

**FINAL
ENVIRONMENTAL IMPACT REPORT**

for the

**RANCHO SAN JUAN SPECIFIC PLAN
AND HYH PROPERTY PROJECT EIR**

SCH No. 2002121142

Prepared for:

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**November 10, 2004
(Revised 12/14/04)**

ERRATA

Rancho San Juan Specific Plan and HYH Property Project Final EIR

December 14, 2004

This document identifies changes in the Specific Plan as well as other relevant information which have come to light subsequent to the preparation of the Final SEIR for the Rancho San Juan Specific Plan and HYH Property Project. The purpose of this document is to evaluate the relationship this information may have, if any, on the results and conclusions of the Final EIR, dated November 10, 2004. As appropriate, the text of the original Final EIR has been revised to reflect the changes discussed in this Errata. Pages which have been revised are identified by the revision date of December 14, 2004 in parentheses following the original date.

As discussed below, the changes and/or additional information do not collectively or individually constitute significant new information within the meaning of Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5, and, therefore, re-circulation of the EIR is not required. Furthermore, this additional information does not contain significant new information, as defined in CEQA Guidelines Section 15088.5, which would require re-circulation of the modified sections or entire document. Lastly, the changes, clarifications, and additions to the FEIR do not identify or result in any new significant impacts or any substantial increase in the severity of any environmental impacts. The revised mitigation measures have been incorporated into the Specific Plan and/or Conditions of Approval for the HYH Properties Project, as appropriate. Therefore, re-circulation of the DEIR or a supplement to Final EIR is not required.

SPECIFIC PLAN MODIFICATIONS

In the course of public hearings, modifications were discussed which will be included in the final version of the Rancho San Juan Specific Plan. The key changes related to the environmental analysis in the Final EIR are as follows:

Housing

The 70 time-share units allocated to the HYH Properties Project have been eliminated from the Specific Plan. A total of 70 residential units would be reallocated from other planning areas within the Specific Plan to the HYH Properties. While the total number of residential units would not exceed the 4,000 total contained in the Specific Plan, the number allocated to HYH Properties would increase from 1,077 to 1,147. As the time-share units would have been located in the HYH Properties, this development potential would be eliminated for HYH Properties. In addition, the provision for the 150 Additional Dwelling Units (ADUs) would be eliminated from the Specific Plan.

With these changes, the total number of traditional residential units allowed by the Specific Plan would remain at 4,000 units. The non-traditional (e.g. time-share units and ADUs) would decrease from a potential of 321 units to 71 units. The 71 units would represent the rental units associated with the golf course on the HYH Properties. Thus, the ultimate total number of residential units would decrease with the changes to the Specific Plan.

Other Specific Plan Changes

Other notable changes in the Specific Plan are as follows:

- Phasing provisions would be modified to provide a bonus of units provided the applicant constructs at least 25 acres of employment uses and/or incorporates specific sustainable development concepts.
- A groundwater use cap would be placed on development within the Employment Center to assure that total consumption would not exceed 600 AF/year.

ENVIRONMENTAL ANALYSIS

The relationship of the modifications which have occurred subsequent to the distribution of the Final EIR are described below according to the appropriate environmental issue.

Agriculture

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding agriculture. No additional agricultural lands would be converted development. No major change in land use would occur which would alter the conclusions related to land use compatibility between planned development and surrounding agricultural uses.

Air Quality

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding air quality. Mobile source emissions related to traffic would be decreased due to the reduction in traffic, as discussed below. The decrease in traffic results from the elimination of the 70 time-share units. The elimination of 150 ADUs would also reduce air quality impacts, although these units were not explicitly included in the calculations in the Draft EIR.

While the traffic associated with HYH would increase slightly due the expansion of the total allowed units from 1,077 to 1,147, the corresponding reduction in units within the balance fo the

Specific Plan would offset this increase. In fact, the contribution from the overall Specific Plan would be less than assumed in the Draft EIR.

As grading areas would be unchanged within the HYH Properties Project as well as the overall Specific Plan, emissions related to construction activities would be the same as assumed in the Draft EIR.

Mitigation Measures 5.7-2b and 2d were revised to restore requirements of the Specific Plan which were inadvertently struck out in the original FEIR relative to providing park and ride as well as shower and locker facilities.

In addition, Mitigation Measure 5.7-2h was deleted for the Specific Plan because it is only applicable to the HYH Property Project. This measure was applied to the HYH Property Project as follows:

Mitigation Measure 5.7-5a: Contribute funding to MBUAPCD sufficient to repower nine existing agricultural pumps to offset NOx emissions.

Biology

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding biology. The changes would not result in more disturbance than assumed in the Draft EIR since the development footprint would remain the same. Similarly, as the land use would be essentially the same, no change in indirect impacts would occur.

In response to a letter from the U.S. Fish and Wildlife Service dated December 9, 2004, several changes were made to the FEIR. The status of the California tiger salamander was updated to reflect the most recent adoption of critical habitat for this species in August 2004. The potential dispersal radius was changed for 1 kilometer to 1.5 kilometers. As a portion of the property is included in critical habitat for this species, Mitigation Measure 5.4-5a was amended to require pre-construction surveys for California tiger salamander for any development within the Specific Plan area, and implementation of protection measures, if found. The reference to critical habitat proposed for the California red-legged frog in the FEIR was also updated to reflect the most recent proposal in April 2004.

Mitigation Measure 5.4-5a: No more than 30 days prior to grading or construction in or within 100 feet of potential habitat areas identified on Figure 5.4-21, the project applicant shall complete a pre-construction survey conducted by a qualified biologist to determine if California

tiger salamander or California red-legged frog occur. If either of ~~thisese~~ these species ~~isare~~ is present, the following actions shall be taken:

- Heavy equipment operators shall be instructed to identify and avoid aquatic and riparian habitats;
- Temporary sediment settling basins and structures such as sediment fencing, straw bales, or other appropriate erosion control measures shall be used to delineate project area boundaries and prevent sediment-laden runoff from entering the drainage channels and riparian corridors;
- Construction activities occurring adjacent to the aquatic and riparian habitats shall occur during summer months when the drainage corridors are dry or nearly dry and rain is unlikely;
- Before construction begins, a qualified biologist shall inform grading equipment operators of the potential presence of the California tiger salamander or California red-legged frog, its protected status, work boundaries, and measures to be implemented to avoid the incidental take ~~of frogs~~;
- A qualified biologist shall monitor grading activities occurring within 100 feet of the aquatic and riparian habitats;
- Food and food-related trash items associated with construction workers shall be enclosed in sealed containers and regularly removed from the project site to deter potential predators ~~of California red-legged frog~~;
- Pets shall not be permitted on the construction site;
- All staging areas and all fueling and maintenance of vehicles and other equipment shall occur at least 20 meters (60 feet) from any riparian habitat, pond, stream, creek or other water body to ensure that habitat contamination does not occur from such activities.

If California tiger salamander(s) or California red-legged frog(s) are observed during the pre-construction survey, and/or if the above avoidance measures cannot be implemented, any improvements proposed in or adjacent to the aquatic and riparian habitats shall be done in consultation with the U.S. Fish and Wildlife Service to determine whether incidental take authorization is required, and to establish any additional avoidance measures.

Prior to the County issuance of a grading permit or approval of the final map, whichever occurs first, the subdivider shall meet all requirements of the federal Endangered Species Act, as applicable to the project authorized by the Combined Development Permit.

In addition, Mitigation Measures 5.4-3 was modified to clarify transplanting option for the fritillary as follows:

Mitigation Measure 5.4-3: Prior to any disturbance of land that would impact mixed native/non-native grassland habitat, a detailed Habitat Restoration Plan shall be submitted and approved by the County of Monterey in consultation with the California Department of Fish and Game.

The plant material and location shall in general reflect the conceptual habitat restoration plan illustrated in Figure 5.4-2 and described in this EIR. The plan shall provide for the replacement or restoration of impacted native grassland at a ratio of 1:1. The Habitat Restoration Plan shall include a focused grassland survey, which shall be conducted at the appropriate time of year by a qualified biologist. This survey shall quantify and map the area of native grassland habitat that would be impacted by the proposed development. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat.

At the end of five years, success criteria shall be met if native species in grassland planting areas comprise 70 percent of all species present, or if total plant cover is 90 percent of all plant cover present. Other native species that colonize the perennial grassland planting areas in addition to planted species will be used to calculate the final success criteria. If the success criteria are not met at the end of the five-year monitoring program, then applicant shall identify and implement additional measures that would achieve success including but not limited to replanting, enhanced maintenance or appropriate compensatory mitigation for the species impacted. Monitoring shall continue annually until the success criteria are achieved.

The Habitat Restoration Plan shall also provide compensation for all fragrant fritillary plants that will be impacted. A survey of fragrant fritillary plants shall be conducted to determine the location and number of impacted plants. The Habitat Restoration Plan shall include a combination of the following actions to compensate for impacts to the fragrant fritillary providing that applicant demonstrates that he has relied upon transplantation first to the maximum extent feasible, then preservation through fee title or conservation easement and last, a voluntary contribution to a rare plant conservation program.

1. Identify on-site locations suitable for transplanting impacted fragrant fritillary plants. The Plan shall describe in detail the transplanting process and monitoring methods, and will identify the entity responsible for implementation and monitoring. Plants shall be derived from the following sources:
 - Transplanting existing on-site plants.

- Propagation from seeds from on-site plants or an approved commercial source.
 - Bulbs supplied from an approved commercial source.
2. Preserve through fee title acquisition or conservation easement, an existing off-site and currently unprotected population of fragrant fritillary identified by the applicant or recommended by DFG. The conservation easement shall prohibit activities and land uses that could adversely affect the fritillary population (e.g., development, discing, and plowing). The conservation easement shall require the continuation of land uses believed to benefit the population (e.g., grazing and burning). The conservation easement shall be submitted to DFG for review and approval prior to recordation. The preserved area shall be demonstrated to have a population of equal or greater size than the population which would be impacted.
 3. Make a voluntary contribution to a rare plant conservation/restoration program recommended by DFG. The fee will be proportionate at a 2:1 ratio to the remaining acres of fragrant fritillary that are required to be mitigated.

Transplanting success shall be achieved if the number of fragrant fritillary plants in restoration areas after 5 years is 110% of the total number impacted. If this goal is not achieved, then applicant shall identify and implement additional measures to achieve success including but not limited to planting additional fragrant fritillary or acquisition of additional off-site population to bring the retention to the 110% criteria. Monitoring of onsite plantings shall continue annually until the success criteria are achieved.

Geology/Soils

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding geology/soils. The development types and locations would be unchanged. Consequently, the discussion of potential geotechnical constraints and the need for appropriate remedial actions would be unaffected.

Hydrology/Water Quality

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding hydrology/water quality. As the development types and locations would be unchanged, the impermeable surface area and runoff potential would be essentially the same as assumed in the Draft EIR. Consequently, the Draft EIR discussion of potential drainage impacts and the effectiveness of the proposed drainage control program in the Specific Plan would be unaffected.

In response to concerns from a downstream property owner regarding the flooding and erosion impacts of the proposed Specific Plan, a memorandum was prepared by Project Design Consultants to document the EIR conclusion that implementation of the Specific Plan would not create significant erosion or flooding impacts on downstream properties. The memorandum included as Exhibit A confirms that the runoff analysis did consider runoff volume as well as flow rate. It also determined that the level of analysis and conceptual drainage plans contained in the Specific Plan were sufficient to demonstrate that the project would not cause significant downstream flooding or erosion. In addition, the memorandum confirmed that the development within the proposed Specific Plan would not be allowed to discharge surface runoff at a level exceeding that which currently occurs during a 10-year storm event.

Although the County does not believe development within the Specific Plan subject to the drainage controls described above, would substantially impact downstream areas, the County is proposing to add an additional condition of approval to the HYH Properties Project and future development within the Specific Plan. The additional conditions of approval would require project applicants to complete a study of downstream drainage effects of the proposed development. This study will include, as appropriate, recommendations to relieve downstream inadequacies which may be substantially affected by the proposed development. The project applicant will be required to complete final plans and construct any downstream drainage improvements which are determined warranted by the Directors of Public Works and the Water Resources Agency.

Land Use

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding land use. The development types and locations would be unchanged. Consequently, the discussion of land use policy conformance and compatibility would be unaffected.

The following mitigation measures in the Final EIR were amended.

Mitigation Measure 5.1-8: Concurrent with the approval of the Specific Plan, the ~~ADC-GSAP~~ shall be amended to ~~delete Principle 27. The GSAP shall be amended to~~ add additional text to page 91 allowing exceptions to the height and lot coverage standards, excluding parking and landscaping requirements for Rancho San Juan. ~~subject to the approval of the Board of Supervisors for a regulatory Specific Plan designed to create a~~ “sustainable”, “new urbanist”, “neotraditional”, “transit-oriented development”, or “smart growth” community or projects.

Mitigation Measure 5.1-9: Concurrent with the approval of the Specific Plan, the ~~ADC-GSAP~~ shall be amended to ~~delete Principle 27. The GSAP shall be amended to add~~ additional text to page 91 allowing exceptions to the height and lot coverage standards, excluding parking and landscaping requirements for Rancho San Juan. ~~subject to the approval of the Board of Supervisors for a regulatory Specific Plan designed to create a “sustainable”, “new urbanist”, “neotraditional”, “transit-oriented development”, or “smart growth” community or projects.~~

Mitigation Measure 5.1-14: Prior to approval of a tentative map, the project applicant shall demonstrate to the satisfaction of the County that public services are adequate to meet the needs of the proposed development. Prior to approval of tentative map, the project applicant shall demonstrate to the satisfaction of the County that public services are adequate to meet the needs of the proposed development. Applicant shall also demonstrate agreement to pay all relevant fees and indicate which service would be provided by a Community Services District.

Landform Alteration/Visual Quality

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding landform alteration/visual quality. The grading and subsequent development described in Final EIR would be unchanged. Consequently, the discussion of potential landform alteration and visual quality would be unaffected.

In response to issues raised concerning the amount of grading and grading of 30% slopes, Mitigation Measure 5.3-2 has been modified as follows:

Mitigation Measure 5.3-2: Prior to the issuance of a grading permit for development phases, the applicant shall submit a plan for the review and approval of the Monterey County Planning and Building Inspection Department that ~~identifies building envelopes on each proposed lot that would minimize grading impacts by avoiding ridgeline development.~~ Prior to the issuance of grading permits for individual lots with the potential for ridgeline development, the applicant shall submit a plan identifying building envelopes that would minimize additional grading and avoid ridgeline development.

Noise

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding noise. Traffic volumes and the related traffic noise affecting future development within the Specific Plan as well as surrounding development would not increase and, in fact, would decrease in some cases due to the lower traffic generation. Thus, the traffic noise calculations in the Final EIR would be essentially

unchanged. Noise generators and receptors within and adjacent to the Specific Plan would be unaffected by the changes to the Specific Plan. Thus, the impacts and mitigation measures described in the Final EIR remain valid.

The following mitigation measure was revised to clarify the responsibility of the applicant to construct a noise barrier along the future Prunedale Bypass.

Mitigation Measure 5.6-5a: Prior to issuance of a building permit for any residence located along the following roadways:

- Prunedale Bypass;
- J Street between Town Square and K Street; and
- K Street, west of J Street.

An acoustical study shall be prepared for all adjacent noise sensitive uses and implemented by the applicant. The acoustical study shall identify appropriate measures to reduce outdoor noise levels to 60 dBA CNEI or less. Measures may include, but are not limited to, sound walls and earthen berms; preliminary sound wall locations and heights are approximated in Figure 5.6-9. Wherever possible, site planning techniques shall be used to avoid or minimize the need for sound walls. If the applicant can demonstrate that the Prunedale Bypass will never be constructed, noise attenuation measures related to the roadway need not be implemented. The requirement to address acoustic impacts for residential units adjacent to the Prunedale Bypass would only apply to the subdivider if the Bypass is completed prior to the construction of the potentially impacted residential units in the HYH Properties project.

Traffic and Circulation

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would not change the EIR results or conclusions regarding traffic and circulation. The total number of trips generated by the Specific Plan would actually decrease as indicated the memorandum from Higgins and Associates included in Exhibit B. This decrease is the result of the elimination of 70 time-share units included in the original Specific Plan.

While the transfer of 70 residential units to HYH Properties from other planning areas within the Specific Plan would result in a minor increase over that assumed in the Final EIR, this increase is considered nominal and would not change the conclusions regarding impacts and mitigation measures for the project. In addition, the traffic generated by the overall Specific Plan would be less than assumed in the Final EIR. In addition, the elimination of 150 potential ADUs would eliminate the potential trips related to these units.

In response to issues raised concerning inconsistencies in the information contained in support information prepared as part of the responses to comment (Volume IV of the FEIR), Higgins and Associates prepared a letter (see Exhibit B). The letter indicates that the truck volume percentage used in modeling traffic volumes on Highway 101 were lower than anticipated to occur along this highway. The correct volumes are included in Exhibit B. Although the new volumes are higher than set forth in Volume IV, the resulting level of service is identical to that identified in the FEIR. Thus, the error in Volume IV does not change the original analysis.

A second inconsistency is noted in the letter. In the course of preparing revised traffic projections for Volume IV, the titles of the columns identifying the results of the analysis for the build out condition, with and without the proposed development, were reversed. As a consequence, the volumes with the proposed development erroneously indicate that traffic volumes would be less than without the development. However, the differences between the volumes in these columns do not alter the interpretation of the data and the mitigation measures which are identified in Volume IV.

Lastly, Exhibit B provides additional information supporting the validity of the traffic model used in the analysis. This documentation has been provided to allay Caltrans' concern that AMBAG has not officially approved the traffic model. It is also noted that in reviewing the Draft EIR, AMBAG indicated in its letter, dated June 14, 2004, that "The AMBAG Board of Directors considered the project on June 10, 2004, and has not comments at this time." No subsequent written correspondence has been submitted by AMBAG.

In order to better assure that traffic improvements needed to accommodate future development within the Specific Plan, the mitigation measures have been revised to require construction of improvements rather than just payment of money in accordance with fair share provisions.

Mitigation Measures 5.2-1a and 5.2-3 for the Specific Plan are modified as follows:

Mitigation Measure 5.2-1a: Prior to approval of any final map (except within the HYH Properties Project) or issuance of a building permit resulting in vehicle trips, the project applicant shall prepare a supplemental traffic report to assess the direct impacts of the trips associated with the proposed development. The report shall recommend off-site transportation improvements which would provide the most relief from identified impacts. The County shall determine the project applicant's fair share amount of traffic improvements described in shall pay, or otherwise guarantee, a fair share contribution toward the following improvements pursuant to Table 5.2-17 of the EIR: 1 and 3-15. The project applicant shall use the determined fee amount to construct the traffic improvements identified in the supplemental traffic report to the greatest degree possible, as determined by the County. The project applicant shall post a performance bond equal to the amount of the fair share fees. The traffic improvements to be

~~completed by the applicant shall be identified and the bond posted prior to approval of the final map. The improvements shall be initiated before in conjunction with the first building permit is issued. The County may, at its option, accept payment of all, or a portion, of the applicant's fair share traffic fees in lieu of construction of improvements. The amount of the fair share payment shall be determined by the County.~~

Mitigation Measure 5.2-3: ~~Prior to approval of any final map (except within the HYH Properties Project) or issuance of a building permit resulting in vehicle trips, the project applicant shall prepare a supplemental traffic report to assess the direct impacts of the trips associated with the proposed development. The report shall recommend off-site transportation improvements which would provide the most relief from identified impacts. The County shall determine the project applicant's fair share amount of traffic improvements described in shall pay, or otherwise guarantee, a fair share contribution toward the following improvements pursuant to Table 5.2-17 of the EIR: 1 and 3-15. The project applicant shall use the determined fee amount to construct the traffic improvements identified in the supplemental traffic report to the greatest degree possible, as determined by the County. The project applicant shall post a performance bond equal to the amount of the fair share fees. The traffic improvements to be completed by the applicant shall be identified and the bond posted prior to approval of the final map. The improvements shall be initiated before in conjunction with the first building permit is issued. The County may, at its option, accept payment of all, or a portion, of the applicant's fair share traffic fees in lieu of construction of improvements. The amount of the fair share payment shall be determined by the County.~~

Mitigation Measure 5.2-1b was modified to allow additional permits for projects where the project incorporates sustainability measures and/or provides employment development to help balance traffic impacts.

Mitigation Measure 5.2-1b: ~~After the approval of the first map in Rancho San Juan 1,400 residential units, no subsequent Tentative Map in the Rancho San Juan Specific Plan shall be approved that would result in a cumulative ratio that is less than:~~

- ~~- 450 square feet of employment center square footage for each residential unit exceeding 1,000 cumulative units, or~~
- ~~- 75 square feet of commercial square footage for residential unit exceeding 1,000 cumulative units a cumulative ratio of employment square footage to residential units throughout the entire Rancho San Juan Specific Plan area of less than 450 square feet per residential unit, or that would result in a cumulative ratio of commercial square footage to residential units of less than 75 square feet per residential unit, unless the following finding can be made by the County:~~

“The tentative map is part of a development for which a development agreement either: 1) establishes a development phasing plan consistent with the overall goals and objectives of the Rancho San Juan Specific Plan, including the need to provide a jobs/housing balance and meet the affordable housing requirements; or 2) allow for development of infrastructure critical to the successful implementation of the Rancho San Juan Specific Plan as determined by the Director of Planning and Building Inspection.”

With the exception of HYH Properties Project, no more than 250 building permits for residential units would be approved annually. A bonus of 150 dwellings could be added if the developer meets all of the sustainability requirements in the Specific Plan (Chapter 8). A bonus of 250 dwelling units could be added if the developer proposes to construct 25 acres of employment center lands as part of his Tentative Map submission.

Water Resources

The changes in the Specific Plan and the resulting changes in the HYH Properties Project would change the EIR results or conclusions regarding water resources in that the water consumption associated with the Specific Plan would be reduced with the changes. The restriction placed on total annual water consumption in the Employment Center would reduce the overall consumption of the Specific Plan by 200 AF/yr which represents a reduction of 43%. Thus, the annual deficit in groundwater recharge would decrease from 463 AF/year assumed in the Draft EIR to 263 AF/year. However, the impact would still be considered significant and not mitigated.

During the public hearings additional testimony was presented by water experts regarding the availability of groundwater. Information contained in these presentations is included in Exhibit C.

In order to provide more control over water consumption, the following mitigation measures were created or modified.

Mitigation Measure 5.10-1d: Commencing one (1) year after construction of water-consuming improvements within a subdivision, the applicant shall submit annual reports on total water consumption which shall include total per unit consumption data. This shall include data on water consumption of the golf course. If either the per unit consumption calculation, estimated consumption for the golf course, or total consumption calculation for the particular subdivision exceeds the proportionate consumption cap established in the EIR, the applicant shall be required to adopt such water conservation sustainability measures available in the Specific Plan Matrix to achieve the appropriate annual consumption. If consumption still does not meet the caps

established in the EIR, additional building permits in the non-compliant subdivision shall be withheld or, if the excess consumption is systemic, subsequent tentative maps will not be approved.

If, subsequent to approval of each tentative map, building permits, or at build-out of the Specific Plan, the amount of consumption (either per unit or total) exceeds the amount of water assumed in the EIR, then the Water Resources Agency shall impose some or all of the following measures:

- Water rationing;
- Landscape retrofit;
- Increased water consumption fees; and/or
- Installation of a reverse osmosis unit or its equivalent at the wastewater treatment plant for RSJ.

Mitigation Measure 5.10-1i: Prior to approval of any building permit within the Employment Center, the County shall verify that the combined water demand created by the proposed building permit, in combination with existing development within the employment center, shall not exceed a total annual demand of 600 AF/year. Water demand met by reclaimed water shall not be included in annual cap.

FEIR TEXT CLARIFICATIONS

As a result of the changes discussed above, a series of revisions to the FEIR are appropriate. The revised pages are included in the revised Final EIR. The new text is underlined and the text to be deleted has a line through it.

In addition, minor corrections were also made. In reviewing the summary tables in the Executive Summary (Tables 1.3-1, 1.3-2, 1.4-1 and 1.4-2), the following inconsistencies with the text in Chapters 5 and 6 of the FEIR were identified and corrected:

- Cumulative impact of Alternative 4E related to direct impacts on historic resources was revised from SM to SNM (*Table 1.4-1*)
- Cumulative impacts of Alternatives 2 and 4E related to long-term, offsite traffic noise were revised from NS to SNM (*Table 1.4-1*)
- Cumulative impact of Alternative 4E related to land use: commercial/residential conflict was revised from SM to NS (*Table 1.4-1*)

- Cumulative impact of Alternatives 2 and 4E related to visual quality were eliminated because they were determined not significant (*Tables 1.3-1*)
- Cumulative impact of HYH Properties Project related to visual quality was eliminated because it was determined not significant (*Tables 1.3-2 and 1.4-2*)
- Cumulative impacts of Alternatives 2 and 4E as well as HYH Properties Project were revised from SM to SNM (*Tables 1.4-1 and 1.4-2*)

In response to comments from the Salinas Rural Fire District regarding the provision of fire services to the Specific Plan, the last sentence of paragraph 3 on page 5.12-17 of the FEIR has been changed to read:

Coverage for the Specific Plan within the SRFD boundaries would continue to be provided by the City of Salinas through the Emergency Services Agreement, or a re-negotiated agreement, until such time as a fire station is constructed and staffed at the fire station site located in the Specific Plan, Planning Area 3-2 and Figure 5-5. This site was identified in the Rancho San Juan Fire Protection Plan, dated September 2004 as the preferred site.

The first sentence of paragraph 5 on page 5.12-17 of the FEIR has been changed as follows:

A proposed site has been identified for a fire station within the HYH property to serve the Butterfly Village project and the North County Fire District.

The citation of mitigation for Impact 5.12.6-2 on page 5.12-25 has been explicitly identified as Mitigation Measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, 5.9-1 5.9-4b and 5.9-5.

The citation of mitigation measures for Impact 5.9-10 related to hydrology/water quality on page 5.9-21 has been revised to refer to Mitigation Measures 5.9-5a and 5b rather than Mitigation Measure 5.9-5.

LIST OF EXHIBITS

- A. Letter from ProjectDesign Consultants dated December 2, 2004 regarding drainage issues.
- B. Letter from Higgins And Associates dated December 10, 2004 addressing traffic issues.

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C. Letter from Kleinfelder and Associates dated December 10, 2004.



DATE: December 2, 2004 **FILE:** 2078.00

TO: Alana Knaster

FROM: Bruce McIntyre

SUBJECT: Rancho San Juan Drainage Issues

In response to concerns raised about drainage issues in a letter from Bruce Lymburn dated November 15, 2004, PDC has reviewed the drainage study included in Appendix J.1 of the Draft EIR. Based on this review, we have concluded that the drainage concerns raised in Mr. Lymburn's letter have been adequately addressed and the conclusion that the Specific Plan would not create significant downstream impacts remains valid.

In his letter, Mr. Lymburn expresses concern that the Draft EIR did not adequately evaluate the following downstream drainage issues:

- Adequacy of downstream drainage facilities;
- Runoff volume;
- Downstream erosion; and
- Drainage control design requirements.

Each of these concerns is not considered valid for the reasons discussed below.

Adequacy of Downstream Drainage Facilities

The ability of the downstream drainage system to accommodate runoff from development in accordance with the proposed Specific Plan is adequately evaluated in the Draft EIR. The drainage study contained in Appendix J.1 identifies the fact that areas immediately downstream from the Specific Plan area have experienced significant flooding problems in the past (pages 2 and 3). In response to this fact, the Specific Plan was specifically designed to reduce downstream runoff to assure that the future development within the Specific Plan would not aggravate the existing flooding conditions. In fact, the Specific Plan contains a requirement that storm runoff released into downstream areas not exceed that which presently occurs in a 10-year storm event. With the inclusion of this limitation, development of the proposed Specific Plan would actually reduce the runoff presently experienced by downstream properties in a 100-year storm event.

As the downstream flow rate and volume would be reduced with development of the Specific Plan, it was unnecessary to evaluate drainage control facilities problems associated with the Reclamation Ditch which are identified in the letter from Mr. Lymburn.



Runoff Volume

The claim made by Mr. Lymburn that the EIR failed to evaluate the volume of runoff as well as the flow rate is unfounded. The drainage study contained in Appendix J.1 of the Draft EIR contains extensive computer calculations of runoff volume as well as flow rate. Estimates of runoff volume were essential to the ability to define and locate a series of retention/detention basins designed to attenuate flow rates and volume. This sustainable approach to drainage control served to principal and complementary goals. First, it reduced downstream runoff to levels which were below runoff currently generated by the property in a 100-year storm event. Secondly, it fulfilled the goal of maximizing onsite recharge to replace groundwater extracted to serve future development.

A review of Appendix 4.1 of the drainage report confirms the fact that the study considered both runoff volume as well as flow rate. Based on the information in Appendix 4.1, the downstream discharge from the project area near the intersection of Highway 101 and Russell Road is calculated to have a flow rate of 540 cfs and a volume of 1.4 million cf. With the requirement to reduce downstream discharge to a pre-development 10-year event, the downstream runoff flow rate would be reduced to 78 cfs and 844 cf.

Downstream Erosion

A significant increase in downstream erosion would not occur due to the reduction in both downstream discharge flow rate and volume. The reduction in these factors would avoid a significant increase in erosion and could, in fact, reduce existing erosion from drainage from the Specific Plan area in its current condition during a 100-year storm.

Drainage Control Design Requirements

The Specific Plan contains a comprehensive drainage control program which is illustrated in Figures 6-2 through 6-4 of the Specific Plan. These figures identify the location of detention/retention basins as well as the alignment and suggested diameter of storm drains to serve the future development.

The drainage control process described in the Specific Plan relies on a two-tiered system. The first tier consists of drainage control measures associated with individual development. Except for the HYH property, grass-lined swales would be constructed in lieu of standard curbs and gutters to allow runoff to percolate into the ground. The Plan also encourages permeable pavement as well as other techniques to retain runoff within individual development areas. The second tier of flood control involves more regional facilities which would intercept runoff carried by swales and remaining stream courses within the Specific Plan. As indicated on Figure 6-2 of the Specific Plan, a series of retention/detention basins would be located within the most permeable soil areas within the Specific Plan. Runoff would be diverted to these areas to encourage runoff to

percolate into the ground. In order to further promote retention of onsite runoff, a series of subgrade infiltration areas would be established in recreational areas associated with schools and public parks where drainage could be impounded for prolonged periods of time without adversely affecting land use.

The conceptual drainage plan contained in the EIR, in combination with the specific performance standard of reducing downstream discharge in the post-development condition to that occurring in a 10-year storm in the predevelopment condition, are adequate to assure that significant downstream drainage impacts would not be significant.



HIGGINS ASSOCIATES

CIVIL & TRAFFIC ENGINEERS

December 10, 2004

Ms. Alana Knaster
Monterey County
Planning and Building Department
2620 1st Avenue
Marina, CA 93933

Re: Rancho San Juan Final Environmental Impact Report Traffic Related Responses to Comments

Dear Alana,

This letter corrects information provided in the responses to comments for the Rancho San Juan Final Environmental Impact Report. It also summarizes my verbal comments at the Planning Commission hearing on Thursday, December 2, 2004, regarding Caltrans' concerns about the traffic volume forecasting. It also discusses the changes to the project trip generation that would be caused by the proposed elimination of the 70 time share units to the reallocation of 70 single-family residential units to the HYH portion of the project from other planning areas within the Specific Plan. As a result, the total number of residential units would remain 4,000 for the Specific Plan but would increase within the HYH Properties from 1,077 to 1,147. The elimination of the 70 time-share units would represent a net reduction in development and a proportionate amount of traffic.

Response to Comments Errata

In the course of preparing for recent public hearings at the Planning Commission, it came to my attention that two errors occurred in the responses to comments that need to be corrected. The first is the Highway 101 segment levels of service that were included in *Volume II – Responses to Comments (Appendices) to the Public Review Draft Environmental Impact Report for the Rancho San Juan Specific Plan and HYH Property Project EIR*, SCH No. 2002121142, dated November 2004, Appendix O, Exhibit C. The table that is included was based upon default truck volumes on Highway 101 and not actual truck volumes. The incorrect table was sent to Project Design Consultants on November 10, 2004. A corrected version was sent on November 11, 2004 and is included herein for your convenience as Attachment 1. Although the correct version looks virtually identical to the incorrect version, the levels of service on Highway 101 for existing and future conditions, as indicated on the correct version, are worse than what were reported in the previous incorrect version. These are, however, identical to the levels of service reported in the Draft Environmental Impact Report.

The deficient levels of service as reported in the draft Environmental Impact Report, which were reviewed during public comment and were the basis for public comments, continue to be correct.

The second item is the levels of service for the year 2010 with and without HYH were reversed. In other words, the 2010 without HYH level of service calculations included in Exhibit F of Appendix O of the response to comments is actually 2010 with HYH. The mitigation measures do not change the project's pro-rata contributions as described by the Monterey County Public Works Department in recent presentations to the Planning Commission.

The summary table, included herein as Attachment 2, which was not included in the responses to comments, is the correct version. All of the level of service calculations included in Appendix O that state "2010 Without HYH" should be considered "2010 With HYH". All of the calculations that are labeled "2010 With HYH" should actually be labeled "2010 Without HYH".

Summary and Additional Comments Regarding December 2, 2004 of Planning Commission Testimony

Questions were raised by Caltrans at the Planning Commission hearing on Thursday, December 2, 2004, regarding uncertainty about the traffic forecasts used for the traffic analysis for the Environmental Impact Report. Caltrans did not state that the forecasts were invalid. Caltrans did state that they could not ascertain their validity until the Association of Monterey Bay Area Governments (AMBAG) had certified the modeling methodology and assumptions. This certification process has been on-going for approximately two years. Caltrans also mentioned that a new jobs/housing study was completed by AMBAG in conjunction with the Association of Bay Area Governments (ABAG) that established a stronger link between housing in Monterey County and jobs created in Silicon Valley than the current model work for this project indicates.

In response, the forecasts used for Rancho San Juan indicate that Highway 101 needs to be widened to a six lane freeway through the City of Salinas and an eight lane freeway between Boronda Road and the southern interchange that is immediately west of Rancho San Juan. The Highway 101 corridor through Prunedale will operate at an F level of service if it remains as a four lane freeway. Traffic growth by the year 2020 is expected to be in the range of about 2,400 peak hour trips through the corridor, which results in about a 40% increase in traffic over existing volumes north of Crazy Horse Canyon Road and a nearly 50% increase in traffic north of San Miguel Canyon Road, assuming the Prunedale Bypass is not constructed. The traffic growth indicated by the model is substantial in the northern portion of Monterey County. It indicates that significant degradation in traffic operations will occur in the corridor even with the currently proposed highway improvements. In other words, assuming all of the currently planned improvements in the Regional Transportation Plan are constructed, there would still be deficiencies north of Crazy Horse Canyon Road and in the vicinity of the northern Monterey County line. Highway 101 will require widening to a six lane freeway between Monterey County and Gilroy, based upon the traffic forecasts in the Rancho San Juan Environmental Impact Report. This is consistent with traffic forecasts performed in analyses in Santa Clara County using the Santa Clara traffic forecasting model.

The distributions of traffic on other projects have also been compared with traffic volumes in the new AMBAG Travel Forecasting Model that was released within the last couple of weeks. The distributions appear to be very similar between the new AMBAG model and the model used for Rancho San Juan for projects in the Fort Ord area.

Based upon our experience with projects throughout Monterey County, the traffic forecasting presented in the Environmental Impact Report, is a reasonable forecast. It correctly identifies the magnitude of impacts to be expected not only from the buildout of Rancho San Juan, but also the buildout of other currently planned developments throughout Monterey County. Finally, with respect to the jobs/housing study that was performed by the two regional agencies, (AMBAG and ABAG), there is a likelihood that as time goes on, the linkage will be stronger between employment in Santa Clara County and housing in Monterey County. However, the dynamic nature of housing prices, the timing of job creation versus the timing of the residential development, and the competing market for employment that Monterey County is actively engaged in, including employment development at Rancho San Juan itself as well as UCMBEST and the agricultural industry, the exact linkage between jobs and housing 20 to 30 years from now cannot be predicted by any modeling tool with total certainty.

Impacts on Trip Generation by Residential Land Use Changes

It is my understanding that Monterey County is currently reviewing the option of revising the residential component of the project. This would involve eliminating the proposed 70 timeshare units and transferring 70 residential units from other planning areas to the HYH Properties Project. The result would be a net reduction in traffic due to the elimination of the 70 time share units. Attachment 3 is an updated version of Table 3-5 from the original Wilbur Smith Associates traffic report. The revised project definition under the full Rancho San Juan buildout scenario would generate fewer daily and peak period trips than the version previously analyzed – 1,138 fewer daily trips, 66 fewer AM peak hour trips, and 70 fewer PM peak hour trips. The conclusions reached in the most recent analysis therefore would remain valid under the revised project definition. It should also be noted that the revised HYH definition would generate additional trips compared to the past scenario – 88 additional daily trips, 23 additional AM peak hour trips, and 31 additional PM peak hour trips. However, the percentage increases in project trips, less than 1% on a daily basis and approximately 3% on a peak hour basis, are small and would not constitute a significant change from the previously-analyzed conditions.

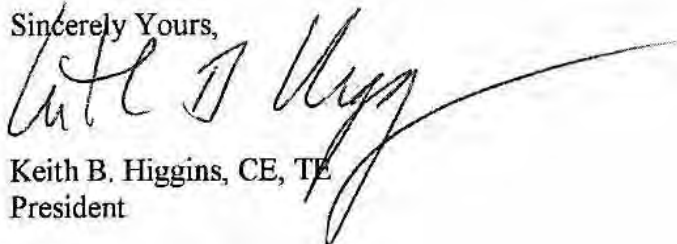
Conclusion

In summary, the recommendations for mitigations identified in the Rancho San Juan traffic analysis are consistent with improvements that have been identified in other regional planning efforts, not only in Monterey County but also in Santa Clara County. The traffic analysis as presented in the Draft Environmental Report with the additional analysis performed during the responses to comments is valid. Finally, the proposed changes to the residential units are relatively minor and would not constitute a significant change from the previous traffic analysis.

Ms. Alana Knaster
December 10, 2004
Page 4

If you have any questions regarding these clarifications, please do not hesitate to contact me. Thank you for the opportunity to assist you with this project that is so important to Monterey County's future.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "Keith B. Higgins", with a long horizontal flourish extending to the right.

Keith B. Higgins, CE, TE
President

Kbh: jb
attachments

Attachment 1 -

Segment Volumes on Highway 101 Between South Salinas and the San Benito County Line

Note: 2 L = (2 lanes 1 direction)

Updated the Freeway Segment Table on October 23, 2004 with Revised RTP and 2010 Land Use Model DATA and resent 12/06/04

Table with 12 columns representing different segments of Highway 101 (labeled 1-12) and rows representing various alternatives and transportation networks (e.g., 2000 Existing, 2010 Existing Regional, 2020 Adopted Regional). Each cell contains traffic volume data categorized by direction (AM, PM) and lane type (LOS).

Notes: 1 Highway 101 between Laurel and Boronda, and north of Boronda, would gain auxiliary lanes between interchanges under this scenario. Auxiliary lanes do not have the capacity of a full freeway lane, and were therefore modeled here as a half-lane in each direction. 2 Analysis based upon 2000 Highway Capacity Manual methodologies for Freeways and Multilane Highways. 3 Analysis utilizes the following base conditions: 16% of traffic are trucks (from 2001 Caltrans traffic counts at Monterey/San Benito County Line), most segments are on level ground, with the exception of North of Russell/Espinosa, The Prunedale Bypass, North of Crazy Horse, and North of San Juan Road, which have more rolling terrain.

N-S Street	E-W Street	Existing Operational Lane Configuration	Existing Intersection Control	Overall LOS Standard	HYH No Build Conditions ^a				HYH Build Conditions ^a				
					AM Peak Hr		PM Peak Hr		AM Peak Hr		PM Peak Hr		
					Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	
1	N. Main Street Harrison Road	Espinosa Road Russell Road	NB 1-L, 1-T, 1-R SB 1-L/T/R EB 1-L/T/R WB 1-L, 1-T/R	Two-way Stop (N/S) Worst Approach	C (E)	6.9 15.7	A C	10.6 41.8	B E	18.7 35.1	C E	69.4 221.9	F F
				Mitigation	8.7	A	7.4	A	8.4	A	7.6	A	
2	N. Main Street	Boronda Road	NB 2-L, 2-T, 1-R SB 1-L, 2-T, 1-R EB 2-L, 2-T, 1-R WB 1-L, 2-T, 1-T/R	Signal	D	59.5	E	95.1	F	67.0	E	108.9	F
				Mitigation	35.8	D	36.0	D	45.4	D	36.0	D	
3	N. Main Street	San Juan Grade	NB 1-L, 2-T, 1-R SB 1-L, 1-T, 1-T/R EB 1-L/T, 1-R WB 1-L, 1-L/T, 1-R	Signal	D	23.6	C	67.2	E	24.5	C	68.3	E
				Mitigation	20.9	C	15.9	B	15.0	B	16.0	B	
4	San Juan Grade	Russell Road	NB 1-L, 1-T SB 1-T, 1-R EB 1-L, 1-R	Signal	C	9.9	A	10.2	B	11.0	B	10.7	B
5	San Juan Grade	Rogge Road	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-way Stop	C	11.6	B	11.5	B	15.3	C	14.6	B
6	San Juan Grade	Hebert Road	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	Two-way Stop (E/W) Worst Approach	C (E)	6.2 25.1	A D	9.3 61.4	A F	6.1 25.9	A D	9.9 63.1	A F
				Mitigation	12.6	B	15.8	C	13.2	B	17.2	C	
7	San Juan Grade	Crazy Horse Canyon Road	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	Two-way Stop (N/S) Worst Approach	C (E)	10.8 30.2	B D	90.4 229.6	F F	10.8 30.9	B D	90.2 233.1	F F
				Mitigation	10.1	B	15.5	C	10.2	B	15.9	C	
8	Natividad Road	Rogge Road	NB 1-L, 1-T SB 1-T, 1-R EB 1-L, 1-R	One-way Stop (EB) Worst Approach	C (E)	1.5 8.0	A A	1.8 8.3	A A	1.8 8.1	A A	2.3 8.5	A A
9	Natividad Road	Boronda Road	NB 1-L, 1-T, 1-R SB 1-L, 1-T/R EB 1-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Signal	D	32.9	C	74.2	E	35.9	D	85.0	F
				Mitigation	21.7	C	24.8	C	23.3	C	25.6	C	
10	Highway 101 NB Ramps	Boronda Road	NB 1-L/T, 2-R EB 2-T, 1-T/R WB 2-T, 1-T/R	Signal	D	14.9	B	23.9	C	15.3	B	24.8	C
11	Highway 101 SB Ramps	Boronda Road	SB 1-L, 1-L/T, 1-R EB 3-T, 1-R WB 2-T, 1-R	Signal	D	11.6	B	14.5	B	11.4	B	14.3	B
12	Highway 101	Crazy Horse Canyon Road	NB 2-T, 1-R SB 1-L, 2-T WB 1-L, 1-R	One-way Stop (WB) Worst Approach	C (E)	* *	F F	* *	F F	* *	F F	* *	F F
				Mitigation	N/A ⁷		N/A ⁷		N/A ⁷		N/A ⁷		
13	Natividad Road	East Laurel Drive	NB 1-L, 2-T, 1-R SB 2-L, 1-T, 1-T/R EB 1-L, 2-T, 1-R WB 2-L, 2-T, 1-R	Signal	D	38.3	D	50.5	D	38.2	D	51.1	D
14	N. Main Street	East Laurel Drive	NB 2-L, 2-T, 1-R SB 2-L, 2-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	41.4	D	66.7	E	41.0	D	66.6	E
				Mitigation	28.7	C	36.7	D	28.7	C	36.4	D	
15	Highway 101 NB Ramps	West Laurel Drive	NB 1-L/T, 1-R EB 2-T, 1-R WB 1-T, 1-T/R	Signal	D	8.7	A	11.6	B	8.7	A	11.6	B
				Mitigation	6.8	A	7.6	A	6.8	A	7.6	A	
16	Highway 101 SB Ramps	West Laurel Drive	SB 1-L, 1-R EB 1-T, 1-T/R WB 1-T, 1-T/R	Signal	D	93.7	F	165.9	F	97.6	F	181.2	F
				Mitigation	19.8	B	22.7	C	21.0	C	24.0	C	
17	Davis Road	Post Drive	NB 1-L, 2-T, 1-T/R SB 1-L, 2-T, 1-R EB 1-L, 1-L/T, 1-R WB 1-L, 1-T/R	Signal	D	243.0	F	182.6	F	240.8	F	182.3	F
				Mitigation	39.9	D	44.8	D	47.8	D	47.5	D	
18	Davis Road	Blanco Road	NB 1-L, 1-T, 1-R SB 1-L, 1-T, 1-R EB 2-L, 1-T, 1-T/R WB 1-L, 1-T, 1-R	Signal	C	123.3	F	191.8	F	132.6	F	198.6	F
				Mitigation	20.2	C	30.4	C	19.8	B	30.7	C	
19	San Juan Grade	Boronda Road	NB 1-L, 1-T, 1-R SB 1-L, 2-T, 1-R EB 1-L, 1-T, 1-T/R WB 1-L, 2-T, 1-R	Signal	D	112.6	F	93.3	F	116.4	F	74.7	E
				Mitigation	53.8	D	50.3	D	54.3	D	50.5	D	
20	Davis Road	West Laurel Drive	NB 1-L, 2-T, 2-R SB 2-L, 1-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 2-L, 2-T, 1-R	Signal	D	100.5	F	175.7	F	107.2	F	178.0	F
				Mitigation	28.6	C	42.9	D	28.6	C	45.3	D	
21	San Juan Grade	Sterling Road	NB 1-L, 1-T SB 1-T, 1-R EB 1-L, 1-R	One-way Stop (EB) Worst Approach	C (E)	0.5 10.8	A B	0.4 10.9	A B	3.9 12.8	A B	4.1 15.7	A C
22	Harrison Road	K Street	NB 1-L/T/R SB 1-L/T/R WB 1-L/T/R	All-way Stop	C	7.3	A	7.5	A	11.0	B	9.9	A
30	Highway 183	Espinosa Road	NB 1-T, 1-R SB 1-L, 1-T WB 1-L, 1-R	One-way stop (WB) Worst Approach	C (E)	* *	F F	* *	F F	* *	F F	* *	F F
				Mitigation	32.7	C	31.6	C	33.6	C	8.3	A	
31	Highway 101	Espinosa Road	NB 1-L, 2-T, 1-R SB 1-T, 1-T/R EB 1-R WB 1-R	One-way stop (E/W) ⁶ Worst Approach	C (E)	* *	F F	* *	F F	* *	F F	* *	F F
				Mitigation	N/A ⁸		N/A ⁸		N/A ⁸		N/A ⁸		

NOTES:

- L, T, R = Left, Through, Right.
- NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
- N/S, E/W = Northbound/Southbound, Eastbound/Westbound
- Level of service calculated using 2000 Highway Capacity Manual methodologies.
- * = Delay greater than 300 seconds (5 minutes)
- Analysis focused on northbound left turn movement, which must stop prior to crossing southbound Highway 101. Northbound, eastbound, and westbound right turn movements are actually ramp-like merges and are not stop-controlled.
- Mitigation at Highway 101/Crazy Horse Canyon Road intersection is the construction of a new interchange that would also connect Crazy Horse Canyon Road with Echo Valley Road. With this improvement in place, the current Hwy. 101/Crazy Horse Canyon intersection would no longer exist.
- Mitigation at Highway 101/Espinosa Road intersection is the construction of the new "southern" interchange to the north of this intersection, in conjunction with the proposed Highway 101 overpass over Espinosa Road-Russell Road. With this improvement in place, the current Hwy. 101/Espinosa intersection will no longer exist.

ATTACHMENT 2

SUMMARY TABLE OF CORRECTED
2010 INTERSECTION LEVELS OF SERVICE
INCLUDED IN RESPONSE TO COMMENTS

PROJECT TRIP GENERATION

	ITE LAND USE CODE	PROJECT SIZE	WEEKDAY DAILY TRIPS	WEEKDAY AM PEAK HOUR				WEEKDAY PM PEAK HOUR			
				TOTAL PEAK HOUR	% OF ADT	IN	OUT	TOTAL PEAK HOUR	% OF ADT	IN	OUT
TRIP GENERATION RATES¹											
Single-Family Detached Housing (per unit)	210		9.57	0.75	8%	25%	75%	1.01	11%	64%	36%
Apartment (per unit) ⁶	220		6.63	0.51	8%	16%	84%	0.62	9%	67%	33%
Retirement Community (per unit) ³	250		4.00	0.17	4%	45%	55%	0.27	7%	56%	44%
Golf Course (per hole) ⁶	430		35.74	2.22	6%	79%	21%	2.74	8%	44%	56%
General Light Industrial (per employee)	110		3.02	0.44	15%	83%	17%	0.42	14%	21%	79%
Resort Hotel (per occupied room) ^{3,8,9}	330		8.00	0.31	4%	72%	28%	0.42	5%	43%	57%
Elementary School (per student)	520		1.02	0.29	28%	59%	41%	-	-	-	-
Middle School/Junior High School (per student)	522		1.45	0.46	32%	57%	43%	0.16	11%	47%	53%
High School (per student)	530		1.79	0.46	26%	70%	30%	0.15	8%	40%	60%
General Office (per employee)	710		3.32	0.46	14%	88%	12%	0.46	14%	17%	83%
Specialty Retail (per 1,000 SQ. FT.) ⁴	814		40.67	1.22	3%	80%	40%	2.59	6%	43%	57%
Shopping Center (per 1,000 SQ. FT.) ^{4,6,8}	820		58.43	1.34	2%	81%	39%	5.43	9%	48%	52%
RESIDENTIAL											
Single-Family Detached Housing	210	2,575 Units	24,643	1,931	8%	483	1,448	2,601	11%	1,665	936
Apartments	220	1,316 Units	8,725	671	8%	107	564	731	8%	490	241
Senior Apartments	250	109 Units	436	19	5%	9	10	29	7%	16	13
RECREATION / EDUCATION / COMMERCIAL											
Golf Course	430	18 holes	643	9	1%	7	2	34	5%	14	20
Employment (Industrial)	110	2,700 employees	8,154	1,188	15%	986	202	1,134	14%	238	896
Resort Hotel	330	221 Rooms	1,768	69	4%	50	19	83	5%	40	53
Three Elementary Schools	520	2,800 students ⁷	2,856	812	28%	479	333	0	0%	0	0
One Middle School	522	1,200 students ⁷	1,740	552	32%	315	237	192	11%	90	102
One High School	530	2,000 students ⁷	3,580	920	26%	644	276	300	8%	120	180
General Office	710	1,245 employees	4,133	598	14%	526	72	573	14%	97	476
Town Center (Retail) ^{6,10}	814	373,100 SQ. FT.	15,174	455	3%	273	182	966	6%	415	551
Neighborhood Center (Retail)	820	153,950 SQ. FT.	8,996	207	2%	126	81	836	9%	401	435
TOTAL											
SUBTOTAL			80,848	7,431		4,005	3,426	7,469		3,586	3,903
Internal Reduction - Non-Educational Uses (25%)			-18,168	-1,287		-642	-645	-1,749		-844	-905
Internal Reduction - Schools (80%)			-6,541	-1,827		-1,150	-677	-394		-168	-228
NET EXTERNAL TRIPS			56,139	4,317		2,213	2,104	5,346		2,574	2,772

Notes:

1. Trip generation rates published by Institute of Transportation Engineers (ITE), "Trip Generation," 6th Edition, 1997, except where otherwise noted.
2. Split of units (residential) and square footage (retail) amongst sub-land uses based upon ratio of amount of each type in original site plan for project (dated July 2002)
3. Daily trip Generation Rate for Resort Hotel and Retirement Community published by San Diego Association of Governments, "San Diego Trip Generators," June 1998. Assumes 100%
4. AM trip generation rates for Specialty Retail published by San Diego Association of Governments, "San Diego Trip Generators," June 1998.
5. Trip generation based upon the higher of either the ITE regression formula or trip rate.
6. Regression rate used in calculation. Trip rate cited here is equivalent rate for this size of development.
7. School populations based upon 3980 total dwelling units, 3.51 persons per household, and 2 adults per household (estimate).



December 10, 2004
File: C12-202610/GEO

Ms. Alana Knaster, Senior Planner
Monterey County Planning and Building Department
2620 First Avenue
Marina, CA 93933

SUBJECT: Ground water Flow Between the Prunedale and Rancho San Juan Areas

Dear Ms. Knaster:

Per your recent question regarding whether future ground water pumping in the Rancho San Juan Area will adversely impact ground water elevations in the Prunedale area, Kleinfelder has reviewed readily available data concerning the historic direction of ground water flow between the proposed Rancho San Juan Area and Prunedale.

The most comprehensive report (study) in our files concerning the Prunedale area and other areas in North Monterey County was prepared by Fugro West, Inc. That report is entitled North Monterey County Hydrogeologic Study, Volume I, Water Resources, dated October 1995 and was prepared for the Monterey County Water Resources Agency. In that report the Prunedale area is described as lying in the "Highlands South Area". Highlands South Area is located adjacent to the "Eastside Subarea" of the Salinas Valley Basin. Rancho San Juan is located within the Eastside Subarea near the boundary with the Highlands Area South as defined by Fugro.

Fugro performed an analysis of ground water flow patterns in the 1970's, 1980's and 1990's within the entire North County area. In the vicinity of Prunedale they interpret ground water flow during wet years as flowing from the Granite Ridge area to the east. However they report during "basin low" conditions (as in 1994) a significant pumping trough forms at Prunedale with ground water flow entering the area from all directions (including the Rancho San Juan area). Fugro further reports that they believe the "basin low" condition is representative of general groundwater elevation conditions. The ground water flow patterns are illustrated in figures 11, 12 and 13 of the Fugro report (attached).

Ground water pumping at Rancho San Juan likely has some influence on water levels in the Prunedale area, but quantification of that influence cannot be made without further focused study. Pumping at Rancho San Juan after substantial retirement of agriculture will be carried out more uniformly through out the year (as opposed to seasonally with irrigated agriculture). Given this planned change in pumping pattern the overall



magnitude of drawdown at Rancho San Juan will likely be less than observed with the seasonal agricultural irrigation pumping. The result of this change will be that the magnitude of the horizontal hydraulic gradient should be smaller and therefore the ground water flow rates between the two areas may be lower if the Rancho San Juan project proceeds.

Kleinfelder performed this work and prepared this report in accordance with the generally accepted standards of practice that exist in Monterey County at this time. It should be recognized that the definition and evaluation of subsurface geologic conditions is a difficult and inexact art. Judgements leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface conditions present. It is possible that variations in subsurface conditions could exist beyond the points explored in our assessment. Also, changes in conditions could occur some time in the future due to variations in rain fall, temperature, regional water usage, or other factors. This report may be used only by the client and only for the purposes stated within a reasonable time from its issuance, but in no event later than one year from the date of the report. Land or facility use, on and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time.

The services provided by Kleinfelder were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in California. As such, no warranty, expressed or implied, is made.

We appreciate the opportunity to be of assistance. Please call (831)755-7900 if you have questions.

Respectfully submitted,

Kleinfelder, Inc.












Nathan A. Stoopes
Location Manager

Christopher Johnson, CHG
Principal Hydrogeologist

Charles Almestad, CHG
Senior Hydrogeologist

Attachments: Fugro West Inc. Figures 1,2,3

Figure 11 1983 WATER LEVELS

-  Pajaro
-  Springfield Terrace
-  Granite Ridge
-  Highlands North
-  Highlands South
-  Water Surface - Below Sea Level
-  Water Surface - Sea Level
-  Water Surface - Above Sea Level
-  Study Area Boundary
-  County Line
-  Township and Range Grid



Sources: MCMRA, PAMA, and Fugro
North Monterey County Hydrogeologic Study

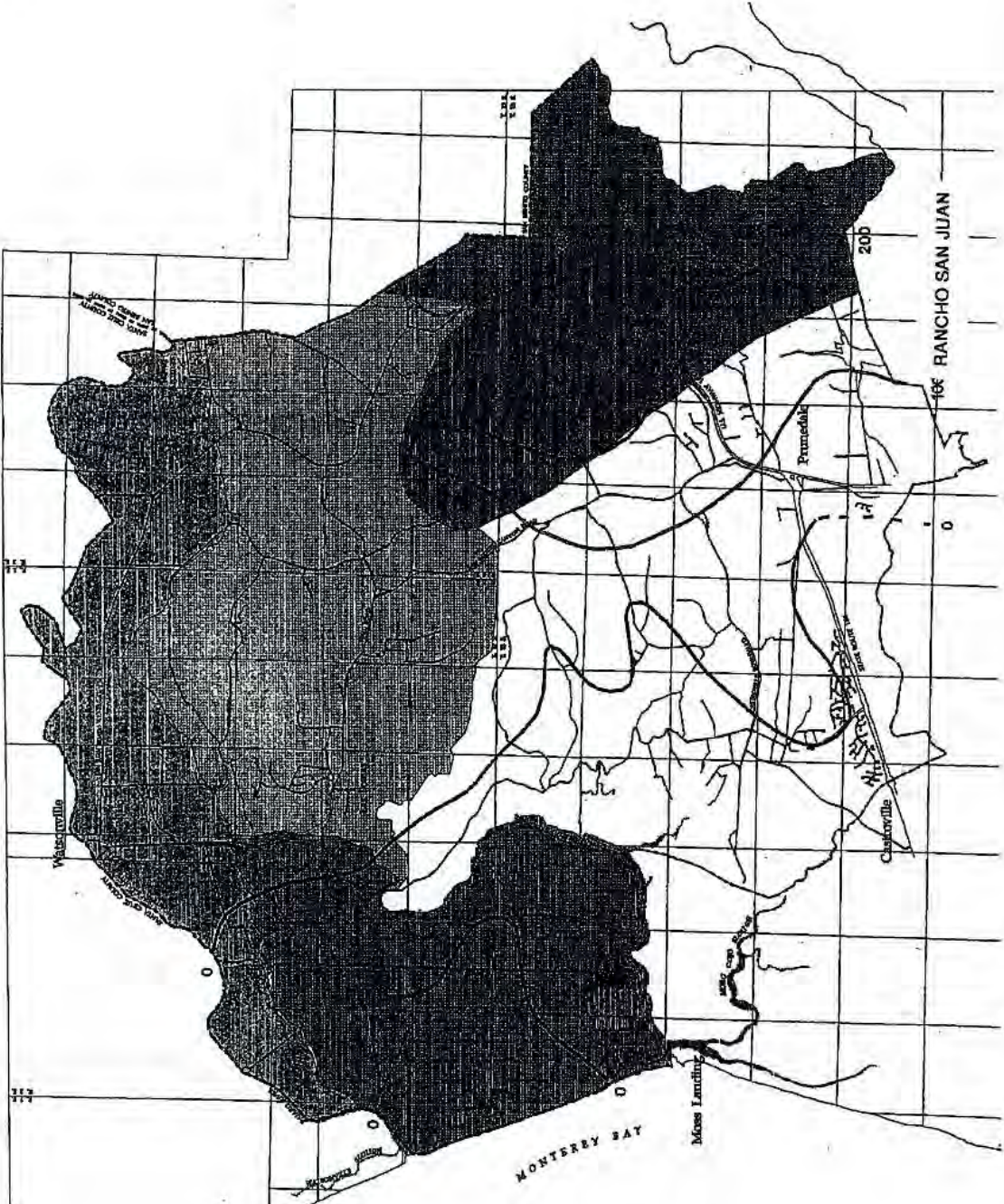













Figure 12
1994 WATER LEVELS

-  Pajaro
-  Springfield Terrace
-  Granite Ridge
-  Highlands North
-  Highlands South
-  Water Surface - Below Sea Level
-  Water Surface - Sea Level
-  Water Surface - Above Sea Level
-  Study Area Boundary
-  County Line
-  Township and Range Grid

Note: Arrows indicate direction of ground water movement.



Sources: MCMRA, PMAVA, and Fugro
North Monterey County Hydrogeologic Study

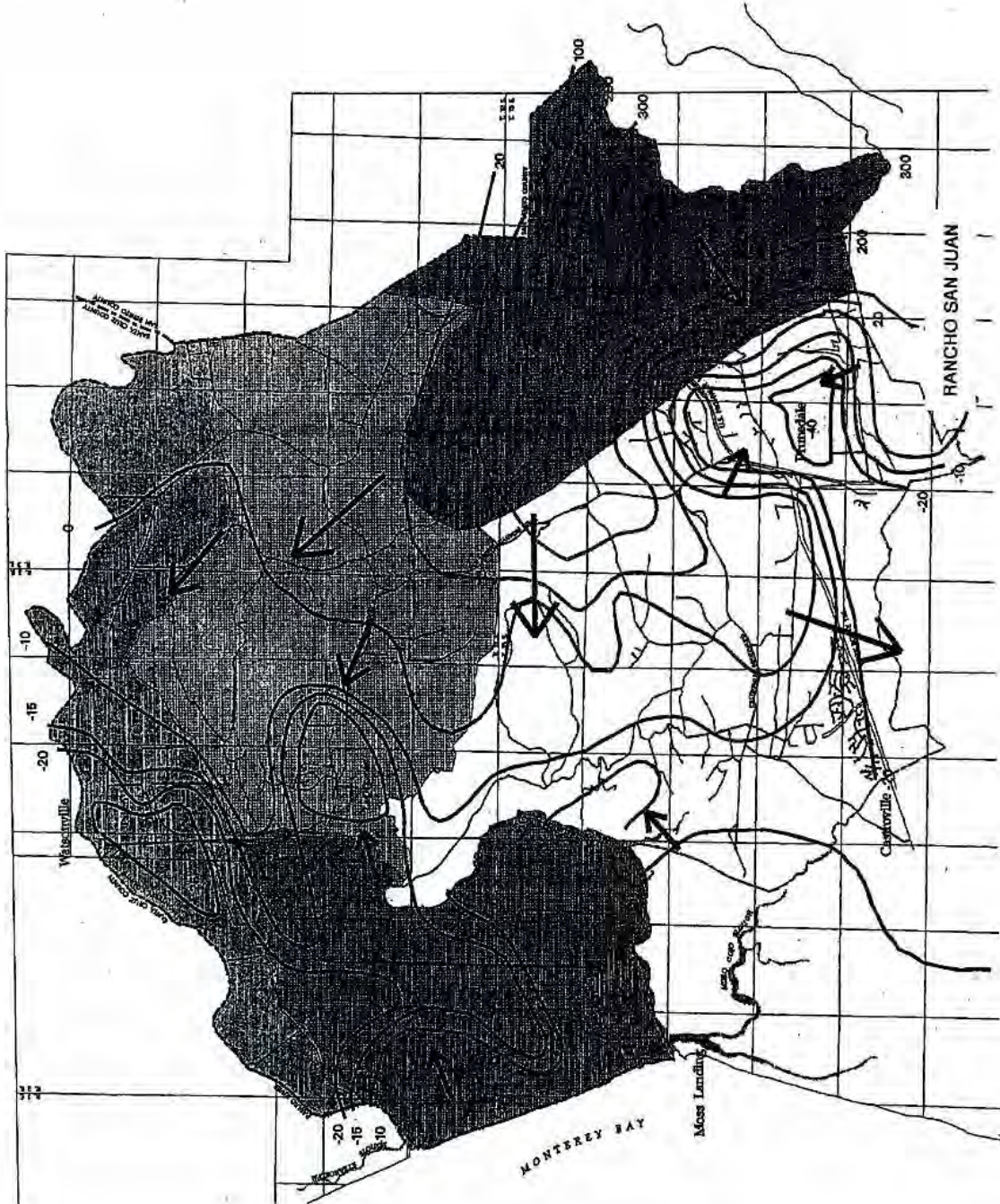


Figure 13
1979 WATER LEVELS

- Pajaro
- Springfield Terrace
- Granite Ridge
- Highlands North
- Highlands South
- Water Surface - Below Sea Level
- Water Surface - Sea Level
- Water Surface - Above Sea Level
- Study Area Boundary
- County Line
- Township and Range Grid



North Monterey County Hydrogeologic Study

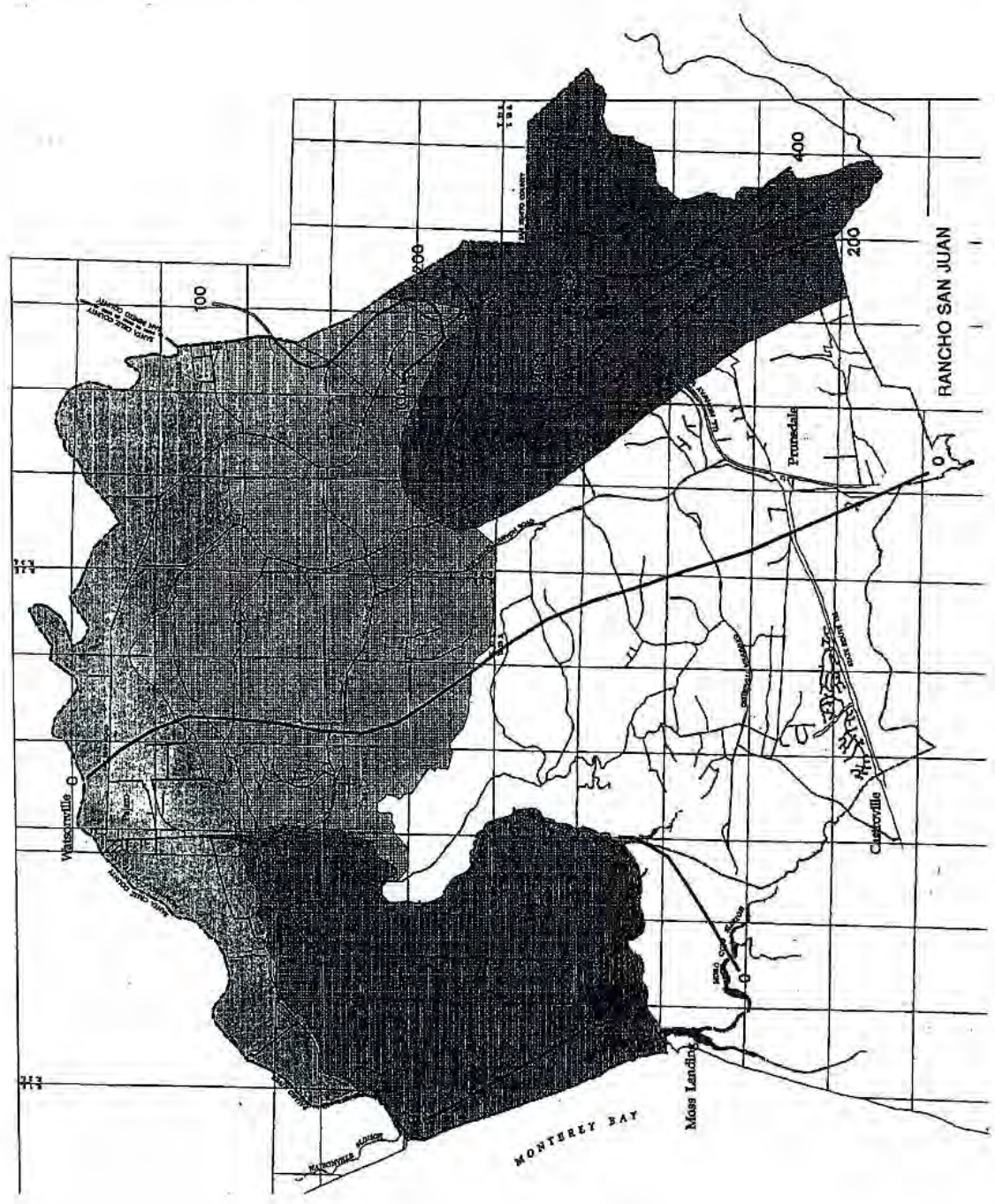


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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This summary provides a brief synopsis of the project description, project alternatives considered and the results of the environmental analysis contained within the Environmental Impact Report (EIR). By necessity, this summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

1.2 PROJECT LOCATION AND DESCRIPTION

1.2.1 Specific Plan

The proposed Rancho San Juan Specific Plan area consists of 2,581 acres and is located in an unincorporated area of Monterey County. The proposed project is located in the northern portion of the County in a region known as Greater Salinas. Highway 101 borders the site to the west.

