center of his property. We might possibly claim this new pathway as a prescriptive easement for the neighborhood.
Because of this Settlement Agreement and the fact that no easements were ever granted, legally, Dr. Barthels has access only to maintain his property. This means he does not have access to bring construction workers, materials or vehicles over any of our properties on to his already crumbling bluff.

2.) DR. Barthels PREVIOUSLY SUED his Title Company
Dr. Barthels, owner of 1837.5 El Camino de la Luz, has already sued his Title Co. claiming his lot as “unbuildable” and had been paid for both lot and expenses by Santa Barbara Title Co 1994 Santa Barbara Judgment by Santa Barbara Court.

3. NEIGHBORHOOD CC & R’s
The proposed construction is inconsistent with the original Neighborhood Plan that shows 8’ setbacks for each home. An additional house will unfairly burden this fragile neighborhood cluster and private driveway where difficult situations already exist in the form of no place to turn around, too much traffic and insufficient parking. The proposed construction is inconsistent with the original Neighborhood Plan that shows 8’ setbacks for each house. The CC&R’s for this subdivision clearly state "that each such main building, house or other mains structure shall be built prior to or concurrently with any other appurtenant building structures."
All of these houses were built concurrently in 1948. The CC&R's also indicate that the original subdivision did not contemplate or allow further subdivision or construction of other structures.
In conclusion we feel that the proposed Final EIR is incomplete, does not address our issues nor concerns and therefore we ask that you and the Planning Commission deny this submittal.

Thank you for taking our comments into account when considering the viability of this project.
Sincerely
Stan Krome and Joanna Morgan
1843 El Camino de la Luz
Santa Barbara, CA 93109
June 4, 1997

James T. Lindsey
Attorney at Law
Granada Building, Suite 402
1216 State Street
Santa Barbara, California 93101-2613

Re: 1837½ El Camino De La Luz (APN 45-100-65)

Dear Mr. Lindsey:

This letter is in response to the packages of materials you submitted to the City during our meeting of May 12, 1997 with your client, Dr. Herbert Barthels, and City Associate Planner, Susie Reardon, concerning the above-referenced parcel and Dr. Barthels’s desire to file a development application for the parcel.

After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino De La Luz, it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity.

During our meeting, I understood you to represent that the agreement between Dr. Barthels and Joanna Morgan dated November 17, 1995 provided that Morgan acknowledged Barthels’s right to use the westerly 7½ feet of the 15 foot wide easement which affects the Morgan property. However, in my review of the 1995 agreement, it appears to have very little to do with the 15 foot wide access easement and is mostly about the pedestrian trail access easement over the Barthels property which was otherwise in dispute between Morgan and Barthels. As a result, it still appears to us that the status of the 15 foot wide easement is unchanged from the stipulation filed in Morgan v. Barthels, et al. (Santa Barbara Superior Court Case No. 186256) wherein Dr. Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7 1/2 FEET," which stipulation was signed by the parties to the litigation and executed by Judge Stevens as an order. In fact, we presume that
it was this stipulation/order which brought about Dr. Barthels prevailing in his Superior Court Case No. 182179 wherein he recovered damages from Santa Barbara Title.

Consequently, the question remains whether this parcel has the required legal access and the access which formed the basis of the City approving the original lot split in 1958. Based on my review of the "History" dated November 26, 1996 which you submitted, I am assuming that Dr. Barthels is now claiming either a prescriptive right to the 15 foot wide easement or that he has access rights by legal "necessity." While this may be the case, the City cannot assume it to be the case in the absence of any sort of final legal determination to that effect. This is particularly true where, as here, the record clearly indicates that the existence of the 15 foot easement vis-a-vis the Morgan property has been extensively litigated and, on its face, a claim of prescriptive right would otherwise seem to be barred by the legal doctrine of res judicata.

In conclusion, the City does not believe it is appropriate to process an application to develop a parcel where the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to the parcel.

Please do not hesitate to contact me should you or your client have further questions or need further assistance in this matter.

Very truly yours,

[Signature]
Stephen P. Wiley
Assistant City Attorney

cc: Don Olson, Asst. Community Development Director
    Susie Reardon, Associate Planner
ORDER

Cite as 94 Daily Journal D.A.R. 13440

HERBERT E. BARTHELS,
Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY
et al.,
Defendants and Respondents.

2d Civil No. B076806
(Super. Ct. No. 182179)
(Santa Barbara County)
California Court of Appeal
Second Appellate District
Division Six
Filed September 23, 1994

THE COURT:

IT APPEARING that the opinion filed August 24, 1994, in the above matter meets the standard for publication pursuant to California Rules of Court, rule 976(b),

IT IS HEREBY ORDERED that the same is certified for publication.

REAL PROPERTY

Title Abstractor’s Negligence in Failing to Discover Easement’s Insufficiency Didn’t Cause Loss of Property Value.

Cite as 94 Daily Journal D.A.R. 13440

HERBERT E. BARTHELS,
Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY
et al.,
Defendants and Respondents.

2d Civil No. B076806
(Super. Ct. No. 182179)
(Santa Barbara County)
California Court of Appeal
Second Appellate District
Division Six
Filed August 24, 1994

In this action for title, abstractor’s negligence, we hold that the negligence of the abstractor did not cause the property to lose value. Therefore, the property owner is not entitled to damages measured by the loss in value of the property. We also hold the trial court correctly determined other aspects of the award of damages. We affirm.

FACTS

In 1978, Herbert Barthels purchased the last beach front parcel of property in the City of Santa Barbara (the City). He paid $24,500 for the unimproved lot. Escrow was through the Santa Barbara Title Company (the Company) which also issued a policy of title insurance. The policy insured the title to the lot and a “perpetual” easement for access 15 feet wide.

Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, when he was preparing to build, he learned that the access easement was only seven-and-a-half feet wide, and not 15 feet as represented by the Title Company. The City refused to issue a building permit without a 15 foot wide easement. The Company tendered $42,875, representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued the Title Company alleging abstractor’s negligence in determining that Barthels had a 15 foot wide easement. Barthels’ claim was for damages for loss of value of the property, money spent on construction plans and expenses incidental to processing permit applications. The Title Company did not deny its negligence. The only question, therefore, was the amount of damages.

At trial Barthels’ testified that in 1989, when he learned of the defect, the property was worth $800,000 with the 15 foot easement, and nothing without the easement. Barthels claimed that through 1992 he had spent out of pocket expenses for such items as property taxes and architectural and engineering fees in the amount of $27,381.25. The Title Company agreed that Barthels expenses were $21,824.40 from 1989 to 1992, the year Barthels discovered the defect in title.

Barthels also claimed $280,000 as compensation for his own time devoted to development of the parcel. He testified he spent 1400 hours and was claiming $200 per hour as the value of his time.

The trial court found that the measure of damages for the Title Company’s negligence was not the $800,000 loss in economic value of the property, but the $42,875 offered by the Title Company. The court told Barthels he could cash the Title Company’s previously tendered check in that amount.

The trial court also awarded Barthels $21,824.40 for out of pocket costs expended until the defect in title was discovered. As to compensation for Barthels’ time, the court found 150 hours represented the time Barthels expended that avoided the need to hire others. The court stated Barthels was not entitled to compensation at his billable rate as a dentist. Although he rescheduled
Barthels contends the trial court erred in falling to award him $800,000 for loss of economic value of his property. We disagree.

The measure of damages for negligence is... the amount which will compensate for all the detriment proximately caused thereby... (Civ. Code, § 3333.) The question here is whether the negligence of the Title Company caused the property to lose economic value. Barthels testified the property had no economic value because it lacked a sufficient easement for access: 'Nothing the Title Company did or did not do caused the property to lack a sufficient access easement.' A sufficient easement simply never existed. Thus, the Title Company cannot be held for any loss of economic value of the property caused by the lack of the easement.

Carter v. Title Ins. Thypny (1980) 106 Cal.App.3d 365 illustrates the role of causation in assessing damages for abstracter's negligence. There the abstracter failed to disclose that the plaintiffs' parcel was subject to a mineral interest in a third party. Plaintiffs sought, among other things, to compel the abstracter to obtain a release of the mineral interest. In upholding the sustaining of a demurrer the court stated: 'The first element of proximate cause is cause in fact. [Citations.] Nothing the defendants did or did not do in any way caused the land to be subject to the Archibalds' mineral interest... Since the acts or omissions of the defendants did not cause the land to be subject to the Archibalds' interest the cost of removing that interest is not a proper measure of plaintiffs' damages, nor are plaintiffs entitled to an order requiring the defendants to obtain a release of that interest.' (Id. at pp. 382-383.)

Here the Title Company's negligence caused Barthels to spend $24,500 on a valueless parcel of property. Damages in the amount of $24,500 plus interest are adequate to compensate Barthels for the loss of that money. The trial court apparently believed Barthels was adequately compensated for the loss of his purchase money by payment of the $42,875 policy limits. That amount represents the purchase price plus an inflation factor specified in the policy. Although interest and not a title policy inflation factor is ordinarily used to measure damages in tort (see 6 Witkin, Summary of Cal. Law (9th ed. 1988) Torts, § 1397, p. 868), Barthels does not complain on appeal that the trial court erred in substituting the inflation factor for interest.

Barthels reliance on Overholzer v. Northern Counties Title Ins. Co. (1953) 116 Cal.App.2d 113 is misplaced. There in discussing liability under a policy of title insurance the court stated, 'It seems quite apparent to us that liability should be measured by diminution in the value of the property caused by the defect in title as of the date of discovery of the defect, measured by the use to which the property is then being devoted.' (Id. at p. 130.)

But liability under a policy of title insurance, as discussed in Overholzer, is determined according to the provisions of the insurance contract. The Overholzer's action was brought on the contract of title insurance. Here, the measure of a title insurer's liability under contract is not relevant. Instead, the instant case is based on negligence. Under the circumstances presented here, holding the Title Company liable for loss of value on a theory of negligence would violate Civil Code 3333. That section limits damages for negligence to the detriment proximately caused by the Title Company's act or omission.

Barthels also contends the trial court erred in awarding other damages.

Barthels argues that the trial court should not have stopped the end of 1989 in calculating damages for his out of pocket expenses. But 1989 is the year Barthels discovered the defect in title. The City refused to issue a building permit, and he knew the land had no value. The trial court did not err in refusing to award damages for expenses made on land after Barthels learned it was worthless.

Barthels argues he should have been awarded damages for loss of income. But the trial court found no credible evidence Barthels lost any income. The trial court did award Barthels $10,000 for the time he spent that avoided the need to hire someone else.

Barthels complains the trial court awarded damages for some of the time he spent, but not all. The trial court was not convinced that all the time Barthels said he spent was reasonably necessary for the development of the parcel. The trial court committed no error. Barthels simply failed to carry his burden of proof. We must treat all evidence unfavorable to the judgment as not having sufficient verity to be accepted by the trier of fact. (GKH Associates v. Mayer Group Inc. (1990) 224 Cal.App.3d 856, 872.) We have no power on appeal to consider the credibility of a witness or to weigh the evidence. (Kumbe v. Board of Education (1987) 192 Cal.App.3d 1423, 1427.)

Barthels also complains that the amount awarded was calculated at $66.66 per hour, rather than the $200 hourly fee of a dentist. But in developing his property, Barthels was not performing the work of a dentist. Instead of compensating Barthels at the hourly rate of a dentist, the trial court properly measured compensation by the reasonable hourly rate for a person doing the type of work Barthels performed in developing his property. There was no credible evidence of the reasonable hourly rate for such work. But because Barthels had the burden of proof, if the trial court erred at all, it erred in awarding Barthels anything for his work. Thus there was no prejudice to Barthels in measuring compensation by $66.66. No reversal is
warranted. (See People v. Watson (1956) 46 Cal.2d 815, 836.)

Finally, Barthels claims the court erred in failing to award attorney's fees. Code of Civil Procedure section 1021 provides in part, "Except as attorney's fees are specifically provided for by statute, the measure and mode of compensation of attorneys and counselors at law is left to the agreement, express or implied, of the parties ...." There being no statute or agreement providing for attorney's fees in this matter, the trial court was correct in refusing to award them.

The judgment is affirmed. Costs are awarded to respondents.

GILBERT, J.

We concur:
STONE, P. J.
VEGAN, J.

Patrick L. McMahon, Judge
Superior Court County of Santa Barbara

James T. Lindsey for Plaintiff and Appellant.
Gibbs, Gilden, Locher, Fleck & Acret, Joseph
M. Gilden, Lawrence B. Parker, and Michael I. Gilden
for Defendants and Respondents.

CIVIL PROCEDURE

Plaintiff in Intervention Isn't Liable for Prevailing Defendant's Costs Dating From Filing of Original Complaint.

Gerald Garcia, et al.,
Plaintiffs,
v.
Hyster Company,
Defendant and Respondent;
Travelers Insurance Company,
Intervener and Appellant.

No. F019160
(Super. Ct. No. 212196)
California Court of Appeal
Fifth Appellate District
Filed September 23, 1994

APPEAL from a judgment of the Superior Court
of Kern County. Rebecca A. Wiseman, Judge.
Mullen & Filipp, Pamela L. Goe, Yohman
Jensen, and Rick Jensen for Intervener and
Appellant.

Marrone, Robinson, Frederick & Foster and J.
Alan Frederick for Defendant and Respondent.

PROCEEDURAL HISTORY

On October 1, 1990, plaintiffs Gerald Garcia, Jr. and Laura Garcia filed a complaint against defendant/respondent Hyster Company. The complaint charged that, while operating an "order picker" designed and manufactured by Hyster Company, Gerald Garcia was crushed between the order picker and a cross-beam. The complaint sought damages for Gerald Garcia's physical and mental injuries, and medical expenses, his lost earnings, and Laura Garcia's loss of consortium.

Hyster Company answered with a general denial and various affirmative defenses, among which were the allegations that Gerald Garcia, an employee, North American Phillips Lighting Corporation, had workers' compensation insurance and that said insurance had "expended certain sums" toward Gary Garcia's medical care and disability payments. Consequently, Hyster Company sought a reduction of any damages awarded by any of medical care treatment and disability payments made by the workers' compensation carrier.

On the same day it answered the complaint, Hyster Company cross-complained against North American Phillips Lighting Corporation, again seeking a set-off against any award on the complaint of the workers' compensation benefits, if any, paid to Gerald Garcia.

The matter was set for a mandatory settlement conference on May 1, 1992, with trial set for May 26. The settlement conference was continued to May 22. During the intervention/defense period, plaintiff in intervention/appellant, Travelers Insurance Company, with the court's permission, filed its complaint in intervention against Hyster Company. Travelers alleged that, as a proximate result of Hyster's negligence, it had been compelled to pay workers' compensation benefits to Gerald Garcia in an undetermined amount; the complaint sought reimbursement for sums expended in paying workers' compensation benefits to Gerald Garcia, and "[r]easonable litigation expenses and reasonable attorney's fees incurred in preparation and prosecution of this action pursuant to Labor Code Section 3856 ...."

On May 28, 1992, Hyster Company made a statutory compromise offer to Travelers of $5,001, pursuant to Code of Civil Procedure section 998. The offer was not accepted by Travelers.

On May 29, 1992, the Garcias' suit against Hyster Company settled for $63,500; one term of the settlement was that each party bear its own fees and costs.

On June 5, 1992, Hyster Company answered the complaint in intervention with a general denial.

The complaint in intervention against Hyster Company came on for trial on September 29, 1992. During the course of the trial, intervener Travelers...
November 30, 2107

pcsecretary@santabarbaraca.gov
Megan.Sinkula@coastal.ca.gov
KKennedy@SantaBarbaraCA.gov

Re: 12/7/2017 EIR hearing CDP2002-00008
1837.5 El Camino de la Luz

Honorable Commissioners:

We have lived at 1903 El Camino de la Luz since 2014. We object still to the development proposed at 1837.5 El Camino de la Luz. We are adding our voices of those of our neighbors who have very clearly and consistently objected to the development of this very small parcel of land at the edge of the bluff, over the last 20+ years.

Of particular concern to us is the issue of the setback from the edge of the bluff. Section 30253 of the Coastal Act states

Minimization of adverse impacts 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.

Mark Johnsson, Staff Geologist in his MEMORANDUM of 16 January 2003 states

Because coastal bluffs are dynamic, evolving landforms, establishing appropriate development setbacks from coastal bluffs is far more challenging than it is for manufactured or natural slopes not subject to erosion at the base of the slope. The mechanisms of coastal bluff retreat are complex, but can be grouped into two broad categories. Bluff retreat may occur suddenly and catastrophically through slope failure involving the entire bluff, or more gradually through grainby-grain erosion by marine, subaerial, and ground water processes. For both processes, the setback must be adequate to assure safety over the design life of the development.

The EIR authors cite various sources (page 107) who, using a variety of techniques, predict the rate of retreat of the bluff ranges from 1-8 inches per year. Additionally, the inherent instability of our bluffs is well evidenced by the major slide in 1978 just to the west of the proposed building site, the loss of many segments of the bluff in Shoreline Park and the loss of several trees from the bluffs in Douglas Family Preserve. To allow a construction project of this magnitude at and over the edge of the bluff is irresponsible at best and risking the lives and property of those currently living in the area at worst.

Finally, as stated so many times in the past, this small parcel of land lacks legal access with the driveway back to the parcel being 6.5 feet wide at one point and either 7.5 feet or 9 feet for most of the rest. It is hard to imagine the equipment needed to construct a building of this size being able to access the site. However, of greater concern to us, is the inadequate access for emergency vehicles, particularly fire trucks. Should a fire break out in or around this structure, it would be impossible for fire trucks to reach the site and this would put our entire neighborhood in danger.

Thank you for your consideration,
Joe & Kim Finegold
1903 El Camino de la Luz
Santa Barbara, CA 93109
Ms. Kennedy:
I write regarding the December 7, 2017 hearing on the 1837 1/2 Camino de la Luz project, case number MST2002-00214. My firm represents Greg and Judith Smith and Citizens to Protect and Preserve the Mesa’s Coastal Bluffs, a citizens group dedicated to protecting the Mesa’s Bluffs and preserving Lighthouse Creek.
We will appear at the hearing and we are also preparing written comments. However, we will not be able to provide 12 written hard copies to the Planning and Zoning Counter by Monday afternoon, December 4th, as suggested in the hearing notice to ensure review by the Commissioners.
The Planning Department did not upload the Final EIR to the City’s website until Monday, November 27, so it was not available to us prior to that date. It is an 844 page document, and it is unreasonable to expect any sort of substantive review and response in only five business days. Further, the Planning Department just now today (at 2:00pm) made available to the public the staff report on the Coastal Development Permit application. That Staff Report is 58 pages, including substantive attachments.
I write now to put you on notice of our clients’ position that the time frame for review and comment on the FEIR and the staff report is unreasonable (5 working days on the FEIR review and only two working days on the Staff Report).
We formally request that the Commission’s hearing be postponed so that adequate review of the nearly 1000 pages of substantive information can be conducted, and so that written comments to the Commission can be prepared by us on behalf of our clients, with enough time that those comments can be provided to the Commission in hard copy a week before the Commission actually holds its hearing.
If the Planning Department chooses to go forward with presenting this project on December 7th and insists on holding a hearing on that date, then we will be sure to raise with the Commission that the Planning Department’s actions have caused prejudice to our clients and we will ask the Planning Commission to remedy the situation.
I appreciate your time and consideration, and look forward to your response.

Sincerely,

Sabrina Venskus
December 4, 2017

VIA E-MAIL AND PERSONAL DELIVERY
Santa Barbara City Planning Commission
City of Santa Barbara
603 Garden Street
Santa Barbara, California 93101
pcsecretary@santabarbaraca.gov

CC: Ariel Calonne
City Attorney
City of Santa Barbara
740 State Street, Suite 201
Santa Barbara, CA 93101
acalonne@santabarbaraca.gov

CC: Scott Vincent
Assistant City Attorney
City of Santa Barbara
740 State Street, Suite 201
Santa Barbara, CA 93101
svincent@santabarbaraca.gov

Re: Comments Regarding the Development Application for Proposed Development Project at 1837.5 El Camino de la Luz, Santa Barbara, California (MST2002-00214)

Honorable Commission Members:

Venskus & Associates, A.P.C. has been retained by Citizens to Protect and Preserve the Mesa’s Coastal Bluffs, a citizens’ group dedicated to protecting the Mesa’s Bluffs and preserving Lighthouse Creek, to represent them in the above-referenced matter. We have also been retained by Greg and Judith Smith to represent them in this matter.

This correspondence incorporates this firm’s November 30, 2016 Letter to the Santa Barbara Planning Commission ("Planning Commission") regarding the Draft Environmental Impact Report ("DEIR") and the comments made by Venskus & Associates, A.P.C., to the Planning Commission on November 17, 2016 ("Venskus November 17, 2016 Comments"), as well as all other public comments in the administrative record at this time.
Although we will be making formal comments on the proposed Final Environmental Impact Report, those comments are not included in this letter because of the incredibly brief time we were afforded to review the FEIR prior to the December 4th cut-off as set forth in the Planning Commission hearing notice. As I notified Kathleen Kennedy of the City of Santa Barbara Planning Department in a November 30, 2017 email, the Planning Department did not upload the Final EIR to the City’s website until Monday, November 27, and it was not available to us prior to that date. The FEIR is an 844-page document, and it is unreasonable to expect any sort of substantive review and response in only five business days. Further, the Planning Department only made available to the public the staff report on the Coastal Development Permit (CDP) application on Thursday, November 30, 2017 at 2:00 p.m. That Staff Report is 58 pages, including substantive attachments.

Our clients’ position is that the time frame for review and comment on the FEIR and the staff recommendation report on the CDP application is unreasonable (5 working days on the FEIR review and only two working days on the Staff Report). We formally request that the Commission’s hearing be postponed so that adequate review of the nearly 1000 pages of substantive information can be conducted, and so that written comments to the Commission can be prepared by us on behalf of our clients, with enough time that those comments can be provided to the Commission in hard copy a week before the Commission actually holds its hearing.

In the meantime, this letter will provide additional insight and analysis on some of the pitfalls of the Proposed Project, and will illustrate why it would be legal error for the City to approve the Proposed Project. As explained in our November 30, 2016 Letter to the Planning Commission and the Venskus November 17, 2016 Comments, 1837.5 El Camino de la Luz (the “Property”, “1837 ½”, or “lot”) cannot be lawfully developed. We respectfully request that you deny the Proposed Project’s application for a development permit.

I. Project History and Background

1837.5 El Camino de la Luz is not a lawful lot. At the time the lot was created, it did not comply with the requirements of City Ordinance 2488, which provided certain access requirements for public health and safety. (See Exhibit A; Exhibit B, p. 2; Exhibit C, p. 2.) The lot was also unlawful because it was not properly recorded with the City. (See Exhibit D, p. 7.) Furthermore, the lot was unlawfully conveyed in violation of the Subdivision Map Act in 1963. (Exhibit D, p. 7.) In 1999, the City issued a Conditional Certificate of Compliance, indicating that the lot was not lawful and that it could not be developed until the lot owner demonstrated that the lot “complied with the access requirements that formed the basis of the original lot split.” (Exhibit E.)

The Applicant, Mr. Herbert Barthels (“Applicant” or “Mr. Barthels”), who owns the Property, knows that he cannot develop the Property. He has been aware of this fact for more than twenty-five years. In deposition testimony taken on February 11, 1992, Mr. Barthels’ attorney explained that prior to the deposition, Mr. Barthels had learned that “the easement [to the property] had never existed” and that this would prevent Mr. Barthels from obtaining a permit to build on his property. (Exhibit F, p. 47, 48, 50.) Mr. Barthels also represented to the Santa Barbara Superior Court and the California Court of Appeal that the Property could not be developed. (See Barthels v. Santa Barbara Title Co. [“SB Title Co.”] (1994) 28 Cal.App.4th 674, attached as Exhibit G.) Both Courts found in Mr. Barthels’ favor and the title company paid the Mr. Barthels’ for the purchase price of the Property, his expenses incurred to pursue development of the Property, and compensation for time he personally expended to pursue development of the Property. (Id. at 677, 678, 680.)
Now, though the Applicant has known for years that he cannot develop his property and has already been fairly and constitutionally compensated for his land as a result of litigation that the Applicant himself initiated, he seeks to develop the property anyway, and in a manner that threatens the stability of the bluff, the safety of his neighbors’ homes, and the viability of Lighthouse Creek and its flora and fauna. Sadly, the Applicant’s development pursuit over these last few years has unfairly and unnecessarily expended valuable public resources and City staff time which come out of the taxpayers’ pockets.

II. The Applicant is Estopped from Obtaining a Development Permit for the Property.

Judicial estoppel is an equitable doctrine that precludes parties from taking inconsistent positions in judicial or administrative proceedings (M. Perez Co. v. Base Camp Condominiums Ass’n No. 1 (2003) 111 Cal.App.4th 456, 463; see 2 Cal. Affirmative Def. § 34:18 (2d ed.)) “to prevent internal inconsistency, preclude litigants from playing ‘fast and loose’ with the courts, and prohibit ‘parties from deliberately changing positions according to exigencies of the moment’” (People ex rel. Sneddon v. Torch Energy Services, Inc. (2002) 102 Cal.App.4th 181, 189, as modified (Oct. 4, 2002) [“Sneddon”], citing U.S. v. Ruiz (9th Cir.1996) 73 F.3d 949, 953 and U.S. v. McCauley (5th Cir.1993) 9 F.3d 368, 378). Judicial estoppel precludes an individual from asserting a position in an administrative proceeding that is inconsistent with a position taken in previous judicial proceedings. (California Practice Guide: Administrative Law Ch. 10-B; see Hi-Desert Medical Center v. Douglas (2015) 239 Cal.App.4th 717, 730, as modified (Sept. 15, 2015), reh’g denied (Sept. 15, 2015), review denied (Nov. 18, 2015).) A party is judicially estopped from asserting a contrary position when: “(1) the same party has taken two positions; (2) the positions were taken in judicial or quasi-judicial administrative proceedings; (3) the party was successful in asserting the first position; (4) the two positions are completely inconsistent; and (5) the first position was not taken as a result of ignorance, fraud, or mistake.” (County of Imperial v. Superior Court (2007) 152 Cal.App.4th 13, 34.) If a party asserts a position that meets the elements of judicial estoppel, they are barred from obtaining relief based on a subsequent inconsistent position. (See Sneddon, supra, at 190.)

In this case, the Applicant is both precluded from asserting that he has a legal lot or that he may obtain a development permit and from obtaining a development permit for his Property.

First, the Applicant has taken two vastly different positions in judicial and quasi-judicial proceedings. In the trial court hearing for SB Title Co., held on April 19, 1993, the Applicant testified that the 15-foot easement along the driveway to the property “actually didn’t exist” (Exhibit H, p. 91), and, as a result, a development project on this property “could not” be completed (id. at p. 92). (See accord SB Title Co., supra, 28 Cal.App.4th at 678, 677, included as Exhibit G.) The Applicant testified that the Property was “a total loss” without the 15-foot driveway easement. (Exhibit H, p. 117; see accord Exhibit G, SB Title Co., supra, 28 Cal.App.4th at 678, 677.) The underlying premise for his position in this action was that, “[i]n June of 1989, during the permitting process, [the Applicant] learned that the access easement was only seven and a half feet wide, and not 15 feet as represented by the Title Company” and “the City refused to issue a building permit without a 15-foot wide easement,” thus rendering the Property worthless. (Id. at 677; see also Exhibit H, pp. 91-92, 117.) The Applicant predicated his suit in SB Title Co. on the premise that he could not develop the Property and that the Property was therefore worthless. In the current development permit process, the Applicant is taking the position that he may develop the Property by submitting a development application to the City of Santa Barbara (“City”), and has explicitly asserted that he has sufficient legal access required to develop the Property. (See Richard Monk, November 7, 2016
Correspondence to Kathleen Kennedy, Associate Planner, Exhibit K, p. 3.) Thus, Mr. Barthels’ current position satisfies the first element of judicial estoppel.

Second, the Applicant has taken, and is currently taking, these positions in judicial and quasi-judicial proceedings. The Applicant took his initial position in a judicial proceeding before the California Superior Court and Court of Appeal. (See SB Title Co., Exhibit G.) The present proceeding at hand is a quasi-judicial proceeding. The adjudication of a Coastal Development Permit application is “adjudicatory or quasi-judicial.” (Patterson v. Central Coast Regional Com. (1976) 58 Cal.App.3d 833, 841.) The present FEIR proceeding is part of the Coastal Development Permit Adjudication process: completion of environmental review under the California Environmental Quality Act is a necessary component of determining whether a Coastal Development Permit should issue. Thus, Mr. Barthels’ current position satisfies the second element of judicial estoppel.

Third, the Applicant was successful in asserting this argument in SB Title Co., and, was compensated for not only the full value of his Property, but for his time, and for expenses he incurred in attempting to develop the Property. (Exhibits I; J; see Exhibit G.) In the Santa Barbara Superior Court Trial Court ruling in Barthels v. SB Title Co., the Honorable Patrick McMahon awarded Mr. Barthels $42,875, for the cost of the Property plus inflation. He also ordered that the title company compensate Mr. Barthels for expenses incurred to attempt to develop the Property, totaling $21,524.40. (Ibid.) Finally, the court hesitantly compensated Mr. Barthels $10,000 for hours he spent to resolve issues with the title defect and his inability to develop the Property, though Mr. Barthels requested that the Court order the title company to pay $280,000 for his time. (Id. at p. 1.) In total, Mr. Barthels received $74,399.40 in the early 1990s as a result of his lawsuit – almost $50,000 more than he originally paid for the Property. (See ibid.)

Fourth, the Applicant’s position in SB Title Co. that he did not have the access required to develop his Property, and therefore could not obtain a development permit, (Exhibit H, pp. 91, 92, 117), is completely inconsistent with his current position in the instant proceeding that he has sufficient access to the Property and therefore is entitled to a development permit (Exhibit K, p. 3.) Thus, Mr. Barthels position satisfies the third and fourth elements of judicial estoppel.

As the Applicant has already been compensated for time expended to develop the Property, and meets all of the judicial estoppel criteria, he is judicially estopped from asserting that he may develop the Property, or that he has sufficient legal access to his lot, and is legally precluded from obtaining approval to develop the Proposed Project.

III. If the City Denied Mr. Barthels’ Request for a Development Permit, the Applicant Would Have No Takings Claim Against the City.

Should the Applicant’s Proposed Project be denied such that he is unable to develop the Property, he would also be judicially estopped from asserting a taking claim against the City. The United State Supreme Court has “recognized, in a wide variety of contexts, that government may execute laws or programs that adversely affect economic values” without constituting a taking. (Penn. Central, supra, 483 U.S. at 124.) For example, a government entity may restrict development on a particular parcel (see Gorieb v. Fox (1927) 274 U.S. 603, 608), though this may “prohibit[] the most beneficial use of property.” (Penn Central, supra, at 125)

Furthermore, in order to successfully pursue a taking claim, a landowner must demonstrate, among many other things, whether any government action intruded on a landowner’s reasonable
“investment-backed expectation.” (Penn. Cent. Transp. Co. v. New York City (1978) 483 U.S. 104, 124 (“Penn Central”)). In this case, the Applicant cannot assert that he had a reasonable-investment backed expectation in developing this property. The Applicant has known that the Property likely cannot be developed since he acquired it. Mr. Barthels purchased the property for $24,500 in 1976 - significantly less than the prevailing market rates at the time- which suggests Mr. Barthels was on notice that the Property was defective. (See Exhibit G, Barthels v. S.B. Title Co., supra, 28 Cal. App. 4th at 676.) He represented to the trial court in SB Title Co. that he definitively discovered that the lot could not be developed in 1989. (See Exhibit J, p. 1.) In 1992 Mr. Barthels' attorney explained, with Mr. Barthels present, that he had learned that “the easement [to the property] had never existed” and that this would prevent Mr. Barthels from obtaining a permit to build on his property. (Exhibit F, pp. 47, 48, 50.) In addition, as discussed in depth above, prior to pursuing this iteration of a Coastal Development Permit, the Applicant took the position that “the property had no economic value because it lacked a sufficient easement for access,” and was awarded money in excess of the purchase price of the Property. (Exhibit G, SB Title Co., supra, 28 Cal.App.4th at 678, 677, 678, 680; Exhibit J.) The Applicant cannot successfully assert a position that, at the time he submitted his most recent development application to the City, he had a reasonable, investment-backed expectation that the Property could be developed. If the City denied the app development permit for the Property, the Applicant could not credibly argue that he had suffered a taking. In addition, the Applicant would be judicially estopped from asserting that he had a reasonable, investment-backed expectation that he could develop the Proposed Project. Given current takings law, and the procedural history of this matter, the Applicant could not successfully assert a taking claim against the City.

IV. The Subdivision Map Act and the Santa Barbara Municipal Code Prohibit the City from Issuing a Development Permit for the Property, Because the Property Does Not and Cannot Comply with the City’s 1999 Conditional Certificate of Compliance.

The California Subdivision Map Act (“SMA”) and the terms of the City’s Conditional Certificate of Compliance require that the Applicant provide substantial evidence that the lot has sufficient access before he can develop the Property. (See Exhibit E; Gov. Code, §§ 66499.35(b), 66499.35(f)(1)(E).)

The Subdivision Map Act governs “the division, by any subdivider, of any unit or units of improved or unimproved land, or any portion thereof” (See Gov. Code, § 66424). Under the Subdivision Map Act, when an agency issues a conditional certificate of compliance for a parcel of land, it certifies that the parcel does not comply with the SMA or local laws created pursuant to the SMA. (Gov. Code, § 66499.35(b); see Gov. Code, § 66499.35(a).) A conditional certificate must articulate measures that a parcel owner must take to bring the lot into compliance with the Subdivision Map Act and local ordinances promulgated under the Subdivision Map Act. (See Gov. Code, §§ 66499.35, 66499.35(f)(1)(E).) Until the owner of the property meets the condition provided by the conditional certificate of compliance, the local agency cannot approve development on the land. (See ibid.) The SMA explains: “the certificate shall serve as notice... that the fulfillment and implementation of these conditions shall be required prior to subsequent issuance of a permit or other grant of approval for development of the property.” (Gov. Code, § 66499.35(b).)

In this case, the Conditional Certificate of Compliance issued in 1999 states that the Property does not comply with the requirements of the SMA or any local ordinances promulgated under the SMA. (Exhibit E.) Under the Conditional Certificate of Compliance issued in this matter, the Applicant must “[p]rovide evidence... that the owner of the parcel described herein substantially
possesses the required amount of legal access that formed the basis of the originally approved lot split before the City may issue any development approval for the Property. (See Exhibit E; Gov. Code, § 66499.35(b).) Under the SMA, until the Applicant does so, the City may not issue a permit or other grant of approval for development of the Property. (See Gov. Code, § 66499.35(b).)

Furthermore, the City of Santa Barbara Municipal Code ("S.B.M.C." or "Municipal Code") provides:

No board, commission, officer or employee of the City shall issue any certificate, permit or grant any approval necessary to develop any real property within the City which has been divided, or which resulted from a division, in violation of the provisions of the Subdivision Map Act or of this ordinance. Any such certificate, permit or grant issued in conflict with the provisions of this ordinance or the Subdivision Map Act shall be null and void." (SBMC, § 27.01.040(h) [italics added]).

The City will violate both the Subdivision Map Act and the Santa Barbara Municipal Code if it issues a development permit for the Property. Mr. Barthels cannot satisfy the requirements of the Conditional Certificate of Compliance. The Property does not possess the amount of legal access that formed the basis of the lot split. The Santa Barbara City Council approved the lot split for a parcel that possessed between fifteen and seventeen feet of access, yet the Property currently possesses access as small as seven and a half feet in some locations and as narrow as ten feet in other locations. (Exhibits B, C, See Exhibit K, p. 3; Exhibit G.) The City's records indicate that the lot split was based on the Property owners' representation that the Property had a fifteen-foot-wide access easement.

During the long-ago adjudication of the lot split application, the Property owner represented to both the Planning Commission and the City Council that the Property possessed an easement for fifteen feet of vehicular access, and, that the access way was, in some places, up to seventeen feet wide. (Exhibit B, C; Exhibit L, p. 2 ["Mrs. Fred Eaton was present and explained that, according to actual measurements, the easement is 17 feet"]). The Planning Commission denied the lot split because the fifteen-foot easement would be too narrow for public safety purposes and would violate the access requirements codified in Santa Barbara City Ordinance 2488. (See Exhibit A, §§ 1, 2; Exhibit B; Exhibit C, p. 2.) The Planning Commission issued a May 26, 1958 report to the City Council regarding the lot split, which explained: “two private easements enter El Camino de la Luz from the cul-de-sac; a 20 ft. easement serves three parcels and a possible fourth and a 15 ft. easement which serves four parcels and a possible fifth parcel.” (Exhibit M, p. 1.) Though the Santa Barbara City Council ("Council") was concerned that the easement, as described by the Planning Commission and the Property owner, was too small, the Council nonetheless approved the lot split based on the Property owners' representation that the lot had a fifteen-foot-wide easement, which was in some locations close to seventeen feet wide, to connect the Property to the closest public street. (Exhibit C, p. 1, 2]; see Exhibit M, p. 1.).

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1 Mr. Barthels counsel, Richard Monk, submitted a Comment Letter to the Draft Environmental Impact Report ("DEIR") on November 7, 2016. (Exhibit K.) In his correspondence, he argues that "evidence presented to the City of Santa Barbara by the Applicant... demonstrates that the existing width of the road access way to the subject parcel, which general ranges from 9 feet to 15 feet (except for the 7.5 pinch point) is in substantially conformity with the width of the road access show
Since that time, the City has consistently taken the position that the lot must possess, at minimum, a fifteen-foot-wide access easement. This position makes sense and has been, and continues to be, consistent with both law and policy involving health and safety matters. According to City Attorney Steven Wiley's June 4, 1997 letter to the Applicant's counsel, "the City cannot process an application for the development of [the Property] until you and Mr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel." (Exhibit N, p. 1.) In a June 27, 1989 correspondence from the Santa Barbara City Public Works Department to the Applicant, the Public Works Department required that the Applicant demonstrate that the Property have a paved sixteen-foot-wide access way to the Property before the City could process a development permit for the Property. (Exhibit O, p. 1.)

By the Applicant's own admission to the City and to the Court of Appeal, the Property does not possess at least fifteen feet of access. (See Exhibit K, p. 3; Exhibit G.) At its narrowest, the Property only possesses 7.5 feet of access, half the amount that formed the basis of the original lot split. (See Exhibits G, P; Exhibit Q.) The lot, therefore, does not possess the required amount of legal access that formed the basis of the originally approved lot split, and, the Applicant cannot satisfy the requirements of the Conditional Certificate of Compliance.

The Property does not and cannot comply with the Conditional Certificate of Compliance. The City, therefore, cannot issue a development permit for the parcel. Doing so would violate both the Subdivision Map Act and the Municipal Code, and would constitute legal error.

V. The City Cannot Lawfully Issue a Coastal Development Permit for the Proposed Project, because the Project Site Does Not Possess Sufficient Vehicular Access Required by the Santa Barbara Municipal Code.

The Municipal Code also prohibits development of the Property with the Proposed Project due to the lack of access needed to ensure fire safety. The S.B.M.C. adopts the California Fire Code in its entirety, but edits certain provisions of the California Fire Code to better meet the "local

on the 1958 Lot Split Map." (Id. p. 3.) He concludes that "the subject parcel has legal access and such access substantially conforms to the access approved on the 1958 Lot Split Map." (Ibid.)

These arguments have no bearing on whether the subject parcel complies with the Conditional Certificate of Compliance. Assertions regarding the "1958 Lot Split Map" are entirely irrelevant. Mr. Monk's correspondence provides no evidence that the City Council based their approval on what he has deemed the "1958 Lot Split Map", nor does he identify the "1958 Lot Split Map" itself. Furthermore, his correspondence does not identify any other original documents to substantiate what "the required amount of legal access that formed the basis of the originally approved lot split" actually entailed, nor does it provide any evidence to demonstrate what the City required in order to approve the initial lot split. (See Exhibit K.)

Our clients, on the other hand, have provided definitive evidence that the City Council predicated their approval of the lot split on the Property on the Property owners' assertion that the Property possessed a fifteen to seventeen foot wide access easement, and that the City has consistently required evidence of at least fifteen feet of access. (See Exhibit L, p. 1; Smith Comment Letter on DEIR, November 30, 2016.) By the Applicant's own admission, he does not currently possess a fifteen foot access way. Without this access, the Applicant does not satisfy the Conditional Certificate of Compliance, and cannot lawfully obtain a development permit for the Property.
climatic, geological and topographical conditions” of Santa Barbara. (S.B.M.C. § 8.04.020.) One such edit sets forth specific requirements for ingress and egress to new buildings. It states: “approved fire apparatus roads shall be approved for every... building hereafter constructed... in the jurisdiction.” (S.B.M.C. § 8.04.020 (H).) Under this section, fire apparatus roads “shall extend to within 150 feet of all portions of the facility.” (Id. at § 8.04.020(f).) The Municipal Code requires:

fire apparatus roads shall have an unobstructed width of not less than 20 feet...
and an unobstructed vertical clearance of 13 feet 6 inches. If the fire apparatus road serves three or fewer single-family residential units, the required width may be reduced to not less than 16 feet upon the approval of the Fire Code Official.

While the S.B.M.C. provides the Fire Code Official with the authority “to require an increase in the minimum access widths” it does not authorize the official to permit a decrease in access widths beyond 16 feet. (Ibid.) It also states that the “minimum required widths and clearances... shall be maintained at all times.” (Ibid.)

The access road to the edge of the Property is 312.83 feet long. (Exhibit R (Map Created by Gary Salmon of Right Angle Land Surveying); Exhibit P, pp. 22 [map showing dimensions of easement].) This calculation does not take into account the distance from the lot line to the Proposed Project site. Thus, pursuant to the Municipal Code, the access way from El Camino de la Luz to the Barthels’ property must be at least twenty feet wide. (See Id. at § 8.04.020(f).) Yet the access road is, in one location, only 7.5 feet wide for a distance of 7.14 feet. (Exhibit P, p. 3., ¶ 4(b); Exhibits G, P.) In certain sections, the road only spans 10 feet. (Id., p. 3, ¶ 4(c).) At its widest, the road is a maximum of 15 feet. (See Exhibit K, p. 3 [stating that the access way “ranges from 9 to 15 feet with a 7.5 foot pinchpoint”]; Exhibit G.) The access road, in this case, therefore, does not comply with the S.B.M.C.’s minimal requirements.

The Proposed Project also would fail to comply with requirements for dead end fire roads. “Dead-end fire apparatus access roads in excess of 300 feet in length shall be provided with approved provisions for the turning around of fire apparatus.” (S.B.M.C. § 503.2.5.) The fire access road to the Proposed Project exceeds 300 feet, yet the Project site does not provide sufficient space for fire trucks or other apparatus to turn around. (See Exhibit R; Exhibit P, p. 22.)

Project Site’s lack of sufficient ingress and egress and turning space violates the Municipal Code’s requirements for safe access to the Proposed Project site and places any potential resident of the Proposed Project, residents of neighboring properties, and the Mesa community at large, in danger of decreased fire response time and increased risk from potential fires.

VI. Bluff Top Development Applications Should Not Be Approved Until the City Completes Its Local Coastal Program Update.

The City of Santa Barbara is currently in the process of updating its Local Coastal Program (“LCP”). A draft Coastal Land Use Plan was released to the public for review in mid-November. (See https://www.santabarbaraca.gov/services/planning/mep/lcp/clup/dclup.asp.) The current LCP’s standards are to some extent outdated, especially with respect to sea level rise and associated bluff erosion, and therefore do not reflect the current policy concerns in the City. (See generally Exhibit S; Exhibit T.) The draft LCP update takes a much stronger stance on protecting the City’s vulnerable coastal resources.
According to a study led by Patrick Barnard, a coastal geologist with the U.S. Geological Survey, beach erosion was 76% higher than normal during the 2015-2016 El Nino season. (Exhibit T.) In addition, new scientific evidence supports the potential for extreme sea level rise over the next fifty years. (Exhibit U, p. 3.) Coastal Flooding, which increases erosion, will more than double in frequency in California by 2050. (Exhibit V, Sean Vitousek et al. Doubling of Coastal Flooding Frequency Within Decades Due to Sea Level Rise (May 18, 2017) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5437046/>; Exhibit W, USGS, In Next Decades, Coastal Flooding Will Double Globally (May 18, 2017) <https://www.usgs.gov/news/next-decades-frequency-coastal-flooding-will-double-globally>.) This rate of sea level rise is projected to be about “30-40 times faster than the sea-level rise over the last century.” (Exhibit U, p. 4.) Gary Griggs, a preeminent oceanographer who studies seal level rise for the State of California, currently “estimates the city [of Santa Barbara] will likely see a 12-inch sea level rise by 2050, and three to four feet by 2100.” (Exhibit X; see Exhibit U.)

Despite significant sea level rise and erosion in Santa Barbara, Santa Barbara’s Local Coastal Program was developed more than thirty years ago, and does not contemplate nor provide regulations to sufficiently protect coastal-adjacent neighborhoods or new development from the unprecedented sea-level rise and coastal bluff erosion facing Santa Barbara. Without an up-to-date LCP that provides for the realities and dangers of sea level rise and bluff erosion, it would be irresponsible to approve development applications for projects located on the bluff edge.

High seas and King Tides during winter 2016/2017, as depicted in at Santa Barbara Channelkeeper, King Tides <http://www.sbck.org/current-issues/king-tides/> (last visited October 2, 2017), caused significant erosion on the beach at and around the Proposed Project site. (See Exhibit Y.) This directly impacts the potential safety and feasibility of the Proposed Project. Because of these concerns, it is particularly important that the City not approve the Potential Project without an updated LCP that includes mechanisms to protect potential development, the integrity of the bluff, and the surrounding neighborhood.

VII. Conclusion

For the reasons articulated in this letter, we respectfully request that the Planning Commission deny the Applicant’s request for a Coastal Development Permit. Thank you for your diligence and careful attention to this matter.

Sincerely,

[Signature]
Sabrina Venskus
Attorney
ORDINANCE NO. 2488

CREATION OF PUBLIC STREETS

AN ORDINANCE CONTROLLING THE GROWTH OF PRIVATE LANES, ALLEYS, AND DRIVEWAYS; ALLOWING THE CONNECTION THEREOF TO THE STREET SYSTEM OF THIS CITY UPON CERTAIN CONDITIONS; REQUIRING THE DEVELOPMENT OF STANDARD STREETS WHICH SERVE MORE THAN TWO PARCELS; RESTRICTING THE ISSUANCE OF BUILDING PERMITS ALONG SUB-STANDARD ROADWAYS UNDER CERTAIN CONDITIONS, AND PROHIBITING REPAIR AND MAINTENANCE BY THIS CITY UPON THOROUGHFARES OTHER THAN OFFICIAL STREETS.

WHEREAS, the Council of the City of Santa Barbara has adopted a map and resolution identifying and describing an official street system of the City of Santa Barbara; and

WHEREAS, many undeveloped roads, ways, thoroughfares and miscellaneous sub-standard passages have in the past through real estate development along the routes thereof, by implied offer and acceptance, become dedicated streets of this City, thus imposing a construction and maintenance burden upon the City; and

WHEREAS, the City of Santa Barbara, in issuing Building Permits, or in granting lot splits, grants a privilege to developers of land, which privilege it may withhold to serve the best interests of the community; and

WHEREAS, the City is desirous of preventing the connection of sub-standard roads to the official street system and of preventing the possibility of implied acceptance thereof as city streets:

THE COUNCIL OF THE CITY OF SANTA BARBARA DO ORDAIN AS FOLLOWS:

SECTION 1. No lot split application nor Building Permit shall be granted except upon the following terms and conditions which shall be administered, as the case may be, for Building Permits by the Department of Public Works, and for lot split permits by the
Planning Commission.

SECTION 2. All new lots or parcels to be created by any proposed lot split which do not front upon an official street of this City, as designated upon the Official Street Map of the City of Santa Barbara now on file in the Office of the Public Works Director, shall be improved and served with a public street constructed according to the specifications for streets set by the Council of the City of Santa Barbara now on file in the Public Works Department; providing that if the maximum available area for building construction under applicant's ownership to be served by a proposed road, lane, way, or driveway, is limited to two parcels, no such street shall be required.

SECTION 3. No Building Permit shall be granted if proposed building construction thereunder and the ultimate use thereof will require more than two parcels or lots to be served by any street, lane, alley, way, road, right of way, driveway, passage or thoroughfare not an official street of the City of Santa Barbara as designated upon said Official Street Map.

SECTION 4. No street, lane, alley, way, road, right of way, passage or thoroughfare shall be connected with the Official Street System of the City of Santa Barbara without a written permit therefore issued by the Public Works Department. The word "street" as used in Section 4 of this Ordinance shall be defined as any lane, alley, way, road, right of way, passage or thoroughfare serving more than two separate lots or parcels.

SECTION 5. No officer, agent or employee of this City shall perform any repair, maintenance, upkeep, nor take any remedial or corrective action, nor exert any dominion, control or jurisdiction, nor do any act upon or in connection with any street, lane, alley, way, road, right of way, driveway, passage or thoroughfare in this City which is not an official street of the City of Santa Barbara as designated upon the said Official Street Map of the City.
of Santa Barbara. This shall not be construed to prevent the
Water Department from carrying on its service functions pursuant
to the rules and regulations of the Water Department, or from
installing mains and incidental facilities in any such street,
lane, alley, way, road, right of way, driveway, passage or
thoroughfare within specially granted easements for use of the
sub-surface thereof.

SECTION 6. All Ordinances or parts of Ordinances of
the City of Santa Barbara, inconsistent herewith, to the extent
of such inconsistency and no further are hereby repealed.

SECTION 7. Any violation of any of the provisions of
this Ordinance is declared to be a misdemeanor and shall be
punishable by a fine of Three Hundred Dollars ($300.00) or
imprisonment in the City Jail of the City of Santa Barbara for a
period of six (6) months, or both.
THREE HUNDRED FORTY-GROUND MEETING

CITY PLANNING COMMISSION

May 20, 1958 2:00 P.M.

REGULAR MEETING

PRESENT: Col. R. Bourbon, J. T. Brady, Mrs. Fred Glahn, Dr. J. F. Halterman, R. L. Korf, Dr. L. C. Monroe, R. V. A. Stoltze, Charles W. Washburn, Planning Director, Wallace Will, Public Works Department.


In the absence of Chairman Bradbury, the meeting was called to order by Vice-Chairman Halterman.

Dr. Halterman called the attention of the Commission to the fact that since the last meeting Mr. Horace Hoefer, former Chairman of the Commission, had passed away. He said that he felt the community had lost a very dear friend, one who had worked diligently for the advancement of the city, and that he felt the Commission should stand for a moment of silence in honor of his services. This was done.

The minutes of the regular meeting of April 1, 1958, were approved on the motion of Col. Bourbon, seconded by Mr. Korf. Next, Resolutions No. 8, 17, 18 and 19 were approved on the motion of Col. Bourbon, seconded by Mr. Korf.

MODIF.

GORDON

The first item for consideration was the application of Guy H. Gordon for modifications of the setbacks required under City Zoning Ordinance No. 2585, in order to construct a one family dwelling on Lot 5, Block C, Santa Barbara Fellowship Tract, located at the intersection of Litchfield Lane and Litchfield Place, in an E-2 residence zone. Said modifications were for 10 ft. from the required 25 ft. front yard setback on Litchfield Lane, and 10 ft. from the required 25 ft. side yard setback on Litchfield Place.

Mr. Washburn clarified the actual location of the property, and said that Mr. Gordon does not actually own this lot at the present time, but that he had presented an affidavit signed by Helen B. Sweeney and William H. Akers, the owners, stating that they approve of this application and had appointed Mr. Gordon to act in their place in negotiating with the city for this approval. He explained that Mr. Gordon wants this modification in order to construct a building of adequate dimensions to suit his family's needs on this triangular-shaped lot; and that although this lot fronts on one street and has its side yard on another, in each case the setback requirement is 25 ft. He said he did not feel that this would interfere with the use and enjoyment of adjoining property; that no objections had been received; and that there are existing 15 ft. front yard setbacks on developed properties in the neighborhood. He said further that there is one additional qualification: that in the event of any widening of Litchfield Lane, it would further reduce the front yard setback, and that the Public Works Department had indicated that this is currently contemplated, since improvements under the 1911 Act have been authorized for Litchfield Lane. He reminded the Commission, however, that any widening would affect all of the properties on this street.
THREE HUNDRED FORTY-SECOND MEETING
CITY PLANNING COMMISSION
May 20, 1958  2:00 P.M.
REGULAR MEETING

PRESENT:  Col. R. Bourbon, J. T. Brady, Mrs. Fred Glahn, Dr. J. F. Halterman, R. L. Korf, Dr. L. C. Monroe, R. V. A. Stoltze, Charles W. Washburn, Planning Director, Wallace Wills, Public Works Department.


In the absence of Chairman Bradbury, the meeting was called to order by Vice-Chairman Halterman.

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Mr. Washburn clarified the actual location of the property, and said that Mr. Gordon does not actually own this lot at the present time, but that he had presented an affidavit signed by Helen B. Sweeney and William H. Akers, the owners, stating that they approve of this application and had appointed Mr. Gordon to act in their place in negotiating with the city for this approval. He explained that Mr. Gordon wants this modification in order to construct a building of adequate dimensions to suit his family's needs on this triangular-shaped lot; and that although this lot fronts on one street and has its side yard on another, in each case the setback requirement is 25 ft. He said he did not feel that this would interfere with the use and enjoyment of adjoining property; that no objections had been received; and that there are existing 15 ft. front yard setbacks on developed properties in the neighborhood. He said further that there is one additional qualification: that in the event of any widening of Litchfield Lane, it would further reduce the front yard setback, and that the Public Works Department had indicated that this is currently contemplated, since improvements under the 1911 Act have been authorized for Litchfield Lane. He reminded the Commission, however, that any widening would affect all of the properties on this street.
Next considered was the application of E. D. Valpey for a 3 ft. modification of the 8 ft. side yard under Section 7.00 of City Zoning Ordinance No. 2585, in order to construct a one family dwelling to be located 5 ft. from the westerly side lot line on Lot 3X, City Assessor's Map No. 7, at 145 Cedar Lane, in an R-2 one family residence zone.

Mr. Washburn read Mr. Valpey's letter of application, and explained that this property is at the end of Cedar Lane. He then read a letter from Mrs. Grace Piper, who lives at the west of the subject property, the side on which the modification is requested, in which she did not object to having the garage itself moved closer, but she did object to having the entire house moved closer.

Mr. Brady commented that he did not see why a house could not be designed to fit onto this lot to conform to the ordinance. Mr. Washburn added that no hardship had been indicated by Mr. Valpey, except that the lot is narrow at the rear end.

Dr. Halpertman inquired when the lot was split to create this particular lot as he recalled that it was Mr. Valpey who had split it. Mr. Washburn replied that it was probably several years ago.

Mrs. H. P. Goss, of 135 Cedar Lane, then spoke from the audience and said that just as she had heard members of the Commission remark, she couldn't see any particular hardship in this request, and she felt it would be a detriment to the other property owners in the neighborhood, as well as not good city planning, if this request were granted, in this very nice neighborhood. Mrs. S. Lauvou, of 142 Cedar Lane, who was also present, said that she lives across the street from Mr. Valepy, and had talked to some of the other neighbors who had not received notice of this request, and that they are all against it, for the same reasons that Mrs. Piper gave in her letter. She also said that she couldn't see why a zoning ordinance should be enacted and then be set aside.

Mr. Brady moved that the request be denied on the grounds that it does not conform with Section 7.00 of the zoning ordinance, and that no hardship has been shown.

Mr. Korf seconded the motion, and the motion carried.

After a ten minute recess, the Commission considered the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels Lots 7T and 11 H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone. Mr. Washburn reminded the Commission that this had been held over from the last meeting because of the question of the number of properties served off of the easements. He noted that there are two easements off the east of the street, one 20 ft. wide which serves three garages, and the subject easement which is 15 ft. wide and serves four garages; that the lot split proposed would create a new lot which would also be served from this easement; and that because of the location of Mrs. Eaton's house and the house across the street, it would be practically impossible to widen this easement. He said, however, that in view of the fact that there is a good building site remaining, and the easement cannot be widened, it might be possible to vary from the limitations.
He said further that the Public Works Director had recommended denial of this request because of nonconformance of the easement to city street standards and because the property does not have frontage on a dedicated city street. He noted that since the last meeting, letters had been received from Mrs. Carol M. Gunn, 1833 El Camino de la Luz, and Mrs. Sara Wardell, who owns the properties at 1843 and 1839 El Camino de la Luz, both of whom are in favor of granting this lot split. He also pointed out that technically, Mrs. Eaton could apply to the Commission for a special use permit to build a second dwelling on this lot, because it meets the area requirements, even though it does not meet the requirements for access.

Mr. Korf commented that he wondered if this would not put the Commission in a bad position as far as any future requests with this same problem might be concerned. Mr. Washburn said, however, that the Commission might also be put in the position, if this request were denied, of depriving a property owner of the full use of his property because of conditions over which he has no control. Mr. Korf countered that, on the other hand, the Commission should consider what might happen if an emergency condition should develop, and that one road were blocked. Mr. Wills said that if this request were granted, the additional parcel would be below the grade line of the sanitary sewer and that a pump would be necessary at all times.

Mr. Korf suggested that these two rights-of-way might be connected and each made a one-way road, and Mr. Stoltze agreed that this would certainly be an improvement over the existing condition.

Mr. Korf moved that this request of Mrs. Fred D. Eaton, Sr. be denied, in that there are now four existing dwellings served by a 15 ft. easement; that in the event that this is granted, there would be a possible fifth or even sixth dwelling served by that same easement; and that the hazard of serving this many residences by the narrow easement is too great. Mr. Brady seconded the motion and the motion carried.

