ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY
PLANNING DEPARTMENT

STAFF REPORT – *INFORMATIONAL ITEM*

TO: CASTRO VALLEY MUNICIPAL ADVISORY COUNCIL
HEARING DATE: AUGUST 12, 2024

GENERAL INFORMATION

APPLICATION TYPE AND NUMBER: PLN2021-00064 - Request for comments on Initial Study / Mitigated Negative Declaration, for Conditional Use Permit, Site Development Review, and Rezoning, to construct and operate a religious facility

OWNER/ APPLICANT: Fa Yun Chan Temple

PROPOSAL: Application to allow a religious facility, with conversion of an existing residence into dormitory housing, and adding (3) Buddha statues & associated meditation trials, demolition of storage and stable buildings, and construction of (5) new buildings and site improvements for the proposed private Buddhist temple complex.

ADDRESS AND SIZE OF PARCEL: 7825 Crow Canyon Road, with 13 separate Assessor's Parcel Numbers, including: 085-4050-001-04, -001-08, -002-00, -003-00, -004-00, -005-00, and -010-02, 085-4055-004-00, 005-00, 006-00, 085-4060-001-09, 085-5000-001-01 and 001-26; about 98 acres total.

ZONING: "R-1-CSU-RV" (Single Family Residential, Secondary Unit, Recreational Vehicle Parking) "C-1" (Commercial) and "A" (Agricultural)

GENERAL PLAN DESIGNATION: Resource Management (RM, Castro Valley General Plan)

ENVIRONMENTAL REVIEW: This project Draft Initial Study/Mitigated Negative Declaration is available for public comment from August 2 to September 3, 2024. The document is available at the Alameda County Planning Department, 224 W. Winton Ave, Room 111, Hayward, the Castro Valley Library Reference Desk, 3600 Norbridge Ave, Castro Valley, and on the Alameda County Planning Department web page: https://www.acgov.org/cda/planning/ceqa-projects/index.htm

RECOMMENDATION

Staff recommends the Council consider the staff report, the Draft Initial Study and Mitigated Negative Declaration, public testimony, and provide comment on the CEQA-related documents.

PARCEL ZONING HISTORY

141st Zoning Unit established Zoning for the property and vicinity.

742nd Zoning Unit changed the zoning classification to C-1 for parcel 085 -4060-002-09 at the intersection of Crow Canyon and Norris Canyon Roads.

October 24, 1974, the 1166th Zoning Unit reclassified the area to the R1-L-BE (Single Family Residential, Limited Agricultural, 5-acre MBSA) District.

May 7, 1988, the 1695th Zoning Unit reclassified the area into to the -CSU (Conditional Secondary Unit) Combining District.

June 4, 1988, the 1812th Zoning Unit reclassified the area into to the -RV (Recreational Vehicle) Combining District.

From 2015 to 2019, three pre-application meetings were held with the applicant to review proposals for a religious facility.

SITE AND CONTEXT DESCRIPTION

Physical Features: The project site consists of thirteen separate parcels, ranging in size from less than 5,000 square feet to 64 acres. The terrain slopes steeply upward from Crow Canyon Road, with grades exceeding 20%. Existing structures on the various parcels include a 3700 square foot residence, a detached 2-story structure with 5 garages underneath, and additional residential and non-residential structures. Other than the residence, there is little permit history for the property. There is at least one unpermitted structure on the project site, constructed around 2006. Prior property owners operated a horse boarding facility on one of the larger parcels until 2005.

There is a single well on the property, providing water for domestic uses as well as landscaping. Historically, this property was part of the Norris Canyon HomeOwners Association (NCHA), a cooperative water venture that distributes water purchased from watershed land eastward toward Contra Costa County. In recent years and under prior ownership, this property's status in the association was suspended and subsequently terminated. The applicant is in communication with the Association regarding the property's future status in the association. The applicant has also worked with a Hydrologist to evaluate and improve the existing well, and there is significant storage for domestic use. The Hydrologist's report, communication with the State Waterboard, and certification of Non-Public Water Supply are attached.

Adjacent Area: The project site is located in an area of larger parcels used for grazing and horse boarding as well as rural homesites. Immediately north of the subject properties are small single-family residential homes within a community accessed off Norris Canyon Road. North of the driveway entry for the project site, Norris Creek flows under Crow Canyon Road, connecting with Crow Creek west of the roadway.

PROJECT DESCRIPTION

For this site the applicant proposes the phased construction of a religious facility, with conversion of an existing residence into a staff dormitory, construction of three Buddha statues and meditation trails, the demolition and removal of five storage buildings, and construction of five new buildings to serve as prayer halls, kitchen facilities and guest quarters.

There would usually be about eight persons living on site. The facility would receive a maximum of forty (40) temple guests on weekends. There would be three (3) annual one-day meditation events for up to 100 participants (including staff) and one (1) annual 7-day Dharma Service Event in December with a maximum of 150 participants (including staff) up to 150. The overnight guests (including residents) would increase to 40 during the annual 7-day special event.

REFERRAL RESPONSES

Alameda County Fire Marshal: Responded to the referral request on June 20, 2021, with six conditions of approval, including required approvals from Cal Fire and future separate approvals for access roads, water supply and phased occupancy.

Alameda County Public Works Agency, Land Development Division: Responded to the referral request on April 19, 2021, with 19 project comments and conditions.

Alameda County Public Works Agency, Grading Division: Responded to the referral request on April 20, 2021 with 10 project conditions, including the requirement for a grading permit and geotechnical report prior to site development.

Alameda County Department of Environmental Health: Responded on March 17, 2021, with information for the applicant regarding the requirements for submission of a request for service for OWTS evaluation.

IMPACTS CONSIDERED UNDER CEQA

This report discusses the project impacts disclosed in the Initial Study during the public comment period. The comment period itself is 30 days instead of the minimum 20 days required. CEQA does not require a public meeting for an initial study, however this meeting provides a clear venue for an open discussion of the impacts. No action is sought for the project itself, which will likely be heard by the Council in the near future.

The Initial Of the impacts from the CEQA checklist, the Initial Study finds that project implementation requires mitigation measures to address impacts to the following resources, reducing them to a less than significant level. These mitigation measures would be included with the Project Mitigation Monitoring and Reporting Program (MMRP) and incorporated into the project conditions of approval.

Air Quality

- During construction, to be addressed with the implementation of best management practices

for equipment used in construction.

Biology

- Alameda whipsnake,
- possible special status bat species
- Birds (Bird Safe Design, minimize lighting)
- Nesting Birds
- Riparian Habitat

Cultural Resources

- Halting of construction in the event of a find, use of buffer around a find.

Tribal Cultural Resources

- Contact a tribal representative in addition to an archeologist, in the event of a find.

Geology

- Update design of existing and proposed structures, if necessary, as required by geotechnical report.
- Halt of construction in the event of discovery of unknown fossils or fossil-bearing deposits.

Hazards

- Applicant/Permittee shall maintain flammable vegetation and material storage.

Utilities

- Prior to issuance of building permits for work under Phase 2, the project shall demonstrate to the satisfaction of the County that adequate water supply is available to meet projected demand.

Mandatory Findings of Significance

- Project adherence to the Biological Mitigation Measures, lack of cumulative impacts, and the implementation of measures protecting air quality and hazard potential serves to address impacts of this type.

Staff met with tribal representatives (Lisjan Nation) regarding the project, and as a result of the meeting updated the mitigation measure related to Tribal Cultural impacts, directing the project representative to contact tribal representatives, in addition to qualified archeologist(s) in the event of a discovery. The Initial Study found the project impacts upon Aesthetics and Transportation to be less than significant without mitigation, as supported by the accompanying reports and exhibits.

Other impacts considered but found not to require mitigation and to have either no impact or less

than significant impacts include aesthetics, agricultural and forestry resources, energy, greenhouse gas emissions, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, and Wildfire.

Public Comment:

A Neighborhood Courtesy Notice and a Public Hearing Notice have been provided to area residents within 1,000 feet of the subject properties. Staff have received no responses as of this report date.

AVAILABILITY OF CEQA DOCUMENTS

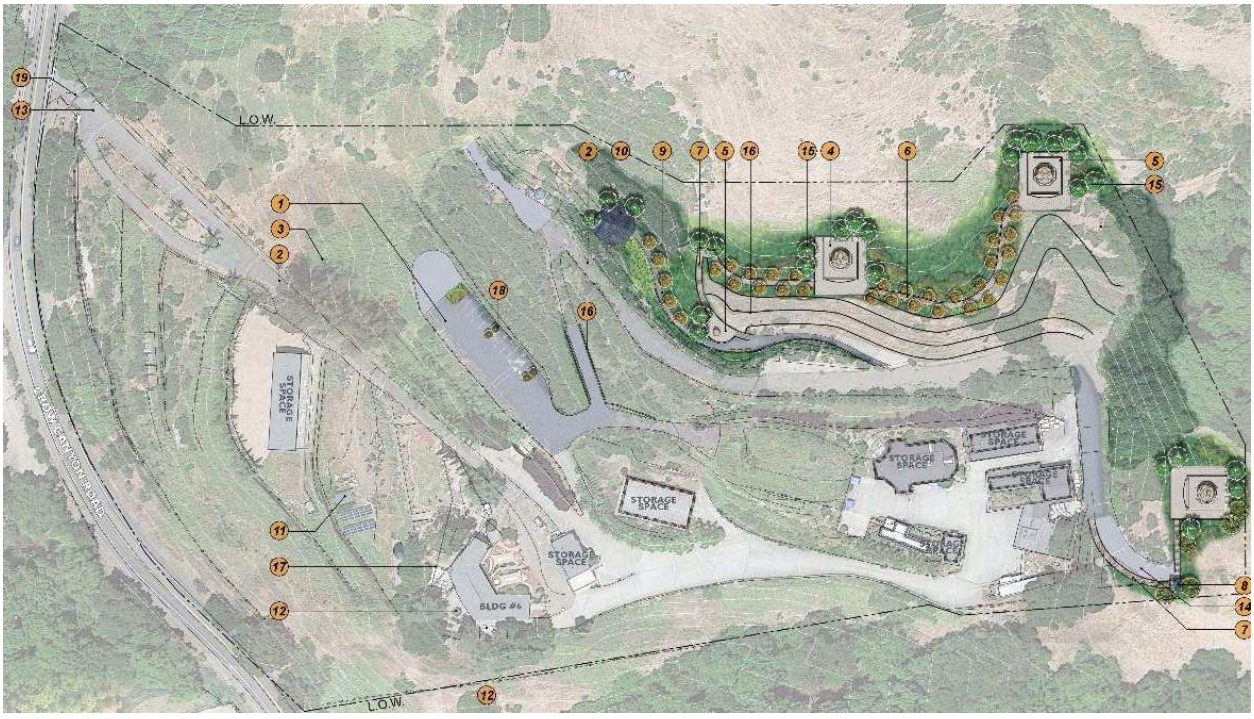
The CEQA documents, including the Draft Initial Study and Mitigated Negative Declaration, as well as their supporting exhibits and attachments, are available for public review at:

Castro Valley Library
3600 Norbridge Ave, Castro Valley, CA 94546

Alameda County Planning Department
224 West Winton Avenue, Suite 111, Hayward, CA 94544

The following internet link:
https://www.acgov.org/cda/planning/ceqa-projects/index.htm

Figure 1 – Overall View of Project Site



ATTACHMENTS

- Referral Responses
- Certification of Non-Public Water Supply
- Response from State Waterboard
- Hydrologist's Report
- Draft Initial Study and Mitigated Negative Declaration, and supporting exhibits and attachments.

(Hardcopy mailed to CVMAC and https://www.acgov.org/cda/planning/ceqa-projects/index.htm)

PREPARED BY: Damien Curry Senior Planner
REVIEWED BY: Rodrigo Orduña Assistant Planning Director

Alameda County Fire Department

Fire Prevention Bureau

Plan Review Comments

6363 Clark Ave, Dublin California 94568 Phone (925) 833-3473 Fax (925) 875-9387

06/20/2022

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

To	Damien Curry	**PLN #**	2021-00064
Address	7825 Crow Canyon Road		
Job Description	Creation of Meditation Center		
Reviewed By	Bonnie S. Terra, Division Chief		

Review of Planning referrals are usually based on information and plans that lacking details for specific comments. The primary focus of our review is to assure fire access to the site. Specific fire and building code issues will be addressed during the regular building permit submittal and review process.

Conditions of Approval

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

1. All improvement and construction shall comply with applicable fire code requirements in effect at time of permit submittals.
2. Access road grade, surface, turnarounds, and locations must be approved separately by Cal Fire if the applicant is requesting any variances.
3. A rural water supply system shall be installed through out the stie. This system must be in service and approved by the fire department prior to any new vertical construction or the start of modifications to existing construction.
4. The approved access roads shall be in service prior to any new construction or modifications to existing construction.
5. Phased occupancy and/or construction requires separate approval.
6. Vegetation must be maintained and comply with Cal Fire regulations.

MEMORANDUM

DATE: **April 19, 2021**

TO: **Damien Curry, Development Planning Division**

FROM: KY **Kyin Yin, Development Services**

SUBJECT: **PLN2021-00064, SDR, 7825 Crow Canyon Rd, Castro Valley**
Fa Yun Chan Temple

We received and reviewed your exhibit and transmittal letter dated March 16, 2021, regarding application PLN2021-00064, located at 7825 Crow Canyon Road, bearing County Assessor's designation: APN 085-4060-001-09, 085-5000-001-01, 085-4060-001-26, 085-4050-001-04, and 085-4050-002-00. This project application is for worship facilities, including the conversion of existing residence into staff dorms, constructing Buddha statues, trail systems, construction of five (5) new buildings, and other site improvements.

Due to the limited information provided, we completed only the preliminary review. When grading, drainage, and road improvement plans are submitted, the detailed review can begin.

Should this application receive favorable consideration by the Planning Department, please consider the following recommendations in establishing the conditions of approval:

1. The Board of Supervisors, under Ordinance No. 295 N.S., on August 8, 1957, established a 100-foot future width line for Crow Canyon Road (50 ft each side measured from the existing center line of the road). The building setback is measured 100 ft from the existing centerline of the Crow Canyon Road. The property owner should dedicate right-of-way to the county as condition of approval.

2. Right-of-way dedication must be done through a separate instrument, in a form and manner acceptable to the Real Estate Division, Public Works Agency.

3. Any right-of-way dedication, road improvement and necessary relocation of utility facilities shall be at no cost to the county.

