Planning for Success.

ENVIRONMENTAL IMPACT REPORT

MST Whispering Oaks Business Park

Final

(State Clearinghouse # 2009121049)

PREPARED FOR

County of Monterey Resource Management Agency
Planning Department

February 23, 2011

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MST Whispering Oaks Business Park

Final Environmental Impact Report

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PREPARED FOR

County of Monterey Resource Management Agency – Planning Department
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February 23, 2011

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1.0
INTRODUCTION

PURPOSE AND ORGANIZATION

The Monterey County Resource Management Agency (RMA) – Planning Department, acting as the lead agency, determined that the proposed MST – Whispering Oaks Business Park (hereinafter "proposed project") might result in significant adverse environmental effects, as defined by the California Environmental Quality Act (CEQA) Guidelines section 15064. Therefore, the RMA – Planning Department had a draft environmental impact report (Draft EIR) prepared to evaluate the potentially significant adverse environmental impacts of the project. The Draft EIR was circulated for public review between July 8, 2010 and August 23, 2010, and public comment was received. CEQA Guidelines section 15200 indicates that the purposes of the public review process include sharing expertise, disclosing agency analysis, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counter proposals.

This Final EIR has been prepared to address comments received during the public review period and, together with the Draft EIR, constitutes the complete MST – Whispering Oaks Business Park EIR. This Final EIR is organized into the following sections:

- Section 1 contains an introduction to the Final EIR.
- Section 2 contains written comments on the Draft EIR, as well as the responses to those comments.
- Section 3 contains a revised summary of the Draft EIR, identifying the changes in the impacts and mitigation measures resulting from comments on the Draft EIR. This section also contains the summary table/mitigation monitoring program.
- Section 4 contains the revisions to the text of the Draft EIR resulting from comments on the Draft EIR, as well as new or revised graphics and appendices.

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2.0
COMMENTS ON THE DRAFT EIR

CEQA REQUIREMENTS

CEQA Guidelines section 15132(c) requires that the Final EIR contain a list of persons, organizations, and public agencies that have commented on the Draft EIR. A list of the correspondence received during the public review period is presented below.

CEQA Guidelines sections 15132(b) and 15132(d) require that the Final EIR contain the comments that raise significant environmental points in the review and consultation process, and written response to those comments. A copy of each correspondence received during the public review period for the Draft EIR is presented on the following pages. Numbers along the left-hand margin of each comment letter identify individual comments to which a response is provided. Responses are presented immediately following each letter. Where required, revisions have been made to the text of the Draft EIR based on the responses to comments. These revisions are included in Section 3.0, Revised Summary and in Section 4.0, Changes to the Draft EIR.

COMMENTS ON THE DRAFT EIR

The following correspondence was received during the 45-day public review period for the Draft EIR:

- Land Watch Monterey County (August 13, 2010)
- Quercus Group (August 16, 2010)
- University of California Santa Cruz (August 26, 2010)

- California Department of Fish and Game (August 25, 2010)
- California State University Monterey Bay (August 27, 2010)
- City of Marina (August 18, 2010)
- Transportation Agency for Monterey County (August 25, 2010)
- Marina Coast Water District (September 1, 2010)

LandWatch
monterey county

Post Office Box 1876, Salinas, CA 93902
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Website: www.landwatch.org
Telephone: 831-422-9390
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August 13, 2010

Craig Spencer, Assistant Planner
Monterey County Planning Department
168 West Alisal, 2nd Floor
Salinas, CA 93901

SUBJECT: DEIR FOR MST WHISPERING OAKS BUSINESS PARK

Dear Mr. Spencer:

LandWatch Monterey County has reviewed the DEIR for a 58 acre business park subdivision including 24.37 acres for the MST Administrative and Maintenance Facility on Fort Ord. Our comments follow:

1 1. Aesthetics (p. 2-1). . The site is visible from Imjin Road, intersection of Seventh Avenue and Inter-Garrison Road, Inter-Garrison Road, Frederick Park. The subdivision would result in the removal of over 4,400 oak trees, including 2,400 for the MST project.

The DEIR limits it findings on the project's impacts on aesthetics to the following:

- there would be no significant impact on visual resources from State designated scenic highways.
- there would be a less than significant impact on the visual quality of the Inter-Garrison Road Corridor because the MST site would include a 10-foot tall masonry wall along a portion of the south property line adjacent to the Inter-Garrison Road right-of-way.
- there would be a less than significant impact from glare.

The DEIR fails to address the impact of the subdivision including the MST project on visual quality of the area even though the DEIR finds (p. 2-6) "The natural landscape of the project site contributes to the scenic quality and visual characteristics of this are of the former Fort Ord when viewed from nearby public streets...". This impact should be addressed pursuant to Appendix G, CEQA Guidelines,"(c) Substantially degrade the existing visual character or quality of the site and its surroundings?" Additionally, the DEIR should address the visual impact of a 10-foot high wall compared to the existing environment.

2. Air Quality (p. 2-14).

2 A. Reference is made to air quality plans providing for district-wide emission reductions of five percent per year averaged over consecutive three-year periods (p. 2-15). This was a requirement for State ozone planning only and is no longer applicable.

3 B. The AQMP includes control measures for both VOC and NO_x emissions, just not VOC emissions as stated (p. 2-18).

4 C. The DEIR states MBUAPCD CEQA guidelines do not have thresholds that apply to construction NO_x emissions and that the impact is considered less than significant if reasonable and feasible measure are employed (p. 2-28). District Guidelines should be cited correctly. Section 5.2 states, "Construction projects using typical construction equipment...are accommodated in the emission inventories of State- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. The District should be consulted regarding emissions from non-typical equipment...".

5 D. Table 6. The threshold of significance for PM_{10} is identified as 82 lbs per day and that the threshold only applies to on-site emissions. The threshold applies to non-mobile sources only. The table should make a distinction between mobile and non-mobile sources if the threshold is to be referenced. Additionally, the table should identify what bus emissions are included in Table 6, i.e., only new bus emissions resulting from the change of locations should be included.

6 E. The DEIR references the 2004 MST bus fleet (p. 2-31) indicating that 20% of the fleet is comprised of CNG buses. However, these buses are no longer in service. If the 2004 bus fleet were used to run the URBEMIS model, it should be revised to reflect the bus fleet at the time of buildout.

7 3. Hazards and Hazardous Waste. The DEIR has extensive discussion of the Salinas Valley Solid Waste Authority (p. 2-81). The document should identify the relevance of this section to the project.

4. Traffic and Circulation.

8 A. Increased trips at State Route I interchanges resulting from the MST project as well as the total project are found to be significant and unavoidable even with payment of traffic impact fees. However, the payment of impact fees for road improvements is found to reduce impacts to less than significant at the following intersections: Davis Road/Reservation Road; Fifth Ave-California Avenue/Imjin Parkway; Third Avenue/Imjin Parkway; General Jim Moore Blvd/Broadway Ave., Abrams Drive;Imjin Parkway; Imjin Parkway/Reservation Road and Blanco Road/Reservation Road. The feasibility of implementing these mitigation measures should be addressed. A construction schedule with an estimated time of completion should be provided along with a determination of whether or not the measures would avoid significant impacts in a timely manner.

9 B. This comment applies to the traffic cumulative impact analysis as well (p. 3-25). Construction schedules for all proposed mitigation measures to be funded by impact fees should be identified along with a determination of whether or not the measures would avoid significant impacts in a timely manner.

5. Greenhouse Gas Emissions (GHG).

10 A. The DEIR finds that all phases of the project would emit 35,800 tons per year of GHG emissions and the impact would be significant and unavoidable even with mitigation. However, the analysis fails to include emission increases related to the loss of over 4,400 oaks trees and other vegetation. Without estimates associated with the loss of this source of sequestration, the analysis is inadequate. Additionally, emissions from tree disposal should be calculated and offset.

11 B. Table 23 identifies annual CO_2 emissions based on a "business-as-usual" scenario (p. 3-16). Reference is also made to Table 23 as identifying reduced annual CO_2 emission if all the mitigation measures were implemented (p. 3-21). Table 23 (p. 3-21) should be identified as Table 24 (p. 3-22).

Thank you for the opportunity to review the DEIR.

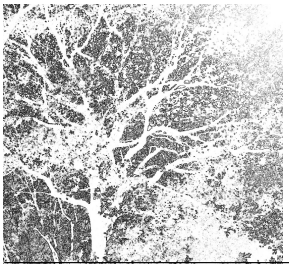
Sincerely,

//s//

Amy L. White, Executive Director
LandWatch Monterey County

EXHIBIT 1

The attached document describes non-fossil fuel greenhouse gas emissions associated with terrestrial conversions and the scientific/factual basis for analyzing these natural resource GHG emissions under the California Environmental Quality Act.



Quercus Group

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CEQA Requires Greenhouse Gas Emissions Analysis for Terrestrial Conversions

The California Air Resources Board's AB 32 Scoping Plan recognizes the significant contribution that terrestrial greenhouse gas (GHG) storage will make in meeting the state's GHG emissions reduction goals: *"This plan also acknowledges the important role of terrestrial sequestration in our forests, rangelands, wetlands, and other land resources"*[1] Further, the California Environmental Quality Act (CEQA) Guidelines specifically address biogenic and land greenhouse gas emissions due to the conversion of forestland to non-forestland use (Appendix G Environmental Checklist and Statement of Reasons).

The amount of project biogenic and land GHG emissions depends on the vegetation types-land types impacted. Vegetative carbon is transformed to soil carbon via roots and decomposition over time. Land carbon decomposes slowly and can accumulate at high rates.

Biogenic and land GHG emissions associated with land-use change are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Over a time horizon of 100 years, methane has 25 times more global warming potential than carbon dioxide and nitrous oxide 320 times the increased temperature effect of carbon. [2] When biogenic and land CO_2, CH_4 and N_2O emissions are added together (equivalent carbon dioxide (CO_2e)), the total land-use change greenhouse gas emissions can be estimated.

> Biogenic Emissions Example
> The project GHG emissions from the natural decomposition of 220 pounds of impacted biomass would be: 245.7 pounds carbon dioxide + 14.3 pounds methane = 546 pounds of total biomass GHG emissions and CO_2e effects. [3] If the biomass is burned, CO_2, CH_4 and N_2O are emitted. How much of each gas depends on biomass moisture content and the method of combustion. If not burned, the quantity of carbon and methane emissions is a result of how the biomass is reduced. [4]

AB 32 and the CEQA Guidelines emphasize forestland greenhouse gas sequestration/emissions. However, carbon stored in non-forested land resources represent very large, more stable CO_2 sequestration pools and are a great source of land-use change GHG emissions. Potentially significant forestland conversion cumulative GHG emissions require analysis. Based on scientific evidence all non-forested land types that serve as natural carbon sequestration reservoirs and greenhouse gas emission sources warrant similar CEQA analysis.

Ron Cowan, Principal

[1] California Air Resources Board (2008). *Climate Change Scoping Plan: a framework for change* (at page ES-5).
[2] California Climate Change Portal (2010). *California Climate Change Glossary*.
[3] Alex Hobbs, PhD, PE. (2009). Biomass presentation to the Sierra Club Forum at North Carolina State University.
[4] These biogenic greenhouse gas emission figures do not include project GHG emissions due to the loss of future biomass carbon sequestration capability.

Response to the Letter from Land Watch Monterey County

1. The second impact statement on page 2-13 addresses the degradation of "visual quality," which is item "c" on the Appendix G checklist for aesthetics. The MST wall is addressed in the discussion of this impact; to quote from the first sentence of the impact statement: "Development of the MST site would include placing a ten foot tall masonry wall along a portion of the south property line adjacent to the Inter-Garrison Road right-of-way." The wall is not cited as the reason that the impact is less than significant.

Although development at both the MST site and the Whispering Oaks Business Park would be visible from Inter-Garrison Road, would change the overall scenic value of the project site's visual contribution to the natural landscape, and would contribute to a gradual change from undeveloped natural vistas to developed vistas, the impact is determined to be less than significant for several reasons. The Reuse Plan EIR found that build-out of the former Fort Ord would result in less than significant impacts from changes to visual quality. Sites without existing development, such as the project site, would have greater effects, but implementation of the visual protection policies in the *Fort Ord Reuse Plan* would reduce these to a less than significant level. The proposed project would implement the applicable *Fort Ord Reuse Plan* visual protection policies. The project site contains areas of previous development and is adjacent to areas of developed or degraded land, including the landfill to the north, dilapidated buildings and unused parking areas immediately to the south, and other development to the west, north, and east. The MST site would be graded to two levels, the top level with landscaping and automobile parking, and the lower level with the buildings, bus parking, and higher lighting levels. Views from Inter-Garrison Road of most of the MST site would be blocked by the proposed wall and by existing oak trees within the Inter-Garrison Road buffer and the southwest portion of the MST site. The 10-foot tall wall will be mostly hidden from Inter-Garrison Road by the oak trees, which are about 20 feet tall and will be retained within a 24-foot wide landscape buffer. The clearest views into the MST site would be at the two driveways, where a break in both the trees and wall would permit views into the site. The MST buildings' ground floor levels would be at least 10 feet below the level of Inter-Garrison Road. The buildings range in height from 40 to 60 feet. Assuming an average tree height of 15 feet, the top of the operations building would extend about 35 feet above tree line, and the other buildings would extend about 15 feet above tree line. At the Whispering Oaks Business Park, a 20-foot wide landscape buffer is proposed within the project site; in addition, there would be an extension of the landscape area within the Inter-Garrison Road right-of-way. Whispering Oaks Business Park building would not exceed 30 feet in height so would extend no more than 15 feet above the tree line.

Additional discussion of the project's contribution to cumulative visual impacts on scenic character and quality of the site and its surroundings are discussed on pages 3-2 and 3-3 of the

Draft EIR. This discussion concluded that the proposed project's contribution to a gradual change in the natural landscape of this area would be a less than significant impact.

The text of the Draft EIR has been revised to provide further clarification. Refer to Section 4.0 Changes to the Draft EIR.

2. The comment is acknowledged. The text has been revised to delete this reference.

3. The text of the Draft EIR has been revised. Refer to Section 4.0 Changes to the Draft EIR.

4. The comment is acknowledged. Note that the referenced text begins on page 2-27. The text of the Draft EIR has been revised to more accurately quote the Air District's CEQA guidelines. Refer to Section 4.0 Changes to the Draft EIR. Construction phase exhaust emissions would be significant (Draft EIR, page 2-35) and Mitigation Measure AQ-2 includes measures that would reduce NO_X emissions.

5. Table 6 includes PM_{10} emissions from both mobile and on-site sources. Although only on-site sources count toward the threshold, even with the added mobile sources, the emission levels are less than significant. Refer to the response to Comment 6 regarding bus emissions.

6. The URBEMIS analysis is based on current year EMFAC data for the type of vehicle analyzed. For existing bus trips, only changes in total trip mileage were accounted for in the URBEMIS analysis. For the 2013, 2016, and 2030 scenarios the respective EMFAC data were used along with projected miles traveled. Note that for the diesel emissions health hazard assessment, a conservative assumption was made that all of the bus fleet would be diesel powered, although this is not likely. Therefore, the diesel analysis likely overstates diesel emissions.

7. Because a landfill is adjacent to the project site, and a landfill buffer affects land use on portions of the project site, the discussion provides background information on landfill buffers.

8. The impact at State Route 1 and Imjin Road was determined to be significant and unavoidable because the required improvements may not be feasible, and the ultimate solution for acceptable level of service may involve long-range Caltrans plans to consolidate that intersection with the Del Monte Road intersection to the north. No improvements at this location are programmed by Caltrans. The majority of intersections where future level of service deficiencies are identified in the Draft EIR are included in capital improvement plans and/or fee programs. The timing for such improvements is determined by the program under which each is planned, and with the exception of those planned for construction in the near future, the timelines are typically only identified in terms of priority or in long-term planning horizons.

Therefore, specific timing for the required improvements cannot generally be identified, although priority is given to the locations with the most immediate need for improvement.

9. CEQA Guidelines section 15130(a)(3) authorizes fair share fee payments as a means of reducing a project's cumulative impact to a less than significant level. Fee payments are used in this case to reduce cumulative impacts to a less than significant level.

10. Refer to the responses to the separate letter from Quercus Group.

11. The comment is correct. The table reference on page 3-21 of the Draft EIR has been corrected.

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August 16, 2010

Attn: Craig Spencer
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Re: Monterey-Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park

Dear Mr. Spencer:

The Quercus Group appreciates the opportunity to submit Monterey-Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park DEIR public comments. The Quercus Group finds that the DEIR fails to properly analyze or proportionally mitigate direct and indirect non-fossil fuel greenhouse gas (GHG) impacts. Specifically, the DEIR fails to analyze the GHG emissions effect of forestland conversion to non-forestland use. Consequently, the DEIR fails to provide the GHG effects information necessary for informed public participation and informed decision-making regarding project environmental effects or proportional mitigation measures.

1 **The DEIR Fails to Analyze the Greenhouse Gas Emissions Effect of Forestland Conversion to Non-Forestland Use**

California Forest Project Protocol

Pursuant to Senate Bill 812 (2002) mandates, in June 2005 the California Climate Action Registry adopted the Forest Project Protocol (FPP) for calculating forestland greenhouse gas sequestration and emissions. Subsequently, the California Air Resources Board approved the FPP measurement methodology in October 2007. Specific California Environmental Quality Act (CEQA) GHG guidelines for the conversion of forestland to non-forest land use, including FPP citation, became effective March 2010. (Attachment)

The Assembly Bill 32 Scoping Plan has set a "no net loss" goal for forestland carbon sequestration and "stretch targets" of increasing forestland CO_2 storage by 2 million metric tonnes by 2020 and 5 MMT by 2050. [1] The FPP is a primary component of California's adopted greenhouse gas regulatory policy to increase forestland carbon sequestration statewide and to require proportional mitigation for biogenic and soil GHG emissions due to forestland conversion to non-forestland use.

For CEQA purposes, the FPP functions as a scientific GHG measurement standard to determine the significance of project forestland emission impacts and the sufficiency of mitigation measures. Key FPP standards for CEQA review are measurement of carbon stocks for all trees three (3) inches or greater in diameter at breast height and calculation of all forestland biogenic and soil emissions over a 100-year period.

Regarding the discretion of a lead agency to select the project forestland GHG emissions methodology, the Natural Resources Agency Final Statement of Reasons makes clear that the FPP is preferred for CEQA forestland emissions analysis/mitigation purposes unless another methodology can demonstrate scientific and factual equivalency. Moreover, the Natural Resources Agency has stated that forest emission mitigation measures based on the Forest Project Protocol likely will be viewed as sufficient project-level mitigation for GHG impacts:

> *"Consistent with section 15126.4(a), a lead agency must support its choice of, and its determination of the effectiveness of, any reduction measures with substantial evidence…Where a mitigation proposal cannot be verified with an existing protocol, a greater evidentiary showing may be required."* (Final Statement of Reasons at 49)

Biomass and soil impacts result in direct GHG emissions and the loss of future forestland carbon sequestration. Thus, the conversion of forestland to non-forestland use results in both direct and indirect GHG emissions. Verification of these distinct direct and indirect forestland GHG emission effects is provided by the Natural Resources Agency:

> *"As explained in the Initial Statement of Reasons, forest conversions may result in direct greenhouse gas emissions. Further, such conversions remove existing forest stock and the potential for further carbon sequestration. (Initial Statement of Reasons, at p. 63.) Sequestration is recognized as a key mitigation strategy in the Air Resources Board`s [AB 32] Scoping Plan. (Scoping Plan, Appendix C, at p. C-168.)"* (Final Statement of Reasons at 74)

Biomass and soil emissions associated with land-use change are carbon dioxide ($C0_2$), methane (CH_4) and nitrous oxide (N_2O). Based on AB 32, Executive Order S-3-05, Forest Project Protocol and CEQA greenhouse gas criterion, there are four biogenic/soil GHG emission questions the conversion of forestland must answer:

2 1. How much potential CO_2 sequestration over the next 100 years will be lost as a result of project impacts to live trees three inches or greater in diameter at breast height?

3 2. How much CO_2, CH_4 and N_2O will be released if the live trees, standing dead trees, downed-woody debris and other vegetation are burned or otherwise dispersed? For example, if the biomass is burned, CO_2, CH_4 and N_2O are emitted. How much of each gas depends on biomass moisture content and the method of combustion. If not burned, the quantity of GHG emissions is a result of how the biomass is reduced.

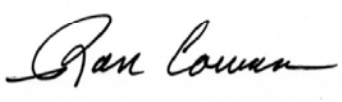
4 3. How much CO_2, CH_4 and N_2O will be released due to soil emissions associated with forestland earth-moving activities?

5 4. How will project forestland GHG emissions be proportionally mitigated in the context of effectively meeting California's 2020/2050 GHG reduction goals, AB 32 forestry sector no net loss/stretch targets and over a 100-year measurement period?

Summary

Substantial evidence has been presented that project impacts to over 37 acres of forestland will result in potentially significant greenhouse gas emissions that have not been properly analyzed or proportionally mitigated. The DEIR has not made "*a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.*" (CEQA Guidelines, § 15064.4 (a)) Therefore the DEIR is deficient as an informational document, in that it fails to apprise decision-makers/public of the full range and intensity of the adverse greenhouse gas emission effects on the environment that may reasonably be expected if the project is approved.

Respectfully,



Ron Cowan, Principal
Quercus Group

Attachment

Reference

[1]Board of Forestry and Fire Protection (2008). *The 2008 Strategic Plan and Report to the California Air Resources Board on Meeting AB32 Forestry Sector Targets.*
www.climatechange.ca.gov/forestry/documents/AB32_BOF_Report_1.5.pdf

Attachment

CEQA Guidelines Appendix G, Environmental Checklist Form
EVALUATION OF ENVIRONMENTAL IMPACTS

II. AGRICULTURE AND FOREST RESOURCES … In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Natural Resources Agency, Final Statement of Reasons

Appendix G. Initial Study Checklist
Specific Purposes of the Amendment - Forest Resources

"The amendments would add several questions addressing forest resources in the section on Agricultural Resources. Forestry questions are appropriately addressed in the Appendix G checklist for several reasons. First, forests and forest resources are directly linked to both GHG emissions and efforts to reduce those emissions. For example, conversion of forests to non-forest uses may result in direct emissions of GHG emissions. (See, e.g., California Energy Commission Baseline GHG Emissions for Forest, Range, and Agricultural Lands in California (March, 2004) at p. 19.) Such conversion would also remove existing carbon stock (i.e., carbon stored in vegetation), as well as a significant carbon sink (i.e., rather than emitting GHGs, forests remove GHGs from the atmosphere). (Scoping Plan, Appendix C, at p. C-168.) Thus, such conversions are an indication of potential GHG emissions. Changes in forest land or timberland zoning may also ultimately lead to conversions, which could result in GHG emissions, aesthetic impacts, impacts to biological resources and water quality impacts, among others. Thus, these additions are reasonably necessary to ensure that lead agencies consider the full range of potential impacts in their initial studies. In the same way that an EIR must address conversion of prime agricultural land or wetlands as part of a project (addressing the whole of the action requires analyzing land clearance in advance of project development), so should it analyze forest removal. (Reasons at 74)

Consistent with section 15126.4(a), a lead agency must support its choice of, and its determination of the effectiveness of, any reduction measures with substantial evidence. Substantial evidence in the record must demonstrate that any mitigation program or measure is will result in actual emissions reductions. As a practical matter, where a mitigation program or measure is consistent with protocols adopted or approved by an agency with regulatory authority to develop such a program, a lead agency will more easily be able to demonstrate that off-site mitigation will actually result in emissions reductions. Examples of such protocols include the forestry protocols described above. Where a mitigation proposal cannot be verified with an existing protocol, a greater evidentiary showing may be required. (Reasons at 49)

During OPR's public involvement process, some commenters suggested that conversion of forest or timber lands to agricultural uses should not be addressed in the Initial Study checklist. (Letter from California Farm Bureau Federation to OPR, February 2, 2009; Letter from County of Napa, Conservation, Development and Planning Department, to OPR, January 26, 2009.) As explained above, the purpose of the Amendments is to implement the Legislative directive to develop Guidelines on the analysis and mitigation of GHG emissions. Although some agricultural uses also provide carbon sequestration values, most agricultural uses do not provide as much sequestration as forest resources. (Climate Action Team, Carbon Sequestration (2009), Chapter 3.3.8 at p. 3.21; California Energy Commission, Baseline GHG Emissions for Forest, Range, and Agricultural Lands in California (2004), at p. 2.) Therefore, such a project could result in a net increase in GHG emissions, among other potential impacts. Thus, such potential impacts are appropriately addressed in the Initial Study checklist. See the Thematic Responses, below, for additional discussion of this issue. (Reasons at 74)

Response to the Letter from Quercus Group

1. CEQA Guidelines Appendix G suggests but does not require the use of the Forest Project Protocol for analysis of carbon sequestration in trees. The County determined that the Forest Project Protocol, although it may provide a more specific and precise estimate for carbon sequestration, would not provide information that was significantly more useful than that obtained by a simpler methodology.

EMC Planning Group prepared the MST Whispering Oaks Business Park Oak Tree Sequestration Analysis in November 2010. The report is included as Appendix M, included as an attachment to this FEIR. The report studied the removal of 37 acres of oak woodland from the portions of the project site that are proposed for development.

An estimate of the current carbon content of the oak tree biomass and soil was made using data from the U.S. Forest Service's Forest Inventory and Analysis project. According to the *Forest Resource Evaluation Whispering Oaks Business Park Monterey, California*, the oak trees on the project site are estimated to be about 60 to 80 years old (Ruskin, August 2009). The U.S. Forest Service provides data on the carbon content of average coast live oak forests 75 years of age. Based on this data and a standard per-acre figure for soil sequestration, the trees and soil are estimated to currently store ("sequester") about 3,300 metric tons of carbon.

The discussion of carbon sequestration on page 3-17 and 3-18 of the Draft EIR has been revised.

2. The carbon sequestration analysis considered the potential additional sequestration that could occur over the following 50 years. The trees are estimated to be about 75 years of age currently. The U.S. Forest Service carbon sequestration data is provided through 125 years of age, because many if not most oak trees will be in decline or dead by that age, and no significant sequestration will occur – in fact, due to decay a forest that age may release more carbon than it sequesters. During the 50 year future period analyzed, the trees could sequester an additional 1,071 metric tons of carbon. Thus, total carbon returned to the atmosphere, or not sequestered in the first place, would be about 4,371 metric tons, although some of this would be returned to the atmosphere naturally regardless of proposed project actions (refer to following response).

3. It is assumed that all materials removed would be either composted or burned as firewood within several years of removal. Carbon released through composting is considered a part of the normal carbon cycle, so that portion of the carbon release was not counted as resulting from the proposed project. Carbon released through burning would be about 2,448 metric tons (out of 3,300 metric tons in storage). Hot, dry, fires with a good supply of oxygen produce mostly carbon dioxide with little carbon monoxide, methane, and non-methane hydrocarbons. The flaming phase of the fire approximates complete combustion, while the

smoldering phase approximates incomplete combustion, resulting in greater production of carbon monoxide, methane, and non-methane hydrocarbons. The precise makeup of emissions from burning cannot be predicted because the nature of the fire is not known.

4. Soil carbon content was estimated using data from the U.S. Forest Service and the California Oak Foundation. Based on these data, the soils would contain about 11.2 metric tons of carbon per acre, or about 420 metric tons for the portion of the development area covered in oak woodland. The quantity of this carbon that would be released during ground disturbance cannot be quantified because of the variables involved. Carbon from ground disturbance would be released as carbon dioxide.

5. GHG emissions would be partially mitigated through replacement plantings and on-site preservation. Oak trees are proposed to be replaced on a 1:1 ratio in accordance with the County's tree replacement policies. Off-site replacements are tentatively proposed for a youth campus in the East Garrison area of the former Fort Ord. The sequestration analysis indicates about half of the lost sequestration would be replaced at the end of 50 years. The sequestration report did not look forward 100 years; however, the replacement trees would reach their peak sequestration period during the second 50 year period, and carbon sequestration from replacement trees would match or exceed the carbon lost from the on-site trees. The conclusion presented in the Draft EIR is that the impact would be significant and unavoidable.

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

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PHYSICAL PLANNING AND CONSTRUCTION SANTA CRUZ, CALIFORNIA 95064

Mr. Craig Spencer
Monterey County Resource Management Agency
Planning Department
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

August 26, 2010

Dear Mr. Spencer:

The University has reviewed the Draft Environmental Impact Report (EIR) for the Monterey Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park and has the following comments:

1. The University owns the parcel west of the project site and 6th Avenue, which includes the off-site improvements to Engineers Equipment Road. Figures 3 and 4 and text on pages 2-4 and 4-5 incorrectly indicate that the University-owned parcel lies to the west of 6th Avenue. Please revise these figures and text to identify the University's ownership of the parcel adjacent to the western boundary of the project site.
2. Figure 13 shows circulation improvements "by others," including the abandonment of the 8th Street Cutoff and improvements to the intersection of Engineers Equipment Road and 6th Avenue. These improvements appear to extend onto the parcel owned by the University. Who are the "others" who will construct these improvements and in which CEQA document are the environmental impacts of these improvements analyzed?
3. The EIR does not describe any provisions for management of stormwater runoff from the off-site improvements to Engineers Equipment Road, and the potential for this runoff to result in erosion and degradation of water quality are not analyzed. Please revise the EIR to describe the stormwater management features associated with the road improvements and analyze the potential erosion and water quality impacts of this runoff.
4. The EIR describes but does not illustrate the locations of sensitive habitats and rare plants in the vicinity of the proposed off-site improvements to Engineers Equipment Road. The EIR should be revised to include figures that show the locations of these biological resources. The figures should include boundaries of the land area that would be disturbed for construction of the road improvements.

We appreciate the opportunity to comment on the Draft EIR.

Sincerely,

Dean Fitch, Interim Director of Campus Planning

Cc: John Barnes, UC Santa Cruz Physical Planning and Construction
Graham Bice, UC MBEST Center
Alisa Klaus, UC Santa Cruz Physical Planning and Construction

Response to the Letter from University of California Santa Cruz

1. The comment is acknowledged. The text and Figure 3 have been revised to indicate that the land owned by University of California is located adjacent to the project site's western boundary.

2. In addition to the off-site road improvements proposed by the project on Engineer's Equipment Road, additional nearby road improvements and re-alignments are anticipated to occur in the future. These off-site circulation improvements "by others" are improvements that are anticipated by the lead agency but are not part of the off-site improvements proposed by the applicant. The improvements have not been designed or proposed for construction at this time, but would be constructed by other jurisdictions (e.g. City of Marina, California State University, University of California, or the Fort Ord Reuse Authority). The proposed project does not trigger the need for these improvements. However, these improvements are conceptually illustrated to provide context to the proposed project improvements and provide an understanding of future circulation patterns. Environmental review of these improvements would be conducted by the jurisdiction proposing the improvements when design and construction are proposed to occur.

3. The off-site road improvements proposed by the project involve widening Engineer's Equipment Road west of the project site. Run-off from the existing pavement drains to the edge of the road where it percolates into the soil. As with the new roads within the project site, drainage channels and/or infiltration galleries would be incorporated into the design of the roadway to capture storm water run-off. The infiltration galleries eliminate soil erosion and assist with natural filtration of run-off water.

4. The Draft EIR and the biological reports adequately describe potential impacts to sensitive habitats and rare plants near the off-site road improvements to Engineer's Equipment Road.

State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
http://www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, *Governor*
JOHN McCAMMAN, *Director*

August 25, 2010

Craig Spencer
County of Monterey
Resource Management Agency
Planning Department
168 West Alisal Street, 2nd Floor
Salinas, California 93901-2487
spencerc@co.monterey.ca.us

Subject: Draft Environmental Impact Report
Monterey-Salinas Transit – Whispering Oaks Business Park
PLN090071
SCH No. 2009121049

Dear Mr. Spencer:

Staff of the Department of Fish and Game (Department) has reviewed the Draft Environmental Impact Report (DEIR) prepared by the County of Monterey for the Monterey-Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park (Project), located on former Fort Ord Army landfill parcels (APN 031-101-056-000 and 031-101-041-000). The proposed Project includes rezoning and subdivision of an 115.53-acre site, with development of a bus yard and maintenance facility and a business park on about 58 acres. The vesting tentative map anticipates 20 parcels, including one parcel of 24.37 acres for the Monterey-Salinas Transit (MST), and 15 additional business park lots totaling 24.44 acres, two open space parcels, one parcel for a detention basin, and one parcel for private streets. We have been working with the County to provide Department input on this Project for several years, in particular to provide guidance on development of an Incidental Take Permit, pursuant to the California Endangered Species Act (CESA); and offer the following comments on the proposed Project in order to better support Department permit issuance for this Project.

1 Department Jurisdiction

Trustee Agency Role: The Department is a Trustee Agency with the responsibility under the California Environmental Quality Act (CEQA) for providing comments to the Lead Agency on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA.

Responsible Agency Role: The Department is a Responsible Agency pursuant to CEQA when a subsequent permit or other type of discretionary approval is required from the Department, such as an Incidental Take Permit, pursuant to CESA, or a Lake and Streambed Alteration Agreement (LSAA) issued under Fish and Game Code Sections 1600 et seq.

The Department has regulatory authority over projects that could result in the "take" of any species listed by the State as threatened or endangered, or designated as a candidate for listing, pursuant to Fish and Game Code Section 2081. If the Project could result in the "take" of any species pursuant to CESA, the Department may need to issue an Incidental Take Permit for the Project. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (Sections 21001(c), 21083, Guidelines Sections 15380, 15064, 15065). Significant impacts must be avoided or "fully mitigated" in order for "take" authorization to be issued by the Department, and while the CEQA Lead Agency may make a supported Statement of Overriding Considerations (SOC), the Department cannot issue a "take" authorization unless all impacts to listed species have been "minimized and fully mitigated" (Fish and Game Code Section 2081).

The CEQA Lead Agency's SOC does not eliminate the Project proponent's obligation to comply with CESA. In other words, compliance with CESA does not automatically occur based on local agency project approvals or CEQA compliance; consultation with the Department is warranted to ensure that Project implementation does not result in unauthorized "take" of a State-listed species.

Incidental "take" authority is required prior to engaging in "take" of any plant or animal species listed under CESA. Plants listed as threatened or endangered under CESA cannot be addressed by methods described in the Native Plant Protection Act. No direct or indirect disturbance, including translocation, may legally occur to State-listed species prior to the applicant obtaining incidental "take" authority in the form of an Incidental Take Permit.

Pursuant to Fish and Game Code Sections 1600 et seq., the Department has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. Given the Project description provided in the DEIR, it would not appear that this Project would require an LSAA. However, if elements of the Project could result in disturbance to the bed or bank of a stream, the Project proponent should submit a Streambed Alteration Notification to the Department for this Project, and the Department would then determine whether an LSAA is necessary.

The Department is also required to comply with CEQA in the issuance or the renewal of a LSAA; therefore, for efficiency in environmental compliance, we recommend that any stream disturbance be described and mitigation for the disturbance be developed as part of the environmental review process. This will reduce the need for the Department to require extensive additional environmental review for an LSAA for a Project in the future. For additional information on notification requirements, please contact our staff for the Lake and Stream Alteration Program in Fresno, at (559) 243-4593.

Permit Streamlining: Issuance of an LSAA and/or an Incidental Take Permit by the Department is considered a "project" (CEQA Guidelines Section15378) and is subject to CEQA. The Department typically relies on the Lead Agency's CEQA compliance to make our own findings. For the Lead Agency's CEQA document to suffice for permit/agreement issuance, it must fully describe the potential Project-related impacts to stream/riparian resources and listed species, as well as measures to avoid, minimize, and mitigate impacts to these resources. Impacts to State-listed species must be "fully mitigated" in order to comply with CESA (California Fish and Game Code Section 2081(b)(2)). If the CEQA document issued by the County for this Project does not contain this information, the Department may need to act as a Lead CEQA Agency and complete a subsequent CEQA document. This could significantly delay permit issuance and, subsequently, Project implementation. In addition, CEQA grants Responsible Agencies authority to require changes in a Project to lessen or avoid effects of that part of the Project which the Responsible Agency will be called on to approve (CEQA Guidelines Section 15041).

Bird Protection: The Department has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized "take" of birds. Sections of the Fish and Game Code that protect birds, their eggs and nests include Sections 3503 (regarding unlawful "take," possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the "take," possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful "take" of any migratory nongame bird).

Project Impacts and Recommendations

2 **Sand Gilia:** The DEIR identified the presence of sand gilia (*Gilia tenuiflora* ssp. *arenaria*), a State Threatened and Federally Endangered plant species on the Project site, and Project implementation would result in "take" of sand gilia. The Department has worked with the County to identify a project which would avoid and minimize impacts to the species to the maximum extent feasible; and to identify a conservation strategy which, when implemented, would fully mitigate project-related impacts to the species. The final details of the conservation program have yet to be determined and accepted by the Department, and no Incidental Take Permit has been issued to date. We would therefore recommend that the County not engage in any vegetation removal or ground-disturbing activities anywhere on the Project site (not just on Lots 2-11 as specified in mitigation measure BIO-2) until an Incidental Take Permit has been issued by the Department for the Project, in order to comply with State law..

3 **Other Sensitive Plant Species:** Please be advised that seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*) is State Endangered; floristic surveys should be conducted by knowledgeable individuals prior to vegetation removal or ground-disturbing activities, during the appropriate time of year, to determine if this species or any other sensitive plant species occurs on the project site. Should floristic surveys identify seaside bird's-beak (or any other CESA-listed plant species) on the project site, no vegetation removal or ground-disturbing activities can legally occur until the County has requested and received "take" authorization from the Department in the form of an Incidental Take Permit.

4 **California Tiger Salamander:** The DEIR identified portions of the Project site as suitable upland habitat for the State and Federally Threatened California tiger salamander (*Ambystoma californiense*; CTS). The DEIR indicates that suitable breeding habitat exists in ponds and pools offsite and adjacent to the Project. The DEIR assumes that no "take" of CTS would result if Project elements which are farther than 1.24 miles from an adjacent breeding site were to be implemented; and further, that any activities within 1.24 miles of the pond will be deferred until "take" authorization is available by way of the base-wide Incidental Take Permit. While we would agree that the probability of CTS occurring on the Project site greater than 1.24 miles from the breeding pond is low, the Department does not concur that no "take" will occur, and requests that protocol-level surveys for CTS be conducted prior to vegetation removal or ground-disturbing activities, in order to determine species presence and whether it potentially uses the entire Project area (not just lots 12-16). Additionally, construction of an on-site drainage basin on Parcel B may result in creating suitable breeding habitat on the Project site, increasing the potential for CTS to occur on upland habitat on the Project site.

If CTS are found on the Project site, "take" authorization would need to occur through the issuance of the Incidental Take Permit, pursuant to Fish and Game Code Section 2081(b). In the absence of protocol surveys, the applicant can assume presence of CTS within the Project area and obtain an Incidental Take Permit. For information regarding Incidental Take Permits please see the following link: http://www.dfg.ca.gov/habcon/cesa/. Included in the Incidental Take Permit would be measures required to avoid and/or minimize direct "take" of CTS on the Project site, as well as measures to fully mitigate the impact of the "take."

The Department also recommends consultation with the United States Fish and Wildlife Service (USFWS) prior to any site development and ground disturbance related to this Project. "Take" under the Federal Endangered Species Act (FESA) is more stringently defined than under CESA; "take" under FESA may also include significant habitat modification or degradation that could result in death or injury to a listed species, by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of Project implementation.

5 **Other Special Status Wildlife Species:** Mitigation measure BIO-6 recommends that when special status animal species are encountered by the biological monitor during the initial grading and vegetation removal, work shall stop until the animal has moved out of the site on its own, or individuals will be moved by the biological monitor outside of the Project site to adjacent habitat. Please be advised that trapping, handling and/or relocating special status species may require authorization from the Department; pursuit and capture are defined as "take" under Fish and Game Code Section 86. If active relocation is anticipated to be utilized for special status species, the biological monitor should work with the Department prior to initiation of ground-disturbing activities or vegetation removal to develop a plan for such relocation and to obtain the necessary authorization(s).

6 **Nesting Birds:** Please be advised that Fish and Game Code Sections 3503, 3503.5 and 3513 protect eggs and nests of all native bird species, as well as raptors and migratory birds. White-tailed kite is also identified as fully protected pursuant to Section 3511, meaning that no "take" of this species can be authorized. The measures identified in mitigation measure BIO-9 should be extended to apply to all nesting bird species, not just raptors.

Thank you for the opportunity to review and comment on the DEIR for the MST Bus Maintenance and Operations Facility and Whispering Oaks Business Park Project. Please feel free to contact Deborah Hillyard, Staff Environmental Scientist, of my staff if you have questions regarding our comments. She can be reached at (805) 772-4318 or via email at dhillyard@dfg.ca.gov. We remain committed to working with the County to resolve the outstanding issues on this Project and to progress to permit issuance.

Sincerely,

Jeffrey R. Single, Ph.D.
Regional Manager

cc: Jim Cook, Director
Monterey County Redevelopment
and Housing Agency
168 West Alisal Street, 3rd Floor
Salinas, California 93901

Douglas Cooper
United States Fish and Wildlife Service
Ventura Office
2493 Portola Road, Suite B
Ventura, California 93003

ec: Annee Ferranti
Deborah Hillyard
Department of Fish and Game

Response to the Letter from the California Department of Fish and Game

1. The comment is acknowledged. The comment provides a summary of the Department of Fish and Game's jurisdiction and role in approval of the proposed project. A Streambed Alteration Permit would not be required for the proposed project.

2. Surveys for sand gilia were conducted and the occurrence of sand gilia within the project site was mapped. Sand gilia was found in the vicinity of proposed Lot 10 in the Whispering Oaks Business Park (refer to Figure 19 Rare Plant Map in the Draft EIR). No sand gilia was found within the western portion of the project site where first phase (MST) development is proposed. Therefore, the mitigation measure is not necessary for development within the MST site.

3. According to Appendix A to the MST Facility/Whispering Oaks Business Park Biological Assessment (Denise Duffy and Associates, August 2009), which is included in Appendix D to the Draft EIR, the project site was surveyed for the presence of seaside bird's beak, but none were found. Additional surveys were conducted of the off-site drainage areas and along Engineer's Equipment Road in September 2010, and no seaside bird's beak was present in those areas. The areas were also surveyed for rein orchid during the September 2010 surveys. Rein orchard was not found within this area. In the event seaside bird's beak did occur on the project site, it would be mitigated by Mitigation Measure BIO-3.

Refer to the bird's beak survey report included in Appendix L, Additional Biological Reports, included as an attachment to this FEIR.

4. Based on a number of studies, the likelihood of CTS occurring beyond the two kilometer limit on the MST/Whispering Oaks site, and the potential for incidental take are extremely low. However, as a result of negotiations with CDFG, Mitigation Measure BIO-4 has been revised to require biological monitoring for all development. If presence of CTS is discovered at the site work must cease and consultation with CDFG will be required. In order to diminish any potential of the presence of CTS beyond the two kilometer buffer, the applicant proposes to install fencing with one-way doors prior to development for Phase 1 and a portion of Phase 2 including lots 2, 3, 7, and 8. Development of the drainage pond on Parcel B would occur concurrently with the development of Lots 2-11, so development on those lots would already be underway before CTS could be attracted to the new pond. However, the mitigation measure would adequately address CTS at the new pond were that to occur.

A memo addressing approaches to mitigating for CTS and showing the location of known occurrence near the project site is included in Appendix L, Additional Biological Reports, included as an attachment to this FEIR.

5. The comment is acknowledged. Mitigation Measure BIO-6 has been revised to reflect protocol for movement of protected species.

6. The comment is acknowledged. Mitigation Measure BIO-9 has been revised to extend protection to all nesting birds.

Facilities Management and Planning
100 Campus Center
Seaside, CA 93955-8001
831-582-3709
Fax 831-582-3545

August 27, 2010

Craig Spencer
Associate Planner
County of Monterey
168 W. Alisal St., 2nd Floor
Salinas, CA 93901

Re: Public Comment of Draft Environmental Impact Report for MST Whispering Oaks Business Park

Dear Mr. Spenser:

California State University, Monterey Bay (CSUMB) has reviewed the Draft Environmental Impact Report (DEIR) for the Monterey-Salinas Transit (MST) Whispering Oaks Business Park, hereinafter referred to as the "proposed project" (State Clearinghouse # 2009121049). The CSUMB campus is located immediately south, east and in the future may acquire property directly west of the proposed project and, for that reason, CSUMB would be uniquely impacted by the proposed project. In that regard, we offer the following comments for your consideration:

1 **Location and Setting**
Page S-1 Please identify CSUMB in the regional setting as a jurisdictional entity located adjacent to the proposed project. We request that CSUMB be reflected as such throughout the DEIR where appropriate.

2.7 Land Use and Planning

2 **No-Impact Division of a Community-** Page 2-120 states "No Impact – Division of a Community. The proposed project would not divide an existing community. The project site is mostly undeveloped land at the edge of existing development, and the proposed uses are consistent with the applicable land use plan."

The proposed project intensifies uses beyond those presented in the Fort Ord Base Reuse Plan (BRP) and appears to be inconsistent with Institutional Land Use Policies A1.2 and A1.3 identified on page 2-110 which specifically refer to zoning and compatible land uses adjacent to CSUMB. The BRP land use designations for the proposed project site include Planned Development, Mixed Use District and Habitat Management, and designates CSUMB as having Land Use Designations of School/University and University Medium Density Residential. The project would

require re-zoning of the project site from Public and Quasi-Public (PQP-D-S) to Heavy Commercial (HC). If the proposed land use was consistent with the project, then why does it require a rezone and rely on the General Development to limit land uses? Please validate a determination of "No Impact" in the EIR for a use that will not improve services for the campus population and could create emissions, safety, and noise concerns between two of our primary uses (Main Campus and East Campus Housing).

3 Note that page 2-112 states that the "Planned CSUMB development adjacent to the project site is limited to staff or faculty housing to the southwest corner of the project site. Future CSUMB development near the project site will be focused westward toward the campus core, and not toward the project site." However future campus build-out will abut the MST development in the form of student housing between 6th and 7th Avenues as well as administrative and academic partnerships in the form of research or business/academic-related projects between 7th and 8th Avenues. The campus core described west of the project site is defined as academic buildings within a 10-minute walk of the crescent, the defining Main Campus landscape feature.

2.6 Hydrology and Water Quality

4 **On-Site Drainage** – Page 2-101 of the DEIR states that conduits would be sized for 25-year storm flows, with storm flows from higher precipitation events potentially flowing above-ground. Based on land gradient, it is anticipated that flows may adversely affect roadway conditions along Inter-Garrison Road, the only direct route between East Campus Housing and Main Campus. Flooding of Inter-Garrison Road may adversely affect vehicle, bicycle, shuttle, bus, and pedestrian and wheelchair traffic. To mitigate this potential impact, CSUMB requests that mitigation be presented in the DEIR that addresses proposed project property owner responsibility for providing alternate transportation means, roadway flooding response and maintenance of Inter-Garrison Road as needed under an appropriate agreement and/or memorandum with the University.

5 **Off-site Drainage** - The Off-site Drainage alternatives presented on pages 2-102-103 do not reflect the discussions held between the project proponents and CSUMB staff over the last few months. The DEIR sources a drainage and hydrology report prepared by AECOM in January 2010 and outdated drainage alternatives. On June 15, 2010, the County of Monterey and MST staff presented storm water solution to CSUMB staff who understood this option to provide a more acceptable and agreeable solution to the management of storm water runoff. CSUMB understands the revised plan prepared by Whitson Engineers dated June 4, 2010 and labeled "Option A" to include but not be limited to the following:

- Storm water would no longer drain off-site to UCSC property from 7th Avenue/Inter-Garrison Road
- Removal of 2.4 acres of asphalt on CSUMB property in Area D2 by project proponent to increase natural storm water infiltration rate and volume, as proposed by Schaff & Wheeler

- Direct runoff into a roadside ditch/gallery south of Inter-Garrison Road on CSUMB property
- Reduce the size of drainage piping to Pond 3 from 30" to 27"
- Reconsideration of pond D2 on the corner of 7th Avenue and Inter-Garrison Road
- Review and approval authority by CSUMB for any work performed on or immediately adjacent to CSUMB property, or that would result in project-related storm water/drainage and hydrological effects on CSUMB property and/or operations

CSUMB requests the DEIR be updated to reflect the most current and improved storm water/drainage and hydrology analysis and discussions available during this environmental review process and that this be provided to the public for review and comment, consistent with CEQA. CSUMB will continue to work with the County to find a mutually acceptable solution to the storm water discharge across Inter-Garrison Road onto the project site.

2.1 Aesthetics

6 **Regional Setting** - On page 2-3 the project site is described as unincorporated Monterey County and is subject to the policies and provisions of the *Fort Ord Reuse Plan*, *1982 Monterey County General Plan* and the *Greater Monterey Peninsula Area Plan*. However, the project site is adjacent to university property in both the Cities of Marina and Seaside.

Also on page 2-3 text states that the "CSUMB Master Plan does not identify a development timeframe for the staff and faculty housing near the southwest corner of the project site. Most of the land to the south of the project site is designated for open space in the CSUMB Master Plan." Note that all projects within the Master Plan are designated to be completed by 2025 and that the majority of the MST site borders what will be residence halls, faculty housing and campus partnerships directly south and adjacent to the project.

7 **Vantage Points** - The first paragraph in this section does not identify the future faculty-housing site as a project vantage point and on page 2-5 it states that "The Monterey County Code protects views from public viewing points, and does not protect views from private property." CSUMB is a public serving institution and is concerned that views from the campus over the project site were not fully evaluated.

Figure 17 on 2-7 indicate that the faculty housing was evaluated from between 7th and 8th Avenues at Inter-Garrison Road. However the future faculty housing will be located just west of 8th Avenue, overlooking the project site. The text for Vantage Point #4 states that "Distinguishing characteristics of views from the higher elevation are characterized by nearly contiguous woodlands in the foreground framed by distant views of the Former Fort Ord buildings..." Please distinguish between and include an

analysis of the aesthetics and view shed from the future faculty staff housing east of 8th Avenue as well as the student housing between 7th and 8th Avenue. Note that future faculty housing will be at an elevation with ocean views that overlook the MST project site.

8 **Perimeter Wall and Landscape Buffer** – On page 2-10 "The MST GDP design standards identify perimeter fencing setbacks of zero feet from right-of-way and interior lot lines....The proposed walls would largely shield the parking lots from view from Inter-Garrison Road," and "Along the entire MST site frontage a buffer of 24 feet would be retained within the Inter-Garrison Road right-of-way, as part of an overall plan line design for the roadway." Please provide a clear description of the buffer for both the MST and Whispering Oak sites. Figure 12 is unclear and has no scale to reference. The campus would like to know how many feet of landscaping will be provided on the south side of the wall, how the wall will be shielded from the road, how the landscape buffer will protect the view from the campus and Inter-Garrison Road and how pedestrian access will safely link the project with the CSUMB campus.

9 **Less than Significant Impact-Glare from Reflective Surfaces and Nighttime Lighting** - On page 2-13 it states that "Most building materials would be non-reflective, although the white elastomer roof could reflect considerable light. Glare effects would be most visible from Imjin Road, but the views from Imjin Road are distant and brief." The CSUMB future faculty and staff housing site, east of 8th Avenue and Inter-Garrison Road, directly overlooks the project site and would likely be the most impacted by the white roofing. Please evaluate this site for glare impacts and consider a non-reflective roofing material to mitigate this potential impact.

2.8 Noise

10 Page 2-128 states that the proposed project includes, "A 10-foot security barrier that provides sound attenuation in locations where a solid wall is used is planned along the west, south, and east property lines of the project site". Although noise impacts may affect nearby sensitive receptors, construction of a 10-foot wall on three of the property lines would create a significant disruption in the safety of Inter-Garrison Road. Such walls create a blockage, visual and physical, and a reduction of pedestrian friendliness and safety results. Further, if an incident should occur along Inter-Garrison Road where students traverse during hours of darkness between housing and Main Campus on foot, bike and vehicle, walls create a real and perceived safety hazard by confining hazards without area for escape. Due to the high level of foot, skate, bicycle and vehicle traffic along this corridor, CSUMB asks that the DEIR look at ways to attenuate sound, provide site security, maintain the oak woodland vista and provide safe pedestrian access across Inter-Garrison Road, by means such as a vegetated buffer and/or other visual and pedestrian corridor enhancements.

2.9 Traffic and Circulation

11 **Transit, Bicycles, Pedestrians** - Page 2-140 states that "The [Inter-Garrison] corridor is planned to ultimately include rail transit and a bicycle/pedestrian path." CSUMB is

aware that the Inter-Garrison Road proposed Multi-Modal Corridor would be used for Bus Rapid Transit, not rail transit, and a bicycle and pedestrian path. We are also aware that it may connect with rail transit off-site and west of CSUMB campus, with the closest potential rail stop at the 8th Street/1st Avenue intersection.

12 **Proposed Street Network Changes** – As described on page 2-148, CSUMB understands the site access improvements to be implemented between Phase 1, 2 and Buildout. During Phase 1 "Inter-Garrison Road right and left turn lanes (at project driveways), frontage improvements along the MST site, and preliminary improvements to Engineer's Equipment Road to facilitate bus and employee access from Imjin Road via Eighth Street or Six Avenue," would be completed. Phase 2 "would construct the final improvements to the existing section of Engineer's Equipment Road, an extension of Engineer's Equipment Road southward to intersect with Inter-Garrison Road." At Buildout, interior cul-de-sacs would be constructed if not already complete.

CSUMB continues to support the following project access scenario which appears to be consistent with this DEIR. Site access should be planned with specific emphasis on promoting compatibility between the approved CSUMB Master Plan and future road improvements that minimize traffic impacts on Inter-Garrison Road and through the campus. The campus is willing to negotiate the required easements across Inter-Garrison Road as shown on sheet 1 of the Vesting Tentative Map for Whispering Oaks prepared by Whitson Engineers on 11.24.09 and described below:

- Realign Imjin Road to a new 6th Avenue, which would serve as the primary northern campus entrance.
- Use Engineer Equipment Road from 6th Avenue as the primary access to both the MST Bus Depot and the entire Whispering Oaks Business Park.
- Limit Inter-Garrison Road access to two driveways which will serve non-employee traffic and MST routes serving CSUMB.