Next considered was the request of Mrs. Henry Reinesto to divide into two parcels Lot 9, City Block 357, located at 1022 East Indio Muerto Street, in a R-3-T zone. Mr. Washburn explained that this had been held over from the last meeting for a revised map, which had not been received.

He said further, that this is the second of two lot splits for which the Building Director had made recommendations that might be considered a bit stiff. He said the Public Works Director had recommended approval, subject to the conditions as set forth in the Building Director's report, and subject to water main extension charge, recommending that curb and gutter requirements be waived. However, the Building Director had recommended approval, subject to a condition that the shed on Parcel 2 be relocated a minimum of 5 ft. By telephone today, he said, Mr. Phillips of the Building Department had indicated that the Building Code required a 3 ft. separation or fireproofing on that side. Mr. Brady asked if this were true even in the case of a nonconforming building like this, and Mr. Washburn replied that apparently there is a change in policy, to require nonconforming buildings to be brought into conformance, and that a further recommendation of the Building Director called for a relocation of the garage, a minimum distance of 10 ft. He said that the waiving of curb and gutter requirements was in conformance with City Council policy. Mr. Brady said he thought Council should furnish the Commission with copies of any policies they might set up, and
Councillor Callahan moved seconded by Councillor Clemens that the Council find that there is good and sufficient reason connected with the health, safety and welfare of the area to continue this request until the next meeting of the Council and suggest that every Councillor inspect the property to determine who is being requested and report on same. Roll Call: Affirmative Council All.

Councillor Callahan was excused from the Council Chambers at this time.

Recommendation from the City Planning Commission was presented as follows:

"Subject: Recommendation for relocation of pedestrian easement in Island View Heights Subdivision.

Recommendation: Approval of relocation of pedestrian easement as shown on map attached, to be located along the boundary line dividing new lots 35 and 37.

Discussion: Thomas J. Pleman, developer of Island View Heights Subdivision, appeared before the City Planning Commission on May 20, 1958, with a request that lot 36 thereof be split, dividing the area equally between adjoining lots 35 and 37. This request was brought about by a change in location of the top of the slope behind lots 35, 36 and 37, so that the crest of the slope is 15 ft. closer to Island View Drive than anticipated, making the building pads for these lots 15 ft. narrower. It was stated that this was a result of City Council disapproval of a proposed encroachment of the toe of the slope onto the Weigs Road right-of-way.

Because this voluntary elimination of one lot (lot 36), will permit the creation and development of two improved building sites, for which new building plans must be developed, the Planning Commission voted to approve this request. This was done on the Commission's authority to approve reasonable adjustments of lot lines without going through the procedures outlined in City Zoning Ordinance No. 2585, and on the specific opinion of the City Attorney that this procedure was applicable in this particular instance because of the resulting improvement in lot development, and the fact that no new lot would be created.

However, because of this elimination of lot 36, it is necessary to relocate the existing approved 10 ft. pedestrian easement, formerly located between lots 36 and 37. Accordingly, the Commission hereby recommends to City Council that this easement now be relocated along the new boundary line between lots 35 and 37, as shown on the attached map.

Councilman Clemens inquired how this could be done. The Chief Administrative Officer explained that since the final map of Island View Heights has been filed, he thought it would be necessary to abandon the first easement, and then accept the deed for the relocation of the pedestrian easement.

The City Attorney stated that the subdivider handed him a deed for the substitute easement, as well as a Resolution abandoning the former easement.

"RESOLUTION NO. 3471
RESOLUTION ABANDONING 10 FOOT PEDESTRIAN EASEMENT LYING BETWEEN LOTS 36 AND 37 OF ISLAND VIEW HEIGHTS NO. 2."

was presented and read in full. Councilman DeLoreto moved seconded by Councilman Callahan that the Council adopt Resolution No. 3471. Roll Call: Affirmative Council All.

Deed for a pedestrian walkway along the revised boundary line dividing lots 35 and 37 in Island View Heights Subdivision and signed by Thomas J. Pleman and Joseph DuBrow, partners in Island View Heights, was presented and ordered accepted by adoption of Resolution No. 3472 on motion of Councilman DeLoreto seconded by Councilman Clemens. Roll Call: Affirmative Council All.

Councilman Callahan returned to the Council Chambers at this time.

Recommendation from the City Planning Commission was presented as follows:

"Subject: Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2488. The existing 15 ft. driveway easement which now serves this dwelling also provides access to an additional parcel. See attached plot plan.
Discussion: As seen on attached plot plan, two private easements enter El Camino de la Luz from the cul-de-sac; a 20 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan.

Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards."

Mrs. Fred Eaton was present and explained that according to actual measurement the easement is 17 feet, and in the past year a number of lots have been split in the neighborhood and they have all been served by an average 15 foot driveway.

The City Planning Director explained that the small map showed the number of parcels to be served by this easement, and reported that because of the location of the Eaton house it is not possible to widen the easement. He suggested that a possible solution might be to tie the two easements together and allow one way traffic on same, but added that this would not meet ordinance requirements, but it would be less hazardous than the proposal as submitted.

Mrs. Eaton explained that tying the two easements together would mean that the driveway would come within five feet of the Wardell Front door, which would not comply with any City Ordinance.

The Planning Director pointed out that City standards require a 50 foot right of way.

Mrs. Eaton explained that there are six and seven cars parked in the driveway easement for the lot splits granted to the west of her property.

In response to a question the City Planning Director stated that if this property were located in a multiple family zone, a 15 foot driveway could serve an unlimited number of families.

Acting Mayor Crowell inquired whether the Council used this ordinance to block developments of this kind in other areas. The City Planning Director stated that in her experience, except that there is only a possibility for one more lot split. He explained that Ordinance No. 2158 covers not the number of units involved, but number of parcels served by a private driveway.

Councilman Clemens suggested returning this request to the Planning Commission with a request that the provisions of the ordinance be studied.

Acting Mayor Crowell stated that you can't do this except to request a recommendation for the revision of the ordinance.

The City Planning Director stated that several of the neighbors wrote letters to the Planning Commission urging approval of the requested division of property, and the granting of a variance in this case.

Councilman Wilson moved seconded by Councilman Clemens that the Council approve the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lot 72 and 11H, located at 1837 El Camino de la Luz, as submitted by the applicant.

The Planning Director stated that the Planning Commission feels that its authority does not extend to this particular ordinance.

Mrs. Eaton explained that Mr. and Mrs. Skofield have no objection to granting the request and that in her discussion with other neighbors in the area she has not heard any objections voiced.

Roll Call: Affirmative Council All.

Councilwoman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3464. Roll Call: Affirmative Council All.

Councilman Wilson moved seconded by Councilman DeLoreto that the Council accept this grant deed by the adoption of Resolution No. 3465. Roll Call: Affirmative Council All.

Councilman Clemens was excused from the Council Chambers at this time.
EXHIBIT C
Discussions. As seen on attached plot plan, two private easements end El Camino de la Luz from the cul-de-sac, 25 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan. Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one-way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards.

Mrs. Fred Eaton was present and explained that according to actual measurement the easement is 17 feet, and in the past year a number of lots have been split in the neighborhood and they have all been served by an average 15 foot driveway.

The City Planning Director explained that the small map showed the number of parcels to be served by this easement, and reported that because of the location of the Eaton house it is not possible to widen the easement. He suggested that a possible solution might be to tie the two easements together and allow one way traffic on one, but added that this would not meet ordinance requirements, but it would be less hazardous than the proposal as submitted.

Mrs. Eaton explained that tying the two easements together would mean that the driveway would come within five feet of the Wardell front door, which would not comply with any City Ordinance.

The Planning Director pointed out that City standards require a 50 foot right of way.

Mrs. Eaton explained that there are six and seven cars parked in the driveway easement for the lot splits granted to the west of her property.

In response to a question the City Planning Director stated that if this property were located in a multiple family zone, a 15 foot driveway could serve an unlimited number of families.

Acting Mayor Crowell inquired whether the Council used this ordinance to block developments of this kind in other areas. The City Planning Director stated it has been done, except that it is not too frequently used when there is only a possibility for one more lot split. He explained that Ordinance No. 2488 covers the number of units involved but the number of parcels served by a private driveway.

Councilman Clemens suggested returning this request to the Planning Commission with a request that the provisions of the ordinance be studied.

Acting Mayor Crowell stated that you can't do this except to request a recommendation for the revision of the ordinance.

The City Planning Director stated that several of the neighbors wrote letters to the Planning Commission urging approval of the requested division of property, and the granting of a variance in this case.

Councilman Wilson moved seconded by Councilman Clemens that the Council approve the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lot 72 and 11H, located at 1837 El Camino de la Luz, as submitted by the applicant.

The Planning Director stated that the Planning Commission feels that its authority does not extend to this particular ordinance.

Mrs. Eaton explained that Mrs. and Mrs. Skofield have no objection to granting the request and that in her discussion with other neighbors in the area she has heard no objections voiced.

Roll Call: Affirmative Council All.

Grant Deed from Antonio and Serafina Montecarlo for lots 12 and 1/4, Block E of La Goleta Ranch, also known as Fairfield was presented in connection with acquisition of a clear zone for the Municipal Airport.

Councilman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3484. Roll Call: Affirmative Council All.

Grant Deed from Justo L. and Inocencia Martinez for Lot 18, Block F of La Goleta Ranch, also known as Fairfield, was presented in connection with the acquisition of a clear zone for the Municipal Airport.

Councilman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3485. Roll Call: Affirmative Council All.

Councilman Clemens was excused from the Council Chambers at this time.
Councillman Callahan moved seconded by Councillman Clemens that the Council find that there is good and sufficient reason connected with the health, safety and welfare of the area to continue this request until the next meeting of the Council and suggest that every Councillman inspect this property to determine what is being requested and report on same. Roll Call: Affirmative Council All.

Councillman Callahan was excused from the Council Chambers at this time.

Recommendation from the City Planning Commission was presented as follows:

"Subject: Recommendation for relocation of pedestrian easement in Island View Heights Subdivision.

Recommendation: Approval of relocation of pedestrian easement as shown on map attached, to be located along the boundary line dividing new lots 35 and 37.

Discussion: Thomas J. Pleman, developer of Island View Heights Subdivision, appeared before the City Planning Commission on May 20, 1955, with a request that lot 36 thereof be split, dividing the area equally between adjoining lots 35 and 37. This request was brought about by a change in location of the top of the slope behind lots 35, 36 and 37, so that the crest of the slope is 18 ft. closer to Island View Drive than anticipated, making the building height for these lots 15 ft. narrower. It was stated that this was a result of City Council disapproval of a proposed encroachment of the top of the slope onto the Wells Road right-of-way.

Because this voluntary elimination of one lot (lot 36), will permit the creation and development of two improved building sites, for which new building plans must be developed, the Planning Commission voted to approve this request. This was done on the Commission's authority to approve reasonable adjustments of lot lines without going through the procedures outlined in City Zoning Ordinance No. 2565, and on the specific opinion of the City Attorney that this procedure was applicable in this particular instance because of the resulting improvement in lot development, and the fact that no new lot would be created.

However, because of this elimination of lot 36, it is necessary to relocate the existing approved 10 ft. pedestrian easement, formerly located between lots 36 and 37. Accordingly, the Commission hereby recommends to City Council that this easement now be relocated along the new boundary line between lots 35 and 37, as shown on the attached map.

Councillman Clemens inquired how this could be done. The Chief Administrative Officer explained that since the final map of Island View Heights has been filed, he thought it would be necessary to abandon the first easement, and then accept the deed for the relocation of the pedestrian easement.

The City Attorney stated that the subdivider handed him a deed for the substitute easement, as well as a Resolution abandoning the former easement.

"Resolution No. 3471

Resolution abandoning 10 foot pedestrian easement lying between lots 35 and 37 of Island View Heights, No. 2 was presented and read in full. Councillman Deloreto that the Council adopt Resolution No. 3471. Roll Call: Affirmative Council All.

Deed for a pedestrian walkway along the revised boundary line dividing lots 35 and 37 in Island View Heights Subdivision and signed by Thomas J. Pleman and Joseph DuBois, partners in Island View Heights, was presented and ordered accepted by adoption of Resolution No. 3472 on motion of Councillman Deloreto seconded by Councillman Clemens. Roll Call: Affirmative Council All.

Councillman Callahan returned to the Council Chambers at this time.

Recommendation from the City Planning Commission was presented as follows:

"Subject: Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lots 7 and 11H, City Engineer Map 19, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2485. The existing 15 ft. driveway easement which now serves this dwelling also provides access to three additional adjoining parcels. See attached plat plan.
EXHIBIT D
City of Santa Barbara  
California

PLANNING COMMISSION  
STAFF REPORT

REPORT DATE: November 10, 2016  
AGENDA DATE: November 17, 2016  
PROJECT ADDRESS: 1837½ El Camino de la Luz (MST 2002-00214)

TO: Planning Commission
FROM: Planning Division, (805) 564-5470, extension 4560  
Beatriz Gularte, Senior Planner  
Kathleen Kennedy, Associate Planner

I. SUBJECT

The purpose of the environmental hearing is to receive comments from the public, interested agencies, and Planning Commission on the adequacy and completeness of the Second Revised Draft Environmental Impact Report (EIR) that evaluates environmental effects of the proposed project to construct a new residence at 1837½ El Camino de la Luz.

The Second Revised Draft EIR concludes that potentially significant project impacts in the areas of visual aesthetics and geology would be reduced to less than significant levels with identified mitigation measures.

This hearing is only for comment on the Second Revised Draft EIR. No action will be taken at this hearing on either the environmental document or the Coastal Development Permit application for the proposed residence. Public comments received at the hearing, along with written comments received through the end of the draft document public review period (November 30, 2016) will be considered in the preparation of a proposed Final EIR. Written responses to comments will be provided as part of the FEIR. The proposed Final EIR along with the requested Coastal Development Permit application will be brought to the Planning Commission for consideration of approval actions at a subsequent noticed public hearing.

II. PROJECT DESCRIPTION

The proposed project consists of a 1,505 square foot (net), two-story single family residence with an attached 429 square foot garage on a 23,885 square foot vacant bluff-top lot. Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill. Access to the site would be provided by private easements extending south from the terminus of El Camino de la Luz.
III. REQUIRED APPLICATION

The discretionary permit application for this project is a Coastal Development Permit (CDP2002-00008) to allow the proposed development in the Appealable Jurisdiction of the City's Coastal Zone (SBMC§28.44.060).

IV. BACKGROUND

The proposed project application was submitted in 2002. It was deemed complete in 2004, and an Initial Study (April 4, 2005) was prepared by staff to analyze the potential environmental impacts of the proposed project pursuant to the California Environmental Quality Act (CEQA). A Draft Mitigated Negative Declaration (MND) was prepared, and two environmental hearings on the Draft MND were held by the Planning Commission in 2005. At that time, it was determined that the preparation of an Environmental Impact Report (EIR) was required to fully evaluate the significance of the project impacts on public views of the ocean from La Mesa Park and surrounding areas. A revised Initial Study (August 31, 2005) was prepared to reflect the need for an EIR, and subsequently the Planning Commission held an environmental scoping hearing for the EIR on September 22, 2005. Based on comments received, another revised Initial Study (October 16, 2006) was prepared that included an updated Biological Assessment Report. A Draft EIR (November 2006) was prepared and an environmental hearing on the Draft EIR was held on January 11, 2007.
Subsequently, a proposed Final EIR (May 2007) was prepared, including responses to comments received, and was reviewed by the Planning Commission on May 22, 2008. At the hearing, the Planning Commission requested that additional geological investigations be conducted consistent with the requirements of a mitigation measure (GEO-3a) that was included in the proposed Final EIR. The Planning Commission did not certify the Final EIR or take action on the Coastal Development Permit.

The geologic investigation mitigation measure (GEO-3a) required additional study of the project site to determine if a previously reported bedding plane fracture actually existed on the site. Additional studies of the project site were recommended by the EIR because a bedding plane fracture, if it existed, could have the potential to result in a slope instability impact.

In response to the request by the Planning Commission that additional study of the geologic conditions of the project site be conducted prior to taking an action on the proposed project, the required geological investigation was completed in 2009, and an additional slope stability analysis was completed in 2011. The 2009 investigation determined that the previously reported bedding plane fracture did not exist on the project site. The 2011 slope stability analysis report concluded that that the proposed project would not result in a significant slope stability impact. As a result of the geological investigation, the First Revised Draft EIR was amended to omit the previously proposed mitigation measure (former measure GEO-3a) because the requirements of that mitigation measure were completed.

The First Revised Draft EIR was circulated for public review in March 2012, and a public hearing to consider the adequacy of the EIR was conducted by the Planning Commission on April 5, 2012. A Final EIR was not prepared pending further analysis of issues raised in public comment.

V. SECOND REVISED DRAFT EIR

A. Additional Analysis

Public comments on the First Revised Draft EIR focused on several issues, including the location of the top of the ocean bluff on the project site, the location of the top of the canyon slope for Lighthouse Creek on the project site, and the stability of the Lighthouse Creek channel slope located on the eastern portion of the project site. In response, two additional geologic evaluations of the project site and the proposed project were conducted in 2013.

In summary, the Second Revised Draft EIR provides the following new or revised information:

2013 Geologic Evaluation:

- A revised “top of bluff” location further landward that generally follows the existing curb and is consistent with the top of bluff location expressed in public comments and supported by City and Coastal Commission staff.

- Updated information regarding the rate of bluff retreat using an updated, more accurate methodology resulting in 1.02 inches per year rather than four inches per year discussed in the 2012 EIR.

- A “top of canyon slope” that is located east of and adjacent to the existing curb rather than the top of bank of Lighthouse Creek previously identified approximately 50 feet east of the proposed building site.

- A slope stability analysis for the western slope of Lighthouse Creek that concludes that the bedrock and soil comprising the slope are stable under both static and earthquake conditions.
Revised Project Description:

- Updates to the project description to reflect changes made to the design of the proposed residence. The current proposed building heights are approximately six to ten feet lower, respectively, than the maximum heights of the previously proposed residence design. The western elevation of the currently proposed residence would have a maximum height of 15 feet above grade and the eastern elevation would have a maximum height of 25 feet above grade.

Environmental Impact Analysis:

- Updated aesthetics analysis of the project based on the changes to the design of the residence.
- Updated analysis of the project’s consistency with applicable plans and policies.
- Updated alternatives to the proposed project to reflect new information regarding the revised project design and new information regarding the geologic conditions of the project site.
- Updated biological resources analysis and mitigations.
- A new section that describes the environmental impacts of the proposed project that have been determined to be less than significant. The Impacts Found Not to be Significant section summarizes analysis provided by the Revised Initial Study prepared for the project, and where necessary, updates that information to reflect changes made to the design of the project and changes to environmental conditions at the project site.

B. Summary of Impacts

The Second Revised Draft EIR concludes that there are no significant, unavoidable impacts, and that all potentially significant impacts would be reduced to less than significant levels with the implementation of identified mitigation measures.

**Significant, Unavoidable Impacts (Class I impacts are unavoidable significant effects for which no feasible mitigation is identified)**

The Second Revised Draft EIR does not identify any significant, unavoidable impacts.

**Significant, But Mitigable Impacts (Class II impacts are potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures)**

Class II impacts were identified in the Second Revised DEIR in the areas of Visual Aesthetics and Geologic Hazards. Additional impacts identified as Class II in the Initial Study are Biological Resources, Hazards (fire), Transportation (access), and Water Resources (drainage, water quality).

**Visual Aesthetics:** The Draft EIR (2007) and the First Revised Draft EIR (2012) prepared for the project evaluated the potential for the original project design to result in significant visual aesthetic impacts and concluded that the project’s original design would result in significant impacts to important public scenic ocean views from areas in and around La Mesa Park. The previous Draft EIRs also concluded that the impacts could be reduced to a less than significant level with the implementation of mitigation measures that identified changes to the design of the project. Design changes similar to those recommended by the previous Draft EIRs have been incorporated into the design of the currently proposed project. The design of the proposed residence has been revised so that it has a maximum height of 25 feet above existing grade, which is approximately ten feet lower than the maximum height of the previously
proposed residence design. The potential for the project’s current design to result in significant visual aesthetic impacts is evaluated in the Second Revised Draft EIR.

The Second Revised Draft EIR concludes that potentially significant impacts to important public scenic ocean views from areas in and around La Mesa Park would be reduced to a less than significant level with the implementation of identified mitigation measures AES-1 (require neutral colors) and AES-2 (install landscaping that will not exceed the height of the residence).

Geologic Hazards: The Second Revised Draft EIR concludes that potentially significant geologic impacts (slope stability, subsidence, and expansive soils) would be reduced to a less than significant level with the implementation of proposed mitigation measures GEO-1 (project to implement a storm water drainage system that will not result in a significant slope stability impact) and GEO-2 (foundation system shall be approved by a licensed Engineering Geologist or Geotechnical Engineer).

Biological Resources: The evaluation of project-related impacts to biological resources provided by the Revised Initial Study was based on information provided by the biological assessment report prepared in 2006 and focused on the potential for the proposed project to adversely affect native plant habitat and wildlife species located on the lower portion of the Lighthouse Creek canyon slope. The Revised Initial Study concludes that potentially significant adverse impacts to biological resources (habitat, water quality) would be reduced to less than significant levels with the implementation of proposed mitigation measure BIO-1 (require habitat restoration plan); BIO-2 (install appropriate landscaping plants); BIO-3 (use appropriate irrigation system); BIO-4.1 through 4.8 (implement appropriate water quality protection measures during construction); and BIO-5 (require Streambed Alteration Agreement from California Department of Fish and Wildlife).

An updated evaluation of existing biological conditions and potential project-related impacts to biological resources was prepared in 2013 (Hunt). The report identifies three additional measures, BIO-4.9, 4.10 and 4.11, (BMPs to prevent soil erosion; grading during dry season and hydromulch disturbed soils; and biologist monitoring of these measures during construction) that would further reduce the potential for project-related water quality impacts to Lighthouse Creek habitat and species. The report also indicates that project-related construction activity would have the potential to result in a significant impact if construction were to occur near an occupied nest. This potentially significant impact can be reduced to a less than significant level by a mitigation measure BIO-6 (protect nesting birds). In addition, the report identifies additional measures to further minimize impacts to native habitat and impacts to wildlife species with mitigation measure BIO-7 (protect wildlife through salvage or relocation) and BIO-8 (protect sensitive habitat with construction fencing).

Hazards (fire): A potential impact pertaining to fire hazard was identified due to the project location adjacent to native vegetation in Lighthouse Creek and the narrow width of the access driveway. This potential impact would be reduced to a less than significant level with the implementation of proposed mitigation measure H-1 (provide automatic fire sprinklers); H-2 (provide monitored fire alarm system); H-3 (comply with high fire hazard area construction requirements); and H-4 (maintain sprinkler and alarm systems).

Transportation (access): The proposed project was identified for a potential to result in a vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. This impact would be reduced to a less than significant level with the implementation of proposed mitigation measure T-1 (owner to provide the City with satisfactory evidence that the required
amount of legal access that formed the basis for the original lot split is available to serve the project). (See further discussion in Section D. below.)

**Water Resources (drainage, water quality):** The proposed construction activities would have the potential to result in short-term water quality impacts to Lighthouse Creek during project construction. This potential impact would be reduced to a less than significant level with the implementation of proposed mitigation measure W-1 (City approval of proposed grading, drainage, storm water and project development plans).

**Less Than Significant Impacts (Class III impacts are impacts that are not substantial or significant)**

Less than significant impacts were identified in the following areas: aesthetics (lighting), air quality, cultural resources, noise, population and housing, public services, recreation, greenhouse gas emissions, and agriculture and forestry resources. These issue areas are evaluated in the Revised Initial Study and the following Recommended Measures have been identified to further reduce less than significant impacts.

**Air Quality (construction):** RM AQ-1 through AQ-5 (standard dust control measures shall be required) and AQ-6 (monitoring reports shall be submitted to City).

**Cultural Resources:** RM CR-1 (standard unanticipated discovery measures shall be implemented if previously undetected cultural resources are uncovered during the construction).

**Noise (construction):** RM N-1 (neighborhood notification), N-2 (limit construction hours), and N-3 (sound control on equipment).

**Public Services (recycling):** RM PS-1 (construction waste shall be recycled).

Transportation (construction traffic, parking): T-2 (haul routes for construction traffic shall be approved by City, truck trips to be during non-peak hours), T-3 (construction parking and storage shall be approved by City).

**Water Resources (drainage):** RM W-2 (maintenance of storm water drainage system) (same as mitigation measure GEO-1).

**C. Alternatives Analysis.**

The Second Revised Draft EIR includes an analysis of alternatives to the proposed project and focuses on alternatives capable of eliminating or reducing significant adverse environmental effects of the project while feasibly attaining most of the objectives of the project. The alternatives to the proposed project evaluated in the EIR include:

**No Project Alternative.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.

**Smaller Project Alternative.** This alternative evaluates the impacts of developing a residence on the project site that has 484 fewer square feet of total floor area than the proposed project. The location of the smaller residence on the project would be similar to the location of the proposed residence. Depending on the final design of this alternative, the structure height could be similar to that of the proposed project or portions of the structure could be taller or shorter. This alternative would result in a slight increase in on-site earthwork for site preparation due to deeper excavation (15 feet rather than 8 feet).
The Second Revised Draft EIR concludes that the Smaller Project Alternative would result in a slight reduction in aesthetic impacts (impacts to ocean views) and would therefore be considered the environmentally superior alternative. However, the reduction in aesthetic impacts provided by the alternative would be very minor compared to the revised project, and is not required to reduce any aesthetic impacts of the proposed project to a less than significant level.

D. Access

The subject property was originally proposed in its current configuration as part of a lot split conditionally approved by City Council on May 29, 1958, which included the adjacent parcel to the north (1837 El Camino de la Luz). At the time of the lot split approval, the City required recordation of a written instrument to validate the subdivision within one year of approval. Because an instrument was not recorded within one year of the City Council approval, the lot split was invalidated. However, in 1963, a grant deed conveyed the subject parcel to a separate property owner. The City determined that the conveyance of the land was in violation of the Subdivision Map Act. In 1999, the City issued a Conditional Certificate of Compliance for the subject parcel, as required by the Subdivision Map Act, to allow the property to be legally sold, leased, or financed. The condition on the Conditional Certificate of Compliance reads as follows:

 PROVIDE EVIDENCE, SATISFACTORY TO THE CITY ENGINEER THAT THE OWNER OF THE PARCEL DESCRIBED HEREIN SUBSTANTIALLY POSSESSES THE REQUIRED AMOUNT OF LEGAL ACCESS THAT FORMED THE BASIS OF THE ORIGINALLY APPROVED LOT SPLIT.

In September of 2009, the Superior Court of the State of California determined that the subject parcel has legal access easements that vary in width from 7.5 feet to 15 feet, as shown on the 1958 Record of Survey (see sheet A.5 of the project plans). The Superior Court “Stipulated Access Order” states in part:

“ALL PARTIES ACKNOWLEDGE THAT THE ACCESS EASEMENT ON THE FRANCO PROPERTY IS LIMITED TO 7.5 FEET IN WIDTH ON THE SOUTHERN 7.14 FEET OF THE FRANCO PROPERTY.”

Transportation planning staff analyzed the width of the driveway available to access the subject property and states that the 7.5 foot wide access section, which spans a length of 7.14 feet, would provide less driveway access width than the City’s practice of 10 feet. However, a majority of passenger vehicles could access the site. The owners would need to be aware that some larger passenger vehicles, construction trucks, recreational vehicles, campers, etc. require a greater width, and, without permission from adjacent owners, could not access the site. For reference purposes, the City’s Parking Design Standards define a standard design vehicle width as 5 foot 10 inches wide. For comparison purposes, a wide passenger vehicle such as a 2010 H1 Hummer (though no longer in production) is 7 feet 1 inch wide.

Fire Department staff also reviewed the existing access driveway to the subject property. Due to the narrow width of the driveway, mitigation measures H-1 through H-4 described above, are required to reduce the potential for a significant fire protection hazard.

As required by mitigation measure T-1 discussed previously, the applicant has provided evidence of the required access in the November 7, 2016 letter (see attachment to staff report). Based on the decision of the Superior Court, and the analysis by City staff it has been determined that the property substantially possesses the required amount of legal access that formed the basis of the originally approved lot split, and that there is adequate access to serve the proposed project at the project site.
VI. DRAFT EIR PUBLIC REVIEW PERIOD

Notification. A notice of the Second Revised Draft EIR document availability, 45-day comment period (October 17 – November 30, 2016), and public hearing date was mailed to surrounding property owners, interested parties, organizations, and agencies, and was also provided via newspaper notice. The Second Revised Draft EIR was also submitted to the State Clearinghouse for review by State agencies (e.g., Coastal Commission).

Draft Document Availability. The Second Revised Draft EIR is available for public review at the City Planning Division offices (630 Garden Street), the Downtown Branch of the public library (40 East Anapamu Street), and on the City web site at www.santabarbaraca.gov/eir.

Public Comment Period. Written comments on the Second Revised Draft EIR for the 1837 ½ El Camino de la Luz project will be accepted through the end of the public review period on Wednesday, November 30, 2016, 4:30 p.m. Please submit mailed comments to the attention of the Planning Commission Secretary, City of Santa Barbara Planning Division, P. O. Box 1990, Santa Barbara, CA 93102. Comments may also be submitted electronically to PCSecretary@santabarbaraca.gov, or delivered to the Planning Division office at 630 Garden Street.

Attachment: Letter from Applicant (Hollister & Brace, November 7, 2016)
Via e-mail: kkennedy@santabarbaraca.gov

Ms. Kathleen Kennedy, Associate Planner
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Re: Barthels Residence, Access Easement
1837 ½ Camino de la Luz, Santa Barbara, California

Dear Kathleen:

Hollister & Brace, in conjunction with RRM Design Group, have been retained by Dr. Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985 (the "Applicant") in connection with the 1837 ½ El Camino de la Luz residential project (the "Project").

This letter will provide some early comments on the Project's Second Revised Draft Environmental Impact Report ("DEIR") as well as provide the additional information you requested regarding the legal status of the easements that provide access to the Applicant's property at the above referenced address.

The DEIR states as follows regarding Transportation/Circulation:

"The proposed project would have the potential to result in a significant vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. To resolve this issue and reduce potential access-related impacts to a less than significant level, Revised Initial Study mitigation measure T-1 requires the project parcel owner to provide the City with satisfactory evidence that 'the required amount of legal access that formed the basis for the original lot split' is available to serve the project." DEIR, Section 9.1.4, p. 9-8.
And, Table 2.3-1 proposes the following Mitigation Measure:

"T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split." DEIR, p. 2-11.

There is no evidence to support the DEIR’s conclusion that “the legal adequacy of the driveway provided to the project site has been disputed” nor that the “proposed project would have, the potential to result in a significant vehicle access-related impact.” In fact, as appears more fully below, the evidence proves the contrary.

In 2007 and 2008 Rafael Franco and some of the other residents of the subject stretch of El Camino de la Luz denied the City’s retained geologist, Dr. Anikouchine, access to the Barthels property for the purpose of performing certain geological investigations which Mr. Franco and said other residents had demanded be performed. As a result, Dr. Barthels’ attorneys, Hollister & Brace, filed a legal action on Dr. Barthels’ behalf against Mr. Franco and said other residents of El Camino de la Luz, being Santa Barbara Superior Case No. 1268293, in order to perfect Dr. Barthels’ legal easement rights. As the City’s Staff Report of September 8, 2009 correctly stated, the Santa Barbara Superior Court entered its Judgment on September 8, 2009 in said Case that Dr. Barthels has access easements varying in width from 7.5 feet to 15 feet in width along the subject stretch of El Camino de la Luz.

The Superior Court’s stipulated access order of September 9, 2009 entered in said Case provides that Mr. Franco and the other named defendants in the lawsuit:

"(a) Shall not block, impede or limit access to the Benefitted Property over the Bound Properties to the full width of the Access Easement as described in Exhibits “A” and “B.”

(b) Shall sign any paperwork required by government agencies relating to or confirming access rights, as long as the paperwork accurately describes all easement terms.

(c ) Shall provide access to City staff or other authorized persons who need access to address or handle a pending application of Benefitted Owner."

and also provides as follows:

"7. NOTICE TO ANY PEACE OFFICER: You may accept a copy of this Order, and are instructed to implement it if so requested by any party, on the conditions stated. You are authorized to order Bound
Party to comply with the Order, to tow any blocking vehicles or item blocking access, or to otherwise enforce this Order, subject to further instructions of the Court.

"8. NOTICE TO BOUND PARTIES: Failure to comply with this Order shall subject you to further Orders of the Court, and the costs of any proceeding to enforce this Order."

The Superior Court’s Judgment is final and binding and no appeal therefrom is possible.

The Conditional Certificate of Compliance issued by the City of Santa Barbara for the subject legal parcel and recorded December 8, 1999 as Instrument No. 99-0095608 provides that the owner of said parcel must:

"Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."

Evidence presented to the City of Santa Barbara by the Applicant’s surveyors, land use agents, and attorneys over the past eleven years demonstrates that the existing width of the road accessway to the subject parcel, which generally ranges from 9 feet to 15 feet (except for the 7.5 pinch point) is in substantial conformity with the width of the road access shown on the 1958 Lot Split Map. Moreover, City Fire Department representatives have consistently opined over the past eleven years that the width of the road access way is sufficient to provide adequate and safe access, including fire protection access to the parcel.

Based upon all of the foregoing, the subject parcel has legal access and such access substantially conforms to the access approved on the 1958 Lot Split Map. And, there is no necessity for proposed Mitigation Measure T-1. Further, there is no evidence whatsoever that the "proposed project would have the potential to result in a significant vehicle access-related impact" because the Applicant’s legal access easements over the subject stretch of El Camino de la Luz have been conclusively judicially determined to exist and are legally enforceable. Hence, no land use nor CEQA issue is presented which requires mitigation.

We are providing the following exhibits below, for your reference:

A. Aerial view showing location of the easement
B. Parcel Map
C. Legal Access Exhibit per Title Report
D. Larger Scale Map Legal Access Exhibit per Title Report
E. Establishment of Legal Access (narrative)
We trust that this information provides you with the documentation needed to show that the Applicant has a legally established easement that provides adequate access to his property for the purpose of developing the proposed residence.

Please let us know if we can be of further assistance.

Very truly yours,

HOLLISTER & BRACE

By:  
Richard C. Monk

RRM DESIGN GROUP

By:  
Detlev Peikert, AIA, LEED
AP BD+C
Principal
CA License No. C15008

RCM:crr
Enclosures: Exhibits A-E

cc:  Dr. Herb Barthels
     N. Scott Vincent, Deputy City Attorney
Aerial photo
Taken from the north
Legal Access Exhibit Map
Per Title Report
Legal Access Exhibit Map
Per Title Report

Morgan Parcel

Barthels Parcel

Peterson Parcel

Franco Parcel
Establishment of Legal Access to Parcel

NOVEMBER 17, 1995 EASEMENT DEED -

➤ On November 17, 1995, Dr. Barthels executed an Easement Deed in favor of Joanna K. Morgan granting to Morgan the following one-foot wide easement within the aforesaid combined 10-foot easements:

"An easement, of a prescriptive nature, for fence and landscaping purposes only, and expressly limited to those present and current exact uses only, on and over a strip of land one foot in width, located within a non-exclusive right of way easement presently owned by Herbert E. Barthels, said one foot wide strip being located immediately to the east of and contiguous with and adjacent to the easterly property line of said 'MORGAN PROPERTY,' Instrument No 95-066680, recorded November 30, 1995, Official Records, Santa Barbara County.

NOVEMBER 17, 1995 AGREEMENT -

➤ The aforesaid one-foot easement was further referenced in a written agreement entered into between Dr. Barthels and Joanna K. Morgan dated November 17, 1995 ("the November 17, 1995 Agreement"), wherein the parties confirmed that Dr. Barthels has combined record access easements of 10 feet in width:

"The 10 feet (being the 7 1/4 foot of driveway easement plus the 2 3/4 foot other easement) on the PETERSON side of the centerline is valid and still existing." November 17, 1995 Agreement, p.3.

➤ The November 17, 1995 Agreement further confirms that the one-foot easement strip granted by Dr. Barthels to Joanna K. Morgan pursuant to the Easement Deed is concurrent with the aforesaid combined 10-foot wide access easement:

"That said one foot easement strip was and is concurrent with the easement rights held by BARTHELS as to the 10 foot driveway easement on the PETERSON property held by BARTHELS." November 17, 1995 Agreement, p.3.

COURT OF APPEAL OPINION -

➤ Court of Appeal acknowledged that the Property still has access, albeit not 15 feet in width:

"Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only 7½ feet wide, and not 15 feet as represented by the title company." Barthels v. Santa Barbara Title Co. (1994) 28 Cal.App.4th 674 at 677.

➤ Joanna K. Morgan confirmed in the November 17, 1995 Agreement that the subject Property has a valid and existing access easement:

"The 10 feet (being the 7 1/4 foot of driveway easement plus the 2 3/4 foot other easement) on the PETERSON side of the centerline is valid and still existing." November 17, 1995 Agreement, p.3.

SUBJECT PROPERTY HAS LEGAL ACCESS IN SUBSTANTIAL CONFORMITY TO 1958 LOT SPLIT MAP -

➤ The Conditional Certificate of Compliance recorded December 8, 1999 as Instrument No. 99-0095608 provides that the subject Property is required to comply with the following specific condition:

"Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."
EXHIBIT E
Pursuant to California Government Code Section 66499.35, in response to written application and request by the owner of the real property described herein, or in response to request by a vendee of the owner of the real property pursuant to a written contract of sale, this Conditional Certificate of Compliance is issued by the City Engineer of the City of Santa Barbara, and recorded in the Official Records, in the Office of the County Recorder, County of Santa Barbara, State of California.

This Conditional Certificate of Compliance is issued for that certain real property in the City of Santa Barbara, County of Santa Barbara, State of California, being more particularly described as follows:

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREME EASTERN END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERN LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 5°16' WEST 350.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 5°16' WEST 170.72 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 172.46 FEET TO A POINT; THENCE NORTH 4°26' EAST 58.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 22°07' WEST 37.85 FEET TO A 1/2 INCH SURVEY PIPE.
NORTH 54°01' WEST 10 FEET TO A 1/2 INCH S. 1/2 INCH PIPE;
THENCE NORTH 38°33' EAST 27.36 FEET TO A 1/2 INCH SURVEY
PIPE; THENCE NORTH 87°44' WEST 113.35 FEET TO THE TRUE POINT
OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY
TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF
ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

In order to provide compliance with California Government Code §66410
et seq., the Subdivision Map Act, pertaining to the division of real
property, and with local ordinances adopted pursuant to the
Subdivision Map Act, development of the real property pursuant to
this Conditional Certificate of Compliance shall be subject to
complete compliance with the condition imposed herein.

Upon compliance with the condition of this certificate the real
property described herein shall comprise one (1) legal parcel. This
certificate relates only to issues of compliance or noncompliance
with the Subdivision Map Act and local ordinances enacted pursuant
thereto. Upon compliance the parcel described herein may be sold,
leased, or financed without further compliance with the Subdivision
Map Act or any local ordinance enacted thereto. Development of the
parcel may require issuance of a permit or permits, or other grant or
grants of approval.

The real property described herein is required to comply with the
following specific condition:

Provide evidence, satisfactory to the City Engineer that the
owner of the parcel described herein substantially possesses the
required amount of legal access that formed the basis of the
originally approved lot split.

All permits of the City of Santa Barbara needed by the owner of the
real property described herein for the development of improvements,
including any development of improvements to implement the above
condition, and permits and other grants of approval for the
development of the real property in the future shall be subject to
the condition listed above.

This Conditional Certificate of Compliance shall be recorded in the
Official Records of the County of Santa Barbara to run with the land
and to serve constructive notice to the property owner, and to any
subsequent vendees, grantees, heirs, transferees or assignees of the
real property, that the fulfillment and implementation of the
condition set forth herein shall be required prior to any subsequent
issuance of City permits or other grants of approval for development of the real property.

Compliance with the foregoing condition by the owner of the real property described herein shall not be required until such time as a permit or other grant of approval for development of the real property is issued by the City of Santa Barbara.

CITY OF SANTA BARBARA

By: ____________________________
    R. Patrick Kelly, City Engineer

RCE No. 27077  Exp. 3/31/01

Assessed Owner: Herbert E. Barthels, Trustee
Herbert E. Barthels Trust dated December 9, 1985
Mailing Address: 1809 Cliff Drive, Suite C
Santa Barbara, CA 93109

ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF SANTA BARBARA

On December 8, 1999, before me, Donald G. Irelan, Notary Public, personally appeared

R. Patrick Kelly, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity (if any), and that by his/her/their signature(s) on the instrument the person(s), or the entity on behalf of which the person(s) acted, executed the instrument.

Witness my hand and official seal.

Signature

[Seal]
Superior Court of the State of California,
For the County of Santa Barbara.

JOANNA K. MORGAN,
Plaintiff,

vs.

HERBERT E. BARTHELS; BRUCE F. PETERSON; ELIZABETH V. PETERSON; SANTA BARBARA TITLE COMPANY; SAFECO TITLE INSURANCE COMPANY; SECURITY UNION TITLE INSURANCE COMPANY; and DOES 1 through 30, inclusive,

Defendants.

DEPOSITION OF HERBERT E. BARTHELS

Tuesday, February 11, 1992
Santa Barbara, California

AHLSTRAND AND ASSOCIATES
Certified Shorthand Reporters
411 E. Carrillo Street 674 County Square Drive, Suite 209
Santa Barbara, California 93101 Ventura, California 93003
(805) 963-3659 (805) 658-6622

File No. 920060
Reported By JOYCE L. GOBLE, CSR# 6976
there anything else about that easement that we need
to talk about?

A. I feel this is very much more clear than our
reproduced.

Q. Well, this is a larger, full-sized one. How
often would you say you were out on your property
prior to the time you began active efforts to develop
it? I mean, is this something you went a couple
Saturdays a month?

A. I was probably out on the property more for
just recreational use than I have for developing over
the years.

Q. Prior to the time that you began your
development activities, how much recreational use did
you have on the property?

A. I can pretty much document my use for
development, because I keep somewhat of a log, and I
really can't say how often I used it.

Q. More than once a month?

A. Oh, yes.

Q. Would it have been Saturday or after work
coming down to watch the sun go down, or how would you
characterize your usage?

A. Could be at will.

Q. All right. Did you ever go down with anyone
else?

A. I can't remember. Usually it was by myself.
Q. Did you engage in any regular activities off the beach, body surfing, kayaking?
A. I think you hit it right on the head.
Q. Both?
A. All of the above.
Q. You took your kayak down?
A. Surfboard.
Q. Surfboard. And in all that time over those several years you never ran into anyone else going on to your property at the same time you were there?
A. No, never noticed it.
Q. Nobody going up or down the trail?
A. I never noticed anyone in that area on the face of the bluff.
Q. Has the city given you any requirement for the size of access road you need to have to develop your property as you intend or desire?
A. The transportation department wanted 15 feet.
Q. Have they modified that requirement yet?
A. No.
Q. Was that to provide for emergency access or fire turn around, or is that just their standard road
A. I believe that is what they required and that was their standard dimension that they wanted for ingress and egress into the property.

MR. LINDSEY: Could I add something?

MR. MAGNUSSON: Sure.

MR. LINDSEY: Dr. Barthels -- I came into the matter when Dr. Barthels was very close to what he believed was the granting of his building permit. He apparently copied everything the City desired, and the Coastal commission, and then the letter, I think, from Mrs. Morgan went to the City, or from your office. It wasn't from your office, it was a letter signed by a group of neighbors. That really, I think, may have made a reference to the easement, but more they did not want any development of that property, and that letter created a problem down at City Hall. So Dr. Barthels asked if I would review that letter and then go down to City authorities to see what might be done to help complete the granting of this permit. I went down to City Hall and I had a brief discussion with the lady by the name of Maggie, who was an authorized staff person down there, subsequently with the lady that took her place, and the indication I had was that -- and I can describe it as no stronger than
an indication, but an indication that the City was favorably looking upon the granting shortly of the building permit, but the letter from the owners, which included Mrs. Morgan, was making some waves down at City Hall, and in the process of that wave making the City began to wonder about -- at least Dr. Barthels may be varifying this, or that to make it appear that the City had done something and checked on something.

It is at that stage that I went to the title company and asked them to verify and confirm whatever may be, and I went first to Santa Barbara -- excuse me, Safeco, because they had issued the title policy, and very swiftly they referred me to Santa Barbara Title, and very swiftly they notified me that I would be receiving communication from Chicago Title out of San Diego. And then subsequently we received a letter from a consultant out of Ventura that informed us that the easement had never existed.

So the problem we have here developed out of that letter that the owners sent to the City, out of which eventually the title company said you don't have any easement. Now, at that stage we cannot go down and tell the city there is no easement there because that would crunch everything, and it might still be a possibility of working something out. The title
company admitted there was no easement out there which impacts on Mrs. Morgan's will. I discussed with Dr. Barthels should Mrs. Morgan ever have a minor remodel or have to rebuild, she is going to be in the same boat Dr. Barthels is, because there an easement out there, at least to the extent they purported it.

MR. MAGNUSSON: There isn't an easement where?

MR. LINDSEY: To the extent that they purported something against Mr. Barthels. The title company became concerned that we were indicating a claim against Mrs. Morgan because it was in Dr. Barthels' deed and in his title policy that backed it up, and a guarantee that they subsequently gave to him because this impacted on Mrs. Morgan's property. Because of what the title company did to her, it impacted on Mrs. Morgan, which I understand is one of the reasons that generated her lawsuit, the cloud on her title zone. Thereby, the title company during the course of the work done by Dr. Barthels, it seems that Bachman had a connection with the Morgan property earlier, the title company did not guarantee that pathway through there, so far as the Morgan property is concerned.

MR. MAGNUSSON: That three-foot walkway?

MR. LINDSEY: No, the main one.

MR. MAGNUSSON: The 15 foot?
MR. LINDSEY: Not the pathway, which impacts on her property and affects drafts or usage of it, but they did something when she acquired her property, made it appear as though there was an easement there, but they weren't insuring it. And our position has always been at one point we had a Cause of Action that at the time Mrs. Morgan was acquiring her property the title company knew there was a defeat, and see, this burden on her deliberately to withhold Dr. Barthels, what they did to Dr. Barthels in 1976. The only way they could withhold from Dr. Barthels is when Mrs. Morgan bought her property to say there is an easement out there, but in the fine print say we are not going to insure against it. In fact, they云oded her title deliberately, it wasn't a necessary thing to her, they -- deliberate act by the title company to use on him.

Now, in the guarantee they gave to Dr. Barthels, he asked that -- the City requested him for a confirmation of that easement, he contacted the title company. They did not give him a confirmation, which he didn't realize because he is only a layman. They gave him a document that entitled guarantee, which said, in essence, that his name is still on the title. And one of the problems now in the case is
that they deliberately gave him a document without his
derstanding what it is, which is a follow-up of what
they deliberately did to the Morgan property. Not
negligence, but a deliberate act by both Santa Barbara
Title and Safeco, because they are tied in together on
it.

And so where the matter stands is that the
City is beginning to wonder about this matter, turned
their attention to his water and said, "Since you
haven't moved your building permit we will take your
water away from you." When he went down to City Hall
they informed me that within a period of a few weeks,
a date they gave me, he would have no more water right
unless he got on the A list, and it would be years.
Without a water right he would never get a permit.
The matter had to be shifted to the very highest
levels of city government, and apparently a
determination was made that he would continue to have
his water determination pending what is going to be
worked out on this. So his permitting process is
literally standing still, but at least they are not
looking at it right now. His water determination has,
for the moment, been protected, and they are not
looking at that. Somewhere along the line they are
going to say the thing sat there too long, so what may
be done in relation to Mrs. Morgan's rights will
impact on that permit, what will come out of the
lawsuit. Again, the two title companies will impact
on it. And Mrs. Morgan, perhaps not now, but I think
now she has given up all her rights to the title
company, but one day if her house burns down or she
decides to remodel, she is going to be in the same
boat he is in.

MR. MAGNUSSON: Why don't we go off the record.

(A discussion was held off the record.)

MR. MAGNUSSON: The original transcript --
deposition transcript will be sent to Mr. Lindsey's
office for his client's signature, and review it
within 30 days. Any changes or corrections will be
given by notice in writing by Mr. Lindsey to this
office. If the original is unavailable at the time of
trial, a copy can be used. It can be signed under
penalty of perjury. The court reporter is relieved of
further obligations under the Code.

MR. LINDSEY: That is agreed.

(The deposition concluded at 12:40 p.m.)

Cases that cite this headnote

[2] Abstracts of Title

_rights, Duties, and Liabilities of Examiners of Title_

Property owner was entitled to purchase price of property plus inflation factor, which was substitute for interest, as damages for title abstractor's negligence in determining that owner had 15-foot access easement when in fact only seven-foot easement existed. West's Ann.Cal.Civ.Code § 3333.

Cases that cite this headnote

[3] Abstracts of Title

_rights, Duties, and Liabilities of Examiners of Title_

Out-of-pocket expenses toward improving property were properly awarded as damages to property owner, in negligence action against title abstractor for determining that owner had 15-foot access easement when in fact only seven-foot easement existed, but only to point in time that owner discovered defect in title.

Cases that cite this headnote

[4] Abstracts of Title

_rights, Duties, and Liabilities of Examiners of Title_

Trial court did not err in failing to award property owner damages for all time owner allegedly spent on development of property, in negligence action against title abstractor for determining that owner had 15-foot access easement when in fact only seven-foot easement existed and property was valueless; owner failed to sufficiently establish that all claimed time was reasonably necessary to development.

Cases that cite this headnote

Property owner brought negligence action against title abstractor for determining that owner had 15-foot access easement when in fact only seven-foot easement existed. The Superior Court, Santa Barbara County, No. 182179, Patrick L. McMahon, J., awarded damages to owner, and owner appealed. The Court of Appeal, Gilbert, J., held that: (1) owner was not entitled to damages for loss of economic value as such loss was not caused by abstractor; (2) purchase price plus inflation factor was proper measure of damages; (3) owner was entitled to damages for out-of-pocket expenses up to time defect was discovered; (4) owner was not entitled to compensation for time spent at hourly rate owner received in practice as dentist; and (5) owner was not entitled to attorney's fees.

Affirmed.

West Headnotes (8)

[1] Abstracts of Title

_rights, Duties, and Liabilities of Examiners of Title_

Property owner was not entitled to loss of economic value of his property as damages from title abstractor that negligently determined that owner had 15-foot access easement when in fact only seven-foot easement existed, even if property was valueless with only seven-foot easement;
Appeal and Error

Findings of Court or Referee

Appellate court must treat all evidence unfavorable to judgment as not having sufficient verity to be accepted by trier of fact.

Cases that cite this headnote

Appeal and Error

Province of Trial Court

Cases that cite this headnote

Abstracts of Title

Rights, Duties, and Liabilities of Examiners of Title

Damages awarded to property owner for time spent in developing property, in negligence action against title abstractor for determining that owner had 15-foot access easement when in fact only seven-foot easement existed, did not have to be calculated at $200 hourly fee charged by owner in his occupation as dentist; rather, $66.66 per hour was appropriate measure as reasonable hourly rate for person doing type of work that owner performed in developing property.

Cases that cite this headnote

Abstracts of Title

Rights, Duties, and Liabilities of Examiners of Title

Property owner was not entitled to attorney's fees in action against title abstractor that negligently determined that owner had 15-foot access easement when in fact only seven-foot easement existed, absent statute or agreement providing for such fees. West's Ann.Cal.C.C.P. § 1021.

Cases that cite this headnote

Attorneys and Law Firms

*676 **580 James T. Lindsey, Santa Barbara, for plaintiff and appellant.

Gibbs, Giden, Locher, Fleming & Acret, Joseph M. Giden, Lawrence B. Parker and Michael I. Giden, Los Angeles, for defendants and respondents.

Opinion

*677 GILBERT, Associate Justice.

In this action for title abstractor's negligence, we hold that the negligence of the abstractor did not cause the property to lose value. Therefore, the property owner is not entitled to damages measured by the loss in value of the property. We also hold the trial court correctly determined other aspects of the award of damages. We affirm.

FACTS

In 1976, Herbert Barthels purchased the last beach front parcel of property in the City of Santa Barbara (the City). He paid $24,500 for the unimproved lot. Escrow was through the Santa Barbara Title Company (Title Company) which also issued a policy of title insurance. The policy insured title to the lot and an appurtenant easement for access 15 feet wide.

Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only seven and a half feet wide, and not 15 feet as represented by the Title Company. The City refused to issue a building permit without a 15-foot wide easement. The Title Company tendered $42,875, representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued the Title Company alleging abstractor's negligence in determining that Barthels had a 15 foot wide easement. Barthels prayed for damages for loss of value of his property, money spent on construction plans and expenses incidental to processing permit applications. The
Title Company did not deny it was negligent. The only question, therefore, was the amount of damages.

At trial Barthels testified that in 1989 when he learned of the defect in title, the property was worth $800,000 with the 15 foot easement and nothing without the easement. Barthels claimed that through 1992 he had out of pocket expenses for such items as property taxes and architectural and engineering fees in the amount of $27,381.25. The Title Company agreed that Barthels expenses were $21,524.40 through 1989, the year Barthels discovered the defect in title.

Barthels also claimed $280,000 as compensation for his own time devoted to development of the parcel. He testified he spent 1400 hours and was claiming $200 per hour as the value of his time.

The trial court found that the measure of damages for the Title Company's negligence was not the $800,000 loss in economic value of the property, but *678 the $42,875 offered by the Title Company. The court told Barthels he could cash the Title Company's previously tendered check in that amount.

The trial court also awarded Barthels $21,524.40 for out of pocket costs expended until the defect in title was discovered. As to compensation for Barthels' time, the court found 150 hours represented the time Barthels expended that avoided the need to hire others. The court stated Barthels was not entitled to compensation at his billable rate as a dentist. Although he rescheduled patients, he did not lose any. The trial court found that a fair rate would be $66.66 per hour. It awarded Barthels $10,000 as compensation for his time. The trial court found no basis for awarding Barthels attorney's fees for prosecuting the negligence action. It therefore awarded a total of $31,524.40 in addition to the amount already tendered by the Title Company.

**581 [1] The measure of damages for negligence is "...the amount which will compensate for all the detriment proximately caused thereby..." (Civ.Code, § 3333.) The question here is whether the negligence of the Title Company caused the property to lose economic value. Barthels testified the property had no economic value because it lacked a sufficient easement for access. Nothing the Title Company did or did not do caused the property to lack a sufficient access easement. A sufficient easement simply never existed. Thus, the Title Company cannot be liable for any loss of economic value of the property caused by the lack of the easement.

Garton v. Title Ins. Trust Co. (1980) 106 Cal.App.3d 365, 165 Cal.Rptr. 449 illustrates the role of causation in assessing damages for abstractor's negligence. There the abstractor failed to disclose that the plaintiffs' parcel was subject to a mineral interest in a third party. Plaintiffs sought an order requiring the abstractor to obtain a release of the mineral interest. In upholding the sustaining of a demurrer the court stated: "The first element of proximate cause is cause in fact. [Citations.] Nothing defendants did or did not do in any way caused the land to be subject to the Archibalds' mineral interest.... Since the acts or omissions of the defendants did not cause the land to be subject to the Archibalds' interest the cost of removing that interest is not a proper measure of plaintiffs' damages, nor are plaintiffs *679 entitled to an order requiring the defendants to obtain a release of that interest." (Id. at pp. 382-383, 165 Cal.Rptr. 449.)

[2] Here the Title Company's negligence caused Barthels to spend $24,500 on a valueless parcel of property. Damages in the amount of $24,500 plus interest are adequate to compensate Barthels for the loss of that money. The trial court apparently believed Barthels was adequately compensated for the loss of his purchase money by payment of the $42,875 policy limits. That amount represents the purchase price plus an inflation factor specified in the policy. Although interest and not a title policy inflation factor is ordinarily used to measure damages in tort (see 6 Witkin, Summary of Cal.Law (9th ed. 1988) Torts, § 1397, p. 868), Barthels does not complain on appeal that the trial court erred in substituting the inflation factor for interest.

a policy of title insurance the court stated, "It seems quite apparent to us that liability should be measured by diminution in the value of the property caused by the defect in title as of the date of the discovery of the defect, measured by the use to which the property is then being devoted." (Id. at p. 130, 253 P.2d 116.)

But liability under a policy of title insurance, as discussed in Overholtzer, is determined according to the provisions of the insurance contract. The Overholtzer's action was brought on the contract of title insurance. Here, the measure of a title insurer's liability under contract is not relevant. Instead, the instant case is based on negligence. Under the circumstances presented here, holding the Title Company liable for loss of value on a theory of negligence would violate Civil Code 3333. That section limits damages for negligence to the detriment proximately caused by the Title Company's act or omission.

II

Barthels also contends the trial court erred in awarding other damages.

[3] Barthels argues that the trial court should not have stopped at the end of 1989 in calculating damages for his out of pocket expenses. But 1989 is the year Barthels discovered the defect in title. The City refused to issue a building permit, and he knew the land had no value. The trial court did not err in refusing to award damages for expenses made on land after Barthels learned it was worthless.

Barthels argues he should have been awarded damages for loss of income. But the trial court found no credible evidence Barthels lost any *680 income. The trial court did award Barthels $10,000 for the time he spent that avoided the need to hire someone else.

[4] [5] [6] Barthels complains the trial court awarded damages for some of the time he spent, but not all. The trial court was not convinced that all the time Barthels said he **582 spent was reasonably necessary for the development of the parcel. The trial court committed no error. Barthels simply failed to carry his burden of proof. We must treat all evidence unfavorable to the judgment as not having sufficient verity to be accepted by the trier of fact. (GHK Associates v. Mayer Group, Inc. (1990) 224 Cal.App.3d 856, 872, 274 Cal.Rptr. 168.) We have no power on appeal to consider the credibility of a witness or to weigh the evidence. (Kimble v. Board of Education (1987) 192 Cal.App.3d 1423, 1427, 238 Cal.Rptr. 160.)