This EIR addresses two alternatives equally. Alternative 2 assumes that some improvements to Highway 101 would occur, but the alignment would remain the same in the project area. Alternative 4E assumes that a bypass, known as the Prunedale Bypass, assumes a new highway which would cross the northern portion of the Specific Plan area.

In general, the land use designations associated with the two plans are the same except for modifications along the northwestern portion of the Specific Plan area which are required to accommodate the construction of the Bypass. Overall, the two land use plans differ only in the distribution of residential types and employment uses in addition to the land area requirements for an interchange.

The Specific Plan includes a variety of land uses which are intended to provide a balanced, sustainable development where people can live, work and utilize neighborhood amenities. Uses include residential, commercial, industrial, and public services and facilities. The Specific Plan would allow for development of up to 4,000 dwellings, a maximum of 2,766,900 square feet of employment space, a maximum of 242,900 square feet of office space, and approximately 527,000 square feet of retail and commercial uses in the Town Center and Neighborhood Centers. A total of five school sites would be created, and recreation opportunities would include ~~an a~~ 229.6 acre 18-hole golf course and 86 acres devoted to parks. A total of 610 acres would be retained in open space. Ultimately, wastewater treatment would be provided by a central wastewater treatment facility. Water would be provided from a series of onsite wells equipped with individual water treatment facilities.

Implementation of the proposed Specific Plan would require an amendment to the adopted General Plan to reconcile differences between the Specific Plan and various goals and objectives of the adopted General Plan and/or the proposed General Plan including substandard community

park size, insufficient industrial area, inconsistent building lot coverage and building height. (See Appendix C)

Other local discretionary actions include an amendment to the water transfer ordinance, approval of the Specific Plan, and establishment of a Community Service District (see Table 4.4-1 in the Project Description for more details).

1.2.2 HYH Property Project

The 671-acre HYH Property is located nearly one mile northwest of Russell Road, 0.25 mile east of Harrison Road, and approximately 3,400 feet to the west of San Juan Grade Road. Approximately 6,200 feet is shared with the northwestern boundary of the proposed Specific Plan area. The HYH Property southeast boundary is adjacent to the Salinas Golf Course and Country Club. Currently the property has no frontage on existing roadways.

The HYH Property would include residential units, commercial, a golf course, and some public services and facilities. The maximum amount of residential units would be 1,077 units. The entire 18-hole golf course and resort with 141 guest villas/timeshares would be located within the HYH development. Additional amenities and uses would include over 45000 square feet of commercial retail, approximately 165 acres of open space, 10 acres of parks, a wastewater treatment facility, ~~and~~ at two wells and water storage facilities.

Implementation of the HYH Property project would require approval several Conditional Use Permits, which would be primarily required for the proposed wastewater treatment plant, golf course, development on slopes over 30 percent, and tree removals(see Table 4.4-2 in the Project Description for more details).

Other local discretionary actions include a Vesting Tentative Subdivision Map, 404 Permit, Section 1603 Streambed Alteration Agreement, Waste Discharge Permit, and Development Agreement (see Table 4.4-2 in the Project Description for more details).

1.3 ENVIRONMENTAL ANALYSIS

The EIR contains an environmental analysis of the potential impacts associated with implementing the proposed project. The major issues that are addressed in this EIR were determined to be potentially significant based on review by the County of Monterey. The issues include land use, traffic and circulation, landform alteration/visual quality, biology, archaeological/historical resources, noise, air quality, soils and geology, hydrology/water quality, water resources, agriculture, and public services and utilities.

Tables 1.3-1 (Specific Plan) and 1.3-2 (HYH Property Project) summarize the potentially significant environmental impacts and proposed mitigation measures by major issue, as analyzed in Sections 5.0 and 6.0 of this EIR. The last column of this table indicates whether the impact would be reduced to below a level of significance after implementation of proposed mitigation measures.

Table 1.3-3 summarizes the potential environmental impacts that are not considered significant, which include population and housing, hazards and hazardous materials, and mineral resources as analyzed in Chapter 8.0 (Effects Found not to be Significant) of this EIR.

1.4 PROJECT ALTERNATIVES

1.4.1 Specific Plan

Alternatives to the proposed project are evaluated in Chapter 9.0 (Significant Irreversible Environmental Changes which cannot be Avoided if the Proposed Project is Implemented) of this EIR in terms of their ability to meet the primary objectives of the proposed project, and eliminate or further reduce its significant environmental effects. Base on these two parameters, the following 5 alternatives are considered: (1) No Development Alternative, (2) No Project Alternative: Development in Accordance with Adopted General Plan, (3) ~~Reduced Project Alternative, and No Groundwater Deficit Alternatives~~, (4) Reduced Biological Impact Alternative, (5) and Reduced Biological Impact/No Groundwater Deficit Alternative.

No Development

The No Development alternative would involve no new development within the Specific Plan area. In addition, the existing agricultural activities would continue but not be expanded. No Specific Plan would be adopted for the property nor would the proposed expansion of the adopted ADC occur. Without a Specific Plan for the ADC, the General Plan's GSAP and Rancho San Juan ADC would not be implemented as previously approved by the Board of Supervisors.

A summary of the environmental impacts of this alternative as compared to the two proposed projects and other alternatives is provided in Table 1.4-1. The analysis of this project, which is provided in Section 10.1.1 (Alternatives), concludes this alternative would eliminate all but the hydrology/water quality and water resources impacts associated with the two proposed projects. This alternative would avoid increased runoff and impermeability, but the water quality impacts associated with the existing agricultural activities would continue. Also, the downstream flooding would continue to occur, as no additional flood control measures would be taken on the subject property. Although no development would occur with this alternative, it would have a significant impact on water resources by resulting in a net reduction in the groundwater supply in the area. Impacts to air quality, agriculture, biology, land use, landform alteration/aesthetics, noise, soils and geology, public services, and traffic and circulation would all be avoided.

No Project Alternative: Development in Accordance with Adopted General Plan

Under the No Project alternative, the property within the proposed Specific Plan area would be developed in accordance with the Greater Salinas Area Plan (GSAP) contained within the County's General Plan. Development of the property pursuant to the GSAP would eliminate the proposed expansion of the Area of Development Concentration. Similarly, the entire project area would be available for development; no future development area would be established.

The GSAP identifies 1,310 acres within the proposed Specific Plan area which are available for residential development. The average residential density would be 5.1 units per acre which could yield up to 6,681 residential units including single- and multiple-family dwellings. In accordance with the GSAP, commercial development including a hotel, neighborhood-serving commercial and retail and office commercial would be developed along the Highway 101 corridor. A total of 570 acres of industrial development would occur in the southern portion of the proposed Specific Plan area along Highway 101. A total of 310 acres of land would be devoted to agricultural use in the northeast corner of the proposed Specific Plan area as required by the GSAP. It is anticipated that this alternative would rely on local groundwater and include the construction of an onsite wastewater treatment plant.

A summary of the environmental impacts of this alternative as compared to the two proposed projects is provided in Table 1.4-1, and analysis is provided in Section 10.1.2 (Alternatives). Generally, this alternative would not reduce or avoid significant impacts of the two proposed projects. Similar to the two proposed projects, this alternative would result in significant impacts to air quality, agriculture, biology, hydrology/water quality, land use, landform alteration/aesthetics, noise, soils and geology, public services, traffic and circulation, and water resources. However, due to the increased density, this alternative would likely result in greater significant impacts than the two proposed projects.

No Groundwater Deficit Alternative

The primary objective of this alternative is to avoid impacts related to groundwater supply. In order to avoid the projected net average annual deficit of 463 AF associated with the proposed project, this alternative would reduce the amount of employment uses included as part of the Specific Plan. The amount of acreage devoted to employment center uses would be reduced by 100 acres to a total of 54 acres. The unused employment center could be used for non-irrigated open space.

Although the proposed golf course creates a high demand for water, it would not be eliminated under the assumption that its irrigation needs would be met with reclaimed water generated by the onsite wastewater treatment process. Furthermore, the golf course offers an opportunity to help recharge groundwater supplies.

The No Groundwater Deficit alternative would eliminate the average annual groundwater deficit of 506 AF which is currently occurring as a result of ongoing agriculture on the property as well as allow development of the property without an average annual groundwater deficit. A summary of the environmental impacts of this alternative as compared to the two proposed projects is provided in Table 1.4-1, and analysis is provided in Section 10.1.3 (Alternatives). Similar to the two proposed projects, this alternative would result in significant, albeit it less, impacts to air quality, biology, hydrology/water quality, land use, landform alteration/aesthetics, noise, and traffic and circulation.

Reduced Biological Impact Alternative

The goal of this alternative is to reduce the impact on sensitive biological resources located within the project area. In order to reduce biological impacts of development within the Specific Plan area, the proposed golf course would be eliminated as would residential estate development within Planning Area ~~46-12C~~ and the corresponding road crossing needed to provide access. It is assumed that the ~~30-34~~ residential units within Planning Area ~~46-126~~ would be distributed throughout the balance of the residential areas of the Specific Plan to retain the maximum number of potential dwelling units. The golf course area would be included in the proposed biological conservation area where grading would not otherwise occur to create the proposed development areas.

A summary of the environmental impacts of this alternative as compared to the two proposed projects is provided in Table 1.4-1, and analysis is provided in Section 10.1.5 (Alternatives). Generally, this alternative would not reduce or avoid significant impacts of the two proposed projects except with respect to biological resources. Similar to the two proposed projects, this alternative would result in significant impacts to air quality, agriculture, hydrology/water quality, land use, landform alteration/aesthetics, noise, soils and geology, public services, traffic and circulation, and water resources.

Reduced Biological Impact/No Groundwater Deficit Alternative

The goal of this alternative is to reduce the impact on sensitive biological resources located within the project area and avoid an average annual groundwater deficit. In order to reduce biological impacts of development within the Specific Plan area, the proposed golf course would be eliminated as would residential estate development within Planning Area ~~46-12C~~ and the corresponding road crossing needed to provide access. It is assumed that the ~~30-34~~ residential units within Planning Area ~~46-12C~~ would be distributed throughout the balance of the residential areas of the Specific Plan to retain the maximum number of potential dwelling units. The golf course area would be included in the proposed biological conservation area where grading would not otherwise occur to create the proposed development areas.

A total of 100 acres of the 154 acres of employment center proposed by the Specific Plan would be eliminated to avoid over drafting groundwater resources.

A summary of the environmental impacts of this alternative as compared to the two proposed projects is provided in Table 1.4-1, and analysis is provided in Section 10.1.5 (Alternatives). As this alternative would reduce impacts in 9 of the 13 impact areas, this alternative would be the environmentally-preferred alternative. Generally, this alternative would reduce or avoid significant impacts of the two proposed projects except with respect to land use due to the reduction in employment center uses. Similar to the two proposed projects, this alternative would result in significant, albeit it less, impacts to air quality, agriculture, hydrology/water quality, land use, landform alteration/aesthetics, noise, soils and geology, public services, traffic and circulation, and water resources.

1.4.2 HYH Property Project

Alternatives to the proposed project are evaluated in Section 9.0 (Significant Irreversible Environmental Changes which cannot be Avoided if the Proposed project is Implemented) of this EIR in terms of their ability to meet the primary objectives of the proposed project, and eliminate or further reduce its significant environmental effects. Base on these two parameters, the following three alternatives are considered: (1) No Development (HYH) Alternative, (2) No Project (HYH) Alternative: Development in Accordance with Adopted General Plan, and (3) Reduced Biological Impacts (HYH) Alternative.

No Development (HYH) Alternative

This alternative would eliminate future development of the HYH property including the proposed golf course resulting in continued agricultural operations on the property. However, development of the remainder of the Specific Plan area would take place in accordance with the proposed Specific Plan. Without development of the HYH Property, the wastewater treatment plant would be constructed within Planning Area 14. Stirling Road would likely continue to be extended from San Juan Grade Road to the proposed town center to maximize traffic flow in the Specific Plan area.

A summary of the environmental impacts of this alternative as compared to the two proposed projects and other alternatives is provided in Table 1.4-2. The analysis of this project, which is provided in Section 10.2.1 (Alternatives), concludes this alternative would eliminate all but the hydrology/water quality and water resources impacts associated with the two proposed projects. This alternative would avoid increased runoff and impermeability, but the water quality impacts associated with the existing agricultural activities would continue. Also, the downstream flooding would continue to occur, as no additional flood control measures would be taken on the subject property. Although no development would occur with this alternative, it would have a significant impact on water resources by resulting in a net reduction in the groundwater supply in the area. Impacts to air quality, agriculture, biology, land use, landform alteration/aesthetics, noise, soils and geology, public services, and traffic and circulation would all be avoided.

No Project (HYH) Alternative: Development in Accordance with Adopted General Plan

Development of the HYH Property under the GSAP would result in residential and commercial land uses. Based on average density allowed by the GSAP of 5.1 dwelling unit per acre, it is anticipated that this alternative could result in up to 3,422 residential units. Given the interest of the project applicant in developing a golf course resort, as well as the fact that a golf course land use is specified in the GSAP, this alternative assumes a facility similar to that included as part of the proposed Specific Plan is assumed to be a part of this alternative. In addition, some level of support retail services would be anticipated to occur within the HYH property under the GSAP.

Future development in accordance the GSAP would be served by groundwater and an onsite wastewater treatment plant as the project is not currently within the service area of a provider of

either of these services. Access to the site would be from a connection to San Juan Grade via Stirling Road. A second connection would be made to Harrison Road.

A summary of the environmental impacts of this alternative as compared to the proposed project is provided in Table 1.4-2, and analysis is provided in Section 10.2.2 (Alternatives). Generally, this alternative would not reduce or avoid significant impacts of the proposed project. Similar to the proposed project, this alternative would result in significant impacts to air quality, agriculture, biology, hydrology/water quality, land use, landform alteration/aesthetics, noise, soils and geology, public services, traffic and circulation, and water resources. However, due to the increased density, this alternative would likely result in greater significant impacts than the two proposed projects.

Reduced Biological Impacts (HYH) Alternative

This alternative would be the same as the Specific Plan alternative described above and in Section 10.1.5 (Alternatives). Under this alternative, the golf course would be eliminated along with development within Planning Area 12C; the wastewater treatment plant would be moved to Planning Area 14 near Highway 101.

A summary of the environmental impacts of this alternative as compared to the proposed project is provided in Table 1.4-2, and analysis is provided in Section 10.2.3 (Alternatives). Generally, this alternative would not reduce or avoid significant impacts of the two proposed projects except with respect to biological resources. Similar to the proposed project, this alternative would result in significant impacts to air quality, agriculture, hydrology/water quality, land use, landform alteration/aesthetics, noise, soils and geology, public services, traffic and circulation, and water resources.

CHAPTER 2.0

INTRODUCTION

2.1 PROPOSED ACTIONS

For purposes of this Environmental Impact Report (EIR), the proposed project consists of two basic elements: (1) the Rancho San Juan Specific Plan and (2) development plans for a portion of the Specific Plan area (known as the HYH Property) on which the landowner is processing entitlements concurrent with the Specific Plan. Each of these actions is briefly summarized below; see Section 4.0 for more specific information on these two elements.

The proposed Specific Plan provides for the development of a planned community with up to 4,000 residential units ranging from single-family detached to multi-family homes, over 500,000 square feet of commercial/retail, a major employment center including approximately 2.7 million square feet of light industrial and business park uses, and over 240,000 square feet of office development. Community amenities would include a golf course, over 80 acres of public parks, and over 600 acres of open space. The Specific Plan area encompasses 2,581 acres north of the City of Salinas generally bounded by Highway 101, Harrison Road and San Juan Grade Road.

The HYH Property project is located within the central portion of the Specific Plan area and would involve the development of 1,077 residential units ranging from single-family detached to multi-family homes, an 18-hole golf course and clubhouse, 71 golf villas and 70 timeshare units, a wastewater treatment facility, parks, and open space on 671 acres.

2.2 CEQA REQUIREMENTS

2.2.1 CEQA COMPLIANCE

The California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et. seq.) requires the preparation of an EIR or other environmental analysis for any project that a Lead Agency determines may have a significant impact on the environment. According to Section 21002.1 of CEQA, "The purpose of an EIR is to identify the significant effects of a project on the environment, to identify alternatives to the project and to indicate the manner in which those significant effects can be mitigated or avoided." CEQA also establishes mechanisms whereby the

public and decision-makers can be informed about the nature of the project being proposed, and the extent and types of impacts that the project and its alternatives would have on the environment if they were to be implemented. This EIR complies with all criteria, standards and procedures of CEQA, the State CEQA Guidelines (California Code of Regulations, Section 15000, et. seq.) and the County of Monterey CEQA Guidelines.

The scope of analysis for this EIR was determined by the County of Monterey as a result of responses to the Notice of Preparation (NOP) dated December 19, 2002 and in a scoping meeting held January 23, 2003. The NOP and associated responses are included in Appendix A of this document.

On the basis of comments received on the NOP as well as at the scoping meeting, the following issues were determined to be potentially significant and are addressed in this EIR:

Land Use	Air Quality
Traffic and Circulation	Geology/Soils
Landform Alteration/Aesthetics	Hydrology/Water Quality
Biology	Water Resources
Archaeology/Historical Resources	Agriculture
Noise	Public Services and Utilities

It should be noted that the review and process of the Specific Plan and the HYH application has been subject to the terms of a court order and Stipulation Agreement between the landowner and the County.¹

2.3 PURPOSE AND USES OF THIS EIR

This EIR evaluates, at a “Program” level, the potential short-term and long-term, direct, indirect and cumulative environmental impacts associated with the Rancho San Juan Specific Plan. In addition, this EIR provides a “Project” level analysis for the HYH Property. The owner is concurrently processing the necessary approvals to develop the property. Entitlements, which are listed in Chapter 4.0 (Project Description), include but are not limited to: a vesting tentative subdivision map and four use permits for a sewage treatment plan, golf course, development on slopes over 30 percent, and tree removals.

This EIR is intended to stand on its own merit and does not depend in any manner on the draft EIR which was prepared for the pending Monterey County General Plan Update. The purpose of this EIR is to disclose the significant environmental effects of the proposed Specific Plan and HYH

¹ In the context of prior planning and policy actions affecting the significant impacts of the Specific Plan area, we note that leading CEQA commentators suggest that CEQA requires that this existing baseline and the adopted policies govern the County’s review at this subsequent phase of the planning process. Stephen L. Kostka, Michael H. Zischke Practice under the California Environmental Quality Act, updated December 2003, Section 13.12F.p.513, nevertheless, the scope of this EIR goes beyond evaluating the incremental impacts of the Specific Plan over the adopted Greater Salinas Area Plan (GSAP) and analyzes impacts against existing physical conditions as of the date of the CEQA Notice of Preparation.

Property project, alternatives to the Specific Plan and HYH Property project, and possible ways to reduce or avoid the possible environmental damage (see Section 15002, CEQA Guidelines). This EIR will be made available for review by the public and public agencies for 45 days to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (Section 15204, CEQA Guidelines). The draft EIR is available for review at the County of Monterey Planning and Building Inspection Department, 2620 First Avenue, Marina, CA 93933, where it will also be available for purchase to members of the public in paper format and on CD.

The County of Monterey, as Lead Agency, will consider written comments received on the draft EIR in making its decision to whether certify the EIR as complete and in compliance with CEQA, and whether to approve or deny the proposed Specific Plan and HYH Property project. In the final review of the proposed project, environmental considerations as well as economic and social factors will be weighed to determine the most appropriate course of action. Subsequent to certification of the EIR, agencies with permitting authority over all or portions of the Specific Plan area will use the EIR as the basis for their evaluation of environmental effects of the Specific Plan and HYH Property and for approval or denial of applicable permits.

Subsequent development proposals within the area covered by the Specific Plan will be evaluated in light of the impact conclusions and mitigation programs developed in this Program EIR. If subsequent projects would have environmental effects not identified and/or adequately addressed in this Program EIR, additional environmental review will be required. Where no significant new effects are anticipated, the subsequent project can be considered based on a negative declaration or an addendum. Where an EIR is required for a subsequent project, the EIR should focus its analysis on site-specific issues not previously addressed.

2.4 EIR FORMAT

The EIR format is designed to provide the appropriate level of analysis for both the Specific Plan and the HYH Property project. To this end, key sections of the EIR contain separate discussions of the Specific Plan and the HYH Property. By necessity, the analysis of the Specific Plan is less detailed due to the general level of information available regarding the ultimate development. As a consequence, the discussion of impacts is often based on a "worst case scenario" in order to assure potential impacts are adequately anticipated. In the absence of information on the actual level of impact, the mitigation measures for the Specific Plan impacts often rely on performance standards to assure that, when implemented on a project by project basis, the measures will be able to reduce identified impacts. As a detailed level of information is available for the HYH Property project, the EIR identifies specific impacts and mitigation measures.

An executive summary, contained in Section 1.0 briefly summarizes the impacts and mitigation measures identified in the EIR. The executive summary also contains a brief comparison of the proposed projects with the alternatives discussed in the EIR. This section (Section 2.0) introduces the proposed project in light of the required environmental review procedures. The project location and physical environmental setting within and adjacent to the project site are

described in Section 3.0. Section 4.0 includes the description and characteristics of the proposed project, the purpose and objectives of the project, and required discretionary approvals. Section 5.0 is the Environmental Analysis, which examines the potentially significant environmental issues identified by the feedback received at the project scoping meeting and the NOP and responses to the NOP. For each environmental issue addressed in Section 5.0, a discussion of the existing conditions, significance thresholds, project impacts and proposed mitigation measures for significant impacts are presented. The impact analysis includes a determination of significance and/or discussion of the project design features that serve to reduce impacts. The mitigation measures identify the action to be taken, timing of implementation, responsible parties, and monitoring and reporting requirements.

Sections 6.0 through 13.0 address the specific topics required by CEQA including cumulative impacts (Section 6.0), growth-inducing impacts (Section 7.0), and effects found not to be significant (Section 8.0). Section 9.0 addresses significant irreversible environmental changes that would be involved in the proposed action, should it be implemented. Section 10.0 includes a discussion of a reasonable range of alternatives to the proposed Specific Plan and HYH Property project that would either avoid or significantly reduce environmental impacts generated by these proposed actions. The final three sections list the references cited in the EIR (Section 11.0), the individuals and organizations consulted during EIR preparation (Section 12.0), and the persons involved in the EIR preparation (Section 13.0).

CHAPTER 3.0

ENVIRONMENTAL SETTING

3.1 LOCATION

3.1.1 SPECIFIC PLAN

The proposed Rancho San Juan Specific Plan area is located in an unincorporated area of Monterey County (Figure 3.1-1). The proposed project is located in the northern portion of the County in a region known as Greater Salinas.

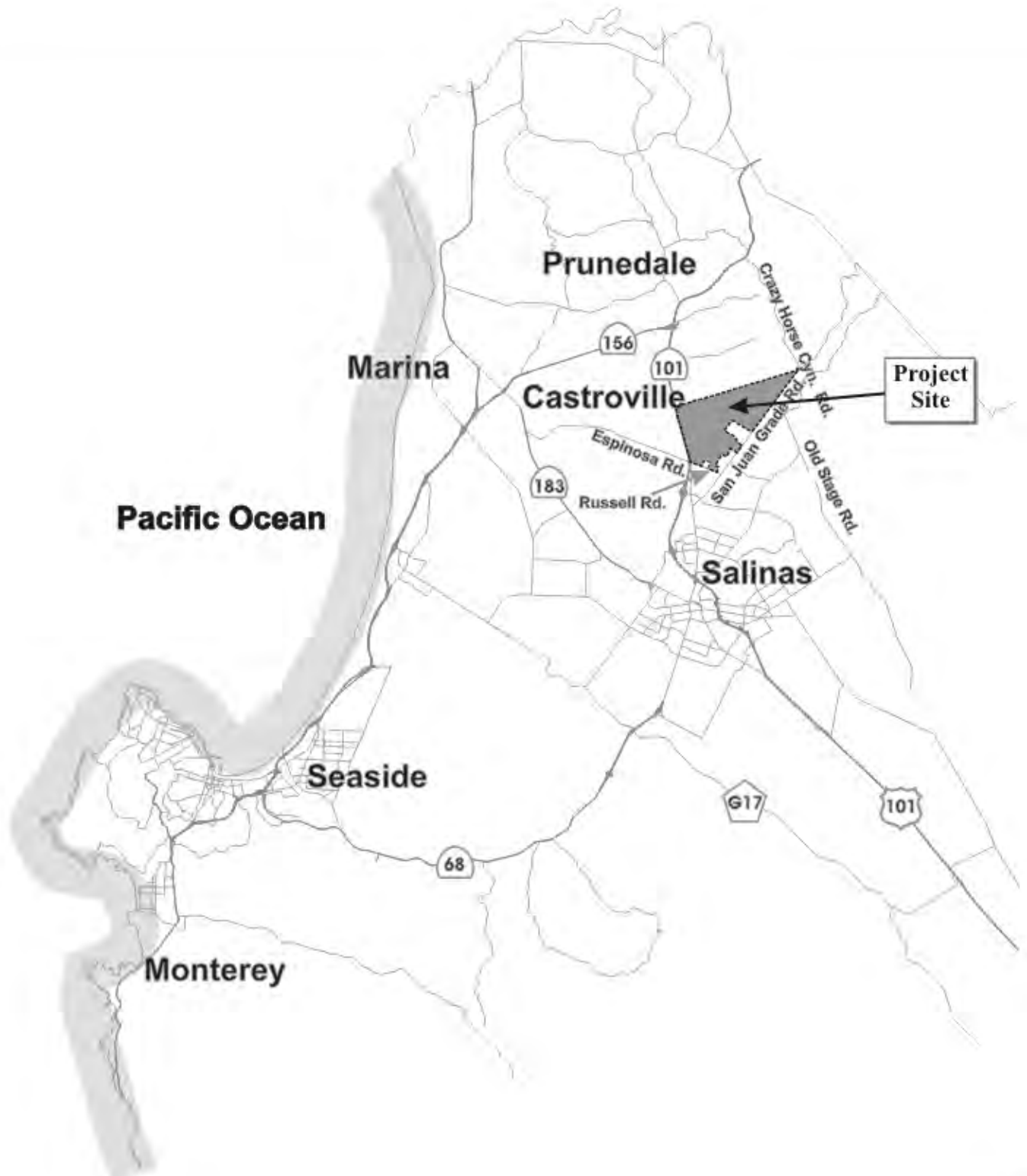
More specifically, the Specific Plan area is located just north of and adjacent to the City of Salinas. The Rancho San Juan Specific Plan area lies within a general area bounded by the historic Bolsa de Escarpines Rancho boundary to the north, Crazy Horse Canyon Road and San Juan Grade Road to the east, Russell Road to the south, and Highway 101 to the west (Figure 3.1-2). The proposed project is within the USGS Monterey Quadrangle Map.

3.1.2 HYH PROPERTY PROJECT

The HYH Property is located nearly one mile northwest of Russell Road, 0.25 mile east of Harrison Road, and approximately 3,400 feet to the west of San Juan Grade Road. Approximately 6,200 feet is shared with the northwestern boundary of the proposed Specific Plan area. The HYH Property southeast boundary is adjacent to the Salinas Golf Course and Country Club. Currently the property has no frontage on existing roadways (Figure 3.1-2). The HYH Property project application was determined to be complete on February 3, 2003.

3.2 PHYSICAL CHARACTERISTICS

Please note that the following discussion is intended to serve as a summary of the project's existing environmental setting conditions. Additional discussions about the environmental setting are included in the existing conditions sections of Chapter 5.0 (Environmental Analysis) as necessary to explain the impacts of the Specific Plan and HYH Property.

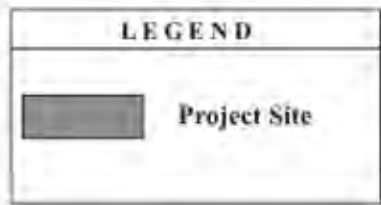
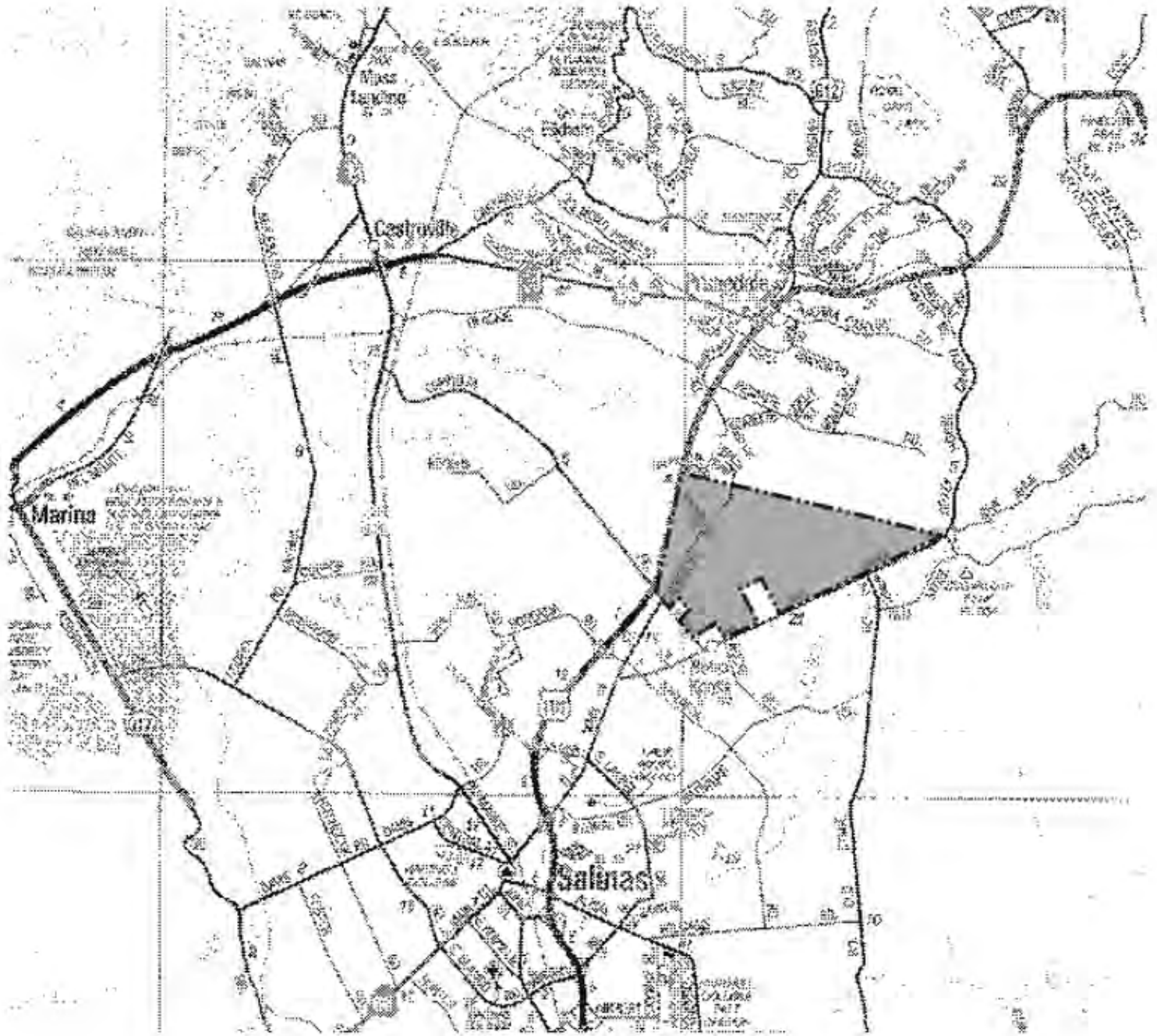


Not to Scale

Source: ProjectDesign Consultants, 2003

Regional Location Map

Figure 3.1-1



1 inch = 2 miles

Source: EMC Planning Group Inc. and California Automobile Association, N7-2002

3.2.1 EXISTING ONSITE USES

3.2.1.1 Specific Plan

The Specific Plan area consists of approximately 2,581 acres of primarily farmland, with limited residential, commercial, and industrial uses (see Figure 3.2-1). The site is predominately used for agricultural activities throughout the year, and the principal crop grown onsite is strawberries, however, raspberries, lettuce, broccoli, cauliflower, and bush berries are also grown. A small portion of the site (namely the Hebert Ranch) is used for grazing activities. The Hebert Ranch is just north of the HYH Property.

Mixed light and heavy industrial uses comprise an area adjacent to Highway 101 and Russell Road. Mixed residential and commercial uses are located adjacent to Highway 101 and Martinez Road. North of the mixed residential and commercial uses along Harrison Road are homes located on large lots. The Lagunita Elementary School is located in the northeastern corner of the Specific Plan area.

Electrical distribution lines traverse the Specific Plan area. Several electrical distribution lines follow Harrison Road with some branching eastward into the Specific Plan area. Transmission lines also parallel San Juan Grade Road, south to its intersection with Crazy Horse Canyon Road. Six other power lines lead westward into the Specific Plan area.

Two ponds, one large and one small, are located in the northeastern portion of the Specific Plan area. Artificial detention ponds and stock ponds are also scattered throughout the site within the agricultural and grazing lands.

3.2.1.2 HYH Property Project

The HYH Property consists of approximately 671 acres. A majority of the property consists of agricultural lands and open space. Two homes with associated structures (i.e. shed, water tower) are located along the western boundary of the HYH Property (see Figure 3.2-1). The site also contains oak woodlands and detention ponds.

3.2.2 TOPOGRAPHY AND DRAINAGE

3.2.2.1 Specific Plan

As indicated in Figure 3.2-2, the terrain of the Specific Plan area varies from flat in the southern portion to the rolling hills in the north. Flatlands are located in the southern portion of the Specific Plan area north of Russell Road, east of Highway 101, and west of Bolsa Knolls subdivision. Flatlands are also located in the northern portion of the Specific Plan area parallel to San Juan Grade Road, north of the Salinas Golf and Country Club, and south of the Lagunita School. The hillsides are located mainly on the HYH Property. The Specific Plan area is crossed by numerous drainage creeks through the rolling hills.



L E G E N D

- ○ ○ ○ ○ Harrison Road Study Area 334 Ac.
- ○ ○ ○ ○ Russell Road Study Area 83 Ac.
- ■ ■ HYH Boundary
- - - - - RSJ Project Boundary

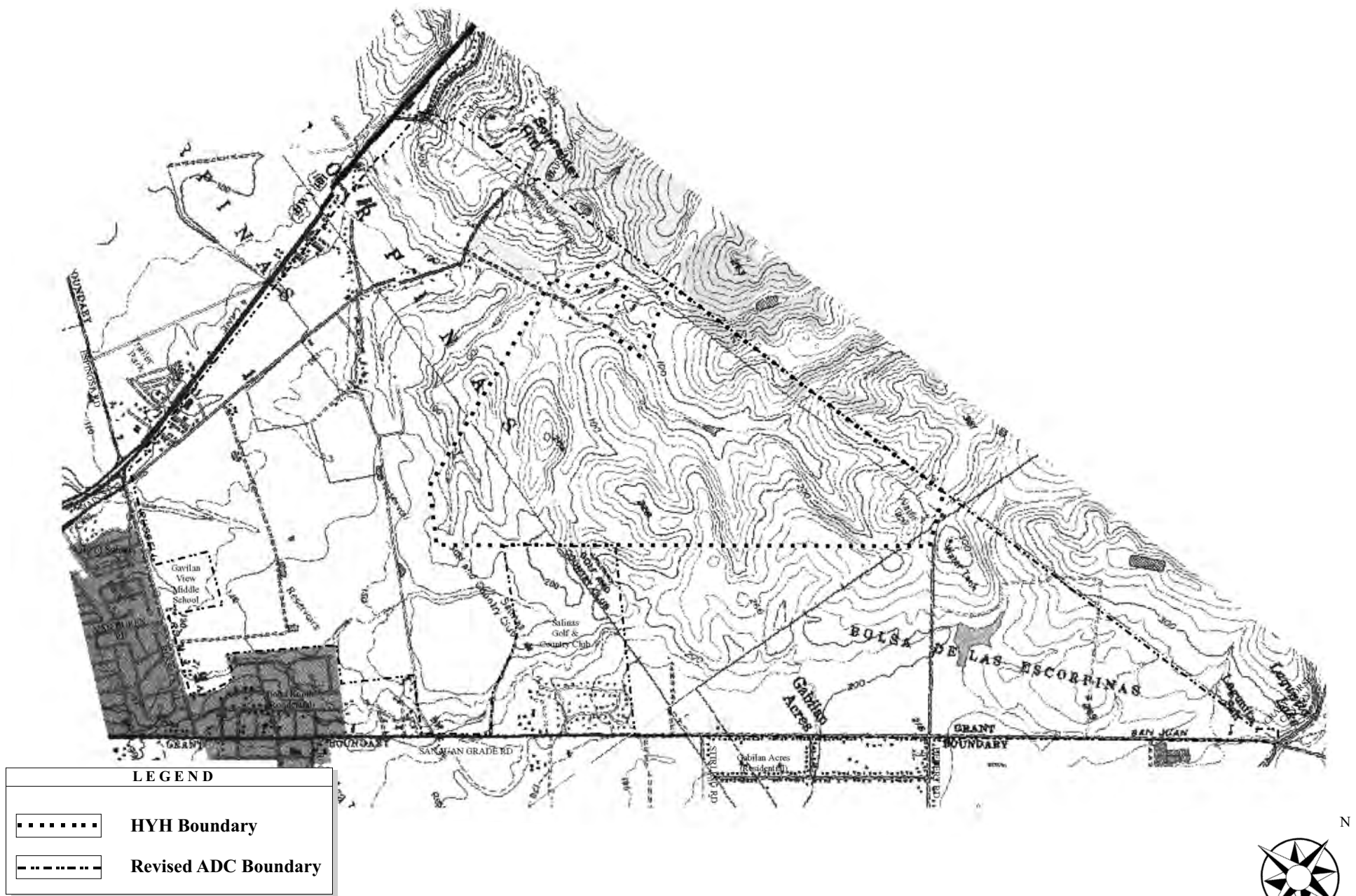
Source: ProjectDesign Consultants, 2003



Aerial Photograph

Figure 3.2-1

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Source: U.S.G.S., 4/29/04



Not to Scale

U.S.G.S. Base Map _____ Figure 3.2-2

3.2.2.2 HYH Property Project

The topography of the HYH Property consists of steep rolling hills, with elevations ranging from approximately 50 feet to 300 feet (Figure 3.2-2). The HYH Property is characterized by a series of ridges and drainage courses throughout. ~~Santa Rita Creek~~ An unnamed, intermittent creek flows through the northern portion of the HYH Property.

3.2.3 ONSITE VEGETATION

3.2.3.1 Specific Plan

The onsite vegetation is characterized by native and non-native habitats, however, the majority of the vegetation is non-native. The vegetation onsite is comprised of agriculture, annual grassland, oak woodland, riparian scrub, and wetlands. The majority of the Specific Plan area contains active agricultural lands and does not contain naturally-occurring plant species. The annual grassland is found in grazing lands and undeveloped areas in the northern and central portion of the Specific Plan area. Oak woodland habitat, comprised primarily of coast live oak with smaller numbers of interior live oak, is found on steep slopes in limited areas of the northern portion of the Specific Plan area. A limited extent of riparian scrub habitat is located along portions of some of the drainage channels that traverse the Specific Plan area, as well as the two pond areas in the northeastern portion of the Specific Plan area. Willows or rushes line some of the drainage channels and ponds. A more detailed discussion of vegetation can be found in Chapter 5.4 (Biology).

3.2.3.2 HYH Property Project

Although there is some native vegetation onsite, the majority of the HYH Property is covered with non-native vegetation. ~~Over 200 acres~~ A total of 413.5 acres of the HYH Property are devoted to agricultural uses, which include strawberries, ~~grain crops, and pasture~~ and cover crops. The remaining land is rangeland dominated primarily by non-native grasses. Patches of native Nodding needlegrass occur in several locations. Coast live oak trees occur in scattered locations on several ridges and hill slopes in the study area. A more detailed discussion of vegetation can be found in Section 5.4.1.2.

3.2.4 SURROUNDING LAND USES

3.2.4.1 Specific Plan

Portions of surrounding areas (Figure 3.2-1) are also characterized by agriculture and open space, while other portions are developed. The area to the immediate north consists of open space and agricultural lands. Immediately east is San Juan Grade Road, along with more agriculture land, along with the Salinas Golf and Country Club and the residential communities of Country Club Estates and Gavilan Acres. The residential community of Bolsa Knolls is located to the southeast. The Gavilan View Middle School is immediately adjacent to the Specific Plan area to the south and, although not included, is surrounded by the Specific Plan area to the north, east and west. Also adjacent on the south is Russell Road, which is the boundary to the City of Salinas. Further south in the City of Salinas are residential and scattered commercial uses.

Immediately adjacent to the west is Highway 101, and further west are some residential and agriculture uses. The residential community of Country Meadow Estates is adjacent to the northwestern boundary of the project area.

3.2.4.2 HYH Property Project

Major land uses surrounding the HYH Property include the Salinas Golf Course and Country Club on the south, and a dairy farm to the west, strawberry fields along portions of the east boundary. Residential areas are located near the west and southwestern boundaries, and north and northwest of the property is open space and agriculture.

3.3 APPLICABLE GENERAL PLANS AND REGIONAL PLANS

Below is a brief description of applicable general and regional plans. A consistency analysis with these plans along with other applicable local plans, policies, and ordinances is contained in Chapter 5.1 (Land Use).

3.3.1 GENERAL PLAN AND LOCAL ORDINANCES

The Specific Plan area and HYH Property lay within the boundaries of the same General Plan and Area Plan.

3.3.1.1 Monterey County General Plan (Adopted)

The General Plan is a comprehensive, long-term planning document that prescribes overall goals for development in the County. The existing General Plan was adopted in 1982. Although a General Plan Update is currently in process, final approval action on this Update is uncertain. Therefore, this discussion focuses on the 1982 General Plan, which currently applies to Rancho San Juan Specific Plan area.

According to the General Plan, the proposed project site is designated as an “Area of Development Concentration (ADC)”. This designation has been applied to various areas within the County of Monterey and identifies areas within which development is to be concentrated in order to better achieve other goals of the General Plan related to preservation, enhancement, and expansion of agricultural lands, efficient provision of public services and protection of natural resources.

As discussed in Chapter 5.1 – Land Use of this EIR, the proposed Specific Plan and HYH Property project are overall consistent with the Monterey County General Plan. Specific inconsistencies are recommended to be mitigated by Plan amendments.

County of Monterey Growth Management Policy

In 1979, a Growth Management Policy was adopted by the Board of Supervisors to guide growth in the County. The Growth Management Policy is included as an appendix to the adopted General Plan, as well as to the draft General Plan Update. It recognizes the need to direct development to urban areas where services and infrastructure already exist and to reserve rural areas for agricultural uses, natural resource protection, and open space. The Policy directs that the priority for growth shall be to infill the existing urban areas. The second goal is to develop on land adjacent to existing and densely settled urban areas where the necessary services and facilities are available, except where this progression impacts prime and productive agricultural lands.

The Policy also provides that new areas of urban concentration should be within existing ADCs to preserve prime agricultural lands or natural resource protection. In order to avoid piecemeal development, the Policy further discourages minor subdivisions.

As discussed in Chapter 5.1 (Land Use), the proposed Specific Plan and HYH Property project would be overall consistent with the Growth Management Policy. The majority of the Specific Plan area and all of the HYH Property is located within an ADC, the balance of the property within the Specific Plan area has already been partially developed and/or lies adjacent to other development. The necessary services are readily available to the Specific Plan area or would be provided as part of the development process.

3.3.1.2 Monterey County General Plan (Proposed)

The County of Monterey is currently in the process of updating its General Plan. Although the proposed revisions have not been adopted by the County's Board of Supervisors, a discussion of the revisions which relate to the proposed Specific Plan are included in Chapter 5.1 (Land Use). The entire Specific Plan area is designated as a Community Area, which would replace the ADC designation. In addition, the proposed General Plan would provide for preparation of Specific or Community Plans for Community Areas to provide more definition of the development type and design. As discussed in Chapter 5.1 (Land Use), the proposed Specific Plan and HYH Property are overall consistent with the General Plan Update. Chapter 5.1 (Land Use) includes mitigation measures calling for plan amendments where there are specific inconsistencies.

3.3.1.3 Greater Salinas Area Plan

The Specific Plan area is also under the jurisdiction of the Greater Salinas Area Plan (GSAP), which is a supplement to the General Plan. The GSAP designates the Specific Plan area as an ADC and requires that a Specific Plan be adopted before any development can occur. The GSAP further specifies that the Specific Plan area should be a planned community with industrial, residential, commercial, visitor-serving, recreation, public facilities and open space uses. The GSAP also includes a section titled "Rancho San Juan ADC Development Guidelines and Principles", which includes detailed direction for the development of the Specific Plan area. The Monterey County Board of Supervisors has previously found the GSAP to be consistent with the County of Monterey Growth Management Policy.

3.3.1.4 Monterey County Water Resources Agency Ordinance No. 3539

The ordinance was adopted “to provide water conservation regulations that will permanently reduce or eliminate waste of water in all areas of Monterey County, and to require the adoption of substantially similar or more restrictive regulations in all jurisdictions of the county which may properly adopted such regulations.” The ordinance includes a restriction on water waste for public, commercial, residential, utility and agricultural uses. Requirements which are applicable to the Specific Plan area include:

- Prompt repair of plumbing, sprinkler or irrigation systems;
- No vehicle washing or exterior building cleaning without automatic shutoff nozzle;
- No use of a hose to clean sidewalks, driveways, parking lots or other outdoor paved areas;
- No spilling of water into streets;
- Fountains must recycle water;
- Visitor-serving uses must promote water conservation;
- Commercial car washes must recycle water;
- Construction watering must use reclaimed water when available; and
- New construction must use water conserving plumbing fixtures.

As discussed in Chapter 4.0 (Project Description), the Specific Plan would include a number of water conserving features which would meet or exceed the requirements of Ordinance No. 3539.

3.3.1.5 Monterey County Ordinance 4037

Ordinance 4037 prohibits development from relying on groundwater sources beyond the immediate property being developed. It is possible that development within the Specific Plan area could utilize water not associated with the immediate location of development. This could be in violation of the ordinance. Because this would frustrate the entire purpose of the GSAP, the ADC and the Community Area designation of the General Plan Update, Mitigation Measure 5.1-7 calls for an amendment which would allow the use of groundwater beyond the immediate boundaries of a particular development in the Specific Plan area.

3.3.2 REGIONAL PLANS

The Specific Plan area and HYH Property lie within the boundaries of the several regional plans.

3.3.2.1 2000 Air Quality Management Plan for the Monterey Bay Region

An Air Quality Management Plan for the Monterey Bay Region (AQMP) was prepared by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) which addresses planning

requirements to meet the ozone standard mandated by the California Clean Air Act of 1988. This Plan includes current air quality data and analysis of air quality trends, revised emission inventory and emission forecasts (for years 2005, 2010, 2015, 2020), a description of the District's photochemical modeling results, and updated analysis of emission reductions needed to meet and maintain the State ozone standard. In a letter dated June 20, 2003, AMBAG found that the project is consistent with the 2000 AQMP. A copy of the letter is presented in the appendix of the Air Quality Report found in the appendices to this EIR.

The proposed actions would create additional emissions and exceed thresholds for several pollutants. See Chapters 5.1 (Land Use) and 5.7 (Air Quality) for further discussions.

3.3.2.2 Water Quality Control Plan for the Central Coastal Basin

A Water Quality Control Plan for the Central Coast Basin (Basin Plan), was adopted by the Regional Water Quality Control Board (RWQCB) that recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems. The plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The project site is included in the Salinas River Watershed of the Salinas Hydrologic Unit and the Salinas Valley Groundwater Basin. According to the Basin Plan, beneficial uses of surface water in this hydrologic unit include: water contact and non-contact recreation; commercial and sport fishing; warm freshwater habitat; estuarine and wildlife habitats; rare, threatened, or endangered species; spawning, reproduction, and/or early development; and shellfish harvesting. Beneficial uses of groundwater in this basin include agricultural water supply, municipal and domestic water supply and industrial use.

Development within the Specific Plan, including the HYH Property, must conform with the National Pollutant Discharge Elimination System (NPDES) Permit that is administered by the State Water Resources Control Board (SWRCB). The SWRCB sets forth the provisions for storm discharges associated with construction and requires a General Permit for construction activity. As such, it can be anticipated that the HYH Property, through project-specific mitigation as well as regulatory requirements, would be consistent with and implement policies and objectives of the Basin Plan (see Chapter 5.9, Hydrology/Water Quality for further details).

3.3.2.3 2002 Monterey County Regional Transportation Plan

The 2002 Monterey County Regional Transportation Plan (RTP) provides policy guidelines for the planning and programming of transportation projects for the next 20 years. It identifies existing and future transportation needs, analyzes alternative solutions, and provides possible solutions given the anticipated funding available for projects and programs.

The goals, objectives, and policies of the RTP address three elements: mobility and accessibility; land use, congestion management, and air quality planning; and safety. The goals of the plan are:

- Develop and maintain a multi-modal transportation network that preserves and/or enhances mobility and access of the transportation system;
- Develop and implement policies that are consistent with effective land use, congestion management, and air quality planning processes;
- Implement and encourage projects that enhance safety and efficiency;
- Ensure that the transportation system complements and enhances the natural environment of the Monterey Bay Region;
- Continually seek new funding and make the most efficient use of limited transportation financial resources; and
- Solicit broad public input in developing regional and local transportation plans, projects, and funding possibilities.

As discussed in Chapters 5.1 and 5.2, the transportation systems proposed to serve the Specific Plan would promote improved transportation circulation within the project area. The Specific Plan contains elements which are intended to reduce external traffic by providing a balanced mix of land uses and promoting non-automobile access.

CHAPTER 4.0

PROJECT DESCRIPTION

4.1 BACKGROUND

In 1982 The County adopted the current General Plan which designated Rancho San Juan as an “Area of Development Concentration” (ADC) study area and deferred planning in that area to the Greater Salinas Area Plan (GSAP). The GSAP was adopted by the County in 1986. It designated Rancho San Juan as an ADC but provided that no discretionary development could take place until a Specific Plan for the area was adopted. In 1994, the County and HYH entered into an agreement whereby HYH was to fund the preparation of a Specific Plan and EIR for the Rancho San Juan ADC. Pursuant to this agreement, a draft Specific Plan and draft EIR were circulated by the County for public comment in 1998. The draft EIR for the Specific Plan generated over 400 comments. The major comments include:

1. Traffic impacts and the lack of a mitigation plan for those impacts;
2. Draw down of aquifer water resources and its impact on the region;
3. Failure to adequately address stormwater management issues;
4. Lack of affordable housing opportunities;
5. Residential density well below the County ADC Density mandate (5.1 DU/ac) and inability to support public transit;
6. Lack of mitigation for damage to the natural environment;
7. Proposed construction over blueline streams;
8. Urban Sprawl; and
9. No justification of the mix of housing.

As the County was in the process of updating its General Plan, it held in abeyance the certification of the EIR and the adoption of the Specific Plan. HYH sued the County, requesting, among other claims, that the court order the County to certify an EIR and adopt a Specific Plan for the Rancho San Juan area. The court agreed and ordered the County to continue to process these two documents. This draft EIR is in response to the court order and to the to the

subsequent stipulation between the County and HYH to process development entitlements for its proposed project concurrently with the adoption of the Specific Plan. Therefore, this EIR contains a programmatic analysis of the Specific Plan and a project specific analysis of the HYH Property project.

4.2 OBJECTIVES OF THE PROPOSED PROJECT

The goals and objectives of the Specific Plan and HYH Property project are described below.

4.2.1 SPECIFIC PLAN

The primary objectives of the proposed Specific Plan is to implement the goals of the County General Plan by creating a comprehensive land use plan and development guidelines to implement the Area of Development Concentration designation assigned to the subject property by the General Plan. Specific objectives include:

- Contribute to the reduction of groundwater overdraft on the groundwater basin.
- Strengthen and direct development towards existing communities;
- Provide a wide choice of housing opportunities that promote affordable/workforce housing;
- Provide a variety of transportation choices;
- Utilize mixed land uses and create walkable neighborhoods;
- Foster a distinctive and attractive town center with a strong identity and sense of place;
- Preserve open space, farmland, natural beauty and critical environmental areas; and
- To implement the Community Area designation of the General Plan Update.

4.2.2 HYH PROPERTY PROJECT

The project objectives for development of the HYH Property include:

- To develop a range of housing opportunities;
- To develop an 18-hole golf course including a clubhouse facility and overnight accommodations for guests;
- To provide retail/commercial development to support local residents;
- To implement the open space system identified in the Specific Plan;
- To develop a wastewater treatment facility to serve the HYH Property development and provide for expansion to serve the overall Specific Plan area;

- To construct offsite portions of planned roadways to provide access to the HYH Property; and
- To settle pending litigation.

4.3 PROJECT CHARACTERISTICS

This EIR covers the Rancho San Juan Specific Plan as well as the HYH Property project. Figure 3.2-1 illustrates the Specific Plan area and the location of the HYH Property. The entire Specific Plan area would be approximately 2,581 acres. This area includes the original ADC identified in the GSAP and immediately adjacent lands to the south and west that are either vacant or underutilized. Proposed land uses would include residential, commercial, employment, public facilities, parks and open space. The HYH Property covers approximately 671 acres. Proposed land uses would include residential, retail, a golf course, parks and natural open space. A detailed discussion of the proposed Specific Plan and HYH Property project follows. A complete copy of the Specific Plan is available at the County of Monterey Planning and Building Inspection Department, 2620 First Avenue, Marina, CA 93933, and is incorporated by reference.

4.3.1 SPECIFIC PLAN

The Specific Plan for Rancho San Juan consists of two alternative development scenarios (Alternative 2 and 4E) due to the uncertainty associated with future plans for Highway 101 in the vicinity of the Specific Plan area. At present, there are three basic alternatives being considered by Caltrans for Highway 101. Two of the alternatives, identified by Caltrans as Alternative 2 and the Prunedale Improvement Project (PIP) Alternative, would not affect the land area available for development within the Specific Plan Area except for a proposed interchange. The third alternative (Alternative 4E, also known as the Prunedale Bypass) assumes a new highway which would cross the northern portion of the Specific Plan area, including the HYH Property.

Specific Plan Alternative 2 assumes that the Prunedale Bypass is not constructed. Specific Plan Alternative 4E assumes that the Prunedale Bypass is constructed. In the interest of avoiding duplication of information, the Specific Plan contains a detailed description of Specific Plan Alternative 2 in light of the fact that it would accommodate both Highway 101 Alternatives 2 and the PIP Alternative. The discussion of Specific Plan Alternative 4E is focused on the differences which would result from implementation of this alternative rather than Specific Plan Alternative 2. As the Prunedale Bypass would not affect a large portion of the development area associated with Alternative 2, the differences between the two alternatives are relatively minimal.

In general, the land use designations associated with the two plans are the same except for modifications along the northwestern portion of the Specific Plan area which are required to accommodate the construction of the Bypass. Overall, the two land use plans differ only in the distribution of residential types and employment uses in addition to the land area requirements for an interchange.

4.3.1.2 Alternative 2

The Specific Plan includes a variety of land uses which are intended to provide a "smart growth" community, with "sustainable" and "new urbanism" elements (Figure 4.3-1 and Table 4.3-1). The Specific Plan would allow for development of up to 4,000 dwellings. Residential development would include a mixture of attached and detached units with density ranging between 0.5 and 20 units per acre. Employment Centers would provide for a maximum of 2,766,900 square feet of employment space and Office Professional areas would accommodate a maximum of 242,900 square feet of office space. Up to 527,050 square feet of retail and commercial uses in the Town Center and Neighborhood Centers would be permitted within the Specific Plan. A 150-room hotel and a 50-room inn would be allowed. A total of five school sites would be created. Recreation opportunities would include an 18-hole golf course and 86.5 acres devoted to parks. A total of 610.6 acres would be retained in natural open space. Ultimately, wastewater treatment would be provided by a conventional wastewater treatment facility. Water would be provided from a series of onsite wells equipped with individual water treatment facilities.

Two Future Development/Interim Agriculture areas, comprised of 565.5 acres would be established, the largest in the eastern portion of the Specific Plan area, and the other in the northwestern portion. Development of these areas would depend on additional sources of water supply as groundwater is currently considered insufficient to accommodate more than the development intensity included in the proposed Specific Plan. Interim agricultural use of the large Future Development/Interim Agriculture area is allowed.

Residential

As indicated earlier, up to 4,000 residential units would be allowed with densities ranging from large estate lots at 0.5 dwelling unit per acre to high density attached units at 20 dwelling units per acre (See Specific Plan Section 3.4.1 for additional information regarding the residential components). Figure 4.3-1 shows the locations of various land use designations. The architectural theme would be a mix of regional styles with California Craftsman/Bungalow, Spanish Colonial Revival, and Monterey, being the primary influential styles. A majority of the residential units would occur in the southwestern portion of the Specific Plan area, near the border with the City of Salinas. Table 4.3-1 lists the various residential designations with corresponding densities, acres, and unit totals. Below is a brief description of the various residential designations.

Residential Estate (RE)

The Residential Estate designation would allow custom homes on lots of at least one acre. This designation would have a density range of 0.5 to 1.0 dwelling unit per acre, for a total of 34 units. The units would be single-family detached, and would be 1- to 2-stories each. Approximately 37.6 acres would be devoted to Residential Estates, which would generally be located on hillsides, adjacent to the northwestern Specific Plan boundary, entirely within the HYH Property. Minimum grading standards and hillside preservation would be required (see Grading discussion on Page 4-28) veryifying page number.



Source: ProjectDesign Consultants, 3/12/2004

Alternative 2 Land Use Plan



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Figure 4.3-1

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**TABLE 4.3-1
Alternative 2 Land Use Summary**

LAND USE	DENSITY (DWELLING UNIT PER ACRE)	ACREAGE ¹	SQUARE FOOTAGE	RESIDENTIAL UNITS
RESIDENTIAL				
Residential Estate	0.5 to 1	37.6		34
Residential Low -1	1 to 3	77.7		250
Residential Low -2	3 to 5	251.5		1,195
Residential Medium -1	5 to 9	74.6		638
Residential Medium -2	9 to 12	41.6		470
Residential High -1	12 to 16	45.0		667
Residential High -2	16 to 20	21.8		399
SUBTOTAL		549.8		3,653
COMMERCIAL/MIXED-USE				
Town Center		38.5	373,100	235, 50-room inn ²
Neighborhood Center -1		10.0	108,950	
Neighborhood Center -2		4.2	45,000	42
Employment Center		154.1	2,766,900	
Office Professional		22.3	242,900	
Live/Work		14.4	140,000	70
Hospitality		15.4		291 guest units ³
SUBTOTAL		258.9	3,676,850	347
PUBLIC FACILITIES AND OPEN SPACE				
Public Facility		40.4		
Schools		87.1		
Golf Course		229.6		
Parks		86.5		
Open Space		610.6		
SUBTOTAL		1,054.2		
OTHER				
Future Development/Interim Agriculture		565.5		
Backbone Circulation Roads		130.2		
Freeway Right-of-way		21.7		
SUBTOTAL		717.4		
TOTAL		2,581.0¹	3,676,850	4,000

¹ Acreages have been rounded, therefore the total acreage in the table equals 2,580.3. However, the total site acreage does equal 2,581.

² Inn rooms are not considered in the residential unit count.

³ Guest units include 150 hotel rooms, 71 guest villas and 70 timeshare units, not included in residential unit count.

Residential Low (RL-1, RL-2)

The Residential Low-1 designation would be low density, but not as low as the Residential Estate designation. The minimum lot size would be 7,000 square feet, with a density range of 1 to 3 dwelling units per acre for a total of 250 units. The units would be single-family detached, and would be 1- to 2-stories each. Residential Low-1 would be located on 77.7 acres of hillsides south of the Residential Estate designation, entirely within the HYH Property.

The Residential Low-2 designation would also be considered low-density housing. The minimum lot size would be 3,000 square feet with a maximum density of 5 dwelling units per acre for a total of 1,195 units. The units would be a combination of single-family detached and attached, and would also consist of 1 to 2 stories. The 251.5 acres of Residential Low-2 would be located in the hillsides south of the Residential Low-1 designation, on all three sides of the Specific Plan area boundaries with the Salinas Golf and Country Club, and north of the Town Center.

Residential Medium (RM-1, MR-2)

The Residential Medium-1 designation would provide for medium-density housing consisting of small lots, townhomes, and duplexes. There would be no minimum lot size; however, the maximum density would be 9 dwelling units per acre for a total of 638 units. The Residential Medium-1 designation would comprise 74.6 acres located near the Town Center and in the hillsides near Residential Low-2 designation.

The Residential Medium-2 designation would also provide for medium-density housing consisting of small lots, multi-family dwellings, townhomes, and duplexes. There would be no minimum lot size; however, the density range would be 9 to 12 dwelling units per acre for a total of 470 units. The units would consist of 1- to 2-story buildings. The Residential Medium-2 designation would be located on 41.6 acres near the Town Center. Multiple-family dwellings would be permitted.

Residential High (RH-1, RH-2)

The Residential High-1 designation would provide for high-density housing. There would be no minimum lot size; however, the maximum density would be 16 dwelling units per acre for a total of 667 units. The units would be multi-family attached, and would consist of apartments, condominiums, flats, duplexes and townhouses. The Residential High-1 designation would be located on 45.0 acres near the Town Center and adjacent to the Golf Resort Center.

The Residential High-2 designation would also provide for high-density housing. There would be no minimum lot size; however, the maximum density would be 20 dwelling units per acre for a total of 399 units. The units would be multi-family attached, and would consist of apartments, condominiums, and flats, duplexes and townhouses. The Residential High-2 designation would be located on approximately 14 acres near the Town Center and on approximately 8 acres near the Neighborhood Commercial-2 units areas in the golf resort center.

Affordable Housing

To achieve the housing goals of the Rancho San Juan ADC/Community Area, the Specific Plan provides that approximately 35 percent of the residential units within the Specific Plan area would be affordable to low-moderate and workforce households. This housing would be provided concurrently with the development of market rate housing. The general formula for the provision of affordable and workforce housing within the Specific Plan area is indicated in below in Table 4.3-2 .

**Table 4.3-2
Affordable Housing Allocation**

MARKET LEVEL	AFFORDABILITY LEVEL	PERCENT OF MEDIAN INCOME ¹	PERCENTAGE OF TOTAL UNITS
Below Market Rate	Very Low Income Units	Less than 50%	6%
	Low Income Units	50% to 80%	6%
	Moderate Income Units	80% to 120%	8%
Market Rate (Varies)	Workforce I (Moderate) Units	120% to 150%	7%
	Workforce II (Moderate) Units	150% to 180%	8%

¹ Income levels for below market rate units shall be as defined in the Monterey County Inclusionary Housing Ordinance.

As shown in Table 4.3-2, 20 percent of the units would be below market rate, while 15 percent of the units, referred to as Workforce I and II level housing, may have the potential to e market rate unites. For a more detailed discussion of affordable housing within the Specific Plan area, refer to Section 10.7 of the Specific Plan.

Accessory Dwelling Units

Accessory Dwelling Units (ADU) are one-bedroom or studio units that provide independent living accommodations for one or more persons. Based on current water balance for Rancho San Juan, a total of 150 ADUs would be permitted in Residential Estate and Residential Low-1 and – 2 areas.

The ADU is only permitted as the second story of a garage and must have its own separate entrance from the main structure. The maximum living area of an ADU would not exceed 800 square feet. For further details see Section 7.6 of the Specific Plan.

Town Center

The Town Center would cover 38.5 acres and would be located at the confluence of most of the Specific Plan’s proposed major collector roads (Figure 4.3-1). The Town Center would also be accessible to the community open space and trail system. The Town Center uses would include the following:

- A commercial area composed of a maximum of 373,100 square feet of retail uses and professional offices including up to 235 residential units above the first floor commercial uses and in separate buildings on 38.5 acres;
- Civic uses on 2.5 acres;
- A Village Square on 1.5 acres;
- A Community Park on 18 acres;
- A 50-room Inn with restaurant facilities on 3.0 acres; and
- A middle school including joint-use facilities such as library and community center on 20 acres.

Neighborhood Center

Five Neighborhood Centers would be located centrally to the residential neighborhoods (Figure 4.3-1). A maximum of 153,950 square feet of retail commercial use covering a total of 14.2 acres would be located throughout the Specific Plan area. A 4.2-acre neighborhood center would be located in the Golf Resort Center and have 42 residential units above ground floor retail commercial use. Some professional office use would be permitted on the ground floor. Uses within the other neighborhood centers would be limited to retail uses with limited office uses and would not allow residential uses. There are two Neighborhood Center designations, the majority would be designated Neighborhood Center-1, while the Neighborhood Center located in the golf resort center would be designated Neighborhood Center-2 and allow for second-story residential units.

Employment Center

The Employment Center designation would provide opportunities for a variety of uses including light manufacturing, warehousing, transportation, construction, and communications. Light manufacturing would be expected to be the predominant use. The Specific Plan area would accommodate up to 2,766,900 square feet of employment uses. The Employment area designation would be applied to a total of 154.1 acres. The Employment Center would be located along the southwestern boundary near the City of Salinas and along the Specific Plan area boundary with Highway 101 (See Figure 4.3-1).

Office Professional

There would be a maximum of 242,900 square feet of Office Professional space located within the Specific Plan area on a total of 22.3 acres southwest of the Town Center (See Figure 4.3-1). The number of office buildings would range from 4 to 8 buildings depending on building size and range in height from 1 to 3 stories. Office buildings would be either single-tenant or multi-tenant structures. The office use areas could also be developed as office parks whereby a number of separate office buildings with supporting uses and open space may be located.

Live/Work

The Live/Work units would be designed to accommodate non-residential uses in addition to, or combined with living quarters. The space of a Live/Work unit would be adaptable for a wide range of non-residential uses from an art, music or dance studio to a small office or retail space, as well as living areas. The Live/Work units would be limited to a minimum height of 2 stories but can be no more than 3 stories. The Live/Work units would be located adjacent to the street with parking behind the units. Approximately 70 Live/Work units would be located adjacent to the Town Center on 14.4 acres along Rancho San Juan's Main Street (See Figure 4.3-1). In addition, depending on the market demand Live/Work units may also be permitted in a limited area of the Town Center, but may not exceed the commercial square footage or dwelling unit total permitted there. Approximately 140,000 square feet of commercial and office space would be permitted on the first floor of the units. Living quarters above would range from studios to three-bedroom units.

Hospitality

The Specific Plan would provide for a full-service business hotel with a total of 150 rooms. Fifty of the hotel rooms would be located in the western portion of the Specific Plan area adjacent to the employment center to take advantage of visitors to the area who are traveling for either business or pleasure. The hotel would be located on approximately 7.5 acres. The hospitality use would also include 71 guest villas and 70 timeshare units located entirely on the HYH Property (See Figure 4.3-1).