13 **Trip Distribution** Page 2-149 states that the trip distribution analysis assumed that "All trips have been routed to avoid passing though the CSUMB campus core; the CSUMB Master Plan proposes that the core area of campus will ultimately be closed to non-CSUMB vehicle traffic." The analysis does not include a way to prevent project associated non-bus traffic from using campus roads, thus placing the responsibility on the campus. The University again requests that this analysis address potential transportation demand management (TDM) strategies to reduce project traffic volumes through and around CSUMB. Appropriate TDM measures will allow the campus to meet its development and academic goals. TDM strategies addressed in the DEIR should include the retention of a transportation coordinator to work with CSUMB to limit vehicles through the campus and ensure the safe mobility of our students, staff and faculty as pedestrians, cyclists and drivers.

14 Page 2-150 states that "The traffic report assigned bus trips to use....Seventh Avenue (en route to Lightfighter Drive), in order to avoid traveling through the CSUMB campus core on Inter-Garrison Road and/or General Jim Moore Boulevard." CSUMB is willing to negotiate the use of its roads for future bus routes that do not serve the campus.

15 **Transit, Bicycles, Pedestrians-** On page 2-152 "A pedestrian walkway would be constructed to connect the MST operations building and Inter-Garrison Road, and other sidewalks would be provided within the MST site." Please clarify how the sidewalk would link the MST development with the CSUMB campus and what safety features would be included.

16 **Mitigation Measure T-8-** On page 2-164 Mitigation Measure T-8 states that "MST shall include a policy in the General Development Pan to require out-of-service buses traveling to and from the beginning or ends of their day's run to use routes that avoid the following streets within the CSUMB campus core area: Inter-Garrison Road/Third Street (Sixth Avenue to General Jim Moore Boulevard) and Divarty Street (east of General Jim Moore Boulevard). The restriction shall not apply to routes serving CSUMB." The campus feels this is not consistent with campus' current plans to convert 7th Avenue into a bicycle boulevard that will connect future bicycle boulevard segments on campus along Divarty Street, Inter-Garrison Road, 5th and 6th Avenues.

CSUMB requests that the mitigation be revised to expand the out-of-service bus service routes to the following and negotiate through traffic with campus staff:

- Inter-Garrison Road (Sixth Avenue to Second Avenue),
- Divarty Street (east between Second Avenue and Fifth Avenue),
- General Jim Moore Boulevard (between Eighth Street and Lightfighter),
- Seventh and Eight Avenues (between Inter-Garrison Road and Colonel Durham Road).
- Routes to deter non-bus traffic associated with the project from passing through CSUMB campus.

This would improve the mitigation to reduce potential conflicts with bicycle, skate and pedestrian traffic utilizing primary non-vehicle transportation routes to and through campus.

17 **Significant Project Impacts** On pages S-14 to S-15 in Phase 1, it is unclear how the significant impacts on the following roads will be mitigated since they are not listed as a part of the FORA or Marina developer fee programs or jurisdictions' capital improvement programs during this time frame:

- Fifth Avenue-California Avenue/Imjin Parkway: add a southbound California Avenue right turn lane;
- Third Avenue/Imjin Parkway: signalize intersection;
- Abrams Drive/Imjin Parkway: add a second eastbound Imjin Parkway through lane; and add a second westbound Imjin Parkway through lane

18 **Significant Cumulative Impact-LOS Below Standard** It is unclear who is responsible for implementing the mitigation listed on S-23 and below at the intersection of CSUMB, Marina, Seaside and Monterey County boundaries:

- Seventh Avenue/Inter-Garrison Road. Add a northbound right turn lane.

19 **Mitigation Measure T-11** As identified on S-26 in mitigation T-11, any improvements that encroach on CSUMB's portion of Inter-Garrison Road will require easements from CSUMB.

1.3 Project Description

20 **Gas Line and Metering Station** CSUMB receives natural gas from a line that traverses the project site. The campus prefers a gas line and metering station relocation solution that installs a new metering/regulator yard above the transmission line to the northwest of the project that is dedicated to CSUMB, thus preventing increased economic hardship on the campus. From here, gas could be conveyed through a new main that ties into the existing CSUMB system in Inter-Garrison Road. The campus intends to continue the ongoing discussions with the County and MST regarding the final layout and relocation of the gas main and gas meter and asks that this report analyze and present different gas line and metering station location alternatives.

2.5 Hazardous Materials/Health and Safety

21 On page S-12 the DEIR identifies hazardous materials transport and use as a potentially significant impact due to the transport and handling of hazardous materials, "including solvents, propane, and vehicle fuel".

Mitigation presented in the EIR states that "H-1 As part of its Business Response Plan, MST shall develop a designated transport route for hazardous waste deliveries and removal, subject to the review and approval of the Monterey County Environmental Health Department." CSUMB requests the lead agency update the mitigation measure to include consultation with CSUMB during creation of the Business Response Plan and hold at least one public meeting presenting the plan prior to its approval by the Monterey County Environmental Health Department to receive public input, particularly targeting the campus and residents of CSUMB's East Campus Housing area, which include students, staff, faculty and community members.

CSUMB appreciates the opportunity to comment on the MST-WO DEIR and looks forward to continued consultation with the County and MST on the above issues. Please contact me if you have any questions or would like to discuss these comments in detail.

Sincerely,

John L. Marker, Associate Vice President
Facilities Management & Planning
California State University, Monterey Bay
Phone:(831) 582-4796 Fax:(831) 582-3545

CC: Hunter Harvath, Monterey Salinas Transit

Response to the Letter from California State University Monterey Bay

1. CSUMB is a neighboring public entity with jurisdiction over its land but not the proposed project. CEQA Guidelines Section 15366 describe a public agency with jurisdiction by law when they have the authority to:

a. Grant a permit or other entitlement for use;

b. Provide funding for the project in question; or

c. Can exercise authority over resource which may be effected by the project (this is interpreted to mean "Trustee Agencies" such as Fish and Game, Refer to Section 15386 of CEQA).

The Location and Setting description on page S-1 will be updated to reflect CSUMB as a neighboring property owner and a public entity.

2. The project site has two land use designations in the *Fort Ord Reuse Plan*: Planned Development Mixed Use and Habitat Management. Development is proposed only within the area designated Planned Development Mixed Use, with the remainder of the project site to be left as undeveloped open space. The County adopted the Public/Quasi-Public Zoning designation for all County owned property in Fort Ord. Properties are re-zoned as development applications are submitted. The Heavy Commercial zoning is proposed in conjunction with the Whispering Oaks General Development Plan and MST General Development Plan, which limit many of the uses otherwise allowed by the proposed Heavy Commercial zoning district. The Monterey County Zoning Code (Title 21) requires general development plans for development within many zoning districts, including the Heavy Commercial district. The zoning and general development plans work in tandem, and as a result, the proposed Heavy Commercial zoning district is consistent with the Planned Development Mixed Use land use designation (see *Fort Ord Reuse Plan* Table 3.4-1). Hence, no amendment to the land use map is necessary or proposed. Refer to the discussion of project consistency with *Fort Ord Reuse Plan* policies on pages 2-111 and 2-112 of the Draft EIR.

The *Fort Ord Reuse Plan* Planned Development Mixed Use designation is "intended to encourage the development of pedestrian-oriented community centers that support a wide variety of land uses, including commercial, residential, retail, professional services, and cultural and entertainment activities. Generally, this mixed use will be located near future transit facilities or along transit corridors, and near commercial and employment centers." Specific policies guide development within some areas designated on the *Fort Ord Reuse Plan* land use map as Planned Development Mixed Use, but no policy specifically guides development within the project site. The purpose of the Planned Development Mixed Use designation adjacent to the university as

expressed in Program A-1.3 is "to encourage use of this land for a university and research oriented environment and to prevent the creation of pronounced boundaries between the campus and surrounding communities." The proposed project would accommodate research and development uses on more than half the developed area.

The Heavy Commercial zoning is proposed because the other suitable zoning districts do not allow the bus maintenance uses proposed by MST. The general development plans restrict incompatible uses and allow a number of uses (including research and development, green product manufacturing and sales, offices, vocational education, limited local serving retail, and restaurants) that would complement the adjacent university uses by providing adjunct research space or personal services for staff or students. The MST facility would enable MST to provide a high level of public transit service for the university campus, which will arguably house the highest concentration of potential riders in the MST service area. The proposed project would also provide a sidewalk along the project frontage on Inter-Garrison Road between CSUMB housing areas to the east with the main part of the campus.

The Draft EIR addressed air emissions, hazards, and noise. The proposed project could result in significant air quality impacts during the construction phase, but these impacts would be mitigated to a less than significant level with dust and exhaust emissions controls. See Section 2.2, Air Quality, of the Draft EIR. The transport and use of hazardous materials was identified as a potentially significant impact, but this impact would be mitigated to a less than significant level through implementation of hazardous materials transport plans as a component of the business response plan. See Section 2.5, Hazards and Hazardous Materials, of the Draft EIR. The proposed project would not result in significant noise impacts. Noise impacts are addressed in Section 2.8, Noise, of the Draft EIR.

3. The comment is acknowledged. The *CSUMB Master Plan* land use map is presented on page 1-23 of the Draft EIR. Faculty/Staff Housing and Campus Partnership uses are directly adjacent, and Student Housing is to the southwest at Inter-Garrison Road and Seventh Avenue.

4. The storm drainage system consists of two primary components: basins, which are sized to detain 100-year flows, and conduits (closed or open), which are sized to accommodate 25 year flows. Both the on-site and off-site drainage systems are designed to this standard. A 25-year or larger storm has a four percent chance of occurrence in a given year. It is accepted practice that flows from larger storm events be carried within streets; this approach reduces the size requirements for pipes and other conveyances, while only occasionally compromising the circulation system. Given the fall of land northward of Inter-Garrison Road, the likelihood of deep flooding on the roadway surface is low, and is considered acceptable by the County of Monterey.

5. The Draft EIR presents three conceptual drainage options provided by the applicant. The June 4, 2010 option referred to in the comment is similar to Alternative 3, shown in Figure 16. The June 4, 2010 option is presented in Section 4.0 Changes to the Draft EIR. The June 4, 2010 option does not include areas not already studied in the Draft EIR, and would not result in any new or increased environmental effects. Therefore, recirculation of the Draft EIR is not required.

6. The comment is acknowledged. The portions of the CSUMB campus that are directly adjacent to the project site are in unincorporated Monterey County. The southwest corner of the project site touches the northeast corner of the City of Seaside. Refer to Figure 7 in the Draft EIR. The discussion identified in the comment describes the regulatory setting of the project site. The project site is not located within the city limit of either the City of Marina or the City of Seaside and is not located within the boundary of the CSUMB Campus. Therefore, these entities do not have permit authority over the project site. The text of the Draft EIR has been revised to identify the CSUMB anticipated timeframe for completion of campus development identified in the comment.

7. CSUMB is a public entity that provides a public service and that planned future campus development includes faculty housing east of Eighth Avenue, as shown on Figure 9, CSUMB Master Plan Land Use Map, in Section 1.0 Introduction. The Draft EIR reports that tree removal and proposed development would be most visible from several public areas including those at higher elevations within the CSUMB campus property south of Inter-Garrison Road (page 2-9). The Draft EIR also includes Visual Simulations (Appendix B) of estimated rooflines on the MST site and their anticipated effect to views from these areas. Photograph 5, of the simulations reflects the ocean views available from higher elevations south of the project site. As demonstrated by the visual simulations, the proposed project would not block or substantially impair public views of the ocean that may be available from future development on the CSUMB site. In addition to the visual simulations, Vantage Point #4 provides a representative example of ground-level views from higher elevations south of the site, near other planned campus development along Seventh Avenue and Eighth Avenue (page 2-5).

The vantage points and locations for visual simulations studied were chosen due to their accessibility by the public and the likelihood that existing unrestricted public access would remain unchanged by future development planned for by CSUMB and the City of Marina. However, as reported in the Draft EIR, the lead agency does not assume that the general public would have unrestricted access to residential areas in the future such as parcels in the Marina Heights residential subdivision to the north of the project site, and or the faculty residential facilities planned for by CSUMB to the south of the project site. Instead, the EIR discussion analyzes impacts to public views from readily accessible ground-level public viewing points such as roadway and pedestrian corridors that currently exist, and could reasonably be expected to be maintained in future campus developments.

The text of the Draft EIR has been revised to ensure consistency of references to future campus development with Figure 9.

8. The comment is acknowledged. Refer to the response to Comment #1 from LandWatch. The text of the Draft EIR has been revised to clarify the buffer areas for the MST site. New Figures 17a and 17b presented in Section 4, Changes to the Draft EIR present cross-sections of the setback design at locations from the centerline of Inter-Garrison Road to the wall/fence line and through the MST site. As reported in the Draft EIR, the lead agency found that much of the development on the Whispering Oaks site would not be visible from Inter-Garrison Road due to the topography of the site between the roadway and the project site, requirements for landscaping and site coverage, height and setback limitations proposed as part of the project (pp 2-11 – 2-12).

Lot 1 (MST) of the proposed development will provide a 75 foot wide oak tree buffer from the southwest edge of Lot 1 to the Bus access driveway on Inter-Garrison Road (Refer to Figure 12 and the discussion on p 2-10). On the east side of the bus access driveway a 24 foot landscape buffer will be provided between the MST perimeter wall and the edge of pavement, within the official plan line of Inter-Garrison Road. The landscape buffer will contain a walkway, oak trees and ornamental landscaping to screen appearance of the wall and the site. East of Lot 1, the Whispering Oaks Business Park General Development Plan requires setbacks of buildings of at least 25 feet from the property line along Inter-Garrison Road, which, when combined with the area in the official plan line of Inter-Garrison Road will provide a vegetated buffer with existing trees preserved within this buffer to screen future development of the lots within the business park (Refer to new Figures 17a and 17b presented in Section 4, Changes to the Draft EIR and the discussion on p 2-11). Where space permits, trees will be replanted within the setback areas along Inter-Garrison Road to ensure a continued oak tree buffer with preserved and planted trees.

9. This comment raises concerns over the glare effects of reflective surfaces to the future CSUMB faculty and staff housing site south of Inter-Garrison Road. As noted previously in the Response to Comment #7, the visual effects of the proposed project, including light and glare effects, to areas south of the project site were analyzed in the Draft EIR, and for the CSUMB future housing areas, are reflected in the Draft EIR discussion of visual effects from Vantage Point 4 and, by extension, the visual simulations presented in the Draft EIR Appendix B. The Draft EIR discussion analyzes impacts to public views from readily accessible ground-level public viewing points such as roadway and pedestrian corridors that currently exist, and public common areas that could reasonably be expected to be maintained or provided by future campus developments.

Specific analysis of the effects of light and glare are discussed on page 2-12 of the Draft EIR and the cumulative effects of light and glare are discussed in Section 3.0, Cumulative Impacts. The Draft EIR notes that impacts from new sources of light and glare would be most visible from "Imjin Parkway to the north and Inter-Garrison Road to the south." This sentence will be modified to refer to areas south of Inter-Garrison Road, where public views overlooking the project site are available.

The Draft EIR acknowledges that portions of the proposed building rooftops would be visible from Vantage Point #4 (p 2-9) and the Draft EIR noted that the white elastomeric roof materials for the MST Maintenance and Operations Building could emit considerable glare (p 2-13). MST is required to have "cool roofing" as part of their commitment meeting LEED silver certification requirements. The text of the Draft EIR project description (page 1-31) has been revised to correctly reflect the details of the proposed buildings. The proposed roofing materials for all three buildings are as follows:

1. The administration (operations) building will have an integrally-colored concrete masonry exterior finish with a curved standing seam metal roof and skylight.

2. The maintenance building will have a metal siding exterior finish with a flat roof and white elastomeric coating.

3. The fuel/brake/tire repair and fuel dispensing building roof would be flat with a white elastomeric coating.

This information reveals that elastomeric roofing materials are proposed only for the large buildings, which are farther from the campus property and placed at a substantially lower elevation than the campus housing site. According to the project plan sections, the roofline of the maintenance building would be eleven feet higher than the street elevation of Inter-Garrison Road. The roofline of the fuel dispensary building would be about 10.5 feet higher than street level. As demonstrated by visual simulation #4, and by comparison of the visual simulations key with the locations of future campus development shown in Figure 9, the maintenance building roofline would be just visible above the canopy of trees along Inter-Garrison Road. The fuel/brake/tire repair and the fuel dispensing building would not be visible when viewed from the ground level on the campus property. The reflectivity of the roofing material would not generate substantial amounts of glare that would impact public views available from areas to the south of the site. The proposed project would retain most of vegetation within the road right-of-way between the proposed MST site and Inter-Garrison Road and the retention of trees between the project site and the campus property would further screen the buildings from public views.

The anticipated height of the operations building relative to existing and proposed topography, and its visibility from off-site areas is discussed in the Draft EIR on page 2-9; however, additional building and site design details have been provided that further clarify this discussion. The smaller (but taller) operations building, located on the eastern portion of the MST site, would be visible from public areas south of the site. According to the project plans, the roof ridgeline of the proposed operations building would be about 36 feet higher than the street elevation of Inter-Garrison Road. The elevation of proposed campus housing south of Inter-Garrison Road is approximately ten to fifteen feet higher in relative elevation than the street level. Therefore, only a portion of the building roof would be visible from the ground-level of the campus property.

The MST site is located north of Inter-Garrison Road and spans from just west of 7th Avenue and east of 8th Avenue. Due to the location of the site relative to the existing and proposed land uses to the south (See Figure 1-7 of the CSUMB Master Plan for planned uses) combined with topography and tree cover, limited areas where impacts from glare may occur have been identified. The method for identifying the potential glare impacts includes consideration of the proposed structure locations, roof angles, materials, elevations, anticipated screening, and the angle of the sun during both the winter and summer months. The sun rises in the east and follows an arc from a southerly position particularly in the winter setting in the west. This means that sun would hit the property in a northwesterly manner in the morning hours gradually moving overhead hitting the site from the south in a northerly direction and moving so that it hits the site in an easterly direction in the later afternoon. With the orientation of the sun, glare from flat roofs (the maintenance building and the fuel/break/tire building) would be greatest to the northwest of the site in the morning, the north in mid-afternoon, and the northeast in the late after-noon. Again CSUMB proposed development is south of the site and therefore would not be significantly impacted by the glare form these flat roofs. Topography and vegetation would prevent significant impacts from glare on existing and proposed development north of the site.

The operations building will produce glare that would effect proposed development on the CSUMB campus south of the site because the operations building contains a rounded standing seam metal roof. The glare would only be visible from elevations considerably higher than the roof of the operations building because the roof has limited vertical surface area. The operations building is located north of Inter-Garrison Road just west of 8th Avenue and given the location, the height, and the orientation of the roof surface, the area potentially impacted is limited to CSUMB future faculty housing area south of the project site and east of Eighth Avenue at a higher elevation. Reflectivity and corresponding glare effects cast from the project site to the campus property could occur only when reflective materials are in line between the planned faculty housing area and the rising sun, and the receiving area is at a higher elevation than the source of the reflected light. Correspondingly, glare effects would be brief, and most evident in the afternoon hours during the late fall, winter, and early spring months, as the sun sets.

Glare effects of the proposed roof can be expected to occur on the CSUMB property, but these would occur only at elevations higher than the proposed building, would be short in duration, and be most evident at certain times of the year. Therefore, the anticipated glare effects generated by the proposed roofing materials would be less than significant when observed from the CSUMB property to the south of site.

10. The proposed project includes walls to provide security for the MST facilities. The proposed project includes a solid masonry wall at the eastern Inter-Garrison Road frontage and an open iron wall along the western Inter-Garrison Road frontage, with two driveways and one walkway opening. Figure 12, MST Site Plan has been revised to show the location of the walls/fences. Security walls on the east and west sides of the MST site would not front on public roads. The County's plans for development of the Inter-Garrison Road corridor include a sidewalk along the north side of the road with a vegetated buffer between the sidewalk and security wall. The vegetated buffer would vary from about 10 to 20 feet at the east end of the MST facility and would be greater than 60 feet at the west end. During business hours pedestrians could enter the MST visitor parking lot at two locations (pedestrian and vehicle entries). MST staff would be at the facility late at night and early in the morning, and could potentially assist or summon help in the event of an emergency or assault. New street lighting along Inter-Garrison Road as part of frontage improvements would increase nighttime security compared to the existing condition.

11. The comment is acknowledged. Although rail service was once considered along this corridor, the current plan calls for bus rapid transit. The text has been revised to correct this. Refer to Section 4.0 Changes to the Draft EIR.

12. The comment is acknowledged. The future circulation system outlined in the comments is consistent with that discussed in the Draft EIR. The need for MST and the County to negotiate easements, as appropriate, with CSUMB, is acknowledged.

13. The major roads passing through the CSUMB campus are currently open to use by anyone. Project traffic trip assignments from Appendix H of the DEIR indicate that the likely distribution of south/west bound traffic will continue to find Imjin Parkway and Imjin Road as the fastest and most direct access point. Those trips headed south/west of the project site towards the campus would use 8th Avenue to Gigling Road. Intersections within the CSUMB campus including General Jim Moore/Intergarrison Road and General Jim Moore/Divarty were studied and assumed open to through traffic with project related trips avoiding this route due to the many impediments to destination/through traffic within the campus including speed limits, pedestrian activity, cross-walks, and numerous stop signs. It is recognized that circulation through campus is restricted on 6th Avenue and will be restricted on Divarty Street. The text has been revised to correct this. Refer to Section 4.0 Changes to the Draft EIR.

The Whispering Oaks GDP includes a transportation demand management (TDM) program. The focus of the program is the reduction of trips overall. The TDM program coordinator will be in a position to discuss with appropriate CSUMB staff the needs of CSUMB as they pertain to the TDM program.

14. The comment is acknowledged. Mitigation Measure T-8 was intended to reduce empty bus traffic in the campus core. The mitigation measure has been revised to require out-of-services busses to use 8th Avenue rather than 7th Avenue.

15. Sidewalks within the MST site would primarily serve employees and visitors to the MST site. A cross-walk on Inter-Garrison Road would connect the walk-way along the Inter-Garrison Road frontage to the south side of Inter-Garrison Road towards CSUMB campus. This cross-walk was envisioned to serve pedestrian access from campus housing to the campus core rather than connecting MST employee pedestrian circulation to the CSUMB campus. The sidewalk along Inter-Garrison Road would be constructed by MST and Whispering Oaks Business Park as part of there respective frontage improvements along Inter-Garrison Road.

16. Refer to the response to Comment 14.

17. These intersections are part of the City of Marina fee program. Because the project site is outside the City of Marina's jurisdiction, the applicant would not typically pay into the City of Marina traffic fee program. However, MST and the County are negotiating with the City of Marina regarding fair-share contributions towards impacted intersections.

18. Improvements to the Inter-Garrison Road/Seventh Street intersection are the responsibility of Monterey County. If improvements, including acquisition of additional right-of-way or relocation of utilities occur within the jurisdiction of CSUMB, an encroachment permit would be required.

19. The comment is acknowledged.

20. The Draft EIR considered a re-location of the gas line along the western edge of the project site, generally consistent with the intent of connecting a metering station to the northwest of the project site with the existing gas line in Inter-Garrison Road. Refer to Figure 5 and Figure 13a in the Draft EIR for the location of existing and proposed realignment of gas lines. The precise alignment and design of the gas line re-location is the subject of negotiations between CSUMB, MST, and the Redevelopment Agency.

21. The suggested process for consideration of the MST Business Response Plan and transport route for hazardous waste is not within the normal process of the County of Monterey. The standards and requirements of the plan will be considered ministerially by the Director of the Monterey County Environmental Health Department.

City of Marina

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Craig Spencer
Monterey County Resource Management Agency
Planning Department
168 West Alisal St., 2nd Floor
Salinas, CA 93901

August 18, 2010

RE: Monterey Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park

Dear Mr. Spencer:

In December 2009, the City of Marina provided a letter to Mr. John Ford of the County of Monterey Resource Management Agency addressing two issues: the 8th Avenue and Imjin Road realignment; and a request that the EIR discuss project re-design to reduce substantial biotic impacts.

This letter addresses the new information contained within the Draft EIR relating to these topics, and includes comments from the Marina Tree Committee and City Traffic Engineer, Mr. Ron Marquez, PE.

Marina Tree Committee Comments:

On Wednesday August 11, 2010, at a Special Meeting, the Marina Tree Committee reviewed and discussed the Draft EIR for the MST Whispering Oaks Business Park and provided the following comments and recommended mitigation measures to reduce the potential impacts of the removal of 4,500 trees to less than significant.

1 1. Please provide copies of two missing documents:

   a. Whispering Oaks Business Park Forest Management Plan as referenced in Mitigation Number BIO-10 as required by Title 21, the Monterey County Tree Ordinance; and
   b. Forest Resource Evaluation for the MST Site to provide professional recommendations and data regarding impacts to oak woodlands.

2. The Marina Tree Committee requests an extension to the comment period to allow for review of the above-noted missing documents.

2 3. The proposed Mitigation Measures reference other technical documents but it is not clear what in the documents is to be incorporated and what is not. Those measures within the documents that are to be incorporated should be clarified. For instance from BIO-10 "avoid tree removal and/or transplant trees whenever possible", "suitable mitigation ratios", and from Alternative 4, the basis of BIO-11, retain the "maximum amount of native oak trees", and "suitable onsite retention and planting areas" are ambiguous terms that require definition.

3 4. In Mitigation BIO-10, clarify the purpose of the "...special fee to FORA to fund tree replacement elsewhere within Fort Ord". Page 11 of the Preliminary Oak Woodland Habitat and Tree Removal Mitigation Strategy Plan for the MST Facility/Whispering Oaks Business Park Site recommends that,
"...the Reuse Plan and HMP already requires the establishment of an additional oak woodland conservation area and protection and management of habitat on Fort Ord in perpetuity... as funded by the payment of FORA development fees..." and concludes that this is not an adequate mitigation option.

4 5. The Forest Management Plan for Bus Maintenance and Operations Base (FJL Center) for Monterey-Salinas Transit Page 11/20 estimates that 94% of the trees will be lost to grading. This grading approach can lead to wind and soil erosion, and loss of valuable habitat as evidenced on the East Garrison site. Implementation of the highlighted design considerations included in the Forest Resource Evaluation for Whispering Oaks Business Park by Bill Ruskin, Registered Professional Forester #2248 (August 2009) should be added to the mitigation measures for both sites as follows:

a. **"Future designs should consider the use of variable elevations for site layout to match existing topography to the extent possible in order to provide opportunities to preserve existing tree "islands" and avoid mass grading of the site."** This approach may be limited in application to the MST site due to the proposed intensity of use but should be required as a lot by lot mitigation for the Whispering Oaks Business Park whereby lot grading does not take place until a project is proposed and future developments are designed around the trees to retain as many of the trees on site as possible. This is particularly true for the retention and preservation of trees smaller than landmark size which have a better opportunity to thrive than landmark trees.

b. **"For future designs, the design team shall retain a qualified Forester/Arborist to assist in the general layout of roads, lot layout, and parking area alternatives to further provide for preservation of existing trees."**

c. **"Use of the existing encroachment to Inter-Garrison Road should be considered as the primary access to the business park. Such an access could be sloped at a very moderate grade in order to preserve the existing topography to the greatest extent possible. This would allow for preservation of the landmark sized trees to the west of this access point (trees #72 and 75)."**

d. **"Use of the existing encroachment to Inter-Garrison Road should be considered as the primary access to the business park. Future designs should focus on this area as the primary access to the development to preserve valuable existing screen trees. Use of this open area will allow for construction of turn lanes and entrance enhancements without the removal of native trees. Post construction landscaping should include plantings of various sized coast live oak with associated native species to reduce watering requirements."**

e. For the length of Inter Garrison Road. **"The landscape buffer should be set at 50 ft. wide to allow adequate space for tree growth and preservation of existing trees."**

5 6. Space needs for seedlings and transplants at a 1:1 mitigation ratio would be addressed by providing a 50 ft. buffer along the entire length of Inter Garrison Road. If space for mitigation and maintenance of healthy habitat is limited within the buffer, additional transplants and/or seedlings should be located within the open space parcels.

6 7. In the Forest Management Plan for Bus Maintenance and Operations Base (FJL Center) for Monterey-Salinas Transit 11/20 it is estimated that 900 oak seedlings can be replanted within various locations where there is no tree preservation or where post construction grading activities are complete. A credit of three (3) transplant trees instead of one (1) seedling (or 300 transplants total) is recommended due to space limitations for the trees. However, these transplants will be reduced by natural attrition. Therefore, it is recommended that one transplant or seedling for each tree be provided within the available space to more readily guarantee the ultimate survival of the transplants.

7 8. For the project, adherence to a 1:1 mitigation ratio is recommended achieved through on and off-site seedlings and transplants. For the MST site, this is approximately 2,420 trees. The number of trees removed for the Whispering Oaks Business Park would be determined in conjunction with design plans for lot by lot development.

City Traffic Engineer Comments:

8 1. The basis for the trip generation estimated for the Phase 2 and 3 developments exceeds the total building square footage described in the project description in the EIR. The traffic analysis uses a total of 850,000 square feet for the potential development of the industrial park (Exhibit 11), whereas the project description on page S-2 assumes a total building area of 695,000 square feet. It is not clear if this latter number includes the buildings for the MST project.

9 2. The MST project assumes a total buildout potential of over 250 buses. This number is three time the number of buses currently operating in the MST fleet. While this presents the ultimate operating characteristics of the facility it is unlikely that this level of development will occur for a very long time. Therefore the impacts identified and the mitigation measures proposed could be phased over time so as not to be so onerous at the outset of the project. It is recommended that the mitigation plan identify a proposed phasing plan perhaps related to the number of buses on the site. Specifically this could relate to the payment of Marina Traffic Impact fees.

10 3. Based on the estimated trip generation for the MST project and the fact that all traffic will be directed to the City of Marina a traffic impact fee of $1,430,000 can be substantiated. The identified impacts for the proposal as currently estimated are equivalent to approximately 160 single family units on the site.

11 4. The MST project includes the widening of Inter Garrison Road to provide left and right turn lanes at two driveways. Yet all traffic in Phase 1 is directed to the northern driveway. In later phases as east west traffic is directed to a completed Engineers Equipment Road. Traffic will be diverted away from Inter Garrison Road with the exception of traffic headed to the University. The resulting volumes on Inter Garrison will likely be lower than they are now as the CSUMB moves to closing the core to through traffic. The proposed widening at the driveways should be analyzed to see if they are warranted under Phase 1 and future conditions.

12 5. The mitigation measure implementation recommends that the Development Agreement for Phases 2 and 3 spell out the share apportioned to each parcel in the subdivision. The City of Marina will need to monitor each development as it occurs on these parcels. The City is requesting notification and or concurrence that all impacts in the City have been addressed.

13 6. Several benefits can be derived from completing the Engineers Equipment connection to Inter Garrison Road with Phase 1. This will reduce the volume of traffic directed to the City of Marina and would reduce the need for the significant widening of Inter Garrison Road.

14 7. The intersection of Engineers Equipment Road and Inter Garrison Road should be designed so that the western leg of the intersection tees into the new east west corridor formed by these two roads. This will improve the operation of the intersection for the predominant movement.

15 8. There are inconsistent comments about the multi-use corridor proposed along Inter Garrison Road. Page 1-38 indicates that this corridor is along the north side of the road while page 2-155 states that the corridor is proposed along the south side of the road.

16 9. Page 5-3 of the DEIR states that the impacts at the Route 1 and Imjin Parkway intersections may not be mitigated because they require approval by Caltrans and Monterey County. These intersections are under the jurisdiction of the City of Marina. Plans are being developed to improve operations in this area. However since this project may not be implemented prior to the proposed project the DEIR correctly indicates the impacts at this location are unavoidable and may require a statement of overriding conditions.

Thank you again for the opportunity to provide further comments on this project.

Sincerely,

Theresa Szymanis, AICP
Planning Services Manager
City of Marina

Cc: Doug Yount, Development Services Director

Response to the Letter from City of Marina

1. Both documents are included within Appendix D of the Draft EIR. The comment period was not extended. Although the documents were included in the Draft EIR, the documents have been emailed to the commenter.

2. The comment is acknowledged. Mitigation Measure BIO-10 has been revised to incorporate specific measures from the forest management plans.

3. The fee has been eliminated from Mitigation Measure BIO-10. The special FORA fee is no longer part of the project mitigations and tree mitigation will be handled through compliance with the Oak Woodland Mitigation Strategy and the FMP recommendations contained in Mitigation Measure BIO-10.

4. Mitigation Measure BIO-10 has been revised to incorporate design measures and tree mitigation measures consistent with the response to Comment 3.

5. The comment is acknowledged. Mitigation Measure BIO-10 has been revised to include this requirement.

6. The comment is acknowledged. Mitigation Measure BIO-10 has been revised to include this requirement.

7. The comment is acknowledged. Mitigation Measure BIO-10 has been revised to include this requirement.

8. Exhibit 11 in the traffic impact analysis provides trip estimates for the Whispering Oaks portion of the proposed project. The Phase 3 square footage (530,000 square feet) is inclusive of the Phase 2 square footage. Phase 2 includes 320,000 square feet and Phase 3 includes 210,000 square feet for a total of 530,000 square feet.

9. The comment is acknowledged. Some of the mitigation measures require traffic impact fees, which would be paid over time with the issuance of building permits. In the case of the MST facility, it is expected that all of the structures would be constructed in a single phase, and there is no mechanism to defer payment of impact fees. Most improvements are the responsibility of both MST and Whispering Oaks, and Whispering Oaks mitigation would be spread out over a number of years.

10. The applicants and Monterey County RMA - Public Works have negotiated an acceptable alternate mitigation to payment of the City of Marina traffic impact fees to address project cumulative impacts on City of Marina intersections located outside the former Fort Ord area. Mitigation Measures T-1, T-3, T-9, and T-10 have been revised to require applicants to pay a fair-share contribution in-lieu of paying the City of Marina traffic impact fee for the specific impacted intersections.

Fair-share calculations were agreed upon by the City of Marina and the project applicants. A table outlining the City of Marina impacted intersections along with the fair-share amounts is presented in Appendix N, Additional Traffic Information.

11. The turn lanes would be utilized by employees and visitors. The MST facility is designed to have access from both Engineer's Equipment road and Inter-Garrison Road to accommodate bus, employee and visitor traffic. These access points are necessary under the cumulative scenario when the multi-modal corridor is improved along Inter-Garrison Road. The County does not foresee that traffic volumes on that section of Inter-Garrison Road would drop to such a low level that turn lanes would be unnecessary.

12. The comment is acknowledged.

13. The comment is acknowledged.

14. The project proposes the intersection consistent with the *Fort Ord Reuse Plan*.

15. The comment is acknowledged. The text of the Draft EIR has been corrected to clarify that the proposed inter-modal corridor would be located to the south of Inter-Garrison Road.

16. The comment is acknowledged.

TAMC
TRANSPORTATION AGENCY FOR MONTEREY COUNTY

Regional Transportation Planning Agency • Congestion Management Planning
Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

August 25, 2010

Mr. Craig Spencer
Resource Management Agency
County of Monterey
168 W. Alisal Street, 2nd Floor
Salinas, California 93901

SUBJECT: Comments on the Draft Environmental Impact Report for the Monterey-Salinas Transit Bus Maintenance Facility and Whispering Oaks Business Park

Dear Mr. Spencer:

The Transportation Agency for Monterey County is the Regional Transportation Planning Agency and Congestion Management Agency for Monterey County. Transportation Agency staff has reviewed the Draft Environmental Impact Report for the Monterey-Salinas Transit Bus Maintenance Facility and Whispering Oaks Business Park.

The proposed project is a rezoning and business park subdivision, with development to be controlled by two general development plans; one plan for the entire business park and one specific to the Monterey-Salinas Transit bus yard and maintenance facility, for a total of about 58 acres to be developed, with about 695,500 square feet of building anticipated.

The Transportation Agency is very supportive of this proposed project and the planned move of Monterey-Salinas Transit's maintenance facilities to a centralized location that will facilitate more efficient transit operations and assist with transit access to our agency's planned Multi-Modal Transit Center on Del Monte Boulevard / Contra Costa Street in the City of Seaside.

Transportation Agency staff offers the following comments for your consideration:

Light Rail & Multi-Modal Transit Station

1. The Transportation Agency is in the process of planning a Multi-Modal Transit Station located at the intersection of Del Monte Boulevard and Contra Costa Street to connect local area buses from Monterey-Salinas Transit with proposed light rail service. Additional major connections for the light rail service will be at Downtown Monterey, as well as near the proposed development at Palm Avenue and Eighth Street. Our agency recommends that Monterey-Salinas Transit continue to work with

our staff to ensure issues of transit access at the station's entrances are properly addressed in the design and construction of the development.

Regional Road and Highway Impacts

2. With the characteristics of this development being partially designed as a transit maintenance yard and operations facility, as well as a business park, it can be expected that there will be significant impacts at regional access points, particularly at the SR-1 interchanges at Light Fighter Drive and 12th Street as well as General Jim Moore Boulevard, Imjin Parkway, and Reservation Road. To mitigate cumulative impacts, the Transportation Agency supports and considers payment of the Fort Ord Reuse Authority's development impact fee as sufficient mitigation of cumulative impacts to regional facilities for projects located within the boundary of the former Fort Ord. As such, our agency is supportive of the applicant's intentions to pay the Fort Ord Reuse Authority impact fee and will not be seeking payment of the regional development impact fee.

3. Site-specific impacts will still need to be addressed and our agency supports the development will be required to fund circulation infrastructure improvements through local impact fee programs, such as the City of Marina's, or through fair-share payments to directly impacted facilities. In particular, our agency supports that the applicants will contribute towards signalizing the impacted intersection at Imjin Road and Eighth Street, constructing a second westbound left-turn lane at the intersection of Imjin Road and Imjin Parkway, and constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street.

Local Roads & Site Access Issues

4. Our agency understands that initial access to the project site was to be from Inter-Garrison Road, with entering and exiting bus coaches traveling near the California State University Monterey Bay campus. The Transportation Agency supports the new proposal to extend Eighth Street / Engineer's Equipment Road through the development and ultimately connecting with Inter-Garrison Road to the south. This new alignment will provide better access to the north of the project site, with bus coaches able to utilize Imjin Parkway, as well as alleviate congestion issues with the University.

Pedestrian & Bicycle Travel

5. The Transportation Agency supports accommodation of alternative forms of transportation (rail, bus transit, bicycle and pedestrian transportation), both through the design of transportation facilities, and through the design and orientation of land uses. As such, our agency supports the development's proposal to extend bicycle and pedestrian facilities along Eighth Street, Inter-Garrison Road, and Davis Road.

6. A premium should be placed on safe and accessible pedestrian access to development sites from intersections and crosswalks, sidewalks, and bicycle facilities. Our agency supports proper striping requirements at all pedestrian crosswalks to clearly identify areas of pedestrian travel and ensure safe transitions for vehicles and pedestrians.

Consideration should also be given to the inclusion of intelligent crosswalks, which provide flashing notification lights when a pedestrian enters the crosswalk to increase visibility and alert drivers of their presence. New pedestrian facilities should be required to be designed with American Disability Act-compliant sidewalks that connect to external facilities and provide access to transit stops.

7. Our agency recommends that planned bike paths and walkways in the development be linked to existing facilities that surround the project area, particularly on Imjin Parkway, 2nd Avenue, General Jim Moore Boulevard, and bike trails in the former Fort Ord area. Also, the project applicant should consult with the Transportation Agency and the City of Seaside's Bike Plans to ensure that all proposed bicycle facilities are accounted for in the site planning of this project, such as the Class 2 facility on First Avenue connecting to the scenic trail, Class 1 facility on General Jim Moore Boulevard connecting to the existing bike path, and additional Class 2 facilities on Monterey Road, Lightfighter Drive, Gigling Road, and Third Street

8. In addition, The Transportation Agency recommends the installation of public bicycle racks and lockers. Adequate lighting at these locations to improve safety and visibility should be provided by the development.

Greenhouse Gas Emissions

9. Senate Bill 375 requires the Metropolitan Planning Organization to develop a Sustainable Communities Strategies as a comprehensive approach to addressing greenhouse gas emissions at a regional level by linking land use and transportation planning decisions. Our agency encourages the City's and the applicant's coordination with the Association of Monterey Bay Area Governments in the development of the region's Sustainable Communities Strategy and for developments within the General Plan area to be consistent with the plan once it is completed.

10. Our agency supports the use of light-colored pavement for pedestrian areas to cut down on the heat island effect. In addition, the development should explore the use of gray granite pavement for parking areas, roadways, and bicycle / pedestrian facilities, which has the benefit over traditional blacktop of increasing nighttime visibility and is permeable to aid in the control of on-site water run-off.

11. Where appropriate, light-emitting diode (LED) lighting should be used for external lighting to reduce the site's electricity consumption.

12. Consideration should be given to including preferred parking spaces for carpools, alternative fuel vehicles and electric vehicle charging stations. The Monterey Bay Electric Vehicle Alliance is currently applying for grants for charging stations to be installed throughout the county. This provides the opportunity for new development to plan to include charging stations at potentially reduced costs, or with costs fully covered for government facilities.

Thank you for the opportunity to review this document. If you have any questions, please contact Michael Zeller of my staff at (831) 775-0903.

Sincerely,

Donald P. Barlich
for Debra L. Hale
Executive Director

CC: Dave Murray, California Department of Transportation (Caltrans) District 5
Yaz Emrani, Monterey County Department of Public Works
Carl Sedoryk, Monterey-Salinas Transit
John Doughty, Association of Monterey Bay Area Governments
Ed Kendig, Monterey Bay Unified Air Pollution Control District

Response to the Letter from the Transportation Agency for Monterey County

1. The comment is acknowledged. MST will continue to work with TAMC regarding the location of transit services.

2. The comment is acknowledged. The comment is consistent with the information presented on page 2-139 of the Draft EIR.

3. The comment is acknowledged. MST and the County will construct some road improvements directly necessitated by the proposed project and will make fair share contributions for other necessary improvements as identified in the Draft EIR.

4. The comment is acknowledged. Initially, all access was to be from Inter-Garrison Road, but the current proposal, as described in the Draft EIR, calls for most bus and employee access to be from Engineer's Equipment Road, with only visitor access from Inter-Garrison Road. Only busses directly in service on Inter-Garrison Road would use the Inter-Garrison Road driveway.

5. The project does not propose to construct bicycle or pedestrian facilities on Davis Road. The proposed project would develop bicycle lanes along the Inter-Garrison Road frontage, along the off-site extension of Engineer's Equipment Road, and on streets within the project site. The proposed project would develop sidewalks along Inter-Garrison Road and on most streets within the project site (with the exception of the north side of Engineer's Equipment Road adjacent to the open space area).

6. The comment is acknowledged. MST has prepared a plan showing the location of sidewalks within or adjacent to the project site. Crosswalks would be provided at each intersection within the Whispering Oaks Business Park or along Inter-Garrison Road, at the MST driveways, and crossing Inter-Garrison Road at Eighth Avenue.

7. The on-site and adjacent off-site bicycle facilities are consistent with the appropriate bikeway plans.

8. The Whispering Oaks GDP includes a provision for bike racks or lockers as part of its transportation management plan.

9. The comment is acknowledged.

10. A Greenhouse Gas Reduction Plan is not required. Measures have been incorporated into the WO GDP to reduce GHG impacts. One of the measures includes meeting LEED silver design standards for buildings. Mitigation Measure CC-1 has been revised.

11. Refer to the response to Comment 10.

12. Refer to the response to Comment 10. The GDP's Transportation Management Plans include this consideration.

MARINA COAST WATER DISTRICT

11 RESERVATION ROAD • MARINA, CA 93933-2099
Home Page: www.mcwd.org
TEL: (831) 384-6131 • FAX: (831) 883-5995

September 1, 2010

Mr. Craig Spencer
Planning Department
Monterey County Resource Management Agency
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901

Subject: Written Comments on the Draft Environmental Impact Report for the Monterey Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park Project

Dear Mr. Spencer,

Marina Coast Water District (MCWD, District) has the following comment to the Draft Environmental Impact Report (DEIR) for the Monterey Salinas Transit Bus Maintenance and Operations Facility and Whispering Oaks Business Park Project (Project). This comment relates to Section 2.10 Water Demand and Supply.

1 MCWD is the agency responsible for providing the Water Supply Assessment (WSA) for this project. The WSA cited in the EIR is currently in currently in draft form and has not been accepted by the District Board as of the date of this letter.

The District appreciates this opportunity to provide these comments. Please contact Mr. Brian True at (831) 883-5937 if you have any questions or comments.

Sincerely,

Carl Niizawa
Deputy General Manager / District Engineer

Cc: Brian True – MCWD
Bob Hoffman – Carollo Engineers

Response to the Letter from the Marina Coast Water District

1. The water supply assessment (WSA) included within the Draft EIR was a draft version; the Marina Coast Water District (MCWD) Board of Directors had not yet acted to approve the WSA. The WSA was revised and was approved by the MCWD Board on November 9, 2010. The estimated water use increased from 80.19 to 92.72 due to changes in the land use categories and water use factors, but the WSA still concludes that the MCWD would have adequate water to serve the proposed project. The Draft EIR has been revised to reflect modifications to the WSA and the date of its approval by the MCWD Board.

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3.0
REVISED SUMMARY

Following is a revised version of the summary from the Draft EIR. Additions to the text are shown with underlines and deletions are shown with strikethroughs. The Mitigation Monitoring Program table shows the final revised mitigation measure language. Also refer to Section 4.0 Changes to the Draft EIR for other changes to the Draft EIR.

CEQA REQUIREMENTS

CEQA Guidelines section 15123 requires an EIR to contain a brief summary of the proposed project and its consequences. The summary identifies each significant effect and the proposed mitigation measures and alternatives to reduce or avoid that effect; areas of controversy known to the lead agency; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

PROPOSED PROJECT

Location and Setting

The 115.53-acre project site is located on the former Fort Ord, north of Inter-Garrison Road, east of Seventh Avenue, and east of the city limits of Marina in unincorporated Monterey County. The project site is comprised of two Assessor's parcels, APNs 031-101-056, and 031-101-041.

The project site is within unincorporated Monterey County and has a County land use designation of Public and Quasi-Public and a County zoning designation of PQP-D-S. The project site is adjacent to the Marina city limits on the west, and within the Marina sphere-of-

influence. Development within the former Fort Ord is subject to the *Fort Ord Reuse Plan*, which is administered by FORA. The *Fort Ord Reuse Plan* land use designation for the project site is Planned Development Mixed Use District.

The project site is essentially undeveloped and predominantly covered in coast live oak woodland. Minor improvements, including two narrow paved roads, several unpaved roads, and a few small structures are located on the project site.

Project Description

The proposed project is a rezoning and business park subdivision, with development to be controlled by two general development plans. The Whispering Oaks General Development Plan would cover the entire business park and a separate general development plan would be specific to the Monterey-Salinas Transit (MST) bus yard and maintenance facility. A total of about 58 acres would be developed, with about 695,500 square feet of building anticipated. About 58 acres would be dedicated as open space preserve.

The following specific components are included in the proposed project, and are described in greater detail in the sections that follow:

1. Amendment to the Monterey County Zoning Map to change the designation for the development portions of the project site from Public and Quasi-Public to Heavy Commercial.
2. Phased vesting tentative map to create 20 parcels including a lot for the MST Administrative and Maintenance Facility (24.37 acres), 15 additional business park lots (24.44 acres), two open space parcels, one parcel for a detention basin, and one parcel for private streets.
3. Disposition and development agreement.
4. General Development Plan for development of the Whispering Oaks Business Park.
5. General Development Plan and Use Permit for development of the MST Administrative and Maintenance Facility.
6. Use permits for the removal of coast live oak trees.
7. California Department of Fish and Game 2081 incidental take permit for sand gilia.
8. Amendments to the Fort Ord Circulation Plan and off-site road construction.
9. On and off-site drainage basins.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

This draft EIR identifies significant or potentially significant environmental impacts in several areas as identified below. The impacts are presented in a summarized format in Table S-1, with the full text of the mitigation measure. The full text of the environmental setting, project analysis, and impacts and the mitigation measures can be found in Section 2.0 Environmental Setting, Impacts, and Mitigation Measures.

Significant Project Impacts

Project-level significant impacts are anticipated in the following areas:

Air Quality

Significant Impact – Construction PM_{10} Generation from Fugitive Dust. Construction activities, such as demolition, clearing, excavation and grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed earth would generate dust and particulate matter. Development of the project site would involve grading in excess of the MBUAPCD thresholds of 2.2 acres daily. This is a significant impact. The implementation of the following mitigation measure would reduce the impact to a less than significant level.

Mitigation Measures

AQ-1. Prior to issuance of the tree removal, grading, or building permits, the applicant shall prepare a dust control plan for submittal to and approval of the Monterey County planning director.

The dust control plan shall be implemented for all construction sites when total project area under grading exceeds 2.2 acres per day. The dust control plan shall limit onsite construction emissions to 82 pounds per day. As more detailed construction information becomes available, emissions from grading activities should be reassessed to determine if the area of grading could be increased.

The following measures shall be included in the dust control plan:

1. Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy periods, watering is to occur on all days of the week regardless of onsite activities.

2. Cover all trucks hauling trucks or maintain at least two feet of freeboard.

3. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.

4. Sweep daily all paved access roads, parking areas and staging areas at construction sites.

5. Sweep streets daily if visible soil material is deposited onto the adjacent roads.

6. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).

7. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.

8. Limit traffic speeds on unpaved roads to 15 mph.

9. Replant vegetation in disturbed areas as quickly as possible.

10. Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.

Potentially Significant Impact: Construction Exhaust Emission. Construction activities would involve use of the heavy-duty off-road equipment and large trucks that use diesel fuel resulting in a cumulative contribution to emissions of diesel particulate matter in the region. This is a potentially significant impact. The implementation of the following mitigation measure would reduce the impact to a less than significant level.

Mitigation Measures

AQ-2. All off-road construction vehicles/equipment greater than 100 horsepower that will be used on site for more than one week shall: 1) be manufactured during or after 1996, and 2) shall meet the NO_X emissions standard of 6.9 grams per brake-horsepower hour. Alternatively, the project shall implement a combination of the following emission reduction measures on some or all of the above described vehicles and equipment, subject to approval by the MBUAPCD:

1. Use alternative fuels (such as biodiesel blends).

2. Require diesel particulate matter filters on equipment.

3. Require diesel oxidation catalyst on equipment.

4. Install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors).

5. Enforce state required idle restrictions (e.g., post signs). Diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate or other bulk materials. Rotating drum concrete trucks may keep their engines running continuously as long as they were onsite and staged away from residential areas.
6. Properly tune and maintain equipment for low emissions.
7. Stage large diesel-powered equipment at least 100 feet from any active land uses (e.g., residences).
8. Limit the hours of operation for heavy-duty equipment to daytime periods.

Biological Resources

Potentially Significant Impact: Sand Gilia and Monterey Ceanothus. Sand gilia and Monterey ceanothus occur immediately adjacent to the northwest corner of the MST parcel outside of project boundaries. These species are both CNPS List 1B and HMP species. Sand gilia is also a federal endangered and state threatened species. Impacts to the sand gilia and Monterey ceanothus outside of the proposed development area may occur as a result of construction activities. Sand gilia also occurs within the area of Lots 2-11. Impacts could include elimination of the entire population during vegetation removal, grading, and other ground-disturbing construction activities. These are considered potentially significant impacts. Implementation of the following mitigation measures will reduce potential impacts to a less than significant level.

Mitigation Measures

BIO-1. The sand gilia and Monterey ceanothus shall be flagged for avoidance and included in the offsite maritime chaparral area fenced for avoidance, as described in Mitigation Measure BIO-13. Disturbance or relocation of sand gilia shall be done in conformance with an approved 2081 Permit from the California Department of Fish and Game. The Monterey ceanothus shall be flagged for avoidance and fenced off as described in BIO-13.

BIO-2. For Lots 2-11: The County of Monterey has consulted with the CDFG regarding the potential for take of sand gilia within the entire landfill site, including the Lots 2-11, and the agencies have agreed upon an acceptable mitigation strategy for the proposed impacts. Under this mitigation strategy, none of the project site would need to be preserved or restored, and the site could be developed in its entirety. However, the County has not obtained a permit for incidental take of sand gilia on the landfill parcel, including the project site, at this time. Therefore, no vegetation removal, grading, or other ground-disturbing construction activities that may result in take of the sand gilia populations within Lots 2-11 shall occur prior to the issuance of a Section 2081 permit.

BIO-3. ~~For the extension of Engineer's Equipment Road; gas line realignment; and off-site drainage basins east of Eighth Avenue: Prior to ground disturbance activities, surveys for Monterey spineflower, sand gilia, coast wallflower, and Kellogg's horkelia shall occur during the blooming period in spring. Additional surveys for Seaside bird's beak and Yadon's rein orchid shall occur during the blooming period in the summer. If individuals of this species are found, the United States Fish and Wildlife Service and the California Department of Fish and Game shall be consulted to determine the appropriate course of action. If removal of the species cannot be avoided, authorization for take will be obtained and any loss will be mitigated in habitat replacement and enhancement areas at a minimum of a 3:1 replacement ratio. A habitat restoration plan shall be prepared to identify the exact amount and location of impacted habitat, identify the appropriate location for replacement or restoration habitat, and provide specifications for installation, maintenance, and monitoring of the replacement habitat. The use of locally-obtained native species shall be specified in the habitat restoration plan, as appropriate.~~ The applicant shall have a qualified biologist develop a species protection plan for each species found at the site. The species protection plan shall include the following:

- Avoidance criteria necessary for plant protection;
- Fencing Plan;
- Monitoring; and
- Follow-up surveys and reports.

The plan shall be submitted to the RMA – Planning Department for Review and approval. If species are found and cannot be avoided, the applicant shall consult with the United States Fish and Wildlife Service and the California Department of Fish and Game to determine the appropriate course of action.

Potentially Significant Impact: California Tiger Salamander. This species only has a high potential to occur within the habitat types located in the proposed Lots 12-16. This is because Lots 12-16 are located within 1.24 miles of a breeding population, which is considered to be a distance that California tiger salamander could cover to breed and/or forage for resources. The other areas of the project site are deemed too geographically distance from the breeding population to be suitable habitat. This species is listed as federally threatened, a state candidate species and a state species of special concern. Impacts to this species may include loss of habitat and direct mortality of individuals as a result of vegetation removal, grading, and other ground-disturbing activities. This would be considered a potentially significant impact. Implementation of the following mitigation measures will reduce potential impacts to a less-than-significant level.

