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Neal Toft, Planning and Building Director
City of Larkspur
400 Magnolia Avenue
Larkspur, CA 94939

RE: Draft Environmental Impact Report for the Proposed Station Area Plan

Dear Mr. Toft:

INTRODUCTION

I represent Community Venture Partners, Inc., (CVP) in regard to the Larkspur Station Area Plan (LSAP) and the accompanying California Environmental Quality Act (CEQA) compliance. CVP is a non-profit organization dedicated to facilitating and assisting community-based projects, programs and initiatives that demonstrate the highest principles of economic, social and environmental equity and sustainability. CVP's officers, board members, and/or donors use, frequent and enjoy the LSAP Plan area and are adversely affected by the LSAP project. The following comments on compliance with state planning processes and the Draft Environment Impact Report (DEIR) for the LSAP are submitted by me on behalf of CVP.

Deficiencies of the LSAP Planning and CEQA Processes

In essence, the City of Larkspur has not complied with either the planning or the zoning process established in the Government Code or the CEQA process set out in the Public Resources Code. Specifically, Larkspur appears to be adopting an unprecedented truncated planning process which does not provide a legally adequate level of impact assessment or public review. Truncated and illegal, as the City contends that it can avoid detailed impact analysis because the LSAP DEIR is a "program" EIR, yet still use the DEIR for later CEQA compliance. Thus, it appears that the City is attempting to short circuit the specific plan and CEQA tiering processes by asserting it does not need to assess impacts in the LSAP DEIR because it is a "program" EIR, yet simultaneously claiming it can later avoid general plan amendment or project-level analysis on any impact considered in the LSAP EIR.

Deficiencies of the LSAP DEIR

The DEIR must be withdrawn or substantially revised to provide a clear, complete, and accurate analysis of the potential environmental impacts and policy inconsistencies that

would result from the proposed project. The legal inadequacies of the DEIR are numerous:

- The DEIR’s Project Description is shifting, unstable, confusing, incomplete and internally inconsistent. The DEIR describes itself variously as a “vision” document, a “program” EIR, an “area plan” EIR, and an EIR that can be used for “project level” analysis. The DEIR fails to adequately disclose to the decision makers and the community what the project actually is;
- The DEIR’s project objectives and alternatives are based on factors that are impermissibly narrow and which are expressly contrary to Larkspur’s General Plan and Housing Element;
- The DEIR brushes off CEQA’s basic requirement to analyze inconsistencies with the City’s own General Plan and Housing element and ignores impacts related to proposed changes to those City legal documents;
- The environmental baseline is not adequately described and impact analyses are misleading, missing, incomplete and inaccurate. For example:
 - The DEIR fails to include a Water Supply Assessment as required by the Water and Public Resources Codes for proposals of more than 500 homes.
 - The DEIR improperly defers impact analysis of project impacts regarding federally listed endangered species, degraded Marin sewage infrastructure, and the severe flooding hazards in Corte Madera Creek;
- Almost all mitigation measures are improperly deferred to future study and plans. For example, the DEIR delays air quality, climate change and polluted runoff modeling despite such analysis only requiring relatively basic calculations based on the project’s footprint;
- Further, by agreeing to approve the LSAP in order to receive funds from the Metropolitan Transportation Commission, the City has improperly made a decision to adopt the LSAP without first assessing the environmental impacts of that decision as required by CEQA. This most basic violation of CEQA encapsulates a disregard for the transparency and disclosure requirements in California planning and zoning and environmental law.

City Must Withdraw or Recirculate DEIR

Because the state planning and zoning and CEQA tiering processes have been so drastically circumvented and the DEIR is so legally inadequate, we request that the LSAP and the DEIR be withdrawn and the entire process started anew with a clearer, more transparent planning approach. If Larkspur will not withdraw the LSAP and the DEIR, then the DEIR must be re-circulated for public review and comment pursuant to CEQA

Guidelines Section 15088.5 because the DEIR is so functionally and basically inadequate that it precludes meaningful public review.

While project components may be approved if they have been the subject of CEQA analysis, transportation infrastructure improvements related to the LSAP, such as highway or street realignments would not qualify for such an approval. The LSAP and DEIR do not describe any actual infrastructure improvements in sufficient detail for CEQA analysis and the DEIR does not assess or mitigate the impacts of such proposals.

EXECUTIVE SUMMARY OF LEGAL INADEQUACIES OF LSAP EIR

Below are the points which relate to the worst legal failings of the DEIR.

I. CEQA PROCESS

The DEIR does not clearly articulate what type of project is being evaluated and thus is confusing and misleading to the decision makers and the public.

The DEIR uses this vagueness to avoid any real impact analysis and mitigation of almost every important broad level, regional, or cumulative impact. The DEIR repeatedly claims that this vagueness is permissible because this is simply a program level EIR (DEIR, p. 44) and yet claims that later related CEQA documents must only focus on impacts not “considered” in this DEIR. But the DEIR “considers” almost every impact that later related projects might have. Unfortunately, it does not consider the impacts in any meaningful detail. The City appears to be depending on the public not legally challenging this EIR because they will be able to review future project-level EIRs, and then later claiming project-level analysis is no longer required for any impact “considered” in this EIR.

The DEIR also claims that the LSAP is simply a vision document but the Station Area Plan for all intent and purposes is what it says it is, an area plan. It has actual building locations with site specific detail, maps and figures and architectural renderings. Such detailed area plans are normally termed “specific plans.” The difference is that the City of Larkspur has not bothered to go through the rigorous specific plan approval process set out in Government Code Section 65450 et seq. However, the DEIR mistakenly cites Section 15168 of the CEQA Guidelines to contend it can nonetheless tier down to project approval level CEQA analysis without the going through the normal planning process provided for specific plans in the Government Code.

II. PROJECT OBJECTIVES

Project Objective 3 is pre-decisional and impermissibly narrow.

- a. This objective includes a requirement that affordable housing be located – “particularly... near the SMART station.” This impermissibly narrows the range of alternatives thereby eliminating reasonable alternatives to all the other objectives. Further, such criteria conflicts with Larkspur’s General Plan and Housing Element.
- b. Also, this objective’s only policy rationale would be reduction of greenhouse gases, yet because of the existing traffic conditions, this project will have a significant impact to climate change. Thus, this objective cannot be met by the proposed LSAP and thus is not a proper objective to eliminate consideration of other reduced development alternatives.

III. PROJECT DESCRIPTION

The Project Description is unclear and impermissibly shifting and self-contradicting.

- a. The DEIR claims at different points to be assessing a “plan,” a “program,” or a “project.” DEIR states that CEQA review of General Plan amendments required but also states that next stage of CEQA documentation would be the permitting and project approval stage.
- b. DEIR claims repeatedly to not have to do detailed impact analysis but then sets up a tiering system to avoid and/or piecemeal such assessments in a later CEQA review.
- c. No supporting data or reference is provided for in the DEIR, the DEIR appendices, or the LSAP itself for the assertion that - in an area such as Larkspur - increased density will increase transit or that that TDM or trip caps are effective in alleviating congestion.
- d. The DEIR states that the LSAP will encourage the use of density bonus provisions in state law. However, even though such a level of development is contemplated in the Project Description, the DEIR improperly excludes impact assessment of the foreseeable impacts of the additional homes.

IV. IMPACT AND MITIGATION ANALYSIS

The DEIR's Setting, Impacts and Mitigation sections are inadequate because it:

- a. Does not assess the impacts of the mitigation measures. E.g. amending the General Plan will have impacts. These impacts must be assessed in this document.
- b. Either does not include or defers much of the impact assessment, claiming a program EIR allows for such scant impact assessment.
- c. Defers almost all mitigation measures claiming a program EIR allows for such scant deferral of mitigation measures.
- d. Will not serve to reduce traffic and does not reduce impacts to climate change to a level below significance.
- e. Improperly does not include a Water Supply Assessment at the Draft stage as required by CEQA for proposals of more than 500 homes. Does not assess compliance with UWMP.
- f. Puts additional homes in floodway and contributes to existing hazardous flood conditions and ignores sea level rise considerations.
- g. Ignores significant impacts to Marin's most sensitive, degraded and important wetlands and endangered species in the estuary of the Corte Madera Creek.

V. ALTERNATIVES ANALYSIS

The DEIR's Alternatives Analysis is inadequate due to narrow project objectives and elimination of reasonable alternatives.

- a. No Project Alternative could be easily modified to meet most project objectives.
- b. Narrow and inaccurate objectives improperly eliminate reasonable reduced development alternatives.

FULL COMMENTS ON CEQA PROCESS AND DEIR

I. CEQA PROCESS

The City's decision process does not comply with the state planning and zoning or CEQA statutory requirements

The City claims that the DEIR is simply a vision document that does not commit it to any development and that later, the City will amend the General Plan to allow for the project. (DEIR, p. 54.) However, both the Land Use section (DEIR, pp. 81 and 87) and Population and Housing sections (under Effects Found Not to Be Significant, DEIR, p. 413)) state that the LSAP is a part of the General Plan update process and will be implemented via the General Plan update. If the LSAP is a part of the General Plan update, this DEIR is premature and should only be prepared once a General Plan update, or Specific Plan process is underway. If not, Larkspur's General Plan update is being segmented into this project and the rest of the City's planning process.

The State of California planning process for projects such as the LSAP involves initiation of, and compliance with the specific plan process managed by the State Office of Planning and Research. All specific plans, whether prepared by a general law city or county, must comply with Sections 65450 - 65457 of the Government Code. These provisions require that a specific plan be consistent with the adopted general plan of the jurisdiction within which it is located. If the City had gone through the procedures to approve the LSAP as a Specific Plan, and prepared an adequate EIR, it could arguably avail itself of the tiering process set up in CEQA. In fact, the LSAP is in essence a specific plan due the detail included regarding the residential development proposed; the LSAP includes specific square footage for all uses, FAR, diagrams, architectural renderings, and proposed zoning designations and design review guidelines.

However, the City has decided not to follow the specific plan approval process. This attempt to circumvent the specific plan process is confirmed by a sentence buried in the Land Use section of the DEIR. The DEIR asserts that in its, *City of Larkspur 2010-2030 General Plan Update* discussion that: "The Station Area Plan, in the form of a Local Area Plan, will be incorporated into the General Plan Update." (DEIR, pp. 81, 87.) Thus, the City is apparently planning to approve the Plan and certify the EIR as if it had complied with the specific plan and CEQA planning requirements and then later simply incorporate the approved LSAP into the General Plan.

Instead of preparing a Specific Plan that assesses General Plan changes and later tiering down to project level CEQA analysis, the City appears to be adopting an unprecedented truncated planning process which affect is to not provide an adequate level of impact assessment. Truncated, and illegal, because the City contends that it can avoid detailed impact analysis because the LSAP EIR is a "program" EIR, yet use the vague conclusions in the DEIR to later avoid project level impact analysis. At certain points, the DEIR acknowledges that a later amendment to the General Plan will be necessary

(DEIR, p. 54) but then concludes that the City will then next proceed to the development review process and issuing of permits. (DEIR, p. 61.)

The LSAP – similar to a Specific Plan - does include precise locations of “priority development sites,” “anticipated land uses,” “includes design standards,” “identifies regulatory and policy changes to the General Plan and Zoning Ordinance, needed to implement the plan,” and a “development plan.” (SAP Executive Summary, p. 3-15; DEIR, p. 2, 54-60.) Also, the LSAP contains dozens of precise policy changes to the Larkspur General Plan. (DEIR, pp. 54-60.) By the City Council taking a vote and adopting such recommendations, the City is committing itself to these policy recommendations regarding a relatively specific development plan. This type of policy commitment to development triggers CEQA and its requirements to analyze and mitigate the impacts of these policy recommendations. But most of these policy changes are not analyzed or mitigated at a level sufficient for CEQA’s area or specific plan environmental review requirements.

The City’s Planning Process Does Not Comply with CEQA’s Tiering Requirements

Perhaps an even more dramatic departure from CEQA is the DEIR’s claims that the City can use the impact conclusions in this DEIR at the project level despite the DEIR claiming that because no project level environmental impact analysis is necessary. “This document is a Program EIR for the Station Area Plan, and may function as a project-level EIR for later specific projects....” (DEIR, p. 1.) “Individual projects will be evaluated for potential environmental impacts, and further environmental review may be necessary if potential site-specific impacts have not been addressed in this EIR.” (DEIR, pp. 8, 87) These two sentences clarify that the City intends that this DEIR be used later, not just as a review of a vision or even a General Plan update but in order to make CEQA findings on impacts of specific development projects.

Thus, it appears that the City is attempting to short circuit the CEQA tiering process by asserting it does not need to assess impacts in the LSAP EIR because it is a “program” EIR, yet claiming it can later avoid project level analysis on any impact considered in the LSAP EIR. Such an approach does not comply with CEQA’s tiering system under Government Code Section 65457, which first requires approval of a specific plan and specific plan EIR. See *Concerned Dublin Citizens, et al. v. City of Dublin, et al.* (2013) 214 Cal.App.4th 1301.

The LSAP and the DEIR mislead the reader by alleging that use of Transportation Demand Management and Trip Caps will reduce transportation, air quality and climate change impacts

The LSAP and the DEIR repeatedly states that TDM and Trip Caps will solve the traffic problems. But these statements are really puffery because the DEIR confirms that there is no evidence either works. The Project Description (p. 51) states:

“The Station Area Plan takes an integrated land use and transportation approach

to provide flexibility but monitors development so as to minimize traffic impacts. To reduce the impact of new vehicle traffic on the roadway network, the Station Area Plan proposes a vehicle trip cap and a Transportation Demand Management (TDM) program.

The vehicle trip cap will limit the increase in vehicle trips from the Plan area to approximately 10 percent above the existing traffic generated by the uses in the area. A monitoring program will be implemented by the City to periodically measure this traffic to ensure that traffic conditions are not significantly worsened by development in the Plan area.”

However, tucked into the last pages of the transportation section, the DEIR admits that: “The TDM program has the potential to reduce traffic to the Plan area and the Larkspur Ferry Terminal. However, the feasibility, funding sources, and effectiveness for these mode shift strategies are unknown at this time.” (DEIR, p. 164.) The DEIR, therefore, in its technical analysis confirms that the claims in the LSAP and DEIR Introduction and Summary sections regarding the efficacy of TDM and Trip Caps are not true. Aside from efficacy, it is doubtful that such measures are even feasible. It is not reasonable to assume that developers, store owners and/or residents will agree to no parking in a suburban area. These project measures, or at least the claims that they will solve transportation and air quality issues, should be removed from the DEIR.

II. PROJECT OBJECTIVES

Under CEQA, Project Objectives must be carefully crafted to allow for a reasonable range of alternatives. (CEQA Guidelines §15124(b).) The DEIR however, includes objectives that impermissibly narrow the range of alternatives. Project Objective 3 is to: “*Increase the housing supply, particularly affordable housing near the SMART Station, meeting the City’s share of regional housing needs.*” This objective is the project objective that defines the City’s proposal to intensify development at Larkspur Landing. Yet this objective – which is used to eliminate other alternatives - is not based on any adopted state or local public policy.

Also, Objective 3 is poorly written and is unclear. The DEIR does not adequately explain how placing affordable housing near SMART relates or supports affordable housing construction or the housing supply? This Objective is also not clear in how it is consistent with the other objectives, such as increasing transit ridership. The Ferry is at full capacity and there is no evidence that low income people will use the ferry or potentially SMART and not drive to jobs or other occupations in Marin County.

The overlying policy in Objective 3 is to increase housing supply, meeting the City’s share of the regional housing needs. But Objective 3 – instead of saying that the LSAP would contribute its share to the City’s overall supply for affordable housing, requires that all of the affordable housing needs be met at one site – Larkspur Landing. The City General Plan contains no such policy and in fact, the Larkspur Housing Element policies are that housing be in a “variety of infill choices,” that there are choices in various areas

and that second units be in “all residential neighborhoods.” (Larkspur 2010 Housing Element, p. 67-68.)

The Housing Element actually mentions certain sites – downtown, North Magnolia, Maclaren Property, Bon Air Center and the Tiscornia Winery site but does not even mention Larkspur Landing aside from the previously designated Ross Valley Sanitary site. (Larkspur 2010 Housing Element, Table 19.) Further, the City of Larkspur’s Regional Housing Needs Assessment allocation is only 132 units.¹ Meeting that objective can feasibly be reached either limiting the project to the existing General Plan and zoning ordinance designations or finding other sites in Larkspur, including those mentioned in the 2010 Housing Element. This Objective, therefore, has been designed by the City to focus development on Larkspur Landing and thus is not a reasonable CEQA Project Objective.

Therefore, there is no General Plan policy that directs that the RHNA housing be at Larkspur Landing, yet the City has, through its contract for grant funds from the Metropolitan Transportation Commission committed to adopting the LSAP Plan and locating any such development at Larkspur Landing. (MTC-City of Larkspur Station Area Plan Funding Agreement, April 26, 2012, Scope of Work, p. 13, Task 8.3.) Thus, the EIR violates the prime directive of CEQA to not make decisions on projects until environmental review has occurred. A “project” is defined under CEQA as any action that “commits the agency to a definite course of action in regard to a project intended to be carried out by any person.” (CEQA Guidelines, § 15352 (a).) The California Supreme Court has also rejected local agency arguments that development plans/projects are not ready for impact because CEQA review may not always be postponed until the last governmental step is taken, because postponing the environmental review may incentivize ignoring environmental concerns. (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116.) *Save Tara*, in fact, involved a contract condition and grants from a federal agency. (*Ibid.*)

This objective is further prohibited by CEQA because it is driving the City’s consideration of the proposed alternatives in a narrow manner. Meeting the share’s regional housing needs at Larkspur Landing is an objective that is not required by any existing Larkspur or State of California policy and thus is simply a measure intended to impermissibly narrow the scope of the alternatives. For example, the DEIR eliminates various alternatives including off site and reduced development alternatives based on an inability to meet this project objective. Further, CEQA prohibits approval of a project when there is a feasible alternative that would reduce impacts, even if that alternative is off site. *Citizens for Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553.

Regarding the other project objectives, none of them would limit development to Larkspur Landing and would allow for consideration of project alternatives at different sites, as provided for in the Larkspur General Plan. Objective One does, however,

¹ “Regional Housing Need Plan” San Francisco Bay Area, 2014-2022, Association of Bay Area Governments, Page 23.

mention “Increase transit ridership.” Certainly the location of the Ferry could assist meet that objective, but so could housing near bus stops on Magnolia Avenue.

Regarding Objective X, the project does not analyze how the project proposal and the alternatives meet this objective. Further, the DEIR does meet its own objective of “Identifying mitigation measures to protect existing and new development from flooding and sea level rise...” See detailed discussion of this under 8, Hydrology, comments below.

III. PROJECT DESCRIPTION

One of the primary flaws of the DEIR is its failure to provide an accurate Project Description. “An accurate, stable and finite project description is an essential element of an informative and legally sufficient EIR under CEQA.”² Several courts have invalidated EIRs for their failure to provide an adequate Project Description. For example, in *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal. App. 4th 859 [134 Cal.Rptr.2d 322], the California Supreme Court found that an EIR was invalid because it omitted a meaningful discussion of the conditions in the northern part of the proposed water supply system. (See also *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal. 3d 376.) The following comments address the specific failings of the Project Description.

The DEIR states that, “Full build-out of the potential development on each property in the LL area would require construction of structured parking.” The DEIR, however, provides conflicting description of such structures and defers analysis of the potential environmental effects of the structured or replacement Ferry terminal parking projects, “which would be addressed under a separate CEQA analysis on a project by project basis.” (DEIR, p. 50.) The DEIR also states that the planning process determined that the Ferry site could accommodate residential development and “replacement parking.” (DEIR, p. 50.) Thus, the project description is unclear. Does the project description include the square footage, residents numbers, diagrams, figures, architect’s renderings that are identified in the LSAP and in this DEIR, or are these simply concepts. The DEIR impermissibly shifts between providing a detailed area or specific plan type analysis and its claims that it won’t review the impacts of any proposal that could be the subject of a later permit. This shifting project description confuses both the reader and the decision maker and is proscribed by CEQA.

The DEIR project description includes several conclusions regarding the LSAP project, yet these conclusions are not supported by any documentation or analysis in the LSAP or the DEIR. The DEIR on page 51 states that Marin Country Mart has the potential to accommodate new residential uses and retail. The DEIR, however, provides no support for this conclusion. The DEIR states that parking would be in below ground or parking

² CEQA Guidelines §15124, citing *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App.3d 185, 199 [139 Cal.Rptr. 396].

structures yet the project description and figures conflict in how such parking structures would be designed.

The DEIR contains “development projections that are unsupported. For instance, “Vehicle trip cap will limit the increase in vehicle trips from the Plan area to approximately 10 percent above the existing traffic generated.” (DEIR, p. 51.) The DEIR, however, provides no support for this conclusion. Another projection, without any evidence is that, “Mixed use transit oriented development has been proven to lower trip generation rates than suburban type development.” Again, what is the evidence for this statement and how does it relate specifically to Larkspur Landing?

Density Bonus. The DEIR states that LSAP will “”Adopt a density bonus ordinance to provide density bonuses and other incentives for projects including senior and affordable housing, consistent with State law. Encourage an increase in the supply of well-designed housing for extremely low, very low, low and moderate income households. Bonuses shall also be available for development projects that generate fewer vehicle trips. Bonuses shall be weighted to incentivize development that generates non-peak period trips.” (DEIR, p. 52) Despite the certainty of use of density bonus in the LSAP project description, the LSAP does not assess the foreseeable impacts of the additional homes that almost certainly will be constructed under density bonus, if the project is approved.