[7] Barthels also complains that the amount awarded was calculated at $66.66 per hour, rather than the $200 hourly fee of a dentist. But in developing his property, Barthels was not performing the work of a dentist. Instead of compensating Barthels at the hourly rate of a dentist, the trial court properly measured compensation by the reasonable hourly rate for a person doing the type of work Barthels performed in developing his property. There was no credible evidence of the reasonable hourly rate for such work. But because Barthels had the burden of proof, if the trial court erred at all, it erred in awarding Barthels anything for his work. Thus there was no prejudice to Barthels in measuring compensation by $66.66. No reversal is warranted. (See People v. Watson (1956) 46 Cal.2d 818, 836, 299 P.2d 243.)

[8] Finally, Barthels claims the court erred in failing to award attorney's fees. Code of Civil Procedure section 1021 provides in part, "Except as attorney's fees are specifically provided for by statute, the measure and mode of compensation of attorneys and counselors at law is left to the agreement, express or implied, of the parties...." There being no statute or agreement providing for attorney's fees in this matter, the trial court was correct in refusing to award them.

The judgment is affirmed. Costs are awarded to respondents.

STEVEN J. STONE, P.J., and YEGAN, J., concur.

All Citations

28 Cal.App.4th 674, 33 Cal.Rptr.2d 579

EXHIBIT H
IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
SECOND APPELLATE DISTRICT, DIVISION SIX

HERBERT E. BARTELS, )
) ) SUPERIOR COURT
Plaintiff & Appellant, ) ) NO. 182179
) )
vs. ) )
SANTA BARBARA TITLE COMPANY, et al., ) )
) ) Defendants & Respondents.)
) )

APPEAL FROM THE SUPERIOR COURT OF SANTA BARBARA COUNTY
HONORABLE THOMAS R. ADAMS, JUDGE
HONORABLE PATRICK L. McMAHON, JUDGE
HONORABLE RONALD C. STEVENS, JUDGE
HONORABLE BRUCE WM. DODDS, JUDGE

REPORTERS' TRANSCRIPT ON APPEAL

APPEARANCES:

For Plaintiff & Appellant: JAMES T. LINDSEY
Attorney at Law
1216 State Street, Suite 402
Santa Barbara, California 93101

For Defendants & Respondents: GIBBS, GIDEN, LOCHER, FLEMING & ACRE
Attorneys at Law
BY: JOSEPH M. GIDEN
2029 Century Park East
34th Floor
Los Angeles, Ca. 90067-3039

ORIGINAL

Volume I (of I Volume)
Pages 1 through 133

WAYNE NELSON, CSR NO. 1160
SANDRA A. FLYNN, CSR NO. 4794
PATRICIA DONATO, CSR NO. 2057
JANA COOKSEY, CSR NO. 7399
Official Reporters
Courthouse
Santa Barbara, California 93101
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA

DEPARTMENT NO. 4
DEPARTMENT NO. 5
DEPARTMENT NO. 1
DEPARTMENT NO. 2

HON. THOMAS R. ADAMS, JUDGE
HON. PATRICK L. McMAHON, JUDGE
HON. RONALD C. STEVENS, JUDGE
HON. BRUCE WM. DODDS, JUDGE

HERBERT E. BARTHELS,)
) Plaintiff & Appellant,)
)
-vs.-
)
SANTA BARBARA TITLE COMPANY, et al.,)
) Defendants & Respondents.)
)
)
)
SUPERIOR COURT
NO. 182179

REPORTERS' TRANSCRIPT OF PROCEEDINGS
May 21, December 13, 1991; March 6, May 1, 1992;
December 4, 1992; April 9, 19, 1993; July 9, 1993

APPEARANCES:

For Plaintiff:
JAMES T. LINDSEY
Attorney at Law

For Defendants:
JOSEPH M. GIDEN,
MICHAEL I. GIDEN
Attorneys at Law

WAYNE NELSON, CSR NO. 1160
SANDRA A. FLYNN, CSR NO. 4794
PATRICIA DONATO, CSR NO. 2067
JANA COOKSEY, CSR NO. 7399
Official Reporters
Courthouse
Santa Barbara, California 93101
Barbara worked, the essential processing of the various
details and stages of it is done informally with these
departments prior to the filing of a formal application?
A That's true.
Q So the city, in essence, desires a developer such
as yourself, a property owner, to have informal approvals from
these various departments prior to the actual filing of the
formal application?
A That's correct.
Q Okay.
Now, a day or so after May 22, 1989, did you
become aware of a letter -- and this letter is in evidence now
as Exhibit 3 -- a letter from a private title consultant, Mr.
Banwell, concerned with a problem on the property?
A Yes, I did.
Q And essentially did that letter of May 22, 1989
indicate there was some question about the 15 foot driveway
easement?
A Yes. There was a question on the driveway
easement, and said that it actually didn't exist.
Q Now, was there then a second letter from Mr.
Banwell dated June 12, 1989 in which Mr. Banwell specifically
advised of the nonexistence of the 15 foot driveway?
A That's true.
Q And that's now in evidence as Exhibit 4?
A That's correct.
Q Now, did you make that knowledge or that notice
being received from Mr. Banwell immediately? Did you call it
immediately to the attention of the Coastal Commission or the city authorities?

A  At that time I was working very closely with the final processing over there to have them accept my completed fully application. I was 90 percent complete until some of these access driveway conditions started to surface.

At that time there was two very, very comprehensive surveys done by Martin, Northart & Spencer.

MR. GIDEN: Move to strike, nonresponsive, your Honor.

The question was whether he made the city aware of the easement problem.


Q  BY MR. LINDSEY: Did you tell at that time the city there was no 15 foot driveway easement?

A  That's correct.

Q  Without a 15 foot driveway easement, could the project be completed?

A  No, it could not.

Q  Did you, after the second Banwell letter, which is Exhibit 4, continue to do some effort incidental to this property?

A  Shortly after that so-called second Banwell letter that advised me of the nonexistence of that full easement, I tried to hold the permit process at bay and hopefully that the title companies would have some resolution to this. I was still on the project as time was running out.

Q  Was there in that -- somewhere in that span of time after the second Banwell letter where the city charged
BY MR. LINDSEY:

Q Dr. Barthels, with the loss of the 15 foot driveway access, do you have an opinion as to what the value of this property then is without the 15 foot driveway easement?

A Right now I understand it’s considered a total loss.

THE COURT: Would you sell it to me for a dollar?

THE WITNESS: I wonder if you would like to have all the complexities that go with this, your Honor.

THE COURT: No, no. For a dollar?

THE WITNESS: Absolutely not.

THE COURT: Of course you wouldn’t.

MR. GIDEN: I made the same offer, your Honor, and was rejected. But I actually offered more.

THE WITNESS: Mr. Giden, I know where you put your decimal point.

Q BY MR. LINDSEY: Let me ask you a question or so about the reason for Mr. Lawson.

During the course of the case were you made aware that the escrow file on your transaction back in 1976 as a matter of normal business procedure had been destroyed by the title company?

A That’s true.

Q Had you also become aware that no title company in this area would provide you with any chain of title on this problem?
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA

DEPARTMENT NO. 3          HON. JAMES M. SLATER, JUDGE

HERBERT E. BARTHELSEN,
)                    )
) Plaintiff,          )
) vs.                ) No. 182179
)                    ) REPORTER'S
SANTA BARBARA TITLE CO., et al., ) CERTIFICATE
) Defendants.        )

STATE OF CALIFORNIA )
) ss.
COUNTY OF SANTA BARBARA )

I, WAYNE R. NELSON, an Official Reporter of the Superior Court of the State of California, for the County of Santa Barbara, do hereby certify that the foregoing pages, 1 through 10, inclusive, comprise a full, true and correct transcript of the proceedings reported by me on May 24, 1991, in the above-entitled matter.

Dated this 30th day of September, 1993.

WAYNE R. NELSON, CSR NO. 1160
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA

DEPARTMENT NO. 5
HON. PATRICK L. McMAHON, JUDGE

HERBERT E. BARTHELS,
Plaintiff & Appellant,

vs.

SANTA BARBARA TITLE COMPANY, et al.,
Defendants & Respondents.

SUPREME COURT
NO. 182179

STATE OF CALIFORNIA ) ss
COUNTY OF SANTA BARBARA )

I, SANDRA A. FLYNN, an Official Reporter of the Superior Court of the State of California, for the County of Santa Barbara, do hereby certify that the preceding pages 11 through 23, and 27 through 133, comprise a full, true, and correct transcript of the proceedings reported by me on December 13, 1991; May 1, December 4, 1992; April 9, 19, 1993; July 9, 1993, in the above-entitled matter.

Dated this 1st day of October, 1993.

Sandrab A. Flynn, CSR NO. 4794
I, PATRICIA DONATO, an Official Reporter of the Superior Court of the State of California, for the County of Santa Barbara, do hereby certify that the preceding pages 24 through 25, comprise a full, true, and correct transcript of the proceedings reported by me on December 13, 1991 in the above-entitled matter.

Dated this 5th day of October, 1993.
HERBERT E. BARTHELS,  }  
Plaintiff and Appellant,  } SUPERIOR COURT  
vs.  } NO. 182179  
SANTA BARBARA TITLE COMPANY, et al.,  ) REPORTER'S  
Defendants and Respondents. ) CERTIFICATE  

I, JANA B. COOKSEY, CSR NO. 7399, an Official Court 
Reporter of the Superior Court in and for the County of 
Santa Barbara, State of California, do hereby certify that 
the foregoing page, Numbered 26, contains a true and correct 
transcript of the proceedings held in the above-captioned 
case as by me taken down in shorthand writing at said 
proceedings on the 6th day of March, 1992. 

DATED: Santa Barbara, California; October 1, 1993.

[Signature]  
JANA B. COOKSEY, CSR NO 7399  
Official Court Reporter
Whereas, copies of the completed Reporter's Transcript on Appeal in the above entitled action having been mailed to the parties representing same or having been orally noticed to pick up the transcripts;

Pursuant to Rule 10(b) of the California Rules of Court, I hereby certify that the foregoing Reporter's Transcript is a true and correct record.

IN WITNESS WHEREOF, I hereby set my hand and the seal of the Superior Court of the State of California, in and for the County of Santa Barbara, on this 18 day of October, 1993.

KENNETH A. PETTIT, County Clerk

BY: [Signature]
Deputy Clerk
This cause came on regularly for trial on April 9, 1993 in Department 5 of the above-entitled Court, the Honorable Patrick L. McMahon Judge, Presiding, sitting without a jury, a jury having been duly waived. Plaintiff appeared by his attorney, James T. Lindsey, Esq. Defendants appeared by their attorneys, Gibbs, Giden, Locher & Fleming by Joseph M. Giden, Esq. Evidence, both oral and documentary, having been presented, the cause having been argued and submitted for decision, a Statement of Decision not having been requested, and the trial having been concluded within one calendar day,
IT IS ORDERED, ADJUDGED AND DECREED that Plaintiff recover of Defendants, and each of them, the sum of $31,524.40, together with costs in the sum of $__________________.

MAY 13 1993

Dated: 5/31/1993

Judge of the Superior Court

PATRICK L. McMAHON
PROOF OF SERVICE  
(C.C.P. § 1013a(3))  
(Santa Barbara County Superior Court, Case No. 182 179)

I am employed in the County of Los Angeles, State of California. I am over the age of 18 and not a party to the within action; my business address is: 2029 Century Park East, Suite 3400, Los Angeles, California 90067.

On May 10, 1993, I served the foregoing document described as: [Proposed] JUDGMENT, on the interested parties in this action by placing a true copy thereof enclosed in a sealed envelope addressed as follows:

James T. Lindsey, Esq.  
Granada Building  
1216 State Street, Suite 402  
Santa Barbara, California 93101-2613

BY U. S. MAIL  
XX I caused such envelope to be deposited in the mail at Los Angeles, California. The envelope was mailed with postage thereon fully prepaid. I am "readily familiar" with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. postal service on that same day in the ordinary course of business. I am aware that on motion of party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

BY PERSONAL SERVICE  
XX I delivered such envelope by hand to the offices of addressee.

XX (State) I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

__ (Federal) I declare that I am employed in the office of a member of the bar of this court at whose direction the service was made.

Executed on May 10, 1993, at Los Angeles, California.

______________________________
Rachael Susan Mintz

00329
EXHIBIT J
NATURE OF PROCEEDINGS: RULING AFTER COURT TRIAL

This case involves abstractors liability. Due to professional negligence, the title company did not discover or disclose a deed restricting an easement across adjacent property reducing the access from 15 feet to 7.5 feet. Such negligence considerably reduced the utility of the property in question as a potential shoreline residence.

We note in passing that the potential damages far exceed the limits of the title policy. It has been assumed by the Court, and the title company, that Dr. Barthels can tender the check for $42,875, the $24,500 policy adjusted for inflation, without impairing his right to the additional damages claimed in this action which are predicated solely upon the theory of abstractors liability. Under the unique circumstances of this case, the amount set forth herein in this Statement of Decision is in addition to the amount Dr. Barthels can recover under the title insurance policy.

The Court adopts in full the memorandum attached to its Ruling dated July 21, 1992. The Statement of Decision will serve to clarify the reasons why relief is, or is not, granted.

The title policy, adjusted for inflation, was tendered seasonably. Therefore, the Court does not award emotional distress damages or attorney’s fees.

The title expert consultation fees, and the bill for legal services are not recoverable by virtue of Code of Civil Procedure Section 1021. Loss of profits and emotional distress will not be allowed.

Counsel for the title insurance company concedes that $21,524.40 is due for out of pocket costs, commencing from the date of acquisition of the property until the end of 1989, the year the defect was discovered. Counsel for the title insurance company contests the request for $280,000 compensation sought by Dr. Barthels for his personal devotion to this matter. The Court has considerable difficulty with both the 1400 hours requested and the rate of compensation predicated upon the rate charged by a dentist for
professional work.

The Court will not allow compensation at all for the years 1977, 1978, 1980, and part of 1983. The figures are too vague and appear to involve either conceptual matters or work unrelated to the loss (such as the survey of the North Property Line and the discussion of alternative plans). Indeed, during 1983 apparently only 12 hours were devoted to the requirements of public entities, as distinguished from miscellaneous matters.

1984, 1985, and 1986 follow similar patterns; for instance, the visit to a Montecito remodel does not have vital significance, and the submission of notice regarding trespassers has nothing to do with this case. Nor do discussions with regard to construction financing. Overall, an allowance of 12 hours would be generous.

The specific project began to get under way in 1987. Although 122 hours were claimed, these estimates appear to be inflated. A large proportion of the time appears to be devoted to personal matters, as distinguished from work undertaken to avoid hiring others. An allowance of 26 hours is again generous.

The request for 152 hours in 1988 follows similar patterns. While it was necessary to attend meetings regarding water allocation, rather than hiring an agent, the Pederson incident involving the police has nothing to do with the case. Likewise, the time devoted to discussions with professionals is excessive. An allowance of 45 hours is appropriate.

The easement problem was discovered in June, 1989. Using the same criteria, 65 hours of effort can be deemed compensable until the problem was identified.

Having found that 150 hours represent time expended which avoided the need to hire others, what is the appropriate rate of compensation? The plaintiff is entitled to compensation at his billing rate as a dentist. Although he rescheduled patients, he did not do so.

One way of testing the rate of compensation is to compare the out of pocket costs incurred in 1988 and the first part of 1989, which total approximately $10,700. Would Dr. Barthels be allowed 136 hours at the rate of even $100 an hour, or a total of $13,600, because he minimized out of pocket expenditures by personally attending meetings and talking with city officials? That makes no sense!

Having no evidence of comparable professional rates, the Court is at a considerable disadvantage. Nevertheless, the Court will assume that a much fairer figure than $100 per hour for comparable services is two thirds of that rate. Hence, for the 150 hours, $10,000 is awarded.

Judgment will be entered in this action for abstractors negligence alone a total of $31,524.40. As this sum was not determinable until trial, no interest is awarded.

Mr. Lindsey is invited to submit an appropriate Judgment and to give notice.

BARTHELS v. SB TITLE, 186256, April 19, 1993

KENNETH A. PETTIT, County Clerk, by ___________, Deputy

Copy to James T. Lindsey, via Will Call

PLMCMV (Rev. 10/92)  Civil Minutes  00277  Page 2
Via e-mail: kkennedy@santabarbaraca.gov

Ms. Kathleen Kennedy, Associate Planner
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Re: Barthels Residence, Access Easement
1837 ½ Camino de la Luz, Santa Barbara, California

Dear Kathleen:

Hollister & Brace, in conjunction with RRM Design Group, have been retained by Dr. Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985 (the "Applicant") in connection with the 1837 ½ El Camino de la Luz residential project (the "Project").

This letter will provide some early comments on the Project’s Second Revised Draft Environmental Impact Report ("DEIR") as well as provide the additional information you requested regarding the legal status of the easements that provide access to the Applicant’s property at the above referenced address.

The DEIR states as follows regarding Transportation/Circulation:

“The proposed project would have the potential to result in a significant vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. To resolve this issue and reduce potential access-related impacts to a less than significant level, Revised Initial Study mitigation measure T-1 requires the project parcel owner to provide the City with satisfactory evidence that ‘the required amount of legal access that formed the basis for the original lot split’ is available to serve the project.” DEIR, Section 9.1.4, p. 9-8.
And, Table 2.3-1 proposes the following Mitigation Measure:

"T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split." DEIR, p. 2-11.

There is no evidence to support the DEIR's conclusion that "the legal adequacy of the driveway provided to the project site has been disputed" nor that the "proposed project would have, the potential to result in a significant vehicle access-related impact." In fact, as appears more fully below, the evidence proves the contrary.

In 2007 and 2008 Rafael Franco and some of the other residents of the subject stretch of El Camino de la Luz denied the City's retained geologist, Dr. Anikouchine, access to the Barthels property for the purpose of performing certain geological investigations which Mr. Franco and said other residents had demanded be performed. As a result, Dr. Barthels' attorneys, Hollister & Brace, filed a legal action on Dr. Barthels' behalf against Mr. Franco and said other residents of El Camino de la Luz, being Santa Barbara Superior Case No. 1268293, in order to perfect Dr. Barthels' legal easement rights. As the City's Staff Report of September 8, 2009 correctly stated, the Santa Barbara Superior Court entered its Judgment on September 8, 2009 in said Case that Dr. Barthels has access easements varying in width from 7.5 feet to 15 feet in width along the subject stretch of El Camino de la Luz.

The Superior Court's stipulated access order of September 9, 2009 entered in said Case provides that Mr. Franco and the other named defendants in the lawsuit:

"(a) Shall not block, impede or limit access to the Benefitted Property over the Bound Properties to the full width of the Access Easement as described in Exhibits "A" and "B."

(b) Shall sign any paperwork required by government agencies relating to or confirming access rights, as long as the paperwork accurately describes all easement terms.

(c) Shall provide access to City staff or other authorized persons who need access to address or handle a pending application of Benefitted Owner."

and also provides as follows:

"7. NOTICE TO ANY PEACE OFFICER: You may accept a copy of this Order, and are instructed to implement it if so requested by any party, on the conditions stated. You are authorized to order Bound
Party to comply with the Order, to tow any blocking vehicles or item blocking access, or to otherwise enforce this Order, subject to further instructions of the Court.

"8. NOTICE TO BOUND PARTIES: Failure to comply with this Order shall subject you to further Orders of the Court, and the costs of any proceeding to enforce this Order."

The Superior Court’s Judgment is final and binding and no appeal therefrom is possible.

The Conditional Certificate of Compliance issued by the City of Santa Barbara for the subject legal parcel and recorded December 8, 1999 as Instrument No. 99-0095608 provides that the owner of said parcel must:

"Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."

Evidence presented to the City of Santa Barbara by the Applicant’s surveyors, land use agents, and attorneys over the past eleven years demonstrates that the existing width of the road accessway to the subject parcel, which generally ranges from 9 feet to 15 feet (except for the 7.5 pinch point) is in substantial conformity with the width of the road access shown on the 1958 Lot Split Map. Moreover, City Fire Department representatives have consistently opined over the past eleven years that the width of the road access way is sufficient to provide adequate and safe access, including fire protection access to the parcel.

Based upon all of the foregoing, the subject parcel has legal access and such access substantially conforms to the access approved on the 1958 Lot Split Map. And, there is no necessity for proposed Mitigation Measure T-1. Further, there is no evidence whatsoever that the “proposed project would have the potential to result in a significant vehicle access-related impact” because the Applicant’s legal access easements over the subject stretch of El Camino de la Luz have been conclusively judicially determined to exist and are legally enforceable. Hence, no land use nor CEQA issue is presented which requires mitigation.

We are providing the following exhibits below, for your reference:

A. Aerial view showing location of the easement
B. Parcel Map
C. Legal Access Exhibit per Title Report
D. Larger Scale Map Legal Access Exhibit per Title Report
E. Establishment of Legal Access (narrative)
We trust that this information provides you with the documentation needed to show that the Applicant has a legally established easement that provides adequate access to his property for the purpose of developing the proposed residence.

Please let us know if we can be of further assistance.

Very truly yours,

HOLLISTER & BRACE

By:  

Richard C. Monk

RRM DESIGN GROUP

By:  

Detlev Peikert, AIA, LEED
AP BD+C
Principal
CA License No. C15008

RCM: crr
Enclosures: Exhibits A-E

cc:  Dr. Herb Barthels
     N. Scott Vincent, Deputy City Attorney
Councilman Callahan moved seconded by Councilman Clemens that the Council find that there is good and sufficient reason connected with the health, safety and welfare of the area to continue this request until the next meeting of the Council and suggest that every Councilman inspect this property to determine what is being requested and report on same. Roll Call: Affirmative Council All.

Councilman Callahan was excused from the Council Chambers at this time.

Recommendation from the City Planning Commission was presented as follows:

"Subject: Recommendation for relocation of pedestrian easement in Island View Heights Subdivision.

Recommendation: Approval of relocation of pedestrian easement as shown on map attached, to be located along the boundary line dividing new lots 35 and 37.

Discussion: Thomas J. Pleman, developer of Island View Heights Subdivision, appeared before the City Planning Commission on May 20, 1958, with a request that lot 36 thereof be split, dividing the area equally between adjoining lots 35 and 37. This request was brought about by a change in location of the top of the slope behind lots 35, 36 and 37, so that the crest of the slope is 15 ft. closer to Island View Drive than anticipated, making the building pads for these lots 15 ft. narrower. It was stated that this was a result of City Council disapproval of a proposed encroachment of the toe of the slope onto the Weigs Road right-of-way.

Because this voluntary elimination of one lot (lot 36), will permit the creation and development of two improved building sites, for which new building plans must be developed, the Planning Commission voted to approve this request. This was done on the Commission's authority to approve reasonable adjustments of lot lines without going through the procedures outlined in City Zoning Ordinance No. 2585, and on the specific opinion of the City Attorney that this procedure was applicable in this particular instance because of the resulting improvement in lot development, and the fact that no new lot would be created.

However, because of this elimination of lot 36, it is necessary to relocate the existing approved 10 ft. pedestrian easement, formerly located between lots 36 and 37. Accordingly, the Commission hereby recommends to City Council that this easement now be relocated along the new boundary line between lots 35 and 37, as shown on the attached map.

Councilman Clemens inquired how this could be done. The Chief Administrative Officer explained that since the final map of Island View Heights has been filed, he thought it would be necessary to abandon the first easement, and then accept the deed for the relocation of the pedestrian easement.

The City Attorney stated that the subdivider handed him a deed for the substitute easement, as well as a Resolution abandoning the former easement.

"RESOLUTION NO. 3471
RESOLUTION ABANDONING 10 FOOT PEDESTRIAN EASEMENT LYING BETWEEN LOTS 36 AND 37 OF ISLAND VIEW HEIGHTS NO. 2."

was presented and read in full. Councilman Clemens moved seconded by Councilman Deloreto that the Council adopt Resolution No. 3471. Roll Call: Affirmative Council All.

Deed for a pedestrian walkway along the revised boundary line dividing lots 35 and 37 in Island View Heights Subdivision and signed by Thomas J. Pleman and Joseph DuBrow, partners in Island View Heights, was presented and ordered accepted by adoption of Resolution No. 3472 on motion of Councilman Deloreto seconded by Councilman Clemens. Roll Call: Affirmative Council All.

Councilman Callahan returned to the Council Chambers at this time.

Recommendation from the City Planning Commission was presented as follows:

"Subject: Request of Mrs. Fred O. Eaton, Sr., to divide into two parcels lots 77 and 111, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2486. The existing 15 ft. driveway easement which now serves this dwelling also provides access to three additional adjoining parcels. See attached plot plan showing dwellings served off El Camino de la Luz.

CALLAHAN LEAVES
RELOCATION OF PEDESTRIAN EASEMENT IN ISLAND VIEW HTS SUBDIV.
RES.3471 ABANDONING PREVIOUS EASEMENT & RESO.
3472 ACCEPTING NEW EASEMENT.

CALLAHAN RETURNS

GRANT LOT SPLIT
REQ OF MRS.FRED EATON AT 1837.
111 CAMINO DE LA LUZ.

"RESOLUTION NO. 3471
RESOLUTION ABANDONING 10 FOOT PEDESTRIAN EASEMENT LYING BETWEEN LOTS 36 AND 37 OF ISLAND VIEW HEIGHTS NO. 2."

was presented and read in full. Councilman Clemens moved seconded by Councilman Deloreto that the Council adopt Resolution No. 3471. Roll Call: Affirmative Council All.

Deed for a pedestrian walkway along the revised boundary line dividing lots 35 and 37 in Island View Heights Subdivision and signed by Thomas J. Pleman and Joseph DuBrow, partners in Island View Heights, was presented and ordered accepted by adoption of Resolution No. 3472 on motion of Councilman Deloreto seconded by Councilman Clemens. Roll Call: Affirmative Council All.

Councilman Callahan returned to the Council Chambers at this time.
Discussion: As seen on attached plot plan, two private easements onto 11 Camino de la Lus from the cul-de-sac. 10 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan. Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one-way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards."

Mrs. Fred Eaton was present and explained that according to actual measurement the easement is 17 feet, and in the past year a number of lots have been split in the neighborhood and they have all been served by an average 15 foot driveway.

The City Planning Director explained that the small map showed the number of parcels to be served by this easement, and reported that because of the location of the Eaton house it is not possible to widen the easement. He suggested that a possible solution might be to tie the two easements together and allow one-way traffic on one, but added that this would not meet ordinance requirements, but it would be less hazardous than the proposal as submitted.

Mrs. Eaton explained that tying the two easements together would mean that the driveway would come within five feet of the Wardell front door, which would not comply with any City Ordinance.

The Planning Director pointed out that City standards require a 50 foot right of way.

Mrs. Eaton explained that there are six and seven cars parked in the driveway easement for the lot splits granted to the west of her property.

In response to a question the City Planning Director stated that if this property were located in a multiple family zone, a 15 foot driveway could serve an unlimited number of families.

Acting Mayor Crowell inquired whether the Council used this ordinance to block developments of this kind in other areas. The City Planning Director stated that it has been done, except that it is not too frequently used when there is only a possibility for one more lot split. He explained that Ordinance No. 2488 covers not the number of units involved but the number of parcels served by a private driveway.

Councilman Clemens suggested returning this request to the Planning Commission with a request that the provisions of the ordinance be studied.

Acting Mayor Crowell stated that you can't do this except to request a recommendation for the revision of the ordinance.

The City Planning Director stated that several of the neighbors wrote letters to the Planning Commission urging approval of the requested division of property, and the granting of a variance in this case.

Councilman Wilson moved seconded by Councilman Clemens that the Council approve the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lot 77 and 111, located at 1837 El Camino de la Lus, as submitted by the applicant.

The Planning Director stated that the Planning Commission feels that its authority does not extend to this particular ordinance.

Mrs. Eaton explained that Mr. and Mrs. Skofield have no objection to granting the request and that in her discussion with other neighbors in the area she has not heard any objections raised.

Roll Call: Affirmative Council All.

Grant Deed from Antonio and Serafina Montecarlo for lots 13 and 19, Block E of La Goleta Ranch, also known as Fairfield, was presented in connection with acquisition of a clear zone for the Municipal Airport.

Councilman DeLorio moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3464. Roll Call: Affirmative Council All.

Grant Deed from Justo L. and Inocencia Martinez for Lot 18, Block F of La Goleta Ranch, also known as Fairfield, was presented in connection with the acquisition of a clear zone for the Municipal Airport.

Councilman DeLorio moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3465. Roll Call: Affirmative Council All.

Councilman Clemens was excused from the Council Chambers at this time.
EXHIBIT M
CITY PLANNING OFFICE  
May 26, 1958

TO:        MAYOR AND CITY COUNCIL
FROM:      City Planning Commission
SUBJECT:   Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels Lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2488. The existing 15 ft. driveway easement which now serves this dwelling also provides access to three additional adjoining parcels. See attached plot plan showing dwellings served off El Camino de la Luz cul-de-sac.

Discussion: As seen on attached plot plan, two private easements enter El Camino de la Luz from the cul-de-sac; a 20 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan. Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one-way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards.

CITY PLANNING COMMISSION  
SANTA BARBARA, CALIFORNIA

[Signature]

Charles W. Washburn  
Planning Director

Attachment: PWD Report

C. Recommended for denial:

[Redacted text]
C. Recommended for denial:

1. Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels Lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Council granted the lot split request.
EXHIBIT O
June 27, 1989

Mr. H. Barthels
1809 Cliff Drive, Suite C
Santa Barbara, CA  93109

SUBJECT:  1837 1/2 EL CAMINO DE LA LUZ – COASTAL DEVELOPMENT

Dear Mr. Barthels:

To summarize your meeting on May 16, 1989 with Alex Ameri regarding the subject development, I have outlined the discussion. Included are the necessary items to complete your application for development for the Public Works Department and a partial list of the Public Works improvements.

1) Revised Access Drive Conditions drawing to reflect:
   - A 16' (minimum) paved access way (excluding removal of the house on A.P.N. #45-100-46)
   - Provide legend of markings on drawing
   - Identify utility poles in easement
   - Identify easement and centerline of access
   - Identify encroachments to be removed

2) Public Works Improvements – (Partial list which is not limited to the following):
   - Smoother transition driveway from El Camino De La Luz to access drive.
   - Undergrounding of utilities to new development
   - Repair of damage to public improvements (curb, gutter, and sidewalk, etc.)
   - Improvements to access drive as necessary for safe and adequate access.
Thank you for your time, effort and cooperation.

If you have any questions please call Marti Schultz, Assistant Civil Engineer at 564-5376.

Sincerely,

Kevin J. Connors
Associate Civil Engineer

MS/ts
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the Herbert E. Barthels Trust dated December 9, 1985,

Plaintiff,

vs.

RAFAEL FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
LINDA FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
BRUCE PETERSON, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003;
HORACE L. WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293

[PROPOSED] STIPULATED JUDGMENT

Assigned to the Hon. Thomas P. Anderele

STIPULATED JUDGMENT
In the above entitled case, Plaintiff is Herbert E. Barthels, Trustee of the Herbert E.
Barthels Trust dated December 9, 1985, (hereinafter referred to as “Plaintiff”). Defendants and
their respective properties are:

1. Rafael Franco, as an individual and as trustee of the Franco Revocable Trust No.
1, established June 30, 1999; Linda Franco, as an individual and as trustee of the Franco
Revocable Trust No. 1, established June 30, 1999, owner of APN 45-100-18 (“the Franco
Parcel”), whose legal description is more fully provided in Exhibit “A”;

2. Bruce Peterson, an individual and as trustee for the Bruce F. Peterson Revocable
Living Trust, U/D/T dated April 21, 2003 owner of APN 45-100-64 (“the Peterson Parcel”),
whose legal description is more fully provided in Exhibit “B”;

3. Horace L. Wright, as an individual and as trustee of the Horace L. & Jerry Lu
Living Trust, UTD, February 18, 1999; Jerry Lu Wright, as an individual and as trustee of the
Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999 owner of APN 45-100-17 (“the
Wright Parcel”), whose legal description is more fully provided in Exhibit “C”;

4. Thomas Sloan, an individual and Tine F. Sloan, an individual, and each of them,
owners of APN 45-100-45 (“the Sloan Parcel”), whose legal description is more fully provided
in Exhibit “D.”

Plaintiff and Defendants have stipulated that judgment be entered granting Plaintiff, the
owner of the real property commonly known as APN 45-100-65 and more particularly described
in the legal description attached hereto as Exhibit “E” (the “Dominant Tenement”) easements
and rights of way for road and public utility purposes (“the Easement”) to be used in common
with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over
portions of the Blanco E. Fryer Tract including Defendants' real properties. The Easement being
more particularly described in the legal description attached hereto as Exhibit “F” and in the
Exhibit map attached hereto as Exhibit “G”. These easements are appurtenant and run with the
land. They may not be transferred separately from their respective properties.
The portion of the road and utility easements that passes over each of these properties is:

(a) No wider than 7.5 feet on the Wright Property, and no wider than 7.5 feet on the Sloan Property, which when these two properties border each other the combined width does not exceed 15 feet, except for the area shown as Camino De Luz on the Record of Survey filed in Book 28, Page 124 of Record of Surveys, where the easement width shall include said Camino De Luz;

(b) No wider than 7.5 feet on the Franco Property, and no wider than 7.5 feet on the Sloan property, which when those two properties border each other the combined width does not exceed 15 feet, except that on the southern 7.14 feet of the Franco Property, the total road width does not exceed 7.5 feet.

(c) No wider than 10 feet on the Peterson Property.

(d) Any other access rights in favor of Barthels over Defendants’ parcels are deemed abandoned.

There currently exists in the Easement over Defendants’ parcels certain minor encroachments, which are permitted, and may not be further improved or enlarged. These encroachments are: (1) a portion of a wall on the Franco Property; (2) a planter on the Wright Property; and (3) a planter and landscaping on the Sloan Property.

IT IS HEREBY ADJUDGED, ORDERED AND DECREEd that judgment be entered granting Plaintiff, Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, the owner of the property commonly known as APN 45-100-65, easements and rights of way for road and public utility purposes to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants’ real properties. The Easement is more particularly described in the legal description attached hereto as Exhibit “F” and in the Exhibit map attached hereto as Exhibit “G”. The Easement shall run with the land.

THOMAS P. ANDERLE

Dated: September 4, 2009

The Hon. Thomas P. Anderle
JUDGE OF THE SUPERIOR COURT
Counsel for Plaintiff and cross-defendant, counsel for Defendants and cross-complainants stipulate to the foregoing judgment.

Dated: September 3, 2009

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Plaintiff and Cross-Defendant.

Dated: September 3, 2009

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnusson,
Counsel for Defendants and Cross-Complainants.
TRUST TRANSFER DEED

The undersigned grantor(s) declare(s):

( ) constituted as a legal entity, or
( ) constituted as an individual

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged

RAFAEL FRANCO and LINDA LLOYD FRANCO, husband and wife,

broadly GRANTOR to

RAFAEL FRANCO and LINDA L. FRANCO, Trustees of the FRANCO REVOCABLE TRUST NO. 1

established June 30, 1999,

the following described real property in the City of Santa Barbara, County of Santa Barbara, State of California:

LEGAL DESCRIPTION ATTACHED HERETO ON EXHIBIT "A" AND MADE A PART HEREOF.

Also commonly known as 1225 El Camino de la Luz, Santa Barbara, CA 93109

Dated: June 30, 1999

RAFAEL FRANCO

Dated: June 30, 1999

LINDA LLOYD FRANCO

STATE OF CALIFORNIA
COUNTY OF VENTURA

On June 30, 1999, CHEERY M. HALL, a Notary Public, personally appeared RAFAEL FRANCO and LINDA LLOYD FRANCO, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose signatures are subscribed to the within instrument and acknowledged to me that they executed the same in their respective capacities, and that by their signatures on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature: 

Mail Tax Statement to:

CHERYL M. HALL
1225 El Camino de la Luz
Santa Barbara, CA 93109
EXHIBIT "A"

All that certain land situated in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

PARCEL ONE:

That portion of the Outside Pueblo Lands of the City of Santa Barbara, on La Salle (so-called) in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a ¾ inch survey pipe set at the most Northwesternly corner of the tract of land described in the Deed from Carina Prieto, et al., to C.L. Vivian, dated September 7, 1944, and recorded in Book 619, Page 147 of Official Records, records of said County, thence South 5°14' West along the Westernly line of said C.L. Vivian Tract of land 175.74 feet to its intersection with the center line of a fifty foot road; thence along the center line of said fifty foot road, South 74°18' East, 526.23 feet to a point; thence at right angles South 10°27' West 25.00 feet to a ¾ inch survey pipe set on the Southerly line of said fifty foot road; thence along the Southerly line of said road South 34°38' East 93.17 feet to a ¾ inch survey pipe set on the center line of a fifty foot road Eastment; thence along the center line of said 15 foot road Eastment South 5°16' West 35.61 feet to a ¾ inch survey pipe and the true point of beginning of the tract of land herein described; thence continuing along the center line of said 15 foot road Eastment South 5°16' West 55.00 feet to a ¾ inch survey pipe; thence at right angles and leaving the center line of said last mentioned road Eastment South 34°44' East 151.43 feet to a ¾ inch survey pipe in a ravine; thence along the ravine of the tract of land described in Deed to C.L. Vivian, above mentioned, from which ¾ inch survey pipe set at an angle point in said Eastern line of said C.L. Vivian Tract thereon 10°25' North 12.54 feet distant, thence up said ravine along the Eastern line of said last mentioned tract of land North 18°25' East 56.48 feet to a ¾ inch survey pipe; thence leaving said ravine, North 34°44' West 164.28 feet to the true point of beginning.

PARCEL TWO:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon or through a strip of land described as follows:

Beginning at the Northwest corner of Parcel One above described and running thence along the Westernly line of said Parcel One, and the center line of the 15 foot Eastment mentioned in said Parcel One above, South 5°16' West 55.00 feet to a ¾ inch survey pipe; thence at right angles South 84°44' East 7.50 feet to a ¾ inch survey pipe set on the Easternly line of said 15 foot Eastment above mentioned; thence at right angles and along the Easternly line of said 15 foot Eastment South 5°16' West 15.00 feet to a point; thence at right angles North 84°44' West 15.00 feet to a point on the Westernly line of said Eastment; thence at right angles and along the Westernly line of said Eastment North 5°16' East 114.69 feet to a point; thence North 31°38' West 93.17 feet to a ¾ inch survey pipe set on the Southernly line of the 50 foot road first above mentioned in Parcel One; thence North 10°27' East 25.00 feet to a point on the center line of said 50 foot road; thence North 11°16'50" East 25.00 feet to a ¾ inch survey pipe set on the Northernly line of said 50 foot road; thence along said Northernly line of said road South 77°28'20" East 82.50 feet to a point; thence South 5°16' West 149.27 feet to a ¾ inch survey pipe set on the Northernly line of Parcel One above described; thence at right angles and along the Northernly line of said Parcel One North 64°44'West 7.50 feet to the point of beginning.
EXHIBIT "A"

(PARCEL THREE)

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon or through a strip of land 50 feet in width lying 25 feet on each side of the following described lines:

Beginning at the Northerly end of the course described in Parcel Two above as North 10° 22' East 25.00 feet; being a point in the center line of the 50 foot road above referred to; thence North 79° 18' West along the center line of said 50 foot road, 582.23 feet to a point on the Westerly line of the tract of land described in said deed to C.L. Wisham above mentioned, from which the Northwesterly corner thereof bears North 51° 16' East 175.71 feet distant; thence North 79° 18' West continuing along the center line of said 50 foot road above mentioned 446.81 feet to a point on the Easterly line of Oliver Road.

The property herein described is shown together with other property on a Map of Survey filed in the office of the County Recorder of said County on October 14, 1948 as Instrument No. 14629 in Book 29, Page 25.
GRANT DEED

THE UNDERSIGNED GRANTOR(S) DECLARE(S)

DOCUMENTARY TRANSFER TAX IS $0. Conveyance into Trust for benefit of Grantor
☐ Computed on full value of property conveyed, or
☐ Computed on full value less liens or encumbrances remaining at time of sale
☐ Unincorporated area ☐ City of Santa Barbara

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged

hereby GRANT(S) to

Bruce F. Peterson, a married man, dealing with his sole and separate property
hereby GRANT(S) to

Bruce F. Peterson, Trustee of the Bruce F. Peterson Revocable Living Trust U/D/T dated April 21, 2003

the following described real property in the City of Santa Barbara, County of Santa Barbara, State of California:

LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A".

Dated: April 21, 2003

Bruce F. Peterson

STATE OF CALIFORNIA

COUNTY OF SANTA BARBARA

On this 21st day of April, 2003, before me, the undersigned, a Notary in and for said County and State, personally appeared Bruce F. Peterson, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged that he executed the same in his authorized capacity and that by his signature on the instrument the person or the entity on behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Ellen Owens

© America's Documents LDA #0013, Santa Barbara County
DESCRIPTION:

PARCEL ONE:

That portion of the land in the City of Santa Barbara, County of Santa Barbara, State of California described in Quitclaim Deed to Gertrude E. Eaton, recorded July 17, 1962 as Instrument No. 29640 in Book 1911, Page 1400 of Official Records of said County, described as follows:

Beginning at a point in the Westerly line of said Eaton Tract distant thereon South 05°16'00" West 145.77 feet from the Northwest corner thereof, being the Northwest corner of the land described in Parcel One in deed to Ed R. Brewer, et ux., recorded November 29, 1958 as Instrument No. 37841 in Book 2177, Page 78 of Official Records of said County; thence along the Westerly line of said Eaton Tract North 03°16'00" East 145.77 feet to the Northwest corner thereof; thence along the boundary of said Eaton Tract the following courses and distances: South 84°44'00" East 151.43 feet; South 18°25' West 12.54 feet; South 32°31' East 57.76 feet; South 31°32' West 43.00 feet; and South 38°33' West 43.34 feet to the Northeast corner of the hereinafter mentioned Brewer Tract; thence along the Northerly line of said Brewer Tract North 84°44' West 113.35 feet to the point of beginning.

Said land is shown with other land on Map recorded in Book 49, Page 44 of Records of Surveys of said County.

PARCEL TWO:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de Luz as shown on a Map of Survey of the Blanco F. Fryer Tract, filed in Book 28, Page 124 of Record of Surveys, in the office of the County Recorder of Santa Barbara County.

EXCEPTING therefrom that portion described in the deed to the City of Santa Barbara, recorded September 13, 1954 as Instrument No. 18762 in Book 1267, Page 156 of Official Records of Santa Barbara County.

PARCEL THREE:

An easement and right of way for road and utility purposes of a strip of land 13.00 feet in width, the center line being described as follows:

Beginning at the Northwest corner of the hereinafter described Parcel One; thence North 05°16' East 205.18 feet to a 1/2 inch steel pipe set at the extreme Eastern and of the Northerly line of said El Camino de Luz as shown on a Map of Survey of the Blanco F. Fryer Tract, filed in Book 28, Page 124 of Record of Surveys, in the office of the County Recorder of Santa Barbara County.

EXCEPTING therefrom any portion included within the lines of Parcel Two hereinafter described.

PARCEL FOUR:

An easement for walk, walkway and path for the purposes of access to and from beach below, over the Westerly 3 feet of the land described as Parcel One in the deed to Ed R. Brewer, et ux., recorded November 29, 1968 as Instrument No. 37841 in Book 2177, Page 785 of Official Records of Santa Barbara County.
correcting quitclaim deed

this document is to correct the quitclaim deed recorded on february 23, 1999, as instrument no. 99-013326.

the following is the correct information:

for a valuable consideration, receipt of which is hereby acknowledged, horace l. wright and jerry lu wright, husband and wife, as community property,

hereby grant to the horace l. wright and jerry lu wright living trust, utd, february 18, 1999, horace l. wright and jerry lu wright, trustees,

the real property in the county of santa barbara, state of california, described as:

legal description per exhibit "a" attached hereto and made a part hereof:

with all appurtenances, subject to covenants, easements and restrictions of record.

commonly known as: 1833 el camino de la luz, santa barbara, ca 93109

dated: may 18, 1999

[signature]

horace l. wright

dated: may 18, 1999

[signature]

jerry lu wright

mail tax statement as shown above.
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Santa Barbara

On 5/18/99 before me, SAWE DAWMPT, Notary Public
personally appeared HERAC L. WEIGT, Sex: M, Weight: 200 lbs.

[Signature]

Date: 5/18/99

WITNESS my hand and official seal.

[Notary Public]

OPTIONAL

[Information about attached document]

Description of Attached Document: \textit{Connecting Quitclaim Deed}

Date: 5/18/99

Number of Pages: 2

[Signature]

None

Capacity(ies) Claimed by Signer:

[Signer's Name]

Individual

Corporate Officer — Title:

Partner — Limited

Attorney in Fact

Trustee

Guardian or Conservator

Other:

[Signature is Not Representing]
EXHIBIT A

THOSE PORTIONS OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:
BEGINNING AT A 3/4 INCH SURVEY PIPE SET ON THE MOST NORTHWESTERN CORNER OF THE TRACT OF LAND DESCRIBED IN THE DEED TO C. L. VIVIAN FROM CARROLL FAYE AND ROBERT S. ROBERT, DATED SEPTEMBER 19, 1944, AND RECORDED IN BOOK 191 AT PAGE 141 OF OFFICIAL RECORDS; THEN SOUTH 5° 18' WEST ALONG THE WESTERN LINE OF THE SAID C. L. VIVIAN TRACT 150.63 FEET TO A 3/4 INCH SURVEY PIPE SET ON THE NORTHWESTERLY SIDE OF A 50 FOOT ROAD EASEMENT, KNOWN AS EL CAMINO DE LUX; THENCE SOUTH 79° 38' EAST ALONG THE NORTHWESTERLY LINE OF SAID EL CAMINO DE LUX 564.86 FEET TO A 3/4 INCH SURVEY PIPE SET AT AN ANGLE POINT; THENCE SOUTH 77° 48' 10" EAST CONTINUING ALONG THE NORTHWESTERLY LINE OF SAID EL CAMINO DE LUX 55.34 FEET TO A 3/4 INCH SURVEY PIPE SET AT THE MOST NORTHWESTERN CORNER OF THE SAID 50 FOOT ROAD EASEMENT AND THE TRUE POINT OF BEGINNING OF THE TRACT OF LAND HEREBY DESCRIBED, USING NORTHWEST CORNER OF THE TRACT OF LAND DESCRIBED IN DEED TO A. L. KENNEL, ET UX., RECORDED DECEMBER 10, 1947 IN BOOK 762 AT PAGE 334 OF OFFICIAL RECORDS; THENCE 1ST, SOUTH 77° 48' 10" EAST ALONG THE NORTHWESTERLY LINE OF SAID EL CAMINO DE LUX PRODUCED EASTERLY 70.94 FEET, MORE OR LESS, TO A 3/4 INCH SURVEY Pipe SET IN A RAVINE, BEING A POINT IN THE EASTERN LINE OF THE TRACT OF LAND DESCRIBED IN DEED TO C. L. VIVIAN ABOVE MENTIONED; THENCE 2ND, SOUTH 40° 45' EAST, 75 FEET General Course OF SAID RAVINE, ALONG THE EASTERN LINE OF SAID VIVIAN TRACT OF LAND, 23.96 FEET TO A 3/4 INCH SURVEY PIPE; THENCE 3RD, SOUTH 39° 16' EAST, 70 FEET AND 9 INCHES, ALONG THE EASTERN LINE OF SAID VIVIAN TRACT OF LAND, 71.92 FEET TO A 1/2 INCH SURVEY PIPE; THENCE 4TH, SOUTH 18° 55' WEST, 60 FEET AND 9 INCHES, ALONG SAID RAVINE, ALONG THE EASTERN LINE OF SAID VIVIAN TRACT OF LAND, 90.91 FEET TO A 3/4 INCH SURVEY PIPE, SET AT THE MOST SOUTHEASTERLY CORNER OF THE TRACT OF LAND DESCRIBED IN DEED TO A. L. KENNEL, ET UX., RECORDED JULY 31, 1946, IN BOOK 195 AT PAGE 135 OF OFFICIAL RECORDS; THENCE 1ST, NORTH 84° 19' WEST LEAVING SAID RAVINE AND FOLLOWING ALONG THE NORTHWESTERLY LINE OF SAID KENNEL TRACT OF LAND 164.28 FEET TO A POINT ON THE CENTER LINE OF A 15 FOOT PRIVATE ROAD EASEMENT FROM WHICH A 1/2 INCH SURVEY PIPE SET OF THE EASTERN SIDE OF SAID EASEMENT BEARS SOUTH 4° 44' EAST, 77.50 FEET DISTANT, ALSO BEING THE EASTERN LINE OF SAID TRACT OF LAND DESCRIBED IN SAID DEED TO A. L. KENNEL, ET UX., RECORDED DECEMBER 10, 1947, IN BOOK 762 AT PAGE 334 OF OFFICIAL RECORDS; THENCE 2ND, NORTH 5° 26' EAST, RIGHT ANGLES FOLLOWING ALONG THE CENTERLINE OF SAID ROAD EASEMENT AND THE EASTERN LINE OF SAID LAST MENTIONED TRACT OF LAND 150.18 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL TWO:

AN EASEMENT FOR INGRESS AND EGRESS AND THE INSTALLATION, MAINTENANCE, AND REPAIR OF PUBLIC UTILITIES IN, ON, OVER, UNDER, OR UPON EL CAMINO DE LUX, AS SHOWN ON MAP OF THE BLANCO G. FAYE TRACT FILED IN BOOK 28 AT PAGE 126 OF RECORDS OF SURVEYS.
QUITCLAIM DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Thomas C. Sloan, and Time F. Sloan, husband and wife, as community property, as to an undivided 50% interest and Esther F. Sloan, an unmarried woman, as to an undivided 50% interest, all as tenants-in-common,
do hereby REMISE, RELEASE AND FOREVER QUITCLAIM to

THOMAS C. SLOAN and TIME F. SLOAN, husband and wife, as community property

the real property in the City of Santa Barbara
County of Santa Barbara, State of California, described as

SEE LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A".

Dated: October 6, 1993

THOMAS C. SLOAN
ESTHER F. SLOAN
TIME F. SLOAN

STATE OF CALIFORNIA
COUNTY OF SANTA BARBARA
On: October 6, 1993
Before me,
Catherine Ann Nevarez,
presiding officer.

r: 0 Comment:
DESCRIPTION:

All that certain land situated in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

PARCEL ONE:

That portion of the Outside Pueblo Lands of the City of Santa Barbara, on La Mesa so-called in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4 inch survey pipe set at the Northwesterly corner of the tract of land described in Deed to C.L. Vivian from Catalina Fryer and Robert S. Emmett, dated September 7, 1944, and recorded in Book 619 at Page 141 of Official Records of said County, thence South 5°16' West along the Westerly line of said C.L. Vivian property 113.74 feet to a point on the center line of a 50 foot road, thence South 79°38' East along the center line of said 50 foot road 560.00 feet to the true point of beginning of the tract of land herein described said corner being the Northeast corner of Parcel One described in Deed to Whitford G. Kelley et al., dated August 5, 1946 and recorded in Book 698, at Page 476 of Official Records of said County from which a 3/4 inch survey pipe set on the Southerly side of said 50 foot road bears South 3°16' West 25.11 feet distant thence South 5°16' West along the Easterly line of said Kelley Tract of land 180 feet, thence at right angles East 59.76 feet to the Easterly line of the Tract of land described in deed to A.L. Kienzle et al., recorded December 10, 1947 in Book 362 at Page 304 of Official Records, records of said County thence North 5°16' East parallel with the Easterly line of said Kelley Tract and distant 59.76 feet Easterly thence and along the Easterly line of said Kienzle Tract to the Northeast corner thereof being a point on the Southerly line of the Tract of land described as Parcel One deed to A.L. Kienzle et al., recorded in Book 377 at Page 416 of Official Records, records of said County, thence North 77°43'20" West, along the Southerly line of said last mentioned Kienzle Tract 54.94 feet thence South 12°11'40" West, continuing along the line of said last mentioned Kienzle Tract 23.00 feet to the center line of a 50 foot road, thence North 79°38' West along the center line of said 50 foot road 22.23 feet to the true point of beginning.

PARCEL TWO:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon the or through a strip of land 50 feet in width, lying 25 feet on each side of the following described line:

Continued...
Beginning at the Easterly end of the last course of Parcel One above described on the center line of the said 30 foot road, thence North 79°38' West 502.23 feet to a point on the Westerly line of said tract of land described in Deed to C.L. Vivian above referred to from which the most Northwesterly corner of same bears North 5°16' East 175.74 feet distant thence North 79°38' West, continuing along the center line of said road 446.83 feet to the Easterly line of Oliver Road.

PARCEL THREE:

A right of way for road purposes for the installation, maintenance and repair of public utilities as granted by deed recorded December 10, 1947 as Instrument No. 16515 in Book 762, Page 304 of Official Records over, under, upon or through a strip of land 7.50 feet in width lying parallel with adjacent to and Easterly of the following described line:

Beginning at the Northeast corner of the tract of land described in Deed to A.L. Kienze et al., filed for record December 10, 1947, in Book 762, at Page 304 of Official Records in the office of the County Recorder of said County thence South 5°16' West along the Easterly line of said Kienze Tract 205.18 feet.

PARCEL FOUR:

A non-exclusive easement for pedestrian ingress and egress, on and under over a strip of land 3 feet in width along the Westerly property line of that certain parcel of land described as follows:

That portion of the land in the County of Santa Barbara, State of California, described inQuitclaim Deed to Gertrude E. Eaton, recorded July 17, 1962, as Instrument No. 29640 in Book 1941, Page 1400 of Official Records of said County, described as follows:

Beginning at a point in the Westerly line of said Eaton Tract distant therefrom South 15°16'0" West 145.77 feet from the Northwest corner thereof, being the Northwest corner of the land described in Parcel 1 in deed to Ed R. Brewer, et al., recorded November 29, 1966, as Instrument No. 37841, in Book 2173, Page 765, of Official Records of said County; thence along the Westerly line of said Eaton Tract North 03°16'00" East 145.77 feet to the Northwest corner thereof; thence along the boundary of said Eaton Tract the following courses and distances; South 84°44'00" East 151.43 feet; South 18°25' West 12.54 feet; South 03°16' East 57.78 feet; South 31°32' West 43.00 feet; and South 38°33' West 45.34 feet to the Northeast corner of the hereinabove mentioned Brewer Tract North 84°44' West 111.35 feet to the point of beginning.
STATE OF OREGON,

County of Lane

RE IT REMEMBERED, That on this 18th day of October, 1993,

before me, the undersigned, a Notary Public in and for said County and State, personally appeared the within named

Esther F. Sloan

known to me to be the individual described in and who executed the within instrument and acknowledged to me that she executed the same freely and voluntarily.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

My Commission expires 2-2-97

Notary Public for Oregon

Official Seal

[Stamp]
STATE OF CALIFORNIA  
COUNTY OF Santa Barbara  

On 10-22-93  before me, Catherine Ann Nevers,  
personally appeared, **Tina F. Sloan**  

 swore to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and as acknowledged to me that the person(s) executing the same on behalf of which the person(s) appeared, executed the instrument.

WITNESS _____________________________
______________________________

Catherine Ann Nevers  
Notary Public in and for the County of Santa Barbara, State of California  
(Seal)  

Notary Public  
(Signature)  

Notary Public  
(Seal)  

(Signature)  

(Signature)
Trust Transfer Deed

The undersigned Grantor(s) execute this instrument by virtue of the power of attorney given to me by Herbert E. Barthels, as Trustee of the Herbert E. Barthels Trust dated December 9, 1985.

The following described real property in the County of Santa Barbara, State of California:

Per legal description attached hereto and made a part hereof.

Grantor(s): HERBERT E. BARTHELS, an unmarried man

Herbert E. Barthels, as Trustee of the HERBERT E. BARTHELS TRUST dated December 9, 1985.

State of California
County of Santa Barbara

On this the 9th day of December, 1985,

before me, Robert A. Barthels, Notary Public, personally appeared

HERBERT E. BARTHELS, known to me to be the person whose name appears on the face of the instrument, acknowledged the execution of the instrument.

This instrument was acknowledged on this 9th day of December, 1985.

Notary Signature

EXHIBIT E
LEGAL DESCRIPTION

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:
BEGINNING AT A 3/8 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREMELY EASTERN END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONATION OF THE EASTERN LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 3°16' WEST 350.93 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 3°16' WEST 120.02 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 127.46 FEET TO A POINT; THENCE NORTH 49°26' EAST 30.38 FEET TO A 3/8 INCH SURVEY PIPE; THENCE NORTH 22°07' WEST 37.85 FEET TO A 3/8 INCH SURVEY PIPE; THENCE NORTH 59°01' WEST 51.20 FEET TO A 3/8 INCH SURVEY PIPE; THENCE NORTH 59°33' EAST 17.16 FEET TO A 3/8 INCH SURVEY PIPE; THENCE NORTH 87°44' WEST 113.33 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME HAS TIDE LAND, WHICH HAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

PARCEL TWO:
AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, OVER SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP OF THE BLANCO E. FRYER TRACT, ABOVE REFERRED TO.

PARCEL THREE:
AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 15 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE TRUE POINT OF BEGINNING OF THE PARCEL ONE HEREIN-ABOVE DESCRIBED; THENCE NORTH 87°31' EAST 350.93 FEET TO SAID 3/8 INCH SURVEY PIPE SET AT THE EXTREMELY EASTERN END OF THE NORTHERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP.

PARCEL FOUR:
AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 2 1/2 FEET IN WIDTH, THE EASTERN LINE OF SAID 2 1/2 FOOT STRIP BEING A PARALLEL TO AND 2 1/2 FEET EASTERLY OF THE EASTERN LINE OF THE EASEMENT AND RIGHT OF WAY DESCRIBED AS PARCEL THREE ABOVE; THE SOUTHERLY TERMINUS OF SAID 2 1/2 FOOT STRIP BEING THE NORTHERLY LINE OF PARCEL ONE HEREIN-ABOVE DESCRIBED, AND THE NORTHERLY TERMINUS OF SAID 2 1/2 FOOT STRIP BEING THE NORTHERLY LINE OF PARCEL ONE AS DESCRIBED TO GERTRUDE E. FRYER RECORDED MARCH 13, 1931 AS DOCUMENT NO. 2033 IN BOOK 133, PAGE 379, OFFICIAL RECORDS, OF SANTA BARBARA COUNTY.