Mitigation Measure

BIO-4. For development of Lot 1, off-site drainage improvements, and road improvements to Inter-Garrison Road and Engineer's Equipment Road (Phase 1) and development of Lots 2, 3, 7, and 8 with improvement to Whispering Oaks Drive (part of Phase 2): All development shall be monitored by a qualified biologist consistent with Mitigation Measure BIO-5. If at any time California tiger salamanders are found in the development area, all construction shall cease, and the Department of Fish & Game and U.S. Fish & Wildlife shall be consulted. Development may not resume until clearance from Fish & Game and Fish & Wildlife is secured.

For ~~Lots 12-16~~ the remaining improvements in Phase 2 (Lots 4, 5, 6, and 10, Parcel B, and the remaining Whispering Oaks Drive improvements) and all of Phase 3 (Lots 12 – 16): Prior to the initiation of any ground-disturbing activities, including vegetation removal and grading, the applicant shall comply with one of the following three approaches:

1. Conduct protocol surveys to determine the presence or absence of California tiger salamander within Lots ~~12-16~~ 4, 5, 6, 10, 12-16, and Parcel B. Protocol surveys conducted in compliance with the protocols outlined in the /Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander /(USFWS October 2003). Two consecutive years of upland drift fence studies are required. Fencing arrays shall be installed and approved by USFWS prior to October 15 of each survey year. Surveys shall continue until individuals are found or the criteria for a Negative Finding are met. If individuals are found, either approach 2 or 3 shall be implemented;

2. If the presence of California tiger salamander is documented or the applicant chooses to assume the species is present, the project shall comply with the ESA and CESA and obtain Incidental Take Authorization from the USFWS and CDFG for the loss of California tiger salamander individuals and upland habitat associated with construction and operation of the project; or

3. Following adoption of the Fort Ord HCP and issuance of base-wide federal and state incidental take permits, all applicable conditions of the HCP shall be followed and individual incidental take permits are not required.

Potentially Significant Impact: ~~Monterey Dusky-footed Woodrat,~~ American Badger, White-tailed Kite, Nesting Raptors, and Coast Horned Lizard. Construction activities within the project site may result in impacts to special status wildlife species, including the ~~Monterey dusky-~~

~~footed woodrat,~~ American badger, white-tailed kite and other nesting raptors, and coast horned lizard. Impacts to these species may include direct mortality of individuals, destruction of nests or dens, and loss of habitat as a result of vegetation removal and grading. These are considered significant impacts. Implementation of the following mitigation measures will reduce potential impacts to a less-than-significant level.

Mitigation Measures

BIO-5. For all development areas: prior to construction activities, project proponents shall retain a qualified biologist to monitor construction. The biological monitor shall conduct an Employee Education Program for the construction crew. The biologist shall meet with the construction crew at the project site at the onset of construction to educate the construction crew on the following:

- A review of the project boundaries;
- All special-status species that may be present, their habitat, and proper identification;
- The specific mitigation measures and success criteria that will be incorporated into the construction effort (Measures BIO-6 through BIO-9);
- The general provisions and protections afforded by the USFWS and CDFG; and
- The proper procedures if a special-status animal is encountered within the project site.

BIO-6. For all development areas: The biological monitor shall be onsite during initial grading and vegetation removal activities to protect any special-status species encountered. The qualified biologist shall identify and explain the protection methods during the Employer Education Program as described in Mitigation Measure BIO-5. These methods could include, but are not limited to, stopping work in the area where the animal is encountered until it has moved on its own outside of the project site~~ or moving individuals outside of the project site to adjacent appropriate habitat.~~ or take appropriate action consistent with the CDFG "take" authorization requirements.

~~BIO-7. For all development areas: To avoid and reduce impacts to the Monterey dusky-footed woodrat, project proponents shall retain a qualified, CDFG-approved biologist to conduct pre-construction surveys within three days prior to construction for woodrat nests within the project area and in a buffer zone 100 feet out from the limit of disturbance. All woodrat nests shall be flagged for avoidance of direct construction impacts, where feasible. Any active nests that will not be in areas of grading or~~

~~vegetation removal will be avoided and protected during project activities with a minimum 25 foot buffer. Nests that cannot be avoided shall be manually deconstructed prior to land clearing activities to allow animals to escape harm and to reestablish territories for the next breeding season. Nests shall be dismantled during the non-breeding season, between October 1 and December 31. Dismantling shall be done by hand, allowing any animals to escape either along existing woodrat trails or toward other available habitat. If a litter of young is found or suspected, nest material shall be replaced, and the nest left alone for two to three weeks before rechecking the nest to verify that young are capable of independent survival before proceeding with nest dismantling.~~

BIO-8. For all development areas: To avoid and reduce impacts to the American badger, project proponents shall retain a qualified biologist to conduct focused pre-construction surveys for badger dens in all areas proposed for construction, ground disturbance, or staging no more than two weeks prior to construction. If no potential badger dens are present, no further mitigation is required. If potential dens are observed, the following measures are required to avoid potential significant impacts to the American badger:

- If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction.
- If the qualified biologist determines that potential dens may be active, the entrances of the dens shall be blocked with soil, sticks, and debris for three to five days to discourage the use of these dens prior to project disturbance. The den entrances shall be blocked to an incrementally greater degree over the three to five day period. After the qualified biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.

BIO-9. For all development areas: To avoid ~~and reduce~~ impacts to the white-tailed kite, ~~and~~ other nesting raptors, and other protected birds, construction activities can be timed to avoid the nesting season period. Specifically, tree removal can be scheduled after September 1 and before January 31 to avoid impacts to these species. Alternatively, if avoidance of the nesting period is not feasible, pre-construction surveys shall be conducted for nesting raptors and other nesting protected birds within 300 feet of proposed construction activities if construction is to be initiated between February 1 and August 31. Pre-construction surveys shall be conducted no more than 30 days prior to the start of construction. If nesting raptors or other nesting protected birds are identified during the pre-construction surveys, the CDFG shall be contacted and an appropriate no-disturbance buffer imposed within which no construction activities or disturbance

shall take place (generally 300 feet in all directions for raptors) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist and the CDFG.

Significant Impact: Coast Live Oak Woodland. Coast live oak trees and oak woodland habitat are protected under Monterey County Zoning Ordinance Title 21, Chapter 16.60 of Title 16 of the Monterey County Code (Ordinance 3420), Section 21.64.60, PRC 21083.4, and the Oak Woodland Management Act. Approximately 37.4 acres of coast live oak woodland would be removed as a result of construction activities. This is considered a significant impact. Additionally, off-site drainage improvements could occur in locations with oak trees, and construction oft these improvements could result in the loss or disturbance of oak trees. This is considered a potentially significant impact.

The Reuse Plan EIR determined the impacts to oak woodland as a result of redevelopment of the former Fort Ord are less than significant due to the establishment of the base-wide conservation area and the habitat preservation and management of these spaces in perpetuity as required by the HMP. The project site is within a parcel designated as "development with reserve areas or restrictions" in the HMP, which allows for development of approximately 81 acres of the 309 acre landfill parcel. The project site is within the allowable development area, and therefore the project is consistent with the HMP and the associated impact analysis of the Base Reuse Plan EIR. These base-wide conservation easements combined with the proposed on-site easements also satisfy Alternative 1 of PRC 21083.4 with the required payment of FORA development fees, a portion of which goes to management of the open space.

In addition, establishment of an on-site conservation easement on the 8.71-acre Parcel D has been proposed by the project applicant, and implementation of the following mitigation measures would reduce potential impacts to a less than significant level in coordination with the conditions set forth in the tree removal permit.

Mitigation Measures

BIO-10. The applicant shall comply with the measures included in the Forest Management Plans that were prepared for the MST and Whispering Oaks Business Park sites. ~~The Forest Management Plans include measures to avoid tree removal and/or transplant trees whenever possible as well as suitable mitigation ratios and planting areas. If off-site improvements result in disturbance to oak trees, the provisions of the MST Forest Management Plan shall apply to that off-site location. In addition, a program shall be established for the applicant to submit a special fee to FORA to fund tree replacement elsewhere within Fort Ord.~~ <u>The applicant shall also comply with the Oak tree preservation and recovery strategy prepared in compliance with the recommendation of the Forest Management Plan for effective implementation. Although it is only feasible</u>

to exactly determine impacts to individual trees at the time of construction, the protective and compensatory measures will be adhered to with the guidance of a Professional Forester or Arborist. These measures include, but are not limited to, the following:

Tree Protection Measures (both projects)

- To maximize tree retention and protection, a forester, arborist or other tree care professional shall be involved in review and development of final grading and construction plans wherever trees occur either at project or grading margins.

- Prior to commencement of any grading within 50 feet of retained trees, the contractor shall install protective fencing at the driplines of retained trees to create a Tree Protection Zone (TPZ) that shall not be entered for any reason unless approved by the project forester. The TPZ may extend within the driplines of retained trees where approved by the project forester in order to retain more trees. Grading may not commence until the project forester has inspected and approved the protective fencing installed by the contractor.

- Prior to commencement of any grading within 50 feet of retained trees, the project forester shall identify retained trees needing significant pruning to protect them during grading operations. This protective pruning work shall be completed by a qualified tree contractor, in accordance with current arboricultural standards and practices prior to commencement of operations to balance canopy, provide necessary clearances, remove dead wood, and promote the health of the tree.

- No equipment, construction materials, trucks or vehicles shall be operated, stored or parked within a TPZ of a retained tree.

- No soil shall be removed or added within the dripline of a retained tree unless it is part of approved construction and approved by the project forester or arborist.

- Under no circumstances shall fill be placed in contact with the base of a retained tree. Permanent wells shall be constructed as appropriate whenever necessary to prevent fill/trunk contact, never at a distance less than a foot from the trunk, and without causing significant root damage.

- To avoid soil compaction from damaging the roots, heavy equipment shall not be allowed to drive over the root area. If deemed necessary and approved by the forester, equipment may drive across one side of the tree. To reduce soil compaction, wood chips shall be spread 6-12 inches deep to disperse the weight of equipment and plywood sheets shall be placed over the wood chips for added protection.

- Roots exposed by excavation must be pruned and recovered as quickly as possible to promote callusing, closure and healthy re-growth.

- Retained trees shall be watered periodically in accordance with species needs to promote tree health. Transplanted trees and their intended planting areas shall be pre-watered. Post planting watering shall be done as needed to assure establishment.

- Use retaining walls wherever feasible to preserve existing native trees. Excavators or backhoes shall be used to remove soil adjacent to "save" trees where needed.

Replacement and Planting Measures (MST project)

- Replant a minimum of 900 seedlings along boundaries and within detention basin and landscape areas. Planting density for seedlings shall be 10 feet by 10 feet to allow for some unavoidable mortality over time.

- Transplants are encouraged and will be credited on a 3:1 basis. Final replanting numbers may be modified by additional tree retention and should be made part of the final landscaping plan.

- Consideration should be given to redesigning the project to use the existing encroachment from Inter-garrison road in order to preserve landmark-sized trees at this location.

- All graded areas that are scheduled for replanting shall be returned to preconstruction soil condition prior to replanting. Tree replacement requirements shall be met promptly after the close of construction and based on a final tally of trees actually removed in the project area rather than on the estimates contained in the Forest Management Plan.

- Not less than 80 percent of replacement trees shall be small, less than one gallon in size (supercells or D40 treepots). Not more than 20 percent of the replacement trees shall be of five-gallon container size or larger.

Design Measures (Whispering Oaks project)

- A qualified Forester/Arborist shall be contracted to assist during the design phase in the general layout of roads, lot layout, and parking area alternatives to further provide for preservation of existing trees and to prepare Forest Management Plans for each lot or combination of lots as needed.

- The design for the Whispering Oaks Business Park shall include lots/building pads at appropriate elevations to avoid mass grading of the site. Lot elevations should be selected to match existing terrain to the extent feasible to allow for the preservation of existing "islands" of resident oaks in the landscape.

- Use of the existing encroachment to Inter-Garrison Road shall be considered as the primary access to the business park if feasible for traffic circulation. Such an access could be sloped at a very moderate grade in order to preserve the existing topography to the greatest extent possible. This would allow for preservation of the landmark-sized trees to the west of the access point.

- The landscape buffer along Inter-Garrison Road shall comply with the GDPs including buffer areas within the project site and/or the Inter-Garrison Road right-of-way. The MST GDP incorporates a tree buffer area on-site at the western end of the site and will provide for a landscape buffer between the wall at the property line and the edge of pavement for the entire frontage. The WO GDP requires a 20 foot oak tree buffer on-site measured from the property line on Inter-Garrison Road with additional buffer within the Inter-Garrison Road right-of-way between the edge of pavement and the property line.

- When the project design is completed an estimate of the appropriate number of replacement seedlings shall be made based on available planting space.

- Not less than 80 percent of replacement trees shall be small, less than one gallon in size (supercells or D40 treepots). Not more than 20 percent of the replacement trees shall be of five-gallon container size or larger.

- Final landscape planting shall require a post planting watering plan based on the time of planting and size of selected stock.

BIO-11. For both projects, in order to minimize impacts to Oak woodlands and in compliance with PRC 21083.4: The appropriate strategy for compliance, as identified in the ~~*Preliminary Oak Woodland Habitat and Tree Removal Mitigation Strategy Plan for the MST Facility/Whispering Oaks Business Park* (Denise Duffy & Associates, Inc., 2009)~~ Oak Tree Preservation-Recovery Strategy for this project is as follows:

  - Pay FORA impact fees for maintenance of permanent open space in the Fort Ord area.

  - The maximum amount of native oak trees as feasible for screening and habitat purposes shall be retained in coordination with a qualified arborist, the General Development Plans, and a comprehensive exclusionary fencing plan requirement.

- ~~Construction and best management practices (as identified in the appropriate FMP) to protect retained trees and trees adjacent to the project site shall be implemented.~~

- Trees shall be replanted in the landscaping areas, the street frontages, the buffer areas, and within Parcel D.

- Off-site replanting and habitat management or payment of equivalent in-lieu fees to the Parks Department will occur. The Youth Camp parcel has been identified as an appropriate off-site mitigation area to achieve a minimum 1:1 replacement.

BIO-12. Two, five, and eight years following mitigation plantings, the applicant shall arrange for a qualified arborist to inspect replacement tree plantings following project completion. Any trees that have died or are in poor condition in the judgment of the arborist shall be replaced and inspected on a two, five and eight year schedule beginning with the next inspection on the original schedule, and with the same replacement location requirements.

Potentially Significant Impact: Central Maritime Chaparral. Central maritime chaparral occurs immediately adjacent to the MST Parcel, within proposed Lots 2-11, along the off-site section of Engineer's Equipment Road, and may occur within the area of the alternative drainage improvements. Central maritime chaparral is designated as a sensitive habitat on the California Natural Diversity Database's working list of high priority and rare natural communities. Impacts to central maritime chaparral habitat outside of the proposed development area may occur as a result of construction activities. This is considered a potentially significant impact. Habitat set-aside completed throughout the former Fort Ord in accordance with the *Fort Ord Reuse Plan* and the Fort Ord HMP, establishment of on-site conservation easements over half the project site as proposed by the project applicant, implementation of Mitigation Measure GEO-3, and implementation of the following mitigation measure would reduce potential impacts to a less-than-significant level.

Mitigation Measure

BIO-13. For the MST project, gas line realignment, Lots 2-11, Engineer's Equipment Road, and off-site drainage improvements: The maritime chaparral vegetation immediately adjacent to the construction area shall be protected during construction. This includes the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. A biological monitor shall supervise the installation of protective fencing. The monitor shall remain on-site during the initial

grading activities and vegetation removal. After these activities are completed, the biological monitor shall check at least once per week until the construction is complete that the protective fencing remains intact and that all construction work is maintained within the limits of construction. This fencing requirement shall be incorporated into a comprehensive fencing plan.

Geology and Soils

Potentially Significant Impact: Seismic Ground Shaking. The known seismicity of the project site, coupled with the project site soils profile type described in the Fugro West report, may result in seismically-induced hazards for the proposed project. This is a potentially significant impact. The implementation of the following mitigation measure would reduce the impact to a less than significant level.

Mitigation Measure

GEO-1. All future development within the project site shall be designed using the parameters for code-based design listed in the Fugro West report ~~and shall be designed in accordance with the requirements for Seismic Design Category "D."~~

Potentially Significant Impact: Soil Instability and Seismic Settlement. The project site is located on cohesionless dune sand materials and may be subject to surficial instability and seismically-induced settlement. Future development on the project site may be at risk due to the instability of the soil. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

GEO-2. All future development within the project site shall be designed consistent with the latest edition of the California Building Code as adopted by Monterey County and its related seismic standards, as well as any additional standards required as standard conditions of approval by the County of Monterey. Future development on the MST site shall incorporate all recommendations from the geotechnical report, and if necessary, a supplemental exploration may be required depending on the final layout of the proposed structures and facilities. A geotechnical report shall be required prior to development on any lot within the Whispering Oaks Business Park. Final improvement plans and building plans shall be based on recommendations in the geotechnical report, and subject to review and approval of Monterey County prior to issuance of a grading or building permit. A geotechnical report may be prepared to apply to more than one lot.

Potentially Significant Impact: Soil Erosion. Although the project site soils have a moderate erosion risk, during construction, when soils are disturbed or bare, the erosion hazard would increase. New storm drainage outfalls could result in increased or concentrated storm water flows that could cause erosion. This is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

GEO-3. Each applicant shall prepare an erosion control plan consistent with the requirements of Monterey County Code Chapter 16.12 prior to approval of tree removal, grading, or building permits. All erosion control measures required by the approved erosion control plan shall be in place until work is completed. Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. Prior to the issuance of an occupancy permit, permanent erosion control measures shall be in place and approved by the Resource Management Agency. An erosion control plan may be prepared to apply to more than one lot or for related projects at different sites.

Hazards and Hazardous Materials

Potentially Significant Impact: Hazardous Materials Transport and Use. The proposed project would involve the transport and handling of a variety of hazardous or potentially hazardous materials, including solvents, propane, and vehicle fuel. The transport and use of these materials is carefully regulated by several government agencies. The MST site plan places the fueling station and hazardous waste storage areas at the opposite side of the project site from the proposed residences at CSUMB minimizes the potential for adverse effects at the nearest sensitive receptors. Transport of hazardous materials could occur adjacent to or through the CSUMB, University of California, or Golden Gate University campuses, and could expose students at these facilities to risks resulting from a spill or accident. This is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

H-1. As part of its Business Response Plan, MST shall develop a designated transport route for hazardous waste deliveries and removal and consult with CSUMB during development of the plan. The plan shall be subject to the review and approval of the Monterey County Environmental Health Department.

Potentially Significant Impact: Munitions and Explosives. Although the project site was not used for military training exercises, the potential exists to discover isolated munitions or explosives during tree removal and grading operations. This is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

H-2. Construction supervisors and crews shall attend a U.S. Army sponsored munitions and explosives safety briefing prior to commencement of construction. This briefing shall identify the variety of munitions and explosives that are known to exist on the former Fort Ord and the actions to be taken if a suspicious item is discovered. This requirement for briefing shall be included in construction documents.

Hydrology and Water Quality

Potentially Significant Impact: Soil Erosion during Construction. The proposed project would expose large areas of soil through tree removal and grading during construction. The project site soils have a moderate potential for erosion, and this erosion risk would be significantly elevated when the soils are disturbed. Implementation of Mitigation Measure GEO-3 would reduce this impact to a less than significant level.

Potentially Significant Impact: On-site Storm Drainage Basin Capacity. The proposed project includes on-site basins and galleries for infiltration of on-site storm water run-off. The basins and galleries that are specifically proposed are sized adequately to accept flows during the 100-year storm event. However, no specific basins or basin capacities have been proposed for Lots 2, 3, 7, and 8. Therefore, it cannot be determined if these lots would be able to adequately retain storm water and prevent flooding. This is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

HY-1. Prior to the issuance of any grading and/or building permits, the developer(s) for Lots 2, 3, 7, and 8 shall provide the Water Resources Agency a drainage plan prepared by a registered civil engineer addressing on-site impacts with supporting calculations and construction details. The plan shall include retention facilities to mitigate the impact of impervious surface storm-water runoff. ~~P~~ Where necessary, as determined by the project engineer, pond(s) shall be fenced for public safety. Oil-grease/water separators shall be installed for the pre-treatment of storm-water runoff from paved parking areas. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency.

Potentially Significant Impact: Water Quality at Percolation Basins. The high percolation rate of the soil necessitates the inclusion of passive water quality pre-treatment measures for storm water, generally categorized as storm water best management practices. The general development plans do not specify pre-treatment of storm water. Storm water that percolates into the groundwater without pre-treatment is considered a significant environmental impact. Implementation of the following mitigation measures would reduce this impact to a less than significant level.

Mitigation Measures

HY-2. Prior to filing the final map, the applicant shall provide the Water Resources Agency a drainage plan prepared by a registered civil engineer addressing on-site and off-site impacts with supporting calculations and construction details. The plan shall include retention facilities to mitigate the impact of impervious surface storm-water runoff. ~~P~~ Where necessary, as determined by the project engineer, pond(s) shall be fenced for public safety. Oil-grease/water separators shall be installed for the pre-treatment of storm-water runoff from paved parking areas. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency.

HY-3. Prior to filing the final map, a copy of a signed and notarized Road and Drainage Maintenance Agreement shall be provided to the Water Resources Agency for approval. The agreement shall be recorded concurrently with final map. The responsibility for care, maintenance, and repair of road and drainage improvements in the subdivision shall be the joint and several personal obligation of each and every owner of a lot in the Subdivision. The obligation includes preparation of an annual drainage report by a registered civil engineer which shall include analysis of the subdivision drainage facilities and recommendation of any maintenance. The report shall be submitted to the Monterey County Water Resources Agency for review and approval by the 15th day of August, and any recommended maintenance activities shall be completed by the 15th day of October of the same year.

Transportation and Circulation

Significant Impact: Unacceptable LOS (Phase 1). The first phase of the proposed project would result in additional trips and increased delays at intersections already operating at LOS E or F. although it would not result in a reduced level of service at any of these already deficient intersections. The affected intersections and the improvements necessary to achieve acceptable levels of service would be:

- *Davis Road/Reservation Road:* signalize intersection; add second eastbound left-turn lane; re-channelize the southbound right turn as a formal right;

- *Fifth Avenue – California Avenue/Imjin Parkway:* add a southbound California Avenue right turn lane;
- Third Avenue/Imjin Parkway: signalize intersection;
- *General Jim Moore Boulevard/Broadway Avenue:* add a northbound General Jim Moore Boulevard left turn lane and a second northbound through lane; add a southbound General Jim Moore Boulevard left turn lane and a second southbound through lane; add an eastbound Inter-Garrison Road left turn lane;
- *Abrams Drive/Imjin Parkway:* add a second eastbound Imjin Parkway through lane; add a second westbound Imjin Parkway through lane;
- *Imjin Parkway/Reservation Road:* add a third northbound Imjin Parkway right turn lane; and
- *Blanco Road/Reservation Road:* add a second westbound Reservation through lane.

Phase 1 contributions to these impacts would be a significant impact. Implementation of the Mitigation Measure T-1 would reduce this impact to a less than significant level.

Potentially Significant Impact: Vehicle Queues (Phase 1). The first phase of the proposed project would result in left-turn queues extending into traffic and a potential safety impact at the following intersection:

- *Imjin Parkway/Imjin Road.* Movements at the westbound Imjin Parkway left turn onto Imjin Road that would exceed the left-turn pocket storage capacity.

Implementation of Mitigation Measure T-2 would reduce this impact to a less than significant level.

Mitigation Measures

T-1. In order to mitigate impacts from additional trips added by Phase I to intersections already operating at LOS E or F~~. P~~ prior to i~~ssuance of building permits~~ recordation the final map for Phase I, ~~MST shall submit to the RMA – Planning Department evidence of payment of~~ the fees listed below (fair share costs for project-level impacts based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be paid.

~~▪ FORA development impact fees.~~

~~▪ City of Marina traffic impact fees.~~

County of Monterey fair share costs for improvements at the following intersections:

- Davis Road/Reservation Road (1.3%of $1,825,600 = $23,389)
- Blanco Road/Reservation Road (2.0% of $263,400 = $5,288).

City of Marina fair share costs for lane improvements at the following intersection:

- Imjin Road/Imjin Parkway – eastbound right (17.5% of $466,888 = $81,791) Note: this fee would be reimbursable to Whispering Oaks Business Park – see Mitigation Measure T-6.

City of Marina fair share costs for two lane improvements at the following intersection:

- Imjin Parkway/Reservation Road (1.~~3~~7% of $222,700 = $~~2,788~~ 3,764).

City of Seaside fair share costs for improvements at the following intersections:

- General Jim Moore Boulevard/Broadway Avenue (0.4% of $300,000 = $1,054)

Caltrans fair share costs for improvements at the following intersections:

- Northbound State Route 1/Imjin Parkway (~~1.2~~ 0.7% of $151,428 = $~~1,875~~1,012)
- Southbound State Route 1/Imjin Parkway (0.8% of $965,308 = $7,562)

~~**Monitoring Actions**~~

~~Prior to issuance of building permits the applicant shall submit the required fees to the appropriate jurisdiction.~~

~~Prior to issuance of building permits, the applicant shall provide evidence of fee payment to the RMA – Planning Department.~~

Mitigation Measure

T-2. ~~MST shall construct the following improvement prior to acceptance of Phase 1 (lot 1) improvements~~: In order to mitigate potential safety impacts from left-turn queues exceeding the left-turn lane storage capacity at Imjin Parkway and Imjin Road, Phase I improvements shall include:

- Construction of a second westbound left-turn lane at the intersection of Imjin Road and Imjin Parkway.

~~MST shall be owed reimbursement of 11.6 percent of the cost of this improvement by the Whispering Oaks Business Park developer or successor ($107,189 based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) – see Mitigation Measure T-3.~~

~~**Monitoring Actions**~~

~~Prior to issuance of final maps for Phase 1 the applicant shall submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval.~~

~~Prior to acceptance of subdivision improvements for Phase 1, the applicant shall provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.~~

Phase 2 and Phase 3 Impacts.

Significant Impact: Unacceptable LOS (Phases 2 and 3). The second and third phases of the proposed project would result in additional trips and increased delays at intersections already operating at LOS E or F although they would not result in a reduced level of service at any of these already deficient intersections. The affected intersections and the improvements necessary to achieve acceptable levels of service would be:

- *Davis Road/Reservation Road:* signalize intersection; add second eastbound left-turn lane; re-channelize the southbound right turn as a formal right;
- *Fifth Avenue – California Avenue/Imjin Parkway:* add a southbound California Avenue right turn lane;
- Third Avenue/Imjin Parkway: signalize intersection;
- *Imjin Road/8th Street:* Signalize intersection; and add a second southbound Imjin Road left turn lane, and corresponding second eastbound Eighth Street receiving lane, or alternatively, realign Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection;
- *General Jim Moore Boulevard/Broadway Avenue:* signalize intersection; add a northbound General Jim Moore Boulevard left turn lane and a second northbound through lane; add a southbound General Jim Moore Boulevard left turn lane and a second southbound through lane; add an eastbound Inter-Garrison Road left turn lane;
- *Abrams Drive/Imjin Parkway:* add a second eastbound Imjin Parkway through lane; and add a second westbound Imjin Parkway through lane;
- *Imjin Parkway/Reservation Road:* add a third northbound Imjin Parkway right turn lane;
- *Blanco Road/Reservation Road:* add a second westbound Reservation through lane.

Phase 2 and 3 contributions to these impacts would be a significant impact. Implementation of Mitigation Measures T-3, T-4, and T-5 would reduce this impact to a less than significant level.

Significant Impact: Vehicle Queues (Phases 2 and 3). The second and third phases of the proposed project would result in left-turn and right-turn queues extending into traffic and a potential safety impact at the following intersection:

- *Imjin Parkway/Imjin Road.* Although overall operations would be within acceptable levels, Phase 2 and 3 of the proposed project would add sufficient traffic to the westbound Imjin Parkway left turn movement at this intersection to cause the westbound left turn lane to overflow into the adjacent through lane. In addition, the high traffic volume for the eastbound Imjin Parkway right turn movement would also contribute to the long vehicle queues for the eastbound Imjin Parkway outer through lane, especially during the AM peak hour.

Implementation of Mitigation Measure T-3 and T-6 would reduce this impact to a less than significant level.

Significant Impact: LOS at Engineer's Equipment Road/Whispering Oaks Drive (Phase 3). Worst movement level of service at this intersection would drop to LOS F at project build-out during the AM peak hour. This would be a significant impact. Implementation Mitigation Measure T-7 would reduce this impact to a less than significant level.

Mitigation Measure

T-3. In order to mitigate impacts resulting from the increase of traffic trips from Phases 2 and 3 on intersections already operating at LOS E or F, prior to ~~the issuance of building permits~~ recordation of the Phase 2 final map, ~~the Whispering Oaks Business Park developer or successor(s) shall submit to the RMA – Planning Department evidence of payment of the specific development's~~ the pro-rata share of fees listed below (fair share costs for project-level impacts based on estimated 2010 project costs to adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be paid.

~~FORA development impact fees.~~

~~City of Marina traffic impact fees (includes improvements at Fifth Avenue – California Avenue/Imjin Parkway, Third Avenue/Imjin Parkway, Second Avenue/Imjin Parkway, Abrams Drive/Imjin Parkway, and signalization at the Imjin Parkway/southbound State Route 1 ramps).~~

County of Monterey fair share costs for improvements at the following intersections:

- Davis Road/Reservation Road (4.3%of $1,825,600 = $78,375)
- Blanco Road/Reservation Road (4.6% of $263,400 = $12,056).

City of Marina fair share costs for two lane improvements at the following intersection:

- Imjin Road/Imjin Parkway – second westbound left (11.6% of $925,453 = $107,189) Note: this fee would be reimbursable to MST – see Mitigation Measure T-2.

City of Marina fair share costs for two lane improvements at the following intersection:

- Imjin Parkway/Reservation Road (~~2.9~~4.1% of $222,700 = ~~$6,481~~ 9,207).

City of Seaside fair share costs for improvements at the following intersection:

- General Jim Moore Boulevard/Broadway Avenue (4.0% of $300,000 = $12,119)

Caltrans fair share costs for improvements at the following intersections:

- Northbound State Route 1/Imjin Parkway (3.2% of $151,428 = $4,797)
- Southbound State Route 1/Imjin Parkway (2.6% of $965,308 = $24,759)

~~**Monitoring Actions**~~

~~Prior to execution of the development agreement, a pro-rata division of costs shall be assigned to each lot (lots 2-16) within the Whispering Oaks Business Park.~~

~~Prior to issuance of building permits the applicant shall submit the required fees to the appropriate jurisdiction.~~

~~Prior to issuance of building permits, the applicant shall provide evidence of fee payment to the RMA – Planning Department.~~

Mitigation Measure

T-4. ~~The Whispering Oaks Business Park developer shall construct the following improvements prior to acceptance of Phase 2 (lots 2-12) improvements:~~ In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Imjin Road and Eighth Street, Phase II improvements shall include:

- Signalizing intersection of Imjin Road/Eighth Street and adding a southbound Imjin Road left turn lane, and corresponding second eastbound Eighth Street receiving lane, or
- Constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street, realigning Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection.

~~The Whispering Oaks Business Park developer is responsible for 78.2% of the cost of this improvement and MST is responsible for 21.8% of the cost of this improvement (see Mitigation Measure T-9).~~

~~**Monitoring Actions**~~

~~Prior to issuance of final maps for Phase 2 the applicant shall submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval.~~

~~Prior to acceptance of subdivision improvements for Phase 2, the applicant shall provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.~~

Mitigation Measure

T-5. ~~The Whispering Oaks Business Park developer shall construct the following improvement prior to acceptance of Phase 3 (lots 13-16) improvements:~~ In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Imjin Road and Eight Street, Phase III improvements shall include:

- Adding a westbound right-turn lane at the Imjin Road/Eighth Street intersection, or
- Constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street, realigning Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection.

~~The Whispering Oaks Business Park developer is responsible for 78.2% of the cost of this improvement and MST is responsible for 21.8% of the cost of this improvement (see Mitigation Measure T-9).~~

~~**Monitoring Actions**~~

~~Prior to issuance of final maps for Phase 3 the applicant shall submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval.~~

~~Prior to acceptance of subdivision improvements for Phase 3, the applicant shall provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.~~

Mitigation Measure

T-6. ~~The Whispering Oaks Business Park developer shall construct the following improvement prior to acceptance of Phase 2 (lots 2-12) improvements:~~ In order to mitigate potential safety impacts from right-turn queues exceeding the right-turn lane storage capacity at Imjin Parkway and Imjin Road, Phase II road improvements shall include:

- Constructing an eastbound right-turn lane at the intersection of Imjin Road and Imjin Parkway.

~~The Whispering Oaks Business Park developer or successor shall be subject to reimbursement of 17.5 percent of the cost of this improvement by MST ($81,791 based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) – see Mitigation Measure T-1.~~

~~**Monitoring Actions**~~

~~Prior to issuance of final maps for Phase 2 the applicant shall submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval.~~

~~Prior to acceptance of subdivision improvements for Phase 2, the applicant shall provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.~~

Mitigation Measure

T-7. ~~The Whispering Oaks Business Park developer shall construct the following improvement prior to acceptance of Phase 3 (lots 13-16) improvements:~~ In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Engineer's Equipment Road and Inter-Garrison Road, Phase III road improvements shall include:

- Signalization of the intersection of Whispering Oaks Drive/Engineer's Equipment Road. The signal light shall be coordinated with the signal light at Engineer's Equipment Road and Inter-Garrison Road.
- construction of northbound and southbound left turn lanes.
- construction of eastbound and westbound right turn lanes.

~~**Monitoring Actions**~~

~~Prior to issuance of final maps for Phase 3 the applicant shall submit improvement plans for the identified off site improvements for review and approval.~~

~~Prior to acceptance of subdivision improvements for Phase 3, the applicant shall provide evidence of completion and acceptance of off site improvements to the RMA – Planning Department.~~

Less than Significant Impact: Need for Transit and Pedestrian Facilities. *Fort Ord Reuse Plan* policies require adequate pedestrian, bicycle, and transit provisions for all new development. The proposed project indicates the provision of pedestrian facilities within and adjacent to the MST facility (including reservation of land for the multi-modal corridor), new bus stops at both the MST and Whispering Oaks locations, and sidewalks within the business park. This would be a less than significant impact.

Potentially Significant Impact: Non-service Bus Traffic within Campus Core. Bus traffic heading to/from route initiation/termination points west of the CSUMB campus core could increase out-of-service bus traffic through the CSUMB campus core area on Inter-Garrison Road and other campus roads. This would increase the potential for traffic congestion and conflict with pedestrians and bicyclists. This is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

T-8. MST shall include a policy in the General Development Plan to require out-of-service buses traveling to and from the beginning or ends of their day's runs to <u>consult with CSUMB regarding</u> ~~use~~ routes that ~~avoid~~ <u>use</u> the following streets within the CSUMB campus core area: Inter-Garrison Road/Third Street (Sixth Avenue to General Jim Moore Boulevard) and Divarty Street (east of General Jim Moore Boulevard). The restriction shall not apply to routes serving CSUMB.

~~**Monitoring Action**~~

~~**Prior to approval of the MST GDP**, a policy shall be added to the GDP or condition placed upon the approval to require the policy prior to project development.~~

Significant Cumulative Effects

Significant cumulative impacts are anticipated in the following areas:

Climate Change

Refer to the section on significant unavoidable impacts regarding cumulative climate change impacts.

Transportation and Circulation

Significant Cumulative Impact: LOS Below Standards. The proposed project would contribute traffic to 19 intersections with level of service below standards during cumulative conditions. One additional intersection is listed for which Whispering Oaks Business Park would provide mitigation at Phase 2 and 3, but for which MST would represent a cumulatively considerable share of traffic. The proposed project would have a cumulatively considerable contribution to LOS degradation at the following intersections.

Davis Road/Reservation Road. Signalize Intersection; and add second westbound Reservation left turn lane.

Inter-Garrison Road/Reservation Road. Add northbound Inter-Garrison right turn overlap signal phase; add second westbound Reservation Road left turn lane; add a second northbound Inter-Garrison right turn lane.

Imjin Road/Imjin Parkway. Add an eastbound Imjin Parkway right turn lane; add a second westbound Imjin Parkway left turn lane; add a northbound Imjin Road right turn overlap signal phase; and add third eastbound and third westbound Imjin Parkway through lanes.

Fifth Avenue-California Avenue/Imjin Parkway. Add a southbound California right turn lane.

Third Avenue/Imjin Parkway. Signalize intersection.

Second Avenue/Imjin Parkway. Add an eastbound right turn overlap signal phases.

Northbound State Route 1 Off-ramps/Imjin Parkway: Signalize intersection.

Southbound State Route 1 Off-ramps/Imjin Parkway: Signalize intersection.

General Jim Moore Boulevard/Light Fighter Drive. Add a southbound General Jim Moore Boulevard right turn lane; and add a second eastbound Light Fighter Drive left turn lane.

Second Avenue/Light Fighter Drive. Add a southbound right turn overlap signal phase.

First Avenue/Light Fighter Drive. Add a second northbound left turn lane.

General Jim Moore Boulevard/Broadway Avenue. Signalize intersection; add a northbound General Jim Moore Boulevard left turn lane and a second northbound through lane; add a southbound General Jim Moore Boulevard left turn lane and a second southbound through lane; add an eastbound Inter-Garrison Road left turn lane.

Seventh Avenue/Inter-Garrison Road. Add a northbound right turn lane.

Engineers Equipment Road/Whispering Oaks Drive. Add northbound and southbound Engineering left turn lanes; signalize intersection; and add eastbound and westbound right turn lanes.

Whispering Oaks Way/Inter-Garrison Road. Add a southbound Whispering Oaks right turn lane; an eastbound Inter-Garrison Road left turn lane; a westbound Inter-Garrison Road right turn lane; second eastbound and second westbound Inter-Garrison Road through lanes; and a median left turn acceleration lane on Inter-Garrison Road.

Engineers Equipment Road/Inter-Garrison Road. Signalize intersection; add a second southbound left turn lane; a westbound right turn lane; and a second eastbound Inter-Garrison Road through lane.

Sixth Avenue/Eighth Street-Engineers Equipment Road. Signalize Intersection; add a single northbound Sixth Avenue left turn lane, two southbound Imjin Road left turn lanes; two eastbound Eighth Street left turn lanes, a single westbound Engineer's Equipment Road left turn lane; a southbound Imjin Road right turn lane, an eastbound Eighth Street right turn lane, a westbound Engineer's Equipment Road right turn lane; and southbound and westbound right turn overlap signal phases.

Eastside Parkway/Gigling Road. Add an eastbound Gigling Road left turn lane; a westbound Gigling Road left turn lane; a northbound Eastside Parkway left turn lane; a southbound Eastside Parkway left turn lane; and a southbound Eastside Parkway right turn lane.

Abrams Drive/Imjin Parkway. Add second westbound and second eastbound Imjin Parkway through lanes.

Imjin Road/Eighth Street. MST would contribute traffic to this intersection that would require mitigation under Phase 2 and 3 conditions and be improved by the Whispering Oaks Business Park (see Mitigation Measures T-4 and T-5).

Payment of the development impact fees and fair share fees as required by Mitigation Measures T-1 and T-3, construction of improvements as required by Mitigation Measures T-2, T-4, T-5, T-6, and T-7 in Section 2.9 Traffic and Circulation, and implementation of Mitigation Measures T-9, T-10, and T-11 presented below would reduce these impacts to a less than significant level.

Mitigation Measure

T-9. In order to mitigate the Phase 1 portion of the cumulative impact of the proposed subdivision, prior to issuance of building permits, ~~MST shall submit to the RMA - Planning Department~~ evidence of payment of the fees listed below (fair share costs for

cumulative impacts based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be submitted to the RMA-Planning Department.

FORA development impact fees.

County of Monterey fair share costs for improvements at the following intersections:

- Inter-Garrison Road/Reservation Road (1.8% of $612,100 = $11,056)
- Engineer's Equipment Road/Whispering Oaks Way (17.8% of $300,000 = $53,251)
- Engineer's Equipment Road/Inter-Garrison Road (3.6% of $300,000 = $10,827)

City of Marina fair share costs for reimbursement to Whispering Oaks Business Park at the following intersection ~~Note: this amount may be bonded or otherwise assured, and the cost could change if an alternate improvement is constructed~~ (a per-trip equivalent payment can also satisfy this requirement):

- Imjin Road/Eighth Street (21.8% of $1,136,064 = $247,689)
- Fifth Avenue – California Avenue/Imjin Parkway (1.7% of $390,111 = $6,632)
- Third Avenue/Imjin Parkway (1.1% of $543,000 = $6,110),
- Second Avenue/Imjin Parkway (0.7% of $42,000 = $307)
- Abrams Drive/Imjin Parkway (1.6 % of $1,304,596 = $20,770) and
- Imjin Parkway/southbound State Route 1 ramp (1.1% of $488,582 = $5,207)
- Imjin Parkway/northbound State Rout 1 ramp (0.9% of $488,582 = $4,563)

~~**Monitoring Actions**~~

~~Prior to issuance of building permits the applicant shall submit the required fees to the appropriate jurisdiction.~~

~~Prior to issuance of building permits, the applicant shall provide evidence of fee payment to the RMA – Planning Department.~~

Mitigation Measure

T-10. In order to mitigate the Phase 2 & 3 portions of the cumulative impact of the proposed subdivision, prior to issuance of building permits, ~~the Whispering Oaks Business Park~~

~~developer or successor(s) shall submit to the RMA – Planning Department~~ evidence of payment of the ~~specific development's pro-rata share of~~ fees listed below (fair share costs for cumulative impacts based on estimated 2010 project costs to adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be submitted to the RMA - Planning Department.

FORA development impact fees.

City of Marina fair-share contributions for improvements at the following intersections (a per-trip equivalent payment can also satisfy this requirement):

- Fifth Avenue – California Avenue/Imjin Parkway (4.1% of $390,111 = $16,168)
- Third Avenue/Imjin Parkway (3.7% of $543,000 = $19,857)
- Second Avenue/Imjin Parkway (2.4% of $42,000 = $997)
- Abrams Drive/Imjin Parkway (4.3% of $1,304,596 = $55,574)
- Imjin Parkway/southbound State Route 1 ramp (3.5% of $488,582 = $17,299)
- Imjin Parkway/northbound State Route 1 ramp (3.0% of $488,582 = $14,830)

County of Monterey fair share costs for improvements at the following intersections:

- Inter-Garrison Road/Reservation Road (3.3% of $612,100 = $20,468)
- Engineer's Equipment Road/Whispering Oaks Way (82.2% of $300,000 = $248,749)
- Engineer's Equipment Road/Inter-Garrison Road (7.8% of $300,000 = $23,298)

City of Seaside fair share costs for improvements at the following intersections:

- General Jim Moore Boulevard/Light Fighter Drive (1.1% of $654,185 = $7.416)
- Second Avenue/Light Fighter Drive (0.9% of $18,000 = $159)
- First Avenue/Light Fighter Drive (1.1% of $102,600 = $1,141)

~~**Monitoring Actions**~~

~~Prior to execution of the development agreement, a pro-rata division of costs shall be assigned to each lot (lots 2-16) within the Whispering Oaks Business Park.~~

~~Prior to issuance of building permits the applicant shall submit the required fees to the appropriate jurisdiction.~~

~~Prior to issuance of building permits, the applicant shall provide evidence of fee payment to the RMA – Planning Department.~~

Mitigation Measure

T-11. In order to mitigate impacts resulting in unacceptable LOS at Phase 3 under the cumulative conditions, ~~The Whispering Oaks Business Park developer shall construct~~ the following improvements shall be constructed prior to acceptance of Phase 3 (lots 13-16) improvements at the intersection of Whispering Oaks Way and Inter-Garrison Road:

- Construct a southbound Whispering Oaks right turn lane;
- Construct an eastbound Inter-Garrison Road left turn lane;
- Construct a westbound Inter-Garrison Road right turn lane;
- Construct second eastbound and second westbound Inter-Garrison Road through lanes; and
- Construct a median left turn acceleration lane on Inter-Garrison Road.

~~**Monitoring Actions**~~

~~Prior to issuance of final maps for Phase 3 the applicant shall submit improvement plans for the identified improvements for review and approval.~~

~~Prior to acceptance of subdivision improvements for Phase 3, the applicant shall provide evidence of completion and acceptance of off-site improvements to the RMA – Planning Department.~~

Significant Unavoidable Impacts

Significant and unavoidable impacts are anticipated in the following areas:

Climate Change

Significant and Unavoidable Impact: Project Related GHG Emissions. There are no existing local or applicable regional plans in place that identify thresholds of significance or mitigation approaches for reducing the impacts of local development on climate change. In the absence of such plans, AB 32 becomes the applicable plan with which the proposed project should be consistent in order to meet the threshold of significance identified earlier, which is as follows:

result in a net increase in greenhouse gas emissions, in terms of carbon dioxide equivalents, that could substantially impede local, regional or statewide efforts to reduce overall greenhouse gas emissions.

The Scoping Plan discusses the role of local governments in assisting with the implementation of AB 32. Local governments are encouraged to set goals to reduce community emissions by approximately 15 percent from current levels by 2020. The GHG emissions generated by the proposed project would make the state's ability to achieve reductions targets identified in AB 32 more challenging. In the absence of local, regional or state guidelines, the impact is considered significant and unavoidable.

Both the MST and Whispering Oaks Business Park general development plans include direction that would reduce GHG emissions, including facilitation of transit use and LEED certification for most buildings. Additional greenhouse gas reduction measures can be implemented that would reduce the operational emissions of the proposed project. However, the full GHG emissions reduction potential of the measures may not be realized due to economic and site constraints, overlapping or mutually excusive nature of some of the measures, or other reasons. Therefore, reductions of GHG emissions to a less than significant level cannot be guaranteed, and the impact would remain significant and unavoidable. A statement of overriding considerations would be required.

Mitigation Measure

CC-1. The project applicant and/or succeeding developers shall <u>follow the greenhouse gas reduction measures contained in the General Development Plans prepared for the sites.</u> ~~prepare a greenhouse gas emissions reduction plan to reduce greenhouse gas emissions from the project site to the extent feasible.~~ <u>In addition, t</u>he following specific measures shall be implemented as part of the general development plan, development agreement, final map, and/or development plans as applicable:

1. MST shall analyze future bus routes and modify these routes to effectively reduce daily vehicle miles traveled. For near term, the proposed project is expected to result in an average of 1,959 miles of additional travel each day to serve existing routes that are served by the two existing transit facilities. This assessment uses a worst case analysis that this mileage would increase proportionally with new bus routes in the future. However, MST has outgrown their existing facilities, so new facilities would be necessary to serve the future transit demands. Potential reductions: 20 percent of the daily increased vehicle miles travelled. This 20 percent reduction would equate to a reduction of 392 miles when the project first becomes operational (assuming 186 daily bus trips).

2. MST and Whispering Oaks employees and visitors shall be provided opportunities for using transit that would reduce travel to the site. Potential reductions: up to 15 percent according to the URBEMIS2007 model. This reduction is based solely on the transit service at the site (e.g., frequency of buses within one-quarter mile and regional transit service within ½ mile). With future transit routes, the project could achieve a 10 percent reduction in mobile (non-bus) GHG emissions.

3. MST and Whispering Oaks employees shall be provided incentives to use transit, such as discounted transit passes. Potential reductions: five percent of employee mobile source emissions.

4. Provide local retail uses. Retail services, such as restaurants, markets, and automatic teller machines located in proximity could substantially reduce employee vehicle miles travelled during the day (lunch period). ~~One lot within the business park shall be designated for retail services only~~. The Whispering Oaks General Development Plan shall allow for local retail and food service uses. Potential reductions: two percent of employee mobile source emissions according to the URBEMIS2007 model.

5. Provide amenities for bicycle and pedestrian modes of travel. Sidewalks and bicycle lanes shall be provided on both sides of all streets to serve the project site (except sidewalks on the north side of Engineer's Equipment Road where it abuts open space). In addition, secure employee bicycle facilities, along with lockers and showers shall be provided at each lot, and at least one public bicycle parking space shall be provided at each lot. Signal light sensors shall be set to respond to bicycle traffic, and an automatic walk signal shall be provided with green lights. Potential reductions: up to nine percent of employee mobile source emissions, depending on the network of bicycle lanes and sidewalks serving the project site, according to the URBEMIS2007 model. An additional two percent could be achieved with on-site amenities that would encourage employees to bike or walk to work. The total combined reductions for these measures could reach 10 percent, depending on the network of developed sidewalks and bicycle lanes in the future. Note: this measure shall not be required on interim access driveways built within street rights-of-way.

6. LEED credits shall focus to the extent feasible on approaches that directly or indirectly reduce greenhouse gas emissions. Potential reductions: 20 percent or more by meeting LEED Silver design level.

The project applicant and/or succeeding developers may elect to utilize other measures not specifically listed, including measures to reduce dependence on gas or electrical space or water heating, and additional means to encourage forms of transportation that reduce greenhouse gas emissions. Use of other methods may be credited toward fulfilling this measure based on anticipated emissions reductions.

~~Measures to be included in the general development plan(s) or development agreement(s) shall be prepared as part of project-wide emissions reduction plan for RMA – Planning Department review and recommendation prior to Board of Supervisors approval. Measures to be included as notes on or designs within a final map, site plan, or building plans, shall be prepared as part of a site-specific emissions reduction plan for RMA – Planning Department review and approval prior to approval of the relevant permit. The applicant/developer may elect to prepare a consolidated greenhouse gas emissions reduction plan for two or more lots.~~

~~**Monitoring Actions**~~

- ~~**Prior to Board of Supervisors approval of the development agreement or general development plan,** the project applicant shall prepare a project-wide greenhouse gas reduction plan for the review and recommendation of RMA – Planning Department and shall include applicable measures from the greenhouse gas reduction plan in the general development plan and development agreement.~~

- ~~**Prior to approval of a final map,** the applicant/developer shall include applicable measures from the project-wide greenhouse reduction plan on the final map, subject to the review and approval of the RMA - Planning Department.~~

- ~~**Prior to issuance of a building permit,** the applicant/developer shall prepare a site-specific greenhouse reduction plan for the review and approval of the RMA - Planning Department, and shall include applicable measures from the greenhouse reduction plan in site plans, improvement plans, and building plans.~~

Transportation

Significant Unavoidable Impact: Increased Trips at State Route 1 Interchanges (Phase 1). The first phase of the proposed project would add new trips to the following two intersections already operating at LOS F at both the AM and PM peak hours. These intersections and the required improvements are:

- *Northbound State Route 1 Off-ramps/Imjin Parkway:* close the median along Imjin Parkway at this intersection; and

- *Southbound State Route 1 Off-ramps/Imjin Parkway:* signalize intersection; add a second westbound Imjin parkway left turn lane; and add a second southbound State Route 1 Off-ramp left turn lane.

The improvements necessary to mitigate this impact to a less than significant level would require the approval of Caltrans, and implementation of the improvements may not be feasible.

Ultimately, Caltrans plans to re-design and consolidate this interchange and the Del Monte Boulevard interchange to the north. Until such time as that major improvement is undertaken, mitigation at this location is infeasible and the interchange will continue to operate at LOS F. The City of Marina traffic fee program includes signalization of this intersection and implementation of Mitigation Measure T-1 would require fair share payment to Caltrans towards the lane improvements. However, these fees would not reduce the impact to a less than significant level.

Significant Unavoidable Impact: Increased Trips at State Route 1 Interchanges (Phases 2 and 3). The second and third phases of the proposed project would add new trips to the following two intersections already operating at LOS F at both the AM and PM peak hours. These intersections and the required improvements are:

- *Northbound State Route 1 Off-ramps/Imjin Parkway:* close the median along Imjin Parkway at this intersection; and
- *Southbound State Route 1 Off-ramps/Imjin Parkway:* signalize intersection; add a second westbound Imjin parkway left turn lane; and add a second southbound State Route 1 Off-ramp left turn lane.

The improvements necessary to mitigate this impact to a less than significant level would require the approval of Caltrans, and implementation of the improvements may not be feasible. Ultimately, Caltrans plans to re-design and consolidate this interchange and the Del Monte Boulevard interchange to the north. Until such time as that major improvement is undertaken, mitigation at this location is infeasible and the interchange will continue to operate at LOS F. The City of Marina traffic fee program includes signalization of this intersection and implementation of Mitigation Measure T-3 would require fair share payment to Caltrans towards the lane improvements. However, these fees would not reduce the impact to a less than significant level.

Growth Inducing Effects

The proposed project would construct local-serving infrastructure, including on-site water and sewer lines, and on-site and adjacent roads. The proposed project would also make use of existing infrastructure located adjacent to the project site. The proposed project would not develop new or over-sized utilities that would allow for unplanned growth in adjacent areas. The proposed project is within an area planned for development in the *Fort Ord Reuse Plan*. The proposed project would not be growth inducing.

Areas of Controversy

CEQA Guidelines section 15123(b)(2) requires an EIR summary to identify areas of controversy known to the lead agency including issues raised by agencies and the public. The following concerns have been raised regarding the proposed project:

Aesthetics

The proposed project could result in significant changes to the visual character of the project site. In particular, California State University at Monterey Bay has raised concerns regarding the effect of tree loss on the visual character of the site when viewed from adjacent CSUMB locations. The City of Marina has expressed concerns regarding the effects of tree loss on the open space character of the Inter-Garrison Road corridor.

Biological Resources

The proposed project would result in the removal of approximately 4,500 oak trees.

Land Use and Planning

The project site has a *Fort Ord Reuse Plan* designation of Mixed Use – Planned Development. The project site is also within the City of Marina planning area, and has a *Marina General Plan* land use designation of Park and Open Space.

Summary of Alternatives

Project alternatives are presented, discussed, analyzed and compared in Section 4.0 Alternatives.

Alternatives Analyzed

The following project alternatives were analyzed:

- **Alternative 1: No project.** This alternative assumes no development takes place on the project site.
- **Alternative 2: MST Facility Only.** This alternative includes development of the MST facility only on the project site, without the Whispering Oaks subdivision portion of the proposed project.
- **Alternative 3: Seventh-Gigling/Light Industrial.** This alternative includes development of the MST facility on the land located at Seventh Avenue and Gigling Road and designated in the *Fort Ord Reuse Plan* for the MST facility; and development of the entire project site for Light Commercial uses.

