



Central Contra Costa Sanitary District

Protecting public health and the environment

5019 Imhoff Place, Martinez, CA 94553-4392

January 9, 2017

PHONE: (925) 228-9500

FAX: (925) 228-4624

www.centalsan.org

Holly Pearson
Town of Moraga Planning Department
329 Rheem Blvd.
Moraga CA 94556

ROGER S. BAILEY
General Manager

KENTON L. ALM
Counsel for the District
(510) 808-2000

ELAINE R. BOEHME
Secretary of the District

Dear Ms. Pearson:

DEVELOPMENT REVIEW, INDIAN VALLEY CONCEPTUAL DEVELOPMENT PLAN FOR A PROPOSED 71-LOT SUBDIVISION; CDP 2-16/D16-67; NORTH/EAST OF CANYON ROAD, SOUTH OF INDIAN RIDGE AND NORTH/WEST OF THE TOWN OF MORAGA TOWN LIMIT LINE; APN NOS. 257-180-034, -037; -038, -040, -041, -073; 271-120-015, -016, -020; WS 10; MAPS 73C6, 73C7, 73D6, 73D795D1, 95D2, 95E1, 95E2

I am responding to your agency comment request seeking information about Central Contra Costa Sanitary District's (Central San) jurisdiction and ability to provide wastewater utility service to this project, if developed. The 140.9 acres project site is inside Central San's service boundary. Wastewater from the subject property (as currently proposed) would not flow by gravity into Central San's sewer system. The project proposes the installation of a community pumping station to transport wastewater to Central San's existing sewer system. The establishment of new, permanent, publicly-owned, community pumping stations is contrary to Central San policy. Furthermore, the nearest connection points to Central San's sewer system are 3,600 to 4,700 feet away, so the construction of such facilities would need to be addressed in the project's environmental document. The applicant should consult with Central San staff on this matter soon.

Central San has conducted a capacity study for the existing system downstream of the subject property. This study determined that the existing local sewers have capacity to accommodate the additional quantity of wastewater which could be generated by the proposed project. Central San's wastewater treatment plant is located near the Interstate 680/State Route 4 interchange in unincorporated Martinez. Central San's current discharge permit allows an average dry weather flow rate of 53.8 million gallons per day (mgd) based on a secondary level of treatment. The actual average dry weather flow rate in the year 2015 was 29.1 mgd. Based on a design flow of 195 gallons per day (gpd) per single-family residential dwellings, the 71-unit project would generate 13,845 gallons of wastewater per day. This volume equates to about .01 million gallons per day for comparison to treatment plant capacity. The project, therefore, would have an insignificant effect on treatment plant capacity. If you any questions regarding these comments, please contact me at 925-229-7255.

Sincerely,

Russell B. Leavitt
Engineering Assistant III

RBL/sj

Holly Pearson

From: Sean Tully <Sean.Tully@dcd.cccounty.us>
Sent: Wednesday, January 04, 2017 8:56 AM
To: Holly Pearson
Subject: Comments Regarding Proposed Indian Valley 71-Lot Subdivision

Holly:

Good morning. Thank you very much for providing the County with the opportunity to review on this application. The proposal was reviewed by our Transportation Division, who would like to provide a brief response. I kindly request that you review their email below for the details of their comments. Thank you again.

SEAN TULLY
SENIOR PLANNER
CONTRA COSTA COUNTY
DEPARTMENT OF CONSERVATION AND DEVELOPMENT
30 MUIR ROAD
MARTINEZ, CA 94553
(925) 674-7800 PH
(925) 674-7258 FX

From: John Cunningham
Sent: Tuesday, January 03, 2017 11:00 AM
To: Sean Tully <Sean.Tully@dcd.cccounty.us>
Subject: Proposed Indian Valley 71-Lot Subdivision

Sean,

In response to your memo requesting comments and proposed conditions of approval for the subject application: my comments are below.

- The development should provide a direct connection to the Lafayette/Moraga Trail.
- The project proponent should establish an ongoing funding source to fund transportation alternatives. The County has established a funding source such as this which pays for a school bus and some additional County Connection bus service. The County used the "County Service Area" mechanism to fund the service, the charges are annually seen on the residents property tax bill. The future residents, through an equivalent funding mechanism, could provide funding to pay for incremental expansions of the Lamorinda School Bus Program and County Connection Route 6 to the development.

- John

John Cunningham
Principal Planner
Contra Costa County
Department of Conservation and Development
30 Muir Road, Martinez, CA 94553

Direct Line: 925-674-7833



December 30, 2016

Holly Pearson, Senior Planner
Town of Moraga Planning Department
329 Rheem Boulevard
Moraga, CA 94556

Re: Agency Comment Request – Indian Valley Project – Conceptual Development Plan
for a Proposed 71-Lot Subdivision – Town File Number CDP 2-16/D16-67

Dear Ms. Pearson:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Conceptual Development Plan for the proposed Indian Valley Project consisting of a 71-lot subdivision located in the Town of Moraga (Town). EBMUD has the following comments.

