

INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

**TRACT 8053 RESIDENTIAL SUBDIVISION PROJECT**

# **2014 UPDATED ADDENDA**

Prepared For:

**COUNTY OF ALAMEDA**



COMMUNITY DEVELOPMENT AGENCY  
224 WEST WINTON AVENUE  
HAYWARD, CA 94544

Prepared By:

  
IPA PLANNING SOLUTIONS, INC.

August 2014

# 2014 UPDATED ADDENDA

## FURTHER RESPONSE TO COMMENTS ON AND MODIFICATIONS TO PROPOSED PROCTOR COURT PROJECT:

- Memorandum to Staff, dated August 8, 2014
- Plan Set for Adjusted, 18 Lot Proctor Court Project
- Geotechnical Feasibility Evaluation by ENGEQ,  
dated November 19, 2013
- Correspondence from the Chief of the Regulatory  
Division of the U.S. Army Corps of Engineers, dated  
December 12, 2013
- Alameda County Fire Department Conditions of  
Approval, dated July 30, 2014
- Letter from TJKM, Traffic Consultant in response to  
comments at July 8 MAC meeting and to address  
Traffic impact adjustments for the 18 Lot Proposal,  
dated August 7, 2014

**INITIAL STUDY & MITIGATED NEGATIVE DECLARATION**  
**TRACT 8053 RESIDENTIAL SUBDIVISION PROJECT**

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- **Letter from Johnson Marigot Consulting, LLC  
containing a report on the seasonal wetland area of  
the Proctor Road Property, dated August 8, 2014**

**INITIAL STUDY & MITIGATED NEGATIVE DECLARATION**  
**TRACT 8053 RESIDENTIAL SUBDIVISION PROJECT**

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- **Letter from TJKM, Traffic Consultant in response to adjustments for the 18 Lot Proposal, dated August 7, 2014**
- **Letter from Johnson Marigot Consulting, LLC containing a report on the seasonal wetland area of the Proctor Road Property, dated August 8, 2014**

MEMORANDUM: Summary of Adjustments to the Proctor Court Subdivision Project to Allow 18 Lots and an Evaluation of the Continued Standing of the INITIAL STUDY & MITIGATED NEGATIVE DECLARATION Prepared for the Previous 19 Lot Plan, As Well As Further Response to Public Comments, Technical Reports and Regulatory Requirements Subsequent to the July 8, 2013 MAC meeting.

TO: Damien Curry and Philip Sawrey-Kubicek, Alameda County Planning Department

FROM: Jay Claiborne, Consultant

DATE: August 8, 2014

RE: Updated Project Information and Description

On January 29, 2013, A Public Notice was posted and sent to all neighbors near the project site in Castro Valley informing them and the general public of the intention of the County to adopt the Initial Study and Mitigated Negative Declaration on a proposed 19 Lot Subdivision for Tract 8053 subdivision PLN 2010-00100.

This memorandum provides a summary and discussion of the issues raised prior to, during, and following the Castro Valley MAC Hearings on February 25, 2013 and July 8, 2013, in anticipation of a MAC Hearing to be scheduled for discussion of further adjustments to the Tract 8053 Proctor Court Residential Subdivision Project. These adjustments include the removal of a lot on Proctor Road to further reduce the number of planned lots in the subdivision to 18, as well as several other modifications intended to reduce the level of environmental impacts as well as reduce the impacts to the surrounding neighborhoods.

The memorandum describes the details of these adjustments and revisions. The accompanying 2014 Update to the review Addendum includes technical studies and reports for the proposed refinements. The subdivision plan adjustments for the 18 Lot Subdivision are responsive to additional letters of concern, comments made at the MAC Public Hearings, and include modifications regarding tree removal, lot slopes, house design, and lot slope and configuration. The grading configurations for all 18 lots will provide flat padded footprints for homes that allow conventional structural design.

The modifications to the project do not increase any identified potential environmental impacts. The Initial Study and Mitigated Negative Declaration for the 19 Lot Subdivision will remain applicable to the 18 Lot proposal. The adjusted 18 Lot development plan includes a request for a rezoning from R-1-B-E-CSU-RV to a PD (Planned Development) District allowing the following modifications to the zoning standards: (1) side yard setbacks are to be measured as the distance between homes rather than as the distance from property lines; and (2) allow a height limit of 28.5 feet rather than 25 feet to permit steeper pitched roofs, which are more aesthetically pleasing.

## POTENTIALLY SIGNIFICANT IMPACTS REQUIRING MITIGATION

The revised 18 Lot project would not result in any additional potentially significant impacts requiring mitigation as identified by the Initial Study for the 19 Lot proposal. All identified mitigation measures to reduce potential environmental impacts to a less than significant level remain in place as discussed below.

### 1. Aesthetics (Street and Site Lighting, Landscape, and Home Design)

As with the previous 19 lot proposal, the street and site lighting for the proposed project will be sensitive to neighboring land uses and will minimize energy use. The lighting plan for the 18 lot proposal will be professionally designed in conformance with the County's lighting guidelines and criteria for energy usage to ensure and enhance safety, security, functionality, privacy and conservation. The removal of the one lot on Proctor Road will further reduce potential impacts to the public street area. Effects from street and site lighting will be limited to the private road, further reducing all identified, less than significant aesthetic impacts.

Concerns for the existing view shed and general view obstruction for neighboring residences were raised at earlier public MAC meetings and in a neighbor's letter and signed petition, which is on record for development of the site. The Castro Valley General Plan does not designate any scenic vistas related to the Project Site. The Project Site is located on the south side of Proctor and gently slopes south and southeast. The predominant views from surrounding homes are toward the south and southwest. Two existing residences on the north side of Proctor have partial views to the south and southwest from their second story. These two homes are sited on higher elevations than that of the project site. Partial views to the southwest from residences on Sorani Court will either be enhanced by removal of some vegetation on the project site or will not be obstructed by the new homes mainly resulting from the lower elevations and the farther distances of the proposed new homes.

As illustrated in the plan set for the revised 18 Lot subdivision proposal (See the page titled: Cross Section View Diagrams and Analysis), future homes on the project site would either not break the height of the existing ridgeline or would be blocked from offsite views due to existing vegetation. In either case, the diagrams show that future homes on the project site would not affect views to and through the site from off site locations mainly due to fact that most homes in the new subdivision will be constructed at a lower elevation in comparison with the homes in the surrounding area. Views for adjacent residents remain relatively unaffected by the 18 Lot.

The viewshed analysis included in the plan set demonstrates the extent to which the modified site grading and flat building pads increase the protection of views across the subdivision, including conformance with the policy intent of the Castro Valley General Plan (CVGP). As discussed in section 8 below, the proposed 18 Lot subdivision will require rezoning to a PD district allowing R-1 uses.

The level building pads in the modified, 18 Lot proposal allow standard, conventional foundation and structural systems for each lot which will result in shorter construction duration. As in the earlier 19 Lot proposal, the homes in the subdivision will be architecturally designed to conform with the aesthetic character and scale of the surrounding homes and neighborhoods.

The design and construction of the 18 new homes will be in conformance with the Castro Valley General Plan Design Guidelines and with County building codes, which address and minimize visual impacts to the environment. For the proposed site, certain proposed design criteria are considered critical, including:

- Grading Plan for alteration of existing natural grades to be in accordance with code, and to provide economically viable building pads while preserving the overall topographic canyon shape of the site; and
- Seasonal wetland area preservation at the south end of the subdivision maintained to ensure that the natural drainage areas and associated wildlife are preserved within the common boundaries of Parcel B.

A professionally designed landscape plan for the 18 Lot subdivision will coordinate important elements of fire safety, conservations, aesthetics and privacy. A local, licensed, professional landscape architect and fire prevention specialist has been contracted to ensure that the project will create an attractive, viable and safe home environment for the site and the surrounding neighborhoods. The grading and siting modifications for the 18 Lot proposal increase opportunities for protecting significantly important existing plant material and trees.

## 2. Air Quality (Construction Period Impacts, Including Safety, Security, and Nuisance)

Air Quality issues for the site result primarily from the construction phase of project. The following practices submitted for the 19 Lot proposal remain unchanged for the 18 Lot project. In addition to all required measures to control traffic, construction noise, dust, hours of operations, soil erosion, and water pollution, other measures such as rodent and animal control will be exercised to minimize construction phase impacts to the adjacent neighborhoods.

Extra measures will also be taken to address traffic control and security issues for project sites, including neighborhood crime prevention.

Coordinated project planning, construction and management mechanisms will be put in place to minimize total project construction time for the 18 lots proposed for the project site.

### 3. Biological Resources

As noted above, appropriate rodent and animal control will be exercised during the construction phase of the project. All identified mitigation measures for the 19 Lot proposal will apply to the reduced, 18 Lot project to reduce to less than significant potential impacts to the two identified special status plant species, to nesting birds and nesting bird habitat, and potential interference with migratory wildlife corridors.

### 4. Cultural Resources

As an undeveloped land area, any cultural resources are limited to archaeological and paleontological resources or to human remains. As for the 19 Lot proposal, the 18 Lot project will follow proper mitigation practices for such resources.

### 5. Geology and Soils (Slope and Soil Engineering Stability)

The issue of project site slope and soil stability has been raised, both at the February hearing and in a letter by one of the adjacent homeowners.

A Geotechnical investigation was conducted for the originally proposed 23 Lot subdivision. The Geotechnical Engineering firm, Henry Justiniano and Associates made the following conclusion: "Based on the results of our evaluations, we conclude that there are no geotechnical nor geologic considerations that would preclude the proposed development. Information from our review of the geological maps, published geotechnical reports, the existing topography, and our exploration program, indicates that the designed building locations would be within acceptably stable terrain, and that the site would be feasible for construction of the proposed residences, provided that the recommendation presented herein are incorporated into the design, and adhered to during the construction phases of the project." The reduction in the number of proposed lots from 23 to 18, as well as the increased lot size, should further reduce concern for site slope and soil stability

At the July 8, 2013 public MAC meeting, Mr. Justiniano, the Principal of the Geotechnical Engineering firm, supported the feasibility of the 19 Lot project proposal for geotechnical and geologic considerations. His assessment is on record in a letter summarizing the analysis for the 19 Lot subdivision, dated April 30, 2013. In addition to the geotechnical work completed by Mr. Justiniano, further evaluation has been conducted for the subdivision site by the firm ENGEO on behalf of Braddock and Logan, dated November 19, 2013, which concludes that site is suitable for the proposed 18 Lot development. The ENGEO report is included in the Updated Addendum.



The grading plan modifications for the 18 Lot proposal provide additional refinements that improve the site design for each of the homes. The basic concepts of the 19 Lot plan remain in place, but are modified to provide a flat footprint area for each home appropriate to allow conventional construction practices. In addition, lot lines are set at or near the top of each slope to make property edges more understandable to home owners for fencing and planting and to support more feasible access for landscape maintenance. The modified grading also improves view protection for properties adjacent to the subdivision, as discussed in the viewshed section below. Potential impacts to geology and soils remain mitigated by the grading plan to less than significant.

## 6. Hazards and Hazardous Materials

The site is located within an area designated as a very high hazard fire danger zone. The development plans now reference the former fire buffer zone on the 19 Lot plan set as a “hazardous vegetation and fuel management area” to comply with the language of the California Fire Code. The vegetation management areas are consistent with the revised lot design and do not extend into the adjacent lot on Proctor Road adjacent to Lot 1.

The revisions also include home design to fully comply with the Wildland-Urban Interface County Building Code (CBC) Standards under Chapter 7 A C.B.C, including use of fire retardant building materials and sprinkler systems. County standards are met for private road and emergency access and clearance, including provisions for and installation of signs along the Fire Lane No Parking side of the private roadway. The roadway width, as discussed below in Section 10, is designed with a minimum width of 28 feet, allowing on-street parking opposite the Fire Lane curb edge. Fire hydrants, as required, are located to provide a minimum clearance for access of 26 feet. A professionally prepared Vegetation and Fire Hazard Management Plan will be prepared and submitted to the County Fire Department for action. These measures are intended to significantly improve the existing fire safety conditions for the site area and prevent potential future fire hazards for the neighborhood. All revisions for the 18 Lot proposal are responsive to the Conditions of Approval noted in a letter from the by the County Fire Department, dated July 30, 2014, which is included in the Addendum.

## 7. Hydrology and Water Quality

As in the 19 Lot subdivision proposal, the 18 Lot proposal retains a water quality collection area, retitled Parcel B, which is located at the southeast end of the property. This area is subject to protection by the agencies for flood control and water conservation as reported in the attached documents from the U.S. Army Corps of Engineers. The wetland separates the proposed subdivision from a more elevated, adjacent neighborhood area, accessed by Joseph Drive, a public street. Unlike the 19 Lot proposal, the modified subdivision plan does not create a large water feature in this area for collecting runoff, but rather provides for the treatment of surface runoff from the private street and other impervious surface areas prior to its open passage into the absorption area. The treatment management approach is an

improvement that more effectively mitigates polluted runoff prior to its absorption by the preserved lower land area, Parcel B. The letter dated August 8, 2014 included in the Addendum, provides further clarification on how the seasonal wetland area will not be impacted or filled by the project and will continue to receive storm water from the surrounding watershed in the post development scenario.

#### 8. Conflicts with Land Use or Zoning

Similar to the previous 19 Lot subdivision plan, the current proposal would comply with the Castro Valley General Plan (CVGP). Reclassification to a Planned Development (PD) district allowing R-1 uses would be required for the project to be compliant with the Alameda County Zoning Ordinance. The intent of PD districts (17.18.010) in the Zoning Ordinance is to allow appropriate regulatory flexibility, in accordance with the policies of the General Plan, for development of more environmentally sensitive areas. The rezoning is necessary to allow the proposed building height and side yard setbacks. The Hillside Residential designation is used for steep slopes and/or in high fire hazard areas to ensure that adequate mitigations are identified for one family detached dwellings for lot sizes that can range from 5,000 to 10,000 square feet with overall densities of 4-8 du/acre. The project site currently is zoned as R-1-BE-CSU-RV Single Family Residential, with a 6500 net square foot minimum building site area.

As has been discussed in the section above on grading, the preferred property line locations are responsive to slope and grading conditions. In a number of cases, lot lines do not maintain County standards for side yards. However, in the proposed plan the physical separation between the identified building pads for the subdivision allow or exceed the County dimension established by the standard side yard requirement. Comparably, the height of the homes proposed for the proposed flat building pads is appropriate to the sloped conditions of the site, but exceed that allowed by the standard measurement practice. The building height as it impacts the surrounding neighborhoods and adjacent lots considering the general topography and planned regrading is consistent with General Plan policies. The PD R-1 rezoning allows the necessary regulatory flexibility for full consistency of the proposed 18 Lot plan with the CVGP.

Previously, when 23 lots were proposed for the 5.85 acre project site, there was concern that the subdivision would exceed the environmental constraints of the site and that the proposed average 8,050 square foot lot size would be significantly inconsistent with the average lot size for the surrounding neighborhoods. Those concerns, as well as issues of traffic and soils, were first addressed in the Initial Study (IS) and Mitigated Negative Declaration (MND) for the 23 Lot proposal and were discussed at the initial February 2013 MAC meeting. They have remained issues for study through the project revisions that have shaped the 19 Lot proposal, for which the number and size of the 19 lots are found to be less than significant. The current subdivision proposed for the site eliminates one more lot and allows an average lot size of 12,093 gross square feet (10,813 net), with the smallest lot being 7,421 gross square feet (6,515 net). Two of the 18 lots are slightly larger than 33,000 and 26,000 gross square feet. The current project clusters smaller lots on the flatter portions of the site, while the larger lots are within the more constrained portions of the site.

The original subdivision project initially planned for the site would have created 24 lots. At the above referenced hearing at the end of February 2013, the project submitted had been reduced to 23 lots, for a total maximum density of approximately 3.9 units per acre. The maximum density for the 19 Lot proposal is approximately 3.3 units per acre. The current 18 Lot proposal further reduces the density, to approximately 3.1 units per acre, which is slightly below the density range for the CVGP, which should not be a concern given the nature of the public comments. New homes planned for the 18 Lot subdivision are to be approximately 2,800 to 3,100 square feet. For comparison, the 19 Lot proposal assumed an average home size of approximately 2,800 square feet.