- **Alternative 4: Seventh-Gigling/Recreational.** This alternative includes development of the MST facility on the land located at Seventh Avenue and Gigling Road and designated in the *Fort Ord Reuse Plan* for the MST facility; and a recreational use on the entire project site.

Comparison of Alternatives

The "no project" alternative would result in the least environmental impact, since it would not involve any new development. The "Seventh-Gigling MST / Recreational" alternative and the "MST Only" alternative rank similarly, and although the "MST Only" alternative appears best in the alternatives summary table, the "Seventh-Gigling MST / Recreational" ranks better in two important categories. The "Seventh-Gigling MST / Recreational" alternative is superior to the "MST Only" alternative in terms of aesthetics and biological resources. The "Seventh-Gigling MST / Recreational" alternative maintains the project site in low intensity recreational uses that do not result in significant loss of trees or introduction of light or glare. This alternative avoids these two primary adverse effects associated with development on the project site. The "Seventh-Gigling MST / Recreational" alternative does result in potential noise effects in the vicinity of the MST site, but the "MST Only" alternative results in greater aesthetics and biological resources effects. The "Seventh-Gigling MST / Industrial" alternative involves a greater level of development and has greater environmental impacts than the proposed project and the other alternatives.

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RESOLUTION ___ - EXHIBIT 1 **Monterey County Resource Management Agency** **Planning Department** **Condition Compliance and/or Mitigation Monitoring Reporting Plan**	**Project Name: MST – Whispering Oaks Business Park EIR** **File No**: PLN090071 **APNs**: 031-101-056, 031-101-041 **Approved by:** **Date:** **Feb 24, 2011(Final EIR)**

Monitoring or Reporting refers to projects with an EIR or adopted Mitigated Negative Declaration per Section 21081.6 of the Public Resources Code.

Permit Cond. Number	*Mitig. Number*	*Conditions of Approval and/or Mitigation Measures and Responsible Land Use Department*	*Compliance or Monitoring Actions to be performed. Where applicable, a certified professional is required for action to be accepted.*	*Responsible Party for Compliance*	*Timing*	*Verification of Compliance (name/date)*
		Mitigation Measures				
1.	AQ-1.	**Prior to issuance of the tree removal, grading, or building permits, the applicant shall prepare a dust control plan for submittal to and approval of the Monterey County planning director.** **The dust control plan shall be implemented for all construction sites when total project area under grading exceeds 2.2 acres per day. The dust control plan shall limit onsite construction emissions to 82 pounds per day. As more detailed construction information becomes available, emissions from grading activities should be reassessed to determine if the area of grading could be increased.** **The following measures shall be included in the dust control plan:** **1. Water all active construction areas at least twice daily and more often during windy periods. Active areas adjacent to existing businesses should be kept damp at all times. If necessary, during windy period, watering is to occur on all days of the week regardless of onsite activities.**	The applicant shall prepare a dust control plan that meets the requirements of the mitigation measure. The contractor shall appoint a qualified site monitor to ensure that the dust control plan is implemented. The contractor shall submit reports on said activities to the project proponent who shall then forward a copy to the Monterey County Planning and Building Inspection Department.	Applicant/ Developer/ Contractor	Prior to issuance of the tree removal, grading, or building permits Prior to commencement of construction activities Monthly during grading and construction activities	

		2. Cover all trucks hauling trucks or maintain at least two feet of freeboard. **3. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.** **4. Sweep daily all paved access roads, parking areas and staging areas at construction sites.** **5. Sweep streets daily if visible soil material is deposited onto the adjacent roads.** **6. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).** **7. Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles.** **8. Limit traffic speeds on unpaved roads to 15 mph.** **9. Replant vegetation in disturbed areas as quickly as possible.** **10. Suspend excavation and grading activity when hourly-average winds exceed 15 mph and visible dust clouds cannot be contained within the site.**				
2.	AQ-2.	**All off-road construction vehicles/equipment greater than 100 horsepower that will be used on site for more than one week shall: 1) be manufactured during or after 1996, and 2) shall meet the NOX emissions standard of 6.9 grams per brake-horsepower hour. Alternatively, the project shall implement a combination of the following emission reduction measures on some or all of the above described vehicles and equipment, subject to approval by the MBUAPCD:** **1. Use alternative fuels (such as biodiesel blends);** **2. Require diesel particulate matter filters on equipment;** **3. Require diesel oxidation catalyst on equipment;**	The applicant shall require in construction contracts that all off-road construction vehicles comply with the specifications outlined in the mitigation measure, and shall submit a report to the Planning Department showing compliance. The project proponent shall submit a written roster of equipment anticipated to be used on the project site, including fuel use information on each. The contractor shall keep a certified daily log of each activity performed during construction including date and	Applicant/ Developer/ Contractor	Prior to building or grading permits Prior to commence-ment of grading During grading and construction activities,	

		4. Install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors). **5. Enforce state required idle restrictions (e.g., post signs). Diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate or other bulk materials. Rotating drum concrete trucks may keep their engines running continuously as long as they were onsite and staged away from residential areas.** **6. Properly tune and maintain equipment for low emissions.** **7. Stage large diesel-powered equipment at least 100 feet from any active land uses (e.g., residences).** **8. Limit the hours of operation for heavy-duty equipment to daytime periods.**	photographs, as necessary. Monthly reports shall be submitted to the Monterey County Planning and Building Inspection Department. Failure to submit a report, or failure to comply with the requirements of the mitigation measure, shall cause all work to be stopped until the report is received and approved by the Monterey County Planning and Building Inspection Department.			
3.	BIO-1.	**Disturbance or relocation of sand gilia shall be done in conformance with an approved 2081 Permit from the California Department of Fish and Game. The Monterey ceanothus shall be flagged for avoidance and fenced off as described in BIO 13.**	Obtain Section 2081 permit from CDFG to allow for disturbance in areas known to support sand gilia. Sand gilia and Monterey ceanothus shall be flagged for avoidance and included in the offsite maritime chaparral area fenced for avoidance. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County Department of Planning and Building Inspection.	Applicant/ Developer	Prior to Ground Disturbance Lots 2-11 Prior to Construction Weekly during grading activities	
4.	BIO-2.	**For Lots 2-11: The County of Monterey has consulted with the CDFG regarding the potential for take of sand gilia within the entire landfill site, including the Lots 2-11, and the agencies have agreed upon an acceptable mitigation strategy for the proposed impacts. Under**	Within Lots 2-11, the applicant shall provide evidence of the issuance of a Section 2081 permit. Sand gilia and Monterey ceanothus shall be flagged for avoidance and included in	Applicant/ Developer	Prior to grading permit Prior to Construction	

		this mitigation strategy, none of the project site would need to be preserved or restored, and the site could be developed in its entirety. However, the County has not obtained a permit for incidental take of sand gilia on the landfill parcel, including the project site, at this time. Therefore, no vegetation removal, grading, or other ground-disturbing construction activities that may result in take of the sand gilia populations within Lots 2-11 shall occur prior to the issuance of a Section 2081 permit.	the offsite maritime chaparral area fenced for avoidance. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County Department of Planning and Building Inspection.		Weekly during grading activities	
5.	BIO-3.	**The applicant shall have a qualified biologist develop a species protection plan for each species found at the site. The species protection plan shall include the following:** **• Avoidance criteria necessary for plant protection;** **• Fencing Plan** **• Monitoring; and** **• Follow-up surveys and reports.** **The plan shall be submitted to the RMA – Planning Department for Review and approval. If species are found and cannot be avoided, the applicant shall consult with the United States Fish and Wildlife Service and the California Department of Fish and Game to determine the appropriate course of action.**	Surveys for Monterey spineflower, sand gilia, coast wallflower, and Kellogg's horkelia shall occur during the blooming period in spring. Additional surveys for Seaside bird's beak and Yadon's rein orchid shall occur during the blooming period in the summer. If individuals of this species are found, the United States Fish and Wildlife Service and the California Department of Fish and Game shall be consulted to determine the appropriate course of action Additional surveys for Seaside bird's beak and Yadon's rein orchid shall occur during the blooming period in the summer. Submit take permit and habitat restoration plan or submit evidence that take will be avoided. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County Department of Planning and Building Inspection. Provide habitat restoration plan compliance report	Applicant/ Developer	Prior to Ground Disturbance resulting from the extension of Engineer's Equipment Road, gas line relocation, or off-site drainage basins east of Eighth Avenue. Prior to Construction Weekly during grading activities At termin-ation of work	

6.	BIO-4.	**For development of Lot 1, off-site drainage improvements, and road improvements to Inter-Garrison Road and Engineer's Equipment Road (Phase 1) and development of Lots 2, 3, 7, and 8 with improvement to Whispering Oaks Drive (part of Phase 2): All development shall be monitored by a qualified biologist consistent with Mitigation Measure BIO-5. If at any time California Tiger Salamanders are found in the development area, all construction shall cease, and the Department of Fish & Game and U.S. Fish & Wildlife shall be consulted. Development may not resume until clearance from Fish & Game and Fish & Wildlife is secured.** **For the remaining improvements in Phase 2 (Lots 4, 5, 6, and 10, Parcel B, and the remaining Whispering Oaks Drive improvements) and all of Phase 3 (Lots 12 – 16): Prior to the initiation of any ground-disturbing activities, including vegetation removal and grading, the applicant shall comply with one of the following three approaches:** **1. Conduct protocol surveys to determine the presence or absence of California tiger salamander within Lots 4, 5, 6, 10, 12-16, and Parcel B. Protocol surveys conducted in compliance with the protocols outlined in the /Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander /(USFWS October 2003). Two consecutive years of upland drift fence studies are required. Fencing arrays shall be installed and approved by USFWS prior to October 15 of each survey year. Surveys shall continue until individuals are found or the criteria for a Negative Finding are met. If individuals are found, either approach 2 or 3 shall be implemented;**	Provide evidence to the RMA – Planning Department that criteria for a Negative Finding have been met, or that the requirements of the ESA or HCP will be implemented. Contract with a qualified biologist to provide reports for submittal to the RMA – Planning Department as may be required by conditions of the Incidental Take Permit or Fort Ord HCP.	Applicant/ Developer	Prior to Ground Disturbance within Lots 12-16 During construction within Lots 12-16.	

		2. If the presence of California tiger salamander is documented or the applicant chooses to assume the species is present, the project shall comply with the ESA and CESA and obtain Incidental Take Authorization from the USFWS and CDFG for the loss of California tiger salamander individuals and upland habitat associated with construction and operation of the project; or **3. Following adoption of the Fort Ord HCP and issuance of base-wide federal and state incidental take permits, all applicable conditions of the HCP shall be followed and individual incidental take permits are not required.**				
7.	BIO-5.	**For all development areas: prior to construction activities, project proponents shall retain a qualified biologist to monitor construction. The biological monitor shall conduct an Employee Education Program for the construction crew. The biologist shall meet with the construction crew at the project site at the onset of construction to educate the construction crew on the following:** **• A review of the project boundaries;** **• All special-status species that may be present, their habitat, and proper identification;** **• The specific mitigation measures and success criteria that will be incorporated into the construction effort (Measures BIO-6 through BIO-9);** **• The general provisions and protections afforded by the USFWS and CDFG; and** **• The proper procedures if a special-status animal is encountered within the project site.**	Conduct an Employee Education Program for the construction crew on the points listed in the mitigation measure. Submit evidence of training to Monterey County RMA - Planning Department. .	Applicant/ Developer	Prior to construction activities Monthly monitoring reports	

8.	BIO-6.	**For all development areas: The biological monitor shall be onsite during initial grading and vegetation removal activities to protect any special-status species encountered. The qualified biologist shall identify and explain the protection methods during the Employer Education Program as described in Mitigation Measure 5. These methods could include, but are not limited to, stopping work in the area where the animal is encountered until it has moved on its own outside of the project site or take appropriate action consistent with the CDFG "take" authorization requirements.**	The biological monitor shall conduct an Employee Education Program for the construction crew. The biological monitor shall be onsite to stop work or move individual species outside of the work area. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County RMA - Planning Department.	Applicant/ Developer/ Contractors	Prior to construction activities During construction activities Monthly monitoring reports	
9.	BIO-7.	**Mitigation Measure removed.**				
10.	BIO-8.	**For all development areas: To avoid and reduce impacts to the American badger, project proponents shall retain a qualified biologist to conduct focused pre-construction surveys for badger dens in all areas proposed for construction, ground disturbance, or staging no more than two weeks prior to construction. If no potential badger dens are present, no further mitigation is required. If potential dens are observed, the following measures are required to avoid potential significant impacts to the American badger:** **• If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction.** **• If the qualified biologist determines that potential dens may be active, the entrances of the dens shall be blocked with soil, sticks, and debris for three to five days to discourage the use of these dens prior to project disturbance. The den entrances shall be blocked to an incrementally greater degree over the three to five day period. After the qualified biologist determines that badgers have stopped using active**	Retain a qualified biologist to conduct focused pre-construction survey's for badger dens in all areas proposed for construction, ground disturbance, or staging. The biological monitor shall be onsite to stop work or move individual species outside of the work area.	Applicant/ Developer	Survey/ report no more than two weeks prior to construction Prior to construction activities	

		dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.				
11.	BIO-9.	**For all development areas: To avoid and reduce impacts to the white-tailed kite, and other nesting raptors, and other protected birds, construction activities can be timed to avoid the nesting season period. Specifically, tree removal can be scheduled after September 1 and before January 31 to avoid impacts to these species. Alternatively, if avoidance of the nesting period is not feasible, pre-construction surveys shall be conducted for nesting raptors and other nesting protected birds within 300 feet of proposed construction activities if construction is to be initiated between February 1 and August 31. Pre-construction surveys shall be conducted no more than 30 days prior to the start of construction. If nesting raptors or other nesting protected birds are identified during the pre-construction surveys, the CDFG shall be contacted and an appropriate no-disturbance buffer imposed within which no construction activities or disturbance shall take place (generally 300 feet in all directions for raptors) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist and the CDFG.**	The applicant shall time construction activities to avoid the nesting season period. If construction cannot be timed outside of the nesting period, pre-construction surveys shall be conducted for nesting raptors within 300 feet of proposed construction activities if construction. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County RMA - Planning Department. If avoidance of the nesting period is not feasible, the applicant shall conduct pre-construction surveys for nesting raptors within 300 feet of proposed construction activities. Establish buffers in conjunction with CDFG if necessary Submit evidence of CDFG compliance	Applicant/ Developer	Survey/ report o more than 30 days prior to the start of construction CDFG evidence prior to start of construction and monthly monitoring reports	
12.	BIO-10.	**The applicant shall comply with the measures included in the Forest Management Plans that were prepared for the MST and Whispering Oaks Business Park sites. The applicant shall also comply with the Oak tree preservation and recovery strategy prepared in compliance with the recommendation of the Forest Management Plan for effective implementation. Although it is only feasible to exactly determine impacts to individual trees at the time of construction, the**	Construction supervisors shall review the Forest Management Plans to identify and prepare for mitigation directed at tree avoidance and tree protection during construction.	Applicant/ Developer/ Contractors	Prior to Construction	

		protective and compensatory measures will be adhered to with the guidance of a Professional Forester or Arborist. These measures include, but are not limited to, the following: **Tree Protection Measures (both projects)** **• To maximize tree retention and protection, a forester, arborist or other tree care professional shall be involved in review and development of final grading and construction plans wherever trees occur either at project or grading margins.** **• Prior to commencement of any grading within 50 feet of retained trees, the contractor shall install protective fencing at the driplines of retained trees to create a Tree Protection Zone (TPZ) that shall not be entered for any reason unless approved by the project forester. The TPZ may extend within the driplines of retained trees where approved by the project forester in order to retain more trees. Grading may not commence until the project forester has inspected and approved the protective fencing installed by the contractor.** **• Prior to commencement of any grading within 50 feet of retained trees, the project forester shall identify retained trees needing significant pruning to protect them during grading operations. This protective pruning work shall be completed by a qualified tree contractor, in accordance with current arboricultural standards and practices prior to commencement of operations to balance canopy, provide necessary clearances, remove dead wood, and promote the health of the tree.** **• No equipment, construction materials, trucks or vehicles shall be operated, stored or parked within a TPZ of a retained tree.** **• No soil shall be removed or added within the dripline of a retained tree unless it is part of approved**				

		construction and approved by the project forester or arborist. **• Under no circumstances shall fill be placed in contact with the base of a retained tree. Permanent wells shall be constructed as appropriate whenever necessary to prevent fill/trunk contact, never at a distance less than a foot from the trunk, and without causing significant root damage.** **• To avoid soil compaction from damaging the roots, heavy equipment shall not be allowed to drive over the root area. If deemed necessary and approved by the forester, equipment may drive across one side of the tree. To reduce soil compaction, wood chips shall be spread 6-12 inches deep to disperse the weight of equipment and plywood sheets shall be placed over the wood chips for added protection.** **• Roots exposed by excavation must be pruned and recovered as quickly as possible to promote callusing, closure and healthy re-growth.** **• Retained trees shall be watered periodically in accordance with species needs to promote tree health. Transplanted trees and their intended planting areas shall be pre-watered. Post planting watering shall be done as needed to assure establishment.** **• Use retaining walls wherever feasible to preserve existing native trees. Excavators or backhoes shall be used to remove soil adjacent to "save" trees where needed.** **Replacement and Planting Measures (MST project)** **• Replant a minimum of 900 seedlings along boundaries and within detention basin and landscape areas. Planting density for seedlings shall be 10 feet by 10 feet to allow for some unavoidable mortality over time.** **• Transplants are encouraged and will be**				

		credited on a 3:1 basis. Final replanting numbers may be modified by additional tree retention and should be made part of the final landscaping plan. **• Consideration should be given to redesigning the project to use the existing encroachment from Inter-garrison road in order to preserve landmark-sized trees at this location.** **• All graded areas that are scheduled for replanting shall be returned to preconstruction soil condition prior to replanting. Tree replacement requirements shall be met promptly after the close of construction and based on a final tally of trees actually removed in the project area rather than on the estimates contained in the Forest Management Plan.** **• Not less than 80 percent of replacement trees shall be small, less than one gallon in size (supercells or D40 treepots). Not more than 20 percent of the replacement trees shall be of five-gallon container size or larger.** **Design Measures (Whispering Oaks project)** **• A qualified Forester/Arborist shall be contracted to assist during the design phase in the general layout of roads, lot layout, and parking area alternatives to further provide for preservation of existing trees and to prepare Forest Management Plans for each lot or combination of lots as needed.** **• The design for the Whispering Oaks Business Park shall include lots/building pads at appropriate elevations to avoid mass grading of the site. Lot elevations should be selected to match existing terrain to the extent feasible to allow for the preservation of existing "islands" of resident oaks in the landscape.** **• Use of the existing encroachment to Inter-Garrison Road shall be considered as the primary access to the business park if feasible for traffic**				

		circulation. Such an access could be sloped at a very moderate grade in order to preserve the existing topography to the greatest extent possible. This would allow for preservation of the landmark-sized trees to the west of the access point. **• The landscape buffer along Inter-Garrison Road shall comply with the GDPs including buffer areas within the project site and/or the Inter-Garrison Road right-of-way. The MST GDP incorporates a tree buffer area on-site at the western end of the site and will provide for a landscape buffer between the wall at the property line and the edge of pavement for the entire frontage. The WO GDP requires a 20 foot oak tree buffer on-site measured from the property line on Inter-Garrison Road with additional buffer within the Inter-Garrison Road right-of-way between the edge of pavement and the property line.** **• When the project design is completed an estimate of the appropriate number of replacement seedlings shall be made based on available planting space.** **• Not less than 80 percent of replacement trees shall be small, less than one gallon in size (supercells or D40 treepots). Not more than 20 percent of the replacement trees shall be of five-gallon container size or larger.** **• Final landscape planting shall require a post planting watering plan based on the time of planting and size of selected stock.**				
13.	BIO-11.	**For both projects, in order to minimize impacts to Oak woodlands and in compliance with PRC 21083.4: The appropriate strategy for compliance, as identified in the Oak Tree Preservation-Recovery Strategy for this project is as follows:** **• Pay FORA impact fees for maintenance of**	A qualified arborist shall be consulted as necessary regarding the best removal, protection, transplanting, planting and irrigation methods as construction proceeds.	Applicant/ Developer/ Contractors	During Construction	

		permanent open space in the Fort Ord area. • **The maximum amount of native oak trees as feasible for screening and habitat purposes shall be retained in coordination with a qualified arborist, the General Development Plans, and a comprehensive exclusionary fencing plan requirement.** • **Trees shall be replanted in the landscaping areas, the street frontages, the buffer areas, and within Parcel D.** • **Off-site replanting and habitat management or payment of equivalent in-lieu fees to the Parks Department will occur. The Youth Camp parcel has been identified as an appropriate off-site mitigation area to achieve a minimum 1:1 replacement.**				
14.	BIO-12.	**Two, five, and eight years following mitigation plantings, the applicant shall arrange for a qualified arborist to inspect replacement tree plantings following project completion. Any trees that have died or are in poor condition in the judgment of the arborist shall be replaced and inspected on a two, five and eight year schedule beginning with the next inspection on the original schedule, and with the same replacement location requirements.**	A qualified arborist shall inspect replacement tree plantings following project completion. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County RMA – Planning Department.	Applicant/ Developer	Two, five, and eight years following mitigation plantings	
15.	BIO-13.	**For the MST project, gas line realignment, Lots 2-11, Engineer's Equipment Road, and off-site drainage improvements: The maritime chaparral vegetation immediately adjacent to the construction area shall be protected during construction. This includes the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. A biological monitor shall supervise the installation of protective fencing. The monitor shall**	Protect the maritime chaparral vegetation immediately adjacent to the project site using an appropriate barrier. After initial grading and vegetation removal activities are completed, the biological monitor shall check that the protective fencing remains intact and that all construction work is maintained within the limits of construction at least once per week until the construction is complete.	Applicant/ Developer	Prior to start of construction Weekly during construction activities	

		remain on-site during the initial grading activities and vegetation removal. After these activities are completed, the biological monitor shall check at least once per week until the construction is complete that the protective fencing remains intact and that all construction work is maintained within the limits of construction. This fencing requirement shall be incorporated into a comprehensive fencing plan.	Standard erosion control techniques to minimize erosion and sedimentation to native vegetation shall be utilized in consultation with a qualified hydrologist, engineer, or erosion control specialist.			
16.	GEO-1.	**All future development within the project site shall be designed using the parameters for code-based design listed in the Fugro West report.**	The applicant shall design all development using the parameters for code-based design listed in the Fugro West report and according to Seismic Design Category "D".	Applicant/ Developer	Prior to approval of grading, improvement or building plans.	
17.	GEO-2.	**All future development within the project site shall be designed consistent with the latest edition of the California Building Code as adopted by Monterey County and its related seismic standards, as well as any additional standards required as standard conditions of approval by the County of Monterey. Future development on the MST site shall incorporate all recommendations from the geotechnical report, and if necessary, a supplemental exploration may be required depending on the final layout of the proposed structures and facilities. A geotechnical report shall be required prior to development on any lot within the Whispering Oaks Business Park. Final improvement plans and building plans shall be based on recommendations in the geotechnical report, and subject to review and approval of Monterey County prior to issuance of a grading or building permit. A geotechnical report may be prepared to apply to more than one lot.**	Prepare a geotechnical report to inform design and engineering for development within the Whispering Oaks Business Park. Design all development within the project site to be consistent with the latest edition of the California Building Code as adopted by Monterey County and its related seismic standard, and well as any additional standards required as standard conditions of approval by the County of Monterey.	Applicant/ Developer	Prior to the issuance of a grading or building permit	

18.	GEO-3.	**Each applicant shall prepare an erosion control plan consistent with the requirements of Monterey County Code Chapter 16.12 prior to approval of tree removal, grading, or building permits. All erosion control measures required by the approved erosion control plan shall be in place until work is completed. Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation. Prior to the issuance of an occupancy permit, permanent erosion control measures shall be in place and approved by the Resource Management Agency. An erosion control plan may be prepared to apply to more than one lot or for related projects at different sites.**	A qualified engineer shall prepare an erosion control plan, including but not limited to the methods outlined in the mitigation measure. The erosion control plan shall be submitted to the Monterey County Planning and Building Inspection Department for review and approval, based on conformance with the methods outlined in the mitigation measure and consistent with the requirements of Monterey County Code Chapter 16.12. The contractor shall submit a letter report and/or photographs from a qualified soils engineer to the Monterey County Planning and Building Inspection Department documenting the ongoing maintenance and the condition of the erosion control fencing and other erosion control measures. The Monterey County Planning and Building Inspection Department shall review the reports for conformance with the methods outlined in the mitigation measure. Failure to submit a report showing that the proposed project is in conformance with the methods outlined in the mitigation measure shall cause all work to be stopped until conformance is confirmed and the report is received by the Monterey County Planning and Building Inspection Department. The project proponent shall be responsible for correcting any violations immediately. Frequency of the reporting may be decreased at the discretion of the Monterey County Planning and Building Inspection Department if there is no active grading.	Applicant/ Developer/ Contractor	Prior to the approval of permits for tree removal, grading, or other site improve-ments Monthly between October 15 and April 15	

			The project proponent shall demonstrate to the Monterey County Planning and Building Inspection Department that the applicable provisions of the approved landscape, re-vegetation, and erosion control plans have been implemented. The report shall briefly explain why measures not employed are not necessary or applicable. The applicant shall submit to Monterey County Building Inspection Department a certified report from a qualified soils engineer regarding how each post-construction erosion control measure has been implemented at the subject lot.		Prior to sign-off on a grading permit Prior to issuance of each occupancy permit	
19.	H-1	**As part of its Business Response Plan, MST shall develop a designated transport route for hazardous waste deliveries and removal and consult with CSUMB during development of the plan. The plan shall be subject to the review and approval of the Monterey County Environmental Health Department.**	Submit to Monterey County Building Inspection Department an approved Business Response Plan.	Applicant/ MST	Prior to issuance of occupancy permit for MST	
20.	H-2.	**Construction supervisors and crews shall attend a U.S. Army sponsored munitions and explosives safety briefing prior to commencement of construction. This briefing shall identify the variety of munitions and explosives that are known to exist on the former Fort Ord and the actions to be taken if a suspicious item is discovered. This requirement for briefing shall be included in construction documents.**	Construction supervisors and crews shall attend a U.S. Army sponsored munitions and explosives safety briefing. Construction supervisors shall submit an evidence letter to the Monterey County Building Inspection Department	Applicant/ Developer/ Construct-ion Super-visors	Prior to the start of construction	

21.	HY-1.	**Prior to the issuance of any grading and/or building permits, the developer(s) for Lots 2, 3, 7, and 8 shall provide the Water Resources Agency a drainage plan prepared by a registered civil engineer addressing on-site impacts with supporting calculations and construction details. The plan shall include retention facilities to mitigate the impact of impervious surface storm-water runoff. Where necessary, as determined by the project engineer,pond(s) shall be fenced for public safety. Oil-grease/water separators shall be installed for the pre-treatment of storm-water runoff from paved parking areas. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency.**	Prepare drainage plan prepared by a registered civil engineer addressing on-site impacts with supporting calculations and. Indicate basin locations and provide construction details on plans.	Applicant/ Developer	Prior to the approval of grading or building permits for Lots 2, 3, 7, and 8	
22.	HY-2.	**Prior to filing the final map, the applicant shall provide the Water Resources Agency a drainage plan prepared by a registered civil engineer addressing on-site and off-site impacts with supporting calculations and construction details. The plan shall include retention facilities to mitigate the impact of impervious surface storm-water runoff. Where necessary, as determined by the project engineer, pond(s) shall be fenced for public safety. Oil-grease/water separators shall be installed for the pre-treatment of storm-water runoff from paved parking areas. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency.**	The developer shall submit a drainage plan prepared by a registered civil engineer addressing on-site and off-site impacts with supporting calculations and construction details.	Applicant/ Developer	Prior to filing the final map	
23.	HY-3	**Prior to filing the final map, a copy of a signed and notarized Road and Drainage Maintenance Agreement shall be provided to the Water Resources Agency for approval. The agreement shall be recorded concurrently with final map. The responsibility for care, maintenance, and repair of road and drainage improvements in the subdivision shall be the joint and separate personal obligation of each and every owner of**	Submit a copy of a signed and notarized Road and Drainage Maintenance Agreement shall be provided to the Water Resources Agency for approval. Record Road and Drainage Maintenance Agreement	Applicant/ Developer	Prior to filing the final map Concurrent with filing the final map	

		a lot in the Subdivision. The obligation includes preparation of an annual drainage report by a registered civil engineer which shall include analysis of the subdivision drainage facilities and recommendation of any maintenance. The report shall be submitted to the Monterey County Water Resources Agency for review and approval by the 15th day of August, and any recommended maintenance activities shall be completed by the 15th day of October of the same year	Submit an annual drainage report by a registered civil engineer which shall include analysis of the subdivision drainage facilities and recommendation of any maintenance Complete any recommended maintenance activities identified in annual drainage report		Annually by August 15 October 15 of the same year	

24.	T-1.	**In order to mitigate impacts from additional trips added by Phase I to intersections already operating at LOS E or F, prior to recordation of the final map for Phase I, the fees listed below (fair share costs for project-level impacts based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be paid.**
		• **County of Monterey fair share costs for improvements at the following intersections:**
		  • **Davis Road/Reservation Road (1.3%of $1,825,600 = $23,389)**
		  • **Blanco Road/Reservation Road (2.0% of $263,400 = $5,288).**
		• **City of Marina fair share costs for lane improvements at the following intersection:**
		  • **Imjin Road/Imjin Parkway – eastbound right (17.5% of $466,888 = $81,791) Note: this fee would be reimbursable to Whispering Oaks Business Park – see Mitigation Measure T-6.**
		• **City of Marina fair share costs for two lane improvements at the following intersection:**
		  • **Imjin Parkway/Reservation Road (1.7% of $222,700 = $3,764).**
		• **City of Seaside fair share costs for improvements at**
			Submit off-site improvement plans for the design and construction of the listed street improvements.
			
			Prior to issuance of building permits the applicant shall submit the required fees to the appropriate jurisdiction.
			Prior to issuance of building permits, the applicant shall provide evidence of fee payment to the RMA – Planning Department.
				Applicant/ Developer	Prior to approval of Phase 1 site improvement plans.
					
					Prior to issuance of building permits	

		the following intersections: • **General Jim Moore Boulevard/Broadway Avenue (0.4% of $300,000 = $1,054)** • **Caltrans fair share costs for improvements at the following intersections:** • **Northbound State Route 1/Imjin Parkway (0.7% of $151,428 = $1,012)** • **Southbound State Route 1/Imjin Parkway (0.8% of $965,308 = $7,958)**				
25.	T-2	**In order to mitigate potential safety impacts from left-turn queues exceeding the left-turn lane storage capacity at Imjin Parkway and Imjin Road, Phase I improvements shall include:** • **Construction of a second westbound left-turn lane at the intersection of Imjin Road and Imjin Parkway.**	Submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval. Provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department. Construct listed improvements in accordance with approved plans.	Applicant/ Developers Applicant/ Developers Applicant/ Developers	Prior to issuance of final maps for Phase I Prior to acceptance of Phase I subdivision improve-ments Prior to occupancy permits	
26.	T-3.	**In order to mitigate impacts resulting from the increase of traffic trips from Phases 2 and 3 on intersections already operating at LOS E or F, prior to recordation of the Phase 2 final map, the pro-rata share of fees listed below (fair share costs for project-level impacts based on estimated 2010 project costs to adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be paid.** • **County of Monterey fair share costs for improvements at the following intersections:** • **Davis Road/Reservation Road (4.3%of $1,825,600 = $78,375)**	A pro-rata division of costs shall be assigned to each lot (lots 2-16) within the Whispering Oaks Business Park. The applicant shall submit the required fees to the appropriate jurisdiction and shall provide evidence of fee payment to the RMA – Planning Department.	Applicant/ Developer	Prior to execution of development agreement Prior to issuance of building permits	

		• **Blanco Road/Reservation Road (4.6% of $263,400 = $12,056).** • **City of Marina fair share costs for two lane improvements at the following intersection:** • **Imjin Road/Imjin Parkway – second westbound left (11.6% of $925,453 = $107,189) Note: this fee would be reimbursable to MST – see Mitigation Measure T-2.** • **City of Marina fair share costs for two lane improvements at the following intersection:** • **Imjin Parkway/Reservation Road (4.1% of $222,700 = $9,207).** • **City of Seaside fair share costs for improvements at the following intersection:** • **General Jim Moore Boulevard/Broadway Avenue (4.0% of $300,000 = $12,119)** • **Caltrans fair share costs for improvements at the following intersections:** • **Northbound State Route 1/Imjin Parkway (3.2% of $151,428 = $4,797)** • **Southbound State Route 1/Imjin Parkway (2.6% of $965,308 = $24,759)**				
27.	T-4.	**In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Imjin Road and Eighth Street, Phase II improvements shall include:** • **Signalizing intersection of Imjin Road/Eighth Street and adding a southbound Imjin Road left turn lane, and corresponding second eastbound Eighth Street receiving lane, or** • **Constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street, realigning Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection.**	Submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval. Provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.	Applicant/ Developer Applicant/ Developer	Prior to issuance of final maps for Phase 2 Prior to acceptance of subdivision improvements for Phase 2	

28.	T-5.	**In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Imjin Road and Eight Street, Phase III improvements shall include:** • **Adding a westbound right-turn lane at the Imjin Road/Eighth Street intersection, or** • **Constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street, realigning Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection.** **The Whispering Oaks Business Park developer is responsible for 78.2% of the cost of this improvement and MST is responsible for 21.8% of the cost of this improvement (see Mitigation Measure T-9).**	Submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval. Provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.	Applicant/ Developer Applicant/ Developer	Prior to issuance of final maps for Phase 3 Prior to acceptance of subdivision improve-ments for Phase 3	
29.	T-6.	**In order to mitigate potential safety impacts from right-turn queues exceeding the right-turn lane storage capacity at Imjin Parkway and Imjin Road, Phase II road improvements shall include:** • **Construct an eastbound right-turn lane at the intersection of Imjin Road and Imjin Parkway.**	Submit improvement plans for the identified off-site improvements to the City of Marina public works department for review and approval. Provide evidence of completion and acceptance of off-site improvements by the City of Marina public works department to the RMA – Planning Department.	Applicant/ Developer Applicant/ Developer	Prior to approval of a final maps for Phase 2 Prior to acceptance of subdivision improvements for Phase 2	
30.	T-7	**T-7. In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Engineer's Equipment Road and Inter-Garrison Road, Phase III road improvements shall include:** • **Signalization of the intersection of Whispering Oaks Drive/Engineer's Equipment Road. The signal light shall be coordinated with the signal light at Engineer's Equipment Road and Inter-Garrison Road.** • **construction of northbound and southbound left turn lanes.** • **construction of eastbound and westbound right turn lanes.**	Submit improvement plans for the identified off-site improvements for review and approval. Provide evidence of completion and acceptance of off-site improvements to the RMA – Planning Department.	Applicant/ Developer Applicant/ Developer	Prior to issuance of final maps for Phase 3 Prior to acceptance of subdivision improve-ments for Phase 3	

31.	T-8	**MST shall include a policy in the General Development Plan to require out-of-service buses traveling to and from the beginning or ends of their day's runs to consult with CSUMB regarding routes that use the following streets within the CSUMB campus core area: Inter-Garrison Road/Third Street (Sixth Avenue to General Jim Moore Boulevard) and Divarty Street (east of General Jim Moore Boulevard). The restriction shall not apply to routes serving CSUMB.**	A policy shall be added to the GDP or condition placed upon the approval to require the policy prior to project development.	County/ MST	Prior to approval of the MST GDP	
32.	T-9	**In order to mitigate the Phase 1 portion of the cumulative impact of the proposed subdivision, prior to issuance of building permits, evidence of payment of the fees listed below (fair share costs for cumulative impacts based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be submitted to the RMA-Planning Department.** **County of Monterey fair share costs for improvements at the following intersections:** • **Inter-Garrison Road/Reservation Road (1.8% of $612,100 = $11,056)** • **Engineer's Equipment Road/Whispering Oaks Way (17.8% of $300,000 = $53,251)** • **Engineer's Equipment Road/Inter-Garrison Road (3.6% of $300,000 = $10,827)** **City of Marina fair share costs for reimbursement to Whispering Oaks Business Park at the following intersection (a per-trip equivalent payment can also satisfy this requirement):** • **Imjin Road/Eighth Street (21.8% of $1,136,064 = $247,689)** • **Fifth Avenue – California Avenue/Imjin Parkway (1.7% of $390,111 = $6,632)** • **Third Avenue/Imjin Parkway (1.1% of $543,000 = $6,110),**	Submit the required fees to the appropriate jurisdiction and provide evidence of fee payment to the RMA – Planning Department.	Applicant/ Developer	Prior to the issuance of a building permit	

		• **Second Avenue/Imjin Parkway (0.7% of $42,000 = $307)** • **Abrams Drive/Imjin Parkway (1.6 % of $1,304,596 = $20,770) and** • **Imjin Parkway/southbound State Route 1 ramp (1.1% of $488,582 = $5,207)** • **Imjin Parkway/northbound State Rout 1 ramp (0.9% of $488,582 = $4,563)**				
33.	T-10	**In order to mitigate the Phase 2 & 3 portions of the cumulative impact of the proposed subdivision, prior to issuance of building permits, evidence of payment of the fees listed below (fair share costs for cumulative impacts based on estimated 2010 project costs to adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be submitted to the RMA - Planning Department.** **FORA development impact fees.** **City of Marina fair-share contributions for improvements at the following intersections (a per-trip equivalent payment can also satisfy this requirement):** • **Fifth Avenue – California Avenue/Imjin Parkway (4.1% of $390,111 = $16,168)** • **Third Avenue/Imjin Parkway (3.7% of $543,000 = $19,857)** • **Second Avenue/Imjin Parkway (2.4% of $42,000 = $997)** • **Abrams Drive/Imjin Parkway (4.3% of $1,304,596 = $55,574)** • **Imjin Parkway/southbound State Route 1 ramp (3.5% of $488,582 = $17,299)** • **Imjin Parkway/northbound State Route 1 ramp (3.0% of $488,582 = $14,830)** **County of Monterey fair share costs for improvements at the for**	A pro-rata division of costs shall be assigned to each lot (lots 2-16) within the Whispering Oaks Business Park. Submit the required fees to the appropriate jurisdiction and provide evidence of fee payment to the RMA – Planning Department.	Applicant/ Developer Applicant/ Developer	Prior to execution of the development agreement Prior to issuance of building permits	

		• **Inter-Garrison Road/Reservation Road (3.3%t of $612,100 = $20,468)** • **Engineer's Equipment Road/Whispering Oaks Way (82.2% of $300,000 = $248,749)** • **Engineer's Equipment Road/Inter-Garrison Road (7.8% of $300,000 = $23,298)** **City of Seaside fair share costs for improvements at the following intersections:** • **General Jim Moore Boulevard/Light Fighter Drive (1.1% of $654,185 = $7.416)** • **Second Avenue/Light Fighter Drive (0.9% of $18,000 = $159)** • **First Avenue/Light Fighter Drive (1.1% of $102,600 = $1,141)**				
34.	T-11	**In order to mitigate impacts resulting in unacceptable LOS at Phase 3 under the cumulative conditions, the following improvements shall be constructed prior to acceptance of Phase 3 (lots 13-16) improvements at the intersection of Whispering Oaks Way and Inter-Garrison Road:** • **construct a southbound Whispering Oaks right turn lane;** • **construct an eastbound Inter-Garrison Road left turn lane;** • **construct a westbound Inter-Garrison Road right turn lane;** • **construct second eastbound and second westbound Inter-Garrison Road through lanes; and** • **construct a median left turn acceleration lane on Inter-Garrison Road.**	Submit improvement plans for the identified improvements for review and approval. Provide evidence of completion and acceptance of off-site improvements to the RMA – Planning Department.	Applicant/ Developer Applicant/ Developer	Prior to issuance of final maps for Phase 3 Prior to acceptance of subdivision improvements for Phase 3	

35.	CC-1	**The project applicant and/or succeeding developers shall follow the greenhouse gas reduction measures contained in the General Development Plans prepared for the sites. In addition, the following specific measures shall be implemented as part of the general development plan, development agreement, final map, and/or development plans as applicable:** **1. MST shall analyze future bus routes and modify these routes to effectively reduce daily vehicle miles travelled. For near term, the proposed project is expected to result in an average of 1,959 miles of additional travel each day to serve existing routes that are served by the two existing transit facilities. This assessment uses a worst case analysis that this mileage would increase proportionally with new bus routes in the future. However, MST has outgrown their existing facilities, so new facilities would be necessary to serve the future transit demands. Potential reductions: 20 percent of the daily increased vehicle miles travelled. This 20 percent reduction would equate to a reduction of 392 miles when the project first becomes operational (assuming 186 daily bus trips).** **2. MST and Whispering Oaks employees and visitors shall be provided opportunities for using transit that would reduce travel to the site. Potential reductions: up to 15 percent according to the URBEMIS2007 model. This reduction is based solely on the transit service at the site (e.g., frequency of buses within one-quarter mile and regional transit service within ½ mile). With future transit routes, the project could achieve a 10 percent reduction in mobile (non-bus) GHG emissions.**	Prepare a project-wide greenhouse gas reduction plan for the review and recommendation of RMA – Planning Department and include applicable measures from the greenhouse gas reduction plan in the general development plan and development agreement. The applicant/developer shall include applicable measures from the project-wide greenhouse reduction plan on the final map, subject to the review and approval of the RMA - Planning Department. The applicant/developer shall prepare a site-specific greenhouse reduction plan for the review and approval of the RMA - Planning Department, and shall include applicable measures from the greenhouse reduction plan in site plans, improvement plans, and building plans.	Applicant/ Developer Applicant/ developer Applicant/ developer	Prior to Board of Supervisors approval of the development agreement or general development plan Prior to approval of a final map Prior to issuance of a building permit	

		3. MST and Whispering Oaks employees shall be provided incentives to use transit, such as discounted transit passes. Potential reductions: five percent of employee mobile source emissions. **4. Provide local retail uses. Retail services, such as restaurants, markets, and automatic teller machines located in proximity could substantially reduce employee vehicle miles travelled during the day (lunch period). The Whispering Oaks General Development Plan shall allow for local retail and food service uses. Potential reductions: two percent of employee mobile source emissions according to the URBEMIS2007 model.** **5. Provide amenities for bicycle and pedestrian modes of travel. Sidewalks and bicycle lanes shall be provided on both sides of all streets to serve the project site (except sidewalks on the north side of Engineer's Equipment Road where it abuts open space). In addition, secure employee bicycle facilities, along with lockers and showers shall be provided at each lot, and at least one public bicycle parking space shall be provided at each lot. Signal light sensors shall be set to respond to bicycle traffic, and an automatic walk signal shall be provided with green lights. Potential reductions: up to nine percent of employee mobile source emissions, depending on the network of bicycle lanes and sidewalks serving the project site, according to the URBEMIS2007 model. An additional two percent could be achieved with on-site amenities that would encourage employees to bike or walk to work. The total combined reductions for these measures could reach 10 percent, depending on the network of developed sidewalks and bicycle lanes in the future. Note: this**				

		measure shall not be required on interim access driveways built within street rights-of-way. **6. LEED credits shall focus to the extent feasible on approaches that directly or indirectly reduce greenhouse gas emissions. Potential reductions: 20 percent or more by meeting LEED Silver design level.** **The project applicant and/or succeeding developers may elect to utilize other measures not specifically listed, including measures to reduce dependence on gas or electrical space or water heating, and additional means to encourage forms of transportation that reduce greenhouse gas emissions. Use of other methods may be credited toward fulfilling this measure based on anticipated emissions reductions.**				

END OF MITIGATION MEASURES

Rev. 11/21//2009

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4.0
CHANGES TO THE DRAFT EIR

This section contains text, tables and graphics from the Draft EIR with changes indicated. Additions to the text are shown with underlines and deletions are shown with ~~strikethroughs~~. Also refer to Section 3.0 Revised Summary for an updated summary. Revised graphics are presented at the end of the section.

The text on page 1-4 is revised to include land owned by the University of California.

Project Vicinity Existing Conditions

Existing surrounding land uses include the inactive Fort Ord landfill to the north; coast live oak woodland and mostly vacant former Fort Ord buildings to the south; a residential neighborhood to the east; and vacant land, the Eighth Street Cutoff, the California State University at Monterey Bay (CSUMB) campus, and the Golden Gate University satellite campus to the west. Vacant land adjacent to the project site on the west is owned by the University of California. Figure 3, Project Vicinity Conditions, shows significant features near the project site. Figure 4, Project Vicinity Photos, shows photographs of the surrounding area.

The text on page 1-13 is revised to clarify CSUMB's jurisdictional role within its boundaries.

CSUMB is adjacent to the project site on the south and east sides and has jurisdiction over its lands. The *CSUMB Master Plan* guides development of the campus and includes faculty and staff housing to the east of the project site and near the southwest corner of the project site. The housing to the east is already existing (former military housing); the *CSUMB Master Plan* does not identify a specific development timeframe for the staff and faculty housing near the southwest corner of the project site, but development is assumed to occur within the planning horizon of the master plan, which is 2025. Most of the land to the south of the project site is designated as open space in the *CSUMB Master Plan*. The *CSUMB Master Plan* land use

framework map is presented in Figure 9, CSUMB Master Plan Land Use Map. The project site is owned by the Redevelopment Agency of the County of Monterey. The project site was conveyed to the Redevelopment Agency from the U.S. Department of the Army in 2006 as part of the base closure proceedings begun in 1993.

The text on page 1-31 is revised to correct details of the building designs.

- 39,800 square-foot, three story administrative building, including Board of Directors' board room. The administration (operations) building will have an integrally-colored concrete masonry exterior finish with a ~~flat~~ curved standing seam metal roof and skylight.
- 96,450 square-foot, two story bus maintenance building to include an engine and transmission rebuild shop, machine shop, brake shop (including a brake dyno testing apparatus), body shop, paint spray booth, tire shop, specialty repair shop, and steam cleaning facility. The building would include 21 service bays. The building would have three 1,000-gallon fluids storage tanks, and several waste oil tanks. The maintenance building will have a metal siding exterior finish with ~~standing seam metal~~ with a flat roof~~ing~~ and white elastomeric coating. A photovoltaic system generating about 12 percent of this buildings energy demand will be mounted on the roof.
- 18,620 square-foot fuel/brake/tire repair and fuel dispensing building. The building would have three 1,000 and one 2,500 gallon storage tanks for fluids. The roof would be flat with a white elastomeric coating.

The text on page 1-38 is revised to correct an error.

Inter-Garrison Road would be widened to provide an east-bound left-turn pocket and a west-bound right-turn lane at the MST entrance; a west-bound left turn pocket at Eighth Street, and 24-foot landscape area with sidewalk along the MST frontage. A plan line for a future multi-modal corridor would be established on the ~~north~~ south side of Inter-Garrison Road.

The text on page 1-44 is revised to describe proposed walls and fences at the MST site.

Specific development plans have been prepared for the MST facility on Lot 1. The MST site would be graded into two levels: the higher level would be at the southeast corner of the site and be occupied by the automobile parking; all other facilities would be located on the lower level. A security barrier (concrete block in most areas, but open iron fencing at the southwest and northeast corners) would be constructed at the periphery of the MST site (refer to Figure 12, MST Site Plan. Most on-site streets would be graded and constructed during development of Lots 2 through 16. No specific development plans have been prepared for Lots 2 through 16. Individual lots would be graded as development plans are approved for each.

The text on page 2-3 is revised to identify CSUMB development timeframes.

The project site is located within the City of Marina planning areas and immediately north of the CSUMB campus. Future residence halls, faculty housing, and land reserved for campus/business partnerships research are planned for by CSUMB on parcels south of Inter-Garrison Road and east of Eighth Avenue. The *CSUMB Master Plan* includes faculty and staff housing to the east of the project site and near the southwest corner of the project site. The Frederick Park housing to the east is already existing (former military housing); the *CSUMB Master Plan* does not identify a development timeframe for the staff and faculty housing near the southwest corner of the project site, but development is assumed to occur within the planning horizon of the master plan, which is 2025. Most of the land to the south of the project site is designated for open space in the *CSUMB Master Plan*. Refer to Figure 9, CSUMB Master Plan Land Use Map, in Section 1.0 Introduction.

The text on page 2-5 has been revised.

Six vantage points were selected to provide representative views of the project site from public locations: Imjin Parkway (north), Eighth Avenue (west), the intersection of Seventh Avenue and Inter-Garrison Road (southwest), near the planned locations of future CSUMB campus housing (south), Inter-Garrison Road (south) and from existing Frederick Park residential development to the east. The applicant for the MST project also provided visual simulations of the rooflines of the proposed MST buildings. Figure 17, Project Viewpoints, presents a map of the six vantage points with accompanying photographs. The Monterey County Code protects views from public viewing points, and does not protect views from private property. Figure 17a MST Grading Sections, presents the finished grading profile and illustrates relative elevation of Inter-Garrison Road and the proposed buildings.

The text on page 2-5 has been revised.

Vantage Point #4. This viewpoint is elevated above Inter-Garrison Road and the project site ~~at~~ near the planned location of future CSUMB housing. The wooded features of the MST site dominate the foreground. Distinguishing characteristics of views from the higher elevation are characterized by nearly contiguous woodlands (including those on the project site) in the foreground framed by distant views of former Fort Ord buildings and development within the City of Marina in the background.

The following text has been added to page 2-6 for clarification.

Development of the project site would change the overall scenic value of the project site's visual contribution to the natural landscape, and would contribute to a gradual change from undeveloped natural vistas to developed vistas as other areas of the former Fort Ord are

developed. The Reuse Plan EIR found that build-out of the former Fort Ord would result in less than significant impacts from changes to visual quality. Sites without existing development, such as the project site, would have greater effects, but implementation of the visual protection policies in the *Fort Ord Reuse Plan* would reduce these to a less than significant level. The proposed project would implement the applicable *Fort Ord Reuse Plan* visual protection policies. A discussion of the cumulative impact to scenic quality of the site and area is found in Section 3.0, Cumulative Impacts.

The text on page 2-12 is revised for clarification.

The proposed MST facility would create a new source of illumination including continuous night time illumination of 15 acres of parking lots, in an area where little to no lighting currently exists. These effects would be most visible from Imjin Parkway to the north, ~~and~~ Inter-Garrison Road, and from public viewing areas at higher elevations to the south.

The text on page 2-15 is revised to correct out-of-date information.

Standards for Criteria Air Pollutants. In general, criteria pollutants are pervasive constituents, such as those emitted in vast quantities by the combustion of fossil fuels. Both the State of California and the federal government have developed ambient air quality standards for the identified criteria pollutants, which include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and suspended particulate matter 10 microns or less (PM_{10}), and 2.5 microns or less ($PM_{2.5}$). Table 3, Federal and State Ambient Air Quality Standards, lists state and federal ambient air quality standards for criteria air pollutants. The state standards generally have lower thresholds than the federal standards, yet both are applicable to the proposed project. When thresholds are exceeded at regional monitoring stations, an "attainment plan" must be prepared that outlines how an air quality district will achieve compliance. ~~Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods.~~

The text on page 2-18 is revised for clarification

Air Quality Management Plan. The MBUAPCD is delegated with local responsibility to implement both federal and state mandates for improving air quality in the air basin through implementation of an air quality plan. The MBUAPCD adopted the *Monterey Bay Unified Air Pollution Control District Air Quality Management Plan* (Air Quality Management Plan) in 1991 and several updates in subsequent years. The Air Quality Management Plan presents measures to control emissions of volatile organic compounds (VOC) and NO_X from stationary and mobile sources in order to meet the ozone standard mandated by the California Clean Air Act. In 2006 CARB made the ambient air quality standards more stringent by adding an 8-hour ozone average to the standard.

The text on pages 2-27 and 2-28 is revised for clarity.

Construction equipment can emit substantial amounts of NO_X ~~that could have a small, but cumulative effect on ozone concentrations~~. The MBUAPCD CEQA guidelines do not have thresholds that apply to these emissions. The MBUAPCD CEQA guidelines state that construction projects using typical construction equipment such as dump trucks, scrappers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone [i.e., volatile organic compounds (VOC) or oxides of nitrogen (NOx)], are accommodated in the emission inventories of State- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. The guidelines suggest the District should be consulted regarding emissions from non-typical equipment, e.g., grinders, and portable equipment. ~~Therefore, the impact is considered less than significant if reasonable and feasible measures to reduce emissions are employed.~~

The text on page 2-53 is revised to eliminate discussion of Monterey dusky footed woodrat, because that species is no longer listed as a protected species.

Wildlife. Potential habitat for the California tiger salamander was identified during the site surveys. This species is federally listed and is also proposed for state listing. In addition, habitat for the following state listed species was identified within the development area: ~~Monterey dusky-footed woodrat,~~ American badger, Monterey ornate shrew, white-tailed kite, nesting raptors, California legless lizard, and coast horned lizard. These species are discussed in more detail in the Biological Assessment.

The text on page 2-57 is revised to eliminate discussion of Monterey dusky footed woodrat, because that species is no longer listed as a protected species.

~~**Monterey Dusky-footed Woodrat.** Monterey dusky-footed woodrat relies on duff accumulated within oak woodlands to build nests and native understory plants for cover. Woodrat abundance is limited by the availability of duff. Disturbance and/or removal of coast live oak woodland on the project site, including trimming or removal of oak trees, disturbance or removal of understory plants associated with the oak woodland, and removal of accumulating duff, could result in the loss of habitat for Monterey dusky-footed woodrat.~~

Mitigation Measure BIO-1 on page 2-60 is revised to reflect a comprehensive fencing approach (Mitigation Measure BIO-13) and the Fish and Game Section 2081 permit process.

BIO-1. ~~The sand gilia and Monterey ceanothus shall be flagged for avoidance and included in the offsite maritime chaparral area fenced for avoidance, as described in Mitigation Measure BIO-13.~~ Disturbance or relocation of sand gilia shall be done in conformance with an approved 2081 Permit from the California Department of Fish and Game. The Monterey ceanothus shall be flagged for avoidance and fenced off as described in BIO-13.

Mitigation Measure BIO-3 on page 2-60 is revised to account for new surveys and an existing take permit for UCSC property along Engineer's Equipment Road.