WATER SERVICE

Based upon the elevation and location of the proposed development, there are no existing EBMUD water distribution facilities within the project area that can serve the proposed development. Water service to the proposed development, if feasible, will be determined by EBMUD when the project sponsor applies for water service. In order to determine how the proposed development may obtain water service and have adequate information to analyze potential impacts to EBMUD's water distribution system and water supply for inclusion in the project's environmental documentation, the project sponsor should contact EBMUD's New Business Office to initiate a Preliminary Work Agreement (PWA) to determine the costs and conditions for providing water service to the proposed development. EBMUD also requests that the project environmental documentation include an analysis of the potential impacts related to development of EBMUD facilities that will be required to serve the project, as well as potential impacts related to EBMUD's finite water supply. Engineering, planning, design and installation of major facilities (reservoirs, pumping plants and related pipeline, or any elements thereof) and water mains require substantial lead time that should be provided for in the project sponsor's development schedule. The project sponsor should submit preliminary development plans as part of the PWA application.

WATER CONSERVATION

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD requests that the Town include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7,

Holly Pearson, Senior Planner

December 30, 2016

Page 2

Sections 490 through 495). The project sponsor should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense. EBMUD staff would appreciate the opportunity to meet with the project sponsor to discuss water conservation programs and best management practices applicable to the project area. A key objective of this discussion will be to explore timely opportunities to expand conservation via early consideration of EBMUD's conservation programs and best management practices applicable to the project. Due to EBMUD's limited water supply, all customers should plan for shortages in time of drought.

If you have any questions concerning this response, please contact Jennifer L. McGregor, Senior Civil Engineer, Water Service Planning Section at (510) 287-1030.

Sincerely,



David J. Rehnstrom
Manager of Water Distribution Planning

DJR:LAM:dks
sb17_007.doc

cc: Joan Bruzzone
899 Hope Lane
Lafayette, CA 94549

P/A Design Resources, Inc.
3021 Citrus Circle, Suite 150
Walnut Creek, CA 94598-2635



2950 PERALTA OAKS COURT P.O. BOX 5381 OAKLAND CALIFORNIA 94605-0381 T: 1-888-EBPARKS F: 510-569-4319 TRS RELAY: 711 WWW.EBPARKS.ORG

January 9, 2017

Holly Pearson
Moraga Planning Department
329 Rheem Boulevard
Moraga, California 94556

Sent via e-mail to
hpearson@moraga.ca.us
On January 9, 2017 NL

RE: Indian Valley Conceptual Development Plan

Dear Ms. Pearson,

The East Bay Regional Park District (“District”) appreciates the opportunity to provide comments on the Indian Valley Conceptual Development Plan (“Project”), located near the intersection of the Park District’s Lafayette Moraga and Redwood Las Trampas Regional Trails (“Regional Trails”) off of Canyon Road. The Lafayette Moraga Regional Trail is one of the District’s oldest regional trails, operated and maintained since 1976 and the District has a long-term commitment to providing recreational opportunities and protecting open space in Contra Costa County. In particular, the District has long standing interest in the Indian Valley and Ridge in Moraga and has identified a Regional Trail connector on its 2013 Master Plan, the Indian Ridge to Moraga Trail. The proposed project raises concerns for the District in regards to developing this Regional Trail.

The Indian Valley Project proposes to build a 71-home residential subdivision within the lower valley portion of the 140.9 acre Indian Valley Bruzzone property. The proposed project would include a potential creek trail, no-development of Indian Ridge per the Moraga Open Space Ordinance, and a potential regional trail connection to the Lafayette Moraga Regional Trail. The Park District has the following requests and concerns regarding the proposed project:

1. Project developer must commit to trails as shown in the Conceptual Development Plan (“CDP”). Currently trails are proposed as possible, which leaves the possibility of trails not being implemented.
2. Project developer needs to commit to extending the Lafayette Moraga Regional Trail to the proposed development and connecting it to the proposed creek loop trail.
3. Project developer and City staff need to ensure that the Regional Trail extension adheres to District standards and the trail design plans must be reviewed and approved by District staff.
4. District must review and approve plans for the intersection of Canyon Road and Indian Creek Way to ensure a safe and functional trail crossing is provided connecting the Regional Trail to the proposed creek loop trail.
5. Developer must ensure there is an adequate buffer between the proposed creek trail and Indian Creek.
6. Developer must ensure there is a GHAD or HOA maintained vegetated buffer between the proposed creek trail and the residential lots along the trail. The proposed vegetated buffer within the residential lots does not permanently protect the trail corridor and experience.