#### 9. Noise

As noted above in the discussion Air Quality, the potential for significant noise impacts from the project is largely related to the construction period. All mitigations required by the Initial Study for the 19 Lot project will be used by the 18 Lot project, keeping potential impacts to a less than significant level.

#### 10. Transportation and Traffic

The feasibility of creating the private street access for the proposed subdivision from Proctor Road has been studied and further refined by the transportation consultant and reviewed by County Staff. In the general setting of the Project Site and the surrounding neighborhoods, a private road has been determined to be the best option for lot access within the subdivision. A public street was considered during the conceptual design phase and it was determined not to be feasible or practicable due to a combination factors, including:

- hillside topography;
- space constraints at the entrance;
- conservation considerations for less grading;
- minimization of impervious surfaces;
- minimization of need for retaining walls; and
- preservation of the rural characteristics of the neighborhood.

All lots for the current 18 lot subdivision are to be accessed from the private roadway. One of the lots in the earlier 19 lot proposal was located at the northeast corner of the subdivision and was to be accessed by a driveway from Proctor Road, as are two separately owned, developed properties on either side of the proposed new intersection for the private road. As previously stated, the lot on Proctor Road has been eliminated from the proposed subdivision plan.

To help mitigate potential turn movement conflicts along Proctor Road, the proposed 18 Lot development will include the earlier concept to relocate the driveway curb cuts for the two existing homes and create new driveways farther from the Proctor Court intersection. A stop controlled intersection (Parcel A) for the new, private subdivision road with Proctor Road is proposed. As with

other residential street intersections, the stop signs will be located on the right-of-way of the private roadway that serves the 18 Lot subdivision.

In concurrence with the Alameda County Fire Department and Alameda County Public Works, the right-of-way for the new proposed private road is 33 feet, with a 28 foot roadway width and a 5 foot sidewalk along the interior side of the roadway. The private road will meet all the county requirements and standards for public safety and engineering design, as well as for emergency and large vehicle access, including fire.

The proposed 28 foot width for the private Proctor Court roadway is adequate to accommodate on-street parking in accordance with County Standards. In compliance with the Alameda County Fire Department criteria, all on-street parking will be located on the same side of the private roadway. A total of 18 on-street parking spaces along the interior edge of the roadway are designated for the proposed 18 homes. With the elimination of the one lot on Proctor Road, no on-street parking resulting from the 18 Lot subdivision is anticipated.

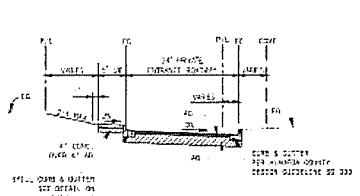
TJKM, the traffic consultant for the project, has compared potential impacts for the 19 Lot subdivision with the original 23 Lot subdivision and concluded that traffic impacts from the revised project to the neighborhood would be minimum to insignificant. Subsequent to the further refinements for the 18 Lot subdivision plan, they have updated their analysis for potential impacts. Roadway widths and parking for the 18 Lot subdivision remain in conformance with the County's standards for private roads. TKJM's updated report for the 18 Lot subdivision plan concludes that impacts from traffic will be reduced slightly and remain minimum to insignificant.

The TKJM Traffic impact Reassessment Letter, which addresses circulation and parking concerns raised at the July 8, 2103 MAC meeting, as well as their update report on the 18 Lot subdivision is included as part of the 2014 Updated Addenda.

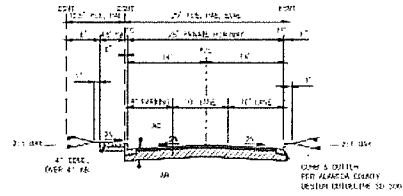
## 11. Utilities and Service Systems

All public utility providers, including PG&E, EBMUD, and the Castro Valley Sanitary District have provided letters for the 19 Lot proposal confirming that the proposed project site is within the boundary of their respective service areas and capacity. The 18 Lot proposal does not alter this confirmation and, if anything, slightly lowers the overall demand placed on the capacity of the existing utility network.

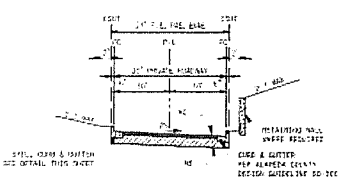




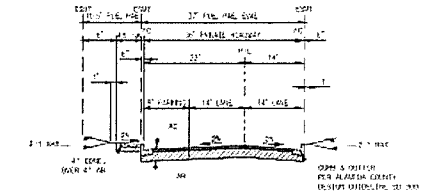
**24' PRIVATE ENTRANCE STREET SECTION**



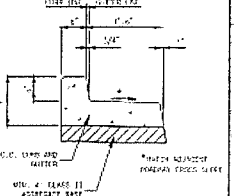
**28' PRIVATE STREET SECTION**



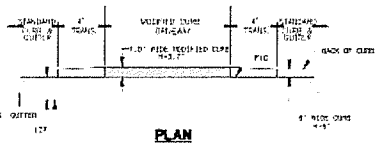
**20' PRIVATE STREET SECTION**



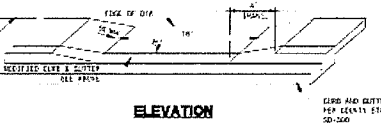
**36' PRIVATE STREET SECTION**



**SPILL CURB & GUTTER**

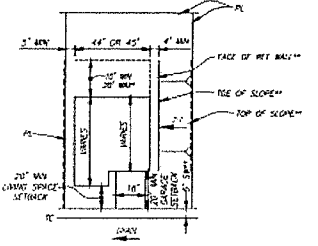


**PLAN**



**ELEVATION**

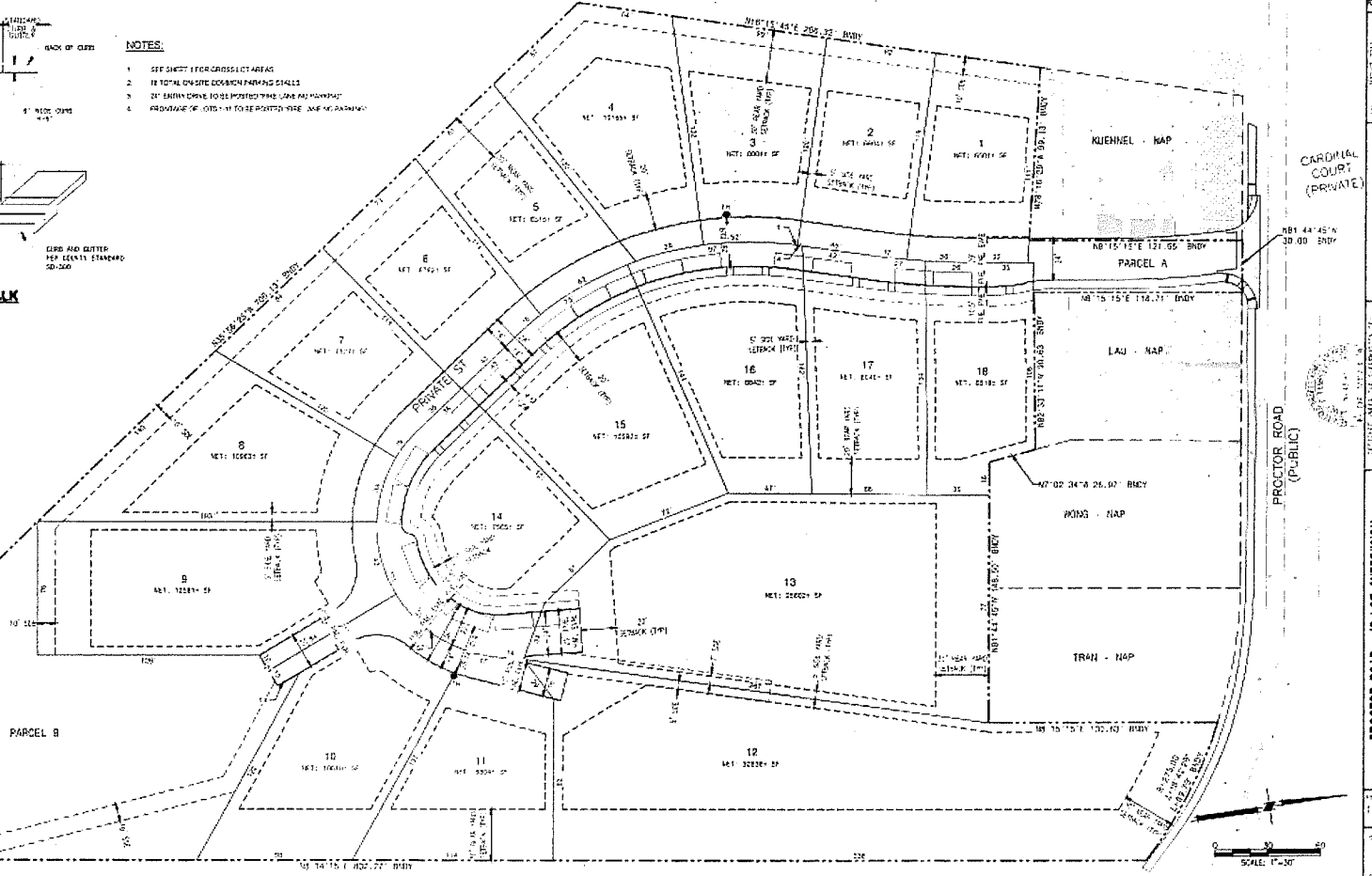
**DRIVEWAY CROSSING SIDEWALK**



**TYPICAL LOT LAYOUT**

- \* 24" COMPACT GRANITE CURBS
- \*\* 12" FOR LOTS 2, 6, 12 & 13
- \*\* 18" FOR LOTS 1, 4, 8, 10, 11, 14, 15, 16, 17, 18

- NOTES:**
1. SEE SHEET 11 FOR CROSS-SECTION AREAS
  2. IF TOTAL ON-SITE DOWNSTREAM PARKING SHALL
  3. 24" GRANITE CURB TO BE INSTALLED TO CURB AND SIDEWALK
  4. PROVISIONS OF 101-101 TO BE INSTALLED TO CURB AND SIDEWALK

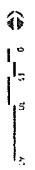
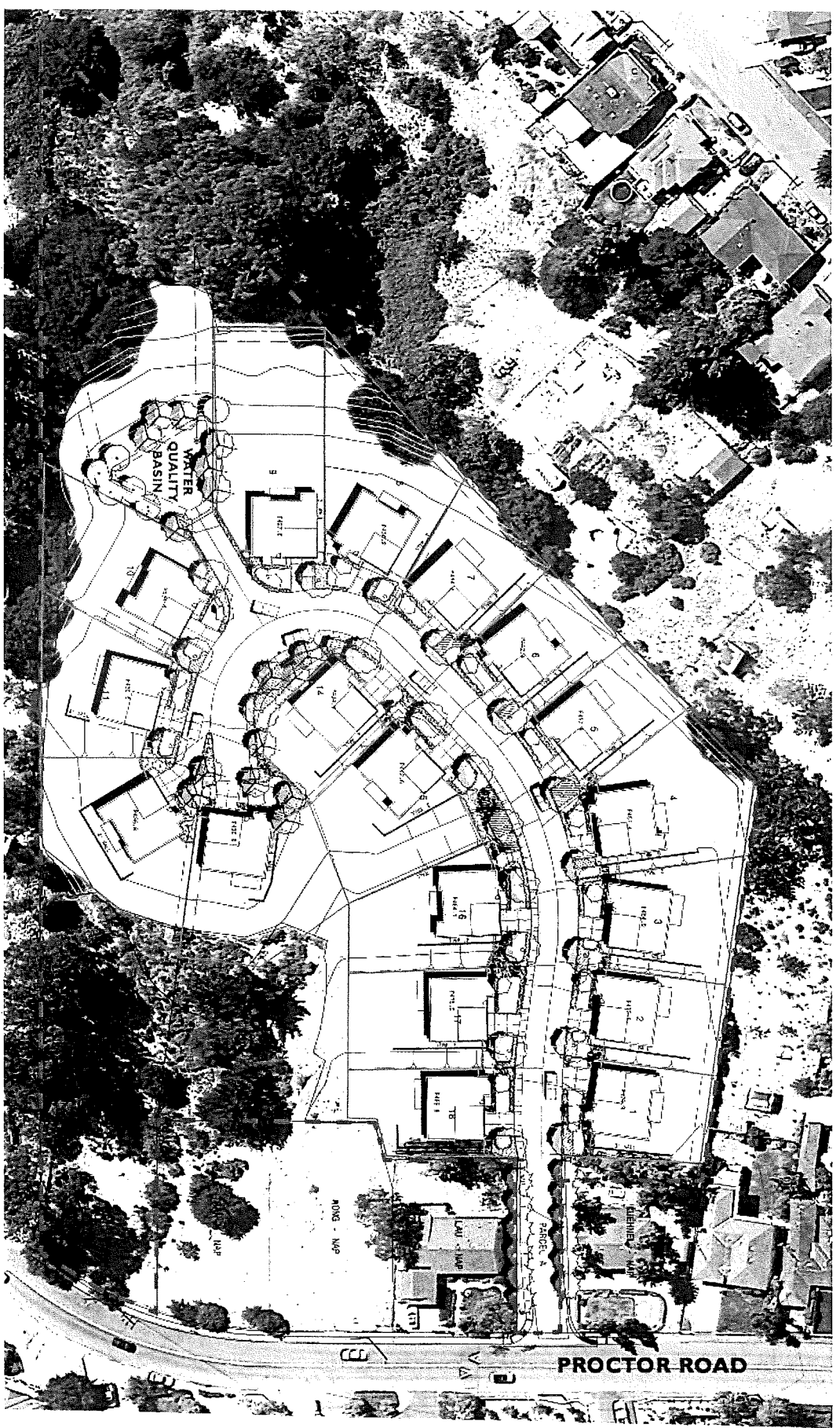


PROJECT NO.	18761-000
DATE	11/11/2020
SCALE	1" = 30'
PROJECT NAME	PROCTOR ROAD - 18 LOT SUBDIVISION
PROJECT ADDRESS	VICTORIA TRACT MAP NO. 1613
PROJECT TYPE	SITE PLAN AND DETAILS
PROJECT LOCATION	PROCTOR ROAD (PUBLIC)
PROJECT OWNER	KUHNEL - MAP
PROJECT ARCHITECT	LAU - MAP
PROJECT ENGINEER	PONG - MAP
PROJECT SURVEYOR	TRAH - MAP
PROJECT LANDSCAPE ARCHITECT	
PROJECT CIVIL ENGINEER	
PROJECT ELECTRICAL ENGINEER	
PROJECT MECHANICAL ENGINEER	
PROJECT PLUMBING ENGINEER	
PROJECT STRUCTURAL ENGINEER	
PROJECT TRAFFIC ENGINEER	
PROJECT ENVIRONMENTAL ENGINEER	
PROJECT GEOTECHNICAL ENGINEER	
PROJECT HISTORIC PRESERVATION	
PROJECT OTHER	