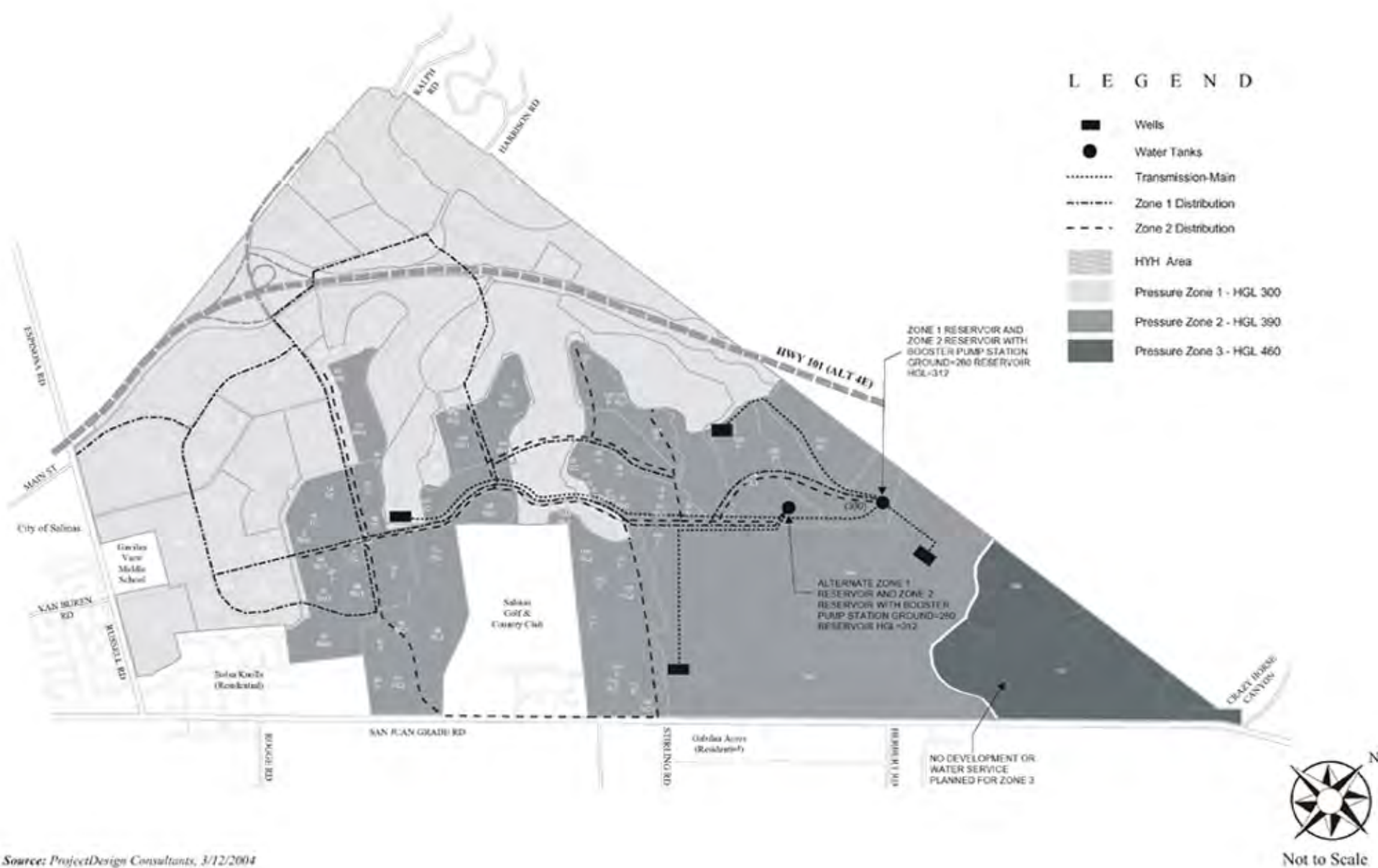
Public Facilities

Approximately 40.4 acres would be used for public facilities including water supply and wastewater, which are discussed below. Other public facility uses including police, fire, and library would be located throughout the Specific Plan area, but are not included in the public facilities designation. These other public facilities uses are discussed in detail in Chapter 5.12 (Public Services and Utilities).

Water Supply

Water would be provided to future development by a series of wells located within the Specific Plan area (Figure 4.3-2). Well water would be tested and compared to state health requirements. If the well water does not meet the requirements for primary contaminants such as nitrates, bacteria or arsenic, the well cannot be used as a potable water supply well, if the water does not meet the requirements for secondary contaminants such as iron and manganese, it would be treated in order to comply.

Water would be extracted from the ground via onsite wells and pumped to storage tanks which would provide domestic and fire flow storage. The location and size of these tanks would be designed to maximize the use of gravity to serve future development. Preliminary engineering indicates that three pressure zones would be required to serve the Specific Plan (Table 4.3-3). These preliminary zones are as follows:



Source: ProjectDesign Consultants, 3/12/2004

**TABLE 4.3-3
Water Pressure Zones**

ZONE NO.	ELEVATION OF HYDRAULIC GRADE (FEET)	LAND ELEVATION (FEET)	STATIC PRESSURE (POUNDS PER SQUARE INCH)
Zone 1	300	150- 90	65- 91
Zone 2	390	240- 150	65-104
Zone 3	460	300- 240	69-95

Reservoirs would be placed at the following elevations: 460, 300, and 260 feet. The 460-elevation tank would be located offsite. It would be approximately one-half mile from the northern project boundary. The offsite tank is required for the agricultural areas within Zone 3. The offsite tank may be delayed if the agricultural areas do not require initial service.

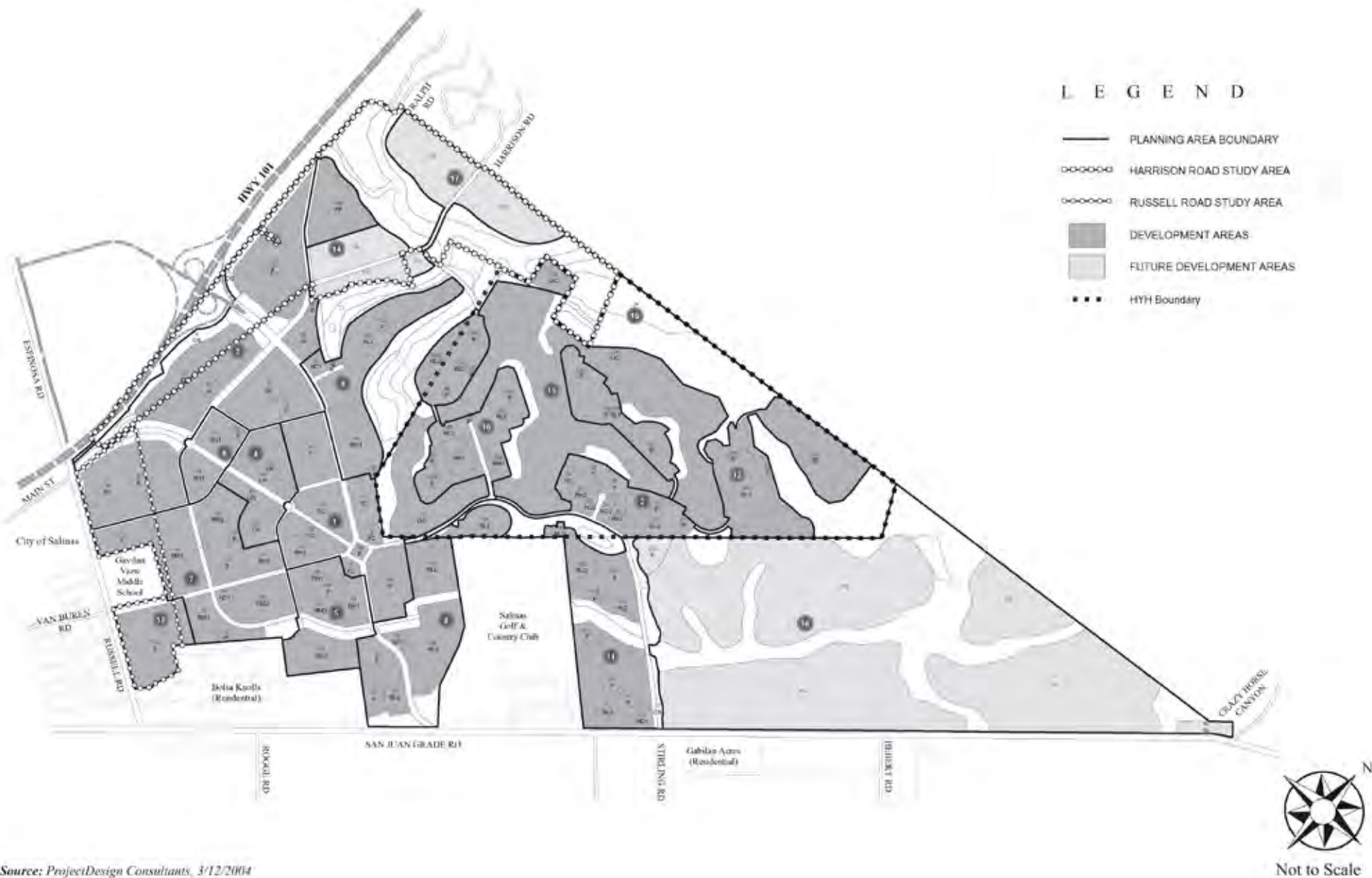
If the offsite area is not available for a water tank, a hydro pneumatic system could be provided at the 300-foot elevation. Zones 1 and 2 would provide service to all of the development areas. For service to Zones 1 and 2, the pressure boost for the hydro pneumatic system would be 40 pounds per square inch (psi). For Zone 3 service, the pressure boost would be 70 psi. An additional tank at the 260-foot elevation may also be required.

The water distribution system would consist of mains which distribute water to service areas as well as transmit water from supply locations to the reservoirs. The exact sizing and configuration of the mains would be determined during the improvement plan phase of a project.

The entity responsible for water treatment and distribution has not been determined. However, it is anticipated that the water system would be operated through one of the following options: Community Services District, Community Facilities District or public utility. As California Water Service Company is planning on serving the HYH Property project, they would be the most likely public utility to provide water service to the entire Specific Plan area.

Wastewater Treatment Facility

The Specific Plan anticipates that future development would be served by a central wastewater/reclamation treatment plant located in the northwest corner of the HYH Property on 15 acres (Figure 4.3-3). It is anticipated that the facility would be operated by the California American Water Company. Two options are being considered regarding the reclamation facility. One is to construct a temporary reclamation facility; the other is to proceed directly with constructing the master planned reclamation facility (See Appendix B). The temporary facility would include a 40-foot shipping container compartmentalized into each of the unit processes needed to treat the incoming wastewater. This facility would be suitable for a flow up to 83,000 gallons per day (gpd). Once wastewater flows were to reach 50,000 gpd, the temporary facility would be removed and flows would be diverted to the permanent reclamation facility.



Alternative 2 Planning Areas

Figure 4.3-3

The permanent treatment facility would be built in phases to reflect the anticipated growth in the area. The initial phase would serve the HYH Property and treat approximately 0.3 million gallons per day (mgd). The facility would be ultimately expanded to serve the entire Specific Plan area and treat up to ~~2.3~~ 1.6 mgd, depending on ultimate sewage generation.

The wastewater treatment facility would contain enough 120-day wet season storage to meet the needs for the HYH Property and the 3-day storage requirements for untreated sewage. The remaining 120-day storage requirements would be located near the western boundary of the Specific Plan area.

The proposed collection system would be 8-inch and 12-inch lines within the development areas to a trunk system in the south access road. The trunk system would be 18-inch and 24-inch lines, which would outfall to the proposed sewer lift station and force main that would deliver to the wastewater treatment facility and reclaimed water facility. The main trunk sewer is proposed to be gravity main, and is expected to vary in depth from 18 to 22 feet of cover over the pipe.

The facility would be operated by a contract operation or a private entity. In addition, a pretreatment plant in the Employment Center may be needed for industrial wastewater.

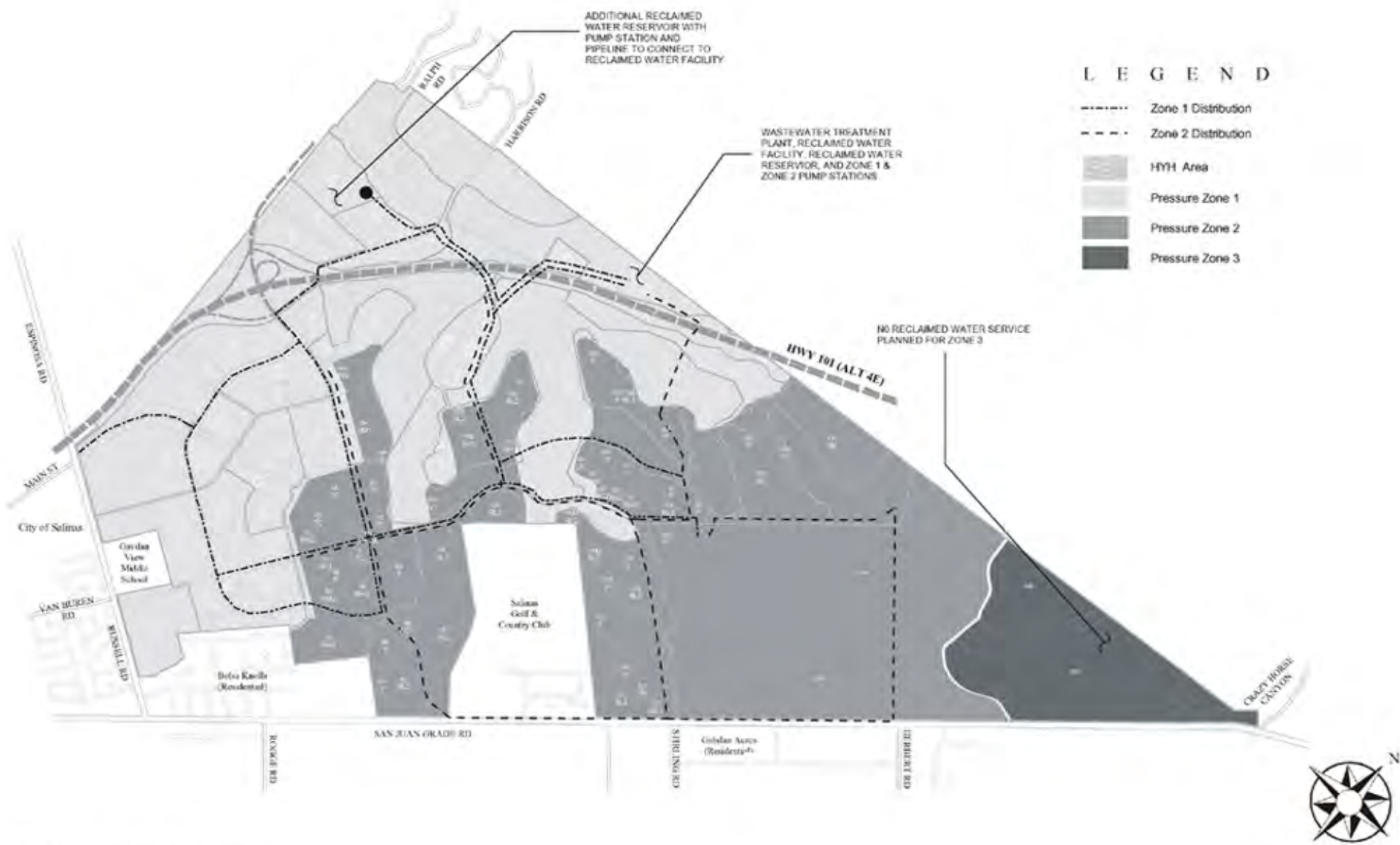
Reclaimed Water

The wastewater collected at the treatment plant would be treated and the resultant effluent would be pumped to storage reservoirs. From the storage reservoirs, the effluent would be pumped to the golf course, open space, office, and employment for landscape irrigation (Figure 4.3-4).

The wastewater treatment facility would meet strict environmental health requirements as established by the Monterey County Health Department, Division of Environmental Health and the ~~State~~ California Regional water-Water Quality Control Board, Central Coast Region. Nitrogen removal would be controlled prior to discharge. Storage requirements for raw wastewater in case of an emergency would be three days of flow. Storage requirements for treated effluent meeting the discharge requirements would be 120 days of flow.

The water storage systems will be designed and constructed in accordance with all applicable regulations.

Biosolids would be treated onsite in thickeners and digesters, followed by drying in a filter press. The final product could be reused for agricultural purposes or could be transported to the nearby Crazy Horse landfill and used as cover material. Disinfection of the effluent would be accomplished. To prevent the creation of odors, precautions would be taken in the design of the facility. This would include capabilities to add odor-reducing bacteria in the pumping stations and housing of treatment processes that may emit potential odors. The air in the buildings would be treated and discharged odorless to the atmosphere.



Source: ProjectDesign Consultants, 3/12/2004

Schools

The Specific Plan area would include sites for three elementary schools for grades K-6, one middle school for grades 7-8, and one high school for grades 9-12. A total of 87.1 acres would be devoted to school sites (Figure 4.3-1). An elementary school site would be located north of the Salinas Golf and Country Club, another elementary school site would be located south of the Salinas Golf and Country Club, and a third site would be located north of Russell Road near the Town Center. Due to concerns regarding the location of the proposed elementary school site near the Town Center, the Specific Plan provides an alternative site located north of the community park (Figure 5.12-1). The middle school site would be located southwest of the Salinas Golf and Country Club, and the high school site would be located just north of Russell Road, next to the existing Gavilan View Middle School. If the high school site is not acceptable to the District, the Specific Plan allows for the high school site to expand into the adjacent residential acreage to the north.

The middle school site would be located adjacent to the Town Center in order to provide for the opportunity of multi-purpose buildings such as other civic uses (library, community center) utilized by both the school and community due to its proximity to the Town Center. See Chapter 5.12 (Public Services and Utilities) for further information regarding schools details.

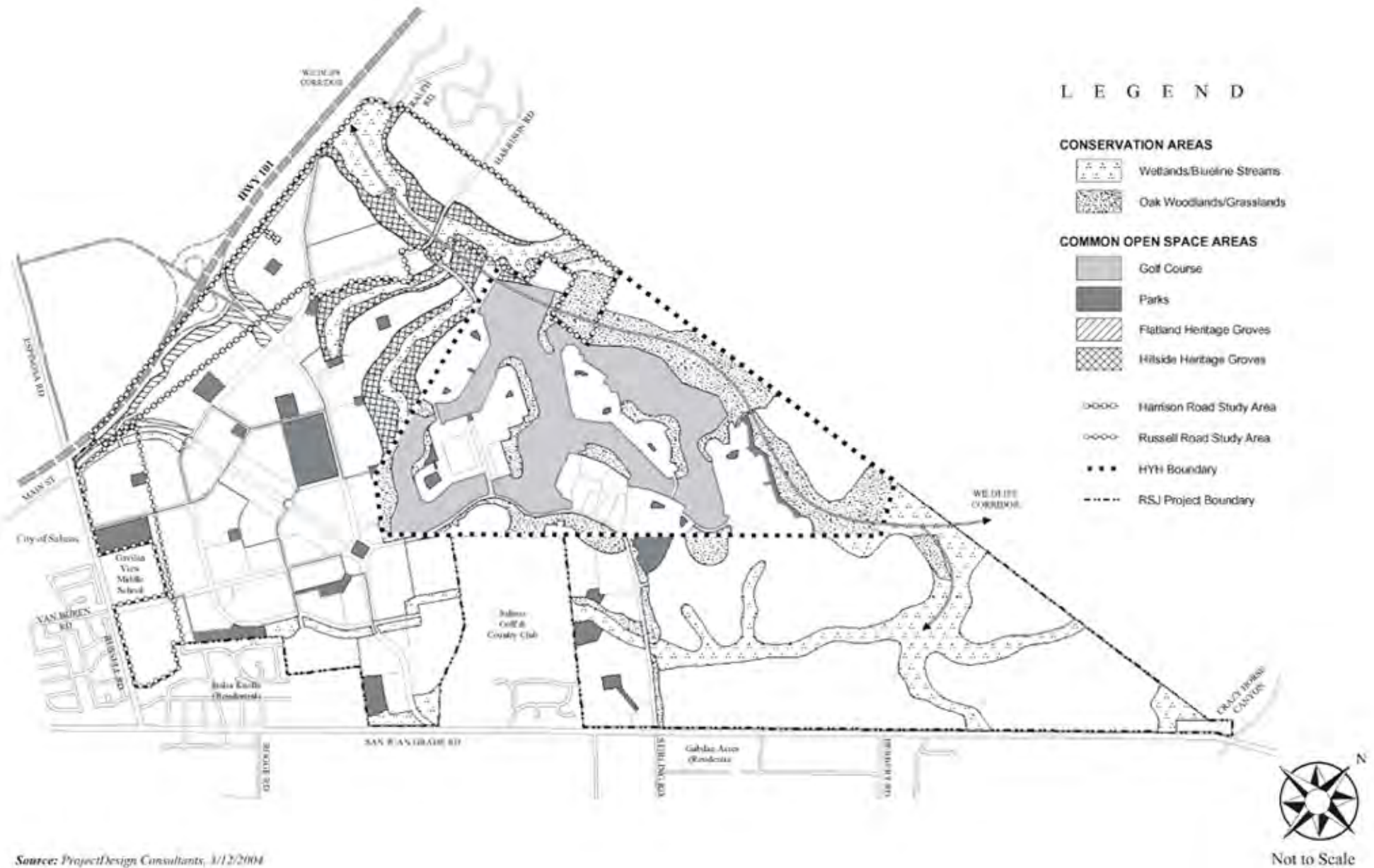
Golf Course

An 18-hole golf course would be located in the west central portion of the Specific Plan, largely within the 216.9-acre golf course would be used for restoration and conservation of streams and native vegetation, storm water detention and conveyance, storage and use of treated effluent for both irrigation and aesthetics. The golf course would include a 5.4-acre clubhouse facility and a 7.3 acre maintenance facility.

Parks

Approximately 86.5 acres would be reserved for parks throughout the Specific Plan area (Figure 4.3-5). These parks would be planned to accommodate the nearby population. A majority of the parks would also be utilized for storm water detention. Some of the parks, including the Town Center community park, would be utilized for percolation of storm water run-off and treated effluent. A linear park from Salinas Golf Course to the northwest corner of the Bolsa Knolls subdivision would link neighborhoods with schools. The linear park would also be used for stream restoration and storm water detention. Trails and passive recreation uses would be included in the linear park.

More specifically, the parks would comprise approximately 86.5 acres and include the following types:



Source: Project Design Consultants, 3/12/2004

Alternative 2 Open Space/Parks Plan _____ Figure 4.3-5

Mini-Parks and Neighborhood Parks

A minimum of 31.6 acres of mini-parks and neighborhood parks would be located within the various residential neighborhoods. Mini-parks would have a minimum size of 2,500 square feet, and would include facilities such as seating areas and tot lots. The neighborhood parks would typically be between one and five acres. Exact facilities have not been determined, but would likely include multi-purpose courts, picnic area, and a tot lot. The Specific Plan requires 2.5 acres of mini-parks and neighborhood parks per 1,000 residents.

Community Parks

Two community parks, totaling 30 acres, would be located within the Specific Plan area. One park would be located adjacent to the Town Center. The second park would be located adjacent to Russell Road and the Gavilan View Middle School. Exact facilities have not been determined, but would likely include sport fields, basketball courts, and a playground for children. The Specific Plan suggests a minimum of two acres of community parkland be designated as a dog park area, and at least one skateboard park facility be included in one of the community parks. The Specific Plan requires 2.0 acres of Community Parks per 1,000 residents.

Cultural Heritage Park

A potential cultural heritage park is proposed for the Hebert Ranch area. Within the ranch is a grouping of structures consisting of a barn, bunkhouse and several outbuildings that may be suitable for adaptive reuse as park facilities, such as a museum or interpretive center. The ranch inspired Steinbeck's 1933 novelette, "The Red Pony" and is a cultural landmark for the Salinas Valley.

Open Space

Approximately 610.6 acres of open space would be designated throughout the Specific Plan area (Figure 4.3-5). The open space would be divided into two categories: conservation open space areas and common open space areas. Conservation open space areas include lands within existing natural or nonnative vegetation or lands that would be enhanced or rehabilitated to a more natural condition. The conservation open space would include existing biological resources such as native grassland, wetlands and associated drainages, and oak woodlands. Common open space areas would include lands that would be landscaped for a particular purpose.

Future Development/Interim Agriculture

Two Future Development/Interim Agriculture areas are proposed within the Specific Plan area with a total of 565.5 acres (Figure 4.3-1). The Future Development/Interim Agriculture areas would not be developed for at least 20 years until the balance of the Specific Plan area has been substantially developed and there are adequate public facilities and services, including water, to serve these areas. The Future Development/Interim Agriculture areas could be developed for urban use provided an amendment to the Specific Plan is granted. Until such time, all land uses and development rights under the existing and interim zoning shall be maintained.

Circulation

Below is a summary of the circulation plan for the Specific Plan area. Refer to Section 4.2.6 of the Specific Plan for street sections and additional information regarding streets and streetscapes.

Automobile Circulation

Vehicular access to the Specific Plan area would be from Russell Road, San Juan Grade Road, and Highway 101 (Figure 4.3-6). Approximately 130.2 acres within the Specific Plan area would be dedicated to backbone circulation, exclusive of freeway right-of-way. The primary roadways would connect with existing or planned offsite roads. Freeway-right-of-way would require approximately 21.7 acres.

There would be an east-west arterial roadway linking the Highway 101 interchange to the Town Center. Collector streets would link the site to Russell Road and San Juan Grade Road. Van Buren Road and Main Street would tie the City of Salinas to the Town Center. Stirling Road would extend to the golf resort center (see Figure 4.3-6).

An emergency access roadway would be constructed to serve Planning Area 12C. The emergency access road would provide a connection from the cul-de-sac in Planning Area 12C up to the water tanks and through to Hebert Road.

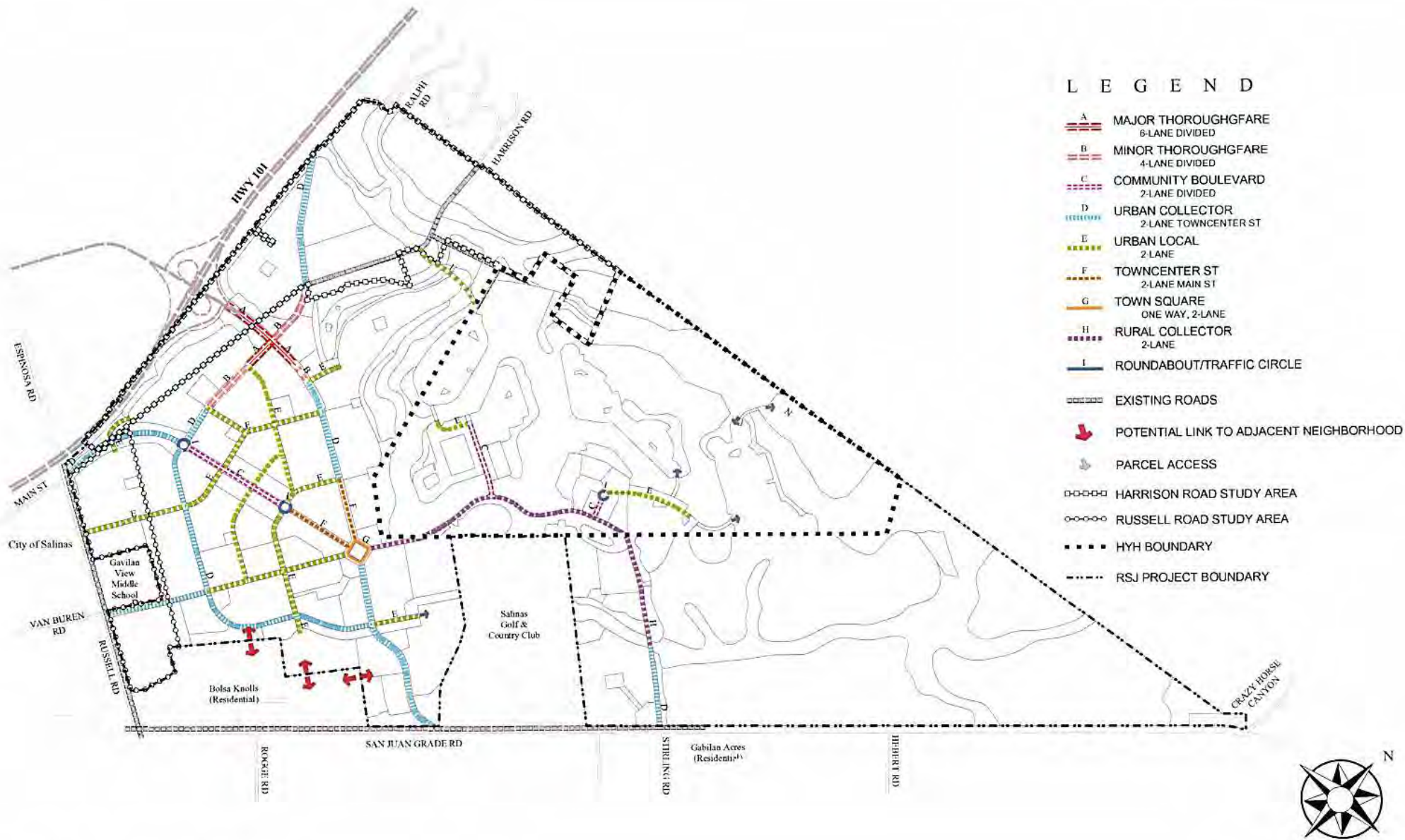
There would be 12 street classifications within the Specific Plan area (Figure 4.3-6). These classifications are described as follows:

Major Thoroughfares would be 6-lane divided roadways with 74 feet of paving within a 132 to 150-foot right-of-way. The roadway would have a center landscaped median and earthen swales on each side. Sidewalks would be located along side these swales separated from the street and would be wide enough to accommodate bicycles and pedestrians.

Minor Thoroughfares would be 4-lane divided roads with 54 feet of paving within a right-of-way between 126 and 130 feet. The roadway would have a landscaped median with earthen swales on either side. Sidewalks would be located along side these swales separated from the street.

Employment Center Streets would be 3-lane streets with a center turn lane and two travel lanes. A total of 60 feet of pavement within a right-of-way of between 110 and 118 feet would be provided. The roadway would have earthen swales on either side. Bike lanes and sidewalks would be located along side these swales separated from the street.

Community Boulevards would be 2-lane roads with 50 feet of paving with variable right-of-ways. The travel lanes would be separated by a center earthen swale. Bike lanes would be along the travel way while sidewalks would be separated by a landscape strip.



Source: ProjectDesign Consultants, 3/12/2004



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Alternative 2 Primary Circulation Plan

Figure 4.3-6

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Urban Collectors would be 2-lane, undivided roadways with 48 feet of pavement within a right-of-way of between 76 and 82 feet. The roadway would have earthen swales on either side. Bike lanes would be adjacent to the travel lane while sidewalks would be separated by a landscape strip.

Urban Local Roads would be 2-lane, undivided roadways with a paved width of 50 feet within a right-of-way of 68 feet. The roadway would have curbs and gutters on either side. Bike lanes would be adjacent to the travel lane while sidewalks would be separated by a landscape strip.

Town Center Streets would be 2-lane, undivided streets with 46 feet of pavement within a 76-foot right-of-way. The bike lane would be adjacent to the travel way and the sidewalks would be contiguous to the curb. No earthen swales would be provided.

Town Square Streets would be 2-lane, one-way streets with 40 feet of pavement within a 66-foot right-of-way. The bike lane would be adjacent to one side of the travel way and the sidewalk would be contiguous to the curb on the one side and separated by a landscape strip on the other.

Rural Collectors would be 2-lane, undivided roadways with 36 feet of pavement within 56 feet of right-of-way. The roadway would have earthen swales on either side. Bike lanes would be adjacent to the travel lane while a landscape strip would separate a trail system.

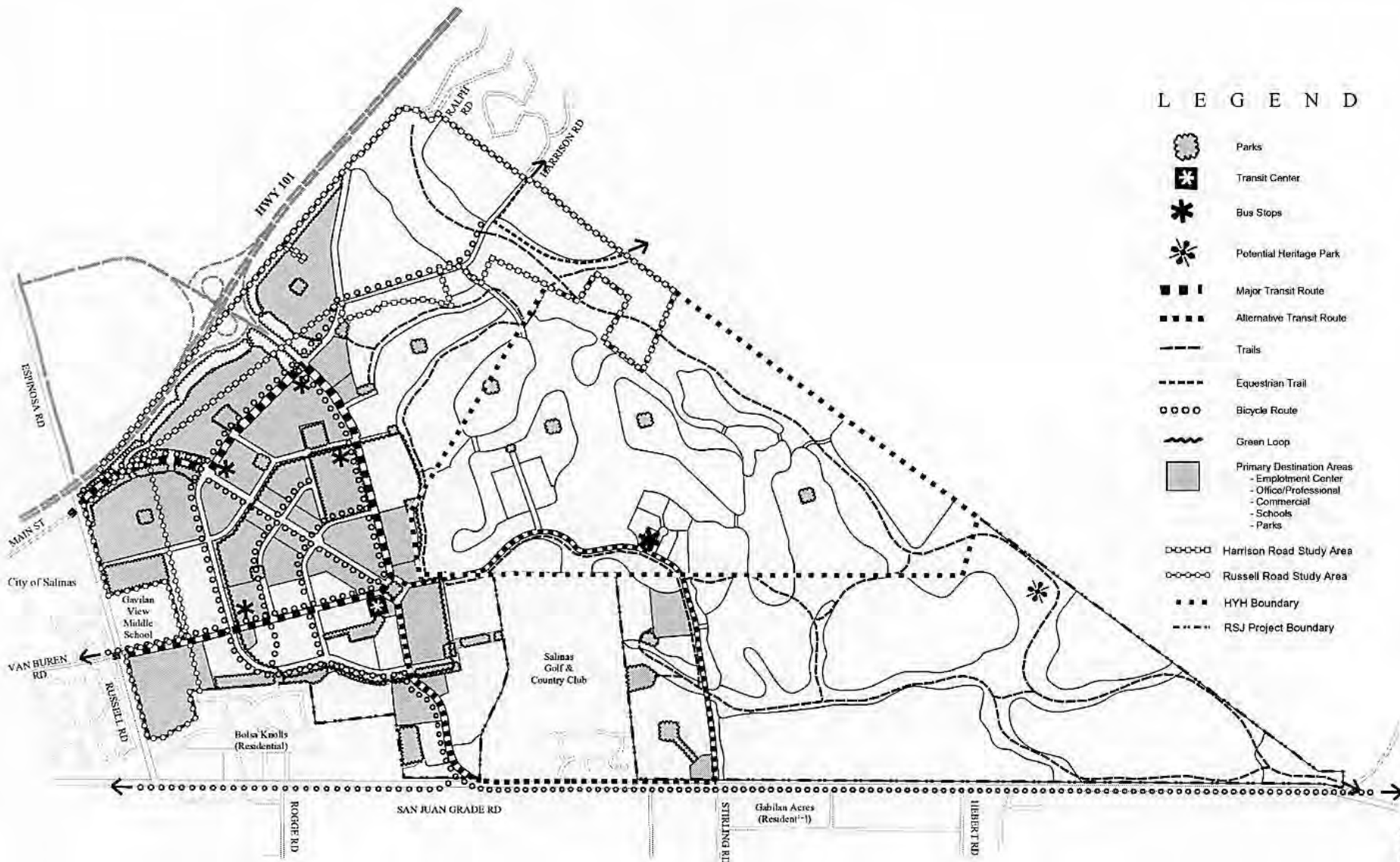
Neighborhood Local Streets would be 2-lane, undivided roadways with 40 feet of pavement within 60 feet of right-of-way. The roadway would have curb and gutter on either side. A landscape strip would separate sidewalks. No bike lanes would be provided.

Private Neighborhood Drives would be two-lane, undivided roadways with 22 feet of pavement within 45 feet of right-of-way. The roadway would have an earthen swale on one side. No sidewalks or bike lanes would be provided.

Alleyways would be two-lane, undivided roadways with 16 feet of pavement within 20 feet of right-of-way. ~~have a single travel lane of 16 feet and~~ Alleyways would provide access to the rear of residential and commercial uses. No sidewalks, bike lanes or swales would be provided.

Pedestrian/Bicycle Circulation

A minimum five-foot-wide pedestrian sidewalk (or an eight-foot-wide trail in the case of Rural Collectors) would be located within the street right-of-way of all streets within the Specific Plan area except private neighborhood drives and alleyways. The sidewalks would be on both sides of the road, except along Private Neighborhood Drives and Alleyways. In addition, a series of trails would be provided throughout the Specific Plan area to promote pedestrian and bicycle activities (see Figure 4.3-7). A trail system would be located throughout the open space. In addition to providing for internal pedestrian activities, this trail system would link to the proposed County trail system which is expected to include a combined use trail along Old Stage Road and Crazy Horse Canyon Road.



Source: ProjectDesign Consultants, 3/12/2004



Not to Scale

Alternative Circulation Modes

Figure 4.3-7

Bike lanes and bike trails would be located throughout the Specific Plan area. The City of Salinas proposes to construct a bike lane along San Juan Grade Road, south of Russell Road and the County plans to construct a bike lane link along the roadway north of Russell Road. A bike lane currently exists along Van Buren Road, south of Russell Road. The Specific Plan area would provide connections to these bike lanes. Six-foot wide bike lanes would be provided along all roads except Neighborhood Local Streets, Private Neighborhood Drives and Alleyways. Major and Minor Thoroughfares as well as Employment Center Streets would include an eight-foot bike/pedestrian trail on both sides of the street, separated from moving traffic.

Transit

Figure 4.3-7 shows possible public transit routes and transit center locations. Currently, Monterey-Salinas Transit provides bus service along Russell Road. Caltrain has plans to extend rail service along the central coast of California within the next three years, with added service to the station in Salinas approximately five miles south of the town center. Although not required, a transit center is recommended for the town center.

Planning Areas

The Specific Plan would be comprised of 18 distinct Planning Areas (Figure 4.3-8). The Planning Areas would be used to provide a more detailed profile of the land use and design required for the area. See Chapter 5 of the Specific Plan for a detailed discussion of each Planning Area.

Drainage

The Specific Plan proposes a comprehensive drainage control program which is intended to meet a number of goals (Figure 4.3-9). First, it would control onsite drainage to minimize flooding within the Specific Plan area as well as minimize the impact of development of the Specific Plan on downstream areas. Second, the drainage program is intended to maximize groundwater recharge through the use of detention basins. Third, the system would reduce transportation of urban pollutants into downstream areas by integrating a series of urban runoff control measures.

Storm water drainage control would include a variety of facilities and techniques including:

- Surface and subsurface detention and retention basins;
- Vegetated swales;
- Permeable pavement; and
- Infiltration trenches.

The drainage system involves a hierarchy of drainage controls. Except within the HYH Property, the first form of drainage control would be accomplished through roadside swales rather than impermeable curb and gutter. These swales would allow surface water to permeate



- LEGEND**
- PLANNING AREA BOUNDARY
 - - - - - HARRISON ROAD STUDY AREA
 - - - - - RUSSELL ROAD STUDY AREA
 - DEVELOPMENT AREAS
 - FUTURE DEVELOPMENT AREAS
 - HYH Boundary

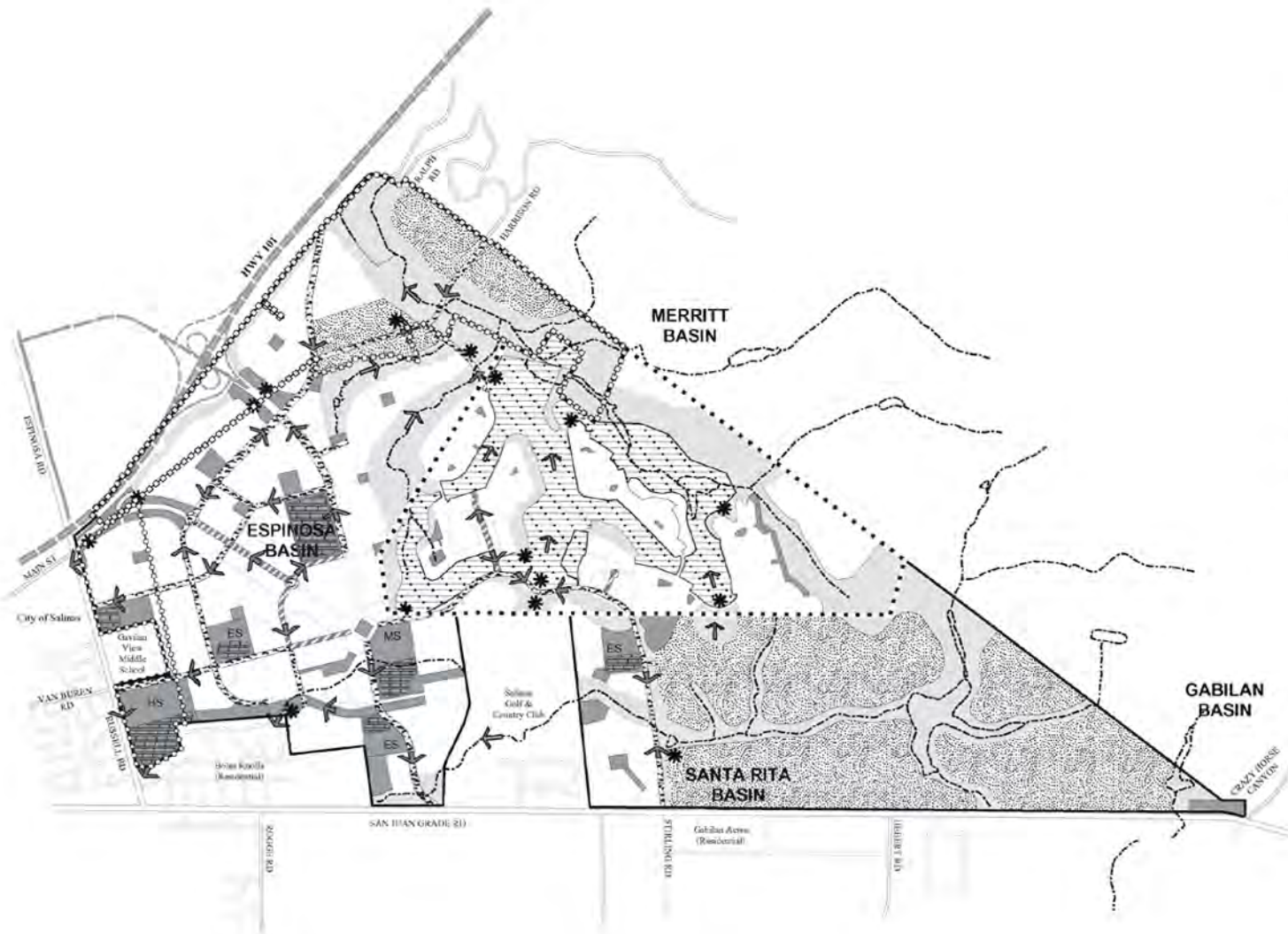
Source: ProjectDesign Consultants, 3/12/2004



Alternative 2 Planning Areas _____ Figure 4.3-8

L E G E N D

-  Single Blue-line Swale
-  Double Swale
-  Percolation/Detention Area
-  Flow Direction
-  Detention in Open Space or Golf Course
-  Blue-line Streams
-  Development Areas
-  Future Development Areas
-  Schools/Parks/Buffers/Created Wetlands
-  Golf Course
-  Open Space
-  Harrison Road Study Area
-  Russell Road Study Area
-  HYH Boundary
-  RSJ Project Boundary



Not to Scale

Source: ProjectDesign Consultants, 3/12/2004

into the ground as well as allow vegetation to remove urban pollutants before reaching storm drain systems connected to roadways. Runoff collected by storm drain inlets connected to these roadway swales and parking areas would be transported to subsurface storm drains which would transport runoff into natural swales. A series of retention and detention basins would be constructed within or alongside of drainages. Large detention basins may also be integrated into recreational areas to allow for groundwater recharge over large surface areas. These basins would serve several functions. First, they would regulate flows to minimize impact on downstream areas. Second, they would serve to remove urban runoff pollutants by allowing urban pollutants to be captured by artificial means (e.g. filters) or retained for a sufficient period of time to allow vegetation to passively remove urban pollutants.

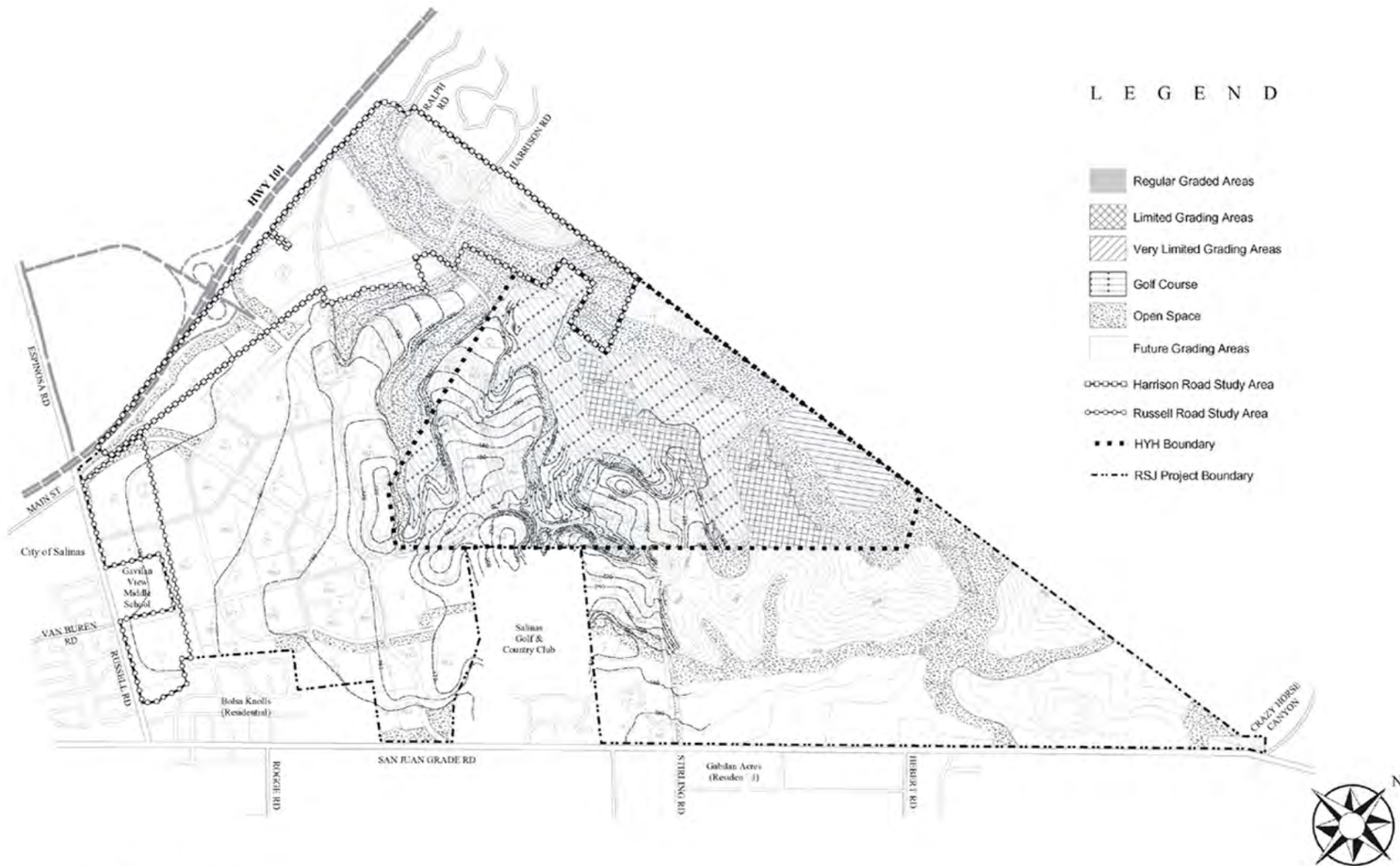
Grading

The grading of the Specific Plan area would encompass approximately 1,530 acres and consist of approximately 5.6 million cubic yards including the golf course, depending on final development plans. It is anticipated that cut and fill quantities would be balanced in order to avoid the need to import or export materials. As illustrated in Figure 4.3-10 the greatest amount of grading would occur in the central portion of the Specific Plan where the terrain variation is the greatest (See Section 4.3.2 for a discussion of HYH Property). As much of the southern and western portions of the Specific Plan are relatively flat, large manufactured slopes are not anticipated to occur with development of this area.

Section 9.6 of the Specific Plan contains a number of policies and guidelines which are intended to reduce grading. Most notably, the conceptual grading plan identifies Very Limited Grading Areas where only minimal building pads would be allowed, and Limited Grading Areas which are to be graded with more sensitivity to landform and edge conditions and transitions than the areas to the south and east. Grading of both the Limited and Very Limited Grading Areas would involve terrain-sensitive techniques such as contour grading, terracing and retaining walls are encouraged. Manufactured slopes would be 3:1 except where 2:1 vegetated slopes would be permitted in areas where existing mature trees would be saved. Filling of drainages would not be permitted except where the Specific Plan allow for realignment of drainages.

Conceptual Landscape Plan

The Conceptual Landscape Master Plan is illustrated in Figure 4.3-11. The landscaping theme for the Specific Plan area is "California Ranch". The conceptual landscape plan includes standards which establish a framework for the landscaping of future development within the Specific Plan area. The conceptual landscape plan and standards identify specific landscape design requirements by location, erosion control function, irrigation requirement, water conservation techniques, and recommended plants. Landscaping would be implemented as each area is developed. (See Chapter 9 of the Specific Plan for further details regarding the Conceptual Landscape Plan.)



L E G E N D

-  Regular Graded Areas
-  Limited Grading Areas
-  Very Limited Grading Areas
-  Golf Course
-  Open Space
-  Future Grading Areas
-  Harrison Road Study Area
-  Russell Road Study Area
-  HYH Boundary
-  RSJ Project Boundary

Source: ProjectDesign Consultants, 3/12/2004



Conceptual Grading Plan _____ Figure 4.3-10



Source: ProjectDesign Consultants, 3/12/2004



Conceptual Landscape Master Plan _____ Figure 4.3-11

Interim Zoning

The Specific Plan would allow for existing zoning to remain in effect until final subdivision maps are recorded (Figure 4.3-12). Within 30 days of adoption of the Specific Plan, the interim zoning would restore the previous Rural Grazing and Farmland zoning designations that were in effect before 1994 (in 1994 the Board of Supervisors rescinded the existing zoning and replaced it with the ADC zoning designation). ~~For the~~ The HYH Property would be rezoned. area the Specific Plan ~~will~~ would become the designated zoning for the HYH Property upon its adoption. See Sections 3.8, 7.1.1 and 10.1 of the Specific Plan for further information regarding the existing and proposed interim zoning.

Offsite Improvements

As indicated earlier, an offsite water storage tank would potentially be constructed approximately one-half mile to the north of the Specific Plan. While onsite storage could be accomplished, the offsite location would provide water by gravity rather than requiring a hydro pneumatic pump.

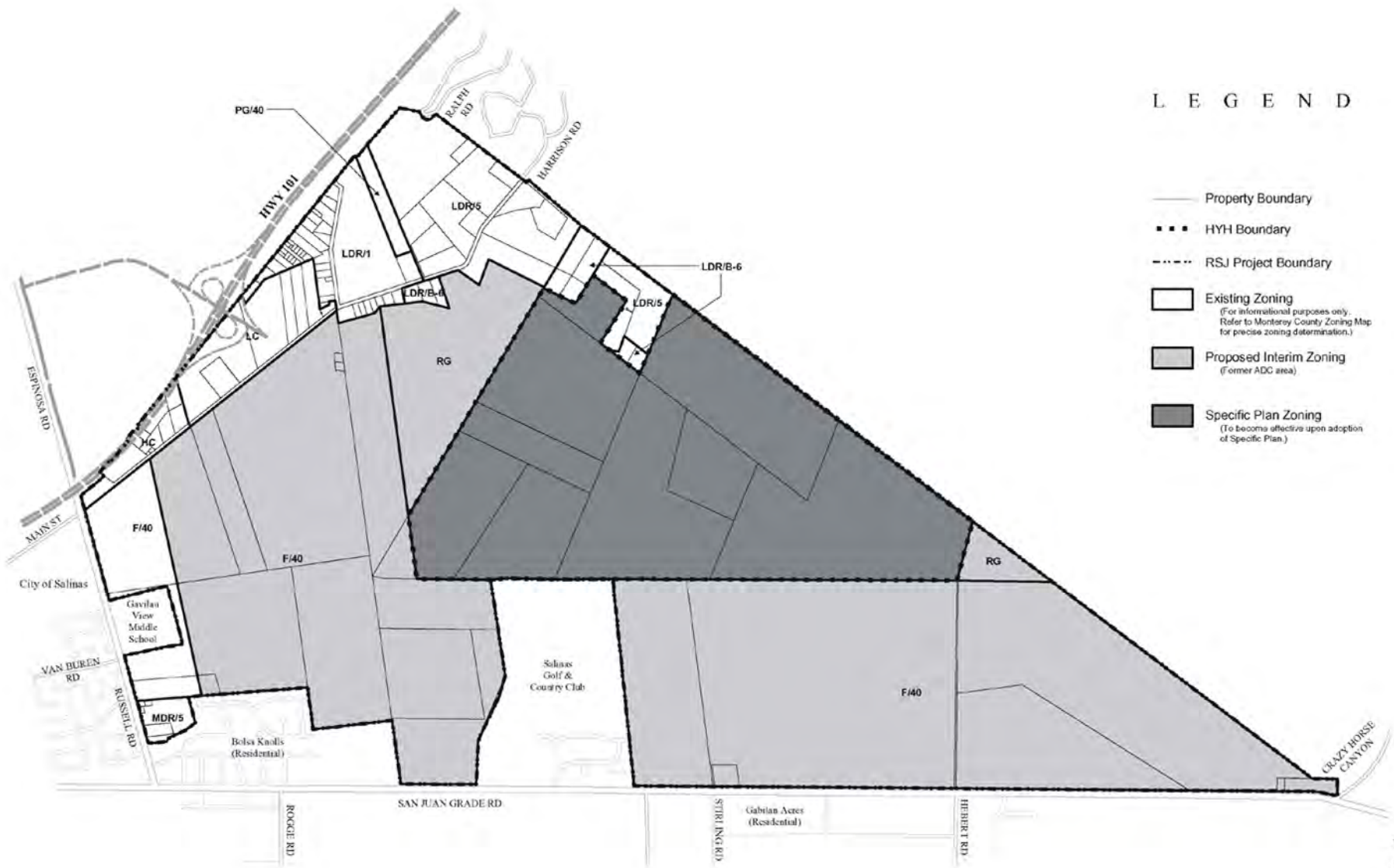
Offsite improvements to surrounding roadways may be required as mitigation for the Specific Plan, however, it is unknown at this time if such improvements would be required or if in lieu fees would be paid.

4.3.1.3 Alternative 4E

If the Prunedale Bypass is constructed, the proposed land use components would generally be the same as Alternative 2, with only minor modifications (Figure 4.3-13). Table 4.3-4 illustrates a comparison of Alternative 2 with Alternative 4E land uses.

Residential uses for Alternative 4E would have the same density ranges as Alternative 2, and the total number of dwelling units would remain at 4,000; however, the number of units within several categories would change. The total number of Residential Low-2 units would decrease by 100 to 1,095, and the acreage would decrease by 22.8 for a total of 228.7 acres. Residential Medium-1 would decrease by five to a total of 633 units, although the acreage would increase by 4.7 for a total of 79.3 acres. The total number of Residential Medium-2 units would increase from 470 to 575, and the acreage would increase by 8.9 for a total of 50.5 acres. Although the number of units would remain the same, the total acreage of the Residential High-1 units would decrease by 0.1 acre for a total of 44.9 acres. The Planning Areas would be only slightly changed for this alternative (Figure 4.3-14).

Several non-residential uses would also change slightly. The Employment Center square footage would decrease by 332,750 to 2,434,150 square feet, and the acreage would decrease by 19.3 acres for a total of 134.8 acres. The Hospitality acreage would decrease by 0.5 for a total of 14.9 acres. The Parks acreage would decrease by 2 acres for a total of 84.5 acres. The Open Space acreage would decrease by 42.1 for a total of 568.5 acres and have a slightly different configuration (Figure 4.3-15). The total acreage of the Future Development/Interim Agriculture would decrease by 8.9 acres to 556.6 acres. The amount of land dedicated to backbone



L E G E N D

- Property Boundary
- - - - - HYH Boundary
- - - - - RSJ Project Boundary
- Existing Zoning
(For informational purposes only. Refer to Monterey County Zoning Map for precise zoning determination.)
- Proposed Interim Zoning
(Former ADC area)
- Specific Plan Zoning
(To become effective upon adoption of Specific Plan)



Not to Scale

Source: ProjectDesign Consultants, 3/12/2004

Existing and Proposed Interim Zoning _____ Figure 4.3-12



LEGEND

 RE Residential Estate	 TC Town Center
 RL1 Residential Low-1	 NC1 Neighborhood Center-1
 RL2 Residential Low-2	 NC2 Neighborhood Center-2
 RM1 Residential Medium-1	 OP Office Professional
 RM2 Residential Medium-2	 EC Employment Center
 RH1 Residential High-1	 LW Live/Work
 RH2 Residential High-2	 H Hospitality
 Future Development	 PF Public Facilities
	 S School
	 P Park
	 OS Open Space
	 GC Golf Course
	 Harrison Road Study Area
	 Russell Road Study Area
	 HYH Boundary
	 RSJ Project Boundary

Source: ProjectDesign Consultants, 3/12/2004



Not to Scale

Alternative 4E Land Use Plan

Figure 4.3-13

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**TABLE 4.3-4
Alternative 2 vs. 4E**

LAND USE	DENSITY (DWELLING UNIT PER ACRE)	ACREAGE ¹		SQUARE FOOTAGE		RESIDENTIAL UNITS	
		ALT. 2	ALT. 4E	ALT. 2	ALT. 4E	ALT. 2	ALT. 4E
Residential Estate	0.5 to 1	37.6	37.6			34	34
Residential Low -1	1 to 3	77.7	77.7			250	250
Residential Low -2	3 to 5	251.5	228.7			1,195	1,095
Residential Medium -1	5 to 9	74.6	79.3			638	633
Residential Medium -2	9 to 12	41.6	50.5			470	575
Residential High -1	12 to 16	45.0	44.9			667	667
Residential High -2	16 to 20	21.8	21.8			399	399
Subtotal		549.8	535.1			3,653	3,653
COMMERCIAL/MIXED-USE							
Town Center		38.5	38.5	373,100	373,100	235, 50 room inn ²	235, 50 room in ²
Neighborhood Center -1		10.0	10.0	108,950	108,950		
Neighborhood Center -2		4.2	4.2	45,000	45,000	42	42
Employment Center		154.1	134.8	2,766,900	2,434,150		
Office Professional		22.3	22.3	242,900	242,900		
Live/Work		14.4	14.4	140,000	140,000	70	70
Hospitality		15.4	14.9			291 rooms ³	291 rooms ³
Subtotal		258.9	239.1	3,676,850	3,344,100	347	347
PUBLIC FACILITIES AND OPEN SPACE							
Public Facility		40.4	40.4				
School		87.1	87.1				
Golf Course		229.6	229.6				
Parks		86.5	84.5				
Open Space		610.6	568.5				
Subtotal		1,054.2	1,010.1				
OTHER							
Future Development/Interim Agriculture Reserve		565.5	556.6				
Backbone Circulation Roads Right-of-way		130.2	129.1				
Freeway Right-of-way		21.7	110.9				
Subtotal		7197.4	796.6				
Total		2,581.0¹	2,581.0¹	3,676,850	3,340,450	4,000	4,000

¹ Acreages have been rounded, therefore the total acreage in the table for Alternative 2 equals 2,580.3, and Alternative 4E equals 2,580.9. However, the total physical site acreage does equal 2581.00.

² Inn rooms are not considered in the residential unit count.

³ Guest units include 150 hotel rooms, 71 guest villas and 70 timeshare units, not included in residential unit count



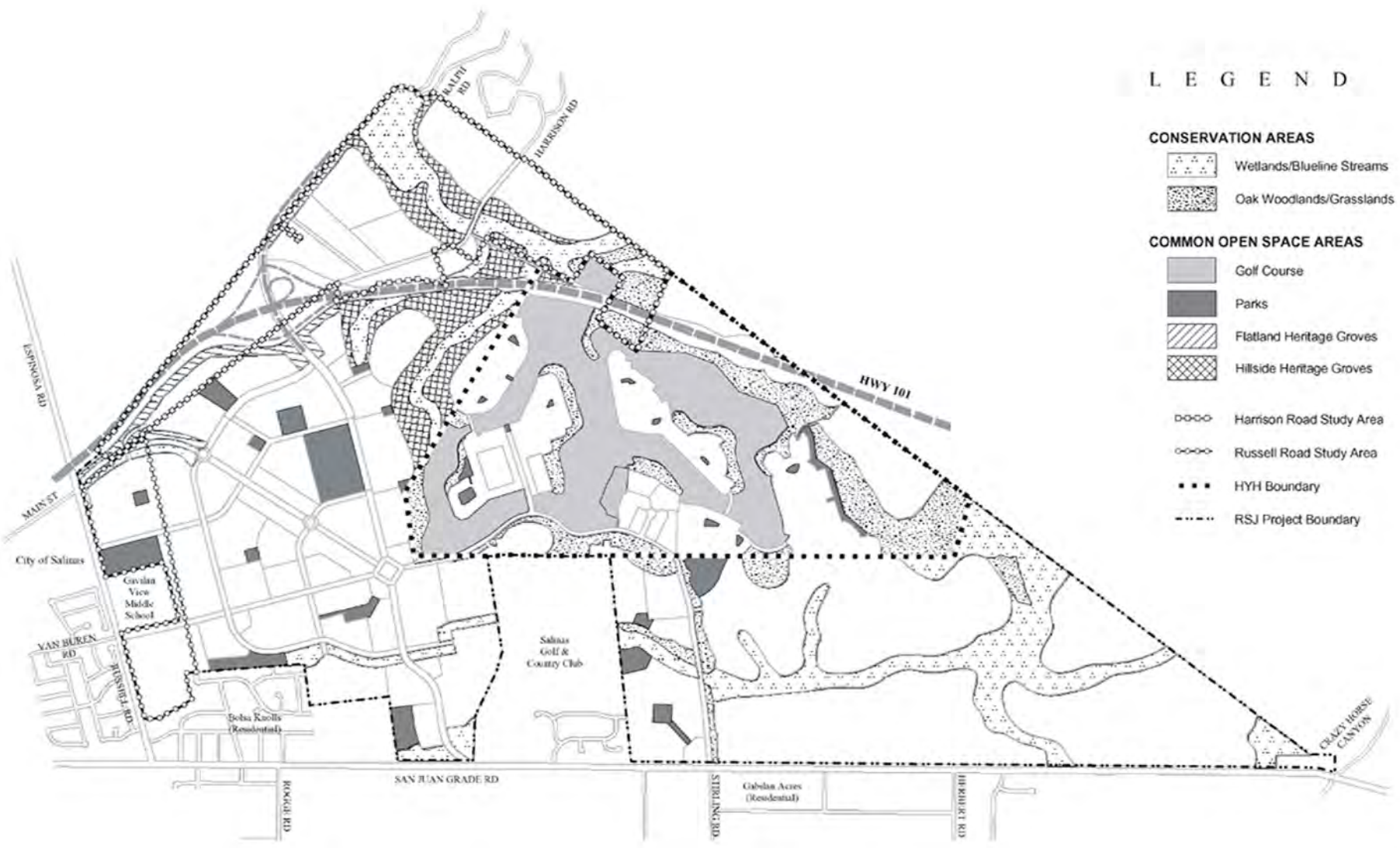
L E G E N D

- PLANNING AREA BOUNDARY
- - - - - HARRISON ROAD STUDY AREA
- - - - - RUSSELL ROAD STUDY AREA
- DEVELOPMENT AREAS
- FUTURE DEVELOPMENT AREAS
- ■ ■ HYH Boundary

Source: ProjectDesign Consultants, 3/12/2004





Alternative 4E Planning Areas _____ Figure 4.3-14







L E G E N D

CONSERVATION AREAS

-  Wetlands/Blueline Streams
-  Oak Woodlands/Grasslands

COMMON OPEN SPACE AREAS

-  Golf Course
-  Parks
-  Flatland Heritage Groves
-  Hillside Heritage Groves

-  Harrison Road Study Area
-  Russell Road Study Area
-  HYH Boundary
-  RSJ Project Boundary



Not to Scale

Source: ProjectDesign Consultants, 3/12/2004

Alternative 4E Open Space/Parks Plan _____ Figure 4.3-15

circulation would decrease by 1.1 for a total of 129.1 acres. The amount of land dedicated to freeway right of way would increase by 89.2 to 110.9 acres and would have a slightly different configuration (Figure 4.3-16).

4.3.2 HYH PROPERTY PROJECT

The largest property interest within the Specific Plan area is the 671-acre holding of the HYH Corporation. This property is expected to be the first phase of development and would consist of residential and recreational uses with supporting commercial uses. The boundaries of this area are shown on Figures 4.3-1. The site plan is shown on Figure 4.3-17, and uses are shown on Figure 4.3-18. HYH has submitted applications for all of its intended development. Those applications are available at Monterey County Planning and Building Inspection Department, Marina Office, 2620 First Avenue, Marina, CA 93933.

The type and intensity of land uses are illustrated in Table 4.3-5. The maximum amount of residential units would be 1,077 units. Residential densities would range from 1 dwelling unit per acre to 20 dwelling units per acre and would include single-family and multiple-family development. The entire 18-hole golf course and resort with guest villas and timeshares would be located in this phase of development. Additional amenities and uses would include over 45,000 square feet of commercial retail with residential units permitted on the second floor, approximately 142.9 acres of open space and parks, a wastewater treatment facility, and water storage.

Residential

Residential units would include a range of densities from large estate lots at 1 dwelling units per acre to high density attached units at 20 dwelling units per acre and residential units above retail in the Neighborhood Center. Table 4.3-4 shows various residential types with corresponding densities, acres, and unit totals. Below is a brief description of the various residential types.

Residential Estate (RE)

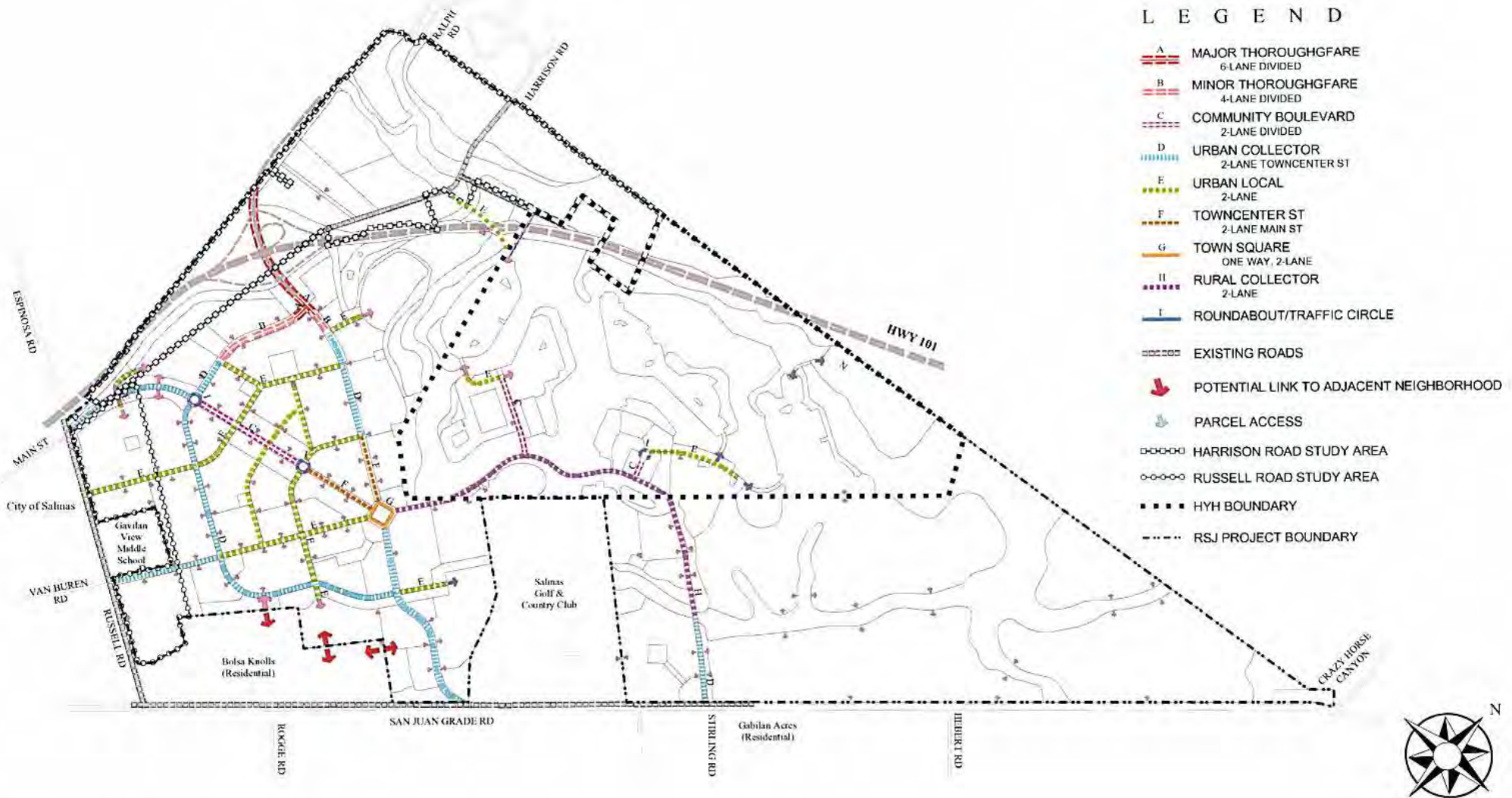
Same as described in Section 4.3.1.2.

Residential Low (RL-1, RL-2)

Same as described in Section 4.3.1.2, with the exception that there would be only 455 Residential Low-2 units on 91.6 acres.