4. The owner shall obtain approval from the Alameda County Department of Environmental Health for the domestic septic system and the domestic water supply.

5. Provide a copy of the drainage area map and drainage calculations. Show construction details and cross-sections for all proposed drainage facilities.

6. Provide a conceptual Storm Water Management Plan. This plan should depict the drainage management areas (DMA) for the entire project site and a plan to treat each area. All proposed treatment measures shall be numerically sized to accommodate treatment flows from their respective DMA. It is not clear from the exhibits which features are proposed treatment measures. Once this matter is addressed, we may have additional comments.

7. If the permeable pavement is proposed as a method of stormwater treatment, design guidelines require the subgrade to be ungraded in-situ material with a minimum percolation rate of 0.5" per hour. If infiltration is proposed a satuated hydraulic conductivity rate of 1.6" per hour or greater is required, if ksat is less than 1.6" per hour underdrain will need to be provided to remove detained flows within the pervious surface and base. Provide a geotechnical report showing that existing soil conditions comply with permeable pavement and infiltration implementation requirements.

8. The proposed surface parking stalls shall conform to the minimum code requirements. Parallel parking space (9'x22'), standard (20'x9') and compact (8'x16') parking space dimensions shall conform to the Alameda County minimum space and aisle requirements

9. Existing and proposed landscaping and embankment along the public street frontage should not create sight obstructions at the driveway. Sheet PA1.1 shows an access driveway off of Crow Canyon Road. Provide adequate sight distance for vehicles exiting and entering the site. Grading and trimming of landscaping may be required, or the proposed driveway may need to be placed at another location.

10. The proposed improvements (gate and retaining wall) are located within the future road right-of-way and are to be removed.

11. Obtain County Fire Department approval for this project.

12. Obtain County Grading Department approval for this project.

GENERAL COMMENTS

13. Any right-of-way dedication, road improvements, and any necessary relocation of utility facilities shall be at no cost to the County.

14. All roadway and storm drain facilities are to conform to Alameda County's Subdivision Design Guidelines and Hydrology and Hydraulics Criteria Summary. All work must be in compliance with Alameda County ordinances, guidelines, and permit requirements.

15. Acquire an encroachment permit from Alameda County for all work within the roadway right-of-way.

16. Before any demolition or grading, destroy known water wells that do not have documented intent of future use. Obtain a destruction permit from Alameda County Public Works Agency for any water well in the remainder of Alameda County. For additional information, the owner or other responsible party should call the Alameda County Public Works Agency at (510) 670-5554.

17. On-site driveway and parking area structural pavement section are required designed by a civil engineer. The minimum structural section should be 2 inches asphalt concrete over 6 inches aggregate base, or equivalent.

18. The maximum driveway grade should not exceed 15 percent. Grades up to 20 percent may be allowed if use of this grade is consistent with good engineering practice and County Fire

Department concerns are satisfied.

19. Design the driveway entrances to intersect the road right-of-way at a perpendicular angle. A minimum length of 20 feet behind the curb must be relatively flat (6 percent maximum) to ensure safe access to the road. Also, there should be no parking spaces within this minimum 20-foot area.

20. The private access way will need traffic safety signs in accordance with Alameda County standards, including the stop and parking restriction signs.

21. Adequate streetlighting shall be provided at the entrance and on-site according to County requirements. Streetlights shall be located at least 3 feet from driveway flares, 5 feet from fire hydrants, and 20 feet from trees.

22. It is not clear how the proposed development areas will drain. Do not augment or concentrate or divert or block runoff to the adjacent properties.

23. The drainage area map created for the project drainage design calculations shall clearly indicate all areas tributary to the project site.

24. No grading work would be allowed during the rainy season except upon 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.

25. No grading shall be permitted on this site until a grading plan and an erosion and sedimentation control plans have been reviewed by the County and a grading permit is issued in accordance with the Alameda County Grading Ordinance.

26. Graded slopes shall not be steeper than 2 horizontal to 1 vertical.

27. Sites with land disturbances greater than one (1) acre must file a Notice of Intent (NOI) with the State Water Resources Control Board for coverage under the State General NPDES permit for Construction Activities. A copy of the NOI must be submitted to the District prior to issuance of a grading permit for the site or any land disturbance on the site. A Storm Water Pollution Prevention Plan (SWPPP) shall be made available to the District prior to issuance of grading permit or any land disturbance on the site

28. All retaining walls are to be concrete. Safety fencing shall be provided on all retaining walls exceeding 30" in height located in the right-of-way, and in accordance with Building Requirements within lots. Safety fencing shall be wrought iron, unless otherwise approved by the Alameda County Planning Department.

29. Due to the impacts impervious surfaces have on creeks and water quality, new development projects must provide stormwater quality treatment to the maximum extent practicable. Treatment is to be provided in the form of landscape features. If the use of landscape features is not practicable, the impracticability must be demonstrated with calculations, geo-technical review and/or soil analysis. After review, alternative options may be considered for compliance. Site design may also be an acceptable means of treatment. The primary references for providing stormwater treatment are Start at the Source & the 2003

California BMP Handbook for New Development and Redevelopment. Both are available through www.cleanwaterprogram.com. The stormwater treatment system installed must be maintained. Maintenance language must be recorded in a maintenance agreement and/or on the deed prior to finalizing the project.

a) Minimize construction access points to local roads. Provide construction entrances at each access point. Remove all silt, gravel rubbish, and green waste from the street, gutter, and sidewalks adjoining the construction site prior to October 1. Provide regular maintenance, weekly or after storm events, to keep each access point clean and free of debris which may be washed away. During wet weather, avoid driving off paved areas and tracking mud and silt onto paved areas.

b) Minimize removal of any vegetation. Stabilize all cleared and de-vegetated areas prior to the rainy season, October 1. Stabilization techniques should include temporary or permanent re-seeding, mulching, protective berms and silt fences, plastic covering or rocking of all roads in use, but should be based on ABAG erosion control or California Storm Water BMP Handbook standards.

c) Protect adjacent properties from all storm water or silt runoff generated by on-site construction activities.

d) Delineate clearing limits, easements, setbacks, trees, drainage courses, sensitive or critical areas and their buffers to be protected on the plan and provide for their marking on-site.

e) Source control of potential pollutants, such as "good housekeeping" practices shall be used during construction to prevent construction related contaminants from entering the storm drain system. Gather all construction debris on a regular basis. Store all construction materials and waste in a covered area, or under a tarp. Sweep where possible; do not use water to wash down areas draining to storm drains. Indicate on the plan materials and waste storage areas which can be covered during storms. Indicate on the plan vehicle parking, maintenance, and cleaning areas. Use proper equipment cleaning, fueling, and maintenance practices. Indicate on the plans a contained area for concrete truck washing.

f) Stabilize swales, gullies, channels, culverts, field inlets, and outfalls on the construction site to prevent erosion.

g) Use sediment controls and filtration to reduce sedimentation from dewatering effluent.

h) Control the use and prevent discharge to storm drains of all potential pollutants. For example, pesticides, petroleum products, nutrients (plant wastes), solid wastes, and construction discharges from dewatering activities, street washing, and pavement saw cutting. Install filter materials (sandbags, filter fabric) at all storm drain inlets which drain the site. Filters shall be maintained and changed regularly to ensure effectiveness and prevent flooding. Dispose of filtrate properly.

i) Include on the plan the following emergency measures: storage of extra erosion control items on-site (hay bales, silt fence, life vests), alternative drainage or erosion control measures, locations of high drainage flow potential, emergency contact names and phone numbers of the contractor, developer and plan preparer.

j) The developer shall design all landscaping irrigation so runoff is minimized. Design of landscaping shall consider that the use of pesticides and fertilizers shall be minimized to

prevent storm water contamination (i.e., native and/or pest resistant plants).

30. In order to help discourage the disposal of litter and other pollutants into the drains, the developer shall stencil, emboss the concrete, or affix an iron placard on all storm drain inlets where storm water runoff from the site may enter the storm drain system with the message "NO DUMPING! DRAINS TO BAY," or other approved wording. The applicant may contact the Alameda Countywide Clean Water Program at 510-670-5543 to obtain stencils.

31. Site planning practices such as limiting disturbed areas, limiting impervious areas, avoiding areas with water quality benefits and susceptibility to erosion, protection of existing vegetation and topography, and clustering to structures should be employed.

If you have any questions, please call me at X55954.

COUNTY OF ALAMEDA

PUBLIC WORKS AGENCY

INTER-OFFICE COMMUNICATION

DATE : April 20, 2021

TO : Damien Curry, Development Planning Division

FROM : Andy Cho, Grading Division, Construction and Development Services

SUBJECT **: Case No. PLN 2021-00064, Site Development Review**

Reference is made to the subject planning application that was referred to this office for information and recommendation. Per the referral sheet, this application is to develop the site for worship facilities, including the conversion of existing residence into staff dorms, constructing Buddha statues, trail systems, construction of five (5) new buildings and other site improvements at 7825 Crow Canyon Road, unincorporated area of Castro Valley, APN 85-4060-001-09, 85-5000-001-01, 85-4060-001-26, 85-4050-001-04, and 85-4050-002-00.

Based on the limited grading information provided, we completed only preliminary review and offer the following general grading comments and recommendations:

1. No grading shall be permitted until a grading plan and erosion and sedimentation control plan has been reviewed and approved by the County and a grading permit is obtained in accordance with the provisions of the Alameda County Grading Ordinance.

2. A geotechnical/geologic investigation report shall accompany the grading permit application in accordance with the provisions of the Alameda County Grading Ordinance Chapter 15.36.320. The report shall contain all of the elements listed under the Alameda County Grading Ordinance Chapter 15.36.350.

3. According to the Seismic Hazard Zones map of Hayward Quadrangle published by the *California Geologic Survey,* the portions of the subject site are shown to be located in the mapped seismic hazard zones for **liquefaction** and **earthquake-induced landslide**. Assessment of such potential hazards should be included in the geotechnical/geologic report and reviewed by the County in conformance with the provisions of the Seismic Hazards Mapping Act (SHMA) and the SP 117A.

4. Any geotechnical/geological report submitted to the county may be subject to a technical in-depth geotechnical/geologic review by one of the County's consulting geotechnical/geologic firms. Funding for such review would be provided for by the developer.

5. No grading work would be allowed during the rainy season, from October 1 to April 30, except upon 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.

6. Grading work associated with the construction of a fire access road must be reviewed and approved by the jurisdictional fire agency prior to issuance of a grading permit.

7. Grading work associated with a development that involves the construction or reconstruction of an on-site wastewater disposal system must be reviewed and approved by the Department of Environmental Health prior to issuance of a grading permit.

8. Sites with land disturbances greater than one (1) acre must file a Notice of Intent (NOI) with the State Water Resources Control Board for coverage under the State General NPDES permit for Construction Activities. A copy of the NOI must be submitted to the District prior to issuance of a grading permit for the site or any land disturbance on the site. A Storm Water Pollution Prevention Plan (SWPPP) shall be made available to the District prior to issuance of grading permit or any land disturbance on the site.

9. All drainage facilities shall be designed to carry surface and subsurface waters to the county stormdrain system or other juncture, subject to the approval of the director of public works. Drainage shall be effected in such a manner that it will not cause erosion or endanger the stability of any slopes or any building or structure.

10. A building permit must be obtained from the Building Department for the construction of the proposed retaining wall(s) in accordance with the provisions of the Alameda County Building Code.

Feel free to contact me at andyhjc@acpwa.org or (510) 670-6451 if you have any questions.

Curry, Damien, CDA

From: Colom, Natali, Env. Health
Sent: Friday, October 21, 2022 4:27 PM
To: xinxin_shi@yahoo.com; victorweitehwu@yahoo.com; Curry, Damien, CDA; Leslie Miyashiro; Kwame Agyare
Cc: mmilani@milani-eng.com; Karan Partap Cheema; Eyerusalem Clark; Roe, Dilan, Env. Health; dehowts, Env. Health; Barbosa, Josh, Env. Health
Subject: 7825 Crow Canyon Rd. Castro Valley - PLN2021-00064
Attachments: ACDEH Comments_OWS Feasibility Plans_7825 Crow Canyon Rd. Castro Valley_Fa Yun Chan Temple.pdf; Approved OWS Feasibility Design_Sycamore Rd. Pleasanton.pdf

Hello All,

Thank you for meeting with us yesterday to discuss the proposed project on this site.

As discussed during the meeting, Alameda County Department of Environmental Health (ACDEH) requests that the Planning Department re-refer revised Planning Referral Plans to ACDEH that incorporate OWS Plans into the plan set and providing the updated proposed merge of all parcels into a single parcel.

The Civil and OWS Plan sheets must utilize the same base map and designate setbacks from the site development features to the OWS components per ACDEH's OWTS Manual. Specifically, the revised OWS plans must include the following:

(1) Appropriate setback distances to stormwater retention ponds to prevent saturation of soil in the vicinity of the dispersal field.
(2) Identification of proposed surface covering over the dispersal field. (No structures are allowed on the proposed dispersal field, including walking pathways, etc.)
(3) The location of trees at a distance from the dispersal system sufficient to minimize root intrusion and not adversely affect the OWS.
(4) The correct alignment of roads as approved by the Fire Department.
(5) A minimum of three Percolation Test Holes, and 1 Profile Test Pit in each dispersal field (installed and reserve).
(6) A Performance Evaluation of the existing OWS and Plans for repair, modification, or replacement as needed to bring the OWS into compliance with the current OWTS Manual.
(7) All other comments provided in the attached marked up OWS plans should be addressed. We have additionally attached a previously approved OWS Design for a different site prepared by Salvador Ruiz REHS, as an example of the format for OWS Design Plan submittal that we would like to see.

ACDEH requests, as discussed above, that the OWS Preliminary Design Plan sheets be incorporated into the revised Planning Referral plan set for referral by the Planning Department to ACDEH. ACDEH also requests that a separate copy of the submittal of OWS Design Plans and Report is submitted to ACDEH.

Thank you.

Natali Colom Cruz

Senior Hazardous Material Specialist

Alameda County Department of Environmental Health

OWTS Program

1131 HARBOR BAY PKWY

ALAMEDA CA 94502

510-567-6723

State Water Resources Control Board
Division of Drinking Water

Certification of Non-Public Water Supply

As authorized representative for Fa Yun Chan Temple and the owner (or owner's designee) of the property located at 7825 Crow Canyon Road, Castro Valley, CA 94552. I hereby certify that the Fa Yun Chan Temple and the facilities for this property:

(a) Will not be operating a public water system, as defined by Section 116275(h) of the *California Health and Safety Code*: "a system for the provision of water for human consumption through pipes or constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year."