THE LAND ABOVE DESCRIBED IS SHOWN TOGETHER WITH OTHER PROPERTY ON A MAP OF A SURVEY FILED DECEMBER 15, 1947 IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS, RECORDS OF SAID COUNTY.

RECORDS WITHIN LEGIBILITY OF WRITING.
TYPING OR PRINTING UNSATISFACTORY
IN THIS DOCUMENT WHEN RECEIVED.
EXHIBIT
Legal Description
(Barthel Access)

Parcel One:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de la Luz, as shown on the map of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California, filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County.

Parcel Two:

An easement and right of way for road and public utility purposes over that portion of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County, described as follows:

Beginning at the northeast corner of El Camino de Luz, now known as El Camino de la Luz, as shown on said map:

Thence South 84°44' East, perpendicular to the easterly line of said El Camino de Luz, 7.50 feet to a line parallel with and 7.50 feet easterly of said easterly line and the northeasterly corner of the land described as Parcel Three and One/Half in a deed granted to Ed R. Brewer, et ux. recorded November 29, 1966 in Book 2173, Page 765 of Official Records;

Thence South 05°16' West, along said parallel line and its southerly extension 204.27 feet to its intersection with the northerly line of the land described as Parcel One, in a deed granted to Fred A. Eaton, et ux. recorded November 10, 1949 in Book 883, Page 328 of Official Records;

Thence South 84°44' East, along the northerly line of said Parcel One granted to Fred A. Eaton, et ux., 2.50 feet to the northeasterly corner of Parcel Four described in said deed granted to Ed R. Brewer, et ux.;

Thence South 05°16' West, along the easterly line of said Parcel Four, 145.78 feet to the northerly line of the land described as Parcel One in said deed granted to Ed R. Brewer, et ux.;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 10.00 feet to the northwesterly corner of said last mentioned Parcel One and a point on the westerly line of said Parcel One granted to Fred A. Eaton, et ux.;
Thence North 5°16' East, along said last mentioned westerly line, 145.77 feet to the northwestern corner of said Parcel One granted to Fred A. Eaton;

Thence North 5°16' East, along the easterly line of the land described as Parcel One in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records, 7.14 feet to the northeast corner of said last mentioned Parcel One;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 7.50 feet to a line parallel with and 7.50 feet easterly of the easterly line of said Camino de Luz;

Thence North 5°16' East, along said last mentioned parallel, 92.55 feet, more or less, to its intersection with the southerly line of said Camino de Luz;

Thence South 34°38' East, along the southerly line of said Camino de Luz, 11.78 feet to the southeast corner of said Camino de Luz;

Thence North 5°16' East, along the easterly line of said Camino de Luz, 114.57 feet to the point of beginning.
Richard C. Monk, State Bar No. 48355
Marcus S. Bird, State Bar No. 147463
HOLLISTER & BRACE
1126 Santa Barbara Street
Santa Barbara, CA 93101
Telephone (805) 963-6711
Facsimile (805) 965-0329
Attorneys for Plaintiff, Herbert E. Barthels,
Trustee of the Herbert E. Barthels Trust
dated December 9, 1985

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the
Herbert E. Barthels Trust dated December 9,
1985,

Plaintiff,

vs.

RAFAEL FRANCO, as an individual and as
trustee of the Franco Revocable Trust No. 1,
established June 30, 1999;
LINDA FRANCO, as an individual and as
trustee of the Franco Revocable Trust No. 1,
established June 30, 1999;
BRUCE PETERSON, an individual and as
trustee for the Bruce F. Peterson Revocable
Living Trust, U/D/T dated April 21, 2003;
JOANNA K. MORGAN, an individual and as
trustee of the Joanna K. Morgan Residence Trust,
dated February 23, 2005;
HORACE L. WRIGHT, as an individual and as
trustee of the Horace L. & Jerry Lu Living Trust,
UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as
trustee of the Horace L. & Jerry Lu Living Trust,
UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293
NOTICE OF ENTRY OF JUDGMENT

NOTICE OF ENTRY OF ACCESS JUDGMENT
TO ALL PARTIES AND TO THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that on September 8, 2009, the above-entitled court entered the Stipulated Access Judgment. A true and correct copy of the Judgment is attached hereto as Exhibit A.

Dated: September 14, 2009

HOLLISTER & BRACE
A Professional Corporation

By

Richard C. Menk
Marcus S. Bird
Attorneys for Plaintiff
Herbert Barthels
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the Herbert E. Barthels Trust dated December 9, 1985,
Plaintiff,

vs.

RAFAEL FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
LINDA FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
BRUCE PETERSON, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003;
HORACE L. WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293

[PROPOSED] STIPULATED ACCESS JUDGMENT

Assigned to the Hon. Thomas P. Anderele

EXHIBIT A
In the above entitled case, Plaintiff is Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, (hereinafter referred to as "Plaintiff"). Defendants and their respective properties are:

1. Rafael Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; Linda Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999, owner of APN 45-100-18 ("the Franco Parcel"), whose legal description is more fully provided in Exhibit "A";

2. Bruce Peterson, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003 owner of APN 45-100-64 ("the Peterson Parcel"), whose legal description is more fully provided in Exhibit "B";

3. Horace L. Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; Jerry Lu Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999 owner of APN 45-100-17 ("the Wright Parcel"), whose legal description is more fully provided in Exhibit "C";

4. Thomas Sloan, an individual and Tine F. Sloan, an individual, and each of them, owners of APN 45-100-45 ("the Sloan Parcel"), whose legal description is more fully provided in Exhibit "D."

Plaintiff and Defendants have stipulated that judgment be entered granting Defendants, and each of them, non-exclusive easements (the "Easement") over portions of Plaintiff’s real property commonly known as APN 45-100-65 and more particularly described in the legal description attached hereto as Exhibit "E". The Easement is more particularly described in the legal description attached hereto as Exhibit "F".

IT IS HEREBY ADJUDGED, ORDERED AND DECREE that judgment be entered granting Defendants, and each of them, non-exclusive easements over portions of Plaintiff’s real property commonly known as APN 45-100-65 and benefitting Defendants real properties said easements being more particularly described in the legal description attached hereto as Exhibit "F." The Easement shall run with the land. The Easement is subject to the same terms and conditions and the parties agree to assume the same obligations that Morgan assumed in

STIPULATED ACCESS JUDGMENT

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paragraphs 3, 4 and 8, of the “Agreement” section in at pp. 2-4, Exhibit “B” to the Easements Deed benefiting Joanna K. Morgan, recorded with the Santa Barbara County Recorder’s Office as Instrument No. 95-066680, as well as paragraphs 2, 3, 4 and 7 on pp. 5-7 of the Morgan “Agreements,” Exhibit “B.” No provision of this agreement is intended to release Morgan of any obligations she may have under those instruments.

IT IS HEREBY FURTHER ADJUDGED, ORDERED AND DECREED that Defendants, and each of them, shall be solely liable for any and all maintenance of said easements. Defendants, and each of them, shall indemnify, defend and hold harmless Plaintiff from any and all liability and expense incidental to any injuries or deaths suffered in the course of usage of said easements by Defendants, or by any of their family members or guests. Defendants shall have no obligation to maintain the easements for the use of Plaintiff or Plaintiff’s invitees or to warn Plaintiff or Plaintiff’s invitees of any condition of the easements.

IT IS HEREBY FURTHER ADJUDGED, ORDERED AND DECREED that in the exercise of their right to the use and enjoyment of the Easement is limited to access and Defendants shall have no right to engage in recreational activities on the Easement nor to use the Easement for beach viewing purposes.

Defendants may maintain for their own use, or the use of their permitted invitees, the existing stairs and steps located along said easement. Any maintenance obligation pursuant to this Stipulated Judgment is not intended to impose any duty toward the public or other users.

Dated: September 6, 2009

THOMAS P. ANDERLE
The Hon. Thomas P. Anderle
JUDGE OF THE SUPERIOR COURT
Counsel for Plaintiff and cross-defendant, counsel for Defendants and cross-complainants stipulate to the foregoing judgment.

Dated: September 3, 2009

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Plaintiff and Cross-Defendant.

Dated: September 3, 2009

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnusson,
Counsel for Defendants and Cross-Complainants.
PROOF OF SERVICE BY MAIL

STATE OF CALIFORNIA, COUNTY OF SANTA BARBARA

I am employed in the County of Santa Barbara, State of California. I am over the age of 18 and not a party to the within action; my business address is 1126 Santa Barbara Street, Santa Barbara, California.

On September 14, 2009, I served the foregoing documents described as:

NOTICE OF ENTRY OF JUDGMENT

by placing ___ the original ___ a true copy thereof enclosed in sealed envelopes addressed as follows:

David W. Magnusson
Haws, Record & Magnusson
3700 State Street, Suite 230
Santa Barbara, CA 93105

I am "readily familiar" with the firm's practice of collection and processing correspondence for mailing. Under that practice, it would be deposited with U.S. Postal Service on that same day with postage thereon fully prepaid at Santa Barbara, California in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

Executed on September 14, 2009, at Santa Barbara, California.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Sylvia G. Tate
Type or Print Name

Signature

F:\MATTER\WK1\6100.001\POS\POS - Mail.doc
Richard C. Monk, State Bar No. 48355
Marcus S. Bird, State Bar No. 147463
HOLLISTER & BRACE
1126 Santa Barbara Street
Santa Barbara, CA 93101
Telephone (805) 963-6711
Facsimile (805) 965-0329

Attorneys for Plaintiff, Herbert E. Barthels,
Trustee of the Herbert E. Barthels Trust
dated December 9, 1985

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the
Herbert E. Barthels Trust dated December 9,
1985,

vs.

RAFAEL FRANCO, as an individual and as
trustee of the Franco Revocable Trust No. 1,
established June 30, 1999;
LINDA FRANCO, as an individual and as
trustee of the Franco Revocable Trust No. 1,
established June 30, 1999;
BRUCE PETERSON, an individual and as
trustee for the Bruce F. Peterson Revocable
Living Trust, U/D/T dated April 21, 2003;
JOANNA K. MORGAN, an individual and as
trustee of the Joanna K. Morgan Residence Trust,
dated February 23, 2005;
HORACE L. WRIGHT, as an individual and as
trustee of the Horace L. & Jerry Lu Living Trust,
UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as
trustee of the Horace L. & Jerry Lu Living Trust,
UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293
NOTICE OF ENTRY OF JUDGMENT

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TO ALL PARTIES AND TO THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that on September 8, 2009, the above-entitled court entered the Stipulated Judgment. A true and correct copy of the Judgment is attached hereto as Exhibit A.

Dated: September 14, 2009

HOLLISTER & BRACE
A Professional Corporation

By

Richard C. Monk
Marcus S. Bird
Attorneys for Plaintiff
Herbert Barthels
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the Herbert E. Barthels Trust dated December 9, 1985,

Plaintiff,

vs.

RAFAEL FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
LINDA FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
BRUCE PETERSON, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003;
HORACE L. WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293

[PROPOSED] STIPULATED JUDGMENT

Assigned to the Hon. Thomas P. Anderele

EXHIBIT A
In the above entitled case, Plaintiff is Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, (hereinafter referred to as "Plaintiff"). Defendants and their respective properties are:

1. Rafael Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; Linda Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999, owner of APN 45-100-18 ("the Franco Parcel"), whose legal description is more fully provided in Exhibit "A";

2. Bruce Peterson, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003 owner of APN 45-100-64 ("the Peterson Parcel"), whose legal description is more fully provided in Exhibit "B";

3. Horace L. Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; Jerry Lu Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999 owner of APN 45-100-17 ("the Wright Parcel"), whose legal description is more fully provided in Exhibit "C";

4. Thomas Sloan, an individual and Tine F. Sloan, an individual, and each of them, owners of APN 45-100-45 ("the Sloan Parcel"), whose legal description is more fully provided in Exhibit "D."

Plaintiff and Defendants have stipulated that judgment be entered granting Plaintiff, the owner of the real property commonly known as APN 45-100-65 and more particularly described in the legal description attached hereto as Exhibit "E" (the "Dominant Tenement") easements and rights of way for road and public utility purposes ("the Easement") to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants' real properties. The Easement being more particularly described in the legal description attached hereto as Exhibit "F" and in the Exhibit map attached hereto as Exhibit "G". These easements are appurtenant and run with the land. They may not be transferred separately from their respective properties.
The portion of the road and utility easements that passes over each of these properties is:

(a) No wider than 7.5 feet on the Wright Property, and no wider than 7.5 feet on the Sloan Property, which when these two properties border each other the combined width does not exceed 15 feet, except for the area shown as Camino De Luz on the Record of Survey filed in Book 28, Page 124 of Record of Surveys, where the easement width shall include said Camino De Luz;

(b) No wider than 7.5 feet on the Franco Property, and no wider than 7.5 feet on the Sloan property, which when those two properties border each other the combined width does not exceed 15 feet, except that on the southern 7.14 feet of the Franco Property, the total road width does not exceed 7.5 feet.

(c) No wider than 10 feet on the Peterson Property.

(d) Any other access rights in favor of Barthels over Defendants’ parcels are deemed abandoned.

There currently exists in the Easement over Defendants’ parcels certain minor encroachments, which are permitted, and may not be further improved or enlarged. These encroachments are: (1) a portion of a wall on the Franco Property; (2) a planter on the Wright Property; and (3) a planter and landscaping on the Sloan Property.

IT IS HEREBY ADJUDGED, ORDERED AND DECREED that judgment be entered granting Plaintiff, Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, the owner of the property commonly known as APN 45-100-65, easements and rights of way for road and public utility purposes to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants’ real properties. The Easement is more particularly described in the legal description attached hereto as Exhibit "F" and in the Exhibit map attached hereto as Exhibit "G". The Easement shall run with the land.

THOMAS P. ANDERLE

Dated: September 4, 2009

The Hon. Thomas P. Anderle
JUDGE OF THE SUPERIOR COURT
Counsel for Plaintiff and cross-defendant, counsel for Defendants and cross-complainants stipulate to the foregoing judgment.

Dated: September 3, 2009

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Plaintiff and Cross-Defendant.

Dated: September 3, 2009

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnuson,
Counsel for Defendants and Cross-Complainants.
PROOF OF SERVICE BY MAIL

STATE OF CALIFORNIA, COUNTY OF SANTA BARBARA

I am employed in the County of Santa Barbara, State of California. I am over the age of 18 and not a party to the within action; my business address is 1126 Santa Barbara Street, Santa Barbara, California.

On September 14, 2009, I served the foregoing documents described as:

NOTICE OF ENTRY OF JUDGMENT

by placing ___ the original ___ a true copy thereof enclosed in sealed envelopes addressed as follows:

David W. Magnusson
Haws, Record & Magnusson
3700 State Street, Suite 230
Santa Barbara, CA 93105

I am "readily familiar" with the firm's practice of collection and processing correspondence for mailing. Under that practice, it would be deposited with U.S. Postal Service on that same day with postage thereon fully prepaid at Santa Barbara, California in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

Executed on September 14, 2009, at Santa Barbara, California.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Sylvia G. Tate
Type or Print Name

Signature
HERBERT E. BARTHELS, Trustee of the Herbert E. Barthels Trust dated December 9, 1985,

vs.

RAFAEL FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
LINDA FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
BRUCE PETERSON, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003;
JOANNA K. MORGAN, an individual and as trustee of the Joanna K. Morgan Residence Trust, dated February 23, 2005;
HORACE L. WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

NOTICE OF ENTRY OF ORDER
TO ALL PARTIES AND TO THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that on September 8, 2009, the above-entitled court entered the Stipulated Access Order. A true and correct copy of the Order is attached hereto as Exhibit A.

Dated: September 14, 2009

HOLLI STER & BRACE
A Professional Corporation

By

Richard C. Monk
Marcus S. Bird
Attorneys for Plaintiff
Herbert Barthels
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHIELS, Trustee of the
Herbert E. Barthels Trust dated December 9,
1985,

Plaintiff,

vs.

RAFAEL FRANCO, et al.,

Defendants.

CASE NO.: 1268293

[PROPOSED]
STIPULATED ACCESS ORDER

Assigned to the Honorable
Thomas P. Anderle for all purposes

Upon Stipulation of all parties, by and through their counsel of record, as part of the
Settlement of this action, and with the approval of the terms of this Order by counsel, IT IS
HEREBY ORDERED that:

1. "Bound-Owners" are the identified owners of the properties, hereafter "Bound
Properties", which are commonly known as

A. 1833 El Camino de la Luz, Santa Barbara, CA, now owned by Horace L.
Wright and Jerry Lu Wright, as trustees of the Horace and Jerry Lu Living Trust.

B. 1835 El Camino de la Luz, now owned by Rafael and Linda Franco, as
trustees of the Franco revocable Trust no. 1.

C. 1837 El Camino de la Luz, now owned by Bruce Peterson.

D. 1841 El Camino de la Luz, Santa Barbara, CA now owned by Thomas
2. "Benefitted Owner" is Herbert E. Barthels, as trustee of the Herbert E. Barthels Trust, who is the owner of 1837 1/2 El Camino de la Luz, Santa Barbara, CA, which property is also described herein as the "Benefitted Property." The term Benefitted Owner includes Herbert Barthels' heirs, assigns, successors in interest, designees and transferees. Benefitted Owner has easement rights over the Bound Properties as described in Exhibits "A" and "B" (the "Access Easement").

3. Benefitted Owner has a pending application before government agencies for development of the Benefitted Property.

4. During the time of the pendency of this Order, Bound Owners:

   (a) Shall not block, impede or limit access to the Benefitted Property over the Bound Properties to the full width of the Access Easement as described in Exhibits "A" and "B."

   (b) Shall sign any paperwork required by government agencies relating to or confirming access rights, as long as the paperwork accurately describes all easement terms.

   (c) Shall provide access to City staff or other authorized persons who need access to address or handle a pending application of Benefitted Owner.

   (d) All parties acknowledge that the access easement on the Franco Property is limited to 7.5 feet in width on the southern 7.14 feet of the Franco Property.

5. This Order shall bind all Bound Owners as follows:

   A. As long as any application is pending, from the date of filing of this Order until either the application is terminated, by abandonment, closure, cancellation or issuance of Certificate of Occupancy.

   B. If a permit application is terminated, and a subsequent application is initiated by Benefitted Owner, then during the pendency of that application, for the same period of time specified in paragraph 5(A) above.

   C. Upon final termination of all permit processes or granting of a Certificate of Occupancy, counsel shall submit a Stipulation and Order to terminate this Order.
Termination of this Order does not constitute a waiver of rights of Benefitted Owner, who reserves all remedies to enforce his easement rights, but only terminates this remedy by this Stipulation.

6. This is an Order personal between the parties; it shall not be recorded, and is not to be a covenant running with the land. Excepting a transfer from an individual to a trust in which the individual is a beneficiary, or from a trust to the trustee or beneficiary in an individual capacity, upon sale of a Bound Property, this Order shall terminate as to that Bound Owner and Bound Property.

7. NOTICE TO ANY PEACE OFFICER: You may accept a copy of this Order, and are instructed to implement it if so requested by any party, on the conditions stated. You are authorized to order Bound Party to comply with the Order, to tow any blocking vehicles or item blocking access, or to otherwise enforce this Order, subject to further instructions of the Court.

8. NOTICE TO BOUND PARTIES: Failure to comply with this Order shall subject you to further Orders of the Court, and the costs of any proceeding to enforce this Order.

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Benefitted Party

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnusson,
Counsel for Bound Parties

Good Cause Appearing Therefore, it is SO ORDERED.

Date: September 9, 2009

Hon. Thomas P. Anderle
Superior Court Judge
PROOF OF SERVICE BY MAIL

STATE OF CALIFORNIA, COUNTY OF SANTA BARBARA

I am employed in the County of Santa Barbara, State of California. I am over the age of 18 and not a party to the within action; my business address is 1126 Santa Barbara Street, Santa Barbara, California.

On September 14, 2009, I served the foregoing documents described as:

NOTICE OF ENTRY OF ORDER

by placing the original a true copy thereof enclosed in sealed envelopes addressed as follows:

David W. Magnusson
Haws, Record & Magnusson
3700 State Street, Suite 230
Santa Barbara, CA 93105

I am "readily familiar" with the firm's practice of collection and processing correspondence for mailing. Under that practice, it would be deposited with U.S. Postal Service on that same day with postage thereon fully prepaid at Santa Barbara, California in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

Executed on September 14, 2009, at Santa Barbara, California.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Sylvia G. Tate
Type or Print Name

Signature
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the
Herbert E. Barthels Trust dated December 9,
1985,
Plaintiff,

vs.

RAFAEL FRANCO, et al.,
Defendants.

CASE NO.: 1268293

[PROPOSED]
STIPULATED ACCESS ORDER

Assigned to the Honorable
Thomas P. Anderle for all purposes

Upon Stipulation of all parties, by and through their counsel of record, as part of the
Settlement of this action, and with the approval of the terms of this Order by counsel, IT IS
HEREBY ORDERED that:

1. “Bound Owners” are the identified owners of the properties, hereafter “Bound
Properties”, which are commonly known as

A. 1833 El Camino de la Luz, Santa Barbara, CA, now owned by Horace L.
Wright and Jerry Lu Wright, as trustees of the Horace and Jerry Lu Living Trust.

B. 1835 El Camino de la Luz, now owned by Rafael and Linda Franco, as
trustees of the Franco revocable Trust no. 1.

C. 1837 El Camino de la Luz, now owned by Bruce Peterson.

D. 1841 El Camino de la Luz, Santa Barbara, CA now owned by Thomas
and Tine Sloan.

2. "Benefitted Owner" is Herbert E. Barthels, as trustee of the Herbert E. Barthels Trust, who is the owner of 1837 ½ El Camino de la Luz, Santa Barbara, CA, which property is also described herein as the "Benefitted Property." The term Benefitted Owner includes Herbert Barthels’ heirs, assigns, successors in interest, designees and transferees. Benefitted Owner has easement rights over the Bound Properties as described in Exhibits “A” and “B” (the “Access Easement”).

3. Benefitted Owner has a pending application before government agencies for development of the Benefitted Property.

4. During the time of the pendency of this Order, Bound Owners:

(a) Shall not block, impede or limit access to the Benefitted Property over the Bound Properties to the full width of the Access Easement as described in Exhibits “A” and “B.”

(b) Shall sign any paperwork required by government agencies relating to or confirming access rights, as long as the paperwork accurately describes all easement terms.

(c) Shall provide access to City staff or other authorized persons who need access to address or handle a pending application of Benefitted Owner.

(d) All parties acknowledge that the access easement on the Franco Property is limited to 7.5 feet in width on the southern 7.14 feet of the Franco Property.

5. This Order shall bind all Bound Owners as follows:

A. As long as any application is pending, from the date of filing of this Order until either the application is terminated, by abandonment, closure, cancellation or issuance of Certificate Occupancy.

B. If a permit application is terminated, and a subsequent application is initiated by Benefitted Owner, then during the pendency of that application, for the same period of time specified in paragraph 5(A) above.

C. Upon final termination of all permit processes or granting of a Certificate of Occupancy, counsel shall submit a Stipulation and Order to terminate this Order.

STIPULATED ACCESS ORDER
Termination of this Order does not constitute a waiver of rights of Benefitted Owner, who reserves all remedies to enforce his easement rights, but only terminates this remedy by this Stipulation.

6. This is an Order personal between the parties; it shall not be recorded, and is not to be a covenant running with the land. Excepting a transfer from an individual to a trust in which the individual is a beneficiary, or from a trust to the trustee or beneficiary in an individual capacity, upon sale of a Bound Property, this Order shall terminate as to that Bound Owner and Bound Property.

7. NOTICE TO ANY PEACE OFFICER: You may accept a copy of this Order, and are instructed to implement it if so requested by any party, on the conditions stated. You are authorized to order Bound Party to comply with the Order, to tow any blocking vehicles or item blocking access, or to otherwise enforce this Order, subject to further instructions of the Court.

8. NOTICE TO BOUND PARTIES: Failure to comply with this Order shall subject you to further Orders of the Court, and the costs of any proceeding to enforce this Order.

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Benefitted Party

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnusson,
Counsel for Bound Parties

Good Cause Appearing Therefore, it is SO ORDERED,

Date: September 9, 2009

Hon. Thomas P. Anderle
Superior Court Judge
EXHIBIT

Legal Description
(Barthel Access)

Parcel One:

An easement and right of way for road and public utility purposes to be used in common
with others, over El Camino de la Luz, as shown on the map of the Blanco E. Fryer Tract, in
the City of Santa Barbara, County of Santa Barbara, State of California, filed in Book 28,
Page 124 of Record of Surveys, in the Office of the County Recorder of said County.

Parcel Two:

An easement and right of way for road and public utility purposes over that portion of the
Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of
California as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys, in
the Office of the County Recorder of said County, described as follows:

Beginning at the northeast corner of El Camino de Luz, now known as El Camino de la Luz,
as shown on said map:

Thence South 84°44' East, perpendicular to the easterly line of said El Camino de Luz, 7.50
feet to a line parallel with and 7.50 feet easterly of said easterly line and the northeasterly
corner of the land described as Parcel Three and One/Half in a deed granted to Ed R.

Thence South 05°16' West, along said parallel line and its southerly extension 204.27 feet to
its intersection with the northerly line of the land described as Parcel One, in a deed granted
Records;

Thence South 84°44' East, along the northerly line of said Parcel One granted to Fred A.
Eaton, et ux., 2.50 feet to the northeasterly corner of Parcel Four described in said deed
granted to Ed R. Brewer, et ux.;

Thence South 05°16' West, along the easterly line of said Parcel Four, 145.78 feet to the
northerly line of the land described as Parcel One in said deed granted to Ed R. Brewer, et
ux.;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 10.00
feet to the northwesterly corner of said last mentioned Parcel One and a point on the
westerly line of said Parcel One granted to Fred A. Eaton, et ux.;
Thence North 5°16' East, 145.7 feet to the northwest corner of said Parcel One granted to Fred A. Eaton;

Thence North 5°16' East, along the easterly line of the land described as Parcel One in a deed granted to Joanne K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records, 7.14 feet to the northeast corner of said last mentioned Parcel One;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 7.50 feet to a line parallel with and 7.50 feet easterly of the easterly line of said Camino de Luz;

Thence North 5°16' East, along said last mentioned parallel, 92.55 feet, more or less, to its intersection with the southerly line of said Camino de Luz;

Thence South 34°38' East, along the southerly line of said Camino de Luz, 11.78 feet to the southeast corner of said Camino de Luz;

Thence North 5°16' East, along the easterly line of said Camino de Luz, 114.57 feet to the point of beginning.
SETTLEMENT AND RELEASE AGREEMENT

THIS SETTLEMENT AND RELEASE AGREEMENT ("Agreement") is entered into by and between:

1. Herbert Barthels, Trustee (Barthels)
2. Rafael/Linda Franco; Bruce Peterson;
3. Horace/Tony Wright; all three as Trustees/Defendants
4. Tim/lune Sloan. All except Barthels called "Owners"

with reference to the following facts:

RECITALS

A. There is currently pending a lawsuit entitled Barthels v. Franco, Santa Barbara County Superior Court Case No. 1268293 (the "Pending Lawsuit").

B. On May 22, 2005 the parties participated in mediation with Mediator Judith Rubenstein. As a result the parties desire to resolve all disputes between them, and enter into this Agreement for that purpose.

AGREEMENTS

NOW THEREFORE, in consideration of the covenants, conditions and promises hereinafter set forth, the parties agree as follows:
1. SETTLEMENT TERMS

In full and final settlement of all claims between them the parties agree as follows:

A. Stipulated judgment to confirm easement per survey, subject to minor existing encroaching improvements *(see)* Easements to be on all Owners lots.

B. Stipulated Order # all Owners to honor block, increase or limit access per the Stipulated Judgment in IA above, to exist # from now until building permit issued or Bartells project is approved as long as application is pending, and # if project approved, until issuance of Certificate of Occupancy. # 3 Order to expire if # is not pending, or # is not approved. Owners to sign accurate paperwork for city purposes, at no cost, or to provide access for government review process per the easement.

C. Stipulated judgment to provide all other access rights over Owners' parcels are abandoned by Bartells; and all other access rights in favor of Owners or Bartells are abandoned.

D. Bartells by stipulated judgment to grant to Owners parcels a pedestrian easement: 1) across eastern easement along western boundary of Bartells parcel from Peterson parcel to edge of cliff, 2) down from northern end of 1) to the beach, subject to these limitations: A condition of moving tendency found in Morgan deed apply # A no right to recreational activity or

* Morgan deed recorded 11/10/95 as 95 - 066680.
A. Deed review on bluff top portion of Barthei's parcel. Owner may not install improvements on bluff top portion, may maintain existing improvements below bluff top.

E. All parties retain rights to common on Barthei's project as citizen.

F. As to attached legal description Exhibit A and Map Ex. B hereto, are legal descriptions - plot maps of the applicant's easement to be confirmed by para. 1A above.

(Descriptions may be correctly situated - they are in error)

G. Existing encroachments:

Franco - wall segment

Wright - top planter

Sloan - planter, landscaping:
2. DISMISSAL

Immediately upon recording evidence as per pp. 2-3

Counsel for the Plaintiff (and any cross-complainants) in thePending Action shall file a Request for Dismissal with prejudice of the Pending Action, and provide conformed copies thereof to counsel for all parties.

3. MUTUAL RELEASES

With the exception of the obligations imposed under this Agreement, each of the parties, for themselves, and their respective officers, directors, members, managers, partners, affiliated entities, agents, employees, attorneys, heirs, successors, predecessors and assigns, hereby releases and discharges each of the other parties and their respective officers, directors, members, managers, partners, affiliated entities, agents, employees, attorneys, heirs, successors, predecessors and assigns, individually and collectively, of and from any and all debts, claims, rights, demands, actions, obligations, liabilities, and causes of action of any and every kind, nature and character whatsoever, whether known or unknown, (collectively "Claims") which any party does or may now have, or may in the future have by reason of any matter whatsoever, including but not limited to any claims raised in or rising out of the Pending Action, or the facts giving rise to the Pending Action.

The parties each understand and agree that this release extends to all Claims of every nature and kind whatsoever, known or unknown, suspected or unsuspecting, and each party hereby waives all rights under California Civil Code Section 1542, which reads as follows:

“A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.”

4. SETTLEMENT OF DISPUTED CLAIMS

It is understood and agreed that this Agreement represents a compromise and settlement of existing and potential disputed claims, and that this
Agreement and payment of the settlement amount should not be deemed or construed as an admission of liability or responsibility at any time for any purpose. The parties expressly acknowledge and agree that this settlement is being entered into solely for the purpose of avoiding further expense and inconvenience from litigating the existing and potential claims, and each of the parties hereto expressly denies any liability to the other.

5. ATTORNEY FEES

The parties hereto agree that each of them shall pay and be responsible for all of their own attorneys' fees, costs and expenses in connection with the disputes which gave rise to this Agreement, and the negotiation and preparation of this Agreement. If, however, any party is compelled to incur additional legal fees in order to interpret or enforce this Agreement, the prevailing party in such event shall be entitled to recover from the non-prevailing party(ies) its reasonable attorneys' fees, costs and expenses for such subsequent legal work.

6. ENTIRE AGREEMENT

This Agreement (a) incorporates the entire understanding among the parties hereto with respect to the subject matter hereof, (b) recites the sole considerations for the promises exchanged herein, (c) supersedes all prior or contemporaneous oral or written agreements and discussions, and (d) may be amended or modified only by a subsequent agreement in writing. In reaching this Agreement, no party has relied upon any representations or promises except those expressly set forth herein. This Agreement refers to other documents to be prepared.

7. INDEPENDENT COUNSEL AND REVIEW OF AGREEMENT

The parties hereto have been represented in this matter by independent legal counsel of their own choosing. Each of them represents that it has read this Agreement and that it is fully aware of the contents and legal effect hereof. Each of them agrees and represents that it has had an opportunity to discuss
this Agreement with its respective attorneys, and signs this Agreement voluntarily, freely, and without coercion.

8. MISCELLANEOUS PROVISIONS

8.1 This Agreement shall be construed and enforced in accordance with and governed by the laws of the State of California.

8.2 Each of the parties hereto represents and warrants that it has not transferred, granted or assigned or purported to transfer, grant or assign to any other person any of the Claims disposed of and released in this Agreement.

8.3 This Agreement is binding upon and shall inure to the benefit of each of the parties hereto, and their respective agents, employees, attorneys, predecessors, successors and assigns.

8.4 Each person signing this Agreement on behalf of a party hereto represents and warrants to each other party hereto that she/he has all requisite power and authority to execute and deliver this release for such party and that this Agreement when so executed and delivered, will be a finding obligation of, and enforceable against, such party in accordance with its terms.

8.5 This Agreement may be executed in counterparts and by fax, and when each party has signed and delivered their counterpart (with original or fax signatures), the counterparts shall constitute one agreement, binding upon and effective as to all parties.

8.6 This Agreement is intended to be fully enforceable under Code of Civil Procedure 664.6.

8.7 The Parties stipulate that Judith Rubenstein is appointed as arbitrator to enforce this Settlement. The costs of enforcement proceedings shall be borne by the losing party. The decision of any enforcement proceeding or motion shall be binding and non-appealable.
IN WITNESS WHEREOF, the parties hereby have executed the

Agreement effective on the last date set forth below.

Date: 6/22/09

[Signature]
Name: [Signatory Name]
Title: [Signatory Title]

Date: 5/22/09

[Signature]
Name: [Signatory Name]
Title: [Signatory Title]

Date: 5/22/09

[Signature]
Name: [Signatory Name]
Title: [Signatory Title]

Date: 5/23/09

[Signature]
Name: [Signatory Name]
Title: [Signatory Title]

[Signature]
Name: [Signatory Name]
Title: [Signatory Title]
EXHIBIT A
Legal Description

Parcel 7A:

Beginning at the true point of beginning of Parcel One described in the deed recorded November 29, 1966 as Instrument No. 37841 in Book 2173, Page 765 of Official Records;

Thence North 5°16' East, 145.77 feet to the northwesterly corner of that certain parcel of land described as Parcel One in the deed recorded November 10, 1949 as Instrument No. 14012 in Book 883, Page 328 of Official Records of said County.

Parcel 7B:

The easterly 2.50 feet of the westerly 10.00 feet of the land described as Parcel One in a deed granted to Mrs. Josephine Pallotti, et con., in the City of Santa Barbara, County of Santa Barbara, State of California, recorded April 14, 1980 as Instrument No. 80-15124 in the Office of the County Recorder, of said County.

Parcel 7C:

A One (1.00) foot wide easement of a prescriptive nature, for fence and landscaping purposes only, and expressly limited to those present and exact uses only, on and over a strip of land, located within a non-exclusive right of way easement presently owned by Herbert E. Bartheis, over a portion of the Blanco B. Fryer Tract in the City of Santa Barbara, County of Santa Barbara, State of California, as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys in the Office of the County Recorder of said County, the westerly line of said One (1.00) foot wide strip is described as follows:

Beginning at the northeast corner of the land described as Parcel One in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records;

Thence South 5°16' West, along the easterly line of said hereinbefore mentioned Parcel One, 107.85 feet to the southeast corner of said hereinbefore mentioned Parcel One.
EXHIBIT
Legal Description

Parcel 12-1:

A non-exclusive easement for pedestrian ingress and egress, three (3.00) feet wide over a portion of the land described as Parcel One, in a deed granted to Josephine Pallotti, et con., in the City of Santa Barbara, County of Santa Barbara, State of California, recorded April 14, 1980 as Instrument No. 80-15124 of Official Records, in the Office of the County Recorder of said County, the westerly line of which is described as follows:

Beginning at the southeasterly corner of Parcel One described in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records;

Thence South 5°16' West, along the westerly line of said Parcel One, described in , 45.07 feet, more or less to the northwesterly corner of the land described as Parcel One in a deed granted to Herbert E. Barthels, recorded December 7, 1076 in Book 2636, Page 1197 of Official Records.

The sidelines of said three foot wide easement shall be lengthened or shortened as necessary to begin at right angles and terminate on the northerly line of said last mentioned Parcel One.

Parcel 12-2:

A non-exclusive easement for pedestrian ingress and egress, over the westerly three (3.00) feet of the land described as Parcel One, in a deed granted to Herbert E. Barthels, in the City of Santa Barbara, County of Santa Barbara, State of California, recorded December 7, 1076 in Book 2636, Page 1197 of Official Records in the Office of the County Recorder of said County.

Parcel 12-3:

A non-exclusive easement for pedestrian ingress and egress, five (5.00) feet wide over a portion of the land described as Parcel One, in a deed granted to Herbert E. Barthels, in the City of Santa Barbara, County of Santa Barbara, State of California, recorded December 7, 1076 in Book 2636, Page 1197 of Official Records, in the Office of the County Recorder of said County, the centerline of which is described as follows:

Beginning at the northwest corner of said Parcel One;

Thence South 84°44' East, along the northerly line of said Parcel One, a distance of 9.27 feet to the True Point of Beginning;

Thence South 27°46'32" East a distance of 54.78 feet;

Thence South 56°53'07" East a distance of 16.87 feet;
Thence South 52°38'28" East a distance of 12.16 feet;
Thence South 48°51'26" East a distance of 8.47 feet;
Thence South 20°51'06" West a distance of 22.47 feet;
Thence North 54°41'25" West a distance of 14.96 feet;
Thence South 36°07'57" West a distance of 8.19 feet;
Thence South 26°21'53" East a distance of 10.42 feet;
Thence South 33°44'48" East a distance of 16.36 feet;
Thence South 45°11'23" East a distance of 9.21 feet;
Thence South 59°07'33" West a distance of 12.28 feet;
Thence South 85°20'57" West a distance of 20.44 feet;
Thence North 75°07'45" West a distance of 18.08 feet;
Thence South 82°59'40" West a distance of 23.25 feet to the intersection of the easement centerline with the westerly property line of said hereinbefore mentioned Parcel One.

The sidelines of said five-foot wide easement shall be lengthened or shortened as necessary to begin on the northerly line of said hereinbefore mentioned Parcel One, meet at angle points and terminate on the westerly line of said hereinbefore mentioned Parcel One.

Parcel 12-4:

A One (1.00) foot wide easement of a prescriptive nature, for fence and landscaping purposes only, and expressly limited to those present and exact uses only, on and over a strip of land, located within a non-exclusive right of way easement presently owned by Herbert E. Barthels, over a portion of the Blanco E. Fryer Tract in the City of Santa Barbara, County of Santa Barbara, State of California, as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys in the Office of the County Recorder of said County, the westerly line of said One (1.00) foot wide strip is described as follows:

Beginning at the northeast corner of the land described as Parcel One in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records;

Thence South 5°16' West, along the easterly line of said hereinbefore mentioned Parcel One, 107.85 feet to the southeast corner of said hereinbefore mentioned Parcel One.
EXHIBIT

Legal Description

(Barthel Access)

Parcel One:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de la Luz, as shown on the map of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California, filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County.

Parcel Two:

An easement and right of way for road and public utility purposes over that portion of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County, described as follows:

Beginning at the northeast corner of El Camino de Luz, now know as El Camino de la Luz, as shown on said map:

Thence South 84°44' East, perpendicular to the easterly line of said El Camino de Luz, 7.50 feet to a line parallel with and 7.50 feet easterly of said easterly line and the northeastern corner of the land described as Parcel Three and One/Half in a deed granted to Ed R. Brewer, et ux. recorded November 29, 1966 in Book 2173, Page 765 of Official Records;

Thence South 05°16' West, along said parallel line and its southerly extension 204.27 feet to its intersection with the northerly line of the land described as Parcel One, in a deed granted to Fred A. Eaton, et ux. recorded November 10, 1949 in Book 883, Page 328 of Official Records;

Thence South 84°44' East, along the northerly line of said Parcel One granted to Fred A. Eaton, et ux., 2.50 feet to the northeasterly corner of Parcel Four described in said deed granted to Ed R. Brewer, et ux.;

Thence South 05°16' West, along the easterly line of said Parcel Four, 145.78 feet to the northerly line of the land described as Parcel One in said deed granted to Ed R. Brewer, et ux.;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 10.00 feet to the northwesterly corner of said last mentioned Parcel One and a point on the westerly line of said Parcel One granted to Fred A. Eaton, et ux.;
Thence North 5°16' East, along said last mentioned westerly line, 145.77 feet to the northwest corner of said Parcel One granted to Fred A. Eaton;

Thence North 5°16' East, along the easterly line of the land described as Parcel One in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records, 7.14 feet to the northeast corner of said last mentioned Parcel One;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 7.50 feet to a line parallel with and 7.50 feet easterly of the easterly line of said Camino de Luz;

Thence North 5°16' East, along said last mentioned parallel, 92.55 feet, more or less, to its intersection with the southerly line of said Camino de Luz;

Thence South 34°38' East, along the southerly line of said Camino de Luz, 11.78 feet to the southeast corner of said Camino de Luz;

Thence North 5°16' East, along the easterly line of said Camino de Luz, 114.57 feet to the point of beginning.
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the
Herbert E. Barthels Trust dated December 9,
1985,

Plaintiff,

vs.

RAFAEL FRANCO, as an individual and as
trustee of the Franco Revocable Trust No. 1,
established June 30, 1999;
LINDA FRANCO, as an individual and as
trustee of the Franco Revocable Trust No. 1,
established June 30, 1999;
BRUCE PETERSON, an individual and as
trustee for the Bruce F. Peterson Revocable
Living Trust, U/D/T dated April 21, 2003;
HORACE L. WRIGHT, as an individual and as
trustee of the Horace L. & Jerry Lu Living Trust,
UTD, February 18, 1999;
JERRY L. WRIGHT, as an individual and as
trustee of the Horace L. & Jerry Lu Living Trust,
UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293

PROPOSED STIPULATED ACCESS JUDGMENT

Assigned to the Hon. Thomas P. Anderle
In the above entitled case, Plaintiff is Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, (hereinafter referred to as “Plaintiff”). Defendants and their respective properties are:

1. Rafael Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; Linda Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999, owner of APN 45-100-18 ("the Franco Parcel"), whose legal description is more fully provided in Exhibit "A";

2. Bruce Peterson, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003 owner of APN 45-100-64 ("the Peterson Parcel"), whose legal description is more fully provided in Exhibit "B";

3. Horace L. Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; Jerry Lu Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999 owner of APN 45-100-17 ("the Wright Parcel"), whose legal description is more fully provided in Exhibit "C";

4. Thomas Sloan, an individual and Tine F. Sloan, an individual, and each of them, owners of APN 45-100-45 ("the Sloan Parcel"), whose legal description is more fully provided in Exhibit “D.”

Plaintiff and Defendants have stipulated that judgment be entered granting Defendants, and each of them, non-exclusive easements (the “Easement”) over portions of Plaintiff’s real property commonly known as APN 45-100-65 and more particularly described in the legal description attached hereto as Exhibit “E”. The Easement is more particularly described in the legal description attached hereto as Exhibit “F”.

IT IS HEREBY ADJUDGED, ORDERED AND DECREED that judgment be entered granting Defendants, and each of them, non-exclusive easements over portions of Plaintiff’s real property commonly known as APN 45-100-65 and benefitting Defendants real properties said easements being more particularly described in the legal description attached hereto as Exhibit “F.” The Easement shall run with the land. The Easement is subject to the same terms and conditions and the parties agree to assume the same obligations that Morgan assumed in
paragraphs 3, 4 and 8, of the "Agreement" section in at pp. 2-4, Exhibit "B" to the Easements
Deed beneficial to Joanna K. Morgan, recorded with the Santa Barbara County Recorder's Office
as Instrument No. 95-066680, as well as paragraphs 2, 3, 4 and 7 on pp. 5-7 of the Morgan
"Agreements," Exhibit "B." No provision of this agreement is intended to release Morgan of
any obligations she may have under those instruments.

IT IS HEREBY FURTHER ADJUDGED, ORDERED AND DECREED that Defendants,
and each of them, shall be solely liable for any and all maintenance of said easements.
Defendants, and each of them, shall indemnify, defend and hold harmless Plaintiff from any and
all liability and expense incidental to any injuries or deaths suffered in the course of usage of
said easements by Defendants, or by any of their family members or guests. Defendants shall
have no obligation to maintain the easements for the use of Plaintiff or Plaintiff's invitees or to
warn Plaintiff or Plaintiff's invitees of any condition of the easements.

IT IS HEREBY FURTHER ADJUDGED, ORDERED AND DECREED that in the
exercise of their right to the use and enjoyment of the Easement is limited to access and
Defendants shall have no right to engage in recreational activities on the Easement nor to use the
Easement for beach viewing purposes.

Defendants may maintain for their own use, or the use of their permitted invitees, the
existing stairs and steps located along said easement. Any maintenance obligation pursuant to
this Stipulated Judgment is not intended to impose any duty toward the public or other users.

Dated: September 11, 2009

THOMAS P. ANDERLE

The Hon. Thomas P. Anderle
JUDGE OF THE SUPERIOR COURT
Counsel for Plaintiff and cross-defendant, counsel for Defendants and cross-complainants stipulate to the foregoing judgment.

Dated: September 3, 2009

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Plaintiff and Cross-Defendant.

Dated: September 3, 2009

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnuson
Counsel for Defendants and Cross-Complainants.
TRUST TRANSFER DEED

The undersigned grantor(s) declare(s):

Documentary transfer to is (s) (Rev. & Tax Code Sec. 11911.1 (Transfer in Revocable Trust))

( ) computed on full value of property conveyed or
( ) computed on full value less value of lease and encumbrances remaining at time of sale.

( ) Undivided interest: ( ) City of ________________ and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged

RAFAEL FRANCO and LINDA LLOYD FRANCO, tenants and with,

 Recoil PLANCO

RAFAEL FRANCO and LINDA L. FRANCO, Trustees of the FRANCO REVOCABLE TRUST NO. 1
established June 30, 1999,

the following described real property in the City of Santa Barbara, County of Santa Barbara, State of California:

LEGAL DESCRIPTION ATTACHED HERETO ON EXHIBIT "A" AND MADE A PART HEREOF.

Also commonly known as 1124 El Camino de la Lora, Santa Barbara, CA 93108

Date: June 30, 1999

RAFAEL FRANCO

Date: June 30, 1999

LINDA LLOYD FRANCO

STATE OF CALIFORNIA
COUNTY OF VENTURA

On June 30, 1999, CHEERY L. RALL, a Notary Public, personally appeared RAFAEL FRANCO and LINDA LLOYD FRANCO, personally known to me (or proved to me by the affidavit of satisfactory evidence) to be the persons whose names are subscribed to the instrument and acknowledged to me that they executed the same in their individual capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Signature: Cheery L. Rall

MAIL TAX STATEMENTS TO:
Mr. and Mrs. Rafael Franco
1124 El Camino de la Lora
Santa Barbara, CA 93109

EXHIBIT A
EXHIBIT 'A'

All that certain Land situated in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

PARCEL ONE:

That portion of the Outside Pueblo Land's of the City of Santa Barbara, on La Cuesta (so-called) in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4 inch survey pipe set at the meot Northwesterly corner of the tract of land described in the deed from Carina Pryer, et al., to C.L. Viven, dated September 3, 1944, and recorded in Book 619, Page 411 of Official Records, records of said County; thence South 5°16' West along the westerly line of said C.L. Viven Tract of land 175.76 feet to the intersection with the center line of a fifty foot roadway thence along the center line of said fifty foot roadway South 79°18' East, 562.23 feet to a point; thence at right angles South 10°27' West 25.00 feet to a 3/4 inch survey pipe set on the southerly line of said fifty foot roadway thence along the southerly line of said road South 34°18' East 93.17 feet to a 3/4 inch survey pipe set on the center line of a 15 foot road easement; thence along the center line of said 15 foot road easement South 3°14' West 35.61 feet to a 3/4 inch survey pipe and the true point of beginning of the tract of land herein described; thence southerly along the center line of said 15 foot road easement South 5°16' West 35.61 feet to a 3/4 inch survey pipe; thence at right angles and leaving the center line of said last mentioned road easement South 34°14' East 151.43 feet to a 3/4 inch survey pipe in a ravine, being a point in the westerly line of the tract of land described in deed to C.L. Viven, above mentioned, from which 3/4 inch survey pipe set at an angle point in said westerly line of said C.L. Viven Tract herein above described 14°25' West 12.54 feet distance; thence up said ravine along the westerly line of said last mentioned tract of land North 11°25' East 56.45 feet to a 3/4 inch survey pipe; thence leaving said ravine, North 34°44' West 164.28 feet to the true point of beginning.

PARCEL TWO:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon or through a strip of land described as follows:

Beginning at the Northwest corner of Parcel One above described and running thence along the westerly line of said Parcel One, and the center line of the 15 foot easement mentioned in said Parcel One above, South 5°16' West 85.00 feet to a 3/4 inch survey pipe; thence at right angles South 84°44' East 7.50 feet to a 3/4 inch survey pipe set on the westerly line of said 15 foot easement above mentioned; thence at right angles and along the westerly line of said 15 foot easement South 5°16' West 15.00 feet to a point; thence at right angles North 84°16' West 15.00 feet to a point on the westerly line of said easement; thence at right angles and along the westerly line of said easement North 11°18' East 145.27 feet to a 3/4 inch survey pipe set on the southerly line of said 50 foot road; thence North 10°13' East 25.00 feet to a point on the center line of said 50 foot road; thence North 11°18'20' East 25.00 feet to a 3/4 inch survey pipe set on the northerly line of said 50 foot road; thence along the northerly line of said road South 77°18'20' East 43.90 feet to a point; thence South 5°16' West 145.27 feet to a 3/4 inch survey pipe set on the northerly line of Parcel One above described; thence at right angles and along the northerly line of said Parcel One North 4°14' West 7.50 feet to the point of beginning.
GRANT DEED

THE UNDERSIGNED GRANTOR(s) DECLARE(s)

DOCUMENTARY TRANSFER TAX IS $0. Conveyance into Trust for benefit of Grantor
☐ Computed on full value of property conveyed, or
☐ Computed on full value less liens or encumbrances remaining at time of sale
☐ Unincorporated area ☐ City of Santa Barbara

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged

hereby GRANT(S) to

Bruce F. Peterson, a married man, dealing with his sole and separate property

Bruce F. Peterson, Trustee of the Bruce F. Peterson Revocable Living Trust U/D/T dated April 21, 2003

the following described real property in the City of Santa Barbara, County of Santa Barbara, State of California:

LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A".

Dated: April 21, 2003

Bruce F. Peterson

STATE OF CALIFORNIA

) SS.

COUNTY OF SANTA BARBARA

On this 21st day of April, 2003, before me, the undersigned, a Notary in and for said County and State, personally appeared Bruce F. Peterson, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged that he executed the same in his authorized capacity and that by his signature on the instrument the person or the entity on behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

[Notary Seal]

America's Documents LDA #0013, Santa Barbara County

EXHIBIT B
DESCRIPTION:

PARCEL ONE:

That portion of the land in the City of Santa Barbara, County of Santa Barbara, State of California described in Quitclaim Deed to Gertrude E. Eaton, recorded July 17, 1962 as Instrument No. 4964 in Book 941, Page 1400 of Official Records of said County, described as follows:

Beginning at a point in the Westerly line of said Eaton Tract distant therefrom South 03°16'00'' West 145.77 feet from the Northwest corner of the land described in Parcel One in a deed to Ed R. Brewer, et ux., recorded November 29, 1966 as Instrument No. 13701 in Book 1247, Page 743 of Official Records of said County; thence along the Westerly line of said Eaton Tract North 03°16'00'' East 145.77 feet to the Northwest corner thereof; thence along the boundary of said Eaton Tract the following courses and distances:

South 04°44'00'' East 181.43 feet; South 18°25' 15'' West 12.54 feet; South 03°21' East 57.78 feet; South 03°33'20'' West 40.34 feet to the Northwest corner of the hereinafter mentioned Brewer Tract; thence along the Northerly line of said Brewer Tract North 84°44'' West 133.35 feet to the point of beginning.

Said land is shown with other land on Map recorded in Book 1247, Page 743 of Records of Surveys of said County.

PARCEL TWO:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de Luis as shown on a Map of Survey of the Bianca F. Fryer Tract, filed in Book 38, Page 124 of Records of Surveys, in the office of the County Recorder of Santa Barbara County.

EXCEPTING therefrom that portion described in the deed to the City of Santa Barbara, recorded September 13, 1951 as Instrument No. 13701 in Book 1247, Page 743 of Official Records of Santa Barbara County.

PARCEL THREE:

An easement and right of way for road and utility purposes 15.00 feet in width, the center line being described as follows:

Beginning at the Northwest corner of the hereinafter described Parcel One; thence North 03°16' East 203.18 feet to an iron stake survey pipe set at the extreme Westerly end of the Northerly line of said El Camino de Luis as shown on a Map of Survey of the Bianca F. Fryer Tract, filed in Book 28, Page 124 of Records of Surveys, in the office of the County Recorder of Santa Barbara County.

EXCEPTING therefrom any portion included within the lines of Parcel Two hereinafter described.

PARCEL FOUR:

An easement for walk, walkway and path for the purposes of access to and from beach below, over the Westerly 100 feet of the land described as Parcel One in the deed to Ed R. Brewer, et ux., recorded November 29, 1966 as Instrument No. 13701 in Book 1247, Page 743 of Official Records of Santa Barbara County.
Correcting Quitclaim Deed

This document is to correct the quitclaim deed recorded on February 21, 1999, as Instrument No. 99-015326.

The following is the correct information:

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Horace L. Wright and Jerry Lu Wright, husband and wife, as community property, hereby grant to the Horace L. Wright and Jerry Lu Wright Living Trust, UTD, February 11, 1999, Horace L. Wright and Jerry Lu Wright, Trustees, the real property in the County of Santa Barbara, State of California, described as:

LEGAL DESCRIPTION PER EXHIBIT 2. ATTACHED HERETO AND MADE A PART HEREOF.
With all appurtenances, subject to covenants, easements and restrictions of record.

Commonly known as: 1833 El Camino De La Luz, Santa Barbara, CA 93109

DATED: May 18, 1999

[Signature]
Horace L. Wright

DATED: May 18, 1999

[Signature]
Jerry Lu Wright
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Santa Barbara

On 5/18/99 before me, JANE DAVENPORT, Notary Public,
personally appeared, MARK L. WEIGHT, Signature:...

☐ Personally known to me
☐ Proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in their/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

JANE DAVENPORT
Notary Public

Description of Attached Document:

Covenants and Deeds

Document Date: 5/18/99
Number of Pages: 2

Signer(s) Other Than Named Above: None

Capacity(ies) Claimed by Signer

Signer's Name:

☐ Individual
☐ Corporate Officer — Title:
☐ Partner — Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other

Signer is Representing:

Acknowledged, sworn to, and signed by the person(s) acknowledged in the presence of me.

JANE DAVENPORT
Notary Public

Sworn to and subscribed before me on 5/18/99.

JANE DAVENPORT
Notary Public

Notary Public Seal

Sworn to and subscribed before me on 5/18/99.

JANE DAVENPORT
Notary Public

Notary Public Seal

Sworn to and subscribed before me on 5/18/99.

JANE DAVENPORT
Notary Public

Notary Public Seal
EXHIBIT A

THOSE PORTIONS OF THE OUTSIDE FUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MEJA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT A 3/4 INCH SURVEY PIPE SET AT THE MOST NORTHEASTERLY CORNER OF THE TRACT OF LAND DESCRIBED IN THE DEED TO C. L. VIVIAN FROM CARLA FRYER AND ROBERT S. ROBERT, DATED SEPTEMBER 7, 1944, AND RECORDED IN BOOK 615 AT PAGE 141 OF OFFICIAL RECORDS; THERE IS SOUTH 57°18' WEST ALONG THE WESTERNLY LINE OF THE SAID C. L. VIVIAN PROPERTY 150.63 FEET TO A 3/4 INCH SURVEY PIPE SET ON THE NORTHWESTERLY SIDE OF A 50 FOOT ROAD EASEMENT, KNOWN AS EL CAMINO DE LUZ; THERE IS SOUTH 71°34' EAST ALONG THE NORTHWESTERLY LINE OF SAID EL CAMINO DE LUZ 364.86 FEET TO A 3/4 INCH SURVEY PIPE SET AT AN ANGLE POINT; THERE IS SOUTH 77°48'70" EAST CONTINUING ALONG THE NORTHWESTERLY LINE OF SAID EL CAMINO DE LUZ 55.14 FEET TO A 3/4 INCH SURVEY PIPE SET AT THE MOST NORTHEASTERLY CORNER OF THE SAID 50 FOOT ROAD EASEMENT AND THE TRUE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED, BEING NORTHEAST CORNER OF THE TRACT OF LAND DESCRIBED IN DEED TO A. L. KIEFEL, ET UX., RECORDED DECEMBER 10, 1944 IN BOOK 764 AT PAGE 304 OF OFFICIAL RECORDS; THERE IS SOUTH 77°48'70" EAST ALONG THE NORTHWESTERLY LINE OF SAID EL CAMINO DE LUZ PRODUCED EAST 70.93 FEET, MORE OR LESS, TO A 3/4 INCH SURVEY PIPE SET IN A RAVINE, BEING A POINT IN THE EASTERNLY LINE OF THE TRACT OF LAND DESCRIBED IN DEED TO C. L. VIVIAN ABOVE MENTIONED; THERE IS SOUTH 40°15' EAST DOWN CENTRAL COURSE OF SAID RAVINE, ALONG THE EASTERNLY LINE OF SAID C. L. VIVIAN TRACT OF LAND 73.01 FEET TO A 3/4 INCH SURVEY PIPE; THERE IS EAST 39°21' EAST DOWN SAID RAVINE, ALONG THE EASTERNLY LINE OF SAID C. L. VIVIAN TRACT OF LAND 37.93 FEET TO A 3/4 INCH SURVEY PIPE; THERE IS SOUTH 18°15' WEST DOWN SAID RAVINE, ALONG THE EASTERNLY LINE OF SAID C. L. VIVIAN TRACT OF LAND 10.91 FEET TO A 3/4 INCH SURVEY PIPE, SET AT THE MOST NORTHEASTERLY CORNER OF THE TRACT OF LAND DESCRIBED IN DEED TO A. L. KIEFEL, ET UX., RECORDED JULY 11, 1944, IN BOOK 765 AT PAGE 46 OF OFFICIAL RECORDS; THERE IS WEST 44°44' EAST LEAVING SAID RAVINE AND FOLLOWING ALONG THE EASTERNLY LINE OF SAID KIEFEL TRACT OF LAND 144.18 FEET TO A POINT ON THE CENTER LINE OF SAID KIEFEL TRACT OF LAND FROM WHICH A 1/2 INCH SURVEY PIPE SET ON THE EASTERNLY SIDE OF SAID EASEMENT BOUNDS SOUTH 84°44' EAST 7.50 FEET DISTANCE, ALONG THE EASTERNLY LINE OF SAID TRACT OF LAND DESCRIBED IN SAID DEED TO A. L. KIEFEL, ET UX., RECORDED DECEMBER 10, 1944, IN BOOK 764 AT PAGE 304 OF OFFICIAL RECORDS; THERE IS NORTH 3°18' EAST AT EIGHT ANGLES FOLLOWING ALONG THE CENTERLINE OF SAID ROAD EASEMENT AND THE EASTERNLY LINE OF SAID LAST MENTIONED TRACT OF LAND 150.18 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL TWO:

AN EASEMENT FOR INGRESS AND EGRESS AND THE INSTALLATION, MAINTENANCE, AND REPAIR OF PUBLIC UTILITIES IN, ON, UNDER, OR UPON EL CAMINO DE LUZ, AS SHOWN ON MAP OF THE BLANCO E. FRYER TRACT FILED IN BOOK 18 AT PAGE 124 OF RECORD OF SURVEYS.
QUITCLAIM DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, THOMAS C. SLOAN and TIME F. SLOAN, husband and wife, as community property, do hereby REMISE, RELEASE and FOREVER QUIETLY QUITCLAIM TO:

THOMAS C. SLOAN and TIME F. SLOAN, husband and wife, as community property

The real property in the City of Santa Barbara, County of Santa Barbara, State of California, described as

SEE LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A".