Residential High (RH-1, RH-2)

Same as described in Section 4.3.2.1, with the exception that there would be 157 units on 10.1 acres for Residential High-1, and 139 units on 8.1 acres for Residential High-2.



Source: ProjectDesign Consultants, 3/12/2004

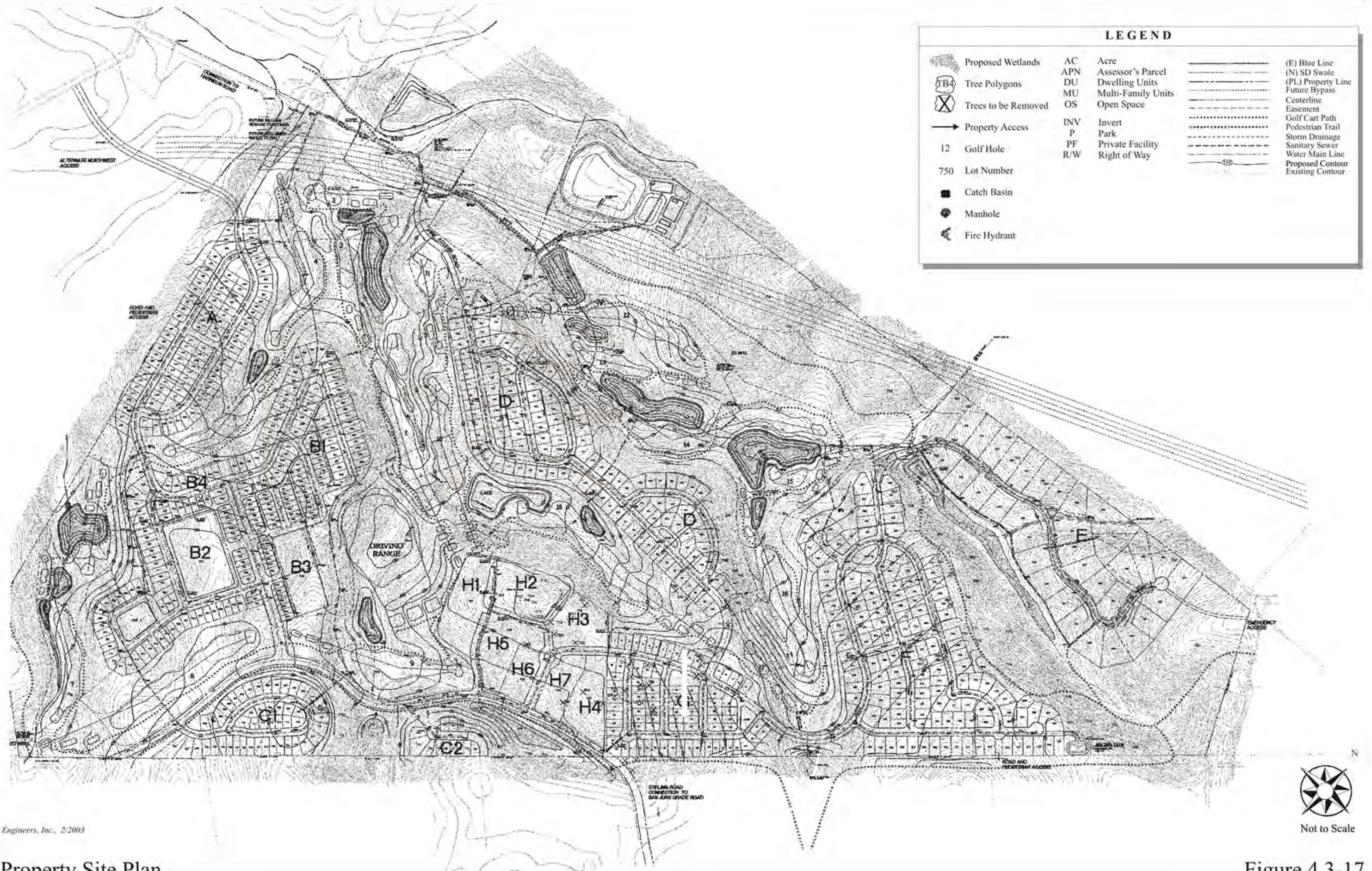


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Alternative 4E Primary Circulation Plan

Figure 4.3-16

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Source: Bestor Engineers, Inc., 2/2003

HYH Property Site Plan



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Figure 4.3-17

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Source: Bestor Engineering, Inc., 2/2004

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**TABLE 4.3-5
HYH Property Project Land Use Summary (Alternative 2¹)**

LAND USE	DENSITY (DWELLING UNIT PER ACRE)	ACREAGE ²	SQUARE FOOTAGE	RESIDENTIAL UNITS
RESIDENTIAL				
Residential Estate	1	37.6		34
Residential Low -1	1 to 3	77.7		250
Residential Low -2	3 to 5	91.6		455
Residential High-1	12 to 16	10.1		157
Residential High -2	16 to 20	8.1		139
Subtotal		225.1		1,035
COMMERCIAL/MIXED-USE				
Neighborhood Center -2		4.2	45,000	42
Hospitality		7.6		141 guest villas/timeshares ³
Subtotal		11.8	45,000	42
PUBLIC FACILITIES AND OPEN SPACE				
Golf Course		229.6		
Public Facilities		15.4		
Parks		10.0		
Open Space		132.9		
Freeway Right-of-Way		32.8		
Subtotal		420.7		
OTHER				
Backbone Circulation Roads		13.3		
Subtotal		13.3		
Total		671.0²	45,000	1,077

¹ HYH would differ only slightly with Alternative 4E. The open space would be reduced by 32.8 for a total of 132.9 acres, and 32.8 acres would be required for freeway right of way.

² Acreages have been rounded, therefore the total acreage in the table equals 670.9. However, the total site acreage does equal 671.0.

³ Guest villas/timeshares are not considered in the residential unit total

Neighborhood Center

A Neighborhood Center-2 would consist of approximately 45,000 square feet of retail space below 42 residential units on 4.2 acres. The Neighborhood Center would be the main entrance to the golf resort center area although the golf clubhouse would have its own separate entry.

Hospitality

Same as described in Section 4.3.1.2, however, only the 71 guest villas and 70 timeshare units are included.

Public Facilities

Water Supply

The HYH Property project would draw water from the 2 existing onsite wells, at 1,200 and 1,800 gallons per minute (gpm). It is anticipated that the wells would be operated by California Water Service Company, who could, if needed, interconnect the onsite water system with their existing systems on San Juan Road and on Hitchcock Road, via booster pump or pressure reducer systems.

Proposed water storage would be provided by two proposed steel tanks at the northeast end of the project. Each would have a capacity of 400,000 gallons, and would be approximately 32 feet high by 46 feet in diameter. The tank elevations would be 280 feet at base with a 312 feet working water level. Water would not require any treatment, other than chlorinating.

The distribution system would consist of 12-inch and 8-inch pipes. The 12-inch pipes would be required to provide adequate fire flow to commercial and high-density multifamily areas. The remainder of the property would be served by 8-inch lines. A small number of single-family homes lie above the normal 48-psi pressure level, and would require local booster pumps, and reduced diameter pipes (e.g. 4-inch and 2.2-inch). All homes, however, could be provided adequate fire protection pressure without the use of booster pumps.

The lowest home (118 feet) would have 90 psi, and may require an individual pressure regulator.

The golf course irrigation distribution would be completely separate from the domestic water system. It would provide sub-potable water and would consist of reclaimed wastewater to the extent it would be available. During early years, before home buildout and full occupancy, the irrigation system would require be provided from well water. At full occupancy, however, the wastewater treatment plant should be able to provide ample water for all irrigation needs.

Wastewater Treatment Facility

The wastewater treatment facility would be located within the HYH Property; therefore, the details are the same as described above. Two options are being considered: one is to construct a temporary reclamation facility; the other is to proceed directly with constructing the master

planned reclamation facility. The temporary facility would include a 40-foot shipping container compartmentalized into each of the unit processes needed to treat the incoming wastewater. This facility would be suitable for a flow up to 83,000 gallons per day (gpd). The permanent treatment facility would be built in phases to reflect the anticipated growth in the area. The initial phase would serve the HYH Property and treat approximately 0.3 million gallons per day (mgd). The facility would be ultimately expanded to serve the entire Specific Plan area and treat up to 2.3 mgd.

The wastewater treatment facility would contain enough 120-day wet season storage to meet the needs for the HYH Property and the 3-day storage requirements for untreated sewage. The remaining 120-day storage requirements would be located near the western boundary of the Specific Plan area.

As with the Specific Plan, the proposed collection system would be 8-inch and 12-inch lines within the development areas to a truck system in the south access road and the main that would deliver to the wastewater treatment facility and reclaimed water facility. The main trunk sewer is proposed to be gravity main, and is expected to vary in depth from 18 to 22 feet of cover over the pipe.

Golf Course

Same as described in Section 4.3.1.2. The entire 216.9-acre, 18-hole golf course would be located within the HYH Property, and would include a 5.4-acre clubhouse facility and a 7.5 acre maintenance facility.

Parks

Approximately 10.0 acres have been reserved for parks throughout the HYH Property. These parks would be planned to accommodate the nearby population that they would be intended to serve. A majority of the parks would be utilized for storm water detention.

Mini-Parks and Neighborhood Parks

Ten acres of mini-parks and neighborhood parks would be constructed within the HYH Property.

Open Space

The HYH Property would include 132.9 acres of open space, which would include conservation open space areas and common open space areas.

Circulation

Vehicular Circulation

Approximately 13.3 acres of backbone circulation would be located within the HYH Property. Primary vehicular access to the HYH Property would be from a collector street linking the Town Center to the various development areas on the HYH Property. This two-lane collector with bike

lanes and trail would connect to San Juan Grade Road via Stirling Road. This collector street would have a 16-foot median to allow for left turn lanes into proposed development areas. A temporary construction access road would be constructed in the southwest corner of HYH Property from Harrison Road. If warranted, this temporary access could be improved to provide a second access into the HYH Property. A hierarchy of roadways would be developed. A Community Boulevard street with landscaped median would be constructed in the development area located closest to the Town Center in the southeast portion of the site. Roadways serving the Residential Low-1 and Residential Estate areas would utilize a more narrow street section and a steeper gradient than the remainder of the community in order to preserve the natural topography of these residential sections. One roundabout would be installed in the golf resort center area adjacent to the Neighborhood Center and the RH-1 residential areas (Figure 4.3-19).

In addition to the circulation improvements located on the HYH property, HYH would fund either by direct payment of mitigation fees, or through a CSD, County acquisition of land and/or easements and construct the following off-site roads serving the development. All such public roads and traffic improvements shall be constructed in accordance with accepted local engineering standards and Specific Plan standards. All collector road systems, to the extent funded directly or indirectly by HYH, including off-site road and traffic improvements, are eligible for fair share reimbursement from future development benefiting from the facilities.

The following improvements are among those eligible for such fair share reimbursement:

- Project access improvements on J Street/Stirling Road from the HYH site to its intersection with San Juan Grade Road;
- Signal and intersection improvements at Stirling/San Juan Grade Road;
- A northwest project access between the HYH site and its intersection with Harrison Road;
- Signal and intersection improvements at the intersection of the northwest access road and Harrison Road; and
- Emergency access roads as required by the fire department.

Pedestrian/Bicycle Circulation

A minimum five-foot pedestrian walkway or an eight-foot-wide trail would be located within the street right-of-way of all of the streets within the HYH Property except private neighborhood drives and alleyways. A trail system would be located throughout the open space. In addition to providing for internal pedestrian activities, this trail system would link to the proposed County trail system which is expected to include a combined use trail along Old Stage Road and Crazy Horse Canyon Road.

Bikeways and bike trails would be located throughout the HYH Property. Six-foot width bike lanes would be provided along both sides of all collector streets.



Source: Bestor Engineers, 3/12/2004

HYH Property Circulation Plan

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Figure 4.3-19

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Planning Areas

The HYH Property would be comprised of Planning Areas 2, 10, a portion of 11, 12, 15, and 16 (Figure 4.3-8).

Drainage

The project includes development of a develop a series of permanently-maintained detention ponds, which would effectively reduce storm water discharge in even a 100-year storm to a rate lower than the existing 10-year storm runoff rate (247 cubic feet per second [cfs] during a ten-year peak storm at northwest discharge point).

Grading

The HYH Property project would cover an area of approximately 456 acres and include an estimated 4.8 million cubic yards of excavation (Figure 4.3-17). The grading quantities include approximately 190,000 cubic yards for wastewater treatment ponds, 44,000 cubic yards of offsite access roads, and approximately 1.3 million cubic yards for the golf course. The grading is intended to balance earthwork quantities so no import or export of materials would be required. Slope heights would vary from one-foot to 60 feet next to golf course hole 6. Area C1- would have a maximum slope of 35 feet, and next to the 16th green would be a 40-foot slope. Finished slopes would be at a 3:1 ratio unless recommended otherwise by the soils engineer.

Conceptual Landscape Plan

The primary objectives would be to build upon the existing predominate features of the property, to provide a transition from natural terrain to improved lands by integration and expansion of oak trees and grassland understory, and to plant material types and locations in development areas to be designed as visually appealing while screening sensitive views.

Plant materials would include California live oak as the predominate species, along with native and drought tolerant trees, plants and shrubs. A mix of evergreen and deciduous materials would also be used. In addition, species with high capacity for removing pollutants would be planted within drainage swales.

The various elements of the HYH Property would be landscaped appropriately. The open space, trails, and parks would include signage, landscape, and hardscape features to identify the entrance and nature of the area. These areas would incorporate shade trees, grasses, local wildflowers, shrubs and ornamental trees at picnic and viewing areas. The residential areas would include landscaping with signage, lighting, and hardscape elements at the neighborhood entryways. Each neighborhood would be identified by a specific plant species of that area. Views or filtered views would be enhanced with landscaping which would not block the view of adjacent lots. Private outdoor areas would include the use of hedges, trees and shrubs.

Landscaping of the Neighborhood Center would include an entryway similar to the residential. The roundabout would be the visual focus of the area and would include specimen trees with colorful ground cover mixtures of annuals and perennial shrubs. Appropriate landscape

materials would screen parking from the street and adjacent areas. The entryway to the golf club and villas would be landscaped. The existing oak grove within the golf villas would be retained and enhanced. Additional plant materials such as native grasses, shrubs, and wildflowers would be the predominate understory. The golf course maintenance facility and wastewater treatment facility would be screened with earth berms and dense planting of native trees and shrubs. Streetscapes would include tighter spacing of trees along residential frontage, and generous spacing of trees adjacent to the golf course and open space areas. The understory would be in low mounding ground covers, turf grasses and shrubs visibility would not be affected.

Interim Zoning

The HYH Property would not include overlay zoning. Instead, upon adoption of the Specific Plan, the zoning of the HYH Property would be designated “Specific Plan” HYH development and would need to be consistent with the Specific Plan land use plan. See Sections 3.8 and 10.1 of the Specific Plan for further information regarding the existing and proposed interim zoning.

Offsite Improvements

Offsite road improvements would occur to Stirling Road from San Juan Grade Road to the site, and west connector from Harrison Road to the site and to connector roads along existing rights-of-way through the northwest adjacent area (Baptist Church, etc.). Improvements would include grading, road improvements (pavement, curb gutters) drainage facilities, underground utilities, and erosion control planting, on approximately eight acres.

4.4 DISCRETIONARY ACTIONS

Discretionary approvals related to approval of the Specific Plan are included but not limited to those identified in Table 4.4-1. Table 4.4-2 identifies discretionary actions which include but are not limited to those required to implement the HYH Property project.

**TABLE 4.4-1
Discretionary Actions Related to the Rancho San Juan Specific Plan**

DISCRETIONARY ACTION	PURPOSE	RESPONSIBLE AGENCY
General Plan Amendment	To reconcile differences include but are not limited to those between the Specific Plan and various goals and objectives of the adopted General Plan and/or the proposed General Plan including but not limited to substandard community park size, insufficient industrial area, inconsistent building lot coverage and building height (See Appendix C)	County of Monterey
Water Transfer Ordinance Amendment	Amend to exclude Rancho San Juan Specific Plan area	County of Monterey
Approve Rancho San Juan Specific Plan	Approve project	County of Monterey
Establish Community Service District (CSD)	Operation and maintenance of public facilities	County of Monterey

**TABLE 4.4-2
Discretionary Actions Related to the HYH Property Project**

DISCRETIONARY ACTION	PURPOSE	RESPONSIBLE AGENCY
Vesting Tentative Subdivision Map	Required to subdivide the HYH Property	County of Monterey
Conditional Use Permits	Required for the proposed wastewater treatment plan, golf course, fire station, development on slopes over 30 percent, and tree removals (See Permitted Use Matrix, Table 7-4 in Specific Plan for additional use permits required)	County of Monterey
404 Permit	Wetland disturbance	U.S. Army Corps of Engineers
Section 1603 Streambed Alteration Agreement	Wetland disturbance and streambed alteration	California Department of Fish and Game
Waste Discharge Permit	Operation of Wastewater Treatment Plant	Regional Water Quality Control Board
Development Agreement	Provide assurance of public benefits and protect developer from changes in law	County of Monterey

CHAPTER 5.0

ENVIRONMENTAL ANALYSIS

5.1 LAND USE

5.1.1 EXISTING CONDITIONS

5.1.1.1 Specific Plan

Existing Land Use

Onsite

As discussed in Chapter 3.2 (Environmental Setting) and illustrated in Figure 3.2-1, the Specific Plan area primarily consists of farmland with limited residential, commercial, and industrial uses. The site is used for agricultural activities throughout the year. The principal crop grown onsite is strawberries; however, raspberries, lettuce, broccoli, cauliflower, and bush berries are also grown. A small portion of the site (the Hebert Ranch) is used for grazing activities. The Hebert Ranch also includes a complex of farm buildings including a ranch house, bunk house, two barns, a storage shed and a corral.

Mixed light and heavy industrial uses occupy the area adjacent to Highway 101 and Russell Road. Mixed residential and commercial uses are located adjacent to Highway 101 and Martinez Road. North of the mixed residential and commercial uses along Harrison Road are homes located on large lots. The Lagunita Elementary School is located in the northeastern corner of the Specific Plan area.

Electrical distribution lines traverse the Specific Plan area. Several electrical distribution lines follow Harrison Road with some branching eastward into the Specific Plan area. Transmission lines also parallel San Juan Grade Road, south to its intersection with Crazy Horse Canyon Road. Six other power lines lead westward into the Specific Plan area. Two ponds, one large and one small, are located in the northeastern portion of the Specific Plan area. Artificial detention ponds and stock ponds are also scattered throughout the site within the agricultural and grazing lands.

Surrounding Area

Portions of surrounding areas (Figure 3.2-1) are also characterized by agriculture and open space, while other portions are developed. The area to the immediate north consists of open space and agricultural lands. Immediately east is San Juan Grade Road, further east is more agriculture land, along with the Salinas Golf and Country Club and the residential communities of Country Club Estates and Gavilan Acres. The residential community of Bolsa Knolls is located to the southeast. The Gavilan View Middle School is immediately adjacent to the Specific Plan area to the south and, although not included, is surrounded by the Specific Plan area to the north, east and west. Also adjacent on the south is Russell Road, which is the boundary to the City of Salinas. Further south in the City of Salinas are residential and scattered commercial uses. Immediately adjacent to the west is Highway 101, and further west are some residential and agriculture uses. The residential community of Country Meadow Estates is adjacent to the northwestern boundary of the project area.

Land Use Plans and Policies

County of Monterey General Plan (Adopted)

The County's General Plan contains a number of goals, policies and objectives which relate to development of the subject property. Many of these relate to similar development throughout the unincorporated area while others relate directly to the Specific Plan area.

In addition, the County has created an Area Plan as part of the General Plan which provides more specific direction for the subject property and an area around it. The property is located in the Greater Salinas Area Plan (GSAP).

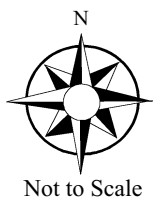
Figure 5.1-1 shows the General Plan land use designations. The General Plan establishes a series of development guidelines and principles intended to guide future development within the Specific Plan area. Land surrounding the Specific Plan area is designated as residential, commercial, and farming.

Appendix C of the Specific Plan identifies all of the goals, policies and objectives of the General Plan as well as the GSAP which relate to the subject property. It also lists all of the guidelines and principles established for the Rancho San Juan ADC. Because of the number of relevant goals, policies, objectives, guidelines and principals, the reader is referred to Appendix C of the EIR which contains Appendix C from the Specific Plan in its entirety. However, in general, the goals, policies, objectives which are related to the proposed project are associated with the following issues.

- Conservation
 - Retain natural vegetation and wildlife;
 - Conserve soils;
 - Preserve agriculture;
 - Maintain water supply;
 - Preservation of cultural resources;



- LEGEND**
- High Density Residential
 - Commercial
 - Industrial
 - Farmland/40
 - LDR 1A/U
 - LDR 2.5A/U
 - LDR 5A/U
 - MDR 2A/U
 - MDR 5A/U
 - Permanent Grazing/40
 - Public/Quasi Public
 - Rural Density Residential
 - Approximate Specific Plan Boundary



Source: County of Monterey, 2004

General Plan Land Use Designations _____ Figure 5.1-1

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- Save energy;
- Maintain water quality; and
- Preserve steep slopes.

- Land Use
 - Promote orderly growth;
 - Encourage variety of housing types;
 - Encourage commercial and industrial uses within or in the vicinity of residential areas; and
 - Provide adequate range of park and recreation opportunities.

- Public Safety
 - Minimize flooding; and
 - Reduce fire hazard.

- Public Services
 - Encourage provision of infrastructure concurrent with demand; and
 - Promote education and library facilities.

- Transportation
 - Promote safe, efficient traffic circulation; and
 - Provide for mass transit.

Growth Management Policy

The Growth Management Policy, which is an appendix to the adopted General Plan and the draft General Plan Update, recognizes the need to direct development to urban areas where services and infrastructure already exist and to reserve rural areas for agricultural uses, natural resource protection, and open space. The Policy directs that the priority for growth shall be to infill the existing urban areas. The second goal is to develop on land adjacent to existing and densely settled urban areas where the necessary services and facilities are available, except where this progression impacts prime and productive agricultural lands.

The Policy also provides that new areas of urban concentration should be within existing ADCs to preserve prime agricultural lands or natural resource protection. In order to avoid piecemeal development, the Policy further discourages minor subdivisions.

County of Monterey General Plan (Proposed)

The County of Monterey is currently in the process of updating its General Plan. Although the proposed revisions have not been adopted by the County's Board of Supervisors, a discussion of the revisions which relate to the proposed Specific Plan are included in the EIR as background in the event they are ultimately adopted as part of the County's General Plan. The following discussion is based on the version which was released in January 2004. This section summarizes the key Land Use Element policies which relate to the Rancho San Juan Community Area (the Community Area designation would replace the ADC designation). The entire Specific Plan

area is designated as a Community Area. In addition, the proposed General Plan would provide for preparation of specific or Community Plans for Community Areas to provide more definition of the development type and design.

Land use policies of the proposed General Plan which are relevant to the development of the Rancho San Juan ADC/Community Area include the following.

Land Use Policy LU-2.4.a.1 classifies Community Areas as a Major Land Group. Community Areas are described as urban in nature and are unincorporated communities that are served, or are planned to be served, a balanced mix of land uses, diverse housing types and general public amenities, and where further subdivision and urban-level development is planned.

Land Use Policy LU-3.1 describes Community Areas in greater detail. Community Areas are served by or planned to be served with a full range of urban services, such as public water and sewer, an extensive road network, public transit, safety and emergency response services, parks, trails, and open space. Community Areas are characterized by moderate and higher density residential, commercial, and industrial development. They are located and sized to accommodate, in conjunction with the cities, the full share of the 20-year population and economic growth projections of the County.

Land Use Policy LU-3.7 states that new development within Community Areas must be phased in accordance with an infrastructure improvement funding and construction program.

Land Use Policy LU-3.8 states that a Community Plan or Specific Plan shall be prepared for each Community Area, using private or public funding or both. Preparation of the Plan shall be directed and administered by the County. The Plan shall include an impact fee and seek to preserve and enhance the quality, integrity and community identity of the existing unincorporated community, and encourage a full mix of urban uses in a compact, livable design. Residential uses shall be planned at a minimum of 7 dwelling units per acre and up to a maximum of 30 dwelling units per acre in order to support transit and other urban services. The proposed General Plan allows a Specific Plan to be prepared in-lieu of a Community Plan for the proposed project.

Land Use Policy LU-3.9 requires Community or Specific Plans for Community Areas to strive to achieve all of the following design criteria:

- a. Compact, mixed use development pattern with urban-level services and infrastructure;
- b. Diversity of housing types, including at least 40 percent of the units priced to meet the needs of the local workforce;
- c. Balance mix of uses containing neighborhoods, schools, parks, open space, retail establishments and workplaces;
- d. Mix of medium to high residential densities, with a minimum of 7 units per acre and a maximum of 30 units per acre. At least 50 percent of the

- residential areas shall be planned at an average density of 10 units per acre or higher within each Community Area;
- e. An Accessory Dwelling Unit (ADU) is allowed in addition to the principal residence on single-family lots;
 - f. Residential development at a density lower than 7 units per acre, where allowed, is subject to agricultural and open space mitigation fees or participation in a purchase/transfer of development rights program to offset the inefficient use of land resources;
 - g. Flexibility in road design and level of service standards to create a transit-friendly and walkable community design, yet maintain appropriate access for emergency vehicles;
 - h. Innovative parking design to reduce amount of surface parking and encourage shared parking and other creative options;
 - i. Trails and related amenities included so that development is more conducive to bicyclists and pedestrians;
 - j. Transit-oriented facilities and design features that encourage transit use and reduce the need for automobile trips;
 - k. Connection to regional and sub-regional infrastructure systems;
 - l. Public infrastructure and services in place concurrent with new development, based on a road construction plan and local impact fee program;
 - m. No reduction of levels of service for adjacent development below the standards in Table PS-1 in the Public Services Element;
 - n. One hundred percent of the funding to construct and maintain needed infrastructure and services is provided within the community, as documented in a Capital Improvement Program, although certain regional or sub-regional facilities may be funded by Caltrans or other services;
 - o. Best available technology and best management practices for energy and water conservation provided in all development and infrastructure; and
 - p. Environmental impacts mitigated to the extent feasible through a master EIR and design standards incorporated to minimize negative impacts; and
 - q. Incentives for transfer of TDR credits into Community Areas.

Land Use Policy LU-9.1 states that within Community Areas, an accessory dwelling unit is allowed in areas defined by the Community or Specific Plan. Only one accessory dwelling unit is allowed on a single parcel and must be subordinate in size to the principal residence.

Land Use Policy LU-9.14 requires a buffer for any new non-agricultural development located adjacent to agricultural lands. The buffers shall be approximately 200 feet wide, and shall come from the proposed new non-agricultural use or development project site, unless the adjacent farm owner is voluntarily willing to include a portion or all of the buffer on the agricultural property.

Land Use Policy LU-9.17 states that no development shall be allowed on slopes of greater than 30 percent.

Land Use Policy LU-9.18 provides that public golf courses shall qualify to meet a portion of the recreational land dedication requirements of the Monterey County Subdivision Ordinance.

Greater Salinas Area Plan

The GSAP allocates space to provide for the projected housing needs of northern unincorporated Monterey County. The GSAP proposes to create jobs by providing space for industries currently experiencing rapid growth. The GSAP's policies enhance and protect the naturally occurring features in the area and direct development into a pattern designed to maximize open space and reduce environmental impacts.

The GSAP proposes to accomplish all these objectives by directing almost all future unincorporated area growth into areas designated as ADCs. The GSAP permits ADCs to cluster residences around natural features to lessen the environmental impact while allowing for a "higher intensity" development. The ADC also permits mixed-use developments, linking housing to nearby jobs and service centers in order to reduce lengthy auto commutes.

The Board of Supervisors adopted the Rancho San Juan area as an ADC in the GSAP in 1986. The entire ADC is located within the Specific Plan area, however, the Specific Plan area also contains land outside of the ADC (but entirely within the future Community Area).

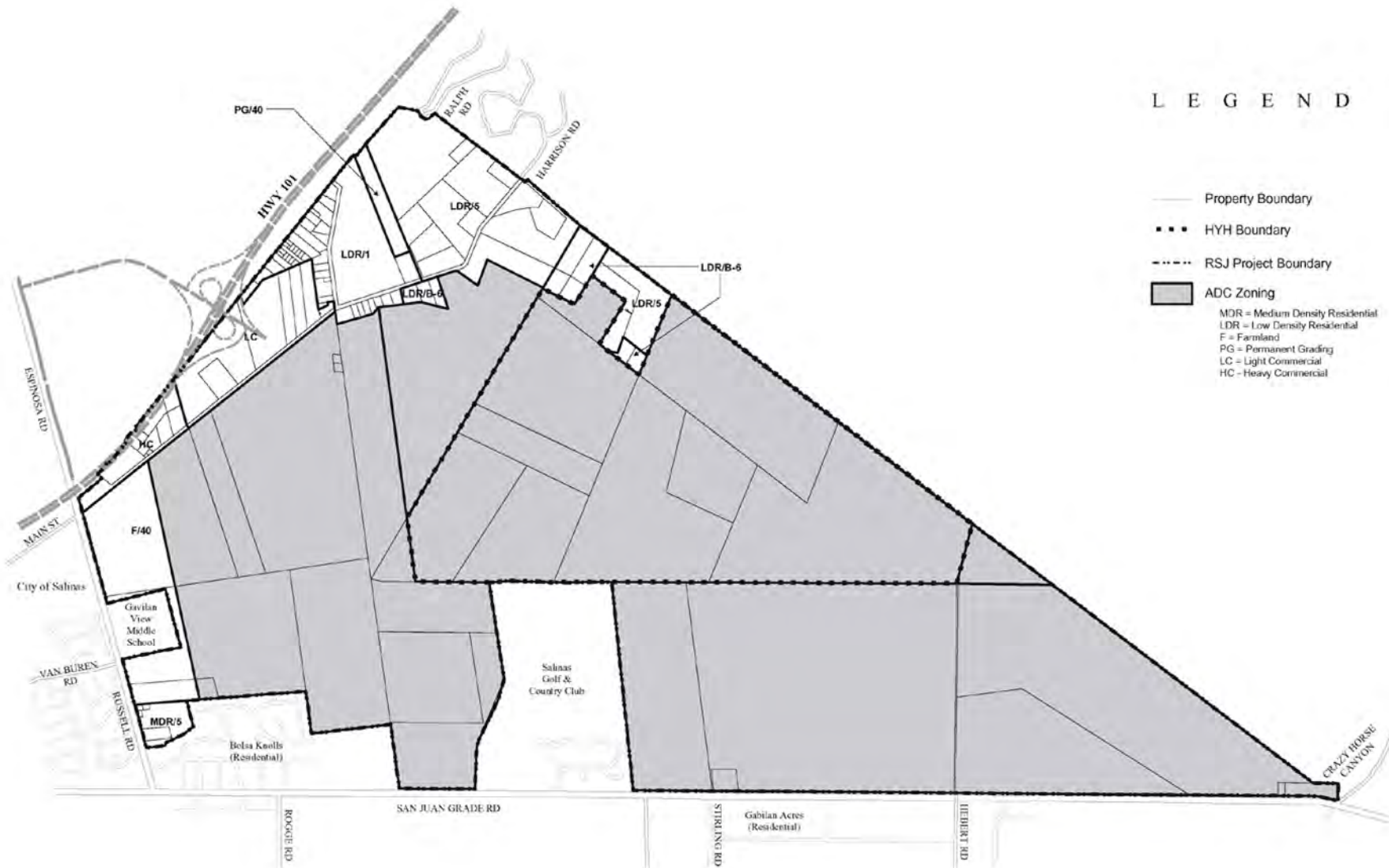
County of Monterey Zoning Ordinance

The County's Zoning Ordinance implements the land use designations established by the General Plan. The Zoning Ordinance sets standards for a variety of land use factors including type and intensity of development, setbacks, etc.

The County General Plan designates 90 percent of the subject property as an Area of Development Concentration (ADC), which is intended to promote concentrated development to capitalize on common infrastructure and help maintain viable agricultural areas. The General Plan designates the remaining 10 percent as residential and commercial (Figure 5.1-2). Properties which lie outside the existing ADC boundaries are zoned for a variety of uses. As illustrated in Figure 5.1-2, most of the properties located outside the ADC between Harrison Road, Highway 101 and Martinez Road are zoned for commercial use, though several parcels are zoned for low-density residential use. Properties in the polygon formed by Martinez Road, Harrison Road and the north/west boundary of the Specific Plan area are zoned for low-density residential use. The same is true for the several parcels located east of Harrison Road.

Monterey County Water Resources Ordinance No. 3539

The ordinance was adopted "to provide water conservation regulations that will permanently reduce or eliminate waste of water in all areas of Monterey County, and to require the adoption of substantially similar or more restrictive regulations in all jurisdictions of the county which may properly adopted such regulations." The ordinance includes a restriction on water waste for public, commercial, residential, utility and agricultural uses. Requirements that are applicable to the Specific Plan area include:



Source: ProjectDesign Consultants, 2003



- Prompt repair of plumbing, sprinkler or irrigation systems;
- No vehicle washing or exterior building cleaning without automatic shutoff nozzle;
- No use of a hose to clean sidewalks, driveways, parking lots or other outdoor paved areas;
- No spilling of water into streets;
- Fountains must recycle water;
- Visitor-serving uses must promote water conservation;
- Commercial car washes must recycle water;
- Construction watering must use reclaimed water when available; and
- New construction must use water conserving plumbing fixtures.

As discussed in Chapter 4.0 (Project Description), the Specific Plan would include a number of water-conserving features which would meet or exceed the requirements of Ordinance No. 3539.

Monterey County Ordinance 4037

This ordinance states that water supply serving a subdivision may not be established through the reduction or elimination of water use on a parcel other than the parcel which is the subject of the subdivision as an approved design standard. This ordinance does not prohibit the subdivision of property in agricultural use.

County of Monterey Inclusionary Housing Program

In August 2002, the County modified its Inclusionary Housing Program. The program now requires that 20 percent of all new residential developments be made available to households with very low, low, and moderate incomes. Residential developments of three to four units provide an in-lieu fee for affordable housing. Developments of five units must provide one moderate-income unit. Developments of six to ten units must provide one moderate income and one low-income unit. Developments of 11 or more units must make a minimum of six percent of the units available to very low-income households, six percent to low-income households, and eight percent to moderate-income households.

Air Quality Management Plan

The 2000 Air Quality Management Plan (AQMP) was adopted by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) in May of 2001. The plan was prepared pursuant to the California Clean Air Act of 1988, as amended. The Clean Air Act requires air districts that exceed State ozone standards to reduce pollutant emissions by five percent per year, or take all feasible measures to achieve emissions reductions. The AQMP identifies that the North Coast Air Basin, in which Monterey County is located, was borderline between attainment and non-attainment of State ozone standards due to the variable meteorological conditions occurring from year to year. However, the California Air Resources Board has designated this air basin as

moderate non-attainment. Therefore, the AQMP requires measures to reduce ozone levels in the District.

The principal strategies for ozone reduction that are relevant to the proposed project are the control of construction dust, the reduction of automobile trips and traffic congestion, the provision of transit and encouragement of bicycle and pedestrian travel.

Regional Transportation Plan

The 2002 Monterey County Regional Transportation Plan (RTP) was adopted by the Transportation Agency for Monterey County (TAMC) on February 27, 2002. The plan provides policy guidelines regarding the planning and programming of transportation related needs, analyzes alternative transportation possibilities, and identifies available funding for transportation projects and programs in Monterey County. The plan identifies planned transportation improvements located adjacent to the Specific Plan project area. Adjacent improvement plans include traffic signals and left-turn pockets for the Russell Road/Van Buren Street intersection, widening of Russell Road from Highway 101 to San Juan Grade Road, intersection widening, alignment, and the addition of signals at the intersection of Russell Road and San Juan Grade Road, and the installations of bike lanes on Espinosa/Russell Road from San Juan Grade Road to State Route 183.

City of Salinas General Plan

Although the Specific Plan areas lies outside the incorporated area of Salinas, future annexation of the Specific Plan area has been discussed between County of Monterey and City of Salinas. In the 1986 Memorandum of Understanding (MOU) between the City of Salinas and Monterey County, the City acknowledged the County's intent to develop Rancho San Juan and agreed that it will not propose annexation or inclusion of the area in its Sphere of Influence before September 30, 2004. The County agreed that Rancho San Juan would be planned and developed to a high standard at least commensurate with similar developments in the City. The County also agreed to continue to advise and receive input form the City on all plans and plan amendments, development proposals and permits, and plans for service in the area.

As stated earlier, many of the proposed infrastructure (e.g. roads and drainage structures) have been designed to meet City of Salinas as well as County design criteria in the event the property is annexed into the City. As a result, this section identifies the aspects of the City's General Plan which includes a general overview of the City of Salinas General Plan with a focus on land use planning and development design issues.

Figure 5.1-1 also illustrates the land use designations of the Salinas General Plan in the vicinity of the proposed Specific Plan. Immediately south of the Specific Plan area and adjacent to Russell Road is low, medium, and high density residential uses. Further south within the City of Salinas is an elementary school and commercial uses.

The City of Salinas General Plan places an extremely high priority on limiting new growth to clearly delineated growth areas to conserve resources. Preservation of prime agricultural land is also a high priority.

The City's General Plan places priority on directing new urban growth into "Future Growth Areas" that, for the most part, are designated for unincorporated areas within the City's Sphere of influence. Future Growth Areas are areas outside the city limits that are designated for urban uses. Annexation of these areas to the City is a pre-requisite to development of designated Future Growth Areas. Future Growth Areas are concentrated to the north and east of the existing city limits. The nearest Future Growth Area to the Specific Plan area extends to the intersection of Russell Road and San Juan Grade Road. Only a small portion of the proposed Specific Plan area, located east of Gavilan Middle School and north of Russell Road is located within the City's Sphere of Influence.

Though the proposed project site is contiguous to the City limits, the Future Growth Areas defined in the City of Salinas General Plan do not include the proposed project site. This fact reflects the City's position that over the next 20 years, the city limits would not be expanded into this area enabling new urban growth. However, the boundary of new urban development (proposed within Future Growth Areas) will shift closer to the project site.

5.1.1.2 HYH Property Project

Existing Land Use

Onsite

As discussed in Chapter 3.2 (Environmental Setting), the majority of the HYH Property consists of agriculture although portions of the property are covered in native vegetation. Two homes occur within the HYH property along the western boundary. One of the homes also has a water tower, a large shed, and several smaller outbuildings.

Surrounding Area

Major land uses surrounding the HYH Property include the Salinas Golf Course and Country Club and a dairy farm on the south, and strawberry fields along portions of the east and western boundaries. Residential areas are located along the west and southwestern boundaries. To the north are areas of open space and agriculture.

Land Use Plans and Policies

The HYH property is subject to the same land use plans and policies identified in Section 5.1.1.1.

5.1.2 THRESHOLDS OF SIGNIFICANCE

Land use impacts would be significant if the proposed project would:

- Conflict or be inconsistent with applicable federal, state, regional or other local agency plans, regulations, or policies;
- Result in substantially incompatible land uses; and/or
- Physically divide an established community.

5.1.3 POTENTIAL IMPACTS

5.1.3.1 Alternative 2

Land Use Compatibility

The proximity of different land uses within the proposed Specific Plan poses the potential for activities associated with adjacent land uses to adversely affect one another. Typical sources of land use compatibility concerns are associated with noise, lighting, public safety, and odors. While the planning effort undertaken to develop the land use plan for the Specific Plan have minimized land use compatibility impacts to the greatest degree possible. Potential sources of conflicts could occur with implementation of the Specific Plan. These activities are discussed below.

Agriculture

As discussed earlier, the Specific Plan encourages agricultural activities to occur within the Specific Plan as an interim use until the land is developed. While this offers an excellent opportunity to maintain productive use of undeveloped property and contribute to the region's agricultural economy, various aspects of agriculture pose potential sources of land use incompatibility. Agricultural operations pose the greatest risk of incompatibility when they occur adjacent to residential uses. Potential sources of compatibility issues at the interface of agriculture and residential areas are related to the following aspects: pesticide application, noise, dust and trespassing.

Some offsite agriculture is located adjacent to the northwestern boundary of the Specific Plan area. Agricultural fields are also located to the west of the Specific Plan but are separated from the Specific Plan boundary by Highway 101. Agriculture is also located to the east of the Specific Plan area, separated by San Juan Grade Road.

A land use compatibility concern with agriculture is the aerial spraying of pesticides, which can drift to residential areas during windy days. As discussed previously, strawberries are the dominant crop grown within the Specific Plan area. The traditional form of farming strawberries involves the application of pesticides by ground crews, not by aerial spraying. Therefore, drifting of pesticides would not be a concern. However, according to the Monterey County

Agricultural Commission, residents living near strawberry fields often complain about the odor associated with pesticides.

Initial preparation of land for strawberries may involve tractors for grading, however the normal operation of strawberry fields does not involve tractors. Therefore, noise and dust impacts from tractor use would be short term and last only for the duration of field grading.

Incompatibility with surrounding agriculture would be minimized by 200-foot buffer required by LU 9.14, as well as notification by the buyer of adjacent agriculture per Right to Farm Act. Compatibility with agriculture within the Specific Plan would be short-term until the Specific Plan is built out.

Golf Course

While golf courses are typically viewed as an amenity to residential areas, golf course maintenance activities within the proposed golf course as well as the existing Salinas Golf and Country Club would generate noise adjacent to nearby residents. As discussed in Chapter 5.6 (Noise), maintenance activities and, lawn mowing in particular, along the golf course could exceed acceptable levels depending on the time of day. If they occur before 6:30 a.m., noise levels could exceed identified thresholds.

The proposed location of the golf course maintenance facility would avoid significant impacts to residential areas. The facility would be located along the western boundary away from proposed residential areas. It would be separated from existing homes by a 30-foot cut slope. As indicated in Chapter 5.6 (Noise), equipment noise levels generated from the maintenance facilities peak activity period would not exceed significant levels.

The lack of proactive mosquito control in golf course lakes could result in high populations of the mosquitoes which would annoy residents at a minimum and allow transport of diseases such as West Nile virus, in the worst case.

Commercial

Both the employment center and the various retail uses within the Specific Plan could adversely affect nearby residential areas. Conflicts related to these activities are associated with several factors including noise from exterior heating, ventilation and air conditioning (HVAC) equipment, loading dock and parking lot lighting.

The location of the proposed employment center would minimize land use conflicts. The employment center would be separated from nearby residential areas by streets to provide physical separation. For the most part, it would not be located near residential areas. Rather, nearby uses would be primarily commercial and park uses. Where it would be located near residential, the residential uses would be high or medium density areas which would not be expected to have as many outdoor activities which may be adversely affected by noise and light.

Commercial, primarily retail uses, within residential areas pose potential conflicts related to noise and lighting. If improperly designed, commercial loading docks may expose residents to early morning truck and loading activities. Similarly, unshielded lights and HVAC equipment noise could adversely affect adjacent residential areas.

Several elements of the proposed Specific Plan would minimize potential impacts from commercial uses within residential areas. Most notably, the majority of the commercial uses have been directed to the Town Center in order to centralize these activities. Also, neighborhood commercial areas would typically be located at the intersection of roads to minimize common boundaries with residential areas. The Specific Plan also requires that all HVAC exposed to residential areas be screened from view which would help reduce noise. All lighting would conform to the standards established by the County of Monterey's Lighting and Night Time Sky standards. In addition, the Specific Plan identifies lighting requirements which would prohibit building mounted lights above the first floor as well as fluorescent, high pressure sodium, floodlights and search lights. Non-glare bulbs and fixtures would be required.

Schools

Although schools are commonly found in residential neighborhoods, localized conflicts can occur between residential areas and schools. The common conflicts relate to playground noise and student drop traffic. Playground noise is generally limited to elementary schools while student drop off traffic is associated with middle and high schools as well as elementary schools. The ultimate site planning for the schools would determine the potential for conflict. Location of playgrounds and drop off points would reduce potential conflicts.

Wastewater Treatment

Odor and noise associated with the proposed wastewater treatment plant could potentially impact residential areas. Odors arise from the treatment process while noise impacts are associated with the equipment used in the treatment process.

As described in Chapter 5.7 (Air Quality), odors may enter the local airstream during ordinary use or from accidental spills. As described in Chapter 5.6 (Noise), the primary sources of noise associated with the facility would be pumps, processing machinery and emergency generators. Noise generated by this equipment could cause noise levels in adjacent residential areas to exceed the desired levels. Therefore, the wastewater treatment plant could pose a significant land use conflict with existing and proposed residential development.

Potential conflicts could also arise due to uncovered reclaimed water storage ponds. As with the golf course lakes, mosquitoes could be attracted by the stagnant water.

Land Use Policy Conformance

County of Monterey General Plan (Adopted) and Greater Salinas Area Plan

Overall Consistency

In general, the proposed Specific Plan would not only be consistent with the General Plan and GSAP but would implement the overall goals and objectives envisioned by these documents for the subject property. A discussion of the major issues identified in Section 5.1.1 follows. Inconsistencies between the Specific Plan and General Plan are summarized at the end of this section. Where appropriate language to amend the General Plan is suggested in Appendix C. The final GPA language will be provided in a separate document prepared by the County.

Conservation

The proposed project would achieve many of the goals related to conservation through implementation of the Biological Mitigation Program included in the Specific Plan. This Program would retain approximately 600 acres in permanent natural open space including grassland, wetlands and oak woodland habitat and the wildlife these habitats support. The major historic resource, the Hebert Ranch, would be retained in open space.

Water supply and quality would be protected by a number of features identified in the Specific Plan. Conservation and monitoring of groundwater extraction combined with the use of reclaimed water would minimize overdrafting on the underlying groundwater table. Water conservation on individual lots such as water-conserving plumbing would reduce groundwater demand. Retained natural drainages supplemented by retention/detention basins included in the proposed drainage system would naturally filter out urban runoff pollutants such as oil, grease, litter and pesticides.

The project would directly and indirectly foster agriculture in other areas of the County. The proposed project would implement the ADC concept which focuses development into specific areas to allow for large areas of agricultural lands to remain available for agriculture. The eastern portion of the property would be designated as Future Development/Interim Agriculture. Agriculture would be allowed to continue on the subject property. Agricultural may also continue over 543.3 acres of the subject property until the future development occurs.

The Specific Plan is designed to minimize impacts to ridgelines and steep slopes. To further reduce topographic impacts, contour grading is encouraged.

Although the Specific Plan would allow interim agriculture, development of the subject property would ultimately result in the loss of approximately 994 acres of Important Farmland. This loss was anticipated by the placement of the property in an ADC as part of the General Plan. Thus, the loss would not conflict with the goal of preserving agriculture. (Goal 30 of the General Plan and Policy 26.1.4.1 of the GSAP)

Land Use

Overall, the proposed Specific Plan would be consistent with the goals of the General Plan, GSAP and ADC. The proposed land use plan is designed to provide a variety of housing types integrated with retail, employment and recreation opportunities. Pursuant to the ADC, the development includes high densities of residential development. The residential development would be situated around a town center where retail, services and employment opportunities would be within walking distance to encourage pedestrian movement.

The GSAP calls for densities ranging from 0.20 dwelling units per acre to 20 units per acre (high density). The proposed development would create residential densities ranging from 0.5 dwelling units per acre to 20 dwelling units per acre which would be consistent with the density goals of the GSAP.

The proposed neighborhood parks, golf course and trails through the open space would provide a broad range of recreation opportunities for future residents.

The area proposed for the employment center is designated for commercial use. Development of the Employment Center would not be consistent with the commercial designation. Although the location may not be the same, the Specific Plan would include a variety of commercial uses in the proposed Town Center. Although not located near Highway 101, these commercial uses would be readily accessible from the highway. Thus, allowing them to serve future residents of the Specific Plan as well as motorists on Highway 101. Thus, the proposed Specific Plan would not result in a General Plan inconsistency. (Policy 28.1.1.2 of the GSAP)

The GSAP encourages commercial building intensity to not exceed a building height of 35 feet, or a lot coverage of 50 percent. The proposed town center would allow building heights to reach 65 feet. In addition, lot coverages may exceed 50 percent due to the goal of the Specific Plan of minimizing the area devoted to surface parking. As the potential building height and coverage conflicts in the town center would allow concentration of a mix of land uses including commercial and residential, the conflicts with the GSAP would not be considered significant (Area Land Use Plan of the GSAP, page 91).

While the Specific Plan discourages development on steep slopes, it does not prohibit it. Consequently, development could disturb onsite ridgelines and steep slopes. However, the site does not possess any ridgelines which meet the General Plan definition for significant ridgelines. (Policies 26.1.9 and 10 of the General Plan).

Up to 5,500 residential units are allowed under the GSAP within the Rancho San Juan ADC. The proposed project would only allow up to 4,000 residential units in order to protect the local groundwater supply. If new sources of water become available, development within the Future Development Area could achieve the 5,500-unit goal. Thus, the proposed project would not preclude achieving the target of 5,500 residential units within the Specific Plan area. (Area Land Use Plan of the GSAP, page 95)

The ADC calls for the designation of 10 to 15 acres for a community facility which is envisioned to include uses such as a “major religious institution”. While the proposed Specific Plan would not set aside a designated site for a community facility, it would allow churches throughout the plan area in specific zones. Therefore, the Specific Plan would not significantly conflict with the ADC. (Principle 45 of the ADC)

Review of developments within Rancho San Juan is intended to be subject to a design review committee established for the Specific Plan area. The proposed Specific Plan would not create a design review committee. However, it would establish detailed architectural and site design guidelines to govern future development. Thus, the Specific Plan would conform in concept with the ADC. (Principles 73 and 74 of the ADC)

Public Safety

The proposed Specific Plan calls for drainage improvements which would not only protect onsite development from flooding but would substantially reduce existing flooding experienced by residential areas to the south of the Specific Plan area. A series of retention/detention basins would be constructed to reduce the existing velocity of surface runoff occurring on the property. Runoff quantities would also be reduced by the use of natural swales along roadways to encourage surface water to be absorbed into the groundwater table.

Fire management would be undertaken on development areas adjacent to the open space system to protect residents from brush fires originating in this area.

Mosquito abatement would be carried out in standing water bodies.

Public Services

The proposed Specific Plan includes the construction of public services to meet the needs of the development including elementary and middle schools, a fire station, and a wastewater treatment facility. In addition, backbone distribution systems for water, sewer, electricity, natural gas, and communications would be constructed to serve future development areas.

The ADC guidelines call for the establishment of a Community Services District or County Service Area to oversee the operation and maintenance of infrastructure within Rancho San Juan. It further states that these entities shall be “dependent” districts with the County Board of Supervisors acting as the Board of Directors. Because of the unique sustainable aspects associated with the proposed Specific Plan, the entity overseeing the infrastructure may not be totally dependent due to the roles associated with the management entities established for Rancho San Juan. Specifically, the water, energy and agricultural managers established to monitor operations associated with these issues may require independent authority to ensure successful implementation of sustainable features. This would not create a significant conflict with the ADC. (Guideline 16 of the ADC)

Transportation

The Specific Plan includes several features which would further the transportation goals of the planning documents which apply to the property. In the more traditional sense, the Specific Plan contains a backbone roadway network designed to meet the needs of the planned development. Of particular note is the concentric design of roadways around the town center with a central roundabout which would serve as the hub of the town center.

The project was designed with substantial consideration given to pedestrians. The highest concentrations of residential development have been placed within walking distance of the town center to allow people to walk rather than drive to obtain everyday goods and services. Key connections would be made to surrounding regional roads including Highway 101, Russell Road, San Juan Grade Road, Main Street and Harrison Road.

The GSAP calls for two interchanges with Highway 101 within the Rancho San Juan ADC. However, the proposed project only includes one interchange. Should Caltrans desire a second interchange, it could be built as part of subsequent improvements to Highway 101. Thus, no significant conflict would occur. (Policy 40.1.1.1 of the GSAP)

Inconsistencies

While the proposed Specific Plan is generally consistent with the General Plan, GSAP and ADC, there are specific goals, objectives or policies with which the Specific Plan could conflict. Potential conflicts are identified in Appendix C by a shading overlay in the second column where a discussion of the potential conflicts is provided. The following discussion summarizes the conclusions of Appendix C; the reader is referred to this Appendix more details.

Land Use

The GSAP calls for the area along the north side of Russell Road to be developed as a community park. While the proposed Specific Plan calls for a 10-acre community park within this land area, the proposed size would fall short of the 20-acre community park envisioned by the GSAP. (Policy 51.4.1.1 of the GSAP)

The GSAP establishes a maximum building coverage of 50 percent and a maximum building height of 35 feet for commercial buildings and maximum building height of 35 to 75 feet for industrial buildings. As the proposed Specific Plan establishes no maximum building coverage standard, and building height limits are 65 feet for commercial buildings and 50 feet for industrial buildings, development within the Neighborhood, Town, and Employment Centers may exceed the GSAP maximum standards. Due to the emphasis on encouraging alternative transportation and walking to work, not as much space must be devoted to parking. However, the building coverage and heights in the proposed Specific Plan could increase and significantly impact the GSAP coverage guidelines. (Area Land Use Plan of the GSAP, page 91)

The anticipated development phasing of the proposed Rancho San Juan Specific Plan area would not conform with the phasing identified in the ADC Guidelines. These guidelines encourage development to begin around the employment center and radiate out from there. As discussed

earlier, the HYH property is anticipated to represent the first phase of development within Rancho San Juan. As the HYH property lies approximately 0.3 mile east of the Employment Center, the development progression would not conform to the ADC Guidelines. Unless necessary services are provided to meet the needs of development within the HYH property, the Specific Plan would significantly conflict with the ADC. (Guideline 6 of the ADC)

The proposed residential densities would not fully reflect the densities illustrated on Figure 13 of the ADC. Figure 13 assigns higher densities to the flatland areas and lower densities to the hillsides. The proposed Specific Plan would allow densities up to 5.1 units per acre on the hillside areas within the HYH property. (Guideline 6 of the ADC)

The ADC calls for higher density residential development to be located near open space areas. In order to achieve the sustainable goals of the project, higher density residential uses are situated around the town center and employment center to maximize opportunities to walk to work and shopping. Thus, the SPC would conflict with the goal of locating high density development adjacent to open space. (Principle 27 of the ADC)

The GSAP anticipates a total of 500 acres within the Rancho San Juan ADC would be devoted to industrial development (pg. 86 of GSAP). The proposed Specific Plan does not achieve this total. The Specific Plan establishes a total of 154 acres within the Employment Center which would be available for industrial development. As indicated in Table 5.1-2, market studies performed as part of the Specific Plan preparation indicate that the property cannot support 500 acres of industrial development. Therefore, the impact of providing less than 500 acres of industrial area would be significant.

Public Services

The ADC calls for water to be provided from onsite wells by a public or private water utility or the equivalent. If the Specific Plan area is served by an existing provider, it may not be feasible or practical to limit water supply to onsite wells. This would conflict with the ADC. (Principle 65 of the ADC).

Monterey County Growth Management PolicyThe proposed Specific Plan would be overall consistent with the Growth Management Policy. The majority of the Specific Plan area is located within an ADC, the balance of the property within the Specific Plan area has already been partially developed and/or lies adjacent to other development. The necessary services are readily available to the Specific Plan area or would be provided as part of the development process.

County of Monterey General Plan (Proposed)

Overall Consistency

As with the adopted General Plan, the proposed Specific Plan would implement the primary goals specified by the General Plan Update for the Rancho San Juan Community Area (formerly ADC). The Specific Plan is designed to implement the Community Areas Land Group definition applied to the site and is consistent with the content requirements for such a plan. The Specific

Plan includes a comprehensive plan for development that provides for a mix of land uses and provision of an array of public services and utilities.

The proposed project would meet the overall goal of LU-2.4.1.a and LU-3.14 as the Specific Plan is characterized by moderate and higher density residential, commercial, and industrial development.

The proposed Specific Plan would include an infrastructure improvement funding and construction program required by LU-3.7.

The Specific Plan would further the majority of the criteria established by LU-3.9. The Specific Plan contains a mixture of land uses and a diversity of housing types. The land use plan balances residential, retail, employment, parks and open space. Accessory development units are proposed as part of the Specific Plan. The proposed circulation system is designed to encourage pedestrian and bicycles. Adequate emergency access would be accommodated. Parking facilities would encourage shared use and transit would be promoted. The Specific Plan would require that the necessary infrastructure be in place concurrent with need. Water and energy conservation would be promoted.

The Specific Plan would be consistent with LU-9.1 because accessory dwelling units would be allowed within the Specific Plan area. The Specific Plan would also be consistent with LU-9.18 because the golf course would be a public course and would be considered a recreational use within the Specific Plan area.

The proposed Specific Plan may not meet the average agricultural buffer of 200 feet required by LU 9.14 within the Specific Plan area. As indicated in Chapter 5.11 (Agriculture), agricultural buffers are not considered necessary within the Specific Plan area because the General Plan has identified the Specific Plan area as an area to be developed rather than farmed. Future uses on the perimeter of the Specific Plan which would lie adjacent to offsite agricultural activities would be subject to LU 9.14 and would be required to establish appropriate buffers.

Inconsistencies

The proposed Specific Plan would not meet the minimum residential density target of not less than 7 dwelling units per acre (dwelling units per acre) within Rancho San Juan. The proposed project includes residential development at densities that range from 0.5 to 20 dwelling units per acre. The proposed Residential Estate (0.5-1.0 dwelling units per acre), Residential Low-1 (1.0-3.0 dwelling units per acre), and Residential Low-2 (3.0-5.0 dwelling units per acre) designation densities fall below the minimum 7 dwelling units per acre threshold. Development per the Residential Medium-1 (5.0-9.0 dwelling units per acre) could also occur at below threshold density. In addition, the overall density of the Specific Plan would not achieve the goal of at least 50 percent of the residential areas having an average density of 10 units per acre or higher. Only 36 percent of the residential units would result in a density of 10 units per acre or larger. This would represent a significant conflict with the proposed General Plan. (Policy LU-3.8 and LU-3.9(d) of the proposed General Plan)

Pursuant to LU-3.9 (f) , in order to compensate for the densities below 7 dwelling units per acre, the proposed General Plan would require agricultural and open space mitigation fees or participation in a purchase/transfer of development rights program to offset the inefficient use of land resources. If LU-3.9 is adopted in its present form, then the payment of these fees would allow the proposed project to conform with the proposed LU-3.8 and LU-3.9(d).

As the proposed Specific Plan would allow limited grading on slopes greater than 30 percent, the project would not be consistent with LU 9.17 which prohibits grading of slopes over 30 percent.

The project proposes to construct a local wastewater treatment plant, therefore the proposed Specific Plan would be inconsistent with the policy encouraging wastewater and water be supplied by a regional system. While the project could be connected to a regional wastewater treatment facility, such an action would thwart efforts to achieve a sustainable community. In particular, sending wastewater to a regional facility would likely preclude plans to reduce the demand placed on local groundwater by reusing wastewater for landscape irrigation and agriculture. As discussed in Chapter 5.10 (Water Resources), reclaimed water is critical to the proposed water balance. If regional wastewater treatment were required for the project, regional water supply would also be necessary to take advantage of the offset to regional groundwater use achieved through regional reclaimed water usage.

County of Monterey Zoning Ordinance

The Specific Plan would implement the Monterey County zoning designations for the project site. The Monterey County Zoning Ordinance guides, controls, and regulates development within the County consistent with the Monterey County General Plan land use designations and any area plans, specific plans and/or polices and standards adopted by the County. However, in cases where a specific plan is used to implement the Monterey County General Plan, the specific plan may contain its own development standards to regulate land uses within the plan area. Those development standards may replace the standards contained in the Monterey County Zoning Ordinance. Such is the case with the proposed Specific Plan.

The Specific Plan contains development regulations that would be applied within the project area. These regulations are proposed because the Specific Plan includes land uses (such as Mixed Use) and infrastructure elements that have no implementing regulations in the Monterey County Zoning Ordinance and/or because modifications of existing zoning standards are required to implement sustainable design aspects of the Specific Plan. In cases where the Monterey County Zoning Ordinance and the Specific Plan development standards are in conflict, the standards in the Specific Plan shall prevail. In cases where the Specific Plan does not provide specific development standards, the regulations and procedures of the Monterey County Zoning Ordinance shall apply.

The Specific Plan includes development standards that regulate proposed land uses, signage, parking, loading, transit, public art, etc. It also includes a Residential Pattern Book. The Residential Pattern Book provides specific development standards for each building type proposed. Chapters on design standards and landscape architecture design are also provided, as

is a full range of roadway design standards. In total, the development regulations, Residential Pattern Book, design standards, landscape architecture, and roadway design standards address all of the major development components included in the Specific Plan. Since these standards replace those in the Monterey County Zoning Ordinance, major conflicts between the Specific Plan and the Monterey County Zoning Ordinance are not anticipated.

It should be noted that the Specific Plan would involve interim zoning (as discussed in Section 4.3.1.2 (Project Description) of the EIR and Chapter 3.8 and 7.1.1 of the Specific Plan). The Specific Plan would allow for existing zoning to remain in effect until final subdivision maps are recorded, except as may be provided by approved development agreement. This interim zoning would reflect current zoning, and would not conflict with the Monterey County Zoning Ordinance.

Monterey County Water Resources Agency Ordinance 3539

This ordinance requires water conservation and a reduction in water waste. Water conservation and reduction in water waste would be achieved in the Specific Plan area in several ways. Relatively simple plumbing fixtures which are currently available including low-flow showerheads and toilets would be used, as well as water-conserving irrigation equipment and the use of drought-tolerant landscaping. These physical techniques would be combined with education of new residents and businesses on the importance of water conservation through a proactive outreach information program.

Monterey County Ordinance 4037

Ordinance 4037 restricts the use of groundwater on adjacent property. The proposed water balance strategy for the project relies on the groundwater supply beneath the entire Specific Plan area. Therefore individual developments within the Specific Plan area could rely on groundwater located outside of their immediate ownership. This would conflict with Ordinance 4037.

County of Monterey Inclusionary Housing Program

The Specific Plan includes a complete Affordable Housing Program. It requires that at least 20 percent (800 units) of the total 4,000 units be affordable to very low- to low- and moderate-income households. This Program would meet the requirements of the County's Inclusionary Housing Program which requires that 20 percent of all units in projects of 11 or more units be made available. The Specific Plan would therefore be consistent with the County's inclusionary housing requirements.

Air Quality Management Plan (AQMP)

One of the fundamental design criteria in the Specific Plan is to reduce automobile trips through appropriate land use planning and through promoting pedestrian and bicycle travel. The Specific Plan would include a transit center and development intensities that can support use of alternative transportation and mass transit. Extensive provisions have been made for pedestrian and bicycle access. Mixed-use development is included wherein many of the needs of local residents can be met within walking distance of residences. In short, the project incorporates a

number of the principal strategies for reducing air emissions. The project would be consistent with the AQMP from a design perspective.

Consistency of the residential component of the Specific Plan with the cumulative air quality projections made in the AQMP is dependent on the proposed project's consistency with AMBAG's regional population projections. A written request was sent to AMBAG to conduct a consistency evaluation of the project. In order to project the population of the project, AMBAG used the average persons per household of 2.95, which is the average for the unincorporated areas of Monterey County. An assumption was made that the HYH portion of the Specific Plan area, consisting of approximately 1,077 housing units (or a 3,403 person population increase at 3.16 persons per dwelling unit) would be constructed prior to 2010. This population increase would be consistent with AMBAG population projections for the County for the year 2010, and therefore, the HYH portion of the Specific Plan would be consistent with the AQMP. AMBAG also determined that build out of the remaining portion of Specific Plan (approximately 2,923 dwelling units) would result in population growth that is within population projections made for the year 2015. Hence, build out of the remaining portions of the Specific Plan will be consistent with the AQMP for the year 2015. Overall, AMBAG predicts build out of the entire Specific Plan is anticipated to generate population growth of about 11,343 persons. This is less than AMBAG's projected countywide population increase of about 14,954 for the year 2015. Therefore, AMBAG has found the entire Specific Plan project to be consistent with the AQMP for the year 2015. It should be noted that the County of Monterey has determined that the persons per household within the Specific Plan area would be 3.16. Using the higher 3.16 persons per household, HYH would result in a population increase of 3,403 persons, and total buildout population of 12,640 persons, which would still be below the projected Countywide population increase of 14,954 for the year 2015.

A written request was also sent to the MBUAPCD to request a review of the proposed 150-room hotel with the AQMP. The MBUAPCD responded in writing that this element is consistent with the AQMP.

The request made to the MBUAPCD did not include the proposed Inn, which consists of 50 rooms. As of April 30, 2003, MBUAPCD data indicates that an allocation of about 170 hotel rooms remains before the total number of planned or constructed units exceeds projections made in the AQMP. The additional 50 units are within this remaining 150-room allocation and therefore are also assumed to be consistent with the AQMP.

Regional Transportation Plan

Nothing in the project design conflicts with the transportation projects identified in the RTP. The Caltrans proposed Highway 101 Prunedale Bypass is one of the major projects included in the RTP. The Specific Plan would include a land use plan alternative that fully addresses how the bypass project would affect development of the Specific Plan area. As such, the Specific Plan proposes development that can accommodate this planned transportation improvement.

Several other transportation improvements proposed by the County are planned in the immediate project area including:

- Russell Road-Van Buren Street Intersection – installation of traffic signals and left-turn pockets;
- San Juan Grade Road-Russell Road – intersection widening, alignment, and addition of signals;
- Russell Road Widening – widening of Russell Road from Highway 101 to San Juan Grade Road; and
- Espinosa-Russell Road Bike Lanes - Install bike lanes on Espinosa/Russell Road from San Juan Grade Road to State Route 183.

Of these, TAMC considers the first two to be “constrained”, meaning that the projects can be constructed with existing and projected future funding sources, in these cases over the next two to ten years. Funding for the third and fourth projects are “unconstrained” meaning the funds have not been identified for their implementation within the next 20 years.

The proposed project would not preclude these projects from being implemented. Therefore, it is considered to be consistent with the RTP. In its response to the Notice of Preparation of this EIR, TAMC noted that the County’s proposed plans for an interchange on Highway 101 providing access to the Specific Plan area would need to be coordinated between the County, Caltrans, and TAMC.

Chapter 5.2, Traffic and Circulation, includes a full description of traffic and circulation plans and improvements that are likely to be required as part of the Specific Plan implementation process. Traffic impact fees will be collected prior to the issuance of building permits for projects proposed within the Specific Plan area. Some of the impact fees would likely be used to fund the transportation projects planned for the area. Therefore, the proposed project would be consistent with the RTP.

City of Salinas General Plan

The portion of the City’s General Plan which is most closely related to the proposed project is the issues associated with the Future Growth Areas identified in the General Plan. One of the underlying goals for development within these areas is the implementation of sustainable development principles. At the most comprehensive level, the introduction to the Land Use Plan section of the Land Use Element states:

To minimize the amount of agricultural land lost to urban development and create a livable community, New Urbanism principles were used to design a land use plan that is compact and pedestrian-friendly, with a mixture of higher density uses surrounding activity centers/neighborhood focal points. Higher density residential uses surround retail, recreational, and governmental uses in the Future Growth Area, and all of these core activity centers are connected with pedestrian,

bicycle, and transit routes to help reduce the number of vehicle trips generated by new development.

Additional examples from various sections of the City's General Plan that reinforce this design principal approach include:

Future growth is visualized in a compact form, that is pedestrian and transit friendly, with activity nodes located throughout the Future Growth Area. (Land Use Element introduction)

Higher density uses, both residential and non-residential, are concentrated around activity centers within the Future Growth Area to implement New Urbanism principles and reduce vehicle trips generated by the new development by encouraging the use of transit and other non-automobile means of transportation. (Land Use Element, Land Use Classification System introduction)

This (Mixed-Use) category is extremely important for achieving the Salinas of the future. The Mixed-Use category is designated in areas where a vibrant combination of residential and non-residential uses is desired, either to create New Urbanism activity centers in the Future Growth Area or to help revitalize or redevelop the Focused Growth Areas. (Land Use Element, Land Use Classification introduction)

Roadway category descriptions are designed to create pedestrian friendly environment consistent with New Urbanism principles contained in this General Plan. (Circulation Element, Future Growth Area Roadways)

Many of the goals and policies of the Community Design Element for development within Focused Growth Areas also reflect the best management practices for development design.

The City's General Plan states:

Prior to approving development proposals within the Future Growth Area, developers will need to prepare Specific Plans. This will allow for a comprehensive planning approach that implements the New Urbanism principles described throughout this General Plan. (Land Use Element, Specific Plans description).