BIO-3. ~~For the extension of Engineer's Equipment Road; gas line realignment; and off-site drainage basins east of Eighth Avenue: Prior to ground disturbance activities, surveys for Monterey spineflower, sand gilia, coast wallflower, and Kellogg's horkelia shall occur during the blooming period in spring. Additional surveys for Seaside bird's beak and Yadon's rein orchid shall occur during the blooming period in the summer. If individuals of this species are found, the United States Fish and Wildlife Service and the California Department of Fish and Game shall be consulted to determine the appropriate course of action. If removal of the species cannot be avoided, authorization for take will be obtained and any loss will be mitigated in habitat replacement and enhancement areas at a minimum of a 3:1 replacement ratio. A habitat restoration plan shall be prepared to identify the exact amount and location of impacted habitat, identify the appropriate location for replacement or restoration habitat, and provide specifications for installation, maintenance, and monitoring of the replacement habitat. The use of locally-obtained native species shall be specified in the habitat restoration plan, as appropriate.~~ The applicant shall have a qualified biologist develop a species protection plan for each species found at the site. The species protection plan shall include the following:

- Avoidance criteria necessary for plant protection;
- Fencing Plan
- Monitoring; and
- Follow-up surveys and reports.

The plan shall be submitted to the RMA – Planning Department for Review and approval. If species are found and cannot be avoided, the applicant shall consult with the United States Fish and Wildlife Service and the California Department of Fish and Game to determine the appropriate course of action.

Mitigation Measure BIO-4 on page 2-61 is revised to provide additional mitigation options for California tiger salamander.

BIO-4. For development of Lot 1, off-site drainage improvements, and road improvements to Inter-Garrison Road and Engineer's Equipment Road (Phase 1) and development of Lots 2, 3, 7, and 8 with improvement to Whispering Oaks Drive (part of Phase 2): All development shall be monitored by a qualified biologist consistent with Mitigation Measure BIO-5. If at any time California Tiger Salamanders are found in the

development area, all construction shall cease, and the Department of Fish & Game and U.S. Fish & Wildlife shall be consulted. Development may not resume until clearance from Fish & Game and Fish & Wildlife is secured.

For ~~Lots 12-16~~ the remaining improvements in Phase 2 (Lots 4, 5, 6, and 10, Parcel B, and the remaining Whispering Oaks Drive improvements) and all of Phase 3 (Lots 12 – 16): Prior to the initiation of any ground-disturbing activities, including vegetation removal and grading, the applicant shall comply with one of the following three approaches:

1. Conduct protocol surveys to determine the presence or absence of California tiger salamander within Lots ~~12-16~~ 4, 5, 6, 10, 12-16, and Parcel B. Protocol surveys conducted in compliance with the protocols outlined in the /Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander /(USFWS October 2003). Two consecutive years of upland drift fence studies are required. Fencing arrays shall be installed and approved by USFWS prior to October 15 of each survey year. Surveys shall continue until individuals are found or the criteria for a Negative Finding are met. If individuals are found, either approach 2 or 3 shall be implemented;

2. If the presence of California tiger salamander is documented or the applicant chooses to assume the species is present, the project shall comply with the ESA and CESA and obtain Incidental Take Authorization from the USFWS and CDFG for the loss of California tiger salamander individuals and upland habitat associated with construction and operation of the project; or

3. Following adoption of the Fort Ord HCP and issuance of base-wide federal and state incidental take permits, all applicable conditions of the HCP shall be followed and individual incidental take permits are not required.

Mitigation Measure BIO-6 on page 2-63 is revised to state correct protocol for moving protected species.

BIO-6. For all development areas: The biological monitor shall be onsite during initial grading and vegetation removal activities to protect any special-status species encountered. The qualified biologist shall identify and explain the protection methods during the Employer Education Program as described in Mitigation Measure BIO-5. These methods could include, but are not limited to, stopping work in the area where the animal is encountered until it has moved on its own outside of the project site~~ or moving individuals outside of the project site to adjacent appropriate habitat.~~ or take appropriate action consistent with the CDFG "take" authorization requirements.

The impact statement on page 2-62 is revised and Mitigation Measure BIO-7 on page 2-63 is removed because the dusky-footed woodrat has been removed from the list of protected species. The first monitoring action for Mitigation Measure BIO-7 on page 2-64 has been eliminated.

Potentially Significant Impact: ~~Monterey Dusky-footed Woodrat,~~ American Badger, White-tailed Kite, Nesting Raptors, and Coast Horned Lizard. Construction activities within the project site may result in impacts to special status wildlife species, including the ~~Monterey dusky-footed woodrat,~~ American badger, white-tailed kite and other nesting raptors, and coast horned lizard. Impacts to these species may include direct mortality of individuals, destruction of nests or dens, and loss of habitat as a result of vegetation removal and grading. These are considered significant impacts. Implementation of the following mitigation measures will reduce potential impacts to a less-than-significant level.

~~BIO-7. For all development areas: To avoid and reduce impacts to the Monterey dusky-footed woodrat, project proponents shall retain a qualified, CDFG-approved biologist to conduct pre-construction surveys within three days prior to construction for woodrat nests within the project area and in a buffer zone 100 feet out from the limit of disturbance. All woodrat nests shall be flagged for avoidance of direct construction impacts, where feasible. Any active nests that will not be in areas of grading or vegetation removal will be avoided and protected during project activities with a minimum 25-foot buffer. Nests that cannot be avoided shall be manually deconstructed prior to land clearing activities to allow animals to escape harm and to reestablish territories for the next breeding season. Nests shall be dismantled during the non-breeding season, between October 1 and December 31. Dismantling shall be done by hand, allowing any animals to escape either along existing woodrat trails or toward other available habitat. If a litter of young is found or suspected, nest material shall be replaced, and the nest left alone for two to three weeks before rechecking the nest to verify that young are capable of independent survival before proceeding with nest dismantling.~~

Monitoring Actions

~~Prior to Construction, a CDFG-approved biologist shall conduct pre-construction surveys within three days prior to construction for woodrat nests within the project area and in a buffer zone 100 feet out from the limit of disturbance. All woodrat nests shall be flagged for avoidance of direct construction impacts, where feasible. Reports documenting compliance with mitigation requirements shall be submitted to Monterey County RMA Planning Department.~~

Mitigation Measure BIO-9 on page 2-64 is revised to extend protection to all birds.

BIO-9. For all development areas: To avoid ~~and reduce~~ impacts to the white-tailed kite, ~~and~~ other nesting raptors, and other protected birds, construction activities can be timed to avoid the nesting season period. Specifically, tree removal can be scheduled after September 1 and before January 31 to avoid impacts to these species. Alternatively, if avoidance of the nesting period is not feasible, pre-construction surveys shall be conducted for nesting raptors and other nesting protected birds within 300 feet of proposed construction activities if construction is to be initiated between February 1 and August 31. Pre-construction surveys shall be conducted no more than 30 days prior to the start of construction. If nesting raptors or other nesting protected birds are identified during the pre-construction surveys, the CDFG shall be contacted and an appropriate no-disturbance buffer imposed within which no construction activities or disturbance shall take place (generally 300 feet in all directions for raptors) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist and the CDFG.

Mitigation Measure BIO-10 on page 2-65 is revised to specifically require measures outlined in the forest management plans.

BIO-10. The applicant shall comply with the measures included in the Forest Management Plans that were prepared for the MST and Whispering Oaks Business Park sites. ~~The Forest Management Plans include measures to avoid tree removal and/or transplant trees whenever possible as well as suitable mitigation ratios and planting areas. If off-site improvements result in disturbance to oak trees, the provisions of the MST Forest Management Plan shall apply to that off-site location. In addition, a program shall be established for the applicant to submit a special fee to FORA to fund tree replacement elsewhere within Fort Ord.~~ The applicant shall also comply with the Oak tree preservation and recovery strategy prepared in compliance with the recommendation of the Forest Management Plan for effective implementation. Although it is only feasible to exactly determine impacts to individual trees at the time of construction, the protective and compensatory measures will be adhered to with the guidance of a Professional Forester or Arborist. These measures include, but are not limited to, the following:

Tree Protection Measures (both projects)

- To maximize tree retention and protection, a forester, arborist or other tree care professional shall be involved in review and development of final grading and construction plans wherever trees occur either at project or grading margins.

- Prior to commencement of any grading within 50 feet of retained trees, the contractor shall install protective fencing at the driplines of retained trees to create a Tree Protection Zone (TPZ) that shall not be entered for any reason unless approved by the project forester. The TPZ may extend within the driplines of retained trees where approved by the project forester in order to retain more trees. Grading may not commence until the project forester has inspected and approved the protective fencing installed by the contractor.

- Prior to commencement of any grading within 50 feet of retained trees, the project forester shall identify retained trees needing significant pruning to protect them during grading operations. This protective pruning work shall be completed by a qualified tree contractor, in accordance with current arboricultural standards and practices prior to commencement of operations to balance canopy, provide necessary clearances, remove dead wood, and promote the health of the tree.

- No equipment, construction materials, trucks or vehicles shall be operated, stored or parked within a TPZ of a retained tree.

- No soil shall be removed or added within the dripline of a retained tree unless it is part of approved construction and approved by the project forester or arborist.

- Under no circumstances shall fill be placed in contact with the base of a retained tree. Permanent wells shall be constructed as appropriate whenever necessary to prevent fill/trunk contact, never at a distance less than a foot from the trunk, and without causing significant root damage.

- To avoid soil compaction from damaging the roots, heavy equipment shall not be allowed to drive over the root area. If deemed necessary and approved by the forester, equipment may drive across one side of the tree. To reduce soil compaction, wood chips shall be spread 6-12 inches deep to disperse the weight of equipment and plywood sheets shall be placed over the wood chips for added protection.

- Roots exposed by excavation must be pruned and recovered as quickly as possible to promote callusing, closure and healthy re-growth.

- Retained trees shall be watered periodically in accordance with species needs to promote tree health. Transplanted trees and their intended planting areas shall be pre-watered. Post planting watering shall be done as needed to assure establishment.

- Use retaining walls wherever feasible to preserve existing native trees. Excavators or backhoes shall be used to remove soil adjacent to "save" trees where needed.

Replacement and Planting Measures (MST project)

- Replant a minimum of 900 seedlings along boundaries and within detention basin and landscape areas. Planting density for seedlings shall be 10 feet by 10 feet to allow for some unavoidable mortality over time.

- Transplants are encouraged and will be credited on a 3:1 basis. Final replanting numbers may be modified by additional tree retention and should be made part of the final landscaping plan.

- Consideration should be given to redesigning the project to use the existing encroachment from Inter-garrison road in order to preserve landmark-sized trees at this location.

- All graded areas that are scheduled for replanting shall be returned to preconstruction soil condition prior to replanting. Tree replacement requirements shall be met promptly after the close of construction and based on a final tally of trees actually removed in the project area rather than on the estimates contained in the Forest Management Plan.

- Not less than 80 percent of replacement trees shall be small, less than one gallon in size (supercells or D40 treepots). Not more than 20 percent of the replacement trees shall be of five-gallon container size or larger.

Design Measures (Whispering Oaks project)

- A qualified Forester/Arborist shall be contracted to assist during the design phase in the general layout of roads, lot layout, and parking area alternatives to further provide for preservation of existing trees and to prepare Forest Management Plans for each lot or combination of lots as needed.

- The design for the Whispering Oaks Business Park shall include lots/building pads at appropriate elevations to avoid mass grading of the site. Lot elevations should be selected to match existing terrain to the extent feasible to allow for the preservation of existing "islands" of resident oaks in the landscape.

- Use of the existing encroachment to Inter-Garrison Road shall be considered as the primary access to the business park if feasible for traffic circulation. Such an access could be sloped at a very moderate grade in order to preserve the existing topography to the greatest extent possible. This would allow for preservation of the landmark-sized trees to the west of the access point.

- The landscape buffer along Inter-Garrison Road shall comply with the GDPs including buffer areas within the project site and/or the Inter-Garrison Road right-of-way. The MST GDP incorporates a tree buffer area on-site at the western end of the site and will provide for a landscape buffer between the wall at the property line and the edge of pavement for the entire frontage. The WO GDP requires a 20 foot oak tree buffer on-site measured from the property line on Inter-Garrison Road with additional buffer within the Inter-Garrison Road right-of-way between the edge of pavement and the property line.

- When the project design is completed an estimate of the appropriate number of replacement seedlings shall be made based on available planting space.

- Not less than 80 percent of replacement trees shall be small, less than one gallon in size (supercells or D40 treepots). Not more than 20 percent of the replacement trees shall be of five-gallon container size or larger.

- Final landscape planting shall require a post planting watering plan based on the time of planting and size of selected stock.

Mitigation Measure BIO-11 on page 2-66 is revised to provide specific tree replacement requirements.

BIO-11. For both projects, in order to minimize impacts to Oak woodlands and in compliance with PRC 21083.4: The appropriate strategy for compliance, as identified in the ~~*Preliminary Oak Woodland Habitat and Tree Removal Mitigation Strategy Plan for the MST Facility/Whispering Oaks Business Park* (Denise Duffy & Associates, Inc., 2009)~~ Oak Tree Preservation-Recovery Strategy for this project is as follows:

- Pay FORA impact fees for maintenance of permanent open space in the Fort Ord area.

- The maximum amount of native oak trees as feasible for screening and habitat purposes shall be retained in coordination with a qualified arborist, the General Development Plans, and a comprehensive exclusionary fencing plan requirement.

- ~~Construction and best management practices (as identified in the appropriate FMP) to protect retained trees and trees adjacent to the project site shall be implemented.~~

- Trees shall be replanted in the landscaping areas, the street frontages, the buffer areas, and within Parcel D.

- Off-site replanting and habitat management or payment of equivalent in-lieu fees to the Parks Department will occur. The Youth Camp parcel has been identified as an appropriate off-site mitigation area to achieve a minimum 1:1 replacement.

Mitigation Measure BIO-13 is revised to tie the mitigation measure to a comprehensive fencing plan required as a condition of approval.

BIO-13. For the MST project, gas line realignment, Lots 2-11, Engineer's Equipment Road, and off-site drainage improvements: The maritime chaparral vegetation immediately adjacent to the construction area shall be protected during construction. This includes the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species. A biological monitor shall supervise the installation of protective fencing. The monitor shall remain on-site during the initial grading activities and vegetation removal. After these activities are completed, the biological monitor shall check at least once per week until the construction is complete that the protective fencing remains intact and that all construction work is maintained within the limits of construction. This fencing requirement shall be incorporated into a comprehensive fencing plan.

Mitigation Measure GEO-1 on page 2-76 is revised to eliminate reference to the seismic design category.

GEO-1. All future development within the project site shall be designed using the parameters for code-based design listed in the Fugro West report ~~and shall be designed in accordance with the requirements for Seismic Design Category "D."~~

Mitigation Measure H-1 on page 2-91 has been revised to add CSUMB as a reviewing party.

H-1. As part of its Business Response Plan, MST shall develop a designated transport route for hazardous waste deliveries and removal and consult with CSUMB during development of the plan. The plan shall be subject to the review and approval of the Monterey County Environmental Health Department.

Mitigation Measure HY-1 on page 2-104 is revised to clarify that ponds do not necessarily require fencing.

HY-1. Prior to the issuance of any grading and/or building permits, the developer(s) for Lots 2, 3, 7, and 8 shall provide the Water Resources Agency a drainage plan prepared by a registered civil engineer addressing on-site impacts with supporting calculations and construction details. The plan shall include retention facilities to mitigate the impact of impervious surface storm-water runoff. ~~P~~ Where necessary, as determined by the project engineer, pond(s) shall be fenced for public safety. Oil-grease/water separators shall be

installed for the pre-treatment of storm-water runoff from paved parking areas. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency.

Mitigation Measure HY-2 on page 2-105 is revised to clarify that ponds do not necessarily require fencing.

HY-2. Prior to filing the final map, the applicant shall provide the Water Resources Agency a drainage plan prepared by a registered civil engineer addressing on-site and off-site impacts with supporting calculations and construction details. The plan shall include retention facilities to mitigate the impact of impervious surface storm-water runoff. ~~P~~ Where necessary, as determined by the project engineer, pond(s) shall be fenced for public safety. Oil-grease/water separators shall be installed for the pre-treatment of storm-water runoff from paved parking areas. Drainage improvements shall be constructed in accordance with plans approved by the Water Resources Agency.

The text on page 2-140 is revised to correct an error.

Inter-Garrison Road is proposed as part of a realigned multi-modal corridor envisioned in the *Fort Ord Reuse Plan* to follow Imjin Parkway and Blanco Road. FORA is currently considering a new route alignment that would follow Eighth Street, Inter-Garrison Road, and Davis Road. The corridor is planned to ultimately include ~~rail~~ bus rapid transit and a bicycle/pedestrian path.

The text on page 2-147 is changed to note future access restrictions at CSUMB.

Proposed Street Network Changes

The circulation system in the vicinity of the project site would change with time. Likewise, new streets would be developed within the project site during the several phases of project development. These changes are summarized below by phase, as assumed in the traffic impact analysis. *It is anticipated that Divarty Street through the CSUMB campus will have restricted access in the future.* Refer to the earlier section for changes expected to occur during background conditions. Also refer to Section 3.0 Cumulative for changes anticipated to occur under the cumulative traffic condition.

Mitigation Measure T-1 on page 2-157 is revised to clarify the payment of fair share traffic fees for mitigation of City of Marina impacts and to characterize the payment of FORA impact fees as mitigation for cumulative impacts (see Mitigation Measures T-9 and T-10).

T-1. In order to mitigate impacts from additional trips added by Phase I to intersections already operating at LOS E or F. ~~P~~ prior to ~~issuance of building permits~~ recordation of the final map for Phase I, ~~MST shall submit to the RMA – Planning Department~~

~~evidence of payment of~~ the fees listed below (fair share costs for project-level impacts based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be paid.

- ~~FORA development impact fees.~~
- ~~City of Marina traffic impact fees.~~

County of Monterey fair share costs for improvements at the following intersections:

- Davis Road/Reservation Road (1.3%of $1,825,600 = $23,389)
- Blanco Road/Reservation Road (2.0% of $263,400 = $5,288).

City of Marina fair share costs for lane improvements at the following intersection:

- Imjin Road/Imjin Parkway – eastbound right (17.5% of $~~4~~66,888 = $81,791) Note: this fee would be reimbursable to Whispering Oaks Business Park – see Mitigation Measure T-6.

City of Marina fair share costs for two lane improvements at the following intersection:

- Imjin Parkway/Reservation Road (1.~~3~~7% of $222,700 = $~~2,788~~ 3,764).

City of Seaside fair share costs for improvements at the following intersections:

- General Jim Moore Boulevard/Broadway Avenue (0.4% of $300,000 = $1,054)

Caltrans fair share costs for improvements at the following intersections:

- Northbound State Route 1/Imjin Parkway (~~1.2~~ 0.7% of $151,428 = $~~1,875~~1,012)
- Southbound State Route 1/Imjin Parkway (0.8% of $965,308 = $7,562)

Mitigation Measure T-2 on page 2-158 is revised to clarify that the Phase I developer is responsible for funding and construction of the improvement.

T-2. ~~MST shall construct the following improvement prior to acceptance of Phase 1 (lot 1) improvements~~: In order to mitigate potential safety impacts from left-turn queues exceeding the left-turn lane storage capacity at Imjin Parkway and Imjin Road, Phase I improvements shall include:

- Construction of a second westbound left-turn lane at the intersection of Imjin Road and Imjin Parkway.

~~MST shall be owed reimbursement of 11.6 percent of the cost of this improvement by the Whispering Oaks Business Park developer or successor ($107,189 based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) – see Mitigation Measure T-3.~~

Mitigation Measure T-3 on page 2-160 is revised to clarify the payment of fair share traffic fees for mitigation of City of Marina impacts and to characterize the payment of FORA impact fees as mitigation for cumulative impacts (see Mitigation Measures T-9 and T-10).

T-3. In order to mitigate impacts resulting from the increase of traffic trips from Phases 2 and 3 on intersections already operating at LOS E or F, prior to ~~the issuance of building permits~~ recordation of the Phase 2 final map, ~~the Whispering Oaks Business Park developer or successor(s) shall submit to the RMA – Planning Department evidence of payment of the specific development's~~ the pro-rata share of fees listed below (fair share costs for project-level impacts based on estimated 2010 project costs to adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be paid.

~~FORA development impact fees.~~

~~City of Marina traffic impact fees (includes improvements at Fifth Avenue – California Avenue/Imjin Parkway, Third Avenue/Imjin Parkway, Second Avenue/Imjin Parkway, Abrams Drive/Imjin Parkway, and signalization at the Imjin Parkway/southbound State Route 1 ramps).~~

County of Monterey fair share costs for improvements at the following intersections:

- Davis Road/Reservation Road (4.3%of $1,825,600 = $78,375)
- Blanco Road/Reservation Road (4.6% of $263,400 = $12,056).

City of Marina fair share costs for two lane improvements at the following intersection:

- Imjin Road/Imjin Parkway – second westbound left (11.6% of $925,453 = $107,189) Note: this fee would be reimbursable to MST – see Mitigation Measure T-2.

City of Marina fair share costs for two lane improvements at the following intersection:

- Imjin Parkway/Reservation Road (~~2.9~~4.1% of $222,700 = $~~6,481~~ 9,207).

City of Seaside fair share costs for improvements at the following intersection:

- General Jim Moore Boulevard/Broadway Avenue (4.0% of $300,000 = $12,119)

Caltrans fair share costs for improvements at the following intersections:

- Northbound State Route 1/Imjin Parkway (3.2% of $151,428 = $4,797)
- Southbound State Route 1/Imjin Parkway (2.6% of $965,308 = $24,759)

Mitigation Measure T-4 on page 2-161 is revised to clarify responsibilities for funding and construction of the improvements.

T-4. ~~The Whispering Oaks Business Park developer shall construct the following improvements prior to acceptance of Phase 2 (lots 2-12) improvements:~~ In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Imjin Road and Eighth Street, Phase II improvements shall include:

- Signalizing intersection of Imjin Road/Eighth Street and adding a southbound Imjin Road left turn lane, and corresponding second eastbound Eighth Street receiving lane, or
- Constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street, realigning Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection.

~~The Whispering Oaks Business Park developer is responsible for 78.2% of the cost of this improvement and MST is responsible for 21.8% of the cost of this improvement (see Mitigation Measure T-9).~~

Mitigation Measure T-5 on page 2-162 is revised to clarify responsibilities for funding and construction of the improvements.

T-5. ~~The Whispering Oaks Business Park developer shall construct the following improvement prior to acceptance of Phase 3 (lots 13-16) improvements:~~ In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Imjin Road and Eight Street, Phase III improvements shall include:

- Adding a westbound right-turn lane at the Imjin Road/Eighth Street intersection, or
- Constructing the re-alignment of Imjin Road between Imjin Parkway and Eighth Street, realigning Imjin Road as a fourth approach to the Sixth Avenue/Eighth Street-Engineer's Equipment Road intersection.

~~The Whispering Oaks Business Park developer is responsible for 78.2% of the cost of this improvement and MST is responsible for 21.8% of the cost of this improvement (see Mitigation Measure T-9).~~

Mitigation Measure T-6 on page 2-163 is revised to clarify responsibilities for funding and construction of the improvements.

T-6. ~~The Whispering Oaks Business Park developer shall construct the following improvement prior to acceptance of Phase 2 (lots 2-12) improvements:~~ In order to mitigate potential safety impacts from right-turn queues exceeding the right-turn lane storage capacity at Imjin Parkway and Imjin Road, Phase II road improvements shall include:

- Constructing an eastbound right-turn lane at the intersection of Imjin Road and Imjin Parkway.

~~The Whispering Oaks Business Park developer or successor shall be subject to reimbursement of 17.5 percent of the cost of this improvement by MST ($81,791 based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) – see Mitigation Measure T-1.~~

Mitigation Measure T-7 on page 2-163 is revised to clarify responsibilities for funding and construction of the improvements.

T-7. ~~The Whispering Oaks Business Park developer shall construct the following improvement prior to acceptance of Phase 3 (lots 13-16) improvements:~~ In order to mitigate impacts resulting in an unacceptable LOS at the intersection of Engineer's Equipment Road and Inter-Garrison Road, Phase III road improvements shall include:

- Signalization of the intersection of Whispering Oaks Drive/Engineer's Equipment Road. The signal light shall be coordinated with the signal light at Engineer's Equipment Road and Inter-Garrison Road.
- construction of northbound and southbound left turn lanes.
- construction of eastbound and westbound right turn lanes.

Mitigation Measure T-8 on page 2-164 is revised to recognize the role of CSUMB.

T-8. MST shall include a policy in the General Development Plan to require out-of-service buses traveling to and from the beginning or ends of their day's runs to consult with CSUMB regarding ~~use~~ routes that ~~avoid~~ use the following streets within the CSUMB campus core area: Inter-Garrison Road/Third Street (Sixth Avenue to General Jim Moore Boulevard) and Divarty Street (east of General Jim Moore Boulevard). The restriction shall not apply to routes serving CSUMB.

Section 2.10 Water Supply and Demand is revised on pages 2-167, 2-168, and 2-172. The final water supply assessment approved by the MCWD Board of Directors is included as Revised Appendix J.

Demand Coefficients

The project site is located within the MCWD service area. The projected water demands in the UWMP were calculated by multiplying water demand coefficients, expressed in acre-feet per year (AFY), ~~and~~ land area expressed in acres, and building area expressed in square feet. The project site has a proposed zoning classification of Heavy Commercial, but the Whispering Oaks GDP limits the types of allowed uses. ~~The WSA assumed that the UWMP's closest equivalent to the Heavy Commercial land use would be the Other Commercial designation, which has an average year water demand coefficient of 0.0003 AFY per square foot. The demand coefficients for the open space and other land use designations are zero AFY. To calculate a high water demand, the WSA used a total building area of 686,459 square feet and the water demand coefficient of 0.0003 AFY/square foot to yield a water demand of 205.9 AFY, which is equivalent to 127.7 gallons per minute (gpm) or 18,400 gallons per day (gpd).~~

Based on the Whispering Oaks GDP's allowable uses, an average water demand coefficient was developed for the proposed project assuming that the proposed project would consist of roughly 20 percent retail uses, 50-percent office/research and development, and 30 percent light industrial uses. Using a weighted average of UWMP demand factors, an average demand factor of 0.0001545 AFY per square foot of building area was calculated. In addition, it was assumed that each parcel would consist of roughly 10 percent landscaped areas, with a demand coefficient of 2.1 AFY per acre, consistent with the UWMP demand coefficient for improved landscaping. The demand coefficient for the open space was assumed to be zero AFY. Water demands for the MST site were based on a detailed assessment prepared by AECOM for the MST project. That report is included as an attachment to the WSA.

~~To develop a land use coefficient range for commercial land uses, the WSA examined similar local water planning documents. For example, the *2005 Soledad Water Master Plan* uses a water demand coefficient of 0.94 gpm/acre or 1,354 gpd/acre for commercial land uses. A demand coefficient range of 800 – 2,000 gallons per day per acre (gpd/acre) was determined to be typical for commercial land uses. Based on study of the various demand coefficients, the WSA recommended using a demand coefficient of 1,500 gpd/acre for the proposed project, which is 25 percent lower than the high value in the range.~~ Table 19, ~~Low, High, and Recommended~~ Proposed Project Water Demands, shows the demands for the proposed project ~~site utilizing the low, high, and the recommended water demand coefficient values~~ (Carollo, page ~~12~~ 13).

As shown in Table 19, the calculated demand ~~using the WSA recommended demand coefficient of 1,500 gpd/acre~~ is ~~80.19~~ 92.72 AFY. This is a significantly lower demand estimate compared

to the 205.94 AFY calculated ~~previously~~ using the UWMP water demand coefficient of 0.0003 AFY/square foot. Table 20, Water Demands Comparison, presents a comparison of water demand projections for the project (Carollo, page 13).

The UWMP provides water demand projections to the year 2025. However, the proposed project demands were not accounted for in the UWMP. The WSA adjusted the UWMP demands to include the recommended average water demand for the project (Carollo, page 14).

Wastewater generated by both the Whispering Oaks Business Park and the MST facilities would be collected and disposed of through the existing MCWD sewer collection system. The MST facility includes a bus washing and steam-cleaning building, which would include a water reclamation system that would re-use 75 percent of the water from each wash, however the water used in these processes would eventually be discharged into the sewer system and require treatment.

Wastewater generation rates for both the Whispering Oaks Business Park and the MST facilities can be estimated using the water demand rates from the Water Supply Assessment (WSA), ~~since it can be assumed that all of the domestic water~~ because the WSA assumes 90 percent of water used on the project site would be discharged into the sanitary sewer system. ~~Therefore, the amount of wastewater generated and discharged by the proposed project into the sanitary sewer system is assumed to be equal to the amount of water used by the proposed project. As some of t~~The remaining water would be applied to landscaping~~, the actual wastewater generation would be somewhat lower than total water use~~.

The WSA provides an estimated water demand for the proposed project based on estimates in the Marina Coast Water District's *2005 Urban Water Management Plan* (UWMP). The WSA also shows a range of estimated water demands for the proposed project. The range included a low and high water demand, as well as a recommended water demand based on the experience of Carollo Engineers with projects of this type. The recommended demand is the amount of water expected to be used by the proposed project. Table 20, Water Demands Comparison, shows the range of water demands estimated for the proposed project as well as the water demand estimated for the project site in the UWMP.

The WSA recommends a land use water demand coefficient of ~~1,500 gallons per day~~ 0.0001545 AFY per building square foot ~~acre (gpd/acre)~~ for the Whispering Oaks Business Park ~~for a use similar to the proposed project~~ (Carollo Engineers 2010, page ~~15~~ 11). According to the ~~demand coefficient outlined for commercial uses in the~~ WSA, the ~~57.91-acre~~ proposed project ~~site~~ would have a water demand of ~~86,865 gpd, which is equal to 97.30~~ 92.72 acre feet per year (AFY). Of this amount, about 10.97 acre-feet would be used for landscaping, and about 81.75 AFY would be used within or relating to the use of buildings. The water use attributed to buildings would be discharged to the sanitary sewer. Therefore the proposed project would generate about 81.75 AFY or ~~86,865~~ 72,982 gpd of wastewater.

Table 19 ~~Low, High, and Recommended~~ Proposed Project Water Demands

~~Land Use~~ Lot or Parcel	Building Area (Square Feet)	~~Total~~ Landscaped Acreage	~~Low Coefficient 800 gpd/acre~~ Building Demand (AFY)	~~High Coefficient 2,000 gpd/acre~~ Landscape Demand (AFY)	~~WSA Recommended Coefficient 1,500 gpd/acre~~ Total Demand (AFY)
~~Heavy Commercial~~		~~48.82~~	~~42.77~~	~~106.92~~	~~80.19~~
Lot 1 (MST Site)	162,425	2.78	14.28	5.84	20.12
Lot 2	33,040	0.19	5.10	0.39	5.49
Lot 3	32,862	0.18	5.08	0.39	5.46
Lot 4	26,789	0.15	4.14	0.32	4.45
Lot 5	24,289	0.14	3.75	0.29	4.04
Lot 6	20,003	0.11	3.09	0.24	3.33
Lot 7	25,539	0.14	3.95	0.30	4.25
Lot 8	28,218	0.16	4.36	0.33	4.69
Lot 9	29,468	0.17	4.55	0.35	4.90
Lot 10	22,860	0.13	3.53	0.27	3.80
Lot 11	21,253	0.12	3.28	0.25	3.53
Lot 12	18,217	0.10	2.81	0.21	3.03
Lot 13	29,647	0.17	4.58	0.35	4.93
Lot 14	45,006	0.25	6.95	0.53	7.48
Lot 15	53,400	0.30	8.25	0.63	8.88
Lot 16	26,075	0.15	4.03	0.31	4.34
Parcels C and D (Open Space)		~~57.62~~	--	--	--
Parcels A and B ~~Other~~ (roads, percolation facility)		~~9.10~~	--	--	--

Totals	599,092	~~115.54~~ 5.23	~~42.77~~ 81.75	~~106.92~~ 10.97	~~80.19~~ 92.72

Source: EMC Planning Group Inc. 2010, Carollo Engineers 2010

Table 20 Water Demands Comparison

Land Use	UWMP Demand (AFY)	WSA ~~Recommended~~ Demand (AFY)	~~Low Demand (AFY)~~	~~High Demand (AFY)~~
Heavy Commercial	205.94	~~80.19~~ 97.72	~~42.77~~	~~106.92~~

Source: EMC Planning Group Inc. 2010, Carollo Engineers 2010

The text on pages 2-175 and 2-176 is revised to reflect new water use figures.

~~The *Monterey – Salinas Transit Maintenance & Operations Center General Development Plan & Preliminary Design Report* prepared by AECOM dated June 9, 2009 includes wastewater projections for the MST facilities that are more conservative than the Carollo estimates. According to the design report, average daily flows for the MST facilities are estimated to be approximately 40,000 gallons per day (gpd). Taking into account the similar uses and comparable acreages for both the MST facilities and the Whispering Oaks Business Park it can be assumed that both project components would demand an equal amount of water. This would result in the business park also having a water demand of 40,000 gpd. Therefore, the proposed project would have a total water demand of 80,000 gpd, which is equal to 89.61 AFY. Therefore, using this methodology, the proposed project would generate 80,000 gpd of wastewater.~~

~~Although the AECOM estimate is slightly higher than the amount estimated by Carollo in the WSA, the amount of wastewater generated by a project cannot typically exceed the amount of water used. For purposes of this analysis the Carollo estimate has been used, and therefore, the proposed project is expected to generate about 80 AFY, or 72,000 gpd, of wastewater, which is equal to the water demand of the proposed project.~~

The discussion on page 3-17 and 3-18 is revised to reflect quantified data on carbon sequestration.

The proposed project would necessitate the removal of numerous coast live oak trees. These trees are mostly short, with an average height of no more than 20 feet. The age of the trees is estimated at 60 to 80 years. The removal of these trees would result in temporary CO_2 emissions

associated with the use of gasoline or diesel powered equipment during removal and potential increases in CO_2 from the lack of CO_2 sequestration as the result of the loss of trees. According to the Whispering Oaks GDP, tree removal would be minimized to the extent possible and trees would be replanted in the development areas. The replanting of trees would sequester CO_2 during the active growing period of the tree (i.e., within the first 125 years). After the active growing period is complete, the replanted trees would sequester CO_2 at lower rates~~, similar to the existing trees~~. This sequestration is often offset by pruning, tree death, and removal of replaced trees. ~~Based on estimates from the U.S. Department of Energy, a mature coast live oak provides CO_2 sequestration of about 0.28 tons per year.~~ According to the carbon sequestration report prepared for the proposed project, ~~T~~the removal of about 37.45 acres of ~~an estimated 5,500~~ trees for project implementation would remove about 3,300 metric tons of carbon from storage on the project site and release it to the atmosphere, and would reduce CO_2 sequestration by about ~~1,500~~ 1,071 tons over the subsequent 50 ~~per~~ years. The preservation of some trees and the replanting of new trees both on and off site could partially offset the ~~lack~~ loss of CO_2 sequestration ~~that is currently provided at the project site~~ over the next 50 years, but only about half of the lost sequestration would be made up ~~there would be a significant reduction in the number of trees compared to existing conditions~~. The carbon sequestration report in presented in Appendix M.

Mitigation Measure CC-1 on page 3-19 is revised to recognize that the necessary reduction measures are presented within the General Development Plan rather than a separate plan.

CC-1. The project applicant and/or succeeding developers shall follow the greenhouse gas reduction measures contained in the General Development Plans prepared for the sites. ~~prepare a greenhouse gas emissions reduction plan to reduce greenhouse gas emissions from the project site to the extent feasible.~~ In addition, the following specific measures shall be implemented as part of the general development plan, development agreement, final map, and/or development plans as applicable:

1. MST shall analyze future bus routes and modify these routes to effectively reduce daily vehicle miles traveled. For near term, the proposed project is expected to result in an average of 1,959 miles of additional travel each day to serve existing routes that are served by the two existing transit facilities. This assessment uses a worst case analysis that this mileage would increase proportionally with new bus routes in the future. However, MST has outgrown their existing facilities, so new facilities would be necessary to serve the future transit demands. Potential reductions: 20 percent of the daily increased vehicle miles travelled. This 20 percent reduction would equate to a reduction of 392 miles when the project first becomes operational (assuming 186 daily bus trips).

2. MST and Whispering Oaks employees and visitors shall be provided opportunities for using transit that would reduce travel to the site. Potential reductions: up to 15

percent according to the URBEMIS2007 model. This reduction is based solely on the transit service at the site (e.g., frequency of buses within one-quarter mile and regional transit service within ½ mile). With future transit routes, the project could achieve a 10 percent reduction in mobile (non-bus) GHG emissions.

3. MST and Whispering Oaks employees shall be provided incentives to use transit, such as discounted transit passes. Potential reductions: five percent of employee mobile source emissions.

4. Provide local retail uses. Retail services, such as restaurants, markets, and automatic teller machines located in proximity could substantially reduce employee vehicle miles travelled during the day (lunch period). ~~One lot within the business park shall be designated for retail services only~~. The Whispering Oaks General Development Plan shall allow for local retail and food service uses. Potential reductions: two percent of employee mobile source emissions according to the URBEMIS2007 model.

5. Provide amenities for bicycle and pedestrian modes of travel. Sidewalks and bicycle lanes shall be provided on both sides of all streets to serve the project site (except sidewalks on the north side of Engineer's Equipment Road where it abuts open space). In addition, secure employee bicycle facilities, along with lockers and showers shall be provided at each lot, and at least one public bicycle parking space shall be provided at each lot. Signal light sensors shall be set to respond to bicycle traffic, and an automatic walk signal shall be provided with green lights. Potential reductions: up to nine percent of employee mobile source emissions, depending on the network of bicycle lanes and sidewalks serving the project site, according to the URBEMIS2007 model. An additional two percent could be achieved with on-site amenities that would encourage employees to bike or walk to work. The total combined reductions for these measures could reach 10 percent, depending on the network of developed sidewalks and bicycle lanes in the future. Note: this measure shall not be required on interim access driveways built within street rights-of-way.

6. LEED credits shall focus to the extent feasible on approaches that directly or indirectly reduce greenhouse gas emissions. Potential reductions: 20 percent or more by meeting LEED Silver design level.

The project applicant and/or succeeding developers may elect to utilize other measures not specifically listed, including measures to reduce dependence on gas or electrical space or water heating, and additional means to encourage forms of transportation that reduce greenhouse gas emissions. Use of other methods may be credited toward fulfilling this measure based on anticipated emissions reductions.

~~Measures to be included in the general development plan(s) or development agreement(s) shall be prepared as part of project-wide emissions reduction plan for RMA – Planning Department review and recommendation prior to Board of Supervisors approval. Measures to be included as notes on or designs within a final map, site plan, or building plans, shall be prepared as part of a site-specific emissions reduction plan for RMA – Planning Department review and approval prior to approval of the relevant permit. The applicant/developer may elect to prepare a consolidated greenhouse gas emissions reduction plan for two or more lots.~~

The table reference on page 3-21 is corrected.

Table ~~23~~ 24, Reduced Annual CO_2 Emissions for the Proposed Project, shows the reduced GHG emissions if all of the measures in Mitigation Measure CC-1 were implemented by 2030. Reductions are shown with and without the increase in bus travel emissions because these additional emissions would be affected by changes in routing that cannot be predicted in the future. Overall, a 20 percent reduction could reasonably be achieved. This reduction would be in addition to reductions that are expected from state and federal actions. Such actions would include a reduction in GHG emissions from motor vehicles (new vehicles and fuel reformulation) and reduction in GHG emission to produce electricity.

Mitigation Measure T-9 on page 3-29 is revised to clarify the payment of fees and fair share payments.

T-9. In order to mitigate the Phase 1 portion of the cumulative impact of the proposed subdivision, prior to issuance of building permits, ~~MST shall submit to the RMA – Planning Department~~ evidence of payment of the fees listed below (fair share costs for cumulative impacts based on estimated 2010 project costs to be adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be submitted to the RMA-Planning Department.

FORA development impact fees.

County of Monterey fair share costs for improvements at the following intersections:

- Inter-Garrison Road/Reservation Road (1.8% of $612,100 = $11,056)
- Engineer's Equipment Road/Whispering Oaks Way (17.8% of $300,000 = $53,251)
- Engineer's Equipment Road/Inter-Garrison Road (3.6% of $300,000 = $10,827)

City of Marina fair share costs for reimbursement to Whispering Oaks Business Park at the following intersection ~~Note: this amount may be bonded or otherwise assured, and the cost could change if an alternate improvement is constructed~~ (a per-trip equivalent payment can also satisfy this requirement):

- Imjin Road/Eighth Street (21.8% of $1,136,064 = $247,689)
- Fifth Avenue – California Avenue/Imjin Parkway (1.7% of $390,111 = $6,632)
- Third Avenue/Imjin Parkway (1.1% of $543,000 = $6,110),
- Second Avenue/Imjin Parkway (0.7% of $42,000 = $307)
- Abrams Drive/Imjin Parkway (1.6 % of $1,304,596 = $20,770) and
- Imjin Parkway/southbound State Route 1 ramp (1.1% of $488,582 = $5,207)
- Imjin Parkway/northbound State Rout 1 ramp (0.9% of $488,582 = $4,563)

Mitigation Measure T-10 on page 3-30 is revised to clarify the payment of fees and fair share payments.

T-10. In order to mitigate the Phase 2 & 3 portions of the cumulative impact of the proposed subdivision, prior to issuance of building permits, ~~the Whispering Oaks Business Park developer or successor(s) shall submit to the RMA – Planning Department~~ evidence of payment of the ~~specific development's pro-rata share of~~ fees listed below (fair share costs for cumulative impacts based on estimated 2010 project costs to adjusted annually on July 1 by the Engineering Record's Construction Cost Index) shall be submitted to the RMA - Planning Department.

FORA development impact fees.

City of Marina fair-share contributions for improvements at the following intersections (a per-trip equivalent payment can also satisfy this requirement):

- Fifth Avenue – California Avenue/Imjin Parkway (4.1% of $390,111 = $16,168)
- Third Avenue/Imjin Parkway (3.7% of $543,000 = $19,857)
- Second Avenue/Imjin Parkway (2.4% of $42,000 = $997)
- Abrams Drive/Imjin Parkway (4.3% of $1,304,596 = $55,574)
- Imjin Parkway/southbound State Route 1 ramp (3.5% of $488,582 = $17,299)
- Imjin Parkway/northbound State Route 1 ramp (3.0% of $488,582 = $14,830)

County of Monterey fair share costs for improvements at the following intersections:

- Inter-Garrison Road/Reservation Road (3.3% of $612,100 = $20,468)
- Engineer's Equipment Road/Whispering Oaks Way (82.2% of $300,000 = $248,749)
- Engineer's Equipment Road/Inter-Garrison Road (7.8% of $300,000 = $23,298)

City of Seaside fair share costs for improvements at the following intersections:

- General Jim Moore Boulevard/Light Fighter Drive (1.1% of $654,185 = $7.416)
- Second Avenue/Light Fighter Drive (0.9% of $18,000 = $159)
- First Avenue/Light Fighter Drive (1.1% of $102,600 = $1,141)

Mitigation Measure T-11 on page 3-31 is revised to note location and purpose.

T-11. In order to mitigate impacts resulting in unacceptable LOS at Phase 3 under the cumulative conditions, ~~The Whispering Oaks Business Park developer shall construct~~ the following improvements shall be constructed prior to acceptance of Phase 3 (lots 13-16) improvements at the intersection of Whispering Oaks Way and Inter-Garrison Road:

- Construct a southbound Whispering Oaks right turn lane;
- Construct an eastbound Inter-Garrison Road left turn lane;
- Construct a westbound Inter-Garrison Road right turn lane;
- Construct second eastbound and second westbound Inter-Garrison Road through lanes; and
- Construct a median left turn acceleration lane on Inter-Garrison Road.

The following changes are made to graphics and figures:

a) Figure 3 is revised to correct the location of the University of California land.

b) Figure 12 is revised to show wall locations.

c) New Figures 17a and 17b present grading sections for the MST site

d) The latest off-site drainage concept is presented.

The new and revised graphics are presented on the following pages.

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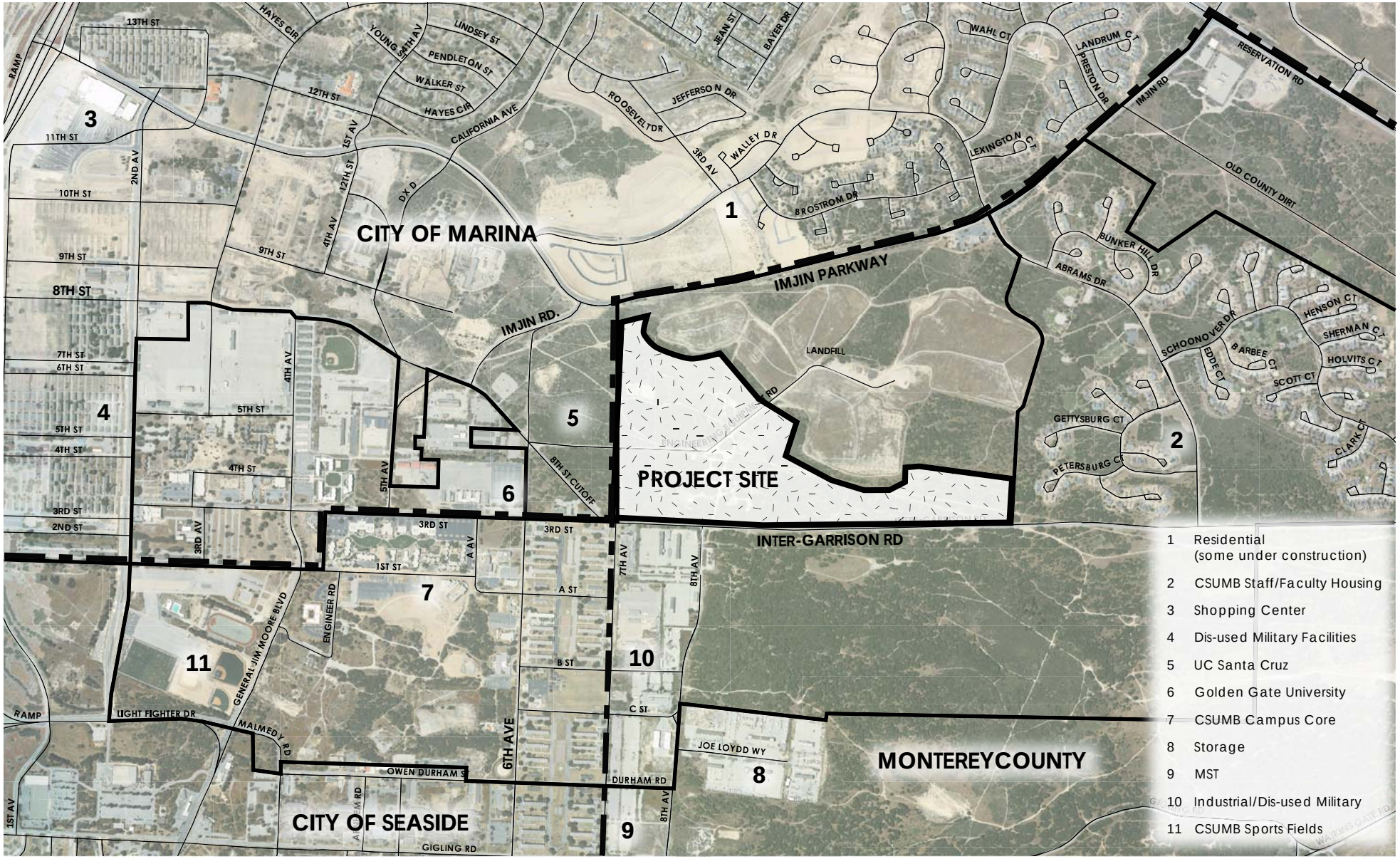

Source: EMC Planning Group 2010, Monterey County 2006, 2009, Orthophoto: Google Earth 2007, CSUMB 2007

Figure 3

Project Vicinity Existing Conditions

MST Whispering Oaks Business Park EIR

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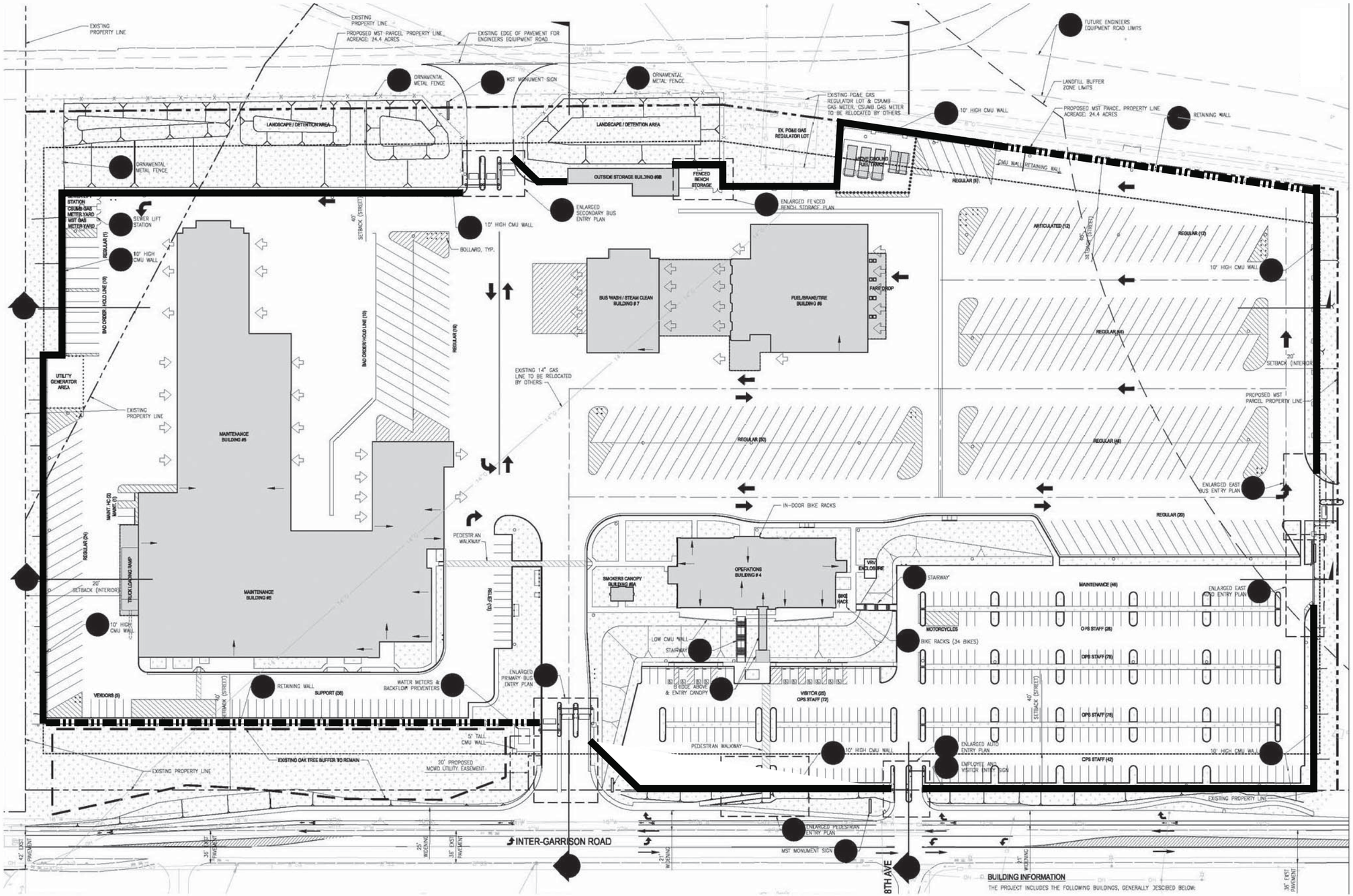

Not to scale

Open Iron Fence

Concrete Block Wall

Source: EMC Planning Group 2010, AECOM 2010

Revised Figure 12

MST Site Plan

MST Whispering Oaks Business Park EIR

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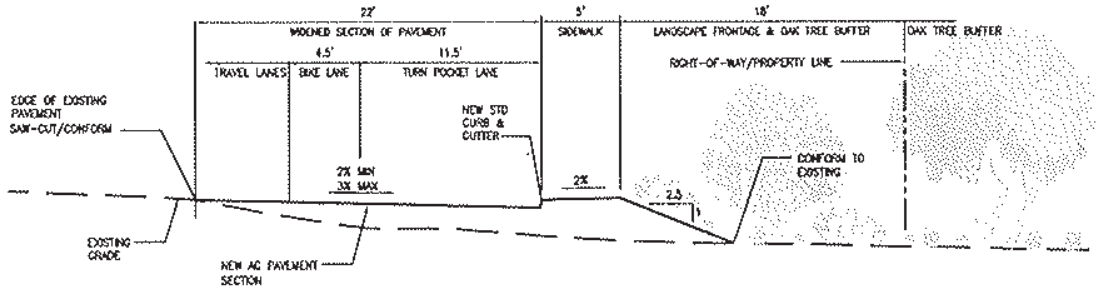
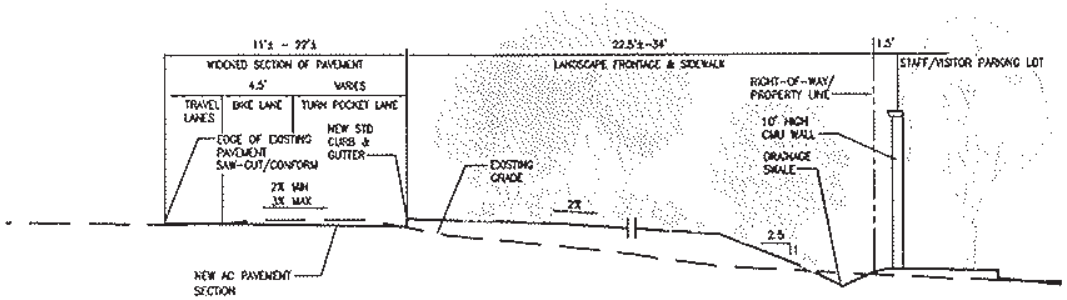
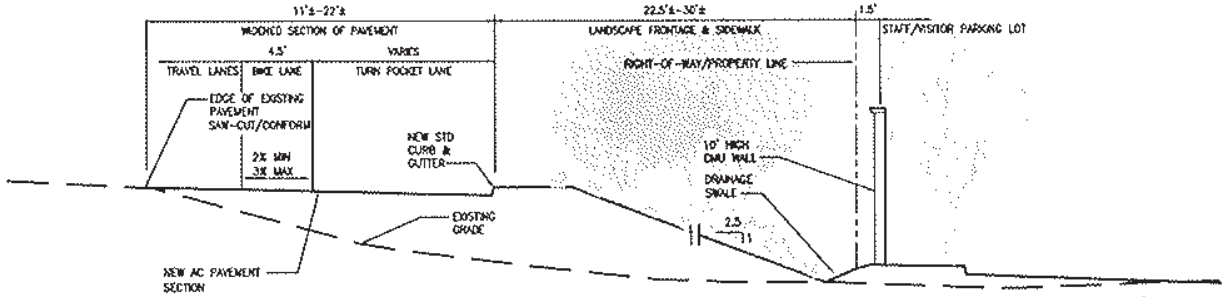


SECTION--A -- INTER-GARRISON ROAD FRONTAGE AT OAK TREE BUFFER AREA



SECTION--B INTER-GARRISON ROAD FRONTAGE AT PARKING AREA -- 1



SECTION--C INTER-GARRISON ROAD FRONTAGE AT PARKING AREA -- 2

Not to Scale

Source: AECOM 2010

New Figure 17a

MST Frontage Area Grading Sections

MST Whispering Oaks Business Park FEIR

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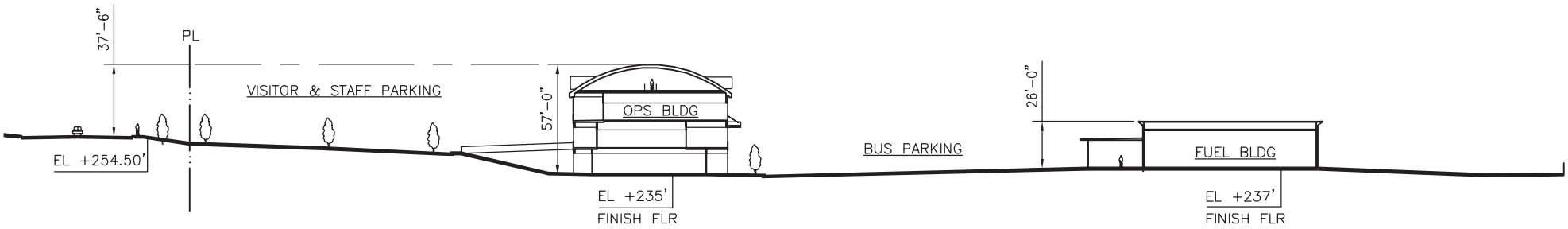
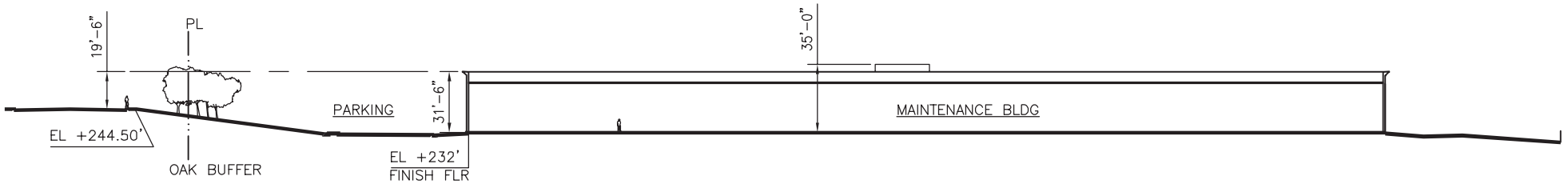


SITE SECTION B 4A-2



SITE SECTION C 4A-2

Not to Scale

Source: AECOM 2010

NewFigure 17b

MST Overall Site Grading Sections

MST Whispering Oaks Business Park FEIR

E M C

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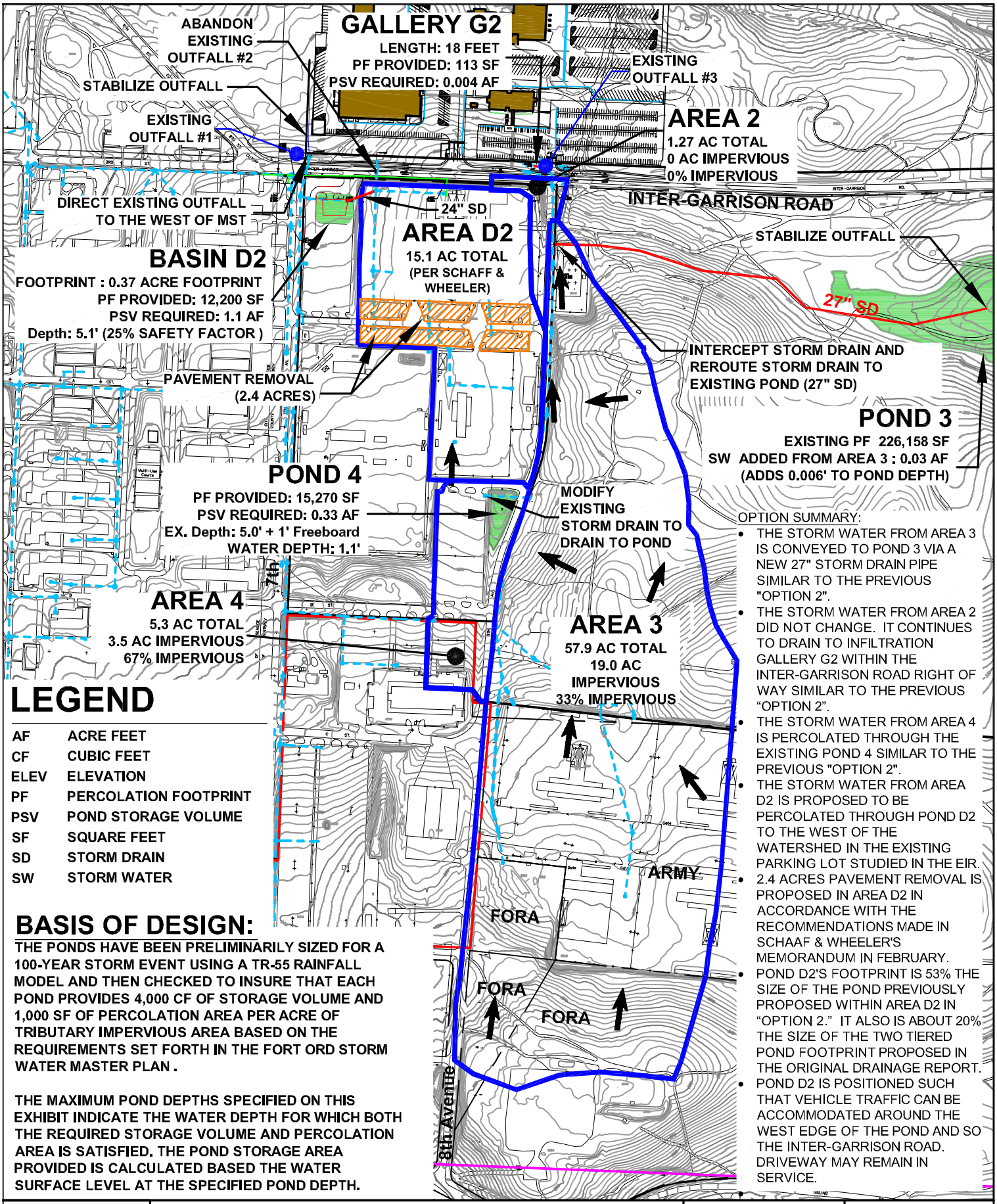

LEGEND

AF	ACRE FEET
CF	CUBIC FEET
ELEV	ELEVATION
PF	PERCOLATION FOOTPRINT
PSV	POND STORAGE VOLUME
SF	SQUARE FEET
SD	STORM DRAIN
SW	STORM WATER

BASIS OF DESIGN:

THE PONDS HAVE BEEN PRELIMINARILY SIZED FOR A 100-YEAR STORM EVENT USING A TR-55 RAINFALL MODEL AND THEN CHECKED TO INSURE THAT EACH POND PROVIDES 4,000 CF OF STORAGE VOLUME AND 1,000 SF OF PERCOLATION AREA PER ACRE OF TRIBUTARY IMPERVIOUS AREA BASED ON THE REQUIREMENTS SET FORTH IN THE FORT ORD STORM WATER MASTER PLAN .

