Staff Report to the Agricultural Policy Advisory Commission

Application Number: 181325

Applicant: Sean Lopes
Owner: Paul and Kimberly Lego
APN: 046-261-27

Date: 1/17/2019
Agenda Item #: 7
Time: 1:30 p.m.

Project Description: Proposal to demolish an existing single-family dwelling and to construct a single-family dwelling with a detached garage within 200 feet of Type 3 agriculture resource land. Requires an Agricultural Buffer Determination to reduce the 200-foot setback to a minimum of 101 feet to APN 046-072-20, 139 feet to APN 046-261-23, 160 feet to APN 046-261-21 (148'8" to property line), 25 feet to APN 046-261-25, and 47 feet to APN 046-081-24.

Location: Property located on the west end of an unnamed right-of-way, approximately 600 feet northwest of Seaview Terrace (630 Seaview Terrace). Seaview Terrace is located approximately 1300 feet southwest of the intersection of Crest Drive, which is located approximately 850 feet southwest of San Andreas Road.

Permits Required: Agricultural Buffer Determination, Coastal Development Permit

Staff Recommendation:

- Recommend the Zoning Administrator Approve Application 181325, based on the attached findings and conditions.

Exhibits

A. Findings
B. Conditions
C. Assessor's, Location, Zoning, and General Plan maps
D. Project plans
E. Agricultural Viability Analysis, prepared by Rush and Associates, dated June 24, 2017
F. Comments & Correspondence

Parcel Information

Parcel Size:	1.2 acres
Existing Land Use - Parcel:	Existing Single-family Dwelling
Existing Land Use - Surrounding:	Residentially developed properties
Project Access:	Unnamed 50-foot right-of-way
Planning Area:	San Andreas
Land Use Designation:	AG (Agriculture)
Zone District:	CA (Commercial Agriculture)
Coastal Zone:	_x_ Inside __ Outside
Appealable to Calif. Coastal Comm.	_x_ Yes __ No

Services Information

Urban/Rural Services Line:	__ Inside _x_ Outside
Water Supply:	Well
Sewage Disposal:	Septic
Fire District:	Aptos La Selva Fire Protection District
Drainage District:	Located outside Drainage District

Analysis and Discussion

The proposed project is to demolish an existing 967 square foot single family dwelling and to construct a 1,114 square foot one-story, single family dwelling with a detached 482 square foot garage on a parcel approximately 1.2 acres in size. Property located on the west end of an unnamed right-of-way, approximately 600 feet northwest of Seaview Terrace. Seaview Terrace is located approximately 1300 feet southwest of the intersection of Crest Drive, which is located approximately 850 feet southwest of San Andreas Road.

The building site is within 200 feet of Type 3 Agriculture Resource land (approximately 101 feet to APN 046-072-20, 139 feet to APN 046-261-23, 160 feet to APN 046-261-21(148'8" to property line in vicinity), 25 feet to APN 046-261-25, and 47 feet to APN 046-081-24). The applicant is requesting a reduction in the 200- foot agricultural buffer setback to allow the proposed dwelling.

The subject property is characterized by sloping topography from the northeast to the southwest. The parcel is located outside the Urban Services Line and can be characterized as an agricultural area, though this specific neighborhood contains a pocket of smaller residentially developed parcels with no agricultural development. The parcel is located within the Agriculture (AG) General Plan designation and the implementing zone district is (CA) Commercial Agriculture.

The subject property contains a Type 3 Agriculture resource designation. Commercial Agriculture Resource Type 3 land is situated within 200 feet of all sides of the property. The nearest agriculturally developed property is located a minimum of approximately 615 feet to the

northeast and 490 feet to the north. All properties adjacent to the proposed dwelling are either vacant, in process to be developed with a dwelling, developed with a dwelling, or contain non-agricultural development. Properties to the north and west contain residential uses. The property immediately to the east was recently approved for development with a dwelling. Properties to the east beyond that are vacant and small and likely to be developed with residential as well. Manresa Uplands Campground is located to the south of the property, and although it contains a Type 3 Agriculture resource designation, it is developed with a campground. No agricultural production uses are in the immediate 200 feet of the subject property on any side.

General Plan/LCP Policy 5.13.28 requires that residential uses be incidental to commercial agriculture development unless the parcel is less than 1 acre in size or there are physical constraints other than size which preclude commercial agricultural use. The parcel does not contain an agricultural use. Thus, the applicant provided an agricultural viability analysis for the property located directly to the east (Exhibit E) that also addresses the subject property. This report confirmed that the area has not been farmed, does not have enough land with a suitable soil type to comprise a viable agricultural economic unit for three crops, among other factors associated with the site that preclude agricultural viability.

Development of a residential use alone, in the absence of an agricultural use, is allowed on the subject property and is consistent with the General Plan/LCP because the parcel does not meet the soil characteristics to be a viable economic unit for agricultural development.

A reduced agricultural buffer is recommended since the site would not allow sufficient building area for a dwelling if the required 200-foot setbacks were maintained from the adjacent Commercial Agriculture zoned property.

The applicant is not proposing solid board fencing because the nearest agriculturally developed properties are over 200 feet from the subject property (490 to 615 feet away) and surrounding properties are residentially developed or are vacant small parcels unlikely to support agricultural development. Staff is not recommending fencing either. The project plans include a landscape plan. The project is conditioned to be reviewed and approved by Steve Tjosvold, the Environmental Horticulture Farm advisor for the University of California Extension office, responsible for evaluation of appropriate agricultural buffer plant species that are not included on the recommended agricultural buffer plant list. The applicant will also be required to record a Statement of Acknowledgement regarding the issuance of a building permit in an area determined by the County of Santa Cruz to be subject to Agricultural-Residential use conflicts.

Recommendation

- Recommend Zoning Administrator **APPROVE** the Agricultural Buffer Reduction Determination, proposed under Application 181325, based on the attached findings and recommended conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of

the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

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Report Reviewed By: Steven Guiney, AICP
Principal Planner
Development Review

Required Findings for Agricultural Buffer Setback Reduction
County Code Section 16.50.095(D)

1. Significant topographical differences exist between the agricultural and non-agricultural uses which eliminates or minimizes the need for a 200 foot agricultural buffer setback; or

2. Permanent substantial vegetation (such as a Riparian Corridor or Woodland protected by the County's Riparian Corridor or Sensitive Habitat Ordinances) or other physical barriers exist between the agricultural and non-agricultural uses which eliminate or minimize the need for a two hundred (200) foot agricultural buffer setback; or

3. A lesser setback is found to be adequate to prevent conflicts between the non-agricultural development and the adjacent agricultural development and the adjacent agricultural land, based on the establishment of a physical barrier (unless it is determined that the installation of a barrier will hinder the affected agricultural use more than it would help it, or would create a serious traffic hazard on a public or private right of way) or the existence of some other factor which effectively supplants the need for a two hundred (200) foot agricultural buffer setback; or

4. The imposition of a two hundred (200) foot agricultural buffer setback would preclude building on a parcel of record as of the effective date of this chapter, in which case a lesser buffer setback distance may be permitted, provided that the maximum possible setback distance is required, coupled with a requirement for a physical barrier (e.g. solid fencing and/or vegetative screening) to provide the maximum buffering possible, consistent with the objective of permitting building on a parcel of record.

The subject property is approximately 1.2 acres in size and situated in an area of small, non-commercially viable agriculturally zoned parcels due to the small parcel size and/or development with single family residences. This is supported by the agricultural viability analysis, which confirmed that the area does not have enough land with a suitable soil type to comprise a viable agricultural economic unit for three crops, among other factors associated with the site that preclude agricultural viability. The imposition of a 200-foot setback would preclude building on this parcel of record. However, no conflicts would occur between the proposed residential use and surrounding properties given the greater than 200-foot setback to the nearest agricultural developed property. Agriculture buffer vegetation or fencing is not necessary given the surrounding residential development.

Exhibit A

Required Finding for Agricultural Buffer Setback Reduction on Commercial Agriculture (CA) Zoned Land County Code Section 16.50.095(E)

1. In the event that an agricultural buffer setback reduction is proposed and the proposed non-agricultural development is located on Type 1, Type 2, or Type 3 commercial agricultural land, the non-agricultural development shall be sited so as to minimize possible conflicts between the agricultural use on the subject parcel; and the non-agricultural development shall be located so as to remove as little land as possible from production or potential production.

The subject property is located on Type 3 commercial agricultural resource type land and is approximately 1.2 acres in size. The property does not contain an existing commercial agricultural use. Thus, the proposed residential use does not conflict with an existing agricultural use on the property.

Furthermore, the proposed residential development would not remove land from commercial agricultural production or potential commercial agricultural production because a commercial agriculture zoned site less is not suitable for farming. This is supported by General Plan Policy 5.13.28, which notes that residential development is not required to be ancillary to commercial agricultural use when the property is less than an acre in size or there are physical constraints other than size which preclude commercial agricultural use. This is supported by the agricultural viability analysis, which confirmed that the surrounding area does not have enough land with a suitable soil to comprise a viable agricultural economic unit for three crops, among other factors associated with the site that preclude agricultural viability. Thus, the proposed residential development will not remove land from agricultural production or future agricultural production.

Required Findings for Development on Land Zoned Commercial Agriculture or Agricultural Preserve County Code Section 13.10.314(A)

1. The establishment or maintenance of this use will enhance or support the continued operation of commercial agriculture on the parcel and will not reduce, restrict or adversely affect agricultural resources, or the economic viability of commercial agricultural operations, of the area.

The subject property is not currently in agricultural production; and,

The proposed residential development would not reduce, restrict or adversely affect agricultural resources on the subject property because the property does not support commercial agricultural production. This is supported by General Plan Policy 5.13.28, which notes that residential development is not required to be ancillary to commercial agricultural use when the property is less than an acre in size or there are physical constraints other than size which preclude commercial agricultural use. This is supported by the agricultural viability analysis, which confirmed that the area does not have enough land with a suitable soil type to comprise a viable

Exhibit A

agricultural economic unit for three crops, among other factors that preclude agricultural viability. Thus, the proposed residential development will not remove land from agricultural production or future agricultural production; and,

The proposed residential development would not adversely affect the economic viability of the agricultural operations of the area as the closest agriculturally developed parcels are over 490 feet from the subject property and properties in the immediate vicinity are developed with residential uses and are not farmed.

2. The use or structure is ancillary, incidental or accessory to the principal agricultural use of the parcel or no other agricultural use of the parcel is feasible for the parcel; or the use consists of an interim public use which does not impair long-term agricultural viability, or consists of a permanent public use that will result in the production of recycled wastewater solely for agricultural irrigation and that limits and mitigates the impacts of facility construction on agriculture consistent with the requirements of Section 13.10.635; or

The subject property is located on Type 3 commercial agricultural resource type land, but the property does not contain an existing commercial agricultural use. Furthermore, no agricultural use of the parcel is feasible. This is supported by the agricultural viability analysis, which confirmed that the area does not have enough land with a suitable soil type to comprise a viable agricultural economic unit for three crops, among other factors associated with the area that preclude agricultural viability.