The proposed Specific Plan would be consistent with the goals of the City's General Plan for Future Growth Areas as it incorporates the sustainable approaches described for Future Growth Areas.

Division of Established Communities

Implementation of the proposed Specific Plan would not result in a division of an existing community. The Specific Plan lies on the north side of the City of Salinas. Development of the

Specific Plan would represent a natural extension of the development which characterizes Salinas.

5.1.3.2 Alternative 4E

Land Use Compatibility

As with Alternative 2, implementation of Alternative 4E could potentially result in land use compatibility impacts related to agriculture, commercial, golf course maintenance, wastewater treatment, and existing school activities.

The major difference between the two plans with respect to land use compatibility is related to the construction of the Highway 101 bypass. This roadway would introduce high levels of traffic noise into an area which would be preserved as open space under Alternative 2. Highway traffic noise would impact the various residential areas situated around the propose route.

Land Use Policy Conformance

The relationship of Alternative 4E to the various state and local policies which govern development of the Specific Plan area would be essentially the same as Alternative 2. The only major difference would be related to Conservation goals of the County's General Plan. Construction of the Highway 101 bypass would bisect the valley which would be preserved in open space as part of Alternative 2. However, it should be noted that the route and construction would be undertaken by Caltrans independent of the proposed project. Thus, Alternative 4E would not create the inconsistencies with the General Plans open space goal but rather would accommodate the alignment if constructed.

Division of Established Communities

Implementation of the proposed Specific Plan pursuant to Alternative 4E would not result in a division of an existing community. The Specific Plan lies on the north side of the City of Salinas. Development of the Specific Plan would represent a natural extension of the development which characterizes Salinas.

5.1.3.3 HYH Property

Land Use Compatibility

Potential land use compatibility issues associated with development within the HYH property mirror those of the Specific Plan. As the proposed HYH development contains a greater level of detail regarding the location and placement of land uses allowed under the Specific Plan, a more detailed analysis of the potential land use compatibility can be undertaken.

Agriculture

Development within the HYH Property would likely be exposed to short-term agriculture until the property fully develops. Much of the HYH Property is already engaged in agriculture (primarily strawberries). Agriculture may continue to occur on land outside the HYH Property.

Golf Course

As discussed with the Specific Plan, golf course maintenance associated with the proposed golf course as well as the Salinas Golf and Country Club maintenance facility have the potential to generate noise impacts on surrounding houses when equipment starts up in the early morning hours. As indicated in Chapter 5.6 (Noise), equipment noise levels generated from the maintenance facilities peak activity period could not exceed thresholds if initiated before 7:00 a.m.

Commercial

As with the Specific Plan, neighborhood retail centers could result in impacts related to noise from exterior heating, ventilation and air condition (HVAC) equipment loading dock and parking lot lighting.

Conformance with Specific Plan would reduce impacts from commercial activities. Several elements of the proposed Specific Plan would minimize potential impacts from commercial uses within residential areas. The Specific Plan requires that all HVAC exposed to residential areas be screened from view which would help reduce noise. All lighting would conform to the standards established by the County of Monterey's Lighting and Night Time Sky standards. In addition, the Specific Plan identifies lighting requirements which would prohibit building mounted lights above the first floor as well as fluorescent, high pressure sodium, floodlights and search lights. Non-glare bulbs and fixtures would be required.

Schools

No schools would be located within the HYH property. Thus, no land use conflicts would occur.

Wastewater Treatment

The HYH Property proposes to construct a wastewater treatment facility which would serve its needs as well as the ultimate demand generated by the Specific Plan. The facility would be located along the northwestern boundary of the Specific Plan, approximately 1,200 feet from proposed residential development and 350 feet from existing residences.

As with the Specific Plan, wastewater treatment may generate odors, noise levels and mosquito infestations which could adversely affect surrounding residents.

As described in Chapter 5.6 (Noise), noise generating equipment could cause surrounding noise levels to exceed desirable levels and result in a significant land use conflict. As described in Chapter 5.7 (Air Quality), odors may enter the local airstream during ordinary use or from accidental spills.

Potential conflicts could also arise due to uncovered water storage ponds. As with the golf course lakes, mosquitoes could be attracted by the stagnant water.

Land Use Policy Conformance

As the HYH Property project would implement the Rancho San Juan Specific Plan, the land use policy conformance issues would be essentially the same.

County of Monterey General Plan (Adopted) and Greater Salinas Area Plan

Overall Consistency

In general, the proposed development plans for the HYH Property would not only be consistent with the GSAP and Rancho San Juan ADC Concentration but would implement the overall goals and objectives envisioned by these documents for the subject property.

Conservation

The proposed development would preserve open space pursuant to the Specific Plan. Water supply and quality would be protected by implementing, to the extent feasible, one or more of the sustainability features pursuant to the Specific Plan. Reclaimed water would be used on the golf course to reduce demand placed on groundwater. Water conservation on individual lots such as water-conserving plumbing would reduce groundwater demand. Retained natural drainages supplemented by natural roadway swales, biofilters and retention/detention basins included in the proposed drainage system would naturally filter out urban runoff pollutants such as oil, grease, litter and pesticides. A Golf Course Management Plan would be created and implemented to reduce impacts of herbicides and pesticides used in maintaining the golf course.

The proposed grading plan for the HYH Property would involve grading on slopes which would exceed 30 percent. Consequently, development would disturb onsite ridgelines and steep slopes. However, as indicated earlier, the property does not possess any ridgelines which meet the General Plan definition for significant ridgelines. (Policies 26.1.9 and 10 of the General Plan). Thus, the proposed project would not conflict with the goal of preserving significant ridgelines.

Land Use

Overall, the proposed development would be generally consistent with the goals of the General Plan, GSAP and ADC. The development would include a variety of housing types integrated with retail, employment and recreation opportunities. The golf course and associated resort would create both jobs and recreational opportunities. A total of up to 1,077 residential units would be constructed.

The GSAP calls for densities ranging from 0.2 to 20 units per acre. The proposed development would create residential densities ranging from 0.5 to 20 dwelling units per acre which would be consistent with the density goals of the GSAP.

Public Safety

The proposed development would include drainage improvements which would not only protect onsite development from flooding but would substantially reduce existing flooding experienced by residential areas to the south of the Specific Plan area. A series of retention/detention basins would be constructed to reduce the existing velocity of surface runoff occurring on the property. Fire management would be undertaken on development areas adjacent to the open space system to protect residents from brush fires originating in this area.

Mosquito abatement programs would be conducted on affected areas.

Public Services

The proposed development would involve the construction of a wastewater treatment plant and a water distribution system to meet the needs of the development. However, no public schools, police or fire facilities would be constructed as part of the project. Although a future fire station would be provided, in addition, backbone distribution systems for electricity, natural gas, and communications would be constructed to serve future development.

Transportation

The development would construct the backbone roadway network identified by the Specific Plan which cross through the HYH Property project. In addition, it would construct the offsite portion of Stirling Road to provide one of the access points identified in the Specific Plan. It would also improve an existing connection to Harrison Road, to providing interim secondary access.

Inconsistencies

While the proposed HYH development would be generally consistent with the General Plan, GSAP and ADC, there are specific goals, objectives or policies with which the development as with the Specific Plan could conflict.

Land Use

Development of the HYH Property site as the initial phase of the Specific Plan would not conform with the phasing identified in the ADC Guidelines. These guidelines encourage development to begin around the employment center and radiate out from there. As the HYH Property site lies approximately 0.3 mile east of the employment center, the development progression would not conform to the ADC Guidelines. (Guideline 6 of the ADC)

The proposed residential densities would not fully reflect the densities illustrated on Figure 13 of the ADC. Figure 13 assigns higher densities to the flatland areas and lower densities to the hillsides. The proposed HYH development would result in densities of up to 5.1 units per acre on the hillside areas within the HYH Property. (Guideline 6 of the ADC)

The GSAP establishes a maximum building coverage of 50 percent and building height of 35 to 75 feet for commercial areas. As the HYH Property project establishes no maximum building coverage standard, and building heights may be 50 feet, development within the Neighborhood Center may exceed to GSAP maximum standard. Due to the emphasis on encouraging

alternative transportation and walking to work, not as much space must be devoted to parking. However, the building coverage and building height in the proposed HYH Property project could increase and significantly impact the GSAP coverage guidelines. (Area Land Use Plan of the GSAP, page 91)

Public Services

The proposed development would involve the construction of a wastewater treatment plant and a water distribution system to meet the needs of the development. However, no public schools, police or fire facilities would be constructed as part of the project. As discussed in Chapter 5.12 (Public Services and Utilities), the development of the HYH property without concurrent construction of school, police and fire facilities could result in a short-term impact until these services are constructed.

Transportation

While the HYH development would include a roadway network designed to accommodate traffic generated by the proposed uses, the sustainable features integrated into the proposed roadway system would not strictly adhere to road classifications identified in the General Plan. Features such as progressive roadway narrowing and roundabouts are not part of the General Plan. (Policy 39.2.1 of the General Plan)

Monterey County Growth Management Policy

The proposed HYH Property project would be overall consistent with the Growth Management Policy. The entire HYH Property is located within an ADC, which as discussed above is designated for urban development. The necessary services are readily available to the Specific Plan area or would be provided as part of the development process.

County of Monterey General Plan (Proposed)

Overall Consistency

As with the Specific Plan, the proposed HYH development would implement the primary goals specified by the General Plan Update for the Rancho San Juan Community Area (formerly ADC).

Inconsistencies

As with the proposed Specific Plan, the HYH development would not meet the minimum residential density target of not less than 7 dwelling units per acre. The proposed development would include residential densities of 0.5 dwelling units per acre and 20 dwelling units per acre. In addition, the overall density would not achieve the goal of at least 50 percent of the residential areas having an average density of 10 units per acre or higher. Only 29 percent of the residential units would result in a density of 10 units per acre or larger. (Policies LU-3.8 and LU-3.9(d) of the proposed General Plan)

Pursuant to LU 3.9(f), in order to compensate for the densities below 7 dwelling units per acre, the proposed General Plan would require agricultural and open space mitigation fees or participation in a purchase/transfer of development rights program to offset the inefficient use of land resources. Payment of these fees would allow the proposed development to conform with the proposed LU 3.8 and LU-3.9(d).

As the proposed development would develop slopes over 30 percent, the project would not be consistent with LU 9.17 which prohibits grading of slopes over 30 percent.

As the development would rely on an onsite wastewater treatment plant and well, it would be inconsistent with the policy encouraging wastewater and water be supplied by a regional system.

County of Monterey Zoning Ordinance

As the HYH development would be consistent with the land use development regulations of the Specific Plan which conforms with the Monterey County Zoning Ordinance, the development would be consistent with the Zoning Ordinance.

Monterey County Water Resources Agency Ordinance 3539

Water conservation and reduction in water waste would be implemented as part of the HYH development in accordance with requirements contained in the Specific Plan. Thus, the project would be consistent with this ordinance.

Monterey County Ordinance 4037

As discussed in Chapter 5.10 (Water Resources), the HYH Property project would be served by a water district, which uses ground water. The water district would operate wells on site; therefore, the proposed project would not conflict with Ordinance 4037.

County of Monterey Inclusionary Housing Program

The HYH development would implement the inclusionary housing program contained in the Specific Plan. As the Specific Plan conforms with the County's inclusionary housing program, the HYH development would implement the goals of this program.

Air Quality Management Plan

An assumption was made that the HYH Property portion of the Specific Plan area, consisting of approximately 1,077 housing units (or a 2,893 person population increase at 2.95 persons per dwelling unit) would be constructed prior to 2010. This population increase would be consistent with AMBAG population projections for the County for the year 2010, and therefore, the HYH portion of the Specific Plan would be consistent with the AQMP. The HYH Property project would still be consistent with the AQMP if the figure of 3.16 persons per dwelling unit is used as it is in the Specific Plan.

Regional Transportation Plan

Nothing in the proposed HYH development plans would conflict with the transportation projects identified in the RTP.

City of Salinas General Plan

As the HYH Property project would implement the Specific Plan which was found to be consistent with the Salinas General Plan, the HYH development would not conflict with the City's General Plan.

Division of Established Communities

As implementation of the proposed Specific Plan would not result in a division of an existing community; development of the HYH Property would not divide an existing community.

5.1.4 MITIGATION MEASURES

The following section contains a summary statement for each significant land use impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.1.4.1 Alternative 2

Impact 5.1-1: Result in substantially incompatible land uses relating to agriculture. (Direct)

Implementation of Alternative 2 would result in the development of residential uses could put pressure on agricultural operations around the Specific Plan area associated with complaints related to pesticides, dust and noise. No significant incompatibility with internal agriculture would occur because these agricultural uses would be short-term and assumed to be eliminated due to the ADC designation. Implementation of 200-foot agricultural buffers would reduce agricultural conflicts to below a level of significance.

Mitigation Measure 5.1-1: Prior to the approval of a tentative map for any development adjacent to an existing agricultural operation outside of the boundary of the specific plan, the applicant shall submit plans and supporting documentation demonstrating that a 200-foot agricultural buffer will be provided as set forth in Section 7.11 (Agricultural Buffers) of the Rancho San Juan Specific Plan. The plans and supporting documentation shall be subject to review and approval by the Monterey County Planning and Building Inspection Department and Agricultural Commissioner's Office.

Level of Significance of Impact 5.1-1 After Mitigation: Less than significant.

Impact 5.1-2: Result in substantially incompatible land uses relating to commercial operations and nearby sensitive areas. (Direct)

Noise related to loading docks and HVAC equipment as well as outdoor lighting could impact adjacent residential areas. Implementation of mitigation measure 5.6-1d related to noise the following mitigation measure would reduce impacts from commercial activities to below a level of significance.

Mitigation Measure 5.1-2: Prior to approval of a building permit for retail and industrial buildings located within 100 feet of light sensitive areas (e.g. residential, medical care facilities), the project applicant shall submit a lighting study to confirm that light within adjacent light-sensitive property complies with Policy 26.1.20 of the General Plan.

Level of Significance of Impact 5.1-2 After Mitigation: Less than significant.

Impact 5.1-3: Equipment noise and odors from wastewater treatment. (Direct)

Pumping equipment and wastewater treatment could impact nearby sensitive land use (e.g. residential). Implementation of Mitigation Measure 5.6-1c would assure that appropriate sound attenuation is included in the treatment facility. Implementation of Mitigation Measure 5.7-3 would assure that appropriate odor control measures are taken at the facility. Implementation of noise attenuation measures and odor control measures would reduce the impacts to below a level of significance.

Level of Significance of Impact 5.1-3 After Mitigation: Less than significant.

Impact 5.1-4: Result in substantially incompatible land uses relating to golf course maintenance on nearby residential uses. (Direct)

Golf course maintenance, and mowing, in particular, before 6:30 a.m. could cause noise levels in excess of those desired for residential areas. Implementation of Mitigation Measure 5.6-1e to restrict hours of operation would reduce golf course maintenance noise levels from the proposed course to acceptable levels. However, the applicant has no control over golf course maintenance activities on the adjacent Salinas Golf and Country Club.

Level of Significance of Impact 5.1-4 After Mitigation: Significant.

Impact 5.1-5: Substandard Community Park as designated within local agency plans, regulations or policies. (Direct)

Implementation of Alternative 2 would result in a community park which would not meet the minimum size specified in the GSAP. The GSAP requires a 20-acre community park along the north side of Russell Road; however, the Specific Plan proposes a 10-acre community park in this area. An amendment to the GSAP would reduce this impact to less than significant.

Mitigation Measure 5.1-5: Concurrent with the approval of the Specific Plan, the GSAP shall be amended to delete Policy 51.4.1.1.

Level of Significance of Impact 5.1-5 After Mitigation: Less than significant.

Impact 5.1-6: Reliance on groundwater supplies outside of proposed development as designated within local agency plans, regulations, or policies. (Direct)

Implementation of proposed developments within the Specific Plan could generate a groundwater demand which exceeds the average annual recharge potential for the subject property. This would conflict with Monterey County Ordinance 4037 which prohibits development from relying on groundwater sources beyond its immediate property. An amendment to this ordinance to allow use of offsite groundwater within the Specific Plan area or securing an outside water purveyor would reduce this impact to below a level of significance.

Mitigation Measure 5.1-6: Prior to approval of any tentative map which relies on groundwater sources located outside of the project boundaries, Ordinance 4037 shall be amended to allow use of groundwater located beyond the project boundaries.

Level of Significance of Impact 5.1-6 After Mitigation: Less than significant.

Impact 5.1-7: Insufficient industrial area as designated within local agency plans, regulations, or policies. (Direct)

The 154 acres of industrial land to be created by Alternative 2 would fall short of the 500-acre goal of the GSAP for the Specific Plan area. As indicated in Table 5.1-2, market studies performed as part of the Specific Plan preparation indicate that the property cannot support 500 acres of industrial development. An amendment to the GSAP to reduce the minimum size of the industrial area to 150 acres would reduce the impact to below a level of significance.

Mitigation Measure 5.1-7: Concurrent with the approval of the Specific Plan, the GSAP shall be amended to set 150 acres as the minimum area of industrial land within the Rancho San Juan ADC.

Level of Significance of Impact 5.1-7 After Mitigation: Less than significant.

Impact 5.1-8: Inconsistent building lot coverage and building height as designated within local agency plans, regulations, or policies. (Direct)

Implementation of Alternative 2 may result in building coverage of greater than 50 percent and heights of 65 feet for commercial buildings and 50 feet for industrial buildings. This would conflict with the GSAP maximum building coverage of 50 percent and building heights of 35 feet for commercial buildings and 35 to 75 feet for industrial buildings. An amendment to the GSAP to allow exceptions subject to the approval of the Board of Supervisors would reduce this impact to less than significant.

Mitigation Measure 5.1-8: Concurrent with the approval of the Specific Plan, the ADC-GSAP shall be amended to delete Principle 27. The GSAP shall be amended to add additional text to page 91 allowing exceptions to the height and lot coverage standards, excluding parking and landscaping requirements for Rancho San Juan. ~~subject to the approval of the Board of Supervisors for a regulatory Specific Plan designed to create a “sustainable”, “new urbanist”, “neotraditional”, “transit-oriented development”, or “smart growth” community or projects.~~

Significance of Impact 5.1-8 after Mitigation: Less than significant.

Impact 5.1-9: Highest density residential not located near open space areas. (Direct)

Implementation of Alternative 2 would result in the highest residential densities located near the town center and employment center, instead of near open space as set forth on the ADC. Open space areas and parks are located adjacent to some higher density residential areas, however, there are a greater number of medium and low density residential located adjacent to open space areas. An amendment to the ADC would reduce impacts to less than significant.

Mitigation Measure 5.1-9: Concurrent with the approval of the Specific Plan, the ADC-GSAP shall be amended to delete Principle 27. The GSAP shall be amended to add additional text to page 91 allowing exceptions to the height and lot coverage standards, excluding parking and landscaping requirements for Rancho San Juan. ~~subject to the approval of the Board of Supervisors for a regulatory Specific Plan designed to create a “sustainable”, “new urbanist”, “neotraditional”, “transit-oriented development”, or “smart growth” community or projects.~~

Significance of Impact 5.1-9 after Mitigation: Less than significant.

5.1.4.2 Alternative 4E

Significant impacts related to land use would be the same as Alternative 2. Implementation of the corresponding mitigation measures would reduce these impacts to below a level of significance.

5.1.4.3 HYH Property Project

Impact 5.1-10: Result in substantially incompatible land uses relating to agricultural operations. (Direct)

Residential development along the northern boundary could put pressure on adjacent agricultural operations as discussed earlier. Implementation Mitigation Measure 5.1-1 would reduce agricultural conflicts to below a level of significance.

Level of Significance of Impact 5.1-10 After Mitigation: Less than significant.

Impact 5.1-11: Result in substantially incompatible land uses relating to noise associated with the golf course maintenance on nearby residential uses. (Direct)

As described earlier, golf course maintenance, and mowing, in particular, before 6:30 a.m. could cause noise levels in excess of those desired for residential areas. Implementation of Mitigation Measure 5.6-1e would reduce golf course maintenance noise levels from the proposed course to acceptable levels. However, the applicant has no control over golf course maintenance activities on the adjacent Salinas Golf and Country Club.

Level of Significance of Impact 5.1-11 After Mitigation: Significant.

Impact 5.1-12: Result in substantially incompatible land uses relating to commercial operations. (Direct)

Noise and outdoor lighting could impact adjacent residential areas. Implementation of Mitigation Measure 5.6-1d and 5.1-2 would reduce noise and lighting impacts from commercial activities to below a level of significance.

Level of Significance of Impact 5.1-12 After Mitigation: Less than significant.

Impact 5.1-13: Equipment noise and odors from wastewater treatment. (Direct)

Pumping equipment and wastewater treatment could impact nearby residential areas. Implementation of Mitigation Measures 5.6-1c and 5.7-3 would reduce noise and odor impacts from wastewater treatment to below a level of significance.

Level of Significance of Impact 5.1-13 After Mitigation: Less than significant.

Impact 5.1-14: Initial development of HYH Property conflict with ADC phasing as designated within local agency plans, regulations, or policies. (Direct)

Development of the HYH Property before the western portion of the Specific Plan would conflict with the goals of the GSAP to assure that public services are available to meet the needs of development within the Specific Plan area. Infrastructure improvements required prior to development would assure that adequate services are available concurrent with need and would reduce phasing impacts to below a level of significance.

Mitigation Measure 5.1-14: Prior to approval of a tentative map, the project applicant shall demonstrate to the satisfaction of the County that public services are adequate to meet the needs of the proposed development. Prior to approval of tentative map, the project applicant shall demonstrate to the satisfaction of the County that public services are adequate to meet the needs of the proposed development. Applicant shall also demonstrate agreement to pay all relevant fees and indicate which service would be provided by a Community Services District.

Level of Significance of Impact 5.1-14 After Mitigation: Less than significant.

Impact 5.1-15: Inconsistent building lot coverage and building height within local agency plans, regulations, or policies. (Direct)

Implementation of the HYH Property project may result in building coverage of greater than 50 percent and heights of 65 feet for commercial. This would conflict with the GSAP maximum building coverage of 50 percent and building heights of 35 feet for commercial buildings. Implementation of Mitigation Measure 5.1-9 would reduce this impact to less than significant.

Significance of Impact 5.1-15 after Mitigation: Less than significant.

5.2 TRAFFIC AND CIRCULATION

5.2.1 EXISTING CONDITIONS

This section provides an evaluation of potential traffic impacts associated with implementation of the Rancho San Juan Specific Plan and HYH Property project. The following discussion is based on the Traffic Impact Analysis prepared by Wilbur Smith Associates (Appendix D).

5.2.1.1 Existing Vehicle Circulation System

Regional Access

Regional access to the project site is provided via Highway 101 (Figure 5.2-1). Access to the project site is provided via Ralph Lane, Martines Road and Russell Road and the Boronda Road interchange.

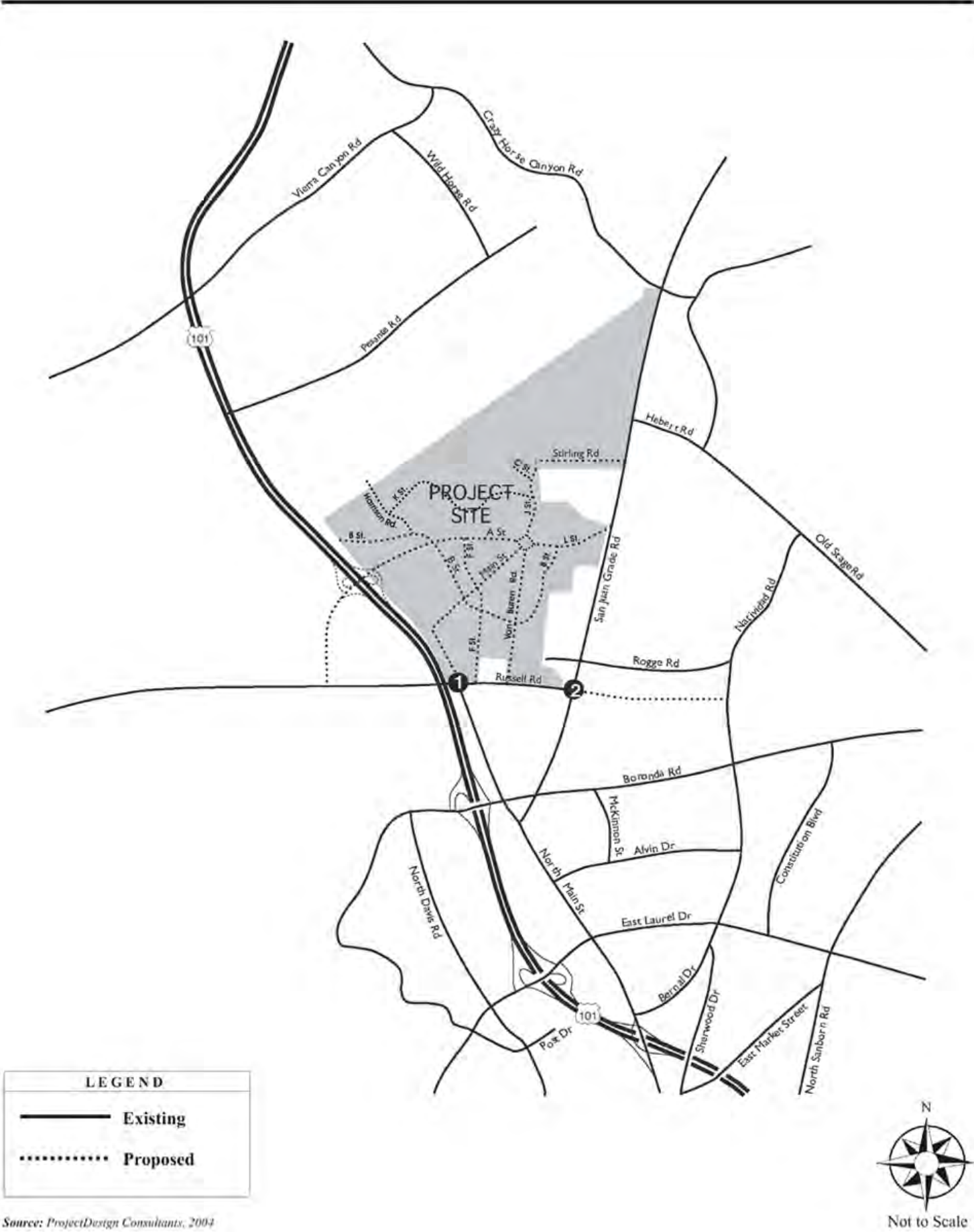
Highway 101 is a four-lane freeway that connects Prunedale, San Benito and Santa Clara counties to the north with southern Monterey County and the Salinas Valley to the south. This highway is the main corridor through Salinas running in a northwest-southeast direction. Current traffic volume on Highway 101 are as follows: 58,000 average daily trips (ADT) (north of Russell Road), 69,000 ADT (south of Russell Road), 59,000 ADT (south of Boronda Road) and 56,000 ADT (south of West Laurel Drive).

In the vicinity of the project, Highway 101 is a four-lane divided expressway with a number of at-grade intersections. There are no parallel roadways in the project site area and this section of Highway 101 carries local as well as regional through traffic. Highway 101 resumes as a freeway to the south of the Boronda Road interchange.

The Monterey-Salinas Highway State Route 68 (SR 68) which connects indirectly to Highway 101, provides access to the Monterey Peninsula. SR 68 is a four-lane freeway between Salinas and the Toro Park and becomes a two-lane highway with at-grade intersections closer to the Monterey Peninsula.

SR 156 runs between Highway 101 and SR 1, near Prunedale, providing a connection between the Castroville area and the project site. It is primarily a two-lane highway that experiences heavy congestion at times.

Additional regional access is also provided by SR 183 which is a two-lane highway connecting Salinas with Castroville.



Source: ProjectDesign Consultants, 2004

Roadways (Specific Plan) _____ Figure 5.2-1

Local Circulation

The project site is located directly east of Harrison Road, and is bounded by Harrison Road to the west, Russell Road to the south, and San Juan Grade Road to the east. Streets that provide local access to the project site are North Main Street/Harrison Road, Russell Road, and San Juan Grade Road.

North Main Street/Harrison Road, in the vicinity of the project site, is a two- to four-lane, minor arterial located west of the project site. The roadway extends north-south from Market Street to Russell Road, connecting downtown Salinas to the project site.

Russell Road is a two- to four-lane, minor arterial located south of the project site. The roadway extends east-west from San Juan Grade Road to Highway 101. West of Highway 101, Russell Road becomes Espinosa Road and continues westward to SR 183.

San Juan Grade Road is a two-lane, minor arterial that forms the eastern boundary of the project site. The roadway extends from the Monterey/San Benito County line to North Main Street in the City of Salinas

Rogge Road is a two-lane, minor arterial that extends east-west from Natividad Road to San Juan Grade Road.

Crazy Horse Canyon Road is a two-lane, minor arterial that extends northwest-southeast from Highway 101 to San Juan Grade Road.

Boronda Road is a four to six-lane, primary arterial between Highway 101 beyond San Juan Grade Road near the Northridge and Harden Ranch shopping centers. Boronda Road is an east-west facility located approximately one mile south of Russell Road. Boronda Road forms intersections with Natividad Road, San Juan Grade Road, and North Main Street and provides a full interchange with Highway 101 in the vicinity of the project site.

West Laurel Drive is a major four-lane, undivided arterial running between Highway 101 and Davis Road on the west to Williams Road on the east.

North Davis Road is a four-lane, divided arterial between Boronda Road to the north, through the Westridge Shopping Center and West Laurel Drive to the Market Street (SR 183) interchange. South of the Market Street interchange, it is a two-lane arterial.

Blanco Road is a four-lane, major east-west arterial in the City of Salinas.

Post Drive is a two-lane commercial street that runs between Davis Road and Calle del Adobe.

5.2.1.2 Existing Traffic Volumes and Roadway Operating Characteristics

This section evaluates the ability of the roadway system to meet current demands. The ability of the roadway to meet current demands is assessed by comparing existing ADT volumes to roadway capacity standards. Traffic conditions on area roadway segments are calculated using the volume to capacity (v/c) ratios, which correspond to level of service (LOS) definitions. Levels of service (LOS) measure traffic conditions using letter grades ranging from A to F. Level of service indicates the quality of roadway service based on congestion, travel time, and delay. Level of service A represents the best conditions while Level of Service F indicates major delays and operations at or near capacity. Intersections generally dictate traffic conditions on arterial and collector streets. Table 5.2-1 shows intersection level of service description used in this analysis.

**TABLE 5.2-1
Level of Service Definitions for Intersections**

LEVEL OF SERVICE	DESCRIPTION	CONTROL DELAY (SECONDS PER VEHICLE)
<u>Signalized Intersections</u>		
A	Free Flow/Insignificant Delays	≤ 10.0
B	Stable Operation/Minimal Delays	10.1 – 20.0
C	Stable Operation/Acceptable Delays	20.1 – 35.0
D	Approaching Unstable/Tolerable Delays	35.1 – 55.0
E	Unstable Operation/Significant Delays	55.1 – 80.0
F	Forced Flow/Excessive Delays	> 80.0
<u>Unsignalized Intersections</u>		
A	Little or no delay	≤ 10.0
B	Short traffic delay	10.1 – 15.0
C	Average traffic delays	15.1 – 25.0
D	Long traffic delays	25.1 – 35.0
E	Very long traffic delays	35.1 – 50.0
F	Extreme delays	> 50.0

Source: Highway Capacity Manual, 2000.

For freeway and multi-lane highway analysis, the level of service is determined by vehicle density (passenger cars per mile per lane) as shown in Table 5.2-2.

**TABLE 5.2-2
Level of Service Definitions for Freeways and Multiple Lane Highways**

LEVEL OF SERVICE	MAIN LINE FREEWAY SEGMENT FREE FLOW	
	MAXIMUM DENSITY (PASSENGER CARS/MILE/LANE)	MINIMUM SPEED (MPH)
A	≤ 10	65.0
B	10.1 – 18.0	65.0
C	18.1 – 26.0	64.6
D	26.1 – 35.0	59.7
E	35.1 – 45.0	52.2
F	> 45	< 52.2

Source: Highway Capacity Manual, 2000.

Level of Service

Intersections

A total of 20 intersections were evaluated within and surrounding the Specific Plan area. Existing levels of service for these intersections are shown in Table 5.2-3. Conditions were evaluated for both the weekday AM and PM peak periods. Traffic counts used for this analysis were collected in 2002 and 2003 and were provided by Monterey County, the City of Salinas and by WSA field personnel traffic counts.

The majority of the existing study intersections operate at an acceptable level of service during the weekday AM peak hour. However, the following intersections operate below LOC C during the weekday AM peak hour:

- North Main Street/Russell Road (Intersection 1)-(LOS F); and
- Crazy Horse Canyon Road/Highway 101 Northbound Ramp (Intersection 12) - (LOS F)

During the PM peak hour, the following seven study intersections operate below LOS C:

- North Main Street/Russell Road (Intersection #1) - (LOS F);
- North Main Street/Boronda Road (Intersection # 2) - (LOS F);
- Hebert Road/San Juan Grade Road (Intersection # 6) - (LOS D);
- Natividad Road/Boronda Road (Intersection # 8) - (LOS D);
- Crazy Horse Canyon Road/Highway 101 NB (Intersection # 12) - (LOS F);
- West Laurel Drive/Highway 101 NB (Intersection # 15) - (LOS E); and
- Boronda Road/San Juan Grade Road (Intersection # 19) - (LOS D).

**TABLE 5.2-3
Existing Intersection Level of Service**

INTERSECTION		TRAFFIC CONTROL	WEEKDAY AM PEAK		WEEKDAY PM PEAK	
			LOS	DELAY	LOS	DELAY
1	North Main Street/Russell Road	U	F	> 80.0	F	> 80.0
2	North Main Street/Boronda Road	S	C	21.4	F	> 80.0
3	North Main Street/San Juan Grade Road	S	B	17.0	D	36.1
4	Russell Road/San Juan Grade Road	U	A	6.6	A	6.0
5	Rogge Road/San Juan Grade Road	U	B	13.6	B	10.3
6	Hebert Road/San Juan Grade Road	U	C	15.2	D	20.7
7	Crazy Horse Canyon Road/San Juan Grade Road	U	B	13.2	B	12.9
8	Natividad Road/Rogge Road	U	B	12.4	B	14.8
9	Natividad Road/Boronda Road	S	C	29.1	D	39.5
10	Boronda Road/Highway 101 NB	S	B	5.3	C	21.5
11	Boronda Road/Highway 101 SB	S	A	5.0	B	14.3
12	Crazy Horse Canyon Road/Highway 101 NB	U	F	>80.0	F	>80.0
13	East Laurel Drive/Natividad Road	S	C	30.9	D	36.3
14	East Laurel Drive/North Main Street	S	C	20.4	C	32.9
15	West Laurel Drive/Highway 101 NB	S	B	5.4	E	58.9
16	West Laurel Drive/Highway 101 SB	S	B	7.4	C	15.3
17	North Davis Road/Post Road	S	B	16.1	C	33.8
18	North Davis Road/Blanco Road	S	C	23.9	D	49.6
19	Boronda Road/San Juan Grade Road	S	B	8.7	D	49.1
20	East Laurel Drive/Davis Road	S	C	20.2	C	31.9

Source: Wilbur Smith Associates, 2001.

Bold = Unacceptable level of service

U = Unsignalized Intersection

S = Signalized Intersection

Roadway Segments

A total of 21 roadway segments were evaluated within and surrounding the Specific Plan area. Existing levels of service for these segments are shown in Table 5.2-4. Conditions were evaluated for both the weekday AM and PM peak periods. Traffic counts used for this analysis

were collected in 2002 and 2003 and were provided by Monterey County, the City of Salinas and by WSA field personnel traffic counts.

**TABLE 5.2-4
Existing Street Traffic Volumes (2001) And Level Of Service**

ROADWAY SEGMENT	LANE NUMBER	ADT	LOS (AM)	LOS (PM)
1. Crazy Horse Canyon, East of Highway 101	2	3,834	C	C
3. San Juan Grade Road, North of Hebert Road	2	4,134	C	C
5. San Juan Grade Road, North of Boronda Road	2	7,950	C	D
6. San Juan Grade, North of Russell Road	2	6,666	C	D
10. Russell Road, East of Highway 101	2	2,649	C	C
11. Espinosa Road, West of Highway 101	2	4,090	C	C
12. North main, South of Boronda Road	2	8,084	C	D
13. Boronda Road, East of Boronda Interchange	6	21,966	C	C
15. Boronda Road, East of McKinnon	2	10,535	D	D
16. Natividad Road, North of Boronda	2	3,681	C	C
18. Russell Road, West of San Juan Grade	2	4,096	C	C
19. Hebert Road, Natividad Road and Old Stage Road	2	2,970	C	C
20. North Main Road, South of Russell Road	4	3,106	C	C
24. Hall Road, East of Willow Road	2	7,404	C	D
25. Blanco Road, East of Salinas River Bridge	2	11,713	D	E
26. David Road, North of Central Avenue	2	14,089	D	E
27. David Road, South of Blanco Road	2	2,287	C	C
30. San Miguel Canyon Road, South of Morrow Road	2	9,915	D	D
31. San Miguel Canyon Road, South of Hall Road	2	7,666	C	D
32. Elkhorn Road, North of Hall Road	2	9,285	D	D
33. Salinas Road, West of Elkhorn Road	2	5,665	C	C

Source: Wilbur Smith Associates, 2001.

The majority of the existing study roadway segments operate at an acceptable level of service during the weekday AM peak hour. However, the following five segments operate below LOC C during the weekday AM peak hour:

- Boronda Road, east of McKinnon Road (Segment 15)-(LOS D);
- Blanco Road, east of Salinas River Bridge (Segment 25)-(LOS D);
- Davis Road, north of Central Avenue (Segment 26)-(LOS D);

- San Miguel Canyon Road, south of Morro Road (Segment 30)-(LOS D); and
- Elkhorn Road, north of Hall Road (Segment 32)-(LOS D).

During the PM peak hour, the following ten study segments operate below LOS C:

- San Juan Grade Road, north of Boronda Road (Segment 5)-(LOS D);
- San Juan Grade Road, north of Russell Road (Segment 6)-(LOS D);
- North Main Street, south of Boronda Road (Segment 12)-(LOS D);
- Hall Road, east of Willow Road (Segment 24)-(LOS D);
- Boronda Road, east of McKinnon Road (Segment 15)-(LOS D);
- Blanco Road, east of Salinas River Bridge (Segment 25)-(LOS E);
- Davis Road, north of Central Avenue (Segment 26)-(LOS E);
- San Miguel Canyon Road, south of Morro Road (Segment 30)-(LOS D);
- San Miguel Canyon Road, south of Hall Road (Segment 31)-(LOS D); and
- Elkhorn Road, north of Hall Road (Segment 32)-(LOS D).

Freeway and Multi-lane Highway Levels of Service

Existing levels of service for Highway 101 segments in the study area are shown in Table 5.2-5. Conditions are evaluated for the weekday AM and PM peak hours. Traffic counts used for this analysis were from the Caltrans control station located north of Russell/Espinosa Road. These counts, along with existing ramp volumes from the traffic forecast model were used as the base for estimating segment volumes south of Russell/Espinosa Road and south of Boronda Road.

The following segment of Highway 101 operates below a LOS D in the AM peak hour:

- Southbound Highway 101, north of Highway 156 (LOS E).

During the weekday PM peak hour, the following two segments of Highway 101 operate below LOS D:

- Northbound Highway 101, north of Boronda Road (LOS E); and
- Northbound Highway 101, north of Highway 156 (LOS F).

5.2.1.3 Transit

Monterey Salinas Transit (MST) is the public transit operator that provides service throughout urbanized areas of Monterey County. MST operates primarily on a “hub and spoke” system with most routes connecting to each other at transit centers in downtown Salinas and Monterey. There are currently no public transportation routes serving the project site. MST line 45-East Market-Creekbridge provides service between the downtown transit center and the Northridge Center. This line travels on Russell Road between North Main Street and Van Buren Avenue.

**TABLE 5.2-5
Existing Freeway and Multi-Lane Highway Level of Service**

AM PEAK HOUR	US 101 SB NORTH OF RUSSELL /A/		US 101 NB NORTH OF RUSSELL		US 101 SB NORTH OF BORONDA /A/		US 101 NB NORTH OF BORONDA		US 101 SB NORTH OF LAUREL /B/		US 101 NB NORTH OF LAUREL /	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Volume	2,608	2,3185	1,962	3,028	2,931	2,788	2,333	3,540	2,744	2,285	1,865	3,178
Density	25.0	22.0	18.7	29.6	28.5	26.9	22.2	35.9	24.0	18.7	15.2	26.9
Level of Service	C	C	C	D	D	D	C	E	C	C	B	D

Source: Wilbur Smith Associates 2004
 Bold = unacceptable LOS

Intercity bus and Amtrak train service are available at the Salinas Transit Center. The center is located downtown on Lincoln Street off of West Market Street approximately four miles south of Russell Road.

There is currently limited Pedestrian/Bike access in the vicinity of the project site. There are no pedestrian sidewalks or bike lanes/paths on or adjacent to the project site.

5.2.1.4 Monterey County Congestion Management Program (CMP)

The Congestion Management Program represents an effort to manage traffic congestion by coordinating transportation, land use, and air quality programs in Monterey County. An important aspect of the CMP is the monitoring that measures traffic on roadways and develops plans to relieve congestion.

The CMP is administered by the Congestion Management Agency (CMA). The Transportation Agency for Monterey County (TAMC) functions as the CMA. The CMP provides level of service and performance standards, trip reduction techniques, development of deficiency programs, transportation system management, and capital improvement programming for the purpose of minimizing regional traffic impacts of development. The CMP roadway system in the vicinity of the project site includes the Highway 101, North Main Street, Boronda Road, Blanco Road and Davis Road. All of these roadways are considered urban roadways by CMP.

The primary objective of the CMP is to reduce traffic congestion and improve mobility for persons and freight. The policies and objectives of the CMP are intended to insure that traffic circulation improves, or is at least maintained, as population increases in Monterey County.

The CMP encourages each city and the County to address the regional transportation issues related to land use decisions with the goal to mitigate the traffic impacts associated with proposed development. For the CMP to be a success, the cities and the County must work together to find cooperative solutions to multi-jurisdictional transportation problems. In addition, the CMP must be consistent with the Regional Transportation Plan and its goals.

5.2.2 THRESHOLDS OF SIGNIFICANCE

The proposed project would have significant transportation/traffic impacts if it would:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system as determined by policies it affected;
- Exceed, either individually or cumulatively, a level of service standard established by a county congestion management agency for a designated road or highway;
- Result in a change in air traffic patterns;
- Substantially increase hazards due to a design features;
- Result in inadequate emergency access;

- Result in inadequate parking capacity; and/or
- Conflict with adopted policies, plans, or programs supporting alternative transportation.

Four agencies have jurisdiction over the roads which may be affected by the proposed projects. The County of Monterey or the City of Salinas have jurisdiction over surface streets. The California Department of Transportation (Caltrans) has authority over the state highways. The Transportation Agency of Monterey County (TAMC) is a 23-member agency which oversees highways and arterials designated as part of the Congestion Management Plan. In addition, TAMC is Monterey County's State designated Regional Transportation Planning Agency (RTPA), Local Transportation Commission (LTC), and Service Authority for Freeways and Expressways (SAFE).

The respective significance thresholds for each of these agencies is as follows.

5.2.2.1 Monterey County

According to the Monterey County Guide for the Preparation of Traffic Studies, the proposed project would have a significant traffic impact on County roads if it would:

- Degrade a signalized intersection to below LOS C or diminish the volume to capacity ratio of an intersection already operating at below LOS D and E by 0.01 or more, or add any vehicles to an intersection already operating at LOS F;
- Degrade any traffic movement at an unsignalized intersection to LOS F, or cause any traffic signal warrant to be met;
- Degrade roadway segments operating at A through E to a lower level of service of D, E, or F; and/or
- Add any trips to a roadway segment already operating at LOS F.

The proposed project would have a significant impact on parking if it would:

- Create a demand for parking which exceeds supply.

5.2.2.2 City of Salinas

According to the Salinas General Plan, the proposed project would have a significant impact on City roads if it would:

- Degrade roadway segments to below an LOS D or add any trips to a segment which is already operating at less than LOS D; and/or
- Degrade a signalized or unsignalized intersection to below LOS D or add any trips to an intersection which is already operating below LOS D.

5.2.2.3 Caltrans

According to Caltrans' Guide for the Preparation of Traffic Studies, the proposed project would have a significant impact on State highways if it would:

- Degrade highway segments to below LOS D or add any new trips to facilities already over LOS D.

5.2.2.3 Transportation Agency of Monterey County

According to the Congestion Management Program (CMP) administered by TAMC, the proposed project would have a significant impact on designated CMP arterials if it would:

- Degrade the LOS on an urban roadway currently operating at LOS D or better to below LOS D; or
- Degrade the LOS on a rural roadway currently operating at LOS C or better to below LOS C.

The CMP establishes different LOS standards for State highways. For Highway 101 between Airport Road and Espinosa Road, the LOS standard is D. South of Espinosa to the San Benito County line, the LOS standard is E on Highway 101.

5.2.3 POTENTIAL IMPACTS

Assessment of the impacts of the development of Rancho San Juan on local and regional traffic is complicated by the uncertainty associated with the roadway network which may exist in the project area in the future. In particular, the condition of Highway 101 in the project area is very difficult to predict at the present time. As discussed earlier, there are two basic configurations which Highway 101 may take in the future. Either the basic alignment of Highway 101 would be retained and substantially improved to freeway standards or a bypass freeway would be constructed. Either freeway alternative would satisfy the capacity needs of Highway 101.

Furthermore, future improvements to existing Highway 101 are expected to occur in three phases. As discussed earlier, the first phase would consist of those improvements associated with the Prunedale Improvement Project (PIP).

The second phase of improvements include more substantial improvements to Highway 101 which are identified in the Regional Transportation Plan (RTP). As described earlier, these improvements could be made along the existing Highway 101 alignment or a bypass around Prunedale would be constructed to relieve traffic on the existing Highway 101. The first scenario is reflected in Alternative 2 of the proposed Specific Plan while the bypass is assumed as part of Alternative 4E.

In order to assure that the traffic impacts associated with Rancho San Juan are properly evaluated, the evaluation of impacts assumes a range of improvement scenarios for Highway

101. Furthermore, the analysis examines the short-term impacts (year 2010) and long-term impacts (year 2020) in order to accurately predict roadway improvements that will be needed as the Specific Plan area develops. The background traffic volumes used in their analysis are based on traffic forecast prepared for the Salinas General Plan as well as the pending update of the Monterey County General Plan. The trips generated by development within the RSJ Specific Plan were eliminated from the forecast to provide the “no project” baseline for comparing impacts to the proposed Specific Plan.

In assessing the year 2010 impacts, two scenarios were assumed. One scenario assumed that development would be spread over the entire Specific Plan area. The second scenario assumed that only the HYH Property would develop by 2010.

In order to provide a conservative analysis of the traffic conditions in the year 2010, the analysis assumed that no improvements to Highway 101 would be in place by 2010.

By the year 2020, additional improvements to Highway 101 are expected to occur. PIP improvements are assumed to be in place under implementation of the Regional Transportation Plan (RTP). Ultimately, as assumed by Alternative 2 of the proposed Specific Plan, the existing alignment of Highway 101 would be substantially improved to accommodate future traffic volumes. As an alternative, a bypass could be constructed to relieve traffic on the existing Highway 101; this bypass is referred to as the Prunedale Bypass and is reflected in Alternative 4E of the proposed Specific Plan. Thus the analysis of traffic impacts in the year 2020 assumes four different scenarios for Highway 101: (1) PIP, (2) RTP, (3) buildout of Highway 101 (without bypass) and (4) buildout of Highway 101 (with Prunedale bypass).

The analysis of traffic impacts examines key elements of the roadway system serving the Specific Plan area including segments and intersections of surface streets and segments and interchanges associated with the highway system serving the project area.

5.2.3.1 Alternative 2

Development of the Specific Plan area in accordance with the land use designations contained in Alternative 2 would produce a total of 82,300 average daily vehicle trips of which 25,072 would remain internal (see Table 5.2-6) at full buildout of the Specific Plan. Of the total 57,228 daily trips which would be external, 4,386 trips would occur during the morning peak hour while 5,414 trips would occur in the afternoon peak hour.

By the year 2010, the Specific Plan area is anticipated to generate a total of 27,232 external daily vehicle trips. This traffic would be produced by the level of development discussed earlier.

Traffic Impacts

Implementation of the proposed Specific Plan would cause substantial increases in traffic on local roadways.

**TABLE 5.2-6
2020 Project Traffic Generation (Alternative 2)**

USE	PROJECT SIZE	DAILY TRIPS
<u>Residential</u>		
Single-Family Detached Housing	2,645 units	25,121
Apartments	1,246 units	8,261
Senior Apartments	109 units	436
<u>Recreation/Education/Commercial</u>		
Golf Course	18 holes	643
Employment (industrial)	2,742 employees	8,281
Resort Hotel	291 rooms	2,328
Three Elementary Schools	2,800 students	2,856
One Middle School	1,200 students	1,740
One High School	2,000 students	3,580
General Office	1,245 employees	4,133
Town Center (Retail)	373,100 sf	15,174
Neighborhood Center (Retail)	153,950 sf	9,746
Internal Trip Reduction		-25,072
NET EXTERNAL TRIPS		57,228

Source: Wilbur Smith Associates, 2001.

Intersection Impacts

As indicated earlier, a number of the intersections in the project area are operating at unacceptable levels of service. The addition of trips generated from the Specific Plan area would further degrade the level of service at these intersections. As indicated in Table 5.2-7, a total of 15 intersections which were evaluated in the traffic report would be significantly impacted by traffic generated by the project by the year 2010. In addition, 3 of the new intersections within the Specific Plan area would operate at unacceptable levels of service by the year 2010. By the year 2020, continued buildout of the project would significantly increase traffic congestion at 7 intersections.

Year 2010

The impacted intersections are identified in Table 5.2-7. The impacts identified in this table assume that no improvements are made to the existing intersection conditions. A total of 15 intersections evaluated would operate at a level of service which would not be acceptable according the LOS standards established by the agency with jurisdiction over the affected intersection.

**TABLE 5.2-7
Intersections Impacted in the Year 2010 (Alternatives 2 and 4E)**

INTERSECTION No.	NAME	LOS	
		AM	PM
1	North Main Street and Russell Road	F	F
2	North Main Street and Boronda Road	F	F
3	North Main Street and San Juan Grade Road	E	F
5	Rogge Road and San Juan Grade Road	F	F
6	Hebert Road and San Juan Grade Road	F	F
7	Crazy Horse Canyon Road and San Juan Grade Road	F	F
9	Antiviral Road and Boronda Road	F	F
12	Crazy Horse Canyon Road and Highway 101 NB	F	F
13	East Laurel Drive and Antiviral Road	F	F
14	East Laurel Drive and North Main Street	F	F
15	West Laurel Drive and Highway 101 (northbound)	B	F
16	West Laurel Drive and Highway 101 (southbound)	D	F
17	North Davis Road and Post Drive	C	F
18	North Davis Road and Blanco Road	E	F
19	Boronda Road and San Juan Grade Road	C	F
20	East Laurel Drive and North Davis Road	F	F
21	San Juan Grade Road/Sterling Road	C	C
22	Harrison Road/K Street	B	B
23	L Street/San Juan Grade Road	C	D
24	Russell Road/Van Buren Road	B	D

Source: Wilbur Smith Associates, 2001.

Year 2020

With buildout of the land uses allowed within the Specific Plan under Alternative 2, a total of 7 intersections evaluated would operate at a level of service which would not be acceptable according to the LOS standards established by the agency with jurisdiction over the affected intersection. As with the 2010 analysis, no improvements to the existing intersections are assumed. The name of the impacted intersections and the anticipated level of service by the year 2020 are summarized in Table 5.2-8.

**TABLE 5.2-8
Intersections Impacted in the Year 2020 (Alternatives 2 and 4E)**

INTERSECTION NO.	NAME	LOS					
		PIP		RTP		HIGHWAY 101 (w/O BYPASS)	
		AM	PM	AM	PM	AM	PM
1	North Main and Russell Road	F	F	F	F	F	F
5	Rogge Road and San Juan Grade Road	F	F	F	F	F	F
6	Hebert Road and San Juan Grade Road	F	F	E	F	F	F
9	Natividad Road and Boronda Road	F	F	F	F	F	F
11	Boronda Road and Highway 101 (southbound)				E		
12	Crazy Horse Canyon Road and Highway 101 (northbound)	F	F	F	F	F	F
14	East Laurel Drive and Natividad Road	F	F	F	E	F	E
15	East Laurel Drive and North Main			D	E		
17	West Laurel Drive and Highway 101 (southbound)				E		
19	North Davis Road and Blanco Road	F	E		F	F	E
20	Boronda Road and San Juan Grade Road	D	F	E	D	F	E
21	East Laurel Drive and North Davis Road	E	D		D		
23	US 101 NB/New Interchange	D	C	D	D		
24	North Main Street/B Street	C	C	D	C		
25	A Street/B Street	D	D	C	D		

Source: Wilbur Smith Associates, 2001.

Surface Street Segments

Year 2010

As illustrated in Table 5.2-9, development anticipated by the year 2010 would impact a total of 15 roadway segments in the vicinity of the Specific Plan area by impacting intersections which would already be operating at less than LOS D.

Year 2020

As illustrated in Table 5.2-10, development anticipated by the year 2020 would impact a total of 13 roadway segments in the vicinity of the Specific Plan area. Affected roadways include San Juan Grade Road, North Main Street, Boronda Road, Hall Road, Blanco Road, Davis Road, San Miguel Canyon Road, Elkhorn Road, Salinas Road, Russell Road, and Espinosa Road. Impacts would generally occur in both the morning and afternoon peak hour. As the LOS is already below LOS D on the CMP arterials (North Main Street, Boronda Road, Blanco Road and David Road), no direct impacts would occur with respect to the TAMC criteria.

Freeway Segments

Year 2010

As illustrated in Table 5.2-11, development anticipated by the year 2010 would impact a total of 3 of the 12 segments of Highway 101 addressed in Appendix D by adding traffic to segments that are already operating at LOS D or less. The name of the impacted segments and the anticipated level of service by the year 2010 are summarized below. As the LOS is already below LOS D, no direct impacts would occur with respect to the TAMC criteria.

Year 2020

As illustrated in Table 5.2-12, development anticipated by the year 2020 would impact a total of 4 of the 12 segments of Highway 101 by adding traffic to segments that are already operating at LOS D or less. Impacts would generally occur in both the morning and afternoon peak hour. As the LOS is already below LOS D, no direct impacts would occur with respect to the TAMC criteria.

Change in Air Traffic Patterns

The proposed project is not located near any airports and therefore would not result in a significant impact on air traffic patterns.

Increased Traffic Hazards

New roadways constructed as part of the project would be constructed in accordance with applicable road design standards in order to avoid creating a significant traffic hazard.

**TABLE 5.2-9
Roadways Impacted in the Year 2010 (Alternatives 2 and 4E)**

SEGMENT NO.	NAME	LOS	
		AM	PM
3	San Juan Grade Road, North of Hebert Road	D	E
5	San Juan Grade Road, North of Boronda Road	E	F
6	San Juan Grade Road, North of Russell Road	E	E
12	North Main Street, South of Boronda Road	E	E
13	Boronda Road, East of Boronda Interchange	D	E
15	Boronda Road, East of McKinnon Road	F	F
16	Antiviral Road, North of Boronda Road	D	E
18	Russell Road, West of San Juan Grade Road	E	E
24	Hall Road, East of Willow Road	E	E
25	Blanco Road, East of Salinas River Bridge	F	F
26	Davis Road, North of Central Avenue	F	F
30	San Miguel Canyon Road, South of Morro Road	E	F
31	San Miguel Canyon Road, South of Hall Road	E	E
32	Elkhorn Road, North of Hall Road	E	E
33	Salinas Road, West of Elkhorn Road	D	E

Source: Wilbur Smith Associates, 2001.

**TABLE 5.2-10
Roadway Impacted in the Year 2020 (Alternatives 2 and 4E)**

SEGMENT No.	NAME	LOS					
		PIP		RTP		HIGHWAY 101 (W/O BYPASS)	
		AM	PM	AM	PM	AM	PM
5	San Juan Grade Road, North of Boronda Road	E	E	E	E	E	E
6	San Juan Grade Road, North of Russell Road	E	E	E	E	E	E
10	Russell Road, East of Highway 101	E	E	E	E	E	E
11	Espinosa Road, West of Highway 101	D	E	E	E	D	E
12	North Main, South of Boronda Road	D	E	E	E	D	E
15	Boronda Road, East of McKinnon	E	E	E	E	E	E
18	Russell Road, East of San Juan Grade Road	E	E	E	E	E	E
24	Hall Road, East of Willow Road	E	F	E	F	E	E
25	Blanco Road, East of Salinas River Bridge	F	F	F	F	F	F
30	San Miguel Canyon Road, South of Morro Road	E	F	F	F	E	F
31	San Miguel Canyon Road, South of Hall Road	E	E	E	E	E	E
32	Elkhorn Road, North of Hall Road	E	F	F	F	E	F
33	Salinas Road, West of Elkhorn Road	E	E	E	E	E	E

Source: Wilbur Smith Associates, 2001.

**TABLE 5.2-11
Freeway Segments Impacted in the Year 2010 (Alternatives 2 and 4E)**

FREEWAY	NORTHBOUND		SOUTHBOUND	
	AM	PM	AM	PM
Highway 101, North of Boronda Road	D	E	D	E
Highway 101, North of Crazy Horse Canyon Road	C	E	E	D
Highway 101, North of San Juan Road	C	E	E	D

Source: Wilbur Smith Associates, 2001.

**TABLE 5.2-12
Freeway Segment Impacted in the Year 2020 (Alternatives 2 and 4E)**

SEGMENT	RTP				PIP				W/O BYPASS			
	NB		SB		NB		SB		NB		SB	
	PM	AM	PM	AM	PM	AM	PM	AM	AM	PM	AM	PM
Highway 101, North of Boronda Road	C	D	D	D	C	D	D	D	D	F	D	E
Highway 101, North of Russell Road	D	D	D	D	D	D	D	D	D	F	D	E
Highway 101, North of Crazy Horse Canyon Road	C	E	D	D	C	E	D	D	D	E	E	D
Highway 101, North of San Juan Road	C	E	E	D	C	E	E	D	C	F	E	D

Source: Wilbur Smith Associates, 2001.

Emergency Access

The proposed project includes a network of roadways that would provide adequate access for emergency vehicles within the Specific Plan area. In addition, it would provide a direct linkage to Highway 101 as well as a second link to San Juan Grade Road which would facilitate emergency vehicle access.

An emergency access roadway would be constructed to serve Planning Area 12C. The emergency access road would provide a connection from the cul-de-sac in PA 12C up to the water tanks and through Hebert Road.

Parking

Parking would be provided to serve individual uses in accordance with County of Monterey standards. Thus, no significant impacts would occur.

Transit Accommodation

The proposed Specific Plan would not interfere with future transit alternatives in the region. The Specific Plan encourages alternatives to the automobile. Sidewalks and trails are provided throughout the Specific Plan. The Specific Plan proposes connections to bike lanes along Van Buren Avenue and San Juan Grade Road. It also suggests possible transit routes and transit center locations in the proposed town center.

5.2.3.2 Alternative 4E

Trip generation associated with Alternative 4E would be slightly less than Alternative 2. With the reduction of industrial development by approximately 330,000 square feet, the total trips would decrease by 1,005 trips to 56,223 average daily trips.

Traffic Impacts

Intersection Impacts

As indicated earlier, a number of the intersections in the project area are operating at unacceptable levels of service. The addition of trips generated from the Specific Plan area would further degrade the level of service at these intersections.

Year 2010

As with Alternative 2, a total of 15 intersections would operate at a level of service which would not be acceptable according to the LOS standards established by the agency with jurisdiction over the affected intersection (refer to Table 5.2-7).

Year 2020

A total of 7 intersections would operate at a level of service which would not be acceptable according to the LOS standards established by the agency with jurisdiction over the affected intersection (refer to Table 5.2-8).

Roadway Segment Impacts

Year 2010

As illustrated in Table 5.2-9, development anticipated by the year 2010 would impact a total of 15 roadway segments in the vicinity of the Specific Plan area by impacting intersections which would already be operating at less than LOS D.

Year 2020

As illustrated in Table 5.2-10, development anticipated by the year 2020 would impact a total of 13 roadway segments in the vicinity of the Specific Plan area. Affected roadways include San Juan Grade, North Main, Boronda Road, Russell Road, and Espinosa Road. Impacts would generally occur in both the morning and afternoon peak hour.

Freeway Segments

Year 2010

As illustrated in Table 5.2-11, development anticipated by the year 2010 would impact a total of 4 segments of Highway 101. Impacts would generally occur in both the morning and afternoon peak hour.

Year 2020

As illustrated in Table 5.2-12, development anticipated by the year 2020 would impact a total of 4 segments of Highway 101. Impacts would generally occur in both the morning and afternoon peak hour.

Change in Air Traffic Patterns

As with Alternative 2, Alternative 4E would not result in a significant impact on air traffic patterns.

Increased Traffic Hazards

As with Alternative 2, new roadways constructed as part of the project would be constructed in accordance with applicable road design standards in order to avoid creating a significant traffic hazard.

Emergency Access

As with Alternative 2, adequate emergency access would be available to future development under Alternative 4E.

Parking

As with Alternative 2, parking would be provided to serve individual uses in accordance with County of Monterey standards. Thus, no significant impacts would occur.

Transit Accommodation

As with Alternative 2, Alternative 4E would not interfere with existing or planned traffic. In fact, it would include design features to encourage alternative forms of transit.

5.2.3.3 HYH Property

Development of the HYH Property would produce a total of 11,598 average daily vehicle trips (see Table 5.2-13). Of this total, 765 trips would occur during the morning peak hour while 1,147 trips would occur in the afternoon peak hour.

Traffic Impacts

Intersection Impacts

As indicated earlier, a number of the intersections in the project area are operating at unacceptable levels of service. The addition of trips generated from the HYH Property would further degrade the level of service at these intersections. As indicated in Table 5.2-14, 16 intersections which were evaluated in the traffic report would be significantly impacted by traffic generated by the HYH Property by the year 2010. The intersections impacted by the HYH Property Project in 2010 are different than those impacted in 2010 under Alternatives 2 and 4E because the traffic is assigned to different roadways due to the different location of traffic. For example, the HYH Property project contains none of the employment center.

**TABLE 5.2-13
Traffic Generation (HYH Property Project)**

USE	PROJECT SIZE	DAILY TRIPS
<u>Residential</u>		
Single-Family Detached Housing	730 units	6,986
Apartments	230 units	1,525
Senior Apartments	117 units	468
<u>Recreation/ Commercial</u>		
Golf Course	18 holes	643
Neighborhood Center (Retail)	45,000 sf	2,849
Internal Trip Reduction		-873
NET EXTERNAL TRIPS		11,598

Source: Wilbur Smith Associates, 2001.

**TABLE 5.2-14
Intersections Impacted in the Year 2010 (HYH Property)**

INTERSECTION NO.	NAME	LOS	
		AM	PM
1	North Main and Russell Road	F	F
2	North Main and Boronda Road	E	F
3	North Main and San Juan Grade Road	C	F
5	Rogge Road and San Juan Grade Road	F	E
6	Hebert Road and San Juan Grade Road	F	F
7	Crazy Horse Canyon Road and San Juan Grade Road	F	E
9	Natividad Road and Boronda Road	F	F
12	Crazy Horse Canyon Road and Highway 101 (northbound)	F	F
13	East Laurel Drive and Natividad Road	F	F
14	East Laurel Drive and North Main	F	F
15	West Laurel Drive and Highway 101 (northbound)	B	F
16	West Laurel Drive and Highway 101 (southbound)	D	F
17	North Davis Road and Post Drive	E	F
18	North Davis Road and Blanco Road	C	E
19	Boronda Road and San Juan Grade Road	F	F
20	East Laurel Drive and North Davis Road	F	F

Source: Wilbur Smith Associates, 2001.

Roadway Segment Impacts

As illustrated in Table 5.2-15, development of the HYH Property would impact a total of 15 roadway segments in the vicinity of the Specific Plan area. Affected roadways include San Juan Grade, North Main, Boronda Road, Natividad Road and Harrison Road. Impacts would generally occur in both the morning and afternoon peak hour; however, three of the affected segments would operate at acceptable LOS during the morning.

**TABLE 5.2-15
Roadways Impacted in the Year 2010 (HYH Property)**

SEGMENT NO.	NAME	LOS	
		AM	PM
3	San Juan Grade Road, North of Hebert Road	D	E
5	San Juan Grade Road, North of Boronda Road	E	F
6	San Juan Grade Road, North of Russell Road	E	E
12	North Main Street, South of Boronda Road	E	E
13	Boronda Road, East of Boronda Interchange	D	E
15	Boronda Road, East of McKinnon Road	E	F
16	Natividad Road, North of Boronda Road	D	E
18	Russell Road, West of San Juan Grade Road	D	E
24	Hall Road, East of Willow Road	E	E
25	Blanco Road, East of Salinas River Bridge	F	F
26	Davis Road, North of Central Avenue	F	F
30	San Miguel Canyon Road, South of Morro Road	E	F
31	San Miguel Canyon Road, South of Hall Road	E	E
32	Elkhorn Road, North of Hall Road	E	E
33	Salinas Road, West of Elkhorn Road	D	E

Source: Wilbur Smith Associates, 2001.

Freeway Segments

As illustrated in Table 5.2-16, development of the HYH Property would impact a total of 4 segments of Highway 101. Impacts would generally occur in both the morning and afternoon peak hour.

Change in Air Traffic Patterns

As with Alternative 2, the HYH Property Project would not result in a significant impact on air traffic patterns.

**TABLE 5.2-16
Freeway Segments Impacted in the Year 2010 (HYH Property)**

FREEWAY	NORTHBOUND		SOUTHBOUND	
	AM	PM	AM	PM
Highway 101, North of Boronda Road	D	E	D	E
Highway 101, North of Crazy Horse Canyon Road	C	E	E	D
Highway 101, North of San Juan Road	C	E	E	D

Source: Wilbur Smith Associates, 2001.

Increased Traffic Hazards

As with Alternative 2, roadways within the HYH Property Project would be constructed in accordance with applicable road design standards in order to avoid creating a significant traffic hazard.

Emergency Access

As with Alternative 2, adequate emergency access would be available to future development within the HYH Property Project.

Parking

As with Alternative 2, parking would be provided to serve individual uses within the HYH Property Project in accordance with County of Monterey standards.

Transit Accommodation

The HYH Property Project would provide sidewalks and trails in accordance with the Specific Plan guidelines. In addition, it would not interfere with existing or future transit.

5.2.4 MITIGATION MEASURES

As discussed above, the proposed development would cause a substantial increase in traffic on local roadways. The following section contains a summary statement for significant traffic impacts related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.2.4.1 Alternative 2

Impact 5.2-1: Substantial Increase in Traffic Congestion at Intersections and Roadway Segments in Year 2010. (Direct)

By the year 2010, implementation of Alternative 2 would reduce the level of service at 15 intersections and 15 roadway segments to below acceptable levels, or add traffic to intersections and/or roadway segments already operating at unacceptable levels of service, which would result in significant traffic impacts. Implementation of improvements identified in Table 5.2-17 and shown in Figure 5.2-2 would reduce these impacts. Each development within the Specific Plan would be assessed a fair share of the cost of the identified improvements in an amount to be determined at the final map approval stage for each project in the Specific Plan area. The fair share can be used for both roadway segments and intersections, and shall be calculated to mitigate the project impacts and not existing conditions, although the improvements in most cases are expected to also improve existing conditions. While the payment of a fair share fee approach to implementing the improvements is an appropriate and equitable form of mitigation, availability of supplemental funding or other limitations may constrain the ability of the County to implement the improvements identified in Table 5.2-17. Consequently, the improvements may not be available concurrent with need or completed at all. Thus, the impact on intersections is considered significant and not mitigated to below a level of significance.