(b) Will not be selling water to any person or user for the purpose of rendering it safe for human consumption.

In accordance with Section 116525 of the *California Health and Safety Code*, I agree to notify the Division of Drinking Water, State Water Resources Control Board, and the County of Alameda, within 30 days if there is a change in any of the information contained in this certification.

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

Date: June 3, 2024 Signature: 

Name: XinXin Shi

Title: CEO

Mailing Address: 7825 Crow Canyon Road, Castro Valley, CA 94552

Phone No.: (510)393-2510

Email Address: x xinxin_shi@yahoo.com

Curry, Damien, CDA

From: Pacheco, Marco@Waterboards <Marco.Pacheco@waterboards.ca.gov>
Sent: Thursday, July 25, 2024 11:49 AM
To: Curry, Damien, CDA; Mark Woyshner
Cc: dennies; 心信法師 釋; Victor Wu; WB-DWPDIST04; Glade, Sara@Waterboards
Subject: RE: Water well source to a proposed new public water system.

Hi Damien,

I apologize for the delay in response. I was away on paternity leave when Mark sent the signed certification document, and it did not make it's way to my staff who was involved on reviewing this project.

Yes, the certification document is sufficient, and the owners of Fa Yun Chan Temple will not be required to submit a preliminary technical report or a public water system permit application to the Division of Drinking Water at this time, since it will not be operated as a public water system. As the certification states, the owners must contact Alameda County and this office within 30 days once they anticipate that Fa Yun Chan Temple will be operating as a public water system.

Please let us know if you have any additional questions.

Sincerely,

Marco Pacheco, P.E.
Senior Water Resource Control Engineer
San Francisco District
Division of Drinking Water
State Water Resources Control Board
850 Marina Bay Parkway, Bldg. P-2nd Fl.
Richmond, CA 94804

Phone: (510) 620-3454
Cell Ph: (510) 421-8382
Fax: (510) 620-3455
E-mail: marco.pacheco@waterboards.ca.gov

From: Curry, Damien, CDA <damien.curry@acgov.org>
Sent: Thursday, July 25, 2024 10:44 AM
To: Mark Woyshner <mwoyshner@balancehydro.com>; Pacheco, Marco@Waterboards <Marco.Pacheco@waterboards.ca.gov>
Cc: dennies <dennies@gmail.com>; 心信法師 釋 <xinxin_shi@yahoo.com>; Victor Wu <victorweitehwu@yahoo.com>; WB-DWPDIST04 <DWPDIST04@waterboards.ca.gov>
Subject: RE: Water well source to a proposed new public water system.

Marco, does this certification suffice for the Waterboard?

Damien Curry
Alameda County Planning Department

510.670.6684

From: Mark Woyshner <mwoyshner@balancehydro.com>
Sent: Tuesday, June 4, 2024 5:04 PM
To: Pacheco, Marco@Waterboards <Marco.Pacheco@waterboards.ca.gov>
Cc: dennies <dennies@gmail.com>; 心信法師 釋 <xinxin_shi@yahoo.com>; Victor Wu <victorweitehwu@yahoo.com>; WB-DWPDIST04 <DWPDIST04@waterboards.ca.gov>; Curry, Damien, CDA <damien.curry@acgov.org>
Subject: RE: Water well source to a proposed new public water system.

Dear Mr. Pacheco:
Please find attached the requested Certification of Non-Public Water Supply signed by the property owner of the proposed project located at 7825 Crow Canyon Road, Castro Valley. Please let us know if anything else is required by the water board.

Thank you.

-Mark

Mark Woyshner
Balance Hydrologics
(510) 704-1000 x.209

From: Pacheco, Marco@Waterboards <Marco.Pacheco@waterboards.ca.gov>
Sent: Wednesday, August 3, 2022 1:11 PM
To: Mark Woyshner <mwoyshner@balancehydro.com>
Cc: dennies <dennies@gmail.com>; 心信法師 釋 <xinxin_shi@yahoo.com>; Victor Wu <victorweitehwu@yahoo.com>; WB-DWPDIST04 <DWPDIST04@waterboards.ca.gov>
Subject: RE: Water well source to a proposed new public water system.

Dear Mr. Woyshner:

During our phone conversation earlier this week, you stated that the described Project located at 7825 Crow Canyon Road, Castro Valley will only be serving 10 residents and hosting only 2 events per year exceeding 60 persons.

Please note that California Health and Safety Code Section 116275 defines a public water system as “a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.” There is a “What is a public water system?” document on our public website to guide determination of a public water system and the permitting requirements associated.

According to your description, your proposed Project location will not exceed the service connection or population thresholds to be considered a public water system. Therefore, you would not be required to obtain a public water system permit from our agency. In order to document that this facility will not be classified as a public water system for State and local governments, I am requesting that the owner complete, sign, and return the attached certification form to this office.

Please let me know if you have any further questions or concerns.

Sincerely,

Marco Pacheco, P.E.

Senior Water Resource Control Engineer
San Francisco District
Division of Drinking Water
State Water Resources Control Board
850 Marina Bay Parkway, Bldg. P-2nd Fl.
Richmond, CA 94804

Phone: (510) 620-3454
Cell Ph: (510) 421-8382
Fax: (510) 620-3455
E-mail: marco.pacheco@waterboards.ca.gov

From: Mark Woyshner <mwoyshner@balancehydro.com>
Sent: Friday, July 29, 2022 11:11 AM
To: Pacheco, Marco@Waterboards <Marco.Pacheco@waterboards.ca.gov>
Cc: dennies <dennies@gmail.com>; 心信法師 釋 <xinxin_shi@yahoo.com>; Victor Wu <victorweitehwu@yahoo.com>; WB-DWPDIST04 <DWPDIST04@waterboards.ca.gov>
Subject: RE: Water well source to a proposed new public water system.

EXTERNAL:

Good morning Marco-
Sending this information request to you after a couple attempts at sending it to DWPDIST04@waterboards.ca.gov. Please read the email below sent on July 8th.

We'd like some guidance on the permitted use of an existing well as a source to a transient non-community water system. Given that the well has a 50-foot deep 2.5-inch annular seal (not a 3-inch annular seal), can it be used as source water under modified treatment requirements and/or meeting applicable sections of the Surface Water Treatment Rule, or perhaps with a DDW variance?

Thank you! Looking forward to your reply.

-Mark

Mark Woyshner
Balance Hydrologics
(510) 704-1000 x.209

From: Mark Woyshner
Sent: Monday, July 18, 2022 2:51 PM
To: 'DWPDIST04@waterboards.ca.gov' <DWPDIST04@waterboards.ca.gov>
Cc: 'dennies' <dennies@gmail.com>; '心信法師 釋' <xinxin_shi@yahoo.com>; 'Victor Wu' <victorweitehwu@yahoo.com>
Subject: RE: Water well source to a proposed new public water system.

Dear DDW District 4 Marco Pacheco and staff,
I'm simply checking back with you to be sure my email got through. Looking forward to your ideas.

Thank you!

Mark Woyshner
Balance Hydrologics
(510) 704-1000 x.209

From: Mark Woyshner
Sent: Friday, July 8, 2022 11:39 AM
To: DWPDIST04@waterboards.ca.gov
Cc: dennies <dennies@gmail.com>; 心信法師 釋 <xinxin_shi@yahoo.com>; Victor Wu <victorweitehwu@yahoo.com>
Subject: Water well source to a proposed new public water system.

Dear DDW District 4 Marco Pacheco and staff,

Balance Hydrologics is assisting Fa Yun Chan Temple with developing groundwater supply for their proposed worship center project at 7825 Crow Canyon Road, Castro Valley (Project). The Project property currently has one water well which has a 10-inch diameter borehole, a 5-inch diameter casing, and a 50-ft deep seal. Please see attached well completion report (WCR). Based on the WCR, the well has a 2.5-inch annular seal and does not meet the 3-inch annular seal requirement for a source well to public water system. Nevertheless, would it be possible to still use the well as a potable water source for their Project, perhaps under modified treatment requirements and/or meeting applicable sections of the Surface Water Treatment Rule?

We're currently executing a water-well drilling campaign to complete a second well so the Project will then have two wells for their potable water system. This new well will have a 3-inch annular 50-ft seal (minimum).

We look forward to you advise.

Thank you!

-Mark

Mr. Mark Woyshner, Principal Hydrologist/Hydrogeologist
Balance Hydrologics, Inc. | 800 Bancroft Way, Suite 101 | Berkeley, CA 94710
P: (510) 704-1000 x.209 | F: (510) 704-1001 | E: mwoyshner@balancehydro.com
M: (510) 459-1522 | E (backup): mwoyshner@icloud.com

TECHNICAL MEMO

To: Victor Wu and Master Xin Xin Shi, Fa Yun Chan Temple
From: Mark Woyshner and Barry Hecht, CHg50, CEG1245
Date: January 5, 2022
Cc: Mike Milani, Leslie Miyashiro

Subject: Site reconnaissance for siting potential water wells

Purpose

Fa Yun Chan Temple has begun the conditional use permit (CUP) process with Alameda County Public Works to develop a proposed 40,600 square-foot worship center (Project) located at 7825 Crow Canyon Road in Castro Valley, California, on adjoining APNs 85-4060-1-9 and 85-5000-1-1. Water supply at the site is currently limited for the Project.

- The property was previously supplied with potable water by a connection to the Norris Canyon Property Owner's Association (NCPOA) community water system. However, based on personal communication with Mary Jo Ferris, the administrative contact for NCPOA, the former owners of the subject property were grossly negligent with their use payment to NCPOA and as a result, service to the property was discontinued and legally removed from the system. According to Ms. Ferris, removal-process notifications were sent to the former owners and records are on file at NCPOA.

- East Bay MUD does not supply water to the property.

- There is one water well on site used as a potable water source for current residents with a 4-hour tested yield of 6.5 gallons per minute (gpm).

- Spring and stream baseflows on adjoining APN 85-5000-1-26 are intermittent.

- Stormflow diversion and storage is impractical.

- Rainwater collection is not permitted as a potable water source.

To serve potable water to community members, the Project will require a public water-system[1] permit with the California Division of Drinking Water (DDW), likely a non-community water

[1] A public water system is defined as a system that provides water for human consumption to 15 or more connections or regularly serves 25 or more people daily for at least 60 days out of the year. Human consumption means the use of water for drinking, bathing, or showering, hand washing, oral hygiene, or cooking, including but not limited to, preparing food and washing dishes per Section §116275(e) of the Health and Safety Code.

system[2] permit per Title 22 California Code of Regulations (22CCR). A "community" water system requires two source wells, with the lower yielding well defining the source capacity of the water system.[3]

Current minimum water-well standards for a source to a public water system include a) a 50-foot-deep concrete seal, and b) a 3-inch annular seal. The driller's well completion report for the existing well on site (**Appendix A**) identifies a 50-foot seal and 5-inch diameter well casing but does not identify the drillhole size or annulus diameter of the seal. We contacted and talked with the driller of the well, Chuck Moore of Pacific Coast Well & Pump. He reported that "the well was drilled with a 10.5-inch diameter bore to satisfy County requirements for a 2-inch diameter annular seal." Therefore, the existing well on site does not technically satisfy the current minimum water-well standards for a source well to a public water system. The existing well, however, may continue to be used as a domestic source suppling a single residence and as a source for irrigation and fire suppression.

Fa Yun Chun Temple contacted Balance Hydrologics (Balance) to assist them with siting, installing, and testing new water wells on their property, to be potentially used as water sources to a proposed new public water system for their Project. On September 28, 2021, Mark Woyshner and Barry Hecht from Balance met on site with Master Xin Xin Shi and Mr. Ming to reconnoiter the property and vicinity with the objective to field verify mapped geologic formations and fractures and to locate potential sites for drilling new water wells. This memo summarizes the finding of our reconnaissance.

Permit Requirements for New Water Wells

Going beyond the purpose of the site reconnaissance results of this memo, we have included below common permit requirements relevant for a new public water system and the testing new water wells. These standards are covered under Title 22 California Code of Regulations (22CCR) and recently enacted Senate Bill No. 1263.

Permit requirements for a public water system are described in 22CCR Chapter 16 Article 2. A public water system's water source(s) shall have the capacity to meet the system's maximum day demand. The source capacity of new wells drawing groundwater from bedrock shall conform with the 22CCR §64554(g). Well capacity testing requirements outlined in this section include a constant-rate-pumping drawdown test and a drawdown recovery test. Typically, either a 72-hour pumping test or a 10-day pumping test is performed during the months of August, September, or

[2] Non-community water systems are classified as either transient or non-transient. A Transient Non-Community Water System does not provide water to the same 25 persons during 6 months per year. Examples would be a campground, a park, a rural gas station or restaurant that provides their own potable water source. Most people that consume the water neither reside nor regularly spend time there. A Non-Transient Non-Community Water System regularly serves at least the same 25 persons during 6 months per year. Non-community non-transient water systems are places like schools and businesses that provide their own water. The same people have a regular opportunity to consume the water, but they do not reside there.

[3] California Code Regulations Title 22 § 64554 (c): Community water systems using only groundwater shall have a minimum of two approved sources before being granted an initial permit. The system shall be capable of meeting MDD with the highest-capacity source offline.

October. The well capacity assigned for a 72-hour test is 25 percent of the pumping rate, and for a 10-day test, 50 percent of the pumping rate is assigned as the well capacity. To complete either the 72-hour or 10-day source capacity test, the well shall demonstrate that, within a length of time not exceeding the duration of the pumping time of the well capacity test, the water level has recovered to within two feet of the static water level measured at the beginning of the well capacity test or to a minimum of ninety-five percent of the total drawdown measured during the test, whichever is more stringent.

In addition to Title 22 California Code of Regulations, a new water system must comply with Senate Bill No. 1263, approved by the Governor and filed with Secretary of State on September 29, 2016. Based on the legislative conclusion that "it is the policy of the state to discourage the establishment of new, unsustainable public water systems when there is a feasible alternative", SB1263 directs the State Water Board to approve new public water systems with "the necessary technical, managerial, or financial capacity to be sustainable in the long term in view of water supply uncertainties." SB1263 added Section 116527 to the Health and Safety Code requiring a preliminary technical report prior to applying for a permit for a proposed new public water system. Based primarily on the findings of the preliminary technical report, the State Water Board shall issue or deny a new public water system permit and may impose permit conditions. SB1263 is attached as **Appendix B**.