THE MAXIMUM POND DEPTHS SPECIFIED ON THIS EXHIBIT INDICATE THE WATER DEPTH FOR WHICH BOTH THE REQUIRED STORAGE VOLUME AND PERCOLATION AREA IS SATISFIED. THE POND STORAGE AREA PROVIDED IS CALCULATED BASED THE WATER SURFACE LEVEL AT THE SPECIFIED POND DEPTH.

OPTION SUMMARY:

- THE STORM WATER FROM AREA 3 IS CONVEYED TO POND 3 VIA A NEW 27" STORM DRAIN PIPE SIMILAR TO THE PREVIOUS "OPTION 2".
- THE STORM WATER FROM AREA 2 DID NOT CHANGE. IT CONTINUES TO DRAIN TO INFILTRATION GALLERY G2 WITHIN THE INTER-GARRISON ROAD RIGHT OF WAY SIMILAR TO THE PREVIOUS "OPTION 2".
- THE STORM WATER FROM AREA 4 IS PERCOLATED THROUGH THE EXISTING POND 4 SIMILAR TO THE PREVIOUS "OPTION 2".
- THE STORM WATER FROM AREA D2 IS PROPOSED TO BE PERCOLATED THROUGH POND D2 TO THE WEST OF THE WATERSHED IN THE EXISTING PARKING LOT STUDIED IN THE EIR.
- 2.4 ACRES PAVEMENT REMOVAL IS PROPOSED IN AREA D2 IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN SCHAAF & WHEELER'S MEMORANDUM IN FEBRUARY.
- POND D2'S FOOTPRINT IS 53% THE SIZE OF THE POND PREVIOUSLY PROPOSED WITHIN AREA D2 IN "OPTION 2." IT ALSO IS ABOUT 20% THE SIZE OF THE TWO TIERED POND FOOTPRINT PROPOSED IN THE ORIGINAL DRAINAGE REPORT.
- POND D2 IS POSITIONED SUCH THAT VEHICLE TRAFFIC CAN BE ACCOMMODATED AROUND THE WEST EDGE OF THE POND AND SO THE INTER-GARRISON ROAD. DRIVEWAY MAY REMAIN IN SERVICE.

WHISPERING OAKS

MONTEREY CALIFORNIA

OPTION A

DRAWING PATH: T:\Whispering Oaks\TM\1968.04-Offsite-Cost-Est-Options.dwg

DATE:	June 4, 2010
SCALE:	1"=500'
DRAWN:	RMT
CHECKED:	RPW
PROJECT No.:	1968.04

SHEET 1 OF 1

WHITSON ENGINEERS - 9699 BLUE LARKSPUR LANE, SUITE 105 - MONTEREY, CALIFORNIA 93940 - TEL (831) 649-5225 - FAX (831)373-5065 - WWW.WHITSONENGINEERS.COM

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The following revised and/or additional information is added to the EIR and presented on the following pages:

- Appendix J (Revised), Final Water Supply Assessment.
- Appendix L, Additional Biological Reports. This appendix includes the following new biological resources reports:
    - a survey report regarding seaside bird's beak prepared by Denise Duffy and Associates;
    - a memorandum regarding seaside bird's beak prepared by Zander Associates; and
    - a memorandum and map regarding California tiger salamander by Zander Associates.
- Appendix M, Oak Tree Sequestration Report
- Appendix N, Additional Traffic Information

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APPENDIX J (REVISED)

FINAL WATER SUPPLY ASSESSMENT

County of Monterey

WATER SUPPLY ASSESSMENT
PROVISIONS OF SB 610

MONTEREY-SALINAS TRANSIT –
WHISPERING OAKS BUSINESS PARK PROJECT

FINAL

November 2010

7580 NORTH INGRAM AVENUE • SUITE 112 • FRESNO, CALIFORNIA 93711 • (559) 436-6616 • FAX (559) 436-1191

County of Monterey

WATER SUPPLY ASSESSMENT
PROVIONS OF SB 610

MONTEREY-SALINAS TRANSIT –
WHISPERING OAKS BUSINESS PARK PROJECT

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WATER SUPPLY ASSESSMENT - PROVISIONS OF SB 610 MONTEREY-SALINAS TRANSIT – WHISPERING OAKS BUSINESS PARK PROJECT

1.0 PURPOSE

This Water Supply Assessment (WSA) was prepared to assist the County of Monterey (County) and the Marina Coast Water District (District) in satisfying the requirements of Senate Bill 610 (SB 610). This WSA is specific to the Monterey-Salinas Transit – Whispering Oaks Business Park Project (Project) and addresses the potential impact of the Project's water demands on the District-wide water supply conditions. This WSA includes the following:

- Information on the District's water supplies consistent with Water Code Sections 10620 et. seq. (the Urban Water Management Planning Act) and 10910 et. seq. (Water Supply Planning to Support Existing and Planned Future Users).
- Information on current water demands and projected water demands, based on the District's adopted Urban Water Management Plan and specific project proposals currently under review by the District.
- Comparison of water supplies and water demands for normal, single dry, and multiple dry years.
- Information to make the sufficiency findings required by the California Environment Quality Act (CEQA).

2.0 ASSOCIATED AGENCIES

The County has commissioned the preparation of this WSA in its role as the lead agency under CEQA for the Project. The project site is owned by the Redevelopment Agency of the County of Monterey, who is the proponent of this project. Other key agencies associated with this WSA are listed below:

- Marina Coast Water District (District)
- Fort Ord Reuse Authority (FORA)
- City of Marina
- Monterey County Water Resources Agency (MCWRA)
- Monterey Peninsula Water Management District (MPWMD)

3.0 APPROVAL PROCESS

The County and District Board may approve the WSA, after hearing testimony and evidence presented at a hearing. Upon conclusion of the hearing, the County and District Board may determine whether the projected water supplies will be sufficient to satisfy the proposed project demands. The County Board must include the WSA findings in the environmental documents prepared for the designated project pursuant to CEQA requirements.

4.0 SENATE BILL 610

Senate Bill 610 (SB 610) became effective January 1, 2002. SB 610 amended the California Public Resources Code to incorporate Water Code findings within the CEQA process for certain types of projects. SB 610 amended the Water Code to broaden the types of information included in Urban Water Management Plans (Water Code Section 10620 et. seq.) and to add Water Code part 2.10 Water Supply Planning to Support Existing and Planned Future Uses (Section 10910 et. seq.).

Water Code part 2.10 clarifies the roles and responsibilities of the Lead Agency under CEQA and the "water supplier" with respect to describing current and future supplies compared to current and future demands.

Part 2.10 also defines the "Projects" that are subject to a WSA and the Lead Agency's responsibilities related to the WSA. A WSA is required for the following:

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 people or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 people or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 people, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- A mixed-use development that includes one or more of the uses described above.
- A development that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project.
- For Lead Agencies with fewer than 5,000 water service connections, any new development that will increase the number of water service connections in the service area by ten percent or more.

Under Part 2.10, the Lead Agency must identify the affected water supplier and research whether the new demands are included in the supplier's Urban Water Management Plan (UWMP). If the UWMP includes the demands then it may be incorporated by reference. If not the Lead Agency must prepare the WSA (Water Code Section 10912(c)).

5.0 SENATE BILL 221

SB 221 is intended as a "fail safe" mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs when it should – before construction begins. Not every project that is subject to the requirements of SB 610 would also require the mandatory water verification of SB 221 (e.g. if there is no subdivision map approval).

Government Code section 65867.5 states that SB 221 is required for projects that contain a development agreement that includes a subdivision, as defined in section 66473.7. A Subdivision is defined as proposed residential development of more than 500 dwelling units, except that for a public water system that has fewer than 5,000 service connections, "subdivision" means any proposed residential development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections.

6.0 URBAN WATER MANAGEMENT PLANNING ACT

The Urban Water Management Planning Act (Act) requires the supplier to document water supplies available during normal, single dry, and multiple dry water years during a 20-year projection. The Act requires that the projected supplies and demands be presented in 5-year increments for the 20-year projection.

7.0 2005 URBAN WATER MANAGEMENT PLAN

The 2005 UWMP, which was prepared by the District after the adoption of SB 610, includes information required by SB 610, including the District's groundwater, recycled water, and desalination supplies. The 2005 UWMP was adopted by the District on December 14th, 2005.

The 2005 UWMP includes the following elements: existing and future water demand projections, existing and future water supply facilities, existing and future demand versus supply comparison, groundwater basin conditions, water supply reliability, water demand management measures, water recycling, and water shortage contingency plan.

In order to comply with SB 610 requirements, the 2005 UWMP includes the following:

- A description of the water service area including climate, current and projected population, and other demographic factors that affect water management planning. Demographic data is presented in 5-year increments for 20 years.
- A description and quantification of the existing and planned water sources.
- A description of the reliability and vulnerability of the water supply to seasonable or climatic shortages in the average water year, single dry water year, and multiple dry water year. Contingency plans including demand management and conjunctive use potential are discussed.
- A description of current and projected water demands among all user classes in 5-year increments.
- A description of all water supply projects and water supply programs that may be undertaken by the District, the County, and the Regional Water Reclamation Project to meet the total projected water demands.
- A description of demand management measures employed and scheduled to be employed.
- A description of any groundwater basin (or basins) from which the District pumps groundwater.
- Information that characterizes the condition of the groundwater basin and a description of the measures currently being taken by the District to minimize any potential for overdraft conditions.
- A detailed description and analysis of the amount and location of groundwater pumped by the District for the past five years from any groundwater basin from which the proposed project will be supplied.
- An analysis of the location, amount, and sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed projects.

A copy of the District's 2005 UWMP can be obtained by contacting District staff or by viewing the document on the District's web site at www.mcwd.org.

8.0 WATER SYSTEM MASTER PLAN

The District's Water System Master Plan (WSMP), which was completed in November 2006, presents existing water demands, summarizes the criteria developed in the City's 2005 UWMP for projecting water demands through the year 2025, identifies existing and future water system capacity deficiencies, recommends projects to correct these deficiencies, and identifies major water facilities for servicing future developments. The WSMP also addresses the supply facilities, water augmentation projects, and includes a

capital improvement program. This WSA extracts relevant information presented in the District's WSMP.

9.0 PROJECT DESCRIPTION

The 115.54-acre Project is located on the former Fort Ord, north of Inter-Garrison Road, east of 7th Avenue and east of the city limits of Marina in unincorporated Monterey County (Figure 1). The project site is composed of two Assessor's parcels, APN 031-101-056 and 031-031-101. The Project site is undeveloped, and relatively undisturbed. Existing surrounding land uses include the inactive Fort Ord landfill to the North; coast live oak woodland and vacant former Fort Ord buildings to the south; a residential neighborhood to the east; and vacant land, the 8th Street Cutoff, and the Golden Gate University satellite campus to the west.

Three agencies have developed land use designations for the Project site. For example, development within the former Fort Ord is subject to the Fort Ord Reuse Plan, which is administered by the Fort Ord Reuse Authority (FORA). FORA is the public agency created to manage the conversion of the former Fort Ord Army Base to civilian use. The Fort Ord Reuse Plan land use designation for the Project site is "Planned Development Mixed Use District" and "Habitat Management" (Figure 2). The Monterey County zoning designation for the project site (and surrounding areas within the unincorporated County) is Public and Quasi –Public. The Project site is also within the City of Marina sphere of influence. The City of Marina General Plan designates the Project site as Parks and Recreation. The Project site is not within the Marina city limits; therefore, it does not have a City of Marina land use designation.

The Whispering Oaks Business Park Draft General Development Plan (GDP), modified September 21, 2010, summarizes the allowable uses for development occurring within the Project site (Appendix A). The allowable uses include sales, service and limited manufacturing of "green" products and related materials, professional offices, research and development, office condominiums, shops for tradesman and artisans, a caretaker unit for the purpose of providing on-site security, photography/art studios, retail businesses of light commercial/industrial character, convenience retail, restaurants, and vocational training facilities. Therefore, the Project site can be described as "mixed use," and could consist of any number of land use designations, such as Retail, Restaurant, Office/R&D, Other Commercial, Light Industrial, Government, or Institutional (Figure 3). It is expected that the majority of the development will consist of Office/R&D.

As shown on Figure 4, The proposed Project includes the creation of 20 parcels, including a 24.37 acre lot (Lot 1) for the Monterey-Salinas Transit (MST) Administrative and Maintenance Facility, 15 additional lots (Lots 2-16) for the Whispering Oaks Business Park (24.44 acres total), two open space Parcels (57.62 acres total), one parcel for a detention

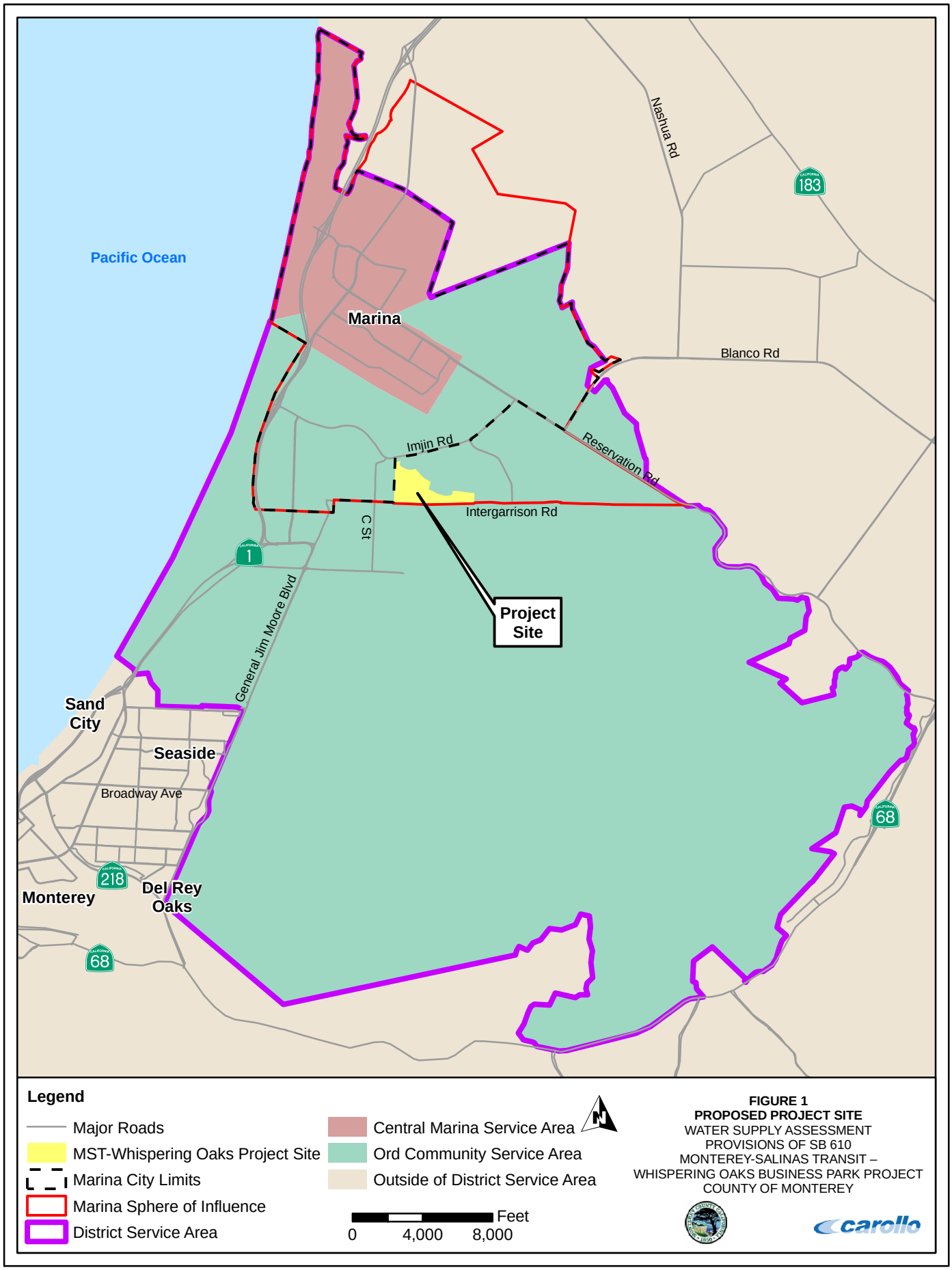
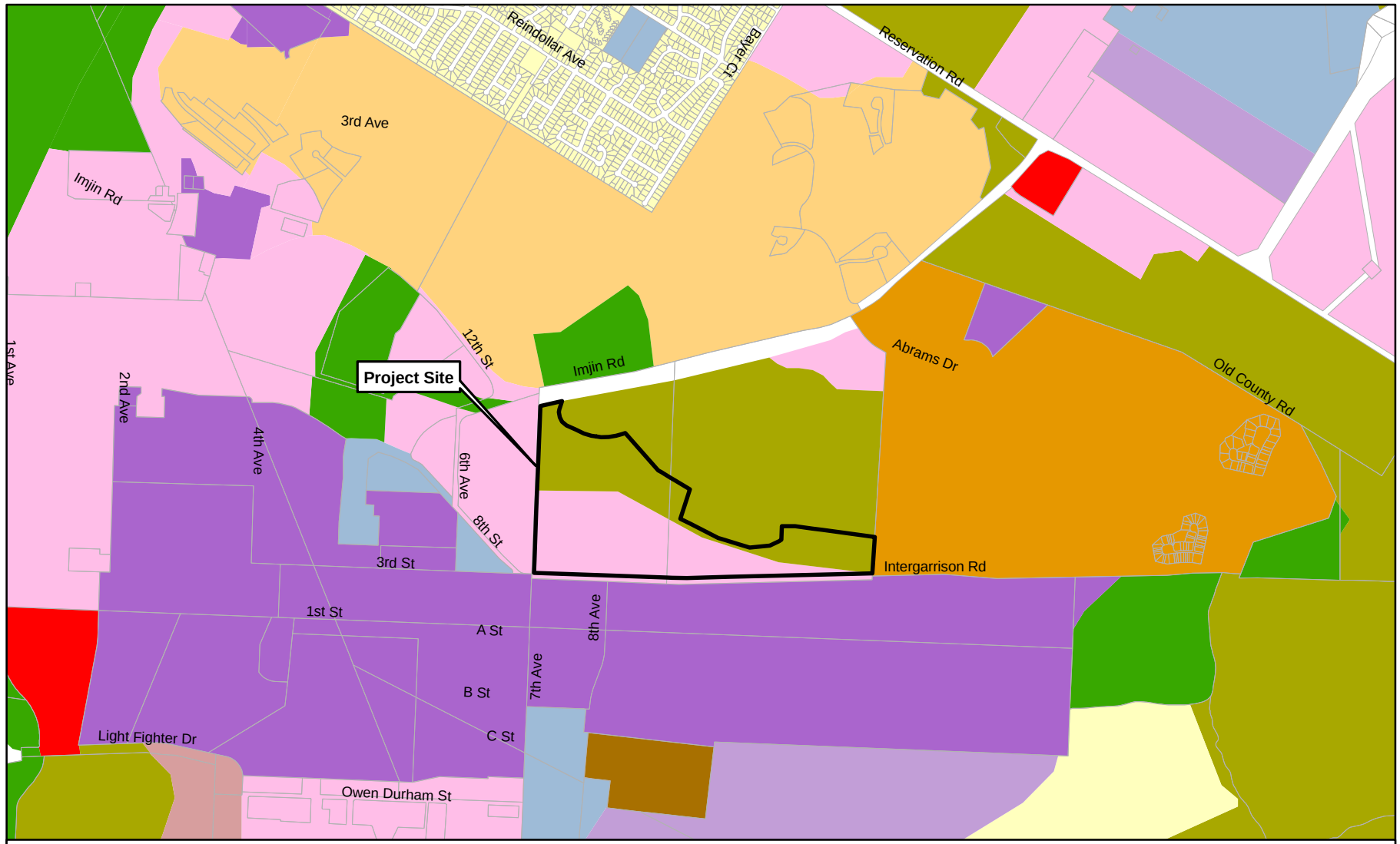


FIGURE 1
PROPOSED PROJECT SITE
WATER SUPPLY ASSESSMENT
PROVISIONS OF SB 610
MONTEREY-SALINAS TRANSIT –
WHISPERING OAKS BUSINESS PARK PROJECT
COUNTY OF MONTEREY

carollo



Legend

- MST-Whispering Oaks Project Site

Fort Ord Reuse Plan Land Use

- SFD Low Density Residential
- SFD Medium Density Residential
- Planned Development Mixed Use District
- Business Park/Light Industrial Office/R & D
- Neighborhood Retail
- Regional Retail
- Open Space/Recreation
- Habitat Management
- School/University
- University Medium Density Residential
- Public Facility/Institutional
- Military Enclave
- Parcels

0 1,000 2,000 Feet

FIGURE 2
FORT ORD REUSE PLAN
LAND USE DESIGNATION
WATER SUPPLY ASSESSMENT
PROVISIONS OF SB 610
MONTEREY-SALINAS TRANSIT –
WHISPERING OAKS BUSINESS PARK PROJECT
COUNTY OF MONTEREY

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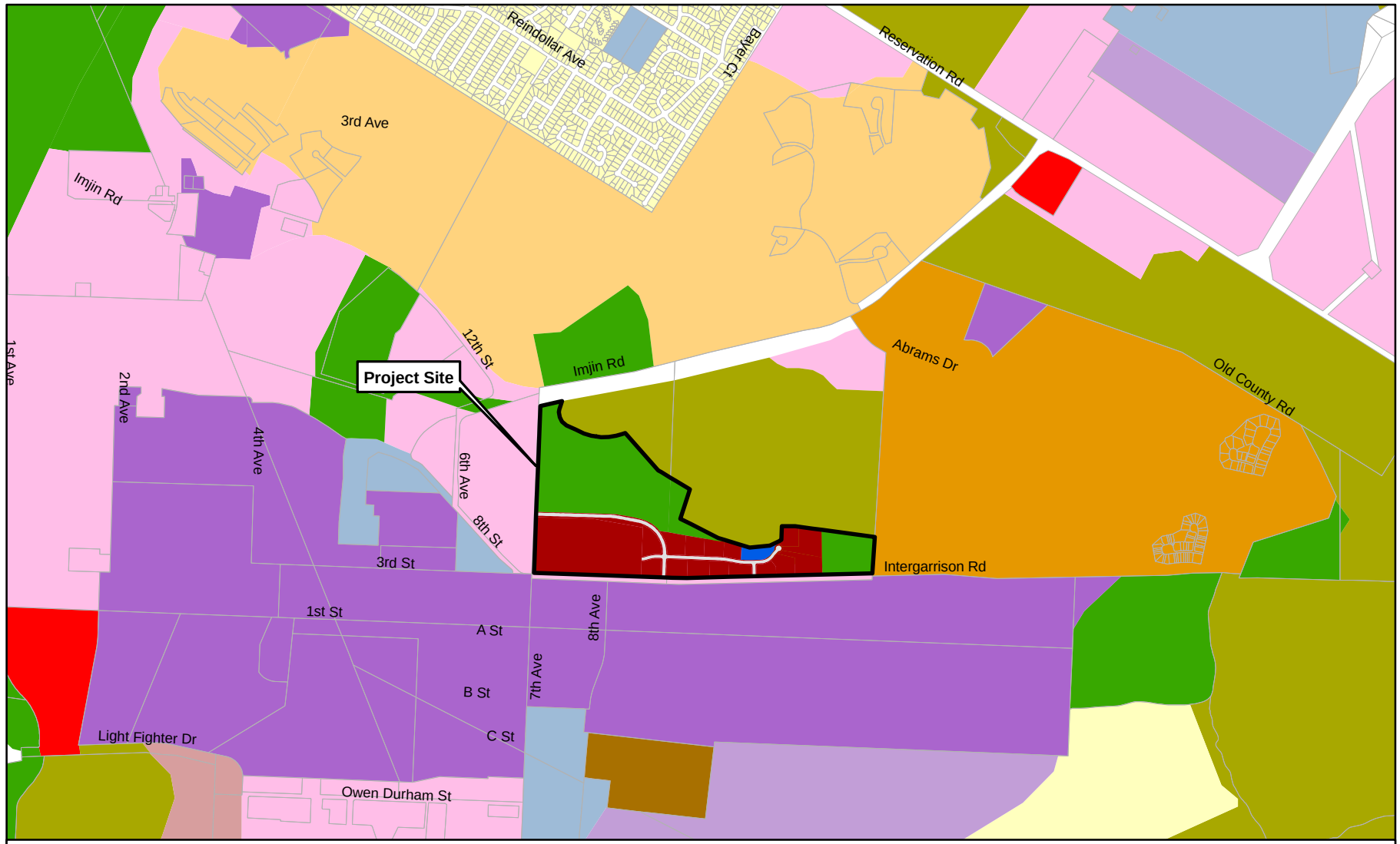

FIGURE 3
PROPOSED PROJECT LAND USE
WATER SUPPLY ASSESSMENT
PROVISIONS OF SB 610
MONTEREY-SALINAS TRANSIT –
WHISPERING OAKS BUSINESS PARK PROJECT
COUNTY OF MONTEREY

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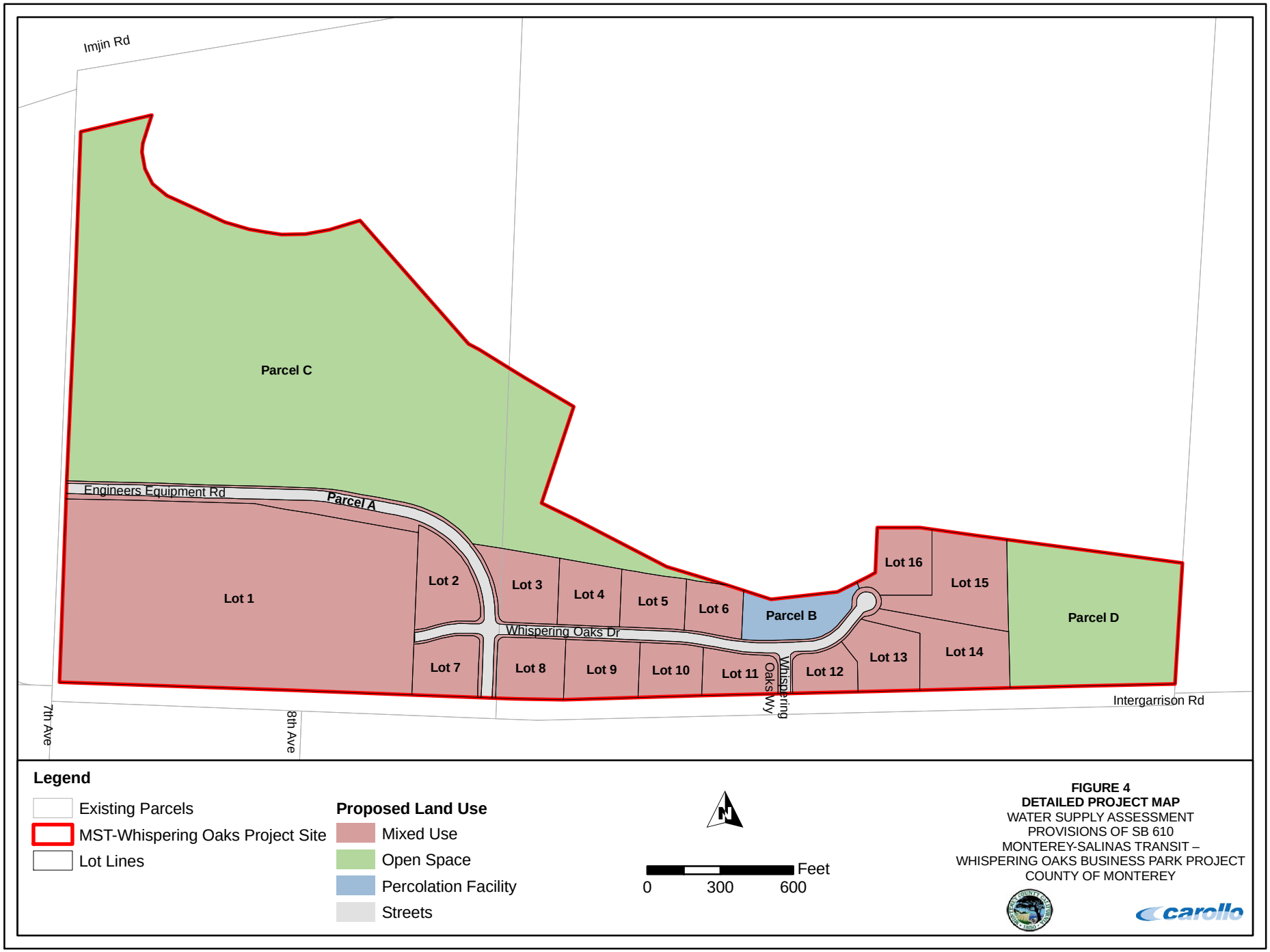


FIGURE 4
DETAILED PROJECT MAP
WATER SUPPLY ASSESSMENT
PROVISIONS OF SB 610
MONTEREY-SALINAS TRANSIT –
WHISPERING OAKS BUSINESS PARK PROJECT
COUNTY OF MONTEREY

basin (1.71 acres), and one parcel for private streets (7.39 acres) for a total of 115.53 acres.

10.0 PROJECT WATER REQUIREMENTS

Under Water Code Part 2.10, the Lead Agency must identify the affected water supplier and research whether the new demands are included in the supplier's UWMP. If the UWMP includes the demands, then it may be incorporated by reference.

The Project site is located within the District's service area as identified in the 2005 UWMP. The projected water demands in the 2005 UWMP were based on assumptions documented within the report. The water demands presented in the UWMP were calculated by multiplying water demand coefficients, expressed in acre-feet per year (AFY), and land-use area expressed in acres. The UWMP water demand coefficients for different land uses are shown in Table 1. The Project site can best be described as "mixed use," and would utilize demand coefficients ranging from 0.000135 to 0.00021 AFY per building square foot (sf), based on the water demand coefficients presented in the UWMP.

Table 1 Water Demand Coefficients Applied in the UWMP
Water Supply Assessment - Provisions of SB 610
Monterey-Salinas Transit – Whispering Oaks Business Park Project
County of Monterey

Land Use	Demand Coefficient (AFY)
Residential	
Single Family Residential - <5 du/acre	0.5
Single Family Residential – 5-8 du/acre	0.33
Residential – 8-15 du/acre	0.25
Multi Family >15 du/acre	0.25
Commercial and Industrial	
Hotel/Motel and Timeshare Units	0.17
Retail	0.00021/sf
Restaurant (at 9 sf/seat * .7 gsf)	0.029/seat
Office/R&D	0.000135/sf
Other Commercial	0.0003/sf
Light Industrial	0.00015/sf
Public/Quasi-Public	
Governmental (corporation yard 0.25 af/acre)	0.0003/sf
Institutional	0.0003/sf
Schools (K-12)	0.0003/sf

Table 1	**Water Demand Coefficients Applied in the UWMP** ***Water Supply Assessment - Provisions of SB 610*** ***Monterey-Salinas Transit – Whispering Oaks Business Park Project*** **County of Monterey**

Land Use	Demand Coefficient (AFY)
Higher Education	0.0003/sf
Irrigation	
Improved Landscaping	2.1/acre
Turf	2.5/acre

Notes:
(1) Source: Marina Coast Water District 2005 Urban Water Management Plan, Byron Buck & Associates, December 2005.

An average water demand coefficient was developed for the proposed Project assuming that the Project would consist of roughly 20-percent Retail uses, 50-percent Office/R&D uses, and 30% Light Industrial uses, as detailed in Table 2. Table 3 provides a breakdown of land area by parcel for the Project.

Table 2	**Project Water Demand Coefficient** ***Water Supply Assessment - Provisions of SB 610*** ***Monterey-Salinas Transit – Whispering Oaks Business Park Project*** **County of Monterey**

Land Use	Demand Coefficient (AFY per SF)	Assumed Land Use (%)	Weighted Demand Coefficient (AFY per SF)
Retail	0.00021	20%	0.000042
Office/R&D	0.000135	50%	0.0000675
Light Industrial	0.00015	30%	0.000045
Total	**-**	**100%**	**0.0001545**

In addition, it was assumed that each parcel would consist of roughly 10-percent landscaped areas. The demand coefficient for landscaped areas was assumed to be 2.1 AFY per acre, consistent with the UWMP demand coefficient for improved landscaping. The demand coefficients for the open space and other land use designations are 0 AFY. Table 4 provides a detailed estimate of the Project water demands. Water demand estimates for the MST area (Lot 1) are based on water demand estimates calculated in Appendix B.

As shown in Table 4, the calculated demand for the proposed project is 92.72 AFY.

Table 3 **Project Breakdown by Proposed Land Use Designation**
Water Supply Assessment - Provisions of SB 610
Monterey-Salinas Transit – Whispering Oaks Business Park Project
County of Monterey

Land Use	Total Lot Area (Square Feet)	Total Building Area (Square Feet)
Lot 1	1,061,557	162,425
Lot 2	80,586	33,040
Lot 3	80,150	32,862
Lot 4	65,340	26,789
Lot 5	59,242	24,289
Lot 6	48,787	20,003
Lot 7	62,291	25,539
Lot 8	68,825	28,218
Lot 9	71,874	29,468
Lot 10	55,757	22,860
Lot 11	51,836	21,253
Lot 12	44,431	18,217
Lot 13	72,310	29,647
Lot 14	109,771	45,006
Lot 15	130,244	53,400
Lot 16	63,598	26,075
Subtotal	**2,126,599**	**599,092**
Open Space		
Parcel C	2,130,520	-
Parcel D	379,408	-
Subtotal	**2,509,928**	**-**
Other		
Roads (Parcel A)	321,908	-
Percolation Facility (Parcel B)	74,488	-
Subtotal	**396,396**	**-**
Total	**5,032,923**	**599,092**

Notes:
(1) Source: Vesting Tentative Map Whispering Oaks, Whitson Engineers, November 24, 2009.
(2) Total Building Area is estimated based on an average FAR of 0.33 to 0.50, with 0.41 being considered representative.

Table 4 Project Water Demand Estimates
Water Supply Assessment - Provisions of SB 610
Monterey-Salinas Transit – Whispering Oaks Business Park Project
County of Monterey

	Proposed Land Use Breakdown			Project Water Demand		
Land Use	**Total Lot Area[1] (Sq. Ft.)**	**Total Building Area[2] (Sq. Ft.)**	**Landscaped Area[3] (acres)**	**Building Demand[4] (AFY)**	**Landscape Demand[5] (AFY)**	**Total Demand (AFY)**
Mixed Use						
Lot 1[6]	1,061,557	162,425	2.78	14.28	5.84	20.12
Lot 2	80,586	33,040	0.19	5.10	0.39	5.49
Lot 3	80,150	32,862	0.18	5.08	0.39	5.46
Lot 4	65,340	26,789	0.15	4.14	0.32	4.45
Lot 5	59,242	24,289	0.14	3.75	0.29	4.04
Lot 6	48,787	20,003	0.11	3.09	0.24	3.33
Lot 7	62,291	25,539	0.14	3.95	0.30	4.25
Lot 8	68,825	28,218	0.16	4.36	0.33	4.69
Lot 9	71,874	29,468	0.17	4.55	0.35	4.90
Lot 10	55,757	22,860	0.13	3.53	0.27	3.80
Lot 11	51,836	21,253	0.12	3.28	0.25	3.53
Lot 12	44,431	18,217	0.10	2.81	0.21	3.03
Lot 13	72,310	29,647	0.17	4.58	0.35	4.93
Lot 14	109,771	45,006	0.25	6.95	0.53	7.48
Lot 15	130,244	53,400	0.30	8.25	0.63	8.88
Lot 16	63,598	26,075	0.15	4.03	0.31	4.34
Subtotal	**2,126,599**	**599,092**	**5.23**	**81.75**	**10.97**	**92.72**
Open Space						
Parcel C	2,130,520	-	-	-	-	-
Parcel D	379,408	-	-	-	-	-
Subtotal	**2,509,928**	**-**	**-**	**-**	**-**	**-**
Other						
Roads (Parcel A)	321,908	-	-	-	-	-
Percolation Facility (Parcel B)	74,488	-	-	-	-	-
Subtotal	**396,396**	**-**	**-**	**-**	**-**	**-**
Total	**5,032,923**	**599,092**	**5.23**	**81.75**	**10.97**	**92.72**

Notes:

(1) Source: Vesting Tentative Map Whispering Oaks, Whitson Engineers, November 24, 2009.

(2) Total Building Area is estimated based on an average FAR of 0.33 to 0.50, with 0.41 being considered representative.

(3) Landscaped areas were assumed to account for roughly 10-percent of the total lot area.

(4) Assumes an average WDF of 0.0001545 AFY/sf for Building Areas (see Table 4 for derivation).

(5) Assumes a WDF of 2.1 AFY/acre for Landscaped Areas for landscape (non-turf) uses per the MCWD UWMP.

(6) Water demand estimates the MST parcel are based on the water demand estimates provided in Appendix B.

The 2005 UWMP provides water demand projections to the year 2025. However, the Project demands were not accounted for in the 2005 UWMP. Table 5 adjusts the 2005 UWMP demands to include the recommended average water demand for the Project.

Table 5 2005 UWMP Demand Projections
Water Supply Assessment - Provisions of SB 610
Monterey-Salinas Transit – Whispering Oaks Business Park Project
County of Monterey

Jurisdiction	2010 (AFY)	2015 (AFY)	2020 (AFY)	2025 (AFY)
Former Fort Ord [2]	7,810	9,602	11,286	11,591
Marina Sphere[3]	0	0	0	0
Marina Area[4]	3,046	3,214	3,797	3,812
UWMP Total	**10,856**	**12,816**	**15,083**	**15,403**
Additional Demands for Project				
Marina Sphere[3]	93	93	93	93
New Demand Total	**10,949**	**12,909**	**15,176**	**15,496**

Notes:
(1) Source: Marina Coast Water District Urban Water Management Plan, Byron Buck & Associates, December 2005.
(2) Former Fort Ord includes the following areas: California State University Monterey Bay (CSUMB); Del Rey Oak; City of Monterey; County of Monterey; Monterey Bay Education, Science, and Technology Center of the University of California, Santa Cruz (UCMBEST); City of Seaside; U.S. Army; California State Parks and Recreation; Marina Ord Community; Fort Ord Reuse Authority (FORA) Strategic Reserve; and an assumed line loss.
(3) Marina Sphere includes the Project area and is located in Monterey County, within the City of Marina Sphere of Influence.
(4) Marina Area consists of Armstrong Ranch, RMC Lonestar, and Marina – Central.

11.0 DISTRIBUTION SYSTEM

According to the District's WSMP, the District provides potable water service to its residential, commercial, industrial, and institutional customers within its service area. The service area includes the City of Marina and the former Fort Ord (Ord Community), as shown in Figure 1. Water service in the Ord Community is provided under agreement with the FORA.

The District's municipal water system extracts water from the underground aquifers via a series of groundwater wells distributed along the valley floor and supplies five major pressure zones. Water is then pumped up to service the higher pressure zones via booster stations. The District's water system facilities include six groundwater wells, eight potable water storage tanks, five booster stations, and over 280 miles of pressured pipes ranging

from 2 to 24-inches in diameter. Gates and pressure reducing valves are used to isolate or regulate flow between pressure zones.

Historically, the District has operated their distribution and supply facilities as two independent systems. One system served users in Central Marina. The second system served the Ord Community. In 2005, the District completed a project that connected the two systems, maintaining the ability to preserve a zero net balance of flows between the two systems through Supervisory Control and Automated Data Acquisition (SCADA) controls.

12.0 GROUNDWATER SUPPLY

This section and its subsections contain excerpts and summaries from the Districts 2005 UWMP and WSMP.

The District draws water from the Salinas Valley groundwater basin (managed by the Monterey County Water Resources Agency (MCWRA) through wells to supply water to its customers. While the District is also located above the Seaside groundwater basin, managed by the Monterey Peninsula Water Management District (MPWMD), it currently has no operational wells or plans for withdrawing from this basin. The water from the wells is pumped directly into the District's distribution system with no treatment except for disinfection by chlorination. Three of the wells, Well Nos. 10, 11, and 12, are deep aquifer (900-foot) wells located in the Marina water system and the other three wells, Well Nos. 29, 30, and 31, are located in the shallow (180-foot) and middle (400-foot) aquifers and serve the Ord water system. Table 6 presents a summary of District's wells.

Some wells are experiencing deteriorating water quality due to seawater intrusion, the presence of trichloroethylene (TCE), manganese, and elevated water temperatures. Seawater intrusion is due to the overdraft condition that currently exists in the Salinas Valley groundwater basin and has been steadily increasing inland. As of 2005, the plume of seawater intrusion (>500 mg/L of chloride) has extended east of Blanco Road in the 180-foot aquifer and east of Salinas Avenue in the 400-foot aquifer. The Central Marina wells (Wells 10, 11, and 12) are already within the seawater intrusion plume.

A TCE plume exists north of Reservation Road between the Marina Airport and the Central Marina boundary on Tallmon Street. TCE contamination is due to past Army activities on the former Fort Ord. TCE concentrations near Tallmon Street have measured 20 parts per billion (ppb) based on sampling completed in September 2005. The State of California drinking water standard is 5.0 ppb. The TCE contamination is located in the shallow 180-foot groundwater aquifer and so far has not spread to the 900-foot aquifer where the District's Central Marina wells are located. The well most likely to see TCE contamination first would be Well 12 but it is unlikely due to the clay layers separating the aquifers.

Table 6	Well Summary *Water Supply Assessment - Provisions of SB 610* *Monterey-Salinas Transit – Whispering Oaks Business Park Project* County of Monterey			
Well Number	Water System	Aquifer	Estimated Capacity[(1)] (AFY)[(2)]	Estimated Capacity[(1)] (gpm)[(3)]
10	Central Marina	180-foot	3,230	2,000
11	Central Marina	180-foot	2,180	1,350
12	Central Marina	180-foot	3,060	1,900
29	Ord Community	400-foot	2,420	1,500
30	Ord Community	400-foot	3,870	2,400
31	Ord Community	400-foot	3,870	2,400

Notes:
(1) Estimated well capacity based on well pump curve.
(2) AFY = Acre Feet per Year
(3) gpm = Gallons per Minute
(4) Source = District's Water System Master Plan, November 2006

The District performs wellhead sampling to detect the presence of potential contaminants in the groundwater. In addition, monitoring wells are maintained at strategic locations and sampling is performed to provide early warning of water quality issues that could jeopardize the District's wells. In order to prepare for the possible loss of one or more of the wells, the District is studying the feasibility of installing new wells. Possible options for new wells include establishing a new well field located east of the District's current service area and constructing new wells that would reach the deep aquifer. A detailed discussion of the water quality issues facing the District can be found in the 2005 Urban Water Management Plan. Individual systems for on-site generation of sodium hypochlorite are provided for each of the Central Marina wells to disinfect the groundwater. Disinfection facilities for the Ord Community wells are located near the Intermediate Reservoir.

12.1 GROUNDWATER BASIN

Potable water for the District's Marina and Ord Community service areas comes primarily from wells developed in the Salinas Valley groundwater basin. This groundwater basin underlies the Salinas Valley from San Ardo to the coast of Monterey Bay and is divided into five hydrologically linked subareas: Pressure, East Side, Forebay, Arroyo Seco and Upper Valley. The basin is further divided in the Pressure subarea by distinct aquifers, commonly referred to as the 180-foot, 400-foot and deep aquifer. Historically, the deep aquifer was thought to be geologically confined in the Marina area, meaning that groundwater did not move between the deep aquifer and the 400-foot and 180-foot aquifers. However, recent stratigraphic analyses have indicated that these aquifers are connected hydraulically, with

water from the 180-foot and 400-foot aquifers recharging the deep aquifer[1]. Additionally, the deep, or 900-foot, aquifer is in reality a series of aquifers, not all of which are hydraulically connected.

The Salinas Valley groundwater basin remains in an overdraft condition with seawater intrusion of about 9,000 AFY at its coastal margins. The District's groundwater withdrawals, including the Ord Community lands, are about 4,670 AFY, or less than 1.0 percent of total annual basin withdrawals of about 500,000 AFY. Other than the District, only a small number of wells tap the deep aquifer, some of which also draw from the middle aquifer. Prior to receiving recycled water for crop irrigation, there were agricultural lands in the Castroville area that pumped water from the deep aquifer. These agricultural wells are currently used to meet supplemental needs during peak summer demand periods and also part of the monitoring network overseen by the MCWRA. Delivery of recycled water to the Castroville area has contributed to a recent recovery in groundwater levels in this area (MCWRA, 2005).

As a result of basin-wide pumping, levels in some basin subareas (Pressure and East Side) have declined over time. The other three basin subareas – the Forebay, Arroyo Seco and Upper Valley – tend to recharge rapidly and recover historic groundwater levels each year.

In a healthy condition, Salinas Valley basin groundwater would move through the basin and into the Monterey Bay through subsurface freshwater outcrops. However, over time, the cumulative reductions of groundwater basin storage have contributed to a decrease in the amount of groundwater moving toward and into Monterey Bay. This imbalance is generally part of a definition of groundwater overdraft. The result has been a reversal of the seaward gradient. In its place the basin experiences a landward gradient of seawater (intrusion), where the seawater has contaminated coastal aquifers and wells. While historic groundwater pumping throughout the basin created the overdraft, only the basin's coastal areas adjacent or near to the Bay suffer from seawater intrusion.

12.1.1 Groundwater Basin Management

Two regional water management agencies have jurisdiction over groundwater production in the vicinity of the District. The MCWRA is responsible for regulation and supply of water from the Salinas Valley groundwater basin. The MPWMD is responsible for regulation and supply of water from the Seaside groundwater basin. These two basins are adjacent to each other under Ord Community lands. The District recognizes the jurisdiction of the two regional groundwater management entities, and so has not independently developed a groundwater management plan pursuant to Water Code § 10750.

Where groundwater basins are in or are projected to be in overdraft, the Water Code requires UWMPs to provide detailed descriptions of efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition. In the Salinas Valley

1 Deep Aquifer Investigation Study. WRIME, 2003

groundwater basin, an urban water supplier like the District that accounts for less than 1 percent of total basin pumping, cannot by itself eliminate or remedy a condition that results from basin-wide activities. The District works cooperatively with MCWRA and is taking actions to protect and preserve its ability and right to access groundwater, and to augment groundwater supplies with new sources of supply.