3. Single family residential uses will be sited to minimize conflicts, and that all other uses will not conflict with commercial agricultural activities on site, where applicable, or in the area.

The property does not contain an existing commercial agricultural use on site and therefore no conflicts would exist. In addition, the proposed residential use would not conflict with commercial agriculture activities in the area because the nearest commercial agricultural use is a minimum of 490 feet from the subject property.

4. The use will be sited to remove no land from production (or potential production) if any non-farmable potential building site is available, or if this is not possible, to remove as little land as possible from production.

The subject property is located on Type 3 commercial agricultural resource type land, but the property is approximately 1.2 acres and does not support commercial agricultural production. This is supported by the agricultural viability analysis, which confirmed that the area does not have enough land with a suitable soil type to comprise a viable agricultural economic unit for three crops, among other factors that preclude agricultural viability. Thus, the proposed residential development will not remove land from agricultural production or future agricultural production.

Exhibit A

Required Findings for Residential Development on Land Zoned Commercial Agriculture or Agricultural Preserve In The Coastal Zone
County Code Section 13.10.314(B)

1. The parcel is less than one acre in size; or the parcel has physical constraints (such as adverse topographic, geologic, hydrologic, or vegetative conditions) other than size which preclude commercial agricultural use; or that the residential use will be ancillary to commercial agricultural use of the parcel based upon the fact that either:

   (i) The farmable portion of the parcel, exclusive of the building site, is large enough in itself to constitute a minimum economic farm unit for three crops, other than greenhouses, suited to the soils, topography, and climate of the area; or

   (ii) The owners of the subject parcel have a long-term binding arrangement for commercial agricultural use of the remainder of the parcel, such as an agricultural easement.

The parcel is approximately 1.2 acres in size and does not support commercial agricultural production. This is supported by the agricultural viability analysis, which confirmed that the area does not have enough land with a suitable soil type to comprise a viable agricultural economic unit for three crops, among other factors that preclude agricultural viability of the parcel.

2. The residential use will meet all the requirements of section 16.50.095 pertaining to agricultural buffer setbacks.

County Code 16.50.095 requires a minimum 200-foot buffer between residential uses and agriculture resource type land. The proposed development is too small to meet the required setbacks. However, the proposed project includes a request for an agricultural buffer reduction by the Agricultural Policy Advisory Commission and is subject to conditions of approval, including a declaration of agricultural acknowledgment. The property is located within a pocket of residentially developed commercial agriculture zoned parcels and no agricultural production occurs in this area. The proposed residential use does not conflict with agricultural production in the area in that the nearest agricultural use is a minimum of 490 feet from the subject property.

3. The owners of the subject parcel have executed binding hold-harmless covenants with the owners and agricultural operators of adjacent agricultural parcels. Such covenants shall run with the land and shall be recorded prior to the issuance of the permit for the proposed development.

The project is conditioned to require recordation of a declaration of acknowledgement prior to issuance of a building permit.

Exhibit A

Conditions of Approval

I. This permit authorizes demolition of an existing 967 square foot single family dwelling and to construct a 1,114 square foot one-story, single family dwelling with a detached 482 square foot garage within 200 feet of Type 3 agriculture resource land Resource. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit, including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Coastal Development Permit from the Santa Cruz County Building Official.

C. Obtain a Building Permit and Grading Permit from the Santa Cruz County Building Official.

1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "D" on file with the Planning Department. Any changes from the approved Exhibit "D" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. A copy of the text of these conditions of approval incorporated into the full-size sheets of the architectural plan set.

2. A development setback of a minimum of approximately 101 feet to APN 046-072-20, 139 feet to APN 046-261-23, 160 feet to APN 046-261-21(148'8" to property line in vicinity), 25 feet to APN 046-261-25, and 47 feet to APN 046-081-24 from the single-family dwelling to the adjacent commercial agriculture resource lands.

EXHIBIT B

3. Water Efficient Landscape Plan (including a signed Water Efficient Landscape Checklist and Certificate) prepared in accordance with the requirements of the Water Efficient Landscape Ordinance (County Code Chapter 13.13) by a certified/licensed landscape architect, landscape contractor, civil engineer, landscape irrigation designer, landscape irrigation auditor, or water manager. Landscape plans shall be reviewed and approved by the Environmental Horticulture Farm advisor for the University of California Extension office for evaluation of appropriate agricultural plant species that are not included on the recommended agricultural buffer plan list.

B. Obtain a Coastal Development Permit.

C. The owner shall record a Statement of Acknowledgement, as prepared by the Planning Department, and submit proof of recordation to the Planning Department. The statement of Acknowledgement acknowledges the adjacent agricultural land use and the agricultural buffer setbacks.

III. All construction shall be performed according to the approved plans for the building permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. The agricultural buffer setbacks shall be met as verified by the County Building Inspector.

B. Any required vegetative shall be installed. The applicant/owner shall contact the Planning Department's Agricultural Planner, a minimum of three working days in advance to schedule an inspection to verify that the required barrier (vegetative and/or other) has been completed.

C. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official and/or the County Senior Civil Engineer.

IV. Operational Conditions

A. The vegetative buffer shall be permanently maintained, if required.

B. All required Agricultural Buffer Setbacks shall be maintained.

C. In the event that future County inspections of the subject property disclose non-compliance with any Conditions of this Approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, up to and including permit revocation.

V. As a condition of this development approval, the holder of this development approval

("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.

D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

Minor Variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below or if additional discretionary permits are required for the above permitted project, this permit shall expire on the same date as any subsequent approved discretionary permit(s) unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit,

EXHIBIT B

will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Agricultural Policy Advisory Commission under the provisions of County Code Chapter 16.50, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.

EXHIBIT B

46-26
Assessor's Map No. 46-26
County of Santa Cruz, Calif.
Feb. 2000
Tax Area Code
69-278
POR. SAN ANDREAS RANCHO
SECS. 3, T.12S. & T.12S., R.1E., M.D.B. & M.
123RS21
3/6/2015
24PMT2
3/15/1977
SAN ANDREAS RD
SEA VIEW TE
Note - Assessor's Parcel & Block
Numbers Shown In Circles.
FOR TAX PURPOSES ONLY

EXHIBIT C

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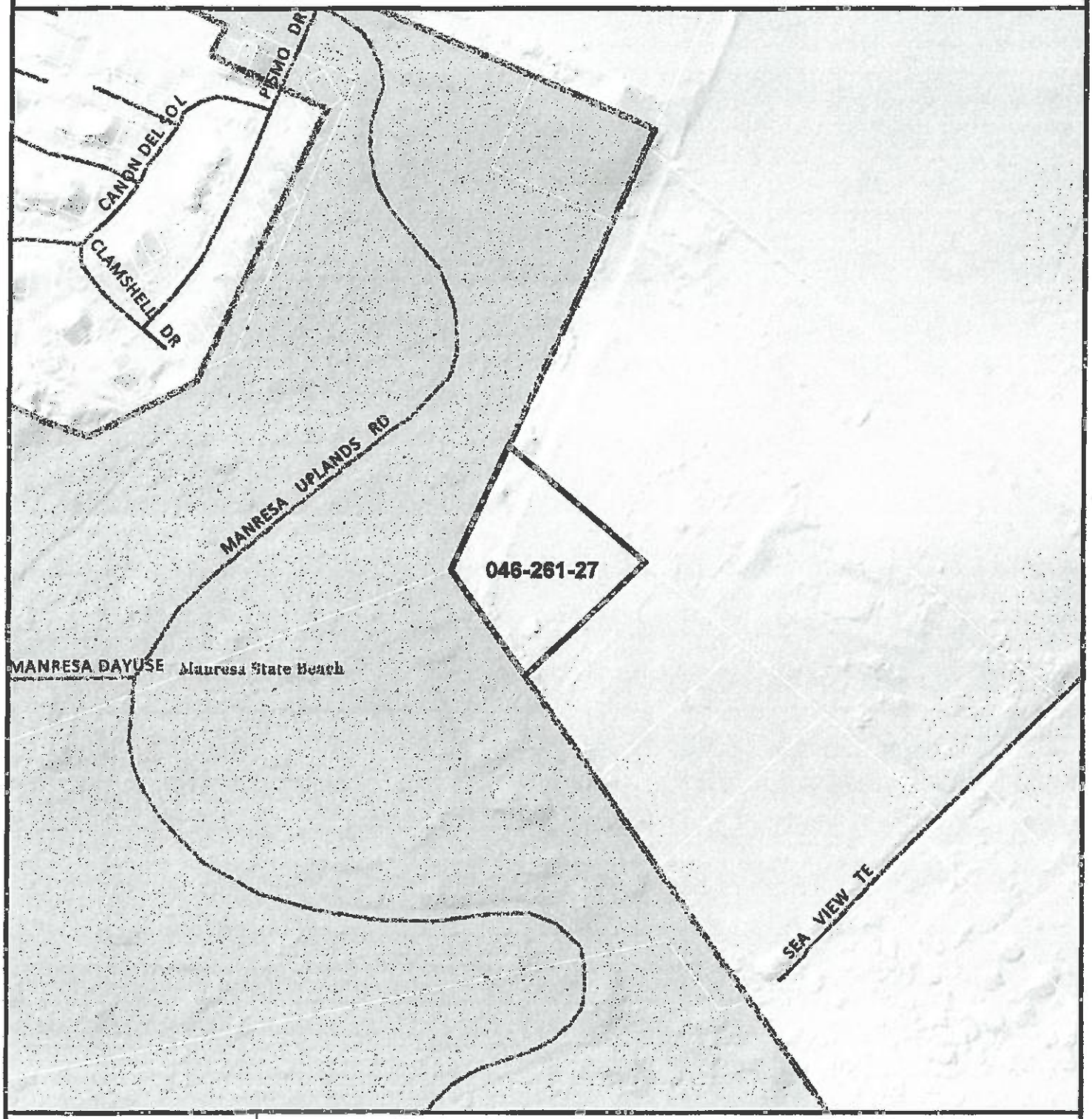
Parcel Location Map