Important considerations for the proposed Project include the following SB1263 requirements:

- Per Section 116527(c) of SB1263, the preliminary technical report shall identify "each public water system for which any service area boundary is within three miles, as measured through existing public rights-of-way, of any boundary of the applicant's proposed public water system's service area". Furthermore, the report shall discuss "the feasibility of annexing, connecting, or otherwise supplying domestic water to the applicant's proposed new public water system's service area" and shall include "a discussion of all actions taken by the applicant to secure a supply of domestic water from an existing public water system for the proposed new public water system's service area." The NCPOA community water system and EBMUD fall under this requirement.

- Regarding the capacity of the new wells, Section 116527(c)(8) of SB1263 requires "an analysis of whether a proposed new public water system's total projected water supplies available during normal, single dry, or multiple dry water years during a 20-year projection will meet the projected water demand for the service area."

Hydrogeologic Setting

The geology of the Crow Canyon and Norris Canyon area is covered in detail on the 1:50,000 scale U.S. Geological Survey geology map by Graymer (2000), shown in **Figure 1**. Additional interpretations are found on geology maps by Dibblee and Minch (2005) and Crane (1988), which we have reviewed and included in our analysis. The Project site is situated within a heavily folded and deformed section of Miocene-age marine sedimentary rock found east of the regional northwest-southeast trending Miller Creek – Palomares thrust fault.

Rodeo Shale, Hambre Sandstone, Tice Shale, and Oursan Sandstone are mapped as an undifferentiated group (***Tro***) across the southwest portion of the property (on APNs `85-4060-1-9 and 85-5000-1-1). These rocks are identified by Dibblee and Minch (2005) as Monterey Formation, comprising a white-weathered thin-bedded siliceous shale (***Tm***) and a grey, bedded clay shale, locally semi-siliceous to sandy (***Tmc***). Beds dip steeply to the northeast and generally strike northwesterly, in line with the thrust fault. In on-site boring logs, Rodeo Shale was logged as claystone and Hambre Sandstone was logged as siltstone (Stevens Ferrone & Bailey, 2019). The existing well on site (**Figure 2**) was drilled by Pacific Coast Well & Pump to a depth of 300 feet into these strata. The well completion report identified alternating sandstone and clay zones with no further description of the drill cuttings (**Appendix A**). When the well was reconditioned in June 2021, Kvilhaug Drilling & Pump removed "a large amount of a white mud and bacteria slime" (Eric Kvilhaug personal communication). The observations are consistent with siliceous shale entering the well.[4]

At higher elevations across the northeast portion of the Project property, Briones Sandstone (***Tbr***) is mapped. Briones Sandstone is light grey to light brown (tan), thick bedded, arkosic sandstone, siltstone, and conglomerate, which uniquely includes beds of shell breccia (**Figure 3**). It is steeply dipping and forms ridge tops on site and vicinity. On-site beds strike along a local north-northeast oriented syncline with the axis crossing the east portion of APN 85-5000-1-26. Unnamed sedimentary and volcanic rocks (***Tus***) overly the Briones Sandstone along this syncline and across the region north of the Project site.

In general, these sandstone, siltstone and siliceous shale rock types are often unfavorable sources for groundwater supply, except possibly where fractured. Large-scale movement of these Tertiary rocks along Miller Creek – Palomares thrust fault have broadly cross-faulted regional blocks and highly folded and fractured the formations, while steeply dipping the bedding (and in some areas overturning the beds). The area between the thrust fault and the regional Kaiser Creek syncline – which underlies the Project site – is tightly folded within a north-northwesterly plunging syncline and anticline. Furthermore, regional streams and tributary have in part developed their course along primary fractures and block joints within their watershed. Based on tributary alignment, we interpreted a regional fracture through the Briones Sandstone on site, as shown on **Figure 1**. We used this fracture trace across the Project property to locate potential water-well drilling sites.

Dry-Season 2021 Reconnaissance and Well Siting

We met with Master Xin Xin and Mr. Ming on September 28, 2021 to field check rock outcrops, road cuts, spring sources, stream channels, and the existing water well on site. Our observations are summarized in **Table 1**. Conditions were quite dry on site at the end of water year 2021, a second consecutive dry year.[5] There was no surface water in the two tributaries and at the

[4] The driller at Kvilhaug Drilling & Pump who previously worked at Pacific Coast Well & Pump said that information on the WCR was largely fictional and development of the well following completion was limited at best.

[5] A "water year" begins on October 1 and ends on September 30 of the named year. For example, water year 2021 (WY2021) began on October 1, 2020, and concluded on September 30, 2021.

headwater spring on APN 85-5000-1-26. Norris Creek at the entrance to the Project site was also dry and appeared to not have had flow during water year 2021. While investigating road cuts along Norris Canyon Road, we noted a spring/seep at milepost 0.14 with no flowing water but supporting Equisetum (a wetland plant) downslope from the road. The NCPOA spring source is located about a mile up Norris Canyon Road, about 1,500 feet from the drainage divide, within Briones Sandstone beds of The Knife anticline. Considerable amount of distance and geologic deformation separates the NCPOA spring source from the Project site.

The existing well on site (**Figure 2**) was completed on February 29, 2016 to a depth of 300 with 5-inch diameter SDR21 PVC casing, perforated from 60 feet to the bottom of the well with a 0.032-inch slot size. The 10.5-inch diameter bore annulus was filled with 1/8 x 1/4 graded coarse sand from 50 feet to the bottom of the well and sealed with concrete from 50 feet to ground surface. Mr. Ming informed us that at the first of each month he adds chlorinating tablets (calcium hypochlorite) to the well to maintain disinfection. In June 2021, Kvilhaug Drilling & Pump cleaned the well with Baroid Aqua-Clear AE, replaced the pump, downpipe, and electrical wiring, and developed the well to pump clear. A new Grundfos 5 gpm ¾ HP pump was set with its suction at a depth of 263 feet within the well.

We measured the specific conductance and temperature (SCT) of groundwater pumped from the existing well on site at 2,040 uS/cm at 17.1°C (normalized to 2,440 uS/cm@25°C).[6] Per CCR22, the recommended maximum contaminant level (MCL) for specific conductance is 900 uS/cm@25°C, with an upper MCL of 1,600 uS/cm@25°C and a short-term MCL of 2,200 uS/cm@25°C. Our field measurement of specific conductance exceeded the short-term MCL. It may be possible that SCT is lower during the wet season given that the SCT of the well water when sampled on February 29, 2016 after well completion was 1,700 uS/cm@25°C (**Appendix C**). We also measured SCT of the NCPOA spring source located further up Norris Canyon Road (shown on **Figure 1**), which was 466 uS/cm at 16.5°C (or 550 uS/cm@25°C).

Water Quality

Water-quality laboratory results for the existing well on site, sampled on February 29, 2016 are attached in **Appendix C** and summarized in **Table 2**. Specific conductance, total dissolved solids, iron, manganese, and sulfate all exceeded their MCL and would likely require a level of treatment if for a public water system. Specific conductance and total dissolved solids exceeded the upper MCL, and sulfate exceeded the recommended MCL. Iron and manganese have "secondary" standards to address esthetics and are considered "Consumer Acceptance Contaminant Levels" and may be waived. For comparison in **Table 2**, the NCPOA spring source results (**Appendix D**) posted at the State Water Board's database (CA0103040) were in compliance for all regulated constituents. **Table 2** also summarizes (for comparison) the

[6] Specific conductance measures the ability of water to conduct electricity and is a widely used index for salinity or total dissolved solids (TDS). Rainwater, for example, has very low specific conductance. As water flows on the ground and percolates in, minerals are dissolved into the water, thereby increasing the specific conductance of groundwater. Higher specific conductance indicates transmittal through salt-bearing geologic formations or longer residence times in the ground. Specific conductance is temperature dependent and normalized to 25 degrees Celsius for reporting.

laboratory results of a water sample collected from Cull Creek at the U.S. Geological Survey gage (no. 11180960) above Cull Canyon Reservoir.

Major-ion results for the existing well and for the NCPOA spring were plotted in a Piper diagram[7] (**Figure 4**), which is a commonly used method of illustrating the activity (or charge balance) of the major ions and can be used to 'fingerprint' groundwater sources. The existing well on site is characterized as mixed groundwater with a significant fraction of sulfate, while the Norris Canyon Property Owner's Association spring source and Cull Creek samples are a calcium bicarbonate groundwater. These data suggest that groundwater from the onsite well is of a distinctly different source than regional surface water and groundwater. Seawater is plotted for reference.

Groundwater Recharge Potential

Another consideration for siting wells in the hilly areas of the Oakland and Hayward Hills is identifying areas where there are sufficient soils suitable for groundwater recharge. While quantifying recharge potential can be complex, a useful way of assessing recharge at this stage of exploring for groundwater is to consider the infiltration capacity of soils through which aquifers contributing to wells and springs can be recharged. Recharge is important not only to keep springs and wells supplied, but also to keep salinities low. Soils capable of absorbing and infiltrating rainfall during the major storms of each winter are most important in sustaining recharge. Based on our experience, soils capable of infiltrating rainfall exceeding one-quarter inch per hour will make it possible for these major storms to pass through the soil layer. Suitable recharge conditions are found across much of the Project site, largely on Los Osos silty clay loam and Millsholm silt loam soils (**Table 3**).

Selection of Potential Well Drilling Sites

Based on our fracture analysis (described above), we have selected four potential well sites, as shown in **Figure 5** and **Table 1**:

- Site A targets groundwater within fractures corresponding with the intersection of a) the north-northeasterly regional fracture traces projected through the Project site based on surface erosional features and b) the east-west drainage feature associated with the storm drain basin inlet on APN 85-5000-1. Site A is the preferred drill site, largely owing to the intersection of the two opposing lineations, which is interpreted to have enhanced fracturing and thus higher permeability and groundwater storage. In addition, the watershed for the drainage feature extending eastward onto APN 85-5000-26 should provide primary recharge to the fractures network. Drill rig access to this site is also quite feasible, as shown in **Figure 6**. A well depth of 200 to 300 feet would be reasonable at this site, to be re-evaluated during drilling based on ongoing findings.

[7] Piper diagrams (Piper, 1944) show the relative concentration of major cations and anions, in milliequivalents per liter, to the total content major ions of the water. Groups of samples generally relate to a common source, flow path, or chemical process (such as mixing, mineral precipitation, or ion exchange).

- Site B targets groundwater within a massive landslide on site. The landslide may be related to groundwater flow at the contact of Briones Sandstone and underlying shale and a well at Site B would target drawing groundwater at the base of the slide plane. The well site is close to the storage tanks and drill rig access is feasible from the access road to the tanks.

- Sites C and D are alternate sites along north-northeasterly regional fracture trace and accessible from paved service roads on site.

Recommendations

To proceed with the drilling of Sites A and B, we would request quotes from Maggiora Bros. Drilling (in Watsonville), from Martell Water Systems (in Pittsburg), and from Kvilhaug Drilling & Pump (in Concord). Kvilhaug has been on the property to recondition the existing well, and Maggiora and Martel have drilled other wells in the area. Following completion of wells on site, the driller's airlift estimate of yield will provide guidance for well capacity testing per 22CCR §64554(g). Dry-year analyses per Section 116527(c)(8) of SB1263 may be completed using results of the well capacity tests.

To comply with Section 116527(c) of SB1263, the Norris Canyon Property Owner's Association and EBMUD must be contacted regarding the feasibility of annexing, connecting, or otherwise supplying domestic water to the applicant's proposed new public water system's service area. All actions taken by Fa Yun Chun Temple to secure a supply of domestic water from an existing public water system for the proposed new public water system's service area must be discussed and correspondence documented in a preliminary technical report to the State Water Board prior to applying for a permit for a proposed new public water system.

Limitations

This memorandum was prepared for Fa Yun Chan Temple as a field results level assessment of groundwater conditions for planning new water wells on site, proposed for a potential water supply source to a new public water system. Fa Yun Chan Temple is the only intended beneficiary of this document. No other party should communicate the information presented herein without the consent of Fa Yun Chan Temple. Considering the intrinsic variability of geologic materials, particularly in this setting, if additional information or detail is required or alternative uses or applications envisioned, then consultation should commence with Balance Hydrologics for site-specific exploration and interpretations. The findings, recommendations, specifications, and professional opinions are presented within the limits of the proposed work for the client in accordance with generally accepted professional engineering and geologic practice in Northern California. No warranty is expressed or implied.

Cited References

Crane, R.C., and Cassa, R.C., 1988, Northern California Geological Society field trip guide to the geology of the San Ramon valley and environs

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, 1:24,000.

Graymer, R.W., 2000, Geologic map and map database of the Oakland metropolitan area, Alameda, Contra Costa, and San Francisco Counties, California: U.S. Geological Survey Miscellaneous Field Studies MF–2342, scale 1:50,000.

Stevens Ferrone & Bailey Engineering Company, 2019, Geotechnical investigation phase 1 development of 7825 Crow Canyon Road, Castro Valley, California: Prepared for Fa Yun Chan Temple, SFB Project No. 848-1, March 13, 2019, 24 p. + figure and appendices.

Welch, L.E, Huff, R.C., Dierking, R.A., Cook, T.D., Bates, L.A., and Andrews, W.F., 1966, Soil survey of the Alameda area, California: U.S.D.A. Soil Conservation Service in cooperation with the University of California Agricultural Experiment Station. 98 p.

