FIRSTCARBONSOLUTIONS™

FINAL
Supplemental Environmental Impact Report
2018 Alves Ranch Project
City of Pittsburg, Contra Costa County, California

Prepared for:
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565
925.252.4920

Contact: Kristin Pollot, Planning Manager

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Contact: Mary Bean, Project Director
Grant Gruber, Project Manager

Date: May 24, 2019

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Table of Contents

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SECTION 1: INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of Pittsburg has evaluated the comments received on the 2018 Alves Ranch Project Draft Supplemental Environmental Impact Report (Draft SEIR). The responses to the comments and errata which are included in this document, together with the Mitigation Monitoring and Reporting Program (MMRP), form the Final Supplemental EIR (Final SEIR) for use by the City of Pittsburg in its review.

This document is organized into three sections:

- **Section 1—Introduction.**
- **Section 2—Responses to Written Comments.** Provides a list of the agencies, organizations, and individuals who commented on the Draft SEIR. Copies of all of the letters received regarding the Draft SEIR and responses thereto are included in this section.
- **Section 3—Errata.** Includes an addendum listing minor refinements and clarifications on the Draft SEIR, which have been incorporated; these revisions merely amplify and clarify the analysis and do not trigger recirculation.

The Final SEIR consists of the following contents:

- Draft SEIR (provided under separate cover)
- Draft SEIR appendices (provided under separate cover)
- Responses to Written Comments on the Draft SEIR and Errata (Sections 2 and 3 of this document)
- MMRP (provided under separate cover)

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SECTION 2: RESPONSES TO WRITTEN COMMENTS

2.1 - List of Authors

A list of public agencies, organizations, and individuals that provided comments on the 2018 Alves Ranch Project Draft Supplemental Environmental Impact Report (Draft SEIR) is presented below. Each comment has been assigned a code. Individual comments within each communication have been numbered so comments can be crossed-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

Author **Author Code**

Federal Agencies

Federal Emergency Management Agency ..... FEMA

State Agencies

Contra Costa Area Department of California Highway Patrol ..... CHP
California Department of Fish and Wildlife ..... CDFW

Local Agencies

Contra Costa County Flood Control District ..... CCCFCD

Organizations

Contra Costa Mosquito & Vector Control District ..... CCMVCD

Individuals

Wilson Catalan ..... CATALAN
Jason Chi ..... CHI
Natasha Exner ..... EXNER
Hanson Bridgett, LLP ..... LAWSON
Bruce Ohlson ..... OHLSON
Kathleen West ..... WEST

2.2 - Responses to Comments

2.2.1 - Introduction

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of Pittsburg, as the Lead Agency, evaluated the comments received on the Draft SEIR during the 45-day public comment period[1] for the 2018 Alves Ranch Project (2018 Project), and has prepared the

[1] The comment letter from CDFW (dated May 16, 2019) was received after the close of the 45-day public comment period. Although not required to do so under CEQA, the City, in its discretion, has determined to provide responses to the comments set forth therein.

following responses to the comments received. This Response to Comments document becomes part of the Final Supplemental Environmental Impact Report (Final SEIR) for the 2018 Project in accordance with CEQA Guidelines Section 15132.

2.2.2 - Comment Letters and Responses

The comment letters reproduced in the following pages follow the same organization as used in the List of Authors.

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

April 8, 2019

Jordan Davis, Senior Planner
Community Development Department/Planning Division
City of Pittsburg
65 Civic Avenue
Pittsburg, California 94565

Dear Mr. Davis:

This is in response to your request for comments regarding the City of Pittsburg Notice of Availability 2018 Alves Ranch Project Draft Supplemental Environmental Impact Report, SCH 2004012097, March 2019.

Please review the current effective Flood Insurance Rate Maps (FIRMs) for the County of Contra Costa County (Community Number 060025) and City of Pittsburg (Community Number 060033), Maps revised March 21, 2017. Please note that the City of Pittsburg, Contra Costa County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map. 1

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at http://www.fema.gov/business/nfip/forms.shtm.

1 CONT

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Pittsburg floodplain manager can be reached by calling Fritz McKinley, Community Development Director/City Engineer, at (925) 252-4930. The Contra Costa County floodplain manager can be reached by calling Warren Lai, at (925) 313-2315.

If you have any questions or concerns, please do not hesitate to call Xing Liu of the Mitigation staff at (510) 627-7267.

Sincerely,

Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:
Fritz McKinley, Community Development Director/City Engineer, City of Pittsburg
Warren Lai, Division Manager Engineer Services, Contra Costa County
Ray Lee, WREA, State of California, Department of Water Resources, North Central Region Office
Xing Liu, NFIP Planner, DHS/FEMA Region IX
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

Federal Agencies

Federal Emergency Management Agency (FEMA)

Response to FEMA-1

Consistent with the comment, in conducting the environmental review for the 2018 Project, the City reviewed the current FEMA Flood Insurance Rate Maps (FIRMs) for Contra Costa County and the City of Pittsburg. As noted in the 2018 Alves Ranch Project Initial Study, page 64, the project site is located in Zone X, Area of Minimal Flood Hazard, as designated by the FEMA FIRM No. 06095C0690F effective 8/3/2016. As such, no impact would occur. Therefore, the 2018 Project would not introduce new significant environmental impacts or increase the severity of any previously identified significant environmental impacts beyond those analyzed in the 2004 FEIR. No further analysis is required. The remainder of the comment generally summarizes various National Flood Insurance Program (NFIP) floodplain building management requirements, and as such, does not require any response in this regard.

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State of California- Transportation Agency GAVIN C. NEWSOM, Governor

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
5001 Blum Road
Martinez, California 94553
(925) 646-4980
(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)

May 8, 2019

File No.: 320.15370

Kristin Pollott
City of Pittsburg
65 Civic Avenue
Pittsburg CA 94565

Dear Ms. Pollott,

The Contra Costa Area Office of the California Highway Patrol recently received a "Notice of Completion & Environmental Document Transmittal" environmental document for the Alves Ranch Project - State Clearing House (SCH) #2004012097. After our review, we have concerns with the potential impact this project could have on traffic congestion and service delivery. 1

Our concerns relate to the proposed construction of 356 residential units with an additional 140,000 square feet of commercial space. This project is located in close proximity to State Route 4 (SR-4) which serves as an artery for the City of Pittsburg and the greater region for vehicles traveling to and from the central Bay Area. This location currently experiences heavy volumes of commute traffic, and the current configuration appears to not have the capacity to accommodate the expected increase in vehicular traffic. Additionally, SR-4 already experiences a significant amount of collisions due, in large part, to congested traffic. The Contra Costa Area would strongly recommend this project incorporate infrastructure improvements which would increase the vehicular volume capacity of SR-4, particularly to the on and off ramps in the area. Without substantial infrastructure upgrades this project could have a negative impact on our operations due to the increased traffic congestion; which could lead to a potential increase in traffic collisions, increased response times, delays in emergency services; and a negative impact to the safe movement of people, services, and commerce within our jurisdiction. Should you have any questions or need any additional information, please feel free to contact Lieutenant Knopf, of this command, directly at (925) 646-4980. 2

Sincerely,

D. G. SEAMAN, Captain
Commander

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State Agencies

State of California-Transportation Agency, Department of California Highway Patrol (CHP)

Response to CHP-1

This comment is introductory in nature and states general concerns regarding the 2018 Project's potential impact on traffic congestion and service provision. No response to these introductory comments is necessary; see also Response to CHP-2.

Response to CHP-2

The Draft SEIR, supported by the Traffic Impact Study (TIS), fully evaluated the potential impacts of the 2018 Project in accordance with CEQA mandates, as discussed more fully therein and below.

As discussed on page 3.5-62 of the Draft SEIR and page 53 of the TIS, State Route 4 (SR-4) currently operates beyond the desired Multimodal Transportation Planning Service Objective (MTSO) in the westbound direction during the morning peak-hour and the eastbound direction during the evening peak-hour. Approved and planned development in Eastern Contra Costa County, and beyond, is projected to further degrade the operations of the SR-4 corridor in the near-term and long-term condition. As disclosed in the Draft SEIR, the 2018 Project would also increase travel demand along the SR-4 corridor, resulting in a significant project impact—similar to the impact identified in the 2004 FEIR.

As part of their regional transportation planning efforts, the Contra Costa Transportation Authority (CCTA) and California Department of Transportation (Caltrans) have identified a number of transportation system improvements to the SR-4 and State Route 242 (SR-242) corridors that would increase capacity, including widening SR-4 from west of Interstate 680 (I-680) to east of SR-242. These identified improvements would also provide for adaptive ramp metering, incident management, transit information, and integration with the Interstate 80 (I-80) Integrated Corridor management (ICM) system. These improvements would be partially paid for through regional transportation impact fees, to which the 2018 Project would be required to contribute pursuant to Mitigation Measure (MM) TRANS-4. Additional improvements to provide increased capacity at the SR-4 Westbound Ramps Loop On-ramp from northbound San Marco Boulevard south of Evora Road/Willow Pass Road were also identified as part of the Draft SEIR, and could be funded through regional transportation impact fees imposed as part of MM TRANS-4. However, as the City of Pittsburg cannot assure the completion of regional roadway improvements on Caltrans facilities, these impacts were identified in the Draft SEIR as significant and unavoidable (Draft SEIR page 3.5-72, and TIS page 65).

Although the 2018 Project would increase traffic on the regional roadway system, it also provides opportunities for additional people to live within walking/biking distance of a Bay Area Rapid Transit (BART) station, such that those residents would have increased opportunities to use transit. Additionally, the planned commercial space would provide opportunities for locally serving retail uses, allowing for existing and future residents of the area to have additional opportunities to purchase goods and services closer to home, thereby helping to reduce travel demand on the SR-4 corridor.

Much of the forecasted growth in travel demand along the SR-4 corridor is from communities east of the project site, where there are limited transit options and limited employment centers that reduce the need to travel through the SR-4 corridor during the morning and evening commute periods.

Given the significant demand for housing in the San Francisco Bay Area, should additional housing opportunities not be provided, they would likely be provided elsewhere in the County, potentially on sites not as well served by transit and other mobility options, which would contribute to further traffic increases along the SR-4 corridor.

Regarding the comments about a potential increase in traffic collisions, increased response times, delays in emergency service, and potential impacts to the "safe movement of people, services and commerce," the commenter does not raise any specific Project design issue that would trigger any such safety concerns, but rather asserts the general proposition that increased traffic could increase the risk of these concerns occurring. Because these comments do not raise CEQA issues, but rather are comments on the merits of the 2018 Project, no further response is necessary. However, for information purposes, the following is noted.

The most recent available collision data provided by Caltrans staff as presented in the Interstate 680/SR-4 Interchange Phase 3 (SR-4 Widening) Project: Final Traffic Operations Analysis Report (Fehr & Peers, May 2015) is summarized below reflecting the 3-year period from April 1, 2010, to March 31, 2013, for both eastbound and westbound State Route 4 from Morello Avenue to Bailey Road. During this period, eastbound SR-4 had a total of 269 collisions, of which two were fatal. The westbound direction had a total of 266 collisions with two fatalities. Both directions of SR-4 had a lower overall collision rate than the statewide average for similar facilities. The collision history on eastbound and westbound SR-4 by type of collision is also presented below. The largest category is classified as rear-end collisions; these types of collisions are often associated with congested freeway conditions when traffic operates in a stop-and-go fashion. SR-4 also has relatively large percentages of sideswipe and hit-object collisions, but the overall accident rate remains below the statewide average.

Because the 2018 Project is increasing the number of traffic trips on these corridors, theoretically, this could contribute to an increase of the accident rate, particularly with respect to rear end collisions. However, beyond the general assumption that congested conditions are associated with more rear-end collisions, it would be speculative to estimate what, if any, increase would occur as a result of the 2018 Project, but it is unlikely to result in the corridor exceeding the Statewide Average. At any rate, there is no CEQA criteria related to collision rates, and as noted above, this does not give rise to a CEQA issue.

Table 1: Collision History for SR-4

	Number of Collisions			Collision Rate (collisions/million vehicle miles)					
				Actual			State Average		
Facility	Total	Fatal	Fatal + Injury	Fatality	Fatal + Injury	Total	Fatality	Fatal + Injury	Total
Eastbound	269	2	101	0.004	0.22	0.59	0.004	0.23	0.73
Westbound	266	2	99	0.004	0.22	0.59	0.004	0.23	0.73

Notes:
Extents of collisions reported on SR 4 are between the Morello Avenue and Bailey Road interchanges.
Source: *Interstate 680/SR 4 Interchange Phase 3 (SR 4 Widening) Project: Final Traffic Operations Analysis Report*, Fehr & Peers, May 2015.

Table 2: Types of Collisions for SR-4

Type of Collision	Eastbound		Westbound	
	Number	Percent	Number	Percent
Head On	1	0.4%	1	0.4%
Sideswipe	52	19.3%	46	17.3%
Rear End	130	48.3%	117	44.0%
Broadside	5	1.9%	10	3.8%
Hit Object	54	20.1%	67	25.2%
Overturn	22	8.2%	16	6.0%
Auto-Pedestrian	1	0.4%	4	1.5%
Other	2	0.7%	1	0.4%
Not Stated	2	0.7%	4	1.5%

Notes:
Types of collisions reported on SR 4 are between the Morello Avenue and Bailey Road interchanges.
Source: *Interstate 680/SR 4 Interchange Phase 3 (SR 4 Widening) Project: Final Traffic Operations Analysis Report*, Fehr & Peers, May 2015.

Regarding the comment about increases in response times and/or delays in the provision of emergency service due to a general increase in the number of trips on SR 4, the commenter offers no evidence of the 2018 Project contributing to such circumstances (beyond the general reference to an increase in trips). Moreover, State Route 4 through the study area provides 10-foot shoulders on both sides of the roadway, in both directions of travel. Caltrans routinely clears the shoulders of debris to facilitate use of the shoulder area by emergency vehicles. While the 2018 Project is projected to increase the levels of vehicle traffic on SR-4 in the immediate project area, it would not substantially change the ability of emergency responders to access the shoulder lane, or otherwise materially increase response times.

With respect to the comment regarding the potential impact on safe movement of people, services and commerce, as noted above, this does not raise a CEQA issue and there is no CEQA criteria to evaluate any such purported impacts. For informational purposes, see above responses.

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

May 16, 2019

Mr. Jordan Davis, Senior Planner
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565
jdavis@ci.pittsburg.ca.us

Dear Mr. Davis:

Subject: 2018 Alves Ranch Project, Supplemental Environmental Impact Report, SCH #2004012097, City of Pittsburg, Contra Costa County

The California Department of Fish and Wildlife (CDFW) received a draft Supplemental Environmental Impact Report (SEIR) from the City of Pittsburg (City) for the 2018 Alves Ranch Project (Project) pursuant the California Environmental Quality Act (CEQA).

CDFW is submitting comments on the SEIR to inform the City, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project. CDFW is providing these comments and recommendations regarding those activities involved in the Project that are within CDFW's area of expertise and relevant to its statutory responsibilities (Fish and Game Code, § 1802), and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096 and 15204).

CDFW ROLE

1

CDFW is a Trustee Agency with responsibility under CEQA (Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a California Endangered Species Act (CESA) Permit, a Lake and Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

REGULATORY REQUIREMENTS

California Endangered Species Act
Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c), 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code section 2080.

Lake and Streambed Alteration
CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement (or ITP) until it has complied with CEQA as a Responsible Agency. 1 CONT

PROJECT DESCRIPTION SUMMARY

Proponent: City of Pittsburg

Description and Location: The Project site is located in the City of Pittsburg, Contra Costa County, California. The Project is located within the incorporated limits of the City of Pittsburg, north of West Leland Road between San Marco Boulevard and Bailey Road. The Project is a revised portion of the 2004 Alves Ranch Project, later amended in 2009. The Project consists of the development of 346 single-family dwelling units and 10 accessory dwelling units on approximately 25.93 acres, and the rezoning of approximately 12 acres of the Project site for up to 140,000 square feet of commercial uses.

COMMENTS AND RECOMMENDATIONS

CDFW offers the below comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Western Burrowing Owl (*Athene cunicularia*)
The SEIR should evaluate the potential for burrowing owls to be present within and adjacent to the Project area by documenting the extent of fossorial mammals that may provide burrows used by owls during the nesting and/or wintering seasons. Burrowing owls may also use unnatural features such as debris piles, culverts and pipes for nesting, roosting or cover. If suitable burrowing owl habitat is present, CDFW recommends that surveys be conducted following the methodology described in Appendix D: Breeding and Non-breeding Season Surveys of the CDFW Staff Report on Burrowing Owl Mitigation (Staff Report), which is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843. 2

Burrowing owl surveys should be conducted by a qualified biologist (i.e. someone with multiple years of experience conducting species-specific surveys). In accordance with the Staff Report, a minimum of four survey visits should be conducted within 500 feet of the Project area during the owl breeding season which is typically between February 1 and August 31. A minimum of three survey visits, at least three weeks apart, should be conducted during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. Pre-construction surveys should be conducted no-less-than 14 days prior to the start of construction activities with a final survey conducted within 24 hours prior to ground disturbance.

Please be advised that CDFW does not consider exclusion of burrowing owls or "passive relocation" in and of itself sufficient to reduce the permanent loss of habitat to a level of less-than-significant. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid "take". 2 CONT

The CEQA document for the Project should also include measures to avoid or minimize loss of burrowing owl foraging habitat, and mitigation for loss of habitats that cannot be fully avoided. Please note that the permanent loss of habitat (foraging, nesting, etc.) is considered significant in and of itself, and should be mitigated regardless of current level of disturbance or reconnaissance survey results. To offset this significant permanent impact, the Project proponent should be required to purchase and protect in perpetuity compensatory mitigation lands at a minimum of a 1:1 mitigation ratio (or a minimum mitigation ratio of 3:1 if active burrows or winter roosts are identified on-site) or as a condition of Project approval. If active burrows or winter roosts are found on-site or take cannot be avoided, the mitigation ratio should be increased to a minimum of 3:1 (mitigation: loss).

Swainson's Hawk (*Buteo swainsoni*)
CDFW recommends that a qualified biologist conduct surveys prior to any construction activities that may impact Swainson's hawk in accordance with the Swainson's Hawk Technical Advisory Committee's (TAC) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (2000), available on CDFW's webpage at https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds.

Survey methods should be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys should be conducted: 1) within a minimum 0.25-mile radius of the Project area or a larger area if necessary to identify potentially impacted active nests, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys should occur annually for the duration of the Project. The qualified biologist should have a minimum of two years of experience implementing the TAC survey methodology. If an active nest is identified, a 0.25-mile buffer shall be maintained around the nest until the young fledge. If Swainson's hawk activity (foraging or courtship, not just nests) is noted within 0.25 miles of the project site and a non-disturbance buffer of 0.25 miles cannot be implemented, 3

the Project proponent should be required to obtain a CESA ITP and pursue further compensatory mitigation as a condition of Project approval.

Avoidance and minimization measure *MM BIO-1b* indicates that Swainson's hawk foraging habitat shall be mitigated at a 1:1 ratio for each acre developed if nests are located and determined to be occupied. However, the Project site is within 10 miles of documented Swainson's hawk nests and provides suitable foraging habitat for the species and other special-status raptors [e.g., golden eagle (*Aquila chrysaetos*)]. Nesting Swainson's hawks will travel up to 10 miles to suitable foraging habitat, but the likelihood of both adult and nest survival decreases with greater travel distances to suitable foraging habitat (Briggs et al. 2011). Therefore, the permanent loss of habitat is considered significant and should be mitigated for, regardless of current level of disturbance or reconnaissance survey results. Mitigation lands should be protected in perpetuity under a conservation easement and be managed in perpetuity through an endowment with an appointed land manager. The easement should be held by a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. As the state's trustee for fish and wildlife resources, CDFW should be named as a third-party beneficiary under the conservation easement. 3 CONT

Migratory and Nesting Birds

Avoidance and minimization measure *MM BIO-1c* (page 11) specifies a 300-foot non-disturbance radius around an active raptor nest and a 50-foot non-disturbance radius around an active migratory bird nest. Depending on the species, nest stage, and site conditions, 50 to 300 feet may not be sufficient to prevent disturbance-related nest failure. If nests are found in or near the Project area, CDFW can provide guidance on establishing appropriate buffers to minimize the potential for take and to reduce potential impacts to less-than-significant. As such, CDFW recommends *MM BIO-1c* be revised to require nest buffer approval from the State's trustee for fish and wildlife (CDFW) **prior** to Project construction. 4

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs., tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089). 5

CONCLUSION

To ensure significant impacts are adequately mitigated to a level less-than-significant, the feasible mitigation measures described above should be incorporated as enforceable conditions into the final CEQA document for the Project. CDFW appreciates the opportunity to comment on the SEIR to assist the City in identifying and mitigating Project impacts on biological resources. 6

Questions regarding this letter or further coordination should be directed to Ms. Jennifer Rippert, Environmental Scientist, at (707) 428-2069 or Jennifer.Rippert@wildlife.ca.gov; or Ms. Melissa Farinha, Senior Environmental Scientist (Supervisory), at (707) 944-5579.

Sincerely,

Gregg Erickson
Regional Manager
Bay Delta Region

Cc: State Clearinghouse

REFERENCES

Briggs, C.W., B. Woodbridge, and M.W. Collopy. 2011. Correlates of Survival in Swainson's Hawks Breeding in Northern California. Journal of Wildlife Management 75 (6): 1307-1314.

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State of California-Department of Fish and Wildlife (CDFW)

Response to CDFW-1
This comment provides introductory text and restates the Project Description. No response is necessary.

Response to CDFW-2
Draft SEIR Section 3-2, Biology, evaluated potential impacts to burrowing owl resulting from to implementation of the 2018 project in accordance with the mandates of CEQA. The Draft SEIR determined that there is a low potential for burrowing owl to exist on-site due the marginal habitat, such as dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. As required by the 2004 Final EIR, MM BIO-1a, a qualified biologist shall be required to conduct a pre-construction burrowing owl survey no more than 30 days prior to construction to confirm the presence or absence of burrowing owls. The survey shall take place near the sunrise or sunset in accordance with applicable CDFW guidelines. All burrows or burrowing owls (if any) shall be identified and mapped. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls (if any) are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1–January 31), surveys shall document whether burrowing owls (if any) are using habitat on or directly adjacent to any disturbance area.

To reinforce the requirements of the CDFW guidelines, in accordance with the commenter's recommendation, MM BIO-1a is revised to specifically reflect the requirements for surveys, with a minimum of three survey visits to be conducted at least 3 weeks apart during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. Please refer to Section 4, Errata, for the revised text of the mitigation measure.