Board of Directors

Beverly Lane President Ward 6	Dennis Waespi Vice-President Ward 3	Ayn Wieskamp Treasurer Ward 5	Whitney Dotson Secretary Ward 1	Dee Rosario Ward 2	Ellen Corbett Ward 4	Vacant Ward 7	Robert E. Doyle General Manager
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7. District encourages the Town of Moraga to ensure the permanent protection of Indian Ridge on the remaining open space parcel.
8. District requests that any proposed western trail connections take into consideration existing conservation easements and trail development restrictions per the Long-Term Management for the Montanera Project Preserve Areas. The District would only be willing to consider accepting the development of the creek trail in lieu of the District's proposed ridgeline Indian Ridge to Moraga Trail, if a trail connection would be feasible to the west of the property.

Thank you for your review and consideration of our comments. Please send the District notices on any future actions regarding this project. If you have any questions or concerns, please contact me at (510) 544-2626, or by e-mail at nlavalle@ebparks.org.

Respectfully,

A handwritten signature in blue ink that reads "Neoma Lavallo". The signature is fluid and cursive, with the first name being more prominent.

Neoma Lavallo
Senior Planner

Hultgren-Tillis Engineers

January 12, 2017
File No. 861.01

Town of Moraga
Department of Planning Department
329 Rheem Boulevard
Moraga, California 94556

Attention: Mr. Holly Pearson

**Preliminary Geotechnical Review (draft)
Indian Valley Development
Moraga, California**

Dear Ms. Pearson:

INTRODUCTION

This letter provides the results of our preliminary review of the geotechnical aspects of the proposed Indian Valley Development. The property encompasses about 450 acres of land north of Canyon Road in the southwestern area of Moraga, California. The proposed development would consist of 71 residential lots along with roadways and associated utilities.

We received the following documents:

- "Indian Valley Project Description (Application Appendix B)," dated December 12, 2016, by Applicant, Joan E. Bruzzone.
- "Indian Valley Conceptual Development Plan," Cover Sheet with 22 Plan Sheets, dated December 12, 2016, by P/A Design Resources.
- "Updated Preliminary Geotechnical Report, Indian Valley Project," revised date June 24, 2015, by Engeo, San Ramon, California.

PROJECT DESCRIPTION

The project site is located on a southwest-facing hillside along the east side of Indian Valley Creek. Existing slope gradients range from about 8H:1V (horizontal to vertical) in the low lying area along the stream to about 1H:1V along the upper area along the eastern side of the site. Elevations range from about 515 feet (mean sea level) in the stream at the southwestern corner of the site to about 1,070 feet at the ridgeline above the site.

The 71 lot development would be clustered along a roadway through the low lying area in the western portion of the site. Roadway construction would include four bridges where the alignment crosses primary drainage ravines that cross the hillside. An emergency vehicle access (EVA) road is proposed along the lower margin of the site adjacent to the stream channel. The EVA road will have five bridges where the alignment crosses primary drainage ravines. The clustered residential lots would be located between the drainage ravines.

The primary tier of lots are located on the southwest and northeast side of the main roadway. A secondary tier of lots are located in the middle of the development above the stream channel and on the hillside northeast of the roadway. Access to the secondary tier of lots will be provided by cul-de-sac or hammer head spurs off the main road.

Earthwork for the cuts and fills to grade the development plan is estimated to be about 800,000 cubic yards. The estimated earthwork quantity does not include remedial grading to build new slopes or repair landslides. The development plan shows new slopes throughout the site that are inclined at 3H:1V with slopes along the upper limit of the development inclined at 2.5H:1V. The slopes vary in height ranging up 180 feet vertically.

SITE GEOLOGIC CONDITIONS

Regional geologic maps show the site to be underlain by two geologic units. The Moraga volcanics bedrock unit forms a hard resistant cap of basalt bedrock along the top of the ridge. Underlying the basalt cap, the majority of the hillside is underlain by relatively weak sedimentary rocks of the Orinda formation. Broad erosion swales cross the site in an east-west direction. The swales are filled with colluvial deposits consisting of debris fans and slope wash originating from high on the slope.

The site is located in an area of known landslides and relatively high landslide hazards. Regional landslide maps by the U.S. Geological Survey (Nilsen, 1975) show the site to be underlain by deep colluvial deposits with broad landslide sources at the head of swales. Local photo-interpretive mapping for the Town of Moraga (Cotton Shires & Associates, 2014 draft unpublished) shows similar landslide conditions as the Nilsen map. These preliminary interpretations of landslide conditions at the site indicate a significant source of debris flows at the top of slope and fan deposition on the middle and lower portions of the slope.

These conditions result in a significant geologic hazard for the site that has a documented source of debris flows and landslides near the top of slope. The landslides and debris flows have travelled downslope and have deposited and accumulated as fan deposits in swales and along the toe of slope. In general the debris flows have a source area, a zone of travel (run-out) and an area of deposition. The currently proposed development encroaches into the travel and deposition zones of the debris flow hazards.