Mitigation Measure 5.2-1a: Prior to approval of any final map (except within the HYH Properties Project) ~~or issuance of a building permit~~ resulting in vehicle trips, the project applicant shall prepare a supplemental traffic report to assess the direct impacts of the trips associated with the proposed development. The report shall recommend off-site transportation improvements which would provide the most relief from identified impacts. The County shall determine the project applicant's fair share amount of traffic improvements described in shall pay, or otherwise guarantee, a fair share contribution toward the following improvements pursuant to Table 5.2-17 of the EIR: 1 and 3-15. The project applicant shall use the determined fee amount to construct the traffic improvements identified in the supplemental traffic report to the greatest degree possible, as determined by the County. The project applicant shall post a performance bond equal to the amount of the fair share fees. The traffic improvements to be completed by the applicant shall be identified and the bond posted prior to approval of the final map. The improvements shall be initiated before in conjunction with the first building permit is issued. The County may, at its option, accept payment of all, or a portion, of the applicant's fair share traffic fees in lieu of construction of improvements. The amount of the fair share payment shall be determined by the County.

Mitigation Measure 5.2-1b: After the approval of ~~the first map in Rancho San Juan~~ 1,400 residential units, no subsequent Tentative Map ~~in the Rancho San Juan Specific Plan~~ shall be approved that would result in a cumulative ratio that is less than:

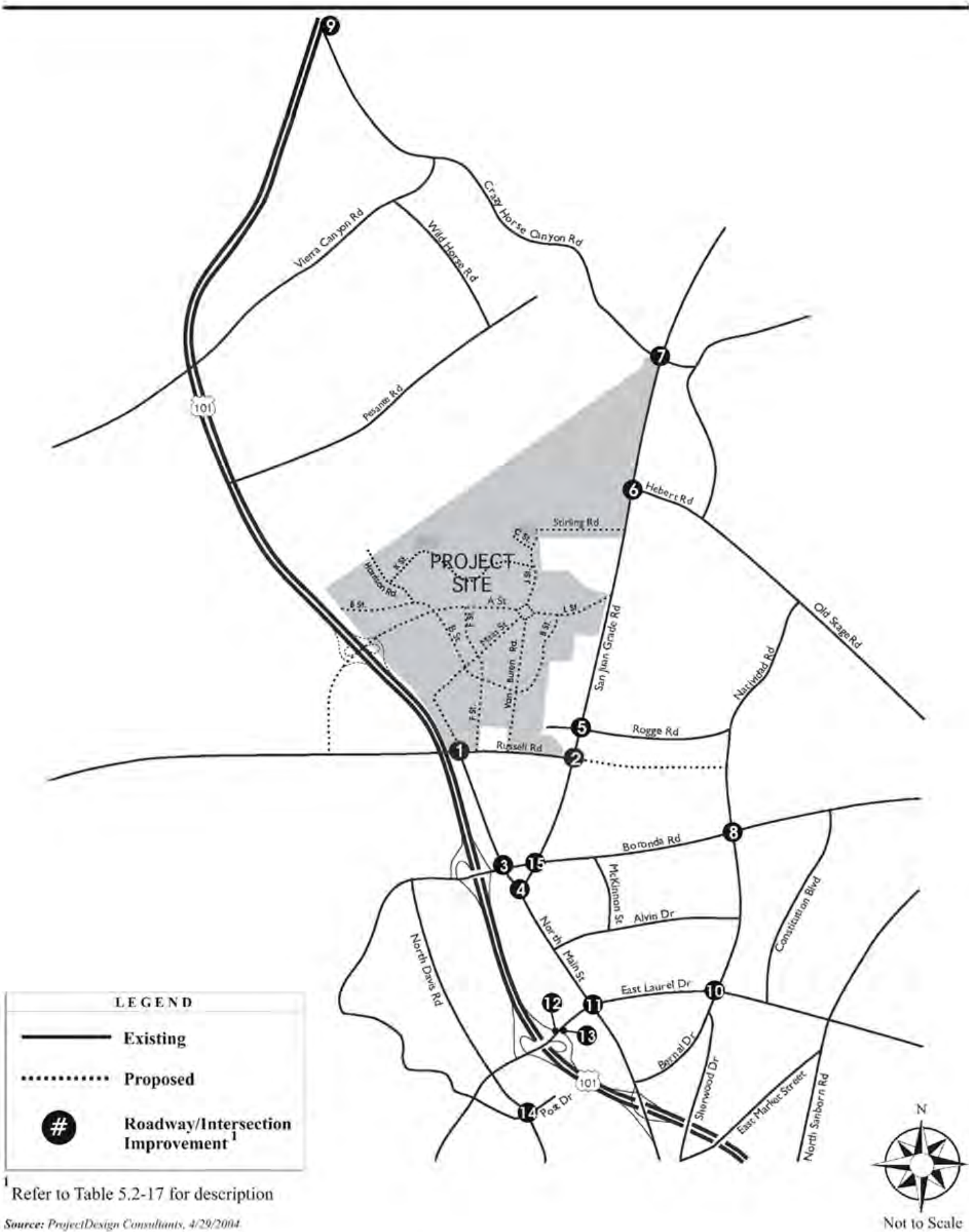
- 450 square feet of employment center square footage for each residential unit exceeding 1,000 cumulative units, or

**Table 5.2-17
Mitigating Roadway Improvements (Alternatives 2 and/or 4E)**

ID #	LOCATION	ACTION	RESPONSIBILITY	IMPLEMENTATION TIMING				
				PRIOR TO YEAR 2010	AFTER YEAR 2020			
					RTP	PIP	WITHOUT BYPASS	WITH BYPASS
1	Russell Road/North Main Street (#1)	Signalize	FS	X	X	X		
2	Russell Road/North Main Street (#1)	Signalize, add s/b through lane and n/b left-turn lane on Main St.	FS				X	X
3	Boronda Road/North Main Street (#2)	Add e/b, w/b and s/b through lanes as well as shared left- through and additional s/b right turn	FS	X				
4	San Juan Grade Road/North Main Street (#3)	Add s/b through lane and e/b left-turn lane	FS	X	X	X		
5	San Juan Grade Road/Rogge Road (#5)	Signalize	FS	X	X	X	X	X
6	San Juan Grade Road/Hebert Drive (#6)	Signalize	FS	X	X	X	X	X
7	San Juan Grade Road/Crazy Horse Canyon Road (#7)	Signalize	FS	X	X	X		
8	Natividad Road/Boronda Road (#9)	Left and through lanes in all directions plus n/b right.	FS	X	X	X	X	X
9	Crazy Horse Canyon Road/US 101 NB (#12)	Signalize	FS	X				
10	East Laurel Drive/Natividad Road (#13)	Add n/b and s/b through lanes and s/b right turn lanes	FS	X	X	X	X	X
11	East Laurel Drive/North Main Street (#14)	Add s/b right-turn lane on N. Main	FS	X	X			
12	West Laurel Drive/US 101 NB (#15)	Add e/b through lane and e/b right-turn lane at East Laurel	FS	X				
13	West Laurel Drive/US 101 SB (#16)	Add s/b left turn lane	FS	X	X			
14	Post Drive/Davis Road (#17)	Add w/b right-turn lane at Post Rd.	FS	X				
15	Boronda Road/San Juan Grade Road (#20)	Left turn lanes at all approaches, e/b through and right-turn, and w/b through	FS	X	X	X	X	X

.Source: Wilbur Smith Associates, 2001.

FS = Fair Share Contribution.



Roadway Mitigation Locations (Specific Plan) Figure 5.2-2

- 75 square feet of commercial square footage for residential unit exceeding 1,000 cumulative units~~a cumulative ratio of employment square footage to residential units throughout the entire Rancho San Juan Specific Plan area of less than 450 square feet per residential unit, or that would result in a cumulative ratio of commercial square footage to residential units of less than 75 square feet per residential unit, unless the following finding can be made by the County:~~

“The tentative map is part of a development for which a development agreement either: 1) establishes a development phasing plan consistent with the overall goals and objectives of the Rancho San Juan Specific Plan, including the need to provide a jobs/housing balance and meet the affordable housing requirements; or 2) allow for development of infrastructure critical to the successful implementation of the Rancho San Juan Specific Plan as determined by the Director of Planning and Building Inspection.”

With the exception of HYH Properties Project, no more than 250 building permits for residential units would be approved annually. A bonus of 150 dwellings could be added if the developer meets all of the sustainability requirements in the Specific Plan (Chapter 8). A bonus of 250 dwelling units could be added if the developer proposes to construct 25 acres of employment center lands as part of his Tentative Map submission.

Level of Significance of Impact 5.2-1 After Mitigation: Significant.

Impact 5.2-2: Substantial Increase in Traffic Congestion on Highways in Year 2010. (Direct)

No adopted fee program is currently in place for project applicants to programmatically compensate for individual project impacts on the State Highway system. TAMC is in the process of finalizing a Regional Development Impact Fee Program to adopt a programmatic development traffic Impact Fee Program that would provide such a mechanism if adopted by the County. Until this program is in effect, impact fees are assessed on an ad hoc basis. Although the County will continue to require developers to contribute their fair share for the ad hoc program, until the TAMC Program is in effect, the impact is considered significant and not mitigable to below a level of significance.

Level of Significance of Impact 5.2-2 After Mitigation: Significant.

Impact 5.2-3: Substantial Increase in Traffic Congestion at Intersections and Roadway Segments in Year 2020. (Direct)

By the year 2020, implementation of Alternative 2 would reduce the level of service at 7 intersections and 13 roadway segments to below acceptable levels, or add traffic to intersections and/or roadway segments already operating at unacceptable levels of service, which would result in significant traffic impacts. Implementation of improvements identified in Table 5.2-17 and shown in Figure 5.2-2 would reduce these impacts. Each development within the Specific Plan

would be assessed a fair share of the cost of the identified improvements in an amount to be determined at the final map approval stage for each project in the Specific Plan area. The fair share amount can be used for both roadway segments and intersections, and would be calculated to mitigate the project impacts and not existing conditions, although the improvements in most cases are expected to also improve conditions. While the payment of a fair share fee approach to implementing the improvements is an appropriate and equitable form of mitigation availability of supplemental funding or other limitations may constrain the ability of the County to implement the improvements identified in Table 5.2-17. Consequently, the improvements may not be available concurrent with need or completed at all. Thus, the impact on intersections is considered significant and not mitigated to below a level of significance.

Mitigation Measure 5.2-3: ~~Prior to approval of any final map (except within the HYH Properties Project) or issuance of a building permit resulting in vehicle trips, the project applicant shall prepare a supplemental traffic report to assess the direct impacts of the trips associated with the proposed development. The report shall recommend off-site transportation improvements which would provide the most relief from identified impacts. The County shall determine the project applicant's fair share amount of traffic improvements described in shall pay, or otherwise guarantee, a fair share contribution toward the following improvements pursuant to Table 5.2-17 of the EIR: 1 and 3-15. The project applicant shall use the determined fee amount to construct the traffic improvements identified in the supplemental traffic report to the greatest degree possible, as determined by the County. The project applicant shall post a performance bond equal to the amount of the fair share fees. The traffic improvements to be completed by the applicant shall be identified and the bond posted prior to approval of the final map. The improvements shall be initiated before in conjunction with the first building permit is issued. The County may, at its option, accept payment of all, or a portion, of the applicant's fair share traffic fees in lieu of construction of improvements. The amount of the fair share payment shall be determined by the County.~~

Level of Significance of Impact 5.2-3 After Mitigation: Significant.

Impact 5.2-4: Substantial Increase in Traffic Congestion on Highways in Year 2020. (Direct)

No adopted fee program is currently in place for project applicants to programmatically compensate for individual project impacts on the State Highway system. TAMC is in the process of finalizing a Regional Development Impact Fee Program to adopt a programmatic development traffic Impact Fee Program that would provide such a mechanism if adopted by the County. Until this program is in effect, impact fees are assessed on an ad hoc basis. Although the County will continue to require developers to contribute their fair share for the ad hoc program, until the TAMC Program is in effect, the impact is considered significant and not mitigable to below a level of significance.

Level of Significance of Impact 5.2-4 After Mitigation: Significant.

5.2.3.2 Alternative 4E

Impact 5.2-5: Substantial Increase in Traffic Congestion at Intersections and Roadway Segments in Year 2010. (Direct)

By the year 2010, implementation of Alternative 4E would reduce the level of service at 15 intersections and roadway segments to below acceptable levels, or add traffic to intersections already operating at unacceptable levels of service, which would result in significant traffic impacts. Implementation of improvements identified in Table 5.2-17 and shown in Figure 5.2-2 would reduce these impacts. Each development within the Specific Plan would be assessed a fair share of the cost of the identified improvements in an amount to be determined at the final map approval stage for each project in the Specific Plan area. The fair share can be used for both roadway segments and intersections, and shall be calculated to mitigate the project impacts and not existing conditions, although the improvements in most cases are expected to also improve existing conditions. While the payment of a fair share fee approach to implementing the improvements is an appropriate and equitable form of mitigation, availability of supplemental funding or other limitations may constrain the ability of the County to implement the improvements identified in Table 5.2-17. Consequently, the improvements may not be available concurrent with need or completed at all. Implementation of Mitigation Measures 5.2-1a and b would reduce impacts on local roadway intersections and segments, but not to less than significant. Thus, the impact on intersections is considered significant and not mitigated to below a level of significance.

Level of Significance of Impact 5.2-5 After Mitigation: Significant.

Impact 5.2-6: Substantial Increase in Traffic Congestion on Highways in Year 2010. (Direct)

No adopted fee program is currently in place for project applicants to programmatically compensate for individual project impacts on the State Highway system. TAMC is in the process of finalizing a Regional Development Impact Fee Program to adopt a programmatic development traffic Impact Fee Program that would provide such a mechanism if adopted by the County. Until this program is in effect, impact fees are assessed on an ad hoc basis. Although the County will continue to require developers to contribute their fair share for the ad hoc program, until the TAMC Program is in effect, the impact is considered significant and not mitigable to below a level of significance.

Level of Significance of Impact 5.2-6 After Mitigation: Significant.

Impact 5.2-7: Substantial Increase in Traffic Congestion at Intersections and Roadway Segments in Year 2020. (Direct)

By the year 2020, implementation of Alternative 4E would reduce the level of service at 7 intersections and 13 roadway segments to below acceptable levels which would result in

significant traffic impacts. Implementation of Mitigation Measure 5.2-3 would reduce impacts on intersections and roadways, but not to below a level of significance.

Level of Significance of Impact 5.2-7 After Mitigation: Significant.

Impact 5.2-8: Substantial Increase in Traffic Congestion on Highways in Year 2020. (Direct)

No adopted fee program is currently in place for project applicants to programmatically compensate for individual project impacts on the State Highway system. TAMC is in the process of finalizing a Regional Development Impact Fee Program to adopt a programmatic development traffic Impact Fee Program that would provide such a mechanism if adopted by the County. Until this program is in effect, impact fees are assessed on an ad hoc basis. Although the County will continue to require developers to contribute their fair share for the ad hoc program, until the TAMC Program is in effect, the impact is considered significant and not mitigable to below a level of significance.

Level of Significance of Impact 5.2-8 After Mitigation: Significant.

5.2.3.3 HYH Property

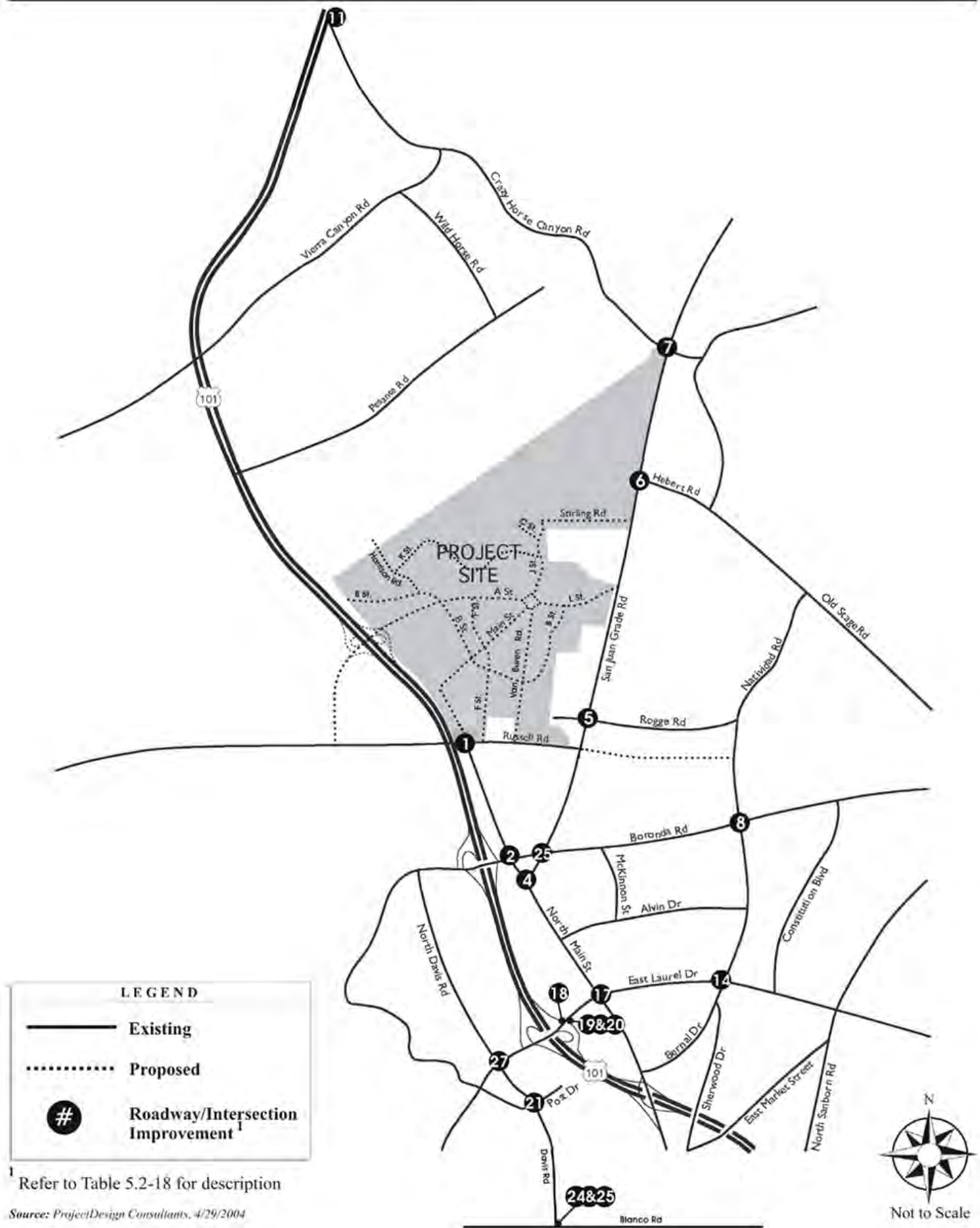
Impact 5.2-9: Substantial Increase in Traffic Congestion at Intersections and Roadway Segments in Year 2010. (Direct)

Development of the HYH Property would reduce the level of service at 16 intersections and 15 roadway segments to below acceptable levels which would result in significant traffic impacts. Implementation of the year 2010 intersection improvements identified in Table 5.2-18 and Figure 5.2-3 would reduce these impacts. Pursuant to a litigation settlement memorialized in the Stipulation between HYH and Monterey County, the amount of local, regional and state highway traffic impact fees and other traffic exactions or improvements, which HYH is legally required to pay or to construct was limited to the amounts calculated and improvements specified by County when the Stipulation was entered into. This calculation was based on a Capital Facilities Plan prepared for the General Plan Update, the City of Salinas' Traffic Fee Ordinance and a nexus study of regional fees prepared by TAMC. Subsequently, County's consultant completed additional traffic modeling and studies indicating that the cost of mitigating traffic impacts of the HYH project would be greater than the stipulated amount. At County's request, HYH has agreed to pay an increased amount not to exceed \$16,017,310 as a mitigation fee for regional and local off-site traffic impacts resulting from residential and commercial development. These fees are to be paid on a per unit and square foot basis at the time of issuance of building permits. In addition to the above traffic impacts fees, HYH shall: 1) construct at its cost, or cause to be constructed by a Community Facilities District, all streets and roads within the HYH Property Project, such improvements, by prior agreement, will be owned by the County and maintained by a Community Services District; and 2) fund, either by direct payment of mitigation fees, or through a Community Facilities District, County acquisition of land or right of way, through negotiation or eminent domain, and construction of all of the off-site roads and

**Table 5.2-18
Mitigating Roadway Improvements (HYH Property)**

ID #	LOCATION	ACTION
1	Russell Road/North Main Street (#1)	Signalize
3	Boronda Road/North Main Street (#2)	Add e/b, w/b and s/b through lanes as well as shared left- through and additional s/b right turn
4	San Juan Grade Road/North Main Street (#3)	Add s/b through lane and e/b left-turn lane
5	San Juan Grade Road/Rogge Road (#5)	Signalize
6	San Juan Grade Road/Hebert Drive (#6)	Signalize
7	San Juan Grade Road/Crazy Horse Canyon Road (#7)	Signalize
8	Natividad Antiviral Road/Boronda Road (#9)	Left and through lanes in all directions plus n/b right.
11	Crazy Horse Canyon Road/Highway 101 NB (#12)	Signalize
14	East Laurel Drive/ Natividad Antiviral Road (#13)	Add n/b and s/b through lanes and s/b right turn lanes
17	East Laurel Drive/North Main Street (#14)	Add s/b right-turn lane on N. Main
18	West Laurel Drive/Highway 101 NB (#15)	Add e/b through lane and e/b right-turn lane at East Laurel
19	West Laurel Drive/Highway 101 SB (#16)	Add s/b left turn lane
20	West Laurel Drive/Highway 101 SB (#16)	Add s/b left turn lane
21	Post Drive/Davis Road (#17)	Add w/b right-turn lane at Post Rd.
22	Blanco Road/Davis Road (#18)	Add s/b through lane, and e/b and n/b right turn lanes
24	Blanco Road/Davis Road (#18)	Add w/b right turn lane at Blanco
25	Boronda Road/San Juan Grade Road (#19)	Left turn lanes at all approaches, e/b through and right-turn, and w/b through
27	East Laurel/Davis Road	E/b left, s/b left

Source: Wilbur Smith Associates, 2001.



Roadway Mitigation Locations (HYH Property Project) — Figure 5.2-3

traffic improvements serving the HYH Property Project. Pursuant to prior agreements, all of these improvements will be owned by the County and maintained by a Community Services District, or if the improvement is to be part of the existing County road system, by the County. All such public roads and traffic improvements shall be constructed in accordance with accepted local engineering standards and Specific Plan standards. All collector road systems, to the extent funded directly or indirectly by HYH, including off-site road and traffic improvements, are eligible for fair share reimbursement from future development benefiting from the facilities.

The following improvements are among those eligible for such fair share reimbursement:

- Project access improvements on J Street/Stirling Road from the development site to its intersection with San Juan Grade Road;
- Signal and intersection improvements at Stirling Road/San Juan Grade Road . This intersection shall operate at acceptable levels of service;
- A northwest project access between the development site and its intersection with Harrison Road;
- Signal and intersection improvements at the intersection of northwest access road and Harrison Road. This intersection shall operate at acceptable levels of service; and
- Emergency access roads as required by the fire department.

These fees and off-site improvements represent County's calculation of HYH's maximum proportionate fair share of traffic mitigation required for the HYH Property project based on an updated Capital Facilities Plan, the City of Salinas' Traffic Fee Ordinance and nexus study of regional fees prepared by TAMC. They are also considerably in excess of the fee and exaction limitations of the Stipulation and reflect the legal limits of what may be imposed consistent with County's contractual commitments. County maintains separate developer fee accounts consistent with state law and will assure that fees collected from HYH will be held in segregated accounts and allocated to the construction of the traffic improvements specified in this EIR.

However, availability of supplemental funding or other limitations may constrain the ability of the County to implement the improvements identified in Table 5.2-18. Thus, the impact on intersections is considered significant and not mitigated to below a level of significance.

Mitigation Measure 5.2-9: Prior to issuance of a building permit resulting in vehicle trips, The applicant shall pay an amount not to exceed \$16,017,310 as a traffic fee for regional, and local off-site commercial and residential traffic impacts to be paid on a per unit or per square foot basis at the time of issuance of building permits. Traffic fees are as follows:

Housing \$14,399,90813,546,095

Market-Rate/Workforce Housing

- No. Units: 862932
- \$/Unit: \$13,794674
- Total Fees: \$12,744,54711,890,733

Moderate

- No. Units: 86
- \$/Unit: \$9,259
- Total Fees: \$796,3054

Low Income

- No. Units: 64.5
- \$/Unit: \$7,039
- Total Fees: \$454,038

Very Low Income

- No. Units: 64.5
- \$/Unit: \$6,279
- Total Fees: \$405,018

Other \$1,617,4012,471,216**Commercial**

- No. Units: 45
- \$/Unit: \$9,118/1,000 sq. ft.
- Total Fees: \$410,298

Golf Course

- No. Units: 1
- \$/Unit: \$342,65048
- Total Fees: \$342,65048

Guest Villas/Timeshares

- No. Units: 44171
- \$/Unit: \$12,17512,186
- Total Fees: \$864,4551,718,268

Total Traffic Fees: \$16,017,310

In addition to the above traffic impacts fees HYH shall: 1) construct at its cost or cause to be constructed by a Community Facilities District, all streets and roads within the HYH Property Project, such improvements, by prior agreement, will be owned by the County and maintained by a Community Services District or other suitable or appropriate entity; and 2) fund, either by direct payment of traffic fees or through a Community Facilities District, County acquisition of land or right of way, through negotiation or eminent domain, and construction of all of the off-site road and traffic improvements serving the HYH Property Project. Pursuant to prior agreements, all of these improvements will be owned by the County and maintained by a Community Services District, or if the improvement is to be part of the existing County road system, by the County. All such public roads and traffic improvements shall be constructed in accordance with accepted local engineering standards and Specific Plan standards.

All on-site and off-site roads and traffic improvements constructed by the applicant, to the extent funded directly or indirectly by applicant, shall be eligible for fair share reimbursement from future development benefiting from the facilities, except to the extent that such improvements are funded by traffic impact fees paid by applicant. Applicant shall prepare and execute an agreement that reimburses the applicant for the fair share proportionate costs subject to the approval of the Public Works Director and County Counsel.

The following improvements are among those roads eligible for such fair-share reimbursement:

- Project access improvements on Stirling Road through the development site to its intersection with San Juan Grade Road;
- Signal and intersection improvements at Stirling Road/San Juan Grade Road. This intersection shall operate at acceptable levels of service;
- A northwest project access between the development site and its intersection with Harrison Road;
- Signal and intersection improvements at the intersection of northwest access road and Harrison Road. This intersection shall operate at acceptable levels of service; and
- Emergency access roads as required by the fire department.

(Planning and Building Inspection, Public Works, North County Fire Protection District)

~~Prior to issuance of a building permit resulting in vehicle trips, the project applicant shall pay a fair share amount not to exceed \$16,017,310 as a mitigation fee for regional, and local off-site commercial and residential traffic impacts to be paid on a per-unit or per-square foot basis at the time of issuance of building permits. In addition to the above traffic impacts fees HYH shall: 1) construct at its cost or cause to be constructed by a Community Facilities District, all streets and roads within the HYH Property Project, such improvements, by prior agreement, will be owned by the County and maintained by a Community Services District; and 2) fund, either by direct payment of mitigation fees or through a Community Facilities District, County acquisition of land or right of way, through negotiation or eminent domain, and construction of all of the off-site roads and traffic improvements serving the HYH Property Project. Pursuant to prior agreements, all of these improvements will be owned by the County and maintained by a Community Services District, or if the improvement is to be part of the existing County road system, by the County. All such public roads and traffic improvements shall be constructed in accordance with accepted local engineering standards and Specific Plan standards. All backbone road systems, to the extent funded directly or indirectly by HYH, including off-site road and traffic improvements shall be eligible for fair share reimbursement from future development benefiting from the facilities.~~

~~The following improvements are among those eligible for such fair share reimbursement:~~

- ~~—Project access improvements on J Street/Stirling Road from the development site to its intersection with San Juan Grade Road;~~
- ~~—Signal and intersection improvements at Stirling Road/San Juan Grade Road. This intersection shall operate at acceptable levels of service;~~

- ~~— A northwest project access between the development site and its intersection with Harrison Road;~~
- ~~— Signal and intersection improvements at the intersection of northwest access road and Harrison Road. This intersection shall operate at acceptable levels of service; and~~
- ~~— Emergency access roads as required by the fire department.~~

~~These fees and off-site improvements represent County's calculation of HYH's maximum proportionate fair share of traffic mitigation required for the HYH Property project based on an updated Capital Facilities Plan and nexus study. They are also considerably in excess of the fee and exaction limitations of the Stipulation and reflect the legal limits of what may be imposed consistent with County's contractual commitments. County maintains separate developer fee accounts consistent with state law and will assure that fees collected from HYH will be held in segregated accounts and allocated to the construction of the traffic improvements specified in this EIR. However, availability of supplemental funding or other limitations may constrain the ability of the County to implement the improvements identified in Table 5.2-18. Consequently, the improvements may not be available concurrent with need or completed at all. Thus, the impact on roadway segments is considered significant and not mitigated to below a level of significance.~~

Level of Significance of Impact 5.2-9 After Mitigation: Significant.

**Impact 5.2-10: Substantial Increase in Traffic Congestion on Highways in Year 2010.
(Direct)**

No adopted fee program is currently in place for project applicants to programmatically compensate for individual project impacts on the State Highway system. TAMC is in the process of finalizing a Regional Development Impact Fee Program to adopt a programmatic development traffic Impact Fee Program that would provide such a mechanism if adopted by the County. Until this program is in effect, impact fees are assessed on an ad hoc basis. Although the County will continue to require developers to contribute their fair share for the ad hoc program, until the TAMC Program is in effect, the impact is considered significant and not mitigable to below a level of significance.

Level of Significance of Impact 5.2-10 After Mitigation: Significant.

5.3 LANDFORM ALTERATION/VISUAL QUALITY

5.3.1 METHOD OF ANALYSIS

The assessment of visual impacts associated with the Specific Plan and HYH Property project is based on a site visit; a review of aerial photography and site photographs; and review of applicable policies in the Adopted Monterey County General Plan, GSAP and the Proposed Monterey County General Plan. The visual assessment of the Specific Plan and HYH Property project involves both a regional and local visual impact assessment.

5.3.1.1 Regional Impact Assessment

Regional landscapes are made up of a characteristic combination of landscape components that distinguishes them from other regional landscapes. The components of the regional landscapes are their “land form” and “land cover.” While “land form” includes natural topography, “land cover” includes various components such as water, vegetation, and manmade development.

5.3.1.2 Local Visual Impact Assessment

The local environment includes areas, or viewsheds, that are visually recognized as being united by character, visual boundaries, or adjacency. The purpose of identifying viewsheds is to determine where visual impacts could occur.

5.3.2 EXISTING CONDITIONS

5.3.2.1 Specific Plan

Regional Setting

The Specific Plan area is located at the northern border of the city limits of the City of Salinas. The City of Salinas is surrounded by agricultural land and has a distinct identity as an urban island located within a rural setting. The Monterey County General Plan identifies the Specific Plan area as the location of future low density residential, high density residential, industrial, and permanent grazing. According to the City of Salinas General Plan, future growth areas would be located in the northeast portion of the city limits, adjacent to the project site.

Local Setting

The Specific Plan area comprises approximately 2,581 acres and is bounded by Highway 101 to the west, Russell Road to the south, San Juan Grade Road to the east, and Bolsa de Escarpines Road to the north. The Specific Plan area is primarily in agriculture, with the remainder consisting of a combination of vacant land and grazing uses. Other uses within the Specific Plan area include the Lagunita School, near San Juan Grade Road and Crazy Horse Canyon Road, and

the Hebert Ranch at the end of Hebert Road near the Bolsa de Escarpine boundary. The Specific Plan area is illustrated in the aerial photograph shown in Figure 3.2-1.

Topography

Topography of the Specific Plan area consists of gently rolling hills in the northern and northwestern portion and generally flat areas in the southern and eastern areas. Elevations range from about 120 feet to approximately 300 feet above mean sea level. The Specific Plan area can be characterized by three main areas: the southwestern flats located adjacent to the City of Salinas (871 acres), the southeast flats (550 acres), and the north hillsides (1,160 acres). Approximately 153 acres, or 6 percent of the Specific Plan area, has between 20 and 30 percent slopes and approximately 23 acres, or 1 percent of the Specific Plan area, exceeds 30 percent slopes. Slopes within the Specific Plan area are presented in Figure 5.3-1. The steeper slopes are located within the north hillside area. The gentle slopes and overall rise in elevation north of Salinas offers excellent views of the Salinas Valley and Gabilan Mountains.

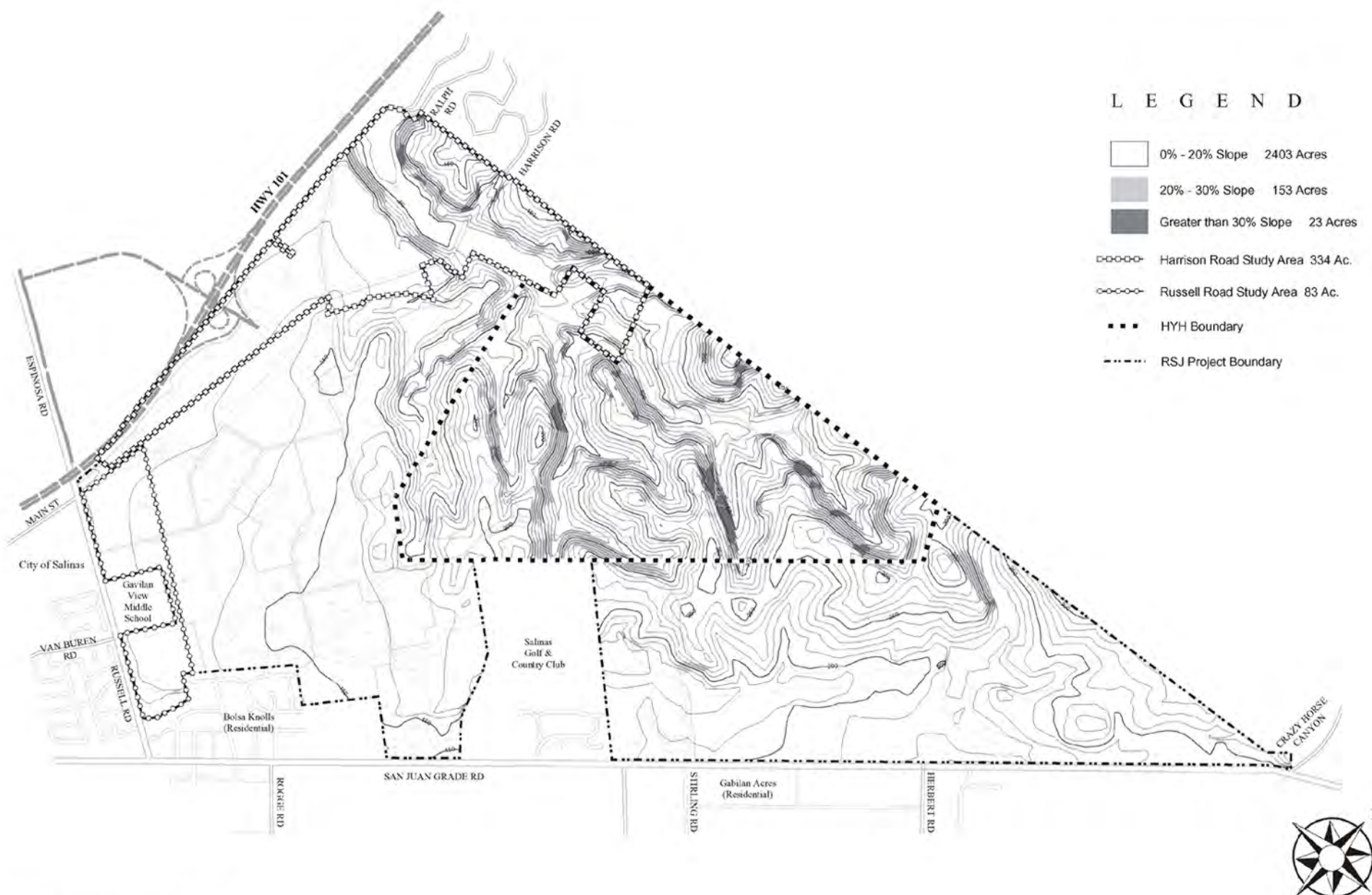
Surrounding Land Uses

The surrounding visual character is comprised of urban development, agriculture and open space. Scattered commercial uses are inter-spaced with row crop agriculture along the west side of Harrison Road, with large parcel residential uses established along the east side of Harrison Road. Numerous small residential subdivisions and a golf course surround most of the south, east, and west perimeter of the project site. The residential area known as Bolsa Knolls, in the City of Salinas, borders the Specific Plan area to the south. The Salinas Golf and Country Club Estates, located on the westside of San Juan Grade Road, is surrounded on three sides by the project site. To the east of San Juan Grade Road, north of the country club, is Gabilan Acres, an older residential subdivision. Further east of the Specific Plan area are agricultural lands and a dolomite quarry. Gavilan Middle School is located south of the Specific Plan area along Russell Road. A few scattered homes located on large parcels also exist along the northeast boundary of the project site. Woodland hillsides and a limited amount of farmland are located north of the Specific Plan area.

Primary Viewsheds

There are five primary viewshed areas from surrounding roadways with views of the Specific Plan area. These viewshed areas include the following:

- **Highway 101.** Highway 101 runs north to south approximately 4,500 feet west of the project site. According to the Adopted Monterey County General Plan and the Proposed Monterey County General Plan, Highway 101 is not considered a State Scenic highway in the vicinity of the project site. Existing views of the Specific Plan area from Highway 101 are slightly obscured in the northbound and southbound direction by existing commercial/industrial and residential development located adjacent to the highway and the change in the topography along the highway. Figure 5.3-2 presents a view of the Specific Plan area from Highway 101.



- L E G E N D**
- 0% - 20% Slope 2403 Acres
 - 20% - 30% Slope 153 Acres
 - Greater than 30% Slope 23 Acres
 - Harrison Road Study Area 334 Ac.
 - Russell Road Study Area 83 Ac.
 - HYH Boundary
 - RSJ Project Boundary

Source: ProjectDesign Consultants, 2003



Slope Map _____ Figure 5.3-1

- **San Juan Grade Road.** San Juan Grade Road borders the Specific Plan area to the east. Existing development along San Juan Grade Road includes the Bolsa Knolls residential development, Salinas Golf and Country Club, and Country Club Estates along the eastern portion of the Specific Plan area. These existing developments and undulating landform block direct views into the Specific Plan area from the eastern portion of the Specific Plan area. The dominant view in the western portion of San Juan Grade Road is of existing agricultural fields and adjacent ridgelines. San Juan Grade Road is not a County designated scenic roadway. Figures 5.3-3 presents a view of the Specific Plan area from San Juan Grade Road.
- **Russell Road.** Russell Road runs west to east and forms the southern boundary of the project area. The Specific Plan area borders Russell Road to the north. Existing development in the City of Salinas is located south of Russell Road. Existing views of the Specific Plan area from Russell Road include agricultural fields and Gavilan View Middle School. Russell Road is not a County designated scenic roadway. Figure 5.3-4 presents views of the Specific Plan area from Russell Road.
- **Harrison Road.** Harrison Road forms the western boundary of the Specific Plan area. Undulating topography and existing development partially block direct views from this roadway to the Specific Plan area. Harrison Road is not a County designated scenic roadway. Figure 5.3-5 presents views of the Specific Plan area from Harrison Road.

Regulatory Framework

This section presents applicable policies from the Adopted Monterey County General Plan, GSAP and the Proposed Monterey County General Plan (draft dated January 2004). Applicable policies for the discussion of visual resources are discussed within this section.

Monterey County General Plan (Adopted)

Several applicable visual resource policies contained within the Adopted Monterey County General Plan are applicable to the Specific Plan. These policies include the following:

Policy 26.1.9 limits ridgeline development to preserve the County's scenic and rural character. Ridgeline development is defined as development on the crest of a hill, which has the potential to create a silhouette or other substantially adverse impact when viewed from common viewing areas. The County grants permits when development would not create a substantially adverse visual impact when viewed from a common viewing area. This policy is applicable to the proposed project.

Policy 26.1.10 generally prohibits development on slopes greater than 30 percent with a few exceptions if the findings can be made there is no alternative which would allow development to occur on slopes of less than 30 percent, or the proposed development better achieves the resource protection objectives and policies contained in the Monterey County General Plan, accompanying area plans, and land use plans, and all applicable master plans. This policy is applicable to the proposed project.

Match Line



Match Line



Source: EMC Planning Group, Inc., 3/2004

View from Highway 101 _____ Figure 5.3-2

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Source: EMC Planning Group, Inc., 3/2004

View from San Juan Grade Road _____ Figure 5.3-3

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Source: EMC Planning Group, Inc., 3/2004

View from Russell Road

Figure 5.3-4

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Source: EMC Planning Group, Inc., 3/2004

View from Harrison Road _____ Figure 5.3-5

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Policy 26.1.20 requires that all exterior lighting reduce the affects of light and glare. This policy is applicable to the proposed project.

Greater Salinas Area Plan

According to the GSAP, the project site or immediate vicinity is not identified as a scenic vista. However, the Policy 40.1.1.1 indicates the Prunedale Bypass, if constructed, shall be designated a scenic highway.

Monterey County Draft General Plan (Proposed)

Scenic resources in the Proposed General Plan are addressed under Goal ER-9 of the Environmental Resource Management Element. Goal ER-9 states: "Protect the scenic resources of the County for environmental quality and to support the economic vitality of the County's tourism industry." The Proposed General Plan proposes 15 policies to implement this goal. One policy is applicable to this project and is summarized below.

Policy ER-9.6 pertains to topographic alteration. This policy requires that all structures shall be designed to fit within the hillside, rather than altering the landform to accommodate buildings designed for level sites where topographic alterations may be necessary. This policy requires that grading plans mimic the existing topography and avoid geometric cuts and fills where feasible. This policy is applicable to the proposed project.

5.3.2.2 HYH Property Project

Local Setting

The HYH Property comprises approximately 671 acres and is bounded by the Specific Plan area to the north and the Salinas Golf and Country Club to the south. The majority of the property consists of agricultural lands and open space. Two homes with associated structures (i.e. shed, water tower) are located along the western boundary of the HYH Property. The site also contains oak woodlands and detention ponds.

Topography

The topography of the HYH Property consists of steep rolling hills, with elevations ranging from approximately 50 feet to 300 feet. The HYH Property is characterized by a series of ridges and drainage courses throughout. Santa Rita Creek flows though the northern portion of the HYH Property.

Primary Viewsheds

The HYH Property is primarily visible from Highway 101, Russell Road, San Juan Grade Road, and Harrison Road.

Regulatory Framework

The HYH Property is subject to the same regulatory framework as the Specific Plan.

5.3.3 THRESHOLDS OF SIGNIFICANCE

Impacts to visual resources and landforms would be significant if the proposed project would exceed the following CEQA thresholds:

- Have a substantial adverse effect on a scenic viewshed;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway or County scenic roadway;
- Substantially degrade the existing visual character or the quality of the site and its surroundings; or
- Create a new source of substantial light or glare, which would adversely affect day and nighttime views in the area, and/or

Exceed the following County of Monterey threshold:

- Result in excessive ridgeline development or development on slopes greater than 30 percent.

5.3.4 POTENTIAL IMPACTS

5.3.4.1 Alternative 2

Visual Character

Implementation of Alternative 2 would change the visual character of the project site by converting approximately 67 percent (1,727.1 acres) of the Specific Plan area from largely agricultural uses to urban development. Although the Specific Plan contains design measures which would assure that the development would be sensitively designed and sited, the magnitude of the change in visual character resulting from conversion from agriculture/open space to a developed condition would have a significant impact on the visual character of the area.

According to the GSAP, Adopted Monterey County General Plan and the Proposed Monterey County General Plan, the Specific Plan area is not identified as within a scenic viewshed. However, the GSAP identifies the future Prunedale Bypass as a scenic route. The existing Highway 101 is not considered a State Scenic highway in the vicinity of the project site. No existing roads within the vicinity of the project site are designated or eligible County Scenic Routes in the Monterey County General Plan or the Monterey County Draft General Plan Update. As the Prunedale Bypass would not be constructed under this alternative, no impacts on scenic roadways would occur as a result of Alternative 2.

Approximately 4,000 residential units, a mixed-use town center, and town square with nearly 373,100 square feet of retail/community space would occur in the central and western portions of the Specific Plan area. Approximately 610 acres of the development area would be retained in open space. The open space would be located primarily along the northern boundary and along

drainage courses throughout the property. In addition, a golf course would be created in the central portion of the property. Agriculture would continue to be an interim use within this future development area.

Development would be located in the lower elevations or valleys in the southern portion of the Specific Plan area, however, some low density residential and estate homes would be sited on steeper slopes in the north hillside area of the Specific Plan. Development within the north hillside area would primarily occur within Golf Course Resort Planning Area, Central Neighborhood Planning Area, North Hillside Neighborhood Planning Area, and Sewage Treatment Facility Planning Area. The current alignment of Highway 101 would be maintained but improvements such as a new interchange along the boundary of the project site would be undertaken but not as part of the project.

Proposed development on higher elevations within the Specific Plan would not result in a significant visual impact. Views of the Specific Plan area from the viewpoints discussed above are as follows:

- **Highway 101.** The lower elevations of the Specific Plan would be slightly obscured from vehicular traffic traveling north and south along Highway 101 as the undulating topography and existing industrial, residential, and commercial uses located along the eastern side of the highway generally obscure direct views of the project site. As stated earlier, Highway 101 is not considered a scenic highway within the vicinity of the project site.
- **San Juan Grade Road.** Portions of the Specific Plan would be visible from San Juan Grade Road, however development within the southwestern portion of the project site would be slightly obscured by existing development including the Salinas Golf and Country Club and the Bolsa Knolls residential neighborhood. Alternative 2 proposes open space, low density residential, a neighborhood center, and future residential uses along San Juan Grade Road. Although development within the Specific Plan area would be visible from the San Juan Grade Road, this roadway is not designated a County designated scenic roadway.
- **Russell Road.** Development in the Specific Plan area would be visible from Russell Road, however Gavilan View Middle School would partially block direct views of the Specific Plan area from this roadway. Development proposed along Russell Road includes a school, a park, and the employment center. Although development within the Specific Plan area would be visible from Russell Road, this roadway is not a County-designated scenic roadway.
- **Harrison Road.** Undulating topography and existing development would partially block direct views of development proposed in the Specific Plan from Harrison Road, however, proposed residential, office, hotel, and open space would be visible from the roadway. Although, development within the Specific Plan area would be visible from Russell Road, this roadway is not a County designated scenic roadway.

According to the Specific Plan, design standards are presented as a minimum set of guidelines for future development within the Specific Plan area. The intended use of the design guidelines is to provide a framework to illustrate and define design standards for a unified, harmonious setting for the diverse activities and land uses inherent in a large-scale mixed-use development of this nature. The Specific Plan includes design standards for residential; commercial/mixed use; employment center; and public parks. Within each land use designation are standards for site design criteria, and architecture associated with the various site constraints within each planning area. Implementation of these standards would ensure consistency of form between the urban development proposed within each planning area in the Specific Plan.

The Specific Plan would include construction of up to 4,000 residential units, a mixed-use town center, and town square with nearly 373,100 square feet of retail/community space. Lighting associated with these proposed urban improvements would increase over existing rural/agricultural conditions at the project site. Detailed lighting standards are included within the Specific Plan, including standards for lighting associated with sidewalks and streets, parking lots, and energy efficient lighting. In addition, a number of lighting sources have been prohibited within the Specific Plan area to minimize light and glare associated with exterior lighting with construction of these uses. Implementation of these standards would ensure that the proposed project would not result in the emission of light and glare, which would affect the nighttime sky.

Landform Alteration

Based on preliminary mass-grading plans, an estimated 1,530 acres or 59 percent of the site would be graded with implementation of the Specific Plan.

The Specific Plan includes a number of design guidelines which would reduce landform impacts. Grading would be kept to a minimum by concentrating development at higher intensities on the more level portions of the project site. Grading standards in the Specific Plan would require that reshaping of land be carried out in a manner that preserves and enhances the natural topography of the Specific Plan area and prohibits grading on slopes of 30 percent or greater unless consistent with Section 21.64.230 of the Monterey County Zoning Ordinance.

Specific standards are included in the Specific Plan for grading activities on slopes greater than ten percent. For all slopes over ten percent, the Specific Plan includes policies that would ensure: grading of roads would not exceed five percent; contour grading to echo the adjacent terrain and not look artificial or out of place; limiting cut and fill slopes to a maximum of twenty feet; and designing slopes adjacent to roadways and highly visible places to soften their visual impacts. Only minimal grading would be allowed on slopes of 15 to 20 percent if they are located away from an open space edge and surrounded by proposed development and no grading would be permitted on slopes greater than 20 percent, unless required for a public facility, such as a sewer treatment plant or ponds, retention or detention basins, habitat restoration or trails.

5.3.4.2 Alternative 4E

Visual Character

As with Alternative 2, this development scenario would convert 67 percent of the property to an urban development pattern, which would have a significant impact on the visual character of the area. In general, the development character and locations would be similar to Alternative 2. Development footprints and residential densities would vary somewhat, however, the overall appearance of the development would remain the same.

As indicated earlier, the Prunedale Bypass would be considered a Scenic Highway. Development of the Specific Plan area would change the character of the property as viewed from the future Prunedale Bypass. Currently, views of the property from on the onsite alignment of the Bypass are dominated by agricultural fields. Development in accordance with the proposed Specific Plan would replace these agricultural fields with a variety of development. The area immediately south of the Bypass would be converted to the proposed golf course. The golf course would provide an attractive foreground view for motorists traveling along the Bypass and form a transition to the residential development which is proposed further south.

The golf course maintenance facility and wastewater treatment plant would be visible along the north side of the Bypass through the Specific Plan area. The visual impact of these two facilities would be reduced by the fact that they would occur at an elevation which is higher than the Bypass. Consequently, the facilities would not be as visible. Furthermore, views of the golf course to the south would most likely divert attention from views to the north. Thus, the proposed project would not have a significant impact on the Bypass as a scenic highway.

Landform Alteration

Grading associated with Alternative 4E would be essentially the same as Alternative 2 as the development footprints in the area would be similar. As with Alternative 2, implementation of the grading standards contained in the proposed Specific Plan would avoid significant landform impacts from development in accordance with Alternative 4E.

5.3.4.3 HYH Property

Visual Character

As with the Specific Plan, the development of the HYH Property would result in a significant impact on visual character due to the conversion of undeveloped land to urban development. As the HYH Property contains the higher elevations found within the Specific Plan area, development within this area would be generally visible from all four primary viewpoints described earlier. Proposed residential development along the western property boundary would be visible from Highway 101 and Russell Road. Facilities associated with the proposed golf course maintenance, and wastewater treatment plant located along the northern boundary would also be visible from these roadways. Although the foreground view is currently agriculture, the foreground view would consist of a mixture of residential and commercial uses envisioned by the

Specific Plan. As a result, the contrast between development and agriculture would be anticipated to be eliminated in the long-term.

The proposed project would also be visible from San Juan Grade Road. Foreground views include agriculture with the exception of the Salinas Golf and Country Club and Country Club Estates. As discussed earlier, these foreground views would be expected to convert to development with implementation of the Specific Plan. Background views consist of the Gabilan Mountains in the distance. Development of the HYH Property would change the middle ground view from San Juan Grade from agriculture to development including residential and the proposed golf course. The development would not block long-range views of the Gabilan Mountains nor would it contrast with the foreground view once the rest of the Specific Plan is implemented.

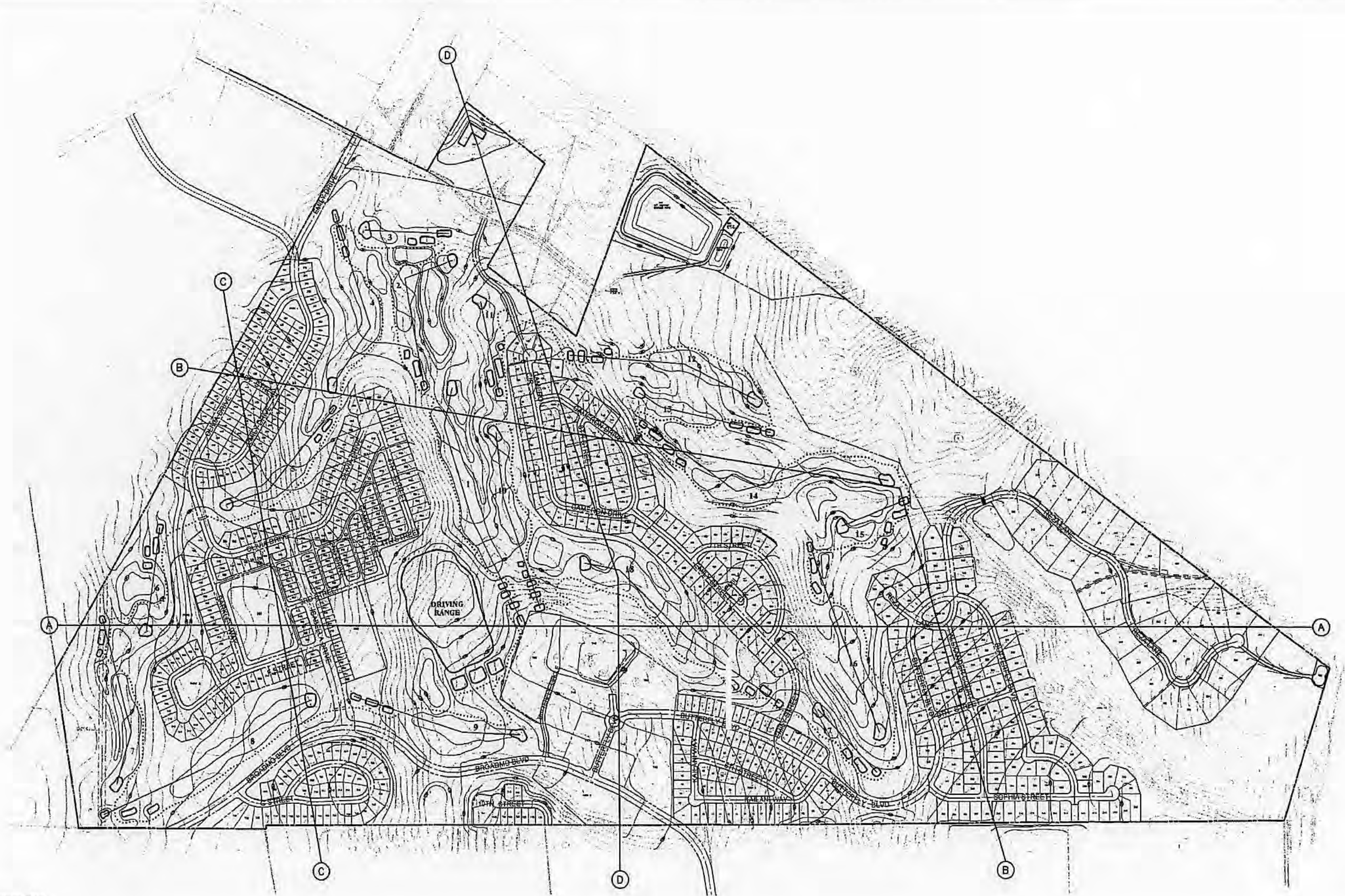
Views from Harrison Road would be similar to Highway 101 and Russell Road. Future homes would be visible in the area of Olivia Lane, as would portions of the golf course. The proposed golf course maintenance facility, and wastewater treatment plant would also be visible. As discussed earlier, the foreground views would be anticipated to change from agriculture to development including residential homes and possibly the Prunedale Bypass. However, a portion of the foreground view would be retained in open space by the proposed Specific Plan.

The potential sources of light and glare as well as the control standards contained in the Specific Plan for the HYH Property would be the same as Alternative 2 and 4E. An exterior lighting plan is a standard condition of approval and would be required prior to issuance of building permits. Therefore, no significant light or glare impacts would result from implementation of the HYH Property development within the Specific Plan area.

Landform Alteration

As the HYH Property contains the portion of the Specific Plan area exhibiting the greatest variety of topography, development of the property would result in the largest amount of landform alteration associated with development of the Specific Plan area. According to the applicant, grading associated with HYH Property would encompass 456 acres result in cut and fill of approximately 4,874,000 cubic yards of soil. The applicant has prepared cross sections of the grading profiles associated with the HYH Property development. A key map of these sections is shown in Figure 5.3-6A. Grading cross sections are shown in Figures 5.3-6B and 6C.

Overall, the proposed grading reflects that the preliminary grading concept envisioned for the property by the Specific Plan. The majority of the knolls and ridgelines would be cut to create development areas. Fill would be placed in ravines to increase the development area on knolls and to accommodate the proposed golf course. In the process of creating development areas, the knolls and ridgelines would be lowered by as much as 50 feet. However, several of the graded development areas in the vicinity of knolls would create grade variation which reflect the original landform. The greatest reduction in the knolls would occur in the south and west portions of the property as depicted in Figure 5.3-6A and 6B. For example, the knoll along the



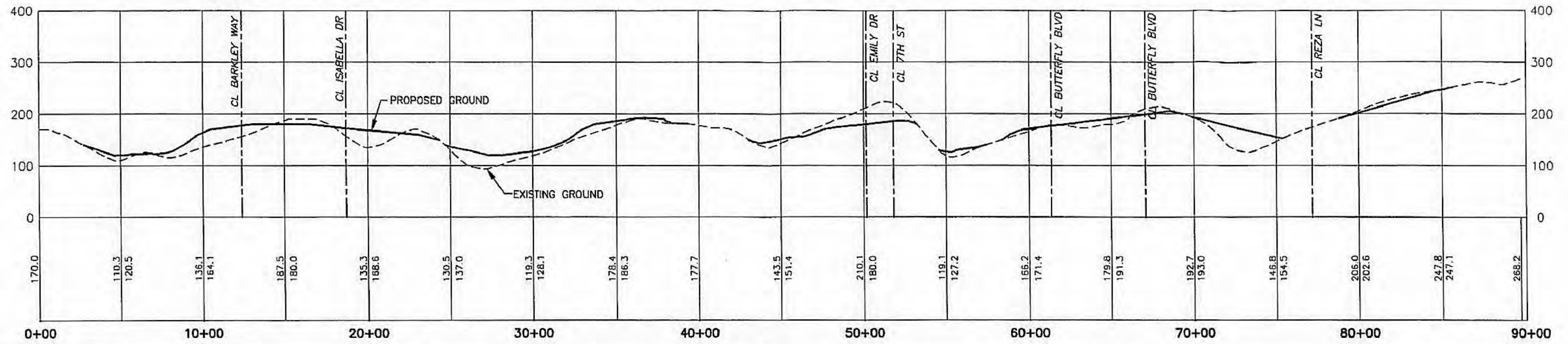
Source: Bestor Engineers, 2004



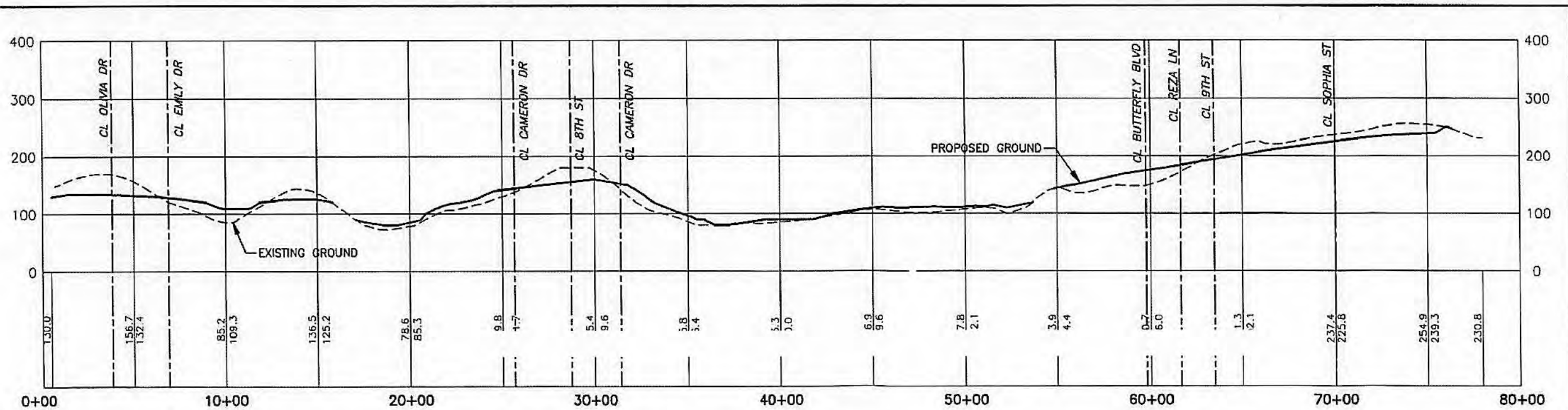
HYH Grading Cross Sections

Figure 5.3-6A

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SECTION A-A

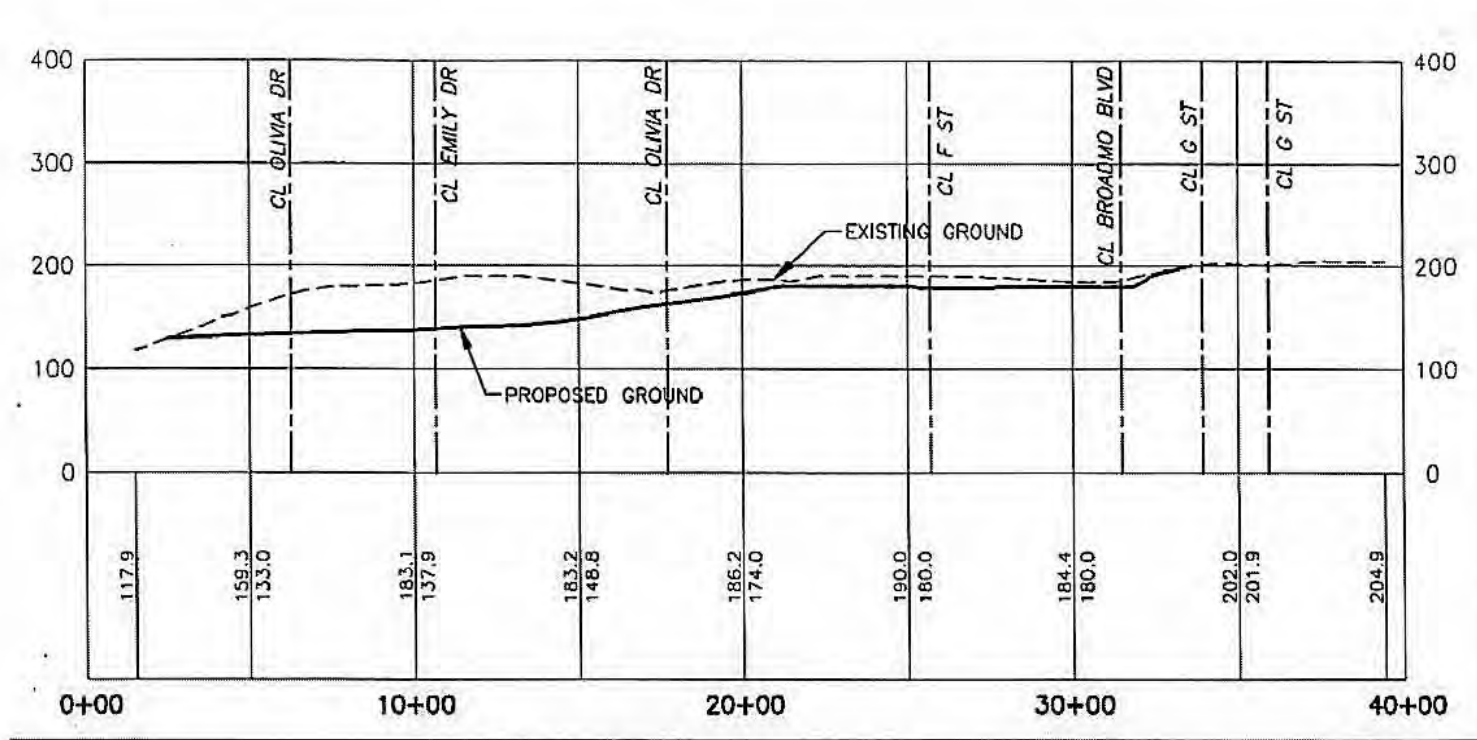


SECTION B-B

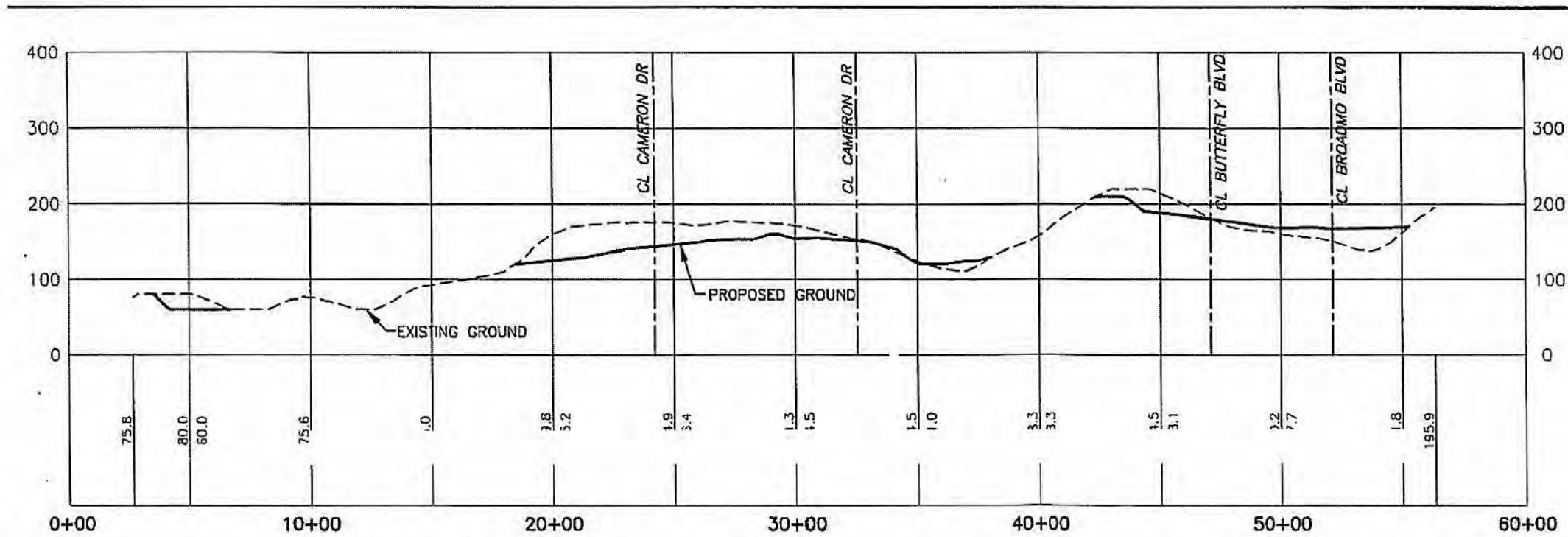
Source: Bestor Engineers, 2004

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SECTION C-C



SECTION D-D

Source: Bestor Engineers, 2004

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western boundary in the vicinity of the proposed Olivia Lane would be reduced by a maximum of 53 feet. The most substantial fill would be placed in the western portion of the property to support the proposed driving range. In general fill would be placed within ravine areas in a manner that retains the original configuration of the ravines although generally reducing their width.

A limited ridgeline silhouette of housing and golf course facilities would be visible from a short segment of San Juan Grade Road. The silhouette would largely result from the construction of single-family residential homes along the proposed Barkley Way in the HYH Property site. Residential design standards in the Specific Plan would ensure that paint colors are restricted to medium to light earth-tone colors that would blend in with the existing environment. In addition, the Specific Plan restricts the use of brightly colored or highly reflective roofing materials. The homes proposed along this silhouette would not exceed 25 feet, although the Specific Plan would allow for the construction of homes with a maximum height of 35 feet. Thus, it is concluded that the HYH development would not have a significant impact on ridgelines

As indicated earlier, Policy ER-9.6 in the Proposed County of Monterey General Plan could apply to the HYH Property because it pertains to topographic alteration. This policy requires that all structures be designed to fit within the hillside, rather than altering the landform to accommodate buildings designed for level sites where topographic alterations may be necessary. This policy requires that grading plans mimic the existing topography and avoid geometric cuts and fills. Although substantial landform alteration would occur within the subject property, contour grading has been incorporated into the HYH Property grading plans. As discussed earlier, the grading on some of the knolls would reflect the original shape. In addition, fill placed in ravines would be contoured to reflect the existing topography.