Enclosures:

Table 1. Site reconnaissance observations and selection of potential well sites
Table 2. Summary of analytical water-quality results
Table 3. Published properties of surficial soils

Figure 1. Regional geology map
Figure 2. Photos of existing well on site
Figure 3. Photos of Briones Sandstone and shell breccia road cut along Norris Canyon Road
Figure 4. Piper diagram
Figure 5. Potential well site map
Figure 6. Photos of potential well site A

Appendix A. Driller's well completion report and flow test results for existing well (No. e0303161)
Appendix B. Senate Bill No. 1263
Appendix C. Water quality lab results for existing well (2/29/2016)
Appendix D. Norris Canyon Property Owner's Association Consumer Confidence Report (Revised February 2021)

TABLES

Table 1. Site reconnaissance observations and conditions at potential well sites, Fa Yun Chan Temple, Castro Valley, Alameda County, CA

Location	Date Time (PDT)	Latitude (degrees)	Longitude (degrees)	Elevation (ft)	Temperature (deg. C)	Specific Conductance [1] (uS/cm)	(uS/cm @25C)	Remarks
Existing well on site	9/28/2021 08:30	37.730236°	-122.033119°	496	16.5	2040	2440	Sampled from well head valve
On-site tributary retention basin on APN 85-5000-1-1	9/28/2021 10:45	37.729455°	-122.030439°	570	--	--	--	dry
Tributary headwater spring on APN 85-5000-1-26	9/28/2021 12:30	37.729456°	-122.024836°	870	--	--	--	dry
Norris Cr right bank seep	9/28/2021 15:00	37.734523°	-122.030347°	435 (approx.)	--	--	--	Equisetum at mile post 0.14; no surface water; Norris Cr dry and possibly did not flow during WY2021
NCPOA spring source	9/28/2021 16:00	37.753686°	-122.016567°	844	17.1	466	550	Storage tank overflow approx. 10 gpm
Potential well site A	9/28/2021 13:00	37.729470°	-122.030549°	870	--	--	--	Preferred well site at the intersection of fracture orientations
Potential well site B	9/28/2021 11:00	37.730650°	-122.032010°	577	--	--	--	Targeting groundwater within massive landslide; slide dewatering a secondary benefit
Potential well site C	9/28/2021 13:20	37.729715°	-122.030150°	600	--	--	--	Alternate site along regional fracture trace
Potential well site D	9/28/2021 12:00	37.728885°	-122.030559°	600	--	--	--	Alternate site along regional fracture trace

[1] Specific conductance measures the ability of water to conduct electricity and is a widely used index for salinity or total dissolved solids (TDS). Rainwater, for example, has very low specific conductance. As water infiltrates and passes through the ground, minerals are dissolved into the water, thereby increasing the specific conductance of groundwater. Higher specific conductance indicates transmittal through salt-bearing geologic formations or longer residence times in the ground. Specific conductance is temperature dependent and normalized to 25 degrees Celsius for reporting.

Table 2. Summary of analytical water-quality results, Fa Yun Chan Temple, Castro Valley, Alameda County, CA

PARAMETER	UNITS	Method	PQL/RL [1]	MCL [1]	LABORATORY RESULTS			
					7825 Crow Cyn Rd Well	7825 Crow Cyn Rd Well	Norris Canyon Property Owner's Association	USGS 11180960 Cull Cr above Reservoir
DESCRIPTORS								
Sample I.D.	--	--	--	--	WCR No. e0303161	WCR No. e0303161	CA0103040_007 Spring Source	11180960
Latitude (GoogleEarth, WGS84)	degrees	--	--	--	37.730236°	37.730236°	37.753686°	37.717637°
Longitude (GoogleEarth, WGS84)	degrees	--	--	--	-122.033119°	-122.033119°	-122.016567°	-122.054366°
Ground elevation (GoogleEarth, WGS84)	feet	--	--	--	496	496	844	
Lab used [2]	--	--	--	--	Cerco	Cerco	waterboard	USGS
Lab number	--	--	--	--	1603000	1603114		
Sample collected by	--	--	--	--	PCW&P	PCW&P	NCPOA	USGS
FIELD MEASUREMENTS								
Date	MM/DD/YY	--	--	--	2/29/16	3/10/16	5/19/20	3/23/00
Pumping rate	gpm	--	--	--	6.5			
Pumping duration	hours	--	--	--	4			
WATER QUALITY INDICATORS								
Alkalinity (total)	mg/L CaCO3	SM2330B	2	--	330		230	244
Hardness (total)	mg/L CaCO3	SM2330B	5	--	550		240	292
Hydroxide	mg/L CaCO3		2	--			0	
pH (laboratory)	pH units	SM4500-H+B	0.1	--	7.3		7.56	
Specific conductance (@ 25°C) [3]	umhos/cm	SM2510B	1	900/1600/2200	**1700**		560	688
Total dissolved solids (TDS) [3]	mg/L	SM2540C	10	500/1000/1500	**1200**		350	422
TDS/SC	--	--	--	--	*0.71*		*0.63*	*0.61*
Total Coliform	MPN/100ml	SM 9223 B	1	--	*present*	<1	<1	
E. Coli	MPN/100ml	SM 9223 B	1	--	*absent*	<1	<1	
Fecal coliform	MPN/100ml	SM 9223 B	1	--				
GENERAL MINERALS								
Bicarbonate (as CaCO3)	mg/L CaCO3	SM2330B	*2*	--	*271*		230	244
Bicarbonate (HCO3)	mg/L	SM2330B	2	--	*330*		280	297
Calcium (Ca)	mg/L	EPA200.7	1	--	140		84	73
Carbonate (as CaCO3)	mg/L CaCO3	SM2320B	*3*	--	0		0	0
Carbonate (CO3)	mg/L	SM2320B	2	--	0		0	0
Chloride (Cl) [3]	mg/L	EPA300	1	250/500/600	110		18	21.8
Magnesium (Mg)	mg/L	EPA200.7	0.5	--	52		7.5	26.4
Potassium (K)	mg/L	EPA200.7	0.5	--	20		0.5	2.22
Sodium (Na)	mg/L	EPA200.7	0.5	--	140		22	35.3
Sulfate (SO4) [3]	mg/L	EPA300	1	250/500/600	**390**		23	62.9
Major Cations (Ca+Mg+K+Na)	meq/L	--	--	--	*17.87*		*5.78*	*7.41*
Major Anions (HCO3+CO3+Cl+SO4)	meq/L	--	--	--	*16.63*		*5.58*	*6.80*
Ion Balance (Cations/Anions)	--	--	--	--	*1.07*		*1.04*	*1.09*

Table continues to next page.

PARAMETER	UNITS	Method	PQL/RL [1]	MCL [1]	LABORATORY RESULTS			
					7825 Crow Cyn Rd Well	7825 Crow Cyn Rd Well	Norris Canyon Property Owner's Association	USGS 11180960 Cull Cr above Reservoir
Table continued from previous page.								
TITLE 22 PRIMARY STANDARDS, INORGANIC [3]								
Aluminum (Al)	ug/L	EPA200.8	5	1000			0	
Copper (Cu), total	ug/L	EPA200.7	20	1000	6		0	
Nitrate as (NO3)	mg/L	EPA300	0.4	45	*0.0*		*15.9*	*24.5*
Nitrate as (N)	mg/L	EPA300	0.1	10	0		3.6	5.53
Nitrite (as N)	mg/L	EPA300	0.1	10			0	
Nitrate + Nitrite (as N)	mg/L	EPA353.2	0.1	1			0	
Perchlorate	ug/L	EPA314.0	0.5	6			0	
TITLE 22 SECONDARY STANDARDS, INORGANIC [3]								
Color, Apparent (Unfiltered)	color units	EPA110.1	5	15			2	
Iron (Fe), total	ug/L	EPA200.8	10	300	**1500**		0	10
Manganese (Mn), total	ug/L	EPA200.8	10	50	**230**		0	7.7
MBAS (surfactants)	mg/L	EPA425.1	0.025	0.5			0	
Odor threshold at 60°C	TON	EPA140.1	1	3			2	
Sliver (Ag)	ug/L	EPA200.8	1	100			0	
Turbidity	NTU	EPA180.1	0.1	5			0.11	
Zinc (Zn), total	ug/L	EPA200.8	10	5000	20		0	

NOTES

1. MCL = California Maximum Contaminant Level as listed by California Administrative Code, Title 22. **Bold red font** indicates a laboratory result exceeding its MCL.
2. Lab key: Cerco = Cerco Analytical; waterboard = sdwis.waterboards.ca.gov/PDWW/
3. Primary standards address health concerns. Secondary standards address esthetics and are considered "Consumer Acceptance Contaminant Levels" which may be waived. Secondary standards for TDS, specific conductance, chloride, and sulfate have recommended/upper/short term MCLs.
4. Lab results accurate for the date of sampling; 0 = not detected; blank value = not tested; na = not applicable; *italicized violet font* indicates calculated values based on lab data.

Table 3. Published properties of surficial soils, Fa Yun Chan Temple, Castro Valley, Alameda County, CA.

Map Symbol (USDA 1966)	Soil Series[1] (USDA 1966)	Parent Material	Taxonomy (order, suborder, family)	Hydrologic Soil Group	Depth Zone (inches)	USDA Texture	USCS[2]	Atterberg Limits Liquid	Atterberg Limits Plastic	Permeability (inches/hour)	Available Water Capacity[3] Per Inch *(in./in. of soil)*	Available Water Capacity[3] Profile *(total, in)*	Reaction (pH)	Shrink-Swell Potential	Remarks
LtE2 and LtF2	Los Osos silty clay loam, LtE2 on 30 to 45 percent slopes and LtF2 on 45 to 75 percent slopes, eroded	Moderately deep, well drained soils, formed in residuum weathered from sandstone and shale.	Mollisols	C (moderately slow infiltration, runoff potential very rapid, erosion hazard very high)	0 to 30	Silty clay loam	ML-CL	--	--	0.2 to 0.8	0.167	5.0	5.5 to 6.5	moderate	Found on site across higher elevations largely on Briones Sandstone (*Tbr*) and overlying unnamed sedimentary and volcanic rocks (*Tus*)
			Xerolls		>30	Weathered bedrock	--	--	--	--	--	--	--	--	
			Fine, montmorillonitic, thermic Typic Argixerolls												
DbE2	Diablo clay, 30 to 45 percent slopes, eroded	Moderately deep, well drained calcareous soils, formed in fine-grained sandstone and shale.	Vertisols	C (moderately slow infiltration, slow runoff when soil is dry, medium to rapid when soils are moist, erosion hazard severe)	0 to 6	Clay	CH	45	19	0.05 to 0.2	0.167	1.0	6.1 to 7.4	high	Found at lower elevations at southwest portion of site on silicious shales. Further detailed in on-site phase 1 investigation by Stevens Ferrone & Bailey Engineering Company (2019).
			Xererts		6 to 32	Silty clay	CH	49	24	0.05 to 0.2	0.167	4.3	7.4 to 7.8	high	
			Fine, montmorillonitic, thermic Chromic Pelloxererts		32 to 50	Silty clay loam	Cl	48	21	0.2 to 0.8	0.15	2.7	7.8 to 8.2	moderate	
					>50	Weathered bedrock	--	--	--	--	Total =	8.0	--	--	
MhF2	Millsholm silt loam, 45 to 75 percent slopes, eroded	Shallow, well drained soils that formed in material weathered from sandstone, mudstone and shale.	Inceptisols	C (moderately slow infiltration, runoff potential very rapid, erosion hazard very severe)	0 to 20	Silty loam	ML-CL	--	--	0.8 to 2.5	0.15	3.0	5.6 to 6.0	moderate	Found at higher elevations on east portion of APN 85-5000-26 on Briones Sandstone (Tbr) and overlying unnamed sedimentary and volcanic rocks (Tus)
			Ochrepts		>20	Weathered bedrock	--	--	--	--	--	--	--	--	
			Loamy, mixed, active, thermic Lithic Xerochrepts												
GaF2	Gaviota, rocky sandy loam, 40 to 75 percent slopes, eroded	Very shallow, well drained soils formed in residuum weathered from hard sandstone	Entisols	D (very slow infiltration, very high runoff potential, excessively drained)	0 to 11	Sandy loam	SW	--	--	2.5 to 5.0	0.083	0.9	6.0 to 6.5	low	Found at higher elevations on the very easternmost portion of APN 85-5000-26 on Briones Sandstone (Tbr)
			Orthents		>11	Weathered bedrock	--	--	--	--	--	--	--	--	
			Loamy, mixed, active, nonacid, thermic Lithic Xerorthents												

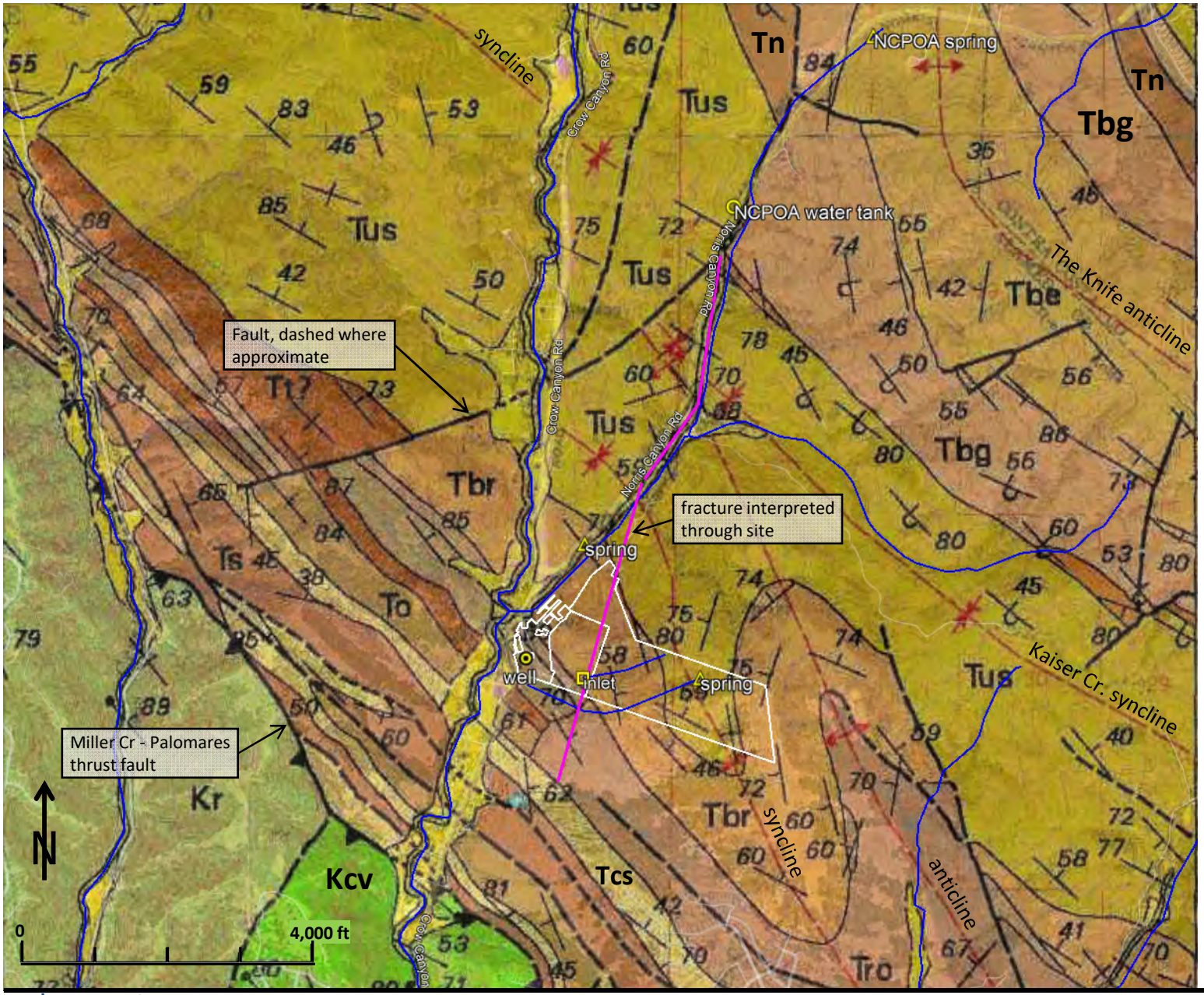
Notes

1) Information taken from the USDA soil survey for the area. This soil survey generally does not distinguish areas smaller than about 20 to 40 acres.