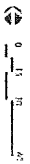
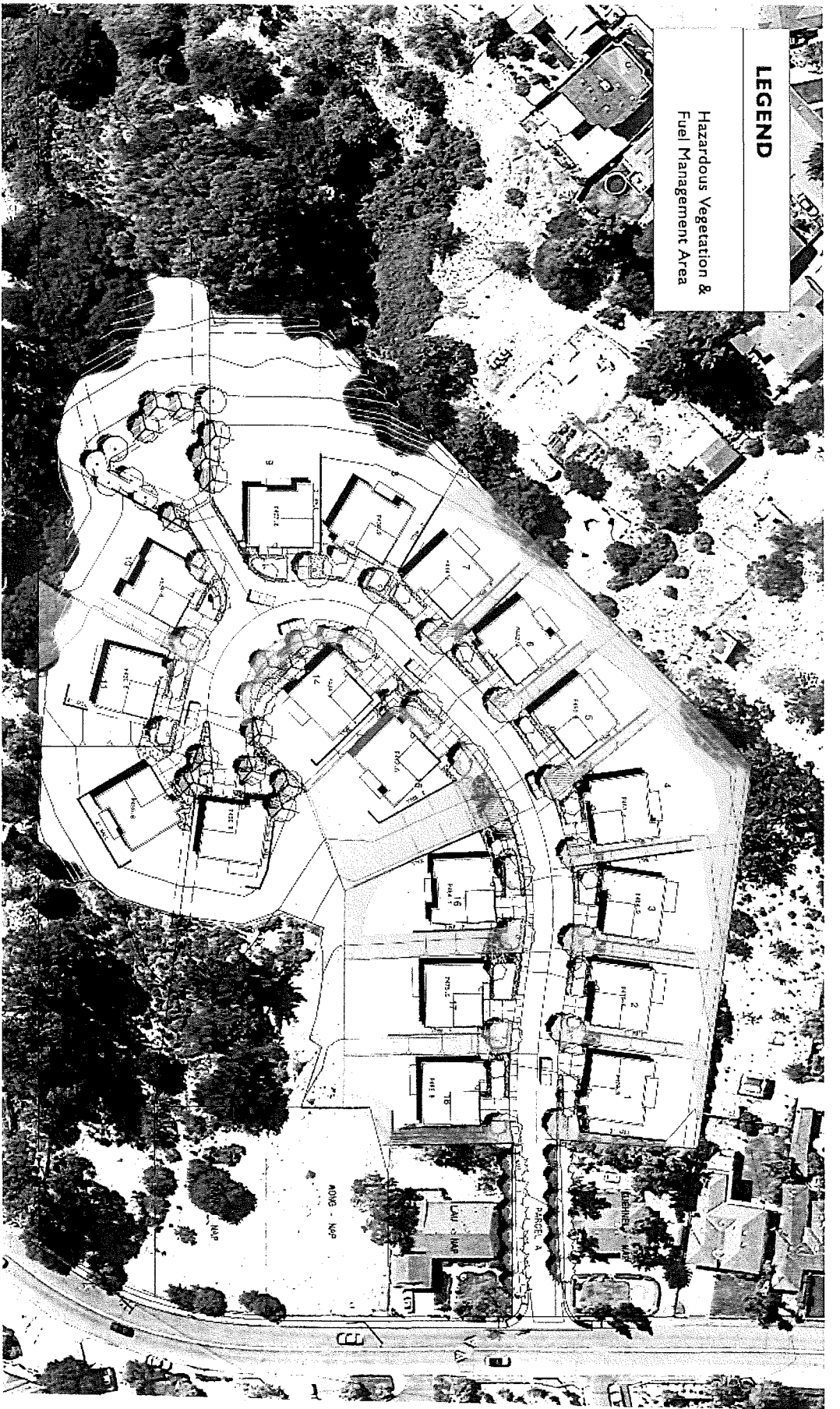






**LEGEND**

Hazardous Vegetation &  
Fuel Management Area

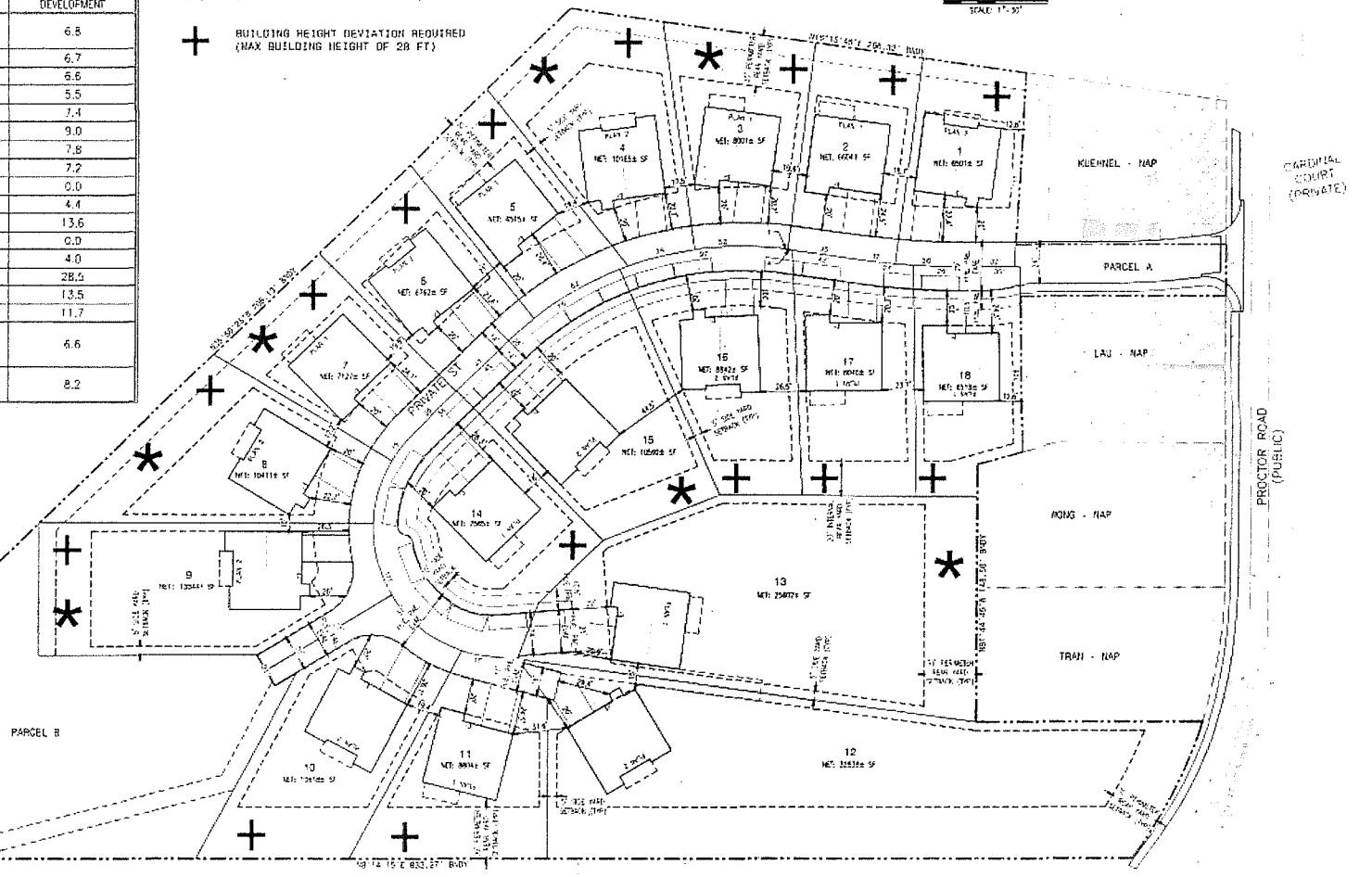
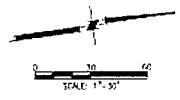


AGGREGATE SIDEYARD SETBACKS (HOUSE TO HOUSE)			
LOTS	CURRENT ZONING (FT)	PROPOSED PLANNED DEVELOPMENT (FT)	EXCESS SETBACK PROVIDED BY PLANNED DEVELOPMENT
1 (HOUSE TO BOUNDARY)	6	12.8	6.8
1-2	6+6=12	18.7	6.7
2-3	6+7=13	19.8	6.8
3-4	7+5=12	17.5	5.5
4-5	5+6=11	15.4	7.4
5-6	6+6=12	21.0	9.0
6-7	6+6=12	19.8	7.8
7-8	5+5=10	17.2	7.2
8-9	5+5=10	10.0	0.0
10-11	7+8=15	19.4	4.4
11-12	8+10=18	31.6	13.6
12-13	10+5=15	15.0	0.0
14-15	5+9=14	18.0	4.0
15-16	9+7=16	44.5	28.5
16-17	7+6=13	26.5	13.5
17-18	6+6=12	23.7	11.7
18 (HOUSE TO BOUNDARY)	6	12.6	6.6
AVERAGE SETBACK	12.2	20.4	8.2

**LEGEND**

\* SIDE YARD SETBACK DEVIATION REQUIRED  
(5 FT MIN SIDE YARD SETBACK)

+ BUILDING HEIGHT DEVIATION REQUIRED  
(MAX BUILDING HEIGHT OF 28 FT)



SHEET 12 OF 30

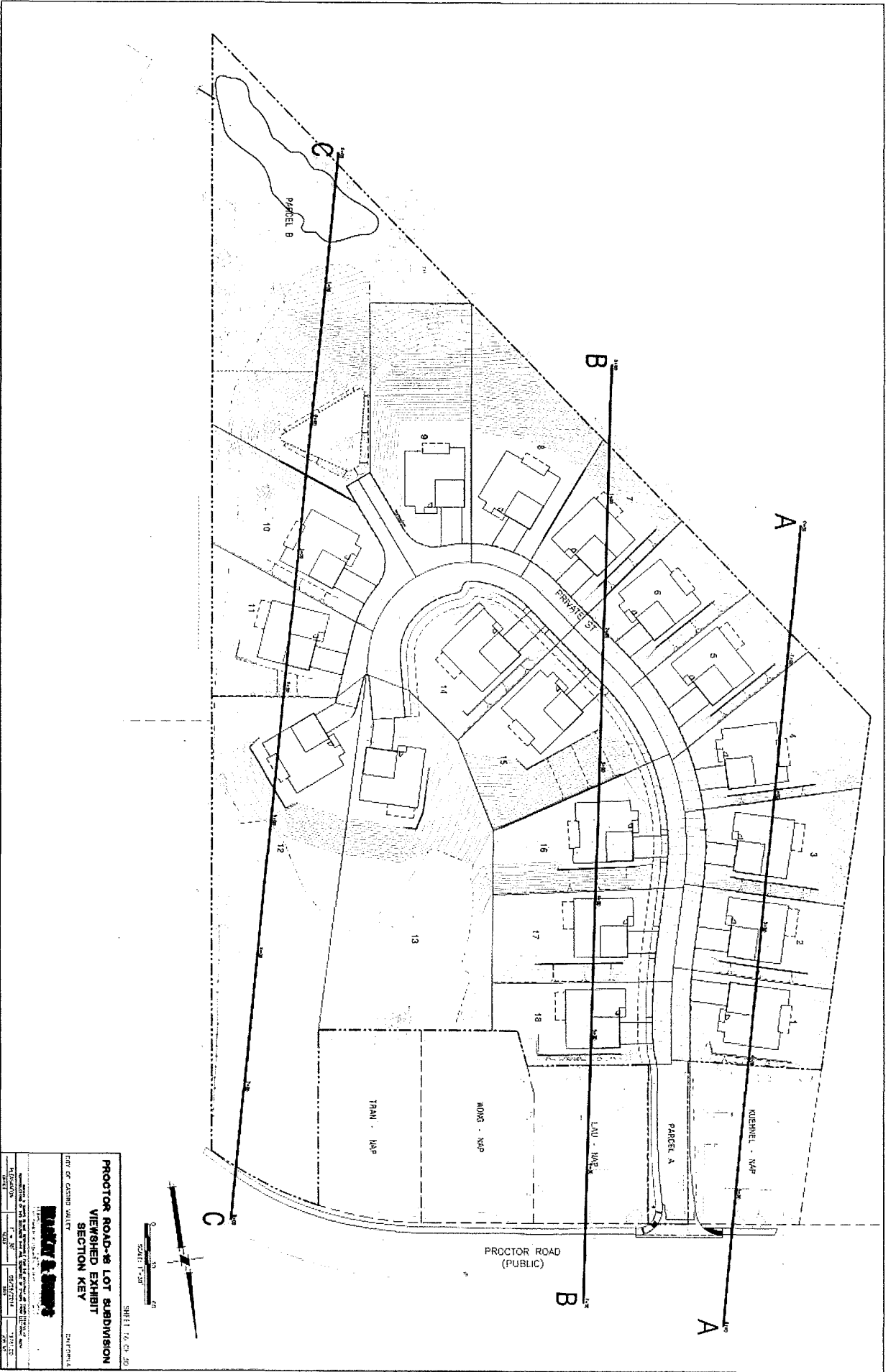
**PROCTOR ROAD-18 LOT SUBDIVISION**  
**SITE DEVELOPMENT PLAN /**  
**PLANNED DEVELOPMENT EXHIBIT**

CASTRO VALLEY, CALIFORNIA

**BLANKIN & SAMP**

REGISTERED PROFESSIONAL ARCHITECTS  
 10000 BAYVIEW AVENUE, SUITE 100, CASTRO VALLEY, CA 94546  
 TEL: (925) 938-8800 FAX: (925) 938-8801

PRELIMINARY	DATE: 01/11/2014	BY: [Signature]
REVISED	DATE: 02/27/2014	BY: [Signature]
REVISED	DATE: 03/11/2014	BY: [Signature]



**PROCTOR ROAD-18 LOT SUBDIVISION**  
**VIEWED EXHIBIT**  
**SECTION KEY**

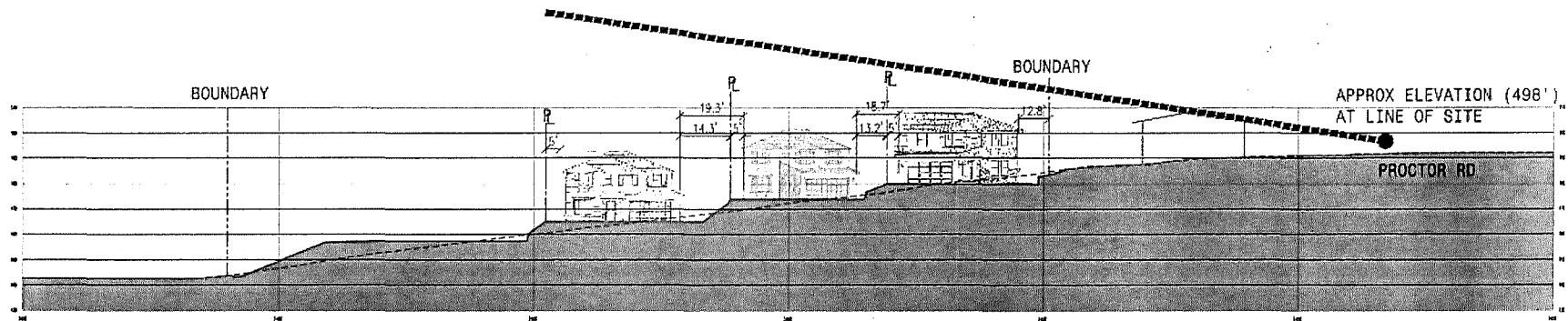
SHEET 12 OF 20  
 END OF CADING VALLEY

**PROCTOR & COMPANY**  
 1000 W. 10th St., Suite 100, Proctor, VT 05761  
 TEL: 802-895-1234 FAX: 802-895-1234

APPROVED	DATE	APPROVED	DATE

**LEGEND**

- EXISTING GRADE
- ██████████ PROPOSED GRADE
- LINE OF SIGHT AT ELEVATION 5.0' ABOVE EXISTING GROUND ON PROCTOR ROAD



**SECTION A-A**  
**SCALE: 1" = 20' - 0"**

SHEET 17 OF 30

**PROCTOR ROAD-16 LOT SUBDIVISION**  
**VIEWSHED EXHIBIT**  
**SECTIONS**

CITY OF CASTRO VALLEY CALIFORNIA

**HANKIN & SHREPS**

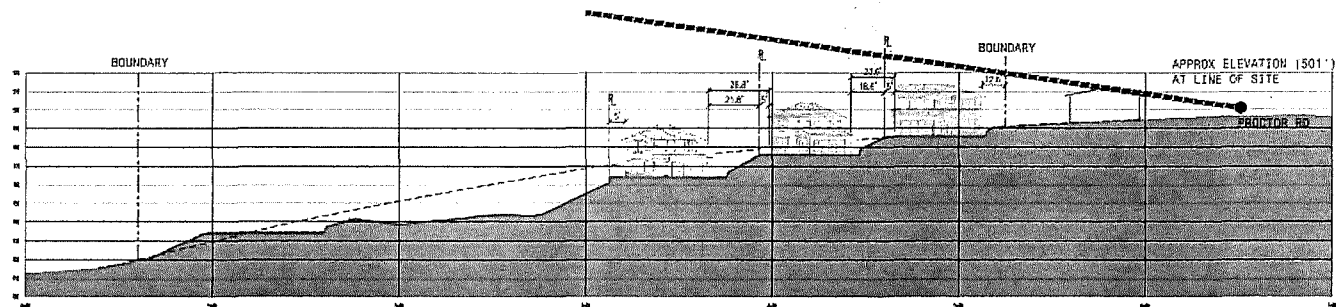
DESIGNATION: 17-001 02/17/2014 11:00 AM

**LEGEND**

----- EXISTING GRADE

█ PROPOSED GRADE

-----● LINE OF SIGHT AT ELEVATION 5.0' ABOVE EXISTING GROUND ON PROCTOR ROAD



**SECTION B-B**  
**SCALE: 1" = 30' - 0"**

SHEET 1A OF 20

**PROCTOR ROAD-18 LOT SUBDIVISION**  
**VIEWSHED EXHIBIT**  
**SECTIONS**

CITY OF CASTRO VALLEY CALIFORNIA

**BRADY & SONS**

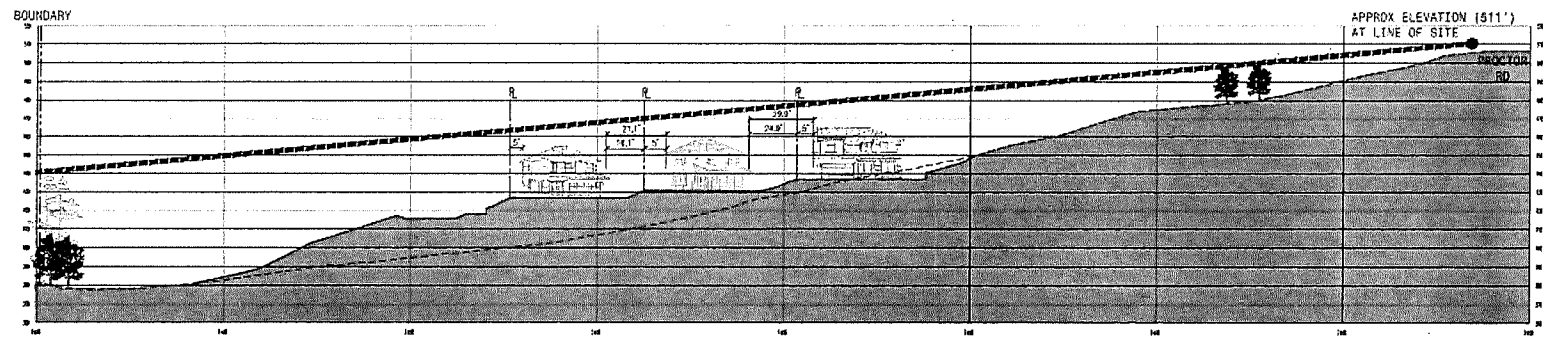
PRELIMINARY	1" = 30'	02/05/2014	1111-10
SHEET	1A	02	2014