Nowhere in the DEIR are the impacts of full build out of the 35% density bonus addressed. Either the population projections must be corrected to reflect additional density afforded by the density bonus, or, the LSAP DEIR must specifically state that the plan density is an absolute maximum, including the density bonus. This is especially important in light of the likely need to include affordable housing for the displaced mobile home park residents. The DEIR must address full build out, including the Density Bonus, in its population projections, and traffic, air quality, water demand, noise, and services analyses. Absent this inclusion, these analyses substantially underestimate project impacts.

TDM. The DEIR asserts that “[t]o reduce the impact of new vehicle traffic on the roadway network, the Station Area Plan proposes a vehicle trip cap and a Transportation Demand Management (TDM) program.” (DEIR, p. 52.) The DEIR continues to assert that if TDM will be implemented that a 5-10% mode shift will result from TDM. This project measure however, unlike the square footage and project design, is not described in enough detail to determine if such a project measure can feasibly reduce congestion or result in a mode shift. The LSAP and the DEIR repeatedly assert that, [t]he mixed use, transit-oriented development proposed in the Station Area Plan has been proven to have lower trip generation rates than traditional, suburban-type development when located in proximity to transit.” (DEIR, p. 52.) Yet no supporting data or reference is provided for in the DEIR, the DEIR appendices, or the LSAP itself for the assertion that - in an area such as Larkspur - increased density will increase transit or that that TDM or trip caps are effective in alleviating congestion. For instance, there is no such data or modeling or references in DEIR Appendix B or the 11-19-2013 *Larkspur SMART Station Area Plan: Parking Demand Analysis Memorandum from Fehr and Peers*.

The DEIR Project Description includes amendments to the Larkspur Zoning Ordinance, General Plan and Design Guidelines. (DEIR, pp. 2, 52-59.) These amendments include dozens of changes which amount to what is essentially a whole scale revision of the General Plan. However, the DEIR contradicts itself by also claiming that the proposed General Plan amendments are mitigation measures. (DEIR, p. vi.) This contradiction and shifting nature regarding the nature of key project components renders the project description inadequate.

If the project description consists essentially of legislative changes, then the LSAP is in itself a proposed general plan or specific plan amendment. And since these legislative amendments are essential project components, the impacts of those project components must be assessed. Yet, the DEIR does not assess the environmental impacts of the Larkspur General Plan or Zoning Ordinance changes but instead asserts that can be done at a later date. (DEIR, p. 54.) The DEIR is stating, therefore, that while the main project components of the LSAP are General Plan and Zoning Ordinance amendments, it will defer impact analysis and identification of mitigation measures for those project measures to a later CEQA document. But impact analysis of project measures and identification of mitigation measures are precisely what CEQA requires and thus this DEIR is holey deficient in compliance with the very heart of CEQA. (Pub. Res. Code §21100(b)(1).)

The Project Description includes a Plan-recommended policy to “Work with SMART and GGBHTD to study an alternative location for the Larkspur SMART station in the vicinity of the ferry terminal.” (DEIR, p. 58). Yet the Alternatives discussion specifically rejects such a relocation because “1) relocation of the SMART station is not an objective of the Area Plan, and b) the location of the SMART Station is outside of the control of the City of Larkspur.” These two statements are completely contradictory, adding to the confused and convoluted Project Description and muddying the Land Use analysis. Further, the entire Larkspur Ferry Terminal, which constitutes Opportunity Area 1, as well as the Sanitary District site, Opportunity Area 5, are owned by other public agencies and outside the control of the City. If being located outside of the City’s control is a criterion for inclusion in the plan, why are those two sites included?

IV. IMPACT AND MITIGATION ANALYSIS

The following comments set forth CEQA’s requirements and identify specific areas where the DEIR failed to meet those requirements.

The Environmental Setting section is legally flawed

One of the major flaws of this DEIR is its failure to describe the environmental setting with enough detail to ensure an adequate consideration of impacts and alternatives. As stated in the CEQA Guidelines, “[t]he environmental setting will normally constitute the baseline physical condition by which a lead agency determines whether an impact is significant.” (§15125(a).) An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published. (*Id.*) The environmental setting constitutes the

baseline physical conditions by which the County and the CCC will determine whether an impact is significant. (*Id.*).

When the environmental baseline is not properly understood, environmental impacts cannot be properly assessed. As a result, there is no basis to determine whether avoidance is feasible or what other mitigation measures are necessary to reduce significant impacts to the extent possible before a project can be approved, as required pursuant to CEQA Guidelines §§ 15002(a)(3) and 15021(a)(2). (See also Pub. Res. Code §21081(a)(3) and *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal.App.4th 105, 134 [65 Cal.Rptr.2d 580].)

An inadequate baseline will provide the basis for a court to invalidate an EIR. For example, in *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App. 4th 99, 119-128 [104 Cal.Rptr.2d 326], the court found that an EIR was inadequate in its baseline discussion for the following reasons: failure to investigate and present evidence to support the assumption that the pre-project use of water on the property was for irrigation; introducing a new methodology for baseline determination at the end of the environmental review process; and by inviting the Board to select a baseline at the end of the review process. The court also found that the Board's ultimate decision setting the baseline was not supported by substantial evidence. (See also *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729 [32 Cal.Rptr.2d 704] (EIR invalidated due to failure to disclose nearby wetland and wildlife preserve); *Galante Vineyards v. Monterey Peninsula Water Management District* (1997) 60 Cal.App.4th 1109 [71 Cal.Rptr.2d 1] (court found EIR deficient for failure to identify wineries in area that would be impacted by the proposed project).)

As noted below, the DEIR fails to adequately portray the location and existence of habitats due to improper mapping methodologies and deferral of surveys. The DEIR is also inconsistent in its treatment of existing and future circulation conditions, air quality, and existing hazardous flood conditions. Baseline cultural and hazardous soil contamination conditions are referred to, but they are not adequately described to form a basis for impact analyses. Site characterizations to determine the baseline cultural and soils conditions are improperly deferred. Other problems with the baseline are described further below in various sections regarding the Project's impacts.

Consideration and Discussion of Environmental Impacts is Inadequate

An EIR must identify, analyze, and mitigate each and every significant environmental impact of a proposed project. Specifically, CEQA has a statutory mandate that requires that an EIR “shall include a detailed statement setting forth … *all* significant effects on the environment of the proposed project.” (Pub. Res. Code §21100(b)(1), emphasis added.); see also Guidelines, Cal. Code Regs., tit. 14, § 15126, subd. (a).)

The DEIR anticipates Initial Studies and Negative Declarations future compliance with CEQA but contends that it is not required to currently assess project level impacts. (DEIR, p. 44.) Such an assertion violates one of CEQA’s prime policies; the prohibition

against ignoring foreseeable impacts for later analysis is clearly proscribed by CEQA. *Laurel Heights*. Cases citing Laurel Heights continue to disapprove of program or plan level EIRs that put off impact analysis: “but tiering is not a device for deferring the identification of significant environmental impacts that the adoption of a specific plan can be expected to cause.” *California Native Plant Soc. v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 623-25.

CEQA Guidelines §§15126 and 15126.2 require that an EIR evaluate and classify impacts as to their severity. As stated above, impacts are normally measured against the existing environmental setting. In many instances, the LSAP DEIR fails to measure the impacts against the existing environmental setting because the setting is inadequately documented or described, or because the DEIR improperly uses future conditions or other alternatives as the basis for the impact analyses. Additionally, impacts to future residents, such as encouraging at risk, low income and other people to live next to a major freeway or in areas subject to current and/or future flooding, should also be considered. (CEQA Guidelines §15126.2(a).)

Another persistent problem is that the DEIR does not identify, evaluate or classify certain impacts. Part of the reason for this omission may be that the project is not sufficiently described (e.g., due to missing details regarding flood conditions, wastewater infrastructure, wetlands and endangered species impacts, etc.). Another reason is that the environmental setting is not accurately described (e.g., whether or not an area has contaminated soils). In other cases, impacts are identified but incorrectly analyzed. Examples of this include the DEIR’s failure to use appropriate Air Quality and Circulation Modeling. The DEIR also fails to comply with CEQA Guideline §15126, which require analysis and mitigation of indirect impacts. Finally, the DEIR misclassifies some impacts by improperly concluding that they can be mitigated to less than significant.

Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects is Inadequate

An EIR must describe feasible mitigation measures which will avoid or substantially lessen each significant environmental effect to the maximum extent feasible. (CEQA Guidelines §15126.4(a)(1); *Save Our Peninsula Committee*, supra, 87 Cal.App.4th at 139.) A lead agency cannot approve a project if there are feasible alternatives or mitigation measures that would avoid or substantially lessen significant impacts. (Pub. Res. Code §§21002 and 21081(a)(3); CEQA Guidelines §§ 15002(a)(3) and 15021(a)(2); *Mountain Lion Foundation*, supra, 16 Cal.App.4th at 134.)

The lead agency’s decision with regards to the feasibility of mitigation measures must be based on substantial evidence in the record. (*Citizens for Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167 [243 Cal.Rptr. 39] (“Goleta I”).) Decisions regarding whether or not alternatives and mitigation measures substantially lessen or avoid significant impacts must also be based on substantial evidence in the record.

Moreover, mitigation may not be deferred. As a matter of law, an agency cannot defer consideration or adoption of mitigation measures to a later date. (CEQA Guidelines §15126.4(a)(1)(B); *Kings County Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692 [270 Cal.Rptr. 650]; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296 [248 Cal.Rptr. 352].) Deferral may only be allowed where there is a reasonable expectation of effectiveness and compliance based on a requirement that the measure meet specific performance standards that are identified in the EIR. (*Endangered Habitats League, Inc.*

v. County of Orange (2005) 131 Cal. App.4th 777 [32 Cal. Rptr.3d 177.] The impacts of proposed mitigation measures must also be discussed in the DEIR. (CEQA Guidelines §15126.4(a)(1).)

As stated below, the DEIR fails to comply with the mandates for CEQA with respect to the analysis of the environmental setting, environmental impacts, and proposed mitigation measures for the SAP.

A. Land Use and Planning Policy

The DEIR description of land use plans and project measures concerning those plans is unstable and self-contradictory.

The DEIR states, “As noted in the Project Description, the General Plan Land Use Map will be amended to reflect the new Mixed Use Administrative and Professional Two land use designations.” (DEIR, p. 87.) But the Project Description states that the LSAP adoption “would not automatically amend the General Plan” but rather “would trigger a new, separate planning process to amend the General Plan.” (p. 54.) As stated above, this violates CEQA’s requirements for a stable project description and leaves the land use impacts analysis indecipherable.

The DEIR discusses “themes” of the 2010-2030 Land Use Plan but that plan has not been adopted. (DEIR, p. 81) Compliance of the project with existing Land Use policies has not been evaluated. The DEIR includes a list of policies and a general statement that the project mostly complies with those policies. There is no accompanying analysis or supporting data supporting the conclusion.

On page 87 the DEIR states that. “Given the size and location adjacent to major transportation corridors and near a transit node, the Plan area can accommodate increases in land use intensity and overall changes in land use character.” There is no support for this claim and it simply makes no sense given the high congestion in the area. Is the DEIR contending that there will be so much congestion, that the LSAP would encourage reduced dependence on private motor vehicles? That would also be a conclusion with no evidence. Further, such a claim contradicts Transportation and Circulation conclusions regarding impacts to traffic.

The DEIR does not include key tables that are in the SAP. The DEIR, Tables 4.1 and 4.3 of the LSAP identifies critical projects elements total maximum new development and

proposed land use designations. (DEIR, p. 88.) The DEIR must include these basic tables and reference them in the text.

The DEIR does not include the required analysis regarding the impacts of the land use impacts

In general, the DEIR contains almost no analysis of the project's proposed changes in land use on the existing and surrounding land uses. Potential conflicts with existing land uses, including existing retail, residential, and office uses, are not examined.

The DEIR Land Use section contains a brief discussion of compliance of the LSAP land use designations with existing designations, and then just states that "there could be a conflict with selected goals and policies....[and] The Planning Commission and City Council, in deciding whether to approve a proposed project will decide whether, on balance, the project is consistent with the General Plan." (DEIR, p. 87.) This DEIR approach, however, defers the entire general plan conformance assessment to the project level, and results in this DEIR failing to address the land use consistency and impacts issues at all. (CEQA Guidelines §§ 15125(d).) Also, the City needs to keep in mind that it cannot make findings to approve the project unless it makes consistency findings with the General Plan. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777.

Dividing the Community. The DEIR (DEIR, p. 84) states that the LSAP "includes no large-scale infrastructure projects...that would divide an established community." However, substantial roadway improvements would be required to handle traffic generated from full build out of the project. In addition, the LSAP has a policy to encourage relocation of the SMART train station at the ferry terminal site. That would require extending a rail line across Sir Francis Drake Blvd. This LSAP policy, which violates the DEIR's significance criteria, is not analyzed. Also, the LSAP contemplates relocation of the mobile home park residents to elsewhere in the area. The DEIR goes on to state that the project would intensify existing land uses and include "improvements" to Sir Francis Drake Blvd. All of these actions may result in dividing existing communities, and must be assessed in the EIR.

The DEIR assumes that, given the SAP's location adjacent to major transportation corridors and near a transit mode, the Plan area can accommodate increases in land use intensity and overall changes in and use character. The DEIR illogically states that the increased land use intensities would encourage reduced dependence on private motor vehicles. There is no support for this claim. It is simply a conclusion with no evidence and is contradicted in the Circulation conclusion.

Incompatibility with Adjacent Land Uses. The EIR's discussion of incompatibilities is half a page long, nearly all of which is merely a restatement of the project's Urban Design Guidelines, and includes no actual analysis of adjacent land uses or how they may be affected by project impacts. (DEIR, p. 88) Yet the "analysis" concludes, "Implementation of the LSAP would not result in any new land uses that would be

incompatible with existing land uses.” Visual, noise, odor, traffic, and other potential incompatibilities are nowhere addressed in this section. Nor is any evidence provided that the project’s impacts would be less than significant.

The project could have potential incompatibilities with onsite and adjacent land uses, none of which are evaluated. For example, would the new development on the Country Mart site be compatible with the Mart? Would changes in views from the intensive waterfront development be compatible with existing residential uses? Would changes in density proposed be compatible with existing adjacent residential densities? Would the Plan adversely affect the Mobile Home parks?

The Project description (DEIR, pp. 52-60) states that the LSAP would require numerous substantive amendments to the City’s Zoning Ordinance and General Plan. These include listed changes to the Zoning Map, Density Bonus provisions, off-street parking and loading provisions, affordable housing requirements, Planned Development District requirements, and amendments to the General Plan’s Land Use, Circulation, Housing, Urban Design, and Public Facilities elements. Many of these changes would have city-wide implications and impacts because they would be applicable to the entire city and not just this LSAP area. The DEIR fails to evaluate the potential applicability and impacts of these changes to the rest of the City.

The discussion of conflict with a General Plan or Specific Plan fails to assess the project’s compliance with existing General Plan policies or the Zoning Ordinance.

The DEIR lists some possible general plan designations that the proposed project does not comply with, but does not analyze the Project’s lack of compliance with other general plan policies or objectives. In fact, the DEIR even admits the City has not reviewed those other General Plan policies and contemplates that the remaining policies will be rendered inconsistent with the revised policies, thus violating horizontal and vertical consistency requirements in the Government code. “The GP contains many policies, some of which may compete with each other.” (DEIR, p. 87.) Then the DEIR essentially discloses that it does not know what will be in this same DEIR and whether it will reduce impacts. “Further environmental review may be necessary if potential site specific impacts have not been addressed in this EIR.”

Further, the Project Description states that numerous General Plan policies and designations would need to be changed to allow the Project. These conflicts and proposed changes should be addressed here. Further, the implications of those changes on the remainder of the City should be assessed in terms of physical environmental impacts.

For instance, Community Character Element: Goal 2 Policy B is to “preserve natural character – marshes hillsides as components of Larkspur’s community character and identity.” Changing or eliminating this Policy signifies the City is changing the character and identity of Larkspur. No discussion of such changes is discussed in the DEIR, even though this policy is an essential, central component of the City’s General Plan.

Another example is: Open Space Element. Goal 1 – “Preserve open space e.g. wetlands and view corridors which contribute to a sense of openness in Larkspur.” Despite urbanization and density being the central goal and objective of the LSAP there is no discussion of SAP’s conflict with this policy or the impacts of the mitigation measure – eliminating Goal 1.

Similarly, there is no real CEQA analysis describing how the proposed project, including General Plan and zoning changes, would possibly conflict with other parts of the Zoning Ordinance. The DEIR simply includes a conclusion that due to zoning changes mentioned in the project description there would be no inconsistencies with the Zoning Ordinance. (DEIR, p. 88.) However, the LSAP EIR’s Project Description does not even mention which changes may occur in the Zoning Ordinance.

The DEIR’s discussion of Cumulative Impacts improperly fails to consider impacts to adjacent areas

The Land Use section fails to address cumulative effects of the project and other planned development in Larkspur and adjacent areas. Instead, this section includes a random discussion of Bay Area wide residents. (DEIR, p. 89.) This analysis is completely inadequate. It uses neither methodology accepted as a cumulative impacts study basis – projects or trends. The analysis is simply a promotional piece for the Plan Bay, and depends on the Plan Bay Area as a way to deal with growth in Larkspur Landing but it does not cite any initiatives or show how those initiatives will mitigate land use impacts in Larkspur and Central Marin. For instance, the DEIR cites entire Bay Area growth numbers but does not bother to state Larkspur, Central Marin, or Marin County numbers.

The DEIR must be revised to address cumulative impacts of this plan in association with other changes proposed in the General Plan Update and other land uses changes in nearby areas of adjacent cities and the County.

The DEIR does not include the required analysis regarding the impacts of the mitigation measures, including revising the general plan, for land use impacts

The DEIR says that significant impacts would be avoided because the plan would enhance mobility, enhance bike and pedestrian infrastructure, and include unspecified Urban Design Guidelines. (DEIR, p. 84.) The DEIR also proposes to “continue to coordinate with local and regional agencies to pursue possible enhancement to SFD that will mitigate potential long term traffic impacts.” (DEIR, p. 84.) “Continue to coordinate” is not a mitigation measure – it is a policy. And that policy is no change from existing policy. The DEIR provides no evidence or analysis as to how these “enhancements” would reduce or eliminate land use impacts of the project.

The DEIR identifies numerous significant impacts due to the LSAP inconsistency with General Plan policies and designations and zoning ordinance policies, directives and standards. The DEIR then proposes mitigation measures of amending the General Plan

and zoning ordinance to eliminate the inconsistencies and ostensibly reduce the impacts below the level of significance.

However, the DEIR includes absolutely none of the required analysis of the impact of the mitigation measures themselves as is required in CEQA. “If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed.” CEQA Guidelines §15126.4(d).) Given that the DEIR includes measures to drastically alter the existing vision of the community in the General Plan it is particularly important to discuss the impacts of these mitigation measures. Not doing so clearly renders the DEIR inadequate.

B. Transportation and Circulation

This comment letter incorporates by reference the letter prepared by Pang Ho, PHA Analytics, dated May 27, 2014 and addressed to Bob Silvestri, CVP, Inc. (Attachment 1.)

The DEIR makes unsupported assumptions regarding Travel Demand Management on which it bases transportation and circulation impacts.

The DEIR makes unsupported assumptions regarding Travel Demand Management on which it bases transportation and circulation impacts. In simpler terms, the DEIR provides no evidence indicating TDM plans and traffic caps would work. The phrase TDM only occurs in the DEIR where it states it will be implemented and it "it is estimated" that it will mitigate impacts (DEIR Project Description, pp. 51 – 52.) There isn't any description of what a TDM is in the DEIR even though the entire traffic and parking mitigation measures depend on them. The DEIR, while making unsupported generalities regarding TDM, does not analyze the traffic impacts of similar broad project measures. For instance, the project would replace offices with residences, worsening Larkspur's (and Marin's) jobs/housing imbalance. The only jobs created would be low-paying retail jobs. This exacerbation of Larkspur's job/housing imbalance would increase, not decrease, traffic generation and the DEIR contains no analysis of these probable project impacts..

"TDM" and "TMA" do show up in the DEIR under proposed revisions to the Circulation Element on page 63. However, they appear without any reference to any documents or data. The only reference in all the LSAP documents seems to be a reference in a FAQ found in the LSAP "Primer" on page 5. The Primer states that, "A more detailed explanation of the Station Area place types can be viewed in MTC's Station Area Planning Manual (2007), available on the MTC website." The DEIR must provide the decision maker and the reader references and analysis regarding its conclusions and aside from this oblique reference in the Primer (which was not referenced in the DEIR), there is no cited data, reference, analysis, or discussion of why TDM will work at suburban, highly congested locations such as Larkspur Landing.

As was stated above in the Project Description section of these comments, no supporting data or reference is provided for in the DEIR that - in a suburban area such as Larkspur - TDM or trip caps are effective in alleviating congestion. The traffic study indicated that the proposed Larkspur Station Specific Plan sub Area 1A is expected to generate a net of 7,502 new trips daily (including 411 and 459 a.m. and p.m. peak hour trips respectively). Sub Area 1B would generate 712 daily trips (including 70 and 76 a.m. and p.m. trips respectively). Since SFD is already operating at capacity these large increases to traffic are clearly significant impacts and measures to reduce those impacts must be more than unsupported assumptions. Further, the proposed TDM would have to accommodate most of the new traffic alone with no help from roadway capacity improvements.