Santa Cruz County Planning Department

Parcel Number
046-261-27
Oct. 25, 2018



Symbol Key

Street

Park

Location Overview

N

0 80 160

Feet

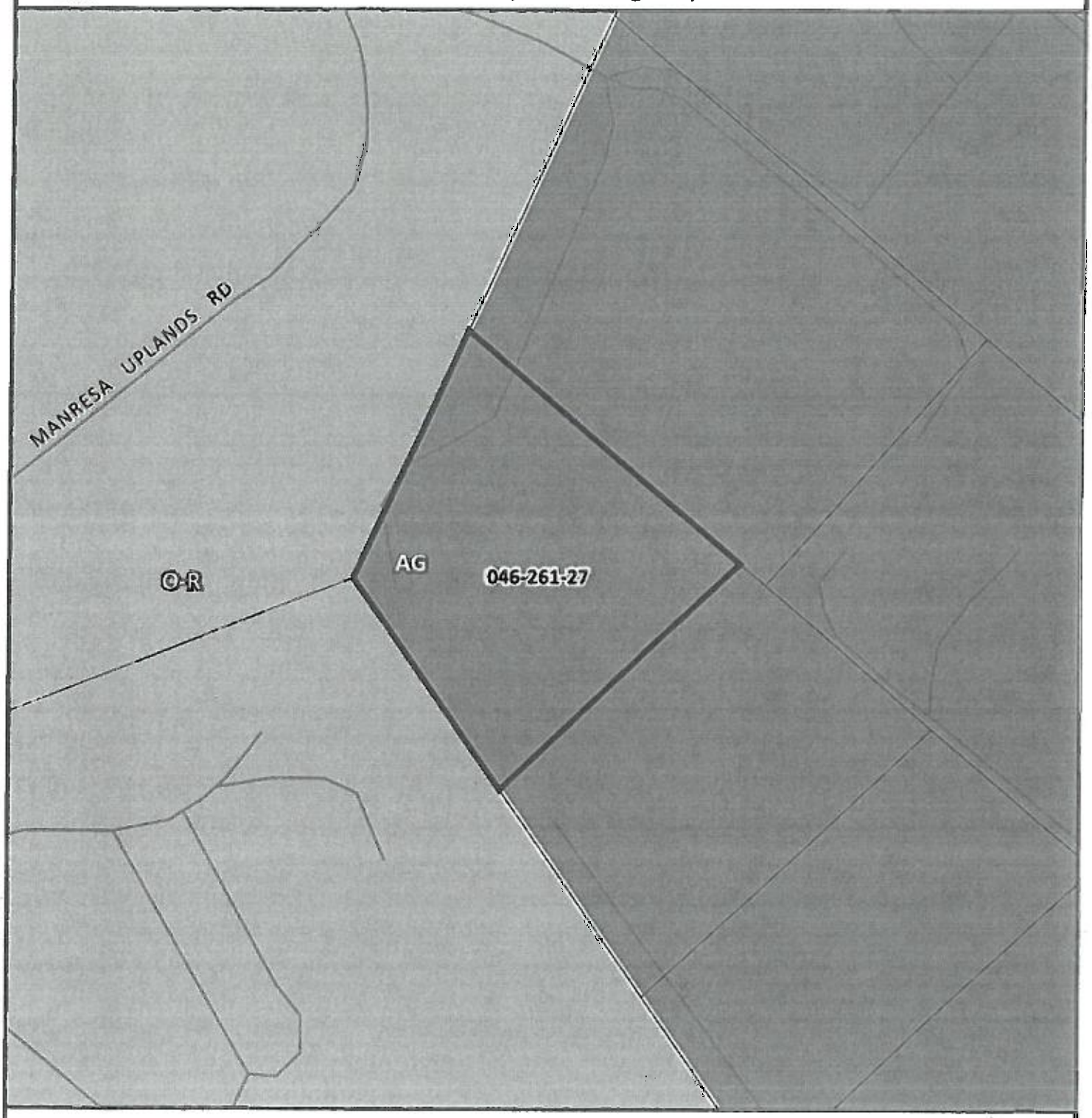
EXHIBIT C

14

Parcel General Plan Map

Santa Cruz County Planning Department

Parcel Number
046-261-27
Oct. 25, 2018



General Plan

- AG - Agriculture
- O-R - Parks and Recreation

N

0 40 80
Feet

EXHIBIT C

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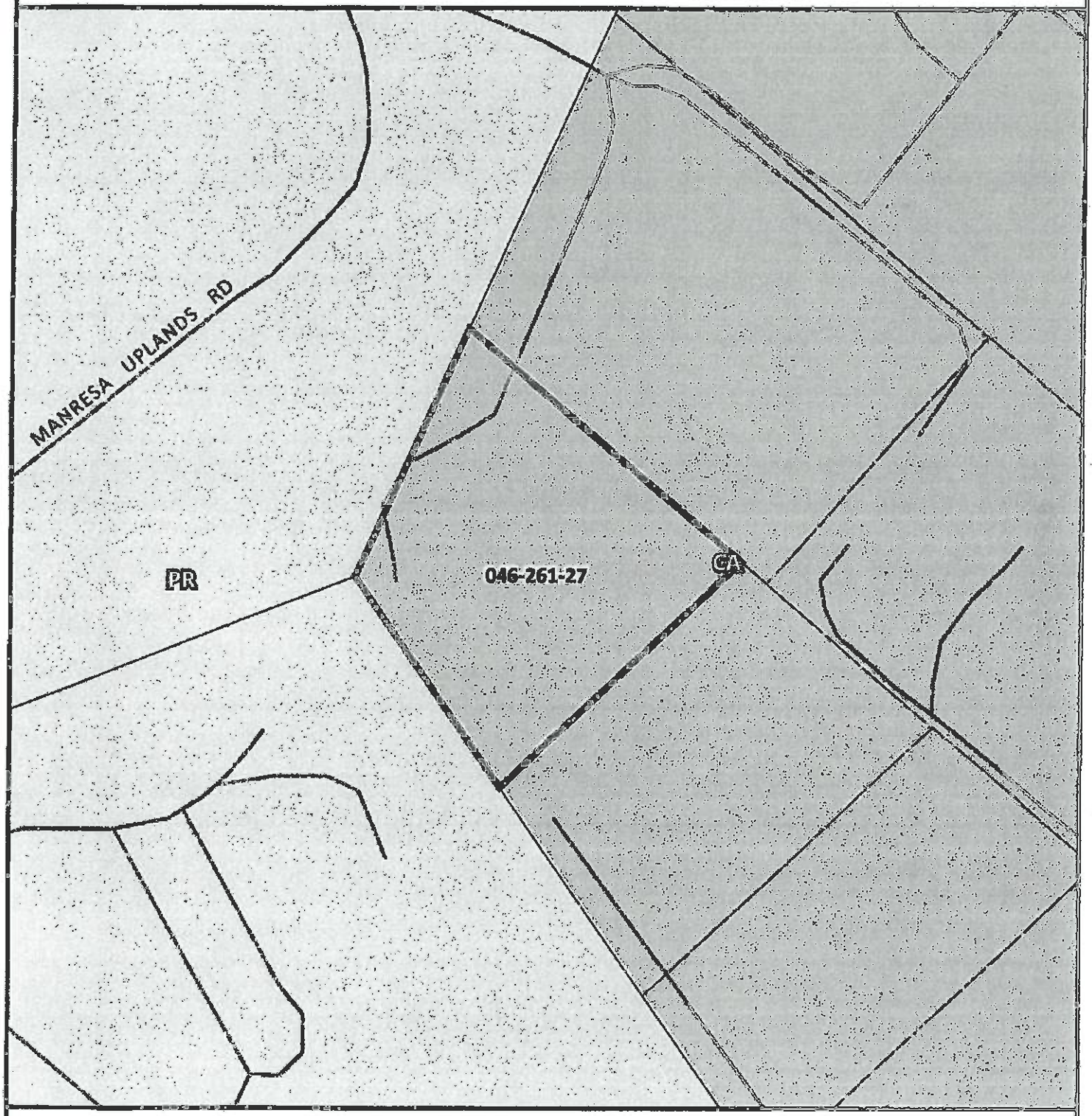
Parcel Zoning Map

Santa Cruz County Planning Department

Parcel Number
046-261-27
Oct. 25, 2018



Zoning

(CA) Commercial Agriculture

(PR) Parks, Recreation, and Open Space

N

0 40 80

Feet

EXHIBIT C

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LEGO - SURF SHACK
630 SEA VIEW TERRACE WATSONVILLE, CA
APN: 046-261-27
A1.0
PACIFIC PENINSULA ARCHITECTURE
PROPOSED SITE PLAN
EXISTING FLOOR AREA
AREA CALCULATION(S)
PROJECT DATA:
SHEET INDEX:
PROJECT TEAM:

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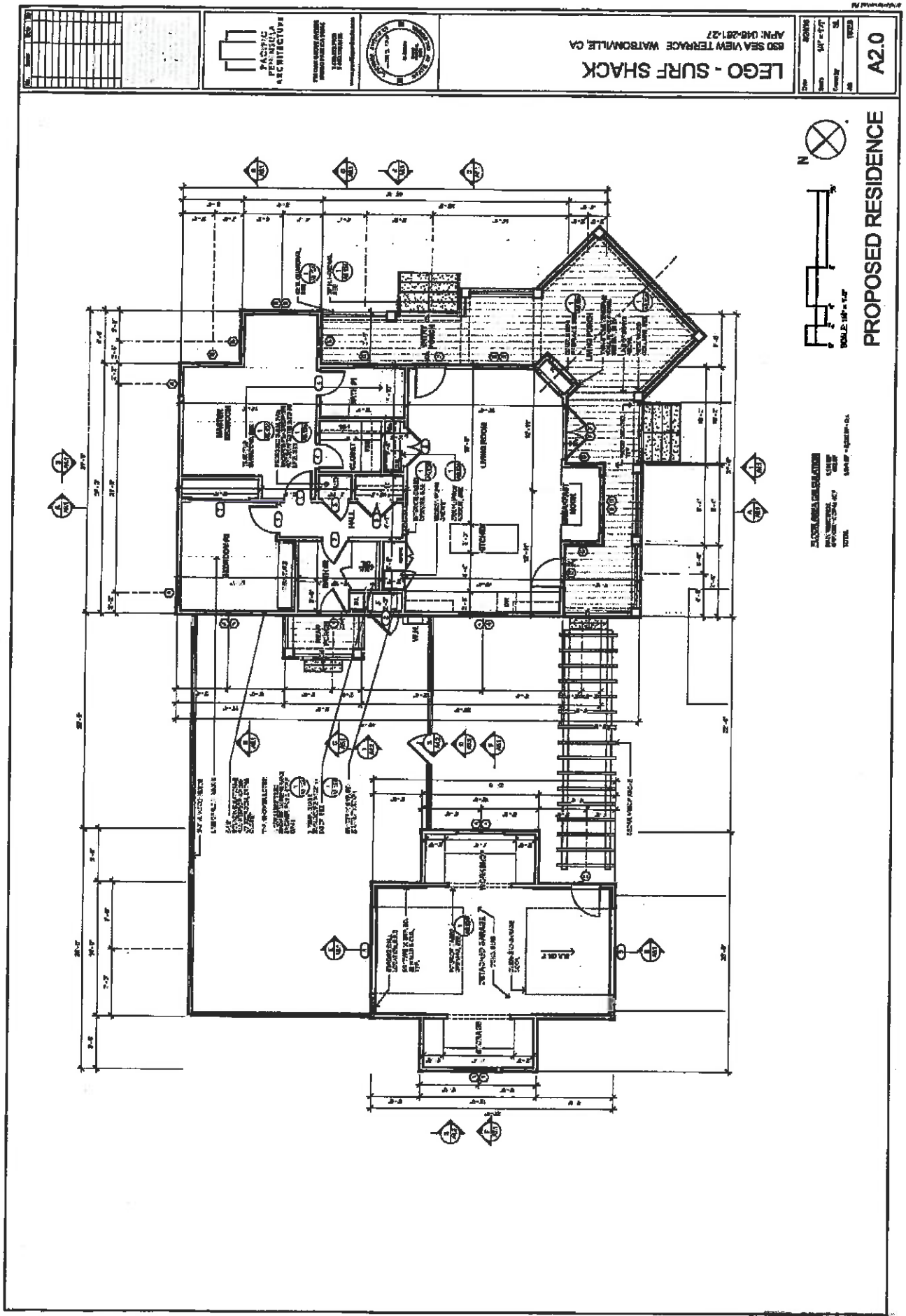
LEGO - SURF SHACK
650 SEA VIEW TERRACE WATSONVILLE, CA
APN: 046-261-27
A2.0
PROPOSED RESIDENCE