5.3.5 MITIGATION MEASURES

The following section contains a summary statement for each significant landform alteration/visual quality impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is provided which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.3.5.1 Alternative 2

Impact 5.3-1: Development of the Specific Plan area would convert the land from agriculture and open space to urban development. (Direct)

Implementation of Alternative 2 would transform the property from an undeveloped condition consisting of agriculture and open space to an urban development. While the Specific Plan includes a series of guidelines that would reduce the visual impact of this conversion (e.g. landscaping and building height limitations), the magnitude of the change prevents the design

measures from reducing the visual impacts to below a level of significance. No other mitigation is available

Level of Significance of Impact 5.3-1 After Mitigation: Significant.

Impact 5.3-2: Development of the Specific Plan area would result in a substantial modification of the ridgelines and slopes over 30 percent. (Direct)

Implementation of Alternative 2 would grade 67 percent of the property. Ridges would be lowered by as much as 50 feet and large manufactured slopes would be created to accommodate the proposed development. While the Specific Plan includes a series of guidelines to reduce the landform impacts (e.g. contour grading), the magnitude of the landform change prevents the design measures from reducing the impacts to ridgelines and slopes over 30 percent to below a level of significance. The mitigation measure provided below would contribute to a further reduction of impacts to ridgelines and slopes over 30 percent, but not to below a level of significance.

Mitigation Measure 5.3-2: Prior to the issuance of a grading permit for development phases, the applicant shall submit a plan for the review and approval of the Monterey County Planning and Building Inspection Department that ~~identifies building envelopes on each proposed lot that would minimize grading impacts by avoiding ridgeline development.~~ Prior to the issuance of grading permits for individual lots with the potential for ridgeline development, the applicant shall submit a plan identifying building envelopes that would minimize additional grading and avoid ridgeline development.

Level of Significance of Impact 5.3-2 After Mitigation: Significant.

5.3.5.2 Alternative 4E

Significant impacts related to landform alteration/visual quality would be the same as these for Alternative 2. While design guidelines contained in the proposed Specific Plan would reduce the visual and landform impacts of development and applicants will be required to implement Mitigation measure 5.3-2, no additional mitigation measures are available to reduce the change in visual character to below a level of significance.

5.3.5.3 HYH Property Project

Impact 5.3-3: Development of the HYH Property would convert the land from agriculture and open space to urban development. (Direct)

Implementation of the HYH Property project would transform the property from an undeveloped condition consisting of agriculture and open space to an urban development. While the Specific Plan includes a series of guidelines to reduce the visual impact of this conversion, the magnitude of the change prevents the design measures from reducing the visual impacts to below a level of significance. No other mitigation measure is available.

Level of Significance of Impact 5.3-3 After Mitigation: Significant.

Impact 5.3-4: Development of the HYH Property would result in a substantial modification of the ridgelines and slopes over 30 percent. (Direct)

Implementation of the HYH Property project would grade a major portion of the property. Knolls would be lowered by as much as 50 feet and large manufactured slopes would occur to accommodate the proposed development. While the Specific Plan includes a series of guidelines to reduce the landform impacts (e.g. contour grading), and although the applicant will be required to comply with Mitigation Measure 5.3-2, the magnitude of the landform change prevents the design measures from reducing the impacts to ridgelines and slopes over 30 percent to below a level of significance.

Level of Significance of Impact 5.3-4 After Mitigation: Significant.

5.4 BIOLOGY

The following discussion is based on the Rancho San Juan Specific Plan Comprehensive Biological Resources Assessment (EMC Planning Group, Inc. (EMC) May 2003), which is contained in its entirety in Appendix E of the technical appendices of this EIR. Due to evolution of the land use plan subsequent to the preparation of this EIR, the impact statistics in the report are partially outdated. The original survey covered a larger project area and the land use bubbles have been amended in the interim. The correct impact areas, however, are included in the discussion of biological impacts which follows.

The Comprehensive Biological Resources Assessment incorporated existing biological resources information for the Specific Plan area contained in the following documents: Biological Inventory and Survey Report for Special-Status Plant Species, Rancho San Juan ADC Specific Plan EIR, Planning Area 2 (Sycamore Environmental Consultants 1998), Rancho San Juan Area of Development Concentration Special-Status Vertebrate Survey (Biosearch Wildlife Surveys 1995), Site Assessment Report for California Red-Legged Frog: Rancho San Juan ADC Specific Plan EIR, Planning Area 2 (Sycamore Environmental Consultants 1998), Wildlife Survey Report for Rancho San Juan ADC Specific Plan EIR Planning Area 2 (Sycamore Environmental Consultants 1998), Planning Area 2 of Rancho San Juan ADC, Winter & Spring 2000 California Tiger Salamander Assessment, Monterey County, California (Bryan Mori Biological Consulting Services 2001), various correspondence from U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). (These documents are provided as appendices to the Comprehensive Biological Resources Assessment.) In addition to incorporating information from these documents, the Comprehensive Biological Resources Assessment includes the results of reconnaissance-level surveys of the Specific Plan area conducted by Cara Galloway, MA, Biologist, EMC Planning Group Inc., on April 15, April 17, June 20, and June 21, 2002. This section also includes information obtained from Dave Pareksta, USFWS, and Jeff Cann, CDFG, during a meeting on site on March 20, 2002 to discuss previous biological resources studies, current site conditions, and the current conceptual site plan in order to determine any remaining surveys required to identify biological resources, potential impacts, and appropriate mitigation measures, and to identify necessary regulatory requirements for development in the Specific Plan area. Finally, this section includes information provided in the Forest Management Plan for Butterfly Estates at Rancho San Juan (Staub Forestry and Environmental Consulting 2003), which was prepared for the HYH Property project and is included as Appendix E of the technical appendices of this EIR.

5.4.1 EXISTING CONDITIONS

5.4.1.1 Specific Plan

Habitat Types

As indicated in Figure 5.4-1, the Specific Plan area is composed primarily of agricultural land, non-native annual grassland, mixed native/non-native grassland, oak woodland, riparian scrub,

and aquatic habitats. The following is a description of the habitats found in the Specific Plan area.

Agricultural Lands

The majority of the Specific Plan area contains active agricultural lands (predominantly cultivated strawberry fields) and does not contain naturally-occurring plant species. Agricultural land uses and associated rural residential development occupy approximately 1,900 acres, or 74 percent of the Specific Plan area. Ruderal (disturbed) vegetation dominated by non-native grasses and other weedy plants, including rigput brome (*Bromus diandrus*), foxtail (*Hordeum* spp.), wild mustard (*Brassica* spp.), and filaree (*Erodium* spp.) occurs along the field margins.

Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife. Crows and songbirds forage in cultivated and fallow fields, and small mammals, including Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), and black-tailed hare (*Lepus californicus*) also forage and burrow in fields, where they are not actively controlled, and field margins. Larger mammals such as coyotes (*Canis latrans*) and foxes may also utilize cultivated or fallow fields for hunting and foraging but are not likely to inhabit these areas.

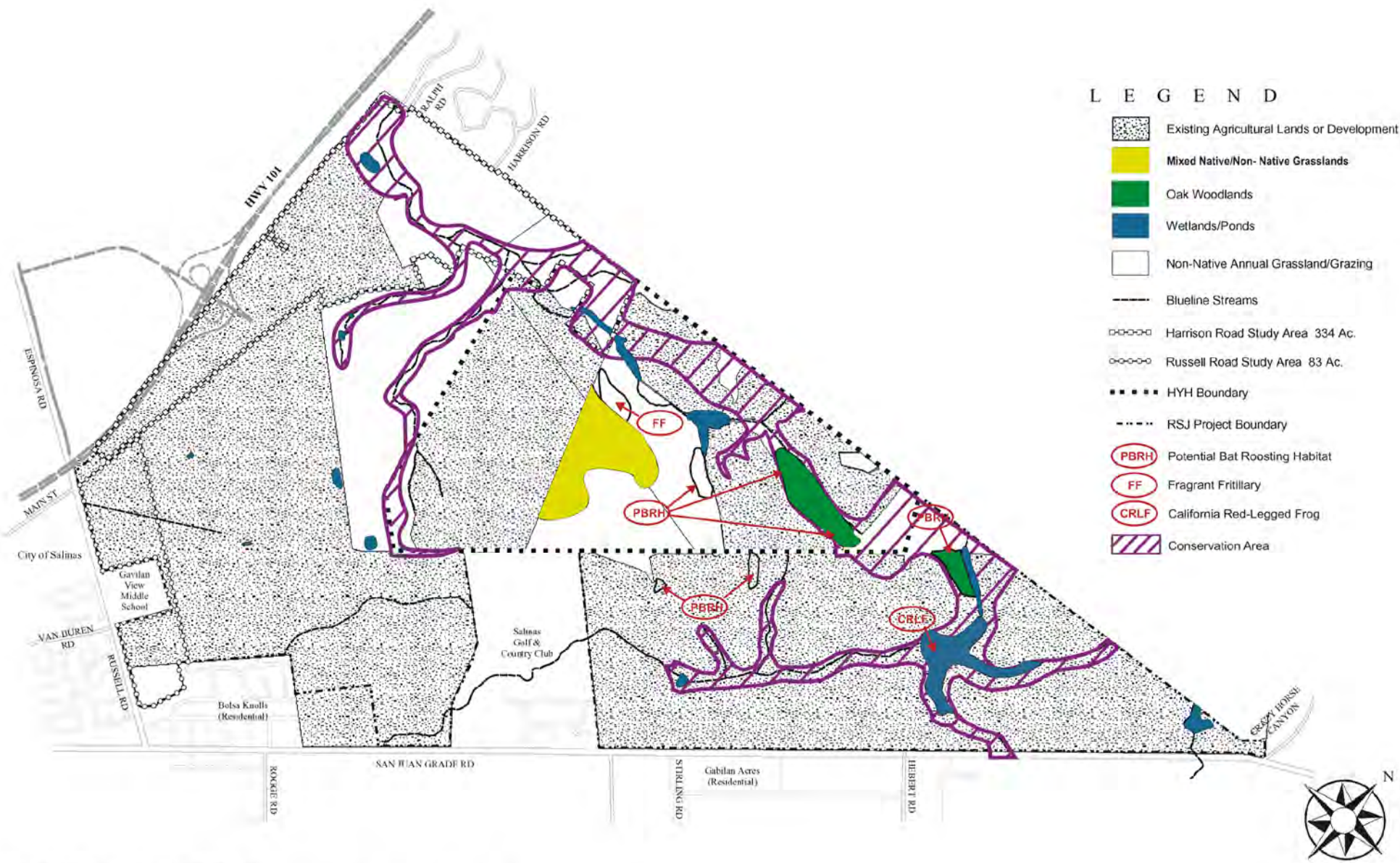
Non-native Annual Grassland

Non-native annual grassland is found in grazing lands and undeveloped areas in the northern and central portion of the Specific Plan area. Non-native annual grassland habitat occupies approximately ~~610~~565 acres, or ~~24~~23 percent of the Specific Plan area. Non-native annual grassland habitat includes ~~approximately 565 acres of~~ non-native grassland vegetation, which is dominated by non-native annual grasses and forbs, including rigput brome (*Bromus diandrus*), wild oat (*Avena* spp.), barley (*Hordeum murinum*), wild mustard (*Brassica* spp.), and filaree (*Erodium* spp.). A low percentage of native plant species is found in the non-native annual grassland habitat where non-native vegetation is predominant.

Non-native Annual Grassland habitat protects the soil from erosion and provides a primary source of forage for grazing wildlife. Common mammals found in Non-native Annual Grassland include California vole (*Microtus californicus*), broad-footed mole (*Scapanus latimanus*), California ground squirrel, Botta's pocket gopher, and black-tailed hare. Raptors such as red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*) forage over grasslands, and small mammals serve as prey species for predatory animals such as coyote and bobcat (*Lynx rufus*).

Mixed Native/Non-Native Grassland

Approximately ~~40~~45 acres of the annual grassland habitat located in the central portion of the Specific Plan area includes a higher percentage of native vegetation. Vegetation in this area still contains a mix of non-native vegetation; however, native grasses and forbs are much more predominant. Native plant species that are predominant in this mixed native/non-native grassland area include nodding needlegrass (*Nassella cernua*), lupines (*Lupinus* spp.), sun cups



- LEGEND**
- Existing Agricultural Lands or Development
 - Mixed Native/Non- Native Grasslands
 - Oak Woodlands
 - Wetlands/Ponds
 - Non-Native Annual Grassland/Grazing
 - Blueline Streams
 - Harrison Road Study Area 334 Ac.
 - Russell Road Study Area 83 Ac.
 - HYH Boundary
 - RSJ Project Boundary
 - Potential Bat Roosting Habitat
 - Fragrant Fritillary
 - California Red-Legged Frog
 - Conservation Area

Source: ProjectDesign Consultants, 5/3/2004

Biological Resources and Proposed Conservation Area (Alternatives 2 and 4E)

Figure 5.4-1

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(*Camissonia ovata*), California poppy (*Eschscholzia californica*), California buttercup (*Ranunculus californicus*), blue-eyed grass (*Sisyrinchium bellum*), brodiaea (*Brodiaea* and *Triteleia* spp.), and sedges (*Carex* spp.).

Oak Woodland

Oak woodland habitat, comprised primarily of coast live oak (*Quercus agrifolia*) with smaller numbers of interior live oak (*Q. wislizenii*), is found on steep slopes in limited areas of the northern portion of the Specific Plan area. Oak woodland habitat occupies approximately 25 acres, or less than 1 percent of the Specific Plan area. The oak woodland habitat within the Specific Plan area ranges from an open-canopy to mostly closed-canopy community with an understory of non-native annual grasses and forbs, including wild oat, barley, miner's lettuce (*Claytonia perfoliata*), and hedge nettle (*Stachys ajugoides*), and shrubs, such as poison oak (*Toxicodendron diversiloba*) and coyote brush (*Baccharis pilularis*).

Oak woodlands are considered important natural communities because they provide a variety of ecological, aesthetic, and economic values. The extent of oak woodlands in California has declined as a result of agricultural conversion, urban development, fuel wood harvesting, and grazing. In response to this loss, CDFG, California Department of Forestry and Fire Protection, California Native Plant Society, and The Nature Conservancy have identified the conservation and management of oak woodlands as major issues.

Oak woodland habitat provides many wildlife resources, including food, cover, roosting, and breeding sites. Acorns are preferred or essential food items in the diets of black-tailed deer (*Odocoileus hemionus*), western gray squirrel (*Sciurus griseus*), deer mouse (*Peromyscus maniculatus*), woodrat (*Neotoma fuscipes*), woodpeckers (*Picoides* spp.), northern flicker (*Colaptes auratus*), and scrub jay (*Aphelocoma coerulescens*). Oak foliage and bark contain insects that attract birds, such as ash-throated flycatcher (*Myiarchus cinerascens*), white-breasted nuthatch (*Sitta carolinensis*), and western kingbird (*Tyrannus verticalis*). In addition, oak-dependent fungi, lichen, mistletoe, and galls provide food for such species as raccoon (*Procyon lotor*) and northern mockingbird (*Mimus polyglottos*).

Oak trees offer shade, shelter and breeding areas for many animals. Woodpeckers excavate nest holes that may subsequently be used by other hole-nesting birds, including western bluebird (*Sialia mexicana*) and American kestrel. Species that forage in open grasslands during the day return to roost in oak woodlands at night.

The patchy understory of the oak woodland habitat contains downed branches and dead wood that provides cover and nesting sites for rufous-sided towhee (*Pipilo erythrophthalmus*) and California quail (*Callipepla californica*). Small mammals, such as deer mouse and woodrat, inhabit shrub thickets and downed wood. The presence of small mammals in the oak woodland provides an important prey source for predatory species, such as various snakes and raptors, including red-tailed hawks and American kestrel.

Riparian Scrub

A limited extent of riparian scrub habitat is located along portions of some of the drainage channels that traverse the Specific Plan area, as well as the two pond areas in the northeastern portion of the Specific Plan area. Riparian scrub habitat occupies approximately 20 acres, or less than 1 percent of the Specific Plan area. Dirt roads and trails used for the adjacent agricultural operations are located along the edges of these drainage channels and associated riparian vegetation. The riparian vegetation is dominated by arroyo willow (*Salix lasiolepis*). Riparian habitats are protected by CDFG (discussed further below).

Non-native annual grasses and forbs dominate open areas between the riparian vegetation and agricultural fields. Common species include oat, riggut brome, thistles (*Cirsium vulgare*, *Silybum marianum*), mallow (*Malva* spp.), and wild mustards.

The riparian vegetation provides roost and nesting sites for a variety of bird species, and the canopy contributes to the value of the drainage channels and ponds as corridors for wildlife movement. White-crowned sparrow (*Zonotrichia leucophrys*), yellow-rumped warbler (*Dendroica coronata*), bushtit (*Psaltriparus minimus*), black phoebe (*Sayornis nigricans*), scrub jay, and a variety of small mammals are likely inhabitants of the riparian vegetation.

Aquatic Habitats

Based on planimeter estimates, aquatic habitat occupies approximately 20 acres, or less than 1 percent of the Specific Plan area. Aquatic habitat in the Specific Plan area includes a large and small pond in the northeastern portion of the Specific Plan area, a series of drainage channels throughout the Specific Plan area (including natural drainages and agricultural channels), and artificial detention ponds and stock ponds within the agricultural and grazing lands. At the time of the April and June 2002 field surveys, some of the drainage channels and detention ponds were dry with annual grasses and growing in the channel, while others contained water. The large and small pond in the northeastern portion of the Specific Plan area holds water year-round. Some of the drainage channels and detention ponds are completely unvegetated except for invasive herbaceous plant species, while others are lined by willows or rushes (*Juncus* spp.). Rushes and cattail (*Typha* spp.) are located along portions of the margins of the large pond in the northeastern portion of the Specific Plan area, although vegetation along the western edge of the large pond had been cut and burned at the time of the June 2002 survey. Willows are associated with both the large and small ponds.

Many wildlife species may use the ponds and higher-quality drainages in the Specific Plan area for foraging, breeding, and bathing, including raccoon, striped skunk (*Mephitis mephitis*), Pacific tree frog (*Hyla regilla*), bullfrog (*Rana catesbeiana*), and a variety of water-associated birds, such as ruddy duck (*Oxyura jamaicensis*), American coot (*Fulica americana*), and red-winged blackbird (*Agelaius phoeniceus*).

Wildlife Corridors

Within the Specific Plan area, the drainage channels provide a corridor for wildlife movement, especially those that are vegetated and lead to and from the ponds in the northeastern portion of the Specific Plan area. In addition, the long drainage channel that traverses the northern boundary of the Specific Plan area connects to large areas of natural vegetation located to the north of the Specific Plan area. Wildlife corridors provide connectivity between habitat areas, enhancing species richness and diversity. In developing areas that contain defined movement corridors and/or are continuous with adjacent open space areas, such as the oak woodlands north of the Specific Plan area, wildlife corridors between natural areas take on added importance by providing cover, water, food, and breeding sites.

Sensitive Biological Resources

Sensitive Plant Communities

Riparian Habitat

Riparian habitat is regarded as an important vegetation community because of the number of ecological functions it performs (e.g., nutrient removal, sediment stabilization, groundwater recharge) and its value as wildlife habitat and as a movement corridor for a number of common and special-status species. Loss of this resource is attributed to conversion of habitat to agricultural and urban land uses. In response to the reduction of riparian habitat, CDFG considers riparian woodland habitat to be a “high priority” habitat, which include habitats that are rare in California and worthy of consideration by the CDFG Natural Diversity Database.

Oak Woodlands

Oak woodlands are considered important natural communities because they provide a variety of ecological, aesthetic, and economic values. The extent of oak woodlands in California has declined as a result of agricultural conversion, urban development, fuel wood harvesting, and grazing. In response to this loss, CDFG, California Department of Forestry and Fire Protection, California Native Plant Society, and The Nature Conservancy have identified the conservation and management of oak woodlands as major issues.

Native Grasslands

Native grasslands are not listed by USFWS or CDFG and have no designation. However, because native ~~grasses~~ grasslands have been displaced by invasive, non-native grassland vegetation throughout much of their historical range, native grasses are an important resource. An area of mixed native/non-native grassland was observed in the central portion of the Specific Plan area during the 1998 plant survey and during surveys conducted in April and June 2002. The mixed native/non-native grassland area includes a higher percentage of native plant species than the other non-native grassland areas in the Specific Plan area and which supports scattered nodding needlegrass, a native perennial bunchgrass.

Special-Status Species

Special-status species include species listed by USFWS as threatened or endangered, USFWS candidates for listing as threatened or endangered, species designated by USFWS as “Special Concern,” species listed by CDFG as threatened, endangered, or “Species of Special Concern,” and species included on CNPS Lists 1A, 1B, 2, 3, or 4. Special-status species that were evaluated in the Specific Plan area based on the above data are listed in Table 5.4-1, along with their legal status and habitat. This list was determined by evaluating the geographic ranges and habitat requirements of species and habitat conditions in the Specific Plan area, as well as information contained in biological resources documents regarding the Specific Plan area. The table also indicates whether these species were observed or are likely to occur in the Specific Plan area based on results of the field survey and previous biological resources investigations in the Specific Plan area. Special-status species locations in the Specific Plan area are shown in Figure 5.4-1.

Special-Status Plant Species

The following contains a brief discussion of the species, which were either observed on the property or considered to have a high likelihood of occurrence. The reader is referred to the technical report in Appendix E for a discussion of species, which are not expected to occur within the Specific Plan area.

Fragrant fritillary. Fragrant fritillary is a USFWS “Species of Concern” and is included on CNPS 1B. It is a bulbiferous perennial herb in the lily family that occurs in coastal prairie, coastal scrub, and valley and foothill grassland habitats, often on serpentine soils. This species typically blooms from February ~~to~~ through April. The NDDDB lists one occurrence of this species south of Aromas, approximately 6 miles north of the Specific Plan area. A small population of this species (under 20 individuals) distributed over approximately 3 acres was observed in the mixed native/non-native grassland habitat in the central portion of the Specific Plan area during the 1998 plant survey, as well as during surveys conducted in April and June 2002 (Figure 5.4-1).

Monterey spineflower. Monterey spineflower is listed as “Threatened” by USFWS and is included on CNPS List 1B. It is an annual herb in the buckwheat family that occurs on open, sandy soils in a variety of coastal habitats. This species typically blooms from April ~~to~~ through June. The NDDDB lists few occurrences of this species in the Specific Plan area vicinity, the nearest of which is at Manzanita County Park, approximately 3 miles northwest of the Specific Plan area (Figure 5.4-1). Subsequent input from the USFWS in a letter dated December 9, 2004, the Service indicated that this species has been observed on the northern boundary of the HYH property in biology surveys conducted for the Prunedale Bypass. However, as indicated in Table 5.4-1, none were observed during the surveys conducted for this EIR.

Critical habitat for Monterey spineflower has recently been designated by USFWS as required by the federal Endangered Species Act (ESA). Pursuant to the federal ESA, USFWS has authority over federally-proposed or funded projects that may affect the continued existence of a federally-listed species or may adversely affect their designated critical habitat, which is defined as those

TABLE 5.4-1
Special-Status Species Evaluated for the Rancho San Juan Specific Plan Area

SPECIES	STATUS (FEDERAL/ STATE/CNPS)	HABITAT	SURVEY RESULTS
PLANTS			
Fragrant fritillary <i>Fritillaria liliacea</i>	FSC/--/1B	Coastal prairie, coastal scrub, valley and foothill grasslands	Small population observed in mixed native/non-native grassland in central portion of Specific Plan area during surveys in 1998 and April and June 2002.
Monterey spineflower <i>Chorizanthe pungens</i> var. <i>pungens</i>	FT/--/1B	Recently disturbed sandy sites in coastal dunes, scrub, grassland, and maritime chaparral	Critical habitat designated in portion of planning area; however, no individuals observed during 1998 surveys, and none observed during April and June 2002 surveys. No appropriate microhabitat observed.
Hickman's onion <i>Allium hickmanii</i>	FSC/--/1B	Closed-cone coniferous forest, chaparral, and grasslands	None observed during 1998 surveys, and none observed during April and June 2002 surveys.
Hooker's manzanita <i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	FSC/--/1B	Sandy soils, sandy shales, and sandstone outcrops in chaparral and coastal scrub	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Toro manzanita <i>Arctostaphylos montereyensis</i>	FSC/--/1B	Sandy soils in chaparral, oak woodland, and coastal scrub	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Pajaro manzanita <i>Arctostaphylos pajaroensis</i>	FSC/--/1B	Sandy soils, sandy shales, and sandstone outcrops in chaparral	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Sandmat manzanita <i>Arctostaphylos pumila</i>	FSC/--/1B	Sandhills of maritime chaparral and coast live oak woodland	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.

TABLE 5.4-1 (Continued)
Special-Status Species Evaluated for the Rancho San Juan Specific Plan Area

SPECIES	STATUS (FEDERAL/ STATE/CNPS)	HABITAT	SURVEY RESULTS
Alkali milk vetch <i>Astragalus tener</i> var. <i>tener</i>	--/--/1B	Playas, valley and foothill grasslands, vernal pools	None observed during 1998 surveys, and none observed during April and June 2002 surveys.
Monterey ceanothus <i>Ceanothus cuneatus</i> var. <i>rigidus</i>	FSC/--/4	Sandy hills and flats of maritime chaparral, closed-cone coniferous forest, and coastal scrub	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
One-awned spineflower <i>Chorizanthe rectispina</i>	FSC/--/1B	Chaparral and coastal scrub	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Seaside bird's-beak <i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	FSC/CE/1B	Sandy, often disturbed sites, usually within chaparral or coastal scrub	None observed during 1998 surveys, and none observed during April and June 2002 surveys. No appropriate microhabitat observed.
Hutchinson's larkspur <i>Delphinium hutchinsoniae</i>	FSC/--/1B	Coastal sage scrub, coastal prairie and mixed evergreen forest	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Eastwood's goldenbush <i>Ericameria fasciculata</i>	FSC/--/1B	Coastal dunes and scrub, maritime chaparral, and closed-cone coniferous forest	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Pinnacles buckwheat <i>Eriogonum nortonii</i>	--/--/1B	Chaparral, valley and foothill grasslands	None observed during 1998 surveys, and none observed during April and June 2002 surveys.
Coast wallflower <i>Erysimum ammophilum</i>	FSC/--/1B	Stabilized coastal dunes, scrub, and chaparral	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Sand gilia <i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	FE/CT/1B	Sandy openings in coastal dunes and scrub and maritime chaparral	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.

TABLE 5.4-1 (Continued)
Special-Status Species Evaluated for the Rancho San Juan Specific Plan Area

SPECIES	STATUS (FEDERAL/ STATE/CNPS)	HABITAT	SURVEY RESULTS
Congdon's tarplant <i>Hemizonia parryi</i> ssp. <i>congdonii</i>	FSC/--/1B	Valley and foothill grasslands	None observed during 1998 surveys, and none observed during April and June 2002 surveys.
Santa Cruz tarplant <i>Holocarpha marcradenia</i>	FT/CE/1B	Coastal prairie, coastal sage scrub, and grassland	None observed during 1998 surveys, and none observed during April and June 2002 surveys.
Wedge-leaved horkelia <i>Horkelia cuneata</i> ssp. <i>sericea</i>	FSC/--/1B	Sandy and gravelly openings in coastal scrub and closed- cone coniferous forest	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE/--/1B	Valley and foothill grasslands (mesic), vernal pools	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no records of this species in the region.
Small-leaved lomatium <i>Lomatium parvifolium</i>	--/--/4	Chaparral and open pine forest	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Purple-flowered piperia <i>Piperia michaelii</i>	--/--/4	Coastal bluff scrub	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.
Yadon's rein orchid <i>Piperia yadonii</i>	FE/--/1B	Closed-cone coniferous forest and coastal scrub	None observed during 1998 surveys, none observed during April and June 2002 surveys, and no suitable habitat determined to be present.

TABLE 5.4-1 (Continued)
Special-Status Species Evaluated for the Rancho San Juan Specific Plan Area

SPECIES	STATUS (FEDERAL/ STATE/CNPS)	HABITAT	SURVEY RESULTS
WILDLIFE			
California red-legged frog <i>Rana aurora draytonii</i>	FT/CP, CSC	Lowlands/foothills near permanent deep water sources	None observed during 1995 surveys. 1998 red-legged frog site assessment determined that the Specific Plan area contains low quality habitat, but concluded that frogs could disperse through the site. Observation of two frogs tentatively identified as red-legged frogs by Dave Pereksta, USFWS, at large pond in northeastern portion of Specific Plan area during meeting on site in March 2002.
California tiger salamander <i>Ambystoma californiense</i>	FPT/CP, CSC	Grassland with seasonal water source	None observed during 1995 surveys. Focused surveys on Planning Area 2 (current HYH properties) conducted in spring 1999, winter 2000, and spring 2000 were negative. Marginal habitat present in remaining portion of Specific Plan area.
Long-billed curlew <i>Numenius americanus</i>	--/CSC	Nests in Great Basin shrub habitats, winters in grasslands	Wintering individuals present during 1995 surveys. None observed during April and June 2002 surveys. Outside of breeding range.
California horned lark <i>Eremophila alpestris actia</i>	--/CSC	Grasslands, rangelands, and other open habitats with low, sparse cover	Individuals observed during 1995 surveys and April and June 2002 surveys.
Tricolored blackbird <i>Agelaius tricolor</i>	FSC/CSC	Dense cattails or brambles surrounded by water	Individuals observed during 1995 surveys and April and June 2002 surveys.
Nesting raptors	--/CSC	Tall trees in woodland areas	Several raptor species observed roosting and foraging during 1995 surveys and April and June 2002 surveys.
Monterey dusky-footed woodrat <i>Neotoma fuscipes luciana</i>	FSC/CSC	Deciduous and mixed woodlands, scrub and thickets	Nests observed during 1995 surveys and April and June 2002 surveys.

TABLE 5.4-1 (Continued)
Special-Status Species Evaluated for the Rancho San Juan Specific Plan Area

SPECIES	STATUS (FEDERAL/ STATE/CNPS)	HABITAT	SURVEY RESULTS
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE/--	Vernal pools	No suitable habitat present.
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>	FE/--	Vernal pools	No suitable habitat present.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/--	Vernal pools	No suitable habitat present.
Redwood shoulderband <i>Helminthoglypta sequoicola consors</i>	FSC/--	Known only from the south slope of San Juan Grade	Outside of known range.
Black legless lizard <i>Anniella pulchra nigra</i>	--/CP, CSC	Moist, warm habitats with loose soil for burrowing and prostrate plant cover in beaches, chaparral, pine-oak woodland, or riparian areas	None observed during 1995 surveys, and none observed during April and June 2002 surveys. No appropriate microhabitat observed.
Coast horned lizard <i>Phrynosoma coronatum frontale</i>	--/CP, CSC	Areas with sandy soil and moderate cover	None observed during 1995 surveys, and none observed during April and June 2002 surveys. Limited extent of habitat available.
Western pond turtle <i>Clemmys marmorata</i>	FSC/CP, CSC	Aquatic habitat	None observed 1995 surveys, none observed during April and June 2002 surveys. Ponds provide marginal habitat.
Loggerhead shrike <i>Lanius ludovicianus</i>	--/CSC	Open habitats with scattered trees, shrubs, posts, fences, or other perches	None observed during 1995 surveys or April and June 2002 surveys. Appropriate habitat is present.
Burrowing owl <i>Athene cunicularia</i>	--/CSC	Nests in abandoned ground squirrel burrows	None observed during 1995 surveys, 1998 focused surveys, or April and June 2002 surveys. Appropriate habitat is present.
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE/CE	Willow riparian scrub	None observed during 1995 surveys, none observed during April and June 2002 surveys. Outside of known range.
Mountain plover <i>Charadrius montanus</i>	FPT/CSC	Short-grass prairies and fields	None observed during 1995 surveys, none observed during April and June 2002 surveys. Outside of known range.
Yellow warbler <i>Dendroica petechia brewsteri</i>	--/CSC	Nest and forage in riparian woodlands	None observed during 1995 surveys, none observed during April and June 2002 surveys. Marginal habitat present.

TABLE 5.4-1 (Continued)
Special-Status Species Evaluated for the Rancho San Juan Specific Plan Area

SPECIES	STATUS (FEDERAL/ STATE/CNPS)	HABITAT	SURVEY RESULTS
Pallid bat <i>Antrozous pallidus</i>	--/CSC	Found in a variety of dry, open habitats with rocky areas available for day roosts	None observed during 1995 surveys, none observed during April and June 2002 surveys. Potential roosting habitat present.
California mastiff bat <i>Eumops perotis californicus</i>	--/CSC	Lowland areas in arid to semi-arid habitats including coastal scrub and Non-native Annual Grassland	None observed during 1995 surveys, none observed during April and June 2002 surveys. Potential roosting habitat present.
Townsend’s big-eared bat <i>Plecotus townsendii</i>	FSC/CSC	Roosts in caves and buildings, forages in woodlands and grasslands	None observed during 1995 surveys, none observed during April and June 2002 surveys. Potential roosting habitat present.
Salinas pocket mouse <i>Perognathus inornatus psammophilus</i>	FSC/CSC	Grassland and scrub habitats on sandy soils	None observed during 1995 surveys, none observed during April and June 2002 surveys. Outside of known range.
Salinas harvest mouse <i>Reithrodontomys megalotis distichlis</i>	--/CSC	Fresh and brackish water wetlands and adjacent grasslands	None observed during 1995 surveys, none observed during April and June 2002 surveys. Marginal habitat present.

FE: Listed as “endangered” under the federal Endangered Species Act.

FT: Listed as “threatened” under the federal Endangered Species Act.

FPT: Proposed for listing as “threatened” under the federal Endangered Species Act.

Fed. Cand.: Candidate species for which USFWS has on file sufficient information on the biological vulnerability and threats to support proposals to list as endangered or threatened under the federal Endangered Species Act.

FSC: USFWS “Species of Concern.” Prior to February 1996, USFWS identified these species as “Category 2” candidates for listing (taxa for which information in the possession of USFWS indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threat were not currently available to support proposed rules). The designation of Category 2 species as candidates resulted in confusion about the conservation status of these taxa. To reduce that confusion, and to clarify that USFWS does not regard these species as candidates for listing, USFWS has discontinued the designation of Category 2 species as candidates. USFWS remains concerned about these species, but further biological research and field study are needed to resolve the conservation status of these taxa.

CE: Listed as “endangered” under California Endangered Species Act.

CT: Listed as “threatened” under California Endangered Species Act.

CP: CDFG “Protected.” Pursuant to the California Code of Regulations, Title 14, Division 1, Chapter 5, section 40, it is unlawful to capture, collect, intentionally kill or injure, possess, purchase, propagate, sell, transport, import or export any native reptile or amphibian, or part thereof. “Intentionally kill or injure” does not include death or injury that occurs incidental to an otherwise lawful activity.

CSC: CDFG “Species of Special Concern”. No federal or state protection is provided by this designation. This designation indicates that the population may face extirpation in California and special consideration should be taken when decisions are made regarding the future of an area containing the species.

1B: Plants considered by CNPS to be rare, threatened, or endangered in California and elsewhere due to their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited number of populations.

4: Plants considered by CNPS to be of limited distribution or infrequent throughout a broader area of California, and their vulnerability or susceptibility to threat appears low at this time.

Source: USFWS, CDFG, CNPS, U.S. Army Corps of Engineers, Caltrans, EMC Planning Group Inc. and previous biological resources documents cited herein

geographic areas essential to the conservation of a species. The designated critical habitat for Monterey spineflower includes 18,829 acres in Monterey and Santa Cruz counties. Approximately 200 acres of existing agricultural land and grassland in the northwestern portion spineflower. However, actual critical habitat within the designated critical habitat area must possess several “primary constituent elements,” which are identified in the final critical habitat. These primary constituent elements include: (1) sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland sites with sandy soils, and interior floodplain dunes; (2) plant communities that support associated species, including coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities, and have a structure with opening between the dominant elements (e.g., scrub, shrub, oak trees, clumps of herbaceous vegetation); (3) no or little cover by non-native species which compete for resources available for growth and reproduction of spineflower; and (4) physical processes, such as occasional soil disturbance, that support natural dune dynamics along coastal areas. Active agricultural lands and densely vegetated non-native grassland areas within the designated critical habitat area do not appear to provide the primary constituent elements required to be considered critical habitat.

Section 7 of the federal ESA requires federal agencies to consult with USFWS to ensure that actions that they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or adversely destroy or modify critical habitat. For future projects within the Specific Plan area that require authorization from the Corps as part of the Section 404 permit process or have any other type of federal agency involvement, the potential for Monterey spineflower critical habitat to be affected by the project would necessitate consultation with USFWS pursuant to the ESA. For projects requiring authorization from the Corps, the consultation would be initiated by the Corps as part of the Section 404 permit process.

However, a critical habitat designation has no effect on situations where a federal agency is not involved. Future projects within the Specific Plan area that do not require federal funding or permit authorizations have no critical habitat consultation requirements, regardless of the presence or absence of critical habitat on the project site.

No individuals of this species were observed in the Specific Plan area during the 1998 plant survey or during surveys conducted in April and June 2002, which coincided with the time period during which this species would be identifiable, and no individuals of this species are expected to occur in the Specific Plan area.

Special-Status Wildlife Species

The following contains a brief discussion of the sensitive wildlife species, which were either observed on the property or considered to have a high likelihood of occurrence. The reader is referred to the technical report in Appendix E for a discussion of species, which are not expected to occur within the Specific Plan area.

California red-legged frog. The California red-legged frog is listed as “Threatened” by USFWS, and is designated as “Protected” and a “Species of Special Concern” by CDFG. California red-legged frogs occur in different habitats depending on their life stage and the season. All life

history stages are most likely to be encountered in and around breeding sites, which include many aquatic habitats, such as ponded and backwater portions of streams. This species prefers shorelines with extensive vegetation, and requires 11 to 20 weeks of permanent water for larval development. Creeks and ponds where California red-legged frogs are found often have dense growths of woody riparian vegetation, especially willows. The presence of this kind of vegetation is an important indicator that the site may provide foraging or breeding habitat for California red-legged frogs.

In ~~2001~~2004, USFWS designated critical habitat for California red-legged frog as required by the federal Endangered Species Act (ESA). Critical habitat is defined as those geographic areas essential to the conservation of a species. Section 7 of the ESA requires federal agencies to ensure that their actions do not destroy or adversely modify critical habitat. However, the project area is not included within the designated critical habitat for red-legged frog. ~~In addition, in 2002, critical habitat for the California red-legged frog was rescinded.~~

The NDDDB lists several occurrences of this species in the Specific Plan area vicinity, the nearest of which are approximately 1 mile northwest of the Specific Plan area on the west side of Highway 101 and approximately 1 mile north of the Specific Plan area near the end of Pesante Canyon Road. No individuals of this species were observed in the Specific Plan area during nocturnal and aquatic surveys conducted for the Rancho San Juan Area of Development Concentration Special-Status Vertebrate Survey (Biosearch Wildlife Surveys 1995) (hereinafter “1995 vertebrate survey”).

A Site Assessment Report for California Red-Legged Frog: Rancho San Juan ADC Specific Plan EIR, Planning Area 2 (Sycamore Environmental Consultants 1998) (hereinafter “1998 red-legged frog site assessment”) determined that the Specific Plan area contains low quality habitat, but concluded that frogs could disperse through the site. Sycamore Environmental Consultants submitted the 1998 red-legged frog site assessment to USFWS with a request for a determination as to whether field surveys would be required to determine presence or absence of this species. Diane Noda, USFWS, responded to this request in a letter to Sycamore Environmental Consultants dated August 12, 1998, in which USFWS concluded that the Specific Plan area does not contain high quality red-legged frog habitat, but that it is within dispersal distance for red-legged frog. Therefore, USFWS concluded that the potential exists for red-legged frog to occur in the Specific Plan area, and therefore, a presence/absence survey is unnecessary because surveys could confirm presence, but negative results would only confirm that red-legged frogs were not present at the time of the survey.

During a field visit of the Specific Plan area with David Pereksta, USFWS, on March 20, 2002, two frogs tentatively identified by Mr. Pereksta as red-legged frogs were observed at the large pond in northeastern portion of Specific Plan area (Figure 5.4-1). (Dense vegetation obscured visibility; however, Mr. Pereksta indicated that there was a high possibility that the frogs he observed were California red-legged frogs.) Therefore, California red-legged frog is potentially present in the Specific Plan area. However, designated critical habitat for this species does not include the Specific Plan area.

California tiger salamander. California tiger salamander ~~has been proposed for listing~~ is listed as a “threatened” by USFWS and a portion of the property lies within designated critical habitat for the species. ~~In addition, it, and~~ is designated as “Protected” and a “Species of Special Concern” by CDFG. California tiger salamander occurs in the California Central Valley and in surrounding foothills of both the Coast Range and Sierra Nevada mountains. Adult California tiger salamanders spend the majority of the year below ground in ground squirrel burrows or other rodent burrows. The salamanders are only above ground during the winter and spring rainy season when they feed and move to aquatic breeding sites, such as seasonal ponds, stock ponds, reservoirs, lakes, and occasionally stream pools that are devoid of fish. The larvae spend two to four months in the water before transforming to the adult form and seeking suitable terrestrial habitat. During their migration between breeding sites and upland habitat, the salamanders can travel up to ~~one~~ 1.5 kilometers, or a little over one-half mile.

The NDDB lists several occurrences of this species in the Specific Plan area vicinity, including one record from May 1990 approximately 2,400 feet east of the end of the Harrison Road in the northern portion of the Specific Plan area, and another 1990 record at a spring-fed stock pond approximately 2,000 feet north of the Specific Plan area. However, Bryan Mori reported the observation in the Specific Plan area in May 1990, and according to the Planning Area 2 of Rancho San Juan ADC, Winter & Spring 2000 California Tiger Salamander Assessment, Monterey County, California (Mori 2001), this report could have been in error. This document indicates that because both native and non-native tiger salamanders are known to occur in the region, and because only the larvae were used for identification, the specific taxon of the larvae is uncertain. Also, since the 1990 observation, the pond was converted into a sediment detention basin for adjacent strawberry fields in or around 1994, and the basin no longer provides appropriate breeding habitat.

The Rancho San Juan ADC Specific Plan Draft Program Environmental Impact Report (The Planning Center 1998) indicates that the Route 101 Improvement Alternatives – Prunedale Study prepared by Caltrans indicates that tiger salamanders were found within the Alternative 4 alignment, a portion of which crosses the far western edge of the Specific Plan area. However, specific location information is not provided.

No individuals or larvae of this species were observed in the Specific Plan area during 1995 vertebrate survey, which included aquatic surveys. However, the surveys were conducted late in the season, and nocturnal surveys were not conducted during appropriate conditions to detect adult California tiger salamanders.

~~According to a letter from Brian Hunter, CDFG, to Mark Blum dated May 17, 1999, documented negative findings during two consecutive years of California tiger salamanders is sufficient documentation to conclude that California tiger salamanders are absent. Focused California tiger salamander surveys of Planning Area 2, which consists of the current HYH properties, conducted in spring 1999 and winter and spring 2000 were negative (Mori 2001), and thus, California tiger salamander has been determined to be absent from the HYH Properties within the Specific Plan area. However, focused surveys were not conducted on the remainder of the Specific Plan area, and thus, the presence or absence of California tiger salamander from the remainder of the~~

~~Specific Plan area has not been conclusively determined. Therefore, except for the Planning Area 2 (HYH properties) portion of the Specific Plan area, In light of the tentative nature of the surveys and the fact that the property lies partially within designated critical habitat, California tiger salamander is considered potentially present in the remainder of the Specific Plan area.~~

California horned lark. California horned lark is designated as a "Species of Special Concern" by CDFG. Horned larks occur in open barren plains, deserts, fields, golf courses, airports, sand dunes along coast, and flat meadows. Horned larks feed on seeds, grains and insects. Nests are located on open or bare ground. The NDDDB does not report any occurrences of this species in the Specific Plan area vicinity. Individuals of this species were observed in the Specific Plan area during the 1995 vertebrate survey and during surveys conducted in April and June 2002. The Non-native Annual Grassland habitat within the Specific Plan area provides suitable breeding habitat for this species.

Tricolored blackbird. Nesting tricolored blackbird colonies are designated by USFWS and CDFG as a "Species of Special Concern." Tricolored blackbird nest in cattail marshes and forage in marshy meadows and rangelands. The NDDDB includes one record of this species in the Specific Plan area vicinity. Specific information on the location is not provided in the NDDDB; however, the large pond in the eastern portion of the Specific Plan area is a known breeding location for tricolored blackbird and is most likely the source of this NDDDB record. A breeding colony of this species was observed at the large pond in the northeastern portion of the Specific Plan area during the 1995 vertebrate survey and during surveys conducted in April and June 2002. Individuals of this species were also observed foraging in the Non-native Annual Grassland habitat within the Specific Plan area.

Nesting raptors. Nesting raptors (predatory birds) and active raptor nests (i.e., nests in which raptors are breeding or raising young) are protected by the California Fish and Game Code Section 3503.5 and the federal Migratory Bird Treaty Act. The NDDDB does not report any occurrences of nesting raptors in the Specific Plan area vicinity. Roosting and/or foraging golden eagle, ferruginous hawk, white-tailed kite, Cooper's hawk were observed during the 1995 vertebrate survey, and white-tailed kite and red-tailed hawk were observed during surveys conducted in April and June 2002. Breeding individuals were not confirmed during surveys. However, open oak woodland and Non-native Annual Grassland habitats within the Specific Plan area provide suitable breeding habitat for these species, as well as appropriate foraging habitat.

Monterey dusky-footed woodrat. Monterey dusky-footed woodrat is designated by USFWS and CDFG as a "Species of Special Concern." It is endemic to the Monterey Peninsula and generally occurs in evergreen oak woodland habitats. It prefers forest habitats with moderate canopy and a relatively dense brushy understory with suitable nest building materials. The NDDDB does not report any occurrences of this species in the Specific Plan area vicinity. Woodrat nests were observed scattered throughout the oak woodland habitat within the Specific Plan area during the 1995 vertebrate survey and during surveys conducted in April and June 2002. Despite the fact that the property is not located within the Monterey Peninsula, individuals of this species were also observed foraging in the Non-native Annual Grassland habitat within the Specific Plan area.

Loggerhead shrike. Loggerhead shrike is designated as a "Species of Special Concern" by CDFG. Loggerhead shrikes occur in grasslands and agricultural areas with scattered trees and shrubs. Shrikes feed on insects, reptiles, small mammals, and birds. Nests are usually built in trees and shrubs; however, structures such as telephone poles, and abandoned buildings and machinery are also used. The NDDDB does not report any occurrences of this species in the Specific Plan area vicinity. No individuals of this species were observed in the Specific Plan area during the 1995 vertebrate survey or during surveys conducted in April and June 2002. However, open oak woodland and Non-native Annual Grassland habitats within the Specific Plan area provide suitable breeding habitat for this species.

Burrowing owl. Burrowing owl is a CDFG "Species of Special Concern." Burrowing owls live and breed in burrows in the ground, especially in abandoned ground squirrel burrows. Optimal habitat conditions include large open, dry and nearly level grasslands or prairies with short to moderate vegetation height and cover, areas of bare ground, and populations of burrowing mammals. The NDDDB lists few occurrences of this species in the Specific Plan area vicinity, the nearest of which are on the east side of Highway 183 approximately 1.5 miles south of the Specific Plan area, along Dolan Road approximately 5 miles northwest of the Specific Plan area, and at the Salinas Airport approximately 6 miles south of the Specific Plan area. No individuals of this species were observed in the Specific Plan area during the 1995 vertebrate survey or during surveys conducted in April and June 2002. Focused burrowing owl surveys were conducted pursuant to survey protocol established by CDFG and results were reported in the *Wildlife Survey Report for Rancho San Juan ADC Specific Plan EIR Planning Area 2* (Sycamore Environmental Consultants 1998). "Planning Area 2" consists of the current HYH properties. No burrowing owls were observed, and no dens or potential dens or other signs were observed. However, the non-native annual grassland habitat within the Specific Plan area provides suitable breeding habitat for this species.

Pallid bat, California mastiff bat, and Townsend's big-eared bat. Pallid bat, California mastiff bat, and Townsend's big-eared bat are designated as "Species of Special Concern" by CDFG, and Townsend's big-eared bat is also designated by USFWS as a species of "Special Concern." These species are found in a variety of dry, open habitats, including coastal scrub and non-native annual grassland, with appropriate roost sites. These species are very sensitive to human disturbances at roost sites. The NDDDB does not report any occurrences of these species in the Specific Plan area vicinity. No individuals of these species were observed in the Specific Plan area during the 1995 vertebrate survey or during surveys conducted in April and June 2002. The limited extent of oak woodland habitat within the Specific Plan area provides potential roosting habitat for this species (Figure 5.4-1).

5.4.1.2 HYH Property Project

Habitat Types

The approximately 671.1-acre HYH Property project include the following habitat types:

- Agricultural lands: 413.5 acres, or 62 percent of the HYH Property site;

- Non-native Annual Grasslands: 185.5 acres, or 27 percent of the HYH Property site;
- Mixed non-native/native grasslands: 44.9 acre, or 7 percent of the HYH Property site;
- Oak woodland: 19.4 acres, or 3 percent of the HYH Property; and
- Aquatic habitats: 7.8 acres, or 1 percent of the HYH Property site (including drainage channels, detention ponds, and riparian scrub).

These habitat types are described above.

Sensitive Biological Resources

Sensitive Plant Communities

The riparian scrub habitat, native grassland and oak woodland habitat found on and immediately adjacent to the HYH Property project are sensitive plant communities. These communities are described above.

Special-Status Species

Plants. The small population of fragrant fritillary (under 20 individuals) and the area of mixed non-native/native grassland observed in the Specific Plan area occur on the HYH Property. Also, approximately 134.7 acres of the HYH Property are included in the area of designated critical habitat for Monterey spineflower, although no individuals of this species have been observed on the HYH Property, and no individuals of this species are expected to occur on the HYH Property.

Wildlife. Potential special-status wildlife species occurring on the HYH Property include the following: coast horned lizard, western pond turtle, California horned lark, loggerhead shrike, burrowing owl, yellow warbler, nesting raptors, Monterey dusky-footed woodrat, pallid bat, California mastiff bat, and Townsend's big-eared bat. These species either were observed on the HYH Property or the HYH Property provides appropriate habitat. As discussed above, focused California tiger salamander surveys of Planning Area 2, which consists of the current HYH Property, conducted in spring 1999 and winter and spring 2000 were negative (Mori 2001), and thus, California tiger salamander has been determined to be absent from the HYH Property site.

5.4.2 THRESHOLDS OF SIGNIFICANCE

Biological resource impacts would be significant if the proposed project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (i.e., Monterey County Code Section 21.64.260, Preservation of Oak and Other Protected Trees); and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.4.3 POTENTIAL IMPACTS

The following analysis of biological impacts is based on the development areas illustrated on the land use plans for Alternatives 2 and 4E as well as the tentative map proposed for the HYH Property. The analysis assumes that all of the land within the development bubbles would be impacted. While detailed development plans may retain natural vegetation, this approach would assure that impacts would be no greater than discussed in this section. As individual development plans are proposed within the Specific Plan area, subsequent environmental review would be conducted to more specifically quantify impacts and identify appropriate mitigation measures. The impacts of the HYH project are analyzed in this EIR.

5.4.3.1 Alternative 2

In general, the land use plan for Alternative 2 would allow development to occur in the central and western portions of the Specific Plan area (Figure 5.4-1). Development would include a mixture of uses including residential, office, commercial/retail, parks and public facilities. As indicated in Figure 5.4-1, several of the existing drainage courses would be realigned to accommodate the proposed development areas and roadways.

The Specific Plan identifies Conservation Areas, which would be preserved and enhanced within the Specific Plan area (Figure 5.4-2). Additional land would be set aside in Conservation Areas; however, this land would be disturbed and replanted prior to placement into open space. Thus, the land in these areas would be impacted initially. The undisturbed Conservation Areas would encompass approximately 380 acres. The Conservation Areas would include oak woodlands, grasslands, and wetlands as well as existing agricultural land. Conservation Areas have been specifically designed to preserve the majority of the drainage course as well as existing ponds. Preservation of the drainages would not only protect associated riparian habitat but would allow for wildlife movement through the natural areas within the Specific Plan as well as on surrounding land. Recreation use (e.g. riding and hiking) would be allowed within the

Conservation Areas but would be limited to designated trails to reduce disruption of preserved biological resources.

The Conservation Areas are also intended to provide areas of habitat restoration as mitigation for impacts to natural vegetation within the Specific Plan area as discussed in Section 5.4.4. It is anticipated that restoration activities would include restoration of realigned drainage courses, creation of new wetlands and native grasslands as well as expanding existing oak woodlands.

Habitats

As illustrated in Table 5.4-2, the development areas identified on the land use plan for Alternative 2 would impact a total of 2,200 acres.

**TABLE 5.4-2
Habitat Impacts Associated with Alternative 2**

HABITAT TYPE	EXISTING (ACRES)	IMPACTED (ACRES/PERCENT)	PRESERVED (ACRES/PERCENT)
Non-native Annual Grassland	564.9	421.1 (74%)	146.3 (26%)
Mixed native/non-native Grassland	44.9	44.9 (100%)	0.0 (100%)
Oak Woodland	25.4	0.0 (0%)	25.4 (100%)
Waters of US, Wetlands and Riparian Scrub	42.7	9.6 (23%)	33.1 (77%)
Agricultural Lands	1,902.1	1,724.4 (91%)	177.7 (9%)
Total	2,580	2,200 (85%)	380 (15%)

Mixed Native/Non-Native Grassland

Up to 44.9 acres of mixed non-native/native grasslands could be impacted by future development. The greatest losses would occur as a result of development of the proposed golf course as well as adjacent residential development. The proposed Conservation Areas would retain approximately 146.3 acres of non-native annual grassland but would not retain any mixed non-native/native grasslands.

Oak Woodland

All of the oak woodland would be placed on a Conservation Area. However, isolated oak trees could be impacted within the non-native annual grassland area. Estimates of the actual number of individual oaks which may be impacted within the Specific Plan cannot be determined until final grading plans are prepared.



NOTE:
 This figure represents a conceptual approach for restoration and habitat creation for the Butterfly Village Project. The final planting plan will depend upon input from the county, state, and federal agencies, engineering constraints, and final project design.

As long as the Prunodale Bypass is planned, no restoration shall occur within its right-of-way or associated slopes.



Source: Sycamore Environmental Consultants, Inc., 4/29/2004

Conceptual Habitat Restoration Plan for the HYH Property _____ Figure 5.4-2

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Waters of the U.S., Wetlands, and Riparian Scrub

The proposed realignment of several drainages within the Specific Plan area could impact up to 9.6 acres of potential waters of the U.S. and wetlands, including unvegetated drainages, and riparian scrub; the existing ponds would be retained. An estimated 33.1 acres of potential waters of the U.S. and wetlands and riparian scrub habitat would be retained in Conservation Areas.

Agricultural Lands

The greatest acreage of impact (1,724.4 acres) would be associated with agricultural lands.

Special-Status Species

Plants

A small population (approximately 20 individuals) of one special-status plant species, fragrant fritillary, is located in central portion of the Specific Plan. Based on the development proposed for Alternative 2, all of the area supporting fragrant fritillary (3 acres) in the Specific Plan area would be affected.

No other special status plant species would be impacted by Alternative 2.

Wildlife

Development in accordance with Alternative 2 would impact habitat which could potentially support special status wildlife species including California red-legged frog, California tiger salamander, coast horned lizard, western pond turtle, California horned lark, tricolored blackbird, loggerhead shrike, burrowing owl, yellow warbler, nesting raptors, Monterey dusky-footed woodrat, pallid bat, California mastiff bat, and Townsend's big-eared bat.

Direct impacts could occur during construction. Indirect impacts could occur from light, noise and domestic animals associated with construction as well as subsequent activities associated with new residents. These indirect impacts could interfere with breeding behaviors which would adversely impact sensitive wildlife. Uncontrolled use of pesticides and herbicides on the golf course could also adversely impact wildlife. Thus, significant impacts to sensitive animals could occur.

Sensitive Natural Communities

Waters of the U.S., Wetlands, and Riparian Habitat

Of the 42.7 total acres of potential waters of the U.S., wetlands, and riparian habitat in the Specific Plan area, 9.6 acres are located in development areas in the Specific Plan area. Construction of future development projects in or adjacent to jurisdictional waters or wetlands or riparian habitat would have significant impact on wetland habitat.

Oak Woodland Habitat

All of the oak woodland habitat would be preserved within the Specific Plan. Thus, no impacts would occur to this habitat. Estimates of the actual number of individual oaks which may be impacted within the Specific Plan cannot be determined until final grading plans are prepared.

Native Grasslands

All of the 44.9 acres of mixed native/non-native grasslands would be impacted by development. This loss represents a significant impact.

Wildlife Movement

A 1.6-mile, intermittent drainage channel located in the northern portion of the Specific Plan could be used by terrestrial wildlife as a corridor to move through the Plan area. The channel along this stretch averages three feet in width. The channel could be used by Black-tail deer, coyote, raccoon, and striped skunk. Because most of the drainage lacks vegetative cover, wildlife movement would most likely occur at night.

The golf course ponds and three road crossings to be built across this drainage could impede wildlife movement. Lighting and noise associated with operation of the golf course and wastewater treatment facility could affect wildlife moving through this drainage. Lighting and domestic pets associated with nearby residential use could also affect wildlife movement. Thus, development of the Specific Plan could have a significant impact on wildlife movement.

General Plan

As discussed in Chapter 5.1, the proposed project would be consistent with policies of the County's General Plan and proposed Update related to biological resources by preserving important biological resources in the proposed Conservation Areas and restoring wetlands impacted by development.

Habitat Conservation Plans

The Specific Plan area is not located within the boundary of any local, regional, or state habitat conservation plan. However, the proposal to set aside Conservation Areas within the proposed project would reflect the goals of regional habitat planning by providing large areas of habitat and allowing for wildlife movement occupying adjacent areas.

5.4.3.2 Alternative 4E

The majority of the impacts to habitats would be similar to that associated with Alternative 2. The major difference between the two alternatives would occur in the northern portion of the Specific Plan Area where construction of the Prunedale Bypass would impact much of the land proposed in Conservation Areas on Alternative 2. However, the impacts identified in Table 5.4-3 do not include the impacts associated with construction of the alignment of Highway 101 within Alternative 4E because the highway is not a part of the proposed Specific Plan.

Although not a part of the proposed project, this highway alignment would disturb major portions of the proposed Conservation Areas by filling the northern canyon. In addition to the habitat impacts which would occur, the highway would eliminate wildlife movement from the property into natural vegetation to the north of the Specific Plan.

The impacts to the habitat types are depicted in Table 5.4-3.

**TABLE 5.4-3
Habitat Impacts Associated with Alternative 4E¹**

HABITAT TYPE	EXISTING (ACRES)	IMPACTED (ACRES/PERCENT)	PRESERVED (ACRES/PERCENT)
Non-native Annual Grassland	564.9	421 (75%)	157.8 (28%)
Mixed Native/Non-Native Grassland	44.9	42.1 (93.5 %0)	2.8 (6.5%)
Oak Woodland	25.4	0.0 (0%)	25.4 (100%)
Waters of US, Wetlands and Riparian scrub	42.7	10.6 (25%)	32.1 (75%)
Agricultural Lands	1,902.1	1,745.9 (92%)	156.2 (8%)
Total	2,580	2,219.6 (86%)	360.4 (14%)

¹ Excludes impacts associated with future Prunedale Bypass. Construction of the Bypass would result in the loss of an additional 4 acres of non-native grassland and 21 acres of agricultural lands.

5.4.3.3 HYH Property Project

The proposed tentative map includes 225.1 acres of residential development, 4.2 acres of commercial/mixed use development, 7.6 acres of hospitality use, a 229.6-acre golf course, 10 acres of parks, a 15.4-acre wastewater treatment plant, 165.7 acres of open space, and 13.3 acres of roads.

Implementation of the HYH Property project would result in significant direct impacts related to the loss of three sensitive habitats: native grassland, oak woodland and wetlands. As illustrated in Table 5.4-4, development of improvements shown on the tentative map for the HYH Property project would impact a total of ~~671.559.5~~ 1 acres. As indicated in Table 5.4-4 and illustrated in Figure 5.4-1, the majority of the property is farmed. Impacts identified in Table 5.4-4 are based on the assumption that land not placed within a Conservation Area could be impacted even though on a case by case basis some natural areas may be incorporated into the golf course or other development areas.

The largest vegetation impacts would occur in Non-native Annual Grasslands. Approximately 86 percent of the non-native annual grassland (150.2 acres) would be impacted by the proposed development. An additional 44.9 acres of mixed native/non-native grassland would be impacted. An estimated 83 percent (6.5 acres) of the onsite wetlands would be impacted.

Construction of the golf course would have the greatest impact on biological resources. The majority of the residential and commercial development would be located on land which has been disturbed by agriculture. The golf course would impact a large percentage of the mixed native/non-native grassland and associated sensitive fragrant fritillary.

**TABLE 5.4-4
Habitat Impacts Associated with Tentative Map for HYH Property Project¹**

HABITAT TYPE	EXISTING (ACRES)	IMPACTED (ACRES/PERCENT)	PRESERVED (ACRES/PERCENT)
Mixed Native/Non-Native Grassland	44.9	44.9 (100%)	0 (0%)
Oak Woodland	19.4	0.0 (0%)	19.4 (100%)
Waters of the U.S., Wetland and Riparian Scrub	7.8	6.5 (83%)	1.3 (17%)
Non-native Annual Grassland	185.5	152.7 (82%)	32.8 (18%)
Agricultural Lands	413.5	355.4 (86%)	58.1 (14%)
Total	671.1	559.5 (83%)	111.6 (17%)

¹ Impacts are based on Alternative 2. Construction of the Bypass with Alternative 4E would result in the loss of an additional 4 acres of non-native grassland and 21 acres of agricultural lands.

As the golf course would be situated within the drainage areas, most of the onsite drainage courses and associated wetlands would be disturbed by the golf course. As discussed in Chapter 5.9 (Hydrology/Water Quality), approximately 90 percent (6,000 linear feet) of the blue-line streams would be graded to construct the golf course and associated development. Approximately, 15,000 linear feet (90 percent) of ephemeral drainages on the site would be impacted. Although the selected shorelines of golf course lakes located within this drainage course would be planted with native wetlands, the connectivity of the drainage would be lost. The majority of the natural drainage courses through the golf course would be placed in pipes under proposed fairways between the proposed golf course ponds.

In addition, the northerly drainage course would be crossed by roads in three locations. One crossing would provide access to the golf course maintenance facility. A second would provide access to the proposed wastewater treatment facility. A third crossing would be created to provide access to the rural estate development proposed to the east of the wastewater treatment site. Culverts would be provided under these crossings to accommodate runoff.

Construction of the golf course maintenance and wastewater treatment facilities would impact annual grasslands.

Special-Status Species

Plants

Based on the tentative map for the HYH Property project, development would have a significant impact on the small population of fragrant fritillary which occurs on the site. The population would be impacted by proposed residential development in Area D and the 10th and 18th golf course holes. No other special-status plant species would be impacted by development of the HYH Property project.

Wildlife

Development of the HYH Property project could impact sensitive bats. Potential roosting for bats occur within the oak woodlands located in the eastern portions of the site and south of the large pond. As the largest oak woodland area would be preserved within the proposed Conservation Area and additional woodlands would be created, the HYH Property project would not significantly impact bats.

As no potential habitat exists for the California Red-legged Frog, no impacts would occur to this species as a result of the HYH Property project.

No ~~other~~ major populations of sensitive animals occur on the property. Consequently, development of the HYH Property project would not have a significant impact on sensitive wildlife.

Sensitive Natural Communities

Waters of the U.S., Wetlands, and Riparian Habitat

Of the approximately 7.8 total acres of potential waters of the U.S., wetlands, and riparian habitat on or immediately adjacent to the HYH Property project, approximately 6.5 acres are planned for development as indicated on the tentative map for the HYH Property project. ~~The loss of~~ Impacts to 83 percent of the wetlands within the HYH Property is considered a significant impact due to the sensitivity of this habitat type.

Oak Woodlands

All of the oak woodland on the HYH Property project would be retained in open space. Thus, no impacts would occur to oak woodland.

Although oak woodland would be preserved, individual oaks located within grassland areas would be impacted. A Forest Management Plan (FMP) for Butterfly Estates at Rancho San Juan (Staub Forestry and Environmental Consulting 2004) was prepared to evaluate estimated native oak tree population and removals associated with implementation of the proposed tentative maps for the HYH properties. The FMP was based on evaluation of project grading plans and vesting tentative maps prepared by Bestor Engineers, Inc. dated May 16, 2003. The tentative map indicates trees to be removed with an "X." The FMP and the current plans indicate that a total of 34 oak trees will be removed for construction of housing, roads, and the golf course. The trees to

be removed range in size from 19 to 65 inches in diameter at two feet above ground level. All but one of these trees are 24 inches or greater in diameter and are thus considered landmark trees by Monterey County Zoning Ordinance Section 21.64.260. The FMP indicates that 589 oak trees would be retained on the HYH, including 164 trees with 6 to 11-inch diameter, 362 trees with 12-23 inch diameter, and 63 trees with 24 inch and greater diameter.

The loss of oak trees is considered a significant impact.

Native Grassland

Development of the golf course and residential development within the HYH Property would eliminate all of the mixed native/non-native grassland located on the property. Due to the sensitivity of this habitat, the impact would be significant.

Wildlife Movement

As discussed for Alternative 2, development of the golf course, wastewater treatment plan, rural estate homes and roadway crossings could significantly impact wildlife movement through the northerly drainage course.

Habitat Restoration

The project applicant has prepared a Conceptual Habitat Restoration Plan which covers the designated open space within the HYH Property (Figure 5.4-2). The goal of the conceptual habitat restoration plan is to provide guidance for future restoration actions which may be taken within the designated Conservation Areas for the purposes of compensating for biological impacts associated with Rancho San Juan. In compensating for biological impacts associated with the HYH Property, the applicant would undertake restoration of one or more habitat types as compensation for impacts associated with development. Future planting programs may also be undertaken by other ownerships within the Rancho San Juan Specific Plan area.

The Conceptual Habitat Restoration Plan primarily covers the areas identified as Conservation Area in the Specific Plan. However, planting in adjacent areas is proposed, as appropriate, to complement the restoration and transition into planting associated with the proposed golf course. The habitats identified in the Plan include: oak woodland, oak savannah, perennial grassland, riparian scrub, emergent wetland and seasonal wetland. A brief description of the planting program for each of these habitats follows.

Oak Savannah

Oak savannah habitat would include scattered oak trees with an understory of native grasses. This habitat would be concentrated in the northern drainage to accommodate wildlife movement. This habitat would provide nesting, roosting and foraging habitat for birds as well as ground level wildlife. As illustrated in Figure 5.4-2, oak savannah is proposed within the right of way of the future Prunedale Bypass. It is assumed that this area would not be planted until it has been determined that the Bypass would not be built.

The primary planting within the oak savannah would be Coast live oak (*Quercus agrifolia* var. *agrifolia*), which occurs on the property. This species would be planted on average on 150-foot centers using tree pots of 2 to 10 gallons. Species to be planted in the perennial grassland community (see below) would be planted between the oak trees. Native shrubs and small trees that occur on the property and other suitable native species would also be planted. Such species include California buckeye (*Aesculus californica*), blue elderberry (*Sambucus mexicana*), and scrub oak (*Quercus berberidifolia*). Shrubs and small trees would be a minor component of oak savannah.

Oak Groves

Oaks would be planted to form a closed tree canopy. Oak groves are proposed within the golf course area as well as designated Open Space. Coast live oak would be planted on 30- to 60-foot centers in groves, using tree pots of 2 to 10 gallons. Species to be planted in the perennial grassland community (see below) would be planted between the oak trees. Native shrubs and small trees that occur on the property and other suitable native species would also be planted. Such species include California buckeye (*Aesculus californica*), blue elderberry (*Sambucus mexicana*), and black sage (*Salvia mellifera*). Shrubs and small trees would be a minor component of the oak groves.

Perennial Grassland

Perennial grassland would be planted by itself as well as in combination with oak trees (e.g. oak savannah). As illustrated on Figure 5.4-2, linear plantings of perennial grassland without oak trees would be planted adjacent to much of the golf course as a transition habitat.