**LEGEND**

----- EXISTING GRADE

██████████ PROPOSED GRADE

-----● LINE OF SIGHT AT ELEVATION 5.0' ABOVE EXISTING GROUND ON PROCTOR ROAD



SECTION C-C  
SCALE: 1" = 30' - 0"

SHEET 10 OF 30

**PROCTOR ROAD-16 LOT SUBDIVISION  
VIEWSHED EXHIBIT  
SECTIONS**

CITY OF CACTO VALLEY      CALIFORNIA

**HARKIN & SHOPS**

REGISTERED PROFESSIONAL ENGINEER  
No. 10000      State of California

REGISTRATION STATE	1" = 30'	28/01/2014	7/11/10
DATE	SCALE	JOB	JOB NO.





Project No.  
**10670.000.000**

November 19, 2013

Mr. Andy Bye  
Braddock and Logan Services, Inc.  
4155 Blackhawk Plaza Circle, Suite 201  
Danville, CA 94506

Subject: Tran Property  
Castro Valley, California

## **GEOTECHNICAL FEASIBILITY EVALUATION**

Dear Mr. Bye:

As requested and authorized by you, ENGEO has completed a geotechnical feasibility evaluation of the Tran property in Castro Valley, California. The purpose of this study is to describe the site conditions and development constraints from a geotechnical perspective.

### **SCOPE OF WORK**

Our scope of work for this feasibility evaluation included:

- A review of published geologic maps and reports
- A review of preliminary development plans
- Examination of aerial images acquired between 1993 and 2012
- A visual site reconnaissance

### **SITE DESCRIPTION**

The site is currently vacant and covered with a growth of grasses and brush. Site topography consists of an elevated terrace sloping south from Proctor Road, bounded on the east by a drainage swale as shown on Figure 1. Elevations range from about 500 feet along Proctor Road to a low point at about 380 feet at the south tip of the property. There are two existing residences at Proctor Road that will remain. The property is bounded on the east by an existing residence off Proctor Road with a four-to five foot high concrete retaining wall along the property line. Other existing residential lots border the project on the southeast and west sides.

### **PROPOSED PROJECT**

The Tentative Map, dated April 2013 depicts 19 single-family lots accessed via a road from Proctor Road. A detention/water quality basin is proposed at the south tip of the project. The proposed improvements will generally be constructed by making cuts on the eastern terrace area and by placing fills in the adjacent swale.

## **REGIONAL GEOLOGY AND SEISMICITY**

Regional mapping by Graymer (1994) identifies the site bedrock as Cretaceous-age marine sediments of the Panoche Formation as shown on Figure 2. Bedding strikes northwest and dips steeply to the southwest. The site is not located within an Alquist-Priolo Earthquake fault zone. The nearest active faults are the Hayward Fault located about 1.8 miles to the southwest, the Calaveras fault located about 6.8 miles to the northeast.

Regional landslide mapping by Nilsen (1975) did not identify landslide deposits on the property. The seismic hazard map for the Hayward Quadrangle does not identify liquefaction or seismic slope stability hazards in the near site vicinity.

It should be expected that the site will experience strong seismic ground shaking. The Working Group on California Earthquake Probabilities (WGEP) (2007) estimates the 30-year probability of a M6.7 or greater earthquake occurring on the known active fault systems in the Bay Area to be approximately 63 percent.

## **PREVIOUS EXPLORATION**

A previous geotechnical report by Henry Justiniano and Associates (2010) (HJA) included drilling on one boring and excavation of ten test pits across the site the subsurface explorations typically encountered low plasticity clay soils overlying interbedded siltstone and sandstone bedrock. Bedding was typically found to be striking northwest and dipping 30 to 500 degrees southwest, consistent with regional mapping. Locally, layers interpreted to be possible bedding were noted dipping at low inclinations. Soils on the terrace area were typically found to be a few feet thick, while the soils in the swale area locally exceeded ten feet in thickness.

Laboratory testing on site soil and bedrock included measurement of grain size and plasticity index of the surficial soil. Soil plasticity ranged from 12 to 22, which would be considered to be of low to moderate plasticity.

## **GEOTECHNICAL SITE CONDITIONS.**

We made a visual site reconnaissance in October 2013. The site appears to be generally stable, with no visible evidence of landslides along the sloping western perimeter and in the swale area.

We noted evidence of minor filling with soil and concrete debris on the site at the head of the swale near Proctor Road. The adjacent property owner at the east side of the site has apparently been depositing fill along the west side of his property for a number of years. The retaining wall along the common property line (east side of the project) supports a slope that is inclined steeper than 2:1 locally as high as about 20 feet. There is evidence that the neighbor has continued to deposit undocumented fills on the slope and some fresh-appearing debris from the fill has accumulated on the subject property. The retaining wall is cracked and tilted down slope. Based on the visible condition of the fill, it appears to be marginally stable and could be subject to slope failure.

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on our review of published maps, aerial images and on our visual site reconnaissance, it appears that it will be feasible to develop the site for residential construction. Most of the site appears to be underlain by stable and competent siltstone and sandstone bedrock at a relatively shallow depth, with the exception of the swale area. The surficial soils derived from the bedrock appear to be of relatively low plasticity based on visual examination.

According to the HJA report, bedrock layering appears to generally dip at inclinations of 30 degrees or greater to the southwest. This orientation would not generally be considered to be adverse for slopes inclined at 2:1 or flatter; however, locally flatter bedding was inferred in some test pits. If adverse bedding conditions are found to exist, it may be necessary to locally buttress cut slopes.

For preliminary planning purposes, it can be assumed that cut and fill slopes can generally be inclined as steep as 2:1 for slopes up to 15 feet high. Slopes higher than 15 feet should be inclined at 3:1 or flatter.

The principal geotechnical consideration for this site will be the presence of the potentially unstable undocumented fill along the east property line. Depending on the proposed grading on the subject site, it may be necessary to support the existing wall and slope with a properly designed wall with a few feet of freeboard designed to provide debris catchment. Alternatively, the project could be designed with a debris catchment bench along the property line with a minimum width of 30 feet.

Our conclusions are based on a visual reconnaissance and should be confirmed with subsurface investigation and laboratory testing when more detailed project plans are available.

## **LIMITATIONS AND UNIFORMITY OF CONDITIONS**

This report presents preliminary geotechnical recommendations for planning purposes. If changes occur in the nature or design of the project, we should be allowed to review this report and provide additional recommendations, if any. It is the responsibility of the owner to transmit the information and recommendations of this report to the appropriate organizations or people involved in design of the project, including but not limited to developers, owners, buyers, architects, engineers, and designers. The conclusions and recommendations contained in this report are solely professional opinions.

The professional staff of ENGEO strives to perform its services in a proper and professional manner with reasonable care and competence but is not infallible. There are risks of earth movement and property damages inherent in land development. We are unable to eliminate all risks or provide insurance; therefore, we are unable to guarantee or warrant the results of our work.

This report is based upon field and other conditions discovered at the time of preparation of ENGEO's services. This document must not be subject to unauthorized reuse, that is, reuse without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time. Actual field or other conditions will necessitate clarifications, adjustments, modifications or other changes to ENGEO's documents. Therefore, ENGEO must be engaged to prepare the necessary clarifications, adjustments, modifications or other changes before construction activities commence or further activity proceeds. If ENGEO's scope of services does not include on-site construction observation, or if other persons or entities are retained to provide such services, ENGEO cannot be held responsible for any or all claims, including, but not limited to claims arising from or resulting from the performance of such services by other persons or entities, and any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

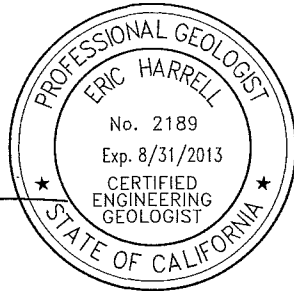
We are pleased to be of continued service to you on this project. If you have any questions, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated



Philip A. Stuecheli, CEG  
eh/pgc/cjn



Raymond P. Skinner CEG



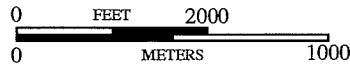
Attachments: List of Selected References  
Figures

---

## LIST OF SELECTED REFERENCES

1. California Geological Survey Staff, 2003, Seismic Hazard Zone Report for the Hayward 7.5-minute quadrangle, Alameda County, California: California Geological Survey, Seismic Hazard Zone Report 091, scale 1:24,000.
2. Dibblee, T.W. and Minch, J.A., 2005, Geologic map of the Hayward quadrangle, Contra Costa and Alameda Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-163, scale 1:24,000.
3. Graymer, R. W., Jones, D. L. and Brabb, E. E., 1994, Preliminary Geologic Map Emphasizing Bedrock Formations in Contra Costa County, California: OFR 94-622.
4. Google Earth © Historical Imagery, 1939-2012.
5. Henry Justiniano & Associates, 2010, Geotechnical Investigation, Proposed 24 Lot Subdivision Tentative Tract Map 8053, Dated November 4, 2010.
6. Nilsen, T.H., 1975, Preliminary photointerpretation maps of landslide and other surficial deposits of 56 - 7.5 minute quadrangles, Alameda, Contra Costa, and Santa Clara Counties, California: U.S. Geological Survey, Open-File Report OF-75-277, scale 1:24,000.
7. 2007 Working Group on California Earthquake Probabilities, 2008, The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2): U.S. Geological Survey Open-File Report 2007-1437 and California Geological Survey Special Report 203 [<http://pubs.usgs.gov/of/2007/143>]

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BASE MAP SOURCE: GOOGLE EARTH PRO



VICINITY MAP  
TRACT 8503  
CASTRO VALLEY, CALIFORNIA

PROJECT NO.: 10670.000.000

SCALE: AS SHOWN

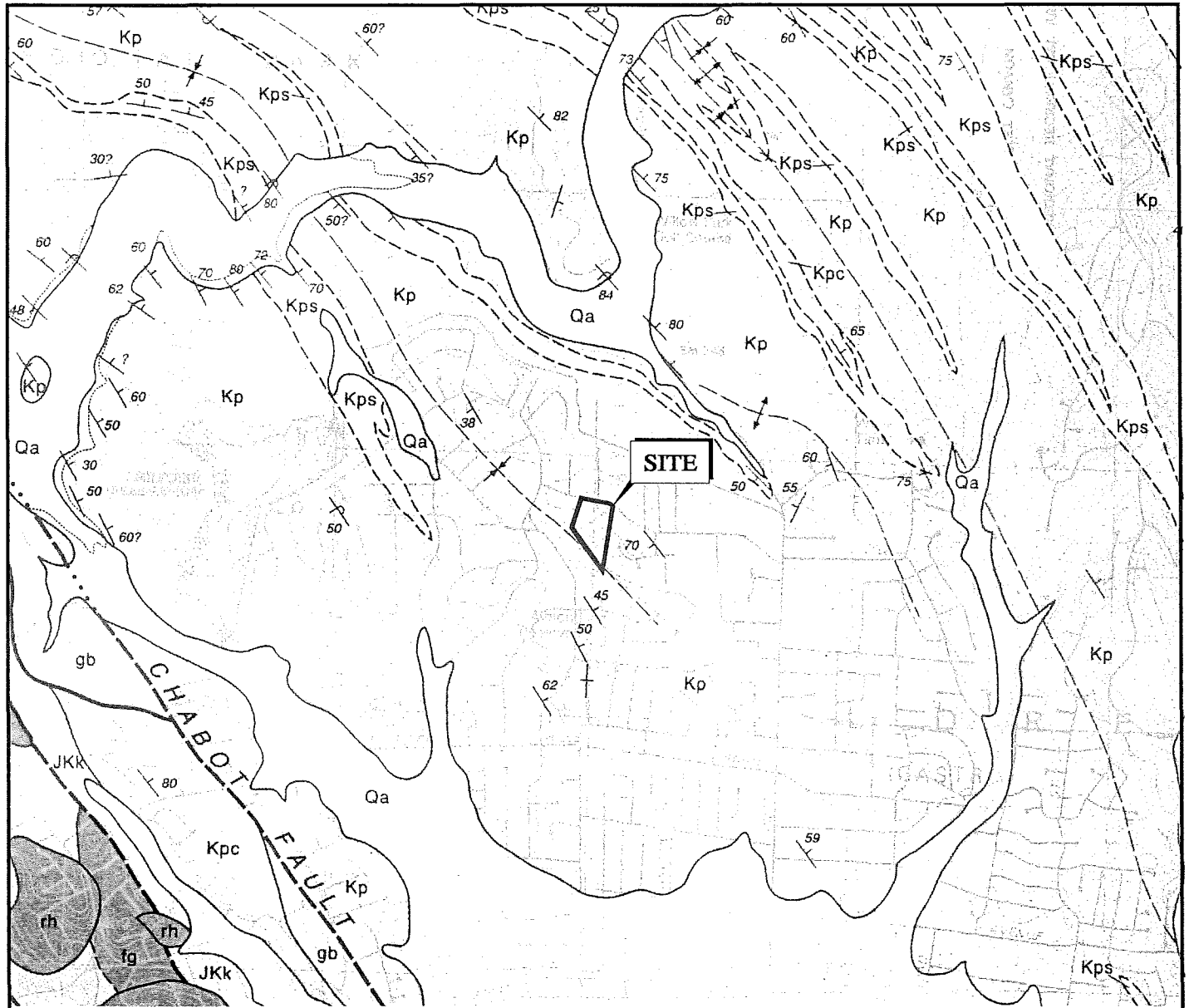
DRAWN BY: LL

CHECKED BY: AU

FIGURE NO.

1

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**EXPLANATION**

----- GEOLOGIC CONTACT-DASHED WHERE GRADATIONAL OR APPROXIMATELY LOCATED

---▲--- FAULT-DASHED WHERE INFERRED, DOTTED WHERE CONCEALED, QUERIED WHERE EXISTENCE IS DOUBTFUL. SAWTEETH ARE ON UPPER PLATE OF LOW ANGLE THRUST FAULT.