Regarding the purported need for compensatory mitigation lands requested by CDFW, the City notes that this is not a regulatory requirement and the City has not imposed this heightened level of mitigation on other projects where the impacts have been determined to be similar. Consistent with the City's approach on other recent projects, the City has determined, in its discretion and based on scientific evidence, industry standard protocols, and expert consultation, that the recommended mitigation, which requires pre-construction surveys and the use of exclusion devices, where needed, to encourage passive relocation. Passive relocation minimizes potential impacts and enables safe relocation without the use of trapping techniques. Passive relocation is a commonly used method and reduces potential impacts to a less than significant level.

Response to CDFW-3
SEIR Section 3-2, Biology, evaluated potential impacts to Swainson's hawk as a result of 2018 project construction in accordance with the mandates of CEQA. The SEIR determined that Swainson's hawk has the potential to occur on-site due to the presence of suitable foraging habitat such as open, dry grassland with little to no ground cover and lack of tree coverage. As required by the 2004 Final EIR, a qualified biologist would conduct a pre-construction survey no more than 30 days prior to construction to establish whether there are any Swainson's hawk nests within 1,000 feet of the project site. The mitigation measure is revised to reflect the CDFW specific guidance requiring the number of surveys and the qualifications of the biologist. Please refer to Section 4, Errata, for the revised text of the mitigation measure. These revisions merely clarify and amplify the analysis and

recommended mitigation, and further ensure that identified impacts are adequately mitigated, and therefore do not trigger recirculation.

Regarding the need for compensatory mitigation, MM BIO-1b already includes the requirement for acquisition of a conservation easement or other instrument suitable to preserve foraging habitat, as determined by the CDFW. Please refer to the complete text of MM BIO-1b. No further revision is required.

Response to CDFW-4
Section 3-2 Biology of the SEIR evaluated potential impacts to migratory and nesting birds as a result of 2018 Project construction in accordance with the mandates of CEQA. Consistent with the recommendations of the commenter, MM BIO-1c is revised to reflect the need to obtain CDFW input on the size of the buffer area around any active nest, prior to project construction. Please refer to Section 4, Errata, for the revised text of the mitigation measure. These revisions merely clarify and amplify the analysis and recommended mitigation, and further ensure that identified impacts are adequately mitigated, and therefore do not trigger recirculation.

Response to CDFW-5
The Lead Agency would pay all applicable CDFW filing fees consistent with California Code of Regulations Title 14, Fish and Game Code 711.4, and Public Resource Code 21089. No further response is necessary.

Response to CDFW-6
This comment summarizes the letters conclusion and does not require any further response.

From: "Jorge Hernandez"
<jorge.hernandez@pw.cccounty.us<mailto:jorge.hernandez@pw.cccounty.us>>
To: "Jordan Davis" <jdavis@ci.pittsburg.ca.us<mailto:jdavis@ci.pittsburg.ca.us>>
Cc: "Teri Rie" <teri.rie@pw.cccounty.us<mailto:teri.rie@pw.cccounty.us>>, "'Alex Azar (aazar@rja-gps.com<mailto:aazar@rja-gps.com>)'" <aazar@rja-gps.com<mailto:aazar@rja-gps.com>>, "'mandy.leung@lyonhomes.com<mailto:mandy.leung@lyonhomes.com>'" <mandy.leung@lyonhomes.com<mailto:mandy.leung@lyonhomes.com>>
Subject: RE: Alves Ranch Subdivision Notice of Availability Draft Supplemental Environmental Impact Report-Flood Control District Comments

Dear Mr. Davis:

We received the Notice of Availability for the Draft Supplemental Environmental Impact Report (DSEIR) for the Alves Ranch Subdivision and Commercial Development (Project No: 18-1348), located between Highway 4 and West Leland Road (APN's 097-700-001, −002, -005), north of the Vista Del Mar subdivision (Sub 8448). We previously provided comments on this development in our January 22, 2019 email and letter dated August 15, 2018 (a copy of which is attached). We received the notice on April 1, 2019, and submit the following comments:

1. This development drains into the Drainage Area 48B Basin (Basin) that was constructed by William Lyon Homes and analyzed by RJA Engineers in their work on the Vista Del Mar Subdivision (located upstream of this project). Construction of the detention Basin is a mitigation measure of the Vista Del Mar Environmental Impact Report. The Initial Study for the SEIR stated that the existing water quality storage volume of the Basin is proposed to be increased from 5 acre-feet to 6.2 acre-feet to address this development's water quality requirements; however it did not further explain that increasing the Basin's water treatment capabilities will decrease the Basin's flood control storage capacity. This proposed reduction in flood control storage capacity could create or contribute runoff water that would exceed the capacity of the existing stormwater drainage system. Since our January 22, 2019 comments on the Notice of Preparation, we have reviewed a drainage study, with an updated hydrology map, dated February 26, 2019, prepared Schaaf & Wheeler, that analyzes the feasibility of increasing the on−site basin's water treatment volumes and the impacts these proposed modifications will have on the basin's Flood Control storage capacity. Based on the study provided, we are satisfied that the existing basin will have enough storage capacity to accommodate the proposed modifications to the basin outlet. We do however request that the developer's engineer provide the Flood Control District with a hard copy of the Schaaf & Wheeler drainage study for our Drainage Area 48B hydrology files. 1

2. This project is located within Drainage Area 48B (DA 48B), for which a drainage fee is due in accordance with Flood Control Ordinance Number 2002-28. By ordinance, all building permits or subdivision maps filed in this area are subject to the provisions of the drainage fee ordinance. Effective January 1, 2019, the current fee in DA 48B is $0.57 per square foot of newly created impervious surface area. The drainage area fee for this development should be collected by the City prior to recording the Final Map. 2

3. The FC District is not the approving local agency for this project as defined by the Subdivision Map Act. As a special district, the FC District has an independent authority to collect drainage fees that is not restricted by the Subdivision Map Act. The FC District reviews the drainage fee rate every year that the ordinance is in effect and adjusts the rate annually on January 1 to account for inflation. The drainage 3

fee rate does not vest at the time of tentative map approval. The drainage fees due and payable will be based on the fee in effect at the time of fee collection. 3 CONT

4. The FC District entered into a Reimbursement Agreement (dated September 27, 2011) with the Vista Del Mar Developer, William Lyon Homes, for the construction of planned drainage lines "B" and "B-1" in DA 48B. Per the Reimbursement Agreement, the Alves Ranch Development was afforded a credit of $449,231 in DA 48B fees for construction of these planned drainage facilities. The agreement also stipulates that "In the event there are changes in the land use, density, or impervious surfaces on the Alves property, Alves or its successor(s) in interest shall be responsible for paying the FC District additional drainage fees based on the drainage fee ordinance applicable at that time." Should changes to the original site plan incur additional DA 48B fees, they should be collected prior to recordation of the Final Map. Please note that we will be following up this email with a revised fee estimate should the proposed changes incur additional DA 48B fees. 4

5. The FC District previously provided comments on the Basin's emergency spillway, the 60−inch diameter secondary spillway standpipe, and the proposed Operation and Maintenance Manual in our e-mail from Craig Standafer, dated August 13, 2008 (attached). To our knowledge, these comments have not all been addressed. In light of the proposed flood control storage capacity reduction and potential increase in reliance on these secondary and emergency spillways, we recommend that the City require the developer to incorporate some of the recommendations from our August 13, 2008 email, specially our recommendation regarding safety and maintenance of the basin, to reduce the potential for flooding. These recommendations include, but are not limited to: 5

a. Ensuring that Caltrans does not construct any structure that would block the basin's emergency spillway. 6

b. Providing access to the secondary spillway trash rack so that loose material can be removed from above. A path, road, or otherwise defined relatively flat corridor to the top of the trash rack needs to be provided to properly maintain the facility. 7

c. Ensuring that the emergency spillway concrete slab can support truck loads. The 6" thick with #4 bars at 12" O.C. shown on the plans appears to be too thin. 8

d. Providing an adequate access road from the basin to the pubic road. The longitudinal slope of the fifteen foot wide access road should not exceed 10 percent. If the longitudinal slope of the access road should exceed 10 percent, the road should be paved with asphalt concrete or other similar surface. The structural section shall be designed to withstand the loads imposed by a 35 ton truck mounted crane. If any portion of the road requires asphalt concrete, the total length of the road should also be so paved. Access roads with longitudinal slope of less than 10 percent slope shall be paved with crushed run gravel, unless otherwise directed by the Chief Engineer or designee. 9

e. The dewatering outlet ¼-inch mesh debris screen shown on the plans could promote clogging and require additional maintenance. We note that other projects done by Caltrans have used ½-inch screen. 10

f. The last set of plans we have for the dewatering outlet call for 2-rows of 8 or, 16 total holes in the riser, however the last hydrologic analysis of the basin (Schaaf & Wheeler Memorandum, dated June 5, 2018) indicates that the riser has eight 1-1/2" diameter holes controlling the outflow. This discrepancy needs to be resolved. 11

We appreciate the opportunity to review projects involving drainage matters and welcome continued coordination. If you have any questions, please call me at (925) 313-2346 or e-mail me at jorge.hernandez@pw.cccounty.us<mailto:jorge.hernandez@pw.cccounty.us>.

Thank you,

[Flood Control Logo-hoz left img]

Jorge Hernandez | Staff Engineer
Contra Costa County Public Works: Flood Control & Water Conservation District
255 Glacier Drive, Martinez, CA 94553
p: 925.313.2346 | f: 925.313.2333 | e:
jorge.hernandez@pw.cccounty.us<mailto:jorge.hernandez@pw.cccounty.us> | cccpublicworks.org
<http://cccpublicworks.org/>

From: Jorge Hernandez <jorge.hernandez@pw.cccounty.us>
Sent: Tuesday, January 22, 2019 5:02 PM
To: jdavis@ci.pittsburg.ca.us
Cc: Teri Rie <teri.rie@pw.cccounty.us>; Alex Azar (aazar@rja-gps.com) <aazar@rja-gps.com>; mandy.leung@lyonhomes.com; Michelle Cordis <michelle.cordis@pw.cccounty.us>
Subject: Alves Ranch Subdivision NOP for SEIR-Flood Control District Comments

Dear Mr. Davis:

We received the Notice of Preparation (NOP) of a Supplemental Environmental Impact Report (SEIR) and Initial Study for the Alves Ranch Subdivision and Commercial Development (Project No: 18-1348), located between Highway 4 and West Leland Road (APN's 097-700-001, -002, -005), north of the Vista Del Mar subdivision (Sub 8448). We previously provided comments on this development in our letter dated August 15, 2018, a copy of which is attached. We received the notice on December 20, 2018, and submit the following comments:

1. This development drains into the Drainage Area 48B Basin (Basin) that was constructed by William Lyon Homes and analyzed by RJA Engineers in their work on the Vista Del Mar Subdivision (located upstream of this project). Construction of the detention Basin is a mitigation measure of the Vista Del Mar Environmental Impact Report. The Initial Study for the SEIR states that the existing water quality storage volume of the Basin is proposed to be increased from 5 acre-feet to 6.2 acre-feet to address this development's water quality requirements; however it does not further explain that increasing the Basin's water treatment capabilities will decrease the Basin's flood control storage capacity. This proposed reduction in flood control storage capacity could create or contribute runoff water that would exceed the capacity of the existing stormwater drainage system. We recommend that the SEIR include mitigation measures to address this drainage capacity concern. As a proposed mitigation measure, we recommend that the applicant's engineer submit to the City and the Contra Costa County Flood Control and Water District (FC District), for review and approval, a drainage study, with an updated hydrology map (stamped and signed by a registered Civil Engineer), that analyzes the feasibility of increasing the on-site basin's water treatment volumes and the impacts these proposed modifications will have on the basin's Flood Control storage capacity. 12

2. The FC District previously provided comments on the Basin's emergency spillway, the 60-inch diameter secondary spillway standpipe, and the proposed Operation and Maintenance Manual in our e-mail from Craig Standafer, dated August 13, 2008 (attached). To our knowledge, these comments have not all been addressed. In light of the proposed flood control storage capacity reduction and potential increase in reliance on these secondary and emergency spillways, the SEIR should include the recommendations from our August 13, 2008 email, as a mitigation measures to reduce the potential for flooding. These recommendations include, but are not limited to:

a. Ensuring that Caltrans does not construct any structure that would block the basin's emergency spillway.

b. Providing access to the secondary spillway trash rack so that loose material can be removed from above. A path, road, or otherwise defined relatively flat corridor to the top of the trash rack needs to be provided to properly maintain the facility.

c. Ensuring that the emergency spillway concrete slab can support truck loads. The 6" thick with #4 bars at 12" O.C. shown on the plans appears to be too thin.

d. Providing an adequate access road from the basin to the pubic road. The longitudinal slope of the fifteen foot wide access road should not exceed 10 percent. If the longitudinal slope of the access road should exceed 10 percent, the road should be paved with asphalt concrete or other similar surface. The structural section shall be designed to withstand the loads imposed by a 35 ton truck mounted crane. If any portion of the road requires asphalt concrete, the total length of the road should also be so paved. Access roads with longitudinal slope of less than 10 percent slope shall be paved with crushed run gravel, unless otherwise directed by the Chief Engineer or designee. 12 CONT

e. The dewatering outlet ¼-inch mesh debris screen shown on the plans could promote clogging and require additional maintenance. We note that other projects done by Caltrans have used ½-inch screen.

f. The last set of plans we have for the dewatering outlet call for 2-rows of 8 or, 16 total holes in the riser, however the last hydrologic analysis of the basin (Schaaf & Wheeler Memorandum, dated June 5, 2018) indicates that the riser has eight 1-1/2" diameter holes controlling the outflow. This discrepancy needs to be resolved.

We appreciate the opportunity to review projects involving drainage matters and welcome continued coordination. If you have any questions, please call me at (925) 313-2346 or e-mail me at jorge.hernandez@pw.cccounty.us.

Thank you,

Jorge Hernandez | **Staff Engineer**

Contra Costa County Public Works: Flood Control & Water Conservation District

255 Glacier Drive, Martinez, CA 94553

p: 925.313.2346 | f: 925.313.2333 | e: jorge.hernandez@pw.cccounty.us | cccpublicworks.org

3 attachments

image002.png

1K

TM FCD Comments 8-15-18.pdf
1780K

E-mail from Craig Standafer, dated 8-13-08.pdf
2865K

Contra Costa County
Flood Control
& Water Conservation District

Brian M. Balbas,
ex officio Chief Engineer
Mike Carlson,
Deputy Chief Engineer

August 15, 2018

Jordan Davis
City of Pittsburg
Community Development—Planning Division
65 Civic Avenue
Pittsburg, CA 94565

RE: The Alves Ranch Subdivision
Project No: 18-1348
Our File: 1002-9235; x-ref: 1002-8448

Dear Mr. Davis:

We have reviewed the proposed amended Site Plan and Tentative Map for the Alves Ranch Subdivision and Commercial Development (Project No: 18-1348) dated July 19, 2018, located between Highway 4 and West Leland Road (APN's 097-700-001, -002, -005), north of the Vista Del Mar subdivision (Sub 8448). We offer the following general comments and recommended conditions of approval for this development:

Completeness Issues:

1. Before the City of Pittsburg (City) deems the application complete, we recommend that the applicant's engineer submit to the City and the Contra Costa County Flood Control and Water District (FC District), for review and approval, a drainage study, with an updated hydrology map, that analyzes the feasibility of increasing the on-site basin's water treatment volumes and the impacts these proposed modifications will have on the basin's Flood Control storage capacity. The developer will need to enter into the Fee-for-Service program for FC District review of the drainage study.

13

General Comments:

1. This project is located within Drainage Area 48B (DA 48B), for which a drainage fee is due in accordance with Flood Control Ordinance Number 2002-28. By ordinance, all building permits or subdivision maps filed in this area are subject to the provisions of the drainage fee ordinance. Effective January 1, 2018, the current fee in DA 48B is $0.56 per square foot of newly created impervious surface area. The drainage area fee for this development should be collected by the City prior to recording the Final Map.

2. The FC District is not the approving local agency for this project as defined by the Subdivision Map Act. As a special district, the FC District has an independent authority to collect drainage fees that is not restricted by the Subdivision Map Act. The FC District reviews the drainage fee rate every year that the ordinance is in effect and adjusts the rate annually on January 1 to account for inflation. The drainage fee rate does not vest at the time of tentative map approval. The drainage fees due and payable will be based on the fee in effect at the time of fee collection.

13 CONT

3. The FC District entered into a Reimbursement Agreement (dated September 27, 2011) with the Vista Del Mar Developer, William Lyon Homes, for the construction of planned drainage lines "B" and "B-1" in DA 48B. Per the Reimbursement Agreement, the Alves Ranch Development was afforded a credit of $449,231 in DA 48B fees for construction of these planned drainage facilities. The agreement also stipulates that "In the event there are changes in the land use, density, or impervious surfaces on the Alves property, Alves or its successor(s) in interest shall be responsible for paying the FC District additional drainage fees based on the drainage fee ordinance applicable at that time." Should changes to the original site plan incur additional DA 48B fees, they should be collected prior to recordation of the Final Map.

4. The proposed project drains into the DA 48B Basin (Basin) that was constructed by William Lyon Homes and analyzed by RJA Engineers in their work on the Vista Del Mar Subdivision. Construction of the detention Basin is a mitigation measure of the Vista Del Mar Environmental Impact Report. The FC District has reviewed several drafts of the Basin hydrology and hydraulics report, and we were in the process of reviewing, under our Fee-for-Service program, a revised report that dealt with increasing the Basin's water treatment capabilities and its potential impacts on the Basin's flood control storage capacity. Our review of the revised report was never completed and the Fee-for-Service account for our review was closed and the outstanding balance returned, at the developer's request. Before the City deems the application complete, we recommend that the feasibility of the proposed modification to the water treatment volume be evaluated to determine there are no adverse impacts on the Basin's flood control storage capacity. The developer should be required to submit to the City and the FC District, for review and approval, a drainage study, with an updated hydrology map (stamped and signed by a registered Civil Engineer) detailing the impacts this modification will have. The developer will need to enter into the Fee-for-Service program for FC District review of the drainage study.

5. The FC District previously provided comments on the emergency spillway, the 60-inch diameter secondary spillway standpipe, and the proposed Operation and Maintenance Manual in our e-mail from Craig Standafer, dated August 13, 2008 (enclosed). To our knowledge, these comments have not all been addressed, and since the outlet and dewatering structures are to be modified to accommodate the new treatment volume, we recommend that the City require the developer to incorporate some of the comments in our August 13, 2008 e-mail, specifically our comments regarding safety and maintenance of the Basin.

6. We recommend that the City condition the developer to design and construct storm drain facilities to adequately collect and convey stormwater entering or originating within the development to the nearest adequate man-made drainage facility or natural watercourse, without diversion of the watershed.
7. The developer should be required to submit hydrology and hydraulic calculations to the City that prove the adequacy of the in-tract drainage system. We defer review of the local drainage to the City. However, the FC District is available to provide technical review under our Fee-for-Service program.

13 CONT

Recommended Conditions of Approval

1. Applicant shall pay DA 48B fees prior to filing the Final Map.

We appreciate the opportunity to review projects involving drainage matters and welcome continued coordination. If you have any questions, please call me at (925) 313-2346 or e-mail me at jorge.hernandez@pw.cccounty.us.

Sincerely,

Jorge Hernandez
Staff Engineer
Contra Costa County Flood Control
& Water Conservation District

JH:cw
\\PW-DATA\grpdata\fldctl\CurDev\CITIES\Pittsburg\Sub 9235 Alves Ranch Commercial\Letters\TM FCD Comments 8-15-18.docx
Enclosure

c: Michelle Cordis, Flood Control
Teri E. Rie, Flood Control
Marsha Brown, Finance
c/enc: Mandy Leung, William Lyon Homes
2603 Camino Ramon, Suite 450
San Ramon, CA 94583
Joseph Azar, Ruggeri-Jensen-Azar & Associates
4690 Chabot Dr., Suite 200
Pleasanton, CA 94588

Jorge Hernandez

From: Craig Standafer
Sent: Wednesday, August 13, 2008 4:06 PM
To: Keith Halvorson
Cc: Tim Jensen; Teri Rie; Joseph Azar; 'Peter Hellmann'
Subject: Subs 9235 and 8448; Basin Study; O&M Manual; District Review

Keith

This email is in response to items sent to the Flood Control District for review regarding the Alves Ranch Commercial Subdivision (Subdivision 9235) and Vista del Mar (Subdivision 8448) located in the western portion of the City of Pittsburg within Formed Drainage Area 48B.

We received and reviewed the following documents:

- Detention Basin Design Study, by RJA, Revised June 5, 2008 (Basin Study)
- Memorandum from Mike Taylor to Tim Jensen and Keith Halvorson, June 18, 2008
- Detention/Water Quality Basin Operation and Maintenance Manual, by ENGEO, June 18, 2008 (O&M Manual)
- Letter from Keith Halvorson to Joseph Azar, June 24, 2008

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DETENTION BASIN DESIGN STUDY

The District previously offered comments to the Basin Study in an email to Keith Halvorson dated May 13, 2008. The memorandum from Mike Taylor addresses comments 1 through 8 and 13. Comments 9 through 12 were specific to the preparation of an Operation & Maintenance Manual (O&M Manual), which do not directly apply to the Basin Study. Comments 9 through 12 do, however, apply to the overall function of the basin, and the basin should not be accepted by the City or the GHAD until they are resolved.

The purpose of the Basin Study is as follows:

- To provide the analysis for the detention basin (formerly known as Basin C of the DA 48B plan) that serves the Vista del Mar subdivision.
- To demonstrate that the basin and the Line B-1 diversion structure effectively reduces the 10-year peak flow rate below values accepted for the Lines B and B-1 culverts under State Highway 4, which are part of the DA 48B plan.
- To address the hydrology and hydraulics of the flood control mitigation features and function of the basin and the Line B-1 diversion structure. The features include a primary, secondary, and emergency spillway.
- To provide design criteria to a separate document for the lower portion of the basin that is reserved for water quality treatment. The Basin Study does not address the water quality treatment features and function required for c.3 compliance.
- To demonstrate that the embankment fill of Highway 4 meets the requirements of the California State Division of Safety of Dams.