EXHIBIT D

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LEGO - SURF SHACK

830 SEA VIEW TERRACE WATSONVILLE, CA

APN. 046-281-27

A2.1

PACIFIC PENINSULA ARCHITECTURE

EXISTING STRUCTURE

(4) FLOOR PLAN

(1) FRONT ELEVATION (SOUTH)

(2) RIGHT SIDE ELEVATION (EAST)

(3) REAR ELEVATION (NORTH)

(4) LEFT SIDE ELEVATION (WEST)

EXHIBIT D

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LEGO - SURF SHACK
630 SEA VIEW TERRACE WATSONVILLE, CA
APN: 046-361-27
A4.1
PACIFIC PENINSULA ARCHITECTURE
EXTERIOR ELEVATIONS
① FRONT ELEVATION (SOUTH)
② RIGHT SIDE ELEVATION (EAST)
③ REAR ELEVATION (NORTH)

EXHIBIT D

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LEGO - SURF SHACK
630 SEA VIEW TERRACE WATSONVILLE, CA
APN: 016-261-27
A4.2
PACIFIC PENINSULA ARCHITECTURE
EXTERIOR ELEVATIONS
1 LEFT SIDE ELEVATION (WEST)
2 LEFT SIDE ELEVATION (WEST)
3 LEFT SIDE ELEVATION (WEST)
4 INSIDE/OUTSIDE CORNER TRIM DETAIL
1 TYPICAL EAVE • GUESTHOUSE
2 EAVE AT PORCH
3 TYPICAL RAKE
5 WALL TRIM • BOARD & BATTEN
6 TYPICAL PORCH COLUMN

EXHIBIT E

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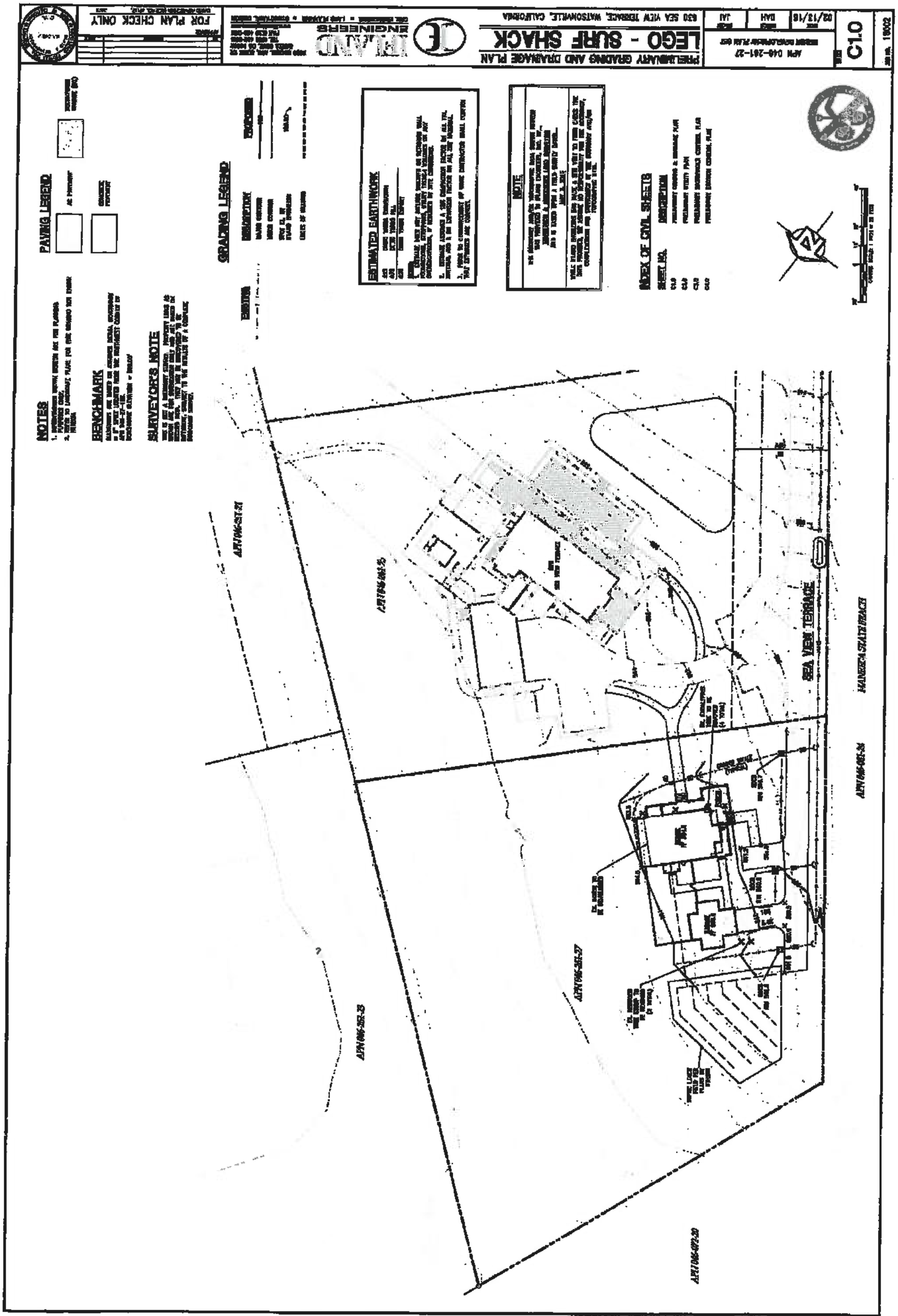
PRELIMINARY GRADING AND DRAINAGE PLAN
LEGO - SURF SHACK
630 SEA VIEW TERRACE, WATSONVILLE, CALIFORNIA
IFLAND ENGINEERS
FOR PLAN CHECK ONLY
C1.0
NOTES
BENCHMARK
SURVEYOR'S NOTE
PAVING LEGEND
GRADING LEGEND
ESTIMATED EARTHWORK
NOTE
INDEX OF CIVIL SHEETS
SEA VIEW TERRACE

EXHIBIT D

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L1.1
LANDSCAPE PLAN
LEGO RESIDENCE
630 SEAVIEW TERRACE
WATSONVILLE, CALIFORNIA
APN: 046-28-125
Virdian Landscape Architecture
591 Lighthouse Avenue, Ste 15
Pacific Grove, CA 93950
Phone: 831.521.6892 - rosemaryw@vlastudio.com
www.vlastudio.com
LIGHTING LEGEND
NOTES
PLANT PALETTE LIST
EXHIBIT D

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Dale W. Rush, Ph.D.
Gary W. Osteen, CPAg
Jon Tecklenburg, B.S.
Steven L. Morrison, Ph.D.
Albert A. Stoddard, III Ph.D.

RUSH and ASSOCIATES

AN ASSOCIATION OF INDEPENDENT AGRICULTURAL CONSULTANTS

28951 Falcon Ridge Road
Salinas, California 93908
Office: (831) 484-4834
Fax: (831) 484-4837

June 24, 2017

File No. 17052.07

Ms. Sheila McDaniel
Project Planner
Santa Cruz County Planning Department
701 Ocean Street - 4th Floor
Santa Cruz, CA. 95060

Re: Status of property identified as APN 046-261-25, location: 620 Sea View Terrace, Watsonville, CA

At the request of Mr. Paul Lego an evaluation of the history, condition, and status of an approximately 1.2-acre parcel of land identified as APN 046-261-25 (APN 25, abbreviated) located at 620 Sea View Terrace was undertaken, specifically with respect to its current zoning as CA or commercial agriculture.

Qualifications

I am an agricultural consultant and have resided in Monterey County since 1994. As a part of my normal work, I evaluate agriculture-related issues including losses or damage to crops, land and/or related property. In addition, I have evaluated properties in the region including Santa Cruz County with respect to agricultural land suitability studies and comparative land uses, where agricultural, commercial, residential and other alternate uses were considered under requests to local planning commissions, departments and review boards, and submitted analyses on behalf of my clients. I also provide expert witness services in hearings and litigation. I have a Bachelors degree in Environmental Biology, a Masters degree in Soil Science, and a Doctorate degree in Soil Science, from the University of California, and more than 40 years of national, regional and local professional and field experience. I am a nationally and regionally certified Soil Scientist, Agronomist and Crop Advisor.

APN 25 and surrounding land

A site inspection revealed the subject APN 25 parcel exists on variably sloped land, and is surrounded on three sides by other residences of variable densities, and a substantial tree vegetation buffer to the west (Exhibit 1). There is no evidence of either previous or on-going agriculture within, among or contiguous with the subject or surrounding parcels.

As I understand the issue, the subject APN 25 is one of four separate and separately owned lots that is reportedly approximately 1.2 acres including areas of access and other easements that is currently zoned CA, although there is no currently used or contiguous land that is or has been used for commercial agricultural purposes. Review of Google Earth photos from 1993 through 2016 revealed there has been no commercial agricultural activity on the subject or surrounding contiguous parcels during that timeframe. Further, according to the current land owner, there has never been commercial agriculture on the subject APN 25 or surrounding parcels, based upon review of historical aerial photos dating back to at least 1948. The only apparent activity has been occasional management of seasonal grassy weeds.

The immediate and general area contains residences on three sides (north, east and south) with the western border abutting Manresa Uplands Campground, inland from Manresa State Beach, with the subject APN 25 property approximately 0.31 miles from the mid tide line of the beach (Exhibit 2). Across from the western

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boundary, the vegetation consists of maturing trees including coast live oaks (*Quercus agrifolia*), Monterey pines (*Pinus radiata*) and the occasional Cypress (*Cupressus macrocarpa*) (Ref. Exhibit 2).