MCWRA is implementing a program to eliminate overdraft and intrusion known as the Salinas Valley Water Project (SVWP). The current program builds upon action taken in the 1940's when MCWRA's predecessor agency, the Monterey County Flood Control and Water Conservation District initiated development of the Nacimiento and San Antonio dams and reservoirs, which augmented water resources within the County. Since the formation of the District, it has cooperated with the MCWRA in further water resources development within the Salinas Valley.

In 1991 and 1992, MCWRA developed and approved the Monterey County Water Recycling Projects (MCWRP) to deliver recycled wastewater for irrigation use in the Castroville area, so that groundwater pumping could be reduced in that area. Recycled water is produced and used along the coast in lieu of pumping groundwater for agricultural irrigation. The projects have operated successfully for eight years, reducing basin overdraft and seawater intrusion.

MCWRA's Salinas Valley Water Project has been developed to address basin overdraft and seawater intrusion. The SVWP will increase reservoir releases to the Salinas River. Some of that water will recharge basin aquifers. Some of that water will be impounded and diverted by a new, in-stream rubber dam near the City of Marina, and be pumped out and added to the MCWRP water supply. In return for increasing the amount of water delivered through the MCWRP distribution system, the SVWP will require recipients of the additional water to reduce their coastal groundwater pumping. MCWRA modeling concludes that this component will eliminate basin overdraft and intrusion. A second phase of the SVWP, examined at a program level in the SVWP EIR, calls for an amount of that surface water to be made available to coastal urban water agencies in the future. MCWRA has recently secured new federal grants to begin analyzing this second phase.

The District is within MCWRA Zones 2/2A, and continues to pay for the first two components, and will help pay for the third (SVWP) component. The District has also agreed to limit its pumping from the Salinas Valley groundwater basin for land in the City of Marina area and outside the former Fort Ord Military Reservation until implementation of a mitigation plan is in place. This action should contribute to the elimination of basin overdraft and seawater intrusion in the most effective way possible.

As noted above, the potable water supply at the Ord Community is from the Pressure subarea of the Salinas groundwater basin. The southwestern portion of the Salinas basin underlies the northern and southeastern segments of the Ord Community. However, parts

of the Ord Community area's hydrogeologic relationship to the main groundwater basin have not yet been determined.

12.2 Groundwater Supply Available to the District

Both the Army and the District have agreements with MCWRA, which allows the District to participate in and benefit from MCWRA's regional basin management planning process. Under the terms of the agreements, Ord Community lands and the District's service area were annexed into MCWRA Zones 2 and 2A. The Army's agreement allows for a combined annual withdrawal of up to 5,200 AFY from the 180-foot and 400-foot aquifers, with an additional annual withdrawal of up to 1,400 AF from the deep aquifer, totaling 6,600 AFY, or about equal to the historical demand from Army uses at Fort Ord. This groundwater supply is allocated by FORA among the land use or land owning jurisdictions on the Ord Community as shown in Table 7. This table also indicates available groundwater supply to the District via its own agreement with MCWRA, which provides for a maximum withdrawal of 3,020 AFY, currently limited to uses in the City of Marina, outside the Ord Community. Additionally, two adjacent major private properties within the District's LAFCO sphere of influence, the Armstrong Ranch and the Lonestar property, have groundwater available for use on those properties as noted in Table 7.

Table 7 Groundwater Supplies Available to the District
Water Supply Assessment - Provisions of SB 610
Monterey-Salinas Transit – Whispering Oaks Business Park Project
County of Monterey

FORA Allocation – Groundwater Available to Ord Community	Annual Acre-feet Allotment or Supply
City of Marina[1]	1,325
City of Seaside[1]	1,012
CSU Monterey Bay	1,035
University of California MBEST	230
City of Del Rey Oaks[1]	242.5
City of Monterey[1]	65
Monterey County[1]	710
US Army	1,577
County/State Parks	45
City of Marina (Sphere)	10
FORA Strategic Reserve[2]	348.5
Rounded Subtotal	**6,600**

Table 7	Groundwater Supplies Available to the District *Water Supply Assessment - Provisions of SB 610* *Monterey-Salinas Transit – Whispering Oaks Business Park Project* County of Monterey	
FORA Allocation – Groundwater Available to Ord Community		**Annual Acre-feet Allotment or Supply**
City of Marina – Groundwater Available within the City of Marina Outside of Ord Community		
Marina Coast Water District by Agreement with MCWRA (groundwater)		3,020
Armstrong Ranch (groundwater)		920
Lonestar Property (groundwater)		500
	Total	**11,040**

Notes:
(1) Includes 150 AFY loan that was changed to allocation January 12, 2007.
(2) To be allocated to strategic reserve to cover project line loss.
(3) Source: FORA Board Report, January 12, 2007 and the District's 2005 UWMP.

13.0 ALLOCATION OF RECYCLED WATER

Recycled water is a component of the FORA 1997 Base Reuse Plan assumptions and is essential to completing planned developments on the former installation. Allocations determined through a series of working group meeting are shown on Table 8. These allocations were prioritized to accommodate individual jurisdiction needs under resource restraints, which were capped at 1,427 AFY of recycled water.

14.0 OTHER WATER SUPPLIES

According to the Districts web site, the District's desalination treatment plant supplements and diversifies the District's water supply sources. The plant was constructed in 1996 and placed in operation in January 1997. At full capacity it can produce 300,000 gallons per day of potable water.

In 1997-1998, the District completed a one-year study comparing water quality of the ocean water and intake well groundwater, seasonal groundwater flow and time of travel for microbial contaminants. The California Department of Public Health evaluated the results and concluded the desalination plant seawater intake well located at Marina State Beach is groundwater not under the direct influence of surface water.

Table 8	Allocation of Recycled Water *Water Supply Assessment - Provisions of SB 610* *Monterey-Salinas Transit – Whispering Oaks Business Park Project* County of Monterey
Jurisdiction	**Allocation of Recycled Water (AFY)**
CSU Monterey Bay	87
University of California MBEST	60
Monterey County	134
City of Del Rey Oaks	280
City of Seaside	453
City of Marina	345
Subtotal (Amount allocated to Fort Ord jurisdictions)	**1,359**
Line Loss	68
Former Fort Ord Total	**1,427**

Notes:
(1) Source: FORA Board Report, May 11, 2007.

With the recent rise in energy costs and the fact that the additional water supply is currently not needed, the desalination plant is not being operated. However, the District maintains state and federal water quality monitoring requirements for the seawater intake well.

The following is a list of other water supplies available to the District:

- MCWD Desalination Plant (Temporarily idle) - 336 AFY

15.0 WATER SUPPLY RELIABILITY

There are two aspects of supply reliability that can be considered. The first relates to immediate service needs and is primarily a function of the availability and adequacy of the supply facilities. The second aspect is climate-related, and involves the availability of water during mild or severe drought periods. This section considers the District's water supply reliability during three water scenarios: normal water year, single dry water year, and multiple dry water years. These scenarios are defined as follows:

- Normal Year: The normal year is a year in the historical sequence that most closely represents median runoff levels and patterns. The supply quantities for this condition are derived from historical average yields.
- Single Dry Year: This is defined as the year with the minimum useable supply. The supply quantities for this condition are derived from the minimum historical annual yield.

- Multiple Dry Years: This is defined as the three consecutive years with the minimum useable supply. Water systems are more vulnerable to these droughts of long duration, because they deplete water storage reserves in local and state reservoirs and in groundwater basins. The supply quantities for this condition are derived from the minimum of historical three-year running average yields.

Such analysis is most clearly relevant to water systems that are supplied by surface water. Since the bulk of the District's supply is groundwater and the remainder is from desalinated supply and recycled water, short and medium-term hydrologic events over a period of less than five years usually have little bearing on water availability. Groundwater systems tend to have large recharge areas.

The Salinas Valley groundwater basin is aided by two large storage reservoirs, Nacimiento and San Antonio, providing about 700,000 acre-feet of storage. These reservoirs regulate surface water inflow to the basin by shifting winter flows into spring and summer releases for consumptive use, which also allows for increased basin recharge.

The Salinas Valley Water Project is expected to increase the average level of groundwater storage, moving the basin from declining storage to a net increase in storage of about 6,000 AF annually. Provided groundwater is protected from contamination and long-term safe yields in the basin are respected, water is available annually even accounting for short-term droughts. This is due to the large storage volume of the basin that can be utilized to offset annual variations in surface runoff. Therefore, the District's groundwater supply is fully available in annual average, single dry year and multiple dry years.

16.0 SUPPLY AND DEMAND COMPARISON

As shown on Table 9, Monterey County currently has a FORA allocation of 720 AFY and a recycled water allocation of 134 AFY for a combined allocation of 854 AFY. The January 12, 2007 FORA Board Report lists existing Monterey County uses and assignments at 527.5 AFY. This leaves an allocation availability of 326.5 AFY. As state in Section 8 of this report, the total Project demands are estimated at 92.7 AFY. Based on this comparison, the District should be able to provide adequate supply to meet the demands associated with the Project under existing condition and existing FORA water allocations.

The District's current groundwater wells have sufficient capacity to accommodate the increase in demand associated with the Project. To meet full build-out of the District as described in the UWMP, the District is currently investigating additional water supply sources. Such facilities are described in the District's WMP. The Project's demands are consistent as a component of the County and Marina Sphere/County FORA demands within an overall water balance prescribed for the Salinas Basin, and FORA jurisdiction allocation criteria can be met for this Project. However, the 2005 UWMP states that there are longstanding concerns that localized groundwater withdrawals could, over the long term, exceed the localized capacity of the groundwater basin and lead to further sea water

intrusion and loss of potable supply at the District's wells. The District and all jurisdictions represented under the FORA have recognized the need to invest in the District's water supply system and the need to respond to seawater intrusion. Accordingly, the District's Capital Improvement Program includes development of new water supply wells located away from the seawater intrusion front.

Table 9	**FORA Water Allocation and Project Demands Summary** ***Water Supply Assessment - Provisions of SB 610*** ***Monterey-Salinas Transit – Whispering Oaks Business Park Project*** **County of Monterey**
Monterey County FORA Allocation	710 AFY
Recycled Water Allocation	134 AFY
County/Marina Sphere Allocation	10 AFY
Total Allocations	**854 AFY**
Existing Monterey County Projects	
East Garrison I	470 AFY
Monterey Peninsula College	52.5 AFY
Ord Market Lease	5 AFY
MST – Whispering Oaks Business Park	92.7 AFY
Total Existing Demands	**620.2 AFY**
Remaining County Availability	**233.8 AFY**

17.0 SUMMARY AND CONCLUSIONS

The Urban Water Management Planning Act (Water Code § 10631) requires the supplier to document water supplies available during normal, single dry, and multiple dry water years during a 20-year projection and the existing and projected future water demand during a 20-year projection. The Act requires that the projected supplies and demands be presented in 5-year increments for the 20-year projection.

If the water demand for the proposed project was NOT accounted for in the most recently adopted UWMP, the water supplier must prepare a WSA that includes a discussion of whether the total projected water supplies determined to be available for the project during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water supplier's existing and planned future uses, including agricultural and manufacturing uses. Water Code § 10910 subdivisions (b) and (c)(3) and (4).

Supplies from all sources, including wholesaler supplies, require documentation. This documentation includes identifying and quantifying water rights, contracts, and/or entitlements to the supply; associated capital outlay programs; federal, state, and local

permits for constructing infrastructure for conveying the supply; and any necessary regulatory approvals required for conveyance.

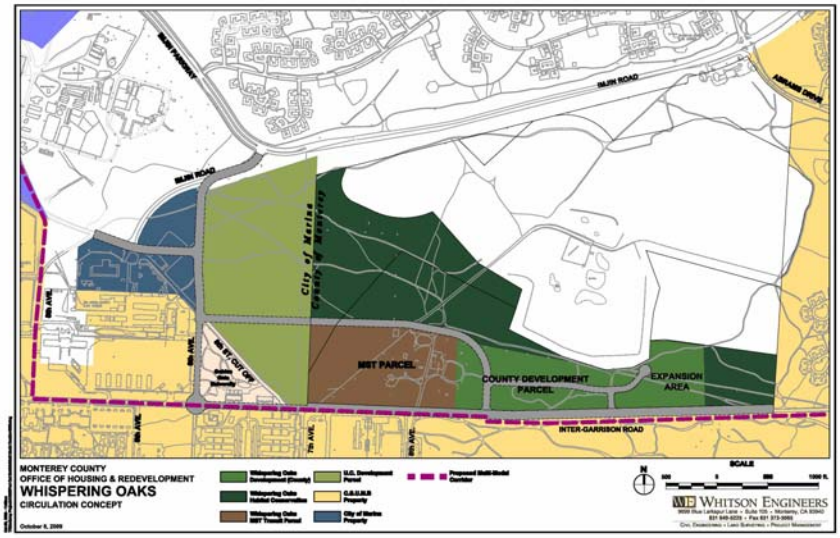
This WSA was prepared to assist the County and District in satisfying the requirements of SB 610. The WSA included a review of the District's 2005 Urban Water Management Plan, Water System Master Plan, and the Project's water requirements.

Based on information presented in these reports and analysis completed for this WSA, the findings show that the water demands associated with this Project were not accounted for in the 2005 UWMP. The District's water supplies are sufficient to meet the District's current water demands and the demands associated with this Project, during normal, single dry, and multiple dry years. It should be noted that this WSA assumes that the Project will be a mixed use development with an average floor area ratio (FAR) of 0.33 to 0.50. If development of the Project site varies significantly from the assumptions presented in this Water Supply Assessment, then further environmental review should be conducted.

Future projects and their water demands will require the District to develop new supply sources. Through continued investment in water production and distribution facilities, the District should be able to maintain supply reliability for new developments, provided that they are consistent with the FORA reuse plans and allocations.

APPENDIX A – WHISPERING OAKS BUSINESS PARK DRAFT GENERAL DEVELOPMENT PLAN

Whispering Oaks Business Park
Draft General Development Plan



Source: Monterey County and Whitson Engineers

November 19, 2009
Resubmitted: March 16, 2010
Modified September 21, 2010

County of Monterey Resource Management Agency
Housing and Redevelopment Office

1.0 Purpose and Intent

This document has been prepared to fulfill the Zoning Ordinance (Section 21.20.030) requirement for a General Development Plan (GDP) and to provide a framework for future physical development within the Whispering Oaks Business Park.

The County of Monterey Redevelopment Agency (Agency) is planning and processing a mixed use business park on approximately 57.9 acres within the larger 308 acre "Landfill Planning Area" within the former Fort Ord. The site will ultimately be developed by a master developer. The intent of the business park is to encourage sustainable development and green building techniques, both in building construction and by attracting businesses and industries associated with environmental sustainability and the green building trade.

The Agency' overall objective for all Fort Ord development opportunities is to ensure that all development is well designed and will create an attractive and pleasing environment as a place to live, work and visit. Within that framework, the Agency's primary goal for the Whispering Oaks Business Park is to promote a development project that will create local jobs.

Another primary goal of the business park and mix of uses is to provide a "self contained" work place, where places of business and industry are supported by a reasonable mix of support services and businesses. A self-supporting development will help minimize off-site vehicle trips during the business day by employees of the project.

The site contains a significant number of native Coast live oak trees, and oaks will be showcased as a design theme. The property is very visible from Inter-Garrison Road, mandating a high level of urban design aesthetic appeal. It is the intent of this plan to continue the oak design theme through retention and preservation of the existing oaks to the extent possible and through the planting or replanting of oaks in the development areas. Site planning and design shall ultimately be environmentally sensitive, consistent with the ultimate business attraction strategy.

Monterey Salinas Transit (MST) is also developing a 24 acre site within the Whispering Oaks Business Park project area. MST will be responsible for developing a project-specific GDP for their site. This plan addresses the uses

allowed within the remaining business park development and also identifies design criteria to be implemented within the business park.

2.0 End Users and Business Attraction

2.1 Allowable Uses

The following uses are allowed under the GDP. The list of uses is intended as a guideline to identify the types and range of businesses envisioned within the Business Park. Other uses not specifically listed within this GDP may be allowable if consistent with the primary goals and vision for the property.

A. Change of commercial uses within a structure, provided the new use will not change the nature or intensity of the current use of the structure;

B. Sales, service, and limited manufacturing of products that promote environmental sustainability ("green" products and related businesses) that do not produce undue odors, dust, smoke, noise, or other environmental hazards, including but not limited to alternative energy manufacturing (e.g. solar panels); recycled furniture manufacturing, recycled building materials manufacturing, green cleaning services, and home energy efficiency consulting services.

C. Other uses of a similar character, density and intensity to those listed in this Section;

D. Professional offices;

E. Research and development uses (that do not produce undue odors, dust, smoke, noise, or other environmental hazards);

F. Office condominiums;

G. Shops for tradesmen and artisans (e.g. craft shops for the manufacture of art, jewelry, silverware, ceramics, leather goods, toys, bookbinding, editorial and designing, printing, lithography) provided that in all cases all equipment and materials, except vehicles, are maintained within a structure;

H Caretaker unit for the purpose of providing on-site security;

I. Photography/art studio;

J. Retail businesses of light commercial/light industrial character that do not produce excessive noise, odors, or environmental hazards such as: interior decorating businesses; picture framing businesses; manufacturing of clothing; carpentry (e.g. wood working or furniture or uses of a similar nature provided that in all cases that the equipment and materials are enclosed within a structure); printing or publishing, repair and maintenance (general), call centers, and warehouse and distribution centers;

K. Convenience retail to service light commercial tenants;

L. Restaurant and food service limited to food manufacturing and packaging that does not produce undue odors, dust, smoke, noise, or other environmental hazards;

M. Vocational training/education facility;

O. Additions to existing, approved wireless communications facilities, pursuant to Section 21.64.310 of the Zoning Ordinance.

2.1 Uses Allowed Subject to Use Permit Approval

Several uses may be allowable within the Business Park, but may require additional review and discretionary permitting due to specific size, environmental, safety, infrastructure, storage and other concerns. Examples of such uses are listed below:

A. Public and quasi-public uses (such as public safety facilities and rehabilitation facilities) and, public utility facilities
B. Any lot or establishment where alcoholic beverages are served, commercial place of amusement or recreation, or any place where live entertainment is provided within 200 feet of the boundary of a residential district (ZA);
C. Research laboratories, provided such use does not produce undue odor, noise, smoke, or other objectionable effects;
D. Wireless communications facilities, pursuant to Section 21.64.310 of the Zoning Ordinance.

3.0 Development Standards and Design Guidance

Any use proposed under the GDP shall comply with the following development standards.

3.1 Lot Size

There is no maximum or minimum lot size in this business park; however, lot sizes of 1.0 acre to 3.0 acres in size are anticipated. Lots may be combined and reconfigured to accomplish the intended development scheme, provided the correct entitlements are obtained to modify the lot configuration.

3.2 Site Design

The general design principles for Whispering Oaks are to reinforce the natural landscape setting consistent with the character of the Monterey Peninsula; respect the topography by minimizing grading and tree removal; and to create a distinctive and visually pleasing streetscape, particularly along Inter-Garrison Road. More specific guidance is provided in the sections below:

3.2.1 Setbacks. In order to allow a variety of uses and maximize the opportunity for creative design no setbacks are established except along Inter-Garrison Road. A minimum twenty foot landscape and grading buffer shall be maintained from the property line along Inter-Garrison Road. Existing native oak trees within this buffer shall be maintained to provide a visual screen between the Whispering Oaks site and Inter-Garrison Road and to maintain the existing forest cover. A minimum of ten feet of landscaping shall be provided along all interior streets.

3.2.2 Access/Circulation. Site design shall incorporate controlled access. Project entrance points, but no individual driveways, shall be placed along Inter-Garrison Road. All parcel access shall be from the interior roadways. Where possible joint driveways and reciprocal access shall be provided to minimize the number of driveways and provide efficient circulation. Each lot shall contain convenient visitor parking. Each project will be responsible for frontage improvements.

Site access should focus on safety and efficiency. Circulation should be designed to reduce conflicts between vehicles and pedestrians.

3.2.3 Landscaping. In addition to the landscaping provided along the street frontages, additional landscaping may be required to provide screening and shading within the site. The landscaping palette shall be comprised of preferably native species (or species native to the central coast) maintaining an oak woodland theme, which shall include but not be limited to Manzanita and Coast live oaks.

Landscape plans for future development of the site shall include provisions for transplanting and replanting of Coast live oak trees on a case-by-case basis, which shall be marked and removed prior to beginning of grading operations under the supervision of a landscape Arborist/Forester. Approximately 10 to 15 individual stem trees in the 12 to 23 inch size class located in the open areas adjacent to Inter-Garrison Road would be the most appropriate trees for transplanting. Replanting of Coast live oak trees that are either transplanted or removed within the site shall be located within the landscaped areas, specifically within the cut and fill slopes along Inter-Garrison Road and along the perimeter of the detention basins to provide additional screening, to maintain existing habitat, and to re-inforce the oak woodland theme. A landscape plan shall identify the appropriate number of replacement seedlings that can be located within the site based on available planting space within these areas. In accordance with the Forest Resource Evaluation, approximately 80 percent of the replacement trees shall be selected from known local seed sources and shall be small, less than one gallon in size as they establish quickly and are easier to maintain. Approximately 20 percent of the replacement trees shall be comprised of a five-gallon container size or larger in areas where a more immediate visual effect is desired (e.g. along Inter-Garrison Road).

Landscape strips shall also be provided between parking areas and any portion of structures. Landscaping and pervious land area shall total no less than 30 percent of the total site area. Project entrances shall be emphasized with formal landscaping and monumentation signage. Where feasible, and consistent with the evaluation of the health of the tree species identified in the Forest Resource Evaluation Report (August 2009), tree islands and their canopy's shall be maintained at project entrances and/or key visual site line locations.

3.2.4 Screening. Outdoor yards, trash enclosures, storage areas and delivery bays shall be screened from public viewing areas, particularly

Inter-Garrison Road and Imjin Parkway, by a combination of decorative screening material, site design and landscaping. Service areas will be located at the sides and rear of buildings.

3.2.5 Building Placement. A variety of building and parking setbacks shall be included to create interest and diversity. Structures should be placed to create opportunities for plazas, courts, gardens or other common, informal gathering places.

3.2.6 Oak Preservation. During subdivision development, the only trees to be removed shall be related to street and infrastructure improvements. The existing native oak trees shall be maintained within the 20-foot landscape buffer along Inter-Garrison Road in order to provide a visual screen between the Whispering Oaks site and Inter-Garrison Road and to maintain the existing forest cover, in coordination with a landscape Arborist/Forester. Particular attention shall be given to the trees that are greater than six inches in diameter and the clusters of small trees located within Lots #7-14, as these lots maintain varying degrees of tree-lined frontage along Inter-Garrison Road.

Removal of trees may be allowed to accommodate site development and would be required to provide relocation or on-site tree replacement within the proposed landscape areas, within the cut and fill slopes along Inter Garrison Road, and along the perimeter of proposed detention basins in accordance with the recommendations in Section 3.2.3, Landscaping and Section 21.64.260 of the Monterey County Zoning Ordinance In addition, specific landmark trees identified for protection in the Forest Resource Evaluation (August 2009) shall be retained as feasible. Emphasis shall also be placed on preserving the younger and healthier trees within the site, as well as trees located along the edges of the lot and/or property lines.

Project applicants would be required to implement best management practices as identified in the Forest Resource Evaluation and monitoring in order to ensure successful establishment in accordance with Section 21.64.260 of the Monterey County Zoning Ordinance.

As an overview, a substantial amount of resident oak trees may be preserved using the following strategies:

- Matching lot locations to elevations (see current Tentative Map)

- The 20-foot landscape buffer may be expanded where appropriate to preserve existing groupings of or individually significant trees;
- Preserving existing islands of resident oaks (as described in the Forest Resource Evaluation);
- Using open space areas between lots to preserve existing healthy oaks;
- Using a Forester/Arborist to assist in final lot layout of internal lots, roadways and parking areas;
- Preserving screen trees long Inter-Garrison Road within the established landscape buffer;
- Preserving healthy, visually significant landmark trees;
- Tree transplants onsite;
- Requiring preparation of a Forest Management Plan to address specific impacts of future construction proposals (per Title 21 of the Monterey County Zoning Ordinance).

3.2.7 Oak Replacement and In-Lieu Fees. While trying to minimize loss, removal of some trees (vis a vis a Use Permit) may be allowed to accommodate limited site development and would be required to provide relocation or on-site tree replacement within the proposed landscape areas, within cut and fill slopes along Inter-Garrison Road, and along the perimeter of proposed detention basins in accordance with the recommendations in Section 3.2.3, Landscaping and Section 21.64.260 of the Monterey County Zoning Ordinance.

An off-site location (Youth Camp) may be utilized to replant those trees lost to development on the Project Site that cannot otherwise be replaced onsite (pursuant to requirements of the Forest Management and/or Resource Evaluation Plans) without compromising the integrity or health of the resident oaks. The Project Applicant shall identify areas within the 145-acre Youth Camp that could benefit from tree planting. Approximately 93 acres of Youth Camp parcel are proposed for management as oak woodland habitat while the remaining portion is slated for camp development. Alternatively, the Project Applicant shall contribute funding to support Youth Camp oak woodland restoration planning at an appropriate level to offset any remaining losses to oak trees on the Whispering Oaks site.

3.2.8 Grading. Each lot will be individually graded to allow maximum opportunity to preserve trees.

3.3 Building Design

3.3.1 Exterior Materials. Exterior building materials and textures should be designed to compliment the oak-prominent landscape. The range of potential materials is somewhat flexible and dependent upon the ideal architectural scheme developed for the entire plan area; however, the plan envisions subdued earth-tones and textures to complement the existing landscape and surrounding environment. Regardless of design theme, materials should be durable and of high quality. Examples include stone, tile, terra cotta, steel, brick, and sculpted concrete. Highly reflective glass and similarly inconsistent materials should be avoided.

3.3.2 LEED Certification and Sustainable Design. All new construction shall conform to LEED Silver certification standards. Site design and building orientation should maximize solar exposure and natural heating/cooling. Specific measures to be explored could include green roofs, recycled, renewable and/or locally-sourced materials; reductions in impervious surface and/or pervious paving, and use of energy-wise technology and equipment.

3.3.3 Building Heights. The maximum building height in Whispering Oaks is 35 feet. This may be modified by the action of the Approving Authority to accommodate either unique design elements, or structures or facilities which are used to achieve LEED certification.

3.3.4 Architecture. The architectural design theme should provide a consistent character to the development, but also avoid repetitive features such as long expanses of flat surfaces and excessive uniformity. Architecture should respect the landscape and emphasize the quality of the project's visual appearance as seen from adjacent roadways.

3.4 Landscaping Plan

All landscaping shall incorporate drought tolerant plant materials and focus upon maintaining an oak woodland theme. In addition to Coast Live Oaks, preference is given to utilizing comparable shrubs and ground covers (e.g. Manzanita), emphasizing use of species native to oak woodland habitat.

All landscaped areas and fences shall be continuously maintained in a litter-free, weed-free, healthy, growing condition.

3.5 Street Lighting

All new street lights proposed for specific projects within the development area shall be reviewed and approved by the Director of the Planning Department. Street light plans shall be incorporated into and approved as part of the final building plans. Street lights shall be full cut-off fixtures that shield and direct the light to the intended on-site areas, but shall be directed such that light does not shine toward Highway 1 or wetland areas.

3.6 Exterior Lighting

All exterior lighting within individual developments shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. Exterior lights shall have recessed lighting elements. Exterior light sources that would be directly visible when viewed from a common public viewing area, as defined in Section 21.06.195, are prohibited unless required for safety. The applicant shall submit 3 copies of an exterior lighting plan for each proposed project which shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The exterior lighting plan for each specific project shall be subject to approval by the Director of the Planning Department, prior to the issuance of building permits.

3.7 Sign Program

The project will require a Master Sign Program to be approved with final development plans. The Master Sign Program shall address common themes, hierarchy of signage types, and minimize illumination. The Master Sign Program may include exceptions to the Monterey County Zoning Ordinance Title 21, if approved by the Planning Director based on exceptional design, architectural style, relationship to building mass, or other attributes. All signage must be in harmony and in the style and character of the development, and viewed as an integral design component relative to architecture, materials, and landscaping.

To provide a cohesive and homogeneous signage for the Business Park, the hierarchy of the signage should be provided in the Business Park as follows. Consistent with Section 21.60.065C of the Monterey County Zoning Ordinance, the aggregate size limitations for the each parcel shall be limited by the restrictions in the ordinance.

- Wall Signs. Wall signs are vehicle and pedestrian orientated signs that are mounted flat on the façade of the building. These signs should be restricted to the name of the firm, company, corporation, or business only. The sign shall have an area not to exceed one square foot for each one foot of structure footage; provided that any business establishment shall be allowed a sign of 50 square feet and no more than 300 square feet; and further provided, that the area permitted may be divided into not more than six single or double-faced signs consistent with Section 21.60.090 of the Zoning Code. This formula shall apply to each street frontage.

- Business Park Entry/Monument Signs. Entry signs should be located at the entrance to the Business Park on Inter-Garrison Road and at Engineers Equipment Road and should include the name of the Business Park. The entry signs should be low profile in nature and not exceed six feet in height and 100 square feet in area.

- Freestanding Signs. Freestanding signs are for tenant identification and should include the addresses of the buildings. Freestanding signs should be installed within or adjacent to private entry driveways. These signs should be limited to 32 square feet and should not exceed six feet in height.

- Directory Signs. Freestanding signs that are located near the primary entry driveways along Inter-Garrison Road and Engineers Equipment Road. These signs should be limited to identifying the business address and tenants and should be visible from the intersection of the applicable private driveways. These signs should not exceed six feet in height.

- Directional Signage – Directional signage should be used to provide direction to on-site/off-site traffic or pedestrians and include directional arrows. The height should not exceed six feet in height and more than 100 square feet in area. Directional signs shall be placed at the intersections of Engineers Equipment Road and Whispering Oaks Drive and at Whispering Oaks Drive and Whispering Oaks Way.

- Sign Lighting. When allowed, lighting of signs attached to structures shall be arranged so as not to produce a glare on other properties in the vicinity of the sign, and the source of light shall not be visible from adjacent property or a public street.

3.8 Parking

Parking shall be provided consistent with the Monterey County Zoning Ordinance Title 21 based on the anticipated mix of uses within the development. Parking will be reviewed with individual site plan submittals.

4.0 Implementation

4.1 Operation

In order to minimize to the greatest extent feasible adverse noise impacts on neighboring areas, deliveries to the Business Park should be restricted during the least noise sensitive hours between the hours of 7:00 AM and 8:00 PM, Monday through Saturdays and restricted on Sundays. Light Industrial/Manufacturing uses that generate noise as part of their operation shall also be limited to operate during these hours.

4.2 Number of Employees

The number of employees will vary depending on actual uses of the buildings.

4.3 Transportation Management Plan

Property owners within the Business Park would be required to participate in a Transportation Management Plan (TMP). A reduction in required parking would be allowed commensurate with and corresponding directly to the degree to which future developments within the Business Park participate in the TMP. The Business Park should consider assigning a Transportation Coordinator to ensure that property owners and tenants are provided information and resource materials on the full range of transportation choices available to employees of the Business Park. If a Transportation Coordinator is not assigned, the property owners shall consider implementing these measures as part of their business practices. These measures shall include but not be limited to the following:

- Catalog of all incentives that encourage employees to utilize alternative transportation programs (e.g. discount transit passes or bicycle amenities);
- Provide up to date transit materials and information for the MST transit stop located within the Business Park;
- Provide information to bicyclists regarding designated bike routes within the Business Park and surrounding area, provide maps, and on-site support

facilities to support alternative transportation (e.g. bike racks, showers and lockers, etc.);
- Provide on-site sale of transit passes;
- Provide alternative transportation program informational packets to all tenants, occupants, developers, property managers, and employee transportation coordinators at the site;
- Provide preferential parking for carpool/vanpool/cleaner fuel vehicles that is located closer to the building entrances;
- Provide personalized ride-matching services;
- Provide local retail uses and convenience services within the Business Park in order to limit trips of employees during lunch hours and breaks, including day care facilities, restaurants/cafeterias, banks/ATMs, recreation facility;
- Encourage tenants to provide flexible and compressed work schedules;
- Provide amenities for bicycle and pedestrian modes of travel (e.g. bicycle lanes, sidewalks on both sides of streets where feasible, secure bicycle parking, and signals with sensors for bicyclists and pedestrians).

A major goal of the Transportation Management Plan is to reduce vehicle miles traveled by implementing the measures previously identified.

4.4 Greenhouse Gas Emissions Reduction Plan

Several measures will be in place to help reduce greenhouse gas emissions. Key measures are identified below.

- Encourage transit to reduce vehicle miles traveled (per Section 4.3 of this General Development Plan)
- Allowing local retail uses (per Section 2.1 of this General Development Plan)
- Provide amenities for pedestrians and bicyclists (per Section 4.3 of this General Development Plan)
- Utilize LEED standards to measure reduction in greenhouse gas emissions and meet a LEED Silver design level (per Section 3.3.2 of this General Development Plan)

-EXAMPLE BUSINESS PARK PROJECTS-

-EXAMPLE BUSINESS PARK PROJECTS-

APPENDIX B – MST WATER CONSUMPTION ESTIMATES

10/6/2010
Job No.: 1968.04

Analysis of Water Supply Assessment
Whispering Oaks
Monterey County, California

Land Use	Demand Coefficient (AFY per SF) (3)	Assumed Land Use (%)	Weighted Demand Coefficient	Est. Building Area (4)	Unit (..)	Water Demand (AFY)
Retail	0.00021	20.0%	0.000042	436,667	SF	18.34
Office/R&D	0.000135	50.0%	0.0000675	436,667	SF	29.48
Light Industrial	0.00015	30.0%	0.000045	436,667	SF	19.65
SubTotal		**100.0%**				**67.47**
WO Landscape Use (1)	2.1	10.0%	0.21	24.45	AC	5.13
Lot 1 MST Use (2)						20.12
Total						**92.72**

Notes:
1. Water demand assumes 10% of lot area for landscape (non-turf) uses per MCWD UWMP.
2. See MST Calculations Below
3. Demand Coefficients are per the MCWD UWMP
4. Estimate Total Building area is based on an average FAR range of 0.33 to 0.50

Assumptions

Average FAR (0.33-0.50)	0.41	
Total WO Lot Area (SF/AC)	1,065,042	24.45
Average Building SF	436,667	

MST	Total Area (SF)	Total Area Breakdown by Use (SF)	Decription	Demand Coeficient (AFY/SF)*	Water Demand (AFY)
Bldg 4 - Operations	39000	39000	Office	0.00012	4.68
Bldg 5 - Maintenance	94332	75830	Auto	0.00007	5.31
		13755	Storage	0.00001	0.14
		4747	Office	0.00012	0.57
Bldg 6 - Fuel/Brake/Tire	19742	6969	Auto	0.00007	0.49
		12773	Fueling	0	0.00
Bldg 7 - Wash †	6588	6588	Bus Wash	†	3.07
Bldg 9B - Storage	2763	2763		0.00001	0.03
Subtotal Buildings	**162425**				**14.28**
Landscaping	2.78	Acres		2.1 AF/AC	5.84
				Total	**20.12**

* Per MCWD Appendix C
† Per AECOM personal communication October 2010

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559 448 8233 fax

October 6, 2010

Mr. Richard Weber, PE, LS
Whitson Engineers
9699 Blue Larkspur Lane, Suite 105
Monterey, CA 93940

Dear Mr. Weber:

The water demand estimates presented in the *Analysis of Water Supply Assessment* document dated October 6, 2010 for "Lot 1 MST Use" are consistent with the estimates AECOM, the Engineer and Architect of Record, have developed as part of our design for the Monterey-Salinas Transit Bus Maintenance & Operations Center project.

Sincerely,

Henry W. Liang, PE
Senior Engineer

APPENDIX L

ADDITIONAL BIOLOGICAL REPORTS

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

MEMORANDUM

Date: 9-29-2010

To: Henry Liang, AECOM

From: Leianne Humble, Senior Planner & Jami Davis, Assistant Environmental Scientist

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The purpose of this memo is to provide the results of a biological survey conducted on September 28, 2010, within the proposed off-site storm drainage improvements area, located southeast of the intersection of 8th Street and Inter Garrison Road on the Former Fort Ord Military Base, Monterey County, California. A survey was also conducted within a 72-foot right-of-way along Engineering Equipment Road, extending approximately 1,000 feet east from the 8th Street Cutoff, where improvements to the road are proposed. The survey was conducted as part of the proposed Whispering Oaks Business Park (Business Park), which is located on portions of former U.S. Army Corps of Engineers (ACOE) parcels E8a.1.4 and E8a.1.1.2. All other portions of the proposed project site were surveyed for biological resources in 2009 and spring 2010; the results of these surveys are presented in the *MST Facility/Whispering Oaks Business Park Biological Assessment* (Biological Assessment, DD&A, 2009) and memos addressed to Henry Liang, dated December 22, 2009; June 18, 2010; and April 20, 2010.

The purpose of the survey was to determine the presence or absence of Seaside bird'-s beak (*Cordylanthus rigidus* ssp. *littoralis*), a state endangered, CNPS List 1B, HMP species, and Yadon's rein orchid (*Piperia yadonii*). Survey methods included walking appropriate habitat within the proposed project impact area, using aerial photos and site plans provided by the project engineer as a guide. The survey was conducted during the appropriate blooming period for Seaside bird's-beak. Additionally, a reference population of Seaside bird's-beak, located near the Calvary Church off of Highway 68, was consulted prior to the survey to ensure that the species was blooming. The blooming period for Yadon's rein orchid had completed at the time of the survey; however, based on examination of a known population of rein orchids, located along Divarty Street and 1st Ave on the Former Fort Ord, vegetation sufficient to identify individuals to genus was still visible at the time of the survey. Therefore, rein orchids at the project site could be located if present, but not identified to species.

The survey concluded that no Seaside bird's-beak or Yadon's rein orchid are present within the survey area. Therefore, no impacts will occur to Seaside bird's-beak or Yadon's rein orchid as the result of the storm drainage or road improvements associated with the Whispering Oaks Business Park.

ZANDER ASSOCIATES

Environmental Consultants

Transmittal/Memorandum

To: John Ford/Craig Spencer
From: Michael Zander
Subject: MST Whispering Oaks Draft EIR
Response to CDFG Comment on Seaside Bird's Beak & Other CESA Species
Date: October 5, 2010

In response to the CDFG request (letter of August 25, 2010) for floristic surveys for various other sensitive plant species prior to vegetation removal or ground-disturbing activities on the MST/Whispering Oaks project site, I offer the following comments.

Systematic plant surveys, conducted for various purposes over a period of almost 20 years at Fort Ord, have never identified any CESA-listed plant species other than sand gilia (*Gilia tenuiflora* ssp. *arenaria*) on the landfill parcel. These surveys include basewide floristic studies conducted by Jones & Stokes Associates in 1992; focused spring plant surveys in areas including the landfill parcel, also conducted by Jones & Stokes, in 1993; plant surveys of the landfill conducted by the Army in 1998; floristic surveys of the landfill parcel conducted by Zander Associates in 2007; and focused plant surveys of the specific project area conducted by DDA in spring and summer 2009. A July 10, 2009 DDA survey was conducted specifically to determine the presence or absence of two summer flowering plant species including seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*). A recent (September 28, 2010) follow up survey was conducted by DDA to confirm the absence of seaside bird's beak (and the federally-listed Yadon's piperia, *Pipeira yadonii*) on the site. During that survey, a DDA botanist also visited known reference locations for bird's beak and piperia to confirm the appropriate timing of the survey. Vegetation removal and ground disturbing activities associated with site development are not expected to affect any CESA-listed plants other than sand gilia, which is the subject of a pending Incidental Take Permit from DFG. No further floristic surveys should be necessary prior to development of the site.

4460 Redwood Hwy, Suite 16-240 telephone: (415) 897-8781
San Rafael, CA 94903 fax: (415) 814-4125

ZANDER ASSOCIATES

Environmental Consultants

Transmittal/Memorandum

To: John Ford/Craig Spencer
From: Michael Zander
Subject: MST Whispering Oaks Draft EIR
Response to CDFG Comment on California Tiger Salamander
Date: September 27, 2010

In response to the CDFG request (letter of August 25, 2010) for protocol-level surveys for the California tiger salamander prior to vegetation removal or ground-disturbing activities on the MST/Whispering Oaks project site, I offer the following comments and recommendations.

Only those portions of the MST/Whispering Oaks site within a two kilometer radius of known CTS breeding ponds were identified as potentially suitable upland habitat for CTS in the Draft EIR. Many other documents pertaining to biological resources at Fort Ord including the Draft Habitat Conservation Plan (HCP), the East Garrison EIR, baseline studies for the Veterans Cemetery, biological opinions issued to the Army from the U.S. Fish and Wildlife Service, and planning studies conducted by the Bureau of Land Management (BLM) have used this two kilometer limit. The limit was established as an outside distance for adult CTS movement away from breeding ponds based on data and observations by researchers over a period of years. However, some studies have indicated that 95 percent of CTS reside within 640 meters (2,100 feet) of their breeding ponds (Shaffer and Trenham 2005). Thus, the likelihood of CTS occurring beyond the two kilometer limit on the MST/Whispering Oaks site, and the potential for incidental take are extremely low. Protocol-level surveys on the entire site to "prove" absence would be unnecessarily time consuming and costly. Such a requirement also begs the question of what distance is far enough away from a breeding pond to preclude such surveys.

However, to fully address potential impacts to CTS, we recommend that the following additional mitigation measures be incorporated into the Final EIR:

> The Project Applicant shall install exclusion fencing with one-way openings around the perimeter of any area scheduled for construction to further insure that no incidental take of CTS will occur (see attached photos). Fencing shall be constructed prior to the onset of the winter rainy season in the late autumn of the year and remain in place until vegetation removal and ground-disturbing activities occur after the rainy season in the spring. CTS potentially in upland burrows within the proposed disturbance area could move out toward breeding ponds in the winter but would be excluded from returning. This method was used successfully on the East Garrison project with approval from the U.S. Fish and Wildlife Service.
>
> The applicant shall design the onsite drainage basin on Parcel B with barriers (e.g. perimeter curbs) to preclude access to CTS and establishment as a breeding pond.

4460 Redwood Hwy, Suite 16-240 telephone: (415) 897-8781
San Rafael, CA 94903 fax: (415) 814-4125

ZANDER ASSOCIATES

Environmental Consultants

Transmittal/Memorandum

To: John Ford/Craig Spencer
From: Michael Zander
Subject: CTS Exclusion Fencing for MST/Whispering Oaks
Date: December 2, 2010

Based on the most recent response from the California Department of Fish and Game (email from Deb Hillyard dated November 23, 2010) regarding the County Redevelopment and Housing Office's proposal to install California tiger salamander exclusion fencing around the perimeter of the MST/Whispering Oaks site, I offer the following summary:

- The County Redevelopment and Housing Office would limit its plans for the 2011 construction season to just the MST site and the first four lots (#s 2, 3, 7 & 8) of the Whispering Oaks site. Construction on the rest of the WO site would be deferred to 2012 or possibly another year. CDFG agrees that the risk of take of CTS seems very low in this phase of the project, especially considering its location (Figure 1) and avoidance measures proposed by the Redevelopment and Housing Office. CDFG would not argue with a County decision to proceed in the absence of a permit for this part of the project.

- As an avoidance measure, MST and the Redevelopment and Housing Office would contract with appropriate parties to install exclusion fencing intended to keep CTS from entering/re-entering the construction areas.

- Approximately 3,465 ft. of exclusion (silt) fencing would be installed around the southeasterly perimeter of the MST/WO project area and approximately 3,644 ft of exclusion fencing would be installed around the area of proposed pipeline trench to Pond #3 (Figure 2). Pond #3 would not require excavation; it is a natural depression where stormwater would percolate. Potential Ponds #1 & #2 would be excavated in areas that are currently paved so that no potential CTS upland habitat would be affected; thus, no fencing should be necessary. Other offsite improvements (e.g. water & sewer lines) would occur in paved road alignments and should not require fencing.

- The exclusion fencing would be installed with one-way openings spaced 50 feet apart along the entire length (see attached Photos). Fencing would be installed in December 2010, prior to the onset of the full winter storm season. The fencing would remain in place throughout the construction period or until take authorization for CTS is in place.

- If CTS are observed on the site, the project would be required to stop until a permit is completed. Having a biological monitor on the project site would help reduce the potential for unpermitted take of any listed species.

Attachments

4460 Redwood Hwy, Suite 16-240 telephone: (415) 897-8781
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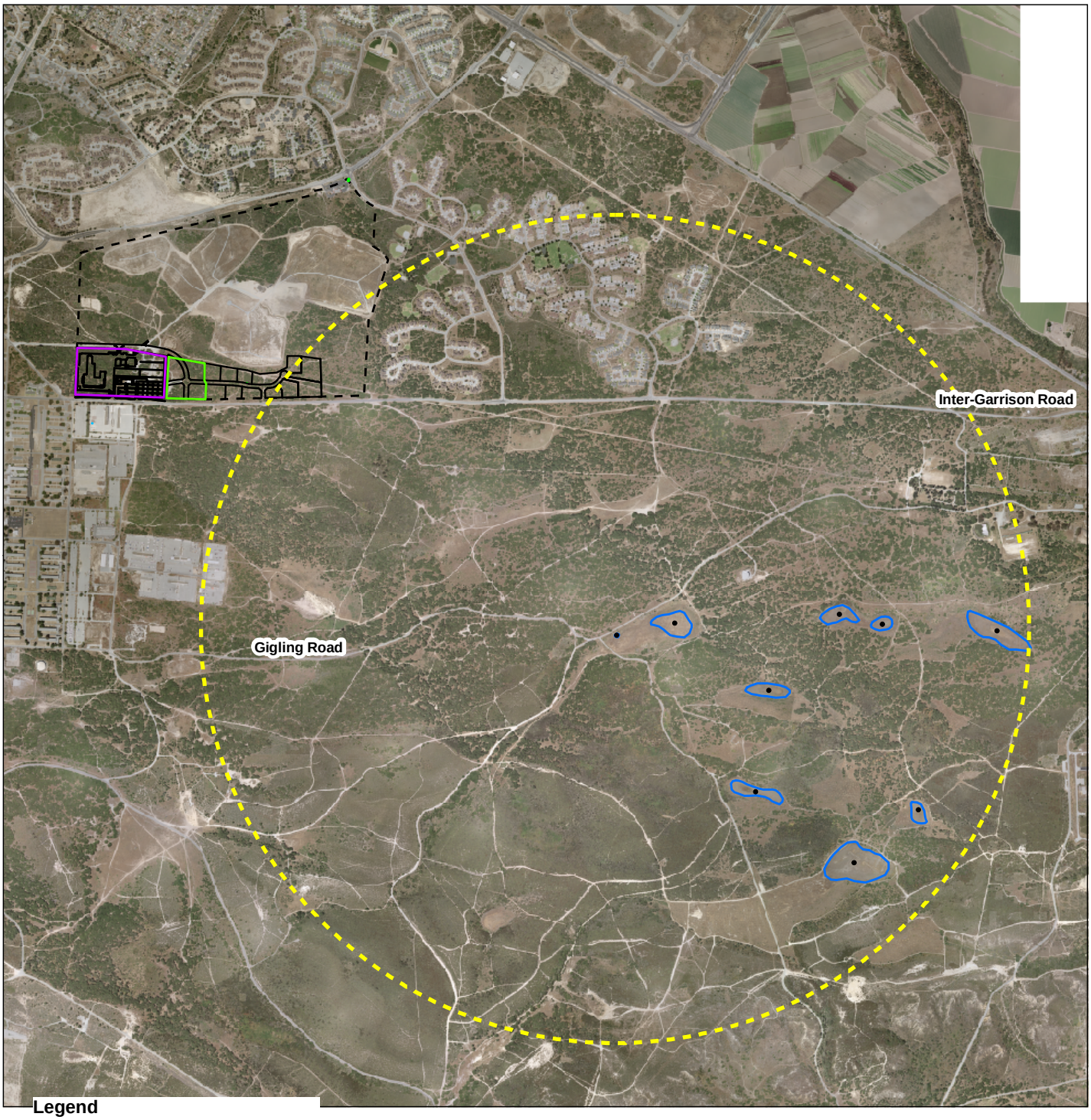
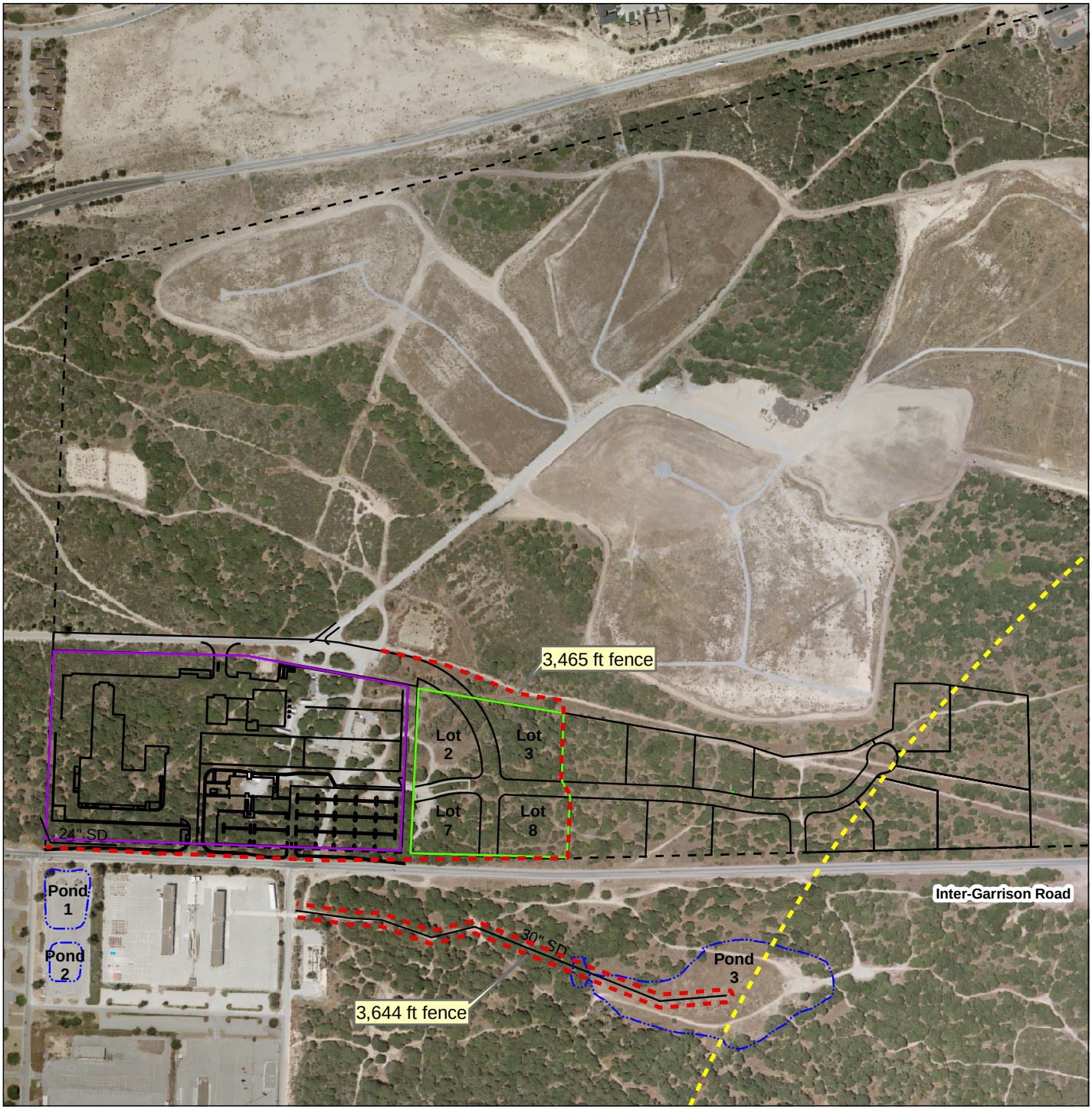


Zander Associates
Environmental Consultants
4460 Redwood Hwy, Suite 16-240
San Rafael, CA 94903

CTS Breeding Habitat Locations
Whispering Oaks/Monterey Salinas Transit Project
Fort Ord, California

10/10

Figure
1



Legend

- Exclusion Fencing
- 2 Km CTS Limit
- MST
- Whispering Oaks Lots
- Landfill Planning Area Boundary

1:7,000

Zander Associates Environmental Consultants 4460 Redwood Hwy, Suite 16-240 San Rafael, CA 94903	CTS Exclusion Fencing Whispering Oaks/Monterey Salinas Transit Project Fort Ord, California 11/10	Figure 2

APPENDIX M

OAK TREE SEQUESTRATION REPORT

Planning for Success.

MST Whispering Oaks Business Park

Oak Tree Sequestration Analysis

PREPARED FOR

Monterey County Resources Management Agency
Planning Department

December 6, 2010

EMC PLANNING GROUP INC.
A LAND USE PLANNING & DESIGN FIRM

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MST Whispering Oaks Business Park

Oak Tree Sequestration Analysis

PREPARED FOR

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December 6, 2010

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1.0 INTRODUCTION

1.1 PROJECT BACKGROUND AND REPORT PURPOSE

Monterey Salinas Transit (MST) and the Monterey County Redevelopment Agency (RDA) are proposing a business park subdivision on about 116 acres east of Marina on the former Fort Ord military reservation. The Monterey County Resources Management Agency - Planning Department, as lead agency, prepared the MST Whispering Oaks Business Park Draft EIR for the proposed project in July 2010. A comment letter submitted by Quercus Group during the public review period requested additional analysis of greenhouse gas sequestration. The removal of oak trees on the project site would reduce existing carbon sequestration on the project site, and contribute to the global warming effects attributed to carbon emissions. The Draft EIR treated this topic qualitatively, and determined that loss of sequestration would contribute to a significant and unavoidable impact. The Quercus Group requested that a quantitative analysis be conducted. The lead agency determined that qualitative evaluation of this impact was appropriate.

1.2 PROJECT DESCRIPTION

Development of the proposed business park would be controlled by two general development plans. The Whispering Oaks General Development Plan would cover Lots 2-16 of the proposed business park subdivision and a separate general development plan would be specific to the MST bus yard and maintenance facility on Lot 1. A total of about 58 acres would be developed, with about 695,500 square feet of building anticipated within the entire business park. About 58 acres would be re-zoned to open space. The project site is largely wooded, and about 4,400 trees on 37.45 acres of land could be removed for construction of the project.