The attached letter from PHA traffic (DEIR, pp. 139-140.) consultants states that "TDMs generally work better in highly urbanized areas such as the downtown areas in San Francisco and Oakland where traffic is highly congested and parking is limited and expensive. Larkspur is essentially a suburban city and the proposed TDM is not likely to be effective." The DEIR must provide more details and specifics of other TDM programs that successfully accommodate that many motorists in suburban settings such as Larkspur. Since the DEIR has no detail on the TDM measures, the City would arguably have complete discretion on how to impose such measures and thus, there is no objective required criteria for mitigation measures.

The DEIR makes unsupported assumptions regarding trip caps on which it bases transportation and circulation impacts.

The traffic study concluded that a 10 percent traffic cap (DEIR, pp. 163-164) would be imposed on the plan area and that new development projects would not be permitted once the cap is reached. The DEIR however, does not explain at all what trip cap measures will be for the Larkspur Landing area. Such caps cannot be negotiated for existing residents or commuters using the area. How do trip caps affect these drivers?

The traffic study indicated the area is already at or above capacity (LOS E and F during peak hour traffic operation). A 10% trip cap above the current level of traffic means the plan implementation would increase the current level of congestion and delays by additional 10 percent over background increases in traffic. The DEIR, however, fails to analyze such congestion impacts to the community and instead assumes that would have to absorb since there is little opportunity for widening of current roadways. The DEIR must disclose and analyze whether cumulative development from outside the specific plan area could generate more than the proposed 10 percent traffic cap.

The DEIR must provide substantially more details about trip cap measures and discuss how traffic would be measured and reduced. The DEIR must explain where the monitored locations will be and what criteria will be used to determine effectiveness of the trip caps. Since the DEIR has no detail on the trip cap measures, the City would arguably have complete discretion on how to impose such measures and thus, there are no objective required criteria for mitigation measures.

The DEIR Fails to Disclose Existing Conditions for Traffic and Fails to Include Analysis of Future Conditions

Fehr and Peers Study. On page 92, the DEIR declares that it bases its analysis on existing conditions and baseline from traffic counts cited in a 2012 report by Fehr and Peers.³ (See also DEIR, p. 115, Figure IV.B-4.) While the DEIR is not clear, it states that those 2011 counts were similar to 2006. Thus, it appears that the DEIR is based on 8 year old traffic counts done during a recession. These traffic counts, therefore are not existing traffic conditions and thus the DEIR traffic conclusions are faulty and misleading because traffic conditions in this area have worsened considerably since 2006 and from 2011 when this report was authored.⁴

Even if some of the traffic counts were from 2011, such analysis would have been performed during the recession when unemployment and thus, traffic counts were down. This is acknowledged on p. 112 of the DEIR – “increasing population and employment growth” and “new housing and employment centers develop” – “commute trips are also increasing.” However, this issue of higher economic activity, employment growth and increase in congestion is not addressed by conducting a new traffic count. This issue is of such importance that it cannot be remedied by disclosing the correct data dates because the public will have had no opportunity to dispute these key data points.

Study Intersections. The DEIR does not consider north and southbound ramps to Highway 101 and two intersections critical to the Sir Francis Drake (SFD) corridor, El Portal and La Questa Drives. (DEIR, p. 91.) The DEIR must include traffic analysis for these four intersections and ramps.

Existing Conditions/Baseline. The DEIR baseline is incorrect because it includes approved projects as part of its 2035 scenario. (DEIR, p. 145. Table IV.) These projects, however, should be included as the existing conditions/baseline. Not accounting for this traffic underestimates short term impacts to traffic and thus, the EIR should address the impacts of these projects under the various scenarios, including existing conditions, existing conditions plus approved projects and cumulative projects.

The DEIR lists the Transportation Authority of Marin study projects that could improve traffic conditions. (DEIR, p. 125). While this list contains specific projects, the DEIR does not contain any required detailed analysis of whether these projects will be implemented and whether they could be considered as feasible mitigation measures for the SAP.

³ DEIR, Table IV.B-9: Fehr & Peers, 2012. *Highway 101 Greenbrae/Twin Cities Corridor Improvements Project Approval/Environmental Document - Final Traffic Operations Report*. October.

⁴ Marin IJ article reports that Caltrans study in 2013 showed hours wasted dropped. ME – but there may be data on 101 that is different.

http://www.marinij.com/marinnews/ci_25195205/marin-highway-101-among-most-sluggish-freeways-bay

Freeway Segment Analysis. The freeway segment analysis in the DEIR using the volume-to-capacity (V/C) approach is inappropriate because speed affects capacity. The Transportation Authority of Marin (TAM) uses travel speed to measure freeway segment LOS, which is a more realistic way to evaluate freeway segment LOS. (DEIR, p. 118, Table IV.B9.) The DEIR should re-evaluate freeway segment LOS using either the travel speed or density based methods discussed in the Highway Capacity Manual (HCM). Further, the DEIR is very unclear whether the data are from 2010 or 2013; this should be clarified.

Lack of Corridor Analysis. The traffic report cited in the DEIR uses separate analysis for separate intersections, considering them two corridors but did not actually do a corridor analysis. (DEIR, p. 114, Table IV.B-8.) The DEIR should assess combining the two corridors and evaluate them as one. The combined corridor should include El Portal Drive and La Questa Drive. Additionally, is should report corridor wide LOS in the study.

Vehicle Queuing and Turn Lane Capacity. Since many intersections along the study corridor currently operate at LOS E and F, there may not be sufficient spacing between intersections to accommodate vehicle queues. (DEIR, p. 116.) Additionally, there may not be enough left-turn lane storage along the corridor intersections to accommodate current and projected left-turn traffic. The DEIR should provide queuing analysis for all study intersections along the corridor.

Driveways, Curb Cuts and Bus Stops. The segment of SFD east of US 101 near the ferry is currently congested during peak commute hours, and any new driveways, curb cuts or bus stops will further deteriorate traffic operation along that section of the corridor. The DEIR however, does not discuss these issues and the DEIR should discuss whether new driveways, curb cuts, and/or bus stops will be added along this section of the corridor. If so, discuss how they would be accommodated.

SMART and Golden Gate Transit Ferry. The LSAP explicitly and implicitly assumes that location along Smart Rail would reduce vehicular travel. While that may be true at stops along the SMART rail line, this site is the terminus of the line, which would likely increase traffic and parking needs at this location because people would ride to the train to take it north. Riders taking SMART south to the project area, who are not connecting with other transit systems, would be picked up by other drivers. The DEIR traffic analysis needs to address this possible increase in congestion due to such SMART-related traffic.

The traffic study attached to the DEIR does not have sufficient details about the proposed SMART train station and the ferry operation or the congestion related to Larkspur Landing being the site of the two terminuses. No details are given in the DEIR about expanding the ferry service and possible increases in traffic due to such expansion. No analysis is included in the DEIR regarding the increase in motorists from SMART and thus congestion due to construction of the SMART station. The DEIR should provide

details and analyses regarding the SMART station and probably ferry expansion, provide an estimated time line for completion of the train station, and provide cumulative impact analysis regarding the impacts from the project, combined with the impacts from SMART and the ferry.

The DEIR concludes that, “These trends indicate that while the roadway may operate near capacity (i.e., within an acceptable LOS) in the peak direction in the AM and PM peak hours, some excess capacity is present in the non-peak direction.” The DEIR, however, does not analyze either future projects or trends regarding whether such excess capacity will be filled by projected increases in traffic. That is, the DEIR only looks at supposed current numbers, not trends and thus begs the question – what are the trends that the DEIR inappropriately does not answer.

High Internal Traffic Capture. The DEIR and traffic study assume internal traffic capture up to almost 30% based on the MXD trip generation model. (DEIR, p.131, 132 Tables IV B -12,13.) However, 30% is a very high and difficult to achieve given the suburban nature of the area. Thus, this capture rate is not reasonable and the DEIR should use a lower internal capture rate that is more reflective of the Larkspur environment.

The DEIR states, “Traffic due to Larkspur Landing is typically spread out over the course of the peak hour and has less of an impact on peak congestion than the Ferry Terminal.” (DEIR, p. 130.) This sentence is not supported by any data and is misleading; what the DEIR must answer is whether existing traffic to and from Larkspur Landing is worsening. The DEIR must also report the volume of traffic from residential and commercial sources.

Accidents and Safety. The DEIR does not provide data or analysis regarding potential increase in accidents due to SAP. For instance, the City of Larkspur General Plan has a summary of intersection accidents, yet this was not cited or updated. While there is an offhand mention to accidents and safety on page 139 of the DEIR, regarding traffic impacts, the DEIR does not assess the foreseeable impact that more traffic will result in more accidents.

Ferry Service/ Smart Train Station. The DEIR and traffic study do not have sufficient details about the future ferry service and the Smart Train Station. No details were given about expanding the ferry service in the future as part of the plan. (DEIR, p.103 and 124) There is no required discussion of whether or not new residents in the proposed project area will be using the ferry to commute to San Francisco or whether or not commuters from Central Marin will ride the smart train to the north, which would bring additional traffic to the study area.

The DEIR also does not adequately discuss Smart Train generated traffic in relation to trip generation. (DEIR, p.131, 132, Tables IV B -12,13) The proposed Smart Train would generate traffic as commuters from the Larkspur area drive to the station to catch trains to travel north. As such, it should be included as a land use component in the trip generation analysis.

The DEIR must provide more details about potential ferry expansion, and provide an estimated time line for completion of the train station, and a plan to accommodate motorists should the train station is delay or canceled. The DEIR should also include the Smart Train as a project component and evaluate its trip generation as part of the plan/project.

The DEIR Fails to Disclose Specific Impacts to due to conflict with the Larkspur Community Plan to Identify Impacts of Mitigation Measures and Does Not Include Analysis or Data to Support Conclusions Regarding Significance of Impacts.

The DEIR does not discuss the impacts of its project and mitigation measures to widen SFD. Two different policies of the Larkspur General Plan clearly prohibit expansion of Sir Francis Drake Boulevard. (DEIR, p. 113.) For instance, General Plan Circulation Goal 3, Policy M states that capacity improvement for Sir Francis Drake would not be desirable for the community due to upstream and downstream bottlenecks and potential impacts to the Larkspur quality of life.⁵ Yet not only does the DEIR hide this conflict in a footnote in the environmental setting section, it does not assess the impacts because of inconsistency with these key General Plan measures and does not identify or discuss the impacts of eliminating Policy M. (DEIR, p. 135.)

The DEIR concludes that there would be a significant impact due to conflict with GP Policy C. (DEIR, p. 135.) However, there is no analysis what the conflict is or what the actual impact is. This is a disclosure document and this section does not disclose what the impact is. Further, the DEIR does not contain the required analysis regarding the impacts of the mitigation measure. For instance, what is the change in community character and noise both in and outside of the LSAP area caused by eliminating General Plan Policies on limiting traffic improvements on Sir Francis Drake?

The DEIR Fails to Disclose Specific Impacts to Intersection Operations to Identify Impacts of Mitigation Measures and Does Not Include Analysis or Data to Support Conclusions Regarding Significance of Impacts.

The DEIR under Impact Trans-2 concludes that there would be a significant impact due to conflict with GP Policy M. However, there is no analysis what the conflict is or what the actual impact is. It mentions a “more than 5 second delay.” How much more? What is the impact in terms to drivers in the various directions? This is a disclosure document and this section does not disclose what the impact is. Further, whether the project conflicts with the GP or not, the increase to LOS E is in itself a significant impact. And this impact has not been measured. Thus, it is impossible to know if adding a third lane will actually mitigate the impact. Further, the DEIR does not contain the required

⁵ The Larkspur General Plan Policy Quality of Life Goal 4, Policy d states that the following intersections are recognized to operate at LOS “E” and should not be improved due to the undesirable impacts which the improvements would cause: Sir Francis Drake Boulevard with Eliseo Drive, La Cuesta Drive, and Bon Air Drive.

analysis regarding the impacts of the mitigation measure. For instance, what is the change in community character and noise both in and outside of the LSAP area caused by eliminating General Plan Policies on limiting traffic improvements on Sir Francis Drake?

The DEIR, under Impact Trans-3, concludes that there would be a significant impact due to traffic worsening from LOS D to LOS E. (DEIR, p. 139.) But the actual impacts are not analyzed. DEIR concludes that “new project trips would worsen congestion” at the 101 northbound ramp but there is no actual analysis of how much traffic or congestion would worsen and thus, there is no analysis what the actual impact is. This is a disclosure document and this section does not disclose what the impact is. Thus, it is impossible to know if adding a third lane will actually mitigate the impact.

The DEIR states the “applicants for individual projects shall pay their *fair share* towards the addition of a third westbound through lane” and explains that such payments will combine with other future funding. (Emphasis added.) But the term “fair share” has little meaning and therefore, this funding is uncertain and the ratio is not identified. The DEIR does not explain what “fair share” is and thus, the developers’ share may well be so minimal due to legal limitations that the City and thus the taxpayer in Larkspur will bear the brunt of this impact. The developer fee ratio can be calculated using the number of residences to be constructed at Larkspur Landing, as applied to City of Larkspur fees under the Mitigation Fee Act requirements.

That is, the DEIR does not include analysis regarding the foreseeable – and probable – scenario that the developer fees will not cover the cost of the transportation and that federal or state funds will not be obtained or be sufficient. Thus, a foreseeable scenario is that the City itself must mitigate the impact and thus, a foreseeable secondary impact of increased traffic and congestion is a financial impact to the City and therefore, the taxpayers. This impact is not identified or analyzed. This financial impact is connected to a significant physical impact and thus, must be analyzed.

Further, there is no commitment to adoption of this mitigation measure and there are no criteria for determining whether the deferred measure will reduce the impact to below significance. Thus this mitigation measure is improperly deferred.

Regarding Impact Trans-4, the DEIR states that average delay would be “more than 5 seconds at SFD and Anderson Drive.” (DEIR, pp. 139.) The DEIR, however, does not state how much more than 5 seconds. The DEIR must include data on accidents in order to determine if additional traffic will result in additional accidents. What is the impact in terms to drivers in the various directions? This is a disclosure document and this section does not disclose what the impact is.

The DEIR states that Mitigation Measure Trans-4 would need to be coordinated with the City of San Rafael and the City cannot guarantee that the measure would be implemented and thus is significant and unavoidable. However, the discussion of the measure then goes on to (unusually) state what the specific mitigation measure is – a traffic signal. Given that the City of SR has recommended this measure, if funding for this traffic signal

is committed to the measure would indeed be reasonable. The City of Larkspur, however, does not identify either the developer's share or its own commitment to the project and thus this reasonable mitigation measure has been rejected improperly.

The DEIR on page 140 identifies an impact of adding traffic to the intersection of SFD and Wolfe Grade but does not call it out as a separate numbered impact. It is located under Trans-4, which is an impact to another intersection. This impact is certainly significant given the intersection is currently at LOS F. Thus a significant impact was not adequately discussed and no mitigation was identified for this impact.

Regarding mitigation measures for impacts to traffic due to increased congestion at intersections, the DEIR neglected to identify SFD/Wolf Grade as a significantly affected intersection which is, and will be, operating at LOS F.

Under the existing plus project conditions, four study intersections would operate at the unacceptable conditions of LOS F. Potentially the El Portal and La Questa Drives would likely be LOS F as well, but impacts to these intersections were improperly not included in the DEIR. Under the cumulative plus project conditions, six of the study intersections would operate at LOS F, plus potentially the El Portal and La Questa Drives, which would likely be LOS F as well.

However, many of the proposed mitigation measures are not likely to occur as the study corridor is fully developed. Further, it is foreseeable that Larkspur General Plan Circulation Policies C and M will *not* be amended due to community concerns and thus, these mitigation measures are not reasonable. The community has for years indicated no desire to widen SFD along the study corridor. The only mitigation that is likely to occur is from installing traffic signals at the Anderson Drive intersection. Thus, the significant impacts of the proposed Larkspur Station Specific Plan will not be mitigated.

The DEIR Fails to Disclose Specific Impacts or Impact Levels to Freeway Operations and Fails to Identify Reasonable Mitigation Measures

DEIR identifies a significant impact due to project contributing traffic to already congested freeway segments but DEIR does not identify it as a number impact, nor does it contain sufficient discussion of the actual impact. For instance, the DEIR does not include any specific discussion of the impacts to freeway condition. The DEIR does not include any support of its conclusion that no segments would exceed the CMP thresholds or have any increase in congestion. Further, it does not include any significance criteria to determine a significant impact or mitigation measures.

Under Impact Trans-6, the DEIR states that project would add traffic greater than 1 percent of freeway segment but does not explain in plain English what the impact actually is. (DEIR, p. 152.). Further, the DEIR identifies one mitigation measure, but that measure is not a feasible measure and thus the DEIR impermissibly does not identify any reasonable mitigation measures.

Cumulative Conditions. The DEIR (pp. 140, 150) identifies a cumulative significant impact of adding traffic to the intersection of SFD and Wolfe Grade but does not call it out as a separate numbered impact. It is located under Trans-5, which identifies an impact to another intersection. This impact is certainly significant given the intersection is currently at LOS F but no significant impact is identified in the DEIR for this impact. Further, the DEIR states that delay would not increase by more than 5 seconds and downplays any cumulative impact because cumulative traffic conditions there will increase greatly. But that is precisely what a cumulative impact is – the combination of the smaller project impact with other projects or changing trends. The DEIR also downplays the impact by stating that simply changing signal timings will solve future traffic problems. There is no basis for this statement and seems to be illogical on its face. Thus a significant impact was not adequately discussed and no mitigation was identified for this impact.

The DEIR Fails to Disclose Specific Impacts or Impact Levels to Ferry Operations and Fails to Identify Reasonable Mitigation Measures

Table IV B 14 shows that current 21,000 daily trips will increase to 29,000. These figures are generated by using a Bay Area data and modeling. But this data and modeling probably do not apply to Larkspur Landing area due to different commuting patterns and the existing full capacity of the Ferry.

The DEIR does not contain any surveys, modeling or data regarding potential increase in ferry ridership due to the SAP. According to the DEIR (DEIR, p. 153) the project will increase ridership. While there is no data to support this conclusion, if this conclusion is true, the DEIR must assess the projects secondary impacts on demand for ferry services and the impacts to the Bridge District operations.

What is the forecasted daily ridership forecasts prepared for the SMART DEIR? What is the basis for these numbers? The source again seems to be the 2013 Fehr and Peers study based on 2006 data. An actual count or survey should be prepared for the residents of Larkspur Landing area. There is no basis for the conclusion that these residents will have the same ridership numbers of other urban Bay Area communities where bus or BART service is much more frequent.

This conclusion that there are no impacts is not supported by any logical analysis. The Ferries are already full and the GG Bridge District has already predicted a rise in ridership, which they are responding to. But the increase in use of the ferry from the project has not been contemplated by the GGBD.

Another problem with their assumptions is that it is not clear whether it addresses the geographical problems of the SMART location. Most people won't make the walk.

The DEIR Fails to Disclose Specific Impacts or Impact Levels Regarding Construction Activity Interference with Circulation and Highway Operations

On page 157, Impact Trans-7, the DEIR concludes that project construction could interfere with circulation patterns. No other information is given what the actual impacts to circulation are. There is no required data, analysis or modeling regarding the impacts to circulation and thus, the impact is not adequately disclosed. While construction impacts are by their nature temporary, this project has a timeline over 20 years and therefore the construction impacts are even more extensive than a normal construction project occurring over a year or two. Thus it is even more important that the actual impacts be disclosed.

Regarding the mitigation measure, required construction management plans, there is no evidence that these measures included in the plans will actually mitigate the impacts because there is no disclosure or analysis regarding the impacts themselves. Further, this is a deferred measure, which will only be enacted later and no criteria have been established regarding the efficacy of these measures.

The DEIR Fails to Disclose Specific Impacts Regarding Parking.

The DEIR does not include any significance criteria for parking impacts. However, the Larkspur GP has parking standards and the Larkspur General Plan and Zoning Ordinance have policies and regulations regarding parking. Thus, these policies and regulations should be used as significance criteria. Further, where the LSAP has conflicts with the General Plan and Zoning Ordinance due to impacts to parking, the DEIR should identify those conflicts and inconsistencies.

While there is a brief discussion of parking in the project conditions scenario there is no discussion of the current parking conditions in the study area. For the project condition scenario (Table IV B-24 page 159), it says a total of 4,990 parking spaces would be provided for an estimated demand of 4,910. This represents a projected occupancy of 98%. Industry standards consider 85% as full occupancy. In other words, parking will be inadequate under the project condition. This may mean that motorists must drive around for extended periods of time to find parking in the study area thus increasing traffic impacts. The DEIR must identify and discuss strategies to add more parking or reduce demand for parking.

C. Air Quality

This comment letter incorporates by reference the letter prepared by Geoff Hornek, Ph.D., dated May 28, 2014 and addressed to Bob Silvestri, CVP, Inc. (Attachment 2.)

The DEIR air quality section is not well organized, is incomplete, and misplaces or erroneously interprets important information and significance criteria.

Especially confusing is the DEIR’s use of the Initial Study air quality checklist items from Appendix G of the state CEQA Guidelines as its “Criteria of Significance” (p. 179). These are general, qualitative criteria that are meant to guide CEQA analysis in all areas of California. But in each particular air district these items are made specific and quantitative by local air quality management district guidelines. In the Bay Area, the Bay Area Air Quality Management District (BAAQMD) *CEQA Air Quality Guidelines* serve that purpose. The DEIR mentions the *CEQA Air Quality Guidelines* and uses its quantitative significance criteria (p. 174-175), but does not include a complete presentation of all the criteria in one place at the beginning of the “Impacts and Mitigation Measures” section (p. 179). Instead, the criteria are scattered through that entire section and some are not easy to find (e.g., the BAAQMD acceptable cancer risk and hazard levels aren’t introduced until p. 187 leading the discussion of AIR-4 and AIR-5 impacts).