GEOLOGIC/GEOTECHNICAL INVESTIGATION REPORT

Engeo states that the updated preliminary report was to provide updated conclusions about the geotechnical considerations for the project. Their geologic map shows the upper portion of the site is underlain by bedrock and landslides. They indicate the types of landslides are debris flows, earthflows, and deep-seat landslides. They also indicate that the various types of slope instability can be a significant hazard that can generally be mitigated. Various mitigation measures are suggested including debris catchment areas and development setback areas.

We have the following comments regarding the geologic/geotechnical investigation report:

1. A significant geologic hazard for the development is the potential for debris flows which are prevalent on the site. The site plan includes numerous lots located within the potential path of debris flows. The debris flow hazard locations have not been adequately characterized to determine appropriate mitigation methods at specific

hazard areas. Therefore, there is significant uncertainty as to the feasibility of lots within major swales. Proper characterization of the debris flow hazards should be provided to ensure the proposed lots are not within a direct geologic hazard from debris flows, sediment-laden runoff or muddy water. The analysis should include but not be limited to characterizing the type/gradation of deposits, estimating the anticipated run-out distance of individual debris flows, and an estimation of the volume of material that should be retained/collected at catchment basins and debris benches. The specific remedial measures (benches, debris catchment area, bollards, walls, etc.) should be shown on preliminary plans to demonstrate feasibility.

2. Engeo makes preliminary recommendations that catchment basins and debris benches will be needed to contain material generated from the debris flow source areas above the developed areas of the project. Catch basins and debris benches may require significant grading that will alter the ground surface upslope of the "limit of civil grading". The locations of these mitigation improvements will affect the upper limit of grading for the development. A conceptual repair scheme is needed to evaluate the feasibility of the development plan and conformance with the Town of Moraga's design guidelines. A conceptual layout of these improvements should be prepared to be included with the project submittal so that the actual limit of grading alteration can be evaluated.
3. Engeo recommends that all slopes greater than 8 feet high have a 3H:1V inclination or flatter. The conceptual development plan shows slopes greater than 8 feet high inclined at 2.5H:1V. The development plan should conform with Engeo's recommendation.
4. Engeo test pit logs describe cobbles and boulders in the debris fans at the site. The cobbles and boulders in the debris fans developed from the Moraga Formation. The potential for further rock fall hazards generated from the Moraga Formation should be characterized.
5. The project description indicated that the development will have a Geologic Hazard Abatement District (GHAD). An overview of the area to be included in the proposed GHAD should be included with the project submittal.

TOWN OF MORAGA OPEN SPACE ORDINANCE – GRADING DESIGN GUIDELINES

In general, the Town of Moraga Open Space Ordinance (MOSO), Grading Design Guidelines (Design Guidelines), and Title 14 Grading Ordinance were adopted to protect resources and preserve the natural topography in open space areas. The intent of the ordinance and guidelines is especially applicable in hillside open space where site development will affect existing slopes and ridgelines.

A large portion of the upper hillside area is mapped as landslide (debris flow and earthflow) deposits and is considered a "High Risk Area" as defined in Part II D2 items a, b, d, and f of the MOSO. As such, the construction to build the development and repair the landslides would need to be reviewed for consistency with CEQA, the Town of Moraga's environmental guidelines, and the Goals and Policies of the General Plan.

We reviewed the conceptual plans and conclude the grading plan for the proposed development will impact the natural slope topography. While the finished grades and contours on the

proposed grading plan may meet the intent of the MOSO and Design Guidelines, the mitigation needed to address the existing debris flow and earthflow deposits will likely extend beyond developed areas and the "cell limit" shown on the plans. Depending on the extent of remedial grading and the configuration of catchment basins, debris benches and landslide repairs, the project could conflict with the Town of Moraga's hillside ordinances and guidelines.

CLOSURE

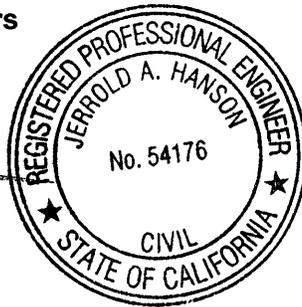
Based on our preliminary review, we conclude that a more detailed submittal is needed before the extent of grading and the cell limit can be determined. Conclusions regarding the conformance of the project with the Town of Moraga's ordinances and guidelines will require a more detailed layout of debris flow and earthflow mitigation along with associated improvements.

We trust this provides you with the information you require at this time. Should you have any questions or comments, please feel free to give us a call.