Soils classification - USDA NRCS Soil Survey

The subject APN 25 and the surrounding area sits on *Baywood loamy sand* of 2% to 30% slopes (soils map units 105 & 106). The upper (relatively) flatter portion of the subject lot mapped as 0.6 acres, has a land capability classification of 3e for the shallower sloped area (2-15% slopes) and 4e for the lower areas 15-30% slopes, *if irrigated*. The "e" subclass indicates the most significant edaphic issue is erosion hazard. If non-irrigated, the classification is 4e regardless of degree of severity of slope. According to the USDA NRCS Soil Classification criteria "Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management or both" (Exhibit 3). For the subject APN 25, the substantial limiting factors include the variable degrees of slope with substantial erosion potential (Exhibit 4), the textural classification as a loamy sand with low inherent water and nutrient holding capacities, and the lack of an irrigation water source. The NRCS soils classifications are the basis for those used by California counties for soils descriptions in regulatory and guidance documents.

Other criteria within the NRCS data includes a potential contradiction in how part of the subject APN 25 parcel is evaluated, in that the upper portion (2-15% slopes) including about 0.6 acres (as NRCS-mapped) is listed as Class 3 prime farmland *if irrigated*, while the lower approximately 0.5 acres of the subject parcel is not prime farmland whether irrigated or not. Even if the upper 0.6-acre portion were irrigable, it is less than the minimum acreage established by the Santa Cruz County General Plan/Local Coastal Program to qualify as a stand alone viable production unit (nor in my opinion does the subject parcel in total constitute a minimum economic farm unit for three crops, based upon accepted standards) and edaphic (slope and texture) constraints, regardless of lack of irrigation water availability.

121-331-04

It should be noted that there is no source of agricultural irrigation water available in the general vicinity of the subject or nearby parcels, so any agricultural suitability evaluation of the subject and surrounding properties as non-irrigated, and thus dominated by essentially non-prime Class 4 soils from an agricultural standpoint. While there is a limited mutual domestic water supply, the subject parcel and surrounding area lie within the seawater intrusion zone as established by the Pajaro Valley Water Management District (Exhibit 5). As such, any attempt at establishing a well with an agricultural use volume could further exacerbate existing salt water intrusion. The lack of evidence that there was ever any agricultural activity, combined with documented edaphic constraints, further illustrates unsuitability of the subject parcel as economically viable commercial ag land.

Conclusion

The subject APN 25 parcel, while slightly larger than one acre (1.2 acres including easements) was never an economically viable commercial agricultural parcel as a stand alone entity; and based upon reported and observed conditions, never a part of a commercially viable parcel, even when considered in aggregate with the surrounding land, due to excessive slope, edaphic features (soil texture etc.), lack of an essential agricultural irrigation source, and within a seawater intrusion zone. Observations and data review are consistent with the county and NRCS classification as Class 4e non-prime, non-irrigable land. The location, size and aspect of the parcel preclude it from being a commercially viable agricultural entity, as do the surrounding land uses.

Dale W Rush

Dale W. Rush, PhD, CPAg/SSc, CCA

DWR:kei
ENclosures: Exhibits 1-5

EXHIBIT E

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EXHIBIT B

EXHIBIT 1

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EXHIBIT 2

EXHIBIT B

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EXHIBIT E

TO THE EAST

pg 1/2

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EAST

EXHIBIT B
pg 2/2

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To the South

EXHIBIT E
PJ 1/2

30

EXHIBIT E
P9/2/2

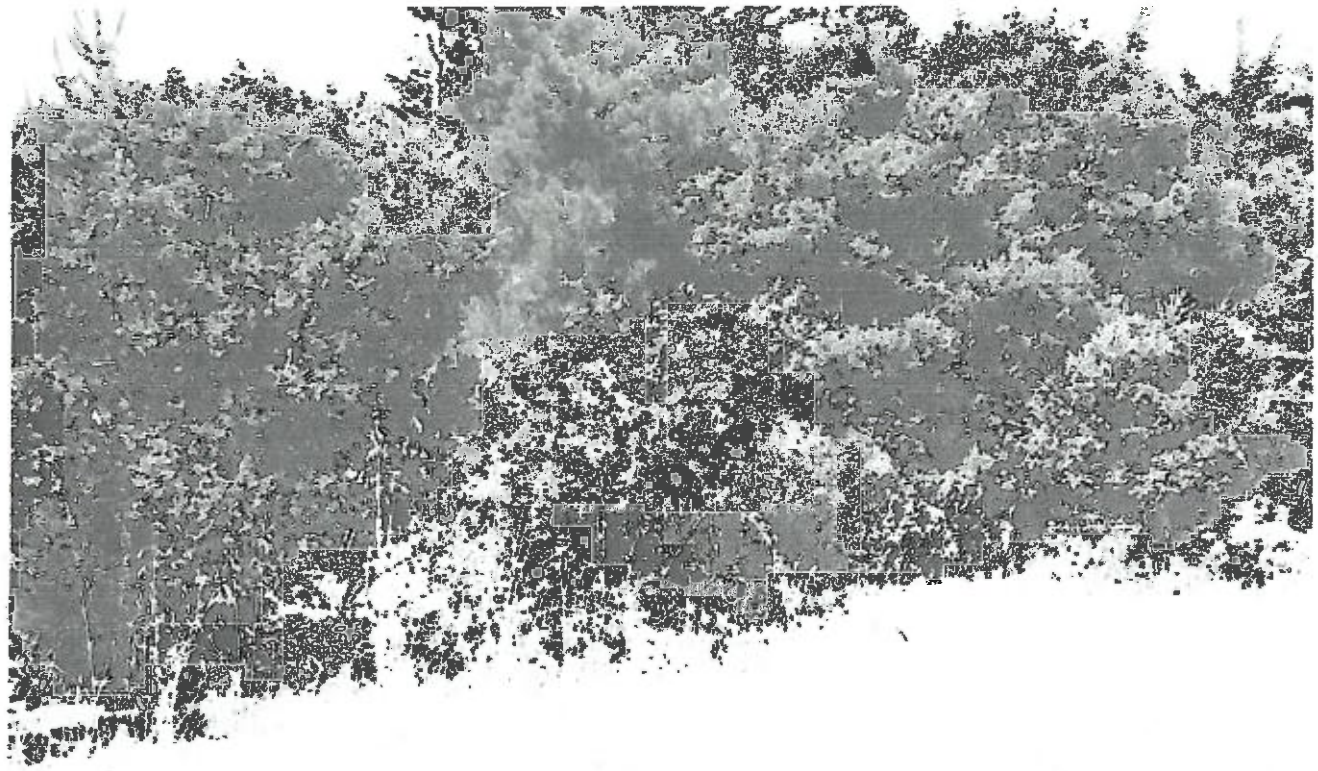
South

31

To the West

EXHIBIT E
Pg 11

32



West

EXHIBIT B
p/2/2

33

Google Earth
feet
meters
1000
400
Google Earth
Lazo
Sea
View
To the North

EXHIBIT E

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Santa Cruz County, California