In some cases, the BAAQMD criteria are misinterpreted and their discussion takes place in the wrong subsection, or not at all. For example, The BAAQMD daily and annual criteria for project ozone precursor and particulate emissions in subsection (2) *Violate Any Air Quality Standards* (DEIR, pp. 181-182) are not “air quality standards.” They are measures of when a project begins to interfere with regional air quality plan attainment goals, or of when project emissions clearly become cumulatively considerable. As such, they should have been listed, and project emission impacts should have been discussed, in the previous subsection (1) *Conflict With Current Air Quality Plan* (p. 179). In contrast, in subsection (2) *Violate Any Air Quality Standards* (p. 181) the carbon monoxide (CO) ambient standards are the only air quality standards mentioned, but the BAAQMD also an incremental standard for PM2.5 in their CEQA Guidelines. Also there are federal and state standards for PM10 and PM2.5, which should also be included.

Regarding toxics, since a significance criteria summary table was not included up front, the BAAQMD Toxic air contaminants (TACs) criteria should have also been mentioned in subsection (2) *Violate Any Air Quality Standards* and not buried in the text of subsection (4) *Expose Sensitive Receptors to Substantial Pollutant Concentrations* (p. 187).

The DEIR is inadequate because it use different project description in the Air Quality section than in the Project Description.

There is a discrepancy between the project specified for the Larkspur Station Area in the DEIR Project Description (p. 48-49), in Tables III-1 and III-2, and the project analyzed in the air quality section (see Appendix C, Air Quality and Global Climate Change Data. The CalEEMod “Land Usage” parameters are different from those in the Project Description, though they are the same as the land use specifications used in the traffic analysis; see Table IV.B-12). For example, the Project Description specifies 920 new dwelling units under the project, while the CalEEMod Land Usage table in Appendix C

specifies 1540 dwelling units; there are similar discrepancies for all the other land use categories. Why these differences? Which “project” is being proposed for the Larkspur Station Area? Also, version 2011.1.1 of CalEEMod used in the DEIR is two years out of date; the latest version is 2013.2 and the model should be rerun with the newer version.

The DEIR improperly defers: 1) health risk assessments of TACs from construction equipment; and 2) operational health risks to the existing and proposed sensitive receptors in the Station Area

On the issue of construction risk, the DEIR says the following (p. 188; underline added):

“The Station Area Plan would be constructed over a period of approximately 15 to 20 years. Construction would result in emissions of dust and diesel exhaust. Toxic construction-related health risks are dependent on the type of construction equipment used and duration of the construction period. Due to the lack of specific construction information, a precise estimate of project construction health risks cannot be determined.”

Project construction equipment emission estimates over a 15 year construction period are presented in Table IV.C-5 (p. 183) as calculated using the CalEEMod model, the standard tool for doing construction emission estimates for CEQA studies. CalEEMod gets the emission estimates by assigning equipment types/numbers based on the size and type of the land use proposed for construction. So, there is an equipment list, construction phase duration and the opportunity sites where the construction would occur under the project. There is no reason the DEIR could not take the next step – assign those emissions to the opportunity sites, spread out in time according to the construction schedule, and use the screening dispersion model SCREEN3 to estimate health risk to sensitive uses in the Larkspur Station Area.

The DEIR uses inappropriate BAAQMD guidelines to assess construction air quality impacts

The DEIR states that AIR-I impacts are significant and mitigable. Such a finding is no reasonable given that construction would be occurring over such a prolonged period. These mitigation measures suggested by the BAAQMD are designed to reduce temporary construction impacts, not impacts that continue over long 10-20 year periods of construction for the SAP.

The DEIR improperly defers mitigation measures for criteria pollutants emissions

Regarding Impact Air-3, significant cumulative net increase in criteria pollutant emissions, the DEIR does not discuss or consider any mitigation measures. (DEIR, p. 189.) CEQA requires that DEIRs identify all reasonable mitigation measures to reduce significant impacts. This DEIR simply abandons the analysis once it is determined that the impact is significant and throws up its hands, not mitigating the mobile source impact.

The DEIR claims an up-front 19% project motor vehicle trip reduction due to the Larkspur Station Area context as a beneficial impact. And the DEIR assumes that all new residential units would have had fireplaces had project design not excluded them. There is no support for either assumption, and thus, these mitigation measures have no basis in actually reducing project emissions when very few of the project residential would have had fireplaces anyway.

The DEIR includes serious errors in assessing and mitigating risk impacts from construction and thus the DEIR has no support for its conclusions that impacts would be less than significant.

A serious error in the DEIR is the construction risk mitigation proposed and the conclusion after its implementation – that it is Less than Significant (p. 188; underline added):

“Mitigation Measure AIR-4: The following language shall be included as a Condition of Approval for new projects associated with implementation of the Station Area Plan:

“For any development project that includes buildings within 1,000 feet of a residential dwelling unit, prior to issuing building permits, a construction health risk assessment shall be conducted to assess emissions from all construction equipment during that phase of construction. Equipment usage shall be modified as necessary to ensure that equipment use would not result in a carcinogenic health risk of more than 10 in 1 million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient PM2.5 increase greater than 0.3 µg/m³. (LTS)”

The DEIR assumes that the construction health risk from each individual project when evaluated in each subsequent CEQA document will either find that risk less than significant (LTS) or be able to mitigate it to LTS. But, if a cumulative health risk analysis is not attempted in this DEIR, it cannot be assumed that the subsequent risk assessments it requires will find the construction risk less than significant. The finding for Mitigation Measure AIR-4 must be **Significant Unavoidable** until subsequent studies prove otherwise.

The DEIR includes serious errors in assessing and mitigating operational risk impacts and thus the DEIR has no support for its conclusions that impacts would be less than significant.

Similar errors are made in the operational health risk analysis and conclusions (page 190; underline added).

“The precise location of future residential units within the Plan area is unknown at this time.”

This is not true; residential is planned for opportunity sites #1, #4, #5 and #6 according to Table III-1 in the Project Description (page 49).

Also:

“Mitigation Measure AIR-5: The following language shall be included as a Condition of Approval for new projects associated with implementation of the Station Area Plan:

“As shown in Figure IV.C-2, residential units proposed within 500 feet of Highway 101, Sir Francis Drake Boulevard and/or any of the stationary sources identified in Table IV.C-7 shall be evaluated for potential health risk exposure. The applicant for a residential project within the Plan area shall prepare a report using the latest BAAQMD permit data and roadway risk estimates to determine impacts to future residents. The report shall outline any measures that would be incorporated into the project necessary to reduce carcinogenic health risk of to less than 10 in 1 million, reduce the non-cancer risk of to less than 1.0 on the hazard index (chronic or acute), and ensure the annual average ambient PM2.5 increase is less than 0.3 µg/m³. Measures to reduce impacts could include upgrading air filtration systems of fresh air supply, tiered plantings of trees, and site design to increase distance from source to the receptor. (LTS)”

The DEIR is assuming that the operational health risk at each new residential site in the area, when evaluated in each subsequent CEQA document, will either be found LTS or can be mitigated to LTS. And the potentially most important local operational TAC source, the Larkspur ferry terminal, has not been included in the list of such sources to be evaluated (indeed, the DEIR does not even mention its presence so close to the project area). Tree plantings and buffer zones are unlikely mitigations to be applicable here because the opportunity sites are relatively small and fixed. And there is very likely not enough distance and area available for these mitigations to decrease TAC exposures substantially. Air filtration systems are the only real mitigation here and since there is no TAC modeling any mitigation is completely subjective. Additionally, there would be no assurance that these systems would be maintained sufficiently to assure acceptable long-term exposures to the future residents (i.e., commonly assumed to be 30-70 years for the purposes of residential health risk assessment).

Moreover, indoor air filtration fails to address outdoor exposures to TACs. Children playing outside, or residents gardening, would have no protection from the high levels of TACs, which would pose additional cancer and other chronic risks.

The DEIR operational analysis is inadequate because it does not include quantification of TAC risk at the opportunity sites or in existing residential areas, which could be done at the screening level using data now available, with addition of a modeling estimate of the ferry TAC impacts. Yet the DEIR assumes that the future studies Mitigation Measure AIR-5 calls for will come up with mitigations that will reduce TAC exposures to LST. This finding undermines the incentive to do those future studies. Only the issues identified in this DEIR as potentially or unavoidably significant are going to be included

in the CEQA scope of the studies for the future development of each opportunity site. The operational TAC impacts have been declared LTS in the DEIR on the basis of studies that have not yet taken place (and probably never will). The finding for Mitigation Measure AIR-5 must be **Significant Unavoidable** until subsequent studies prove otherwise.

In conclusion the DEIR air quality analysis is inadequate to assure that existing and future residents the station area would not be exposed to unacceptable TAC levels. Therefore, the DEIR should conduct screening risk assessments with available data for project and cumulative TAC impacts in the Larkspur Station Area Plan County and then evaluate the need for exposure mitigations based on their results. If there is no feasible mitigation to reduce TAC impacts to LTS levels, the DEIR AIR-4 and AIR-5 impacts should be reclassified as **Significant Unavoidable**.

D. Climate Change

Impact GCC-1 states that “[i]mplementation of the Station Area Plan could result in GHG emissions that would have a significant impact and cumulatively contribute to global climate change. CEQA requires that EIRs include all reasonable mitigation measures to reduce such significant impact measures yet the DEIR is deficient in only apply vague and unenforceable mitigation measures – “a vehicle trip cap and Transportation Demand Management (TDM) program to limit the increase in vehicle trips from the plan area to approximately 10 percent above the existing traffic generated by the site.” There is no required detail as to how this trip cap would be implemented and enforced and no analysis on the feasibility or efficacy of such a measure. As importantly, there is no evidence that TDM or trip caps work, much less work at a location such as Larkspur Landing.⁶

The DEIR identifies essentially one mitigation measure but excludes strategies described by the Attorney General to reduce GHG emissions. For instance, no proposal to capture methane from the WWTP is described in the DEIR, and no carbon emission credit purchases are proposed to offset the Project’s GHG emissions. Because the DEIR does not identify reasonable mitigation measures to avoid the GHG emissions from the Project, and provides no support for its conclusions that TDM and trip caps will reduce climate change impacts, the climate change impact analysis is inadequate.

The City’s Climate Action Plan mentions the need to reduce GHGs. Since the LSAP will increase them, the DEIR must discuss this inconsistency.

⁶ The LSAP itself contains several pages regarding TDM and trip caps but does not cite any sources as to feasibility or efficacy. (SAP, p. 5.3). The LSAP refers the reader to the DEIR.

E. Noise

The DEIR does not contain sufficient detail or analysis regarding noise impacts caused by the Project.

The DEIR does not discuss in sufficient detail the conflicts with General Plan Policy – H&S Goal 11, Policy U.

p. 230 “*Traffic data used in the noise prediction model were obtained from the traffic analysis prepared by Fehr & Peers in the Traffic and Circulation section of this Draft EIR.*” Again, it is not clear whether this study relies on data from 2006 or 2011.

The DEIR impermissibly does not include any discussion, much less analysis regarding noise impacts during construction and increased permanent noise impacts to wildlife species in the Corte Madera Marsh and the surrounding areas, including listed species, such as the Clapper rail, which are sensitive to noise impacts.

The DEIR discloses that there would be impacts to nearby residents from ground borne vibrations (DEIR, p. 237) yet provides no data or quantitative or qualitative analysis determining what the impact would be. The DEIR also provides general mitigation measures but does not support its conclusion that the mitigation measures would reduce the impacts below the level of significance. That is, there is no data or quantitative analysis that provides support for the DEIR’s conclusions on noise impacts. Further, the DEIR impermissibly defers the mitigation by leaving the mitigation measures regarding noise impacts vague and nonspecific and does not include any standards or criteria to which these deferred general mitigation measures could be applied.

F. Biological Resources

This comment letter incorporates by reference the letter prepared by Peter Baye, Ph.D., Coastal Ecologist and Botanist, dated May 22, 2014 and addressed to Bob Silvestri, CVP, Inc. (Attachment 3.)

Summary

The DEIR’s assessment of project impacts arbitrarily omits long-term, indirect, cumulative, and off-site biological impacts to sensitive receptors adjacent to the Plan Area – especially the most sensitive receptor, the Corte Madera Marsh Ecological Reserve (CMMER) and its special-status plant and wildlife species. The DEIR’s biological impacts and mitigation address only temporary construction impacts within an arbitrary 100 feet zone bordering the Plan Area north of Corte Madera Creek. The DEIR does not provide any analysis of significant indirect ecological impacts or mitigation to CMMER, and the project description does not include sufficient information about physical changes within the project area to support a comparison of alternatives with less indirect impact to CMMER.

The DEIR fails to provide adequate, accurate, contemporary (i.e., relevant to the pre-project physical condition of the Plan Area and its vicinity) baseline information about the distribution and abundance of special-status species in the project area and its vicinity. The DEIR fails to assess alternatives consistent with one of its principal objectives “to identify mitigation measure to protect existing and new development from flooding and sea level rise, especially in the Redwood Highway area”.

The DEIR does not adequately assess potentially significant indirect impacts on Corte Madera Marsh Ecological Reserve and its special-status species

The DEIR Biological Resources section almost exclusively addresses direct short-term impacts of proposed project development and alternatives *within* the boundary of the Plan area (project “footprint” impacts), but neglects far more significant potential indirect and cumulative long-term impacts to highly sensitive estuarine wetlands *adjacent* to the southern end of the Plan area – namely, the tidal marshes and special-status species populations of the Corte Madera Marsh Ecological Reserve (CMMER). The DEIR fails to consider off-site impacts in the potential “effects area” of the project that border it or are in its vicinity relative to biological processes (viz., dispersal of predators, pollinators; see discussion below).

The U.S. Fish and Wildlife Services recovery plan for tidal marsh ecosystems (USFWS 2013) reported that in 2006, the highest numbers of federally listed endangered California clapper rails in central San Francisco Bay occurred in Corte Madera (Heerdt) and Muzzi Marshes in Marin County. Recovery criteria for the California clapper rail require a protected and managed “viable habitat area” at CMMER (USFWS 2013:180). In addition, USFWS (2013) asserts that the tidal marshes of Corte Madera Creek must be protected and/or enhanced in order to achieve recovery of listed tidal marsh wildlife species. The omission of this public policy, conservation status and identification of biological importance of the area causes a misleading understatement of the potential sensitive habitats and species affected by the project.

Both impact BIO-4 and Mitigation Measure BIO-4 (DEIR pp. 277-278; attachment B, this letter) narrowly assess only short-term, temporary, direct project construction-related impacts to tidal marsh habitats within proposed areas of development or land use changes within the project area. Impact BIO-4 (and other enumerated impacts) entirely fails to address indirect and cumulative impacts of the Plan’s land use change to the much larger and more sensitive CMMER habitats and populations adjacent to the plan area. For instance, Mitigation Measure Bio-4 – Tidal Marsh does not concern the impacts described above for presence of high density development. (DEIR, p. p. 278.) Instead, it addresses only construction impacts. Thus, the DEIR does not consider the impacts of or provide mitigation for operational impacts to biological resources, including: noise, people, lighting, polluted runoff, and pets nor are the mitigation measures analyzed as their effectiveness.

Further, the DEIR does not analyze any impacts to tidal marsh farther than 100 feet from the project boundary. The DEIR cites no reasonable (scientific or otherwise) basis for

limiting impact assessment spatially to a 100-ft zone around the project boundary, or short-term, temporary construction impacts.

The DEIR fails to analyze at least two significant potential long-term indirect and cumulative impacts to CMMER (tidal marsh and sensitive state and federally listed species) from proposed development or changes in land use intensity within the Plan area:

- a) CMMER special-status wildlife species (including limited to California clapper rails, California black rails, San Pablo Song sparrow, salt marsh common yellowthroat, and the salt marsh harvest mouse) are affected by avian predator populations (e.g., crows, ravens, and raptors) that are dependent on terrestrial food supply and nesting habitats.

No mitigation has been identified for this potential impact, and no alternative for Redwood Highway sub-area 2 has been identified that could offset it. The DEIR states that California clapper rails “have been detected in the tidal marsh habitat along CMC. This species may inhabit the tidal marsh habitat south of the Larkspur Ferry Terminal parking lot and other tidal marsh habitat within the Plan Area.” (DEIR p. 264.) “May inhabit” is simply not an adequate approach to describing the environmental setting and analyzing impacts for an EIR under CEQA. Surveys must be taken of the Plan and surrounding areas to determine the extent and state of this species.

- b) One special-status plant species CMMER plant, northern salt marsh bird’s-beak (Point Reyes bird’s-beak), depends on terrestrial insect pollinators for reproductive success. The DEIR identifies acreages of habitat types within the Plan Area that may support pollinator insects, but does not analyze any changes in either area (loss of habitat) or quality (degradation, reduced suitability for insect pollinator population support) of terrestrial rural/grassland, woodland, or riparian habitats. The DEIR fails to consider terrestrial pollinator limitation of special-status flowering plants of salt marshes at CMMER and fails to assess any mitigation measures to conserve pollinator populations that support special-status plant populations within CMMER. This is a potential significant impact that is unmitigated.

The DEIR omits adequate contemporary biological survey information for impact and mitigation assessment and thus does not contain the required biological resources baseline

The DEIR fails to provide adequate, accurate, contemporary (i.e., relevant to the pre-project physical condition of the Plan Area and its vicinity) baseline information about the distribution and abundance of special-status species in the project area and its vicinity. The DEIR relies on a single June survey date of reconnaissance-level observations and database queries for old (nearly all out of date) incidental records of special-status species. This preliminary level of assessment is merely a screening exercise for relative probability of occurrences, and not a substitute for actual inventory of current special-status species and assessment of potential significant impacts. The exclusive

reliance on database queries and cursory reconnaissance-level surveys may be appropriate for Initial Studies in areas with no likely special-status habitats or species, but it is inadequate for analysis of areas including or bordering known populations of sensitive habitats and species.

For instance, the DEIR states that it is unlikely that impacts to red legged frog and western pond turtle could occur and Impact Bio-1 concludes that construction activities “could” cause impacts to special status species “could” cause nest abandonment or loss of eggs or young during breeding season and would represent a significant impact. No surveys, however, were conducted to determine if these species are at the project site or in the project area of influence. Thus, the DEIR is only taking guesses as to the presence and impacts to these listed species, and not doing the required assessment and quantification of potential impacts.

Scientifically sound, spatially structured sampling or biologically timed surveys for special-status species that the DEIR acknowledges may occur in the project area, such as western pond turtles (*Actinemys marmorata*), are lacking. Similarly, the EIR cites only 1999 (15 years out of date) surveys for California red-legged frogs (*Rana draytonii*) at Tubbs Lake, and does not consider the possibility of past detection failure at low population levels in habitat with dense cover, or with non-protocol (non-nocturnal) surveys prior to listing of this species. Even though the special-status plant, northern salt marsh bird’s-beak (*Chloropyron maritimum* subsp. *palustre*) is known to occur along Greenbrae Boardwalk salt marshes, no surveys were conducted or reported for this species in the DEIR. Instead, the DEIR proposes improper deferred studies: pre-construction surveys and programmatic mitigation measures if species are detected.

Further, the DEIR does not demonstrate how the direct impacts will be reduced below the level of significance, much less how the cumulative impacts will be reduced. Cumulative impact analysis in the DEIR is completely inadequate. There is no analysis, either of other past future or current projects, nor is there any data or analysis of trends regarding those species. (DEIR, p. 285.) The only statement regarding cumulative impacts is that the project is not expected to contribute to cumulative impacts because resources are in protected areas. (DEIR, p. 285.) Yet, the DEIR text above shows that there most certainly will be impacts to those protected areas, so the conclusions in this section is contradicted by the rest of the text.

Shoreline development in neighboring areas is not assessed and thus, where an impact could possibly be mitigated by a mitigation measure, you cannot tell if a more serious cumulative impact would be mitigated. The DEIR must include scientifically sound, meaningful, and interpretable (for pre-project impact assessment and mitigation planning) biological inventories for all sensitive biological resources that are reasonably likely to occur in the project area and its biological “effects area.”

The DEIR fails to discuss alternatives integrating sea level rise adaptation for Redwood Highway

The DEIR fails to assess any alternatives consistent with one of its principal objectives “to identify mitigation measure to protect existing and new development from flooding and sea level rise, especially in the Redwood Highway area” (DEIR p. 394). This objective, if realized in an alternative, would potentially contribute to mitigation of indirect and cumulative project impacts on the CMMER, which could benefit from integrated flood protection designs for tidal marsh transition zones and adjacent development. BCDC recently published a sea-level rise adaptation conceptual plan for the CMMER (tidal wetlands) and adjacent bay lands (BCDC and ESA-PWA 2013) consistent with this objective. The DEIR failed to consider this timely and site-specific plan for one of the main planning sub-areas of the DEIR. As a result, the objective is not met by any alternatives analyzed.

The DEIR should be recirculated to provide:

1. An alternative or alternatives that meets the objective to protect existing development from sea level rise and flooding, especially in the Redwood Highway Area, so that significant cumulative impacts to estuarine marshes and their special-status species populations can be minimized or avoided;
2. Scientifically sound (protocol or equivalent) baseline surveys for all special-status species that are reasonably likely to occur within the project area (project footprint) and its biological “effects area”;
3. An adequate assessment of indirect, cumulative, long-term impacts of the proposed project on the Corte Madera Marsh Ecological Reserve, including assessment of (a) terrestrial avian predators supported by food, prey, or nesting areas within the effects area of the project; and (b) terrestrial pollinator populations serving special-status insect-pollinated special-status flowering plants in CMMER or other tidal marshes in the project vicinity, based on potential pollinator flight distances from the project area. This assessment should include evaluation of indirect impacts including pesticide use, grading, ornamental landscaping, and development.