**AXIS OF FOLD**

←↕→ ANTICLINE      ←↕→ SYNCLINE

**STRIKE AND DIP OF STRATA**

↘ INCLINED      ⊥ VERTICAL      ⊘ OVERTURNED

- Qa SURFICIAL SEDIMENT
- rh LEONA RHYOLITE
- fg GREENSTONE
- gb GABBRO-DIABASE
- Kps SANDSTONE
- JKk KNOXVILLE FORMATION
- Kpc CONGLOMERATE
- kp CLAY SHALE



BASE MAP SOURCE: DIBBLEE, 2005



REGIONAL GEOLOGY  
TRACT 8503  
CASTRO VALLEY, CALIFORNIA

PROJECT NO.: 10670.000.000

SCALE: AS SHOWN

DRAWN BY: LL

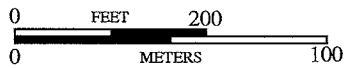
CHECKED BY: AU

FIGURE NO.

2

ORIGINAL FIGURE PRINTED IN COLOR

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BASE MAP SOURCE: GOOGLE EARTH PRO



SITE PLAN  
TRACT 8503  
CASTRO VALLEY, CALIFORNIA

PROJECT NO.: 10670.000.000

SCALE: AS SHOWN

DRAWN BY: LL

CHECKED BY: AU

FIGURE NO.

3





DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
1455 MARKET STREET, 16<sup>TH</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94103-1398

DEC 12 2013

REPLY TO  
ATTENTION OF

Regulatory Division

Subject: File No. 2012-00195

Mr. Hue Tran  
c/o Mr. Pete Balfour  
E Corp Consulting  
2525 Warren Drive  
Rocklin, California 95677

Dear Mr. Tran:

This correspondence is in reference to the June 27, 2012 submittal from E Corp Consulting, on your behalf, requesting a preliminary jurisdictional determination of the extent of waters of the United States occurring on the 5.85-acre property (APN 84D-1403-14-17) on the south side of Proctor Road, at or near 4651 Proctor Road, in the city of Castro Valley, Alameda County, California.

All proposed discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the United States; or below the high tide line in tidal waters of the United States; and within the lateral extent of wetlands adjacent to these waters, typically require Department of the Army authorization and the issuance of a permit under Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*). Waters of the United States generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries. Where a case-specific analysis determines the existence of a "significant nexus" effect with a traditional navigable water, waters of the United States may also include non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary; and certain ephemeral streams in the arid West.

The enclosed delineation map with Corps label titled "Proctor Road Property", dated 5/15/2013, depicts the extent and location of 0.11 acre of wetlands within the boundary area of the site that **may be** subject to U.S. Army Corps of Engineers' regulatory authority under Section 404 of the Clean Water Act. This preliminary jurisdictional determination is based on the current conditions of the site, as verified during a field investigation of May 8, 2013, and a review of other data included in your submittal. While this preliminary jurisdictional


determination was conducted pursuant to Regulatory Guidance Letter No. 08-02, *Jurisdictional Determinations*, it may be subject to future revision if new information or a change in field conditions becomes subsequently apparent. The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*, which has been signed and dated by you and this office.

You are advised that the preliminary jurisdictional determination may **not** be appealed through the U.S. Army Corps of Engineers' *Administrative Appeal Process*, as described in 33 C.F.R. Section 331 (65 Fed. Reg. 16,486; Mar. 28, 2000). Under the provisions of 33 C.F.R. Section 331.5(b)(9), non-appealable actions include preliminary jurisdictional determinations since they are considered to be only advisory in nature and make no definitive conclusions on the jurisdictional status of the water bodies in question. However, you may request this office to provide an approved jurisdictional determination that precisely identifies the scope of jurisdictional waters on the site; an approved jurisdictional determination may be appealed through the *Administrative Appeal Process*. If you anticipate requesting an approved jurisdictional determination at some future date, you are advised not to engage in any on-site grading or other construction activity in the interim to avoid potential violations and penalties under Section 404 of the Clean Water Act. Finally, you may provide this office new information for further consideration and request a reevaluation of this preliminary jurisdictional determination.

You may refer any questions on this matter to Greg Brown of my Regulatory staff by telephone at 415-503-6791 or by e-mail at [gregory.g.brown@usace.army.mil](mailto:gregory.g.brown@usace.army.mil). All correspondence should be addressed to the Regulatory Division, South Branch, referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,



Jane M. Hicks  
Chief, Regulatory Division

Enclosures





Photo 4. View uphill at convergence of E and W swales

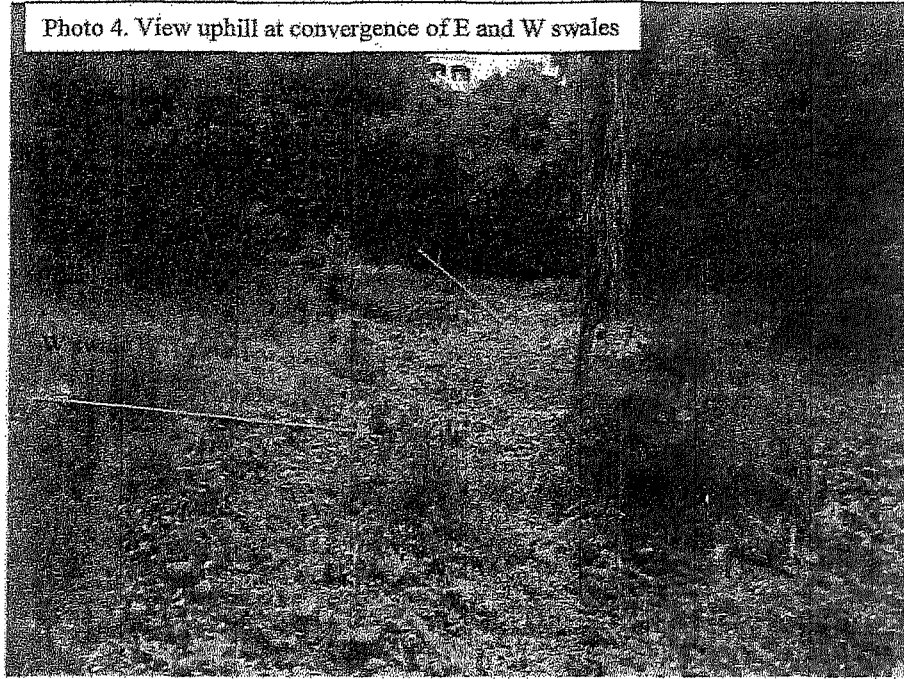


Photo 5. View downstream along wetland

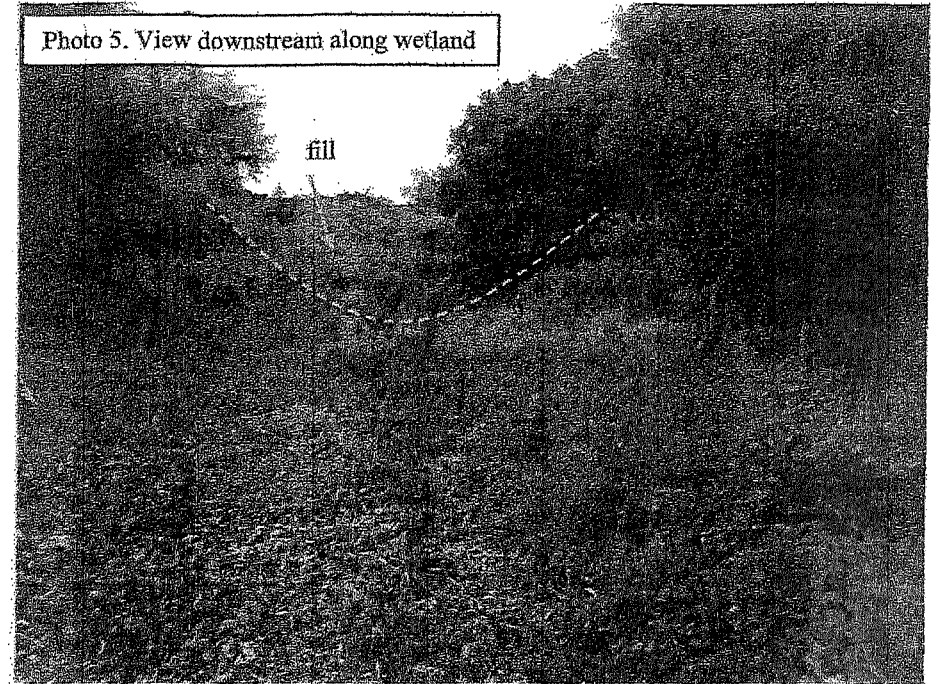


Photo 6. Slope break and veg contrast along sides and downstream wetland boundary



Photo 7. DP3 soil pit, saturation @ 6" & redox

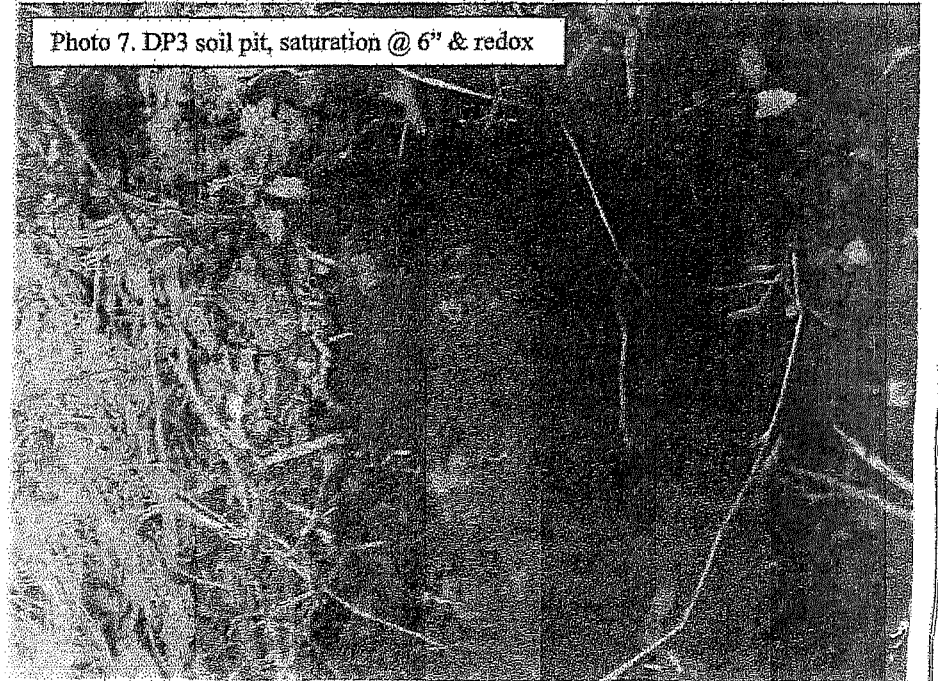


Photo 1. Ruderal grassland along NW part of property, disced in foreground

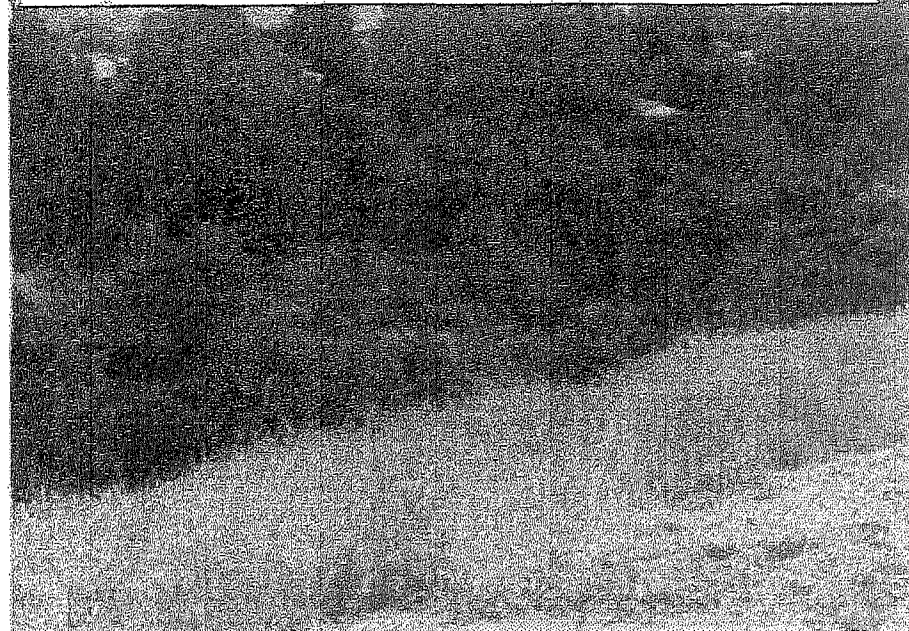


Photo 2. View uphill along eastern swale

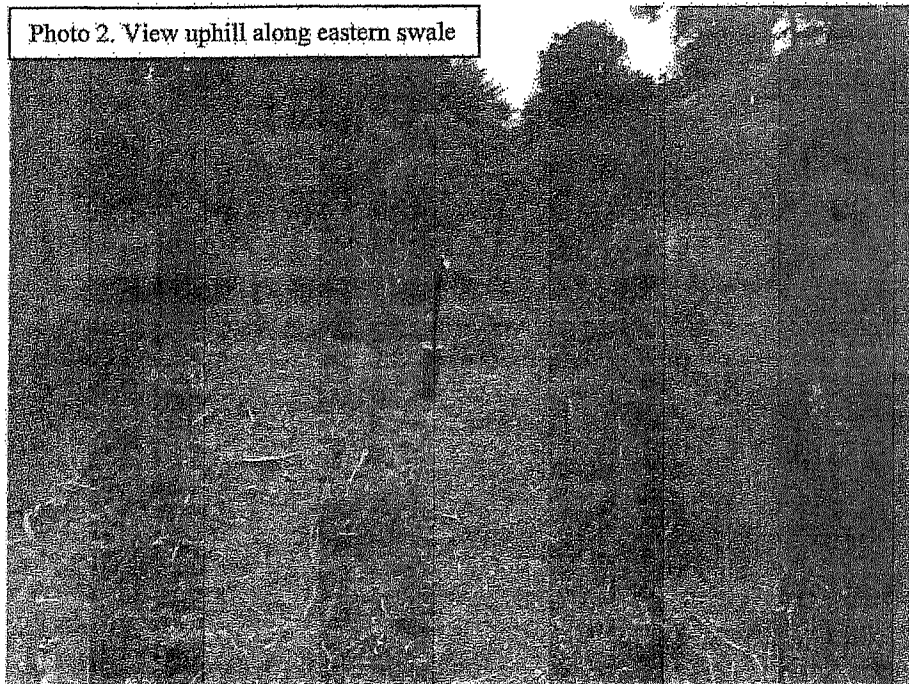
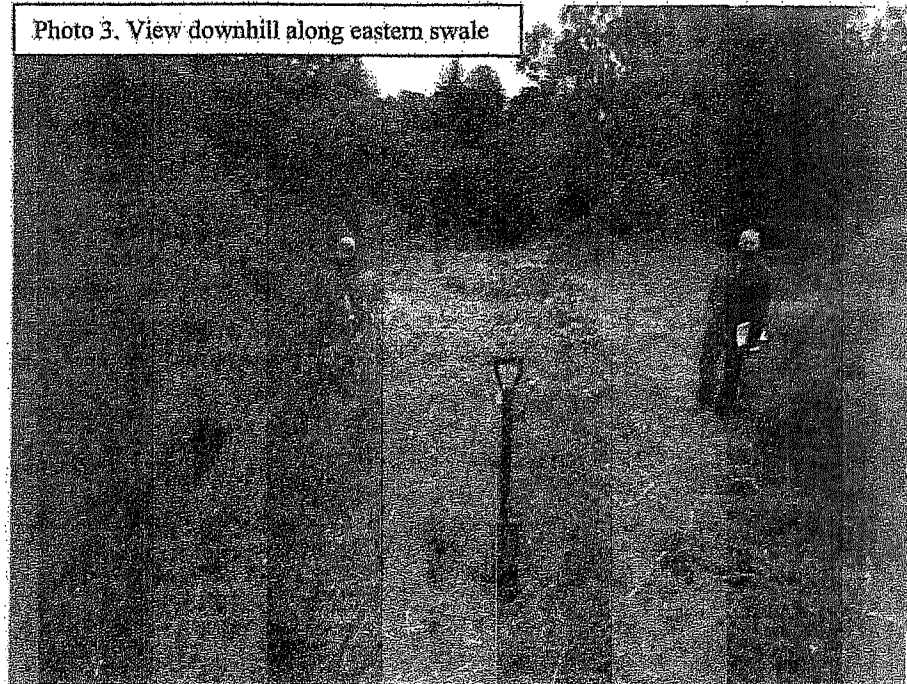


Photo 3. View downhill along eastern swale





U.S. Army Corps of Engineers, San Francisco District

MEMORANDUM FOR RECORD

FILE NUMBER: 2012-00195S  
PROJECT: Proctor Road property JD  
DATE: May 14, 2013  
PROJECT MGR: Greg Brown  
SUBJECT: Site Visit/JD for delineation of wetlands/waters

**Background:** Site visit was conducted to confirm the extent of Corps jurisdiction on the 5.85-acre property (APN 84D-1403-14-17) on the south side of Proctor Road, at or near 4651 Proctor Road, in the city of Castro Valley, Alameda County, California. Property is in suburban neighborhood in hills along northern boundary of Castro Valley.