2) USCS = Unified Soils Classification System, commonly used in geotechnical or soil-foundation investigations, and in routine engineering geologic logging.

3) Available Water Capacity = Held water available for use by most plants, usually defined as the difference between the amount of soil water at field capacity (one day of drainage after a rain or recharge event) and the amount at the wilting point.

FIGURES



Lithology Legend

Tn Neroly Sandstone (late Miocene)

Tus Unnamed sedimentary and volcanic rocks (late Miocene) – Includes conglomerate, sandstone, siltstone.

Tbr Briones Sandstone (late and middle Miocene) – Sandstone, siltstone, conglomerate and shell breccia.

Tbg G member of Wagner (1978) – Massive sandstone, pebble conglomerate, and shell breccia.

Tbe E member of Wagner (1978) – Medium-grained sandstone with abundant shell breccia beds; lithologically similar to unit Tbg.

Tro Rodeo Shale, Hambre Sandstone, Tice Shale, and Oursan Sandstone, undivided (middle Miocene)

Tr Rodeo Shale – Brown siliceous shale with yellow carbonate concretions

Th Hambre Sandstone – Massive, medium-grained sandstone, weathers brown

Tt Tice Shale – Brown siliceous shale

To Oursan Sandstone – Greenish-gray, medium-grained sandstone with calcareous concretions

Tcs Claremont Shale (middle Miocene) – Brown siliceous shale with yellow carbonate concretions and minor interbedded chert.

Ts Sobrante Sandstone (middle Miocene) – Massive white, medium-grained calcareous sandstone.

Kr Redwood Canyon Formation (Late Cretaceous, Campanian) – Distinctly bedded, cross-bedded to massive, thick beds of fine- to coarse-grained, biotite- and quartz-rich wacke and thin interbeds of mica-rich siltstone.

Kcv Unnamed sandstone, conglomerate, and shale of the Castro Valley area (Late Cretaceous, Turonian and younger(?)) – This unit is bounded above and below by faults.

Balance Hydrologics

Figure 1. Regional geology map, Fa Yun Chan Temple, Castro Valley, Alameda County, CA

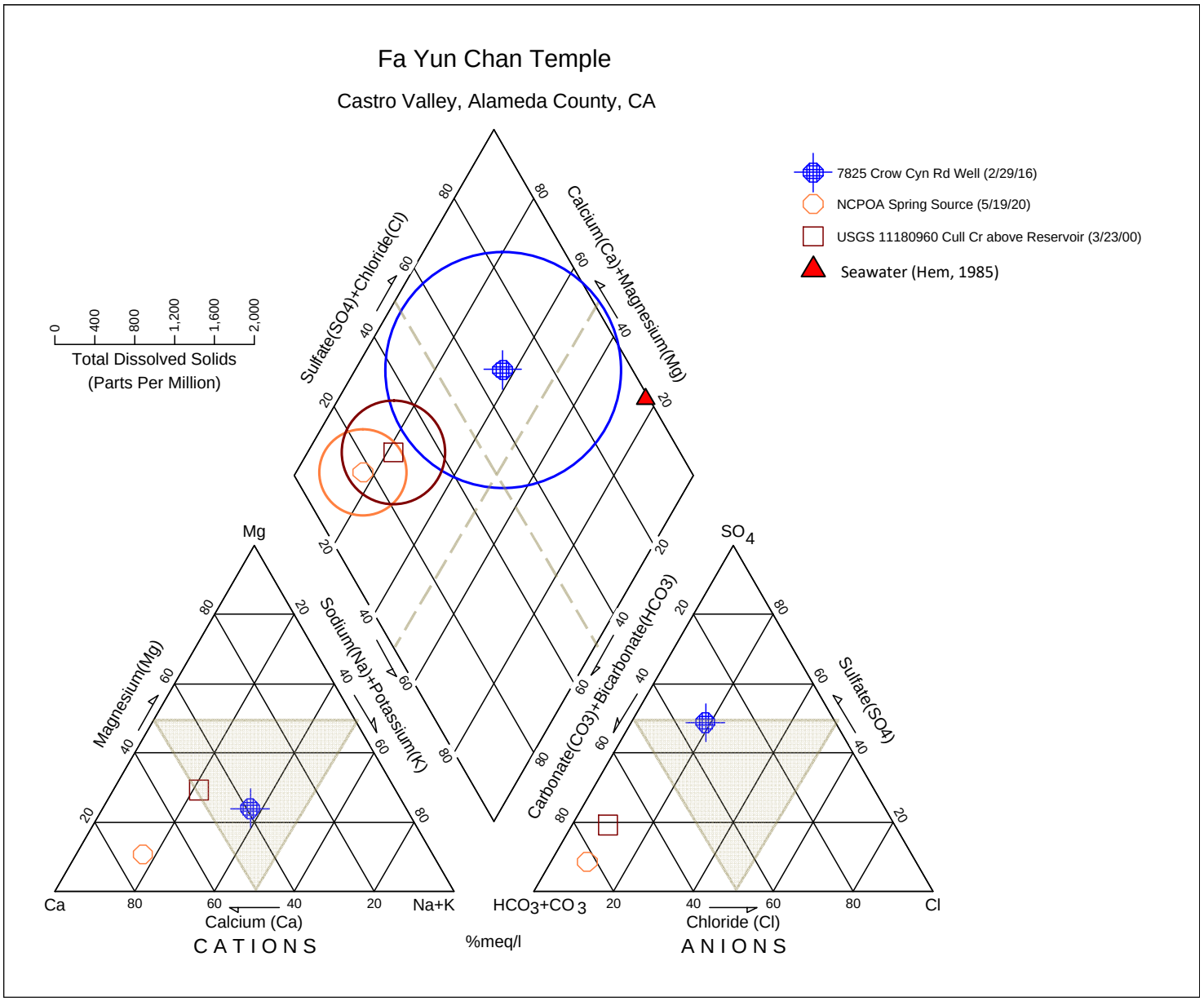
Geology base: Graymer, R.W., 2000, Geologic map and map database of the Oakland metropolitan area, Alameda, Contra Costa, and San Francisco Counties, California: U.S. Geological Survey Miscellaneous Field Studies MF–2342, scale 1:50,000.
Site APNs shown: 85-4060-1-9, 85-5000-1-1, and 85-5000-1-26. Note: Tus, Tbr, and Tro mapped on site.

Balance Hydrologics

Figure 2. Existing well on site, Fa Yun Chan Temple, Castro Valley, Alameda County, CA. WCR No. e0303161 on APN 85-4060-1-9.

Balance Hydrologics

Figure 3. Briones Sandstone and shell breccia road cut along Norris Canyon Road, Castro Valley, Alameda County, CA. Late to middle Miocene age Briones Sandstone (*Tbr*) commonly forms ridges and hilltops and comprises sandstone, siltstone, and conglomerate with seams of shell breccia.

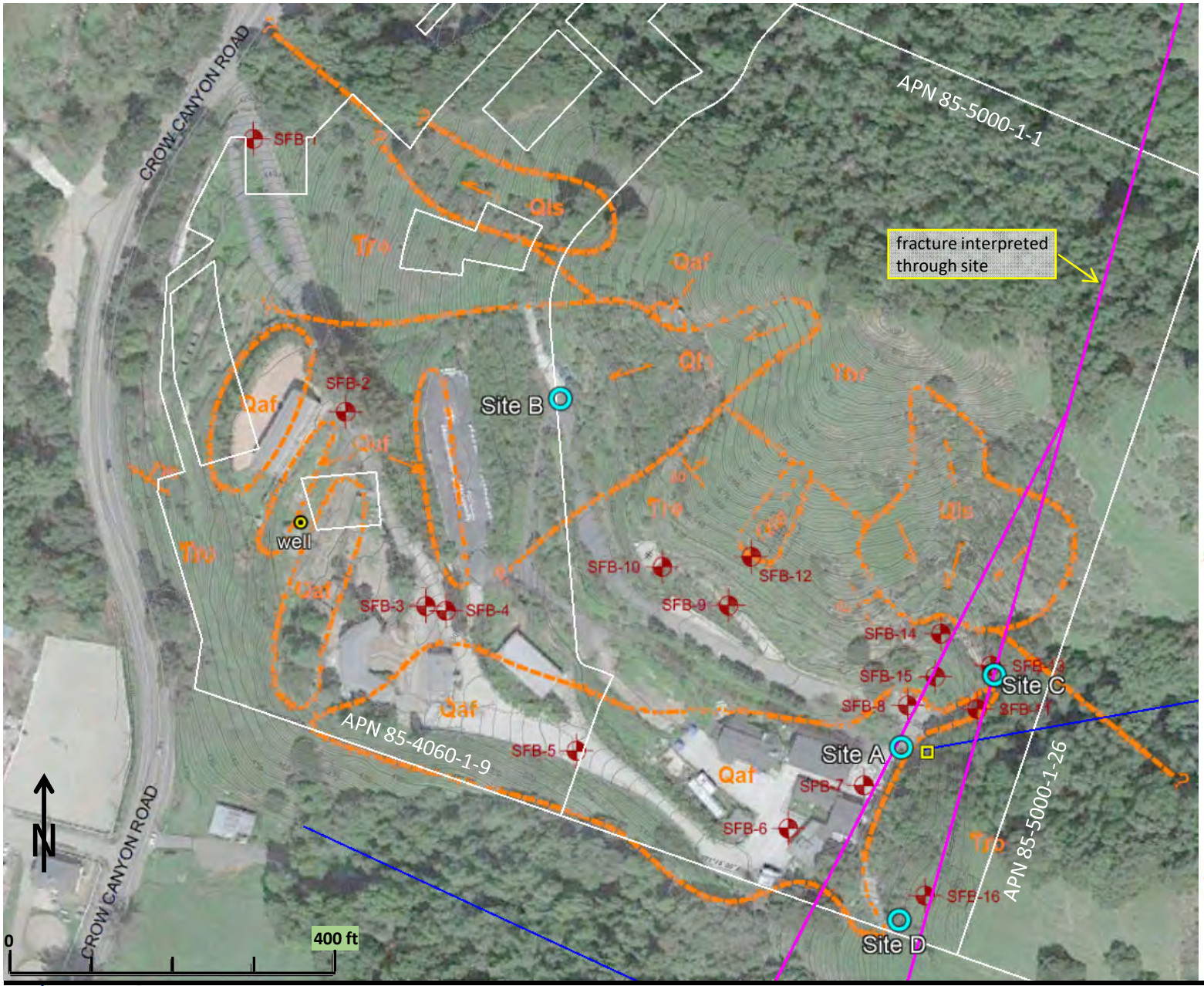


This diagram shows cations in the ternary graph on the left and anions on the right graph. The diamond graph in the center illustrates both cations and anions. Hardness dominated water plots to the left and top on the diamond graph, soft monovalent-salt dominated water to the right, and soft alkaline water towards the bottom. The radius of circle around the plotted points represents the concentration of dissolved solids, calibrated to the scale shown.

Figure 4. Relative ratios of major ion activity ("Piper Diagram") in water samples from wells and springs, Fa Yun Chan Temple, Castro Valley, Alameda County, CA.

The existing well on site is characterized as mixed groundwater with a significant fraction of sulfate, while the Norris Canyon Property Owner's Association spring source is a calcium bicarbonate groundwater. Cull Creek and seawater are plotted for reference.

Balance Hydrologics



Water Well Targets

Site A -- Groundwater within fractures corresponding with the intersection of NNE regional fracture and E-W drainage feature.

Site B -- Groundwater within massive landslide on site

Sites C and D -- Alternate sites along NNE regional fracture

KEY

SFB-16	APPROXIMATE LOCATION OF SFB EXPLORATORY BORING (11/16/18, 11/19/18 - 11/20/18, 11/27/18 - 11/28/18)
Qaf	ARTIFICIAL FILL; PROMINENT AREAS MAPPED, ADDITIONAL AREAS EXIST
Qls	LANDSLIDE DEBRIS
Tbr	MIOCENE BRIONES SANDSTONE
Tro	MIOCENE RODEO SHALE AND HAMBRE SANDSTONE
Qls	APPROXIMATE LOCATION OF LANDSLIDE; ARROW SHOWING APPROXIMATE DIRECTION
?-----?	APPROXIMATE GEOLOGIC CONTACT; QUERRIED WHERE UNCERTAIN
60	APPROXIMATE STRIKE AND DIP OF BEDDING

Balance Hydrologics

Figure 5. Potential well sites, Fa Yun Chan Temple, Castro Valley, Alameda County, CA
Geology base: Stevens Ferrone & Bailey Engineering Company, 2019, Geotechnical investigation phase 1 development report.

Balance Hydrologics

Figure 6. Potential well site A, Fa Yun Chan Temple, Castro Valley, Alameda County, CA. Preferred drilling site at the intersection of fracture orientations on APN 85-5000-1-1.