Sincerely,

Hultgren - Tillis Engineers


Jerrold A. Hanson
Civil Engineer




Kevin J. Ryan
Certified Engineering Geologist



JAH:KJR:RKT:lm:la



MORAGA-ORINDA FIRE DISTRICT

Office of the Fire Marshal

12/20/2016

Permit: CP165000443 - Submitted Plan: Site Access Review: Preliminary Plan Review, Consulting and Meetings

Joan Bruzzone
899 Hope Lane
Lafayette, CA 94549

F I L E

**RE: PLANNING APPLICATION REVIEW AT
NO ADDRESS
MORAGA, CA 94556
APN: 257180034**

Dear Joan Bruzzone :

The District has reviewed the planning application for the above address. Based on the information provided, comments and requirements have been made as conditions of approval (see the attached report).

If during the course of the entitlement process the project changes, additional requirements may apply. Thank you for the opportunity to comment on this proposed project. If you have any questions please contact me at (925) 258-4520 or kleonard@mofd.org

Sincerely,

A handwritten signature in black ink, appearing to read "Kathy Leonard".

Kathy Leonard
Fire Marshal

Moraga-Orinda Fire District Planning Application Review

Submittal Information

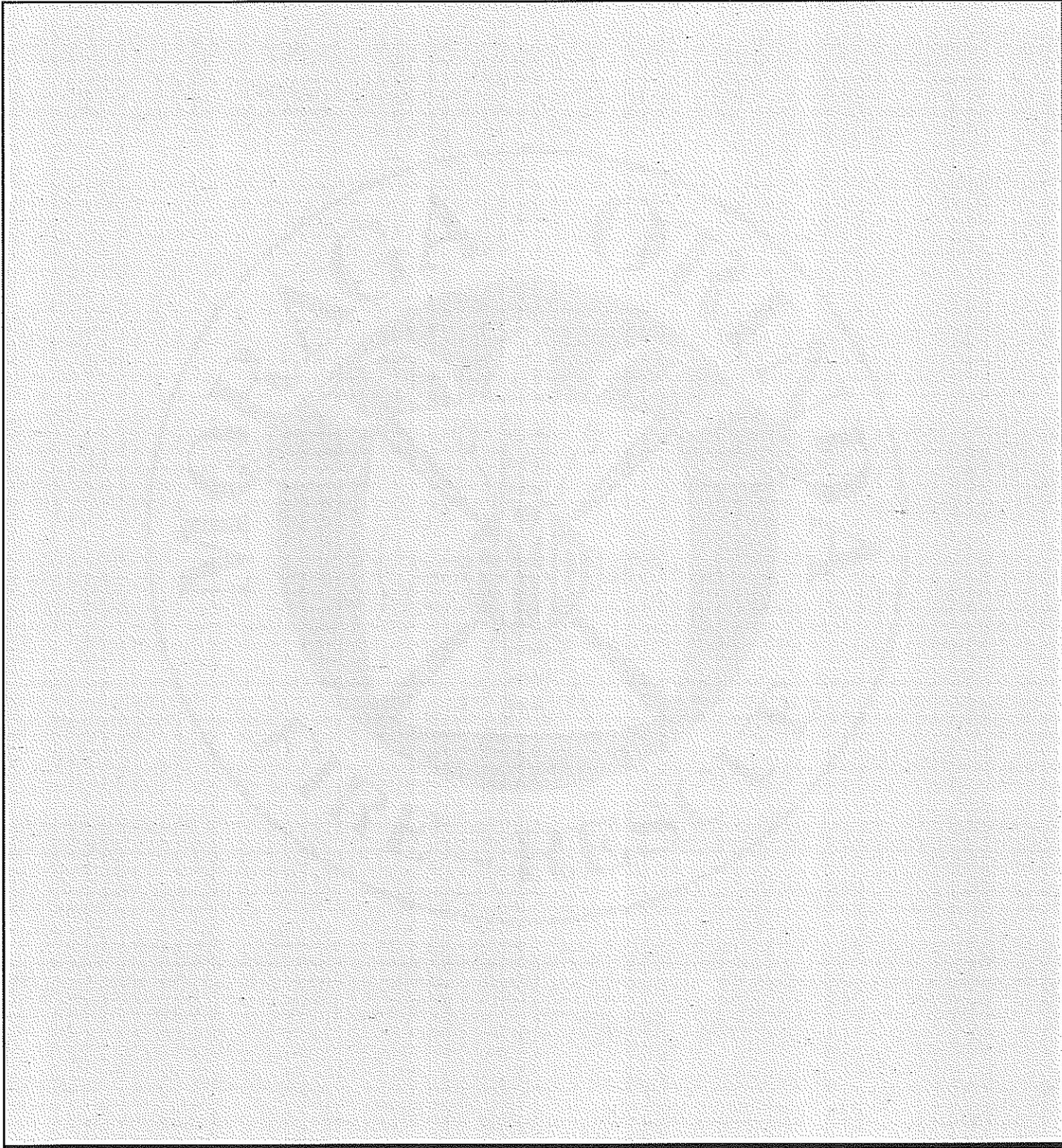
Permit Number	CP165000443	Submittal Number	SN5000552
Submittal Type	Site Access Review: Preliminary Plan Review, Consulting and Meetings	Submitted Date	12/20/2016 09:37:09