**Site Visit:** On 5/8/13 Greg Brown met on site with Mr. Hue Tran (property owner) and Pete Balfour (consultant/agent, ECorp consulting) to tour the property and verify the extent of wetlands and waters mapped by ECorp on May 10, 2012. Weather was clear, a month since last significant rainfall, following a drier than normal late winter.

Property is on south facing slope near ridgetop which forms the divide between San Leandro Creek watershed to north and San Lorenzo Creek watershed to south. Property is undeveloped, but surrounded by rural and low density suburban residential development (see attached field map). Upper, northern part of property lies along gently sloping ridgetop along Proctor Road, with lower, southern part of property sloping more steeply down side of ridge. Upper, flatter parts of property consists mostly of disced ruderal grassland dominated by *Avena barbata*, *Bromus diandrus*, and *Brassica nigra* (photo 1), intersected by several old fencelines, with scattered live oak, and some *Eucalyptus* and other non-native trees.

Two swales descend from ridgetop along eastern and western sides of property, converging at the lowest corner of the property. Eastern swale is 20-40 feet deep and ~150 feet wide, originating abruptly near top of ridge, but with no apparent springs, outfalls, or other source of hydrology other than surface runoff. Flat bottom of swale is filled with *Baccharis pilularis* and sides are bordered by live oaks. Much of swale bottom has been disced/mowed, with remaining intact vegetation consisting mostly of *Baccharis pilularis*, *Toxicodendron diversilobum*, *Cirsium vulgare*, and *Avena*, with some *Rubus armeniacus* and scattered sparse *Cyperus eragrostis* (photos 2-3). Soil pit near some *Cyperus* about halfway up swale showed some redox, but soil was dry down to 18", with veg and soil indicators not quite enough to qualify as wetland. Western swale is broader and shallower, running mostly offsite, and contains landscaping & backyards of adjacent properties.

Swales converge at bottom corner of property to form a flat-bottomed valley bordered by live oaks and *Eucalyptus* (photo 4). Valley contains a saturated/ponded area ~ 50 feet wide by 200 feet long, dominated by *Juncus xiphioides*, *Cyperus*, *Mentha suaveolens*, *R. armeniacus*, and *Rumex acetosella* and *crispus* (photo 5). Downstream of property the bottom of the valley is filled by residential development along Joseph Drive, and the wetland drains into small culvert/storm drain inlet under Joseph drive fill. Sides and downstream end of wetland are defined by distinct slope breaks bordered by dense *Baccharis* and *Toxicodendron* (photo 6). Upstream end of wetland has more gradual slope & vegetation transition to adjacent disced ruderal upland. Recovered and confirmed consultant's data point 2 just outside mapped wetland boundary: at this point soil still contained noticeable redox, but *Baccharis* and other upland veg was codominant with hydrophytic veg, and soil was dry, in contrast to water table at 4" at paired data point 3 (photo 7) approximately 10 feet away just inside mapped wetland. Therefore the upstream end of wetland appears to be accurately mapped based on disappearance of hydrology indicators.

**Recommendation/Conclusion:** The consultant's delineation map dated 5/25/2012 reflects the correct jurisdictional areas as delineated on 5/10/2012 and confirmed by Corps personnel on 5/8/2013. Wetland feature on the property flows into a storm drain system that follows historic drainage features under Joseph Drive and Redwood Road in Castro Valley. Storm drains eventually empty into Chabot Creek, which discharges to San Lorenzo Creek. A Preliminary JD form was signed by the consultant 5/14/2013. The map should be approved and the applicant should be notified of the preliminary jurisdictional determination.




Greg Brown, Project Manager

12-4-13

Date



**Recommendation/Conclusion:** The consultant's delineation map dated 5/25/2012 reflects the correct jurisdictional areas as delineated on 5/10/2012 and confirmed by Corps personnel on 5/8/2013. Wetland feature on the property flows into a storm drain system that follows historic drainage features under Joseph Drive and Redwood Road in Castro Valley. Storm drains eventually empty into Chabot Creek, which discharges to San Lorenzo Creek. A Preliminary JD form was signed by the consultant 5/14/2013. The map should be approved and the applicant should be notified of the preliminary jurisdictional determination.

  
\_\_\_\_\_  
Greg Brown, Project Manager

12-4-13  
Date

**PRELIMINARY JURISDICTIONAL DETERMINATION FORM**  
**San Francisco District**

This Preliminary Jurisdictional Determination finds that there "may be" waters of the United States in the subject review area and identifies all such aquatic features, based on the following information:

Regulatory Division: South Branch      File Number: 2012-00195 S      PJD Completion Date: 5/8/13

<b>Review Area Location</b> City/County: Castro Valley, Alameda Co.    State: California Nearest Named Waterbody: San Lorenzo Creek Approximate Center Coordinates of Review Area Latitude (degree decimal format): 37.71784 °N Longitude (degree decimal format): -122.08197 °W Approximate Total Acreage of Review Area: 5.85 acres	File Name: Proctor Road property  <b>Applicant or Requestor Information</b> Name: Pete Balfour Company Name: ECorp Consulting Street/P.O. Box: 2525 Warren Dr City/State/Zip Code: Rocklin, CA 95677
---	--

<b>Estimated Total Amount of Waters in Review Area</b>  Non-Wetland Waters:      lineal feet      feet wide and/or acre(s)      Flow Regime: Select  Wetlands:      lineal feet      feet wide and/or 0.11 acre(s)      Cowardin Class: Palustrine- emergent	<b>Name of Section 10 Waters Occurring in Review Area</b> Tidal: Non-Tidal:  <input type="checkbox"/> Office (Desk) Determination <input checked="" type="checkbox"/> Field Determination: Date(s) of Site Visit(s): 5/8/13
--	---

**SUPPORTING DATA:** Data reviewed for Preliminary JD (check all that apply – checked items should be included in case file and, where checked and requested, appropriately reference sources below)

Maps, Plans, plots or plat submitted by or on behalf of applicant/requestor (specify):  
 Figure 3 Wetland Delineation map (ECorp, 27 June 2012)

Data sheets submitted by or on behalf of applicant/requestor (specify):  
 Proctor Rd. Property Wetland Delineation Report (ECorp, 27 June 2012)

Corps concurs with data sheets/delineation report.  
 Corps does not concur with data sheets/delineation report.

Data sheets prepared by the Corps.

Corps navigable waters' study (specify):

U.S. Geological Survey Hydrologic Atlas:  
 USGS NHD data.  
 USGS HUC maps.

U.S. Geological Survey map(s) (cite quad name/scale): Hayward, CA 1:24000

USDA Natural Resources Conservation Service Soil Survey.

National wetlands inventory map(s) (specify):

State/Local wetland inventory map(s) (specify):

FEMA/FIRM maps.

100-year Floodplain Elevation (specify, if known):

Photographs:     Aerial (specify name and date):  
     Other (specify name and date):

Previous JD determination(s) (specify File No. and date of response letter):

Other information (specify):

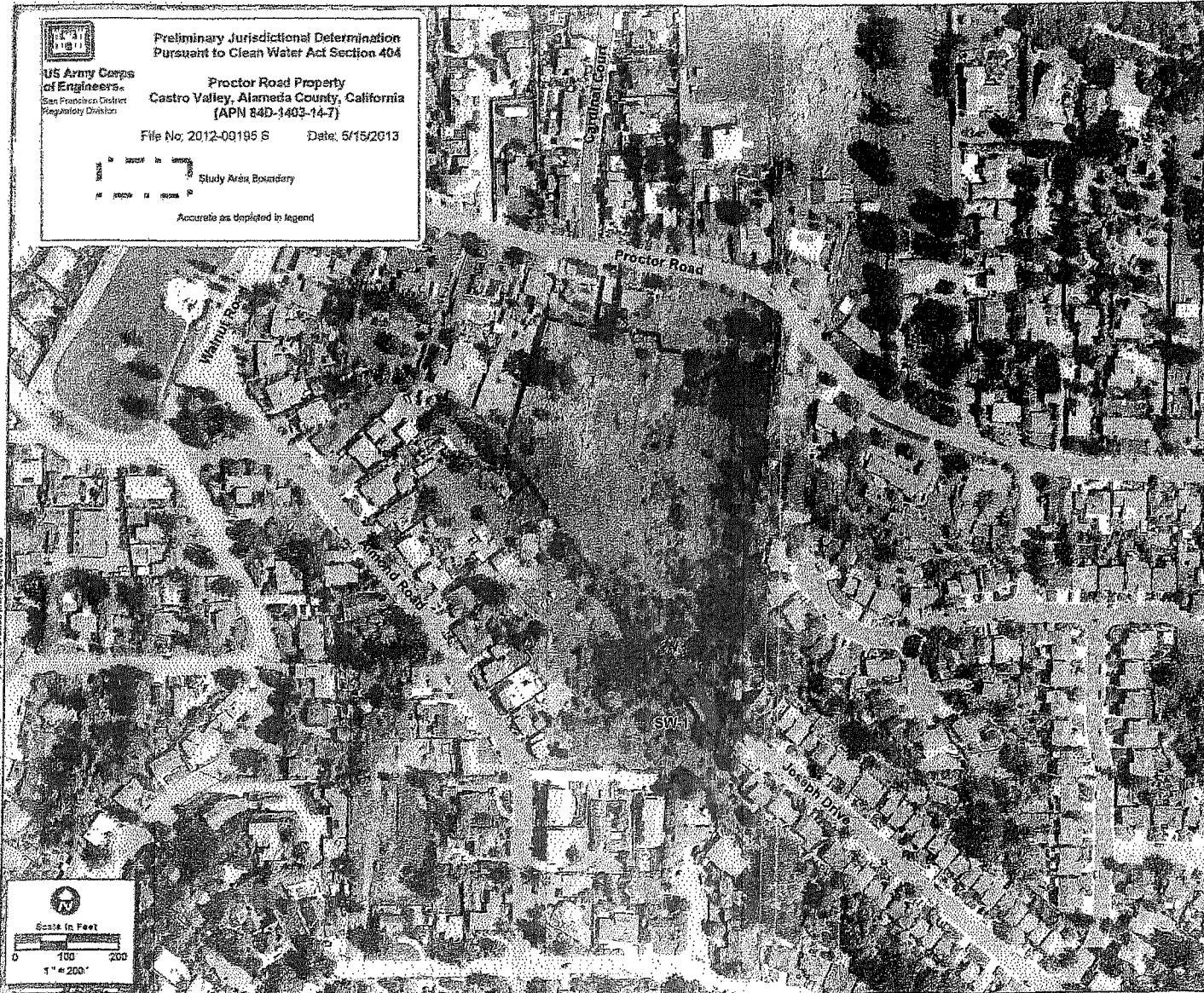
**IMPORTANT NOTE:** If the information recorded on this form has not been verified by the Corps, the form should not be relied upon for later jurisdictional determinations.

\_\_\_\_\_ 5-13-13  
 Signature and Date of Regulatory Project Manager  
 (REQUIRED)

\_\_\_\_\_  
 Signature and Date of Person Requesting Preliminary JD  
 (REQUIRED, unless obtaining the signature is impracticable)      5-14-13



Figure 3. Wetland Delineation



**SEASONAL WETLAND**

ID	Existing Square Feet	Existing Acreage
SW-1	4819	0.111

**WATERS OF THE U.S.**

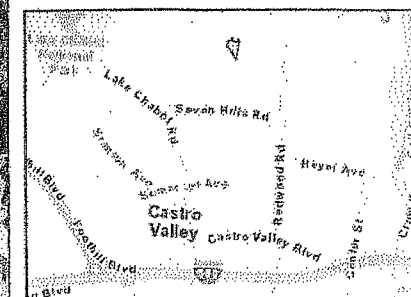
THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
△ 1	37.716760 / -122.081721
△ 3	37.716852 / -122.081832

**UPLAND**

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
△ 2N	37.716871 / -122.081847

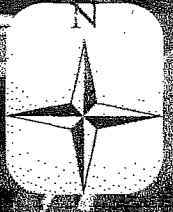
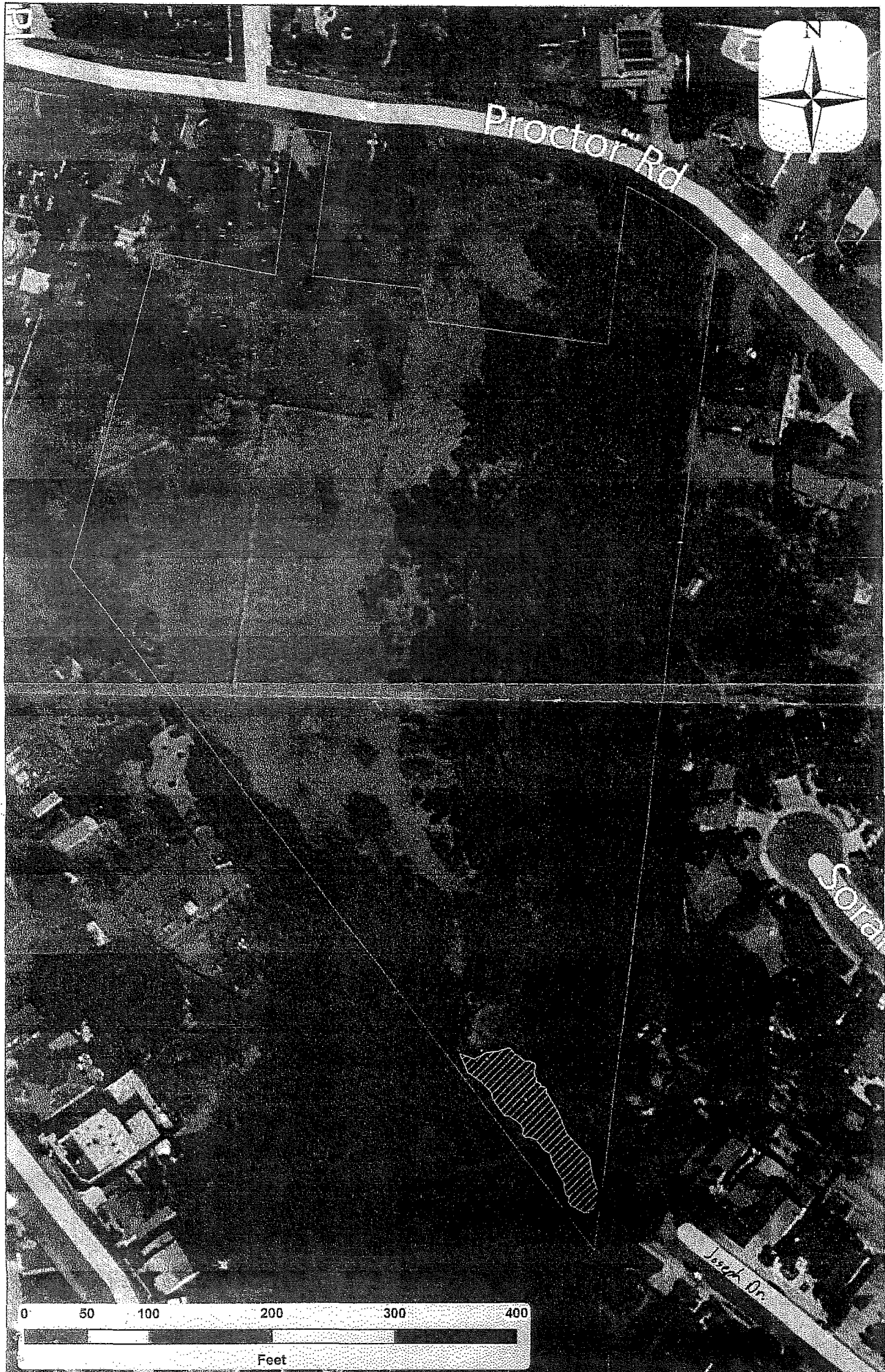
This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual, Arid West Region and conforms to Sacramento District specifications. However, wetland boundaries have not been legally surveyed and may be subject to minor adjustments if exact locations are required.