Catherine Ann Neves

THOMAS C. SLOAN
TIME F. SLOAN

MAIL TAX STATEMENTS AS DIRECTED ABOVE
DESCRIPTION:

All that certain land situated in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

PARCEL ONE:

That portion of the Outside Pueblo Lands of the City of Santa Barbara, on La Mesa so-called in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4 inch survey pipe set at the Northwesterly corner of the tract of land described in Deed to C.L. Vivian from Carlos Fryer and Robert S. Emmett, dated September 7, 1944, and recorded in Book 619 at Page 141 of Official Records of said County, thence South 3° 16' West along the Westerly line of said C.I. Vivian property 175.74 feet to a point on the center line of a 50 foot road, thence South 79° 38' East along the center line of said 50 foot road 560.00 feet to the true point of beginning of the tract of land herein described said corner being the Northeast corner of Parcel One described in Deed to Whitford G. Kelley et al., dated August 5, 1946 and recorded in Book 698 at Page 236 of Official Records of said County from which a 3/4 inch survey pipe set on the Southwesterly side of said 50 foot road bears South 3° 16' West 25.11 feet distant thence South 5° 16' West along the Easterly line of said Kelley Tract of land 180 feet, thence at right angles East 59.76 feet to the Easterly line of the Tract of land described in deed to A.L. Kienle et al., recorded December 10, 1947 in Book 765 at Page 394 of Official Records, records of said County thence North 5° 16' East parallel with the Easterly line of said Kelley Tract and distant 59.76 feet Easterly therefrom and along the Easterly line of said Kelley Tract to the Northeast corner thereof being a point on the Southwesterly line of the Tract of land described as Parcel One deed to A.L. Kienle et al., recorded in Book 732 at Page 416 of Official Records, records of said County, thence North 79° 38' West, along the Southwesterly line of said last mentioned Kienle Tract 34.94 feet thence South 17° 11' 42" West, continuing along the line of said last mentioned Kienle Tract 25.00 feet to the center line of a 50 foot road, thence North 79° 38' West along the center line of said 50 foot road 2.23 feet to the true point of beginning.

PARCEL TWO:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon the or through a strip of land 50 feet in width, lying 25 feet on each side of the following described line:

Continued...
Beginning at the Easterly end of the last course of Parcel One above described on the center line of the said 30 foot road, thence North 89° 38' West 367.73 feet to a point on the Westerly line of said tract of land described in Deed to G.L. Vivian as referred to from which the most Northerly corner of the tract above described is 233.74 feet distant thence North 89° 38' East 175.74 feet distant thence North 89° 38' West, continuing along the center line of said road 406.83 feet to the Easterly line of Oliver Road.

Parcel Three:

A right of way for road purposes for the installation, maintenance and repair of public utilities as located by deed recorded December 10, 1947 as Instrument No. 16515 in Book 762, Page 304 of Official Records, over, under, upon or through a strip of land 7.50 feet in width lying parallel with adjacent to and Easterly of the following described line:

Beginning at the Northeast corner of the tract of land described in Deed to A.L. Kienzie as filed for record December 10, 1947, in Book 762, at Page 304 of Official Records, in the office of the County Recorder of said County thence South 5° 16' West along the Easterly line of said Kienzie Tract 203.18 feet.

Parcel Four:

A non-exclusive easement for pedestrian ingress and egress, on and under a strip of land 3 feet in width along the Westerly property line of that certain parcel of land described as follows:

That portion of the land in the County of Santa Barbara, State of California, described in Quitclaim Deed to Ernest E. Eaton, recorded July 17, 1962, as Instrument No. 29640 in Book 1944, Page 1400 of Official Records of said County, described as follows:

Beginning at a point in the Westerly line of said Eaton Tract divide therefrom South 05° 16' 00" West 145.77 feet from the Northwest corner thereof, being the Northwest corner of the land described in Parcel I in deed to Ed R. Brewer, et al., recorded November 29, 1956, as Instrument No. 31841, in Book 2152, Page 765, of Official Records of said County, thence along the Westerly line of said Eaton Tract North 05° 16' 00" East 145.77 feet to the Northwest corner thereof; thence along the boundary of said Eaton Tract the following courses and distances; South 84° 44' 00" East 151.49 feet; South 18° 25' West 12.34 feet; South 89° 38' 21' East 57.78 feet; South 31° 32' West 43.00 feet; and South 31° 32' West 43.34 feet to the Northeast corner of the hereinbefore mentioned Brewer Tract North 84° 44' West 113.35 feet to the point of beginning.
STATE OF OREGON,

County of Lane.

BE IT REMEMBERED, That on the 18th day of October, 1973,

before me, the undersigned, a Notary Public in and for said County and State, personally appeared the within named:

Esther F. Sloan.

known to me to be the identical individual described in and who executed the within instrument and acknowledged to me that she executed the same freely and voluntarily,

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Schmielma.

Notary Public for Oregon.

My Commission expires 2-2-47.
STATE OF CALIFORNIA
COUNTY OF SANTA BARBARA

On ___________ before me, Catherine Ann Neves, personally appeared **Tina L. Sloan**.

I, the undersigned officer, having been authorized to hold an election and administer oaths, do hereby certify that the person(s) whose name(s) is subscribed to the instrument and acknowledged to me, is (are) the person(s) whose name(s) is (are) subscribed to the instrument and acknowledged to me, and that the person(s) whose name(s) is (are) subscribed to the instrument is (are) the person(s) whose name(s) is (are) subscribed to the instrument.

Witness: Catherine Ann Neves

Catherine Ann Neves

The above is true and correct.
Trust Transfer Deed

Grant Deed (Excluded from Reappraisal Under Proposition 13, i.e., Cal. Const. Art 12A § 1 et seq.)

The undersigned Grantor(s) declare(s) under penalty of perjury that the following is true and correct:

THERE IS NO CONSIDERATION FOR THIS TRANSFER.

☐ Document transfer tax 1 —

☐ Computed on full value of property conveyed, or

☐ Computed on full value less than fair market value of interest and incumbrances remaining at time of sale or transfer.

☐ There is no documentary transfer tax due: (state reason and give Code § or Ordinance number)

☐ Unincorporated area:  City of: 

This is a Trust Transfer under §42 of the Revenue and Taxation Code and Grantor(s) has (has) checked the applicable exclusion(s):

☐ Transfer to a relative trust;

☐ Transfer to a subordinated trust not exceeding 12 years with trustee holding the co-trustee;

☐ Transfer to a trust where the trustee or the trust's spouse is the sole beneficiary;

☐ Change of trustee holding title;

☐ Transfer from trust to trustee or trustee's spouse where prior transfer to trust was excluded from reappraisal and for a valuable consideration, except as if acknowledged;

☐ Other:

GRANTOR(S): HERBERT E. BARTHELS, an unmarried man hereby GRANTING to HERBERT E. BARTHELS, as Trustee of the HERBERT E. BARTHELS TRUST dated December 9, 1985.

the following described real property situate in the County of Santa Barbara, State of California:

Per legal description attached hereto and made a part hereof.

DATED: 11/27/77

Herbert E. Barthelds

STATE OF CALIFORNIA
COUNTY OF SANTA BARBARA

On this the 11th day of November, 1977, before me, Cheryl A. Reynolds, the undersigned Notary Public, personally appeared HERBERT E. BARTHELS, the person(s) whose signature(s) is (are) subscribed to the within instrument and acknowledged that he (we) executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 11th day of November, 1977.

Cheryl A. Reynolds
Notary Public

This area for official notarial seal.

EXHIBIT E
LEGAL DESCRIPTION

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CANTO DE LA LUZ AT THE EXTREME EASTERN END THEREOF, AS SAID EL CANTO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 121 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERN LINE OF SAID EL CANTO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 3° 16' WEST 350.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 3° 16' WEST 134.33 FEET, TO THE LINE OF HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87° 31' EAST 127.46 FEET TO A POINT; THENCE NORTH 18° 26' EAST 36.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 32° 07' WEST 37.83 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 59° 31' WEST 63.20 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 38° 53' EAST 22.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 87° 49' WEST 133.33 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY INPERCEPIABLE DEGREES.

PARCEL TWO:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN CONJUNCTION WITH OTHERS, OVER SAID EL CANTO DE LA LUZ AS SHOWN ON SAID MAP OF THE BLANCO E. FRYER TRACT, ABOVE REFERRED TO.

PARCEL THREE:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 15 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE TRUE POINT OF BEGINNING OF THE PARCEL ONE REFERRED TO ABOVE, DESCRIBED; THENCE NORTH 3° 16' EAST 350.95 FEET TO A 1/2 INCH SURVEY PIPE SET AT THE EXTREME EASTERN END OF THE NORTHERLY LINE OF SAID EL CANTO DE LA LUZ AS SHOWN ON SAID MAP.

PARCEL FOUR:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 2 1/2 FEET IN WIDTH, THE EASTERN LINE OF SAID 2 1/2 FOOT STRIP BEING A PARALLEL TO AND 2 1/2 FEET EAST OF THE EASTERN LINE OF THE EASEMENT AND RIGHT OF WAY DESCRIBED AS PARCEL THREE ABOVE, THE SOUTHERLY TERMINUS OF SAID 2 1/2 FOOT STRIP BEING THE NORTHERLY LINE OF PARCEL ONE REFERRED TO ABOVE, AND THE NORTHERLY TERMINUS OF SAID 2 1/2 FOOT STRIP BEING THE NORTHERLY LINE OF PARCEL ONE AS DESCRIBED IN DEED TO GERARDO P. CASON RECORDED MARCH 17, 1961 AS DOCUMENT NO. 2053 IN BOOK 134, PAGE 757, OFFICIAL RECORDS OF SANTA BARBARA COUNTY.

THE LAND ABOVE DESCRIBED IS SHOWN TOGETHER WITH OTHER PROPERTY ON A MAP OF A SURVEY FILED DECEMBER 15, 1947 IN BOOK 28 AT PAGE 121 OF RECORD OF SURVEYS, RECORDS OF SANTA BARBARA COUNTY.

IMPORTANT NOTICE: This document contains important information that may affect your legal rights. Please review it carefully and consider seeking legal advice if you have any questions.
EXHIBIT
Legal Description
( Barthel Access)

Parcel One:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de la Luz, as shown on the map of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California, filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County.

Parcel Two:

An easement and right of way for road and public utility purposes over that portion of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County, described as follows:

Beginning at the northeast corner of El Camino de Luz, now known as El Camino de la Luz, as shown on said map:

Thence South 84°44' East, perpendicular to the easterly line of said El Camino de Luz, 7.50 feet to a line parallel with and 7.50 feet easterly of said easterly line and the northeasterly corner of the land described as Parcel Three and One/Half in a deed granted to Ed R. Brewer, et ux. recorded November 29, 1966 in Book 2173, Page 765 of Official Records;

Thence South 05°16' West, along said parallel line and its southerly extension 204.27 feet to its intersection with the northerly line of the land described as Parcel One, in a deed granted to Fred A. Eaton, et ux. recorded November 10, 1949 in Book 883, Page 328 of Official Records;

Thence South 84°44' East, along the northerly line of said Parcel One granted to Fred A. Eaton, et ux., 2.50 feet to the northeasterly corner of Parcel Four described in said deed granted to Ed R. Brewer, et ux.;

Thence South 05°16' West, along the easterly line of said Parcel Four, 145.78 feet to the northerly line of the land described as Parcel One in said deed granted to Ed R. Brewer, et ux.;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 10.00 feet to the northwesterly corner of said last mentioned Parcel One and a point on the westerly line of said Parcel One granted to Fred A. Eaton, et ux.;
EXHIBIT Q
DASHED LINES ARE THE LIMITS OF EXHIBIT F LEGAL DESCRIPTION OF STIPULATED JUDGMENT FILED SEPT. 8, 2009.

Distances shown are widths of the easement from edge of legal description to parcel lines.

CAMINO DE LA

LUZ

Scale: 1" = 56'

North

MORGAN PARCEL

PETerson PARCEL

SMITH PARCEL

BARTHELS PARCEL

No. 5019
EXP. 12/31/2017

Licensed Land Surveyor
GARY P. SALMER
STATE OF CALIFORNIA

Gary Salmer
8/21/2017
SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SANTA BARBARA
ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the Herbert E. Barthels Trust dated December 9, 1985,

Plaintiff,

vs.

RAFAEL FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
LINDA FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999;
BRUCE PETERSON, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003;
HORACE L. WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
JERRY LU WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999;
THOMAS SLOAN, an individual;
TINE F. SLOAN, an individual; and
DOES 1 through 50, inclusive,

Defendants.

CASE NO.: 1268293

[PROPOSED] STIPULATED JUDGMENT

Assigned to the Hon. Thomas P. Anderele

STIPULATED JUDGMENT
In the above entitled case, Plaintiff is Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, (hereinafter referred to as "Plaintiff"). Defendants and their respective properties are:

1. Rafael Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; Linda Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999, owner of APN 45-100-18 ("the Franco Parcel"), whose legal description is more fully provided in Exhibit "A";

2. Bruce Peterson, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003 owner of APN 45-100-64 ("the Peterson Parcel"), whose legal description is more fully provided in Exhibit "B";

3. Horace L. Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; Jerry Lu Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999 owner of APN 45-100-17 ("the Wright Parcel"), whose legal description is more fully provided in Exhibit "C";

4. Thomas Sloan, an individual and Tine F. Sloan, an individual, and each of them, owners of APN 45-100-45 ("the Sloan Parcel"), whose legal description is more fully provided in Exhibit "D."

Plaintiff and Defendants have stipulated that judgment be entered granting Plaintiff, the owner of the real property commonly known as APN 45-100-65 and more particularly described in the legal description attached hereto as Exhibit "E" (the "Dominant Tenement") easements and rights of way for road and public utility purposes ("the Easement") to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants' real properties. The Easement being more particularly described in the legal description attached hereto as Exhibit "F" and in the Exhibit map attached hereto as Exhibit "G". These easements are appurtenant and run with the land. They may not be transferred separately from their respective properties.
The portion of the road and utility easements that passes over each of these properties is:

(i) No wider than 7.5 feet on the Wright Property, and no wider than 7.5 feet on the Sloan Property, which when these two properties border each other the combined width does not exceed 15 feet, except for the area shown as Camino De Luz on the Record of Survey filed in Book 28, Page 124 of Record of Surveys, where the easement width shall include said Camino De Luz;

(ii) No wider than 7.5 feet on the Franco Property, and no wider than 7.5 feet on the Sloan property, which when those two properties border each other the combined width does not exceed 15 feet, except that on the southern 7.14 feet of the Franco Property, the total road width does not exceed 7.5 feet.

(c) No wider than 10 feet on the Peterson Property.

(d) Any other access rights in favor of Barthels over Defendants’ parcels are deemed abandoned.

There currently exists in the Easement over Defendants’ parcels certain minor encroachments, which are permitted, and may not be further improved or enlarged. These encroachments are: (1) a portion of a wall on the Franco Property; (2) a planter on the Wright Property; and (3) a planter and landscaping on the Sloan Property.

IT IS HEREBY ADJUDGED, ORDERED AND DECREED that judgment be entered granting Plaintiff, Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, the owner of the property commonly known as APN 45-100-65, easements and rights of way for road and public utility purposes to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants’ real properties. The Easement is more particularly described in the legal description attached hereto as Exhibit “F” and in the Exhibit map attached hereto as Exhibit “G”. The Easement shall run with the land.

THOMAS P. ANDERLE

The Hon. Thomas P. Anderle
JUDGE OF THE SUPERIOR COURT

Dated: September 4, 2009

STIPULATED JUDGMENT
Counsel for Plaintiff and cross-defendant, counsel for Defendants and cross-complainants stipulate to the foregoing judgment.

Dated: September 3, 2009

HOLLISTER & BRACE
By Marcus Bird,
Counsel for Plaintiff and Cross-Defendant.

Dated: September 3, 2009

HAWS, RECORD & MAGNUSSON, LLP
David W. Magnusson,
Counsel for Defendants and Cross-Complainants.
EXHIBIT
Legal Description
 Barthel Access

Parcel One:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de la Luz, as shown on the map of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California, filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County.

Parcel Two:

An easement and right of way for road and public utility purposes over that portion of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County, described as follows:

Beginning at the northeast corner of El Camino de Luz, now known as El Camino de la Luz, as shown on said map:

Thence South 84°44' East, perpendicular to the easterly line of said El Camino de Luz, 7.50 feet to a line parallel with and 7.50 feet easterly of said easterly line and the northeasterly corner of the land described as Parcel Three and One Half in a deed granted to Ed R. Brewer, et al, recorded November 29, 1966 in Book 2173, Page 765 of Official Records;

Thence South 05°16' West, along said parallel line and its southerly extension 204.27 feet to its intersection with the northerly line of the land described as Parcel One, in a deed granted to Fred A. Eaton, et al, recorded November 10, 1949 in Book 883, Page 328 of Official Records;

Thence South 84°44' East, along the northerly line of said Parcel One granted to Fred A. Eaton, et al., 2.50 feet to the northeasterly corner of Parcel Four described in said deed granted to Ed R. Brewer, et al.;

Thence South 05°16' West, along the easterly line of said Parcel Four, 145.78 feet to the northerly line of the land described as Parcel One in said deed granted to Ed R. Brewer, et al.;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 10.00 feet to the northwesterly corner of said last mentioned Parcel One and a point on the westerly line of said Parcel One granted to Fred A. Eaton, et al;
Thence North 5°16' East, along said last mentioned westerly line, 145.77 feet to the northwest corner of said Parcel One granted to Fred A. Eaton;

Thence North 5°16' East, along the easterly line of the land described as Parcel One in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records, 7.14 feet to the northeast corner of said last mentioned Parcel One;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 7.50 feet to a line parallel with and 7.50 feet easterly of the easterly line of said Camino de Luz;

Thence North 5°16' East, along said last mentioned parallel, 92.55 feet, more or less, to its intersection with the southerly line of said Camino de Luz;

Thence South 34°38' East, along the southerly line of said Camino de Luz, 11.78 feet to the southeast corner of said Camino de Luz;

Thence North 5°16' East, along the easterly line of said Camino de Luz, 114.57 feet to the point of beginning.
EXHIBIT R
EXHIBIT S
Rising sea levels could mean twice as much flood risk in Los Angeles and other coastal cities

By Amina Khan

MAY 18, 2017, 5:00 PM

The effects of rising oceans on coastal flooding may be even worse than we thought. Scientists have found that a mere 10 to 20 centimeters of sea-level rise — which is expected by 2050 — will more than double the frequency of serious flooding events in many parts of the globe, including along the California coastline.

The findings, described in Scientific Reports, highlight the environmental and economic impacts of sea-level rise on coastal areas, and the need to properly predict and prepare for these effects.

As global warming marches onward and land-ice reserves continue to melt into the seas — thanks in large part to human-produced greenhouse gases — oceans are continuing their upward creep.
account storm surge and tidal fluctuations, among other variables. But they haven’t included a crucial factor: waves.

“Most of these tide gauges are within harbors or in protected areas, so they don’t record any water level associated with waves,” said Sean Vitousek, a coastal scientist at the University of Illinois at Chicago.

Waves might seem like small potatoes compared with high tides, but they can have a big impact, Vitousek said.

“Waves often generate a pretty significant portion of the actual flood levels,” he explained. “For instance, if you think about just tides and storm surge, then in some areas, waves can add an additional 50-to-100% of that existing water level.”

That’s particularly true in California. Much of the flooding here is dominated by wave-driven events — which is why El Niño years with extremely large waves can have such profound effects on coastal erosion. A recent paper by one of Vitousek’s co-authors showed that the 2015-16 El Niño season caused unprecedented levels of erosion across much of the West Coast.

Even on islands in the Pacific and other equatorial regions where waves are smaller and the tides bring only a few centimeters of change, waves can have an outsize impact — in part because humans may build closer to the water line in those areas and be unprepared for the changes that come with sea-level rise.

For this paper, Vitousek and his colleagues combined wave, tidal and storm surge models with their data on sea-level projections. The results showed that 10 to 20 centimeters of sea-level rise happening no later than 2050 could have major impacts in many parts of the globe, including around India, the Indian Ocean and the tropical Atlantic along the west coast of Africa.

“Often these areas are fairly low-lying, have a lot of development, and those areas would also be fairly impacted by future sea-level rise,” he said. “As you go to higher latitudes, you’ll still get these effects, but not quite as much, because the waves are larger, the tide is larger and so sea-level rise doesn’t represent the same percent or relative contribution to those areas.”

The effects will be most pronounced in the tropics, the researchers found. Areas such as the Marshall Islands in the central Pacific are particularly vulnerable.

“You’ll still see impacts at higher latitudes — the California coast, the Pacific Northwest — but you probably won’t see the same dramatic effects that you would in the tropics,” Vitousek said. “It’s really going to happen everywhere, [but] it’ll happen faster in the tropics.”

The southern portion of Southern California may experience the brunt of sea-level rise in the region, he said. That includes beaches from around Point Loma all the way up to Laguna Beach, including La Jolla, Del Mar.
"These areas have very limited stretches of sandy beach providing a buffer from storms, so they will certainly be the ones that experience the largest impact," he said.

Beaches in the Los Angeles area, such as in Santa Monica and Redondo Beach, and Dockweiler Beach by LAX, are much wider, with extremely large buffers of sand between land and water (thanks in part to decades of "nourishment" as humans dredged sand and brought it to shore).

But many areas in Malibu and Santa Barbara will feel the hit. Thanks to waves, higher sea levels in California come not just with flooding, but with erosion and cliff retreat.

The scientists are sharing this information with state and local agencies to try to figure out where the most vulnerable areas may be — and what should be done to prepare them. For the moment, Vitousek said, one of the easiest solutions may be more beach nourishment, even though it's a temporary solution at best.

The scientists hope to calculate how much economic damage could be incurred by the effects of sea-level rise. In the meantime, they're continuing to study its impact on the California coastline in ever more granular detail — and that in-depth understanding may help scientists continue to improve their models for the world.

"I think it calls to attention the future consequences of sea level rise," said William Sweet, an oceanographer with the National Oceanic and Atmospheric Administration in Silver Spring, Md., who was not involved in the work.

Sweet recently led a NOAA report showing that sea-level rise will progress faster in some places and slower in others — variations that would be key in understanding coastal flooding effects in different areas. The Scientific Reports paper did not take this into account.

"In reality it's not going to be a uniform rise," he said. "The change in land elevation itself, changes in circulation, change in gravity in the future as the ice caps change are all going to cause a very non-uniform rise in sea levels."

Future, increasingly detailed assessments of the impacts of sea-level rise, he added, will need to take that variability into account.

amina.khan@latimes.com

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UPDATES:

5 p.m.: This story has been updated to include comments from William Sweet, an oceanographer with the National Oceanic and Atmospheric Administration.

This story was originally published at 1:30 p.m.

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This article is related to: Floods and Flooding, Environmental Science, Scientific Research
EXHIBIT T
El Niño triggered unprecedented erosion across California's coast

With such high erosion, there's very little chance the gentler waves of summertime can deposit enough sand to make up the difference.

A new study suggests the weather pattern accelerates coastal erosion

By Amina Khan

FEBRUARY 14, 2017, 6:35 PM

El Niño may not have brought much rain to Southern California, but it did take its toll on the Golden State's beaches.

A new study of the waves, water levels and coastal changes at 29 beaches across California, Oregon and Washington has found that the 2015-16 El Niño triggered unprecedented erosion across much of the West Coast.

The results, published this week in the journal Nature Communications, document a level of degradation from which these natural systems may not be able to recover. That could have far-reaching environmental and economic impacts, experts said.

The analysis also opens a window into how the coast is likely to hold up as climate change and its associated sea-level rise worsen.

“This is likely the kind of El Niño we may experience more in the future,” said lead author Patrick Barnard, a coastal geologist with the U.S. Geological Survey in Santa Cruz.

El Niño is a multiyear weather pattern that typically brings big storms to the West Coast. Drought-parched Southern California had awaited the expected rains last winter with bated breath, hoping it would help revive California’s wilting landscape. Northern California did get a good soaking — but down south, the deluge never materialized, leaving many Angelenos wondering whether El Niño really came to the region at all.

But the phenomenon did hit Southern California — along with the rest of the West Coast — hard. That’s because the weather pattern isn’t just about rain. Its strength also can be measured by the power of the waves pounding the coastline.

Barnard knew he wasn’t the only one watching the coastlines; colleagues at half a dozen other institutions had been monitoring activity along the West Coast. They quickly realized that, wet or not, they could have a monster El Niño on their hands — and that it could take a major toll on beaches.

Beaches go through a seasonal cycle: Powerful winter waves drag sand out to sea, while more gentle waves in the summer deposit much of that sand back onshore. During El Niño winters, the waves are extra-strong, removing even more sand — and causing more erosion — than usual.

Teaming up, the scientists made surface maps using a remote-sensing laser technology called light detection and ranging, or LIDAR. They also drove all-terrain vehicles across beaches to perform GPS-based topographic surveys. (Barnard, not the biggest fan of dune buggies, said he took it slow.) That kind of analysis wasn’t possible during the last really big El Niño season in 1997-98, when GPS technology was just coming online, Barnard said.

“There was a little bit of data collection back then,” he added, “but now it’s basically cheaper, it’s faster — it’s easier to collect these kinds of data.”

The researchers found that the most extreme waves were about 50% larger than usual during the 2015-16 El Niño season. Consequently, the level of beach erosion was a whopping 76% higher than normal — and 27% higher than any other recorded winter.

Barnard and his colleagues had expected this El Niño would be big. They just hadn’t thought it would be quite this big.

“We saw the conditions in the Pacific, but I think we were definitely surprised at the scale of the event — especially in relation to the other two monster El Niños that have always been considered to be the big ones,” he said, referring to the 1982-83 and 1997-98 winter seasons.
The problem with such extreme erosion is that there’s very little chance the summertime waves can deposit enough sand to make up the loss. That makes an El Niño like last year’s a potentially unrecoverable event for the natural system.

Beaches can also be replenished with new sediment washing down rain-swollen rivers. But in Southern California, the combination of powerful waves and little rain created a worst-case scenario, Barnard said.

This situation is one that’s been long in the making, said Robert Guza, a physical oceanographer at UC San Diego’s Scripps Institution of Oceanography who was not involved in the study.

“Southern California, we love to build in river floodplains and then say, ‘Holy crap, it flooded,’” Guza said. “Then we dam the rivers for flood control and say, ‘Holy crap, the sand’s not getting to the beaches anymore.’”

The damming of Southern California’s rivers has trapped roughly half of the sediment that would otherwise replenish the region’s beaches, he added — sediment that later costs money to remove.

“Our beaches are sand-starved, partially because we’re starving them,” he added.

The loss of such beach area has serious consequences for the plants and animals that rely on that habitat, said Lesley Ewing, a senior coastal engineer with the California Coastal Commission in San Francisco who was not involved in the research paper.

“There are birds that nest on sandy beach areas; there are fish that lay their eggs on the beach, like grunion,” Ewing said. “So they’re really important for a number of parts of the food web.”

There are also economic ramifications for property owners and cities near such coveted shorelines. Beaches bring in money from both locals and tourists — which is why millions of dollars are often spent to bring in sand to artificially replenish them, Guza said.

“The beaches are really an incredibly valuable public resource,” Ewing said, pointing out that those cooling sea breezes may become increasingly valuable to state residents as inland areas heat up over the next several decades.

Ewing said the study affirmed what she’d seen at beaches in Northern California, including severe erosion at Half Moon Bay and Pacifica State Beach. For Guza, the findings helped explain the significant erosion he’d seen at San Diego beaches.

This El Niño may have been a big one, but it may become “the new normal,” Guza and Ewing said.

During El Niño, the sea level temporarily rises by several inches along the coast. That’s a good proxy for the sea level rise that’s expected in the coming decades as rising temperatures melt polar ice reserves, Guza said.

“The only real prediction I have is, it will get worse — a lot worse,” Guza said. “I just don’t know how fast.”
Communities, he said, will have to decide whether to protect vulnerable beaches — perhaps by bringing in more sand, or building sea walls.

In the meantime, researchers say they plan to continue tracking the health of West Coast beaches.

"Because these kinds of events are forecast to be more common in the future, it's really important for us to capture these in great detail so we can get a better sense for what kinds of winters we may expect more often in the future," Barnard said.

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UPDATES:

6:35 p.m.: The story was updated with additional comments from Patrick Barnard of the USGS, as well as comments from Robert Guza of the Scripps Institution of Oceanography and Lesley Ewing of the California Coastal Commission.

The story was originally published at 8 a.m.

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This article is related to: Climate Change, Geology, Scientific Research, Environmental Science
Rising Seas in California
AN UPDATE ON SEA-LEVEL RISE SCIENCE

APRIL 2017
About This Document

This document was produced by a Working Group of the California Ocean Protection Council Science Advisory Team (OPC-SAT), supported and convened by the California Ocean Science Trust. The State of California Sea-Level Rise Guidance Document, initially adopted in 2010 and updated in 2013, provides guidance to state agencies for incorporating sea-level rise projections into planning, design, permitting, construction, investment and other decisions. Now, the California Ocean Protection Council and the California Natural Resources Agency, in collaboration with the Governor’s Office of Planning and Research, the California Energy Commission, and the California Ocean Science Trust, are updating this statewide guidance to reflect recent advances in ice loss science and projections of sea-level rise. This document, requested by the California Ocean Protection Council and guided by a set of questions from the state Sea-Level Rise Policy Advisory Committee, provides a synthesis of the state of the science on sea-level rise. It provides the scientific foundation for the pending update to the guidance document.

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FUNDING

Funding was provided by the California Ocean Protection Council.
Key Findings

1. **Scientific understanding of sea-level rise is advancing at a rapid pace.** Projections of future sea-level rise, especially under high emissions scenarios, have increased substantially over the last few years, primarily due to new and improved understanding of mass loss from continental ice sheets. These sea-level rise projections will continue to change as scientific understanding increases and as the impacts of local, state, national and global policy choices become manifest. New processes that allow for rapid incorporation of new scientific data and results into policy will enable state and local agencies to proactively prepare.

2. **The direction of sea level change is clear.** Coastal California is already experiencing the early impacts of a rising sea level, including more extensive coastal flooding during storms, periodic tidal flooding, and increased coastal erosion.

3. **The rate of ice loss from the Greenland and Antarctic Ice Sheets is increasing.** These ice sheets will soon become the primary contributor to global sea-level rise, overtaking the contributions from ocean thermal expansion and melting mountain glaciers and ice caps. Ice loss from Antarctica, and especially from West Antarctica, causes higher sea-level rise in California than the global average: for example, if the loss of West Antarctic ice were to cause global sea-level to rise by 1 foot, the associated sea-level rise in California would be about 1.25 feet.

4. **New scientific evidence has highlighted the potential for extreme sea-level rise.** If greenhouse gas emissions continue unabated, key glaciological processes could cross thresholds that lead to rapidly accelerating and effectively irreversible ice loss. Aggressive reductions in greenhouse gas emissions may substantially reduce but do not eliminate the risk to California of extreme sea-level rise from Antarctic ice loss. Moreover, current observations of Antarctic melt rates cannot rule out the potential for extreme sea-level rise in the future, because the processes that could drive extreme Antarctic Ice Sheet retreat later in the century are different from the processes driving loss now.
Probabilities of specific sea-level increases can inform decisions.
A probabilistic approach to sea-level rise projections, combined with a clear articulation of the implications of uncertainty and the decision-support needs of affected stakeholders, is the most appropriate approach for use in a policy setting. This report employs the framework of Kopp et al. (2014) to project sea-level rise for three representative tide gauge locations along the Pacific coastline: Crescent City in northern California, San Francisco in the Bay area, and La Jolla in southern California. These projections may underestimate the likelihood of extreme sea-level rise, particularly under high emissions scenarios, so this report also includes an extreme scenario called the H++ scenario. The probability of this scenario is currently unknown, but its consideration is important, particularly for high-stakes, long-term decisions.

Current policy decisions are shaping our coastal future.
Before 2050, differences in sea-level rise projections under different emissions scenarios are minor but they diverge significantly past mid-century. After 2050, sea-level rise projections increasingly depend on the trajectory of greenhouse gas emissions. For example, under the extreme H++ scenario rapid ice sheet loss on Antarctica could drive rates of sea-level rise in California above 50 mm/year (2 inches/year) by the end of the century, leading to potential sea-level rise exceeding 10 feet. This rate of sea-level rise would be about 30-40 times faster than the sea-level rise experienced over the last century.

Waiting for scientific certainty is neither a safe nor prudent option.
High confidence in projections of sea-level rise over the next three decades can inform preparedness efforts, adaptation actions and hazard mitigation undertaken today, and prevent much greater losses than will occur if action is not taken. Consideration of high and even extreme sea levels in decisions with implications past 2050 is needed to safeguard the people and resources of coastal California.
Report Outline

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Appendix 1: Questions from the Policy Advisory Committee to the OPC-SAT Working Group
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1. Introduction

Global sea-level rise is the most obvious manifestation of climate change in the ocean. It is an issue that will have far-reaching consequences for California, given its 1100-mile open coastline and many additional miles of estuarine shoreline, as well as high concentrations of people and development along the coast. Sea-level rise will continue to threaten coastal communities and infrastructure through more frequent flooding and inundation, as well as increased cliff, bluff, dune, and beach erosion.

Human development and pressures from a rising sea threaten the already diminished coastal wetlands along the California coast. Hundreds of miles of roads and railways, harbors and airports, power plants and wastewater treatment facilities, in addition to thousands of businesses and homes, are at risk from future flooding, inundation, and coastal retreat [1]. But the total potential impact of such coastal risks is significantly larger still: not only are economic assets and households in flood zones increasingly exposed, but also people’s safety, lives, daily movement patterns, and sense of community and security could be disrupted.

California also has the nation’s largest ocean economy, valued at over $44 billion/year [2], with the great majority of it connected to coastal recreation and tourism, as well as ports and shipping. Many of the facilities and much of the infrastructure that support this ocean economy, as well as the State’s many miles of public beaches, lie within a few feet of present high tide.
1.1. Updating California’s Statewide Guidance

The State of California Sea-Level Rise Guidance Document, initially released in 2010 and first updated in 2013, has provided guidance to state agencies for incorporating sea-level rise projections into planning, design, permitting, construction, investment, and other decisions. In 2010, the Governors of Oregon and Washington, along with 10 state and federal agencies, approached the National Research Council (NRC) with a request to provide estimates and projections of future sea-level rise. The NRC Committee built upon and updated the most recent Intergovernmental Panel on Climate Change report at the time [3]. The Committee’s report, Sea-Level Rise for the Coasts of California, Oregon, and Washington - Past, Present and Future was completed in 2012 [4]. The future sea-level projections from this report have guided state agencies in their sea-level rise planning in the subsequent years. Five years have elapsed since the NRC study, during which time a new Intergovernmental Panel on Climate Change (IPCC) report was published containing updated sea-level rise projections based on new scenarios, model simulations, and scientific advances [5]. New research has also been published on some of the primary drivers of sea-level change, which includes important new work on ice sheet mass loss in Antarctica, as well as on new methods for producing probabilistic projections of local sea-level change [6,7].

Now, the California Ocean Protection Council and the California Natural Resources Agency, in collaboration with the Governor’s Office of Planning and Research, the California Energy Commission, and the California Ocean Science Trust, are updating this statewide guidance for a second time to reflect recent advances in ice loss science and projections of sea-level rise. The updated guidance will focus on the needs of state agencies and local governments. It will help cities and counties as they comply with a new law that requires them to incorporate climate change into their planning efforts. The updated guidance document will also assist state agencies prepare for and adapt to climate change, as directed by Governor Brown’s recent Executive Order B-30-15.

This document, a synthesis of the state of the science on sea-level rise, provides the scientific foundation for the update to the existing guidance document. Because effective planning for sea-level rise involves collaboration among various departments within coastal city and county governing bodies, special districts, state agencies, federal agencies, climate researchers, non-governmental organizations, business owners and other stakeholders, a robust public engagement process has been launched and will be implemented throughout 2017 to ensure that the new policy guidance is responsive to user needs. Public input will be integrated into the final guidance document update, which is scheduled for adoption by the California Ocean Protection Council in January 2018.
1.2. How this report was developed

This report was developed by a Working Group of the Ocean Protection Council Science Advisory Team, supported and convened by California Ocean Science Trust. The Working Group was convened from January - April 2017. Working Group members met regularly via videoconference during this period and convened for a two-day in-person meeting in February 2017. The scope and content of the report was informed by a set of questions from the state sea-level rise Policy Advisory Committee (Appendix 1). All Working Group members have contributed to the development of the report, and reviewed the final product. In addition the report has been peer reviewed by experts and revised to reflect the input received.

1.3. How to use this report

This report is intended to provide the scientific foundation for updating California’s statewide sea-level rise policy guidance. It is also intended to be used alongside policy recommendations to support planning, permitting, investment, and other decisions at state and local scales. Planners, land managers, consultants, and government officials can draw directly on the scientific data, graphics, and text provided herein as it offers context, explanation, and scientific foundation for planning and decisions. Scientific information is one important input into the detailed and systematic process that decision-makers undertake to evaluate options to prepare for and respond to the emerging impacts of changing coastal hazards.

We have structured this report to provide scientific information that is useful for making decisions now. Although long-range (>40-50 year) sea-level rise futures are uncertain, we explain the sources of these uncertainties, and to the extent possible offer probabilistic sea-level rise projections that can be used in decisions today and in the near future. As the Earth system enters uncharted territory due to rapid changes in the Earth’s climate, resulting in sea-level rise rates unprecedented at least in human experience, scientists are attempting to understand the processes contributing to sea-level rise as quickly as possible. An update of the science underlying sea-level rise is necessary because the effects of many decisions made today will persist for decades—e.g., 50, 70 and even 100 years into the future. Just as we are still living with decisions about houses, factories, roads, and power plants—made 50 years ago on the assumption of a stable environment and without foresight about possible changes to environmental conditions—the legacy of California’s current decisions in the face of continued sea-level rise will persist. However, today, we have a much-advanced scientific understanding and know that the climate and the oceans are rapidly changing; thus more defensible decisions going forward are possible. This report offers an update on this understanding and provides the best available projections of future conditions.
1.4. How often should practitioners and policy makers reassess scientific data?

Our collective scientific understanding of sea-level rise is advancing at a very rapid pace. We anticipate that new observations, new models, refinement of existing models to capture newly described sea-level rise dynamics, and updated models that are validated with observational data, will continue to be published in the peer-reviewed literature over the coming years.

Moreover, it is not just scientific understanding that is evolving and improving. Sea-level rise projections will continue to change as the impacts of local, regional, national and global policy choices are manifest. Given this dynamic environment, we encourage the creation of science-policy processes that are flexible, iterative and adaptive. At minimum, we recommend that sea-level rise projections be updated every five years, aligned with existing climate change assessment cycles, or when new data become available that are judged to significantly modify existing projections. More fundamentally, we encourage California lawmakers and policymakers to pursue institutional arrangements and processes for dynamic and rapid incorporation of the results of new science into policy. In this report we aim to provide a robust description of the considerations in selecting approaches to project sea-level rise, and justification of the current choices. Our goal is that this scientific information can begin to make the concept of adaptive policy tractable and actionable.
2. Understanding Sea-Level Rise

Sea level is expected to rise significantly over the next century due to a changing global climate. However, change in sea level is not a new phenomenon; sea level has been rising globally since the end of the last ice age about 18,000 years ago. Driven primarily by the melting of land ice, global mean sea level rose about 120-135 m (about 400-450 feet) during this period. Much of this took place between 18,000 and 8,000 years ago at average rates of about 11 mm/year (0.45 in/century) and then began to slow. Sea level rose very gradually (<1 mm/year) over the past 8,000 years.

With the onset of the Industrial Revolution and the expanded use of fossil fuels, the greenhouse gas content of the atmosphere began to increase and the Earth has gradually warmed in response, accompanied by thermal expansion of the warming ocean and melting of the Earth’s land ice. Estimates of the average rate of sea-level rise between 1900 and 1990, derived from the global network of tide gauges have been made but are complicated by regional land motion and ocean dynamics as well as changes in the Earth’s gravitational and rotational fields. These all cause local sea level changes measured by individual tide gauges to deviate from the rate of global mean sea-level rise. Several different approaches have been used to analyze the global tide gauge records in order to accommodate the spatial and temporal variations, and these efforts have yielded sea-level rise rates ranging from about 1.2 mm/year to 1.7 mm/year (about 0.5 to 0.7 inches/decade) for the 20th century, but since 1990 the rate has more than doubled, and the rise continues to accelerate [8-12]. Since the advent of satellite altimetry in 1993, measurements of
absolute sea level from space indicate an average global rate of sea-level rise of 3.4 mm/year or 1.3 inches/decade—more than twice the average rate over the 20th century and greater than any time over the past thousand years [13,14].

2.1. What contributes to current sea-level rise?

2.1.1. Contributors to global mean sea-level rise

Over the last century, ocean thermal expansion was the single greatest contributor to global mean sea-level rise, accounting for about 50% of the signal. The remaining 50% was contributed from land ice; a mix of melting mountain glaciers and ice caps, and the loss of ice from the great polar ice sheets covering Greenland and Antarctica [10]. However, the entire global inventory of mountain glaciers contains only enough ice to raise sea levels by about a half a meter (1.5 feet). In contrast, the Greenland and Antarctic Ice Sheets contain enough ice to raise global mean sea level by 7.4 m (24 feet) and 57 m (187 feet), respectively. While these ice sheets are not expected to melt completely, even on centennial or millennial timescales, the loss of even a small fraction of either of these huge ice sheets could raise sea level significantly, with devastating consequences for global shorelines. This is particularly concerning because satellite observations clearly show that the rate of ice loss from both the Greenland and West Antarctic Ice Sheets is accelerating. If these trends continue, the contribution from the ice sheets will soon overtake that from mountain glaciers and ocean thermal expansion as the dominant source of sea-level rise (see Appendix 2 for a more detailed discussion of this topic).

Withdrawal of groundwater, and changes in water storage behind dams also impact sea level, although over most of the 20th century the filling of reservoirs had a small negative impact on sea-level rise (i.e., reduced the rate of sea-level rise [15]). In recent decades, increasing groundwater depletion has begun contributing positively to sea-level rise by about 0.4 mm/year (0.15 inches per decade; [10]), because about 80% of the groundwater that is withdrawn and then utilized for domestic, agricultural or industrial purposes ultimately flows to the ocean. However, ongoing contributions to global sea levels from this source will likely be small relative to other potential sources.

2.1.2. Contributors to regional and local relative sea-level rise

While global mean sea level is rising, it is relative sea level, the local difference in elevation between the height of the sea surface and the height of the land surface at any particular location, which directly impacts coastal communities and ecosystems at risk from coastal flooding. Changes in relative sea level arise from 1) vertical land motion, 2) changes in the height of the geoid (the gravitationally determined surface of the ocean in the absence of tides and ocean currents), and 3) changes in the height of the sea surface relative to the geoid. In sum, future changes in relative sea level will not be the same across the globe and will even vary along the length of the California coastline.
Vertical land motion can be caused by tectonics (see Box 2), sediment compaction, withdrawal of groundwater and hydrocarbons, and isostatic adjustments which describe the Earth's deformation associated with redistributions of ice and ocean mass [16,17]. For example, the Earth's surface, and relative sea level, is still adjusting to the retreat of the massive ice sheets that covered much of the Northern Hemisphere during the Last Glacial Maximum about 18,000 years ago. Locally, this post-glacial isostatic adjustment can either produce a long-term rise or fall of sea level, depending on the proximity to the past ice load. In the case of California, relatively far from the Last Glacial Maximum ice sheets, this effect is small [18]. Persistent changes in winds and ocean currents can also have local to regional scale impacts on relative sea level, although these effects are not projected to be as consequential for the U.S. West Coast as they are for the U.S. Northeast.

Of particular relevance for California will be future redistributions of ice and water caused by the retreat of the polar ice sheets, especially on Antarctica. These mass redistributions affect the Earth’s gravitational field and the orientation and rate of Earth’s rotation, and deform the Earth’s crust and mantle [16,19]. While the mantle responds on millennial timescales, the gravitational, rotational and crustal effects are essentially instantaneous. As a retreating ice sheet loses mass to the ocean, its gravitational pull on the surrounding ocean is reduced. Within about a thousand miles of a retreating ice sheet, the reduced gravitational pull on the ocean causes the sea-surface (and relative sea level) to drop, even though the ocean has gained volume overall. Further from the ice sheet (~4000 miles), the change in relative sea level is comparable to that expected from the increase in ocean volume contributed by the melting ice sheet. Beyond that distance, the change in
relative sea level is greater than expected from the extra water added to the ocean by the melting ice sheet. Consequently, Northern Hemisphere coastlines generally experience enhanced sea-level rise from the loss of Antarctic ice, while coastlines in the Southern Hemisphere experience enhanced sea-level rise from loss of Greenland ice. Changing distributions of ice and water also shift the Earth's pole of rotation (the physical North and South Poles) and rate of rotation, which modifies the main gravitational response.

Calculations of the spatial distribution of sea-level rise that take into account these gravitational and rotational effects, sometimes called sea level "fingerprints" (Figure 1, [16]), show that North America experiences more sea-level rise from a given meltwater contribution from Antarctica than from Greenland, and if the ice loss is from West Antarctica, the impacts are exaggerated even further. In fact, these calculations show that for California, there is no worse place for land ice to be lost than from the West Antarctic Ice Sheet. For every foot of global sea-level rise caused by the loss of ice on West Antarctica, sea-level will rise approximately 1.25 feet along the California coast, not including the additional local factors mentioned above. In addition, the West Antarctic Ice Sheet is considered the most vulnerable major ice sheet in a warming global climate, and serious irreversible changes are already underway (see discussion below and Appendix 2, [20–22]).

Figure 1. Sea-level ‘fingerprints’ resulting from the distribution of ice and water around the Earth and ensuing gravitational and rotational effects.

The maps depict the relative response of sea-level to the loss of ice mass from (a) Greenland Ice Sheet (GIS) and (b) West Antarctic Ice Sheet (WAIS). The color bar represents the fractional departure of relative sea level rise from that expected given the ice contribution to global mean sea level. For example, when ice is lost from the Greenland Ice Sheet the relative effect on the US West Coast is 75% of the sea-level rise expected from the water volume added to the ocean. By comparison, when ice is lost from the West Antarctic Ice Sheet the US West Coast experiences 125% of sea-level rise from that expected from the water volume added.
2.2. What are recent scientific advances in understanding sea-level rise?

2.2.1. New observations and understanding of climate changes

During the last five years, the atmospheric greenhouse gas concentration has continued to increase. Since late 2015, measurements of the atmospheric CO₂ concentration have consistently exceeded 400ppm. Recent concentrations are approximately 45% higher than the pre-industrial level, and about 2.5% higher than in 2012. Increases in CO₂ and other greenhouse gases have resulted in the Earth’s climate system absorbing more energy than it is emitting back to space, an imbalance estimated to be greater than 0.5 Watts/m². More than 90% of this excess heat is being captured by the global ocean [23]. Heat gain in the deep ocean has occurred unabated at least since 2006, with temperature increases extending from the surface to depths exceeding 1500m in all ocean basins [24].

The Earth’s surface has also continued to warm. Sixteen of the 17 warmest years in the 136-year period of global temperature measurements have all occurred since 2001. 2016 was the warmest year on record, and it was the 3rd year in a row that the record was broken. Arctic sea ice at the peak of the summer melt season now typically covers 40% less area than it did in the early 1980s. Arctic sea ice extent in September, the seasonal low point in the annual cycle, has been declining at a rate of about 13% per decade.[iii]

2.2.2. Advances in observing and modeling sea-level rise

Of the major contributors to global sea-level rise, the loss of ice from the Greenland and Antarctic Ice Sheets has the greatest potential to increase sea levels. Contributions from ice sheet losses also present the greatest uncertainty in the rate and amount of sea-level rise at time horizons beyond the next few decades. In the past five years (since the existing State guidance document was developed), new models and observations have highlighted this possibility and advanced our understanding of the dynamics of ice loss, and the atmospheric and ocean conditions that can drive significant loss. A more comprehensive discussion of this topic is provided in Appendix 2.

Observational data from the GRACE (Gravity Recovery and Climate Experiment) satellites, which measure the Earth’s gravitational field, have revealed increased loss of land ice from Greenland and West Antarctica [13], and confirmed previous observations. Satellite altimeter data show increased loss of grounded land ice from West Antarctica, and evidence of accelerated volume loss of ice shelves in West Antarctica, which buttress grounded ice [22].

[i]https://www.esrl.noaa.gov/gmd/cre/gtrends/monthly.html
New radar sounding observations have also revealed that the very different climates and underlying bedrock topography of Greenland and Antarctica will result in markedly different contributions to global sea-level rise. The bedrock beneath the Greenland Ice Sheet is above sea level around most of its margin, and below sea level only in the interior, which limits its rate of outflow to the ocean [25]. By contrast, much of the West Antarctic Ice Sheet and parts of the East Antarctic Ice Sheet lie on bedrock that is below sea level and deepens toward the continental interior [26]. Model results indicate that, while low rates of loss are possible, much higher rates of ice loss and sea-level rise could occur if oceanic and atmospheric warming is great enough to erode the floating ice that buttresses grounded ice. Ice flow mechanics responding to a high warming scenario could result in an escalating, effectively irreversible discharge of ice into the ocean as the grounded ice front recedes inland. Importantly, the change in the Earth’s gravitational field and rotation that would result from the loss of ice from West Antarctica would result in a higher sea-level rise along the coast of California than the overall global average, an amplification that becomes increasingly consequential as Antarctic ice loss grows larger (see above and Appendix 2).

New studies have also examined historical periods of high sea levels, and rapid rates of sea-level rise, to better understand the potential for specific levels of future sea-level rise [27]. Extremely high sea levels during the Last Interglacial Period (about 125,000 years ago) and Pliocene (about 3 million years ago) indicate that the polar ice sheets are sensitive to relatively modest climate warming. During the Last Interglacial Period, global mean temperatures were similar to today, but sea level was 20 – 30 feet (6 – 9 m) higher. Most of this sea-level rise is thought to have originated from Antarctic ice loss. The Pliocene was approximately 2°C – 3°C warmer than today, and sea levels may have been higher by 30 – 90 feet (10 – 30 m) than today, requiring a substantial contribution from East Antarctica in addition to Greenland and West Antarctica (Appendix 2). Using the reconstructed atmospheric and oceanic climate, new models have been applied to test mechanisms of ice loss (and resulting sea level rise) during those periods to better understand how those high sea levels could have occurred and also to inform future sea-level rise projections [27,28].

While there has been much progress in recent years in observing and modeling the Antarctic Ice Sheet, the precise magnitude and timing of when it will begin to contribute substantially to rising sea levels remains highly uncertain. This is partly due to insufficient knowledge of the physics of Antarctic ice loss processes, such that they cannot be faithfully represented in models. More importantly, however, we do not know what future greenhouse gas emissions
will be; so even if the physics were perfectly captured in the models, there would still be major uncertainty about which processes will become important as the ice sheet evolves. That said, the recent work does allow for some important new conclusions (see also Appendix 2):

- Previously underappreciated glaciological processes, examined in the research of the last five years, have the potential to greatly increase the probability of extreme global sea-level rise (6 feet or more) within this century if emissions continue unabated.

- The processes that could drive extreme Antarctic Ice Sheet retreat later in this century are different from those driving Antarctic Ice Sheet changes now, so the fact that the current rise in global sea level is not consistent with the most extreme projections does not rule out extreme behavior in the future.

- An aggressive reduction in greenhouse gas emissions substantially reduces but does not eliminate the risk of extreme global sea-level rise driven by Antarctic ice loss.

- Once marine-based ice is lost, the resulting global sea-level rise will last for thousands of years.
Short-term increases in sea level

Although long-term mean sea-level rise by itself will provoke increasing occurrences of nuisance flooding, over the next several decades it is highly likely that short-term increases in sea level will continue to be the driver of most of the strongest impacts to infrastructure and coastal development along the coast of California. Short-term processes, including Pacific Basin climate fluctuations (Pacific Decadal Oscillation, El Niño Southern Oscillation, and North Pacific Gyre Oscillation), King tides (perigean high tides), seasonal cycles, and winter storms, will produce significantly higher water levels than sea-level rise alone, and will present greater risks to coastal development.

El Niño associated flooding

Over the recorded era of the 20th and early 21st centuries, most of the significant storm damage to California’s coastline has occurred during major El Niño events, when elevated sea levels coincided with storm waves and high tides [29]. The record from the San Francisco tide gauge, the longest continuously running gauge along California’s coast, reveals several years when seasonal anomalies rose above the long-term trend of 1.9 mm/year (0.07 inches/year). The most prominent of these cases were major El Niño events, for example, 1940-41, 1982-83, and 1997-98, when sea levels were elevated 8-12 inches (20-30 cm) for several months at a time (Figure 2).

Adding these weather and short-period climate events to the more gradual, incremental global rise in mean sea level will present increasing risks for low-lying coastal infrastructure and development. The latest generation of climate model simulations suggests that North Pacific storminess will remain at about the same level of activity as seen in the 20th and early 21st century but that the frequency of extreme El Niño events may increase under a warmer climate [30]. Given the strong association between El Niño, large winter North Pacific storms, and anomalously high sea levels and storm surge [31], occasional large sea level events in future decades must be considered in future scenario planning.

King tides

High tides along the California coast occur twice daily, typically of uneven amplitude, and are caused predominantly by the gravitational attraction of the moon and the sun on the Earth’s oceans. Extreme tides, called spring tides, occur in multi-day clusters twice monthly at times of the full and new moon. Additionally, even higher tides occur several times a year and are designated as perigean high tides, or more popularly “King tides”. These events are now recognized as producing significant coastal flooding in some well-known areas such as the Embarcadero in San Francisco, where King tides are already washing onto the sidewalks. The Earth-moon-sun orbital cycles also amplify tidal ranges every 4.4 and 18.6 years, producing peaks in the monthly high tide that are about 6 inches (15 cm) and 3 inches (8 cm) respectively, higher than in the intervening years.

Storm surges

Storm surges, created when strong onshore winds combined with low barometric pressure force seawater onto the shoreline, also temporarily elevate sea levels. While storm surge along the coast of California is considerably less than that experienced during severe hurricanes and nor’easters along the Gulf and Atlantic Coasts of the United States, the storm surge during major winter storms here can reach as much as 3 feet above predicted sea levels.

Wave-driven water level increase

Large ocean waves can transport significant volumes of water up onto the shoreline as they break, causing temporary increases in sea level through two related processes. Wave run-up describes the process of an individual breaking wave washing up the beach face to an elevation as much as 6 feet above sea level. Wave set-up results from a set of large waves breaking in rapid succession, which can elevate the overall water level along the shoreline as much as 4 or 5 feet for a few minutes at a time. Because many beaches have shallow slopes, extremely high waves and resulting set-up and run-up events can have enormous impacts in causing erosion and damage to coastal infrastructure. Short-term elevated sea levels from any of these processes can not only cause flooding in low-lying coastal areas but can also exacerbate flooding along stream or river courses when runoff is temporarily obstructed by an elevated ocean or high tides, thereby leading to enhanced inland flooding.