1.3 METHODOLOGIES

The Quercus Group requested that a carbon sequestration analysis be prepared based on the Forest Project Protocol. The Forest Project Protocol was developed by the Climate Action Reserve principally to document benefits from pro-active forestland sequestration projects in three categories: reforestation, improved forest management, and avoided conversion. The Climate Action Reserve is a national carbon offsets program working to ensure integrity, transparency, and financial value in the North American carbon market. Although the Forest Project Protocol was not specifically designed for evaluation of carbon sequestration losses from development projects, the "avoided conversion" methodology can be utilized to that end. The Forest Project Protocol involves sampling of tree and soil carbon levels, projection of tree growth, and ongoing monitoring of changes within the subject forest. Projects are typically registered with the Climate Action Reserve to obtain carbon credits for trade purposes.

Pursuant to the mandates of Senate Bill 812 (2002), in June 2005 the California Climate Action Registry adopted the Forest Project Protocol for calculating forestland greenhouse gas sequestration and emissions. In October 2007 the California Air Resources Board approved the Forest Project Protocol measurement methodology for use in CEQA analysis. Forest Project Protocol version 3.2 was released in August 2010, and is the version currently in use. Specific CEQA greenhouse gas guidelines for the conversion of forestland to non-forest land use, including Forest Project Protocol citation, became effective March 2010. The applicable citation from Appendix G of the CEQA Guidelines is as follows:

> II. AGRICULTURE AND FOREST RESOURCES … In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board.

The oak trees on the project site fall under the definition of forest land under Public Resources Code section 12220(g):

> …land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Another similar protocol, known as the Urban Forest Project Protocol, has been developed to assist in valuing new non-forest tree plantings as a means to offset losses in carbon sequestration. It is applicable within municipalities, public lands, and similar areas.

Based on a telephone discussion with County staff on October 6, 2010, an analysis was prepared that utilized existing sample data rather than the site-specific carbon content sampling called for in the Forest Project Protocol. The primary purpose of the MST-Whispering Oaks sequestration report is to document the existing stock of sequestered carbon in the oak trees and estimate the value of the proposed tree planting as mitigation. The MST-Whispering Oaks Business Park EIR considered the loss of sequestration in determining that the proposed project would have a significant and unavoidable impact associated with greenhouse gas emissions. The MST-Whispering Oaks sequestration report provides additional information and disclosure regarding the loss of carbon storage due to tree removal. The end result is that the MST-Whispering Oaks sequestration report provides additional data, but that data does not provide an impact analysis on the global warming problem in the absence of thresholds or more data with which to provide comparison.

The analysis in the MST-Whispering Oaks sequestration report uses data from three sources to estimate the existing carbon storage value of the oak woodland within the proposed development area of the MST Whispering Oaks Business Park. The analysis focuses on the areas proposed for development and covered predominantly by oak woodland, estimated by Denise Duffy and Associates to be 37.45 acres. The areas not proposed for development, covered in other vegetation, or already developed, are not included in the calculations. Small vegetation such as the chaparral on other parts of the project site, represents a relatively minor portion of the biomass (U.S. Environmental Protection Agency April 2010, page 7-17). No estimate of the area proposed to remain as open space has be conducted, although since the acreage of oak woodland in that area could be easily measured, the analysis could be used to approximate the sequestration value of woodland to be conserved. The sequestration analysis utilizes certain aspects of Forest Project Protocol, but does not follow the methodology of the protocol. Refer to Attachment A for a detailed explanation of how the methodology used compares to the Forest Project Protocol. No on-site sampling was conducted or used in estimating the carbon sequestration of the trees or soil. Existing data for typical cases was utilized to provide an estimate of the amount of carbon sequestered at the project site. For projection of the benefits of proposed tree replacement planting, tree age/carbon sequestration data from the U.S. Forest Service was used.

1.4 CARBON CYCLE

To understand the value of oak trees for carbon sequestration, an understanding of carbon, carbon storage, and the carbon cycle is necessary. Elemental carbon is found free in nature in three forms: graphite, diamond, and fullerines. Carbon is more widespread as a compound with other elements. There are close to ten million known carbon compounds, many thousands of which are vital to organic and life processes. Carbon is found as carbon dioxide in the Earth's atmosphere and dissolved in water. It is a component of rocks in the form of carbonates of calcium (limestone) and magnesium (magnesite, dolomite) among others. Coal, petroleum, and natural gas are chiefly hydrocarbons (Los Alamos National Laboratory web page). All living things contain carbon compounds. Carbon is stored in organic materials on and within the Earth, in water, and in the atmosphere. The approximate amounts of carbon stored in each location are summarized in Table 1, Carbon Storage (Sinks).

Table 1 Carbon Storage (Sinks)

Sink	Amount in Billions of Metric Tons
Atmosphere	578 (as of 1700) - 816 (as of 2010)
Soil Organic Matter	1,500 to 1,600
Ocean	37,000
Marine Sediments and Sedimentary Rocks	66,000,000 to 100,000,000
Terrestrial Plants	540 to 610
Fossil Fuel Deposits	10,000

Source: Pidwirny 2006 and Ryan et al 2010.

Note: Atmospheric carbon levels have been rising since 1700.

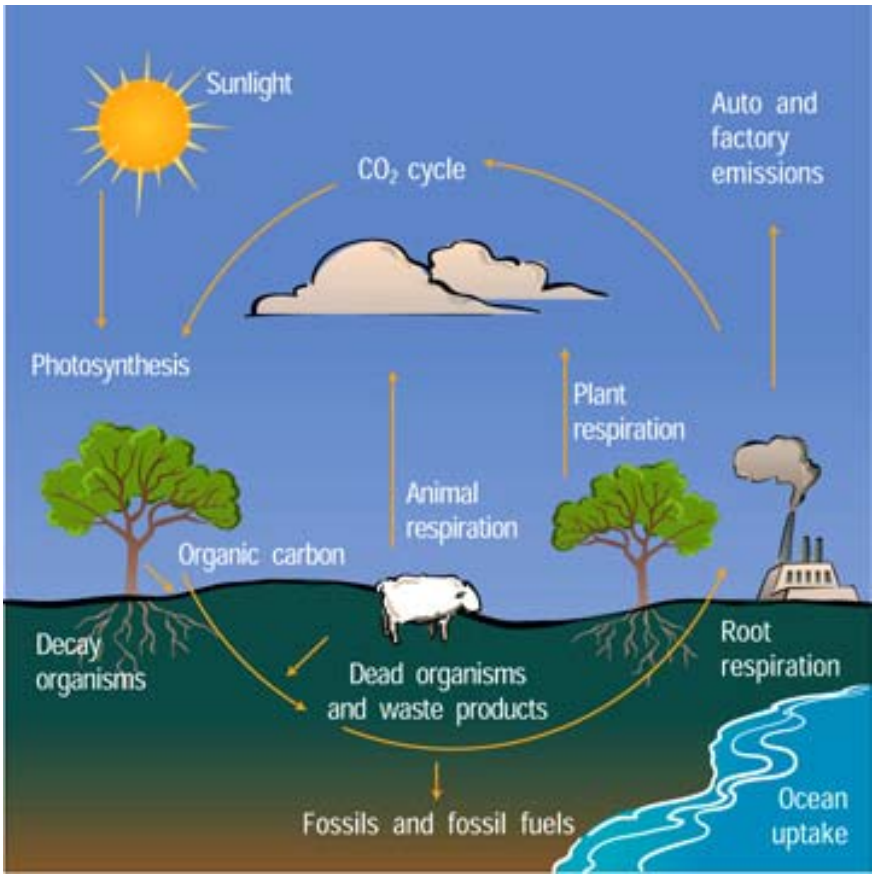
Carbon is not stationary within these locations, but rather is transported throughout the Earth through a number of processes referred to as the carbon cycle. A few of the major transport mechanisms are noted here. Carbon stored in fossil fuels is released when the fuels degrade or are burned. Carbon is stored in plants during photosynthesis and released to the air and soil through respiration (while the plant is alive) or through decay or burning. Animals likewise emit carbon to the atmosphere through respiration. Carbon is dissolved into water from the atmosphere and rocks. A graphic summary of the carbon cycle is presented on the following page in Figure 1, Carbon Cycle.

Global warming, caused by increased atmospheric carbon levels, basically stems from shifts in the carbon cycle and an increased transfer of stored carbon to the atmosphere. The quantity of

carbon dioxide found in the Earth's atmosphere and oceans has increased significantly during the past 300 years. Atmospheric levels have increased by over 30 percent. Emissions from fossil fuel combustion account for about 65 percent of the additional carbon dioxide currently found in the Earth's atmosphere. The other 35 percent is derived from deforestation and the conversion of natural ecosystems into agricultural systems (Pidwirny 2006).

Carbon that is stored in plants or rocks is said to be sequestered. Carbon sequestration within American private and public non-urban forests is estimated by the U.S. Forest Service. Currently, about 41.4 billion metric tons of carbon is stored in the nation's forests, and due to both increases in the total area of forest land and increases in the carbon stored per acre, an additional 192 million metric tons of carbon are sequestered each year. Annual forest sequestration is adequate to off-set about 11 percent of annual fossil fuel greenhouse gas emissions within the United States (U.S. Department of Agriculture Forest Service October 2010 a). An additional 700 million metric tons of carbon is currently sequestered in urban trees (U.S. Department of Agriculture Forest Service October 2010 b; Nowak 2001).

Figure 1 Carbon Cycle.



Source: National Center for Atmospheric Research

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2.0
PROJECT CARBON STORAGE AND RELEASES

2.1 CURRENT CARBON STORAGE ESTIMATE

Oak Trees

The current carbon stock within trees on the project site was estimated using tree inventory data from the *Forest Resource Evaluation Whispering Oaks Business Park Monterey, California* (Bill Ruskin August 2009), *MST Facility / Whispering Oaks Business Park Biological Assessment* (Denise Duffy and Associates August 2009) and data from the Forest Project Protocol (California Climate Action Registry 2010), the California Oak Foundation (Gaman 2006, 2008), and U.S. Department of Agriculture – Forest Service (Smith 2006). This report provides three estimates using three sets of data and makes a determination as to the approximate amount of carbon sequestration within the oak trees at present.

The Forest Project Protocol database provides a per acre carbon factor for Northern California Coast Mixed Oak Woodland (California Climate Action Registry August 2010). This classification includes the following typical species: bigleaf maple, blue oak, California black oak, California live oak, cottonwood, willow, pinyon, juniper, and western oak. This type of woodland is estimated to contain on average 108 metric tons of carbon per acre. This figure accounts for above-ground biomass only. Based on this data, oaks to be removed from the project site sequester about 4,045 metric tons of carbon (37.45 acres x 108 metric tons per acre).

The California Oak Foundation's examination of oak woodland carbon stores is based on vegetation mapping from the California Department of Forestry's Forest and Resource Assessment Program and data from 11,000 plots from the U.S. Forest Service's Forest Inventory and Analysis project. The California Oak Foundation estimates that within the Central Coast area (which includes Monterey County) oak woodlands and forests contain on average 55 metric tons of carbon per hectare, or 22.3 metric tons per acre. This figure accounts for both above and underground components of live and dead trees. Based on this data, oaks to be removed from

the project site sequester about 835 metric tons of carbon (37.45 acres x 22.3 metric tons per acre).

The U.S. Forest Service provides data for forest types throughout the United States in its *Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States* (Smith, James E. et al April 2006). The data is derived from the Forest Inventory and Analysis project. This study provides typical estimates for a variety of tree and forest types at various age periods. The oak trees on the project site are estimated to be 60 to 80 years old (Ruskin 2009 page 4). The "Pacific Southwest, western oak stands" classification and a woodlands age of 75 years were used to arrive at estimate carbon stores. An oak woodland 75 years of age is estimated to contain 76.9 metric tons of carbon per acre (Smith, James E. et al April 2006 Table A29). This figure accounts for all non-soil carbon. Based on this data, oaks to be removed from the project site sequester about 2,880 metric tons of carbon (37.45 acres x 76.9 metric tons per acre).

Soils

An approximation of soil carbon storage was made using factors from the Oak Foundation and Forest Service data. The Oak Foundation provides a standard factor of 28 metric tons of soil carbon per hectare of oak woodland, or about 11.3 metric tons per acre. The Forest Service estimates 11.2 metric tons of carbon per acre. Therefore, the project site's soil carbon storage is estimated at about 420 metric tons (37.45 acres x 11.2 metric tons per acre = 419 metric tons using the Forest Service factor; 37.45 acres x 11.3 metric tons per acre = 423 metric tons using the Oak Foundation factor).

Total Carbon Storage

Based on the estimates discussed above, total carbon storage on the project site is between 1,258 and 4,045 metric tons. The three estimation methods used produced results that varied considerably. The Oak Foundation estimate is the most focused on the type of vegetation being studied, and provides the lowest of the estimates. The Forest Project estimate is based on the most generalized vegetation type, and produces the highest result (higher still when other sources such as dead wood and soil are added). The Forest Service estimate relies on an extensive database (also used by the Oak Foundation). Although the vegetation type is somewhat broad it is less so than that used for the Forest Project, and it provides a middle range but presumably conservative estimate. Therefore, the Forest Service estimate was selected to represent the carbon storage within vegetation (2,880 metric tons per acre).

The two soils estimates are very close. A roughly averaged figure of 420 metric tons has been used for the soil carbon estimate.

The total carbon within the portion of the project site covered in oaks proposed for removal is therefore estimated at about 3,300 metric tons (2,880 metric tons from trees and 420 metric tons from soil). Table 2, Carbon Storage Estimates (Metric Tons) summarizes each of the three carbon estimates.

Table 2 Carbon Storage Estimates (Metric Tons)

	Forest Project	Oak Foundation	Forest Service (Selected Estimate)
Estimated Carbon per Acre (Trees)	108.0	48.2	**76.9**
Estimated Carbon per Acre (Soil)	N/A	11.3	**11.2**
Vegetation Sources Accounted for in Estimates			
Live Tree	Yes	Yes	Yes
Dead Tree	Yes	Yes	Yes
Understory	No	Yes	Yes
Down Dead Wood	No	Yes	Yes
Forest Floor (duff)	No	Yes	Yes
Project Site Tree Carbon Sequestration	4,045	835	**2,880**
Project Site Soil Carbon Sequestration	N/A	423	**419**
Project Site Total Carbon Sequestration	4,045	1,258	**3,299**

Source: California Climate Action Registry 2010, Gaman 2006, 2008, Smith 2006.

Note: Forest Project estimates do not account for understory, dead down wood, forest floor, or soil.

2.2 FUTURE CARBON STORAGE ESTIMATES

The U.S. Forest Service data provides an estimate of biomass and carbon storage at ten-year increments of tree growth from five years up to 125 years of age. Beyond an age of 125 years, it is assumed that a significant portion of the trees would be dying and that no further sequestration would occur from those trees – in fact, carbon would be released during the decay process. With this data, and assuming a current age of 75 years, it is possible to estimate additional storage within the existing trees, were they to remain undisturbed for up to 50 years from present.

With current estimated storage of about 76.9 metric tons per acre (at the current 75 years of age) and a projected storage of about 105.5 metric tons per acre (when the trees reach 125 years of age), each acre of trees can be projected to sequester an additional 28.6 metric tons of carbon (Smith, James E. et al April 2006 Table A29). Therefore, the 37.45 acres of oak trees on the project site would sequester 1,071 metric tons of carbon over the next 50 years if the trees were to remain (37.45 acres x 28.6 metric tons per acre).

2.3 CARBON RELEASES

Ultimately all carbon stored within the oak trees is expected to be released back to the atmosphere, soil, or water. The rate and destination of the release is dependent upon the form of disposition. Wood that is burned immediately returns its carbon to the atmosphere in the form of combustion gasses, primarily carbon dioxide and methane. Wood that naturally decays releases carbon over the course of several to many years. The carbon in wood that is placed in a landfill may remain sequestered by many years, and eventually is largely released as methane gas. The carbon in wood made into wood products (for example oak flooring) remains sequestered during the useful life of the product.

This estimate assumes that 85 percent of the biomass would be made into firewood and burned and that the remaining 15 percent of the biomass would be disposed of at the Monterey Regional Waste Management District's compost facility. The total release of carbon from disposal of the trees removed from the project site can be expected to equal the full current storage amount of about 2,880 metric tons.

Assuming firewood is cured for one year prior to sale, and is burned within two years of purchase, the firewood would release the carbon through burning in years two and three following removal. This release cycle would take place several times, since removal of trees would be phased along with site development. About half of the project site trees would be

removed in 2011 or 2012 for the MST facility; the remainder over the following several years. Carbon released through burning would be about 2,448 metric tons (85 percent of the 2,880 total). Hot, dry, fires with a good supply of oxygen produce mostly carbon dioxide with little carbon monoxide, methane, and non-methane hydrocarbons. The flaming phase of the fire approximates complete combustion, while the smoldering phase approximates incomplete combustion, resulting in greater production of carbon monoxide, methane, and non-methane hydrocarbons (Zepp 1994). The makeup of emissions from burning cannot be predicted because the nature of the fire is not known.

The smaller vegetative material (leaves and small branches and understory) are assumed to account for about 15 percent of the biomass, and would be brought to the Monterey Regional Waste Management Agency facility in Marina. Vegetative materials brought to this facility are diverted to a composting facility. Although off-gassing methane is collected from landfill materials, the vegetative material that becomes compost is ground up and composted without any collection of methane. However, little methane release occurs during compost processing. Methane is primarily associated with anaerobic processes that occur in landfills (U.S. Environmental Protection Agency Methane web page), while composting uses aerobic processes that release carbon dioxide instead. Carbon dioxide release during composting is minimal because the decay process does not proceed far (typically 60 to 90 days) before the compost is ready for use. The U.S. EPA considers the release of greenhouse gasses during composting to be part of the natural carbon cycle. Compost is either top-dressed or turned into soil by the end user. Carbon from compost is released during decay into either the atmosphere or soil.

Disturbance of soils, such as would take place during site clearing, grading, and project construction can release soil-bound carbon into the atmosphere. Decomposed organic matter in soils provides a carbon source for microbes and plants. Disturbance of soil leads to increased exposure to and breakdown of organic matter by microbes. Disturbance of soil also allows carbon dioxide within the soil air and water to escape to the atmosphere. Carbon release is directly related to the level of disturbance (Sundermeier). Adequate data to allow meaningful quantification of carbon release during soil disturbance were not found.

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3.0
CARBON OFFSETS FROM MITIGATION

3.1 PROJECT PROPOSED MEASURES

The proposed project would mitigate the loss of trees through two measures: preservation or relocation of trees existing on the project site, and replacement planting on and off the project site. The following Whispering Oaks Business Park General Development Plan policies are related to tree preservation:

> 3.2.1 Setbacks. In order to allow a variety of uses and maximize the opportunity for creative design no building setbacks are established. A minimum twenty foot natural landscape buffer shall be maintained from the property line along Inter-Garrison Road. Existing native oak trees within this buffer shall be maintained to provide a visual screen between the Whispering Oaks site and Inter-Garrison Road and to maintain the existing forest cover. Any area between the property line and the road improvements shall be maintained as part of this buffer. A minimum of ten feet of landscaping shall be provided along all interior streets.
>
> 3.2.3 Landscaping. In addition to the landscaping provided along the street frontages, additional landscaping may be required to provide screening and shading within the site. The landscaping palette shall give preference to species native to the central coast and shall maintain an oak woodland theme, which shall include but not be limited to Manzanita and Coast live oaks.
>
> Landscape plans for future development of the site shall include provisions for transplanting and replanting of Coast live oak trees on a case-by-case basis. Trees to be transplanted shall be marked and removed prior to beginning of grading operations under the supervision of a Certified Arborist.

A landscape plan shall identify the appropriate number of replacement seedlings that can be located within the site based on available planting space within these areas. In accordance with the Forest Resource Evaluation, approximately 80 percent of the replacement trees shall be selected from known local seed sources and shall be small, less than one gallon in size as they establish quickly and are easier to maintain. Approximately 20 percent of the replacement trees shall be comprised of a five-gallon container size or larger in areas where a more immediate visual effect is desired (e.g. along Inter-Garrison Road).

Landscape strips shall also be provided between parking areas and any portion of structures. Landscaping and pervious land area shall total no less than 30 percent of the total site area. Project entrances shall be emphasized with formal landscaping and monumentation signage. Where feasible, and consistent with the evaluation of the health of the tree species identified in the Forest Resource Evaluation Report (August 2009), tree islands and their canopy's shall be maintained at project entrances and/or key visual site line locations.

3.2.6 Oak Preservation. During subdivision development, the only trees to be removed are related to street and infrastructure improvements. The intent is to preserve as many trees as possible while developing a quality business park environment. The following are intended to implement this objective.

a. The existing native oak trees shall be maintained within the 20-foot landscape buffer along Inter-Garrison Road in order to provide a visual screen between the Whispering Oaks site and Inter-Garrison Road and to maintain the existing forest cover.

b. The twenty foot landscape buffer may be widened to provide for the preservation of either landmark trees, or groupings of trees that are critical to maintain the oak woodland corridor along Inter-garrison Road.

c. Removal of Native Oak Trees outside of the landscape buffer areas on each lot may be allowed to accommodate site development. All tree removal will be required to provide relocation or on-site tree replacement within the proposed landscape areas, within the cut and fill slopes along Inter Garrison Road, and along the perimeter of proposed detention basins in accordance with the recommendations

in Section 3.2.3, Landscaping and Section 21.64.260 of the Monterey County Zoning Ordinance.

d. In addition, specific landmark trees identified for protection in the Forest Resource Evaluation (August 2009) shall be retained as feasible. Emphasis shall also be placed on preserving the younger and healthier trees within the site, as well as trees located along the edges of the lot and/or property lines.

Future Development will be required to implement best management practices as identified in the Forest Resource Evaluation and monitoring in order to ensure successful establishment in accordance with Section 21.64.260 of the Monterey County Zoning Ordinance. As an overview, a substantial amount of resident oak trees may be preserved using the following strategies:

- Matching lot locations to elevations (see current Tentative Map)
- The 20-foot landscape buffer may be expanded where appropriate to preserve existing groupings of or individually significant trees;
- Preserving existing islands of resident oaks (as described in the Forest Resource Evaluation);
- Using open space areas between lots to preserve existing healthy oaks;
- Using a Forester/Arborist to assist in final lot layout of internal lots, roadways and parking areas;
- Preserving screen trees long Inter-Garrison Road within the established landscape buffer;
- Preserving healthy, visually significant landmark trees;
- Tree transplants onsite;
- Requiring preparation of a Forest Management Plan to address specific impacts of future construction proposals (per Title 21 of the Monterey County Zoning Ordinance).

3.2.7 Oak Replacement and In-Lieu Fees. While trying to minimize loss, removal of some trees (vis a vis a Use Permit) may be allowed to accommodate limited site development and would be required to provide relocation or on-site tree replacement within the proposed landscape

areas, within cut and fill slopes along Inter-Garrison Road, and along the perimeter of proposed detention basins in accordance with the recommendations in Section 3.2.3, Landscaping and Section 21.64.260 of the Monterey County Zoning Ordinance.

An off-site location (Youth Camp) may be utilized to replant those trees lost to development on the Project Site that cannot otherwise be replaced onsite (pursuant to requirements of the Forest Management and/or Resource Evaluation Plans) without compromising the integrity or health of the resident oaks. The Agency (or its successor) will fund a Forester to identify appropriate locations for tree plantings at the Youth Camp (considering stand density, forest health, HMB/HCP goals, ecological integrity, etc.) as part of the Whispering Oaks Forest Management Plan. Said plan shall include a summary of the planting recommendations including tree planting/protection guidelines that can be utilized by the County Parks Department. The Agency (or its successor) will arrange for the appropriate number of trees to be planted in the appropriate locations to achieve a 1:1 replacement ratio or contribute funds to County Parks capped at $50,000 to accomplish said plantings.

3.2.8 Grading. Each lot will be individually graded to allow maximum opportunity to preserve trees. Grading on each site needs to respect the existing topography and integrate the natural ground elevations at which existing trees are located into the finished grading.

3.2 ON-SITE TREE PRESERVATION

The value of preservation of trees in place would be directly proportional to the number of acres preserved. The number of acres of oak woodland within the project site that would be preserved under policies in the governing general development plans was estimated by comparing habitat coverage to the tentative map. Areas within the Inter-Garrison Road setback and along property boundaries were considered feasible for oak woodland preservation.

The following are considered minimum areas of preservation within the Whispering Oaks Business Park (Lots 2-16): within the Inter-Garrison Road buffer, approximately 1,800 feet of frontage may be preserved at a width of 20 feet (36,000 square feet); at the western edge of Lots 2 and 7, and at the eastern edge of Lots 14 and 15, about 1,200 feet may be preserved at a width of ten feet (12,000 square feet); at shared lot lines of Lots 3, 4, and 5, Lots 8, 9, 10, and 11 and Lots 12, 13, and 14, about 1,975 feet may be preserved at a width of ten feet (19,750 square feet).

Together, these setback and buffer areas would result in the preservation of about 1.5 acres. Note that additional areas could be preserved as undisturbed woodland, depending on site planning on each lot. The tentative map indicates an Inter-Garrison Road buffer of at least 50 feet at Lots 8, 9, and 10, which could add about 0.4 acres. The tentative map also indicates rear setbacks at Lots 3, 4, 5, and 6. However, the general development plan does not include any policies regarding a setback in this area, so no credit is provided for tree preservation in this area. This area, as shown on the tentative map, has the potential to preserve about 1.1 acres of oak woodland.

At the MST facility (Lot 1), the primary area of oak preservation would be at the southwest corner of the site in an area that measures about 60 by 500 feet (30,000 square feet or 0.7 acres). Smaller sections of oak woodland might be preserved along the margins of the site, but plans call for extensive grading to create two levels on the site, so no other preservation is assumed in this estimate.

Total preservation within the development area would be at least 2.1 acres, with the preservation of 2.6 acres likely (based on tentative map building envelopes near Inter-Garrison Road). Additional preservation is possible depending on site planning, but for the purposes of the sequestration report, preservation of 2.6 acres is assumed. Preservation would reduce the acreage losses discussed in Section 2.0 from 37.45 to 34.85, a reduction of 6.9 percent. Carbon storage losses and carbon releases would be reduced by the same percentage. Adjustments to the carbon stock losses attributed to on-site tree preservation are summarized in Table 3, Oak Preservation Mitigation Summary.

Table 3 Oak Preservation Mitigation Summary

Location	Acres	Carbon Savings (metric tons)
MST Southwest Corner	0.7	53.8
Whispering Oaks Inter-Garrison Road buffer	1.2	92.3
Other Lot Margins	0.7	53.8
Total Current Conditions	2.6	199.9
Projected Future Savings through 2060	2.6	74.4.
Total Savings	2.6	**284.3**

Source: (Smith, James E. et al April 2006).

Note: Carbon savings based on 76.9 metric tons per acre (not including soil)

Carbon savings based on 28.6 metric tons per acre for future sequestration

3.3 REPLACEMENT TREES

Tree replacement is proposed at a 1:1 ratio, in accordance with Monterey County Code. Trees measured at six inches or greater in diameter at two feet above the ground are required to be replaced. The project site has about 125 to 150 trees of this size per acre. The forest resource evaluations note an extremely low occurrence of young trees. The proposed project would remove an estimated 4,400 oak trees at least six inches in diameter. Because intervening grasslands are separately accounted for, oak trees cover essentially 100 percent of the acreage described as oak woodland. Replacement trees would be 80 percent seedlings, and 20 percent larger plants (mostly five-gallon cans). This analysis assumes the trees planted as part of the 1:1 mitigation are seedlings, since five gallon trees and seedlings are likely to be essentially the same size within ten years. U.S. Forest Service data for "Pacific Southwest, western oak stands" provides the typical biomass and carbon content for trees at ages 5, 15, 25 and so on to 125 years (Smith, James E. et al April 2006). This information is provided per acre, so is not necessarily directly transferrable to a program where oak seedlings would be re-planted on a 1:1 replacement basis. However, because the oak woodland on the project site is covered 100 percent in trees, this estimate assumes an acre-for-acre replacement. Replacement is assumed to occur for the remaining acreage after on-site tree preservation is accounted for. Therefore, about 34.85 acres of replacement planting is expected. Table 4, Oak Replacement Mitigation Summary identifies the estimated carbon sequestration capability for the replacement trees at various points in the future. After 50 years, about half of the carbon release and lost future potential sequestration would be made up by the combination of the two mitigation approaches.

3.4 TREE RELOCATIONS

Tree re-location is proposed in the Whispering Oaks Business Park General Development Plan as a mitigation option. Existing trees with high landscape value would be relocated from removal areas to landscape areas within the project site. Relocation, as opposed to removal, would prevent the release of carbon during disposal of the wood. Given a tree density of about 150 trees per acre, a savings equivalent to one acre could be realized for each 150 trees that were re-located. After relocation, it is assumed that tree growth would at least slow if not stop, for a period of time while the tree recovered from the shock associated with the move. In addition, some of the biomass of the tree would be removed to help the tree survive the move. Therefore, future carbon sequestration would be lower for the trees that were moved. Because there is no way to predict how many trees would be re-located, no estimate is attempted in terms of carbon savings.

Table 4 Oak Replacement Mitigation Summary

	2011-2020	2021-2030	2031-2040	2041-2050	2051-2060	Total
Carbon Content Released	2,448					2,448
Less Savings from Preservation (Table 3)	-169					-169
Lost Future Potential Carbon Sequestration (37.45 acres)	300	247	206	172	146	1,071
Less Savings from Preservation (Table 3)	-21	-17	-14	-12	-10	-74
Baseline for Replacement	2,558	230	192	160	136	**3,276**
34.85 acres Replacement Trees	227	125	254	484	551	**1,641**
Net Difference						**-1,635**

Source: Smith et al April 2006 and EMC Planning Group

Note: Accounts for non-soil sequestration in metric tons

Replacement Trees Approximate Sequestration in Metric Tons per Acre: 2011-2020 = 6.5; 2021-2030 = 3.6; 2031-2040 = 7.3; 2041-2050 = 13.9; 2051-2060 = 15.8 (interpolated from Smith et al April 2006 Table B-29 "total non-soil" column

3.5 CONCLUSION

The proposed project would remove 37.45 acres of oak woodland from the project site, releasing about 2,448 metric tons of carbon as the wood is burned. The loss of trees would prevent the trees' future sequestration of an additional 1,071 metric tons of carbon over the following 50 years. About 190 metric tons of carbon emissions could be avoided and future sequestration realized by retaining some of the trees in open space areas within development lot on the project site. Tree planting would replace each lost tree (1:1 replacement ratio), but because the biomass of the replacement trees is significantly less, sequestration would lag behind what could be obtained by the existing trees. Over the course of 50 years, the carbon balance would show a loss of about 50 percent compared to a no project scenario in which the trees were retained. The total estimated mitigation shortfall after 50 years would be 1,635 metric tons. The difference between carbon sequestration lost from tree removal and gained from mitigation plantings would continue to narrow as the analysis window extended beyond 50 years, because the existing trees' sequestration rate would decline with maturity, and the replacement trees' sequestration rate would accelerate as they gain biomass and are still in active growth.

4.0
REFERENCES

County of Monterey Resource Management Agency - Housing and Redevelopment Office. *Whispering Oaks Business Park Draft General Development Plan*. October 19, 2010.

Denise Duffy and Associates. *MST Facility/Whispering Oaks Business Park Biological Assessment.* August 2009.

Denise Duffy and Associates. *Preliminary Oak Woodland Habitat and Tree Removal Mitigation Strategy Plan for the MST Facility/Whispering Oaks Business Park Site*. August 2009.

Gaman, Tom and Jeffrey Firman (California Oak Foundation). *Oaks 2040 - The Status and Future of Oaks in California*. October 2006. www.californiaoaks.org.

Gaman, Tom (California Oak Foundation). *An Inventory of Carbon and California Oaks*. 2008. www.californiaoaks.org.

Gorte, Ross W. (Congressional Research Service). *U.S. Tree Planting for Carbon Sequestration*. May 4, 2009. www.fas.org/sgp/crs/misc/R40562.pdf.

Los Alamos National Laboratory, Chemistry Division. Carbon information web page. http://periodic.lanl.gov/elements/6.html.

Nowak, David J. and Danial E. Crane. Carbon Storage and Sequestration by Urban Trees in the USA. 2001. http://nrs.fs.fed.us/pubs/5521.

Sundermeier, Alan et al (Ohio State University Extension). *Soil Carbon Sequestration – Fundamentals* (Fact Sheet AEX 510 05). ohioline.osu.edu/aex-fact/pdf/0510.pdf.

Pidwirny, M. "The Carbon Cycle" *Fundamentals of Physical Geography*, 2nd Edition. 2006. http://www.physicalgeography.net/fundamentals/9r.html.

Ruskin, Bill. *Forest Management Plan for Monterey Salinas Transit Bus Maintenance and Operations Facility Fort Ord, Monterey County*. August 2009.

Ruskin, Bill. *Forest Resource Evaluation Whispering Oaks Business Park Monterey, California.* August 2009.

Ryan, Michael G. et al (Ecological Society of America). "A Synthesis of the Science on Forests and Carbon for U.S. Forests," *Issues in Ecology* Report Number 13. Spring 2010. www.treesearch.fs.fed.us/pubs/35006.

Smith, James E. et al. *Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States.* April 2006. http://www.treesearch.fs.fed.us/pubs/22954.

U.S. Composting Council. *Greenhouse Gases and the Role of Composting: A Primer for Compost Producers*. 2008. www.compostingcouncil.org.

U.S. Department of Agriculture Forest Service. "New Data Highlights Role of Forests in Fight Against Climate Change" (Release No. 0532.10). October 15, 2010 (a). http://www.fs.fed.us/rmrs/docs/forest-carbon/news-release.pdf.

U.S. Department of Agriculture Forest Service. *U.S. Forests and Carbon: Some Important Facts* (Forest Carbon Briefing Paper). October 15, 2010 (b). http://www.fs.fed.us/rmrs/docs/forest-carbon/fact-sheet.pdf.

U.S. Environmental Protection Agency. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2008* (EPA 430-R-10-006). April 15, 2010. epa.gov/climatechange/emissions/usinventoryreport.html.

U.S. Environmental Protection Agency. Methane – Sources and Emissions web page. http://www.epa.gov/methane/sources.html.

Richard G. Zepp, editor. *Climate Biosphere Interaction: Biogenic Emissions and Environmental Effects of Climate Change*. 1994. http://www.treesearch.fs.fed.us/pubs/30249.

The MST-Whispering Oaks Business Park EIR presented a conclusion that the proposed project would have a significant and unavoidable impact on greenhouse gas emissions. The MST-Whispering Oaks sequestration report provides additional information and disclosure, but does not change the conclusions presented in the draft EIR. The MST-Whispering Oaks sequestration report provides additional data, but that data does not provide an impact analysis on the global warming problem in the absence of thresholds or more data with which to provide comparison.

ATTACHMENT A

FOREST PROJECT PROTOCOL METHODOLOGY COMPARISON

FOREST PROJECT PROTOCOL METHODOLOGY COMPARISON

This comparison presents the steps of the Forest Project Protocol's "avoided conversion" methodology and the corresponding steps used in the MST-Whispering Oaks sequestration report. The comparison references each of the chapters of the Forest Project Protocol version 3.2, published in August 2010.

The Forest Project Protocol was developed by the Climate Action Reserve principally to document benefits from pro-active forestland sequestration projects in three categories: reforestation, improved forest management, and avoided conversion. The Climate Action Reserve is a national carbon offsets program working to ensure integrity, transparency, and financial value in the North American carbon market. Although the Forest Project Protocol was not specifically designed for evaluation of carbon sequestration losses from development projects, the "avoided conversion" methodology can be utilized to that end. Because the end purpose differs, the analysis contained in the sequestration report does not precisely follow the Forest Project Protocol. The Forest Protocol was developed for the purpose of calculating carbon off-set credits known as Climate Reserve Tonnes (metric tons of carbon off-sets). The protocol applies to reforestation, improved forest management, and avoided conversion of woodland projects that through this program can receive the appropriate Climate Reserve Tonnes. Since the project does not propose to obtain carbon offsite credits, the protocol would not apply; however by using the avoided conversion methodology an estimate of the carbon impacts from deforestation of the project site can be quantified.

Forest Project Protocol Chapters 5 and 6 contain the analysis steps of the protocol. The following is an explanation of the Forest Project Protocol avoided conversion step by step process and how each step of the protocol was followed, ignored, or adapted for the purpose of quantifying the carbon sequestration baseline and project impacts in the MST-Whispering Oaks sequestration report.

FOREST PROJECT PROTOCOL CHAPTER 1 - INTRODUCTION

This chapter provides a summary of the purposes of the Forest Project Protocol. The principal purpose of the Forest Project Protocol is documentation of carbon credits for use in cap and trade arrangements. Therefore, the protocol is set up to establish the value of forest land that is intended to be re-established, enhanced, or preserved. Use of the Forest Project Protocol for the purpose of documenting loss of forest land requires modifications to the protocol, and some aspects of the protocol are not relevant.

FOREST PROJECT PROTOCOL CHAPTER 2 - FOREST PROJECT DEFINITIONS AND REQUIREMENTS

Specifically relevant to the MST-Whispering Oaks sequestration report is Section 2.1.3 Avoided Conversion, which sets forth the Climate Action Reserve's qualifications for a project using this methodology. That section reads as follows:

> An Avoided Conversion Project involves preventing the conversion of forestland to a non-forest land use by dedicating the land to continuous forest cover through a conservation easement or transfer to public ownership. An Avoided Conversion Project is only eligible if:
>
> 1. The Forest Owner can demonstrate that there is a significant threat of conversion of project land to a non-forest land use by following the requirements for establishing the project's baseline in Section 6.3 of this protocol.
>
> 2. The project does not employ broadcast fertilization.
>
> 3. The project does not take place on land that was part of a previously registered Forest Project, unless the previous Forest Project was terminated due to an Unavoidable Reversal (see Section 7).
>
> An Avoided Conversion Project may involve tree planting and harvesting as part of the project activity.
>
> Avoided Conversion Projects are eligible only on lands that are privately owned prior to the project start date.

Forest Project Protocol Chapter 3 - Eligibility Rules and Other Requirements

This chapter sets forth the requirements for registration of projects with the Climate Action Reserve. For an "avoided conversion" project, various data, such as a real estate appraisal are required, to demonstrate that the project site has value for conversion to non-forest uses. Because the proposed project would not be registered under this program, this chapter is not relevant to the MST-Whispering Oaks sequestration report

Forest Project Protocol Chapter 4 - Identifying the Project Area

For registration of an "avoided conversion" project with the Climate Action Reserve, the real estate appraisal establishes the project area. For purposes of this report, the project area is the oak woodland within the project site studied in the MST-Whispering Oaks Business Park EIR.

Forest Project Protocol Chapter 5 - GHG Assessment Boundary

The GHG Assessment Boundary defines all the GHG sources, sinks, and reservoirs that must be accounted for in quantifying a Forest Project's GHG reductions and removals. For an "avoided conversion" project Table 5.3 lists various GHG sources as included, excluded, or optional. The following table lists the source, inclusion status, and notes regarding how this information was utilized in this report.

Source	Inclusion	Notes on this Report
Primary Effect Sources/Sinks		
Standing Live Trees	Included	This information is derived from USFS data and is included in this report.
Under Story Plants	Optional	This information is derived from USFS data and is included in this report.
Standing Dead Trees	Included	This information is derived from USFS data and is included in this report.
Down Dead Wood	Optional	This information is derived from USFS data and is included in this report.
Forest Floor Litter / Duff	Optional	This information is derived from USFS data and is included in this report.
Soil Carbon	Opt/Inc [1]	Significant soil disturbance would take place. This information is derived from USFS data and is included in this report.
Forest Products in Use	Included	No in-use forest products would be produced. This sink is not included in this report.
Forest Products in Landfill	Exc/Inc [2]	No forest products would be disposed of in landfills. This sink is not included in this report.

Secondary Effect Sources/Sinks		
Biological Emissions from Site Preparation	Included [3]	This is included in the calculation of differences between existing and future carbon stores.
Mobile Combustion - Site Preparation	Excluded	Construction equipment would used to clear the site. However, this source is not included in this report.
Mobile Combustion - Operations	Excluded	Carbon emissions would result from maintenance of replacement trees. This source is not included in this report.
Stationary Combustion - Operations	Excluded	There would be no stationary combustion operations. This source is not included in this report.
Biological Emissions - Off-site Forest Clearing	Included	The proposed project would not result in changes to forest practices off the project site. This source is not included in this report.
Biological Emissions - Off-site Harvest Changes	Excluded	The proposed project would not result in changes to forest practices off the project site. This source is not included in this report.
Combustion from Processing Forest Products	Excluded	The proposed project would process fire wood (cutting and transporting activities). This source is not included in this report.
Combustion from Processing Alternative Products	Excluded	No alternative products would be processed as a result of the proposed project. This source is not included in this report.
Biological Emissions from Decomposition	Included [4]	This report assumes 15 percent of the biomass will be composted at MRWMD. This decomposition is considered to be a natural part of the carbon cycle and is not included.

Source: Forest Project Protocol version 3.2 Table 5.3 (Climate Action Reserve August 2010)

Notes: 1. Inclusion depends on amount of soil disturbance expected.

2. Included if project harvesting exceeds baseline; otherwise excluded.

3. Biological emissions from site preparation are not quantified separately, but rather are captured by measuring changes in included carbon reservoirs (soil carbon, where applicable). For other carbon reservoirs, changes are unlikely to have a significant effect on total quantified GHG reductions/removals.

4. Emissions from the decomposition of forest products are built into calculations of how much forest product carbon will remain in in-use wood products and in landfills.

FOREST PROJECT PROTOCOL CHAPTER 6 - QUANTIFYING NET GHG REDUCTIONS AND REMOVALS

This chapter provides the analytical framework and specific methods for determining the amount of carbon that would be lost or saved from a project. There are seven steps used in the quantification process, each of which is described below. Specific instructions for an "avoided conversion" project are provided in Section 6.3.

Step 1. Estimating Baseline On-site Carbon Stocks

The baseline is an estimate of what would have occurred in the absence of a forest project (in this case, what would occur with implementation of the proposed project). To establish baseline onsite carbon stocks, the Forest Project Protocol calls for modeling 100 years of carbon stock changes in each of the included and selected optional onsite carbon pools (identified in Table 5.3 in Chapter 5). Modeling must be based on inventoried carbon stocks at the time of the project's initiation following the requirements in Appendix A. Modeling of onsite carbon stocks over time must be conducted following the requirements in Appendix B. Baseline onsite carbon stocks are estimated over a Forest Project's entire crediting period (100 years) at the time of the project's initiation and are not modified thereafter.

The baseline for "avoided conversion" projects is a projection of onsite forest carbon stock losses that would have occurred over time due to the conversion of the project area to a non-forest land use. Estimating the baseline for "avoided conversion" projects takes into account characterizing and projecting the baseline and then discounting for uncertainty of conversion probability. This involves the four sub-steps summarized below.

Step 1a. Identifying Alternative Highest-value Land Use

This step involves specifying an alternative highest-value land use for the project area, (such as identified by the appraisal from Chapter 3). The MST-Whispering Oaks sequestration report assumes the currently proposed plans represent the alternative highest-value land use.

Step 1b. Rate of Conversion

The rate of conversion and removal of onsite carbon stocks is estimated, by either referencing planning documentation for the project area (e.g. development plans) that specify the timeframe of the intended removal of forest cover, or identifying a default annual conversion rate (from Table 6.3). For the MST-Whispering Oaks sequestration report, a ten-year development period is assumed and the percent conversion is derived from project plans and habitat mapping. A ten

year timeframe was selected to more or less match proposed project phasing. Trees on about half the project site are projected to be removed within about three years of project approval, and trees on an additional third of the project site would be removed within about six years of project approval. Trees may not be removed from the remaining 20 percent of the project site for as many as 20 years following project approval. The Forest Project Protocol does not include a mechanism for phasing in this manner, so a roughly averaged term of ten years was selected. The proposed project would remove approximately 93 percent of the project site trees.

Step 1c Growth Modeling

This step includes documentation of existing on-site carbon stores and estimating lost carbon sequestration over the 100-year crediting period of a forest project.

Appendix A of the Forest Project Protocol provides detailed information for obtaining the current carbon storage in the trees. The trees within sample plots are to be measured for girth and height, and biomass estimated based on the measurements. If soil carbon will be included, soil sampling is required. For this report, no on-site measuring or sampling was conducted. The MST-Whispering Oaks sequestration report instead relied on existing data for south-western oak forests from tables prepared by the U.S. Forest Service. Based on the average estimated tree age (obtained from the project's arborist report), the MST-Whispering Oaks sequestration report provided a calculation of total on-site sequestration by multiplying age-appropriate per-acre carbon storage factors from the U.S. Forest Service by the total acres of oak woodland proposed for removal (37.45 acres, reduced to 34.85 acres with on-site preservation).

The Forest Project Protocol requires a computer simulation of project changes in onsite carbon stocks over 100 years, reflecting the rate of conversion estimated in Step 1b. The simulation must model changes in onsite carbon stocks for all required and selected optional carbon pools, as identified in Chapter 5. The Forest Project Protocol lists several computer models that can be used for forest growth projections. Most of the computer models are designed to provide forest product yield estimates for the timber industry, and many are specific to one or two timber species. The MST-Whispering Oaks sequestration report obtained growth data specific to south-western oak forests from tables prepared by the U.S. Forest Service. "Southwestern oak" was the closest match to the project site woodland type; the project site is within an area broadly classified by the U.S. Forest Service as the southwest. The tables used provide average biomass and carbon storage figures at ten-year increments. The difference from one data point to the next provides an estimate of the carbon sequestered during that 10-year interval. The carbon currently sequestered was also estimated based on the U.S. Forest Service tables. The MST-Whispering Oaks sequestration report uses data for trees up to 125 years old (for a total estimation period of 50 years beyond present), at which point the growth rate of the average oak tree has significantly

slowed, and many oak trees are in decline. Thus, at the end of a 50-year timeframe, the oak trees on the project site would no longer provide significant additional sequestration.

Step 1d. Discounting for the Uncertainty of Conversion Probability

This step is not relevant to the proposed project and the MST-Whispering Oaks sequestration report, because the project site is currently proposed for development, and the intent of the MST-Whispering Oaks sequestration report is to determine carbon losses in the event the project is constructed.

Step 2. Estimating Baseline Carbon in Harvested Wood Products

In conjunction with modeling baseline onsite carbon stocks, any harvesting that would have occurred must be forecast. From this the amount of carbon that would have been transferred each year (on average) to long-term storage in wood products is calculated. Baseline harvesting is forecasted following the requirements in Appendix C. This step was not included in the MST-Whispering Oaks sequestration report because no wood product harvesting would occur on the project site with or without the project. The MST-Whispering Oaks sequestration report does not consider firewood to be a forest product for this purpose, because carbon is not stored long-term in firewood as it is, for example, in furniture or building framing.

Step 3. Determining Actual On-site Carbon Stocks

Each year actual onsite carbon stocks must be calculated. This must be done by updating the carbon inventory for the current year, following the guidance in this section and in Appendices A and B. The estimate of actual onsite carbon stocks must be adjusted by an appropriate confidence deduction. The MST-Whispering Oaks sequestration report uses existing U.S. Forest Service data to project future carbon values. Because the proposed project is the inverse of the intended use of the Forest Project Protocol (removal rather than preservation), annual measurements in future years are not possible, and do not serve the purpose of providing information for use in the EIR.

Step 4. Determining Actual Carbon in Harvested Wood Products

Each year any harvesting must be reported and the amount of carbon transferred to long-term storage in wood products determined. No carbon storage in wood products would take place with the proposed project.

Step 5. Calculating the Project's Primary Effect

Each year the actual change in GHG emissions or removals associated with the project's intended ("primary") effect must be quantified. For any given year, the primary effect is calculated by:

a. Taking the difference between actual onsite carbon stocks for the current year and actual onsite carbon stocks for the prior year;

b. Subtracting from (a) the difference between baseline onsite carbon stocks for the current year and baseline onsite carbon stocks for the prior year; and

c. Adding to (b) the calculated difference between actual and baseline carbon in harvested wood products for the current year.

In the typical application of the Forest Project Protocol, the primary effect of the project would be to preserve carbon stores and future sequestration. In the case of this report, the Forest Project Protocol is being used to document losses, rather than document preservation. Therefore, the primary effect is a loss of carbon stocks and sequestration potential, and this step is not applicable to the proposed project.

Step 6. Quantifying the Project's Secondary Effects

Each year the actual change in GHG emissions or removals associated with the Forest Project's unintended ("secondary") effects must be quantified. In the typical application of the Forest Project Protocol, secondary effects will almost always be negative (i.e. they will reflect an increase in GHG emissions caused by the project). Secondary effects documented in the sequestration report are also negative, but there is no positive effect to balance them. The positive effects of replacement plantings are presented separately in the sequestration report. This step of the Forest Project Protocol is not applicable to the proposed project.

Step 7. Calculating total net GHG reductions and removals

For each year, total net GHG reductions and removals are calculated by summing a Forest Project's primary and secondary effects. If the result is positive, then the project has generated GHG reductions and/or removals in the current year. If the result is negative, this may indicate a reversal has occurred. The MST-Whispering Oaks sequestration report determined the primary and secondary effects using a modification of the previous steps, as outlined above, to quantify (in an estimate) the total negative effects.

FOREST PROJECT PROTOCOL CHAPTER 7 – ENSURING THE PERMANENCE OF CREDITED GHG REDUCTIONS AND REMOVALS

This chapter discusses the requirements for establishing mechanisms to ensure that re-established, enhanced, or preserved forest land is maintained as forestland over time. The proposed project would remove the trees on the project site rather than preserve them. Although the project proposes to establish replacement trees on another site, the project is not seeking registration for carbon credits, and this chapter is not relevant to the proposed project or the MST-Whispering Oaks sequestration report.

FOREST PROJECT PROTOCOL CHAPTER 8 – PROJECT MONITORING

This chapter discusses the requirements for monitoring re-established, enhanced, or preserved forest land to ensure that the goals of the project are met and that continued registration for carbon credits is warranted. The proposed project would remove the trees on the project site rather than preserve them. Although the project proposes to establish replacement trees on another site, the project is not seeking registration for carbon credits, and this chapter is not relevant to the proposed project or the MST-Whispering Oaks sequestration report. Monitoring would be conducted as required under County regulations.

FOREST PROJECT PROTOCOL CHAPTER 9 – REPORTING PARAMETERS

Because the proposed project does not seek registration with the Climate Action Reserve, this chapter is not relevant to the proposed project or the MST-Whispering Oaks sequestration report.

Forest Project Protocol Chapter 10 – Verification Guidance

This chapter provides guidance to Reserve-approved verification bodies for verifying GHG emission reductions. This chapter is not relevant to the proposed project or the MST-Whispering Oaks sequestration report.

Forest Project Protocol Chapter 11 – Glossary and Forest Project Protocol Chapter 12 - References

These two chapters provide documentation for the Forest Project Protocol.

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APPENDIX N

ADDITIONAL TRAFFIC INFORMATION

Memorandum

To: City of Marina

From: Ron Marquez, Traffic Engineer RJM

cc: CSG Consultants

Date: January 13, 2011

Re: MST Whispering Oaks Fair Share Calculations Updated

The “fair share “ calculation methodology for calculating contributions provided to me for the MST and Whispering Oaks Project will not mitigate the anticipated impacts. This methodolgy appears to distribute the cost of mitigation to all future traffic rather than to the total new traffic. Using the approach submitted, the City would not receive sufficient funding to complete the needed modifications. The table below uses the figures in the traffic analysis provided for the project to arrive at a “Fair share “ contribution to the projects impacted in the City of Marina. The methodology used for this table is consistent with standard engineering practice. The two highlighted projects reflect improvements needed to address existing problems. For these projects the share is distributed to all traffic.

City of Marina
MST and Whispering Oaks Business Park
Fair Share Contribution

Intersection	Modification	Needed	Cost	Existing Volume PM	MST Trips	Park Trips	Total Volume	MST Fair Share	Park Fair Share	MST Cost	Park Cost
Imjin Road / Imjin Prkway	Add 2nd WB L	Phase 1	$ 925,453	2113	151	508	7009	3.1%	10.4%	$ 28,542	$ 96,023
	Add NB Right OV 3rd EB T & 3rd WB T	Cumulative	$ 1,189,000	2113	151	508	7009	3.1%	10.4%	$ 36,671	$ 123,368
5th Ave / Imjin Prkwy	Add SB R	All Phases	$ 390,111	2201	73	226	7654	1.3%	4.1%	$ 5,222	$ 16,168
3rd Ave / Imjin Prkwy	Signalize	All Phases	$ 543,000	2066	56	182	7043	1.1%	3.7%	$ 6,110	$ 19,857
2nd Ave / Imjin Prkwy	Add EB RT OV	Phase 3 & Cum	$ 42,000	2554	56	182	10224	0.7%	2.4%	$ 307	$ 997
NB Hwy 1 Ramp / Imjin Prkwy	Median Closure	Phase 1-3	$ 151,428	2383	56	182	8379	0.7%	2.2%	$ 1,012	$ 3,289
	Signalize	Cumulative	$ 488,582	2383	56	182	8379	0.9%	3.0%	$ 4,563	$ 14,830
SB Hwy 1 / Imjin Prkwy	Add 2nd WB T & 2nd SB L	Phase 1-3	$ 965,308	1048	31	103	3957	0.8%	2.6%	$ 7,562	$ 25,127
	Signalize	Cumulative	$ 488,582	1048	31	103	3957	1.1%	3.5%	$ 5,207	$ 17,299
Abrams Dr / Imjin Prkwy	Add 2nd WB T & 2nd EB T	All Phases	$ 1,304,596	2653	74	198	7301	1.6%	4.3%	$ 20,770	$ 55,574
Imjin Prkwy / Reservation Rd	Add 3rd NB R	Phase 1-3	$ 222,700	3984	74	181	8362	1.7%	4.1%	$ 3,764	$ 9,207
									Total	**$ 119,730**	**$ 381,740**

All sources MST Whispering Oaks Business Park Traffic Analysis
Source existing volumes Exhibit 4B
Source MST Trips Exhibit 9B & 9D
Source Park Trips Exhibit 13B & 16B
Total Volume Source Exhibit 22B

Let me know if you have any questions or comments.