14

The Basin Study adequately meets its stated purpose and addresses all of our comments from our May 13, 2008 email except the following additional comments:

1. Section E, Number 1 should be revised to state "**4.4 acre-feet below elevation 126.0 feet"** is reserved for water quality use to be consistent with Appendix 13. This is design criteria to the separate analysis for the Water Quality Basin Analysis for Subdivision 9235.
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2. Comment 13a was not resolved, but we defer it to the City of Pittsburg. We acknowledge that the developer and RJA have made numerous attempts to have Caltrans enter into an agreement to assure that no structure like a soundwall or barrier rail would be constructed that could block the basin emergency spillway that opens onto Highway 4. We agree that despite the protection such an agreement could provide to the City and the GHAD, acquiring this agreement is burdensome. We also acknowledge that the risk Caltrans would construct such a facility is relatively remote. Nonetheless, we recommend that the City of Pittsburg and the GHAD include in their inspection checklist to ensures that the spillway remains unblocked. The City and the GHAD should maintain a relationship with the Caltrans Maintenance Division. Joseph Azar suggested meeting with us on this subject, which we would welcome but feel is no longer necessary.

3. In light of Comment 2, it is very important to ensure that the 60-inch diameter secondary spillway standpipe be maintainable due to the potential for actions outside the control of the GHAD. Although Comments 9 through 12 do not directly relate to the hydraulic capacity and function of the basin (the purpose of the Basin Study), the ability for the City and GHAD to keep the facilities properly maintained is a key assumption to the calculations that needs to be addressed. These comments are repeated in a separate section of this email related to the O&M Manual.

We are prepared to make these the final comments that the District will offer to the Basin Study. Except for the comments above, we find the Study complete and that it meets its stated purpose. At your direction, we can prepare a letter addressed to City of Pittsburg, Engineering that repeats the information stated in this email with the comments noted above. Alternatively, we are open to further discussing issues related to maintenance of the secondary spillway. 14 CONT

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O&M MANUAL

Our understanding is that the City of Pittsburg has hired Balance Hydrologics to review the water quality treatment feature of the detention basin. We submit the following comments and notes numbered for ease of response.

1. The District is reviewing the O&M manual at the City's request to provide comments related to the maintenance requirements. The District has not reviewed the water quality treatment features or function of the basin.
2. It is not our intent for the report prepared by ENGEO to be separate report from the GHAD Plan of Control, which the District was not involved in reviewing. The GHAD should be offered the opportunity to review the O&M manual from a maintainability viewpoint.
3. We note that other reports, including Storm Water Control Plan, were prepared by ENGEO for review and comment by the City and Balance Hydrologics. The District did not receive a copy and thus has no comments to offer. Review of water quality features are usually beyond the scope of review for the Flood Control District except as they relate to conformance to a formed drainage area plan for peak flow mitigation.
4. We understand that Balance Hydrologics will perform a thorough review of the issues related to the c.3 compliance for the Alves Ranch Commercial portion as it relates to the City of Pittsburg and the GHAD.
5. The inspection check list should include a line item for inspection of the emergency spillway as discussed separately in comments to the RJA Basin Study.
6. The City and the GHAD should proactively locate a contact in the Caltrans Maintenance Division regarding the emergency spillway.
7. Please discuss how the 60-inch diameter secondary spillway will be maintained. The basin outlet plan and profile on Sheet 11 of Appendix 10 of the Basin Study shows the access road to be five feet in elevation above the top of pipe at a 3:1 slope, which is a 15-foot distance. This is a large span for equipment that would ordinarily be employed. We recommend constructing a platform or other appurtenance to make maintenance easier. Addressing this comment may require revising the Basin Study.
8. We did not receive a response letter or email to comments 9 through 12 that were addressed toward the O&M manual. It does not appear that all of our comments were addressed, especially those that may require reconstruction of physical facilities. The comments are renumbered and repeated below.
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9. REPEAT -- Appendix 8 — Plan 1 – Conceptual Detention Basin Plan. We recognize that the basin has already been constructed and the facilities are in place. The comments listed below relate to maintenance issues and can be addressed in the forthcoming Operations and Maintenance Manual.

    a. Our Detention Basin Design Guidelines state:

    "All trash racks shall be designed to be readily accessible by hand or by a piece of medium sized equipment. Access must be from above the trash rack so the loose material can be removed upward."

    The layout shown does not provide access to the top of the trash rack; access being assumed as a path, road, or otherwise defined relatively flat corridor to the top of the trash rack; however, the 4:1 slopes may allow small machinery to access the trash rack.

    b. The emergency spillway slab, 6" thick with #4 bars at 12" O.C. each way, appears a bit thin to support truck loads. The O&M manual should address spillway inspection and repair.

    c. Plan 1 and the Mass Grading Plans are not clear as to the proposed surface treatments and I calculate the slope to be ±12.5%. Our Detention Basin Design Guidelines should be followed. For access they state:

    "A fifteen foot wide access road shall be provided between the basin and a publicly maintained road. The longitudinal slope of this road shall not exceed 10 percent.

    Access roads with a longitudinal slope greater than 10 percent shall be paved with asphaltic concrete or other surfacing. The structural section shall be designed to withstand the loads imposed by a 35 ton truck mounted crane. If one portion of the road requires asphalt the total length of the road shall be so paved. Access roads with a longitudinal slope of less than 10 percent shall be paved with crushed run gravel unless otherwise directed by the Chief Engineer or designee. 14 CONT

    The cross slope of the road shall be 2 percent and sloped away from the low ground adjacent to the road.

    Wherever possible the basin's primary perimeter access strip shall be located on the basin side slopes approximately 18 inches above the basin floor. The secondary basin perimeter access shall be outside the excavation limits. Both of these strips shall be at least 15 feet in width and graded to be passable by maintenance vehicles. A minimum 6-foot strip shall be provided along the top of the basin.

    Any storm water concentrated due to the grading of the access strip(s) shall be conveyed to a point of adequate discharge in a manner acceptable to the District. The facilities handling the concentrated storm water shall be considered as storm drains and shall be designed. A B-50 outlet structure is required if the pipe discharges into a channel or the detention basin. Erosion protection shall be installed at the lower terminus of the pipe.

    If a basin is to double as a park during the dry months, it must have at least three (3) public points of access."

10. REPEAT-- **In light of comment 9c, above, we recommend paving the access road.** The as-built plans should be revised to show the access road slope.

11. REPEAT -- Appendix 12 — Sheet S-2 shows an **undrained** volume in the manhole below the elevation of the 30" RCP leading from the diversion structure to the basin. This volume should be filled in, the manhole floor raised, or a small orifice/weep hole should be put in the weir wall to allow drainage back to the other side. This would help reduce or eliminate stagnant water, which is a significant vector control issue. **Resolution of this comment requires repair or modification to a facility already constructed.**

12. REPEAT --Appendix 14 — Sheet 12 — Dewatering Structure. These comments are made to a structure that has already been constructed. We advise the City to inspect the facility, in light of these comments, to monitor its performance now that the basin has been in use for two winter seasons.

    a. The mesh of the debris screen is only ¼ inch in size. This seems too small, which could promote clogging. We note other projects done by Caltrans that used ½ inch screen.

b. The screen is shown to go all the way around the riser. We suggest the screen be made so that it is easy to remove for maintenance. Possibly two half circles (in plan view) that overlap slightly could be bolted or tied together at the ends.

c. Per the design, water will pond below the lowest hole in the CMP Riser. Putting the lowest holes down near the CMP interface with the concrete slab (as shown in the detail above) would enhance drainage and deter stagnation. A note on the plans indicating this would be appropriate.

d. The report calls for 14 holes in the riser, yet the plans call for 2-rows of 8 or, 16 total. The calculations for the CMP riser out flow are based on one orifice at elevation 120. The report should be revised to reflect the plan configuration.

e. The elevations of the holes are not shown on the plans. Place holders appear where elevations should be.

f. The screen vertical dimension (or top elevation) is not shown on the plans. It appears to be relative to the hole placement. The hole elevation information is needed to determine the screen size and if there are enough openings in the screen to function if it were partially blocked.

13. REPEAT -- (Formerly letter g) The overflow structure (secondary spillway) may need to be designed with more safety features. It has a fence planned around it, but once inside the fence, the 60" opening is almost flush with the ground and has a 30 foot drop inside. We advise a cable railing or other means of protecting maintenance workers or trespassers once they go inside the chain-link fence. We suggest Caltrans Standard Plans showing cable railing, a "Riser Safety Cage" and a similar "Debris Rack Cage". A barrier like one of these is warranted for safety reasons.

14 CONT

Please forward these comments to the appropriate party to have them addressed. We look forward to receiving responses to these comments and a revised O&M manual (or other document like a GHAD Plan of Control).

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LETTER FROM KEITH HALVORSON REGARDING SUB 9235
Our understanding is that the City of Pittsburg has selected Balance Hydrologics to review the water quality treatment features and function of the detention basin. We have held telephone conversations with Ed Ballman and provided input to him for a letter that he is preparing to send to the City. In general, we concur with their concerns about the selection of runoff coefficients and inconsistent treatment volume (See Comment 2 about to the RJA Basin Study.)

At this time, we offer no further comments to the water quality treatment facilities and function provided the input criteria from the RJA Basin Study is used appropriately (Comment 2 to the Basin Study). We defer further review of the water quality treatment facilities and function to the City of Pittsburg and its consultant, Balance Hydrologics. However, we would appreciate being left in the communication loop regarding the interface between the water quality and flood control function of the basin (above and below elevation 126.0 feet.)

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Please forward these comments to the appropriate parties. Let us know your decision regarding a letter for the Basin Study. Also let us know if you still are planning a meeting with the developer.

We appreciate the opportunity to review plans involving the drainage matters that affect drainage area facilities and welcome continued coordination. If you have any questions, please contact me by e-mail at cstan@pw.cccounty.us or by phone at (925) 313-2018; alternatively, you can reach Teri Rie at trie@pw.cccounty.us or (925) 313-2363.

Craig M. Standafer
Civil Engineer
Flood Control Engineering
Contra Costa County Public Works Dept.

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Local Agencies

Contra Costa County Flood Control and Water Conservation District (CCCFCD)

Response to CCCFCD-1

After summarizing the existing basin's history and describing the commenter's initial question as to whether the increase in water quality storage would result in sufficient flood control capacity, the comment acknowledges that , per analysis provided in the Schaaf & Wheeler Drainage Study, dated February 26, 2019, the existing basin will provide adequate storage capacity (both water quality and flood control) for the 2018 Project. As requested, the applicant will provide a hard copy of the Schaaf & Wheeler Drainage Study for the comment's files. The report is included as Appendix G of this Final EIR.

Response to CCCFCD-2

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The City will collect the required applicable drainage fee prior to recordation of the final map for the 2018 Project. To ensure this occurs, the City will impose this as a mandatory condition of approval.

Response to CCCFCD-3

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The City recognizes the commenter's status as a special district with independent authority to impose impact fees, and confirms that the 2018 Project will not vest into any drainage fees pursuant to applicable laws. The City will collect the required applicable drainage fee based on the current fees in effect at the time of final map recordation for the 2018 Project, as required by MM 9-2 of the 2004 Vista Del Mar EIR, which remains applicable and is included in the Mitigation Monitoring and Reporting Program prepared for the 2018 project.

Response to CCCFCD-4

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The City will collect the required applicable drainage fee based on the approved site plan, in accordance with the referenced Reimbursement Agreement, at the time of final map recordation. The payment of all applicable drainage fees is also required by MM 9-2 of the 2004 Vista Del Mar EIR, which remains applicable and is included in the Mitigation Monitoring and Reporting Program prepared for the 2018 project.

Response to CCCFCD-5

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, and to ensure that the commenter's previous comments were not addressed, responses to specific recommendations are provided below in responses 6 through 11.

Response to CCCFCD-6

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The applicant

will include an inspection checklist for the emergency spillway in the detention basin Operations and Maintenance manual. The City does not have any jurisdiction over what Caltrans may construct within the SR 4 right-of-way. Any project proposed within the City limits would be subject to review and approval by the City, at which time potential impacts on the spillway would be reviewed.

Response to CCCFCD-7

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. Consistent with the recommendation, an existing gravel access road provides access to the spillway trash rack, which will allow loose material to be removed from above. The existing slope from the access road to the concrete apron and fence of the spillway is close to 5:1 and is easily walkable for maintenance personnel to ensure proper maintenance can be performed. The final design improvements to the basin are subject to review and approval by the City Engineer. In addition, maintenance for the basin shall be performed by the GHAD District, with oversight by the City.

Response to CCCFCD-8

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The existing concrete slab was constructed in 2005 and there is no evidence (based on recent visual inspection) that it is insufficient to support anticipated truck maintenance traffic; accordingly, consistent with the recommendation, the slab to be used by the 2018 Project is reasonably anticipated to be adequate to support the minimum truck loads, and no additional changes are warranted The final design improvements to the basin are subject to review and approval by the City Engineer. In addition, maintenance for the basin shall be performed by the GHAD District, with oversight by the City.

Response to CCCFCD-9

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The 2018 Project includes an appropriately designed access road from the basin to the public right of way, which meets the applicable design standards. See, generally, the pavement design chart as shown on sheet 4 of the Vista Del Mar approved mass grading plans, dated 2005. As detailed more fully therein, the design chart shows a 3-inch AC and 10-inch AB section for that portion of the access road that is more than 10 percent in longitudinal grade. The design chart shows an 8-inch AB for the part of the access road that is less than 10 percent in longitudinal grade. These sections meet design standards. The final design improvements to the basin are subject to review and approval by the City Engineer. In addition, maintenance for the basin shall be performed by the GHAD District, with oversight by the City.

Response to CCCFCD-10

The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. Based on recent visual inspection, it is noted that the existing detention basin has performed adequately since its construction more than 15 years ago, with no evidence of clogging such that additional maintenance would be required. Maintenance procedures for all detention basin structures will be

included in the detention basin operations and maintenance manual, and will be mandated to ensure adequate maintenance. The final design improvements to the basin are subject to review and approval by the City Engineer. In addition, maintenance for the basin shall be performed by the GHAD District, with oversight by the City.

Response to CCCFCD-11
The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The minor discrepancy was remedied in the updated Schaaf & Wheeler Drainage Study dated February 26, 2019. Specifically, see page 2, item 2, dewatering outlet, of the report show two rows of eight 1.5-inch diameter holes. The Schaaf & Wheeler report is included as Appendix G of this Final SEIR. The final design improvements to the basin are subject to review and approval by the City Engineer. In addition, maintenance for the basin shall be performed by the GHAD District, with oversight by the City.

Response to CCCFCD-12
This comment repeats statements that are addressed in responses CCCFCD-1 and 5-11 above. As noted more fully therein, the Contra Costa County Flood Control and Water Conservation District is now satisfied with the proposed modifications, and confirms that the basin will provide adequate storage capacity for the 2018 Project. As requested, the applicant will provide a hard copy of the Schaaf & Wheeler Drainage Study for its records. See responses 5 through 11, which address the commenter's specific recommendations.

Response to CCCFCD-13 (appended comment letter dated August 15, 2018)
In regards to the "Completeness Issues," these items are addressed by response to CCCFCD-1 above. As explained more fully therein, the Contra Costa County Flood Control and Water Conservation District is now satisfied with the proposed modifications, and confirms that the basin will provide adequate storage capacity for the project. As requested, the applicant will provide a hard copy of the Schaaf & Wheeler Drainage Study for its records.

In regards the "General Comments" listed as GC 1 through GC 7 below, these comments repeat topics raised in responses CCCFCD-1 through 11 above, as further indicated below:

- **GC-1.** See response CCCFCD-2. .
- **GC-2.** See response CCCFCD-3.
- **GC-3.** See response CCCFCD-4.
- **GC-4.** See response CCCFCD-1.
- **GC-5.** See responses CCCFCD-5-11.
- **GC-6.** The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. As recommended by the comment, the project has been designed to adequately collect and convey stormwater without diversion of the watershed, as documented by the updated Schaaf & Wheeler report. The requested information will be included as part of the construction document submittal package.

- **GC-7.** The comment does not raise any CEQA issues or question the environmental analysis, and therefore no response is necessary. For informational purposes, however, the following is noted. The requested information will be included as part of the construction document submittal package; to ensure this occurs, the City will require satisfaction via the imposition of a conditional of approval.

Response to CCCFCD-14 (Comment Letter dated August 13, 2008)
In regard to the comments subtitled "Detention Basin Design Study," per CCCFCD-1 above, the District acknowledges that the updated Schaaf & Wheeler Drainage Study, dated February 26, 2019, confirms that the basin will provide adequate storage capacity for the project. As a standard part of the City Engineering Division's review of the project prior to issuance of grading or building permits, the applicant will be required to provide an inspection checklist for the emergency spillway in the detention basin Operations and Maintenance (O&M) Manual for its record. The O&M Manual will include all of the items listed in the commenter's letter.

As noted previously, an existing gravel access road provides access to the spillway trash rack. The existing slope from the access road to the concrete apron and fence of the spillway is close to 5:1 and is easily walkable for maintenance personnel.

CONTRA COSTA MOSQUITO & VECTOR CONTROL DISTRICT

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April 15, 2019

Jordan Davis
City of Pittsburg
Community Development Dept. – Planning Div.
65 Civic Avenue
Pittsburg, CA 94565

Re: 2018 Alves Ranch Project Draft Supplemental Environmental Impact Report

Dear Mr. Davis,

Thank you for the opportunity to express the position of the Contra Costa Mosquito & Vector Control District (the District) regarding the 2018 Alves Ranch Project Draft SEIR located in the City of Pittsburg, CA.

As a bit of background, the District is tasked with reducing the risk of diseases spread through vectors in Contra Costa County by controlling them in a responsible, environmentally-conscious manner. A "vector" means any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, mites, ticks, other arthropods, and rodents and other vertebrates. Under the California Health and Safety Code, property owners retain the responsibility to ensure that the structure(s), device(s), other project elements, and all additional facets of their property do not breed or harbor vectors, or otherwise create a nuisance. Owners are required to take measures to abate any nuisance caused by the structure(s), device(s), or other feature(s) on their property. Failure by the property owner to properly address a nuisance may lead to abatement by the Contra Costa Mosquito & Vector Control District and civil penalties of up to $1,000 per day pursuant to California Health & Safety Code §2060-2067.

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While climate-sensitive diseases and mosquitoes are briefly mentioned in the "Human Health Effects of GHG Emissions" under section 3.3 – Greenhouse Gas Emissions, the potential impact to human health by disease vectors is not properly addressed in this document, nor under CEQA—an oversight that has created problems for mosquito abatement and vector control agencies throughout the state. All mosquitoes require water to complete their life cycle. Projects that construct impervious surface, alter water flow or drainage, introduce irrigation, contain water conveyance or treatment elements, produce mitigation wetlands or ponds, etc. have the potential to produce standing water and vector breeding habitat, creating a potential health hazard for area citizens, pets, and wildlife. Vector species that may breed in such locales have the ability to not only affect nearby individuals, but potentially spread disease viruses to persons and other animals several miles away. The existing stormwater basin in its current state has produced *Culex tarsalis* mosquitoes—a primary vector for West Nile virus in Contra Costa County—multiple times per year in 2016, 2017, and 2018. This project's increasing of the basin volume and runoff to the site will likely increase water retention times which may, in turn, increase mosquito production and public health threats to area inhabitants. Additional concerns come in the form of

stormwater conveyance systems. The catch basins and associated lines have been observed in the past to be prolific sources of mosquito production if not designed and constructed properly.

Addressing these concerns in the review and planning phases can not only better protect public health and reduce the need for pesticide applications for control efforts, but avoid costly retrofits and fines for property owners in the future. Attached to this letter is a white paper produced by the Mosquito and Vector Control Association of California that provides a tool for governments and agencies to manage, analyze, and address the impacts of vector production inherent to certain projects that require CEQA review that may be useful. Please don't hesitate to contact me should you have any questions or need anything further. 1 CONT

Sincerely,

Jeremy Shannon
Vector Control Planner
925-771-6119
jshannon@contracostamosquito.com

MVCAC
MOSQUITO AND VECTOR CONTROL ASSOCIATION OF CALIFORNIA

According to the Mosquito and Vector Control Association of California (MVCAC), the state's leading advocate for mosquito and vector control, new development projects that do not take into account vector breeding potential have created an increased threat to public health.

Public health experts believe that much more can be done to prevent mosquitoes, which are responsible for an estimated 725,000 deaths worldwide each year. There are a number of factors that play a role in this devastating figure, however, urbanization itself has become a significant risk factor as populations rise and infrastructure designed to accommodate dense populations is built. Current California Environmental Quality Act (CEQA) Statues and Guidelines neglect to directly address vector and mosquito threats.

While many local governments have done a good job improvising from existing CEQA guidelines and other planning tools to begin to address this issue, a significant gap exists between state regulations and the resources that most local planning agencies need to address vector issues in the planning process. To address this concern, MVCAC has developed the enclosed white paper, "How Better Planning and Use of the California Environmental Quality Act Can Prevent Mosquitoes and Vector-Borne Disease," that discusses the benefits for developers, natural resources and public health when adding vector control considerations to local government project planning and design.

MVCAC's White Paper presents a number of case studies that identify problems and recommended solutions specific to the local planning and CEQA review process and is intended to be a tool for local governments and other lead agencies to manage, analyze, and address the impacts of mosquito and vector breeding inherent in certain types of projects.

We encourage you to read this white paper to learn more about local proactive measures and best practices that can be employed to further protect public health. If you have any questions or comments, please let me know.

Sincerely,

Bob Achermann, Executive Director
Mosquito and Vector Control Association of California (MVCAC)
Phone: 916-440-0826
Email: mvcac@mvcac.org

How Better Planning and Use of the California Environmental Quality Act Can Prevent Mosquitoes and Vector-Borne Diseases



Benefits for Developers, Natural Resources and Public Health

August 2014

MVCAC
MOSQUITO AND VECTOR CONTROL ASSOCIATION OF CALIFORNIA

Worldwide, the dramatic rise in the incidence of emerging and resurging vector-borne disease has been associated with ecological and climate change that favors increased vector densities (vectors are animals that can carry a disease agent from one person or animal to another, like mosquitoes transmitting malaria or West Nile virus). Urbanization itself has become a risk factor as populations rise and infrastructure designed to accommodate dense populations is built. International travel and global commerce daily connects disparate regions of the world providing avenues for introductions of new vector species and emerging vector-borne disease. Today, mosquitoes alone are responsible for an estimated 725,000 deaths worldwide each year.

California is not immune from these changes. In fact, recent introductions of new vector-borne diseases and invasive mosquito species have altered the public health landscape such that the 'status quo' must change. Development projects which affect the movement, collection, or management of water that do not account for vector breeding potential will negatively impact public health, and owners/managers of these projects are accountable.