G. Geology, Soils and Seismicity

The DEIR does not contain sufficient detail or analysis regarding impacts regarding Geology, Soils and Seismicity caused by the Project.

The geological resources section is inadequate because despite the fairly detailed plans in the project description and in the figures, the DEIR contains absolutely no discussion of the proposed construction plans. Nor does the DEIR include any estimate, even general, of the amount (e.g. cubic yards) of either the cut or fill required for the project. For instance, the project description states that several paved, parking areas would be redesigned to either allow structured parking. Such projects call for substantial cut of soil

from those areas and the square footage and location are established in the project description. Design and construction of these type projects calls for soil disturbing disturbance and removal, yet despite the project footprint being identified and despite the current ability to estimate the amount of cut and fill required, the Section G, of the DEIR makes no mention of either the project impacts or mitigation measures.

Regarding construction and geological resources, Chapter 18.34 of the Larkspur Municipal Code provides that “[a]dditional requirements apply if structures are proposed near ridgelines, require greater than 150 cubic yards of cut or fill, or propose greater than 25 cubic yards of cut or fill on properties with an average slope of 25 percent or greater. The DEIR contains no analysis regarding the standards for cut and fill in the Larkspur Municipal Code and does not provide any mitigation measures that would be required if the project triggered the criteria in the Municipal Code.

The DEIR does not contain sufficient detail or analysis regarding hazards related to liquefaction that would affect residents, workers and commuters

Liquefaction. All of Opportunity Sites 1 and 2, and the vast majority of Opportunity Sites 4, 6, and 7 are located in areas of high liquefaction potential. In addition, General Plan Goal 6 has zero applicability to liquefaction. Yet the DEIR, after a two-paragraph “analysis” of geologic issues that does not even mention liquefaction, finds that a study of geologic hazards would mitigate any geologic impact to less than significant. (DEIR, p. 299) First, studies don’t assure mitigation and not considered as mitigation measures by CEQA. Instead, analysis of relevant geotechnical mitigation measures and a feasibility determination should accompany such geological resources impact conclusions. *Oakland Heritage Alliance v. City of Oakland, 195 Cal.App.4th 884 (2011)*

Second, impacts of large-scale liquefaction such as that which may occur in nearly all of the flat portions of the LSAP area may not be mitigable. While individual buildings may survive, infrastructure will not, affecting thousands of new area residents and workers. In addition, combining this impact with the effects of sea level rise make a strong case for the unsustainability of any development on these areas. It is quite likely that this was known when the Country Mart and other Larkspur Landing buildings were located, as they have been sited to avoid the areas of highest liquefaction potential. Not only does the DEIR Geology discussion fail to address this critical issue, it is completely ignored in the alternatives’ analyses, resulting in no differences being found in geology between the No Ferry Site development alternative and the proposed project. This lack of analysis fails to inform the decision-makers and the public of the true impacts of the project and benefits of selecting an alternative that avoids the geologic hazards.

H. Hydrology and Water Quality

The DEIR does not contain sufficient discussion of existing sea level rise and flooding issues

The setting discussion does not inform the reader as to which areas were flooded in the major floods mentioned on p. 305 of the DEIR. How did these floods affect the Opportunity Sites and access to them? Also, FEMA published updated Flood Hazard Maps for the project area on March 7, 2014. The DEIR should be revised to include these maps. These maps show the entire project area as subject to either the 100 or 500-year flood hazards, or both.

All of Opportunity Sites 1, 2, 6, 7, and parts of Sites 3 and 4 would be subject to flooding from sea level rise by 2100. Lower lying parts of the site, including all of the areas currently subject to 100-year flooding, as shown on Figure IV.H-2, would be subject to several feet of flooding every day under the 2100 sea-level rise scenario. The Bay Conservation and Development Commission (BCDC) strongly urges not developing areas subject to sea level rise with the following policies adopted in their amendments to the Bay Plan. (See Attachment 4.) For instance, the Bay Plan states that: The California Climate Adaptation Strategy further recommends that state agencies should generally not plan, develop, or build any new significant structure in a place where that structure will require significant protection from sea-level rise, storm surges, or coastal erosion during the expected life of the structure. (BCDC Bay Plan, p. 10.)

The LSAP and the DEIR however, fail to consider sea-level rise in locating project development, fails to cluster development outside of the likely flood areas (as shown on Figure IV.H-3), fail to develop engineering or design solutions to this major issue, fail to conduct a risk assessment before planning to locate thousands of new residents in a hazard area, fail to consider resiliency to sea level rise, and fail to include any real mitigation for sea level rise. In addition, the project does not meet its own objective of “Identifying mitigation measures to protect existing and new development from flooding and sea level rise...” (p. 394) For instance, regarding Impact HYDRO-1, the DEIR concludes that “the Implementation of the Station Area Plan could result in substantial risk related to exacerbated flooding hazards as a result of predicted sea level rise.” (DEIR, p. 317.) The DEIR however, does not include the required data, modeling or quantitative analysis to determine the project’s flood hazard impacts on both the existing homes in Larkspur Landing and on other areas adjacent to Corte Madera Creek.

Instead, the DEIR blithely includes a single paragraph of incomplete “analysis” of this issue (p. 317), and then says that the impact can be reduced to a less-than-significant impact by the following measure: “Development projects within a mapped flood hazard zone shall incorporate measures to protect future residents and users from exacerbation of flood hazards due to sea level rise. This shall include certificates from a professional engineer or architect that floor elevations and other building requirements for construction in a flood hazard zone shall remain protective of persons and property in the event of a 55-inch sea level rise.”

This measure, however, doesn't mitigate the impact. A dry building interior is of no value if it is entirely surrounded by several feet of seawater all day every day. At the planning level, it is the obligation of the DEIR to identify planning-level strategies to avoid sea level rise hazards. One approach to this would be via CEQA alternatives that reduce the impact.

Not only does this DEIR fail to accurately characterize the severity of the impact, it also fails to consider any benefits of alternatives that would reduce or eliminate development on the most susceptible sites. For example, the Hydrology sentence under the No Ferry Terminal Development alternative (and also the No Project Alternative) states, “Implementation of the No Ferry Terminal Development alternative would result in similar hydrology impacts as the proposed project.” This is not only not supported by any evidence, it is nonsensical. Given the combined liquefaction and flood hazards of the low-lying parts of the LSAP area, the DEIR must include an alternative that eliminates development in these hazard zones.

The DEIR does not contain sufficient discussion of existing floodplain, flooding and flood hazard issues

As is stated in the EIR, the entire stretch of Corte Madera Creek, as well as many of its tributaries have experienced extreme flooding due to impervious surfaces in the watershed, development in the floodplain, inappropriate infrastructure and inadequate stream maintenance. Damage to Ross Valley cities was enormous as recently as 2005 and 2006. Yet the DEIR contains almost no discussion of the flooding hazard issues or the actual impacts of the project on flooding. There is an enormous amount of documentation of Corte Madera's flooding problems⁷ yet the DEIR contains no references to such documents or discussion that a normal plan or program level EIR should have. For instance, the Corte Madera General Plan EIR includes 41 pages of discussion, analysis and mitigation measures regarding flood hazards in the Corte Madera Creek.⁸ The LSAP DEIR has one.

⁷ See City of Larkspur, Central Larkspur Specific Plan Revised EIR, 2005, Hydrology and Water Quality,
<http://ca-larkspur.civicplus.com/DocumentCenter/View/3987>

Corte Madera Bayfront Flood Protection and Wetlands Restoration Project -
<http://bairwmp.org/projects/corte-madera-bayfront-flood-protection-and-wetlands-restoration-project;>

Federal Emergency Management Agency, Mill Valley and Ross Valley Flood Study and Physical Map Revision, Marin, California
<http://www.r9map.org/Pages/ProjectDetailsPage.aspx?choLoco=21&choProj=230>

⁸ Corte Madera General Plan EIR, April 2008, Chapter 4.8, Hydrology and Water Quality,
<http://www.ci.corte->

Given that the project will contribute to the flood hazards in an already hazardous floodplain, the DEIR must include a detailed study of the floodplain and the flood patterns and analysis of the impacts of creating more impervious surfaces and development in the floodplain. The DEIR must include a discussion of the areas of the already hazardous floodplain that will be adversely affected by approval of the SAP.

The DEIR includes one single mitigation measure for what is a severe floodplain problem and it is woefully inadequate. This measure is to adopt a General Plan amendment that states:

“Development projects within a mapped flood hazard zone shall incorporate measures to protect future residents and users from exacerbation of flood hazards due to sea level rise. This shall include certification by a professional engineer or architect that floor elevations and other building requirements for construction in a flood hazard zone shall remain protective of persons and property in the event of a 55-inch sea level rise.”

The first sentence essentially means nothing due to a lack of any specificity. There are no list of measures or criteria that must be adopted as required by CEQA and thus the DEIR improperly defers mitigation. The second sentence is similarly deficient by its lack of measures or criteria and is so vague that it is uncertain to what structures it applies to. That is, the measure is not clear whether it applies only to new construction in the project area or whether it applies to new construction in flood prone areas adversely affected by the SAP. Since there is no analysis of what flood prone areas will be affected the entire mitigation measure is pointless and thus the DEIR impermissibly does not identify any reasonable mitigation measures for impacts regarding flooding or sea level rise.

Regarding impacts addressed in paragraphs, b(1) and b(3-7), the DEIR does not assess or disclose the direct impacts due to construction or permanent placement of impervious surfaces. (p. 317-318.) Therefore, the DEIR contains no required technical data, analysis of impacts or consideration of mitigation measures for the following potential impacts:

- (1) Failure of Levee or Dam
- (2) Contributions to Runoff Water or Polluted Runoff Exceeding Stormwater System Capacity.
- (3) Alter Existing Drainage Patterns Affecting Surface Water Courses or Creating Flooding.

madera.ca.us/planning/General%20Plan/DraftEIRVol1/DEIR%20Volume%201%204-08%20Sect%204.8.pdf

Corte Madera General Plan, April 2009, Chapter 7, Flood and Floodplain Management
<http://www.ci.corte-madera.ca.us/planning/General%20Plan/GeneralPlanApril2009/Chapter%207,%20Flooding%20and%20Flood%20Plain%20Management.pdf>

- (4) Violation of Water Quality Standards.
- (5) Degradation or Depletion of Groundwater Supplies or Recharge.
- (6) Contamination of Water Supply.

The DEIR does not contain sufficient discussion of cumulative impacts regarding polluted runoff, flooding and flood hazard issues

On page 318, the DEIR concludes that construction under the Station Area Plan, in combination with construction of other areas within the Ross Valley Watershed, could increase erosion and sedimentation and degrade storm water runoff quality during the construction activities if grading and excavations occur during the wet season.” The DEIR does not however, assess or disclose cumulative projects or the cumulative impacts due to construction and the project’s operational increase in impervious surfaces from the project.

The DEIR simply concludes that Storm Water Pollution Prevention Plans would reduce potential construction cumulative impacts to a less-than-significant level. No evidence is provided to support this conclusion. Project construction is expected to occur over an approximately 20 year period and thus, SPPP are not sufficient to understand or mitigate the overall cumulative impacts of the project. A program EIR such as this LSAP DEIR is not only the ideal document for large scale analysis, but CEQA requires such analysis, whether there is subsequent regulatory approval required or not. *Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 C3d 376.

I. Hazards and Hazardous Materials

The DEIR does not contain sufficient analysis of impacts regarding contaminated groundwater and soils and the current U.S. EPA investigation of the site

The DEIR does not adequately describe the issues associated with the Ross Valley Sanitation District site in Sub area 1. The DEIR only states that “the two remaining release sites include the 2000 Larkspur Landing site (Site 1 on Table IV.I-1 and Figure IV.I-1), where contaminated soil is known....” (DEIR, p. 327),

However, there is currently an EPA investigation and remediation program in regard to this site and the RVSD is currently in discussions with EPA regarding cleanup and remediation. Therefore, given the seriousness nature of a U.S. EPA investigation, the DEIR must contain more information on the human health risks to existing and future residents if the site is disturbed, even if for remediation, and from construction. Such an analysis should include a specific discussion, analysis and proposal of mitigation measures to sensitive receptors, including wildlife, and any possible senior citizens or children living in or near the site.

J. Cultural and Historic Resources

The DEIR does not contain any site specific analysis or mitigation measures regarding cultural, archeological or anthropological resources.

First, the DEIR fails to include any Phase I or II surveys of the LSAP site. Also, the preparers of the DEIR failed to complete consultation with the local coastal Federated Indians of Graton Rancheria pursuant to SB-18. Although the SB-18 process is not a component of CEQA, it is required for changes to general plans. (Government Code §65352.3.) Therefore such a consultation should be an important component of the Cultural Resources impact analysis because the LSAP calls for such extensive changes to the Larkspur General Plan.

In general, the mitigation measures for CULT-1 and for historical resources regarding City General Plan and municipal code sections provide discretion on the part of the City and the surveyor. This measure could be interpreted by the City to allow the City to simply document or report on arch, anthropological and historic resources. However, simply documenting resources is clearly not sufficient under CEQA. (CEQA Guidelines § 15126.4(b)(2); *League for Protection of Oakland's Architectural & Historic Res. v. City of Oakland*, 52 Cal. App. 4th 896 (1997).) Therefore, the DEIR needs to make more definitive commitments to preservation of sites artifacts. And in order to not be impermissibly deferring mitigation, the DEIR needs mitigation measures that include criteria for which later specific mitigation measures must adhere.

The City's heritage preservation ordinance does not provide the kind of protection to these resources that is required by CEQA. Chapter 15.42 requires that "complete and accurate" records of archaeological findings be submitted to appropriate repositories. Chapter 18.19 includes provisions "for the review, evaluation, enhancement, protection and preservation of natural phenomena, structures, sites and areas that possess unique character, special architectural appearance, historical value or which generate special aesthetic or cultural interest."

This ordinance allows discretion by the City whether to require preservation of all artifacts. While it is arguable that the City General Plan policies and the historic preservation ordinance should direct the City to protect these sites and artifacts, where such sites and artifacts are not identified by the CEQA process, the City may interpret its ordinance to not require the scrutiny and protection that is required. Thus, it is necessary for this DEIR to clarify and commit to mitigation measures for preservation of historic, anthropological and archeological sites and artifacts.

K. Public Services

The DEIR does not contain any projection or study of fire protection services and understates the impacts

There is a significant project-specific and cumulative impact on fire protection services because such services in Larkspur are already strained. As noted in the DEIR, the Larkspur Fire Department (LFD) has reported that it is currently understaffed and is below industry standards/ The DEIR also discloses the need for a renovation of the fire station on Magnolia Avenue. (DEIR, page 370.) Further, the DEIR on page 370 also discloses that the LFD may be slightly less effective at meeting its target response time (5 to 7 minutes 90 percent of the time) and would not be able to provide an acceptable level of service unless additional staff and fire/paramedical equipment are placed in service. A response time over 7 minutes to the Project site is inadequate to meet acceptable standards.

Despite the staffing problems and the impacts to staffing, the DEIR does not contain any required calculation or estimates regarding the number of new LFD staff or of the costs of improving Fire Station 16. The DEIR simply says “it is anticipated” that the project will increase demand for fire services. The DEIR rationalizes its lack of analysis by stating, “*LFD does not have a methodology for calculating the need for new officers or facilities*” (e.g., percentage of population or number of calls). We are aware of no such excuse for lack of impact analysis in CEQA.

Mitigation Measure PS-1 is similarly vague and it is improperly deferred, with no required criteria.

Measure PS-1 provides a vague mitigation measure that the City shall at some point identify a formula for the developer’s fair share. But the mitigation proposed in the DEIR would not guarantee the full funding of new staff or of renovation of Fire Station 16. Given limitations on municipalities’ ability to charge development fees under the California Mitigation Fee Act, there is no assurance that the City will be able to pass a substantial portion of the fees on to developers. Since Measure PS-1 will be ineffective at providing adequate public fire service response times and services Impact PS 1 is a Class I impact.

School Impacts. The DEIR currently does not have accurate data regarding school attendance restrictions. The Kentfield School District letter of May 14, 2014 identifies the correct projections that the DEIR should use.

L. Utilities and Infrastructure

The DEIR violates the Water Code and CEQA by not including a Water Supply Assessment

SB 610 requires that agencies prepare Water Supply Assessments for residential projects larger than 500 units and include them in the project draft environmental impact report. (Water Code § 10910 et seq.) The Larkspur Station Area Plan proposes 920 new residences and thousands of square feet of new commercial use. The Station Area Plan and the accompanying Draft Environmental Impact Report (DEIR), however, do not include any required Water Supply Assessment (WSA) determining whether there is adequate water supply for the proposed development.

The DEIR concludes on page 387 that a WSA “would not be required” because “the Station Area Plan is a policy document” and that WSAs are only required for specific projects meeting the criteria included in Section 15155 of the CEQA Guidelines.” However, neither SB 610, which requires WSAs, nor Section 15155, provides any authority for the notion that a proposal for a 900-unit development is exempt from WSA requirements because the DEIR is labeled a policy or "program" EIR. In fact, an area plan is precisely the type of agency action that CEQA and the Water Code contemplate. CEQA requires that program level analysis of water supply is required for development addressed in area and specific plans. *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 199, 206.

Both the Water Code provisions on WSAs and Section 15155 refer to “project” as within the CEQA definition of a project found in Section 21080 of the Public Resources Code. Section 21080 has been broadly interpreted by the courts to include program and policy level decisions that commit an agency to action or substantially forward an agency’s decision process. *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116. Further, the City has already acknowledged that this agency action – approve the LSAP – is a “project” for purposes of CEQA by preparing this DEIR.

Both the Water Code provisions on WSAs and Section 15155 refer to “project” as within the CEQA definition of a project found in Section 21080 of the Public Resources Code. Section 21080 has been broadly interpreted by the courts to include program and policy level decisions that commit an agency to action or substantially forward agency’s decision process. *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116. This includes program-level analysis of water supply for development addressed in area and specific plans. *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 199, 206. The Court found that, “Respondents argue that because they intend to undertake site-specific environmental review of each of the four “phases” of development, they can properly defer analysis of the environmental impacts of supplying water to the project until the actual source of that supply is selected sometime in the future. But “tiering” is not a device for deferring the identification of significant environmental impacts that the adoption of a specific plan can be expected to cause.”

(Id.) Further, the City has already acknowledged that this agency action – approve the LSAP – is a “project” for purposes of CEQA by preparing this EIR. “

The definition in Section 15155, cited by the DEIR, does not define project but states which kind of CEQA projects are subject to WSA requirements. These projects include; “[a] residential development of more than 500 dwelling units.” There is nothing in Section 15155 that limits this definition to projects where specific entitlements are approved. In fact, a program or area plan DEIR relating to a defined area is precisely the type of CEQA project and document for which a WSA would assist the decision makers and the public in examining scarce water resource. (See *supra Stanislaus Natural Heritage Project at 206.*) Since each development proposal under the LSAP may be less than 500 units, now is the time to prepare a WSA.

Not assessing the water supply issues for the development proposed in the SAP, also runs afoul of the CEQA prohibition against piece meal. *Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 C3d 376, is the seminal CEQA decision regarding the scope of the project requiring detailed analysis for future, related projects. *Laurel Heights* directs agencies to consider impacts in early stage EIRs that are foreseeable, even if not currently being proposed. (*Id* at 390.)

Later interpretations of *Laurel Heights* have also found that tiering is not an excuse to not assess future, foreseeable impacts of related projects: “but tiering ‘is not a device for deferring the identification of significant environmental impacts that the adoption of a specific plan can be expected to cause.’” *California Native Plant Soc. v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 623-25. Thus, postponing such analysis to later smaller projects is impermissible piece meal of the analysis and is proscribed by CEQA. The DEIR then must be recirculated to include a WSA in the DEIR.

The DEIR improperly assumes consistency with the relevant Urban Water Management Plan and does not contain any modeling or projections to support its assumptions.

The DEIR states on p. 387-8 that only a portion of the increase in water demand caused by the LSAP is contemplated in the MMWD Urban Water Management Plan (UWMP). (Marin Municipal Water District 2010 Urban Water Management Plan.)⁹ Therefore, the LSAP project is not consistent with the UWMP. However, there is no actual impact analysis of this obvious inconsistency with the key water plan for the area. Instead, this impact is brushed off by stating that the City will update its General Plan in 2015 to show more population growth. This is irrelevant because: 1) that update is in the future and 2) the LSAP conflict with the UWMP exists now. Instead of blithely assuming consistency with the UWMP, this LSAP DEIR must address the impact caused by the inconsistency of the LSAP with the UWMP, the key water planning document for the area.

⁹ <https://ca-marinwater.civicplus.com/DocumentCenter/View/533>.

Specifically, the DEIR must identify how much water is available (demand assumption) for the plan area in the UWMP and compare the project's water demand to that assumption. The DEIR must also determine whether the UWMP indicates adequate supplies for the LSAP and if not, the DEIR should state how water will be obtained.

The mitigation measure for this impact is irrelevant to consistency with the UWMP; claiming that MMWD will serve the project does not mitigate the fact that the LSAP is inconsistent with the UWMP. First, the MMWD has provided no support that it would take an act inconsistent with the UWMP. Even if such a request were accommodated by the MMWD, it would simply mean the MMWD would be ignoring its own plan. Since MMWD has not in fact issued a letter of can and will serve and since MMWD has not stated that it will not adhere to the UWMP, this mitigation is not feasible. Assuming the MMWD will serve the project is impermissible deferral of a mitigation measure because it is completely out of the control of the City.