Lego Property

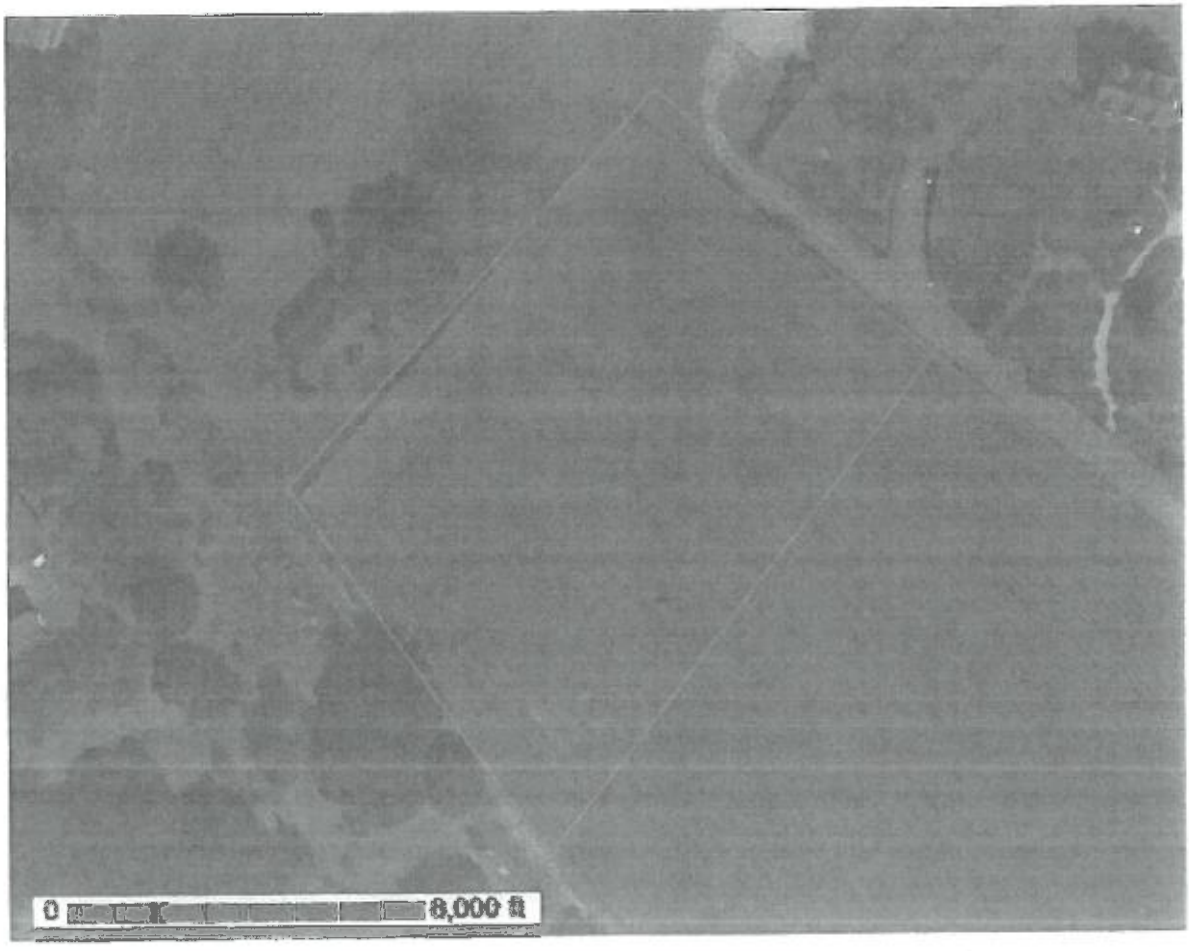

EXHIBIT 3

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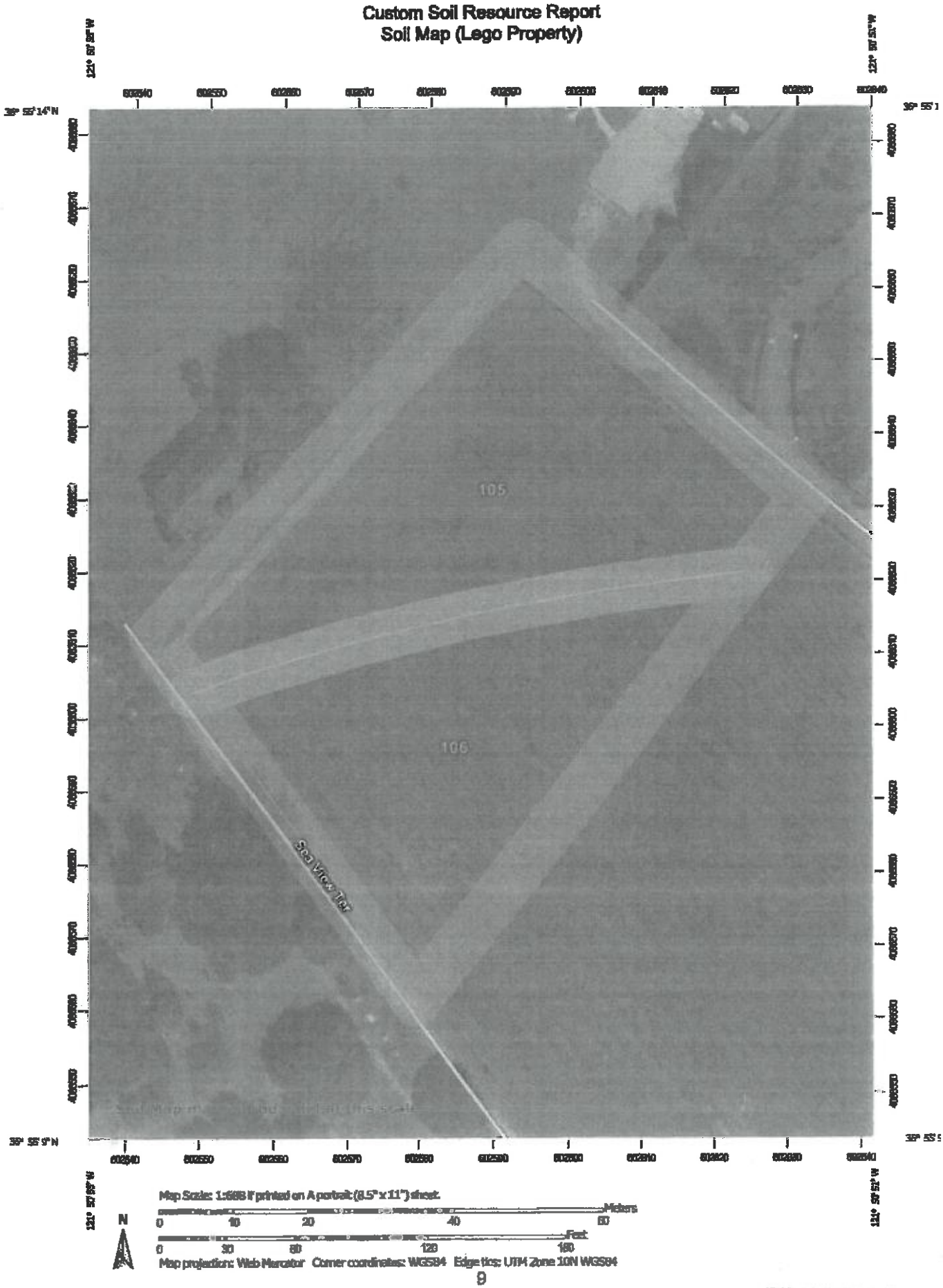

9

EXHIBIT E

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MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP II

The soil surveys that compr
1:24,000.

Warning: Soil Map may not

Enlargement of maps beyo
misunderstanding of the de
fine placement. The maps c
contrasting soils that could
scale.

Please rely on the bar scale
measurements.

Source of Map: Natural R
Web Soil Survey URL:
Coordinate System: Web

Maps from the Web Soil Su
projection, which preserves
distance and area. A projec
Albers equal-area conic pro
accurate calculations of dis

This product is generated fr
of the version date(s) listed

Soil Survey Area: Santa C
Survey Area Data: Versio

Soil map units are labeled (
1:50,000 or larger.

Date(s) aerial images were
24, 2014

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compiled and digitized prob
imagery displayed on these
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EXHIBIT E

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Map Unit Legend (Lego Property)

Santa Cruz County, California (CA087)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
105	Baywood loamy sand, 2 to 15 percent slopes	0.6	56.0%
106	Baywood loamy sand, 15 to 30 percent slopes	0.5	44.0%
Totals for Area of Interest		1.1	100.0%

Map Unit Descriptions (Lego Property)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

EXHIBIT E

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development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

EXHIBIT E

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Santa Cruz County, California

105—Baywood loamy sand, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: h9cv
Elevation: 20 to 500 feet
Mean annual precipitation: 15 to 35 inches
Mean annual air temperature: 52 to 55 degrees F
Frost-free period: 245 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Baywood and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Baywood

Setting

Landform: Dunes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Rise
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Eolian deposits

Typical profile

H1 - 0 to 17 inches: loamy sand
H2 - 17 to 61 inches: loamy sand, loamy fine sand
H2 - 17 to 61 inches:

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: SANDY (R014XD059CA)
Hydric soil rating: No

Minor Components

Elder

Percent of map unit: 4 percent
Hydric soil rating: No

EXHIBIT E

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Elkhorn
Percent of map unit: 4 percent
Hydric soil rating: No

Tierra
Percent of map unit: 3 percent
Hydric soil rating: No

Baywood
Percent of map unit: 3 percent
Hydric soil rating: No

Watsonville
Percent of map unit: 1 percent
Landform: Marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Hydric soil rating: Yes

106—Baywood loamy sand, 15 to 30 percent slopes

Map Unit Setting
National map unit symbol: h9cw
Elevation: 20 to 500 feet
Mean annual precipitation: 15 to 35 inches
Mean annual air temperature: 52 to 55 degrees F
Frost-free period: 245 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition
Baywood and similar soils: 85 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Baywood

Setting
Landform: Dunes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Rise
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Eolian deposits

Typical profile
H1 - 0 to 17 inches: loamy sand
H2 - 17 to 61 inches: loamy sand, loamy fine sand
H2 - 17 to 61 inches:

Properties and qualities
Slope: 15 to 30 percent

EXHIBIT E

Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: SANDY (R014XD059CA)
Hydric soil rating: No

Minor Components

Elkhorn

Percent of map unit: 2 percent
Hydric soil rating: No

Elder

Percent of map unit: 2 percent
Hydric soil rating: No

Watsonville

Percent of map unit: 1 percent
Landform: Marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Hydric soil rating: Yes

Tierra

Percent of map unit: 1 percent
Hydric soil rating: No

Baywood

Percent of map unit: 1 percent
Hydric soil rating: No

EXHIBIT E

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Custom Soil Resource Report
Map—Farmland Classification (Lego Property)