California is home to one of the most extensive mosquito and vector control networks in the United States. Mosquito abatement and vector control districts are charged in Sections 2000-2067 of the California Health and Safety Code (HSC) with managing and controlling populations of mosquitoes and other vectors to protect residents from nuisance and disease. Historically, these districts have worked behind the scenes to manage vector populations as required; but as this White Paper documents, this approach is no longer sustainable nor is it in the best interest of the environment.

Proactive design and maintenance can dramatically reduce the risk of vector production and vector-borne disease transmission, improve water quality and habitat benefits, and result in more sustainable development in the long run. In California, significant mosquito and vector breeding habitat exists today which can be attributed to a correctable oversight in the California Environmental Quality Act (CEQA). Too often, the potential impacts on public health are overlooked in project planning stages and are not recognized in local General Plans, site Specific Plans, or other planning documents. According to Sections 2060-2067 of the HSC, property owners are ultimately responsible for the abatement of a public nuisance and may be held liable for all costs necessary to abate the nuisance, prevent its recurrence, and civil penalties of up to $1000 per day that the nuisance exists.

This White Paper is a tool for local governments and other lead agencies to manage, analyze, and address the impacts of mosquito and vector breeding inherent in certain types of projects subject to CEQA analysis. In this regard, consulting local vector control agencies on the front-end of planning and project approval is recommended to save time, resources, and improve the health of Californians.

Mosquito abatement and vector control districts use Integrated Vector Management (IVM) programs to implement the most environmentally-sound and economically feasible methods to control mosquitoes and other vectors. IVM programs incorporate education, physical control and source reduction, biological and chemical control, and favor integrated planning efforts to manage vector populations and disease risk.

The Mosquito and Vector Control Association of California (MVCAC) recommends that policy-makers, planning officials, and project proponents incorporate relevant considerations from the Best Management Practices for Mosquito Control publication into the planning and review process. This BMP guidance was developed by the California Department of Public Health in collaboration with MVCAC to reduce the spread of diseases and reduce the need to use pesticides. A copy of the most recent update (July 2012) can be viewed here: http://www.cdph.ca.gov/HealthInfo/discond/Documents/BMPforMosquitoControl07-12.pdf.

Issue:

Current CEQA Statutes and Guidelines neglect to specifically address public health pests or provide protections from mosquitoes and other important public health vectors. In some instances, this has led to an avoidable proliferation of project sites that breed mosquitoes and expose Californians, domestic animals, pets, and wildlife to disease risks including the dangerous West Nile virus and emerging threats such as dengue and chikungunya viruses. Some sites also provide harborage for other vectors and nuisance pests, including flies and rodents. ***This oversight has resulted in projects that fail to meet the design or land use objectives necessary for compliance with Sections 2000-2067 of the HSC.***

> Section 2060 Article 5 (b) of the HSC states:
>
> *The person or agency claiming ownership or title, or right to property or who controls the diversion, delivery, conveyance, or flow of water shall be responsible for the abatement of a public nuisance that is caused by, or as a result of, that property or the diversion, delivery, conveyance, or control of that water.*

A public nuisance is in the HSC Section 2002 is defined as:

(j) "Public nuisance" means any of the following:

(1) Any property, excluding water that has been artificially altered from its natural condition so that it now supports the development, attraction, or harborage of vectors. The presence of vectors in their developmental stages on a property is prima facie evidence that the property is a public nuisance.

(2) Any water that is a breeding place for vectors. The presence of vectors in their developmental stages in the water is prima facie evidence that the water is a public nuisance.

(3) Any activity that supports the development, attraction, or harborage of vectors, or that facilitates the introduction or spread of vectors.

As a result, these non-compliant projects needlessly put the public, sensitive wildlife, water quality, and other resources at greater risk. Managing vectors from these sites has resulted in increased pesticide use, liability for project proponents, costly retrofits, fines to property owners, and disproportionate burden to taxpayers.

For example, countless stormwater BMPs have been designed and installed over the last 20 years to manage stormwater discharges without applying basic knowledge of vector ecology. Many poorly designed or inadequately maintained mitigation sites have unintentionally become significant sources of mosquito production, adversely impacting communities, businesses and recreational open spaces. These have also disrupted the balance and diversity of natural environments. Had these projects considered the long-term implications of mosquito production in the planning, design, and maintenance objectives at the onset, these deleterious impacts would have been largely avoided at little or no cost to the project proponent.

Solution:

Inclusion of appropriate language and considerations in local General Plans, local CEQA guidelines and planning guidelines will assist project planners to minimize or avoid mosquito and vector production in CEQA approved projects. This is increasingly essential in light of tightened pesticide regulations, the encroachment of development into wetlands and wildlands, on-site water retention required by Low Impact Development standards (LID) and grey-water recycling and water conservation efforts.

Discussion:

Under existing California law, property or water rights owners are responsible for public nuisances they create and are subject to abatement, including control costs and fines. Fortunately, Best Management practices (BMPs) have been developed to reduce or prevent vector production and harborage. It is also recognized that climate change may further enhance the spread of vectors and increase the outbreak of vector-borne diseases. With proactive planning and incorporation of BMPs into local planning guidelines, the entitlement process, and CEQA, abatement costs are avoided and public health is protected.

The failure to properly address this critical concern within the CEQA Statutes and Guidelines has resulted in the following problems:

Case Studies

Problem 1

Increased urbanization brings mosquitoes closer to where people live and work. Hardscape environments force everyday urban runoff to pool and stagnate in structures designed to convey storm flows and filter out pollutants. Many of these systems are old and in disrepair, especially gutters, retention basins and underground storm drain systems (USDS). Urban runoff from landscape and agriculture irrigation occurs year-round and increases in warmer months. These discharges stagnate and create favorable mosquito breeding conditions. The dispersal of blood-feeding mosquitoes from these sites into the surrounding urban environment increases the risk factor for humans, domestic animals, and wildlife for infection with diseases like West Nile virus.

For example: one northern California city utilizes natural streams and created detention facilities to accommodate pulse storm flows as well as upstream seasonal agricultural drainage and urban runoff. High beaver populations coupled with limited maintenance has allowed dense vegetation to create blockages allowing water to stagnate and breed mosquitoes near heavily used walking paths and residential properties. Each new housing project located along these stream corridors further impacts the drainage issues and contributes additional non-storm flows to the system already at full capacity.

Solution:

When new or redevelopment projects undergo a CEQA review, consideration should be given to the project's potential to produce mosquitoes or other vectors in 1) stormwater treatment/ conveyance structures, 2) year-round runoff flows from the project, 3) any other features (like ornamental lakes or creeks) designed to hold or convey water, and 4) cumulative impacts of projects on current or potential vector-borne disease risks in the area.

The HSC establishes that property and water rights owners are responsible for conditions that support a "public nuisance." Therefore, it is imperative to evaluate the potential of a proposed project to create or prevent such a nuisance. Under most circumstances production of mosquitoes, other vectors, and nuisance pests can be avoided or minimized through proper planning and design or maintenance elements. *The CEQA review process should require the project proponent to examine the potential that water holding or conveyance features may create a public nuisance and then seek the advice of vector control professionals as necessary and mitigate for any significant impacts.*

Problem 2

Under the National Pollution Discharge Elimination System (NPDES) permits, storm water BMPs and Low Impact Development (LID) features are mandated to improve water quality. Most often, these features are designed to capture and retain or infiltrate stormwater. Certain BMPs, like vortex separators, media filter chambers, treatment wetlands, underground storage tanks, and rain barrels hold water for extended periods, creating ideal mosquito breeding conditions, especially if not regularly maintained. Maintenance schedules rarely include recommendations to limit vector breeding. The sheer number of these features, lack of location data, lack of public awareness, and the proliferation of year-round runoff has created a complex and increasing challenge for public health mosquito and vector control programs. The few inches of highly organic water standing in these systems can produce thousands of mosquitoes every week.

Solution:

Few Multiple Separate Stormwater Sewer System (MS4) permits have requirements that address mosquito and vector production from these systems and, in those that do, the language and requirements are quite variable. *The State Water Board and regional water boards should seek state-wide consistency in addressing this issue.* Here is a link to an MS4 permit that got it right: http://www.waterboards.ca.gov/coloradoriver/board_decisions/adopted_orders/orders/2013/0011cv_ms4.pdf

Problem 3

State and federal resource management agencies require project proponents to mitigate project impacts to natural resources like wetlands, riparian creeks, or sensitive species. This mitigation is often in the form of a 2:1 ratio for habitat creation. Wetland/habitat mitigation sites are commonly incorporated as aesthetic elements into housing developments and commercial complexes.

Created wetlands/riparian features often have poor water quality and low species diversity since they are typically fed by urban runoff flows directed from the development. This creates ideal mosquito breeding habitat, often in close proximity to where people live and work. Conflicting resource agency management objectives often result in sites that are frequently not maintained and become filled in with sediment, invasive vegetation, and pestiferous mosquitoes. These conditions make mosquito inspection and treatment difficult and may require the property owner to acquire resource agency permits to have maintenance work performed, so that access and treatments can be effective. Consequently, when effective non-chemical control options such as water management or vegetation reduction cannot be—or are not—used, more frequent pesticide applications may be required to protect public health from mosquitoes and mosquito-borne diseases.

Solution:

If the potential for mosquito and vector production were addressed in the CEQA Statutes and Guidelines, project planners could effectively articulate what vector production avoidance measures would be incorporated into the site design and prescribe long-term maintenance measures. This consideration at the onset of the project is highly cost-effective for the project proponent and/or property owner who otherwise has to pay for expensive remediation and large scale maintenance costs that could have been “designed out” of the project.

Problem 4

Mosquito abatement and vector control programs often do not have discretionary approval or permitting authority, and are not routinely made aware of impending new projects within their jurisdictions by city/county planning or permitting departments. New sources of vectors are typically discovered after a complaint is filed by a member of the public, allowing vector populations to grow unchecked and requiring additional labor and often multiple pesticide applications.

Solution:

Having location and type data on potential new sources would allow mosquito control agencies to keep the sites under surveillance for mosquito production and proactively prevent breeding problems. This is another element that can be addressed by local planning guidelines as project planners would be made aware of these needs and directed to resources like the California Department of Public Health document, titled “Best Management Practices for Mosquito Control in California,” a manual of cost-effective IVM guidelines and design parameters. Consulting vector control agencies when projects have certain features like holding water would also help address this problem.

Problem 5

Public health mosquito and vector control agencies often do not have safe access to sites for inspection and possible treatment. Some project sites have paths and access roads that are used for multiple purposes, but most do not. Routine maintenance and access to creek banks and flooded areas specifically for vector control often are not analyzed under CEQA or are not included in the management plans, thus complicating the local District's efforts for safe and permissive access especially during fire season.

Solution:

Access to properties could be readily planned into a project and integrated with its objectives. This is especially critical for large, vegetated water features. This can also be addressed at the local planning level as project proponents would be made aware of these needs and directed to resources like the California Department of Public Health document, titled "Best Management Practices for Mosquito Control in California," a manual of cost-effective IVM guidelines and design parameters.

Problem 6

Poorly designed projects often breed mosquitoes and other vectors. After installation, pesticide applications are often needed because of design flaws, lack of planning, lack of maintenance, etc. Even with planning, changes in projects can result in the need for coordination from mosquito control professionals.

For example, a sanitation district in southern California constructed wastewater treatment wetlands to treat primary treated wastewater prior to discharging it to a local river. The local mosquito control district consulted on the Initial Study and Mitigated Negative Declaration and entered into a Memorandum of Understanding with the sanitation district to prevent and control mosquito and midge (fly) breeding. The mosquito control district provides the sanitation district with information on its control efforts and coordinates on water flow strategies, vegetation management, and biological resources. In return, the sanitation district provides access to the wetlands, manages vegetation, allows for a chicken flock to be kept for disease surveillance on the property, maintains sprinklers at the edges of the ponds for spraying at dawn and dusk to reduce egg-laying by mosquitoes, and reimburses the mosquito control district for chemical products and supplies used to control mosquitoes in the wetlands. In order to reduce mosquito breeding, the sanitation district even switched to secondary treatment, using the wetlands to provide tertiary treatment of the water, which removes more bio solids and thus provides cleaner water. But poor design could not be overcome and the project has experienced ongoing mosquito activity at unacceptable levels. All of these measures were implemented post design of the project and thus were aimed at mitigation, not prevention.

In 2013, the mosquito control district used $22,068.03 of chemical products and supplies; the sanitation district spent another $100,000 on vegetation management. The wetlands require weekly treatments from March through November to control the mosquitoes and protect the residents from West Nile virus. The wetlands have also become a wild bird sanctuary which requires additional consideration for control product selection and use on the property. While this wild bird sanctuary is an attractive feature, it further complicates the application of chemicals to control mosquito populations.

Solution:

The IVM approach was not followed in the example above. As previously discussed, the IVM approach looks at all available options to manage mosquito and vector populations, and integrates the most effective options to protect public health. A key component of an effective IVM program is to prevent or minimize the need for ongoing control efforts, which reduces the amount of pesticide that is applied. Today, less pesticide would be used if more existing projects had considered mosquito and vector control issues during the design phase. Had this approach been taken in the design phase of the wetlands project in this example by reducing or eliminating features and conditions that would likely result in vector problem, there would have been a substantial savings of time, money and energy and a public health benefit of less mosquitos and reduced need for chemical usage. For example, designing the wetlands with consideration for how far land-based larval mosquito pesticide application equipment can effectively treat mosquitoes would have increased the efficacy of those applications, allowing for better protection of people and wildlife.

Problem 7

In neighborhoods with higher density residential and/or commercial property use, the activities of a redevelopment or construction project may disturb structures, debris and vegetation that have significant rodent populations. These rodent vectors disperse to the surrounding properties or buildings, to the disadvantage of the owner/occupants. There have been significant rodent infestations of neighborhoods caused when large rodent populations are dispersed from old buildings and/or neglected properties that are demolished or cleared.

Solution:

It would be appropriate for the cost of de-populating a vacant property of rodents prior to demolition to be borne by the property owners, saving the neighbors from the consequences of rodent dispersal. In projects where CEQA analysis is necessary, a vermin assessment and abatement plan should be considered and then applied when and where appropriate. Consulting vector control agencies when projects have rodent-dispersing potential would also help address this problem, as the agency could assess the site and propose a best management solution.

Problem 8

The Centers for Disease Control and Prevention reported that 2012 was the deadliest year on record, in the United States, for West Nile virus, reaching 286 fatalities and 5,674 reported infections; 51% of these patients had the neuroinvasive form of the disease, and many will endure long-lasting or permanent neurological impairment as a consequence of their illness. According to a 2006 study that examined the cost-effectiveness of a West Nile virus vaccine, the estimated baseline cost of a neuroinvasive disease was $27,500, and for each infection that resulted in a long-term disability, the cost averaged $210,000. The cost associated with each West Nile virus infection includes health care, lost wages, loss of productivity, and other significant economic ramifications.

Solution:

Reducing the number of potential mosquito and vector breeding sources through cost-effective planning measures may reduce the number of human disease cases and reduce healthcare and other cost burdens both public and private.

Needed Action

The inclusion of mosquito and vector control considerations as a preventive planning measure in the CEQA Statutes and Guidelines, specifically in Appendix G – Environmental Checklist Form will address the aforementioned problems with state-wide consistency. This will also help to synchronize multiple state resource agency objectives, better protect Californians from vectors and vector-borne diseases, reduce costs for project proponents and property owners, and save taxpayer resources.

Below is an example of mosquito and vector related questions that should be considered in a project's CEQA analysis. These can be included as a stand-alone addition to a lead agency's Initial Study Checklist or modified to fit under an existing section of the checklist like Public Services, Biological Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, or Mandatory Findings of Significance depending on the nature of the project:

> *Vector Control — The analysis for a project must consider evidence of potential environmental impacts, even if such impacts are not specifically listed on the Appendix G checklist. [State CEQA Guidelines, § 15063(f)] To determine whether Public Health & Safety may be significantly impacted, lead agencies should refer to the California Health & Safety Code § 2000-2093 for definitions and liabilities associated with the creation of habitat conducive to vector production and to guidance provided by the local mosquito and vector control districts/agencies in their determination of environmental impacts.*
> ***Would the project:***
>
> *a) Increase the potential exposure of the public to disease vectors (e.g., mosquitoes, flies, ticks, and rats)?*
>
> *b) Increase potential mosquito/vector breeding habitat (i.e., areas of prolonged standing/ponded water like wetlands or stormwater treatment control BMPs and LID features)?*

Having these public health vector control considerations added to lead agency CEQA environmental checklists would be an important first step in ensuring that vector issues are appropriately addressed early in the project planning process in environmental documents. This has been done successfully by the County of San Diego, Department of Planning and Land Use, since 2007. When enacted it translates into preventive planning, compatible design, and effective long-term maintenance that avoids or reduces vectors. Beyond the important benefit to public health, it also results in a substantial cost savings to taxpayers and reduces pesticide applications into the environment.

The MVCAC believes that taking these proactive measures will correct a pervasive planning oversight and better ensure protection of the environment and the public health for the citizens of California.

A Short History of Mosquito Control in California – How It Began

The first recorded mosquito control efforts in California were under the direction of University of California professors and employed against the salt marsh mosquitoes of the San Francisco Bay marshlands at San Rafael (1904) and at Burlingame (1905). The devastating effects of malaria in California's Central Valley in 1908 led to an education and demonstration program on malaria and anopheline mosquito control conducted by professor William B. Herms of the University of California, Berkeley, and sponsored by the Southern Pacific Railway. The first organized anti-malaria program was undertaken at Penryn in the Sacramento Valley in 1910, and later the same year an anti-malaria program was started in nearby Oroville.

Abatement Agencies

Enabling legislation for the creation of organized mosquito control agencies was passed May 29, 1915, when the State Legislature approved the Mosquito Abatement Act. Legislation authorizing the creation of pest abatement districts was passed in 1935, but only a few such districts have been formed for mosquito control. In pest abatement districts, the powers and legal bases are very similar to mosquito abatement districts, but the former provide for abatement of "any plant, animal, insect, fish, or other matter or material" as deemed a pest.

Role of the State Department of Public Health

The State Department of Public Health (Department of Health Services) created a Bureau of Vector Control (Environmental Management Branch) in 1946. The Branch was staffed with experts who assisted in the formation of many new mosquito abatement districts. The Branch also provided a number of technical services including disease surveillance and research studies throughout California. Today, CDPH, Infectious Diseases Branch, Vector-Borne Disease Section continues this mission of providing technical assistance and research that promotes vector-borne disease prevention.

Status of Mosquito Abatement and Vector Control Agencies

As of 2012, there were 82 organized mosquito and vector control agencies; these agencies had a combined operating budget totaling 75.8 million dollars. They provide control measures against mosquitoes, chaoborids (phantom midges), chironomids (non-biting midges), yellow jackets, black flies, red imported fire ants, rodents, and other pests and vectors for 37.3 million California residents. The state association that represents these agencies is the Mosquito and Vector Control Association of California (MVCAC). MVCAC is the leading advocate for mosquito and vector control in the California Legislature, among regulatory agencies and for the general public.

Organizations

Contra Costa Mosquito & Vector Control District (CCMVCD)

Response to CCMVCD-1

As noted in the comment, CEQA does not address disease vectors. Because the comment does not raise any CEQA issues or question the environmental analysis, no response is necessary. For informational purposes, however, the following is noted. The project site currently includes a detention basin, the footprint of which is not being expanded as a result of the 2018 Project. As described within the Initial Study, the 2018 Project would be consistent with the C.3 plan currently in place, and would not further alter the drainage patterns of the 2018 Project, and no new mitigation or wetlands ponds would be created as part of the 2018 Project. All work to the catch basins and associated lines will be subject to plan review and inspection to ensure proper construction.

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Subject: Alves Ranch development plan

Wilson Catalan <wilsoncatalan53@gmail.com>
to Jordan Davis

Sat, May 4, 1:38 AM (6 da

Hi
When is this project starting? An when is the estimated completion date?

1

Thank you so much.

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Individuals

Wilson Catalan (CATALAN)

Response to CATALAN-1

As shown in the Draft SEIR, Section 3.1, Air Quality, Table 3.1-7, Construction Schedule, the analysis conservatively assumed that the earliest date for the start of construction is June 1, 2019, and the estimated completion date would be December 30, 2021. Given that the City Council would not consider the 2018 Project until June 2019, and assuming the 2018 Project is approved, construction would not be anticipated to commence until later in 2019 after all mitigation measures and conditions of approval are met, with completion of construction occurring approximately 30 months thereafter.

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Subject: Jordan Ranch development

Jason Chi <156oakpoint@gmail.com>
to Jordan Davis

Fri, May 3, 7:35 PM (7 da

Hi Mr. Davis:

How this development could be recommended without proper environmental impact study? 1

Where are library and parks and trails and retail? Do you think the park off Leland and San Marcos can be called a park? The Safeway off Bailey built and serving community over 50 years ago is only major grocery chain willing to say in Pittsburg. 2 3

Please get these essential needs of community addressed first before any more housing expansion with Seeno family. 4

I will looking forward hearing from you and further community discussion with the rest of city council as well as mayor and concerned citizens.

BR

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Jason Chi (CHI)

Response to CHI-1

The comment is noted. Pursuant to California Public Resources Code, Section 21000, *et seq*., the City has conducted the appropriate level and scope of environmental review for purposes of considering the 2018 Project. Specifically, the City prepared an Initial Study and the Draft SEIR in order to determine, disclose, and mitigate to the extent feasible, the 2018 Project's impacts. In accordance with CEQA, these documents are intended to provide the public and decision makers with information related to its potential environmental impacts, as well as to identify mitigation, as necessary, which could reduce potential impacts to the maximum extent feasible.

Response to CHI-2

The issues regarding the provision of libraries and parks addresses the merits of the 2018 Project and do not raise any issues with the environmental analysis provided in the Draft SEIR, and therefore no further response is required. However, for informational purposes, the following is noted. As described in Section 2, Project Description, the 2018 Project could result in the development of up to 140,000 square feet of commercial retail space, as well as a 0.9-acre, Class I bicycle and pedestrian facility, and 1.28 acres of recreation and/or landscaped open space. Ray Giacomelli Community Park is located near the southern corner of West Leland Road and San Marcos Boulevard and would serve the project site residents and surrounding area. The Initial Study discussed existing park and library facilities at pages 82 through 86, noting that, similar to the conclusions in the 2004 FEIR, the 2018 Project would not directly result in a need to construct new or expanded park facilities. Therefore, the 2018 Project would not introduce new significant environmental impacts or increase the severity of any previously identified significant environmental impacts beyond those analyzed in the 2004 EIR. Implementation of the relevant 2004 FEIR MM 8-8 (pursuant to the adopted MMRP, which will be required to be implemented as mandated conditions of approval) requiring compliance with park dedication requirements of Chapter 17.32 of the City's Municipal Code, would ensure the impacts are less than significant.