Condition #	Category	Condition
5031301	Access & Water	Fire apparatus roadways (public, private streets, roads and in some instances driveways used for vehicle access) shall extend to within 150 ft. (45.72 m) of any portion of an exterior wall of the first story of any building.
5031302	Access & Water	The maximum grade for a fire apparatus roadway is 20%. Roadways with grades of 16-20% shall be grooved concrete. Grooved concrete shall be ½" wide, ½" deep, and spaced 1½" on center. If alternate surfacing is proposed, provide a letter stamped by the civil engineer documenting that the skid resistance is better than or equal to the grooved concrete specification. The alternate surfacing must also be approved by the appropriate city, town or county department.
5031303	Access & Water	Fire hydrant(s) are required. All hydrants shall be wet barrel standard steamer type (1) 4 1/2" (114.3 mm) and (1) 2 1/2" (63.5 mm) outlet. Location and number of Hydrants to be approved by MOFD.
5031304	Access & Water	Fire apparatus roadways in excess of 150 ft. (45.72 m) in length shall make provisions for approved fire apparatus turnarounds. This includes the proposed EVA.
5031305	Planning	Adjacent to fire hydrants, fire apparatus roadways shall be a minimum of 26 feet in width for at least 20 feet (6 meters) in both directions from fire hydrant.
5031306	Planning	For buildings 30 feet (11 meters) and over in height above natural grade, the required fire apparatus access roadway shall be a minimum of 26 feet (8 meters) in width, and shall be positioned parallel to at least one entire side of building, and the inside curb shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from building.
5031307	Planning	Fire flow requirements for buildings or portions of buildings and facilities shall be in accordance with CFC or other approved methods. Provide flow data from appropriate water purveyor to demonstrate that the fire flow is adequate.
5031308	Planning	Provide engineering document disclosing live load standards have been met on private/public access roadways and or bridges (minimum 40,000 lb. (18,144 kg) live load standard). Post sign with maximum live load at bridge entrance(s).
5031309	Planning	Any/all gates across Fire District access roadways shall have the same minimum clear, unobstructed linear width of the road and a clear vertical height of 13 feet 6 inches (4.1 meters). All locking devices shall provide for Fire District emergency access. All gate plans shall be approved by Fire Protection District prior to construction.

Condition #	Category	Condition
5031310	Planning	If development interfaces with wildland or open space areas, a separate landscape plan for vegetation fuel modification and/or buffer zone(s) featuring fire resistive and drought tolerant varieties of landscaping is required to be submitted and approved by the Fire Protection District prior to issuance of grading and building permits. The zone(s) should be shown/designated as separate lettered lots. The plan shall include dedicated easements for emergency and maintenance access to these zones and shall be maintained in perpetuity. The maintenance for the buffer zones and emergency/maintenance access ways shall be assigned to a homeowner's association or other approved agent. These responsibilities shall be disclosed to property owner(s) by way of deed restrictions and/or covenants, conditions and restrictions. Supplemental "Fuel Modification" criteria available upon request.
5031311	General	Project is located within the State Responsibility Area and may be subject to additional submittal, requirements or comments from CalFire.
5031312	General	Proposed project if located within the Very High Fire Severity Zone. CBC 7A building construction is required.
5031313	Planning	Entrance to / egress from project design subject to approval and field test with fire apparatus.
5031314	Access & Water	Fire apparatus roadways (public, private streets, roads, and in some instances driveways used for vehicle access) shall have a minimum unobstructed width of 20 feet (6 m) and an unobstructed vertical clearance of not less than 13 feet 6 inches (4 m). Streets under 36 feet (11 m) shall have red curbs and be posted with signs or red curbs and stenciled on one side and under 28 feet (8.5 m) on both sides of the street. Stencil and signs shall read as follows: "NO STOPPING FIRE LANE CVC 22500.1".
5031315	Access & Water	Fire apparatus roadways (public, private streets, roads and in some instances driveways used for vehicle access) shall be capable of supporting the imposed weight of fire apparatus (40,000 pounds) and shall be provided with an all weather driving surface. [Only paved, concrete, or engineered paver system surfaces are considered to be all weather driving surfaces]
5031316	Access & Water	NOTE ON FIELD PLAN: Fire apparatus roadways (public or private streets or roads used for vehicle access) shall be installed and fire hydrants in service prior to commencement of framing; PRIOR TO COMMENCEMENT OF FRAMING, CONTACT THE MORAGA-ORINDA FIRE DISTRICT TO SCHEDULE AN INSPECTION OF ROADWAYS AND FIRE HYDRANTS.
5031317	Access & Water	NOTE ON FIELD PLAN: Provide a weed abatement program before, during and after construction. Maintain grass or brush clearance of 100 ft. (30.48 m) from combustible construction and 30 feet (9.144 m) from street and property lines.
5031318	Planning	The minimum number of fire apparatus access roads serving residential development(s) shall be based on the number of dwelling units served and shall be as follows: (a) 1-75 units, one public or private access road. (b) 76-150 units, one public or private access road and one emergency vehicle access (EVA) road. (c) 151+ units, at least two public or private access roads.
5031319	General	Prohibited plants- Baccharus and Muhlbergia species are prohibited under MOFD's disallowed plant list-resubmit landscaping plant with revised list.
5031320	Access & Water	Fire apparatus roadways (public, private streets, roads and in some instances driveways used for vehicle access) serving up to 2 dwelling units shall have a minimum unobstructed width of 16 feet (5m) and a minimum unobstructed vertical clearance of not less than 15 feet (4.57m)
5031321	Fire Sprinklers	Residential Automatic Fire Extinguishing Sprinkler Systems are required in residential occupancies.
5031322	General	EVA and main path of egress exiting onto Canyon Road may be a safety hazard for fire and emergency equipment with current road conditions with respect to the speed of vehicles traveling on the road and line of sight to exit or enter project.