The DEIR's analysis regarding wastewater and storm water infrastructure and services is inadequate and understates the impacts

Water Facilities. The DEIR concludes that because the Infrastructure Needs Technical Report concludes that the “redevelopment of the Plan area would likely require installation of recycled water infrastructure.” (DEIR, p. 388.) Yet the very next sentence concludes that implementation of the LSAP would not require any construction of new water facilities. This, of course, makes no sense. If the project would require installation of infrastructure, how could the LSAP not require installation of infrastructure? The DEIR needs to assess and analyze the impacts of water demand and the need for infrastructure.

Wastewater. The DEIR discloses that existing sewage lines lack structural integrity and are deteriorating. (DEIR, p. 388.) The DEIR further discloses that the Regional Water Quality Control Board has issued a cease and desist order for the Ross Valley Sanitation District due to the deteriorated conditions of the system.

Yet the very next sentence of the DEIR concludes that adding demand to these lines of 0.19 mg would have no impact. There is no support for this conclusion and such a conclusion contradicts the evidence that RVSD infrastructure is currently overburdened and potentially in violation of state and federal law. Also, there is no other support for the conclusion of no significant impact, such as an opinion of the CMSA or RVSD that adding demand to the aging lines will not adversely affect the wastewater infrastructure.

The only support for this conclusion is two sentences in the Infrastructure Technical Report in Appendix E.

“It’s important to note that, while the existing lines may require replacement in the near future due to deteriorating structural integrity, the current line sizes appear to be adequate to support the development of the Preferred Plan for the

station area. Aging lines requiring repair or replacement would require the work whether or not there was any new development in the area.”

First, that the “current line sizes appears to be adequate” is simply a conclusion not based on any data or analysis. It is simply an opinion of the anonymous author of the study. The second section is not an analysis that is consistent or compliant with CEQA. CEQA requires that the impact be discussed and quantified and not brushed off simply because the existing conditions are degraded. In fact, a project impact to an already degraded resource is typically considered cumulatively significant under CEQA. Instead, the obvious conclusion is that there will be a need to replace those sewage treatment lines even earlier than planned and that they may well need to be of an expanded capacity.

Further Mitigation Measure UTIL-2 simply does not qualify as a mitigation measure because it only requires that a study be prepared at a future date. Such deferred future studies do not comply with CEQA’s mitigation requirements to identify specific mitigation measures. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296. The vague promise that the project applicants shall be responsible for any modifications to the facilities is uncertain, deferred and unenforceable. Thus the DEIR has not provided any support at all for its conclusion that there is no impact to sewage treatment infrastructure.

Storm water Facilities. The DEIR impermissibly relies completely on later compliance with environmental regulations to avoid any quantitative analysis or discussion of the storm water impacts. (DEIR, p. 340). This area is adjacent to complex wetland areas and while later project applicants may have to comply with certain standards, the cumulative impacts of these runoff into Corte Madera Creek and its adjacent wetlands must be discussed in this EIR.

The DEIR’s lacks assessment of indirect and cumulative impact assessment regarding connected water district supply and connected water bodies and water quality

The DEIR concludes that there would be no cumulative impacts to water supply because of an unenforceable vague water conservation mitigation measure. (DEIR, P. 141.) The DEIR makes this conclusion despite absolutely no mention of past present or future projects or impact trends regarding Marin County’s water supply. Marin’s water supply has been in near emergency drought conditions for 40 years due to its small reservoirs. The MMWD in recent years has begun importing water from Sonoma County. The source is the Russian River, a river system that has water quality issues and is over capacity for Sonoma County. Sonoma County relies on using Eel River water to replenish its water supplies, in part due to MMWD demand. Withdrawals from the Eel River have resulted in impacts to federal Endangered Species including steelhead and Coho Salmon. The DEIR fails to even mention these potential indirect and direct impacts either in this system or in the Biological Resources section. The DEIR also improperly does not analyze the secondary and cumulative impacts regarding water supplied from the Russian River. The DEIR should discuss that water supply rights to Russian River water are held

by Sonoma County Water Agency, and supplies are delivered on a discretionary basis with no guarantee that future supplies will in fact be available.

Similarly, the DEIR includes no required cumulative impact discussion regarding storm water or sewage treatment infrastructure. The DEIR includes no list of past, present, or reasonably foreseeable projects or a summary of projections as required by CEQA. (CEQA Guidelines, § 15130(b).) For instance, storm water runoff enters the Corte Madera Creek and the San Francisco Bay, which both have water quality issues due to the dozens of municipalities discharging storm water to the Bay and its tributaries. The EIR's conclusion that there will be no cumulative storm water or sewage infrastructure impacts has no support and thus is improper.

V. ***ALTERNATIVES ANALYSIS***

Statutory Background

CEQA states that projects shall not be approved “if there are feasible alternatives or feasible mitigation measures available which would substantially lessen ... significant environmental effects” (*Citizens for Goleta Valley v. Board of Supervisors*, *supra*, 197 Cal.App.3d at 1182, citing Pub. Res. Code §21002.) The lead agency’s decision with regards to the feasibility of alternatives must be based on substantial evidence in the record. (*Id.*) The purpose of the alternatives analysis is to identify environmentally superior methods of attaining project objectives, although it must be noted that not all project objectives must be met, or met fully. (CEQA Guidelines §15126.6.)

One of the most significant flaws of this DEIR is that it fails to use the correct baseline when comparing alternatives, thus compromising the integrity of any conclusions concerning the identification of environmentally superior alternatives or project components. Because alternatives analysis is so essential, the DEIR must be revised and recirculated to provide the decision maker and the public the opportunity to examine reasonable alternatives as required by CEQA. (CEQA Guidelines, §15088.5

The DEIR Improperly Dictates a Small Range of Alternatives

The alternatives are incorrectly developed and assessed with respect to traffic, housing, liquefaction, and sea level rise, as described below:

1. The DEIR states that the No Build Alternative would “not allow the City to accommodate its RHNA [regional housing allocation] assigned by ABAG...” Given that the Land Use chapter states that none of the Housing Priority Development Areas identified in the 2010 Housing Element are located in the Plan area, this statement appears to be false.
2. Rejection of the Alternative Station Plan Area Location conflicts with the Plan-recommended policy to “Work with SMART and GGBHTD to study an alternative location for the Larkspur SMART station in the vicinity of the ferry

- terminal.” (p. 58). Why does the Plan have a policy that it then states is infeasible to implement?
3. Project Objective 6 is: “Identify mitigation measures to protect existing and new development from flooding and sea level rise, especially in the Redwood Highway Area.” First, the DEIR does not contain sufficient analysis of this objective for the Preferred or other alternatives. Second, the No Project Alternative meets this objective far better than does the project because it locates development on higher areas of the site less susceptible to sea level rise compared to the project, yet the discussion on p. 396 says that this alternative does not meet that objective. The DEIR should state why and provide support for its conclusion.

The DEIR states that, “[t]he Station Area Plan is intended to encourage an increase in development around the proposed Larkspur SMART Station” and uses this intent to exclude other alternatives that meet the project objectives. Yet, increasing development around the SMART station is not actually identified as a project objective of this DEIR and thus cannot be used to eliminate other reasonable alternatives that meet the project objectives, including the No Build alternative and the Alternative Station Plan alternative.

The DEIR provides for three alternatives, all with substantial amounts of growth, 990, 620 and 560 residential units. There is no other smaller, feasible action alternative mentioned that has a reasonable but smaller amount of growth that would meet the project objectives. As mentioned above, the City is inappropriately narrowing the range of alternatives by contending that other alternatives don’t meet the project objectives, specifically Objective 3. Objective 3 appears to be based on the assertion in the LSAP that “[t]he ‘Transit Neighborhood’ represents the least dense and least intensive of the classifications to study.” (Station Area Plan Overview, p. 5.) However, neither the LSAP nor the DEIR provide any support for limiting alternatives based on a Transit Neighborhood being the only classification to study. For instance, the Metropolitan Transportation Commission *Toolbox Handbook* provides other classifications for small to medium sized municipalities with less dense classification such as “small town,” a descriptor used for communities similar to Larkspur such as Danville and Morgan Hill. (See Metropolitan Transportation Commission *Toolbox Handbook*, p. 15.)

Therefore, a reasonable, feasible alternative providing for “small town” density with few of the SAP’s impacts and most of the benefits would be a slight expanded erosion of the No Project Alternative. But the DEIR improperly does not consider such a classification and thus, improperly excludes reasonable alternatives.

Finally, the analysis of the alternatives in the DEIR is not adequate for purposes of CEQA. Much of the analysis of these alternatives is not an objective discussion of comparison of alternatives but instead is a negative critique of the project compared with the SAP.

The DEIR does not provide evidence regarding its conclusions concerning the Environmentally Superior Alternative

Under the discussion of the Environmentally Superior Alternative (DEIR, p. 408), the DEIR finds that the No Ferry Terminal Development alternative (environmentally superior alternative) “does not fully meet the objectives of the Station Area Plan”. But the Plan itself fails to meet the sea-level rise adaptation objective, while the No Ferry Terminal Development alternative better meets that objective. Further, as described above, objectives involving meeting regional housing needs are unfounded in fact. Further, geologic and hydrologic hazards would result in subjecting low-income residents to severe environmental hazards. The DEIR must reevaluate the compliance of all alternatives ***and the proposed project*** to the project objectives, as this analysis is illogical, unsupported and at worst, false.

The DEIR does not include required reasonable reduced development alternatives and improperly concludes the No Project Alternative does not meet the project objectives

The DEIR dismisses the No Project Alternative because it ostensibly does not “increase the housing supply, particularly affordable housing near the SMART Station, meeting the City’s share of regional housing needs.” There is absolutely no support for this statement. First, the No Project Alternative *does* allow for housing supply near the SMART station. Just like the City can amend its General Plan to accommodate 900 homes and affordable housing at Larkspur Landing, the City can amend its General Plan to allow for additional affordable housing at the Ross Valley Sanitary site (in fact a proposal was made in 2011 for an addition of over 250 units of housing on that site). Even if this were not viewed as No Project, a slightly altered version of the No Project Alternative allowing for more affordable housing. Again, meeting the share’s regional housing needs at Larkspur Landing is an objective that is not required by any existing Larkspur or State of California policy and thus is simply a measure intended to impermissibly narrow the scope of the alternatives.

OTHER CEQA CONSIDERATIONS

Visual Resources

The DEIR improperly excludes analysis of visual quality. The Larkspur Landing area is highly prominent in views from SFD, the Bay, and the Larkspur Landing area. Currently, views of the shoreline and Bay are available from the Marin Country Mart, nearby residential areas, and nearby office areas. Further, views from the Bay (from ferries and pleasure craft) are of low-lying structures and prominent open ridges. These views would be substantially blocked by the massive, intense urban development proposed in this Plan. Yet the assessment of visual quality is relegated to a single page of text plus a map of height limits under “Effects Found Not to Be Significant” (DEIR, p. 414-416).

Further, this “analysis” consists almost entirely of a list of 1990 General Plan policies, which will be revised or possibly eliminated when the new General Plan is adopted. The

three short “analysis” paragraphs on the top of p. 417 merely state that the project should avoid impacting views of the hills and the Bay, but do not include any analysis of whether these views would be adversely affected. The project’s Urban Design Guidelines and other City design policies are mentioned in a conclusion that there would be no impacts.

A mere listing of policies does not constitute an analysis; instead CEQA requires that an EIR “apply” the relevant standards for evaluating impacts. See *Trisha Lee Lotus v. Caltrans* (2014) 167 Cal.Rptr.3d 382, 400. Therefore, the DEIR must consider the City’s Urban Design Guidelines and other City design policies in determining significance. In addition to such significance determination, where the project is inconsistent with the City design policies, the DEIR must discuss and analyze such inconsistencies.

The DEIR states on page 414 that building heights east of US 101 will be allowed to range from two to five stories. The DEIR, however does not describe how such large buildings would affect views from public vantage points such as Sir Francis Drake Boulevard, the area bike paths or the Marin Country Mart farmer’s market. Despite the existence of proposed building sizes and typical designs, there is no visual resources modeling or figures to allow comparison of pre-project views and post-project views.

The DEIR does not include any mitigation measures, but only includes a sentence that is not a mitigation measure but simply a random sentence regarding a possible policy change by the City: “On sites with significant topography variances, taller buildings could be situated against the hillside to minimize impacts to views through the site.” This sentence, of course is not a mitigation measure as it is uncertain, unenforceable and deferred. Given that the LSAP does identify potential building heights, actual height or story or location limits could reasonably be adopted in the LSAP DEIR.

Growth Inducing Effects

CEQA requires that an EIR “discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment.” (CEQA Guidelines §15126.2(d).) This includes projects that will remove an obstacle to growth, such as the expansion of a wastewater treatment plant and construction or expansion of a fire station. The DEIR does not adequately explore growth-inducing impacts and falsely concludes that the Project would not induce growth. (DEIR, p. 413, 418.) Growth inducing impacts should be treated as Class I.

The DEIR specifically concludes that because the Station Area Plan is consistent with Plan Bay Area and it intends to concentrate development Plan Area and support transit ridership and meet the City’s regional housing goals “it would not create a significant impact by inducing substantial unforeseen population growth in an area, either directly or indirectly.” But the DEIR does not provide any discussion of the demographics, growth pattern or projections on population growth and the impacts of rezoning on growth inducement and thus, the DEIR provides absolutely no support for such a conclusion.

Instead, the DEIR simply reports that population will be growing in the San Francisco Bay Area and LSAP will accommodate such growth. Instead of analyzing whether the project will contribute to growth it analyzes how the LSAP will accommodate it. This growth allowed by LSAP only begs the question that is required to be answered in CEQA documents; how will LSAP contribute to or induce this growth? And if it won't, the DEIR should state why it won't be contributing to the growth.

While not stated, it is possible the DEIR is claiming that more density will allow for better more focused growth. But the DEIR does not analyze that or provide project measures that would allow for such focused growth. For instance, the DEIR does not provide any evidence that amending the General Plan to allow more growth in the Larkspur Landing area will reduce growth in other parts of Larkspur or the Bay Area.

Areas of Known Controversy

CEQA Guidelines Section 15123 requires that Areas of Known Controversy identified by the public or other agencies and Issues to be Resolved be summarized in an EIR. The DEIR improperly did not include a discussion of these areas, which could include the controversies regarding: drastic level of General Plan revisions, TDM and trip cap efficacy, traffic modeling and conclusions, level of impact to listed species and habitat, etc.

CONCLUSION

Because the CEQA tiering and state planning and zoning processes have been so drastically circumvented, we request that the LSAP and the DEIR be withdrawn and the entire process started anew with a clearer, more transparent planning approach. If Larkspur will not withdraw the LSAP and the DEIR, then the DEIR must be re-circulated for public review and comment pursuant to CEQA Guidelines Section 15088.5 because the DEIR is so functionally and basically inadequate that it precludes meaningful public review.

For the above reasons, if the DEIR is revised and re-circulated for public review and comment, it must include complete and accurate information regarding the project description, baseline, impacts, alternatives and mitigation measures.

Respectfully submitted,



Edward Yates

cc:

California Department of Fish and Game
NOAA Fisheries
US Fish and Wildlife Service
Regional Water Quality Control
Board State Water Resources
Control Board
State Office of Historic Preservation
State of California Native American Heritage Commission
US Army Corps of Engineers

LIST OF ATTACHED REFERENCES

1. Letter from Pang Ho, PHA Analytics, dated May 27, 2014 and addressed to Bob Silvestri, CVP, Inc
2. Letter from Geoff Hornek, Ph.D., dated May 28, 2014 and addressed to Bob Silvestri, CVP, Inc.
3. Letter from Peter Baye, Ph.D., Coastal Ecologist and Botanist, dated May 22, 2014 and addressed to Bob Silvestri, CVP, Inc.
4. Excerpts from: Bay Conservation and Development Commission, *Bay Plan Amendment*, 1-08, by Resolution 11-08, 2014, Climate Change Findings, Pages 10-17.

ATTACHMENT 1



PHA Transportation Consultants

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May 27, 2014

Bob Silvestri
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Dear Mr. Silvestri:

This letter responds to your and Edward Yates' requests for comments on the Transportation/Circulation section of the Larkspur Station Area Plan Draft Environmental Impact Report (DEIR). The purpose of our peer review is to evaluate whether or not the traffic study has adequately identified the potential traffic impact of the proposed plan and provided reasonable and feasible mitigation to minimize project impact.

Our comments are organized in two parts. Part I focuses on the study's methodology, assumptions, and technical aspects of the analysis and mitigation measures proposed. Part II looks at other areas of the report that we think need clarification and/or further analysis. Our comments and recommendations are as follows:

Part I

1. Study Intersections/Freeway Ramps and Merge Area (p. 91)

While the traffic study evaluated a number of intersections along Sir Francis Drake Boulevard (SFD), it neglected two intersections, El Portal and Laquesta Drives. Both intersections have long left-turn lanes and high volumes of left-turn traffic, and are critical to the operation of the SFD corridor. Also, the ramps to and from freeway US 101 in both north and southbound directions should also be evaluated as part of the study as traffic at these points may back up and affect circulation on SFD.

Recommendation

Evaluate traffic LOS for these two intersections and the ramps and merge areas at US 101 at SFD as part of the study.

2. Study Scenarios (p. 92, Table IV, B-16)

The study identified a number of approved projects but evaluated their impact as part of the 2035 cumulative scenario. These projects, which are either approved or under construction, will likely add traffic to the study area in the next several years, ahead of the proposed Larkspur Station Specific Plan implementation. This will in effect change the baseline traffic significantly. Not accounting for traffic from these projects would underestimate traffic for both existing and short-term conditions.

Recommendation

Add a short-term study scenario to evaluate the impact of these recently approved projects. To address the impact of these projects, the study scenarios should be evaluated in the following order:

1. Existing conditions,
2. Existing plus approved projects conditions,
3. Existing plus approved projects plus Larkspur Station Specific Plan,
4. Cumulative 2035 without Larkspur Station Specific Plan,
5. Cumulative 2035 with Larkspur Station Specific Plan.

3. Freeway Segment Analysis (p.118 Table IV. B-9)

The freeway segment analysis in the report using the volume-to-capacity (V/C) approach is inappropriate because speed affects capacity. When traffic is at a stop-and-go condition, lane capacity is significantly reduced, as is the amount of traffic able to pass through (or be counted), when compared to a free flow condition. Transportation Authority of Marin (TAM) uses travel speed to measure freeway segment LOS, which is a more realistic way to evaluate freeway segment LOS. Further the discussion indicated the freeway data were from Caltrans 2010 PeMS report, but it is confusing that the Table IV. B-9 footnote indicates source from a May 2013 Fehr and Peers report.

Recommendation

Re-evaluate freeway segment LOS using either the travel speed or density based methods discussed in the Highway Capacity Manual (HCM). Please also clarify freeway data dates.

4. Corridor Analysis (p.114 et al Table IV. B-8)

The traffic report indicated that the study intersections were evaluated as two corridors using VISSIM and SIMTRAFFIC models, but reported only individual intersection LOS, neglecting corridorwide LOS. Corridorwide LOS is likely very poor due to the number of intersections already operating at LOS E and F.

Recommendation

Combine the two corridors and evaluate them as one. The combined corridor should include El Portal Drive and La Questa Drive. Additionally, report corridorwide LOS in the study.

6. Traffic Count Data (p.115 Figure IV. B-5)

The report mentioned that traffic counts were first conducted in 2006 and then updated or compared with counts from 2011 from another report to determine its validity. However, it is not clear whether the 2006 or 2011 counts were used in the report (it appeared 2006 counts were used). In general practice, traffic counts more than two years old should not be used.

Recommendation

Clarify what traffic counts were used in the report and collect new traffic counts if necessary.

7. Vehicle Queuing and Turn Lane Capacity (p.116 Table IV, B-8 et al.)

Since many intersections along the study corridor currently operate at LOS E and F, there may not be sufficient spacing between intersections to accommodate vehicle queues. Additionally, there may not be enough left-turn lane storage along the corridor intersections to accommodate current and projected left-turn traffic. Spill over traffic from turning lane affects through traffic movements and corridor operation.

Recommendation

Provide queuing analysis for all study intersections along the corridor.

8. Data Presentation (p.136 Table IV, B-14 et al.)

The intersection LOS summary shows LOS F intersections with symbols >80 seconds or >50 seconds for all study scenarios. This is misleading, as it does not show the incremental and cumulative impact of the project on traffic operation.

Recommendation

Show actual calculated delays for all LOS F intersections for comparison purposes, even if they are theoretical.

9. Parking Analysis (p.159 Table IV B-24)

While there is a brief discussion of parking in the project conditions scenario there is no discussion of the current parking conditions in the

study area. For the project condition scenario, it says a total of 4,990 parking spaces would be provided for an estimated demand of 4,910. This represents a projected occupancy of 98%. Industry standards consider 85% as full occupancy. In other words, parking will be inadequate under the project condition. This may mean that motorists must drive around for extended periods of time to find parking in the study area.

Recommendation

Identify and discuss strategies to add more parking or reduce demand for parking.

10. Driveways, Curb Cuts and Bus Stops (not addressed in the report)
The segment of SFD east of US 101 near the ferry is currently congested during peak commute hours, and any new driveways, curb cuts or bus stops will further deteriorate traffic operation along that section of the corridor.

Recommendation

Discuss whether new driveways, curb cuts, and/or bus stops will be added along this section of the corridor. If so, discuss how they would be accommodated.

11. Ferry Service/ Smart Train Station (p.103 and 124)
The traffic report does not have sufficient details about the future ferry service and the Smart Train Station. No details were given about expanding the ferry service in the future as part of the plan. No discussion of whether or not new residents in the proposed project area will be using the ferry to commute to San Francisco. No discussion whether or not if commuters from around Larkspur will ride the Smart Train to the north, which would bring additional traffic to the study area.