Response to CHI-3

The issues regarding the availability of grocery uses addresses the merits of the 2018 Project and do not raise any issues with the environmental analysis provided in the Draft SEIR, and therefore no further response is required. However, for informational purposes, the following is noted. As described previously, the 2018 Project could include up to 140,000 square feet of retail commercial space on the project site. Pursuant to a memorandum of agreement executed by the developer, property owner, and City, development of these commercial uses would be required to include an approximately 40,000-square-foot grocery store, or otherwise the commercial developer would be required to pay a penalty to the City.

Response to CHI-4

The issues raised by the comment address the merits of the 2018 Project and do not raise any issues with the environmental analysis provided in the Draft SEIR, and therefore no further response is required. However, these comments are noted and will be taken into consideration by decision makers as part of their deliberations regarding the 2018 Project as a whole. For purposes of clarity, the City also notes that the residential developer of the 2018 Project is William Lyon Homes.

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From: Natasha Exner <natashaexner@icloud.com>
Sent: Wednesday, March 27, 2019 11:31 PM
To: Jordan Davis
Subject: 2018 Alves Ranch Project Comments

Hello Jordan,

Thank you for taking comments on the proposed Alves Ranch Project. Of course, as a resident of Pittsburg for more than 20 years I would prefer if nothing was built at all. However, I know that's not an option, therefore, I would like to give some suggestions for the retail space: Trader Joe's, Home Goods, Target, Whole Foods, Sephora, Nothing Bunt Cakes, Petco, and 24 hr fitness.

I am not well versed in city planning but I do know that retailers have to want to open in the location... I also know that the residents within the new developments (and the old ones) travel to the others cities to visit the stores I mentioned above. If I don't shop online I spend most of my money in Concord or Pleasant Hill. 1

*Pittsburg does not need more gas stations or auto part stores.

On a side note I would love if the dog park near this development could be expanded. It is way too small with no amenities (water fountains, fake fire hydrants etc). 2

Thank you and I hope you can make some of my suggestions come to life.

Natasha Exner
Sent from my iPhone

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Individuals

Natasha Exner (EXNER)

Response to EXNER-1

The commenter's preference for specific retailers is noted; however, the market as well as other considerations will dictate what types of users ultimately occupy the commercial space. Because the issues raised in the comment regarding suggested potential tenants for the proposed commercial space address the merits of the 2018 Project and do not raise any issues with the environmental analysis provided in the Draft SEIR, no further response is required.

However, for informational purposes, the following is noted. As described in Section 2, Project Description, page 2-13, up to 140,000 square feet of commercial floor area could be developed. Pursuant to a memorandum of agreement executed by the developer, the property owner, and the City, the 2018 Project would be required to include an approximately 40,000-square-foot grocery store, or otherwise the commercial developer would be required to pay a penalty to the City.

Response to EXNER-2

Regarding the commenter's desired expansion of a nearby dog park, this facility is located outside of the project site boundaries; the 2018 Project developer has no control over this use; and it is not part of the project being considered in the Draft SEIR. Accordingly, the comment is noted, and no further response is required.

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KRISTINA D. LAWSON
PARTNER
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HansonBridgett

May 10, 2019

VIA E-MAIL AND FACSIMILE (925) 252-4814 jdavis@ci.pittsburg.ca.us

Jordan Davis
Senior Planner
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565

Re: Comments on the Supplemental Environmental Impact Report for the 2018 Alves Ranch Project

Dear Mr. Davis:

On behalf of Discovery Builders, Inc. and West Coast Home Builders, Inc. we submit the following comments regarding the March 27, 2019 Supplemental Environmental Impact Report prepared for the 2018 Alves Ranch Project (the "SEIR"). We previously provided comments on the December 2018 Notice of Preparation for the SEIR by letter dated January 17, 2019, and provided extensive comments on the initially prepared 3rd Addendum to the 2004 Vista Del Mar EIR dated August 16, 2018, by letters dated September 4, 2018 and August 21, 2018. 1

1. At a Minimum, Preparation of a Subsequent EIR is Required

While the City has determined that conditions triggering the requirements for subsequent review preclude the City from proceeding with the 3rd Addendum initially prepared for the Project, because those changed and new conditions require more than minor additions or changes to the 2004 EIR, a subsequent rather than supplemental EIR must be prepared. Under the California Environmental Quality Act, Public Resources Code Section 21000, *et seq*., if major changes are required to make a previous EIR adequate, the agency must prepare a subsequent EIR. (Pub. Resources Code Sec. 21166; 14 Cal Code Regs., Sec. 15162)

In contrast, preparation of a supplemental EIR is appropriate when "[o]nly minor additions or changes would be necessary to make the previous EIR adequate for the project as revised."(14 Cal Code Regs Sec. 15163(a)). A supplemental EIR may be prepared to respond to a limited set of issues or project changes. However, changes in circumstances or the receipt of new information trigger the need to prepare a subsequent EIR under CEQA Guidelines §15162, where, as here, the previous EIR must be significantly revised in order to make its environmental analysis adequate. 2

Here, changes to the Project that have been made since the 2004 EIR was prepared for the larger, 293-acre Vista Del Mar project site include a rezoning to change the permitted land uses within the 57.81-acre Project site, a change in unit count and residential density, and a reconfiguration of the circulation system. The surrounding circumstances that have changed

since the preparation of the 2004 EIR include several nearby development projects that have been approved and constructed over the last 15 years, and those currently in the pipeline for approval. The 2004 EIR requires more than minor additions or changes to be relied upon by the City in its consideration of the proposed Project.

2 CONT

Substantive portions of the SEIR are largely comprised of the same information and analysis contained in the previously prepared 3rd Addendum. In addition, the SEIR fails to address previously submitted comments, including those supported by expert opinion, raising concerns of potentially significant environmental impacts.

2. The SEIR Fails to Include Additional Analysis in All of the Required Impact Areas

The SEIR limits its analysis to the areas of Air Quality, Biological Resources, Greenhouse Gas Emissions, Noise, and Transportation. As pointed out by commenters on the Notice of Preparation for the SEIR, additional analysis is required in the areas of Cultural Resources and Hydrology and Water Quality.

3

a. Cultural Resources

We reiterate our previous comment (on the proposed draft 3rd Addendum for the Project) regarding the need for further environmental review in the area of Cultural Resources and submit that the SEIR must identify or otherwise take into consideration any archaeological/cultural resource reports associated with the previous developments of the site. If no reports were completed, the SEIR must identify and analyze any other subsurface information, e.g., soils reports, from the previous development projects.

4

The SEIR does not mention archaeological studies or cultural resource surveys other than referencing conclusions from the Initial Study. While the Initial Study essentially relies on the 2004 EIR determination that impacts are less than significant with mitigation measures, the SEIR appears to fail to incorporate Mitigation Measure 12-1, which requires an archaeological resource to monitor the project.

b. Hydrology and Water Quality

As indicated in the comment letter submitted by the Contra Costa County Public Works, Flood Control and Water Conservation District dated January 22, 2019, the proposed Project will drain into the drainage basin constructed for the development of the Vista Del Mar project, located upstream of the Project site, as a mitigation measure of the 2004 EIR. The Initial Study for the SEIR states that the existing water quality storage volume of the basin is proposed to be increased from 5 acre-feet to 6.2 acre-feet to address the proposed Project's water quality requirements (SEIR, pp. 2-12, 2-14; Initial Study, p. 61). However, it fails to explain that increasing the water treatment capabilities will decrease the flood control storage capacity. This proposed reduction in flood control storage capacity could create or contribute runoff water that would exceed the capacity of the existing stormwater drainage system.

5

Accordingly, the District recommended that a mitigation measure be imposed to address this drainage capacity concern that would require the applicant to submit a drainage study for review and approval by the City and the District, with an updated hydrology map that analyzes the

feasibility of increasing the on-site basin's water treatment volumes and the impacts these proposed modifications will have on the basin's flood control storage capacity.

In addition, the District commented on the basin's emergency spillway, the 60-inch diameter secondary spillway standpipe, and the proposed Operation and Maintenance Manual. In light of the proposed flood control storage capacity reduction and potential increase in reliance on secondary and emergency spillways, the District recommended the SEIR include, as mitigation measures to reduce the potential for flooding, the following recommendations:

- Ensuring that Caltrans does not construct any structure that would block the basin's emergency spillway.
- Providing access to the secondary spillway trash rack so that loose material can be removed from above. A path, road, or otherwise defined relatively flat corridor to the top of the trash rack needs to be provided to properly maintain the facility.
- Ensuring that the emergency spillway concrete slab can support truck loads. The 6" thick with #4 bars at 12" O.C. shown on the plans appears to be too thin.
- Providing an adequate access road from the basin to the pubic road per the specifications recommended by the District.

These recommendations appear to have been ignored. The Initial Study concludes there would be a less than significant impact with applicable 2004 EIR mitigation measures incorporated, and the SEIR provides no additional analysis in the area of Hydrology and Water Quality.

Relatedly, as we previously commented, any application for a tentative subdivision map in the City requires the preparation of a stormwater control plan in accordance with current re-issued Municipal Regional Stormwater NPDES permit (MRP-2.0). The City's Municipal Code Section 13.28.050 requires that "[e]very application for a development project, including…a rezoning, tentative map, parcel map…design review, or building permit that is subject to the development runoff requirements in the city's NPDES permit **shall be accompanied by a stormwater control plan** that meets the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater Section C.3 Guidebook." (Emphasis added). This requirement has not been adhered to.

5
CONT

There is no legal basis for the City's conclusion that the Project cannot be required to submit a stormwater control plan because it is "grandfathered" under the terms of the NPDES Permit and Development Agreement. Again, since 2004, the original project has been significantly reconfigured, through three amendments to the development agreement, and development plan changes and as proposed, will be further revised to rezone the portion of the Project site zoned High Density Residential-Master Plan Overlay as Community Commercial zoning and the remaining portion of the site as Planned Development, to allow high density residential uses, including where commercial uses were originally approved. The Project is an application for a development project within the meaning of Section 13.28.050, and there is no basis or allowance for relying on an over 15 year old C.3 Plan for compliance.

3. The Analysis Provided in the SEIR Remains Inadequate to Make the 2004 EIR Adequate

a. Biological Resources

We reiterate our comments regarding the inadequacy of the biological resource discussion and impact analysis. For special-status wildlife, the SEIR cites 2004 EIR determinations regarding habitat in the Vista Del Mar site's southern portion and provides additional information about the potential for certain species to be on-site. The California Tiger Salamander (CTS), a protected species, is referenced as potentially impacted in the 2004 EIR, yet no additional CTS discussion is in the SEIR. The determination in Appendix D that CTS is unlikely to occur is not supported by the evidence, primarily the aestivation habitat located on-site. Adding in the fact that CTS are listed as threatened by US FWS and a species of special concern by the California Department of Fish and Wildlife, it is clear that additional new mitigation measures are needed and must be identified through a subsequent EIR. 6

b. Traffic and Circulation

The SEIR's response to our previous traffic and circulation comments (which are incorporated herein) is incomplete. In particular, no reasonable standard would indicate that even a minimal on-ramp metering queue increase constitutes a significant project impact. Further, analyzing individual freeway segments rather than the entire segment evaluated in the East County Action Plan is a flawed methodology. 7

We appreciate your consideration and look forward to reviewing a subsequent EIR that responds to the concerns outlined above.

Very truly yours,

Kristina D. Lawson

KDL:rsc

cc: Louis Parsons

Hanson Bridgett, LLP, Kristina Lawson (LAWSON)

Response to LAWSON-1

This comment is introductory in nature, and therefore no response is necessary. For informational purposes, the following is noted. The Initial Study and the Draft Supplemental EIR (Draft SEIR) appropriately considered the comments made regarding the scope of environmental review in the letter from the commenter dated January 17, 2019. With respect to letters dated August 21, 2018, and September 4, 2018, referenced by the commenter, that correspondence does not involve any comments on the Draft SEIR and therefore no further response is necessary. It is noted, however, that in an abundance of caution, the City has prepared the Initial Study and Draft SEIR (and related appendices) to ensure that the potential environmental impacts of the 2018 Project are fully analyzed, disclosed, and mitigated to the extent feasible. As noted, the Draft SEIR includes additional analysis related to Air Quality, Biological Resources, Greenhouse Gas (GHG) Emissions, Noise, and Transportation and Traffic, including impacts to surrounding roadways and cumulative traffic volumes. The analysis of cultural resources contained in the Initial Study was based on field survey and research by a qualified archaeologist, Dr. Dana DePietro, PhD.

Response to LAWSON-2

As discussed more fully therein, the Draft SEIR has been prepared in accordance with CEQA (California Public Resources Code [PRC], § 21000 *et seq*.) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000 *et seq*.) to evaluate the minor changes to the 2018 Alves Ranch Project originally analyzed in the Vista Del Mar EIR, State Clearinghouse No. 2004012097, certified on October 18, 2004.

The environmental impacts of the 2018 Project are analyzed in the Draft SEIR to the appropriate degree of specificity, in accordance with CEQA Guidelines Section 15146. It is the scope of the underlying analysis contained in the CEQA document at issue, rather than the title of the CEQA document, that is dispositive. The City's discretionary decision to prepare a supplemental EIR rather than a subsequent EIR is reasonable, with this decision focusing on "the substance of the EIR, not its nominal title." *City of Irvine v. County of Orange*, 238 Cal. App. 4th 526, 540 (2015). Here, the reasons for the City's decision to prepare a supplement to the 2004 FEIR is described in detail in the Introduction of the Draft SEIR and more fully below, as well as being supported throughout the substantive environmental topic discussion in the Draft SEIR. In summary, because major changes were not required to make the 2004 FEIR adequate, the City was not required to prepare a subsequent EIR. A supplement to an EIR is a document that contains additions or changes needed to make the previous EIR adequate. For purposes of the 2018 Project, as discussed more fully therein and below, only limited additions and changes were required to make the 2004 FEIR; accordingly, a supplemental EIR was proper. (*See* CEQA Guidelines § 15163(a).) A supplemental EIR need only contain the information necessary to make the previous EIR adequate for the project as revised. (*See* CEQA Guidelines § 15163(b).) Because the 2004 FEIR did not need to be rewritten from the ground up to makes its environmental analysis adequate for purposes of the 2018 Project, a subsequent EIR was not required.

In accordance with CEQA Guidelines Section 15163, the Draft SEIR addresses whether: (1) changes to the Alves Ranch Project; (2) a change in circumstances under which the original Alves Ranch Project was undertaken; or (3) new information of substantial importance exists, which would result in any new significant impacts or an increase in severity of previously identified significant impacts. It also identifies

appropriate and feasible mitigation measures that, if adopted, may significantly reduce or avoid certain of these impacts.

The Alves Ranch Project was originally analyzed and approved in 2004, pursuant to the certified 2004 EIR. The City adopted a Statement of Overriding Considerations prior to approving the original Alves Ranch Project. As documented in the Initial Study prepared for the 2018 Project, after considering the 2004 Final EIR and the nature of the changes at issue with respect to the 2018 Project as well as any relevant changes circumstances, coupled with the limited changes and additions necessary to make the 2004 Final EIR adequate for purposes of the 2018 Project, the City determined that a supplemental EIR was appropriate and complies with CEQA's mandate.

The factors used to evaluate whether further environmental review is necessary are set forth in CEQA Guidelines 15162 and 15163 and relate to whether "substantial changes" to the EIR are required. As identified in CEQA Guidelines Section 15162, substantial changes to the EIR are those that are required:

1. Due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
2. Where mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative, or

Where mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
With respect to the 2018 Project, in an abundance of caution, the City decided to conduct further environmental review. The City then needed to determine whether to prepare a supplemental or subsequent EIR. As noted above, Section 15163 of the CEQA Guidelines provides that the City may choose to prepare a supplement to an EIR rather than a subsequent EIR if any of the conditions described in Section 15162 would require further environmental review, but only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

As described in Section 1, Introduction of the Draft Supplemental EIR, the 2018 Project proposes the same types of land uses on the project site, residential and commercial, just in slightly reduced densities and relocated to a certain degree within the original development footprint. As part of the overall development program analyzed as part of the Vista Del Mar project, the 2004 EIR contemplated high density residential and business commercial land uses, as well as a regional stormwater basin, on the approximately 57.81-acre portion of the Alves property north of West Leland Road (i.e., the "project site"). The 2004 FEIR assumed that this northern portion of the Vista Del Mar development would include 563 housing units on 32.1 acres and 257,500 square feet of commercial building space on 14.78 acres, along with the aforementioned stormwater basin site.

The 2018 Project consists of the development of 346 single-family dwelling units and 10 accessory dwelling units on approximately 25.93 acres and the rezoning of approximately 12 acres of the project site for up to 140,000 square feet of future neighborhood- and community-serving commercial uses. As the 2018 Project would include merely a shifting of the same types of uses and would only reduce the density compared to the 2004 EIR, these changes would be considered minor in nature, and would not trigger substantial changes to the 2004 FEIR, as evidenced in the substantive environmental topic chapters in the Draft SEIR and the related Initial Study, a supplemental EIR was proper and satisfies CEQA.

Response to LAWSON-3
This comment generally states additional analysis is required for cultural resources and hydrology and water quality. These comments are addressed in Responses 4 and 5. No further response is necessary.

Response to LAWSON-4
In accordance with applicable CEQA requirements, the City evaluated the issue of whether further environmental review was necessary with respect to cultural resources. As explained more fully below and in the Initial Study, the City concluded that no new significant impacts would occur nor would the severity of any previously identified significant impacts increase as a result of the 2018 Project, and thus no further analysis was required.

As described in the Initial Study, the 2004 FEIR required implementation of MM 12-2, ensuring that an historical resources survey would be conducted for all on-site structures meeting the requirements of Section 5024.1(g) of the State Public Resources Code. MM 12-2 further requires that, to the extent any historic resources are on-site, the survey would identify appropriate measures to mitigate any significant impacts. At the time of the 2004 FEIR, the City concluded that, with incorporation of MM 12-2, impacts would be reduced to less than significant. This mitigation measure was fully implemented as part of the construction of the 2004 Vista Del Mar Project.

The 2018 Project involves development within the same general footprint that was analyzed in the 2004 EIR. As part of the preparation of the Initial Study and the Draft SEIR, FirstCarbon Solutions (FCS) performed a number of additional cultural studies to evaluate whether there was consistency with the findings of the 2004 FEIR. In connection therewith, FCS conducted an updated California Historical Resources Information Center (CHRIS) records search on June 25, 2018, and found that no additional archeological resources have been recorded at the site since 2004. In addition, FCS contacted the Native American Heritage Commission (NAHC) on June 15, 2018, requesting that it perform a search of its Sacred Lands File. The NAHC issued a letter on June 25, 2018, which did not identify any known Tribal Cultural Resources at the site. The City sent letters to the six tribal representatives identified by the NAHC on September 27, 2018, to determine the potential for Native American sites on the project site, and no replies have been received to date. FCS Archaeologist, Dana DePietro, PhD, conducted an updated pedestrian survey for cultural resources at the site on June 25, 2018. The survey failed to identify any unrecorded historical structures or archaeological resources within the project site boundaries, as described more fully in Appendix B to the Initial Study.

As described more fully in the Initial Study, because there are no known archaeological or historic resources on the project site, the 2018 Project would not result in any new significant impacts or increase the severity of any previously identified significant impacts beyond those analyzed in the 2004 FEIR. The 2004 FEIR and 2018 Initial Study included MM 12-1, which requires the presence of an archaeological monitor during on-site excavation, and associated requirements in the event that subsurface cultural resources are uncovered during approved ground-disturbing activities. In addition, the Mitigation Monitoring and Reporting Program (MMRP) will be incorporated into the 2018 Project's conditions of approval, which would ensure implementation and enforcement of MM 12-1.

Response to LAWSON-5
In accordance with applicable CEQA requirements, the City evaluated the issue of whether further environmental review was necessary with respect to hydrology and water quality. As explained more fully below and in the Initial Study, the City concluded that no new significant impacts would occur nor would the severity of any previously identified significant impacts increase as a result of the 2018 Project, and thus no further analysis was required.

As described in the Initial Study, the 2004 FEIR included mitigation that required the construction of a 7-acre stormwater detention basin on the 2018 project site that was to be designed and constructed with the intent of serving the project site and surrounding area with flood control and water quality treatment. The 2018 Project's stormwater system would be designed according to applicable State and local regulations, as well as MM 9-1 and MM 9-2 of the 2004 FEIR, in order to reduce peak runoff volume, prevent inundating downstream waterways, and reduce pollutant loads in accordance with applicable standards and requirements. Specifically, the 2018 Project would implement MM 9-1 and MM 9-2 by raising the outfall of this stormwater detention basin by 2 feet to yield a total storage capacity to 6.2 acre-feet.

The 2018 Project would raise the height of the outfall to provide additional flood control and treatment capacity, which was envisioned when the facility was designed and constructed. The 2018 Project does not propose to modify the other stormwater facilities, as they were permitted, designed, and constructed with the adopted standards in effect and do not need to be altered to serve the 2018 Project's runoff. All of the facilities associated with the stormwater detention basin (e.g., spillways, access roads, and trash racks) reflect the adopted design standards at the time of construction, as contemplated by the applicable laws and regulations. As noted in the comment letter from the Contra Costa County Flood Control District (District) on the Draft SEIR, the District confirms that the Basin has sufficient storage capacity to accommodate the 2018 Project. Please refer to responses CCCFCD-1 through CCCFCD-9

As described in the Initial Study, the City of Pittsburg is a permittee under the California Regional Water Quality Control Board for the San Francisco Bay Region's National Pollutant Discharge Elimination System (NPDES) Municipal Regional Stormwater Permit (MRP; NPDES Permit No. CAS612008). Pursuant to MRP Order No. R2-2015-0049, "Attachment A: Fact Sheet," issued November 19, 2015, Provision C.3.b ("Regulated Projects"), regulated projects with previously approved non-low impact development (LID) stormwater treatment measures that comply with the hydraulic sizing criteria of Provision C.3.d that have begun construction shall only be required to

comply with the Provision C.3 requirements in place at the time the project was originally approved (MSR, Attachment A, page A-34). The 2004 Project included a C.3 plan that was previously approved in compliance with the MRP in effect at the time of project approval and the hydraulic sizing criteria of Provision C.3.d, and construction was initiated as part of the Vista Del Mar single-family residential subdivision to the south. Additionally, the City has previously entered into a Development Agreement with William Lyon Homes and Alves Ranch, LLC, which vested the developers' right to construct the "project," inclusive of modifications and necessary subsequent approvals. As such, the C.3 plan currently in place functions as the applicable Stormwater Control Plan.