Image Source: 2011 NAIP Imagery



**ECORP Consulting, Inc.**  
ENVIRONMENTAL CONSULTANTS

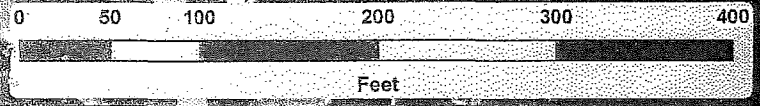
Map Date: 5/25/2012



Proctor Rd

Storrs

Judd Dr





**Alameda County Fire Department**  
**FIRE PREVENTION**

www.acgov.org/fire

July 30, 2014

DEMETRIOUS N. SHAFFER  
Fire Chief

COUNTY  
FIRE PREVENTION  
399 Elmhurst, Room 120  
Hayward, CA 94544  
tel (510) 670-5853  
fax (510) 887-5836

DUBLIN  
FIRE PREVENTION  
100 Civic Plaza  
Dublin, CA 94568  
Tel (925) 833-6606  
Fax (925) 829-9248

EMERYVILLE  
FIRE PREVENTION  
1333 Park Avenue  
Emeryville, CA 94608  
Tel (510) 596-3759  
Fax (510) 450-7812

NEWARK  
FIRE PREVENTION  
37101 Newark Blvd.  
Newark, CA 94560  
Tel (510) 578-4218  
Fax (510) 578-4281

SAN LEANDRO  
FIRE PREVENTION  
835 E. 14th Street  
San Leandro, CA 94577  
Tel (510) 577-3317  
Fax (510) 577-3419

UNION CITY  
FIRE PREVENTION  
34009 Alvarado-Niles Road  
Union City, CA 94587  
Tel (510) 675-5470  
Fax (510) 441-2943

Alameda County  
Community Development Agency  
Planning Department  
224 West Winton Ave., Room 111  
Hayward, California 94544

TO:	Damien Curry	CC	Hue Tran
FROM:	Alameda County Fire Prevention Office		
SUBJECT:	Vesting tentative map 8053, a proposed 18 lot sub-division located at Proctor Road, Castro Valley.		

**Conditions of Approval**

*The following conditions shall be met prior the issuance of a building permit and fire clearance for occupancy.*

1. This project is located in a very high hazard fire severity zone. The homes shall comply with CBC chapter 7A.
2. The wording on the plans referencing a fire buffer zone shall be changed to "hazardous vegetation and fuel management area" to be consistent with the California Fire Code. The locations of the vegetation management areas shown on the plan shall be consistent with the revised lot design and shall not be shown extending into the adjacent lot north of lot 1.
3. The hazardous vegetation/fuels shall be designed and maintained per CFC chapter 49.
4. Parking is allowed on only one side of the streets that are 28 feet wide. The other side of the street shall be posted Fire Lane No Parking. Portions of the streets less than 28 feet wide shall be posted Fire Lane No Parking on both sides of the street.
5. Locations on the streets where fire hydrants are located shall have a minimum clearance of 26 feet.



Vision That Moves Your Community

Transportation  
Consultants

August 7, 2014

Hue Tran  
4584 Ewing Road  
Castro Valley, CA 94546

RE: Traffic Concerns regarding 4659 Proctor Road Residential Development

Dear Mr. Tran,

This letter addresses the concerns heard at the July 8, 2013 at the Municipal Advisory Council meeting in Castro Valley regarding the proposed residential development at 4659 Proctor Road. To address the traffic impacts the project is proposing to reduce the total units to 18 residential single family dwelling units.

The public voiced their concerns regarding traffic and parking that they felt may result from the project. The following issues were raised.

1. "Cars are speeding on Proctor and added traffic will make it worse."
2. "Too much traffic generated from the project"
3. "What is the total traffic added onto the street in the day?"
4. "Sight distance looking east from the driveway is limited."
5. "Width of private roadway proposed too narrow with limited or no sidewalk. Make it a public street with parking both sides and sidewalk on both sides."
6. "Parking supply for guests is not sufficient and will overflow onto Proctor."
7. "Provide two access points in and out of the project site. Connect to Joseph Drive."

Regarding the speeding concern, this can be addressed with increased enforcement from Police on Proctor Road. The Police may also have temporary speed feedback trailers which they can install on Proctor Road to make drivers aware of their speed and slow down to the posted speed limit.

The project is proposing 18 residential single family dwelling units, which is a reduction from the 24 units originally proposed. Trip generation for the proposed development was determined using "trip generation per dwelling unit" rates obtained from Trip Generation, 8<sup>th</sup> edition, published by the Institute of Transportation Engineers (ITE). Table I depicts the anticipated number of trips generated in the AM and PM peak hour. The project is anticipated to generate approximately 15 trips in the AM Peak hour and 14 trips in the PM Peak hour. Table II depicts the anticipated number of trips generated on a weekday.

**Table I: Peak Hour Trip Generation for Proposed Development**

Project	Land Use (ITE Code)	Size	A.M. Peak Hour					P.M. Peak Hour				
			Rate	%In: Out	In	Out	Total	Rate	%In: Out	In	Out	Total
4659 Proctor Road	Single-Family Detached Housing (210)	18 Units	0.75	25:75	4	11	15	1.01	63:37	9	5	14

Pleasanton  
4305 Hacienda Drive  
Suite 550  
Pleasanton, CA  
94588-2798  
925.463.0611  
925.463.3690 fax

Fresno  
516 W. Shaw Avenue  
Suite 200  
Fresno, CA  
93704-2515  
559.325.7530  
559.221.4940 fax

Sacramento  
980 Ninth Street  
16<sup>th</sup> Floor  
Sacramento, CA  
95814-2736  
916.449.9095

Santa Rosa  
1400 N. Dutton Avenue  
Suite 21  
Santa Rosa, CA  
95401-4643  
707.575.5800  
707.575.5888 fax

tjkm@tjkm.com  
www.tjkm.com

**Table II: Daily Trip Generation for Proposed Development**

Project	Land Use (ITE Code)	Size	Daily				
			Rate	%In: Out	In	Out	Total
4659 Proctor Road	Single-Family Detached Housing (210)	18 Units	9.57	50:50	87	87	174

TJKM collected 24 hour Average Daily Traffic machine tube counts along Proctor Road, east of the project location. The total number of vehicles that currently travel on Proctor Road is 2,339 vehicles per day. The proposed project is anticipated to generate approximately 174 vehicles per day. The project generates 56 less daily trips than was originally proposed.

Traffic operations were evaluated for the following two existing and one proposed study intersections that may potentially be impacted by the proposed project:

1. Proctor Road and Redwood Road (Existing)
2. Proctor Road and Walnut Road and Ewing Road (Existing)
3. Proctor Road and the Project Driveway (Proposed)

An intersection level of service (LOS) analysis was performed for the study intersections for the following three scenarios:

1. Existing Conditions (Scenario 1)
  - o This scenario evaluates the existing study intersections based on the existing traffic counts and field surveys.
2. Future Near-term Conditions (Scenario 2)
  - o This scenario is similar to *Existing Conditions* scenario, with the addition of traffic expected from approved developments in the surrounding area of the proposed project.
3. Future Near-term Plus Proposed Project Conditions (Scenario 3)
  - o This scenario is similar to *Future Near-term Conditions* scenario, with the addition of traffic from the proposed residential development at 4659 Proctor Road.

**Summary**

Under *Existing Conditions (Scenario 1)*, the two existing study intersections operate at acceptable levels of service (LOS A or B).

Under *Future Near-term Conditions (Scenario 2)*, the two existing study intersections continue to operate at acceptable levels of service (LOS B).

Under *Future Near-term Plus Project Conditions (Scenario 3)*, the three study intersections operate at acceptable levels of service (LOS A or B).

TJKM reviewed the project site plan to evaluate on-site traffic circulation and access. Internal traffic circulation within the proposed project site is expected to be adequate and has been approved by the County Fire Department.



Lea & Braze Engineering evaluated the stopping sight distance at the proposed entrance to Proctor Road and they determined the stopping sight distance was adequate in both directions based on the posted speed limit of the roadway.

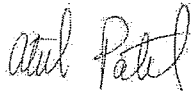
According to the tentative map, Proctor Court is proposed as a private street and has a proposed roadway width of 28 feet, which is adequate for parking on one side of the street and two-way traffic. Sidewalk is proposed on one side of the street. In order for parking and sidewalk to be installed on both sides of the roadway, the roadway would have to be widened by 8 feet to a total of 36 feet and would impact the layout of the houses on each lot.

Residents are concerned that the proposed parking is inadequate and would overflow onto Proctor Road. The project is proposing 18 guest parking spaces, which meets the minimum requirements of the County of one guest parking stall per house.

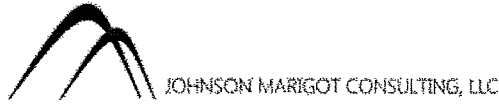
Residents are concerned about one access point in and out of the development with suggestions to connect Proctor Court to Joseph Drive. According to the Civil Engineer at Lea & Braze Engineering, this is not feasible given that the land south of the property boundary is not owned by Mr. Tran, has a height differential of about 22 feet, which makes it impractical to design the roadway connection to in a short distance, and connection to Joseph Drive would impact the existing wetland area, which would create a significant environmental impact.

If you have any questions, feel free to contact me.

Sincerely,



Atul Patel, P.E., P.T.O.E.  
Director of Design & ITS



Andy Byde  
Braddock & Logan  
4155 Blackhawk Plaza Circle, Suite 201  
Danville, CA 94506-4613

August 8, 2014

RE: Review of Proctor Road Property (APN 84D-1403-14-17), (Corps of Engineers ID # 2012-00195)

Dear Mr. Byde:

I took a look at the proposed project maps and the letter from the US Army Corps of Engineers (dated December 12, 2013) as requested and have the following analysis for your consideration. Firstly, the Corps found there to be a single jurisdictional feature, consisting of a 0.11-acre seasonal wetland feature, located within the property boundary. This feature appears on both the Preliminary Jurisdictional Determination map (Prepared by ECORP Consulting, and preliminarily verified by Mr. Greg Brown of the SF District of the Corps of Engineers), and also appears as “approximate limits of wetland delineation” on the tentative map sheet (9 of 14), titled *Proctor Road – 18 Lot Subdivision, vesting tentative tract map No. 8059, storm water management plan*, by MaKay & Somsps engineering (dated August 2014). Secondly, the proposed project shows the jurisdictional seasonal wetland within a separate parcel described as “Parcel B.” The plans show that within parcel B there will be some site grading for stabilization of the existing hill slope and the construction of a “Bio-retention cell.” The site grading shown on the plans does not indicate any discharge to- or filling of- the jurisdictional feature. The Bio-retention cell is designed to retain storm water and ensure water quality prior to discharge, and it is my understanding that under some storm situations, the feature will discharge storm water directly to the jurisdictional seasonal wetland. The narrative provided on map sheet 9 indicates that the project proposes to “. . . utilize the existing pond on site for both hydromodification detention (10% of 2YR storm – 10 YR storm), and 100-YR PRE VS. POST development detention. The project will install an outfall metering device at the outlet of the existing pond to meter the discharge and match post development flows.” The attached engineering plans (*Proctor Road – 18 Lot Subdivision, vesting tentative map tract map NO. 8059, sheets 5 and 9*) clearly indicate that the proposed metering device and outfall structure are to be installed outside of the jurisdictional boundary established by the Corps’ map.

The May 9, 2002, *Final Revisions to the Clean Water Act Regulatory Definitions of “Fill Material” and “Discharge of Fill Material”* created the Final Rule in creating a common definition between the Environmental Protection Agency and the U.S Army Corps of Engineers regarding what constitutes “fill” of regulated waters of the U.S. (and is therefore regulated pursuant to Section 404 of the Clean Water Act. The Final Rule describes the differences

between the regulation of the discharge of fill material (pursuant to Section 404), and the regulation of “pollutants” (pursuant to Section 402).

“The CWA governs the “discharge” of “pollutants” into “navigable waters,” which are defined as “waters of the United States.” Specifically, Section 301 of the CWA generally prohibits the discharge of pollutants into waters of the U.S., except in accordance with the requirements of one of the two permitting programs established under the CWA: Section 404, which regulates the discharge of dredged or fill material, or section 402, which regulates all other pollutants under the National Pollutant Discharge Elimination System (NPDES) program. Section 404 is primarily administered by the Corps, or States/Tribes that have assumed the program pursuant to section 404(g), with input and oversight by EPA. In contrast, Section 402 and the remainder of the CWA are administered by EPA or approved States or Tribes.” 33 CFR Part 323 (Fed. Reg. Vol 67, No 90, pg 31130)

“The final rule defines “fill material: as material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the United States with dry land or changing the bottom elevation of any portion of a water. The examples of “fill material” identified in today’s rule include rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the U.S.” 33 CFR Part 323 (Fed. Reg. Vol 67, No 90, pg 31132)

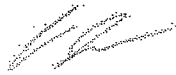
Section 404 of the Clean Water Act generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. All proposed discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the United States; or below the high tide line in tidal waters of the United States; and within the lateral extent of wetlands adjacent to these waters, typically require Department of the Army authorization and the issuance of a permit under Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*). Waters of the United States generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries.

The seasonal wetland located on the site should be considered to be a “Water of the United States” per the Preliminary Jurisdictional Determination. As such, it is subject to regulation pursuant to the Clean Water Act. The proposed site development plans do not indicate that the project will discharge “fill material” into the seasonal wetland. Presuming the grading plan does not change and that the proposed “outfall metering device” is outside of the jurisdictional limit of the seasonal wetland, the project does NOT trigger a Clean Water Act, Section 404 permitting requirement. Discharge of storm water however, IS regulated pursuant to Section 402, and the project is therefore subject to all terms and conditions of the NPDES permit. The NPDES permit is administered by- by- and regulated by- Alameda County, under the authority of the Regional and State Water Boards, and Alameda County is therefore responsible for ensuring compliance with the terms of the permit. Implementation of the required NPDES measures / BMPs for

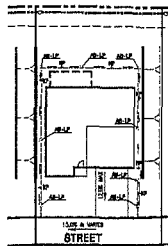
construction and post-construction would typically be required by Alameda County to satisfy the NPDES permit. These measures typically consist of a NOI and SWPPP for construction BMPs and a Storm Water Management Plan that meets the Municipal Regional Permit C.3 Provisions for post-construction BMPs.

Please let me know if you have any additional questions. I can be reached by telephone at (415) 602-2970, or by email at [cameron.johnson@johnson-marigot.com](mailto:cameron.johnson@johnson-marigot.com).