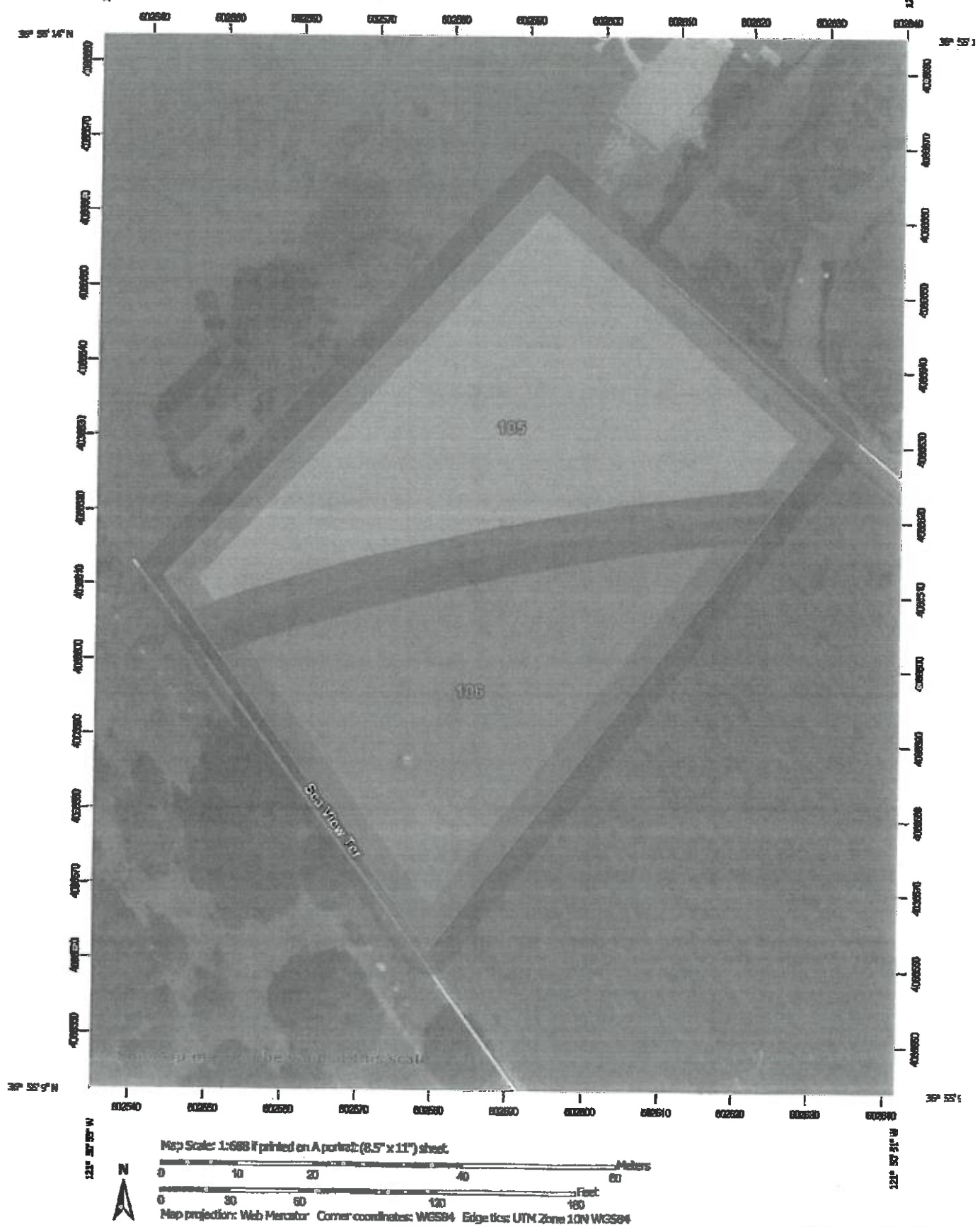

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EXHIBIT E

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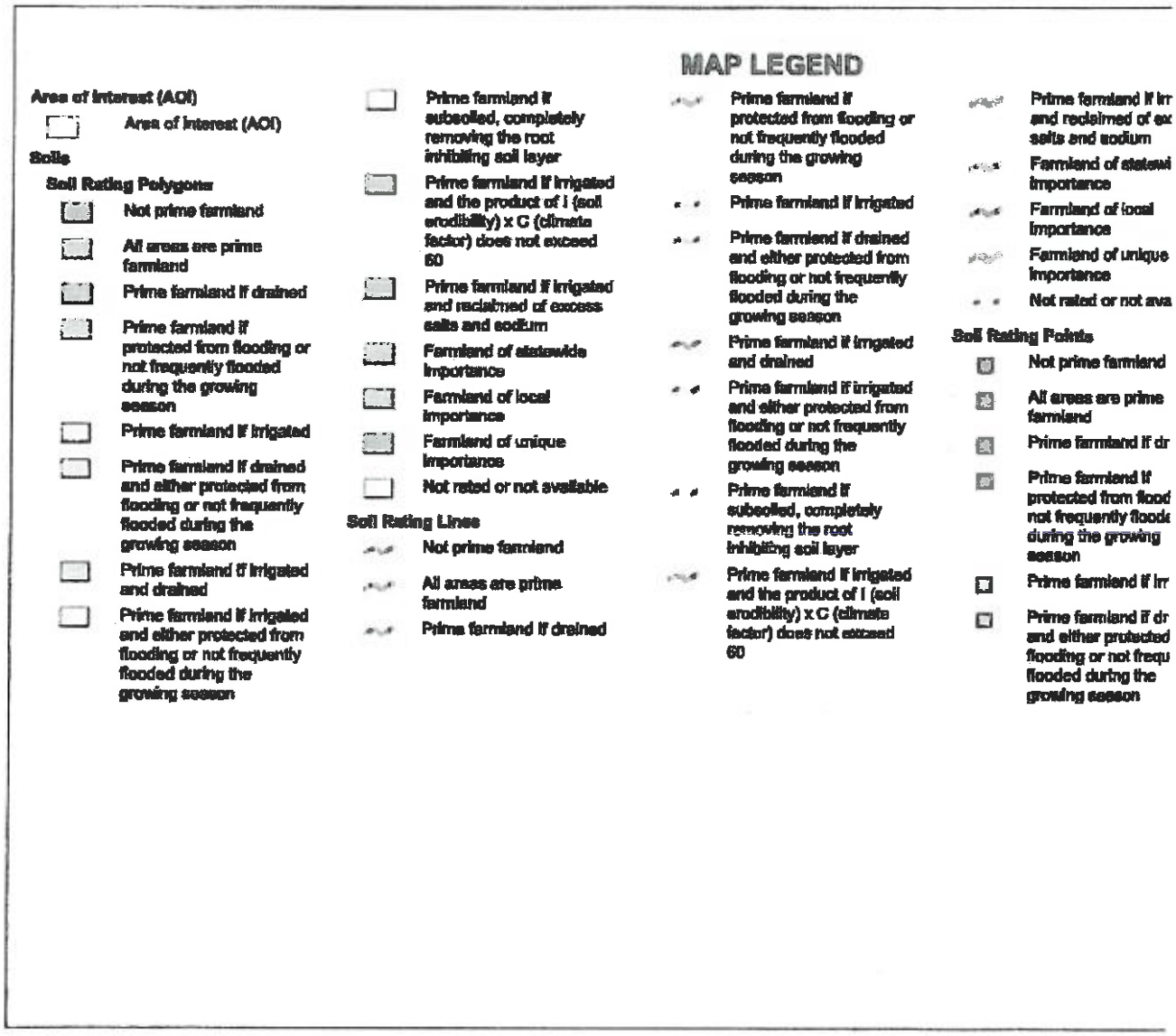
MAP LEGEND
Area of Interest (AOI)
Area of Interest (AOI)
Soils
Soil Rating Polygons
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of local importance
Farmland of unique importance
Not rated or not available
Soil Rating Lines
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irr
and reclaimed of ex
salts and sodium
Farmland of statewi
importance
Farmland of local
importance
Farmland of unique
importance
Not rated or not ava
Soil Rating Points
Not prime farmland
All areas are prime farmland
Prime farmland if dr
Prime farmland if
protected from flood
not frequently floode
during the growing
season
Prime farmland if irr
Prime farmland if dr
and either protected
flooding or not frequ
flooded during the
growing season

EXHIBIT E

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Table—Farmland Classification (Lego Property)

Farmland Classification— Summary by Map Unit — Santa Cruz County, California (CA087)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
105	Baywood loamy sand, 2 to 15 percent slopes	Prime farmland if irrigated	0.6	56.0%
106	Baywood loamy sand, 15 to 30 percent slopes	Not prime farmland	0.5	44.0%
Totals for Area of Interest			1.1	100.0%

Rating Options—Farmland Classification (Lego Property)

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

EXHIBIT E

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Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Chemical Properties

Soil Chemical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil chemical properties include pH, cation exchange capacity, calcium carbonate, gypsum, and electrical conductivity.

Cation-Exchange Capacity (CEC-7) (Lego Property)

Cation-exchange capacity (CEC-7) is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

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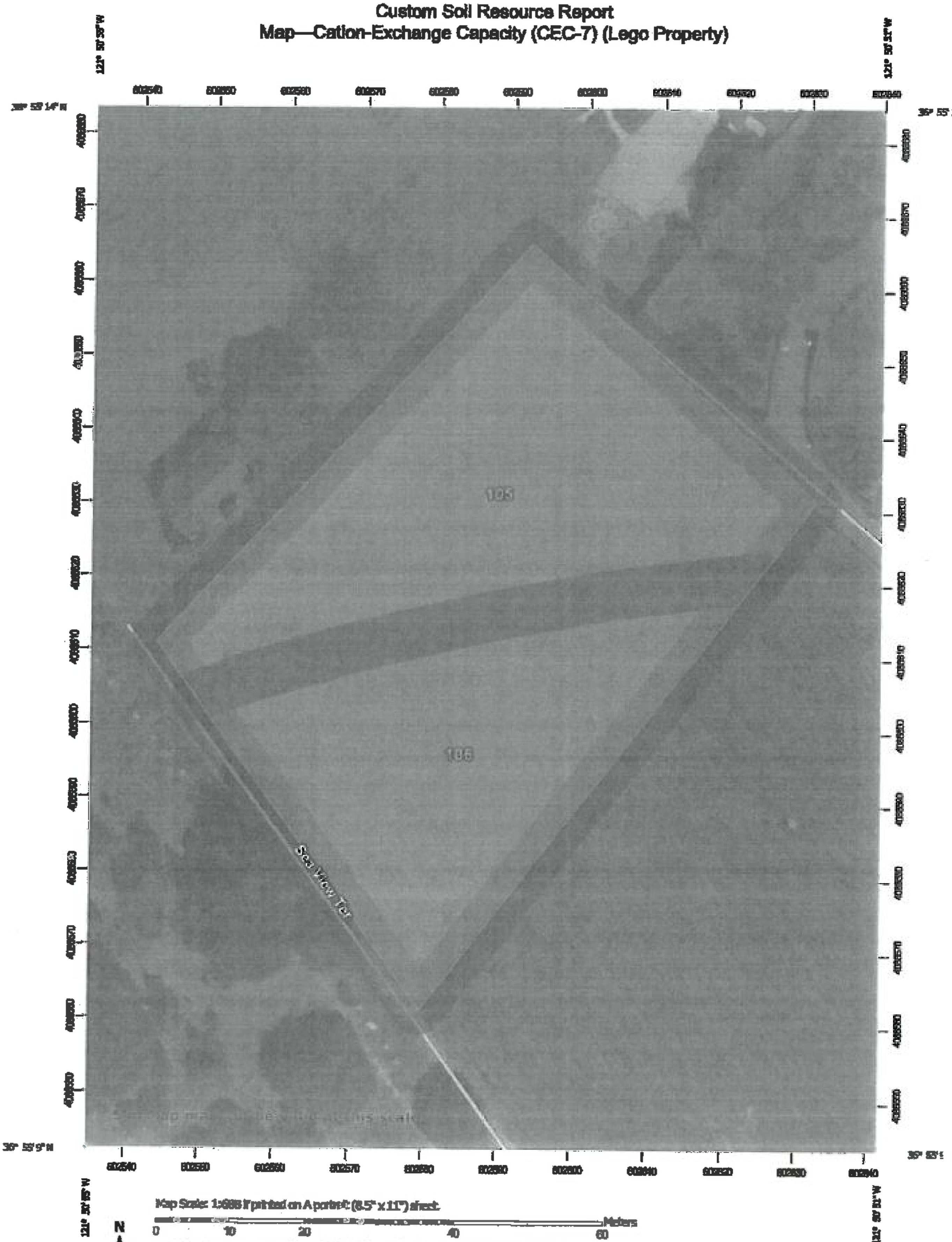
Custom Soil Resource Report
Map—Cation-Exchange Capacity (CEC-7) (Lego Property)



Map Scale: 1:698 if printed on A portrait (8.5" x 11") sheet.

0 10 20 40 60 Meters

0 30 60 120 180 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

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EXHIBIT E

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- = 5.6
- Not rated or not available

Soil Rating Lines

- = 5.6
- Not rated or not available

Soil Rating Points

- = 5.6
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP II

The soil surveys that comp
1:24,000.

Warning: Soil Map may not

Enlargement of maps beyo
misunderstanding of the de
line placement. The maps c
contrasting soils that could
scale.

Please rely on the bar scale
measurements.

Source of Map: Natural R
Web Soil Survey URL:
Coordinate System: Web

Maps from the Web Soil Su
projection, which preserves
distance and area. A projec
Albers equal-area conic pro
accurate calculations of dis

This product is generated fr
of the version date(s) listed

Soil Survey Area: Santa C
Survey Area Data: Versio

Soil map units are labeled (
1:50,000 or larger.

Date(s) aerial images were
24, 2014

The orthophoto or other ba
compiled and digitized prot
imagery displayed on these
shifting of map unit bounda

EXHIBIT B

Table—Cation-Exchange Capacity (CEC-7) (Lego Property)

Cation-Exchange Capacity (CEC-7)— Summary by Map Unit — Santa Cruz County, California (CA087)				
Map unit symbol	Map unit name	Rating (milliequivalents per 100 grams)	Acres in AOI	Percent of AOI
105	Baywood loamy sand, 2 to 15 percent slopes	5.6	0.6	56.0%
106	Baywood loamy sand, 15 to 30 percent slopes	5.6	0.5	44.0%
Totals for Area of Interest			1.1	100.0%

Rating Options—Cation-Exchange Capacity (CEC-7) (Lego Property)

Units of Measure: milliequivalents per 100 grams

Aggregation Method: Dominant Component

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Component" returns the attribute value associated with the component with the highest percent composition in the map unit. If more than one component shares the highest percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher attribute value should be returned in the case of a percent composition tie. The result returned by this aggregation method may or may not represent the dominant condition throughout the map unit.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

EXHIBIT E

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Interpret Nulls as Zero: No

This option indicates if a null value for a component should be converted to zero before aggregation occurs. This will be done only if a map unit has at least one component where this value is not null.