Implications of short-term increases in sea level

The historic records and measurements (from tide gauges) of short-term elevated sea levels, whether due to El Niño events, King tides, storm surges, or a combination of these (as dramatically occurred during the 1982-83 El Niño), provide useful indicators for understanding future total water levels. These short-term elevated sea levels need to be added to projected future sea levels to obtain future total water levels.
3. Sea-Level Rise Projections

3.1. Approach, definitions, and limitations

3.1.1. Emissions scenarios

The Intergovernmental Panel on Climate Change (IPCC) adopted a set of emissions scenarios known as 'representative concentration pathways', or RCPs. These are a set of four future pathways, named for the associated radiative forcing (the globally averaged heat trapping capacity of the atmosphere measured in watts/square meter) level in 2100 relative to pre-industrial values: RCP 8.5, 6.0, 4.5 and 2.6 [32]. RCP 8.5 is consistent with a future in which there are no significant global efforts to limit or reduce emissions. RCP 2.6 is a stringent emissions reduction scenario and assumes that global greenhouse gas emissions will be significantly curtailed. Under this scenario, global CO₂ emissions decline by about 70% between 2015 and 2050, to zero by 2080, and below zero thereafter [33].

RCP 2.6 most closely corresponds to the aspirational goals of the United Nations Framework Convention on Climate Change's 2015 Paris Agreement, which calls for limiting global mean warming to less than 2°C and achieving net-zero greenhouse gas emissions in the second half of this century. This pathway will be very challenging to achieve, and most simulations of such stringent targets require widespread deployment of nascent carbon-negative technologies, such as sustainable bioenergy coupled to carbon capture and storage, or direct air capture of CO₂.
Three of these pathways are used here to project sea-level rise: RCP 8.5, RCP 4.5 and RCP 2.6. We do not include RCP 6.0 because it yields 21st century sea level projections that are nearly identical to those of RCP 4.5 [10], and few climate models have run RCP 6.0 beyond 2100.

3.1.2. Approach to projections

The scientific literature offers several distinct approaches to generating future sea-level rise projections. One set focuses on providing scenarios that span a range of possible futures, while making little or no attempt to assess the relative likelihood of different scenarios. Another set focuses on estimating the probability of different levels of future sea-level change, either by estimating a central projection with an associated range or by attempting to estimate a comprehensive probability distribution that also estimates the likelihood of extreme ‘tail’ outcomes. These approaches also differ in whether they explicitly represent the dependence of future sea-level change on specific greenhouse gas emission pathways (with the implied storyline about future economic and social development attached to them) or present results with no explicit connection to them, for example as a function of global average temperatures, independently of the emission pathways that would produce them, or as a set of low/medium/high projections with no explicit description of what would be driving them (see also Box 3).

For the Third National Climate Assessment, Parris et al. (2012) [34] constructed four discrete scenarios, spanning a range of global mean sea-level change in 2100 from 20 cm to 200 cm. They did not discuss the likelihood of these scenarios, nor did they tie them to specific emissions scenarios. They also did not make explicit geographic projections. However, the U.S. Army Corps of Engineers’ sea-level rise calculator does combine these discrete scenarios with tide-gauge-based estimates of local background processes to produce partially localized sea-level rise projections.1

The National Research Council effort in 2012 [4] produced a set of three scenarios (low, central, and high), with greater weight given to the central scenario. The dependence of ocean thermal expansion and ocean dynamics on emissions was explicitly considered in producing these projections, but the emissions dependence was combined with other sources of uncertainty in producing the low and high values. The IPCC’s Fifth Assessment Report [5,10] did not produce local projections for California, but their global mean sea level projections served as a touchstone for all the work that has followed. They produced estimates of the ‘likely’ range of global sea-level rise under each of four RCPs, where ‘likely’ covers the central 66% of the probability distribution (i.e., the sea levels that fall within the range created by the value that is 17% likely to occur and the value that is 83% likely to occur). They did not, however, attempt to estimate sea-level rise outside these central 66% probability ranges.

1http://www.cop slagistate.us/careeskurves.cfm
Both the absence of local projections and the incompleteness of their estimated probabilities led Kopp et al. (2014) [6] to synthesize several lines of evidence to estimate comprehensive probability distributions for global mean sea level and local relative sea level changes under the four RCPs, with a focus on RCP 2.6, 4.5, and 8.5. In this approach, outputs from process-based models are combined with estimates of contribution from the polar ice sheets derived from an expert elicitation process [35]. The Kopp et al. (2014) framework has been employed by a range of risk analyses (e.g., [36,37]) and stakeholder groups, including the New Jersey Climate Adaptation Alliance [38], and regional groups in Washington State (e.g., [39,40]).

Subsequent work found that the sea-level rise projections of Kopp et al. (2014) were consistent with the historical relationship between temperature and rate of global sea level change over the last two millennia [14]. Other probabilistic projections have yielded somewhat higher projections. For example, the Kopp et al., 2014 approach projects 1.2 m (almost 4 feet) global sea level rise for RCP 8.5 by 2100 (95th percentile), while Jevrejeva et al., (2014, 2016) project 1.8 m (almost 6 feet) for RCP 8.5 by 2100 (95th percentile) [41,42]. Importantly, while Kopp et al. (2014) provide comprehensive probability distributions conditional upon emissions scenarios, they emphasize the tentative nature of these distributions and highlight the 99.9th percentile of their RCP 8.5 projections (about 8 feet or 2.5 m) as being consistent with estimates of 'maximum physically plausible' global mean sea level estimates derived through other methods. An expert panel convened to provide guidance in New Jersey [38] included a narrative recommendation to give this outcome greater weight in decisions involving facilities or structures with a low tolerance for risk (e.g., international airports, large power plants or sewage treatment facilities).
Since 2014, new work on Antarctic Ice Sheet modeling (Appendix 2) has identified various modes of marine ice-sheet instability that could make extreme sea-level outcomes more likely than indicated by the IPCC Fifth Assessment Report or the Kopp et al. (2014) framework, particularly under high-emissions scenarios. To address this possibility, the City of Boston [43] and the Fourth California Climate Change Assessment [44] employed modified versions of the Kopp et al. (2014) framework, in which the Antarctic projections of Kopp et al. (2014) were replaced with ensembles of simulations from DeConto and Pollard (2016). This ad hoc approach highlights the sensitivity of global and local sea-level projections to Antarctic ice sheet instability. However, as Kopp et al. (in review) emphasize, DeConto and Pollard’s (2016) ensembles of simulations were not intended to and do not constitute probability distributions of future Antarctic changes. DeConto and Pollard (2016) explored a discrete set of ice-sheet parameterizations consistent with the geological record, but did not undertake a comprehensive assessment of the probability of different parameterizations. Therefore, these ad hoc approaches cannot be viewed as yielding probability distributions of future changes in the same manner as Kopp et al. (2014).

For the Fourth National Climate Assessment, Sweet et al. (2017) [45] maintained the scenario-based approach of Parris et al. (2012), but drew upon the framework of Kopp et al. (2014) to localize their projections and to discuss the relative likelihood of different scenarios under different emissions pathways. Notably, in light of various assessments of the ‘maximum physically plausible’ global mean sea-level rise and new work such as that of DeConto and Pollard (2016), they added an extreme scenario reaching 8 feet (2.5 m) of global mean sea-level rise in 2100, a level that requires the invocation of the marine ice-sheet instability mechanisms discussed in Appendix 2. In this assessment, ice sheet mass changes were projected based on combining the IPCC expert assessment of likely ranges with information about the broader probability distribution from the expert elicitation of Bamber and Aspinall (2013).

After considering the comprehensive probabilistic approach of Kopp et al. (2014), the ad hoc modification of this approach in the California 4th Climate Change Assessment, and the scenario-based approach of the recent Fourth National Climate Assessment, the Working Group concluded that the comprehensive probabilistic approach was most appropriate for use in a policy setting in California. Probabilistic approaches can be used in a range of decision frameworks, including the sea-level rise allowance framework, which is focused on maintaining expected flood risk at a target level over the lifetime of a decision [46,47]. The scenarios-based approach in the Fourth National Climate Change Assessment does not provide as rich a source of information for risk management and does not highlight the dependence of future sea-level change on greenhouse gas emissions as clearly. The approach of the California 4th Climate Change Assessment depends heavily on a single recent modeling study in a rapidly developing field and does not provide truly probabilistic information. However,
recognizing that the Kopp et al. (2014) projections may underestimate the likelihood of extreme sea-level rise, particularly under high-emissions scenarios, the Working Group concluded that the extreme sea-level rise scenario in the Fourth National Climate Assessment (here called the H++ scenario) should be considered alongside the Kopp et al. (2014) probability distributions for RCPs 2.6, 4.5 and 8.5. At this point, it is scientifically premature to estimate the probability that the H++ scenario will come to pass, and, if so, when the world will move onto the H++ trajectory.

One important point that is underscored by the ad hoc approaches is that the mechanisms driving Antarctic ice mass loss today are different than those that may drive future ice sheet collapse. Although sea-level rise is not following the H++ scenario at this moment, this scenario cannot be excluded for the second half of this century on these grounds.

3.1.3. Timeframes and planning horizons
The projections of sea-level rise provided here are averages across an interval of 19 contiguous years, centered on 2030, 2050, 2100 and 2150. Although the planning horizons of most infrastructure decisions fall within the near-term end of this range, we believe that it is essential to place all decisions within a longer-term context to foster choices that - to the extent possible - do not eliminate or reduce future options.

3.1.4. Starting in 2000
The baseline for the projections in this report is the year 2000, or more specifically, average relative sea level over 1991-2009. Due to a combination of atmosphere and ocean dynamics, the decadal average sea level in San Francisco can change up to 2 inches around the mean, which is equivalent to about 15 years of present-day global sea-level rise.

3.1.5. California tide gauges
There are 12 active NOAA tide gauges along the outer coast of California*, which range in their periods of record from 39 years (Point Arena) to 162 years (San Francisco). Considerable local variability is evident in rates of sea-level rise recorded across these tide gauges, simply because they are all anchored on some land mass or structure that may be experiencing long-term uplift or subsidence (Box 2).

We selected three of these gauges to use as the basis for sea-level rise projections: Crescent City, San Francisco Golden Gate, and La Jolla. Although there is considerable local variation that they do not represent, these gauges span the broad scale geographic extent of the California coastline taking into account the changing tectonic context along the coastline, the gradient of storm and wave climate from north to south, and in consideration of centers of human population and development.

*http://www.corpclimate.us/shorelinescurves.cfm
Local sea-level rise rates along the coastline of California

For the shoreline of Southern and Central California (San Diego to Point Reyes) sea-level rise rates recorded at NOAA tide gauges range from just under 1 mm/year to just over 2 mm/year (a little less than 4 inches to just over 8 inches/century). By comparison, the state’s three northernmost tide gauges lie in tectonic environments that modify global sea-level rise rates. Point Arena, which lies virtually on the San Andreas Fault, has recorded 0.4 mm/year of relative sea-level rise for the past 39 years. At Cape Mendocino, one hundred miles to the north, a major tectonic boundary occurs as the strike slip or transform boundary marked by the San Andreas Fault transitions to the Cascadia Subduction Zone, which continues northward to Vancouver Island. From Cape Mendocino north for the next 120 miles to the Oregon border, the shoreline is being arched upward due to the collision and subduction of the Gorda Plate beneath northern California, although there are local settings, for example Humboldt Spit, where subsidence is occurring. The general pattern of uplift is evidenced by the Crescent City tide gauge, which has recorded relative sea-level change averaging -0.8 mm/year over the past 84 years, or a drop in sea level relative to the coast, illustrating that the coastline here is rising faster than sea level (Figure 2, [4]).

The pattern of coastal uplift north of Point Arena is subject to major periodic interruptions. A wide range of evidence indicates that the Cascadia Subduction Zone periodically generates great earthquakes of magnitude 8 to over 9 that cause sudden shifts and reset rates of vertical motion. Fieldwork along the coasts of northern California, Oregon and Washington indicates that these great earthquakes are accompanied by shoreline subsidence on the order of three feet or more, as well as major tsunami flooding. The last great earthquake occurred in January 1700 and caused a large segment of coastline to subside and be suddenly inundated. The geologic evidence revealing a long series of these events, which occur every 300 to 500 years on average, strongly suggests that the present regime of relatively quiescent sea-level rise along the California coast north of Cape Mendocino will change virtually instantaneously when the next great earthquake occurs.

While the timing of such an event is impossible to predict, the fact that this phenomena has repeatedly occurred over thousands of years means that it must be taken as a serious threat.

Figure 2. NOAA tide gauge records for Crescent City, San Francisco, and La Jolla stations.

Long-term change is listed on top of each record in mm/year. Short-term increases in sea level (such as 1982-93 and 1997-98 El Niños) are clear in the records for all three stations.
3.2. How much sea-level rise will California experience?

Using the methodology of Kopp et al. (2014), we provide projections of sea-level rise that are based on the data from tide gauges in Crescent City, San Francisco and La Jolla (Figure 3, Table 1). As described above (Section 3.1.1), these projections may underestimate the probability of extreme Antarctic ice loss, an outcome that is highly uncertain but, given recent observations and model results, cannot be ignored. Accordingly, we have also included an extreme sea-level rise scenario, which we call the H++ scenario. This is an unknown probability, high consequence scenario such as would occur if high rates of Antarctic ice loss were to develop in the last half of this century. When decisions involve consequential infrastructure, facilities or assets, we advise that extra consideration be given to this upper end of potential sea-level rise outcomes.

We note that the differences in projections under different emissions scenarios before 2050 are minor. By comparison, after 2050, projections increasingly depend on greenhouse gas emissions. Accordingly, we present only projections for RCP 8.5 through 2050, and distinguish between emissions pathways for 2100 and 2150.
Figure 3: Projections of: (a) Global mean sea level, and;
(b) Relative sea level in San Francisco, California.

Sea-level rise projections for RCP 8.5 and RCP 2.6 are calculated using the methodology of Kopp et al., 2014. The shaded areas bounded by the dashed lines denote the 5th and 95th percentiles. The H++ scenario corresponds to the Extreme scenario of Sweet et al. (2017) and represents a world consistent with rapid Antarctic ice sheet mass loss. Note that the behavior of the Antarctic ice sheet early in this century is governed by different processes than those which would drive rapid mass loss; although the world is not presently following the H++ scenario, this does not exclude the possibility of getting onto this path later in the century. The historical global mean sea level curve in (a) is from Hay et al. (2015).
Table 1. Projected sea-level rise (measured in feet) for three tide gauge locations in California: (a) Crescent City (b) San Francisco, Golden Gate, and (c) La Jolla.

Projections are based on the methodology of Kopp et al., 2014 with the exception of the H++ scenario. The 'likely range' is consistent with the terms used by the IPCC meaning that it has about a 2-in-3 chance of containing the correct value. All values are with respect to a 1991-2009 baseline. The H++ scenario is a single scenario, not a probabilistic projection, and does not have an associated distribution in the same sense as the other projections; it is presented in the same column for ease of comparison.

**(a) Crescent City**

<table>
<thead>
<tr>
<th>Year / Percentile</th>
<th>Feet above 1991-2009 mean</th>
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<th>Likely Range</th>
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<th>1-in-200 Chance</th>
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<td>67% probability SLR is between...</td>
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**(b) San Francisco, Golden Gate**

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<th>1-in-200 Chance</th>
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### 3.3. How fast will sea levels rise?

We recognize that planning decisions are often informed by estimates of rates of sea-level rise and estimates of when a particular level of sea-level rise is projected to occur. Rates of sea-level rise provide important context for the time needed to plan and implement adaptation options. They are also an important consideration in evaluating when and where natural infrastructure is a feasible and prudent choice for helping to mitigate the effects of sea-level rise. In some locations, rates of sea-level rise may exceed the rate at which habitats (e.g., seagrass beds, coastal marshes) can migrate and adapt. It is also important to keep in mind that while these natural habitats may provide some buffer to future sea-level rise in estuarine environments (San Francisco Bay, for example), on the exposed, high-energy, open coast, there are very few locations where biological buffers or habitats exist to provide any significant reduction to the impacts of coastal flooding and erosion from future sea-level rise.

Employing the methodology of Kopp et al. (2014), and consistent with the projections above, we provide probabilistic estimates of the rates of sea-level rise at each of the three selected tide gauges: Crescent City, San Francisco and La Jolla (Table 2). We also provide tables of probabilities that sea-level rise will meet or exceed a given height for RCP 8.5 and RCP 2.6 at each of the three tide gauges (Tables 3, 4 and 5). Under the H++ scenario, with rapid ice-sheet loss in the Antarctic, average rates of sea-level rise in California would exceed 50 mm/year (2 inches/year) by the end of the century.

<table>
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<tr>
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<td>2150 (H++)</td>
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Table 2. Projected average rates (mm/year) of sea-level rise in: (a) Crescent City (b) San Francisco, and (c) La Jolla.

Projections are based on the methodology of Kopp et al., 2014 with the exception of the H++ scenario. For example, there is a 50% probability that sea-level rise rates in San Francisco between 2030-2050 will be at least 3.8 mm/year. The 'likely-range' is consistent with the terms used by the IPCC meaning that it has about a 2-in-3 chance of containing the correct value. The H++ scenario is a single scenario, not a probabilistic projection, and does not have an associated distribution in the same sense as the other projections; it is presented in the same column for ease of comparison.

(a) Crescent City

<table>
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(b) San Francisco, Golden Gate

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### (c) La Jolla

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Table 3. Probability that sea-level rise at Crescent City will meet or exceed a particular height (feet) in a given year under: (a) RCP 8.5, and (b) RCP 2.6. Estimates are based on Kopp et al., 2014. All heights are with respect to a 1991-2009 baseline; values refer to a 19-year average centered on the specified year. Grey shaded areas have less than a 0.1% probability of occurrence.

(a) RCP 8.5

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(b) RCP 2.6

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Table 4. Probability that sea-level rise at San Francisco, Golden Gate, will meet or exceed a particular height (feet) in a given year under: (a) RCP 8.5, and (b) RCP 2.6.

Estimates are based on Kopp et al., 2014. All heights are with respect to a 1991-2009 baseline; values refer to a 19-year average centered on the specified year. Grey shaded areas have less than a 0.1% probability of occurrence.

**RCP 8.5**

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**RCP 2.6**

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Table 5. Probability that sea-level rise at La Jolla will meet or exceed a particular height (feet) in a given year under: (a) RCP 8.5, and (b) RCP 2.6.

Estimates are based on Kopp et al., 2014. All heights are with respect to a 1991-2009 baseline; values refer to a 19-year average centered on the specified year. Grey shaded areas have less than a 0.1% probability of occurrence.

(a) RCP 8.5

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Sources of, and approach to, uncertainties

Depending on the time horizon being considered, different sources of uncertainty play smaller or larger roles in projections of sea-level rise [48]. For long-term changes (second half of this century and beyond), the choice of model and scenario of anthropogenic greenhouse gas emissions significantly affect the outcome. By comparison, for short- to mid-term projections (within the next two or three decades), variability in the Earth's climate system, which would exist even in the absence of human-driven changes, is the predominant source of uncertainty.

Emissions scenarios

Emissions of the last decade position us along the highest scenario considered by the last IPCC report, RCP 8.5, and greenhouse gas emissions will continue through this century. However, exactly how large emissions will be depends on policy and societal choices, as well as technological progress, at local to global scales. Greenhouse gas emissions scenarios, which serve as inputs to climate models, are not predictions but rather the outcomes of a set of internally consistent assumptions about the evolution of population, GDP, technology, and, in some cases, mitigation policies. As such, the scientific community that develops and uses them has generally resisted attaching relative likelihoods to different scenarios, and future climate change projections are usually provided specific to and conditional upon a given scenario, as is the case in this report.

Model uncertainty

The uncertainty in model projections stems from the unavoidable approximations involved in the modeling of complex and interacting processes of the Earth system: any type of process model needs to adopt a grid resolution, and choose which processes to either represent explicitly, approximate through parameter selection, or not include at all [49]. These choices introduce unavoidable imprecision in the representation of the real world by any model, and differences among any ensemble of models. The diversity of existing models, each of which relies on a defensible set of parameter choices and computational approaches, translates into differences and uncertainties in sea-level rise projections.

In this report we adopt an approach (that of Kopp et al., 2014) in which model uncertainties are quantified for thermal expansion of seawater, ocean dynamics, and glaciers. These are the model components that are derived (directly for thermal expansion and ocean dynamics, and indirectly via a surface mass-balance model for glaciers) from climate model simulations. For these types of models, a large multi-model ensemble is available [50] that is used to calibrate the probability distributions in the model. By comparison, there is not yet an equivalent model ensemble that would enable us to develop probabilities of other sources of sea-level rise, including ice loss from ice sheets. As a result, we are forced to make approximations or use single-model estimates. In the case of the Antarctic or Greenland ice Sheets, recent scientific advances reveal deep uncertainties, with different modeling approaches changing our understanding and projections (see also Appendix 2). Even with additional observations, it will not be straightforward to characterize model structural dependencies, limitations, and uncertainties, hence the need for a special treatment of the ice-sheet component in sea-level rise projections (see further below).

Variability in the Earth system

Natural variability in the Earth's climate system occurs alongside variability caused by anthropogenic influences. Variability in the Earth's system occurs on daily to centennial timescales and affects both mean water levels and the amplitude of extreme
storm surges. Long-term tide gauge records give us observational data to use in validating models of sea-level rise.

Statistical models of decadal amplitude changes (driven by natural modes of variability in the ocean, like ENSO or other oscillations) and of storm surges (driven by short-term weather phenomena, like storms) can be estimated on the basis of observed or modeled records, thus isolating these components from mean sea level changes and - when needed - superimposing them on projected mean sea-level rise [51]. The underlying assumption here is that the interplay of the two sources of variability is additive rather than non-linear. We note that locations may be identified where changes in mean sea level can indeed affect the size of surges, in which case ad-hoc process models of storm surges driven by scenarios of sea-level rise can be deployed.

As for climate system drivers at large (e.g., ENSO, storms), the question boils down to assessing possible future changes and their statistical characteristics. At the moment, uncertainties in modeling outcomes are large and there is not robust evidence that the internal variability of these phenomena will change significantly under future scenarios [52]. As mentioned, the interplay of these different sources of uncertainty is not unique as we move from short- to mid- to long-term horizons for our projections. Estimated probabilities of particular outcomes are increasingly less robust -- in the sense of comprehensively covering the range of expected outcomes and firmly quantifying their relative probability -- as we lengthen those horizons, and we move into climate scenarios of unprecedented nature as far as anthropogenic forcing is concerned.

Accounting for uncertainty

For projections over the next few decades, we do not expect the role of models and scenarios to be as crucial to pin down. However, as we move into the more distant future, our ability to guess what society will do diminishes, different models will be more or less dependable, and the processes generating our extreme scenario will unfold. As a result, our ability to quantify uncertainty through formal probability distributions decreases. We therefore include a qualitatively different scenario (H++) whose likelihood we cannot characterize at this time, and note that quantified probabilistic projections need to be taken as an evolving representation of our understanding, open to updates and modifications especially in the tails of probability distributions. In this context of likely continued and unquantifiable uncertainties, incorporating long-range planning for sea-level rise in decisions is increasingly urgent.
3.4. How do these projections compare with other regional and national projections?

**Figure 4. Projections of sea level rise in California and U.S. national reports and assessments of the last decade.**

Projections are provided for 2100 according to the approach described in each report. The different approaches reflect the evolution of modeling techniques to project sea-level rise including new approaches to provide greater geographic resolution in projections and probabilistic projections, as well as the different intended purposes of the assessments (i.e., state and national). In brief, the figure depicts: CA 1st, 2nd, 3rd Assessments; range of projections for South Cape Mendocino, NOAA 2012 – range of projections of global mean sea level rise, NRC 2012 – range of projections for South Cape Mendocino, IPCC 2013 – projections of global mean sea-level rise under RCP2.6 and RCP 8.5, NOAA 2017 – range projections for U.S. sea level rise, California 4th Assessment – 5th-95th percentile probabilistic projections for San Francisco under RCP 4.5 and RCP 8.5, California Science Update (this report) – 5th-95th percentile for San Francisco using the Kopp et al., 2014 framework and H++ scenario from NOAA 2017.
Over the last decade, projections of sea-level change in California have evolved considerably (Figure 4).

The common threads across these evolving projections are the recognition that the magnitude and timing of future sea-level rise is uncertain, and that emissions in the near- and mid-term 21st century will have long-lasting consequences that will become increasingly clear in the decades after 2050.

In particular, the magnitudes of estimated sea-level rise have grown, especially at the upper, low probability "tail" of ranges that have been estimated. For example, sea-level rise projections for 2100 in the California 1st Climate Change Assessment (conducted in 2006) ranged from 6 - 22 inches (15 - 56 cm) above a year 2000 starting point. By comparison, the recently released estimates of the California 4th Climate Change Assessment (California 4th Assessment) range from 14 - 94 inches (36 cm - 239 cm) with an additional very low probability worst-case estimate that exceeds 9 feet (274 m).

The sea-level scenarios presented in the California 4th Assessment present a range of scenarios whose mid-to-upper level is higher than that provided in the 2012 National Research Council Report, and much higher than that published in the 4th IPCC Report. At the same time, the high end of the California 4th Assessment range is approximately comparable to that recently provided by the 2017 USGCRP Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force led by NOAA, as well as the 99.9th percentile of Kopp et al. (2014)'s projections.

The strongest driver of this shift toward higher distributions of possible future sea levels is the possibility of high rates of ice loss from the West Antarctic Ice Sheet under scenarios of continued increases in greenhouse gas emissions. The California 4th Assessment includes recent estimates by DeConto and Pollard (2016) of Antarctic Ice Sheet losses from a model that introduces new physical processes that invoke high rates of ice discharge into the Antarctic Ocean. The Working Group's assessment for the purposes of developing updated sea-level rise projections for California was that the DeConto and Pollard (2016) results are compelling enough to include an extreme SLR scenario (called the H++ scenario), based on the highest scenario developed by Sweet et al. (2017). However, since these results are very fresh, and the processes are not yet actually observed in Antarctica, they await further modeling and observational evidence. Consequently, we rely upon the earlier model presented in Kopp et al. (2014) for the emissions scenario-dependent probabilistic projections presented in this report.
Integrating Sea-Level Rise with Coastal Storm and Wave Impacts

There are several different sea-level rise visualization tools available; the NOAA Sea Level Rise Viewer and Climate Central’s Surging Seas are the two most commonly used examples. These allow a user to develop an inundation map for virtually any coastal area in California that will project a range of future sea levels onto the specific area of concern or interest. These viewers have been referred to as a “bathtub approach” simply because, while they use accurate elevation and tide data, inundation is determined by uniformly raising water levels by various selected future sea level values in combination with the average daily high tide. This passive approach is a reasonable approximation of the future everyday impacts of sea-level rise. However, it does not consider potential flooding driven by the dynamic processes that affect coastal water levels daily (e.g., tidal variability, waves), seasonally (e.g., elevated water levels during El Niño events) or during storm events (e.g., storm surge, wave run-up, and river discharge) and the hydrodynamic complexity associated with bathymetry, built structures and the natural coastline configuration.

The Coastal Storm Modeling System (CoSMoS)* is a dynamic modeling approach that has been developed by the United States Geological Survey in order to allow more detailed predictions of coastal flooding due to both future sea-level rise and storms integrated with long-term coastal evolution (i.e., beach changes and cliff/bluff retreat) over large geographic areas. This model simulates a reasonable range of plausible 21st century sea-level rise and storm scenarios to provide coastal planners and decision makers with more accurate information than sea-level rise alone in order to predict areas of coastal flooding and impacts. The model incorporates wave projections, tides and regional atmospheric forcing to generate sea and surge levels that can then be dynamically downscaled to depict local changes. CoSMoS has now been applied to most of the urbanized California coast (e.g., Southern California and the San Francisco Bay Area) and will soon cover the state’s shoreline. Considerable opportunity exists to align the methodology for deriving sea-level rise projections in this science summary with the underlying model in CoSMoS. Doing so will not only return the greatest value on existing investments but also set the stage for efficiently incorporating updated projections into decisions as scientific understanding increases and as sea levels change.

*https://walrus.wr.usgs.gov/coastal_process/icosmos/index.html
4. Conclusions

4.1. Rapidly evolving scientific understanding

Increasing the reliability of future sea-level projections will be important in decision-making for both existing and proposed development and infrastructure. This is a tractable problem, but it will require concerted action on two fronts. First, it will require improved scientific understanding of mass-loss processes from the vast polar ice sheets across all the relevant spatial and temporal scales. This can only be achieved through continued and new observations from satellites and the field (both on the ice and in the surrounding atmosphere and ocean), combined with modeling to investigate key processes such as ice-ocean interactions, surface melting, and fracture mechanics of ice. This will require substantial international and interagency investment to support collaborations across the disciplines of glaciology, meteorology, oceanography, and computational science. Second, it will require tighter integration between the scientific and decision-making communities such that feedbacks from the latter can inform, via recursive process of scientific analysis and stakeholder deliberations [53,54], future sea-level rise studies and projections.

Advances in our understanding of global, regional, and local sea-level rise are already occurring and substantial advances are expected within the next decade. In the meantime, research currently underway and expected in the next one to five years includes improved understanding of the warming thresholds capable of driving substantial retreat in the West Antarctic Ice Sheet. Given these expected rapid developments, the approach taken here allows for relatively frequent updates of location-specific sea-level rise projections. Updating of the science underpinning California’s statewide guidance will be important as our understanding of these ice-
sheet contributions to sea-level rise increases, and/or the range of likely future emissions scenarios begins to narrow. In addition, the explicit consideration of an extreme H++ scenario of indeterminate probability flags for decision-makers the potential for extreme outcomes. Based on some modeling studies the possibility of such extreme sea-level rise is now supported and may come to be viewed as either more or less likely as scientific understanding evolves.

4.2. Informing near-term decisions

These projections of future sea level and changing coastal hazards can and should be used along with a comprehensive assessment of what is at risk (i.e., exposed to future coastal hazards) and what is at stake (i.e., the monetized and non-monetary values attached to what is exposed) to weigh the different types of costs, and potential losses and benefits of taking action now to prevent future harm against the wide-ranging risks of inaction [55].

However, doing so will require the development of decision-support systems that help California decision-makers and stakeholders to decompose what will be complex, uncertain, and inter-temporal decisions into more manageable parts. Various approaches are available for decision analysis and decision-making under uncertainty that aim to go beyond economic efficiency in determining the best possible way forward in the face of multiple objectives and criteria for making difficult choices [55,56]. At their core, these approaches help stakeholders and decision-makers to identify, define, and bound management problems and opportunities; they help these same groups to identify, characterize, and operationalize a shared set of objectives to guide management choices; these approaches emphasize the importance of characterizing the anticipated consequences, based on scientific assessments, of a broad array of different development and management alternatives; and they support the need for tradeoffs when objectives across alternatives inevitably conflict [57–59].

These decision-support approaches, together with numerous studies on the cost of inaction, generally suggest that uncertainty about the exact amount of future sea-level rise should not be a deterrent to taking action now [60–62]. Adaptation and hazard mitigation decisions and investments in the near-term can prevent much greater losses (many times the initial cost) than would incur if such action were not taken (e.g., [63,64]).

The forthcoming, updated sea-level rise policy guidance will thus provide a decision-centric approach to using sea-level rise projections that is informed by a clear understanding of the decision-makers and the decision contexts. It will guide decision-makers through a systematic and defensible process that assists them in framing and structuring the decisions at hand, explicitly laying out objectives and decision criteria, laying out distinct solution options and assessing them in the context of sea-level rise projections and key uncertainties, directly confronting trade-offs, and setting up an adaptive management process going forward [56,65]. In addition, providing recommendations for how to effectively communicate sea-level rise risks and meaningfully engage stakeholders in these challenging planning and decision processes can make the use of uncertain sea-level rise projections in decision making easier and ultimately lead to decisions that reflect decision-makers’ risk tolerances and desired outcomes.
5. References


44. Cayan, DR, Kalansky, J, Iacobellis, S, Pierce D. Creating Probabilistic Sea Level Rise Projections to support the 4th California Climate Assessment. La Jolla, California. 2016.


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Appendix 1

Questions from the Policy Advisory Committee to the OPC-SAT Working Group

The questions below were developed by the State Sea-Level Rise Policy Advisory Committee. The intention of the questions is to elicit information about the current estimates of sea level rise for the California coast and how to understand the scientific context around those estimates, including the state of the science (e.g., areas of uncertainty, emerging science), the importance of each contributor to sea level rise, and sensitivity of the estimates to policy actions.

Following each question we provide a reference to the associated section of the document where the question is addressed and answered.

Estimates of Sea-level Rise

1. What is the current range of estimates of sea level rise for the California coast? (Section 3)
   a. What probabilities can be assigned to those estimates given the current state of science? (Section 3.1)
   b. Should more weight be given to certain parts of the range, and if so, why? (Section 3.2)

2. Across the physically plausible range of sea-level rise projections, is it possible to say which scenario(s) are more likely than others? (Section 3.1.2)
   a. What progress has been made since the existing State Sea-level Rise Guidance Document was published in 2013 on assigning probabilities to different emissions, warming and sea-level rise scenarios? (Section 3.1.2)
   b. Which contributors to sea-level rise (e.g., thermal expansion, ice loss) are currently included in developing probabilistic sea-level rise scenarios? (Section 3.1.2)
   c. What is the OPC-SAT Working Group’s recommendation on how to estimate the likelihood of certain amounts of sea-level rise occurring at future dates for a given global emissions scenario? (Section 3.1.2)
   d. What other approaches is the OPC-SAT Working Group aware of, or could the Working Group recommend, for presenting uncertain sea-level rise projections? (Section 3.1.2)
   e. Is it possible to identify and characterize the degree of uncertainty in different contributors to sea-level rise? Where do the biggest uncertainties lie and what causes these uncertainties? (Box 3)

State of the Science

These questions are designed to elicit information on the state of sea-level rise science, including emerging issues and the treatment of ice loss in Antarctica.

3. What are the significant and notable emerging insights in sea-level rise science since the current State Sea-Level Rise Policy Guidance was issued? Why do they warrant attention? (Section 2.2)
   a. Have there been any notable changes in understanding how thermal expansion of ocean water contributes to sea-level rise? (Section 2.1.1 and Section 2.2)
   b. Have there been any notable changes in understanding of the role of ice loss from inland glaciers and major ice sheets? (Section 2.1 and 2.2)
c. Have there been any notable changes in understanding of steric or dynamic ocean current changes that affect regional sea-level rise projections? (Section 3.1.2)

d. Have there been any notable changes in understanding of local or regional land movement that could affect projections of relative sea level change? (Section 2.2)

4. Does the OPC-SAT Working Group consider the emerging science important and significant enough to warrant consideration in the current update to the State Sea-level Rise Guidance Document? If yes, why? If no, why? Please comment on the current confidence in new scientific insights or advances. (Section 2.2, Section 3.1.1, Appendix 2)

5. Existing models, including Kopp et al. (2014) and Cayan et al. (2016), project very different sea-level rise estimates under different emissions scenarios. However, some scientists suggest that sea levels in 2100 are determined by events in Antarctica, regardless of future GHG emission levels and trajectories. What is your scientific opinion about this issue? (Section 2.1, Section 3.2)

6. What are the scientific advances in best approaches to project sea-level rise since the publication of the existing State Sea-level Rise Guidance Document (2013)? What makes some modeling approaches better than others; in what way? (Section 3.1)

   a. What are the strengths and weaknesses of the different approaches for projecting global sea-level rise? (Section 3.1)

   b. Which approach or combination of approaches would the OPC-SAT Working Group recommend for estimating future global sea levels? (Section 3.1.2)

7. What are the best/most reliable approaches for translating global projections into regional projections? (Section 3.1.2)

8. What are the factors that cause sea-level rise projections to differ among locations? (Section 2.1.2, Box 2)

9. How are these factors considered in regional projections? (Section 3.1.2)

10. Is the OPC-SAT Working Group aware of additional research/modeling efforts, etc., presently underway that should inform the update to the State Sea-level Rise Guidance Document? (Section 4.1)

   a. How soon does the OPC-SAT Working Group expect major breakthroughs in understanding of sea-level changes? What would constitute a major breakthrough? How might these breakthroughs affect sea-level rise projections? Given current uncertainties in scientific understanding, and the anticipated rate of accumulation of new knowledge or observations, can the Working Group provide a recommended frequency for reviewing the latest available science to update guidance for state and local decision-makers? (Section 1.4, Section 4.1, Appendix 2)

   b. Similarly, can the Working Group provide recommendations, from a scientific perspective, on how this science could be considered in a policy setting (e.g., establishing an appropriate frequency for policy updates, establishing a scientific body to provide regular updates)? (Section 1.4)

Understanding the Contributors to Local Sea-Level Rise

11. In addition to projecting future sea levels, other factors may also be important.

   a. What is the state of science on identifying future (a) tidal amplitude and/or phase, and (b) frequency and intensity of extreme events (e.g., high water due to storm surges, ENSO events)? (Box 1)
b. What are the pros and cons of different approaches of arriving at total water level? (Box 4)

c. What is the OPC-SAT Working Group’s recommendation on how to integrate (global or regional) sea-level rise projections with expected changes in tidal and extreme events? (Box 4)

d. What is the OPC-SAT Working Group’s assessment of the adequacy of superimposing historical extreme event departures from mean onto projected mean sea levels to estimate future values? (Box 4)

Policy Sensitivity of Sea-Level Rise Projections

12. How “policy dependent” are the different contributors to sea-level rise? (Section 2.3)

a. Are the different contributors to sea-level rise equally sensitive to changes in global emissions/temperature? (Section 2.1)

b. How much sea-level rise can be avoided or how much can it be slowed down by significant emission reductions (e.g., achieving the global commitments made at COP21 in Paris or 80% GHG emissions reductions by 2050)? (Section 2.1, Section 3.2, and Section 3.3)

c. What new implications for planning and decision making, if any, are introduced by including ice loss scenarios in sea-level rise projections (e.g., magnitude, timing, non-linear rates, nature of the impact)? (Section 3.1.2, Appendix 2)

13. Sea-level rise projections typically use emissions scenarios (e.g., IPCC emissions scenarios/Representative Concentration Pathways (RCPs)) as inputs into general circulation/sea-level rise models. The RCP 2.6 scenario (lowest IPCC emission scenario) appears out of reach, given current greenhouse gas emission trends, and the unlikely development of more ambitious emission reduction targets in the near future. Is there any physically plausible scenario under which it remains sensible to retain such low-end scenarios in the range of projections? If not, what is the lowest plausible sea-level rise scenario? (Section 3.1.1)

Sea-Level Rise Exposure vs. Risk-based Assessment

14. Risk (often defined as probability multiplied by consequence) is a critical input to planning and decision-making.

a. What is the OPC-SAT Working Group’s recommendation on whether and, if so, how to incorporate consideration of risk as part of the State Sea-level Rise Guidance Document to state and local decision-makers? (Section 1.3, Section 4.2)

b. How would this approach take account of the uncertainties in sea-level rise projections? (Section 4.2, Box 3)

15. What other questions should we be asking that we haven’t asked? What other considerations should be brought to bear on this topic?
Role of Polar Ice Sheets in Future Sea-Level Rise:
IMPLICATIONS FOR CALIFORNIA

ABOUT THIS REPORT
This document was developed in response to a request from the California Ocean Science Trust to synthesize current scientific understanding of ice loss from the polar ice sheets, with particular focus on West Antarctica, and to discuss the implications for projections of sea-level rise in California. It was developed to inform an update to the science foundation of California’s statewide policy guidance on sea-level rise, and an associated update in sea-level rise projections for California.

Abstract
Global mean sea level (GMSL) has risen by about 18 cm (7 inches) since 1900. Most of this rise is attributed to a combination of the thermal expansion of a warming global ocean and the loss of land ice (made up of mountain glaciers and small ice caps, and the great polar ice sheets covering Greenland and Antarctica). During the 20th-century, sea-level rise was dominated by ocean thermal expansion, but recently land-ice loss has taken over as the primary contributor. While mountain glaciers and ice caps are currently contributing more meltwater to the ocean than the ice sheets, the rate of ice loss from both Greenland and Antarctica is accelerating, and ice sheets will likely soon become the dominant component of the land-ice contribution. This is particularly concerning because the ice sheets contain enough ice to raise GMSL by about 65 meters (213 feet) if they melted completely. This report reviews emerging science that suggests ice loss from the Antarctic Ice Sheet poses the greatest potential risk to California coastlines over the next 100 years.

Sea Level is Rising, the Rate is Accelerating, and Land Ice has become the Primary Contributor.

Between ~1900 and 1990, the average rate of global mean sea level (GMSL) rise was $-1.2 \pm 0.2$ mm/yr (0.5 inches per decade), but the rate has risen sharply since 1990 to $-3$ mm per year (1.2 inches per decade) and it continues to accelerate (Hay et al., 2015). The primary contributors to rising GMSL are ocean thermal expansion (a warmer ocean has lower density and takes up more space), increased groundwater withdrawal and diminished rates of land-water storage behind dams, shrinking mountain glaciers, and net changes in the mass of the polar ice sheets covering Greenland and Antarctica (Church et al., 2013).

Over the last century, the rise in GMSL was dominated by ocean thermal expansion, which accounted for about 50% of the increase. Land ice, collectively from mountain glaciers, ice caps, and the polar ice sheets, accounted

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1 Contributions to GMSL from groundwater and land-water storage were small or slightly negative over most of the 20th century. These contributions are now positive (mainly due to groundwater depletion) but are smaller than contributions from land ice or ocean thermal expansion. Together, groundwater and land-water storage contributions to GMSL were $0.18 \pm 0.12$ mm per year ($0.07 \pm 0.05$ inches per decade) between 1993 and 2008 (Church et al., 2013).
for most of the remaining increase, with mountain glaciers and ice caps contributing roughly 25% and ice sheets the remaining 25%. However, there are vast differences in the sizes of the land ice reservoirs; losing the entire global inventory of mountain glaciers and ice caps would raise GMSL by only -0.5 m (1.6 feet; Church et al., 2013), whereas complete loss of the Greenland and Antarctic ice sheets would raise GMSL by -7.4 m (24 feet) and -57 m (187 feet), respectively (Bamber et al., 2013; Fretwell et al., 2013). These massive ice sheets represent the greatest potential threat to the long-term sustainability of coastal populations and infrastructure.

Recently, the loss of land ice has surpassed ocean thermal expansion as the largest contributor to sea-level rise (Figure 1). Land ice contributions come from mountain glaciers and small ice caps and the polar ice sheets (Antarctica and Greenland). While glaciers and ice caps continue to contribute substantial meltwater to the oceans (Meier et al., 2009; Marzeion et al., 2012), satellite observations (Figure 2) indicate that the rate of mass loss from Greenland and Antarctica is accelerating (Hari and Simons, 2015; Rignot et al., 2011; Velicogna et al., 2014). The ice sheets have recently taken over as the dominant source of land-ice sea-level rise, with the potential to raise GMSL by several meters in future centuries (Clark et al., 2016; DeConto and Pollard, 2016; Golledge et al., 2015; Huybrechts et al., 2011; Robinson et al., 2012; Winkelmann et al., 2015).

The Greenland Ice Sheet (GIS) is currently losing mass at a faster rate than the Antarctic Ice Sheet (AIS; Figure 1), via a roughly equal combination of surface melt and dynamic thinning of its marginal outlet glaciers (Csatho et al., 2014; Moon et al., 2012). As surface melt increases, particularly around its lower elevation ice margins, the GIS will continue to lose mass at an increasing rate (Huybrechts et al., 2011; van den Broeke et al., 2009). In contrast, Antarctica’s recent increase in mass loss is not through surface melt, but is instead mostly related to the increasing flow and retreat of outlet glaciers in the Amundsen Sea region of West Antarctica (Mouginot et al., 2014; Pritchard et al., 2012; Rignot et al., 2014). As discussed below, warming ocean temperatures in this region are thinning ice shelves (the floating, seaward extensions of the glaciers) triggering a dynamic response of the grounded ice upstream (Pritchard et al., 2012; Paolo et al., 2015).

NASA’s Ice, Cloud and land Elevation (ICESat) mission revealed major mass loss from Antarctica’s ice shelves (Pritchard et al., 2012) and grounded ice sheet (Shepherd et al., 2012) for the period 2003-2009 by estimating the change in ice height with time and converting that to mass. This Ice Sheet Mass Balance Exercise (IMBIE; Shepherd et al., 2012) also included estimates of height change from satellite radar altimetry, and results from two other mass balance techniques (gravity and mass flux) for the period 1992 to 2011. The synthesis of all three techniques showed that the grounded ice changed in mass over this period by: (1) Greenland: +142 ± 49 Gt per year, (2) East Antarctica: +14 ± 43 Gt per year, (3) West Antarctica: -65 ± 26 Gt per year, and (4) Antarctic Peninsula: -20 ± 14 Gt per year. Together this contributed 0.59 ± 0.20 mm/year to GMSL (0.23 ± 0.08 inches per decade).

2 Gt (gigatonne) is a billion metric tonnes of ice, and 360 Gt of ice lost to the ocean represents about 1 mm of GMSL rise.
Figure 1. Left: Observations of global mean sea-level rise from satellite radar altimetry (Leuliette and Scharroo, 2010) since 1992 (black line) relative to contributions from 1) the total change in ocean mass contributed by land ice (mountain glaciers, ice caps and the polar ice sheets), and smaller contributions from groundwater and land water storage (Johnson and Chambers, 2013) (blue), and 2) the contribution from thermal (thermo-steric) expansion of the upper ocean (red) from Argo floats (Roemmich and Gilson, 2009). Note that increasing ocean mass, mostly from melting land ice, is now the dominant source of sea-level rise (Figure source: Leuliette and Nerem, 2016). Right: Estimates of ice mass loss on Greenland (blue) and Antarctica (red) from gravity measurements made by the GRACE satellites. Combined, Greenland and Antarctica have been losing an average of ~400 Gt per year since 2002 and the rate is accelerating. The ~5000 Gt of ice lost by the ice sheets since 2002 (right panel) represents a GMSL contribution of about 14 mm, more than 50% of the rise attributed to increasing ocean mass over this period (left panel). Data Source: NASA.

Figure 2. Spatial patterns of ice mass loss (inches of water equivalent lost per year between 2003 and 2012) over Greenland and Antarctica (left), inferred from the GRACE (Gravity Recovery and Climate Experiment) satellites’ measurements of Earth’s gravitational field (Velicogna et al., 2014; Velicogna and Wahr, 2013). Note the widely distributed ice loss around much of the Greenland Ice Sheet margin. In contrast, Antarctica’s ice mass loss is concentrated in the Amundsen Sea sector of West Antarctica, where warming sub-surface ocean temperatures are in direct contact with the underside of ice shelves (figure source: NASA Jet Propulsion Laboratory). The image at right shows the rate of change in the surface elevation of the Antarctic ice sheet between 2010 and 2013, measured by satellite altimetry. Note the coherence between gravity and altimetry measurements, and the concentrated thinning of Amundsen Sea outlet glaciers (from McMillan et al., 2015).
Greenland's Contribution to Future Sea Level

While Greenland is currently a greater contributor to sea-level rise than Antarctica, ice sheet modeling studies spanning a range of future warming scenarios and timescales (Goelzer et al., 2012; Huybrechts et al., 2011; Seddik et al., 2012), show that the potential for the Greenland Ice Sheet (GIS) to contribute truly catastrophic sea-level rise is limited. Most projections of Greenland’s contribution to GMSL by the year 2100 are below 25 cm (10 inches), even in high-end greenhouse-gas emissions scenarios (Church et al., 2013). While the balance between the rate of accumulating snowfall and the rate of meltwater and iceberg discharged to the ocean is sensitive to relatively modest warming (>2°C above 19th century temperatures), modeling studies show that the near-complete loss of the GIS will be measured in millennia (Figure 3), not decades or centuries (Robinson et al., 2012).

![Image of Relative Ice Volume and Temperature Change Over Time]

**Figure 3.** Future projections of the Greenland Ice Sheet. The percentage of Greenland ice volume lost in model simulations (left) using a range of melt-rate parameterizations and increasing summer temperature anomalies from 2 to 8°C (Robinson et al., 2012), whereby 100% loss is equivalent to a 7.4 m rise in global mean sea level. Note the jump in ice-sheet loss with summer temperature anomalies >2°C. Climate–ice sheet simulations (right) assuming a 4-fold increase in CO₂ concentrations over the next 200 years and maintained into the future (Huybrechts et al., 2011). In both examples, substantial loss of the ice sheet takes centuries to millennia.

Ice Loss from Antarctica will Impact California More than an Equivalent Ice Loss from Greenland

GMSL is clearly rising (Figure 1), but it is relative sea level (RSL), the local difference in elevation between the height of the sea-surface and the height of the solid-Earth surface, that directly impacts coastal communities and ecosystems at risk from coastal flooding.¹ The rise in RSL from shrinking glaciers and ice sheets is not uniformly distributed around the Earth. Changes in the distribution of ice and water over the Earth’s surface affects its gravitational field, the orientation and rate Earth’s rotation, and the deformation of the Earth’s crust and mantle (Mitrovica et al., 2011; Peltier, 2004). While the crust and mantle respond on long (millennial) timescales, the gravitational/rotational effects are essentially instantaneous (annual timescales) and have particular relevance for California.

¹ Changes in RSL arise from 1) vertical (land motion), 2) changes in the height of the geoid (the gravitationally determined surface of the ocean in the absence of tides and ocean currents), and 3) changes in the height of the sea surface relative to the geoid. Vertical land motion can be caused by tectonics (California is tectonically active), sediment compaction, or withdrawal of groundwater and hydrocarbons, and the Earth deformation associated with redistributions of ice and ocean mass. This deformation can be separated into 1) global isostatic adjustment (GIA), which is the ongoing viscoelastic response of the Earth to past changes in ice volume, and 2) the elastic (gravitational/rotational) response to recent changes in land ice. Both past and current changes in ice volume also affect Earth’s gravitational field and rotation, and thus the height of the geoid (Peltier, 2004; Mitrovica et al., 2011). Only the elastic, gravitational, and rotational (fast) components are shown in Figure 4.
As a retreating ice sheet loses mass to the ocean, its gravitational pull on the surrounding ocean is reduced. Within a few thousand kilometers of a retreating ice sheet, the reduced gravitational pull on the ocean causes the sea-surface and thus RSL to drop, even though the ocean has gained volume overall. At some distance further away from the ice sheet (~7000 km), the change in RSL is comparable to that expected from the increase in ocean volume contributed by the melting ice sheet. Beyond that distance, the change in RSL is greater than expected from the extra water added to the ocean by the melting ice sheet. Consequently, Northern Hemisphere coastlines generally experience enhanced relative sea-level rise from the loss of Antarctic ice, while coastlines in the Southern Hemisphere experience enhanced sea-level rise from loss of ice on Greenland. Changing distributions of ice and water also shift the Earth’s pole of rotation (the physical North and South Poles) and rate of rotation, which slightly modifies the main gravitational response. The Earth’s crust also flexes in response to the change in loading, affecting the height of the land; and given enough time, the Earth’s viscous mantle also responds, but these are slower processes generally measured in thousands of years (Peltier, 2004).4

Calculations of the gravitational and rotational effects (Figure 4), sometimes called sea level “fingerprints” (Mitrovica et al., 2011), show that North America experiences more sea-level rise from a given meltwater contribution from Antarctica than Greenland, and if the ice loss is from the West Antarctic Ice Sheet (WAIS), the impacts are exaggerated even further. In fact, for California, there is no worse place for land ice to be lost than from West Antarctica (Figure 4). In the near-term, the WAIS is widely considered the most vulnerable major ice sheet to a warming ocean and atmosphere, and serious changes there are already underway, particularly in the Amundsen Sea region (Joughin et al., 2014; Mouginot et al., 2014; Paolo et al., 2015). Consequently, this report focuses on emerging science regarding the vulnerability of the polar ice sheets with a special emphasis on West Antarctica.

Figure 4. Sea-level “fingerprints” (Mitrovica et al., 2011; Hay et al., 2017). The map at left shows the rapid (gravitational and rotational) response of sea level to an arbitrary unit of equivalent GMSL contributed by the Greenland ice Sheet (GIS). The map at right shows the response from an equivalent mass loss from the the West Antarctic Ice Sheet (WAIS). The units are the fractional departure of RSL relative to a given change in GMSL. Note that the U.S. West Coast only experiences about 75% of the GMSL rise contributed by Greenland (left), but the rise in RSL is about 25% greater than expected if meltwater is added to the ocean from West Antarctica (Figure, compliments of Carling Hay).

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4 The Earth’s surface is still adjusting to the retreat of the massive ice sheets that covered the Northern Hemisphere during the Last Glacial Maximum (LGM) about 18 thousand years ago. Locally, this post-glacial isostatic adjustment (GIA) can either produce a long-term rise or fall of RSL, depending on the proximity to the past ice load. In the case of California, relatively far from the LGM ice sheets, this effect is relatively small and generally on the order of ~1 mm per year (Stella et al., 2007).
Greenland and Antarctic Ice Sheets are Fundamentally Different

The ice sheets covering Greenland and Antarctica behave differently, in part because of the different climate regimes they occupy (relatively warm with massive snowfall on Greenland, versus cold and dry on Antarctica), but more fundamentally, because their subglacial topographies are so different. The bedrock beneath the GIS is above sea level around most of its margin, and below sea-level only in the interior (Figure 5). As a result, much of the ice in the GIS margin is terrestrial, with fast-flowing tidewater glaciers reaching the ocean in deep fjords (Moon et al., 2012). The GIS outlet glaciers lose mass via approximately equal proportions of iceberg calving and melting at their termini.

The AIS, in contrast, contains more than seven times more grounded ice above sea level than the GIS. Moreover, nearly half of the AIS sits on bedrock that is hundreds of meters (or more) below sea level (Fretwell et al., 2013). In many places around the Antarctic margin, grounded ice flows into the ocean and lifts off the bedrock to form large ice shelves; platforms of floating ice that extend over the ocean to form deep sub-ice-shelf cavities. The location where the grounded, seaward flowing ice first loses contact with the bedrock to become an ice shelf is called the “grounding line” (Figure 6). Rather than surface melt, almost all of Antarctica’s mass loss processes occur in the ice shelves: oceanic basal melting in the sub-ice cavities and iceberg calving from the ice fronts (Rignot et al., 2013; Paolo et al. 2015). Importantly, the ice shelves exert a back stress on the grounded ice, inhibiting its seaward flow, a process commonly called “buttressing” (Weertman, 1974; Thomas et al., 2004; Schoof, 2007). Thinning or loss of these ice-shelves reduces or eliminates this buttressing effect, allowing the grounded ice to flow faster toward the ocean (Rignot et al., 2004; Scambos et al.; 2004; Pritchard et al., 2012; Harig and Simmons, 2015, Paolo et al., 2015).

Figure 5. Greenland bedrock elevation (top left; Morlighem et al., 2015), Antarctic bedrock elevation (top right; Fretwell et al., 2013), and ice surface speeds from a numerical ice-sheet model (bottom; DeConto and Pollard, 2016). Most of the Greenland bedrock margin is above sea level (top left). Note the opposite configuration of Antarctica (top right), with deep sub-glacial basins adjacent to the open ocean. As a result, much of the GIS margin terminates on land, with the exception of fast flowing outlet glaciers. In contrast, almost all of the thick AIS terminates in the ocean. The location of features mentioned in the text include AS (Amundsen Sea), BS (Bellingshausen Sea), and Siple Coast. Fast ice speeds (red) show the location of major ice streams, outlet glaciers, and floating ice shelves. Major Antarctic ice shelves are labeled, as are the retreating Pine island and Thwaites glaciers in the Amundsen Sea region.

1 The loss of floating ice and ice below sea level have only a small direct effect on sea level.
In many places in Antarctica, especially in West Antarctica, deep troughs beneath the ice extend inland from the grounding lines, and slope downward toward the interior of the continent, eventually leading to submarine basins that can be more than 1 km deep. For example, Thwaites Glacier (Figure 5) rests on a reverse-sloped bed, leading to the deep WAIS interior (see Figures 6 and 7) where there is enough ice above flotation to raise GMSL by -3 m (9.8 feet).\(^6\) Vast areas of the much larger East Antarctic Ice Sheet (EAIS) also rest in deep sub-marine basins and these EAIS basins contain enough ice to raise GMSL by -19 m (62 feet) if the ice they contain were lost to the ocean. With a few exceptions (e.g., Totten Glacier), the majority of the EAIS ice shelves and outlet glaciers are currently stable (Rignot et al. 2013; Paolo et al., 2015), but that situation could change with increased ocean and atmospheric warming.

Key Processes at Play in Antarctica (Marine-Based Ice)

The climate in Antarctica is colder than in Greenland, but because most of the ice sheet margin terminates in the deep ocean, its outlet glaciers, grounding lines, and the underside of buttressing ice shelves are vulnerable to even modest amounts of ocean warming. In part, this is because the melting point of ice becomes lower with increasing water depth (Holland et al., 2008; Jacobs et al., 2011; Paolo et al., 2015; Shepherd, 2004). In the Amundsen Sea sector, seasonally stronger westerly winds have driven a change in ocean circulation, favoring intrusions of warm salty deep water (upper Circumpolar Deep Water, or CDW) across the continental shelf break into the sub-ice cavities and towards the grounding zones of major ice outlets such as Thwaites Glacier, enhancing ice shelf basal melting (Pritchard et al., 2012; Steig et al., 2012). Currently, the Southern Ocean is taking up more heat and warming faster than other parts of the global ocean (Levitus et al., 2012; Masahiro et al., 2013), especially at intermediate depths (Schmidtke, et al., 2014) where CDW has the potential to flow into sub ice-shelf cavities.

Many marine-based Antarctic outlet glaciers rest on bedrock hundreds of meters to more than 1 km below sea level (Figure 5), and many of these have reverse-sloped beds. In places with this reverse-sloped geometry, including much of WAIS and deep EAIS subglacial basins (Fricker, et al., 2015), the ice sheet is susceptible to a Marine Ice Sheet Instability (MISI; Figure 6), whereby a reduction in ice-shelf buttressing causes an initial grounding-line retreat onto a reverse-sloped bed, which triggers a non-linear acceleration of ice loss and ongoing retreat of the ice margin, because the seaward flow of ice is strongly dependent on the grounding line’s thickness (Pollard and DeConto, 2009; Schoof, 2007; Weertman, 1974) which thickens upstream.