Permit Number: CP165000443

Condition #	Category	Condition
5031323	General	The EVA behind lots #44-48 and the driveways serving lot #27 and #35 need a fire department turn around.





Town of Moraga

PUBLIC WORKS/ENGINEERING
DEPARTMENT

MEMORANDUM

To: Holly Pearson, Senior Planner, Planning Department

From: Frank Navarro, Consulting Senior Civil Engineer

Subject: Indian Valley Subdivision Conceptual Development Plan (D16-67)
Engineering Completeness Comments

Date: January 12, 2017

We have reviewed the following documents associated with the Conceptual Development Plan submittal for the proposed Indian Valley Subdivision:

1. Indian Valley Conceptual Development Plan prepared by P/A Design Resources, dated December 12, 2016
2. Indian Valley Project Description dated December 12, 2016
3. Updated Preliminary Geotechnical Report Indian Valley Project prepared by ENGEO, dated June 24, 2015
4. Trip Generation and Access Review for the Indian Valley Residential Project prepared by Abrams and Associates dated December 12, 2016
5. Indian Valley Preliminary Stormwater Control Plan prepared by P/A Design Resources, dated December 2016

The submittal is deemed incomplete at this time. Please request the applicant to submit the following additional information and to take note of the following initial comments:

- The Town's consulting geotechnical engineer will review the submitted preliminary geotechnical report and provide comments directly to you.
- The Applicant shall provide a more comprehensive traffic analysis for review which includes elements as stated in the project description – sight distance information (vertical and horizontal) on Canyon Road, emergency vehicle access, current conditions and traffic volumes on Canyon Road, and an assessment of the proposed project's effects on safety and service levels.
- As required by the Moraga Orinda Fire District (MOFD) ordinance, the project contains one access road and one emergency vehicle access (EVA) road. However, the two access points both connect to Canyon Road and are separated by only 200 feet. Access points provided must be separate, remotely located, and in this case not connected to the same public road.

- A preliminary hydraulics and hydrology study shall be submitted for review which includes an assessment of current conditions and analysis of the development watershed, Indian Creek and any downstream improvements (including road culverts). The Applicant shall verify the adequacy of any downstream drainage facility accepting stormwater from the project. Also, paths for overland release within the development should be understood at this time.
- The Applicant shall provide an exhibit showing the FEMA Zone AE area that is associated with this section of Indian Creek. It appears that portions of the development may be located within a special flood hazard area. The Applicant shall be aware of the requirements of FEMA and the Town of Moraga's Flood Plain Management Ordinance as it pertains to development or improvements within a special flood hazard area.
- The Applicant shall provide an exhibit indicating proposed ownership and maintenance responsibilities of the various parcels.