APPENDIX A

Well Completion Report and Flow Test for On-Site Water Well

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0303161

Page 1 of 1

Owner's Well Number

Date Work Began 02/09/2016 Date Work Ended 2/29/2016

Local Permit Agency Alameda County Public works agency

Permit Number W2015-0770 Permit Date 8/13/15

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method mud rotary Drilling Fluid Bentonite

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
0	23	Clay
23	65	Grey sandstone
65	81	Hard rock First Water
81	110	Sand stone
110	115	Rock
115	190	Sandstone
190	210	Clay
210	250	Sandstone
250	300	Sandstone

Total Depth of Boring 300 Feet

Total Depth of Completed Well 300 Feet

Well Owner

Name Xin Xin Shi

Mailing Address 439 8th St

City Oakland State CA Zip 94607

Well Location

Address 7825 Crow Canyon Rd

City Castro Valley County Alameda

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

Datum ___ Dec. Lat. ___ Dec. Long. ___

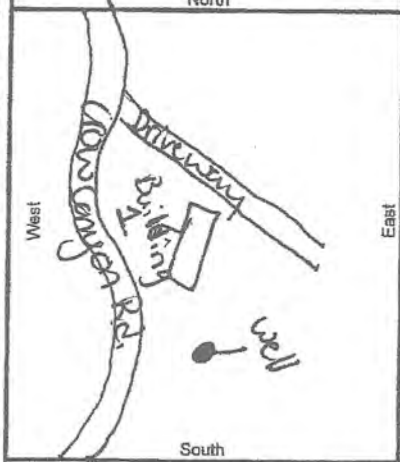
APN Book ___ Page ___ Parcel ___

Township ___ Range ___ Section ___

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North



South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply

☑ Domestic ☐ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 81 (Feet below surface)

Depth to Static Water Level 40 (Feet) Date Measured

Estimated Yield * 7 (GPM) Test Type Air Lift

Test Length 4.0 (Hours) Total Drawdown ___ (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	60	10	Blank	PVC	SDR21	5		0.032
60	300	10	Perf	PVC	SDR21	5		0.032

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	50	1/8X1/4 Concret	

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Pacific Coast Well and Pump Inc (Person, Firm or Corporation)

P.O. Box 2788 (Address) San Ramon (City) CA (State) 94583 (Zip)

Signed [signature] C-57 Licensed Water Well Contractor 3/8/16 Date Signed 810579 C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Pacific Coast Well & Pump Inc.
25-A Crescent Drive 342
Pleasant Hill, CA 94523 -5508
Phone 925-798-8875 Fax 925-827-5437
LIC# 810579: A-General Engineering, B-General Building, C-12 Grading & Paving, C-27 Landscaping, C-29 Masonry, C-57 Well Drilling.

FLOW TEST/INSPECTION REPORT

TEST DATE:	2/29/2016
Customer:	Xin Xin Shi
Location:	7825 Crown Canyon Rd Castro Valley, CA
Contact:	510-987-6039
Well #	
FLOW TEST CONDUCT BY:	CW

STATIC WATER LEVEL	40'
DEPTH OF WELL	300'
DEPTH TO PUMP	280'
CASING	5" PVC
PUMP SIZE/TYPE	1ph 7GS10-230V-1HP
VOLTAGE/AMP DRAW	8.4 Amps
PUMP SAVER	Yes 233P
PRESSURE TANK SYST.	N/A
VARIABLE SPEED	N/A
PRESSURE SETTINGS	N/A
BOOSTER PUMP/TYPE	18GS30 3HP 230V 1PH
VARIABLE SPEED	N/A
PRESSURE TANK SYST.	(2) V250
PRESSURE SETTINGS	50-70PSI
VOLTAGE/AMP DRAW	14.5-17.0 AMP
STORAGE TANK/TYPE	2500 Gal (poly)
FLOAT CONTROLS/TYPE	Elect
NEED REPAIRS:	

Started flo-test at rate of 12.5 gpm in first 15min went from 12.5, 10,8,7.5 finally 6.5 gpm were it sustained a rate of 6.5gpm

LENGTH OF TEST HOURS	4
RECOVERY	40mm
THIS WELL PRODUCES	6.5gpm

START TIME	WATER LEVEL	GPM
8:15		
8:30		
8:45		
9:00		
9:15		
9:30		
9:45		
10:00		
10:15		
10:30		
10:45		
11:00		
11:15		
11:30		
11:45		
12:00		
12:15		
12:30		
12:45		
1:00	40'	12.5
1:15	63'	7.5
1:30	63'	6.5
1:45	63'	6.5
2:00	63'	6.5
2:15	63'	6.5
2:30	63'	6.5
2:45	63'	6.5
3:00	63'	6.5
3:15	63'	6.5
3:30	63'	6.5
3:45	63'	6.5
4:00	63'	6.5
4:15	63'	6.5
4:30	63'	6.5
4:45	63'	6.5
5:00	63'	6.5

APPENDIX B

Senate Bill No. 1263

Senate Bill No. 1263

CHAPTER 843

An act to amend Section 116540 of, and to add Section 116527 to, the Health and Safety Code, and to add Section 106.4 to the Water Code, relating to drinking water.

[Approved by Governor September 29, 2016. Filed with Secretary of State September 29, 2016.]

LEGISLATIVE COUNSEL'S DIGEST

SB 1263, Wieckowski. Public water system: permits.

(1) Existing law, the California Safe Drinking Water Act, imposes on the State Water Resources Control Board various responsibilities and duties relating to providing a dependable, safe supply of drinking water. The act prohibits a person from operating a public water system unless he or she first submits an application, including a technical report, to the state board and receives a permit, as specified. The act requires the state board, upon determination that the application is complete, to make a specified investigation, and allows the state board to impose permit conditions, requirements for system improvements, and time schedules as the state board deems necessary to ensure an affordable, reliable, and adequate supply of water at all times that is pure, wholesome, and potable. The act provides that a person who knowingly makes a false statement or representation in a report submitted, maintained, or used for purposes of compliance with the act may be punished as a misdemeanor.

This bill would require a person submitting an application for a permit for a proposed new public water system to first submit a preliminary technical report to the state board at least 6 months before initiating construction of any water-related improvement, as defined. Because a misstatement in the report could be a crime under the provision described above, this bill would impose a state-mandated local program by expanding the scope of a crime. The bill would allow the state board to direct the applicant to undertake additional discussion and negotiation with certain existing public water systems the state board determines have the technical, managerial, and financial capacity to provide an adequate and reliable supply of domestic water to the service area of the proposed new public water system, as specified, and would require an applicant to comply before submitting an application for a permit to operate a system and would prohibit the application from being deemed complete unless the applicant has complied. The bill would, if the state board determines that it is feasible for the service area of the public water system addressed by the application to be served by one or more currently permitted public water systems, authorize the state board to deny the permit of a proposed new public water system

if it determines that it is reasonably foreseeable that the proposed new public water system will be unable to provide affordable, safe drinking water in the reasonably foreseeable future, as prescribed.

(2) Existing law allows the state board to delegate primary responsibility for the administration and enforcement of the act within a county to a local health officer if certain criteria are met. Existing law requires that the local primacy agency be empowered with all of the authority granted to the state board over the specified public water systems.

This bill would prohibit a local primacy agency from issuing a permit to operate a public water system without the concurrence of the state board. The bill would require, for a proposed new public water system that would be regulated by a local primacy agency, the applicant to also submit a copy of the preliminary technical report to the state board.

(3) Existing law declares the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. Existing law requires a city or county that determines a project, as defined, is subject to the California Environmental Quality Act to identify certain water systems that may supply water for the project and to request those public water systems to prepare and approve a specified water supply assessment. Under existing law, if no public water system is identified, the city or county is required to prepare and approve the water supply assessment. Existing law provides that if, as a result of its assessment, the public water system or city or county concludes that its water supplies are, or will be, insufficient, the public water system or city or county is required to provide its plans for acquiring additional water supplies, as prescribed.

This bill would prohibit a city, including a charter city, or a county from issuing a building permit for the construction of a new residential development where a source of the water supply is water transported by a water hauler, bottled water, a water-vending machine, or a retail water facility, as specified. By imposing new duties on a city or county in connection with the issuance of a building permit, the bill would impose a state-mandated local program.

(4) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for specified reasons.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) There are over 7,500 public water systems in California. The vast majority of these systems provide a reliable supply of safe drinking water. However, there are hundreds of smaller public water systems that consistently fail to provide a reliable supply of safe drinking water to their

customers. Many failing public water systems were created without the necessary technical, managerial, or financial capacity to be sustainable in the long term in view of water supply uncertainties. These uncertainties can be created by effects on water quality and quantity, global climate change, migration of groundwater contamination, the establishment of new drinking water standards, and other factors that are known to significantly erode a system's capacity.

(b) Failing public water systems disproportionately affect disadvantaged communities who are least able to afford to address the conditions that led to the failure.

(c) The proliferation of new, unsustainable public water systems also may undermine the state's human right to water policy.

(d) Therefore, it is the policy of the state to discourage the establishment of new, unsustainable public water systems when there is a feasible alternative.

SEC. 2. Section 116527 is added to the Health and Safety Code, to read:

116527. (a) As used in this section, "water-related improvement" includes, but is not limited to, a water pipe, a water pump, or drinking water infrastructure.

(b) (1) Before a person submits an application for a permit for a proposed new public water system, the person shall first submit a preliminary technical report to the state board at least six months before initiating construction of any water-related improvement.

(2) In order to assist in expediting the permitting process, a person that is considering submitting an application for a permit for a proposed new public water system is encouraged, but is not required, to submit the preliminary technical report no later than seven days after submission of an application to the city or county for a building permit for any water-related improvement.

(3) For a proposed new public water system that would be regulated by a local primacy agency, the applicant shall also submit a copy of the preliminary technical report to the state board.

(c) The preliminary technical report shall include all of the following:

(1) The name of each public water system for which any service area boundary is within three miles, as measured through existing public rights-of-way, of any boundary of the applicant's proposed public water system's service area.

(2) A discussion of the feasibility of each of the adjacent public water systems identified pursuant to paragraph (1) annexing, connecting, or otherwise supplying domestic water to the applicant's proposed new public water system's service area. The applicant shall consult with each adjacent public water system in preparing the report and shall include in the report any information provided by each adjacent public water system regarding the feasibility of annexing, connecting, or otherwise supplying domestic water to that service area.

(3) A discussion of all actions taken by the applicant to secure a supply of domestic water from an existing public water system for the proposed new public water system's service area.

(4) All sources of domestic water supply for the proposed new public water system.

(5) The estimated cost to construct, operate, and maintain the proposed new public water system, including long-term operation and maintenance costs and a potential rate structure.

(6) A comparison of the costs associated with the construction, operation and maintenance, and long-term sustainability of the proposed new public water system to the costs associated with providing water to the proposed new public water system's service area through annexation by, consolidation with, or connection to an existing public water system.

(7) A discussion of all actions taken by the applicant to pursue a contract for managerial or operational oversight from an existing public water system.

(8) An analysis of whether a proposed new public water system's total projected water supplies available during normal, single dry, or multiple dry water years during a 20-year projection will meet the projected water demand for the service area.

(9) Any information provided by the local agency formation commission. The applicant shall consult with the local agency formation commission if any adjacent public water system identified pursuant to paragraph (1) is a local agency as defined by Section 56054 of the Government Code.

(d) (1) If documents prepared to comply with Division 13 (commencing with Section 21000) of the Public Resources Code or any other application for public agency approval concerning providing drinking water to the proposed new public water system's service area include the information required by subdivision (c), including documentation of the consultation with each adjacent public water system and the local agency formation commission, the applicant may submit those documents to the state board in lieu of the preliminary technical report and the documents shall be considered the functional equivalent of the preliminary technical report.

(2) If documents prepared to comply with Division 13 (commencing with Section 21000) of the Public Resources Code or any other application for public agency approval concerning providing drinking water to the proposed new public water system's service area include some, but not all, of the information required by subdivision (c), including documentation of the consultation with an adjacent public water system and the local agency formation commission, the applicant shall submit those documents and the preliminary technical report to the state board and together those documents and the preliminary technical report shall be considered the functional equivalent of the preliminary technical report requirements of this section. A preliminary technical report submitted pursuant to this paragraph shall only be required to include information that is not otherwise addressed by the other submitted documents.

(e) Upon review of a preliminary technical report submitted pursuant to this section, the state board may do all of the following actions:

(1) If an existing public water system has not already sought annexation of the service area of a proposed new public water system from the local agency formation commission or the applicant has not already sought an extension of services agreement from an existing public water system, direct the applicant to undertake additional discussion and negotiation with the local agency formation commission and any existing public water system meeting the requirements of paragraph (1) of subdivision (c) that the state board determines has the technical, managerial, and financial capacity to provide an adequate and reliable supply of domestic water to the service area of the proposed new public water system. The state board shall not direct the applicant to undertake additional discussion and negotiation if documentation submitted to the state board demonstrates that additional discussion and negotiation is unlikely to be successful, including, but not limited to, documentation that the local agency formation commission has previously denied the application for an extension of service or annexation, or that the existing public water system has declined to apply to the local agency formation commission for approval of an extension of services to, or annexation of, the service area of the proposed new public water system.

(2) Direct the applicant to report on the results of discussion and negotiations conducted pursuant to paragraph (1) to the state board.

(3) Establish a time schedule for the applicant's performance of directives issued pursuant to this subdivision.

(f) (1) An applicant shall comply with the state board's directives as assigned in and consistent with subdivision (e) before submitting an application for a permit for a proposed new public water system under this chapter.

(2) An application for a permit for a proposed new public water system under this chapter shall not be deemed complete unless the applicant has complied with the requirements of this section.

(g) The state board's review of a preliminary technical report pursuant to this section shall not be deemed a project or approval of a permit application submitted under this chapter.

(h) The requirements of this section do not apply to either of the following:

(1) An application for a permit for a new public water system that was deemed complete prior to January 1, 2017, pursuant to the statutory permit application requirements effective at the date of the permit submission.

(2) An extension of, or annexation to, an existing public water system.

(i) (1) The requirements of this section do not apply to a service area where an applicant certifies in writing to the state board that the applicant will not rely on the establishment of a new public water system for its water supply. The state board shall acknowledge receipt of the applicant's certification in a timely manner.

(2) An applicant who certifies that the service area will not rely on the establishment of a new public water system and later seeks a permit for a new public water system shall comply with the provisions of this section

and shall assume all risk of delay or rejection related to the permit application.

(j) (1) The provisions of this subdivision apply to a proposed new public water system that achieves either or both of the following:

(A) Consolidates two or more existing public water systems, existing state small water systems, or other existing water systems, which results in the creation of a new public water system.

(B) Provides water service in lieu of individual domestic wells.

(2) At least six months before the construction of any water-related improvements, an applicant for a new public water system that meets the criteria in paragraph (1) shall provide a written notice to the state board that does both of the following:

(A) Clearly describes the proposed new public water system and how it meets the criteria in paragraph (1).

(B) Requests an exemption from the requirements of this section.