Response to LAWSON-6
In accordance with applicable CEQA requirements and in an abundance of caution, the City conducted additional environmental review with respect to biological resources. As explained more fully below and in the Draft SEIR and Appendix D (attached thereto), there was consideration of whether the 2018 Project would result in new significant impacts or an increase in the severity of previously identified significant impacts as these relate to biological resources. The Draft SEIR concluded that the 2018 Project is located north of West Leland Road and does not contain the sensitive habitats that were identified in the 2004 Final EIR (the sensitive habitats were identified south of West Leland Road, in the southern portions of the Vista Del Mar project).

As described in Appendix D of the Draft SEIR, Table 2: Special-status Wildlife Species Potentially Occurring within the Project, California tiger salamanders require underground refuges for aestivation, in particular ground squirrel burrows, and require vernal pools or other seasonal waters sources for breeding. None of these habitats were observed on site during field surveys conducted by FCS and LSA biologists, and as such the site does not support suitable breeding or aestivation habitat for the species. This table is based on the following sources: LSA's Memorandum, FCS's recent field visit, as well as review of data documenting the species that have been recorded to occur within the Honker Bay, California quadrangle, as recorded by the CNDDB and CNPSEI (CDFW 2018; CRPR 2018). Due to the lack of suitable nesting habitat, lack of burrows, and extremely high level of ground disturbance at the project site, California tiger salamanders were determined unlikely to occur on-site, and thus no further analysis in this regard is required.

Regarding other species, both LSA and FCS biologists concluded based on field surveys and related research and analysis that there is a low potential for burrowing owl, Swainson's hawk, and other nesting birds to occur on-site, and the Draft SEIR further determined none of the other species or habitats discussed in the 2004 Final EIR are present on the 2018 Project site.

Particularly with respect to the California tiger salamander, the 2004 Final EIR concluded that impacts to this species could occur in the southern portion of the Vista Del Mar site, located on the south side of West Leland Road. However, the 2018 Project is located north of West Leland Road and does not contain the sensitive habitats that were identified in the 2004 Final EIR. As described in Appendix D of the Draft SEIR, Table 2: Special-status Species Potentially Occurring within the Project, California tiger salamanders require underground refuges, in particular ground squirrel burrows, and vernal pools or other seasonal waters sources for breeding. This table is based on the following sources: LSA's Memorandum, FCS's recent field visit, as well as review of data documenting the species that have been recorded to occur within the Honker Bay, California quadrangle, as recorded

by the CNDDB and CNPSEI (CDFW 2018; CRPR 2018). Due to the lack of suitable nesting habitat, lack of burrows, and extremely high level of ground disturbance at the project site, California tiger salamanders were determined unlikely to occur on-site, and thus no further analysis in this regard is required.

Response to LAWSON-7
The Transportation and Circulation section of the Draft SEIR and accompanying TIS evaluated potential project impacts at 18 intersections, as well as SR 4 between Arnold Industrial Place and Railroad Avenue, and evaluated the effects on ramp meter queues at two locations. Additionally, an assessment of bicycle, pedestrian and transit impacts was also conducted. Previous comments provided by the commenter, related to significance criteria for ramp metering and the freeway analysis were incorporated in the Draft SEIR and TIS, and are further summarized below.

The commenter is correct in that no thresholds of significance related to Ramp Meter queues have been adopted by the City of Pittsburg. While the City has not formally adopted a threshold, the City, in its discretion, and in consultant with its expert traffic consultants and based on scientific evidence, developed a significance threshold in a good faith to effort to disclose the effects of project traffic on ramp meter queues were evaluated. In so doing, findings of significance were made for the purposes of presenting a conservative analysis and disclosure to decision makers. Based on the thresholds developed for the purposes of this Draft SEIR, a potentially significant ramp meter impact was identified where the addition of 2018 Project traffic resulted in ramp meter queues extending beyond the available ramp storage, or where existing queues already extended beyond the available ramp storage and the addition of 2018 Project traffic would increase queue spillback. Based on these criteria, ramp meter impacts were identified at the following locations:

1. SR-4 Westbound Ramps Loop On-ramp from northbound San Marco Boulevard south of Evora Road/Willow Pass Road
2. SR-4 Eastbound Ramps at Bailey Road

Mitigation measures were identified in the Draft SEIR (see MM TRANS-4), but since the City of Pittsburg does not have control over Caltrans facilities and therefore implementation of the identified measures cannot be assured, the impacts were identified as significant and unavoidable.

The commenter states that no reasonable standard would indicate that even a minimal level on-ramp metering queue increase constitutes a significant project impact. Based on the analysis results, at a minimum the 2018 Project would increase an existing ramp metering queue by approximately 5 vehicles (approximately 115-feet) at the Bailey Road interchange, and by even greater levels at the San Marco Ramp. Potential increases would grow over time as other development occurs and adds traffic to the transportation system. Other agencies who have adopted queue threshold criteria typically use an increase of more than 2 vehicles as a significant increase. As the commenter does not suggest alternative significance criteria, and the criteria used in the Draft SEIR presents a conservative assessment of potential project impacts, no changes were made.

The evaluation of freeway segments considers the portions of SR-4 within close proximity to the project site where the 2018 Project is expected to add more than 50-trips to the freeway system,

and significant freeway impacts were identified. Contrary to the commenter's suggestion, evaluating a much longer freeway segment could serve to dilute the 2018 Project's impacts to the freeway system closest to the project site and thus would not reflect a conservative or accurate disclosure of the 2018 Project's potential impacts in this regard, as discussed further below. The commenter does not state why evaluating specific freeway segments is a flawed methodology; moreover, the Draft SEIR and TIS utilize the guidance provided by CCTA, which suggests evaluating freeway segments where the 2018 Project could add more than 50 trips (which was conducted as part of the evaluation). Accordingly, no further analysis is necessary.

The CCTA has designated SR-4 from the Willow Pass Grade to the San Joaquin County Line as a Route of Regional Significance. Along this over 30 miles of roadway, SR-4 operates as a freeway, an expressway, and an arterial. And, much of this segment of SR-4, especially portions east of Antioch, operates with minimal congestion during peak-hours. Evaluating the 2018 Project's effects over this length of roadway segment, much of which operates at free-flow conditions during the morning and evening peak hours, could dilute the projects impact to the localized freeway system. Changes to the freeway evaluation methodology would likely not change the overall findings of significance, nor the resulting mitigation measure of the payment of local and regional transportation impact fees. Therefore, no changes to the freeway analysis methodology were made.

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From: Bruce 0le Ohlson <bruceoleohlson@hotmail.com>
Sent: Monday, April 15, 2019 4:20 PM
To: Jordan Davis
Cc: BEB Susie Hufstader
Subject: Traffic Mitigations for Alves Ranch Development

Dear Jordan,

Here are some possible traffic mitigations that may be applied to the Alves Ranch housing development. All, of course, improve the ability of people to walk and bicycle in and around the vicinity of the development.

- Install crosswalks in all four quadrants of every intersection that has to be "adjusted" because of the additional motor vehicle trips that this project will engender. "Adjusted" must be broadly interpreted. Any change at all (as small as changing the traffic signal timing) should trigger this condition of approval.
- Build a wide sidewalk complete with shade trees in front of the development fronting West Leland Road.
- (Note to Pittsburg Staff: Have the entity that is "storing" dirt on the property on the north side of West Leland Road across the street from Woodhill Drive adjust their K-rail and fencing so that pedestrians can walk along the edge of this segment of street without being forced to walk in the street.)
- All collector and arterial streets in this development must have sidewalks and bike lanes.
- As much as is feasible and possible, all arterial and collector streets in the area surrounding this development must have, or be provided with, bike lanes and sidewalks or an acceptable walking and biking path. 1
- Coordinate with the developer or the architect of the proposed shopping center so that a walking and biking connection between the housing development and the shopping development is not precluded from being built when the shopping development is constructed.
- The Alves Ranch developer must provide the necessary space so that a walking and biking pathway may be installed between this development and the Bay Point BART station. This pathway should be a relatively "direct shot." Direct the developer of the Alves Ranch property to communicate with and cooperate with the owner of the intervening property to the east so that the walking and biking path that will installed as a condition of approval of the adjacent development, and the walking path in the Alves Development coordinate. Have the Alves Ranch developer build the segment of trail to EBRPD standards up to property line. With proper and adequate safeguards, we can allow the Alves developer to postpone actual construction until the adjacent property is developed. However,

we want to see trees planted and maintained in the right of way beginning when the the Alves property is developed. Here's a thought: With the cooperation of the owner and developer of the adjacent property to the east, we might be able to construct this path along the edge of the freeway all the way to the BART property.

- Construct or contribute to the construction of a bridge over the Contra Costa Canal behind the John Henry Johnson Park so that the park can be connected to the paved canal maintenance road. (Following this maintenance road to the west will connect with the Delta de Anza Regional Trail at Ambrose Park. BART is planning to construct a path from the corner of Bailey Road where their entrance road meets the Delta de Anza Regional Trail up to the Bay Point BART station. I think Rachel Factor, rfactor@bart.gov, is the planner for this trail segment. If she isn't, she can put you in touch with the individual who is. Then, from the BART station, a pedestrian or bicyclist could walk along the path (above) to this development.) Note: The use of the canal maintenance road as a walking and biking path is called for in the 2001 Pittsburg General Plan.
- Have the developer construct a 10-foot-wide path on the west side of San Marco Boulevard that extends from the Delta de Anza Regional Trail on the north side of Highway 4, under the freeway, and along San Marco Boulevard all the way up to Lasater Park and Delta View Elementary School. Part of this path has already been constructed. Make any upgrades necessary to ensure that that the existing path meets current EBRPD trail-design standards. Part of this path will be used by children living in this development to walk or bike to school. (Note 1: The development agreement for the construction of the additional 109 apartments in the San Marco Villas Apartment complex included a condition to build this path along the side of their property between the south side of Highway 4 and the AM/PM gas station/mini mart property, but only if a different entity began construction of the segment of path under Highway 4 before the San Marco Development Agreement expires in, I think, 2020. Note 2: The AM/PM mini mart was conditioned to build this path along the east side of its property. This condition does not have an expiration date. The "sidewalk" that they installed does not meet the minimum requirements of the EBRPD.) 1 CONT
- Construct or contribute to the construction of the missing segment of the Delta de Anza Regional Trail along the south side of San Marco Boulevard between Port Chicago Highway and the westbound off-ramp of Highway 4 to San Marco Boulevard. There is sufficient space for the construction of this path over the entire distance requested. Coordinate with East Bay Regional Park District. Sean Dugan sdougan@ebparks.org is the Trails Development Coordinator.

Thank you, Jordan, for all the work you are doing to help the City of Pittsburg become a more walk-able and bike-able community and to reduce our dependence on private automobiles for short trips.

All best wishes,

~0le

Bruce "0le" Ohlson
Bike East Bay
Delta Pedalers Bicycle Club
Contra Costa Countywide Bicycle Advisory Committee
CCTA Bicycle & Pedestrian Advisory Committee
Caltrans District 4 Bicycle Advisory Committee
TRANSPLAN appointee to Highway 4 Integrated Corridor Management Study
Healthy and Livable Pittsburg Collaborative

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Bruce Ohlson (OHLSON)

Response to OHLSON-1

The commenter's suggestions for improvements to enhance pedestrian and cyclist facilities are noted and will be considered by the decision-makers as part of their review and deliberation of the project as a whole. However, because these issues address the merits of the 2018 Project rather than raise any concerns regarding the environmental analysis in the Draft SEIR, no further response is necessary. However, for informational purposes, the following is noted.

As described in Section 2, Project Description, page 2-13, Trails, the 2018 Project would include a Class I bicycle and pedestrian facility consisting of a 12-foot wide paved path along the West Leland Road frontage. The 2018 Project would be constructed to applicable City standards and would not conflict with any City plans for multi-modal enhancements. The Transportation Impact Study did not identify any potentially significant impacts that would require implementation of further pedestrian or bicycle facilities, as implementation of the 2018 Project helps the City complete parts of the bicycle and pedestrian network identified for the area, as well as construct enhancements to existing infrastructure, such as the incorporation of bicycle detection and the addition of a crosswalk at the Alves Ranch Road at West Leland Road intersection to improve bicycle infrastructure and access to transit in the area.

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Subject: Alves Project

Steve West <skwest4@att.net>
to Jordan Davis

Mon, May 6, 6:48 AM (4 da

Dear Mr. Davis

It seems that Pittsburg continues to allow development without an adequate plan to manage the traffic this development creates. Currently Leland road is overwhelmed during commute hours by the existing traffic. What plans-IF ANY?- have been made to manage the traffic that will be created by this project. the the time lines for start and competition of this project. 1

Thank you for your time

Kathleen West

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Kathleen West (WEST)

Response to WEST-1

The Draft SEIR evaluated the potential impacts of the project on local roadways, intersections, and on- and off-ramps of SR-4. Specifically, as listed at pages 3.5-3 and 3.5-4, the Draft SEIR evaluated 17 local intersections and six highway segments. The Draft SEIR evaluated conditions with and without the project in the existing, near-term, and cumulative (Year 2040) scenarios, providing a comprehensive analysis of potential effects related to transportation and traffic.

As described in the Draft SEIR, the West Leland Road at San Marco Boulevard intersection operates at a deficient LOS F during the AM peak hour prior to the addition of 2018 Project traffic in the Existing condition. The addition of 2018 Project traffic would worsen operations and increase average delay by more than 5 seconds. Based on the significance criteria, this is considered a significant impact. However, the 2018 Project would be required to implement MM TRANS-1 which would ensure the project applicant pays fair share fees that could be used to include widening the northbound portion of San Marco Boulevard north of West Leland Road to allow the westbound right movement to operate as a free tuning movement. This improvement is identified in the City's Capital Improvement Program as Project ST-9. With implementation of this measure, intersection operations would improve to an acceptable level, reducing the impact to a less-than significant level. Although the intersection improvement would increase capacity at the intersection, poor operations are experienced at the West Leland Road at San Marco Boulevard intersection in large part due to vehicle queue spillback from the SR-4 On-Ramp. On-Ramp improvements to reduce vehicle queue spillback through the West Leland Road at San Marco Boulevard intersection were identified, but full funding for these improvements has not been identified and the City of Pittsburg cannot assure implementation of improvements on a Caltrans facility. Therefore, this impact was identified as significant and unavoidable.

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SECTION 3: ERRATA

The following are revisions to the Draft Supplemental EIR (Draft SEIR) for the 2018 Alves Ranch Project (2018 Project). These revisions are minor modifications and clarifications to the document that amplify the analysis, and do not change the significance of any of the environmental issue conclusions within the Draft SEIR and do not trigger recirculation. The revisions are listed by page number. All additions to the text are underlined (underlined) and all deletions from the text are stricken (~~stricken~~).

3.1 - Changes in Response to Specific Comments

Executive Summary

Table ES-1

The following typo is corrected in MM AIR-1 to reflect the correct municipality:

MM AIR-1 **Implement BAAQMD Best Management Practices During Construction**

The following text is a refinement of MM 15-1 from the 2004 Final EIR. The text is updated to reflect current BAAQMD best practices.

The following Best Management Practices (BMPs), as recommended by BAAQMD, shall be included in the project design and implemented during construction:

- All active construction areas shall be watered at least three times per day.
- All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The City of Pittsburg ~~Napa~~ and the construction contractor shall take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations

Table ES-1

The following revisions are made to MM BIO-1a, BIO-1b, and BIO-1c to reflect recommended language suggested by California Department of Fish and Wildlife:

MM BIO-1a Burrowing Owl

No more than 30 days prior to the first ground-disturbing activities during breeding season (February 1 to August 31), the project applicant shall retain a qualified biologist to conduct ~~a~~ four preconstruction surveys on the project site per CDFW guidance and methodologies. A minimum of three survey visits shall be completed, at least 3 weeks apart, to be conducted during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. ~~The~~ Preconstruction surveys shall be conducted no less than 14 days before construction with a final survey conducted within 24 hours of ground disturbance. Each survey shall establish the presence or absence of western burrowing owl and/or burrows, and evaluate any use by owls in accordance with applicable CDFW survey guidelines and methodologies.

On the portion of the project site where the ground disturbing activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify whether any burrows and/or owls are present. Adjacent areas on the project site that are not being proposed for ground disturbance need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with applicable CDFW guidelines. All burrows or burrowing owls (if any) shall be identified and mapped. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls (if any) are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1–January 31), surveys shall document whether burrowing owls (if any) are using habitat on or directly adjacent to any disturbance area. Survey results shall be valid only for the season during which the survey is conducted.

If burrowing owls are not discovered during the above-described pre-construction surveys, or if burrows are identified but are inactive, further mitigation is not required.

If burrowing owls are observed during the pre-construction surveys, the project applicant shall perform the following measures to limit the impact on the burrowing owls:

- Avoidance shall include establishment of a 160-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1-January 31), the project proponent shall avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a 160-foot non-disturbance buffer zone.
- If it is not possible to avoid occupied burrows, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent re-occupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

MM BIO-1b Swainson's Hawk

Prior to any ground disturbance that occurs during the nesting season for Swainson's hawk (March 15 to September 15), a qualified biologist shall conduct ~~a~~ preconstruction surveys no more than 30 days prior to construction to establish whether there are any Swainson's hawk nests within 1,000 feet of the project site, and if so, whether they are occupied. Pursuant to CDFW guidance and methodologies, the surveys shall be conducted early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest. Surveys shall be conducted within a minimum of 0.25-mile radius of the Project area, and for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall be conducted annually for the duration of project construction. If potentially occupied nests within 1,000 feet are located adjacent to but not on the project site, then their occupancy shall be determined by observation from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) near the project site. If Swainson's Hawks are not discovered during the above-described pre-construction surveys, or if a nest is identified but is inactive, further mitigation is not required.

If nests are located and determined to be occupied, a 0.25-mile buffer shall be maintained around the nest until the young fledge. If a buffer of 0.25 miles cannot be implemented, the applicant shall obtain a California Incidental Take Permit prior to start of construction activities.

Furthermore, in order to mitigate for the loss of Swainson's hawk foraging habitat to a less than significant level the following measures shall be implemented: ~~minimization measures and construction monitoring are required as follows~~:

- ~~In order to mitigate for the loss of Swainson's hawk foraging habitat to a less than significant level,~~ the Project applicant shall acquire conservation easements or other instruments to preserve suitable foraging habitat for Swainson's hawk, as determined by the California Department of Fish and Game. The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City and to the California Department of Fish and Game. The amount of land preserved shall be governed by a 1:1 mitigation ratio for each acre developed at the Project site. In deciding whether to approve the land proposed for preservation by the Project applicant, the City shall consider the benefits of preserving lands in proximity to other protected lands. The preservation of land shall be done prior to any site disturbance, such as clearing or grubbing, or the issuance of any permits for grading, building, or other site improvements, whichever occurs first. In addition, the City shall impose the following minimum conservation easement content standards:
  - The land to be preserved shall be deemed suitable Swainson's hawk foraging habitat by the California Department of Fish and Wildlife.
  - All owners of the mitigation land shall execute the document encumbering the land.
  - The document shall be recordable and contain an accurate legal description of the mitigation land.
  - The document shall prohibit any activity which substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat.
  - If the land's suitability as foraging habitat is related to existing agricultural uses on the land, the document shall protect any existing water rights necessary to maintain such agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the mitigation land.
  - The applicant shall pay to the City a mitigation monitoring fee to cover the costs of administering, monitoring and enforcing the document in an amount determined by the receiving entity, not to exceed 10% of the easement price paid by the applicant, or a different amount approved by the City Council, not to exceed 15% of the easement price paid by the applicant.
  - Interests in mitigation land shall be held in trust by an entity acceptable to the City and/or the City in perpetuity. The entity shall not sell, lease, or convey any interest in mitigation land which it shall acquire without the prior written approval of the City.
  - The City shall be named a beneficiary under any document conveying the interest in the mitigation land to an entity acceptable to the City.
  - If any qualifying entity owning an interest in mitigation land ceases to exist, the duty to hold, administer, monitor and enforce the interest shall be transferred to another entity acceptable to the City or to the City.

Before committing to the preservation of any particular land pursuant to this measure, the Project proponent shall obtain the City's approval of the land proposed for preservation. This mitigation measure may be fulfilled in combination with a

mitigation measure imposed on the project requiring the preservation of agricultural land as long as the agricultural land is determined by the Department of Fish and Wildlife to be suitable Swainson's hawk habitat.

MM BIO-1c Migratory and Nesting Birds

Prior to the start of construction, the implementation of the following avoidance and minimization measures would avoid or minimize potential effects to migratory birds and habitat in and adjacent to the project site. These measures shall be required to be implemented for construction work that occurs during the nesting season (February 15 through August 31). No mitigation measures shall be required during the non-nesting season (September 1 through February 14)

- If construction or tree removal is proposed during the nesting season for migratory birds (February 15 through August 31), a qualified biologist shall conduct pre-construction surveys for ground nesting birds and migratory species, such as the northern harrier, within the construction area, including a 300-foot survey buffer, no more than 3 days prior to the start of ground disturbing activities in the construction area.
- If an active nest of any of the above-identified migratory birds is located during pre-construction surveys, then the project applicant shall adhere to notification requirements to USFWS and/or CDFW (as appropriate) regarding the status of the nest as may be required under applicable laws and regulations. Furthermore, construction activities shall be restricted as necessary within any identified buffer area (as determined by the qualified biologist <u>in consultation with CDFW</u>) to avoid disturbance of the nest until it is abandoned or a qualified biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active migratory bird nest <u>or as otherwise determined to be an appropriate buffer area as determined by the qualified biologist in consultation with CDFW</u>) or alteration of the construction schedule.
- A qualified biologist <u>in consultation with CDFW</u> shall: determine the size of the appropriate buffer and delineate the identified buffer using nest buffer signs, ESA fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently, at which time no further mitigation shall be required.