Recommendation

Provide more details about potential ferry expansion, and provide an estimated time line for completion of the train station, and a plan to accommodate motorists should the train station is delay or canceled.

12. Smart Train as a land use component (P.131, 132 Tables IV B -12,13)
The proposed Smart Train would generate traffic as commuters from the Larkspur area drive to the station to catch trains to travel north. As such, it should be included as a land use component in the trip generation analysis.

Recommendation

Include Smart Train as a component and evaluate its trip generation as part of the plan/project.

13. High Internal Traffic Capture (P.131, 132 Tables IV B -12, 13)

The study assumes internal traffic capture up to almost 30% based on the MXD trip generation model. This may be high and difficult to achieve given the suburban nature of the area.

Recommendation

Consider using a lower internal capture rate that is more reflective of the Larkspur environment.

14. Mitigation (p. 135-139)

The report identified a number of study intersections as having been significantly impacted by the project, and has developed measures to mitigate project impacts. However it neglected to identify SFD/Wolf Grade as a significantly impacted intersection which is and will be operating at LOS F.

Under the existing plus project conditions, four study intersections would operate at the unacceptable conditions of LOS F. Potentially the El Portal and La Questa Drives would likely be LOS F as well, but they were not included in the study. Under the cumulative plus project conditions, six of the study intersections would operate at LOS F, plus potentially the El Portal and La Questa Drives, which would likely be LOS F as well.

Many of the proposed mitigation measures are not likely to occur as the study corridor is fully developed, and the Larkspur General Plan Circulation Policy has indicated no desire to widen SFD along the study corridor. The only mitigation that is likely to occur is from installing traffic signals at the Anderson Drive intersection. In other words, the significant impact of the proposed Larkspur Station Specific Plan will not be mitigated. Finally, the statement on page 135 under Mitigation Measure TRANS-1 “.....to amend the Larkspur General Plan to eliminate Circulation Element Policy C. Implementation of this policy would reduce this impact to less-than-significant levels”, is inaccurate. At best, eliminating the policy will allow the City to accept the significant impact. To reduce project impact to an insignificant level, physical widening at major study intersections must be included.

Recommendation

Indicate and emphasize in the report that the proposed mitigation measures are not likely to occur, and revise the above statement as needed.

15. Travel Demand Management (TDM) (p.163)

The traffic study indicated that the proposed Larkspur Station Specific Plan sub Area 1A is expected to generate a net of 7,502 new trips daily (including 411 and 459 a.m. and p.m. peak hour trips respectively). Sub Area 1B would generate 712 daily trips (including 70 and 76 a.m. and p.m. trips respectively). This will be a major challenge for the TDM program since the SFD is already operating at capacity. The proposed TDM would have to accommodate most of the new traffic alone with no help from roadway capacity improvements.

TDMs generally work better in highly urbanized areas such as the downtown areas in San Francisco and Oakland where traffic is highly congested and parking is limited and expensive. Larkspur is essentially a sub-urban city and the proposed TDM is not likely to be effective.

Recommendation

Provide more details and specifics of other TDM programs that successfully accommodate that many motorists in suburban settings such as Larkspur.

16. Traffic/Trip Cap (p.163-164)

The study indicated that there will be a 10% traffic cap imposed on the plan area and will not permit new development project once the cap is reached. However, the traffic study indicated the area is already at or above capacity (LOS E and F during peak hour traffic operation). A 10% trip cap above the current level of traffic means the plan implementation would increase the current level of congestion and delays by additional 10% the community would have to absorb since there is little opportunity for widening of current roadways. Further, implementation of the plan will likely increase existing traffic level by more than 10%. How is this 10% trip cap going to work? Stop development half-way through?

Recommendation

Provide more details and discussion on how traffic would be measured; whether the measurement would be based on daily traffic volume or peak hour volume; where are the monitored locations; and what are the remedial actions should the plan or cumulative development from outside the specific plan area generate more than the proposed 10% traffic cap.

Part II

1. P. 113 Table IV. B-7, “Local Acceptable LOS Criteria”.
Transportation Authority of Marin uses delay as the basis for rating freeway segment LOS instead of V/C as indicated in Table IV. Please verify and revise as necessary.
2. P. 118 Table IV. B-9, “Existing Freeway Segment LOS Results”.
The capacities used in the table are theoretical capacities based on free flow conditions. Travel speed will be lower during peak hour conditions resulting in lower capacities and LOS than indicated. Using the density method would be more appropriate for freeway segment analysis in this case.
3. P.120, Table IV. B-10 “Marin CMP PM Peak Hour Roadway Segment Results”.
The freeway LOS results in this table are different from the previous found in Table 9. Please review and clarify the discrepancies.
4. P. 131, Table IV. B-12, “Vehicle Trip Generation Summary”.
The ITE trip rate reduction used in Table IV is different from the MXD model cited in the footnote. Also, why existing trips are deducted? Does this table includes existing land uses and trips? It does not appears so by looking at the land use column. If trips from existing uses are not in the table, existing trips should not be reduced. Please clarify and revise as necessary.
5. P.136, Table IV. B-14 “Existing Plus Project Intersection LOS Results”.
It is misleading that the above LOS shows all LOS F intersections with the same delays >80 seconds and >50 seconds for both existing and existing plus project conditions, as if there is no incremental impact due to the project. Please show calculated delays for LOS F intersections, so that the incremental delay and impact of the project can be identified.
6. P. 141, Table IV. B-15, “Existing Plus Project Freeway Segment LOS Results”.
See comment #2.
7. P.145 Table IV. B-16, “Land Use Forecasts in Marin County Model”.
As discussed in Part I, these projects are either approved and/or under construction. The impact of these projects would occur in the next several years and should be evaluated in a short-term scenario rather than the 2035 cumulative scenario.
8. P.149Table IV. B-18 “Cumulative Plus Project Intersection LOS Results”.

See comment #5.

9. P.151, Table IV. B-19, “Cumulative Plus Project Freeway Segment LOS Results”.
See comment #2.
10. P.156 Figure IV. B-15b, “Bicycle and Pedestrian Improvement” shows a 4-way Stop Control as Improvement.
The proposed 4-way stop sign control at Larkspur Landing may create traffic back up since much of the proposed development for the Larkspur Station Specific Plan would occur in Sub Area 1A. The study should conduct LOS analysis to evaluate if the 4-way stop would work and explore alternative traffic control.
11. P.159 Table IV. B-24, “Sub Area Parking Demand”.
The parking demand and supply as shown in the table represents an occupancy of 98%. Industry standards generally consider 85% as full occupancy, this means many motorists would have a difficult time finding parking space in the area.

In summary, because of the omission of a couple of critical intersections, the lack of a short-term traffic scenario, and some potentially questionable traffic count data and assumptions, the report may have underestimated the current baseline traffic and the potential project traffic impact.

Larkspur's circulation policy restriction coupled with the limited available right-of-way leaves little opportunity to mitigate the significant project impact through widening. Because the mitigation measures proposed are not likely to occur, the difficulties involve developing an effective TDM program in a suburban setting such as Larkspur and enforcing the proposed traffic cap in the area, there will be little to ease the impact predicted for the project.

Please feel free to contact me if you have any questions about the above review. Thank you.

Sincerely,



Pang Ho, AICP, Principal
PHA Transportation Consultants

CC: Edward Yates <eyates@marinlandlaw.com>

ATTACHMENT 2

GEOFFREY H. HORNEK

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May 28, 2014

Bob Silvestri
Community Venture Partners, Inc.
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Subject: Comments on the air quality analysis done for the *City of Larkspur SMART Station Area Plan Draft Environmental Impact Report*

Dear Mr. Silvestri:

Thank you for asking me to review the *City of Larkspur SMART Station Area Plan Draft Environmental Impact Report* (DEIR). As a consultant in environmental air quality and acoustics, I have more than 20 years of experience in the preparation and review of environmental technical reports for a wide variety of commercial, transportation, and urban development projects in California. The following content of this letter responds to your and Edward Yates' requests for comments on the Air Quality section of the DEIR.

My overall impression of the DEIR air quality section is that it is not well organized and incomplete, with important information and significance criteria misplaced or erroneously interpreted. Especially confusing is the DEIR's use of the Initial Study air quality checklist items from Appendix G of the state CEQA Guidelines as its "Criteria of Significance" (p. 179). These are general, qualitative criteria that are meant to guide CEQA analysis in all areas of California. But in each particular air district these items are made specific and quantitative by local air quality management district guidelines. In the Bay Area, the Bay Area Air Quality Management District (BAAQMD) *CEQA Air Quality Guidelines* serve that purpose. The DEIR mentions the *CEQA Air Quality Guidelines* and uses its quantitative significance criteria (p. 174-175), but does not include a complete presentation of all the criteria in one place at the beginning of the "Impacts and Mitigation Measures" section (p. 179). Instead, the criteria are scattered through that entire section and some are not easy to find (e.g., the BAAQMD acceptable cancer risk

and hazard levels aren't introduced until p. 187 leading the discussion of AIR-4 and AIR-5 impacts).

In some cases, the BAAQMD criteria are misinterpreted and their discussion takes place in the wrong subsection, or not at all. For example, The BAAQMD daily and annual criteria for project ozone precursor and particulate emissions introduced in subsection (2) *Violate Any Air Quality Standards* (p. 181-182) are not “air quality standards.” They are measures either of when a project begins to interfere with regional air quality plan attainment goals, or of when project emissions clearly become cumulatively considerable. As such, they should have been listed, and project emission impacts should have been discussed, in the previous subsection (1) *Conflict With Current Air Quality Plan* (p. 179) as they are subsequently in subsection (3) *Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant* (p. 187). In contrast, in subsection (2) *Violate Any Air Quality Standards* (p. 181) the carbon monoxide (CO) ambient standards are the only air quality standards mentioned, but the BAAQMD also has a project incremental standard for PM2.5 in their CEQA Guidelines, and there are federal and state absolute standards for PM10 and PM2.5, which should also be included. In a sense, there are also “air quality standards” for toxic air contaminants (TACs), though they are given in terms of their potential for health impacts (i.e., cancer death risk of 10 in a million or chronic hazard index of 1.0) and not their ambient concentrations. Since a significance criteria summary table was not included up front, the BAAQMD TAC criteria should have also been mentioned in subsection (2) *Violate Any Air Quality Standards* and not buried in the text of subsection (4) *Expose Sensitive Receptors to Substantial Pollutant Concentrations* (p. 187).

Another major error is the discrepancy between the project specified for the Larkspur Station Area in the DEIR Project Description (p. 48-49), in Tables III-1 and III-2, and the project analyzed in the air quality section (see Appendix C, Air Quality and Global Climate Change Data; the CalEEMod “Land Usage” parameters are different from those in the Project Description, though they are the same as the land use specifications used in the traffic analysis; see Table IV.B-12) For example, the Project Description specifies 920 new dwelling units under the project, while the CalEEMod Land Usage table in Appendix C specifies 1540 dwelling units; there are similar discrepancies for all the other land use categories. Why these differences? Which “project” is being proposed for the Larkspur Station Area? One last point on the emission modeling: version 2011.1.1 of CalEEMod used in the DEIR is two years out of date; the latest version is 2013.2. These land use discrepancies should be resolved and the model rerun with the newer version.

The most serious errors are in the DEIR analyses (or lack thereof) and conclusions of the health risk assessments of TACs from construction equipment that would build-out the new project land uses and of operational health risks to the existing sensitive receptors in the Station Area and to the proposed sensitive receptors that would be added with Larkspur Station Area Plan implementation.

On the issue of construction risk, the DEIR says the following (p. 188; underline added):

"The Station Area Plan would be constructed over a period of approximately 15 to 20 years. Construction would result in emissions of dust and diesel exhaust.

Toxic construction-related health risks are dependent on the type of construction equipment used and duration of the construction period. Due to the lack of specific construction information, a precise estimate of project construction health risks cannot be determined."

Project construction equipment emission estimates over a 15 year construction period are presented in Table IV.C-5 (p. 183) as calculated using the CalEEMod model, the standard tool for doing construction emission estimates for CEQA studies. CalEEMod gets the emission estimates by assigning equipment types/numbers based on the size and type of the land use proposed for construction. So, there is an equipment list, construction phase duration and the opportunity sites where the construction would occur under the project. There is no reason the DEIR could not take the next step – assign those emissions to the opportunity sites, spread out in time according to the construction schedule, and use the screening dispersion model SCREEN3 to estimate health risk to sensitive uses in the Larkspur Station Area. This plan-level document is the place to do it since it can consider the cumulative effects of all the proposed construction in the plan area, not the piecemeal impacts of each component as it is separately constructed on each individual site.

But a worse error is the construction risk mitigation proposed and the conclusion after its implementation – that it is Less than Significant (p. 188; underline added):

"Mitigation Measure AIR-4: The following language shall be included as a Condition of Approval for new projects associated with implementation of the Station Area Plan:

"For any development project that includes buildings within 1,000 feet of a residential dwelling unit, prior to issuing building permits, a construction health risk assessment shall be conducted to assess emissions from all construction equipment during that phase of construction. Equipment usage shall be modified as necessary to ensure that equipment use would not result in a carcinogenic health risk of more than 10 in 1 million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient PM2.5 increase greater than 0.3 µg/m³. (LTS)"

The DEIR assumes that the construction health risk from each individual project when evaluated in each subsequent CEQA document will either find that risk less than significant (LTS) or be able to mitigate it to LTS. But, if a cumulative health risk analysis is not attempted in this DEIR, it cannot be assumed that the subsequent risk assessments it requires will find the construction risk less than significant. The finding

for Mitigation Measure AIR-4 must be **Significant Unavoidable** until subsequent studies prove otherwise.

The same thing is happening in the operational health risk analysis and conclusions (page 190; underline added).

"The precise location of future residential units within the Plan area is unknown at this time."

This is not true; residential is planned for opportunity sites #1, #4, #5 and #6 according to Table III-1 in the Project Description (page 49).

Also:

"Mitigation Measure AIR-5: The following language shall be included as a Condition of Approval for new projects associated with implementation of the Station Area Plan:

"As shown in Figure IV.C-2, residential units proposed within 500 feet of Highway 101, Sir Francis Drake Boulevard and/or any of the stationary sources identified in Table IV.C-7 shall be evaluated for potential health risk exposure. The applicant for a residential project within the Plan area shall prepare a report using the latest BAAQMD permit data and roadway risk estimates to determine impacts to future residents. The report shall outline any measures that would be incorporated into the project necessary to reduce carcinogenic health risk of to less than 10 in 1 million, reduce the non-cancer risk of to less than 1.0 on the hazard index (chronic or acute), and ensure the annual average ambient PM2.5 increase is less than 0.3 µg/m³. Measures to reduce impacts could include upgrading air filtration systems of fresh air supply, tiered plantings of trees, and site design to increase distance from source to the receptor. (LTS)"

Just as for construction health risk, the DEIR is assuming that the operational health risk at each new residential site in the area, when evaluated in each subsequent CEQA document, will either be found LTS or can be mitigated to LTS. And the potentially most important local operational TAC source, the Larkspur ferry terminal, has not been included in the list of such sources to be evaluated (indeed, the DEIR does not even mention its presence so close to the project area). Tree plantings and buffer zones are unlikely mitigations to be applicable here. The opportunity sites are relatively small and fixed. And there is very likely not enough distance and area available for these mitigations to decrease TAC exposures substantially. Air filtration systems are the only real mitigation here. They need to adequately deal with the level of TACs determined by modeling. And there would be no assurance that these systems would be maintained sufficiently to assure acceptable long-term exposures to the future residents (i.e., commonly assumed to be 30-70 years for the purposes of residential health risk assessment). Moreover, indoor air filtration fails to address outdoor exposures to TACs.

Children playing outside, or residents gardening, would have no protection from the high levels of TACs, which would pose additional cancer and other chronic risks.

The biggest failure of the DEIR operational analysis is not doing any quantification of TAC risk at the opportunity sites or in existing residential areas, which could be done at the screening level using data now available, with addition of a modeling estimate of the ferry TAC impacts. Yet the DEIR assumes that the future studies Mitigation Measure AIR-5 calls for will come up with mitigations that will reduce TAC exposures to LTS. This finding undermines the incentive to do those future studies. Only the issues identified in this DEIR as potentially or unavoidably significant are going to be included in the CEQA scope of the studies for the future development of each opportunity site. The operational TAC impacts have been declared LTS in the DEIR on the basis of studies that have not yet taken place (and probably never will). The finding for Mitigation Measure AIR-5 must be **Significant Unavoidable** until subsequent studies prove otherwise.

My conclusion is that the DEIR air quality analysis is inadequate to assure that existing and future residents the station area would not be exposed to unacceptable TAC levels. Further, there is no evidence that future, in-depth health risk assessments that the DEIR calls for would assure that TAC exposures would meet BAAQMD standards. Therefore, the DEIR should conduct screening risk assessments with available data for project and cumulative TAC impacts in the Larkspur Station Area Plan County and then evaluate the need for exposure mitigations based on their results. If there is no feasible mitigation to reduce TAC impacts to LTS levels, the DEIR AIR-4 and AIR-5 impacts should be reclassified as **Significant Unavoidable**.

Sincerely,

Geoffrey H. Hornek

cc: Neal Toft, Planning and Building Director, City of Larkspur

ATTACHMENT 3



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MEMORANDUM

To: Bob Silvestri, Community Venture Partners, Inc.
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Mill Valley, CA 94941 <http://www.communityventurepartners.org>

Date: May 22, 2014

SUBJECT: City of Larkspur SMART Station Area Plan Draft Environmental Impact Report (DEIR) – SCH No. 2013012020, February 2014 – Biological Resources impact analysis review

Cc: Edward Yates, Richard Grassetti

I have prepared the following critical review of the Biological Resources sections of the Larkspur SMART Station Area Plan Draft EIR, with emphasis on indirect and cumulative biological impacts. This review represents my independent best professional judgment. I have reviewed the DEIR report sections relevant to assessment of biological impacts (project description, alternatives, and biological resources). My comments are presented below in summary form, followed more specific comments. My qualifications to provide expert comments are based on nearly 35 years of professional work in coastal wetland and terrestrial ecology, with over 20 years in San Francisco Estuary wetlands, including long-term direct knowledge of the estuarine wetlands, special-status species, and diked baylands in the project area (Attachment A).

I. Summary

The DEIR's assessment of project impacts arbitrarily omits long-term, indirect, cumulative, and off-site biological impacts to sensitive receptors adjacent to the Plan Area – especially the most sensitive receptor, the Corte Madera Marsh Ecological Reserve (CMMER) and its special-status plant and wildlife species. The DEIR's biological impacts and mitigation measures address only temporary construction impacts within an arbitrary 100 feet zone bordering the Plan Area north of Corte Madera Creek. Potentially significant indirect and cumulative long-term impacts to CMMER and its special-status plant and wildlife species may occur as a result of increased avian predator populations and reduced insect pollinator populations within the effects area of the proposed project. The DEIR does not provide any analysis of significant indirect ecological impacts or mitigation to CMMER, and the project

description does not include sufficient information about physical changes within the project area to support a comparison of alternatives with less indirect impact to CMMER.

The DEIR fails to provide adequate, accurate, contemporary (*i.e.*, relevant to the pre-project physical condition of the Plan Area and its vicinity) baseline information about the distribution and abundance of special-status species in the project area and its vicinity. The DEIR relies on a single June survey date of reconnaissance-level observations and database queries for old (nearly all out of date) incidental records of special-status species. The DEIR fails to adequately describe or assess importance or sensitivity of the special status species populations outside the boundary of the project area, but within the effects area of the project – especially CMMER. This preliminary level of assessment is merely a screening exercise for relative probability of occurrences, and not a substitute for actual inventory of current special-status species and assessment of potential significant impacts.

Without a meaningful baseline of existing plant and wildlife resources, impact assessment and mitigation is reduced to speculative or purely programmatic and deferred mitigation based on pre-construction surveys after land use changes and impacts are irretrievably committed and approved, when options for mitigation by avoidance or minimization are constrained. This defeats the basic purpose of mitigation and priorities for avoidance and minimization.

The DEIR fails to assess alternatives consistent with one of its principal objectives “to identify mitigation measure to protect existing and new development from flooding and sea level rise, especially in the Redwood Highway area”. This objective, if realized in an alternative, would potentially contribute to mitigation of indirect and cumulative project impacts on the Corte Madera Marsh Ecological Reserve, which could benefit from integrated flood control designs for both tidal marsh transition zones and adjacent development or open space.

II. Specific comments on DEIR

Potentially significant indirect impacts on Corte Madera Marsh Ecological Reserve and special-status species within it

The DEIR almost exclusively addresses direct short-term impacts of proposed project development and alternatives *within* the boundary of the Plan area (project “footprint” impacts), but neglects far more significant potential indirect and cumulative long-term impacts to highly sensitive estuarine wetlands *adjacent* to the southern end of the Plan area – namely, the tidal marshes and special-status species populations of the Corte Madera Marsh Ecological Reserve (CMMER). The DEIR fails to justify this omission. Potential significant indirect impacts may occur to special-status species outside the project boundary as a result of project effects on (a) pollinating terrestrial insects on which special-status salt marsh plant populations depend; and (b) avian predator populations affecting resident special-status wildlife at CMMER.

Both impact BIO-4 and Mitigation Measure BIO-4 narrowly assess only short-term, temporary, *direct* project construction-related impacts to tidal marsh habitats *within* proposed areas of development or land use changes within the project area. BIO-4 (and other

enumerated impacts) entirely fails to address indirect impacts of land use change to the much larger and more sensitive CMMER habitats and populations adjacent to the plan area. The DEIR does not analyze any impacts to tidal marsh farther than 100 feet from the project boundary. This is an arbitrary and unjustified cut-off for impact analysis. The DEIR cites no reasonable (scientific or otherwise) basis for limiting impact assessment spatially to a 100 ft zone around the project boundary, or temporally to short-term, temporary construction impacts.