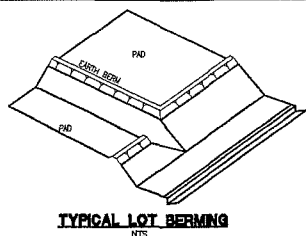
Respectfully,



Cameron Johnson



**TYPICAL FINISHED LOT GRADING / DRAINAGE**  
NTS



**TYPICAL LOT BERMING**  
NTS

**LEGEND**

- FILL AREA
- HP HIGH POINT
- SURFACE DRAINAGE DIRECTION
- AREA DRAIN (AD-LP)
- SUBSURFACE DRAINS
- THRU-CURB DRAIN
- RETAINING WALL

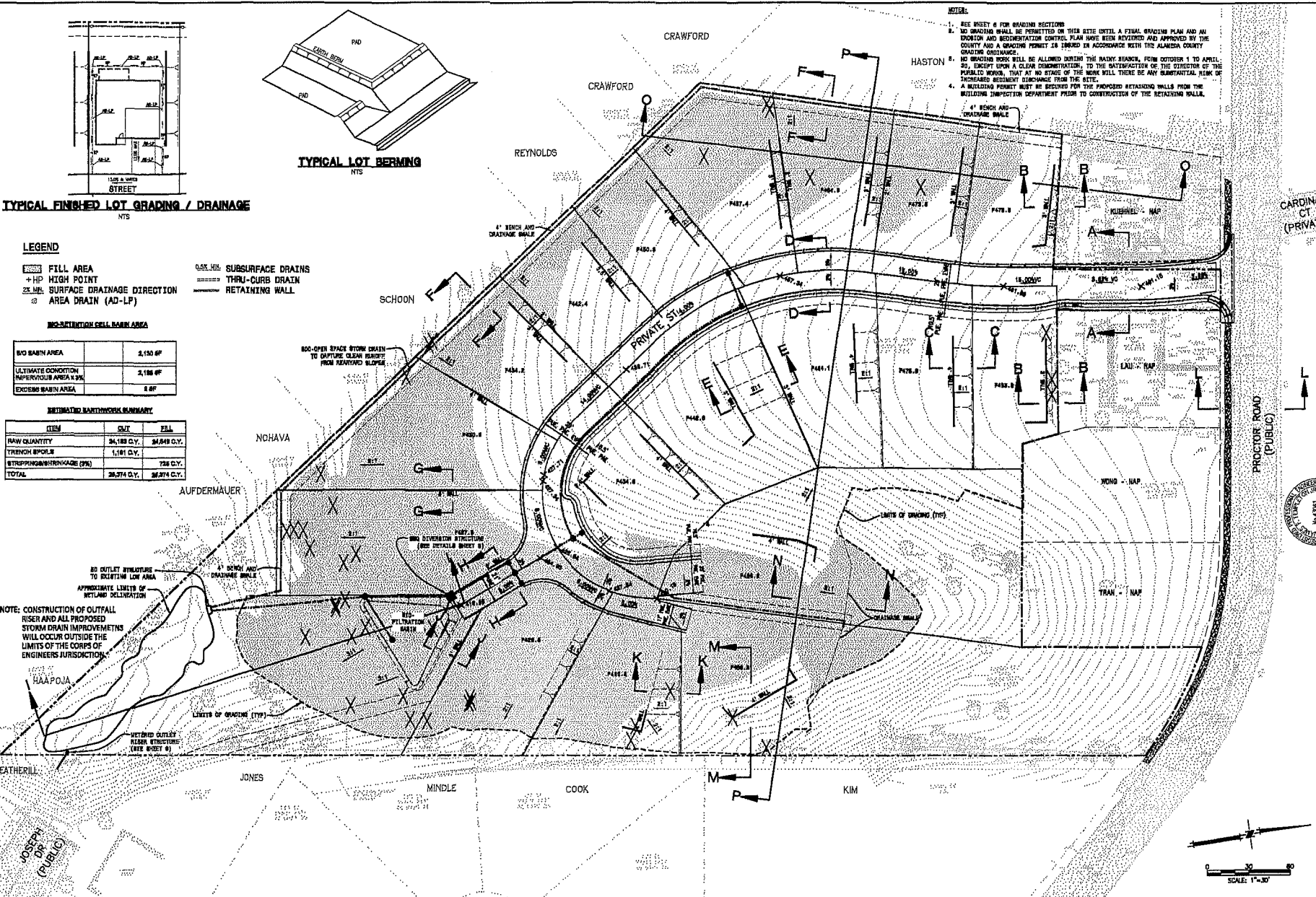
**NO-RETENTION CELL BASIN AREA**

800 BASIN AREA	3,130 SF
ULTIMATE CONDITION INTERPOLAR AREA (1.5%)	3,188 SF
EXCESS BASIN AREA	8 SF

**ESTIMATED EARTHWORK SUMMARY**

ITEM	CUT	FILL
RAW QUANTITY	34,183 C.Y.	34,849 C.Y.
TRENCH SPOLLS	1,181 C.Y.	
STRIPPING/REWORKAGE (5%)		738 C.Y.
TOTAL	35,374 C.Y.	35,587 C.Y.

NOTE: CONSTRUCTION OF OUTFALL RISER AND ALL PROPOSED STORM DRAIN IMPROVEMENTS WILL OCCUR OUTSIDE THE LIMITS OF THE CORPS OF ENGINEERS JURISDICTION.



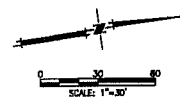
- NOTES:**
- SEE SHEET # FOR GRADING SECTIONS
  - NO GRADING SHALL BE PERMITTED ON THIS SITE UNTIL A FINAL GRADING PLAN AND AN EROSION AND SEDIMENTATION CONTROL PLAN HAVE BEEN REVIEWED AND APPROVED BY THE COUNTY AND A GRADING PERMIT IS ISSUED IN ACCORDANCE WITH THE ALAMEDA COUNTY GRADING ORDINANCE.
  - NO GRADING WORK WILL BE ALLOWED DURING THE BIRDY SEASON, FROM OCTOBER 1 TO APRIL 30, EXCEPT UNDER A CLEAR DEMONSTRATION, TO THE SATISFACTION OF THE DIRECTOR OF THE PUBLIC WORKS, THAT AT NO STAGE OF THE WORK WILL THERE BE ANY SUBSTANTIAL RISK OF INCREASED SEDIMENT DISCHARGE FROM THE SITE.
  - A BUILDING PERMIT MUST BE SECURED FOR THE PROPOSED RETAINING WALLS FROM THE BUILDING INSPECTION DEPARTMENT PRIOR TO CONSTRUCTION OF THE RETAINING WALLS.

CARDINAL CT (PRIVATE)

PROCTOR ROAD (PUBLIC)



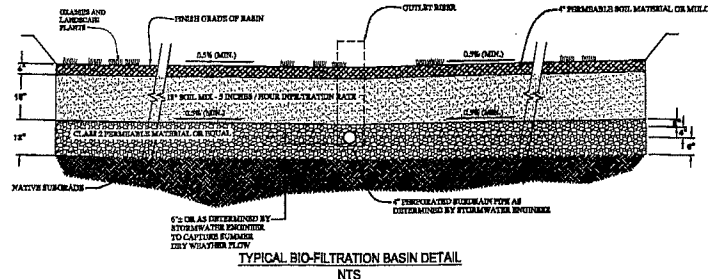
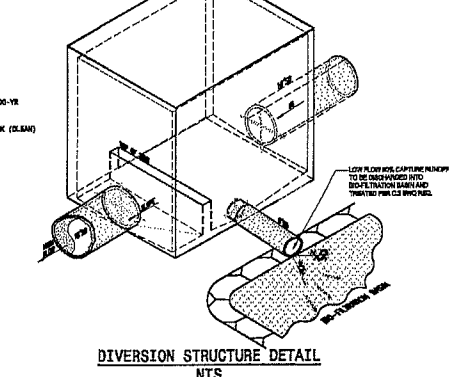
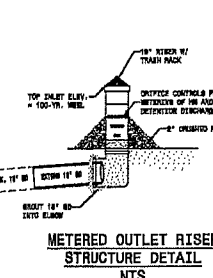
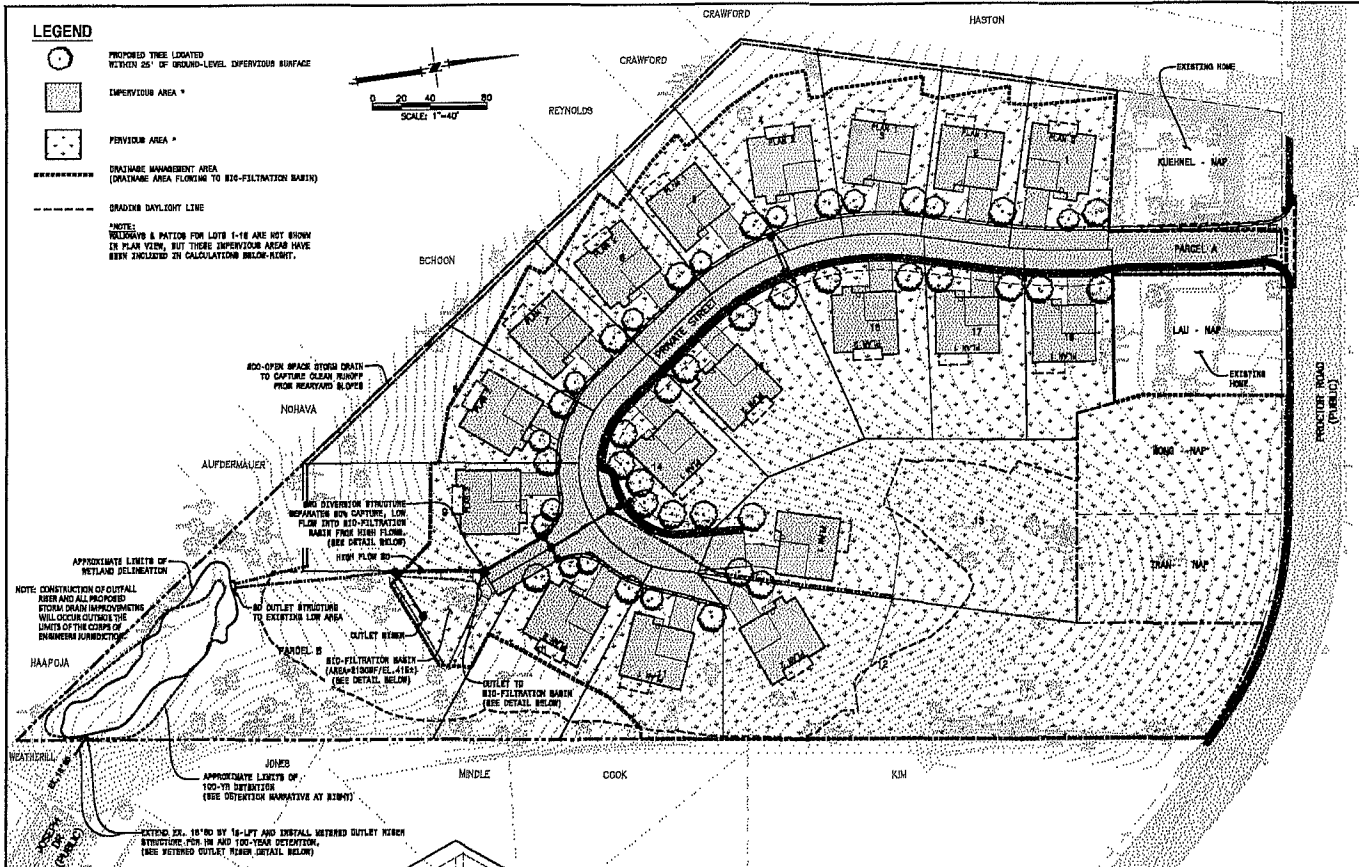
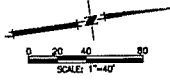
DESIGNED BY: JAMES J. POJKA  
 CHECKED BY: JAMES J. POJKA  
 DATE: MARCH 21, 2018  
 PROJECT NO. 19781-000  
 SHEET 5 OF 30



### LEGEND

- PROPOSED TREE LOCATED WITHIN 25' OF GROUND-LEVEL IMPERMEABLE SURFACE
- IMPERMEABLE AREA \*
- PERMEABLE AREA \*
- DRAINABLE MANAGEMENT AREA (DRAINAGE AREA FLOODING TO BIO-FILTRATION BASINS)
- GRADED DAYLIGHT LINE

NOTES:  
 WALKWAYS & PATIOS FOR LOTS 1-16 ARE NOT SHOWN IN PLAN VIEW, BUT THESE IMPERMEABLE AREAS HAVE BEEN INCLUDED IN CALCULATIONS BELOW-RIGHT.



**PROCTOR ROAD - 18 LOT SUBDIVISION**

30674  
 675702.01  
 0.00

**Bio-Retention Sizing Calculation**  
 Combination Flow and Volume Approach  
 Per Alameda County C.G.S. Ordinance (revised May 2018)

Area	Value	Units
Storm Annual Precipitation <sup>(1)</sup>	23.2	in
Event Frequency, $f_e$ (days) <sup>(2)</sup>	20,000	days
Impervious Area <sup>(3)</sup>	5,000	sq ft
Permeable Area <sup>(4)</sup>	4,816.2	sq ft

**Calculations**

Effective Impervious Area <sup>(5)</sup>	51,139	sq ft
Adjusted Unit Runoff Volume <sup>(6)</sup>	0.86	in
Required Capacity Volume <sup>(7)</sup>	5,052	cu ft
Rain Event Duration <sup>(8)</sup>	4.20	hours

**Results**

Basin Area per 4% Appropriate Sizing Factor <sup>(9)</sup>	5,877	sq ft
Minimum Run Retention Time at Max 12" Capacity Depth <sup>(10)</sup>	2,000	sq ft
Proposed Bio-Retention Area <sup>(11)</sup>	2,100	sq ft
Depth of Ponding <sup>(12)</sup>	11.28	in

**NOTES:**

- <sup>(1)</sup> Based on the California (CALVP) design storm for the area of Alameda County provided in Appendix B of the 2018 California Building Code (CBC).
- <sup>(2)</sup> Frequency factor is based on the return period of the design storm. For design storms, the 100-year return period is used.
- <sup>(3)</sup> Per Section 4.5.1, the impervious area can be reduced for areas where there is a 100-year return period and each new driveway on the project area must meet the requirements of Section 4.5.1 of the 2018 CBC.
- <sup>(4)</sup> Stormwater Treatment Credit (STC) is based on the following table.
- <sup>(5)</sup> Per Section 4.5.1, the impervious area can be reduced for areas where there is a 100-year return period and each new driveway on the project area must meet the requirements of Section 4.5.1 of the 2018 CBC.
- <sup>(6)</sup> Adjusted unit runoff volume is based on the Adjusted Unit Runoff Volume (AURV) table in the 2018 California Building Code (CBC).
- <sup>(7)</sup> Required capacity volume is based on the Adjusted Unit Runoff Volume (AURV) table in the 2018 California Building Code (CBC).
- <sup>(8)</sup> Rain event duration is based on the Adjusted Unit Runoff Volume (AURV) table in the 2018 California Building Code (CBC).
- <sup>(9)</sup> The 4% Sizing Factor is based on the 100-year return period design storm and is based on the 100-year return period design storm.
- <sup>(10)</sup> The minimum run retention time is based on the 100-year return period design storm and is based on the 100-year return period design storm.
- <sup>(11)</sup> The proposed bio-retention area is based on the 100-year return period design storm and is based on the 100-year return period design storm.
- <sup>(12)</sup> The depth of ponding is based on the 100-year return period design storm and is based on the 100-year return period design storm.

**IMPERMEABLE SURFACE BREAKDOWN:**

PRIVATE ROADWAY	22,804 SF
BIKEWALK	2,410 SF
DOCKS (FOR 18 LOTS)	24,238 SF
DRIVEWAY/PATIO/WALKWAYS (FOR 18 LOTS)	10,641 SF
<b>TOTAL 70,093 SF</b>	

**INTERCEPTION TREES BREAKDOWN:**

PROPOSED (WITHIN 25' OF IMPERMEABLE SURFACE) **41 X 100' AT CAPACITY = 4,100 SF**

**PERMEABLE SURFACE BREAKDOWN:**

DRAINAGE MANAGEMENT AREA	218,897 SF
LAWN IMPERMEABLE SURFACE (SEE ABOVE)	2,010 SF
<b>PERMEABLE SURFACE 148,887 SF</b>	

**STORM DRAIN DETENTION NARRATIVE:**

THE PROJECT APPLICANT PROPOSES TO UTILIZE THE EXISTING POND ON SITE FOR BOTH HYDROMODIFICATION AND DETENTION (10% OF 2YR STORM UP TO 10YR STORM) AND 100-YR PRELIMINARY FLOOD DEVELOPMENT DETENTION. THE PROJECT WILL INSTALL AN OUTFALL METERING DEVICE AT THE END OF THE EXISTING 10" STORM DRAIN OUTLET PIPE FROM THE POND TO METER THE DISCHARGE AND MATCH PRE-DEVELOPMENT FLOWS PER ALAMEDA COUNTY AND CCS REQUIREMENTS.

**Mackay & Somp's**  
 CIVIL ENGINEERS AND ARCHITECTS  
 1000 BAY STREET, SUITE 200  
 OAKLAND, CA 94612  
 TEL: 415.778.8800  
 WWW.MACKAYANDSOMPS.COM



**PROCTOR ROAD - 18 LOT SUBDIVISION**  
 TENTATIVE TRACT MAP NO. 0608  
 STORM WATER MANAGEMENT PLAN

PROJECT NO.  
 19761-000

SHEET  
 9  
 OF  
 30