\(^6\) Bedrock is "reverse-sloped" if it deepens toward the continental interior. This is the reverse of the situation off the coast of most continents, including North America, where the continental shelf deepens away from the interior.
Figure 6. A time-evolving schematic sequence illustrating marine ice sheet instability (a-c), whereby a -1-km deep, marine terminating ice-sheet margin with reverse-sloped bed is undergoing ice-shelf thinning due to oceanic warming. Note the sequentially thickening grounding lines (red dashed lines) from top to bottom and enhanced seaward ice flux as the ice margin retreats landward into a deepening basin. Once set in motion, even if the ocean forcing is removed, the retreat will continue until the grounding line meets upward sloping bedrock or a topographic bump, or if a confined ice shelf can reform to provide some buttressing against the seaward ice flow.

Figure 7. An ice-penetrating radar image (vertical cross section) along a flowline of Thwaites Glacier in the Amundsen Sea sector of WAIS (see Figure 5 for location). The underlying bed is clearly visible. The glacier is -120 km wide where it reaches the ocean (right) and reaches back into a deep, ice-filled basin almost 2 km below sea level (left) under the heart of the WAIS. The grounding line (vertical white line) is currently retreating on a reverse-sloped bed and undergoing MISI at an estimated rate of -1 km per year (Rignot, et al., 2014). Its current grounding line thickness is too thin (~600m) to trigger widespread ice-cliff instability (see below), but that situation could change if its current retreat continues (figure source: Alley et al., 2015).
The key glaciological processes associated with MISI have been known for decades, and studied with theoretical, analytical, and numerical models along flowlines or in limited-area domains (Cornford et al., 2015; Favier et al., 2014; Joughin et al., 2014; Schoof, 2007; Weertman, 1974). However, predicting what these processes mean in terms of sea-level rise requires their representation in continental-scale ice sheet models. Only recently have such models become capable of accounting for the linked dynamics of the grounded and floating ice components required to represent MISI.

There are various and well established approaches to independently model the grounded (e.g., Oerlemans, 1982; Huybrechts, 1994; Pattyn et al., 2003; Le Meur et al., 2004) and floating components of marine ice sheets (Morland, 1986; MacAyeal, 1989). However, coupling the grounded component (where vertical shear dominates ice flow) and the floating part (where horizontal stretching dominates) is a challenge, and requires either high spatial resolution at the transition between the grounded and floating ice (Goldberg et al., 2009; Cornford et al., 2015) or a parameterization of the ice flow across the grounding zone (Schoof, 2007; Pollard and DeConto, 2012). Regardless of the approach, simplifications must be made to allow the computational efficiency needed to run a marine ice sheet model for an entire ice sheet for long time periods.

Model inter-comparisons (Pattyn et al., 2012) have tested and compared the ability of independently developed models representing a wide range of complexities and numerical approaches to capture migrating marine grounding lines (Figure 6) and the fundamental dynamics associated with MISI. These comparisons have increased our overall confidence in models’ ability to capture the dynamics of retreating grounding lines on reverse-sloped bedrock, but other processes, not previously included in ice sheet models, could also be critical to Antarctica’s future.

Emerging Science and Previously Underappreciated Glaciological Processes

Recently, another glaciological process: Marine Ice Cliff Instability (MICI; Figure 8), not previously considered at the continental ice-sheet scale, was shown to have a profound effect on ice sheet simulations in climates warmer than today (DeConto and Pollard, 2016; Pollard et al., 2015). With summer warming sufficient to produce extensive meltwater ponding around the Antarctic margin, as expected to occur within decades if greenhouse gas emissions continue at their present rates (Trusel et al., 2015), it is possible that water-filled crevasses may ‘hydrofracture’ ice shelves (Banwell et al., 2013). This was witnessed during the breakup of the Larsen B ice shelf on the Antarctic Peninsula in 2002 (Scambos et al., 2000). If this were to happen to ice shelves that currently protect thick grounding lines where the bedrock has a reverse slope, this could not only trigger MISI, but could also result in tall ice cliffs, as observed at the termini of the few, ~1km thick outlet glaciers in Greenland that have recently lost their ice shelves. Such tall cliffs would be inherently unstable and fail structurally under their own weight (Bassis and Walker, 2012). Because of Antarctica’s bedrock geometry and thick, marine-terminating grounding lines, if protective ice shelves were suddenly lost to hydrofracturing or a combination of hydrofracturing and ocean melt from below, then many places around the Antarctic margin would have structurally unstable ice cliffs.

Including MICI dynamics in an ice sheet model is challenging, in part because the numerical representation of fracture mechanics at an ice front is highly complex. Calving is controlled by many interacting processes. These include the stress regime at the ice front, water depth, ice thickness, flow speed, conditions at the bed of the ice, the penetration depth and spacing of crevasses, the presence of lateral shear (along the walls of a fjord for example), undercutting of the calving front by warm water, tides,
and importantly, the presence of mélange (a mix of previously calved, broken icebergs and sea ice) that can provide some support (buttressing) to the cliff face. Many of these processes are not resolved in continental-scale ice-sheet models, so the approach taken to date has been to \textquoteleft\textquoteleft parameterize\textquoteright\textquoteright\ (simplify) the representation of cliff-failure, to a point where retreat rates can be related to some of the basic prognostic variables (outputs) that ice sheet models can provide—like water depth at the ice terminus, ice flow speed, cliff height, buttressing, and crevassing.

The parameterization of complex processes in models usually relies on real-world observations. In the case of ice-cliff retreat, one major limitation is that marine-terminating grounding lines that are 1) thick enough to generate \textgreater\textasciitilde100m tall ice cliffs, and 2) have completely lost their ice shelves (like the Helheim and Jakobsavn Glaciers in Greenland; Figure 9) are few and far between today. While widespread MICI has not yet been observed in Antarctica, observations on the Antarctic Peninsula (Rignot et al., 2004; Scambos et al., 2004) and in Greenland (Joughin et al., 2008) have shown that brief episodes of ice-cliff instability lead to accelerated retreat.

Today, most places in Antarctica where ice \textgreater\textasciitilde800m thick reaches the ocean, floating ice shelves provide buttressing and preclude exposed, tall cliffs at the \textquoteleft\textquoteleft tidewater\textquoteright\textquoteright grounding line. In the future, given enough atmospheric and ocean warming, it is possible that wide stretches of the marine-terminating Antarctic margin, where thick ice meets the ocean, could lose their protective ice shelves and ice tongues. In that case, cliffs could begin to appear in places like the throat of the Thwaites Glacier. Thwaites Glacier is \textasciitilde10 times wider than the few outlet glaciers in Greenland undergoing MICI today and it is only minimally buttressed. Its grounding line is retreating on reverse-sloped bedrock via MISI (Joughin et al., 2014), but most of the grounding zone is currently resting on bedrock too shallow (Millan et al., 2017) to form a cliff face tall enough to induce MICI (Bassis and Walker, 2012). If grounding line retreat continues into the deep basin upstream, MICI could be initiated, exacerbating the rate of ice mass loss in West Antarctica.

Figure 8. A similar ice sheet margin as shown in Figure 6, but feeling the effects of both sub ice-shelf oceanic warming and atmospheric warming. Meltwater and rainwater accumulating on the ice-shelf surface can fill crevasses (a), which deepens the crevasses, potentially leading to hydrofracturing (b). If the newly exposed grounding line is thick enough to have a tall subaerial ice cliff (c), the terminus would fail structurally. If the rate of structural failure outpaces the seaward flow of ice, the ice margin would back into the deep basin (after Pollard et al., 2015; DeConto and Pollard, 2016), resulting in a massive loss of ice.
Implications of MISI and MICI for California’s Future

Accounting for MICI in an ice sheet can model dramatically increase future sea level projections, and because the epicenter of change will most likely be in WAIS, California would be especially impacted (Figure 2). After including MISI and MICI in their ice sheet model, DeConto and Pollard (2016) tested the performance of the model against the only reasonable analogue for future sea-level times in the geologic past when GMSL was higher than today and Antarctic temperatures were known to be warmer. The benchmarks they used were the Last Interglacial (LIG, about 125 thousand years ago) and the middle Pliocene (about 3 million years ago). During the Last Interglacial, global mean temperatures were similar to today (Capron et al., 2014; Hoffman et al., 2017), but GMSL was about 6 to 9 meters (20-30 feet) higher (Dutton et al., 2015). Most of the sea-level rise is now thought to have come from Antarctica, because Greenland is believed to have remained partially to mostly intact at that time (Dahl-Jensen et al., 2013; Stone et al., 2013), although the precise magnitude of Greenland retreat continues to be re-evaluated (e.g. Yau et al., 2016). Nonetheless, Last Interglacial sea levels provide a powerful message that the polar ice sheets are sensitive to modest warming.

Global average temperatures during the middle Pliocene were warmer than the LIG, 2°-3° warmer than today. GMSL, while uncertain, is thought to have been in the range of 10-30m (30 to 90 feet) higher than present (Miller et al., 2012; Rovere et al., 2014), requiring a substantial contribution from East Antarctica in addition to Greenland and West Antarctica. Pliocene atmospheric CO₂ concentrations were comparable to today (~400 ppmv; Pagani et al., 2009), although cyclic changes in Earth’s orbit (which control the seasonal distribution of solar radiation) likely contributed to periods within the Pliocene when Antarctic temperatures were amplified. It is important to note that Pollard and DeConto’s models with MISI physics alone, could not come close to matching Pliocene and Last Interglacial sea level targets, even including the effects of orbital changes. (Pollard and DeConto, 2009). Only after accounting for the effects of hydrofracturing and ice-cliff failure were they able to simulate Pliocene and Last Interglacial sea levels (DeConto and Pollard, 2016), although other factors yet to be considered could have also played a contributing role.
The Pliocene and LIG sea level targets were used to explore a range of model parameters controlling 1) the sensitivity of ice-shelf melt to warming ocean temperatures, 2) the sensitivity of ice shelf hydrofracturing to surface meltwater and rain, and 3) the maximum rates of ice-cliff collapse, regardless of the height or width of the cliff face. They found 29 combinations of these model parameters capable of achieving Pliocene and LIG sea levels. Versions of the model that produced higher or lower sea levels than justified by the geological records were discarded. Hence, only the ‘validated’ versions of the ice model were used in future simulations, driven by a range of greenhouse gas forcing scenarios. Evolving future atmospheric conditions and ocean temperatures provided by climate model simulations were applied to the ice model, allowing the model to respond to the combined effects of both a warming ocean and a warming atmosphere.

Depending on their assumptions about the magnitude of Pliocene sea levels, which affect the choice of model physical parameters (Pliocene sea-level estimates are more uncertain than LIG estimates), DeConto and Pollard (2016) found that Antarctica has the potential to contribute between 64 ± 0.49 cm and 105 ± 0.30 cm (25 ± 0.19 inches and 41 ± 12 inches) of sea-level rise by the year 2100 in the warmest future greenhouse gas scenario (Figure 10). Another important implication of the study was the recognition that by 2100, the rate of Antarctica’s contribution to sea-level rise could be in the range of 2 cm (almost an inch) per year. This finding is fundamentally different than the assessment of the IPCC AR5 (Church et al., 2013), which concluded that Antarctica would contribute little if any GMSL rise by the year 2100, even in the highest greenhouse gas forcing scenario, Representative Concentration Pathway (RCP) 8.5 (van Vuuren et al., 2011). While at the high end, the results point to the potential for much higher sea levels than previously considered, but they also demonstrate a much reduced risk of future sea-level rise from Antarctica if the lowest greenhouse gas emissions pathway (RCP2.6) is followed.1

Figure 10. Ensembles of Antarctic’s future contribution to sea level, using paleo-calibrated ice-model physics, high-resolution atmospheric climatologies from a regional atmospheric model, and time-evolving ocean model temperatures (from DeConto and Pollard, 2016). The inset at right shows time-evolving CO₂ concentrations (RCPs) used to force the ice sheet simulations (from van Vuuren et al., 2011). Note that different colors are used to represent the RCPs and ice sheet ensembles. The difference between the ensembles at left versus right lies in the assumptions used in the model calibration (based on geological sea-level reconstructions). These differences demonstrate the large uncertainty remaining in current projections. The timing when Antarctica begins major retreat in RCP4.5 and 8.5 (after -2060) also remains uncertain. In addition to greenhouse-gas forcing, the onset of major retreat will be dependent on the trajectory of Antarctic warming in response to a complex combination of factors including recovery of the ozone hole, linkages with tropical dynamics, and feedbacks between the ice-sheet, solid-Earth, ocean, and sea-ice which are not accounted for here. Addressing these shortcomings and uncertainties will be the focus of future work.

1 The RCP’s refer to the extra radiative forcing (in Watts per square meter, Wm-2) added by the greenhouse gases in each scenario at the year 2000. RCP2.6 is roughly consistent with the aspirational goal of the United Nations’ Framework Convention on Climate Change 2015 Paris Agreement to limit the rise in global temperature to less than 2°C. RCP8.5 is consistent with a fossil-fuel-intensive “business-as-usual” scenario and RCP4.5 is an intermediate scenario, closer to RCP2.6 than RCP8.5.
The Loss of Marine-Based Ice is a Multi-Millennial Commitment.

Another underappreciated consequence of the loss of marine-based ice (as in WAIS) is that it can only re-advance (regrow) if confined ice shelves can be reestablished. The shelves are required to buttress the grounding line, allowing it to migrate seaward on its reverse-sloped bed. Because ice-shelf melt rates are so sensitive to a warm ocean (Holland et al., 2008; Shepherd, 2004), the ocean will have to cool down before the ice shelves can reform. Because of the large thermal "inertia" of the ocean, this could take centuries to several thousands of years, after greenhouse gas concentrations return to their preindustrial levels (Winkelmann et al., 2015). The net result is that sea-level rise driven by the loss of marine-based ice (like WAIS) will remain elevated for thousands of years (DeConto and Pollard, 2016).

Reducing Risk of a Serious Sea Level Contribution from Antarctica

The RCP2.6 ensemble averages in Figure 10 suggest Antarctica will make only a small contribution to 21st-century sea-level rise if future greenhouse gas emissions are strictly limited. However, some of the individual RCP2.6 simulations do involve serious WAIS retreat (Figure 11), with the two highest (of 58) ensemble members exceeding a 50 cm (20 inches) contribution to GMSL by 2100. This implies that the risk of threatening sea-level rise, while much reduced, is not completely eliminated in the scenario with the lowest emissions. This finding is in general agreement with other recent modeling studies and observations of the Amundsen Sea outlet glaciers (Thwaites in particular), suggesting that MISI has commenced in that location and retreat into the heart of the WAIS could be irreversible (e.g., Rignot et al., 2014; Joughin et al., 2014). More observational and modeling work will be required, before a precise climatic threshold for unstoppable WAIS retreat can be defined. In preliminary studies, a combined atmospheric and oceanic warming in the Amundsen Sea region of 2-3°C is found to be enough to trigger major retreat of the WAIS (Scambos et al., in press), but the timing when that much regional warming will appear in the Amundsen Sea remains difficult to predict.

Figure 11. Two individual members of the RCP2.6 ice sheet ensembles (Figure 10) using identical future climate forcing (ocean and atmospheric temperatures), but slightly different model parameters controlling oceanic sub-ice melt rates, sensitivity of hydrofracturing to surface meltwater, and the maximum rate of ice-cliff failure. In this case, both versions of the model are equally capable of simulating realistic modern and ancient ice sheets, so both results can be considered possible future outcomes. As in most RCP2.6 simulations, the model on the left produces almost no contribution to future sea-level rise. In contrast, the model on the right undergoes dramatic retreat of Thwaites Glacier and near compete loss of the WAIS within 500 years. Despite the limited warming in the RCP2.6 scenario, the model on the right produces -57 cm (22 inches) of GMSL rise by 2100. Reducing the range of uncertainty in future ice sheet simulations should be a top priority.
How Much Confidence Should be Placed in the New Projections?

The obvious question is: how confident can we be in the recent model projections? First, it should be emphasized that the model ensembles (Figure 10) hinge on the performance of a single ice-sheet model and a single climate model. Furthermore, the ensembles do not explore the full range of parameters in the ice sheet model. Thus, the ensembles do not provide a true probabilistic assessment of Antarctica’s possible future. While much progress observing and modeling the ice sheet has been made in recent years, the precise magnitude and timing when Antarctic might begin to contribute substantial sea level should still be considered deeply uncertain. Regardless of uncertainty in model physics, one of the greatest sources of uncertainty lies in which future greenhouse gas scenario will be followed; so even if the physical model were perfect in its representation of the natural world, there would still be major uncertainty in the Antarctic ice sheet’s future. With that said, the recent work does provide important, new information that should be considered at the policy level (Kopp et al., in review):

- Previously underappreciated glaciological processes have the potential to greatly increase the probability of extreme GMSL rise (2 meters or more) within this century if emissions continue unabated.
- An aggressive reduction in greenhouse gas emissions substantially reduces but does not completely eliminate the risk of extreme GMSL rise from Antarctica.
- Once marine-based ice is lost, the resulting GMSL rise will last for thousands of years.
- The processes (atmospheric dominated) that could drive extreme AIS retreat later in this century are different from those driving AIS changes now (ocean dominated), so the fact that the current rise in GMSL rise is not consistent with the most extreme projections does not rule out extreme behavior in the future.

What are the Major Model Limitations?

The model developed and used by DeConto and Pollard has a number of fundamental limitations that could lead to either an underestimate or overestimate of future ice sheet retreat. These limitations also apply to other recent studies using continental-scale ice sheet models. Perhaps the most fundamental limitation is the lack of observations in the key regions of the ice sheet, for example we do not know the ocean temperature, the ice thickness, or the bathymetry for the sub ice shelf cavities surrounding the entire Antarctic perimeter (see below). Another limitation is the interaction between the retreating ice sheet and the surrounding ocean. Massive volumes of fresh meltwater and ice volumes flowing into the Southern Ocean as the ice sheet retreats could enhance sea ice production, which might ameliorate the pace of atmospheric warming (Bintanja et al., 2013). At the same time, the resulting ocean stratification could enhance heat buildup in the subsurface, increasing ocean melt rates (Hansen et al., 2016). Interactively coupling ice and ocean models is a major challenge and accounting for these interactions at the continental scale is currently a priority of the international ice sheet modeling community.

Another missing feedback is that between the retreating ice sheet and relative sea level at the grounding line. The reduced gravitational pull on the surrounding ocean as the ice sheet retreats leads to a local relative sea level drop at the grounding line. This can have a stabilizing effect on some retreating grounding lines, particularly in places where the onset of MIS1 is close to a threshold (Gomez et al., 2015). While this negative feedback reduces the total amount of modeled ice sheet retreat on millennial timescales, it has only a small influence in the near-term and is not likely to substantially reduce sea level rise risk on decadal to century timescales.

In DeConto and Pollard (2016) and other recent Antarctic modeling studies (e.g., Cornford et al., 2015; Golledge et al., 2015), ice sheet retreat early in the
21st century is largely driven by sub-surface ocean warming and MISI as illustrated in Figure 6. Ocean models are well known to do a poor job simulating recent sub-surface warming trends around Antarctica (Little and Urban, 2016), making the location and magnitude of future ocean warming an important source of uncertainty, especially in the near term.

By the second half of this century, around 2060, DeConto and Pollard (2016) show that the atmosphere will likely take over as the primary driver of ice retreat, mainly though the influence of surface meltwater on hydrofracturing. This is an important new twist on our understanding of Antarctica's possible future behavior. The inclusion of hydrofracturing physics more directly links ice sheet dynamics with atmospheric conditions; the onset of major retreat is largely determined by the appearance of extensive summer meltwater and rainwater on ice shelves. Thus, the projected timing when massive sea-level rise might commence is strongly dependent on the atmospheric model forcing the ice sheet from above. Climate models currently do a poor job resolving recent changes in coastal Antarctic climate, particularly in some of the most sensitive regions of the ice sheet, like the Amundsen Sea region of West Antarctica (Bracegirdle, 2012) adding uncertainty in the predicted timing of retreat. Furthermore, in the future, the trajectory of Antarctic climate and ocean temperatures will be strongly influenced by important teleconnections to the tropical Pacific (Steig et al., 2012; Dutrieux et al., 2014) and the depletion of the Antarctic stratospheric ozone hole (Marshall et al., 2014; Turner et al., 2016), both of which remain uncertain and poorly represented in climate models.

Due to existing computational limitations, continental-scale ice sheet models, like those discussed here, need to make approximations in the mathematical representations of ice dynamics. Ice sheet models with more complete and rigorous dynamical treatments are beginning to appear, but are still too computationally expensive for the long-term, continental-scale, and parameter-exploring experiments that are required. This will likely change within the decade as greater computer power becomes available. It remains to be seen (and is an open and debated question) whether the simplifications used in the current generation of models matter to the results, and if so, by how much. This is an important issue, because key processes related to MISI are concentrated in the grounding zones, which are effectively important boundary layers between different modes of flow (grounded/shearing versus floating/stretching) that are best represented at high spatial resolution and without simplifications of the underlying physics.

A further possible complication is related to firn, old snow that is transitioning to ice and forms a layer below the newer snow. In a warming world, more snow is anticipated to fall over the EAIS, and hence the firn layer will thicken, at least in the short term. As summer air temperatures begin to exceed the freezing point, meltwater will be absorbed by the underlying firn, as long as there is remaining poor space between snow grains to allow refreezing (Figure 12). Eventually, ice lenses will begin to form, the firn will compact, and it will no longer have the ability to absorb summer melt water. At that point, meltwater will have the potential to flow into underlying crevasses where it can cause hydrofracturing. Presently, the meltwater-buffering capacity of firn is poorly represented in most ice-sheet models. Because of this limitation, the timing when hydrofracturing begins to impact ice shelves in the models could be occurring sooner (by years to a few decades) than it will in reality. With that said, in the warmest (RCP8.5) scenario, so much meltwater would begin to appear over the ice shelves by the second half of the 21st century, the firn layer would be quickly overcome regardless of its thickness or the details of the firn model. However, in more moderate warming scenarios closer to a meltwater/hydrofracturing threshold, the buffering capacity of the firn layer could be a determining factor of the timing when hydrofracturing might begin.
Could Future Sea-Level Rise be Even Worse than the new Projections?

The future ice sheet projections in DeConto and Pollard (2016) imply the potential for substantially more sea-level rise (2 m or more by 2100) than any previous model results. This is largely due to the explicit treatment of the hydrofracturing and ice-cliff physics described above. While the results remain uncertain for the reasons described here, it should be stressed that the ensemble averages in Figure 10, do not represent the model's maximum possible rates of Antarctica's contribution to sea-level rise.

In the model cliff-collapse (the horizontal rate of ice-loss at the marine "tidewater" calving terminus) only occurs where ice cliffs are tall enough to generate stresses that exceed the strength of the ice. The rate of cliff retreat ranges from near zero where this stress-strength threshold is just exceeded, to some maximum allowable rate, regardless of the cliff height. This "speed limit" imposed on the model's representation of ice-cliff retreat is meant to represent 1) the average size and frequency of individual calving events, which involve brittle fracture mechanics and modes of ice failure whose controlling factors are not well understood, and 2) the buttressing effects of mélange (icebergs and fragments of icebergs locked together by sea ice) at the ice terminus. Faster cliff collapse should generate more mélange, providing a negative feedback that dampens the rate of retreat.

In the future ice-sheet ensembles shown in Figure 10, a range of maximum cliff-failure rates are used, ranging between one and five km per year. At the tallest vertical ice cliffs observed today (e.g., Helheim and Jakobshavn glaciers in Greenland), the horizontal rate of cliff retreat is as high as 10-14km per year (Joughin et al., 2010; 2012). This is quite remarkable, considering these outlet glaciers rest in narrow fjords 5 to 12 km wide, choked with dense mélange as seen in Figure 9.

In Antarctica, the cliff faces that could appear in the future will be much taller and wider than those in Greenland, where mélange can clog seaways. For example, Thwaites Glacier is >120 km wide and its terminus ends in open ocean rather than a narrow fjord, so it might be reasonable to assume cliff collapse in open settings like Thwaites could approach the rates observed in narrow Greenland fjord settings where mélange is presumably providing some back pressure at the grounding line. Increasing the model's maximum cliff retreat values closer to those observed in Greenland (-10 km per year) increases Antarctica's simulated contribution to GMSL to more than 2m by 2100 in the RCP8.5 scenario (DeConto et al., in preparation).
Considering the implications of multiple meters of sea-level rise on century timescales, additional study of these processes and more explicit model treatments of the buttressing mélange in front of retreating ice fonts should be a priority. In reality, rates of cliff retreat depend on the details of fracture mechanics in addition to back-pressure from mélange and other processes not explicitly represented in the current generation of models. Nonetheless, observed behavior of the few tidewater glaciers thick enough to undergo this type of structural failure hints at the possibility that current ice sheet projections, including those in DeConto and Pollard (2016), could be conservative and that 2.5 m or more of total GMSL rise by 2100 cannot be ruled out.

Other Recent Antarctic Modeling

In the last year, several other modeling studies of the AIS' future were published in high profile journals (e.g., Clark et al., 2016, Golledge et al., 2015, Ritz et al., 2015, and Winkelmann et al., 2015). Among these, Ritz et al., (2015) and Golledge et al., (2015) are the most directly comparable to DeConto and Pollard (2016), because they explicitly discuss the possible state of the ice sheet in 2100.

Ritz et al. (2015) used a hybrid physical-statistical modeling approach, whereby the physical processes triggering the onset of MISI (Figure 6), which DeConto and Pollard attempt to model directly, are determined statistically rather than physically. They estimated probabilities of MISI onset in eleven different sectors around the ice-sheet margin, based on observations of places undergoing retreat today (mainly in the Amundsen Sea) and expected future climate change following the A1B emissions scenario used in IPCC AR4 (Solomon et al., 2007). In places where they project MISI to begin, the persistence and rate of grounding-line retreat is parameterized as a function of the local bedrock topography (slope), grounding line thickness (Schoof et al., 2007), basal slipperiness, and one of three different model treatments of basal friction which is shown to provide considerable uncertainty.

The advantage of the approach used by Ritz et al., (2016) is that the relative simplicity of the ice sheet model allows thousands of model iterations in each of the eleven Antarctic sectors, allowing a probabilistic assessment of the results based on each ensemble member’s performance relative to modern, observed retreat rates in the Amundsen Sea. While their A1B future climate scenario is not directly comparable to the RCPs used by DeConto and Pollard (2016), they concluded that Antarctica could contribute up to 30 cm (12 inches) GMSL by 2100 (95% quantile), similar to the RCP4.5 results of DeConto and Pollard (2016) but considerably less than RCP8.5 (Figure 10).

The Ritz et al., (2015) study represents a careful and statistically rigorous approach, but their conclusions may be hampered by their reliance on modern, observed rates of retreat in the Amundsen Sea to calibrate their results. Today, retreat in the Amundsen Sea is being driven by oceanic sub-ice melt. In the future, atmospheric warming may become an increasingly dominant driver of ice-sheet retreat via hydrofracturing and cliff failure, processes that recent observations in the region do not inform. Furthermore, their maximum retreat rates consider only those processes associated with MISI, and do not consider the additional potential contributions from the physical processes associated with MICI.

Golledge et al. (2015), used the PISM ice sheet model (Winkelmann et al., 2011) which is similar in its formulation to the ice-sheet model used by DeConto and Pollard (2016), but without hydrofracturing and ice-cliff physics, to simulate the future response of the AIS to simplified RCP emissions scenarios. The PISM model captures MISI dynamics, but not MICI, so again, the bulk of simulated ice-sheet retreat is driven by oceanic warming and sub-ice melt, rather than atmospheric warming. PISM’s treatment of sub-ice melt in response to warming ocean temperatures (Feldmann and Levermann et al., 2015) makes PISM more sensitive to ocean warming than DeConto and Pollard’s model. As a result, Golledge et al., (2015) find they can produce 39 cm (10 inches) of GMSL by 2100 from Antarctic in RCP8.5 (mainly through MISI),

*Greenhouse gas emissions scenario A1B is roughly intermediate between RCP4.5 and RCP8.5.
without the MCI physics used by DeConto and Pollard, (2016). Using a more conservative oceanic melt-rate parameterization in their simulations, the GMSL contribution drops from 39 to 10 cm by 2100, highlighting the ongoing uncertainty in heavily parameterized continental-scale ice sheet models, particularly with regard to their sensitivity to a warming ocean.

While Ritz et al. (2015) and Golledge et al. (2015) both simulate less ice sheet retreat by 2100 than DeConto and Pollard (2016), these studies still represent a considerable departure from IPCC AR5 (Church et al., 2013), which assessed little to no contribution to future sea level from Antarctica by 2100, even under the high-emissions RCP8.5 scenario. Furthermore, despite the enhanced sensitivity of the PISM model to a warming ocean, Golledge et al. (2015) also find that a low emissions scenario like RCP2.6 essentially eliminates the risk of a substantial future sea-level contribution from Antarctica. This important conclusion is in agreement with the findings of DeConto and Pollard (2016).

**Outlook: The Science is Moving Quickly**

Recent advances in monitoring and modeling the Greenland and Antarctic ice sheets are leading to steady improvements in our understanding of the underlying processes driving ice-sheet retreat, but the multifaceted complexity of the coupled ice-atmosphere-ocean-Earth system continues to hamper predictions of the ice sheet's future. A number of coordinated, international programs are either just getting underway, or are planned in the near future with the goal of reducing uncertainty in future sea-level rise. Among others, these include, the NRC ESAS 2007 Decadal Survey, which identified the following as a major science question for satellite observations of Earth over the next decade: “Will there be catastrophic collapse of the major ice sheets, including those of Greenland and West Antarctica and, if so, how rapidly will this occur? What will be the time patterns of sea-level rise as a result?” It recommended three key Earth-observation missions for ice-sheet monitoring: (i) DESDynI (now NISAR, a synthetic aperture radar (SAR) to estimate surface deformation); (ii) Ice, Cloud and land Elevation Satellite-2 (ICESat-2) (laser altimeter to estimate ice sheet height) and (iii) a follow on to the current GRACE satellite. NISAR will launch in 2020, and the other two missions are due for launch within the next 2 years. Operation IceBridge is an airborne mission carrying instruments such as an laser altimeter and a sounding radar to bridge the gap between ICESat (ended 2009) and ICESat-2 (to be launched 2018). Internationally, there are several missions collecting relevant data: the European Space Agency has operated CryoSat-2 since 2010 to monitor the ice sheets with radar altimetry, another element in its continuous record since 1992 (ERS-1, ERS-2 and Envisat), and there are plans for a CryoSat-3. Other relevant SAR data also come from Sentinel-1a (ESA), ALOS (Japan) and TerraSAR-X (Germany). Continued availability of these types of observations will be critical for understanding processes and monitoring when and where the ice is thinning and retreatting.

One of the key limitations in understanding processes driving ice sheet mass loss is the lack of observations near the ice margins and the surrounding oceans. This is challenging, as the areas are often ice covered, and are logistically difficult to reach, and so much of the region remains unmapped. A NASA Earth Ventures mission, Oceans Melting Greenland (OMG), was launched in 2015 for $30M. This mission is acquiring, via aircraft and ship, vital measurements in the ocean off Greenland’s outlet glaciers to understand how the ocean conditions are changing. The same needs to be done in Antarctica. In 2016 six ALAMO floats were deployed in the Ross Sea off the Ross Ice Shelf. Observations like these are needed all around Antarctica and especially in the vulnerable Amundsen Sea region.

Constraining how much and how fast the WAIS will change in the coming decades has recently been identified as a
top priority in Antarctic research (National Academies, 2015). The U.S. National Science Foundation and the U.K. National Environmental Research Council recently announced a joint, $23M solicitation for collaborative US-UK science proposals to understand the Thwaites Glacier, how it behaved in the past, and how it might retreat in the future. This level of international coordination is required to surmount the expense and logistical challenges of doing science in the Antarctic.

While observational programs are advancing our understanding of ice-sheet processes and interactions between ice, ocean, atmosphere, and the underlying Earth, numerical models must keep pace, as it is models that will ultimately provide improved projections. While ice sheet modeling advances have been steady in recent years, some of the key limitations described above will need to be resolved before uncertainties in projections can be reduced and the possible thresholds and tipping points can be more robustly identified. Part of the challenge in modeling the ice sheets is illustrated by the number of interacting processes (Figure 13) at an ice sheet margin, or even in a single outlet glacier like Thwaites. Many of these interacting processes operate on different timescales, adding to the modeling challenge.

While detailed and highly resolved models of individual processes or local regions are being developed, the lessons learned from such detailed modeling must be ‘scaled up’ to the continental scale. This often requires parameterizations of the processes that cannot be resolved at the spatial resolution (5-40 km) of typical continental ice sheet models. Furthermore, the decadal to century timescales most relevant for policy decisions, are short for a whole ice sheet. The fast, dynamic behavior of individual outlet glaciers, surging or sticking ice streams, and growing or collapsing ice shelves can be thought of as the ‘weather’ of the ice sheet. The continental ice-sheet models now being tasked with providing useful future projections on decadal-to-century timescales are analogous to climate models, best suited to modeling long-term changes rather than short-term forecasts of the ice sheet ‘weather’. Furthermore, the predictive skill of any model is not only determined by the validity of the physics represented in the model, but also the initial conditions applied at the beginning of a simulation. For an ice sheet model, this means that the bedrock topography, conditions at the bed of the ice, internal ice temperatures, ice rheology, speed of the ice, underlying ocean conditions, overlying atmospheric conditions, etc., need to be known at the spatial resolution of the model. Such details remain unresolved in parts of Greenland and Antarctica and will have to be improved before model confidence can be substantially increased at the continental ice-sheet scale.

Key continental-scale modeling challenges that must be overcome in the short term include 1) two-way ice sheet-ocean-atmosphere coupling, 2) more explicit modeling of grounding line and ice cliff physics, including the effects of mélange, and 3) firn models coupled to both the atmosphere and underlying ice physics. Advances in all of these areas are occurring steadily, and substantial advances are expected within the next decade. In the meantime, work currently underway and expected in the next one to five years includes improved understanding on the ocean and warming thresholds capable of driving substantial WAIS retreat. Furthermore, a more complete exploration of the upper-end (maximum) estimates of what is possible in terms of future sea-level rise from Antarctica (and Greenland) will be particularly valuable for California policy and planning purposes. Based on the emerging science, this extreme upper bound is likely to be higher than in the current literature or published national or international climate assessments.

It is worth emphasizing that the threat of massive sea-level rise from Antarctica is not only supported by the recent ice-sheet modeling literature, but also from basic observations and fundamental physical principles. First, lessons from the geological record show that the polar ice sheets and the AIS in particular are sensitive to modest amounts of warming (Dutton et al., 2015). Second, the amount of warming over Antarctica in high-emissions future greenhouse gas emissions scenario will produce massive amounts of meltwater on Antarctic ice shelves before the end of the century (DeConto and
Pollard, 2016; Trusel et al., 2015) and meltwater has been observed to drive ice-shelf breakup in the recent past. This includes the sudden collapse of the Larsen B ice shelf in 2002 that resulted in the speed-up of upstream glaciers, previously buttressed by the ice shelf, by a factor of eight in some instances (Rignot et al., 2004; Scambos et al., 2004). Third, loss of Antarctic ice shelves and the associated loss of buttressing will trigger MISI on reverse-sloped bedrock as is occurring in the Amundsen Sea today. Fourth, in some locations in Antarctica, marine-terminating ice cliffs greater than 100 meters tall will emerge in some places and these cliffs will fail structurally under their own weight as observed in Greenland today. Fifth, much of the Antarctic Ice Sheet rests in deep sub-marine basins, exposing the ice-sheet margin to a warming ocean, and dynamical instabilities induced by reverse-sloped bedrock.

In summary, the current pace of global sea-level rise (1.2 inches per decade) is already impacting California's coastline. New ice-sheet projections suggest the rate of rise could accelerate sharply later in this century, with the potential for two meters (6.5 feet) or more of total sea-level rise by 2100. While the uncertainty in these projections remains high, the risk is not negligible given the stakes to future society, development, and infrastructure. Given the level of uncertainty but also the potential impacts, significant investment in any major new coastal development with long lifespans needs to be carefully assessed. Similarly, responses to both long-term sea-level rise and short-term elevated sea levels for existing infrastructure and development also need to consider economic, social, and environmental impacts and costs as well as the lifespan of any approach. Increasing the reliability of future sea-level projections will be important in decision making for both existing and proposed development and infrastructure. This is a tractable problem, but it will require improved scientific understanding of mass-loss processes from the vast polar ice sheets across all the relevant spatial and temporal scales. This can only be achieved through continued and new observations from satellites and the field (both on the ice and in the surrounding atmosphere and ocean), combined with modeling to investigate key processes such as ice-ocean interactions, surface melting, and fracture mechanics of ice. This will require substantial international and inter-agency investment to support collaborations across the disciplines of glaciology, meteorology, oceanography, and computational science.

Figure 13. A schematic representation of the primary, interconnected processes operating at a marine-terminating outlet glacier like the Thwaites Glacier. Both the individual processes and their coupled interactions must be understood to be properly modeled, illustrating the grand challenge faced when trying to predict how a system like this will behave in the future. Some processes shown, like cliff collapse and extensive meltwater ponding, have not begun in the region, but could if grounding line retreat and warming continues.
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EXHIBIT V
Doubling of coastal flooding frequency within decades due to sea-level rise

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Global climate change drives sea-level rise, increasing the frequency of coastal flooding. In most coastal regions, the amount of sea-level rise occurring over years to decades is significantly smaller than normal ocean-level fluctuations caused by tides, waves, and storm surge. However, even gradual sea-level rise can rapidly increase the frequency and severity of coastal flooding. So far, global-scale estimates of increased coastal flooding due to sea-level rise have not considered elevated water levels due to waves, and thus underestimate the potential impact. Here we use extreme value theory to combine sea-level projections with wave, tide, and storm surge models to estimate increases in coastal flooding on a continuous global scale. We find that regions with limited water-level variability, i.e., short-tailed flood-level distributions, located mainly in the Tropics, will experience the largest increases in flooding frequency. The 10 to 20 cm of sea-level rise expected no later than 2050 will more than double the frequency of extreme water-level events in the Tropics, impairing the developing economies of equatorial coastal cities and the habitability of low-lying Pacific island nations.

Global sea level is currently rising at ~3–4 mm/yr1,2 and is expected to accelerate due to ocean warming and land-based ice melt3,4. Sea-level rise (SLR) projections range from 0.3 to 2.0 m by 2100, depending on methodology and emission scenarios5–8, and recent work suggests that accepted methodologies significantly underestimate the contribution of Antarctica9.

Coastal regions experience elevated water levels on an episodic basis due to wave setup and runup4, tides6, storm surge driven by wind stress and atmospheric pressure, contributions from seasonal and climatic cycles, e.g., El Niño/Southern Oscillation10,11 and Pacific Decadal Oscillation12, and oceanic eddies13 (Fig. 1). Coastal flooding often occurs during extreme water-level events that result from simultaneous, combined contributions, such as large waves, storm surge, high tides, and mean sea-level anomalies14,15. SLR leads to (1) passive high-tide inundation of low-lying coastal areas16,17, (2) increased frequency, severity, and duration of coastal flooding18,19, (3) increased beach erosion20, (4) ground water inundation16,18,19, (5) changes to wave dynamics20, and (6) displacement of communities21. Predicting regions vulnerable to passive inundation is relatively simple with the aid of high-resolution digital elevation models22. However, predicting the effect of SLR on episodic flooding events is difficult due to the unpredictable nature of coastal storms, nonlinear interactions of physical processes (e.g., tidal currents and waves), and variations in coastal geomorphology (e.g., sediments, bathymetry, topography; and bed friction). Local-scale assessments of coastal hazard vulnerability typically rely on detailed, computationally-onerous numerical modeling efforts23 in order to simulate wave-related nearshore water levels, interactions with local topography, and the resulting flooding. Global-scale coastal hazard vulnerability assessments, on the other hand, rely on extreme value theory applied to water-level observations.

Extreme-value theory. Extreme-value theory24–26 is a statistical method for quantifying the probability or return period of large events. The generalized extreme value (GEV) distribution, sometimes called the Fisher-Tippett distribution, is a powerful and general statistical model for extremes26 (Coles 2001). The GEV distribution models the probabilities of the maxima of a random variable24,25,26 using three parameters μ, σ, and k, the location (mean), scale (width), and shape (family type), respectively26.

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Figure 1. The water-level components that contribute to coastal flooding.

Figure 2. Example: by elevating the exceedance probability distribution, a 1 m increase in SL increases the frequency (A) and lowers the return period (B) of the 5 m-flood level. Note that the steeper the probability distribution in A, the flatter the return time curve in B, i.e., the greater the increase in frequency and the reduction in return time. Thus regions with lower variability in flood level will experience larger increases in flooding frequency under SLR. See Methods and extended data Figs 1 and 2.

Oceanographic and coastal engineering studies often rely on GEV theory to describe the frequency of extreme waves, water-level events, flooding impacts, and to understand the effects of SLR. As sea level increases, the probability increases that a fixed elevation will experience flooding (Fig. 2). Equivalently, the return period or recurrence interval of flooding at a fixed elevation decreases. In the example shown in Fig. 2B, 1 m of SLR causes the 5 m flood level (the former 100-year flood) to recur every 25 years.

SLR can affect flood magnitude and frequency directly (Fig. 2) or indirectly via hydrodynamic feedbacks: SLR alters water depths, changing the generation, propagation, and interaction of waves, tides, and storm surges. Thus, SLR and long-term changes in wave climate, e.g., changes in magnitude, frequency, and tracks of storms, and storm surge, can alter the parameters of extreme water-level distributions and the evolution of coastal hazards over time. In the proposed work, we assume parameter stationarity based on projections of minor changes (5–10%) in mean annual wave conditions and storm surge over large regions of the ocean. In specific locations, such as the Pacific Northwest, trends in extreme wave climate may be significant and lead to a greater flooding hazard than SLR over at least the next several decades, calling for nonstationary methods in future research.

Investigations of increased flooding frequency due to SLR are often site-specific and rely only on water-level data from tide stations. For example, Hunter (2012) and the Intergovernmental Panel on Climate Change (IPCC) 2013 report estimate the factor of increase in the frequency of flooding events due to 0.5 m of SLR at locations of 198 tide stations around the globe (Hunter, Fig. 4 and IPCC, Fig. 13.25). Hunter and IPCC found that regions with low variability of extreme water levels will experience large increases in flooding frequency. This finding, introduced qualitatively by Hoiezmanns et al. (ref. 53), is critical to predict the global regions most vulnerable to SLR. However, global-scale coastal hazard assessments using this methodology encounter three challenges: (1) Water-level observation stations are sparsely located around the globe, especially in the Indian Ocean and South Atlantic; (2) wave-driven water-level contributions, i.e., setup and swash, are not included; and
Figure 3. Global estimates of the location (μ), scale (σ), and shape (k) parameters of the GEV distribution of extreme water-level (the sum of wave setup, tide, and storm surge) shown in panels A, B, and C, respectively. The dashed and solid lines in panel C represent contours of k that are significantly different from zero at the 75% and 95% confidence levels, respectively. The maps in this figure were made using Matlab 2016a (https://www.mathworks.com/products/matlab/).

the global variability of the GEV shape parameter has not been considered, although it can be as influential as the scale parameter in determining vulnerability. Here we meet the three challenges by using extreme-value theory to combine sea level, wave, tide, and storm-surge models to predict increases in extreme water-level frequency on a global scale.

Application. Flooding results from the complex interaction of extreme water levels, topography, and the built environment. Here we use the frequency of extreme water levels as a proxy for regional-scale increases in flooding frequency, while recognizing that the relationship between water level and flooding is location dependent because of coastal topography, coastal defense structures, and drainage systems.

We apply sea-level projections and global wave, tide, and storm surge models to predict the future return periods (associated with the former 50-yr extreme water level) due to SLR. As in Hunter51 and IPCC5, we begin by investigating increases in flooding frequency due to a globally uniform amount of SLR, acknowledging that spatial variability in the regional rate of SLR (e.g., driven by ocean circulation patterns, glacial fingerprinting) and the local relative rate of SLR (e.g., due to tectonic activity, glacial isostasy, land subsidence) will affect flooding predictions for specific locations. Later we take the inverse approach, estimating the amount of SLR that doubles the frequency of extreme water-level events.

Using maximum likelihood estimates, we fit GEV probability distributions to the top three annual maximum water-level events from 1993–2013 obtained via synthesis of the Global Ocean Wave (GOW) reanalysis52, Mog2D storm-surge model53, and TPXO tide model54 as discussed in Methods. Figure 3 shows the global variability of the mean (μ), scale (σ), and shape (k) parameters for extreme total water level in panels A, B, and C, respectively. The GEV parameters provide necessary inputs to the factors of increase, f_{inc}, and the future return period of the former 50-yr water level based on Eq. (3) (see Methods). Figure 4 shows the factor of increase for the SLR projections μ_{50} = +0.1, +0.25, +0.5 m on a global scale. Finally, the GEV parameters allow for global estimation of the amount of SLR that doubles the exceedance probability of the 50-yr water-level elevation [see Fig. 5 and Methods Eq. (4)]. Analyzing the amount of SLR leading to a doubling in flooding (Fig. 5) is equivalent to the
Figure 4. Global estimates of the expected factor of increase in exceedance probability, $f_{inc}$, and the future return period, $T_{50}$, of the 50-yr water level, for SLR projections: $\mu_{sl} = +0.1, +0.25, +0.5$ m. We note that the estimated increase in flooding potential is purely due to SLR and not due to changes in climate or storminess. White lines indicate the Tropic of Cancer and Tropic of Capricorn. The maps in this figure were made using Matlab 2016a (https://www.mathworks.com/products/matlab/).

Figure 5. The upper bound of SLR that doubles the exceedance probability of the former 50-year water level. This SLR is the upper limit of a 95% confidence interval based on a Monte Carlo simulation of the GEV parameter estimates and their associated confidence bands (see Methods). Red areas represent regions particularly vulnerable to small amounts of SLR. The maps in this figure were made using Matlab 2016a (https://www.mathworks.com/products/matlab/).
factor-of-increase results shown in Fig. 4, but it provides a more intuitive picture of the effects of small amounts of SLR. Table 1 summarizes the global, tropical, and extratropical mean values of the quantities presented in Figs 3 and 5. Although the plotted distributions apply only to coasts, they are calculated ocean-wide in order to reveal the continuous global pattern of vulnerability of both continental coastal settings and non-contiguous island nations throughout the world's oceans.

**Discussion**

We first consider the GEV parameters for extreme water levels (Fig. 3), then the frequency increases (Fig. 4), followed by the SLR threshold that doubles exceedance of the 50-yr water level (Fig. 5).

The spatial variability in the GEV location parameter ($\mu$) is shown in Fig. 3A. Globally, 99% of the values of $\mu$ fall between 0.50 and 2.13 m. The location parameter strongly resembles the $M_2$ tidal amplitude and is also influenced by global wave climate. The parameter is largest in the North Pacific and North Atlantic due to large tides and the occurrence of extratropical storms that track mainly west to east, producing large, latitudinally-isolated waves. The scale parameter ($\sigma$) ranges from 0.024 to 0.118 m (Fig. 3B) and is correlated to the location parameter with $r = 0.47$. In other words, the regions that experience the largest water levels also experience the largest variance in those levels. The spatial variability of the shape parameter ($k$) is uncorrelated with that of the other GEV parameters.

The shape parameter ranges from $-0.18$ to $0.20$ (Fig. 3C) with a global mean of $-0.024$. Notably, the geographic regions in Fig. 3C with large (positive) values of the shape parameter are regions with high densities of tropical storm tracks, i.e., the Tropics and lower mid-latitudes of the Pacific and Atlantic Oceans.

The range and geographic variability of the shape parameter in Fig. 3C is remarkably similar to previously reported results for the shape parameter of extreme wave heights, underscoring the importance of wave-driven water-level components (See Extended Data Figs 3 and 8 for details) and the role of tropical cyclones on the magnitude and spatial distribution of the shape parameter.

The positive values of the shape parameter, i.e., bounded water-level distributions, are expected based on the notion that upper bounds on tide, storm surge, and maximum wave heights exist due to limiting processes (e.g., wave breaking and physical limits in wind speed, fetch, and duration prevent unbounded wave heights). On the other hand, positive values of the shape parameter, i.e., unbounded water-level distributions, indicate the probability of exceedingly large yet inconsistent water-level events relative to an annual event. In practice, both positive and negative values of the shape parameter are possible because of the limited amount of data available for parameter estimation and the possibility of outliers. Thus, it is difficult to assess, a priori, whether the large values of the shape parameter result from a proper characterization of the variability of tropical cyclones or from the presence of outliers among a temporally-limited data set. We expect that more than 21 years of data (used here) would likely improve the characterization of extreme events due to tropical cyclones and the estimation of the shape parameter.

The dashed and solid lines in panel C (Fig. 3) represent contours of $k$ that are significantly different from zero at the 75% and 95% confidence levels, respectively. The near-zero mean and the limited extent of the statistically significant non-zero values of the shape parameter in Fig. 3C suggests that the Gumbel distribution [the GEV family when $k = 0$, as in Hunter and IPCC] might suffice for global-scale assessments of SLR impacts. However,
for smaller-scale regions of interest, particularly the Caribbean Sea, the Central North Pacific, and North Atlantic, the variability of the shape parameter should be accounted for when predicting the effects of SLR.

Next, we discuss how the global GEV parameters characterize the increased frequency of flooding due to SLR (Figs 4 and 5). Although the behavior of the scale parameter is well known [as introduced by Hoozemans et al.3, and further explored in Hunter4 and IPCC5], these figures provide the first continuous, global demonstration of that behavior, as well as the first incorporation of wave-driven water levels.

The factor of increase in frequency of the 50-yr extreme water-level event, \( f_{50} \), and the future return period of the former 50-yr extreme water level due to SLR, \( 50 f_{50}^{-1} \), are shown in Fig. 4. For fixed SLR, decreasing values of the scale and shape parameters increase \( f_{50} \) and thus reduce the return period of the present 50-yr water level. The increase in \( f_{50} \) is larger in the Tropics (white lines on Fig. 4) compared to the Extratropics. The results presented in Fig. 4 and Table 1 indicate that the average factor of increase in flooding, \( f_{50} \), in the Tropics with only 10 cm of SLR is approximately 25 times present levels, and the former 50-yr event occurs every 4.9 years. Outside the Tropics, the average factor of increase is 5.5, and the former 50-yr event occurs every 10.9 years. Note that the results given in Table 1 do not exactly follow the reciprocal relationship between the increase in frequency (\( f_{50} \)) and the reduction in return period (50 \( f_{50}^{-1} \)) because of the spatial averaging operation. Finally, we note that the estimated increase in flooding potential is purely due to SLR and not due to possible future changes in wave climate or storm patterns.

The upper bound of the doubling SLR, \( \mu_{50} \) (Fig. 5) is estimated as the upper limit of the 95% confidence intervals of the GEV parameter estimates using Eq. (4) in Methods. As shown in Fig. 5, only 5–10 cm of SLR, expected under most projections to occur between 2030 and 2050, doubles the flooding frequency in many regions, particularly in the Tropics, and would occur even more rapidly in areas where regional SLR exceeds the eustatic rate.2 Less than 5 cm of SLR doubles the frequency of the 50-yr water level in the tropical Atlantic and northern Indian Ocean. The maps of increased flooding potential (Figs 4 and 5) suggest a dire future for the top 20 cities (by GDP) vulnerable to coastal flooding due to SLR4, and for many wave-exposed cities such as Mumbai, Kochi, Grande Vitoria, and Abidjan which may be significantly affected by only 5 cm of SLR. Less than 10 cm of SLR doubles the flooding potential over much of the Indian Ocean, the south Atlantic, and the tropical Pacific. Only 10 cm of SLR doubles the flooding potential in high-latitude regions with small shape parameters, notably the North American west coast (including the major population centers Vancouver, Seattle, San Francisco, and Los Angeles), and the European Atlantic coast. The only regions where 15 cm of SLR does not double the flooding potential are regions with large shape parameters (likely influenced by tropical storm tracks): the mid-latitudes of the northwestern Pacific below Japan, the mid-latitudes of the northwestern Atlantic (the U.S. east coast, Gulf of Mexico, and Caribbean Sea), and the southwest tropical Pacific encompassing Fiji and New Caledonia (discussed below).

The Tropics experience limited water-level variance due to consistently smaller wave heights (due to latitudinal gradients in storm activity) and smaller tide ranges (due to the presence of tidal amphidromes) throughout the region. Consequently, SLR represents a larger percentage of the water-level variance as explained in Fig. 2 and Methods. The mid-latitudes of the northwestern Pacific and the northwestern Atlantic experience smaller increases in extreme water-level frequency due to larger values of the scale and shape parameter, respectively. Notably, the mid-latitudes of the northwestern Pacific below Japan experience large values of the scale parameter without correspondingly large values of the location parameter as in most of the north Pacific and north Atlantic, possibly due to the consistency of tropical storms in the region. The mid-latitudes of the northwestern Atlantic (e.g., the U.S. east coast, Gulf of Mexico, and Caribbean Sea), on the other hand, have elevated values of the shape parameter due to the intermittent occurrence of tropical cyclones, which correspond to elevated probabilities of large extremes rather than bounded extremes. This suggests that although the continued and accelerating impacts of SLR-driven nuisance flooding is a major concern in many of these areas6, the rare occurrence of extreme events (e.g., hurricanes) — and not SLR — will remain the dominant hazard on wave-exposed coastlines in the lower mid-latitudes of the western Pacific and Atlantic for several decades.

Conclusions

Regions with limited variability in extreme water levels, such as the Tropics, will experience greater increases in flooding frequency due to SLR than regions with significant water-level variability, e.g., the Extratropics. Small amounts of SLR, e.g., 5–10 cm, may more than double the frequency of extreme water-level events in the Tropics as early as 2030. This is an especially critical finding as numerous low-lying island nations in the Tropics are particularly vulnerable to flooding from storms today, and a significant increase in flooding frequency with climate change will further challenge the very existence and sustainability of these coastal communities across the globe6,7,8,9.

Methods

Generalized Extreme Value (GEV) distribution. The cumulative distribution function (CDF) of the Generalized Extreme Value (GEV) distribution is given by,

\[
F(x; \mu, \sigma, k) = \begin{cases} 
\frac{1}{1 + \left(\frac{k(x - \mu)}{\sigma}\right)^{1/k}} & \text{for } k \leq 0 \\
\exp\left(-\left(\frac{x - \mu}{\sigma}\right)^{1/k}\right) & \text{for } k = 0 \\
\exp\left(-\left(\frac{x - \mu}{\sigma}\right)^{1/k}\right) & \text{for } k > 0
\end{cases}
\]

(1)

where \( F \) is the probability that water level \( x \) will not be exceeded in any one-year period, and \( \mu, \sigma, \) and \( k \) are the location, scale, and shape parameters, respectively. The GEV distribution includes as special cases three families of extreme value distributions: Gumbel (type I), Fréchet (type II) and Weibull (type III), corresponding to values of the shape parameter \( k = 0, k > 0, \) and \( k < 0, \) respectively. Depending on the value of the shape parameter, \( k, \) the support of \( F(x) \) is either the entire real axis when \( k = 0 \) or \( x : 1 + k(x - \mu)/\sigma > 0 \) when \( k \neq 0. \) From Eq. (1), the exceedance probability distribution, i.e., the probability that water level \( x \) is exceeded in any one-year interval,
is $E = 1 - F$. Thus $E(x)$ is the expected frequency (with units of years$^{-1}$) of events exceeding $x$. The return period, $T_R$, or expected time-interval between events of level $x$ or greater is therefore

$$T_R = 1/E(x),$$

with units of years. For example, a 100-year event has an exceedance probability of 0.01, that is, a 1% chance of occurring in any year. Although return period carries exactly the same information as exceedance probability, it is often more intuitive.

The factor of increase in exceedance probability for SLR $\mu_{SL} > 0$ relative to a baseline ($\mu_{SL} = 0$) is given by

$$f_{inc}(x; \mu, \mu_{SL}, \sigma, k) = \frac{E(x; \mu + \mu_{SL}, \sigma, k)}{E(x; \mu, \sigma, k)},$$

and the factor of decrease in return period is $f_{inc}^{-1}$. For example, for the 50-yr event, $T_{R}(x; \mu, \sigma, k) = 50$ years, hence the future return period of the former 50-yr water-level elevation is $50f_{inc}^{-1}$ as shown in Fig. 4B,D and F.

Finally, we reframe the extreme value analysis to determine the amount of SLR leading to a doubling in exceedance of a particular water-level elevation. Note that in Fig. 2, the SLR leading to a 4x increase in probability of the former 100-yr event (e.g., the 25-yr event with +1.0 m of SLR), is simply the difference between the 100-yr water level, $x(T_R = 100; \mu, \sigma, k)$, and the 25-yr water level, $x(T_R = 25; \mu, \sigma, k)$, of the unaltered distribution. Thus, the doubling SLR is given by

$$\mu_{2x}(T_R) = x(T_R; \mu, \sigma, k) - x(T_R; \mu, \sigma, k)$$

For the example shown in Fig. 5, we use $T_R = 50$ years. Note that the magnitude of $\mu_{2x}$ in Eq. (4) and Fig. 5 is controlled by the gradient of the return time function $x(T_R)$, as explained in Fig. 2B, and that that gradient is controlled by the scale and shape parameters. For low-gradient return time functions, the difference in $x$ for the 50 and 25-yr return times is small, and in Fig. 5 the gradient is low for all levels exceeding that of the 10-yr event.