The DEIR grossly understates the regional and local ecological importance of CMMER wetlands and wildlife, and it fails to identify CMMER's vulnerability and sensitivity to stressors from adjacent land uses. CMMER includes the only prehistoric tidal marsh remnant in Marin County that occurs south of China Camp (Heerdt Marsh unit, north of historically restored Muzzi Marsh). CMMER supports large, important populations of both plant and wildlife special-status species in an urbanized Marin bayland setting, including one of the largest populations of California clapper rails in Marin County, and one of the largest populations of northern (Point Reyes) salt marsh bird's-beak in the entire San Francisco Estuary. In addition, CMMER supports California black rails, salt marsh common yellowthroats, San Pablo song sparrows, and the salt marsh harvest mouse. CMMER is the only urban-edge tidal marsh reserve in Marin County in which all these special-status species co-occur in with significant populations, in spite of threats related to the urban setting.

The DEIR fails to analyze at least two significant potential long-term indirect and cumulative impacts to CMMER (tidal marsh and sensitive state and federally listed species) from proposed development or changes in land use intensity within the Plan area. CMMER special-status wildlife species (including limited to California clapper rails, California black rails, San Pablo Song sparrow, salt marsh common *e.g.*, yellowthroat, and the salt marsh harvest mouse) are affected by avian predator populations (crows, ravens, and raptors) that are dependent on terrestrial food supply and nesting habitats. One special-status plant species CMMER plant, northern salt marsh bird's-beak (Point Reyes bird's-beak), depends on terrestrial insect pollinators for reproductive success.

Land use or intensity changes that increase either food supply or nest success for terrestrial avian predator populations bordering CMMER may cause potentially significant indirect, long-term and cumulative adverse impacts to isolated, vulnerable sensitive wildlife species populations within CMMER. Sensitivity of CMMER special-status wildlife populations to predation impacts is likely to increase as sea level rises. Resident special-status marsh wildlife are dependent on well-distributed, emergent vegetation canopy to provide shelter from avian predators when the marsh is flooded during extreme high daytime tides. Extreme high tides submerge most or all of the marsh vegetation canopy, and reduce the availability of well-distributed high tide vegetation cover for resident marsh wildlife, exposing them to avian predators. Exposure during marsh flooding events will likely increase as sea level rise rates accelerate faster than marsh accretion (vertical growth) rates. Avian predators based on upland habitats in the vicinity are cued by marsh flooding to forage for exposed small mammals and birds. Avian predator populations are affected by artificial food sources (residential and commercial refuse) in and around developed areas. The DEIR does not contain any analysis of how proposed land use changes in "opportunity sites" north of Corte Madera Creek may influence populations (through changes in food supply or nest success)

of crows, ravens, or raptors that may affect CMMER special-status wildlife population viability.

Land use changes within the proposed project area that generate inevitable food resources (refuse, garbage from retail/restaurant or residential areas) for corvids (crows, ravens), or small mammal prey animals of raptors (mice, rats) may have significant potential indirect impacts on CMMER. The cumulative impact of increased avian predator populations supported by the proposed project would likely increase as sea level rises. No mitigation has been identified for this potential impact, and no alternative for Redwood Highway sub-area 2 has been identified that could offset it.

Land use or intensity changes that alter the availability of insect pollinator populations (especially ground-nesting bees) in the vicinity of CMMER may cause declines in pollination success and seed set of northern salt marsh bird's-beak. Pollinator limitation may be a potentially significant limiting factor for conservation of viable populations of this plant (USFWS 2013). Seed set depends especially on ground-nesting native bees strong enough to mechanically work the flowers of both subspecies of salt marsh bird's-beak. Bees have limited flight distances between terrestrial habitats and tidal marshes. Bee populations may be directly affected within the plan area by development or other land use changes that reduce, degrade, or destroy bee nest habitat. Bee populations may be indirectly affected by land use intensity change which increases contaminant burdens of bees (including but not limited to pesticides used in ornamental horticulture from commercial or residential development). Pollinator services to isolated salt marsh populations of insect-pollinated plants would be likely to decline with increasing distance from terrestrial sources (nests) of pollinator insects. The DEIR identifies acreages of habitat types within the Plan Area that may support pollinator insects, but does not analyze any changes in either area (loss of habitat) or quality (degradation, reduced suitability for insect pollinator population support) of terrestrial ruderal/grassland, woodland, or riparian habitats.

The DEIR fails to consider terrestrial pollinator limitation of special-status flowering plants of salt marshes at CMMER as an important ecological process that may be significantly affected by the project. It also fails to assess any mitigation measures to conserve pollinator populations that support special-status plant populations within CMMER or along shorelines at the project boundary. Since the DEIR proposes no alternatives that conserve any upland habitat suitable for pollinators in the Redwood Highway sub-area 2, or sub-areas north of Corte Madera Creek, this is a potential significant impact that is unmitigated.

Biological baseline: omission of adequate contemporary biological survey information for impact and mitigation assessment

The DEIR fails to provide adequate, accurate, contemporary (*i.e.*, relevant to the pre-project physical condition of the Plan Area and its vicinity) baseline information about the distribution and abundance of special-status species in the project area and its vicinity. The DEIR relies on a single June survey date of reconnaissance-level observations and database queries for old (nearly all out of date) incidental records of special-status species. This preliminary level of assessment is merely a screening exercise for relative probability of occurrences, and not a substitute for actual inventory of current special-status species and assessment of potential significant impacts. The exclusive reliance on database queries and

cursory reconnaissance-level surveys may be appropriate for Initial Studies in areas with no likely special-status habitats or species, but it is inadequate for analysis of areas including or bordering known populations of sensitive habitats and species.

Scientifically sound, spatially structured sampling or biologically timed surveys for special-status species that the DEIR acknowledges may occur in the project area, such as western pond turtles (*Actinemys marmorata*), are lacking. Similarly, the EIR cites only 1999 (15 years out of date) surveys for California red-legged frogs (*Rana draytonii*) at Tubb Lake, and does not consider the possibility of past detection failure at low population levels in habitat with dense cover, or with non-protocol (non-nocturnal) surveys prior to listing of this species. Even though the special-status plant, northern salt marsh bird's-beak (*Chloropyron maritimum* subsp. *palustre*) is known to occur along Greenbrae Boardwalk salt marshes, where it provides a proximate potential seed source for all suitable tidal shoreline habitat within the project area, no surveys were conducted or reported for this species in the DEIR. Instead, the DEIR proposes pre-construction surveys and programmatic mitigation measures if species are detected, instead of making a diligent effort to detect them first, and develop effective geographically explicit mitigation measures for them in the DEIR.

Without a meaningful baseline of existing plant and wildlife resources, impact assessment and mitigation is reduced to speculative or purely programmatic and deferred mitigation based on pre-construction surveys after land use changes and impacts are irretrievably committed and approved, and options for mitigation by avoidance or minimization of direct, indirect, and cumulative impacts are constrained. This defeats the basic purpose of mitigation and priorities for avoidance and minimization. The DEIR must include scientifically sound, meaningful, and interpretable (for pre-project impact assessment and mitigation planning) biological inventories for all sensitive biological resources that are reasonably likely to occur in the project area and its biological “effects area” (in the conventional meaning of a biological assessment).

Alternatives integrating sea level rise adaptation for Redwood Highway

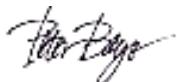
The DEIR fails to assess any alternatives consistent with one of its principal objectives “to identify mitigation measure to protect existing and new development from flooding and sea level rise, especially in the Redwood Highway area” (DEIR p. 394). This objective, if realized in an alternative, would potentially contribute to mitigation of indirect and cumulative project impacts on the Corte Madera Marsh Ecological Reserve, which could benefit from integrated flood control designs for both tidal marsh transition zones and adjacent development or open space. BCDC recently published a scientific study and sea level rise adaptation conceptual plan for the Corte Madera Marsh Ecological Reserve (tidal wetlands) and adjacent baylands (BCDC and ESA-PWA 2013) consistent with this objective. The DEIR failed to consider this timely and site-specific plan for one of the main planning sub-areas of the DEIR. As a result, the objective is not met by any alternatives analyzed.

III. Conclusions. The DEIR should be recirculated to provide:

1. An alternative or alternatives that meets the objective to protect existing development from sea level rise and flooding, especially in the Redwood Highway Area, so that significant

cumulative impacts to estuarine marshes and their special-status species populations can be minimized or avoided;

2. Scientifically sound (protocol or equivalent) baseline surveys for all special-status species that are reasonably likely to occur within the project area (project footprint) and its biological “effects area”;
3. An adequate assessment of indirect, cumulative, long-term impacts of the proposed project on the Corte Madera Marsh Ecological Reserve, including assessment of (a) terrestrial avian predators supported by food, prey, or nesting areas within the effects area of the project; and (b) terrestrial pollinator populations serving special-status insect-pollinated special-status flowering plants in CMMER or other tidal marshes in the project vicinity, based on potential pollinator flight distances from the project area. This assessment should include evaluation of indirect impacts including pesticide use, grading, ornamental landscaping, and development.



Peter Baye

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San Francisco Bay Conservation and Development Commission (BCDC) and ESA PWA. 2013. Corte Madera Baylands Conceptual Sea Level Rise Adaptation Strategy. http://www.bcdc.ca.gov/planning/climate_change/CM%20final%20report_130731.pdf

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ATTACHMENT A – STATEMENT OF QUALIFICATIONS

Following my Ph.D. research in coastal ecology, I worked for the U.S. Army Corps of Engineers, San Francisco District, where I served as a senior environmental scientist and regulatory project manager conducting endangered species consultation, wetland jurisdictional determinations, wetland assessments, preparing Environmental Assessments and managing joint NEPA/CEQA Environmental Impact Statements/Reports. My Corps regulatory projects included sites adjacent to Port Sonoma (Sonoma Baylands, Carl's Marsh). Subsequently I worked for the U.S. Fish and Wildlife Service, where I prepared endangered species recovery plans (including comprehensive plans covering all of Marin Baylands and tidal marshes) and endangered species biological opinions. I was a contributing author and participant in the Baylands Ecosystem Habitat Goals Report (Goals Project 1999), its companion volume on Bayland species and community profiles (2000), and its 2014 update (in preparation), for which I developed many Marin bayland recommendations. I have developed or substantially contributed to estuarine wetland restoration and management plans for many Marin coastal wetland sites, including some adjacent to the plan area: Corte Madera Baylands Conceptual Sea Level Rise Adaptation Strategy, prepared by The San Francisco Bay Conservation and Development Commission and ESA PWA (specific focal area: Corte Madera Ecological Reserve marshes); Aramburu Island, Richardson Bay (with Wetlands and Water Resources) and wetland restoration projects at Bahia, Novato (with ESA-PWA) and Bolinas Lagoon (Kent Island, with William Carmen & Associates).

ATTACHMENT B
ANNOTATED EXCERPTS OF DEIR
BIOLOGICAL RESOURCE IMPACTS AND MITIGATION

Impact BIO-4: Implementation of the Station Area Plan may impact special-status tidal marsh animal species. (S)

Suitable habitat for California black rail, California clapper rail, and salt marsh harvest mouse is present in the approximately **7 acres of tidal marsh habitat within the Plan area**. Construction would not likely extend into existing marsh habitat. Nevertheless, these species are known to use grasslands and other dense vegetation adjacent to marshes as escape cover during high tides. As such, there is a small chance that they may occur **within the construction footprint** during high tides, if present in the marsh habitat. In addition, construction noise has the potential to disturb nesting tidal marsh rails since suitable habitat may be present **within 100 feet of the construction footprint**. Because clapper rails may occur within the tidal marsh/mudflat habitat south of the existing Larkspur Ferry Terminal (shown in Figure IV.F-1), changes in the land-use, such as the residential development, in this area could impact clapper rails and other special-status marsh species, if present.

Potential impacts may include increased lighting, noise, and domestic pets.

Several policies and action programs within the Larkspur 1990 General Plan Environmental Resources Element specify protection of the tidal marsh habitat and the wildlife and special-status species that occur there. Policy C calls for the preservation of the wetlands along Corte Madera Creek and the Larkspur Ferry Terminal. Policy D allows low-intensity development near Corte Madera Creek only if the design preserves natural features, such as marshlands and wildlife habitats. Action Program 8 specifies avoiding development *in areas that contain special-status species*. Policy H protects wildlife and fragile habitat from intrusion by **humans and domestic animals**. Action Program 12 places restrictions on access to sensitive areas by **pets**. Action Program 15 calls for designing future development of the ferry terminal so as to minimize impact on the nearby creek and marsh habitat. These policies will reduce impacts of the Station Area Plan, but not to a less-than-significant level.

[addresses only pets and humans; not avian predator populations with known impact to special-status wildlife at CMMER)

Implementation of the following mitigation measure would reduce these impacts to a less-than significant level.

Mitigation Measure BIO-4: The following language shall be included as a Condition of Approval for new projects associated with implementation of the Station Area Plan:

- ***Ground disturbing activities within upland habitat in the vicinity of the tidal marsh*** shall be conducted only when high tides are not at their winter or summer extremes, to reduce the likelihood that tidal marsh rails and salt marsh harvest mice will be present in the construction footprint. Ground disturbance shall be avoided during the highest tides of June–July and December–January (\pm one week each month). **[short-term, temporary direct construction impact only]**

- To avoid potential disturbance to nesting tidal marsh rails, construction shall be conducted during the non-breeding season (September 1 through January 31), unless current surveys indicate that marsh habitat within 100 feet of the construction footprint is not part of an active rail breeding territory. Such surveys must be conducted in accordance with a project specific survey methodology prepared in accordance with the USFWS and CDFW protocols. *[short-term, temporary direct construction impact only]*
- No work shall be permitted ***within*** suitable habitat for salt marsh harvest mice (i.e., tidal marsh/mudflat and adjacent ruderal/non-native annual grassland) without the appropriate authorization from the USFWS and CDFW. Prior to ground disturbance within suitable salt marsh harvest mouse habitat, a qualified biologist experienced with salt marsh harvest mouse exclusion procedures shall prepare a site-specific salt marsh harvest mouse avoidance plan. The plan will be subject to approval by USFWS and CDFW and be consistent with the Biological Opinion and Incidental Take Permit issued by the USFWS and CDFW, respectively, for the project. At a minimum, the plan shall include: (1) installation of a barrier fencing around the entire portion of the work area that is within 100 feet of the edge of the marsh to exclude salt marsh harvest mouse from the work area; (2) clearing of all vegetation using hand-tools within the fenced work area prior to the initiation of construction activities; and (3) relocation to the marsh of any salt marsh harvest mouse found during vegetation removal (relocation must be approved by USFWS and CDFW prior to initiation of construction activities). Construction work shall start as soon as possible (and no longer than 3 days) after vegetation has been cleared. All exclusion measures and initial ground disturbance activities shall be monitored by a qualified biologist who is approved by the USFWS and CDFW to implement protection measures for salt marsh harvest mouse. *[short-term, temporary, direct construction impact only]*

To protect sensitive habitats ***during construction activities***, a permanent fence shall be constructed outside of the marsh along the southern edge of the Larkspur Ferry Terminal parking area to restrict access of humans and dogs into the tidal marsh/mudflat habitat. A qualified biologist shall provide advice regarding the location and design of the fence, and BCDC and the City shall approve fence design, dimensions and location. The upland habitat on the project site should be landscaped with native shrub species characteristic of the upper marsh zone such as gumplant, saltgrass, and/or coyote brush to buffer the tidal marsh from activity on the parking area and provide rails and other marsh birds with shelter during extreme high tides. Such vegetation (e.g., gumplant) could also provide potential nesting habitat for various species of birds inhabiting the marsh. *[short-term, temporary, direct construction impact]*

- If any development occurs ***within*** the existing Larkspur Ferry Terminal parcel, the City shall require building design features to reduce ***predators*** and lighting that would impact tidal marsh species. Such design features may include anti-predator perching devices or building designs to ***discourage predatory birds from nesting or perching in proximity to the marsh*** and lights that are shielded and focused away from the marsh and sensitive habitat areas. (LTS) *[short-term, temporary, direct construction impact only; no consideration of predator population effects on CMMER]*

ATTACHMENT 4

Excerpts from: Bay Conservation and Development Commission, *Bay Plan Amendment*, 1-08, by Resolution 11-08, 2014, Climate Change Findings, Pages 10-17.

Climate Change (Add New Section to Part IV)

Findings

- a. Greenhouse gases naturally reside in the earth's atmosphere, absorb heat emitted from the earth's surface and radiate heat back to the surface causing the planet to warm. This natural process is called the "greenhouse effect." Human activities since industrialization have increased the emissions of greenhouse gases through the burning of fossil fuels. The accumulation of these gases in the atmosphere is causing the planet to warm at an accelerated rate.
- b. The future extent of global warming is uncertain. It will be driven largely by future greenhouse gas emissions levels, which will depend on how global development proceeds. The United Nations Intergovernmental Panel on Climate Change (IPCC) developed a series of global development scenarios and greenhouse gas emissions scenarios for each development scenario. These emissions scenarios have been used in global models to develop projections of future climate, including global surface temperature and precipitation changes.
- c. Global surface temperature increases are accelerating the rate of sea level rise worldwide through thermal expansion of ocean waters and melting of land-based ice (e.g., ice sheets and glaciers). Bay water level is likely to rise by a corresponding amount. In the last century, sea level in the Bay rose nearly eight inches. Current science-based projections of global sea level rise over the next century vary widely. Using the IPCC greenhouse gas emission scenarios, in 2010 the California Climate Action Team (CAT) developed sea level rise projections (relative to sea level in 2000) for the state that range from 10 to 17 inches by 2050, 17 to 32 inches by 2070, and 31 to 69 inches at the end of the century. The CAT has recognized that it may not be appropriate to set definitive sea level rise projections, and, based on a variety of factors, state agencies may use different sea level rise projections. Although the CAT values are generally recognized as the best science-based sea level rise projections for California, scientific uncertainty remains regarding the pace and amount of sea level rise. Moreover, melting of the Greenland and Antarctic ice sheet may not be reflected well in current sea level rise projections. As additional data are collected and analyzed, sea level rise projections will likely change over time. The National Academy of Sciences is in the process of developing a Sea Level Rise Assessment Report that will address the potential impacts of sea level rise on coastal areas throughout the United States, including California and the Bay Area.

- d. Climate change will alter key factors that contribute to shoreline flooding, including sea level and storm frequency and intensity. During a storm, low air pressure can cause storm surge (a rapid rise in water level) and increased wind and wave activity can cause wave run up, which will be higher as sea level rises. These storm events can be exacerbated by El Niño events, which generally result in persistent low air pressure, greater rainfall, high winds and higher sea level. The coincidence of intense winter storms, extreme high tides, and high runoff, in combination with higher sea level, will increase the frequency and duration of shoreline flooding long before areas are permanently inundated by sea level rise alone. Swimming in the Bay is a popular activity, especially at Bay beaches. Bay water quality can affect the health of Bay swimmers. State law requires local public health officers to test water quality at popular beaches during high use periods, and to notify the public and post closure signs when dangerous levels of bacteria are present.
- e. Shoreline areas currently vulnerable to a 100-year flood event may be subjected to inundation by high tides at mid-century. Much of the developed shoreline may require new or upgraded shoreline protection to reduce damage from flooding. Shoreline areas that have subsided are especially vulnerable to sea level rise and may require more extensive shoreline protection. The Commission, along with other agencies such as the National Oceanic and Atmospheric Administration, the Federal Emergency Management Agency, the United States Army Corps of Engineers, cities, counties, and flood control districts, is responsible for protecting the public and the Bay ecosystem from flood hazards. This can be best achieved by using a range of scientifically based scenarios, including projections, which correspond to higher rates of sea level rise.

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- k. Shoreline development and infrastructure, critical to public and environmental health and the region's economic prosperity, may be, or may become, vulnerable to flooding from sea level rise and storm activity. Public safety may be compromised and personal property and agricultural land may be damaged or lost during floods. Important public shoreline infrastructure and facilities, such as airports, ports, regional transportation facilities, landfills, contaminated lands and wastewater treatment facilities are at risk of flood damage that could require costly repairs, or result in the interruption or loss of vital services or degraded water quality. A current lack of funding to address projected impacts from sea level rise necessitates a collaborative approach with all stakeholder groups to find strategic and innovative solutions to advance the Bay Area's ability to meet environmental, public health, equity and economic goals.

- o. Approaches for ensuring public safety in developed vulnerable shoreline areas through adaptive management strategies include but are not limited to: (1) protecting existing and planned appropriate infill development; (2) accommodating flooding by building or renovating structures or infrastructure systems that are resilient or adaptable over time; (3) discouraging permanent new development when adaptive management strategies cannot protect public safety; (4) allowing only new uses that can be removed or phased out if adaptive management strategies are not available as inundation threats increase; and (5) over time and where feasible and appropriate, removing existing development
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1. When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100- year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. A range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer. The risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices.
2. To protect public safety and ecosystem services, within areas that a risk assessment determines are vulnerable to future shoreline flooding that threatens public safety, all projects—other than repairs of existing facilities, small projects that do not increase risks to public safety, interim projects and infill projects within existing urbanized areas—should be designed to be resilient to a mid-century sea level rise projection. If it is likely the project will remain in place longer than mid-century, an adaptive management plan should be developed to address the long-term impacts that will arise based on a risk assessment using the best available science-based projection for sea level rise at the end of the century.