(3) The state board shall promptly acknowledge receipt of a written notice described in paragraph (2). The state board shall have 30 days from the acknowledgment of receipt of the written notice to issue a written notice to the applicant that compliance with the requirements of this section is necessary and that an application for a permit of a new public water system under this chapter is not complete until the applicant has complied with the requirements of this section. A determination by the state board that compliance with the requirements of this section is necessary shall be final and is not subject to review by the state board. A determination by the state board pursuant to this subdivision is not considered a project subject to Division 13 (commencing with Section 21000) of the Public Resources Code.

(4) If the state board receives a written notice from a project applicant that satisfies the requirements of paragraph (2), the project described in the notice is deemed exempt from the requirements of this section on the 35th day following the date of the state board's acknowledgment of receipt of the written notice, unless the state board has issued a notice to comply pursuant to paragraph (3).

SEC. 3. Section 116540 of the Health and Safety Code is amended to read:

116540. (a) Following completion of the investigation and satisfaction of the requirements of paragraphs (1) and (2), the state board shall issue or deny the permit. The state board may impose permit conditions, requirements for system improvements, technical, financial, or managerial requirements, and time schedules as it deems necessary to ensure a reliable and adequate supply of water at all times that is pure, wholesome, potable, and does not endanger the health of consumers.

(1) A public water system that was not in existence on January 1, 1998, shall not be granted a permit unless the public water system demonstrates to the state board that the water supplier possesses adequate financial, managerial, and technical capability to ensure the delivery of pure,

wholesome, and potable drinking water. This section shall also apply to any change of ownership of a public water system.

(2) A permit under this chapter shall not be issued to an association organized under Title 3 (commencing with Section 18000) of the Corporations Code. This section shall not apply to unincorporated associations that, as of December 31, 1990, are holders of a permit issued under this chapter.

(b) Notwithstanding Section 116330, a local primacy agency shall not issue a permit under this article without the concurrence of the state board.

(c) In considering whether to approve a proposed new public water system, the state board shall consider the sustainability of the proposed new public water system and its water supply in the reasonably foreseeable future, in view of global climate change, potential migration of groundwater contamination and other potential treatment needs, and other factors that can significantly erode a system's capacity.

(d) If the state board determines that it is feasible for the service area of the public water system addressed by an application under this article to be served by one or more permitted public water systems identified pursuant to paragraph (1) of subdivision (c) of Section 116527, the state board may deny the permit of a proposed new public water system if it determines, based on its assessment of the preliminary technical report submitted pursuant to Section 116527, the permit application, and other relevant, substantial evidence submitted, that it is reasonably foreseeable that the proposed new public water system will be unable to provide affordable, safe drinking water in the reasonably foreseeable future.

(e) An applicant may appeal decisions and actions of the deputy director taken pursuant to this section to the state board.

SEC. 4. Section 106.4 is added to the Water Code, to read:

106.4. (a) For the purposes of this section:

(1) "Bottled water" has the same meaning as defined in Section 111070 of the Health and Safety Code.

(2) "Residential development" has the same meaning as defined in Section 65008 of the Government Code.

(3) "Retail water facility" has the same meaning as defined in Section 111070 of the Health and Safety Code.

(4) "Water-vending machine" has the same meaning as defined in Section 111070 of the Health and Safety Code.

(5) "Water hauler" has the same meaning as defined in Section 111070 of the Health and Safety Code.

(b) A city, including a charter city, or a county shall not issue a building permit for the construction of a new residential development where a source of water supply is water transported by a water hauler, bottled water, a water-vending machine, or a retail water facility.

(c) This section does not apply to a residence that will be rebuilt because of a natural disaster.

(d) The Legislature finds and declares that this section addresses a matter of statewide concern and not a municipal affair, as that term is used in Section 5 of Article XI of the California Constitution.

SEC. 5. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act or because costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

O

APPENDIX C

Water Quality Results for On-Site Water Well

California State Certified Laboratory No. 2153

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

Mr. Chuck Moore
Pacific Coast Well & Pump Inc.
P.O. Box 2788
San Ramon, CA 94583

Sample Source:
7825 Crow Canyon Road, Castro Valley
Date Received: 03/01/2016
Date Sampled: 02/29/2016
Matrix: Drinking Water

March 8, 2016
Job No.: 1603000
LabNo.: 001
Cust. No.: 12071
Schedule: Upon Request

Analyte	Results	Detection Limit	Method	Date Analyzed
LabNo.: 001 Retesting for bacteria. took sample on 3/8/16 Sample I.D.: Well				
Total Coliform Bacteria*	Present	--	Colilert™	03/01-02/16
*E. coli**	Absent	--	Colilert™	03/01-02/16
Hardness as CaCO3	550	1 mg/L	SM 2340B	03/08/16
Calcium	140	0.1 mg/L	EPA 200.7	03/08/16
Magnesium	52	0.05 mg/L	EPA 200.7	03/08/16
Sodium	140	0.5 mg/L	EPA 200.7	03/08/16
Potassium	20	0.2 mg/L	EPA 200.7	03/08/16
Alkalinity as CaCO3	330	2 mg/L	SM 2320B	03/08/16
Chloride	110	2.5 mg/L	EPA 300.0	03/01/16
Sulfate	390	2.5 mg/L	EPA 300.0	03/01/16
Nitrate as N	N.D.	0.2 mg/L	EPA 300.0	03/01/16
pH	7.30	Std Unit	SM 4500-H+B	03/01/16
Specific Conductance	1,700	5 umho/cm	SM 2510B	03/01/16
Total Dissolved Solids	1,200	10 mg/L	SM 2540C	03/02/16
Copper	0.006	0.005 mg/L	EPA 200.7	03/08/16
Iron	1.5	0.1 mg/L	EPA 200.7	03/08/16
Manganese	0.23	0.005 mg/L	EPA 200.7	03/08/16
Zinc	0.02	0.01 mg/L	EPA 200.7	03/08/16

* 40 CFR Part 141 ; Chromogenic/Fluorogenic Substrate - Coliforms per 100 mL

N.D. - None Detected

Cheryl McMillen
Laboratory Director

Quality Control Summary - All laboratory quality control parameters were found to be within established limits.

pacific_coast_wp@att.net

California State Certified Laboratory No. 2153

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

Mr. Chuck Moore
Pacific Coast Well & Pump Inc.
P.O. Box 2788
San Ramon, CA 94583

Sample Source:
7825 Crow Canyon Road, Castro Valley
Date Received: 03/10/2016
Date Sampled: 03/10/2016
Matrix: Drinking Water

March 14, 2016
Job No.: 1603114
LabNo.: 001
Cust. No.: 12071
Schedule: Upon Request

Analyte	Results	Detection Limit	Method	Date Analyzed
LabNo.: 001 Bacteria not detectible.				
Sample I.D.: Well				
Total Coliform Bacteria*	<1	–	Colilert™	03/10-11/16
*E. coli**	<1	–	Colilert™	03/10-11/16

* 40 CFR Part 141; Chromogenic/Fluorogenic Substrate, Enumeration by Quanti-tray (tm) Coliforms per 100 mL

<1 = Absent. (According to Lab).

Cheryl McMillen
Laboratory Director

Quality Control Summary - All laboratory quality control parameters were found to be within established limits.

pacific_coast_wp@att.net

APPENDIX D

Norris Canyon Property Owner's Association
2020 Consumer Confidence Report

2020 Consumer Confidence Report

Water System Information

Water System Name: Norris Canyon Property Owner's Association

Report Date: July 1 2021

Type of Water Source(s) in Use: Springs

Name and General Location of Source(s): Spring 001, Upper Spring; Spring 002, Cistern Spring; Spring 003, Lower Spring [currently not in use]. Springs are in Norris Canyon watershed.

Drinking Water Source Assessment Information: 2002/03: All springs are considered most vulnerable to grazing (5 large animals or equivalent per acre), not associated with any detected contaminants. For a copy of full report, call State Water Resources Control Board at (510) 620 3457.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: Board meetings held bimonthly. Announced via email and phone. All are welcome. Options for virtual attendance.

For More Information, Contact: Katherine Montgomery, WQ Monitor, 303 854 7595

About This Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2020 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [Enter Water System's Name] a [Enter Water System's Address or Phone Number] para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 [Enter Water System Name]以获得中文的帮助: [Enter Water System's Address][Enter Water System's Phone Number].

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa [Enter Water System's Name and Address] o tumawag sa [Enter Water System's Phone Number] para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ [Enter Water System's Name] tại [Enter Water System's Address or Phone Number] để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau [Enter Water System's Name] ntawm [Enter Water System's Address or Phone Number] rau kev pab hauv lus Askiv.

Terms Used in This Report

Term	Definition
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG)	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (µg/L)

Term	Definition
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do

not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (State Total Coliform Rule)	(In a month) 0	0	1 positive monthly sample [(a)]	0	Naturally present in the environment
Fecal Coliform or *E. coli* (State Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive	None	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	(In the year) 0	0	(b)	0	Human and animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL
(b) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	Aug 10 2020	5	4.5	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	Aug 10 2020	5	0.31	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
								deposits; leaching from wood preservatives

Table 3. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	5/20/20	22	0-24	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	11/14/17	240	180-220	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha Particle Activity (pCi/L)	8/31/16	6.38	n/a	15	(0)	Erosion of natural deposits
Uranium (pCi.L)	8/31/16	3/16	n/a	20	0.43	Erosion of natural deposits
Chromium (ug/L)	6/14/12	1	n/a	50	(100)	Discharge from steel & pulp mills and chrome plating; erosion of natural deposits
Nitrate (ppm)	5/20/20	3.8	n/a	10	10	Runoff and leaching from fertilizer use;

						leaching from septic tanks and sewage; erosion of natural deposits
TTHMs (Total Trihalomethanes) (ug/L)	5/20/20	3.39	n/a	80	n/a	Byproduct of drinking water disinfection
HAA5 (Sum of 5 Haloacetic Acids) (µg/L)	5/20/20	1.18	n/a	60	n/a	Byproduct of drinking water disinfection

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Sulfate (mg/L)	5/20/20	23	n/a	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Chloride (mg/L)	5/20/20	18	n/a	500	n/a	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	5/20/20	560	n/a	1600	n/a	Substances that form ions when in water; seawater influence
Total Dissolved Solids (TDS) (mg/L)	5/20/20	350	n/a	1000	n/a	Runoff/leaching from natural deposits
Color (units)	5/20/20	2	n/a	15	n/a	Naturally-occurring organic materials
Odor (units)	5/20/20	2	n/a	3	n/a	Naturally-ocurring organic materials

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
n/a					

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Enter Water System's Name] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/lead.

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*: [Enter Additional Information Described in Instructions for SWS CCR Document]

Federal Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
n/a				

For Water Systems Providing Groundwater as a Source of Drinking Water

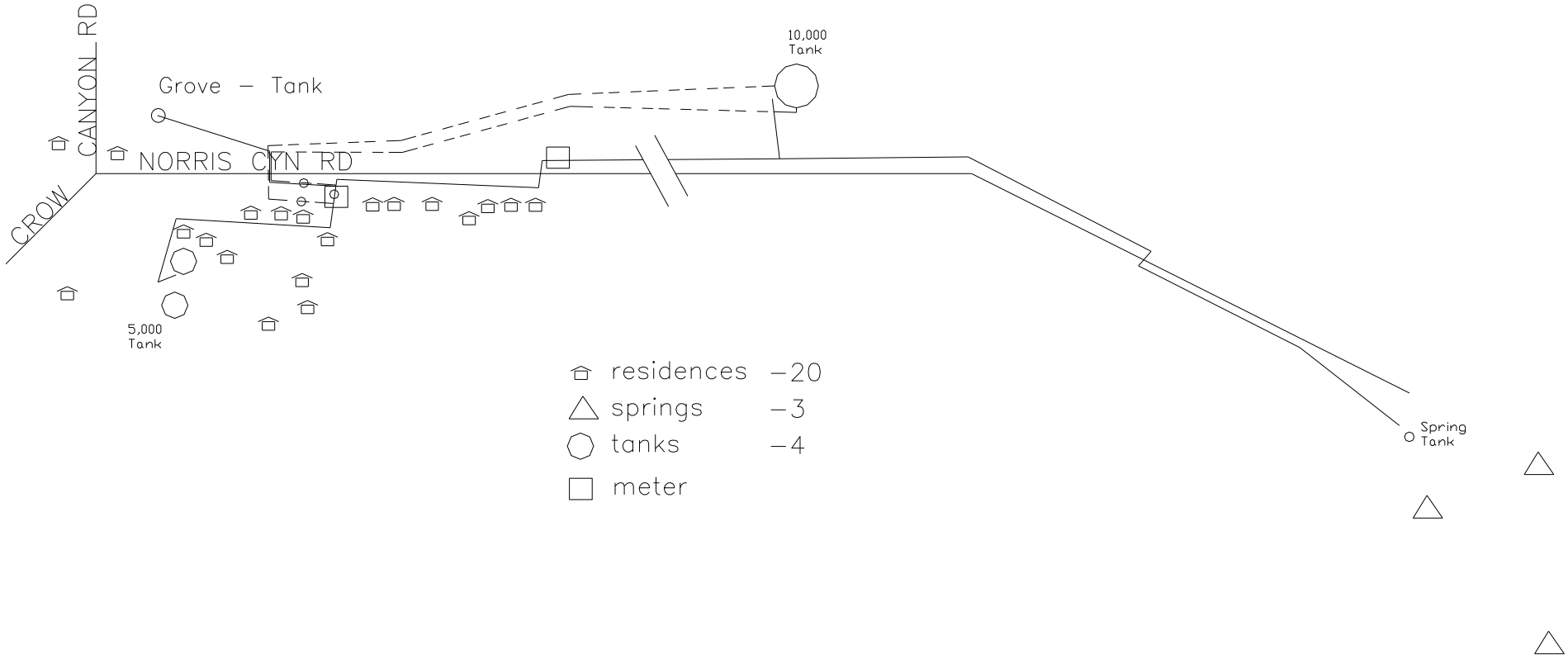
Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
E. coli	(In the year) 5	July-Oct, Dec	0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0	n/a	TT	N/A	Human and animal fecal waste
Coliphage	(In the year) 0	n/a	TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: The detection of e. coli in our source springs is a result of sampling required by the SWRCB Sanitary Survey, done June 24, 2014, to determine whether NCPOA ground water sources are under the influence of surface water. **NCPOA practices continuous disinfection, and there was NO positive bacteriological results within the distribution system during the year.**

NCPOA system—no scale



NCPOA system—no scale

Updated 2017