Please note that we will have additional comments once more information is provided and once we have had an opportunity to perform a thorough review of the submittal. Feel free to contact me with any questions at (925) 575-0417. Thank you.

cc: Edric Kwan
Eric Gonzales

Holly Pearson

From: Holly Pearson
Sent: Thursday, January 12, 2017 11:00 AM
To: Holly Pearson
Subject: FW: Indian Valley CDP - Parks and Recreation Comments

From: Jay Ingram
Sent: Friday, January 06, 2017 12:08 PM
To: Holly Pearson
Subject: Indian Valley CDP - Parks and Recreation Comments

Comments

Generally speaking, consider the 2007 Town-wide Parks and Recreation Commission Master Plan Recommendation when planning this (and future) developments. The community outreach and eventual recommendation as a result of the Master Plan process lead to the following:

- i. Preservation and development of two new neighborhood parks, one special use area, and acres of open space. (West Commons could be considered one newly developed park, even though it isn't located in one of the two suggested locations).
- ii. Developing recreation facilities not currently provided in Moraga, such as:
 - a. off-leash dog park
 - b. a new 30,000 multi-generational community center to meet the Town's need for indoor activity areas, meeting rooms, and gymnasiums
 - c. development of additional sports fields to provide much needed athletic space
 - d. new trails are recommended to create transportation alternatives

-
- Camino Ricardo/Heritage Court is under 15 acres and a 1.5 acre park was provided (complete with two types of trails)
 - Indian Valley is 452 acres and 1.5 miles of trails are proposed and 2/3 of the overall acreage is listed as open space?
 - One could compare this parcel to the Wilder parcel in Orinda, clustered development in both, community-wide recreational facilities in Wilder, but not yet in the Indian Valley CDP.
 - It should also be noted that community facilities in Indian Valley would be close to the "recreational community hub" of Joaquin Moraga Intermediate School. While some may suggest that Indian Valley is not a good location, Rancho Laguna Park is located at the southern tip of the Town and Joaquin Moraga is currently a recreational hub for Moraga residents.

Specific to the CDP plan set provided:

- Sheet 5 of 22 – Parcel A Open Space 6.54 +/- AC, potential place for community facility (community center/sports fields/park). This would follow the Town of Moraga Parks and Recreation Master Plan and it would be similar to the Wilder Art and Garden Center/sports fields in Orinda). This change would require reconfiguration of some proposed home plots.
- Sheet 7 of 22 – looks like the EVA enters the property within the 100 year floodplain? Probably not a good idea.
- Sheet 18 of 22 (Street Section B-B) – 6' wide DG trail will be maintained by the GHAD, right? Same would apply for the 20' wide EVA/Multi-use AC Paved Trail (Street Section A-A)?
- Sheet 20 of 22 – 10' wide proposed extension of EBRPD trail is good as proposed, we could/should encourage that trail to lead to proposed community facilities located on Parcel A – Open Space? Also, the proposed 6' wide trail parallel to Indian Creek Way should spur up to the suggested community facilities on Parcel A – Open Space.
- Sheet 22 of 22 – Since all grading and site improvements will be completed in one phase, provide (and complete) the community facilities improvements as part of phase 1.
- Page 28 – Indian Valley Project Description (Application Appendix B), the 5th bullet statement – Trail improvements will be appreciated. However, due to the many hiking trail opportunities in and around Moraga, to provide "a substantial

recreational opportunity as part of this project” as the bullet suggests, staff requests further review/consideration/comparison for community facilities such as the Wilder development in Orinda.

- Page 28 – Indian Valley Project Description (Application Appendix B), the 6th bullet statement – is having an EVA close a creek as proposed a good idea? I’m not sure of the answer and I’m sure it’s a case-by-case answer, so I ask?
- Page 29 – Indian Valley Project Description (Application Appendix B), the 6th bullet statement – Economic Feasibility, to satisfy recommendations from the 2007 Town of Moraga Parks and Recreation Master Plan, new recreational amenities have historically shown to also improve economic feasibility (in addition to new residential units). In the context of this bullet point, the same owner owns both the Indian Valley parcel and the majority of the land in the MSCP area. Some community-wide level of economic benefit can and should be address through a requirement to provide community facilities beyond the currently proposed trails.
- Page 31 – 6.3 Park and Recreational Facilities – The title, Park and Recreational Facilities, implies more than trails. In comparison to community discussions for trails in Indian Valley in 2001/2002, the CDP proposed trails do not provide extensive new trail facilities. Perhaps this section should address active park acreage and/or other types of recreational facilities the development plans to provide. Community discussions on trails in 2001/2002 resulted in the following suggestions:

- (A) *INDIAN RIDGE. From Valle Vista Staging Area along Canyon Road and traveling toward the town on the Lafayette/Moraga Trail, then at the foot of Indian ridge, cutting North/East to the top of the ridge. Then following the ridge overlooking the Moraga Country Club to the town line with Orinda. This will connect with trails developed by Orinda in Gateway Valley and continue to the Gateway Boulevard exit on Route 24. The trail will continue through Siesta Valley to Tilden Regional Park.*
- (B) *INDIAN VALLEY. From Valle Vista Staging Area along Canyon Road extending the Lafayette/Moraga Trail further west toward Canyon; then heading North through Indian Valley to the town line. This trail will lead to Huckleberry Botanical Regional Preserve.*

Okay, I think that is enough from me for now. Happy to discuss any comments you may have.
Thank you for the opportunity to review.

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