Section 3.1 Air Quality

Page 3.1-53, Paragraph 11

The following typo is corrected in MM AIR-1 to reflect the correct municipality:

MM AIR-1 Implement BAAQMD Best Management Practices During Construction

The following text is a refinement of MM 15-1 from the 2004 Final EIR. The text is updated to reflect current BAAQMD best practices.

The following Best Management Practices (BMPs), as recommended by BAAQMD, shall be included in the project design and implemented during construction:

- All active construction areas shall be watered at least three times per day.
- All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The City of Pittsburg ~~Napa~~ and the construction contractor shall take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations

Section 3.2 Biological Resource

Pages 3.2-16 through 3.2-19

The following revisions are made to MM BIO-1a, BIO-1b, and BIO-1c to reflect recommended language suggested by California Department of Fish and Wildlife:

MM BIO-1a Burrowing Owl

No more than 30 days prior to the first ground-disturbing activities during breeding season (February 1 to August 31), the project applicant shall retain a qualified

biologist to conduct ~~a~~ four preconstruction surveys on the project site per CDFW guidance and methodologies. A minimum of three survey visits shall be completed, at least 3 weeks apart, to be conducted during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. ~~The~~ Preconstruction surveys shall be conducted no less than 14 days before construction with a final survey conducted within 24 hours of ground disturbance. Each survey shall establish the presence or absence of western burrowing owl and/or burrows, and evaluate any use by owls in accordance with applicable CDFW survey guidelines and methodologies.

On the portion of the project site where the ground disturbing activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify whether any burrows and/or owls are present. Adjacent areas on the project site that are not being proposed for ground disturbance need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with applicable CDFW guidelines. All burrows or burrowing owls (if any) shall be identified and mapped. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls (if any) are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1–January 31), surveys shall document whether burrowing owls (if any) are using habitat on or directly adjacent to any disturbance area. Survey results shall be valid only for the season during which the survey is conducted.

If burrowing owls are not discovered during the above-described pre-construction surveys, or if burrows are identified but are inactive, further mitigation is not required.

If burrowing owls are observed during the pre-construction surveys, the project applicant shall perform the following measures to limit the impact on the burrowing owls:

- Avoidance shall include establishment of a 160-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1-January 31), the project proponent shall avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a 160-foot non-disturbance buffer zone.
- If it is not possible to avoid occupied burrows, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using

hand tools and refilled to prevent re-occupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

MM BIO-1b Swainson's Hawk

Prior to any ground disturbance that occurs during the nesting season for Swainson's hawk (March 15 to September 15), a qualified biologist shall conduct ~~a~~ preconstruction surveys no more than 30 days prior to construction to establish whether there are any Swainson's hawk nests within 1,000 feet of the project site, and if so, whether they are occupied. Pursuant to CDFW guidance and methodologies, the surveys shall be conducted early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest. Surveys shall be conducted within a minimum of 0.25-mile radius of the Project area, and for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall be conducted annually for the duration of project construction. If potentially occupied nests within 1,000 feet are located adjacent to but not on the project site, then their occupancy shall be determined by observation from public roads or other publicly accessible observation areas of Swainson's hawk activity (e.g., foraging) near the project site. If Swainson's Hawks are not discovered during the above-described pre-construction surveys, or if a nest is identified but is inactive, further mitigation is not required.

If nests are located and determined to be occupied, a 0.25-mile buffer shall be maintained around the nest until the young fledge. If a buffer of 0.25 miles cannot be implemented, the applicant shall obtain a California Incidental Take Permit prior to start of construction activities.

Furthermore, in order to mitigate for the loss of Swainson's hawk foraging habitat to a less than significant level the following measures shall be implemented: ~~minimization measures and construction monitoring are required as follows~~:

- ~~In order to mitigate for the loss of Swainson's hawk foraging habitat to a less than significant level,~~ the Project applicant shall acquire conservation easements or other instruments to preserve suitable foraging habitat for Swainson's hawk, as determined by the California Department of Fish and Game. The location of mitigation parcels as well as the conservation instruments protecting them shall be acceptable to the City and to the California Department of Fish and Game. The amount of land preserved shall be governed by a 1:1 mitigation ratio for each acre developed at the Project site. In deciding whether to approve the land proposed for preservation by the Project applicant, the City shall consider the benefits of preserving lands in proximity to other protected lands. The preservation of land shall be done prior to any site disturbance, such as clearing or grubbing, or the issuance of any permits for grading, building, or other site improvements,

whichever occurs first. In addition, the City shall impose the following minimum conservation easement content standards:

- The land to be preserved shall be deemed suitable Swainson's hawk foraging habitat by the California Department of Fish and Wildlife.
- All owners of the mitigation land shall execute the document encumbering the land.
- The document shall be recordable and contain an accurate legal description of the mitigation land.
- The document shall prohibit any activity which substantially impairs or diminishes the land's capacity as suitable Swainson's hawk foraging habitat.
- If the land's suitability as foraging habitat is related to existing agricultural uses on the land, the document shall protect any existing water rights necessary to maintain such agricultural uses on the land covered by the document, and retain such water rights for ongoing use on the mitigation land.
- The applicant shall pay to the City a mitigation monitoring fee to cover the costs of administering, monitoring and enforcing the document in an amount determined by the receiving entity, not to exceed 10% of the easement price paid by the applicant, or a different amount approved by the City Council, not to exceed 15% of the easement price paid by the applicant.
- Interests in mitigation land shall be held in trust by an entity acceptable to the City and/or the City in perpetuity. The entity shall not sell, lease, or convey any interest in mitigation land which it shall acquire without the prior written approval of the City.
- The City shall be named a beneficiary under any document conveying the interest in the mitigation land to an entity acceptable to the City.
- If any qualifying entity owning an interest in mitigation land ceases to exist, the duty to hold, administer, monitor and enforce the interest shall be transferred to another entity acceptable to the City or to the City.

Before committing to the preservation of any particular land pursuant to this measure, the Project proponent shall obtain the City's approval of the land proposed for preservation. This mitigation measure may be fulfilled in combination with a mitigation measure imposed on the project requiring the preservation of agricultural land as long as the agricultural land is determined by the Department of Fish and Wildlife to be suitable Swainson's hawk habitat.

MM BIO-1c Migratory and Nesting Birds

Prior to the start of construction, the implementation of the following avoidance and minimization measures would avoid or minimize potential effects to migratory birds and habitat in and adjacent to the project site. These measures shall be required to be implemented for construction work that occurs during the nesting season (February 15 through August 31). No mitigation measures shall be required during the non-nesting season (September 1 through February 14)

- If construction or tree removal is proposed during the nesting season for migratory birds (February 15 through August 31), a qualified biologist shall conduct pre-construction surveys for ground nesting birds and migratory species, such as the northern harrier, within the construction area, including a 300-foot survey buffer, no more than 3 days prior to the start of ground disturbing activities in the construction area.
- If an active nest of any of the above-identified migratory birds is located during pre-construction surveys, then the project applicant shall adhere to notification requirements to USFWS and/or CDFW (as appropriate) regarding the status of the nest as may be required under applicable laws and regulations. Furthermore, construction activities shall be restricted as necessary within any identified buffer area (as determined by the qualified biologist in consultation with CDFW) to avoid disturbance of the nest until it is abandoned or a qualified biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active migratory bird nest or as otherwise determined to be an appropriate buffer area as determined by the qualified biologist in consultation with CDFW) or alteration of the construction schedule.
- A qualified biologist in consultation with CDFW shall: determine the size of the appropriate buffer and delineate the identified buffer using nest buffer signs, ESA fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently, at which time no further mitigation shall be required.

Appendix G:
Alves Ranch Detention Basin Analysis Memo

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MEMORANDUM

TO:	Joseph Azar	DATE:	February 26, 2019
FROM:	Robin J. Lee, P.E.	JOB#:	RJAA.51.18
SUBJECT:	Alves Ranch Detention Basin Analysis		

Introduction

This memorandum summarizes the analysis Schaaf & Wheeler completed on the Vista Del Mar Project existing Detention Basin located on the Alves Ranch property north of West Leland Road in Pittsburg, CA (see Fig. 1).The Basin currently has a water quality storage volume capacity of 5 acre-feet. The water quality storage volume was sized to treat the post development runoff from the Vista Del Mar project.

In order to treat the additional post development runoff from the residential portion of the proposed Alves Ranch project and the existing runoff from the Vista Del Mar project, the existing water quality storage volume need to be increased from 5 acre-feet to 6.2 acre–feet based on the Directly Connected Impervious Area table provided by ENGEO on June 4, 2018. The updated analysis focused on modification to the primary low flow and dewatering outlets to provide additional water quality storage, while still meeting the 10 year peak flow design standards on a 12 hours duration discharge limits and ensuring that the 12-hr 100 year peak flow is contained within the basin per the approved Vista Del Mar Detention Basin Design Study prepared by Ruggeri-Jensen–Azar dated June 5th 2008.

Existing Basin Facilities

The Vista Del Mar detention basin was designed to mitigate the post development 10 year peak flow from the Vista Del Mar, San Marco and Alves Ranch developments within the drainage areas of Line B-1 and Line B. The Line B-1 drainage area drains a portion of the San Marcos project to an existing 30” RCP that runs under Highway 4. Line B drainage area drains the Vista Del Mar project and the Alves Ranch property to an existing 42” RCP that runs under Highway 4. The Detention Basin detains flow from approximately 0.4 square miles directly south (entering the basin from the “Line B” storm drain pipe) in addition to detaining high flows from a diversion structure on the “Line B-1” storm drain pipe to the west, which drains approximately 0.1 square miles.

Figure 1: Schematic and Aerial Map of Basin, Storm Drain Lines, and Flow Directions.

The basin has four primary means of evacuating stored water:

1. The primary, **low flow outlet** for the basin is a 2.6' x 1' rectangular opening controlling flow into the outlet structure and 42-inch diameter outlet pipe. This outlet currently has its center at approximately elevation 126 feet NGVD (6.0 feet above the basin invert).
2. A **dewatering outlet** structure lies near the basin invert (120 feet NGVD). This consists of a sealed riser pipe with two rows of eight 1-1/2" diameter holes controlling outflow. This structure allows the basin to dewater while meeting water quality requirements for the storage volume between the invert and the primary outlet.
3. A **60-inch diameter overflow outlet** connects to the same outflow structure and 42-inch pipe as the primary low flow outlet. This horizontal pipe opening allows water to enter the outlet structure as weir flow over the perimeter of the pipe, starting at elevation 142 feet NGVD.
4. Finally, the dam has a concrete-lined **emergency spillway** structure at its northeast corner that allows uncontrolled spill above 143.2 feet NGVD onto Highway 4 (for extreme inflow events).

The basin was previously designed using Contra Costa County methodology. In its current configuration, the basin detains 5 AF of water quality storage ("dead storage"). The basin's outlet structures were also designed to meet specific post-development peak storm discharge requirements, based on a 10-year design standard on 12-hr duration. Peak storm discharge limits to Highway 4 set by the June 2004 EIR for the Vista Del Mar development area were 50 cfs for Line B and 67 cfs for Line B-1.

Because of the height of the embankment at Highway 4, the Basin is considered by the State to be a reservoir, impounded by an earthen dam. Based on a letter from DSOD dated May 30, 2012, the State has accepted the Dam as constructed.

Analysis

With the proposed Alves Ranch development in the drainage area, the required water quality storage will increase to a total of 6.2 acre-feet. The analysis in HEC-HMS (Figure 2) focused on the modification of the primary outlet to provide additional water quality storage.

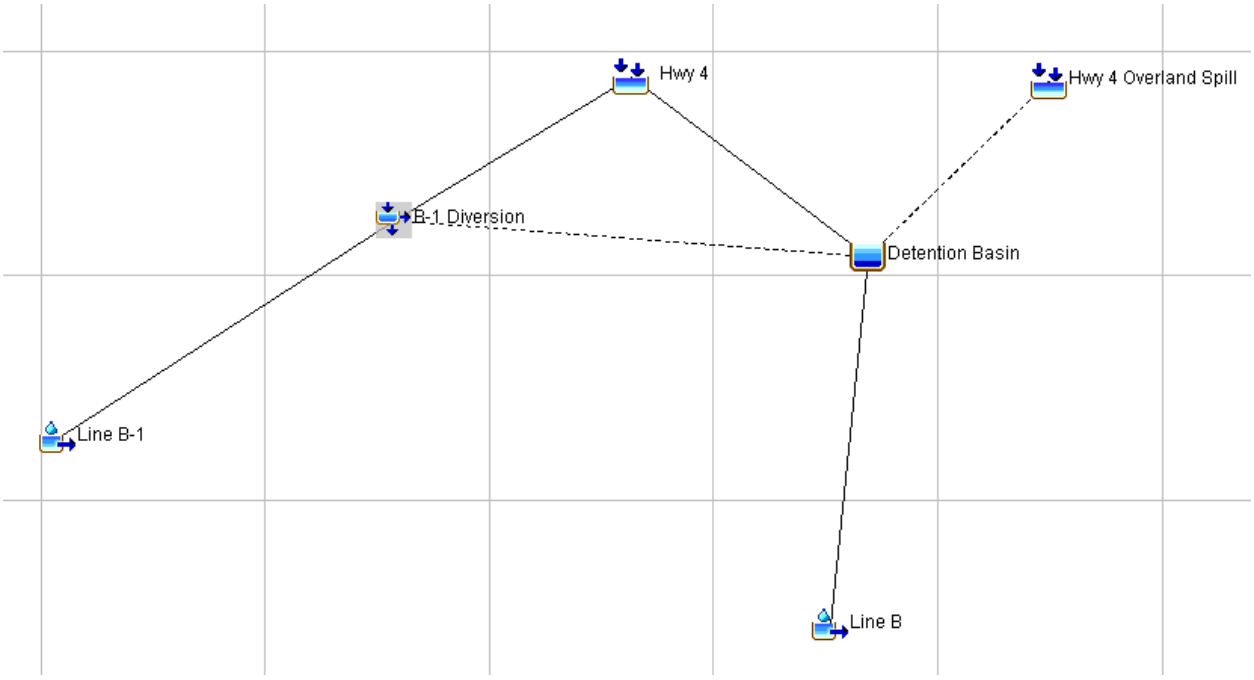


Figure 2. HEC-HMS Model Schematic of Study Area

Hydrologic Model

Input parameters for Watershed "B" and "B-1" were previously estimated based on full build-out of the Vista Del Mar, San Marco and Alves Ranch developments as originally planned based on the approved 2008 Detention Basin Design Study.

While the original model was created using Contra Costa County HYDRO 6 hydrographs and HEC-1 detention basin routing, hydrology standards in the County have since changed. Currently, Contra Costa County supplies a HEC-HMS template that has been utilized in this analysis for both the development of the hydrographs based on County rainfall patterns and for routing flow through the detention basin. HEC-HMS was used to model the project area and the detention basin.

Basin Infiltration Properties

The constant loss rates based on land use type have been provided by RJA, which were based on the approved Vista Del Mar Detention Basin Design Study (2008). These values are summarized in Table 1 and Table 2 and are considered typical impervious cover for each land use type. Attachment 1 shows these areas on a map.

Table 1: Updated Calculation of Constant Loss for Watershed "B"

Land Use	Area	Constant Loss (in/hr)	Product
Courtyard Homes – Area 4	11.0	0.05	0.55
4,000 SF lots – Area 3	24.2	0.06	1.452
6,000 SF lots – Area 1 & 2	63.1	0.06	3.786
Open Space (former Estate Lots) – Area 12 (portion)	7.2	0.17	1.224
Water Tank/ Pump Sta. – Area 16	0.2	0.06	0.012
West Leland Road – Area 6	6.5	0.02	0.130
Open Space – Area 11 & 12 (portion)	64.5	0.17	10.965
Freeway – Area 14 (portion)	7.0	0.02	0.140
Freeway Open Space – Area 15	2.9	0.17	0.493
Single family (Alley type) – Area 7	31.5	0.05	1.575
Open Space (north of Leland) – Area 13	5.9	0.017	1.003
Business Commercial – Area 9	12.0	0.03	1.003
School – Area 5 (portion)	6.3	0.08	0.504
Park – Area 5 (portion)	5.0	0.15	0.75
Detention Basin – Area 10	7.3	0.06	0.438
Total:	**254.6**		**23.382**
		Average	**0.092**

Table 2: Updated Calculation of Constant Loss for Watershed "B-1"

Land Use	Area	Constant Loss (in/hr)	Product
SF Homes – Area 17	36.7	0.06	2.202
Apartments – Area 18	16.7	0.04	0.668
SF Homes – Area 19	10	0.06	0.6
West Leland Road – Area 20	1.26	0.02	0.025
Open Space – Area 21	3.02	0.17	0.513
Freeway – Area 14 (portion)	0.67	0.02	0.013
Total:	**68.35**		**4.021**
		Average	**0.059**

Basin Lag Time

Original lag times of 0.13 hours for both basins were used per the approved 2008 Vista Del Mar Detention Basin Design Study.

Basin and Outlets

The detention basin was modeled in HEC-HMS with an elevation-storage curve along with the two outlets (low flow and dewatering) and two spillways (60 in overflow and emergency spillway). The HEC-HMS

model is capable of calculating the hydraulic rating curve for defined outlet openings, but it is also capable of utilizing user-defined rating curve for more complicated outlet structures. Outlets are input into the model as shown in Table 3. Because the 60-inch overflow first acts as a circular weir, then becomes pressurized with increasing water surface elevations, it is defined as a "Spillway" in the model with a user-defined rating curve reflecting this behavior.

Table 3: Detention Basin Model Element

Outlet	Model ID	Method	Modification
Low Flow Outlet	Outlet 1	Orifice Outlet (Defined Area/Coefficient)	Center El: 128.0 ft Area: 2.6 sq ft Coefficient 0.62
Dewatering Outlet	Outlet 2	Orifice Outlet (Defined Area/Coefficient)	Center El: 120.0 Area: 0.18 sq ft Coefficient 0.60
60-in Overflow	Spillway 1	Specified Spillway (Rating Curve)	60-in outlet at 142 ft Elevation- Discharge curve
Emergency Spillway	Spillway 2	Broad-Crested Spillway (Defined Length/Coefficient)	Elevation 143.2 ft Length 72 ft Coefficient 2.63

Model Design Storm Configuration

The HEC-HMS was calibrated to match the hydrographs produced from the HYDRO 6 model.

Previous Analysis Basin Parameters

The model was run with the existing catchment properties (land use, infiltration, areas, etc.) to ensure the results are similar to the original analysis. This provides a means of ensuring the HEC-HMS results have not diverged significantly from the previously used HYDRO6 results. The 10-year and 100-year, 3-hour and 12-hour runoff hydrographs are shown in Figure 4 – Figure 6 and match very well with the results produced by the County HYDRO model of these basins. The 10-year and 100-year, 24-hour HEC-HMS and HYDRO6 hydrographs do not match that well, as shown in Figure 7 and Figure 8. To calibrate the model to better match the HYDRO hydrographs, NOAA statistics were used, which results in a better match.