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

For an attribute of a soil horizon, a depth qualification must be specified. In most cases it is probably most appropriate to specify a fixed depth range, either in centimeters or inches. The Bottom Depth must be greater than the Top Depth, and the Top Depth can be greater than zero. The choice of "inches" or "centimeters" only applies to the depth of soil to be evaluated. It has no influence on the units of measure the data are presented in.

When "Surface Layer" is specified as the depth qualifier, only the surface layer or horizon is considered when deriving a value for a component, but keep in mind that the thickness of the surface layer varies from component to component.

When "All Layers" is specified as the depth qualifier, all layers recorded for a component are considered when deriving the value for that component.

Whenever more than one layer or horizon is considered when deriving a value for a component, and the attribute being aggregated is a numeric attribute, a weighted average value is returned, where the weighting factor is the layer or horizon thickness.

Top Depth: 0

Bottom Depth: 100

Units of Measure: Inches

EXHIBIT E

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

AOI Inventory

This folder contains a collection of tabular reports that present a variety of soil information. Included are various map unit description reports, special soil interpretation reports, and data summary reports.

Component Text Descriptions (Lego Property)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The component descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the associated soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas (components) for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Component Nontechnical Descriptions" report gives a brief, general description of the soil components that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

EXHIBIT E

Report—Component Text Descriptions (Lego Property)

Santa Cruz County, California

Map Unit: 105—Baywood loamy sand, 2 to 15 percent slopes

Description Category: GENSOIL

Baywood: 85 percent

The Baywood component makes up 85 percent of the map unit. Slopes are 2 to 15 percent. This component is on dunes. The parent material consists of eolian deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R014XD059CA Sandy ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria.

Description Category: GENSOIL

Elder: 4 percent

Generated brief soil descriptions are created for major soil components. The Elder soil is a minor component.

Description Category: GENSOIL

Elkhorn: 4 percent

Generated brief soil descriptions are created for major soil components. The Elkhorn soil is a minor component.

Description Category: GENSOIL

Tierra: 3 percent

Generated brief soil descriptions are created for major soil components. The Tierra soil is a minor component.

Description Category: GENSOIL

Baywood: 3 percent

Generated brief soil descriptions are created for major soil components. The Baywood soil is a minor component.

Description Category: GENSOIL

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Watsonville: 1 percent

Generated brief soil descriptions are created for major soil components. The Watsonville soil is a minor component.

Map Unit: 106—Baywood loamy sand, 15 to 30 percent slopes

Description Category: GENSOIL

Baywood: 85 percent

The Baywood component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on dunes. The parent material consists of eolian deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R014XD059CA Sandy ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Description Category: GENSOIL

Elkhorn: 2 percent

Generated brief soil descriptions are created for major soil components. The Elkhorn soil is a minor component.

Description Category: GENSOIL

Elder: 2 percent

Generated brief soil descriptions are created for major soil components. The Elder soil is a minor component.

Description Category: GENSOIL

Tierra: 1 percent

Generated brief soil descriptions are created for major soil components. The Tierra soil is a minor component.

Description Category: GENSOIL

Baywood: 1 percent

Generated brief soil descriptions are created for major soil components. The Baywood soil is a minor component.

Description Category: GENSOIL

Watsonville: 1 percent

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Generated brief soil descriptions are created for major soil components. The Watsonville soil is a minor component.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Land Capability Classification (Lego Property)

The land capability classification of map units in the survey area is shown in this table. This classification shows, in a general way, the suitability of soils for most kinds of field crops (United States Department of Agriculture, Soil Conservation Service, 1961). Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class 1 soils have slight limitations that restrict their use.
- Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
- Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
- Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

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- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

Report—Land Capability Classification (Lego Property)

Land Capability Classification–Santa Cruz County, California				
Map unit symbol and name	Pct. of map unit	Component name	Land Capability Subclass	
			Nonirrigated	Irrigated
105—Baywood loamy sand, 2 to 15 percent slopes				
	85	Baywood	4e	3e
	4	Elder	—	—
	4	Elkhorn	—	—
	3	Tierra	—	—
	3	Baywood	—	—
	1	Watsonville	—	—
106—Baywood loamy sand, 15 to 30 percent slopes				
	85	Baywood	4e	4e
	2	Elkhorn	—	—
	2	Elder	—	—
	1	Tierra	—	—
	1	Baywood	—	—
	1	Watsonville	—	—

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EXHIBIT 4

EXHIBIT B

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EXHIBIT E

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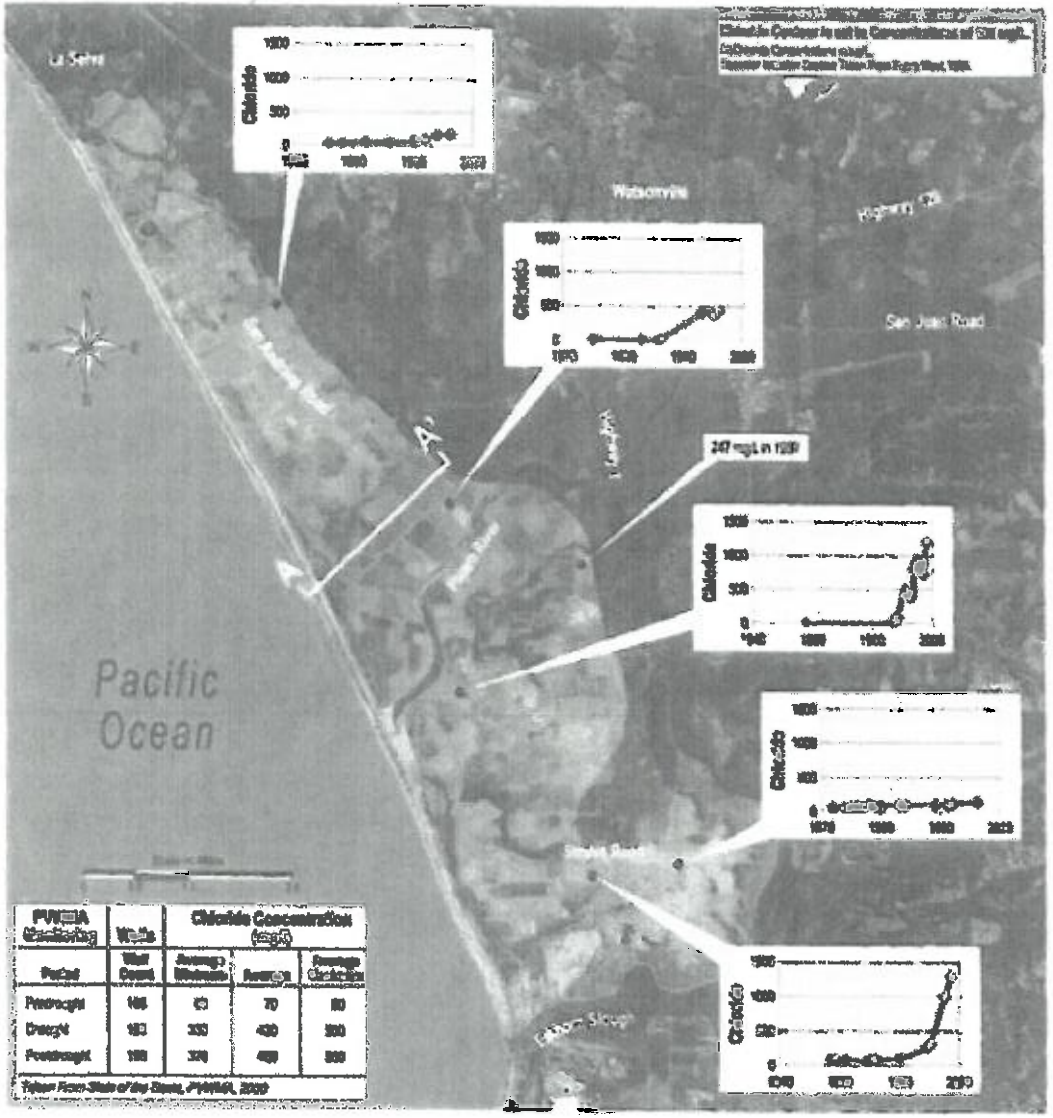
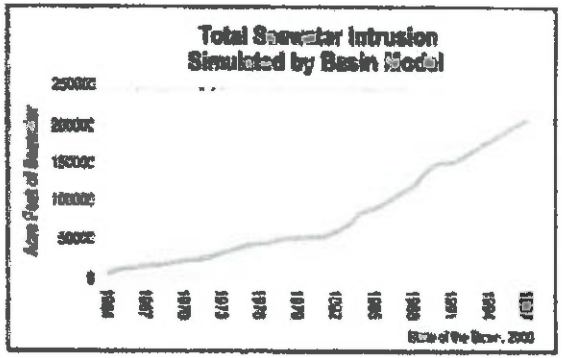
APN [illegible]
620 Sea View Terrace



PVWMA Monitoring Period	Water Year	Chloride Concentration (mg/L)		
		Average Minimum	Average	Average Maximum
Pre-drought	1985	45	70	80
Drought	1993	355	430	500
Post-drought	1998	340	480	600

Taken From State of the Basin, PVWMA, 2000

Summary of Seawater Intrusion Within PVWMA Boundaries



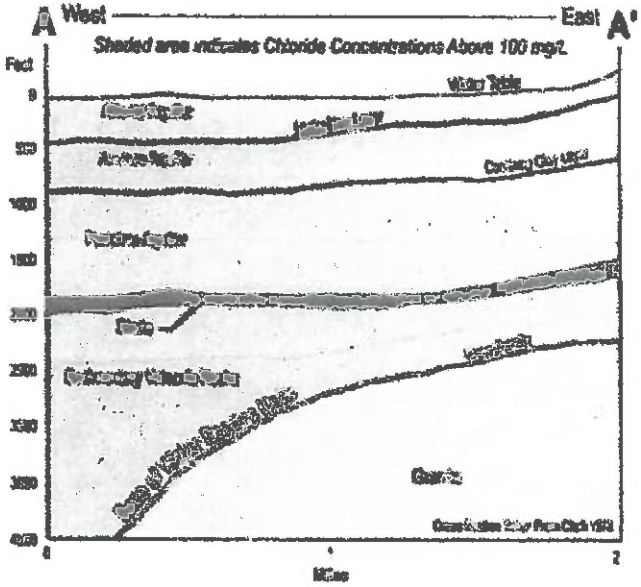


Figure 1: Location of Area Impacted by Seawater Intrusion

EXHIBIT 5

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