**Application.** Well-validated global tide$^{45}$, wave$^{46}$, and storm surge$^{44}$ reanalysis models, each with different spatial and temporal resolutions, are interpolated onto a consistent $1^\circ \times 1^\circ$ grid with hourly time resolution and their water-level components are summed to provide a time series of total water level (TWL). In the proposed approach, we ignore mean sea-level anomalies (MSLA) due to seasonal effects and climate cycles (e.g., El Niño), which, for example, can raise sea level by more than 20 cm along the US west coast$^{11}$, yet are typically less than 20 cm over most of the globe. Large-scale storm surge due to extratropical storms is included in the analysis, but the coarse resolution of the water-level model$^{44}$ precludes simulation of large, spatially isolated hurricane storm surges. On the other hand, the wave fields emanating from hurricanes and tropical cyclones have considerably larger spatial extents and, therefore, are well resolved by the wave model$^{43}$ apart from the near-field generation regions. We limit the time scales considered in our investigation due to the availability of only 21 years of coincident data for waves, tides, and storm surge: extrapolation of 21 years of data to predict 100-year and longer return period events is often problematic.

Hourly time series of tidal water level are computed from 13 harmonic constituents provided by the TPXO tidal inversion model$^{46}$ with native resolution of 0.25$^\circ \times 0.25^\circ$ linearly interpolated onto a global grid of $1^\circ \times 1^\circ$. Time series of wave setup are estimated using the empirical relationship for the 2% exceedance runup on dissipative beaches$^{4}$

$$R_{setup} = 0.016\sqrt{H_d L_o},$$

where $H_d$ and $L_o$ are the deep-water wave height and wavelength, respectively. We exclude wave swash, the time-varying components of wave runup at incident and infragravity frequencies, because of the large uncertainties associated with the estimation of swash magnitude. For example, wave swash is sensitive to local geological characteristics, notably the beach slope. Wave swash is a time-dependent process, which may or may not affect persistent flood levels. In certain locations, wave swash can significantly contribute to persistent coastal flooding via overtopping of seawalls. Therefore, we include the contribution of wave swash to TWL in Extended Data Figures 5, 6 and 7, which depict the same analyses shown in Figs 3, 4 and 5 (which do not include wave swash). In Extended Data Figures 5, 6 and 7, the magnitude of the 2% exceedance wave swash is estimated using the empirical relationship for dissipative beaches$^{4}$ given by

$$R_{swash} = 0.027\sqrt{H_d L_o}$$

which is approximately 1.69 times larger than the wave setup component, Eq. (5). We note that dissipative beach conditions are assumed for the wave runup components in Eqs (5) and (6) in order to avoid the dependence on beach slope.

Time series of $H_d$ and wave period ($T$) are obtained via the hourly $1^\circ \times 1.5^\circ$ Global Ocean Wave (GOW) reanalysis$^{47}$, and linearly interpolated onto a $1^\circ \times 1^\circ$ grid. The time series of wavelength $L_o = T^2/(2\pi)$ is calculated using linear wave theory from the time series of wave period. Time series of storm surge are obtained from the Mog2D barotropic model$^{48}$ with native resolution of 0.25$^\circ \times 0.25^\circ$ at 6-hour intervals, interpolated to an hourly dataset with $1^\circ \times 1^\circ$ resolution. The resulting hourly time series of wave setup, storm surge, and tidal water level for each $1^\circ \times 1^\circ$ grid cell are summed to produce an hourly time series of total water level from 1993–2013. Nonlinear interactions between tide, surge, and wave-driven water levels are not accounted for using this approach. However, processes such as tide-surge interactions may be important in coastal regions around the globe, particularly those adjacent to continental shelves or shallow bathymetry$^{49}$. In general, tides provide the
dominant contribution (51% on average) to the total water level (see Extended Data Fig. 3). However, when wave swash is included, wave runup (i.e., wave setup + wave swash) provides the dominant contribution (66% on average) to the total water level (see Extended Data Fig. 8).

Next, GEV distributions are fitted to the top three (r = 3) annual maxima (n = 63) of the 21-year time series of total water level at each grid point to obtain spatially-varying estimates of the parameters $\mu$, $\sigma$, and $\kappa$. This approach, called the r-largest order statistic model, is consistent with the GEV distribution for block maxima. To avoid the case where the r-highest values were taken from successive hours, a minimum peak separation criterion of 12 hours was applied. This criterion ensures that the block maxima are independent as required by the r-largest order statistic model. The spatial variability of the GEV parameters is smoothed using a penalized least-squares method. Data on the GEV parameter estimates and confidence intervals are available online (see “GEV_data.xlsx”). The GEV parameters $\mu$, $\sigma$, and $\kappa$ control the factor of increase $\gamma_{mc}$ and the future 50-yr return period $T_{50mc}$ based on Eq. (3), for different values of SLR and event level $x$. Here we set $x$ to be the 50-yr water-level event; however the behavior is consistent across a range of extreme values for $x$, particularly those exceeding the 10-yr water level as noted above. Finally, we calculate the sea-level rise, $\mu_{seas}$, that doubles the exceedance of the former 50-yr water-level elevation based on Eq. (4). To account for the uncertainty in the GEV parameter estimates, a Monte Carlo simulation with 100,000 realizations is applied for each grid point. Each realization generates random values of $\mu$, $\sigma$, and $\kappa$ based on the 95% confidence intervals arising from the maximum likelihood estimates and applies Eq. (4) to calculate $\mu_{seas}$. Next, the upper bound of the doubling sea level (Fig. 5) is calculated as the 95% cumulative probability (95% exceedance probability) for the empirical distribution of $\mu_{seas}$.

Figure 5 shows the upper end of the 95% confidence level for the SLR that will double (or more than double) the frequency of the 50-yr water-level event.

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Acknowledgements
This work was completed as part of Project #14–20, which was funded by the USGS Mendenhall Program and the USGS Coastal and Marine Geology Program under co-op agreement G16AC00275. The authors would like to thank Fernando Menéndez, Antonio Espejo, Alba Cid Carrera, Ana Rueda, and Borja Reguero for their comments that lead to improvement of this paper. We also acknowledge Patrick Limber (USGS), who provided helpful initial reviews of this manuscript. Dynamic atmospheric corrections (storm surge model) are produced by CLS Space Oceanography Division using the Mog2D model from Legos and distributed by Aviso, with support from CNES (http://www.aviso.altimetry.fr/).

Author Contributions
S.V., P.B., C.F., N.F., and C.S. developed the concept for this study. S.V. performed the analysis. S.V., N.F., and L.E. verified the analysis. S.V. wrote the original manuscript. All authors discussed the results and edited the manuscript.

Additional Information
Supplementary information accompanies this paper at doi:10.1038/s41598-017-01362-7

Competing Interests: The authors declare that they have no competing interests.

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In Next Decades, Frequency of Coastal Flooding Will Double Globally

The frequency and severity of coastal flooding throughout the world will increase rapidly and eventually double in frequency over the coming decades even with only moderate amounts of sea level rise, according to a new study (http://dx.doi.org/10.1038/s41598-017-01962-7) released today in "Scientific Reports."

This increase in flooding will be greatest and most damaging in tropical regions, impairing the economies of coastal cities and the habitability of low-lying Pacific island nations. Many of the world's largest populated low-lying deltaic (such as the Ganges, Indus, Yangtze, Mekong, and Irrawaddy Rivers), also fall in or near this affected tropical region.

The new report from scientists at the U.S. Geological Survey, the University of Illinois at Chicago and the University of Hawai'i shows that with just 10 to 20 cm (4 to 8 inches) of sea level rise expected no later than 2050, coastal flooding will more than double. This dramatic increase in coastal flooding results from rising sea levels combined with storm-driven flooding, including the effects of waves and storm surge.

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"The key findings are that areas with limited water-level variability, due to small tidal ranges (for example, the Tropics), and more limited ranges in storm water levels (such as the North American West Coast), will experience the largest increases in flooding frequency. In the Tropics, today’s 50-year water level event will occur every 3 years with just 10 cm of sea level rise," said USGS geologist and coauthor, Patrick Barnard.

Most previous research has started with expected scenarios of sea level rise and attempted to find the flooding frequency increase. In this new study, the scientists took the opposite approach, finding the amount of sea level rise needed to double the frequency of flooding, while accounting for the uncertainty and year-to-year variability of storm patterns. One of the surprising findings was that it does not take much sea level rise to double the frequency of flooding (particularly in the Tropics). Using this analysis, Vitousek and his coauthors demonstrate that 10 cm or less of sea level rise expected within the next few decades, can more than double the frequency of coastal flooding for many locations across the globe. The areas with smaller increases in flood frequency include areas with very large tidal ranges and those along typical tropical storm paths.

"Most of the world’s tropical atoll islands are on average only 1-2 meters above present sea level, and even in the high tropical islands such as Hawaii, Guam, American Samoa, U.S. Virgin Islands, Indonesia, and others, the majority of the population and critical infrastructure is located on a narrow coastal fringe at low elevations (1-2 m above present sea level) and thus susceptible to this increased flood frequency," said USGS geologist and coauthor, Curt Storlazzi.

"These important findings will inform our climate adaptation efforts at all levels of government in Hawaii and other U.S.-affiliated Pacific islands," said coauthor Chip Fletcher, Associate Dean and Professor at the School of Ocean and Earth Science and Technology at the University of Hawaii.

The full report, "Doubling of coastal flooding frequency within decades due to sea level rise," (http://dx.doi.org/10.1038/s41598-017-01362-7) is published online in Science Reports.
Rising Tides: Sea Levels in Santa Barbara

Melting Antarctic Ice Sheet Slowly Swelling Toward Us

These are projections for future sea level rise, based on mapping data used for a 2012 study of the Santa Barbara coastline. Blue portions represent 17 inches of sea level rise by 2050, plus three feet of flooding. Red portions represent 55 inches by 2100, plus three feet of flooding. Maps like this use the "bathtub approach" — assuming that everything below a specific elevation will be inundated — and do not factor in natural or man-made barriers.

Story by Talya Meyers
Thursday, June 29, 2017

Santa Barbarans are a varied bunch, but there’s one thing we’d probably all agree on: We like our coastline where it is.

Rising sea levels, though, mean that our beachfront — and quite possibly our downtown — will be fundamentally changed over time. And a new report issued in April found that sea level rise along the California coastline could be faster and more drastic than previously predicted. Especially alarming was one scenario that saw California experiencing a 10-foot sea level rise by 2100, higher than most scientists previously thought possible. Regional sea level studies, of course, can be tricky. It’s difficult to accurately assess how one community will be impacted.

So while the authors don’t know how likely such an extreme scenario is, they can confidently predict it would be a fairly remote possibility. More certain are the report’s projected middle-of-the-road scenarios, which look similar to what we knew already. What we know already, however, is cause for concern.

Gary Griggs, a UC Santa Cruz oceanographer who studied the Santa Barbara coastline in 2012 and found the city vulnerable to climate-caused sea level rise, also contributed to the new April report, commissioned by the California Ocean Protection Council. Griggs has a personal interest in Santa Barbara — he went to UCSB
as an undergraduate and has two daughters in the area — one a former Santa Barbara Independent staffer. He estimates the city will likely see a 12-inch sea level rise by 2050, and three to four feet by 2100. (That’s assuming we continue curbing our carbon emissions.)

But here’s the good news: There’s a lot we can do. The April report clearly shows that our future is in our hands. The rate of sea level rise before 2050 is essentially fixed. But if the world manages to get its emissions under control and achieves the kinds of goals outlined by the Paris Accord, the most likely outcomes for 2100, while significant, are pretty livable.

**Antarctic Chill**

According to the new report, California’s sea level will be particularly affected by the melting of the West Antarctic ice sheet, which is happening at a faster rate than anticipated. This is particularly bad news for the state, since Antarctic Ocean currents move in our direction.

Over time, the state’s sea levels will rise more quickly than the world average, according to the report. One contributor, Bob Kopp, a Rutgers-based climate scientist, said the research group decided to include extreme scenarios, such as a rise of 10 feet by 2100, “even though it’s hard at the moment to figure out how likely they are.” He explained that scientists are just beginning to understand what ice-sheet melting will look like in the future: “We’re getting a better hold on our ignorance.” Though climate scientists want to be as impartial and accurate as possible, they all agree that sea level rise is taking place at a worrying rate, even if there’s some dispute about precisely how much.

Sea levels have always changed over long periods. They began to level off about 8,000 years ago, allowing humans to begin forming agrarian communities. That means, on a global scale, rapid sea level rise “may be the biggest challenge civilization has ever had to face,” Griggs said. “There’s nothing we can do [to stop it]. We can only respond to it.”

**Coastal Views**

Santa Barbara’s coastline is already at risk from a laundry list of environmental issues: flooding, tsunamis, infrastructure damage, cliff erosion, shrinking beaches. Local ecosystems, like the Carpinteria Salt Marsh and the diverse kelp forest in the Channel, are also jeopardized. Accelerated sea level rise threatens to intensify these problems.

The 2012 study, which Griggs conducted with graduate student Nicole Russell, found that the shape of Santa Barbara coastline would likely change over time, with beaches narrowing or even being submerged. Even 14 inches of sea level rise could reach Shoreline Drive.

But the bigger threats, according to that study, will actually come from temporary events: high tides, large waves, storm surges. This will cause more frequent flooding in low-lying areas such as the Andrée Clark Bird Refuge and the airport and could turn into the “perfect storm” when combined with sea level rises during an El Niño year.

And predicting the effect that rising tides will have on Santa Barbara’s stretch of coastline is particularly challenging. We don’t have a great history of tracking tide levels, for one thing. To make matters more complicated, plate tectonics are pushing the Santa Barbara coastline upward, according to UCSB oceanographer Alexander Simms — although the sloughs in Carpinteria and Goleta are sinking at the same time. We’re also experiencing temporarily lower levels right now due to a repeating fluctuation in the Pacific...
Ocean's climate. When the ocean atmosphere shifts again, sea levels will rise.

Neither plate tectonics nor atmospheric shifts are enough to cancel out sea level rise, but Simms stresses this is still good news. It means Santa Barbara’s waters are rising more slowly than in other parts of the world — the global rate is about 3 mm overall; the local coastline between 0.8 and 1.25 mm. That’s likely to increase substantially over time.

No matter what, the atmosphere has warmed enough that melting ice sheets will contribute significantly to the volume of ocean water. Griggs compares it to dropping an ice cube into a boiling a pot of water: You can take the pot off the heat, but it still won’t be a hospitable environment for the ice cube.

**A Sanctuary Coast**
The scientists interviewed for this article all agreed that Trump’s decision to withdraw from the Paris Accord is a significant step backward. “There’s no way to soft-serve this one. It’s a real loss,” said David Lea, a UCSB oceanographer who wasn’t involved in the report. “Honestly, this decision moves the likelihood of the most extreme scenarios up.”

But as Representative Salud Carbajal recently pointed out, state and local efforts to reduce emissions are well underway. (Earlier this month, the City of Santa Barbara committed to having 100 percent sustainable energy by 2030, and California agreed a few weeks ago to work with China on reducing emissions, to name just a couple of examples.) Carbajal also noted that any number of federal agencies and programs are still working to address climate-change issues. “Things don’t come to a stop just because this president says ‘stop,’” he said. “There’s still a framework ... that transcends what a president or administration can do.”

According to Rutgers scientist Bob Kopp, when scientists talk about how “business as usual” can’t go on, they’re talking about unchecked, continually growing emissions — what we were headed toward before the world began to take organized action against climate change. Recent research actually suggests that emissions rates, while mostly still on the rise, are starting to slow, in large part due to the declining use of coal.

In the midst of a high-alarm culture, Lea has been a consistent voice for a moderate, non-sensationalist approach toward climate science. And he has one piece of advice: Don’t give up. “I don’t believe there’s a red line,” he said firmly. “Even if we get to 2 degrees [Celsius of global warming], even if we get to 3 ... we always want to try to limit emissions.”

- Share on Facebook
- Share on Twitter
- Email

Be succinct, constructive, and relevant to the story. Leaving a comment means you agree to our Discussion Guidelines. We like civilized discourse. We don't like spam, lying, profanity, harassment or personal attacks.
taxpayer22 • 4 days ago
Paris was never really about climate. It was a wealth-redistribution scheme with free money. stolen from middle class Americans.

The Oligarch hypocrites who are pushing this nonsense have the largest carbon footprint of anyone on the planet.

loonpt → taxpayer22 • 4 days ago
Ya, it is really sad how all of the progressives are being hoodwinked by the elite, the wealthiest .0001%, and then talk about how they are the 99%.

Progressives need to wake the f up, this is getting ridiculous.

Dan Phillips → loonpt • a day ago
Sadly, of course, you're the one being hoodwinked by big oil...but I don't expect you to be able to wake up and think for yourself.

Rambler → loonpt • 4 days ago
Ya, look at dat! A nudder statistician has a posted!

Sur la Face → taxpayer22 • 3 days ago
True, most of Climate Change is a 'land grab' of money and power. Not that I am against it! We do need our checks and balances, we need to stay in the middle to progress as humans - balance greed and altruism, etc...
Ellen Shocks LGBT Community & Confirms She Is Moving On
Many knew what Ellen's plan was, but no one expected it to leak like this....

Learn More

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EXHIBIT Y
Bluff Erosion Near 1837.5 El Camino de la Luz

Photo A: This photo taken May 2017 below 1837.5 El Camino de la Luz in Santa Barbara, shows erosion and landslide debris from a slide that took place in Winter of 2016/2017.

Photo B: This photo, taken May 2017 east of Lighthouse Point, less than 100 yards from 1837.5 El Camino de la Luz, shows landslide debris from a slide that took place in Winter of 2016/2017.
Photo C: This photo taken May 2017 east of Lighthouse Point, less than 100 yards from 1837.5 El Camino de la Luz, shows landslide debris from a slide that took place in Winter of 2016/2017.

Photo D: This photo taken May 2017 east of Lighthouse Point, less than 100 yards from 1837.5 El Camino de la Luz, shows landslide debris from a slide that took place in Winter of 2016/2017.
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Dear PC Secretary,

Please forward these comments to all Planning Commissioners.

Bruce Peterson
1837 El Camino de la Luz
Santa Barbara, CA 93109

30 November 2017

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Subject: Proposed Final EIR/MND and CDP Dec.7, 2017
1837.5 El Camino de la Luz

Honorable Commissioners:

I have lived at 1837 El Camino de la Luz since 1987. When I purchased the property I was told by the real estate professions that the vacant lot on a 50 by 40 section of asphalt in front of my newly purchased house was "unbuildable". In 1992 I was first acquainted with Dr. Barthels, not actually, but through his attorney, Mr. Lindsay, who deposed me and have been involved in the attempted development of the property for the last 25 years. Although there are dozens of considerations to disqualify 1837.5 as a build-able property, this comment letter will focus on only three major issues. My other neighbors have written about many other valid concerns.

1. Creek and Riparian corridor protection and setback
2. Ocean blufftop setback
3. Required 15 foot access easement from public road, never met condition of lot split agreement with City.

LIGHTHOUSE CREEK -
The new draft LCP, made available to the public on November 11, 2017 clearly shows the top of band (other terminology is rim of canyon?) to be at the birm of the easterly edge of the existing asphalt. The 2011 General Plan ER 21.1 (Attachment A) states creek setbacks must be "greater than 25 feet from top of bank or hard surfaces".

The proposed project does not meet this criteria.

According to Megan Sinkula, our local California Coastal Program Analyst, in her comments letter to City Staff after the November 2016 draft EIR Hearing, the placement of the proposed development "appears to be in violation of Santa Barbara's certified LCP. Ms. Sinkula cites the various LCP sections in the last paragraph of her letter (Attachment B).

How popular are creeks?

**Measure B2000**

**Occupancy Tax Increase**

**City of Santa Barbara**

23271 / 70.76% Yes votes ...... 9616 / 29.24% No votes

See Also: [Index of all Measures](#)
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How popular are creeks?

Measure B2000
Occupancy Tax Increase
City of Santa Barbara

23,271 / 70.76% Yes votes ...... 9616 / 29.24% No votes

See Also: Index of all Measures

Information shown below:

Shall the ordinance that imposes an additional transient occupancy tax (hotel bed tax) to the amount of 2% of the rent charged to hotel guests and provides that the proceeds must be used to fund creek restoration and clean water programs to improve the quality of the water that flows to the ocean be adopted?

23,271 Votes!! To put this into perspective, our new Mayor received less than 7,000 votes earlier this month. The 1% sales tax increase to save the Police Station among other public services garnered only 13,521 votes, Our City voters are concerned about their creeks.

I would like to share a letter from a current PC member, the honorable Michael Jordan, as he personally wrote me about promoting his desire to create healthy clean creeks. (Attachment C)

OCEAN BLUFF RETREAT ND SETBACK
I agree with the photometric study that measured the approximate 40 foot length of blufftop defining the southerly edge of the asphalt berm at 1837.5. The study showed a retreat rate of about 1 inch per year over the last 52 years. This, however is no indication of what might happen in the next 75 - 100 years. Attachment D is an overlay of an 1870 topographical map superimposed on the 2016 google earth map. It reveals AVERAGE blufftop retreat at 5.5 inches a year over 146 years. This is consistent with the generally accepted 4 - 6 inches per year for Santa Barbara blufftop retreat. Bluff retreat is always landward and episodic. Three homes were sent down to the beach in 1978 just 100 yards west of 1837.5 El Camino de la Luz, also in 2008, about 2000 yards to the east, fencing, sidewalks were sent down to the beach as Shoreline Park had a massive landslide at the bluff. I had a Del Playa (Isla Vista) oceanfront property part of the 1990's and saw it retreat week by week and month by month. A subsequent owner has had to shorten the building by 35 feet landward. CCC staff and geologist have told me, even the strongest of blufftops would still be required by their agency to have a MINIMUM buffer from the blufftop of 25 feet. The proposed project is set less than 8 feet from the blufftop. Again, please refer to Attachment B, last paragraph for inconsistencies with Santa Barbara's certified LCP.

15 FOOT EASEMENT
After discovering in 1989 the City would not process a building application due to THE lack of the 15 legal access on which the completion of the lot split was based. 1837.5 has no economic value! That claim is noted in the 1994 Santa Barbara Appellate Courtroom (Attachment E). The final court award was for $84,399, and the purchase price in 1976 was $24,500. Dr. Bartherls has all his money back, and still owns the "worthless" parcel. The lot was pronounced worthless, and all the money had been recouped due to an error by Santa Barbara Tittle Company. City Attorney Stephen Wiley, in June of 1997, sent a letter to Mr. Lindsay, who represented the owner of 1837.5 (Attachment F). To summarize, it states, no
building permit will be issued until proof of the required 15 foot easement is, in perpetuity, provided to City Staff. THIS HAS NOT HAPPENED.

Attachment G was found on the "Parcel Lookup" website.

May 2002 a Conditional Certificate of Compliance was issued. The notes section concludes with "PROJECT MAY PROCEED THROUGH CITY REVIEW PROCESS HOWEVER DO NOT ISSUE PERMITS UNTIL ACCESS ISSUE IS RESOLVED".

Attachment H is a diagram of the entire easement, please note that the last 140 feet toward 1837.5 narrow to under 15 feet.

Attachment I lists the important events in the 1837.5 lot history, from inception and bungling through 2005. It was created by Ray Franco in 2005.

Attachment J was "unearthed" when I was pulling other information. Daisy wheel printer? In 1988, one year after living at 1837, I asked the Real Estate agent who sold me the house to contact "whoever" owned the front parcel. I had no idea what the purchase price was, who owned it, as I don't ever remember seeing anyone on the vacant lot. Dr. Barthels did not respond to Kevin Young, the agent. I wanted to protect the property from development, although at the time I was unaware of Dr. Barthels, who happens to live on Shoreline Drive, where only one private house (the Kallman residence) separates us, well the Coast Guard property is a good buffer.

In summary, Dr. Barthels bought, at a low price ($24,500), what we would call a lemon. It took him 12.5 years to discover the error in title. The courts awarded him $10,000 for his effort to develop the land, in addition to $42,875 and $21,524.40 for out of pocket expenses paid to others. Dr. Barthels was made monetarily whole again for his "worthless property". He and his attorney made the decision to put the proverbial cart before the horse, spend more money on a variety of professions to get the lot ready, ALL without getting the first hurdle cleared. Through land purchase and sale lot lines must be moved. It has not happened yet. Will it?

Sincerely,
Bruce, Grace and Dionne Peterson
Hi Bruce,

Here is the language from the General Plan regarding creek setbacks.

ER21.

Creek Setbacks, Protection, and Restoration. Protection and restoration of creeks and their riparian corridors is a priority for improving biological values, water quality, open space and flood control in conjunction with adaptation planning for climate change.

Possible Implementation Actions to be Considered

ER21.1 Creek Setback Standards. Establish updated creek setback and restoration standards for new development and redevelopment along all creeks, and prepare or update guidelines for restoration, increase of pervious surfaces and appropriate land uses within designated creek side buffers.

Develop setback standards of greater than 25 feet from the top of bank for new a. structures and hard surfaces adjacent to creeks and wetlands.

Thanks,

George Johnson
Creeks Supervisor
CITY OF SANTA BARBARA, Parks and Recreation
(805) 897-1958 | GJohnson@SantaBarbaraCA.gov
SantaBarbaraCA.gov/creeks
December 1, 2016

City of Santa Barbara Planning Division
c/o Kathleen Kennedy, Project Planner
630 Garden Street
Santa Barbara, California 93101

RE: Second Revised Draft Environmental Impact Report for the 1837 ½ El Camino de la Luz Residence

Dear Ms. Kennedy,

Commission staff has reviewed the Second Revised Draft Environmental Impact Report (DEIR), released in October 2016, for the proposed residence at 1837 ½ El Camino de la Luz and would like to provide your staff with the following comments for your consideration.

As provided in the DEIR, the proposed residence at 1837 ½ El Camino de la Luz includes a 1,934 square foot (net) two-story single-family residence (25 foot maximum height) and a 429 square foot attached garage. Grading to construct the residence would require 288 cubic yards of cut under the building footprint and 21 cubic yards of fill under the proposed driveway. The proposed residence would be supported by a drilled caisson foundation system that would require seventeen holes to be drilled seven to eight feet deep within the proposed building footprint area to hold caissons constructed of reinforcing steel and concrete. Grade beams would then be utilized to span between caissons.

The project, as proposed, is located within the jurisdiction of the City of Santa Barbara Local Coastal Program (LCP). Due to the project’s proposed siting between the first public road and the sea and within 300 feet of the seaward face of a coastal bluff, the project is also within the appealable jurisdiction of the California Coastal Commission. As such, the proposed project will require a coastal development permit from the City of Santa Barbara which would be appealable to the Coastal Commission.

Pursuant to the California Environmental Quality Act (CEQA), the City is required to ensure that any Environmental Impact Report generated for the project analyzes all of the projects potentially significant environmental effects, as well as the project’s consistency with the City’s certified LCP and the California Coastal Act, as incorporated by reference into the LCP through Policy 1.1. See 14 Cal. Code Regulations §§ 15121(a), 15161, 15143 and 15151. Policies 2.1, 2.4, 6.8, 6.10 and 9.1 of the City’s LCP and Coastal Act policies 30212, 30230, 30231, 30250, 30251, 30252 and 30253 are of particular relevance to this project as they restrict bluff top development and require new development to minimize impacts to coastal resources and from coastal hazards. Collectively, these policies, in combination with CEQA, require development to be sited and designed to prevent impacts to coastal resources such that no less environmentally
damaging, feasible alternative exists for the project and measures to mitigate potential impacts from the proposed development are employed to the maximum degree possible.

The subject development of a residence at 1837 ½ El Camino de la Luz proposes to cantilever the residence over a canyon bluff that lies directly above Lighthouse Creek and therefore will have no setback from the top of the creek bank and the riparian corridor along the creek. As proposed, the footprint of the proposed residence will permanently displace a significant portion of the riparian habitat onsite. Furthermore, project grading and construction of the drainage system will significantly disturb the riparian vegetation, and potentially wildlife, along the canyon side of the subject parcel. The DEIR contains a plan for habitat restoration; however, it includes the removal of non-native invasive species with chemical herbicides which can cause deleterious impacts to coastal waters and riparian habitat. Additionally, the drainage system will discharge directly into Lighthouse Creek, which may cause additional significant adverse impacts to coastal waters given the immediate connectivity of Lighthouse Creek to the ocean at the subject site.

The subject development is proposed to be sited less than eight feet from the coastal bluff edge. Although the subject parcel represents a very constrained lot, and the subject coastal bluff has a low erosion rate, a setback of less than eight feet constitutes an insufficient setback in regard to siting of the project to avoid adverse visual impacts and the strong potential for geologic instability given the location’s propensity for both historic and active landslides.

Additionally, the stairway on the coastal bluff face directly in front of the subject parcel has a history of public use. Commission staff is concerned that public prescriptive rights for the bluff stairway may exist, and the construction of the proposed residence will block public access entirely from use of the stairway.

In closing, the proposed project raises serious concerns regarding biological impacts to Lighthouse Creek and its riparian corridor, geologic stability of the proposed residence and the subject parcel, and public access impacts of the proposed residence. The project involves development and substantial alteration of a historically and presently unstable area, placement of a permanent structure within the riparian corridor of a coastal waterway, inadequate coastal bluff top setbacks, and has the potential to eliminate a public access way to the coast in contravention to Policies 2.1, 2.4, 6.8, 6.10 and 9.1 of the City’s LCP and Coastal Act policies 30212, 30230, 30231, 30250, 30251, 30252 and 30253. Therefore, for these reasons, the project does not appear to be consistent with the policies and provisions of the City’s certified LCP.

Thank you for the opportunity to review the DEIR at this time. Please contact me with any questions or comments regarding the abovementioned comments.

Sincerely,

Megan Sinkula
Coastal Program Analyst
Dear Bruce,

Creeks are a one-of-a-kind life source in a community.

Like most, I love being around a healthy, clean, natural creek. It’s refreshing – it’s one of the most beautiful, natural places to be.

I write today to ask you to help improve an important local creek here in Santa Barbara.

And you can help without spending one penny of our tax dollars. You simply need to join me in voting Yes on Measure Y this June.

As cities grew over time, creeks were lined with concrete, crisscrossed by sewer and water lines, some were diverted, and others altered or even placed in pipes to make way for homes, roads and businesses.

Arroyo Burro Creek in Santa Barbara is no exception. Over time it has been lined with concrete, placed in channels, experienced erosion, bank destabilization, degradation of habitat, and compromised water quality.

As a former Chair of the City’s Creeks Advisory Committee, I saw firsthand the work to be done – and the cost required. Fortunately, in Santa Barbara over the past decade, we have made great progress as we invested to improve our creeks in ways others have not.

Improving creeks is expensive.

That is why I write to you today. To urge you to join me and other environmentally concerned citizens in voting YES on Measure Y this June.

Measure Y ensures we can restore a significant portion of Arroyo Burro Creek, improve its water quality, and do so at no cost to taxpayers.

Measure Y asks voters to permit the use of a very small piece (less than 1%) of vacant and degrading city land for a new road and an environmentally preferred clear-span bridge to access the Veronica Meadows neighborhood.
In return for the use of this small piece of unused and vacant city land, Measure Y ensures a deteriorated 1,800-foot section of Arroyo Burro Creek will be rehabilitated and restored.

But that’s not all. Y also ensures the restoration of six acres of degraded city land – creating a park, and provides a safe route for bikes and pedestrians to travel to Arroyo Burro beach – avoiding Las Positas.

All of this comes at no cost to taxpayers. The work will be paid for by the property owner and maintenance costs will be paid for by the Veronica Meadows neighborhood.

The City of Santa Barbara and the California Coastal Commission have already approved this precedent setting neighborhood. And the National Marine Fisheries Service (NMFS) applauded the proposed creek restoration plan (letter enclosed).

This is a unique opportunity that I believe has benefits from both a planning point of view and a clean water perspective.

And as a taxpayer, I’m happy that this comes with no cost to us, the community.

Please vote YES on Measure Y in June and help make Arroyo Burro Creek restoration a reality.

Sincerely,

Michael Jordan
ORDER

Cite as 94 Daily Journal D.A.R. 13440

HERBERT E. BARTHELS,
Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY
et al.,
Defendants and Respondents.

2d Civil No. B076806
(Super. Ct. No. 182179)
(Santa Barbara County)
California Court of Appeal
Second Appellate District
Division Six
Filed September 23, 1994

THE COURT:

IT APPEARING that the opinion filed August 24, 1994, in the above matter meets the standard for publication pursuant to California Rules of Court, rule 976(b),

IT IS HEREBY ORDERED that the same is certified for publication.

REAL PROPERTY

Title Abstractor's Negligence in Failing to Discover Easement's Insufficiency Didn't Cause Loss of Property Value.

Cite as 94 Daily Journal D.A.R. 13440

HERBERT E. BARTHELS,
Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY
et al.,
Defendants and Respondents.

2d Civil No. B076806
(Super. Ct. No. 182179)
(Santa Barbara County)
California Court of Appeal
Second Appellate District
Division Six
Filed August 24, 1994

In this action for title abstractor's negligence, we hold that the negligence of the abstractor did not cause the property to lose value. Therefore, the property owner is not entitled to damages measured by the loss in value of the property. We also hold the trial court correctly determined other aspects of the award of damages. We affirm.

FACTS

In 1978, Herbert Barthels purchased the last beach front parcel of property in the City of Santa Barbara (the City). He paid $24,500 for the unimproved lot. Escrow was through the Santa Barbara Title Company (Title Company) which also issued a policy of title insurance. The policy insured title to the lot and an appurtenant easement for access 15 feet wide.

Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only seven and a half feet wide, and not 15 feet as represented by the Title Company. The City refused to issue a building permit without a 15 foot wide easement. The Title Company tendered $42,875, representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued the Title Company, alleging abstractor's negligence in determining that Barthels had a 15 foot wide easement. Barthels also claimed damages for loss of value of his property, money spent on construction plans, and expenses incidental to processing permit applications. The Title Company did not deny it was negligent. The only question therefor, was the amount of damages.

At trial Barthels testified that in 1989 when he learned of the defect in title, the property was worth $800,000 with the 15 foot easement and nothing without the easement. Barthels claimed that over the years he paid $280,000 as compensation for his own time devoted to development of the parcel. He testified he spent 1400 hours and was claiming $200 per hour as the value of his time.

The trial court found that the measure of damages for the Title Company's negligence was $21,524.40 for the year Barthels discovered the defect in title.

The trial court also awarded Barthels $21,524.40 for out of pocket costs expended until the defect in title was discovered. As to compensation for Barthels's time, the court found 150 hours represented the time Barthels expended that avoided the need to hire others. The court stated Barthels was not entitled to compensation at his billable rate as a dentist. Although he rescheduled
patients, he did not lose any. The trial court found that a fair rate would be $68.66 per hour. It awarded Barthels $10,000 as compensation for his time. The trial court found no basis for awarding Barthels attorney's fees for prosecuting the negligence action. It therefore awarded a total of $31,524.40 in addition to the amount already tendered by the Title Company.

**DISCUSSION**

Barthels contends the trial court erred in failing to award him $800,000 for loss of economic value of his property. We disagree.

The measure of damages for negligence is "the amount which will compensate for all the detriment proximately caused thereby." (Civ. Code, § 3333.) The question here is whether the negligence of the Title Company caused the property to lose economic value. Barthels testified the property had no economic value because it lacked a sufficient easement for access. Nothing the Title Company did, or did not do, caused the property to lack a sufficient access easement. A sufficient easement simply never existed. Thus, the Title Company cannot be liable for any loss of economic value of the property caused by the lack of the easement.

**Garton v. Title Ins. Trust Co. (1980) 106 Cal.App.3d 365** illustrates the role of causation in assessing damages for abstractor's negligence. There the abstractor failed to disclose that the plaintiff's parcel was subject to a mineral interest in a third party. Plaintiffs sought an order requiring the abstractor to obtain a release of the mineral interest. It also held that the defendant abstractor was negligent. The court stated: "The first element of proximate cause is cause in fact. [Citations.] Nothing defendants did or did not do in any way caused the land to be subject to the Archibald's mineral interest. . . . Since the acts or omissions of the defendants did not cause the land to be subject to the Archibalds' interest the cost of removing that interest is not a proper measure of plaintiffs' damages, nor are plaintiffs entitled to an order requiring the defendants to obtain a release of that interest." (Id. at pp. 382-383.)

Here the Title Company's negligence caused Barthels to spend $24,500 on a valueless parcel of property. Damages in the amount of $24,500 plus interest are adequate to compensate Barthels for the loss of that money. The trial court apparently believed Barthels was adequately compensated for the loss of his purchase money by payment of the $42,875 policy limits. That amount represents the purchase price plus an inflation factor specified in the policy. Although interest and not a title policy inflation factor is ordinarily used to measure damages in tort (see 6 Witkin, Summary of Cal. Law (9th ed. 1988) Torts, § 1397, p. 868), Barthels does not complain on appeal that the trial court erred in substituting the inflation factor for interest.

Barthels' reliance on **Overholtzer v. Northern Counties Title Insurance Co. (1953) 116 Cal.App.2d 113** is misplaced. There in discussing liability under a policy of title insurance the court stated, "It seems quite apparent to us that liability should be measured by diminution in the value of the property caused by the defect in title as of the date of the discovery of the defect, measured by the use to which the property is then being devoted." (Id. at p. 130.)

But liability under a policy of title insurance, as discussed in Overholtzer, is determined according to the provisions of the insurance contract. The Overholtzer's action was brought on the contract of title insurance. Here, the measure of a title insurer's liability under contract is not relevant. Instead, the instant case is based on negligence. Under the circumstances presented here, holding the Title Company liable for loss of value on a theory of negligence would violate Civil Code 3333. That section limits damages for negligence to the detriment proximately caused by the Title Company's act or omission.

**II**

Barthels also contends the trial court erred in awarding other damages.

Barthels argues the trial court should not have stopped at the end of 1989 in calculating damages for his out of pocket expenses. But 1989 is the year Barthels discovered the defect in title. The City refused to issue a building permit, and he knew the land had no value. The trial court did not err in refusing to award damages for expenses made on land after Barthels learned it was worthless.

Barthels argues he should have been awarded damages for loss of income. But the trial court found no credible evidence Barthels lost any income. The trial court did award Barthels $10,000 for the time he spent that avoided the need to hire someone else.

Barthels complains the trial court awarded damages for some of the time he spent, but not all. The trial court was not convinced that all the time Barthels said he spent was reasonably necessary for the development of the parcel. The trial court concluded no error. Barthels simply failed to carry his burden of proof. We must treat all evidence unfavorable to the judgment as not having sufficient verity to be accepted by the trier of fact.

**GKH Associates v. Mayer Group, Inc. (1990) 224 Cal.App.3d 856, 872.** We have no power on appeal to consider the credibility of a witness or to weigh the evidence. (Kimble v. Board of Education (1987) 192 Cal.App.3d 1423, 1427.)

Barthels also complains that the amount awarded was calculated at $68.66 per hour, rather than the $200 hourly fee of a dentist. But in developing his property, Barthels was not performing the work of a dentist. Instead of compensating Barthels at the hourly rate of a dentist, the trial court properly measured compensation by the reasonable hourly rate for a person doing the type of work Barthels performed in developing his property. There was no credible evidence of the reasonable hourly rate for such work. But because Barthels had the burden of proof, if the trial court erred at all it erred in awarding Barthels anything for his work. Thus there was no prejudice to Barthels in measuring compensation by $68.66. No reversal is
Finally, Barthels claims the court erred in failing to award attorney's fees. Code of Civil Procedure section 1021 provides in part, "Except as attorney's fees are specifically provided for by statute, the measure and mode of compensation of attorneys and counselors at law is left to the agreement, express or implied, of the parties ...." There being no statute or agreement providing for attorney's fees in this matter, the trial court was correct in refusing to award them.

The judgment is affirmed. Costs are awarded to respondents.

GILBERT, J.

We concur:

STONE, P. J.
YEAGAN, J.

Patrick L. McMahon, Judge
Superior Court County of Santa Barbara

James T. Lindsey for Plaintiff and Appellant

CIVIL PROCEDURE

Plaintiff in Intervention Isn't Liable for Prevailing Defendant's Costs Dating From Filing of Original Complaint.

Cite as 94 Daily Journal D.A.R. 13442

GERALD GARCIA, JR et al., Plaintiffs,
v.
HYSTER COMPANY, Defendant and Respondent;
TRAVELERS INSURANCE COMPANY, Intervener and Appellant.

No. F019160
(Super. Ct. No. 212196)
California Court of Appeal
Fifth Appellate District
Filed September 23, 1994

APPEAL from a judgment of the Superior Court of Kern County. Rebecca A. Wiseman, Judge.

Mullen & Filippi, Pamela L. Goe, Yohman and Jensen, and Rick Jensen for Intervener and Appellant.

Marrone, Robinson, Frederick & Foster and J. Alan Frederick for Defendant and Respondent.

PROCEDURAL HISTORY

On October 1, 1990, plaintiffs Gerald Garcia, Jr. and Laura Garcia filed a complaint against defendant/respondent Hyster Company. The complaint charged that, while operating an "order picker" designed and manufactured by Hyster Company, Gerald Garcia was crushed between the order picker and a cross-beam. The complaint sought damages for Gerald Garcia's physical and mental injuries, and medical expenses, his lost earnings, and Laura Garcia's loss of consortium.

Hyster Company answered with a general denial and various affirmative defenses, among which were the allegations that Gerald Garcia's employer, North American Phillips Lighting Corporation, had workers' compensation insurance and that said Insurance had expended toward Gerald Garcia's medical care and disability payments. Consequently, Hyster Company sought a reduction of any damages awarded by the amount of medical care, treatment, and disability payments made by the workers' compensation carrier.

On the same day it answered the complaint, Hyster Company cross-complained against North American Phillips Lighting Corporation, again seeking a set-off against any award on the complaint of the workers' compensation benefits, if any, paid to Gerald Garcia.

The matter was set for a mandatory settlement conference on May 1, 1992, with trial set for May 26. The settlement conference was continued to May 22. During the intervening period, plaintiff in intervention/appellant Travelers Insurance Company, with the court's permission, filed its complaint in intervention against Hyster Company. Travelers alleged that, as a proximate result of Hyster's negligence, it had been compelled to pay workers' compensation benefits to Gerald Garcia in an undetermined amount; the complaint sought reimbursement for sums expended in paying workers' compensation benefits to Gerald Garcia, and "reasonable litigation expenses and reasonable attorney's fees incurred in preparation and prosecution of this action pursuant to Labor Code Section 3856 ...."

On May 28, 1992, Hyster Company made a statutory compromise offer to Travelers of $5,001, pursuant to Code of Civil Procedure section 908. The offer was not accepted by Travelers.

On May 29, 1992, the Garcias' suit against Hyster Company settled for $62,500; one term of the settlement was that each party bear its own fees and costs. On June 5, 1992, Hyster Company answered the complaint in intervention with a general denial.

The complaint in intervention against Hyster Company came on for trial on September 29, 1992. During the course of the trial, Intervener Travelers
June 4, 1997

James T. Lindsey
Attorney at Law
Granada Building, Suite 402
1216 State Street
Santa Barbara, California 93101-2613

Re: 1837½ El Camino De La Luz (APN 45-100-65)

Dear Mr. Lindsey:

This letter is in response to the packages of materials you submitted to the City during our meeting of May 12, 1997 with your client, Dr. Herbert Barthels, and City Associate Planner, Susie Reardon, concerning the above-referenced parcel and Dr. Barthels’s desire to file a development application for the parcel.

After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino De La Luz, it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity.

During our meeting, I understood you to represent that the agreement between Dr. Barthels and Joanna Morgan dated November 17, 1995 provided that Morgan acknowledged Barthels’s right to use the westerly 7½ feet of the 15 foot wide easement which affects the Morgan property. However, in my review of the 1995 agreement, it appears to have very little to do with the 15 foot wide access easement and is mostly about the pedestrian trail beach access easement over the Barthels property which was otherwise in dispute between Morgan and Barthels. As a result, it still appears to us that the status of the 15 foot wide easement is unchanged from the stipulation filed in Morgan v. Barthels, et al. (Santa Barbara Superior Court Case No. 186256) wherein Dr. Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7 1/2 FEET," which stipulation was signed by the parties to the litigation and executed by Judge Stevens as an order. In fact, we presume that
it was this stipulation/order which brought about Dr. Barthels prevailing in his Superior Court Case No. 182179 wherein he recovered damages from Santa Barbara Title.

Consequently, the question remains whether this parcel has the required legal access and the access which formed the basis of the City approving the original lot split in 1958. Based on my review of the "History" dated November 26, 1996 which you submitted, I am assuming that Dr. Barthels is now claiming either a prescriptive right to the 15 foot wide easement or that he has access rights by legal "necessity." While this may be the case, the City cannot assume it to be the case in the absence of any sort of final legal determination to that effect. This is particularly true where, as here, the record clearly indicates that the existence of the 15 foot easement vis-a-vis the Morgan property has been extensively litigated and, on its face, a claim of prescriptive right would otherwise seem to be barred by the legal doctrine of res judicata.

In conclusion, the City does not believe it is appropriate to process an application to develop a parcel where the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to the parcel.

Please do not hesitate to contact me should you or your client have further questions or need further assistance in this matter.

Very truly yours,

[Signature]

Stephen P. Wiley
Assistant City Attorney

cc: Don Olson, Asst. Community Development Director
Susie Reardon, Associate Planner
Every reasonable effort has been made to ensure the accuracy of the information provided; nevertheless, some information may not be accurate. Confirmation is recommended as there may be errors in the database.

## Parcel Details

| **Parcel Address:** | 1837 1/2 EL CAMINO DE LA LUZ  
                      | 1837 EL CAMINO DE LA LUZ |
|---------------------|--------------------------|
| **Parcel Number:**  | 045-100-065              |
| **Zone District:**  | E-3/SD-3                 |
| **General Plan:**   | Mesa: West Mesa          |
| **Neighborhood:**   |                          |
| **Lot Size (from County Assessor's Rolls):** | 0.55 Acres |
| **Lot Size (Estimate from City's GIS System):** | 23,913.77 Square Feet |
| **Slope (Estimate from City's GIS System):** | 55% |
| **High Fire Area:** | No                       |

## Parcel Tags

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<tr>
<th>Description</th>
<th>Notes</th>
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<tr>
<td></td>
<td>As of 4/16/02, this land-locked parcel does not have legal access. Do not accept applications on this parcel until proof of legal access is shown, and verified by City Staff. DYK UPDATE: 5/20/02 Conditional Certificate of Compliance on record. Project may</td>
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Read Note: proceed through City review process however DO NOT ISSUE PERMITS UNTIL ACCESS ISSUE IS RESOLVED.

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<th>Floodplain:</th>
<th>Notes Not on File</th>
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<td>GMP Development Area:</td>
<td>Mesa</td>
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<tr>
<td>Parcel Adjoins Creek/Wetland:</td>
<td>Notes Not on File</td>
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<tr>
<td>Hillside Design District:</td>
<td>Notes Not on File</td>
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**Cases Associated with this Parcel Record**

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<th>Case Number</th>
<th>Description</th>
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<tr>
<td>MST2002-00214</td>
<td>Proposal to construct a new two-story, 1,505 square foot single family residence with an attached 429 square foot, two-car garage located on a 23,885 square foot vacant bluff-top lot in the appealable jurisdiction of the Coastal Zone and in the Hillside Design District. Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill. The proposed total of 1,934 square feet is 41% of the guideline floor-to-area ratio (FAR). Project requires Planning Commission review for a Coastal Development Permit.</td>
<td>See Case Activities</td>
</tr>
<tr>
<td>MST90-02266</td>
<td>SINGLE-FAMILY RESIDENTIAL</td>
<td>See Case Activities</td>
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PROJECT CHRONOLOGY
1837.5 El Camino de la Luz, Santa Barbara
June 4, 2005

Apr. 17, 1958 Fred Eaton, owner of 1837 El Camino de la Luz submits an application for a subdivision of 1837 El Camino de la Luz. Plans submitted with this application indicate a 10 ft. easement to the southerly half of the newly created parcel. This plan has a receipt stamp from the Santa Barbara Planning Commission and an unsigned lot split approval stamp from Public Works.

May 29, 1958 At the City Council hearing the Planning Director points out that City standards require a 50 ft. right of way. Mrs Eaton testified that there were a number of other lot splits approved that had only a 15 ft. easement and that the true access was really 17 ft.

The Council approved the lot split as submitted contingent upon recordation of the easements.

Dec. 2, 1958 Fred Eaton recorded a Record of Survey indicating a 10 ft easement from the north side of the primary parcel to the north side of the newly created parcel. The 15 ft easement is indicated from the center line of El Camino de la Luz, 205.18 ft south to the primary parcel and another 15 ft. further south into the primary parcel as well as the parcel to the west (Morgan parcel). This extension of the easement went under the existing house on the west parcel. This document has bears no approval stamp from the City of Santa Barbara. We have no records of a 10 ft. easement being recorded within the one year time frame required for validation of the lot split.

July 11, 1962 Fred Eaton records a Quitclaim Deed of the subdivided parcel in favor of Gertrude Eaton. He grants and easement of 15 ft. from the northerly property line of 1837, 205.81 ft. north to the center line of El Camino de la Luz. There is no access or utility easement granted to subdivided parcel, 1837.5 El Camino de la Luz. (See 29640, Book 1941, Page 1400, Official Records, Santa Barbara County, attached).

Mar. 26, 1963 Gertrude Eaton grants Brewer a 15 ft. easement from the north property line of the subdivided parcel, 1837.5, 350.85 ft. north to the center line of El Camino de la Luz. This easement includes a 7.5 ft. strip of the neighbor’s property. She did not have ownership of the adjacent parcel nor rights to grant this easement. This was the beginning of the fraud and spurious title.

Dec. 12, 1964 The City Zoning Administrator writes a letter to Gertrude Eaton that her application for a special use permit for 1837 El Camino de la Luz was denied:

"The Planning Commission denied your request because it felt that the private drive extension of El Camino de la Luz would be inadequate to serve the proposed use of your residential property. The Commission felt that the request if granted, would place a hardship on the surrounding area with the added traffic generated on a private drive with inadequate cross-section to carry the added traffic, including service
vehicles, and with no means for adequate turnaround. For these and other reasons brought out at the hearing your application was denied."

Mar. 16, 1967 Brewer transfers title of 1837.5 to Jenkins. Title includes the 15 ft. x 350.85 ft. easement.

Dec. 7, 1976 Barthels purchases the parcel from Jenkins for $24,500. Title included the 15 ft. x 350.85 ft. easement.

April 1989 Barthels discovers that the 15 ft. x 350.85 ft. easement is spurious and informs Santa Barbara Title. Santa Barbara Title does not contest the claim of spurious easement, and tenders $42,875, representing the original purchase price as increased by the title insurance policy inflation endorsement and $21,524 for Barthel's out of pocket expenses. Barthels sues Santa Barbara title for $1,080,000. Superior Court Judge Mc Mahon awards Barthels $42,875, $21,524 and $10,000 for his time.

Aug. 24, 1994 The Court of Appeals affirmed the judgement of the Superior Court. The Court of Appeals never acknowledged the existence of a 7.5 ft easement as stated by Mr. Monk at the May 19, 2005 Planning Commission hearing. The record indicates that Barthels testified that he "discovered that the access easement was only seven and a half feet wide". The width of the easement was not a question before the Appeals Court. (Daily Appellate Record).

Nov. 17, 1995 Barthels granted a Quitclaim deed to Joanna Morgan, the westerly property, for "any and all prescriptive rights" over the northerly 107.85 ft. of that parcel. Without any concession of any easement rights by any of the affected neighbors, the access easement might be, in best case, 7.5 ft. through 1835 El Camino de la Luz. No easement was granted through 1837 El Camino de la Luz on July 11, 62 when Fred Eaton quitclaimed 1837.5 to Gertude Eaton.

June 4, 1997 Assistant City Attorney, Stephen Wiley writes a letter to Barthels informing him that "the City cannot process an application.....until Dr. Barthels demonstrates that the 15 ft. wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity." Mr. Wiley further referenced a stipulation filed in Morgan v Barthels, et. al. (Santa Barbara Superior Court Case No 186256) wherein Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7.5 FEET".

No question was brought up as to the existence of a 7.5 ft. easement across 1837 El Camino de la Luz. No easement was ever recorded. (See 29640, Book 1941, Page 1400, Official Records, Santa Barbara County, attached).
Dec. 1999 Per an allowance in the Map Act, a Conditional Certificate of Compliance is issued to 1837.5 conditioned as follows:

"Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required legal access that formed the basis of the original lot split."

May 19, 2005 The Planning Department presented to the Planning Commission a Draft Mitigated Negative Declaration for a proposed residence on 1837.5 El Camino de la Luz. Page 21 of this document states:

"In 1963, a Grant Deed from Gertrude Eaton to Ed. R. and Joanne F. Brewer, was illegal since the second parcel created by the lot split was never validated."

The MND does not mention the fraudulent 15 ft. x 350.85 ft. easement, the fact that the 10 ft. easement was not granted to Gertrude easement, or the stipulation in Morgan v. Barthels et al.
Mr. Herbert Barthels, D.D.S.
1809 Cliff Drive
Santa Barbara, Ca. 93109

Dear Dr. Barthels,

I work at a local real estate office, and am representing Mr. Peterson who resides at 1837 El Camino de la Luz. Mr. Peterson would like to keep the area of the bluff, known as 1837 1/2 El Camino de la Luz, as a natural preserve, in an ecologically sensitive area, across from the old Santa Barbara lighthouse (circa 1856).

Mr. Peterson would like to purchase your property at twice the price you paid for it, or some other agreeable figure. Please contact me within the next couple of weeks to discuss this matter in further detail, or if I don't hear from you I'll try to reach you.

Respectfully Yours,

Kevin Young

Help-U-Sell 965-5171
please add this letter

Bruce Peterson
1837 El Camino de la Luz
Santa Barbara, CA 93109

30 November 2017

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Subject: Proposed Final EIR/MND and CDP Dec.7, 2017
1837.5 El Camino de la Luz

Honorable Commissioners:

The Superior Court judgement cited in the EIR is simply confirmation of the currently existing easements stipulated in our lawsuit. IT SIMPLY SAYS THAT HE HAS A RIGHT TO PASS. IT is not proof of the original easement used for the lot split. Under the Map Act, the City was forced to issue the CONDITIONAL CERTIFICATE OF COMPLIANCE, Condition being SHOW PROOF THAT HE HAS THE ORIGINAL EASEMENTS USED FOR THE SUBDIVISION.

This was sent by our neighbor Ray Franco today.
Bruce Peterson
I accidentally typed a wrong zip code. My zipcode is 93109 of course. (corrected below)

Sorry! -Janice

On November 30, 2017 at 7:50 PM JANICE TAYLOR <janicehtaylor@cox.net> wrote:

Subject: Proposed Final EIR and CDP2002-00008 Dec 7, 2017
1837-1/2 El Camino de la Luz, Santa Barbara

Honorable Commissioners:

I wish to add my objection to the development of this small parcel.

I have lived on El Camino de la Luz for 27 years and therefore am quite familiar with both the history as well as the current concerns and challenges. I wish I could attend on December 7 but have an important work event scheduled for that very day.

I will briefly summarize the concerns in three categories, as follows:

I. SAFETY:

This parcel is just a few houses away from the area of the region’s largest and most dramatic ocean bluff landslide, where several houses slid down the cliff and many people’s lives were at great peril. Above, in the many houses and gardens, and below, on the beach. According to an impacted party and first-hand witness whom I knew well in the 1990’s (the late Barbara Doolittle who lived at 1933 El Camino de la Luz), there was fortunately a little forewarning with a week of cracking noises emanating from the cliff, which gave people time to evacuate their houses . . . but would we all be so lucky next time? All of these neighbors continue to live with these fears, especially when rains come after prolonged periods of drought.

This parcel is also approximately equidistant between:
1. the area of Shoreline Park which recently collapsed down the cliff, forcing a closure and then an eventual re-routing of the pathway system because of the resultant significantly smaller footprint of the Park., and
2. this week's most recently reported example of “smoldering coastal bluff” below Hope Ranch …a naturally occurring geological phenomenon -- described by Geologist Jim Boles to come from the air and winds on this type of rock conditions – and sometimes evidenced by great flames.

This is clearly an area of eroding Santa Barbara that must be preserved and protected, not given more layers of building and complication! Particularly because there are already about 11 houses squeezed around the end of this fragile cul-de-sac.

II. NEIGHBORHOOD MOBILITY:

In addition to those serious safety concerns, there are tremendous neighborhood mobility and functionality issues, as described at length in Ms. Judith Smith’s letter. This is a severely compacted array of driveways, utilities, homes and gardens, also hosting a constant flow of pedestrians and bicyclists alongside the cars. The construction itself would be a significant problem impacting multitudes, as would the addition of another permanent residence and vehicle or two, plus their visitors.

III. PUBLIC VIEWS:

Furthermore, one needs to take into consideration important public view issues. In fact, a plan for a skateboard park was overturned at La Mesa Park in the 1990's because the varied public uses and tranquility of the park were deemed to be worthy of protection in light of the great cross section of people using this oasis in an ever-more-crowded city. The proposed house would be right in the sight line of those frequenting the view benches.

To wrap up, in light of serious safety, mobility and view reasons, please deny this permit. (I had heard many years ago that this owner had already been compensated - I believe via insurance - for the lack of buildability of this site - is that not the case?)

Thank you for your attention to this important matter, impacting thousands of people.

Sincerely,
Janice Hartoch Taylor

1936 El Camino de la Luz

Santa Barbara CA 93109  (corrected)
Dear Planning Commissioners,
I am writing in opposition to the proposed development at 1837 1/2 El Camino de la Luz.

After reviewing the latest application I realize that nothing has changed from the prior one. The assault on our beautiful Lighthouse Creek is unchanged. The construction would require caissons and, most disturbing, the proximity to the creek would remain the same. This is clearly in violation of several existing regulations. My concern with all of this is from the point of aesthetics. The destruction of the last remaining undisturbed ocean/creek openings to our city is appalling. The projected building would destroy the beautiful view from La Mesa Park and the foot bridge. What makes this view special is the canyon opening to the ocean with its weathered corner bluffs. Over time I’ve watched it change as nature tirelessly erodes them. We will all be deprived of this natural wonder if a building is placed there. The ocean/creek corner bluffs offer a majestic, educational, and historical view from the beach below or a boat passing by. Please make use of the regulations which will stop this from ever happening.

Louis de Bourbon