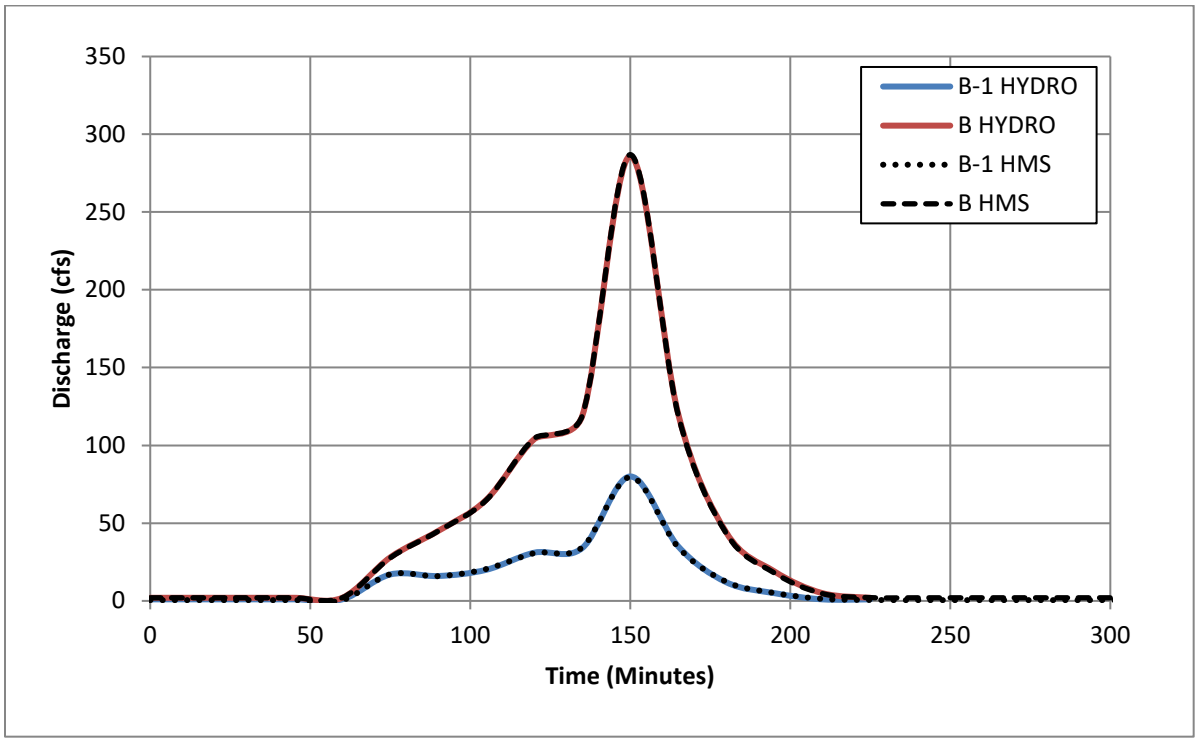


Figure 3. 10-year, 3 hour Runoff Hydrographs

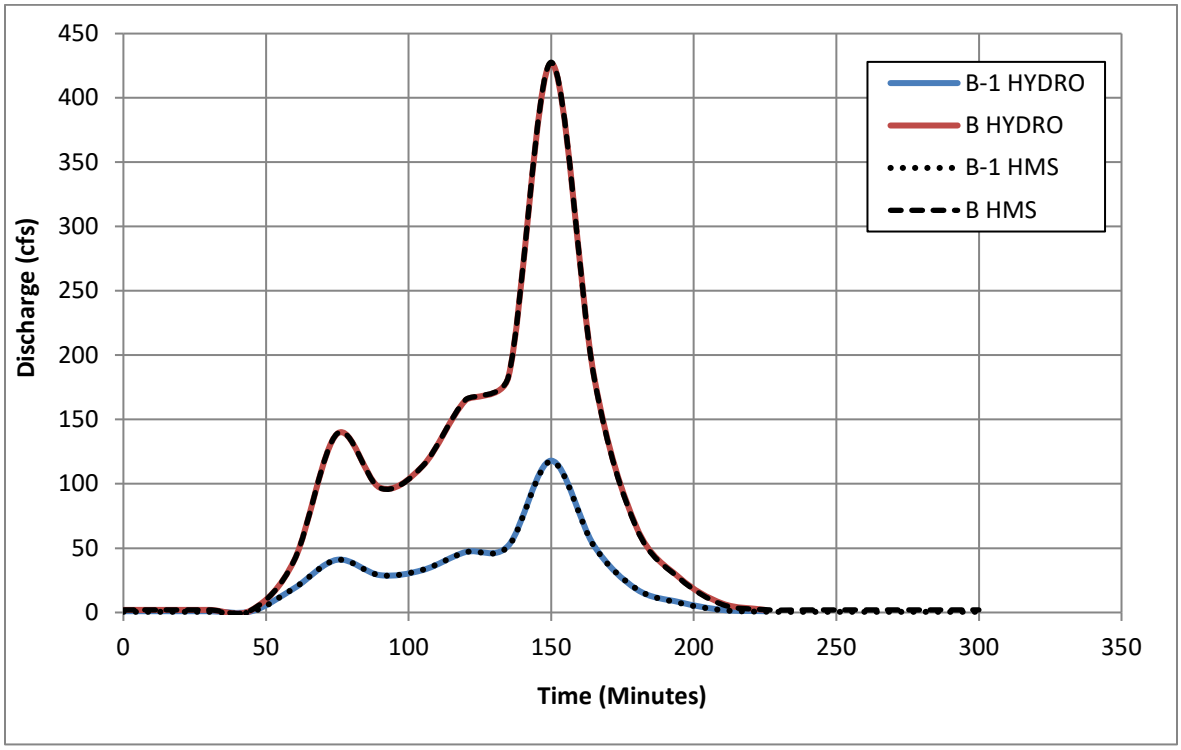


Figure 4: 100-year, 3-hour Runoff Hydrographs

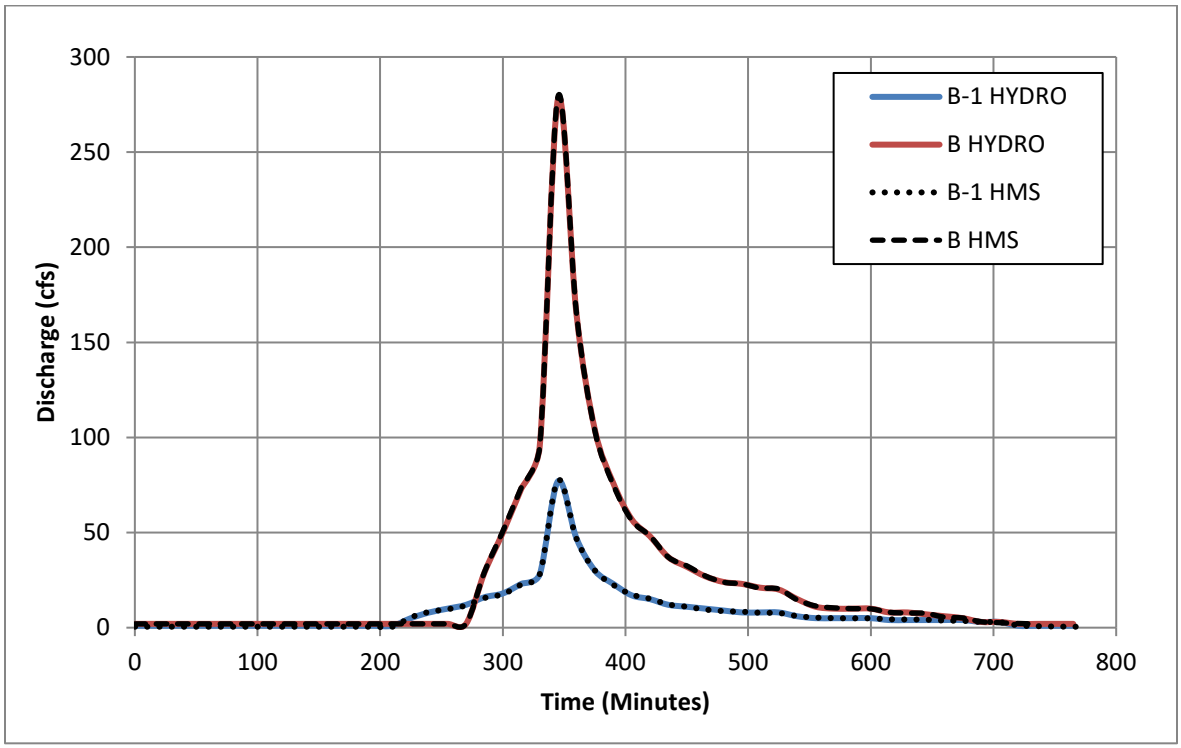


Figure 5. 10-yr, 12- hour Runoff Hydrograph

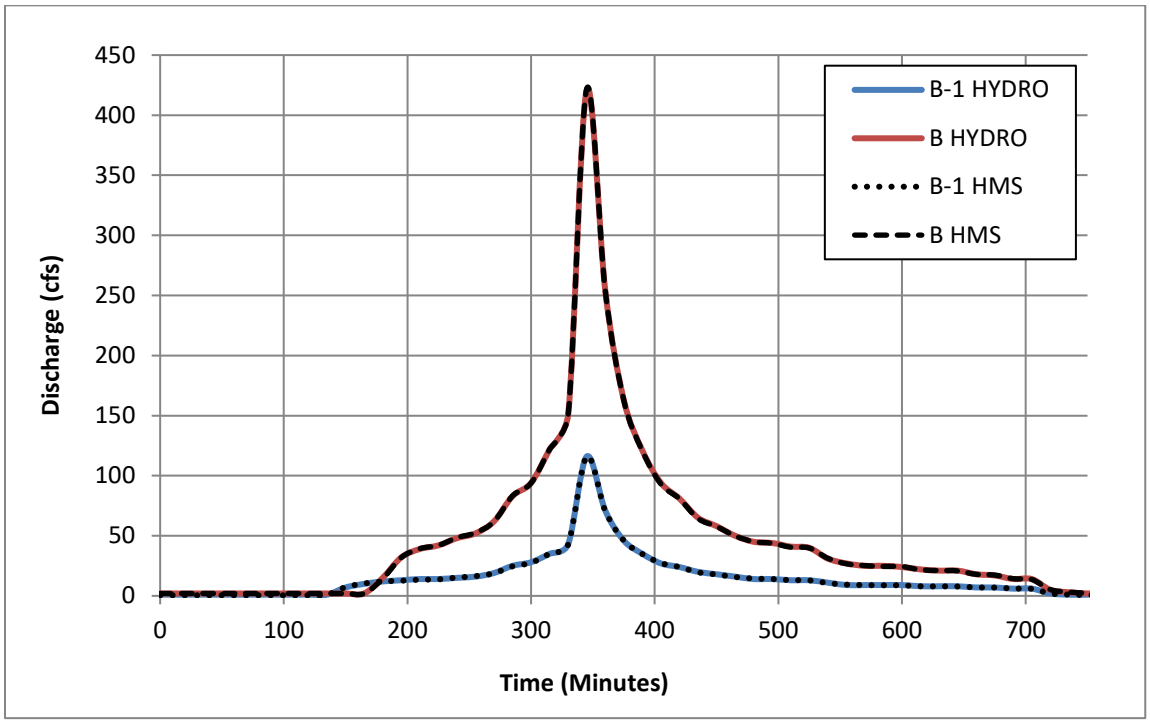


Figure 6. 100-yr, 12-hour Runoff Hydrograph

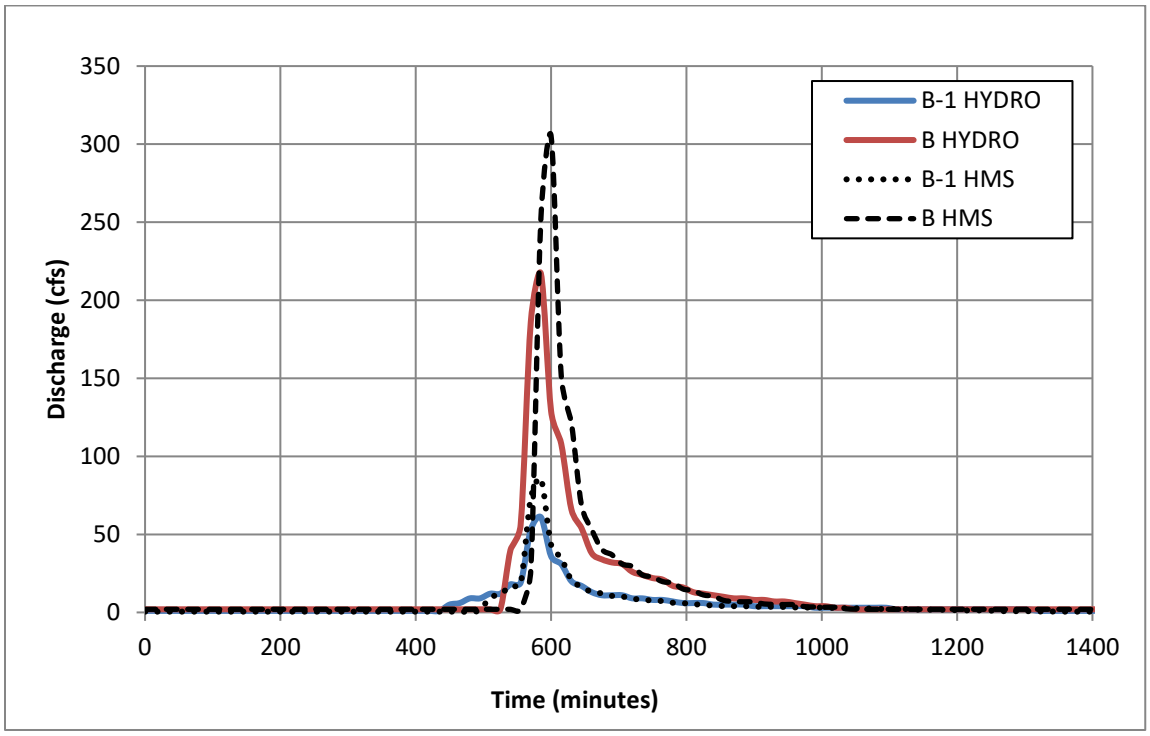


Figure 7. 10-yr, 24-hour Runoff Hydrograph

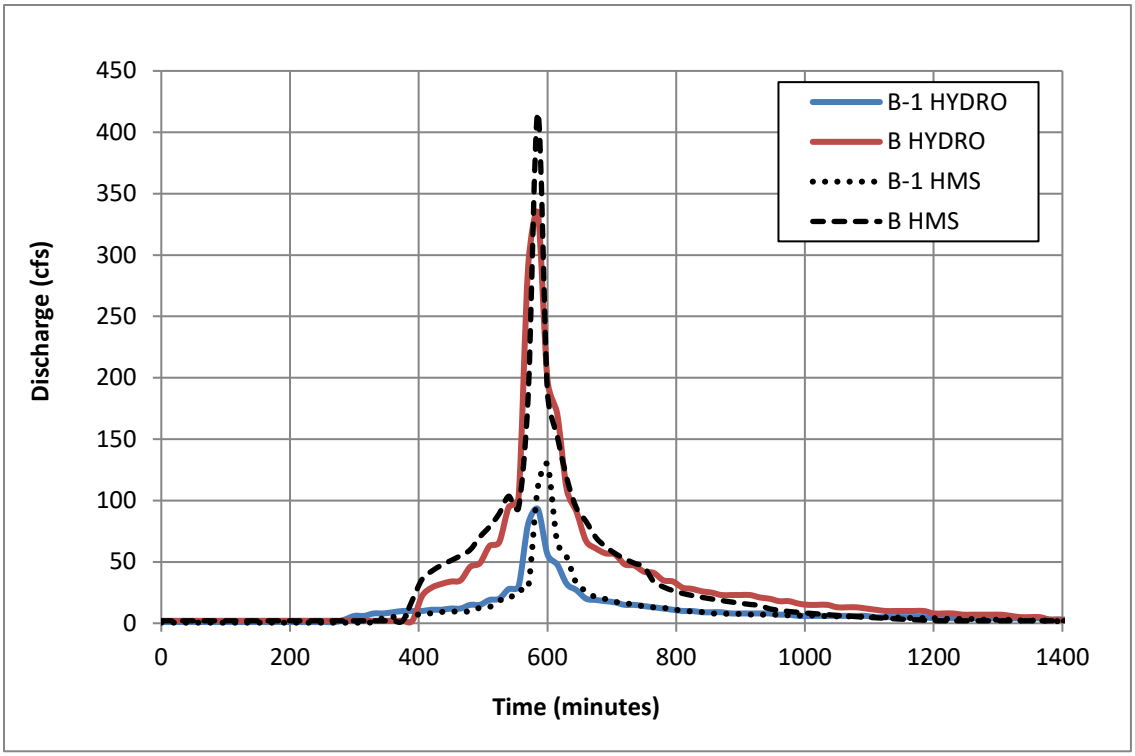


Figure 8: 100-year, 24-hour Runoff Hydrographs

Model Results

Dewatering Structure and Low Flow Outlet

To meet the required water quality storage, the low flow structure was modified so that the height of low flow outlet is at 128.0 NGVD. This configuration retains the required 6.2 ac-ft required for the water quality volume. The area of the dewatering structure was increased to 0.18 sq ft to allow the additional water to drain. The water quality volume drains in approximately 46.1 hours. This will require one (1) additional 1.5 inch diameter hole located at elevation 120 ft.

Basin Performance for Design Storms

The 12-hr 10-yr maximum discharge limits to Highway 4 set by the June 2004 Vista Del Mar EIR development area were 50 cfs for Line B. Table 4 summarizes the peak flow for Line B.

Table 4. Basin Performance for Design Storms

Location	10-yr (cfs)		100-yr (cfs)	
	Developed without Detention	Developed with Detention / Diversion	Developed without Detention	Developed with Detention / Diversion
Line B @ Freeway 3-hr	287.2	34.4	428.6	47.1
Line B @ Freeway 12-hr	279.5	36.9	422.9	51.9
Line B @ Freeway 24-hr	304.5	38.8	417.5	57.4

A summary of the peak water surface elevation for the 100-yr storm in the detention basin is summarized below.

Table 5. Detention Basin Peak Water Surface Elevations

Duration	10-yr		100-yr	
	Water Surface Elevation (ft, NGVD)	Freeboard from Concrete Spillway (143.2 ft)	Water Surface Elevation (ft, NGVD)	Freeboard from Concrete Spillway (143.2 ft)
3-hr	133.8	9.4	139.2	4.0
12-hr	134.7	8.5	141.7	1.5
24-hr	135.5	7.7	142.2	1.0

Diversion of Line B-1 Drainage System

The maximum allowable 12-hour 10-year design flow to Line B-1 at Highway is 67 cfs per the June 2004 Vista Del Mar EIR. Table 6 summarizes the peak flows at the diversion structure and at Highway 4.

Table 6. Diversion Structure Performance for Design Storms

Duration	10-yr Peak Flow (cfs)			100-yr		
	Line B-1 Peak Flow into Structure	Peak Discharge to HWY 4 (Line B-1)	Peak Flow to Basin from B-1 Diversion	Line B-1 Peak Flow into Structure	Peak Discharge to HWY 4 (Line B-1)	Peak Flow to Basin from B-1 Diversion
3-hr	79.4	**60.6**	18.8	117.3	68.8	48.5
12-hr	77.3	**60.1**	17.2	115.8	68.6	47.2
24-hr	85.4	**62.1**	23.3	114.6	68.3	46.3

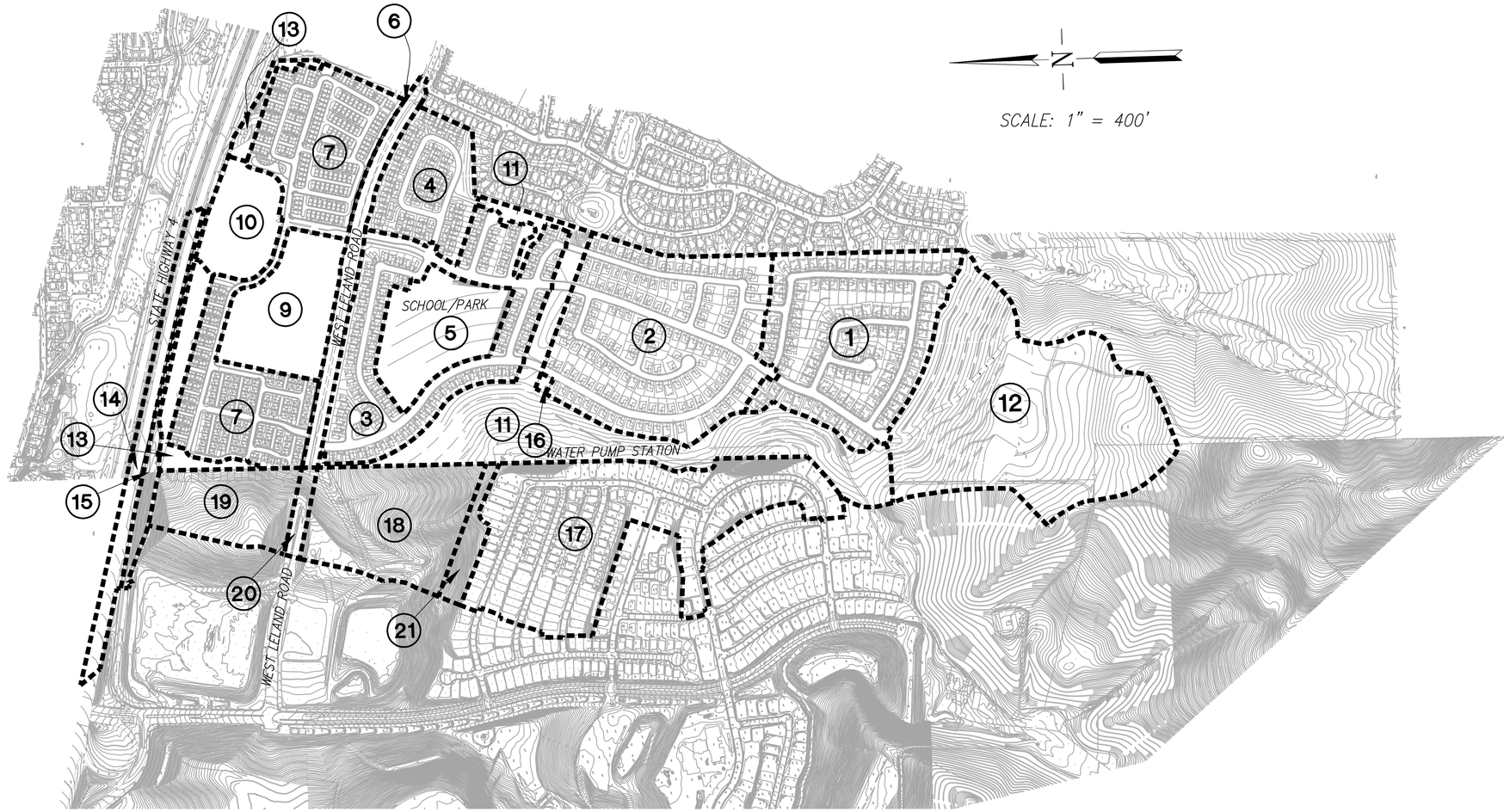
Conclusion

The HEC-HMS model was calibrated to the HYDRO6/HEC-1 modeling from the previous analysis. With the proposed Alves Ranch development plans as a basis for modification, the HMS model indicates that the low level outlet may be raised by 2.0 ft and still meets previously approved criteria per 2008 Vista Del Mar Detention Basin Design Study.

The 12-hr, 10-year storm peak discharge to Line B will be 36.9 cfs (50 cfs maximum allowable at HWY 4 per EIR). The 12-hr, 10-year storm peak discharge to Line B-1 will be 60.1 cfs (67 cfs maximum allowable at HWY 4 per EIR). The maximum 12-hr, 10-year storm peak discharge from Line B-1 to the basin is 17.2 cfs. And the 12-hr, 100-yr WSEL is contained within the basin.

ATTACHMENT 1

Drainage Area Map



WATERSHED B

COURTYARD HOMES	AREA 4	11.0 AC
4,000 SF LOTS	AREA 3	24.2 AC
6,000 SF LOTS	AREA 1 & 2	63.1 AC
OPEN SPACE (FORMER ESTATE LOTS)	AREA 12 (PORTION)	7.2 AC
WATER TANK/PUMP STATION	AREA 16	0.2 AC
WEST LELAND ROAD	AREA 6	6.5 AC
OPEN SPACE	AREA 11 & 12 (PORTION)	64.5 AC
FREEWAY	AREA 14 (PORTION)	7.0 AC
FREEWAY OPEN SPACE	AREA 15	2.9 AC
SINGLE FAMILY (ALLEY TYPE)	AREA 7	31.5 AC
OPEN SPACE (NORTH OF LELAND)	AREA 13	5.9 AC
BUSINESS COMMERCIAL	AREA 9	12.0 AC
SCHOOL	AREA 5 (PORTION)	6.3 AC
PARK	AREA 5 (PORTION)	5.0 AC
DETENTION BASIN	AREA 10	7.3 AC
TOTAL:		254.6 AC

WATERSHED B1

SF HOMES	AREA 17	36.7 AC
APARTMENTS	AREA 18	16.7 AC
SF HOMES	AREA 19	10 AC
WEST LELAND ROAD	AREA 20	1.26 AC
OPEN SPACE	AREA 21	3.02 AC
FREEWAY	AREA 14 (PORTION)	0.67 AC
TOTAL:		68.35 AC

DRAINAGE AREA MAP
VISTA DEL MAR DETENTION BASIN

CITY OF PITTSBURG, CONTRA COSTA COUNTY, CALIFORNIA

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DATE: FEBRUARY 21, 2019 JOB NO. 171084 SHEET 1 OF 1

G:\JOB2017\171084\CAD FILES\00-EXHIBITS\DRAINAGE MAP WATERSHED B.DWG 2/21/2019 10:34:02 AM ALEX AZAR