Nodding needlegrass (*Nassella cernua*), a native species that occurs on the property, would be the most common bunchgrass planted in the perennial grassland. Other native perennial grasses that occur on the property would also be planted including California brome (*Bromus carinatus*), California oatgrass (*Danthonia californica*), and foxtail barley (*Hordeum jubatum*). Native annual herbaceous species that occur on the property or that are indigenous to Monterey County would be seeded between the bunchgrasses, such as lupines (e.g., *Lupinus bicolor*, *L. succulentus*), California poppy (*Eschscholzia californica*), Clarkia (*Clarkia* spp.), and yarrow (*Achillea millefolium*).

Riparian Scrub

Riparian scrub would be planted around the margins of the golf course ponds as well as larger drainage courses. Arroyo willow (*Salix lasiolepis*), a native species that occurs on the property, would be the most common species planted in the riparian scrub communities. Other native species that occur on the property or that are indigenous to Monterey County property would be planted in the riparian scrub such as mule fat (*Baccharis salicifolia*) and mugwort (*Artemisia douglasiana*).

Emergent Wetlands

Emergent wetlands would be created along the edges of ponds and other areas of slow moving water. Hydrophytic species adapted to inundated conditions would be planted in the emergent

wetlands. Cattail (*Typha* sp.), a native species that occurs on the property, would be planted. Other native hydrophytic species such as sedges (*Scirpus microcarpus*) and rushes (*Juncus* spp.) would also be planted in the emergent wetlands.

Seasonal Wetlands

Hydrophytic vegetation would be planted along intermittent and ephemeral channels where the soil is typically saturated for much of the winter. Several native species of rushes, sedges, and spikerush (e.g., *Eleocharis* sp.) would be planted and/or seeded in the seasonal wetlands.

5.4.4 MITIGATION MEASURES

The following section contains a summary statement for each significant biology impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.4.4.1 Alternative 2

Impact 5.4-1: Loss of Wetlands. (Direct)

Implementation of Alternative 2 would result in the loss of up to 9.6 acres of wetlands. This loss is considered a significant direct impact. However, wetland creation and/or enhancement, as discussed in the following mitigation measures would reduce impacts on wetlands to below a level of significance.

Mitigation Measure 5.4-1a: Prior to any disturbance of land, which would impact wetlands a project applicant shall prepare a Detailed Habitat Restoration Plan to be approved by the County of Monterey and implemented by the applicant. This Plan shall identify the exact amount and location of impacted wetland habitat, identify the appropriate location for replacement or restoration of wetland habitat within the Conservation Areas at an overall ratio of 3:1; of which, at least 1:1 must be comprised of wetland creation. A lower overall ratio may be undertaken with the concurrence of the California Department of Fish and Game, U.S. Army Corps of Engineers and Regional Water Quality Control Board based on the habitat value of the area to be impacted. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat. The Plan shall restore hydrologic connectivity and create different hydrologic niches that meet many riparian plant species initiation and establishment requirements. The Plan shall require a five-year monitoring program, which will assess progress based on specific success standards identified in the Plan. The Plan shall specify the use of locally-obtained native species, including arroyo willow, as appropriate. The planting program shall be completed prior to issuance of the first building occupancy permit. At the end of five years, survivorship of planted riparian scrub species will be a minimum of 75 percent of the total number initially planted. Target species will comprise a minimum of 70 percent of all scrub species present in riparian scrub habitats. Other perennial

native shrub species that colonize the riparian scrub planting areas can be used to calculate the final success criteria.

Mitigation measure—Measure 5.4-1b: Developers shall be responsible for implementing habitat restoration efforts to improve the plant diversity and coverage within disturbed habitat within conservation areas (shown as an Open Space Preserve/Mitigation Area on Figure 9-2b, Alt. 4E Landscape plan, in the Rancho San Juan Specific Plan) as set forth in Section 6.7.3 (Application of Technology/Techniques to Achieve Goal) of the Rancho San Juan Specific Plan. Prior to undertaking any habitat enhancement activities, and enhancement plan shall be prepared by the developer or resource management entity (see Resource Management Entity Mitigation Measure). At a minimum, the plan shall include the following components: planting palette and planting and maintenance specifications. The enhancement plan shall be submitted for review and approval by the Monterey County Planning and Building Inspection Department. Enhancement efforts within wetlands shall also be subject to review and approval by the California Department of Fish and Game and/or the U.S. Army Corps of Engineers, as appropriate.

Mitigation Measure 5.4-1c: Prior to approval of a Final Map for future development projects in or adjacent to riparian habitat, ~~the County of Monterey shall verify that setbacks determined acceptable to the California Department of Fish and Game and U.S. Army Corps of Engineers are incorporated into the design.~~ Setback100-foot buffers shall be provided around wetlands unless reduced buffer widths are determined to be appropriate by the County on a case-by-case basis in consultation with the CDFG and USACOE, and based on protection of riparian habitat. Buffer areas shall be planted with appropriate native plant species. Development shall be restricted in this buffer area except for improvements associated with passive recreational uses, such as pedestrian trails, picnic tables and benches, etc. Any passive recreation improvements within the buffer area shall be sited and designed to avoid direct and indirect impacts to riparian habitat.

Mitigation Measure 5.4-1d: Prior to approval of a final grading plan which would impact jurisdictional waters of the U.S. and/or wetlands, the County of Monterey shall verify that appropriate permits have been obtained (e.g. Individual or Nationwide 404 Permit and Streambed Alteration Agreement).

Mitigation Measure 5.4-1e: To the greatest extent possible, the final design of the golf course shall retain surface drainage channels between golf course lakes to promote continuity in the natural drainage system between holes 12 through 15.

Level of Significance of Impact 5.4-1 After Mitigation: Less than significant.

Impact 5.4-2: Loss of Oak Trees. (Direct)

Implementation of Alternative 2 would result in the loss of individual oak trees located within grassland areas. However, replanting oak trees, as discussed in the following mitigation measures, would reduce impacts on oaks to below a level of significance.

Mitigation Measure 5.4-2: Prior to approval of a Final Map which would require removal of three or more oak trees protected by Monterey County (e.g., 6-inches or greater in diameter), a Forest Management Plan shall be prepared as required by Monterey County Zoning Code Section 21.64.260. The Forest Management Plan shall indicate the location of protected trees to be removed for grading and/or construction, as well as protected trees that will not be removed but that are adjacent to grading and/or construction limits (i.e., within twenty feet). All recommendations for tree replanting, protection of trees not proposed for removal, and management measures included in the Forest Management Plan shall be included as conditions of project approval.

Level of Significance of Impact 5.4-2 After Mitigation: Less than significant.

Impact 5.4-3: Loss of Mixed Native/Non-Native Grasslands and Fragrant Fritillary. (Direct)

Development of the Specific Plan would result in the loss of up to 44.9 acres of mixed native/non-native grasslands including a sensitive plant species, the fragrant fritillary. This loss is considered a significant direct impact. However, creation of new native grassland habitat including the fragrant fritillary, as discussed in the following mitigation measures, would reduce impacts on grasslands and fragrant fritillary to below a level of significance.

Mitigation Measure 5.4-3: Prior to any disturbance of land that would impact mixed native/non-native grassland habitat, a detailed Habitat Restoration Plan shall be submitted and approved by the County of Monterey in consultation with the California Department of Fish and Game.

The plant material and location shall in general reflect the conceptual habitat restoration plan illustrated in Figure 5.4-2 and described in this EIR. The plan shall provide for the replacement or restoration of impacted native grassland at a ratio of 1:1. The Habitat Restoration Plan shall include a focused grassland survey, which shall be conducted at the appropriate time of year by a qualified biologist. This survey shall quantify and map the area of native grassland habitat that would be impacted by the proposed development. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat.

At the end of five years, success criteria shall be met if native species in grassland planting areas comprise 70 percent of all species present, or if total plant cover is 90 percent of all plant cover present. Other native species that colonize the perennial grassland planting areas in addition to planted species will be used to calculate the final success criteria. If the success criteria are not met at the end of the five-year monitoring program, then applicant shall identify and implement additional measures that would achieve success including but not limited to replanting, enhanced maintenance or appropriate compensatory mitigation for the species impacted. Monitoring shall continue annually until the success criteria are achieved.

The Habitat Restoration Plan shall also provide compensation for all fragrant fritillary plants that will be impacted. A survey of fragrant fritillary plants shall be conducted to determine the

location and number of impacted plants. The Habitat Restoration Plan shall include a combination of the following actions to compensate for impacts to the fragrant fritillary providing that applicant demonstrates that he has relied upon transplantation first to the maximum extent feasible, then preservation through fee title or conservation easement and last, a voluntary contribution to a rare plant conservation program.

1. Identify on-site locations suitable for transplanting impacted fragrant fritillary plants. The Plan shall describe in detail the transplanting process and monitoring methods, and will identify the entity responsible for implementation and monitoring. Plants shall be derived from the following sources:
 - Transplanting existing on-site plants.
 - Propagation from seeds from on-site plants or an approved commercial source.
 - Bulbs supplied from an approved commercial source.
2. Preserve through fee title acquisition or conservation easement, an existing off-site and currently unprotected population of fragrant fritillary identified by the applicant or recommended by DFG. The conservation easement shall prohibit activities and land uses that could adversely affect the fritillary population (e.g., development, discing, and plowing). The conservation easement shall require the continuation of land uses believed to benefit the population (e.g., grazing and burning). The conservation easement shall be submitted to DFG for review and approval prior to recordation. The preserved area shall be demonstrated to have a population of equal or greater size than the population which would be impacted.
3. Make a voluntary contribution to a rare plant conservation/restoration program recommended by DFG. The fee will be proportionate at a 2:1 ratio to the remaining acres of fragrant fritillary that are required to be mitigated.

Transplanting success shall be achieved if the number of fragrant fritillary plants in restoration areas after 5 years is 110% of the total number impacted. If this goal is not achieved, then applicant shall identify and implement additional measures to achieve success including but not limited to planting additional fragrant fritillary or acquisition of additional off-site population to bring the retention to the 110% criteria. Monitoring of onsite plantings shall continue annually until the success criteria are achieved.

~~Prior to any disturbance of land which would impact native grassland habitat, an applicant shall prepare a Detailed Habitat Restoration Plan to be approved by the County of Monterey. This Plan shall identify the exact amount and location of impacted grassland and fragrant fritillary, and identify the appropriate location for replacement or restoration native grassland and fragrant fritillary within the Conservation Areas, specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat. The Plan shall require a five-year monitoring program, which will assess progress based on specific success standards identified in the Plan. Native grassland shall be compensated on a 1:1 basis which shall consist~~

~~of creation of new grassland habitat. The loss of individual fragrant fritillary shall be on a 1:1 basis.~~

Level of Significance of Impact 5.4-3 After Mitigation: Less than significant.

Impact 5.4-4: Impact on Wildlife. (Direct and Indirect)

In addition to the loss of specific sensitive species and/or habitats, implementation of Alternative 2 could have a significant impact on wildlife by encroaching into the major drainage course that runs along the northern boundary. Uncontrolled use of pesticides and fertilizers near drainages could have an indirect impact on the health of the resident wildlife. Implementation of the Conservation Areas identified in the Specific Plan would assure that this area is preserved in a largely natural condition which would reduce impacts to below a level of significance. In addition, controls on the use of pesticides and fertilizers would reduce potential indirect impacts to below a level of significance.

Mitigation Measure 5.4-4a: Prior to approval of any Final Map, all land designated as Conservation Area within the Final Map area shall be placed in an open space easement which prohibits any disturbance or change in the vegetation. The right of way for the Prunedale Bypass shall not be required to be placed in an open space easement as long as the right of way is potentially required.

Mitigation Measure 5.4-4b: Prior to approval of final landscaping plans, the County of Monterey shall confirm that development located in or within 100 feet of aquatic and/or riparian habitat includes guidelines to prevent contamination of these habitats by pesticides, herbicides, fungicides, and fertilizers. Landscaping shall include appropriate native plant species and shall not include plantings of non-native, invasive plant species.

Mitigation Measure 5.4-4c: As set forth in Section 6.7.3 (Application of Technology/Techniques to Achieve Goal) of the Rancho San Juan Specific Plan, the application submittals for approval of a tentative map and/or use permit for any development located adjacent to a conservation area shall include plans and supporting documentation identifying measures to avoid or minimize adverse effects on plant communities and wildlife located within the conservation area. Conservation areas are shown as an Open Space Preserve/Mitigation Areas on Figure 9-2b, Alt. 4E Landscape plan in the Rancho San Juan Specific Plan. The measures shall include, but not be limited to, the following:

- a. Control illumination within the conservation area by using low pressure sodium lighting, shielding and/or otherwise direction light away from conservation areas;
- b. Avoid the use of exotic plant species which are invasive;
- c. Minimize noise encroachment;
- d. Install fencing which controls movement of domestic animals into conservation areas; and
- e. Restrict wildfire management activities to within the development area.

Mitigation Measure 5.4-4d: Within 120 days of adoption of the specific plan, a qualified resource management entity shall be identified and approved by the Monterey County Board of Supervisors as set forth in Section 6.7.3 (Application of Technology/Techniques to Achieve Goal) of the Rancho San Juan Specific Plan. Funding shall be made available to the resource management entity through a Community Service District (CSD) or comparable funding source, such as the Monterey County Parks Department, Fire District or a non-profit conservancy to cover management activities for the life of the conservation areas in Rancho San Juan. These management responsibilities shall include but not be limited to the following activities:

- a. Fire management;
- b. Control of public access;
- c. Maintain fencing;
- d. Maintain access roads and trails;
- e. Install and maintain signage controlling access and increasing public awareness of the biologic values of the conservation areas;
- f. Trash removal;
- g. Monitor adjacent development to assure adherence to edge effect controls; and
- h. Monitor overall habitat quality and undertake remedial measures as necessary to repair damage including:
 - Invasive plant species removal;
 - Erosion control;
 - Predator control; and/or
 - Habitat creation/restoration/enhancement.

Level of Significance of Impact 5.4-4 After Mitigation: Less than significant.

Impact 5.4-5: Construction Impacts on Sensitive Biological Resources. (Direct and Indirect)

Construction resulting from implementation of Alternative 2 could have direct impacts by killing sensitive wildlife species or indirect impacts by interfering with breeding activities in nearby habitat including California red-legged frog, California tiger salamander, pallid bat, California mastiff bat, Townsend's big-eared bat, burrowing owls, coast horned lizard, western pond turtle, Monterey dusky-footed woodrat and various raptors. Implementation of the following mitigation measures would reduce potential impacts to below a level of significance.

Mitigation Measure 5.4-5a: No more than 30 days prior to grading or construction in or within 100 feet of potential habitat areas identified on Figure 5.4-21, the project applicant shall complete a pre-construction survey conducted by a qualified biologist to determine if California tiger salamander or California red-legged frog occur. If either of these species is present, the following actions shall be taken:

- Heavy equipment operators shall be instructed to identify and avoid aquatic and riparian habitats;

- Temporary sediment settling basins and structures such as sediment fencing, straw bales, or other appropriate erosion control measures shall be used to delineate project area boundaries and prevent sediment-laden runoff from entering the drainage channels and riparian corridors;
- Construction activities occurring adjacent to the aquatic and riparian habitats shall occur during summer months when the drainage corridors are dry or nearly dry and rain is unlikely;
- Before construction begins, a qualified biologist shall inform grading equipment operators of the potential presence of the California tiger salamander or California red-legged frog, its protected status, work boundaries, and measures to be implemented to avoid the incidental take ~~of frogs~~;
- A qualified biologist shall monitor grading activities occurring within 100 feet of the aquatic and riparian habitats;
- Food and food-related trash items associated with construction workers shall be enclosed in sealed containers and regularly removed from the project site to deter potential predators ~~of California red-legged frog~~;
- Pets shall not be permitted on the construction site;
- All staging areas and all fueling and maintenance of vehicles and other equipment shall occur at least 20 meters (60 feet) from any riparian habitat, pond, stream, creek or other water body to ensure that habitat contamination does not occur from such activities.

If California tiger salamander(s) or California red-legged frog(s) are observed during the pre-construction survey, and/or if the above avoidance measures cannot be implemented, any improvements proposed in or adjacent to the aquatic and riparian habitats shall be done in consultation with the U.S. Fish and Wildlife Service to determine whether incidental take authorization is required, and to establish any additional avoidance measures.

Prior to the County issuance of a grading permit or approval of the final map, whichever occurs first, the subdivider shall meet all requirements of the federal Endangered Species Act, as applicable to the project authorized by the Combined Development Permit.

Mitigation Measure 5.4-5b: No more than 30 days prior to grading or construction in or within 100 feet of riparian, woodland or grassland habitats that would occur during the nesting and/or breeding season of special-status bird species potentially nesting in the area (generally March 1 through August 1), the applicant shall complete a pre-construction bird survey conducted by a qualified biologist to determine if active nests of special-status bird species occur in or adjacent to the proposed construction area. The survey shall include all appropriate nesting areas in the construction zone and within 200 feet of the construction zone. If active nest(s) are found, clearing and construction within 200 feet of the nest(s) shall be postponed or halted until the nest(s) are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting, at the discretion of the biologist.

Mitigation Measure 5.4-5c: No more than 30 days prior to grading or construction in or within 100 feet of grassland habitats that would occur during the nesting season or winter residency period for burrowing owls (generally December 1 through August 31), the applicant shall complete a pre-construction survey for burrowing owls conducted by a qualified biologist. The survey shall include all area in the construction zone and within 200 feet of the construction zone. If active burrows are found in the survey area, the applicant shall prepare a burrowing owl habitat mitigation plan and submit it to CDFG for review and approval. The burrowing owl habitat mitigation plan shall contain mitigation measures contained in the CDFG Staff Report on Burrowing Owl Mitigation (CDFG_1995). Compliance with this mitigation measure shall include, but not be limited to, the following:

- Avoidance of occupied burrows during the nesting season (February 1 through August 31);
- Acquisition, protection and funding for long-term management and monitoring of foraging habitat adjacent to occupied habitat;
- Enhancement of existing burrows and/or creation of new burrows; and/or
- Passive relocation of burrowing owls in accordance with the CDFG report on burrowing owls.

Mitigation Measure 5.4-5d: No more than 30 days prior to grading or construction in areas suspected to support coast horned lizard, western pond turtle, Monterey dusky-footed woodrat, and special-status bat species, the applicant shall complete a pre-construction survey conducted by a qualified biologist. If individuals of these species are observed, a salvage and relocation program shall be prepared in coordination with CDFG to prevent death or injury to individuals of these species during grading or construction operations. The salvage program shall include measures to remove individuals from the project site prior to and during project grading and construction, and to relocate them to nearby protected habitat or other suitable locations specified in the program.

Mitigation Measure 5.4-5e: Prior to initiation of grading approval of a grading permit for future development projects in or within 100 feet of riparian habitat, the County of Monterey shall verify that orange plastic or other temporary demarcation has been installed along the boundary of riparian habitat. The fencing shall remain in place until all construction activities within 100 feet of riparian habitat are complete. Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed within the Conservation Areas.

Level of Significance of Impact 5.4-5 After Mitigation: Less than significant.

5.4.4.2 Alternative 4E

Impacts to biological resources would be the same as those for Alternative 2. Implementation of the mitigation measures identified for Alternative 2 would reduce impacts to below a level of significance.

5.4.4.3 HYH Property Project

Impact 5.4-6: Loss of Wetland. (Direct)

Implementation of the HYH Property project would result in the loss of up to 6.5 acres of wetlands. This loss is considered a significant and direct impact. Along with implementation of Mitigation Measures 5.4-1b through 1e, the following mitigation measure would reduce the wetland impacts to below a level of significance.

Mitigation Measure 5.4-6: Prior to any disturbance of land, which would impact wetlands, a Detailed Habitat Restoration Plan shall be submitted and approved by the County of Monterey. The Plan shall be generally consistent with the location illustrated in Figure 5.4-2 and described in this EIR. This Plan shall identify the exact amount and location of impacted wetland habitat, identify the proposed locations for replacement or restoration of wetland habitat within the Conservation Areas at an overall ratio of 3:1; at least 1:1 must be comprised of wetland creation. A lower overall ratio may be undertaken with the concurrence of the California Department of Fish and Game, U.S. Army Corps of Engineers and Regional Water Quality Control Board based on the habitat value of the area to be impacted. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat. The Plan shall specify the use of locally-obtained native species. The Plan shall require a five-year monitoring program, which will assess progress based on specific success standards identified in the Plan. At the end of five years, survivorship of planted riparian scrub species will be a minimum of 75 percent of the total number initially planted. Target species will comprise a minimum of 70 percent of all scrub species present in riparian scrub habitats. Other perennial native shrub species that colonize the riparian scrub planting areas can be used to calculate the final success criteria.

The planting program shall be completed prior to issuance of the first building occupancy permit.

In addition, the applicant shall implement Mitigation Measures 5.4-1b, 5.4-1c, 5.4-1d, and 5.4-1e.

Level of Significance of Impact 5.4-6 After Mitigation: Less than significant.

Impact 5.4-7: Loss of Oak Trees. (Direct)

Development of the HYH Property project would result in the loss of up to 34 oak trees. This loss is considered a significant direct impact. However, planting of new oaks, as discussed in the following mitigation measures, would reduce impacts on wetlands to below a level of significance.

~~***Mitigation Measure 5.4-7a:*** Prior to any disturbance of land, which would impact oak woodland habitat, a detailed habitat Restoration Plan shall be submitted and approved by the County of Monterey. The plant material and location shall reflect that shown on Figure 5.4-2 and described in the EIR. The plan shall provide for the replacement or restoration of 10 acres of oak~~

~~woodland (4:1) within the Conservation Areas, of which 2.5 acres (1:1) would represent new oak woodland. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat. The Plan shall require a five-year monitoring program. At the end of five years, survivorship of planted tree and shrub species will be a minimum of 70 percent, of the total number initially planted. Target species will comprise a minimum of 70 percent of all tree and shrub species present. Other native species that colonize the oak grove planting areas can be used to calculate the final success criteria.~~

Mitigation Measure 5.4-7b7a: Prior to approval of a Tentative Map which would require removal of three or more oak trees protected by Monterey County (e.g., 6-inches or greater in diameter), a Forest Management Plan shall be prepared as required by Monterey County Zoning Code Section 21.64.260. The Forest Management Plan shall indicate the location of protected trees to be removed for grading and/or construction, as well as protected trees that will not be removed but that are adjacent to grading and/or construction limits (i.e., within twenty feet). All recommendations for tree replanting, protection of trees not proposed for removal, and management measures included in the Forest Management Plan shall be included as conditions of project approval.

Level of Significance of Impact 5.4-7 After Mitigation: Less than significant.

Impact 5.4-8: Loss of Mixed Native/Non-Native Grasslands and Fragrant Fritillary (Direct)

Development of the HYH Property project would result in the loss of up to 44.9 acres of mixed native/non-native grasslands including approximately 20 fragrant fritillary individuals. This loss is considered a significant direct impact. However, creation of new native grassland habitat including the fragrant fritillary, as discussed in the following mitigation measures, would reduce impacts on mixed native/non-native grasslands to below a level of significance.

~~**Mitigation Measure 5.4-8:** –Prior to any disturbance of land which would impact mixed native/non-native grassland habitat, a detailed Habitat Restoration Plan shall be submitted and approved by the County of Monterey pursuant to Mitigation Measure 5.4-3. The plant material and location shall reflect that shown on Figure 5.4-2 1 and described in this EIR. The plan shall provide for the replacement or restoration of 45 acres of perennial grassland (1:1) including 20 fragrant fritillary plants. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat. The Plan shall require a five-year monitoring program. At the end of five years, a plant cover of 90 percent shall be achieved. Target species will comprise a minimum of 70 percent of all perennial grass species present in perennial grassland planting areas. Other native grass species that colonize the perennial grassland planting areas can be used to calculate the final success criteria.~~

~~Prior to any disturbance of land which would impact mixed native/non-native grassland habitat, a detailed Habitat Restoration Plan shall be submitted and approved by the County of Monterey. The plant material and location shall reflect that shown on Figure 5.4-2 1 and described in this EIR. The plan shall provide for the replacement or restoration of 45 acres of perennial grassland~~

~~(1:1) including 20 fragrant fritillary plants. The Plan shall specify an appropriate plant palette, and provide specifications for installation and maintenance of the replacement habitat. The Plan shall require a five-year monitoring program. At the end of five years, a plant cover of 90 percent shall be achieved. Target species will comprise a minimum of 70 percent of all perennial grass species present in perennial grassland planting areas. Other native grass species that colonize the perennial grassland planting areas can be used to calculate the final success criteria.~~

Level of Significance of Impact 5.4-8 After Mitigation: Less than significant.

Impact 5.4-9: Impact on Wildlife (Direct and Indirect)

In addition to the loss of specific sensitive species and/or habitats, development of the HYH Property could have a significant impact on wildlife by encroaching into the major drainage course that runs along the northern boundary. Uncontrolled use of pesticides and fertilizers near drainages could have an indirect impact on the health of the resident wildlife. Implementation of the Conservation Areas identified in the Specific Plan would assure that this area is preserved in a largely natural condition which would reduce impacts to below a level of significance. In addition, controls on the use of pesticides and fertilizers would reduce potential indirect impacts to below a level of significance.

Implementation of Mitigation Measures 5.4-4a and 4b would reduce wildlife impacts to below a level of significance.

Level of Significance of Impact 5.4-9 After Mitigation: Less than significant.

Impact 5.4-10: Construction Impacts on Sensitive Biological Resources. (Direct and Indirect)

Construction could have direct impacts by killing sensitive wildlife species or indirect impacts by interfering with breeding activities in nearby habitat including California red-legged frog, California tiger salamander, coast horned lizard, western pond turtle, California horned lark, tricolored blackbird, loggerhead shrike, burrowing owl, yellow warbler, nesting raptors, Monterey dusky-footed woodrat, pallid bat, California mastiff bat, and Townsend's big-eared bat. Implementation of Mitigation Measures 5.4-~~5b~~ 5a through 5c would reduce construction impacts to below a level of significance. ~~As no habitat for the California Red-legged Frog exists, Mitigation Measure 5.4-4-5a is not required for the HYH Property project.~~

Level of Significance of Impact 5.4-10 After Mitigation: Less than significant.

5.5 ARCHAEOLOGICAL/HISTORICAL RESOURCES

5.5.1 EXISTING CONDITIONS

The following discussion summarizes an Archaeological Evaluation and two Historical Evaluations prepared for the proposed Specific Plan as well as the project specific HYH Property. Archaeological and historical evaluations were prepared by Archaeological Resource Management (Appendices F.1 and F.2) and a third evaluation was prepared by Monterey County Planning Staff (Appendices F.3).

5.5.1.1 Specific Plan

Prehistoric Resources

A field archaeologist conducted a general surface reconnaissance on all open land surfaces in the subject area. A controlled intuitive reconnaissance was performed in areas where burrowing animals, exposed banks and inclines, and other activities revealed subsurface stratigraphy and soil contents. A piece of possible prehistoric fire cracked rock was found in the southwestern portion of the Specific Plan area, and another located near the entrance of the Salinas Golf Course and Country Club. In addition, several prehistoric sandstone mortars have been previously recorded on the Schoch Dairy property, but none were detected during this survey. None of the prehistoric resources are considered prehistorically significant.

Historic Resources

Historic Background

The Specific Plan area region was home to Spanish missions in the late 1700s. Land grants were presented to settlers and soldiers during the Spanish Period; however, it does not appear that the Specific Plan area was included in a land grant during this period.

The Mexican Era in the Specific Plan area region lasted from 1822 to 1848, and was based on cattle production and associated agriculture necessary for the cattle industry. Although it is believed that the Specific Plan area was not located within a land grant during the Spanish Period, during the Mexican Era the Specific Plan area was located in the northwestern portion of the Rancho Bolsa de Las Escarpines.

During the American Period after 1848, crop-oriented agriculture was introduced in California, along with irrigation. The early 1900s saw a substantial increase in the population of the Salinas area when people migrated from the Midwest following the dust bowl. The influx of people caused further expansions of the local agricultural industry.

On-site Historic Resources

Schoch Dairy Complex/Espinosa Adobe Site (CA-MNT-1429H)

The Schoch Dairy Complex is located on El Camino Real in the northwestern portion of the Specific Plan area. The Schoch Dairy Complex site was owned by many different people since the Mexican Period. In the early 1900s, the dairy was constructed. In 1944, two brothers who emigrated from Switzerland, Ernest and Adolph Schoch bought and ran the dairy. The dairy is now run by Ernest Schoch's two sons. The Schoch Dairy is one of the few remaining German-Swiss dairies still in operation in the Salinas area. The Schoch Dairy Complex consists of over 20 buildings constructed since the early 1900s, and is currently being used as a dairy business. The barn, water tower, and bungalow residence, the small shed, calf barn, and milk barn were built around 1900. The granary was built for the dairy use in 1944, and the Ranch style residence was built in 1946.

The Schoch dairy is not currently listed on the California Register of Historic Resources (CRHR) or on the National Register of Historic Places (NRHP). In addition, the complex does not appear to qualify as potentially eligible for listing on either register. The structures have not been associated with significant events or people in history. Although the main house contains elements of both the Prairie and Craftsman styles, it is not a significant example of either of these two styles. Therefore, the Schoch dairy would not yield important information regarding history or prehistory in the local area, California, or the nation.

The Espinosa Adobe Site (CA-MNT-1429H) is located within the vicinity of the Schoch Dairy Complex. It is estimated that the adobe home was constructed in 1837 and lived in by Salvador Espinosa, who was the original grantee of the Rancho Bolsa de las Escarpinas (see Appendix E.1 for further details). The walls that had remained in 1950 were razed, and a portion of a building now stands on the site, therefore no visible remains of the Adobe are present on the surface. Below the surface, archaeological investigations have found the remains of footings for the house, adobe brick walls, a well, and artifact deposits associated with the Espinosa family. The recovered artifacts, currently curated at Sonoma State University, include roof tiles and domestic ceramics and glass. The remaining archaeological deposits have been preserved by melted adobe, and therefore retain their historical integrity.

The Espinosa adobe is not currently listed on the CRHR or the NRHP, however, the site of the adobe does appear to qualify as potentially eligible for listing on the CRHR and NRHP. The adobe is known to be associated with Salvador Espinosa, the original grantee of the Rancho Bolsa de las Escarpinas. Although the above ground portion of the adobe has been completely removed and the foundation heavily disturbed, the adobe has the potential to yield information important to the history of the local area.

Hebert Ranch

The Hebert Ranch is located in the northeastern portion of the Specific Plan area and was purchased by Cherri Hebert and was operated as a working ranch. Cherri Hebert was a distinguished local businessman who owned parcels throughout Salinas and Monterey County.

Cherri Hebert was a primary founder of the Salinas Rodeo and also treasurer of the Democratic County Central Committee and of the Santa Lucia Parlor, No. 97.

Cherri Hebert's wife, Alice, had a sister who lived in downtown Salinas, who would often visit the Hebert Ranch with her son, Max Wagner in the early 1900s. Max was a close friend with John Steinbeck, who became a well-known author of many books and stories and who won the Pulitzer Prize and Nobel Prize. As children, Max and John Steinbeck would often play at the Hebert Ranch. Steinbeck wrote a book, *The Red Pony*, which takes place on the Hebert Ranch. The central character of *The Red Pony*, a boy named Jody, is thought to have been based on Steinbeck's friend Max Wagner. The book provides details of historical importance regarding life on a working ranch in early California history and describes the views of the Gabilion Mountains, the lights of the far away City of Salinas, and long walks to the local one room school house (Lagunita School). This book consists of a series of four connected stories. Three of the stories were originally published in 1937 under the title *The Promise* in Harpers Magazine. The fourth story was added and included in a larger work of short stories entitled *The Long Valley Stories*. In 1945, Viking Press published all four short stories under the title *The Red Pony*. In 1949 *The Red Pony* was made into a major motion picture. An annual Steinbeck Festival is held and tours are conducted to the Hebert Ranch.

Although much is known of the Hebert family, dates of the structures onsite are unknown. The main house at the Hebert Ranch is a single-story Victorian home, which is somewhat altered from its original form. Northwest of the main home stands a small bunkhouse, believed to be the one described by Steinbeck as the sleeping quarters of "Billy Buck" in *The Red Pony*. To the northeast of the bunkhouse stands a small barn built in the basilica style. Further northeast is a larger barn also built on the basilica plan. The large barn has been identified as the "Pony Barn" mentioned by Steinbeck in his book *The Red Pony*. A small storage shed is attached to the northwestern side of the barn by a narrow roof extension. A corral is also located on the ranch, across from the larger barn. The corral is constructed of modern welded metal fencing; however it appears to be in the same location as the original corral.

In addition to the Hebert Ranch structures, in *The Red Pony* Steinbeck discussed the views from the Hebert Ranch. A passage in the story reads "Now he turned his head toward the mountains of the east, the Gabilans, and they were jolly mountains, with hill ranches in their creases, and with pine trees growing on the crests." Therefore, along with the structures, the views from the structure are also historically significant.

During the great depression the Hebert family was forced to sell the ranch due to economic hardship. James Bungard owned the ranch for several years. In 1948 the ranch was purchased by Sumner Gould, who was a well-known cattleman and rancher and continued to use the property for cattle ranching. The present owner of the ranch, Bruno Sala, purchased the ranch in 1974.

The structures on the Hebert Ranch property are not currently listed on the CRHR or NRHP; however, the structures do appear to qualify as potentially significant according to the CRHR and NRHP in that it is known to be associated with John Steinbeck, a writer of local, state,

national, and international importance. The ambience of the Hebert Ranch played a formative role in the childhood of the author, as well as being the setting for one of his works, a series of connected short stories called *The Red Pony*. An important factor in evaluating a structure's significance is its integrity. Although the structures at Hebert Ranch have suffered minor alterations and show signs of surface wear from the elements, these alterations are not considered significant.

The Hebert Ranch complex is associated with early California ranching practices and contributes to the broad patterns of California's history and cultural heritage. In addition, Hebert Ranch is associated with the lives of persons important in our past, specifically the internationally renowned author, John Steinbeck, and a local businessman, Cheri Hebert, for his contributions to the historical development of the Salinas Rodeo. Therefore, the Hebert Ranch complex meets the criteria of a cultural resource.

Battle of Natividad Site

The Battle of Natividad took place during the Mexican War when Americans, under the direction of Colonel Fremont, were attacked by local Californios while trying to capture some horses. Three Americans were killed during the battle. It has been speculated that the Battle of Natividad was an important American victory because it kept the horses from being captured by the band of Californios. The horses allowed the Americans to reach southern California in a timely manner, where the presence of Colonel Fremont and his rifle companies in southern California were considered to have been instrumental in the closing of the war between Mexico and the United States.

The site of the Battle of Natividad is commonly believed to be located at the present-day intersection of Crazy Horse Canyon Road and San Juan Grade Road in the northeastern corner of the Specific Plan area. A California Landmark Monument that describes the battle is located at the intersection. Due to the scarcity of reliable historic documentation, it is difficult to determine the precise boundaries of the Battle of Natividad. Therefore, the site may extend throughout the entire Specific Plan area.

The site is currently listed as a California State Landmark, although the battleground is not currently listed on the CRHR or NRHP. However, the Battle of Natividad site does appear to qualify as potentially eligible for listing on both Registers, because the battleground represents a specific event within the broad pattern of the westward expansion of the United States in general and the conquest of California. The battle site is important because two persons significant to the region's past, Thomas O. Larkin and Manuel de Jesus Castro, took part in the battle. Finally, the site has the potential to yield significant information about the history of California.

Lagunita Schoolhouse Site

Originally built in 1897, the little red Lagunita Schoolhouse was located on San Juan Grade Road facing Sugar Loaf Mountain, at the intersection of Crazy Horse Canyon Road at the north eastern portion of the proposed Specific Plan boundary. Truly a piece of Americana, the same little one-room schoolhouse served as the learning ground for children from grades 1-8 until

1967, when the building was declared unsafe. The school was replaced with a larger, similar-looking structure built on the same floor plan, and the original building was moved to the Boronda History Center in October of 1986 for preservation.

While the original structure is no longer located at the site, nor is the site currently listed on the CRHR or NRHP, the site has the potential to yield information important in prehistory or history and could be a potential cultural resource.

Additional Historic Structures

Seven additional structures may possess historic value and may meet the criteria needed to be considered cultural resources. While less notable than the Schoch Dairy and Hebert Ranch, these structures are over 45 years old, which is an initial benchmark established for potential cultural resource status. Although the seven additional historic structures were not evaluated for their potential eligibility for the CRHR or NRHP, they are considered potentially significant and will require site specific evaluations at the time of actual development.

The single-story, National folk style house at 664 Harrison Road appears to have been constructed in approximately 1875. Also present on this property ~~are is a water tower and a large workshop/shed.~~

The house at 660 El Camino was constructed in approximately 1935 and is a Spanish Colonial revival style in good condition. The property also contains a large, front-gabled warehouse and a water tower.

A house constructed in approximately 1920 is located at 337 San Juan Grade Road. The house is a single-story Craftsman bungalow and is in good condition.

A single-story, Victorian house is located at 385 San Juan Grade Road. The house appears to date from approximately 1890 and is in good condition.

The property at 485 San Juan Grade Road contains five structures. The main house was constructed in approximately 1900. The property also has a small shed/workshop, a cabin constructed in approximately 1900 and relocated from a local hunting camp, a small approximately 1870 granary relocated to the property, and a gas station.

Several historic fences of split-rail construction are located within the project area. These fences are located along the northern and western boundaries of the Salinas Golf and Country Club, and along the northwestern property lines of the North Montgomery Heights Corporation Parcels.

5.5.1.2 HYH Property Project

Prehistoric Resources

A field archaeologist conducted a general surface reconnaissance on all open land surfaces in the subject area. A controlled intuitive reconnaissance was performed in areas where burrowing

animals, exposed banks and inclines, and other activities revealed subsurface stratigraphy and soil contents. No prehistoric resources were found onsite.

Historic Resources

Historic Background

The historical background is the same as that described for the Specific Plan.

On-site Historic Resources

A potentially historic structure onsite is the single-story, National folk-style house at 664 Harrison Road. The home appears to have been constructed in approximately 1875. Also present on this property are ~~a water tower and~~ a large workshop/shed, and a ~~severally~~ severely deteriorated barn.

Several historic fences of split-rail construction are located within the project area. These fences are located along the northern and western boundaries of the Salinas Golf and Country Club.

Off-site Historic Resources

The northern portion of the HYH project abuts the Hebert Ranch complex.

5.5.2 THRESHOLDS OF SIGNIFICANCE

Based on Section 15064.5 of the State CEQA Guidelines, impacts to cultural resources would be significant if the proposed project would:

- Cause a substantial adverse change in the significance of a cultural resource that is listed in, or determined to be eligible for listing in, the California Register of Historical Resources; listed in a local register of historical resources or identified as significant in an historical resource survey; or meets any of the following criteria:
 - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - Is associated with the lives of persons important in our past;
 - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of any important creative individual, or possesses high artistic values; or
 - Has yielded, or may be likely to yield, information important in prehistory or history (Section 15064.5 (b));
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 21083.2 of the Public Resources Code (Section 15064.5 (c)); and/or
- Disturb any human remains, including those interred outside of formal cemeteries (Section 15064.5 (e)); and/or

- Directly or indirectly destroys a unique paleontological resource or site or unique geological feature.

5.5.3 POTENTIAL IMPACTS

5.5.3.1 Alternative 2

Prehistoric Resources

Although some prehistoric resources have been previously recorded and several fire-cracked rocks were found onsite, these resources are not considered significant. However, prehistoric resources may be located in the subsurface of the Schoch Dairy/Espinosa Adobe site and the Battle of Natividad site. In the absence of details of the future development of both sites, it must be assumed that the sites would be impacted. Therefore, in a worse case scenario, grading of these sites could cause a significant impact to the potential prehistoric resources.

Historic Resources

Schoch Dairy/Espinosa Adobe

The Specific Plan allows for development on the Schoch Dairy/Espinosa Adobe site. The Schoch Dairy Complex is not considered a significant historical resource, and therefore, removal of this complex would not represent a significant impact. However, the Espinosa Adobe is considered a significant historical resource. While it is possible that development may integrate or preserve the Espinosa Adobe site, in the absence of details of future development, it is assumed that the site would be impacted. Therefore, in a worse case scenario, development of the site would cause a significant impact to the historic Espinosa Adobe.

Hebert Ranch

The Hebert Ranch would not be directly impacted because it is located within the Future Development/Agricultural Preserve area, and is not proposed for development. However, the Specific Plan does discuss the possibility of incorporating the ranch into a community park. As no specific park plan is proposed, it would be speculative to reach any conclusions about the direct potential impacts on the ranch.

Indirect impacts would occur to the Hebert Ranch due to development of the Residential Estate and Residential Low homes located south of Hebert Ranch, within the HYH Property area. Development of these homes would convert the view shed from scattered ranches to suburban development. This would result in a substantial change in the character of the view shed and is considered a significant indirect impact.

Battle of Natividad Site

While the exact location of the Battle of Natividad is unknown, it is anticipated to be located within the Future Development/Agricultural Preserve area. Although the site may be developed in the future, it is located in an area that is presently farmed, and therefore already impacted. It

would be speculative to reach any conclusions about the impacts of possible future development under the Specific Plan on the battle site.

Lagunita Schoolhouse Site

The Lagunita Schoolhouse Site is located within the Future Development/ Interim Agricultural area within the Specific Plan; however, the site has been identified as a school. School operations would continue as status quo; therefore, no environmental impact is anticipated.

Additional Historic Structures

As discussed previously, the six additional historic structures were not evaluated for their potential eligibility for the CRHR or NRHP, which is the basis for consideration of a cultural resource. In the absence of details of future development, it must be assumed, in the worse case scenario, that the additional structures would be developed, or modifications made to the existing structures, which may result in significant impacts. Full historical evaluation shall be conducted prior to implementation of project specific plans.

5.5.3.2 Alternative 4E

Prehistoric Resources

As with Alternative 2, no significant prehistoric resources were detected onsite. However, prehistoric resources may be located in the subsurface of the Schoch Dairy/Espinosa Adobe site and the Battle of Natividad site. Therefore, in a worse case scenario, grading of these sites could cause a significant impact to the potential prehistoric resources.

Historic Resources

Schoch Dairy/Espinosa Adobe

As discussed for Alternative 2, this alternative also allows for development on the Schoch Dairy/Espinosa Adobe site. As the Schoch Dairy Complex is not considered a significant historical resource, therefore removal of the complex would not represent a significant impact. . The Espinosa Adobe is considered a significant historical resource, and could be integrated into development or preserved, in the absence of details of future development it must be assumed that the site would be impacted. Therefore, in a worse case scenario, development of the site could cause a significant impact to the historic Espinosa Adobe.

Hebert Ranch

As with Alternative 2, the Hebert Ranch is located within the Future Development/Agricultural Preserve area, and is not proposed for development in the future. It is possible that the site may be integrated into a park, however in the absence of specific park plans, no conclusion can be made about the potential direct impacts on the ranch.

Indirect impacts would occur to the Hebert Ranch due to development of the Residential Estate and Residential Low homes located south of the Hebert Ranch. Development of these homes

would change the views described in *The Red Pony* from the Hebert Ranch to the Gabilan Mountains, and result in significant indirect impacts.

Battle of Natividad Site

As discussed for Alternative 2, while the exact location of the Battle of Natividad is unknown, it is within the Future Development/Agricultural Preserve area. Although the site may be developed in the future, it is located in an area that is presently farmed, and therefore already impacted.

Lagunita Schoolhouse Site

The Lagunita Schoolhouse Site is located within the Future Development/Interim Agricultural area within the Specific Plan; however, the site has been identified as a school. School operations would continue as status quo; therefore, no environmental impact is anticipated.

Additional Historic Structures

As discussed for Alternative 2, the seven additional historic structures were not evaluated for their potential eligibility for the CRHR or NRHP, and because of the likelihood that they would be developed, a full evaluation shall be conducted prior to implementation of project plans that may result in impacts to them.

5.5.3.3 HYH Property Project

Prehistoric Resources

No prehistoric resources were recorded or detected onsite; therefore impacts to prehistoric resources are not expected to have significant impacts.

Historic Resources

On-site Historic Resources

A potential cultural resource on-site is a single-story, National folk-style house located at 664 Harrison Road. The home appears to have been constructed in approximately 1875. Also present on this property are a water tower, a large workshop/shed and dilapidated barn. Direct development has not been proposed on the parcel; therefore, additional cultural research is not required at this time. As proposed, the applicant's project will not result in impact(s) to the potentially significant resource.

Several historic fences of split-rail construction are located within the project area. These fences are located along the northern and western boundaries of the Salinas Golf and Country Club. As proposed, the HYH project could impact the potentially historic fences if the fences are removed or modified.

Off-site Historic Resources

Although the Hebert Ranch is not located on the HYH Property, development of the Residential Estate and Residential Low homes within the HYH property, located south of the Hebert Ranch, would indirectly impact this historic resource. Development of these homes would change the views described in *The Red Pony* from the Hebert Ranch complex to the Gabilan Mountains and the City of Salinas. In addition, urban development will change the rural nature associated with a working ranch, which is associated with the broad patterns of California's history and cultural heritage.

5.5.4 MITIGATION MEASURES

The following section contains a summary statement for each significant agricultural/historical resource impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.5.4.1 Alternative 2

Impact 5.5-1: Development which damages or destroys significant historic resources. (Direct)

Implementation of Alternative 2 may damage or destroy potentially significant historic resources if development is proposed on or near such sites. In most instances, Mitigation measure 5.5-1 would reduce impacts to less than significant; but, there could be circumstances where documentation only would not eliminate all significant impacts (CEQA Guidelines section 15126.4(b)(2)). In those circumstances, the impact would be significant and unavoidable.

Mitigation Measure 5.5-1: Prior to any activity which could adversely affect potentially significant historical resources, specifically including those named in the text of this section and those which may be identified in connection with a specific project, an historic evaluation shall be conducted to determine the impact of such activities on historic resources. If the impact would be to adversely affect or destroy the resource, the first priority shall be given to avoidance. If avoidance is not feasible, the resource may be protected as specified in CEQA Guidelines Section 15126.4(b)(1) or documented by way of historic narrative, photographs, or architectural drawings.

Level of Significance of Impact 5.5-1 after Mitigation: Significant.

Impact 5.5-2: Disturbance of cultural, archaeological, historical, or paleontological resources. (Direct)

Implementation of Alternative 2 may result in the disturbance of cultural, archaeological, historical, or paleontological resources, including human remains, if development is proposed on

or near such sites. Implementation of the following mitigation measure would reduce impacts to less than significant.

Mitigation Measure 5.5-2: The applicant and inspectors shall monitor the site for cultural materials in the soils. If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources), work shall be halted immediately within 150 feet of the find until it can be evaluated by a qualified professional archaeologist. The Monterey County Planning and Building Inspection Department and a qualified archaeologist (i.e., an archaeologist registered with the Society of Professional Archaeologists) shall be immediately contacted by the responsible individual present onsite. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. In addition, in the event of discovery of human remains, the provisions of CEQA Guidelines Section 15064.5(e) shall be followed.

Level of Significance of Impact 5.5-2 after Mitigation: Less than significant.

Impact 5.5-3: Disturbance of views from the Hebert Ranch. (Indirect)

Implementation of Alternative 2 would disturb views described in Steinbeck's *The Red Pony*, from the Hebert Ranch towards the Gabilan Mountains and the City of Salinas. Development of the Residential Estate and Residential Low homes on the HYH Property would obstruct views from the Hebert Ranch to the Gabilan Mountains and the City of Salinas.

Mitigation Measure 5.5-3a: In order to reduce the visual impacts of the proposed residential units and associated accessory structures, appropriate building materials shall be used including, but not limited to, matted and non-reflective building materials.

Mitigation Measure 5.5-3b: In order to preserve the historical character of the view of the Gabilan Mountains and the City of Salinas from the Hebert Ranch, the applicant shall provide a landscape plan specifically designed to fully screen the proposed residential development. Said screening shall not exceed the height of the proposed structures in order to ensure that the critical view shed is not fully blocked.

Level of Significance of Impact 5.5-3 after Mitigation: Less than significant.

5.5.4.2 Alternative 4E

Significant impacts related to archaeological/historical resources would be the same as Alternative 2. Implementation of the corresponding mitigation measures would reduce Impacts 5.5-1 and 5.5-3 to below a level of significance. As with Alternative 2, Impact 5.5-4 would remain significant and unmitigable.

5.5.4.3 HYH Property Project

Impact 5.5-4 Development which damages or destroys significant historic resources. (Direct)

Several historic fences of split-rail construction are located within the project area. These fences are located along the northern and western boundaries of the Salinas Golf and Country Club. As proposed, the HYH project could impact the potentially historic fences if the fences are removed or modified.

Mitigation Measure 5.5-4: To avoid damaging or removing the historical split-rail fences along the northern and western boundaries of the Salinas Golf and Country Club, the applicant shall incorporate the fences into the design of the proposed project.

Level of Significance of Impact 5.5-4 after Mitigation: Less than significant.

Impact 5.5-5: Disturbance of cultural, archaeological, historical, or paleontological resources. (Direct)

Implementation of the HYH Property project may disturb presently unknown but potentially significant cultural, archaeological, historical, or paleontological resources, including human remains if development is proposed on or near such sites. Implementation of mitigation measure 5.5-2 would reduce the impact to less than significant.

Level of Significance of Impact 5.5-5 after Mitigation: Less than significant.

Impact 5.5-6: Disturbance of views from the Hebert Ranch. (Indirect)

Implementation of the HYH Property project would disturb views described in Steinbeck's *The Red Pony*, from the Hebert Ranch towards the Gabilan Mountains and the City of Salinas. Development of the Residential Estate and Residential Low homes on the HYH Property would change, and potential obstruct, views from the Hebert Ranch. Implementation of the mitigation measures 5.5-3a and 5.5-3b would reduce impacts to less than significant.

Level of Significance of Impact 5.5-6 after Mitigation: Less than significant.

5.6 NOISE

Mestre Greve and Associates prepared a noise assessment dated March 2004 for the Specific Plan and HYH Property project. The noise assessment is included as Appendix G and is summarized below.

5.6.1 EXISTING CONDITIONS

5.6.1.1 Specific Plan

Background

Definition

Noise is often defined as unwanted sound. Sound, however, is measurable, whereas noise is subjective. Sound is energy mechanically transmitted by pressure waves in a compressible medium such as air and is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB).

Effects of Noise

For most people, the usual consequences of noise are associated with speech interference, distractions at home and at work, disturbance with rest and sleep, and the disruption of recreational pursuits. The long-term effects of excessive noise exposure are physical as well as psychological. Physical effects may include headaches, nausea, irritability, constriction of blood vessels, changes in the heart and respiratory rate and increased muscle tension. Prolonged exposure to high noise levels may result in hearing damage. Psychological effects may result from the stress and irritability associated with a change in sleeping patterns due to excessive noise.

Rating Scales

A specific rating scale, the A-weighted decibel, commonly abbreviated as dBA, has been devised to relate sound to the sensitivity of the human hearing system. This scale is calibrated to the faintest sound audible and has approximately the same frequency response as the human hearing system. Figure 5.6-1 provides examples of various noises and their typical A-weighted noise level.

Several rating scales have been developed for measurement of community noise. These scales account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on people; (2) the variety of noises found in the environment; (3) the variations in noise levels that occur as a person moves through the environment; and (4) the variations associated with the time of day. Three of the predominate noise scales are discussed below.

SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS

Numbers in Parentheses are the A-Scale Weighted Sound Levels for that Noise Event

dB(A)	OVER-ALL LEVEL Sound Pressure Level Reference: 0.0002 Microbars	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
130		Military Jet Aircraft Take-Off With After-Burner From Aircraft Carrier @ 50 Ft. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
120 110	UNCOMFORTABLY LOUD	Concord Takeoff (113)*	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100		Boeing 747-200 Takeoff (101)*		100 dB(A) 8 Times as Loud
90	VERY LOUD	Power Mower (96) DC-10-30 Takeoff (96)* Motorcycle @25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft. (89) Boeing 727 w/ Hushkit Takeoff (96)* Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 + or - 6) Boeing 757 Takeoff (76)*	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Propeller Airplane Takeoff (67)* Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
20	JUST AUDIBLE	(dB[A] Scale Interrupted) Desert at Night		
10	THRESHOLD OF HEARING			

*Aircraft takeoff noise measured 6,500 meters from beginning of takeoff roll

Source: Mestro Givve Associates, 3/2004

- **Leq** is the “energy” average noise level during the time period of the sample. Leq can be measured for any time period, but is typically measured for 1 hour.
- **CNEL** (Community Noise Equivalent Level) is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a "CNEL of 60 dBA," "60 dBA CNEL," or simply "60 CNEL." Typical noise levels in terms of the CNEL scale or different types of communities are presented in Figure 5.6-2.
- **L (%)** is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example, since 5 minutes is 25% of 20 minutes, L(25) is the noise level that is equal to or exceeded for five minutes in a twenty minute measurement period. It is L(%) that is used for most Noise Ordinance standards. For example, most daytime city, state and county Noise Ordinances use an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. In other words the Noise Ordinance states that no noise level should exceed 55 dBA for more that fifty percent of a given period.

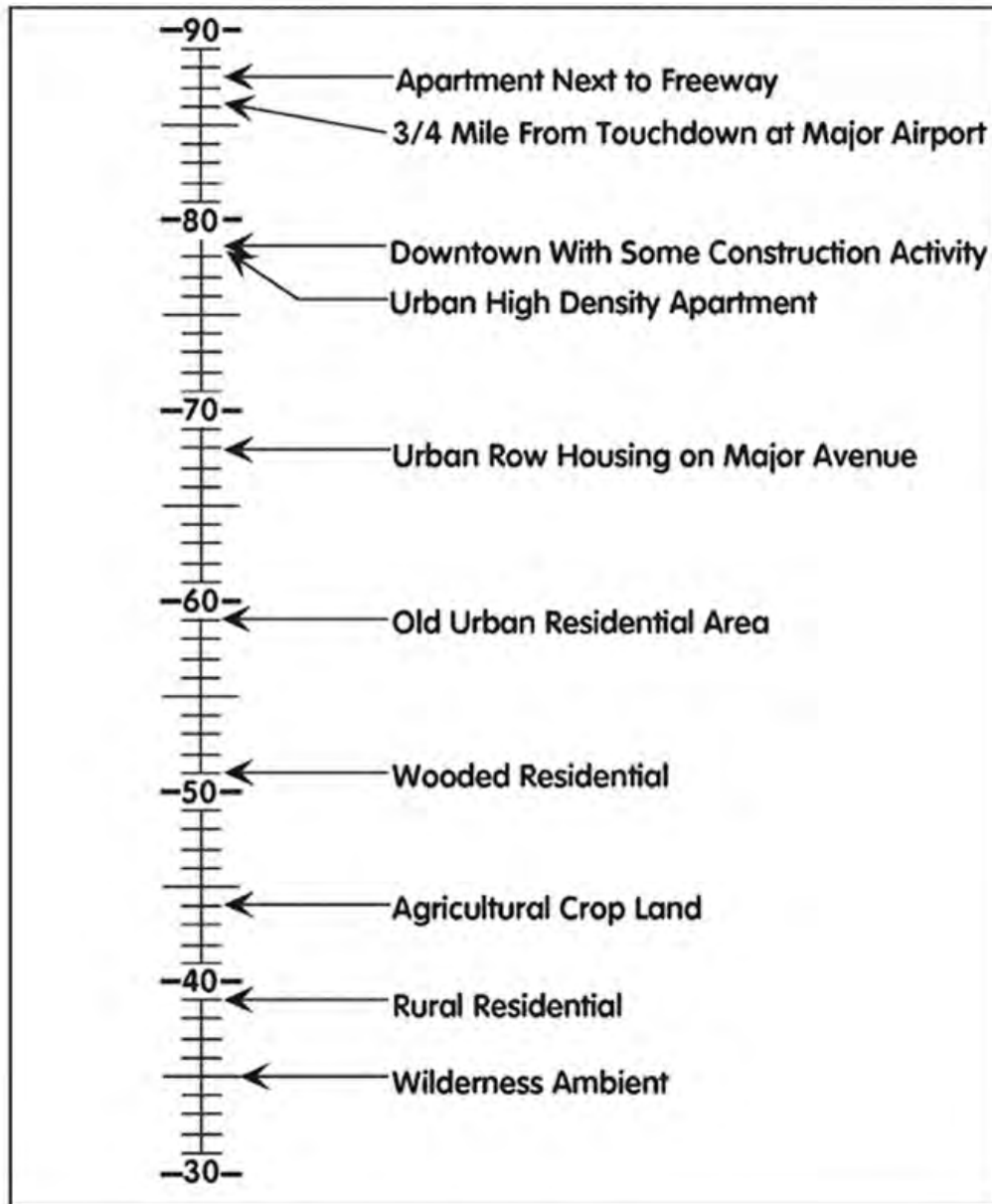
Noise Regulations and Policies

County of Monterey Noise Element

The currently adopted Monterey County General Plan (1982) contains a section on “Noise Hazards.” This section essentially represents the Noise Element for the County of Monterey. The Element presents a noise/land use compatibility matrix and establishes a 45 CNEL interior noise standard for new residential construction. The land use compatibility table for exterior community noises indicates that residential is acceptable in areas below 55 CNEL and conditionally acceptable between 55 and 70 CNEL. Levels in excess of 70 CNEL are considered normally unacceptable.

For planning purposes, noise/land use compatibility standards for various classes of land uses are used to ensure that noise exposure is considered in development decisions. Noise compatibility standards are typically based on guidelines provided by the State of California. The County is in the process of revising its General Plan and has published a draft for public review. Because the interior residential noise standard is the same as the currently adopted plan, and the updated Noise Element presents outdoor noise standards for residential uses and interior noise levels for other uses, the standards presented in the County’s General Plan Update are used for this analysis. The land use/noise compatibility matrix and noise standards are presented in Figure 5.6-3. Sensitive noise receptors include residences, schools, hospitals, parks, libraries and churches.





CNEL Outdoor Location



Source: U.S. Environmental Protection Agency, "Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure," EPA Report NTID 73-4, 1-73.

Source: Mestre Greve Associates, 3/2004

Land Use Category	Outdoor Noise Level (CNEL)								Indoor Standard (CNEL)
	50	55	60	65	70	75	80		
Open space and park uses where quiet is a prime objective									--
Auditoriums, concert halls (-/20) ¹									40
Residential-low density single family, duplex, mobile homes (10/20)									45 (60 Outdoor)
Residential-multi-family (10/20)									45 (60 Outdoor)
Transient Lodging-motels, hotels (10/20)									45
Schools, libraries, churches, hospitals, nursing homes (10/20)									45
Actively used open spaces-playgrounds, neighborhood parks, sports fields									--
Golf courses, riding stables, water recreation, cemeteries									--
Office buildings, business commercial and professional (10/25)									50
Industrial, manufacturing, utilities, agriculture (10/25)									60

-  **Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements
-  **Conditionally Acceptable:** Conventional construction will achieve indoor noise standards, but closed windows and fresh air supply systems or air conditioning will be required.
-  **Normally Unacceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Closed windows and fresh air supply systems or air conditioning will be required. Other building upgrades will probably be needed and should be specified in the acoustical report to meet indoor noise standard. Additionally, residential uses must show that they will achieve an outdoor noise standard of 60 CNEL or less.
-  **Clearly Unacceptable:** New construction or replacement of an existing structure or use shall be disallowed.

1. Numbers in parenthesis indicate the minimum outdoor to indoor noise reduction provided by typical construction with and without windows open. For example, residential buildings will have at least a 10 dBA noise reduction with windows open and a 20 dBA outdoor to indoor noise reduction with windows closed.

Source: Mestre Greve Associates, 3/2004

County of Monterey Noise Ordinance

The current County of Monterey Noise Ordinance is contained the County Code Chapter 10.60 "Noise Control". The ordinance is brief, and applies to "any machine, mechanism, device, or contrivance" within 2,500 feet of any occupied dwelling unit. The ordinance limits the noise generated to 85 dBA at a distance of 50 feet from the noise source.

The County's current Noise Ordinance does not address noise sources other than machines, mechanisms, devices, and contrivances. It does not address other outdoor noise sources, such as outdoor events, public address systems, and live music. The ordinance is also limited by the fact that it does not restrict noise at the property line. Nor does it define the sensitivity of adjacent land uses to varying noise levels.

Because of the limitations of the existing Noise Ordinance, this analysis uses the standards established by the Model Noise Ordinance of the California Department of Health Services in evaluating the significance of noise impacts. The Model Noise Ordinance is designed to control unnecessary, excessive and annoying sounds from sources on private property by setting limits that cannot be exceeded at adjacent properties. The Model Noise Ordinance requirements cannot be applied to mobile noise sources such as heavy trucks when traveling on public roadways. Federal and State laws preempt control of the mobile noise sources on public roads. However, the ordinance does apply to vehicles while they are on private property. The Model Noise Ordinance specifies noise levels that cannot be exceeded at nearby residential properties for a specified period of time.

Table 5.6-1 presents the Model Noise Ordinance Outdoor Noise Standards. The first column of the table presents the maximum amount of time in a one-hour period that the noise level shown in Columns 3 and 4 can be exceeded. Column 2 lists the equivalent noise metric in terms of "percent noise level" or L%. Columns 3 and 4 list the daytime and nighttime noise levels that cannot be exceeded for the time specified in the first column.

**TABLE 5.6-1
Model Noise Ordinance Standards**

MAXIMUM TIME OF EXPOSURE	NOISE METRIC	NOISE LEVEL NOT TO BE EXCEEDED	
		7 A.M. TO 10 P.M. (DAYTIME)	10 P.M. TO 7 A.M. (NIGHTTIME)
30 Minutes/Hour	L50	55 dBA	50 dBA
15 Minutes/Hour	L25	60 dBA	55 dBA
5 Minutes/Hour	L8.3	65 dBA	60 dBA
1 Minute/Hour	L1.7	70 dBA	65 dBA
Any period of time	Lmax	75 dBA	70 dBA

For example, a noise level of 55 dBA cannot be exceeded for more than 30 minutes in an hour during the daytime. A noise level of 60 dBA cannot be exceeded for more than 15 minutes in an hour, 65 dBA cannot be exceeded for more than 5 minutes in an hour, 70 dBA cannot be exceeded for more than 1 minute in an hour and 75 dBA cannot be exceeded at anytime. During the nighttime, these limits are reduced by 5 dB.

Existing Noise Sources and Levels

The Specific Plan area is subject to various noise sources including traffic, schools, agriculture, golf course maintenance and neighborhood noises such as lawn mowers and dogs.

To determine the existing noise environment at the proposed project site, ambient noise measurements were made on February 12, 2004 between 10:20 a.m. and 1:00 p.m. at five locations. The location of the noise measurement site is shown in Figure 5.6-4. Noise levels were measured for 15 minutes at each location.

The measurement results are presented in Table 5.6-2 in terms of the equivalent noise levels (Leq), maximum noise levels, minimum noise levels and percentile noise levels (L%).

**TABLE 5.6-2
Existing Noise Measurements**

SITE	START TIME	SOUND LEVEL (DBA)					
		LEQ	LMAX	L10	L50	L90	LMIN
1	10:22 AM	61	75	66	53	43	40
2	10:50 AM	46	61	46	43	41	39
3	11:18 AM	60	73	64	56	48	43
4	11:44 AM	46	56	48	45	42	39
5	12:49 AM	72	80	74	71	67	61

Site 1 was located near the northeastern extent of the project along San Juan Grade Road. The measurement was taken 100 feet from the roadway centerline. The primary source of noise at Site 1 was traffic on San Juan Grade Road. Site 2 was located at the interface of the project and the existing Bolsa Knolls residential development. The sources of noise at Site 2 included, distant tractors and backup beepers, birds, neighborhood dogs, and a lawn mower in the distance. Site 3 was located along near the southern boarder of the project site, along Russell Road. The measurement was taken approximately 100 feet from the roadway centerline. The primary source of noise at Site 3 was traffic on Russell Road. Activity, a P.E. class, at the Gavilan View Middle School was also audible during the measurements. Site 4 was located in the southwestern portion of the project away from most noise sources. Noise sources included traffic on Harrison Road (the site was located approximately 500 feet from Harrison Road), other distant traffic and tractors, and birds. Site 5 was located along Highway 101, approximately 100

feet from the centerline. The noise environment at Site 5 was dominated by traffic on Highway 101 and little else was audible.

Roadway Noise

An estimate of traffic noise levels in terms of CNEL was computed for the roadways affected by project traffic. The distances to the existing 60, 65 and 70 dBA CNEL contours for the roadways in the vicinity of the proposed project site are given in Table 5.6-3. The CNEL at 100 feet from the roadway centerline is also presented. These represent the distance from the centerline of the road to the contour value shown.

As shown in Table 5.6-3, areas along Highway 101 experience noise levels in excess of 70 dBA CNEL. Traffic noise levels in excess of 65 dBA CNEL are generated along Highway 156 and Boronda Road. Traffic noise levels along San Juan Grade Road, San Miguel Canyon, Russell Road, Espinosa Road, North Main Street, Natividad Road and McKinnion experience noise levels in excess of 60 dBA CNEL.

5.6.1.2 HYH Property Project

Background

The background information for the HYH Property is the same as described for the Specific Plan.

Existing Noise Sources and Levels

As with the Specific Plan area, the HYH Property project is subject to various noise sources, primarily traffic, agriculture (e.g., farm equipment operation) and to a lesser extent golf course maintenance, school and neighborhood noises such as lawn mowers and dogs.

The existing noise sources and levels are the same as for the Specific Plan area, as shown in Tables 5.6-2 and 5.6-3.

5.6.2 THRESHOLDS OF SIGNIFICANCE

Noise impacts would be significant if the proposed project would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. As discussed above, a level of 60 CNEL is used as the threshold for outdoor residential noise in accordance with the County's General Plan Update; the commercial threshold is 75 dBA CNEL for traffic noise. Noise levels in excess of levels identified in Table 5.6-1 shall be considered significant. A level of 45 dBA is used for indoor levels within habitable portions of residences;



Source: Mestre Greve Associates, 3/2004



Not to Scale

Existing Noise Measurement Locations _____ Figure 5.6-4

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**TABLE 5.6-3
Existing Roadway Traffic Noise Levels**

ROAD SEGMENT	CNEL@ 100 FEET FROM CENTERLINE	DISTANCE (FEET) TO CNEL CONTOUR FROM CENTERLINE OF ROADWAY		
		70 CNEL	65 CNEL	60 CNEL
Blackie Road W of Prunedale South Rd	56.1	RW	RW	55
Crazy Horse Canyon Road East of Hwy 101	60.1	RW	47	101
San Juan Grade Road North of Hebert Rd at SB County Line North of Boronda Rd North of Russell	60.9	RW	53	114
	52.5	RW	RW	32
	64.2	41	89	191
	63.5	37	79	170
San Miguel Canyon North of Hwy 101	63.0	34	74	160
Hwy 156 West of McGuffe	66.8	61	131	282
Russell Road East of Hwy 101 West of San Juan Grade	58.5	RW	37	79
	61.2	RW	56	121
Espinosa Road West of Hwy 101	63.4	36	78	169
North Main Street South of Boronda South of Russell	63.5	37	79	170
	58.9	RW	39	85
Boronda Road East of Boronda Interchange East of Auto Mall Drive East of McKinnon	68.6	81	175	377
	64.5	43	93	200
	65.5	50	108	232
Natividad Road North of Boronda	60.5	RW	50	108
McKinnion Road South of Boronda	60.1	RW	47	102
Hebert Road East of San Juan Grade	59.5	RW	43	93
Harrison Road North of Russell	57.2	RW	30	65
Highway 101 North of Boronda South of Boronda	77.1	297	639	1,377
	77.7	328	706	1,521

RW-Contour Falls Within Roadway Right-of-Way

- Expose persons to or generate excessive groundborne vibration or groundborne noise levels; and/or
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. For the purposes of this EIR, an increase of 1.5 dBA CNEL is considered significant because any increase over 1 dBA is considered measurable.

5.6.3 POTENTIAL IMPACTS

Potential noise impacts are commonly divided into two categories; temporary and long term. Temporary impacts are usually associated with noise generated by construction activities. Long-term impacts are related to noise generators and noise receptors. Noise receptor impacts are related to impacts of high noise levels on noise sensitive uses such as residences, schools, medical facilities and churches. Noise generator impacts are associated with land uses which may emit noise levels which impact nearby noise sensitive receptors.

5.6.3.1 Alternative 2

Temporary Impacts

Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, which may include trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. Worst-case examples of construction noise at 50 feet are presented in Figure 5.6-5. Noise measurements made by Mestre Greve Associates for other projects show that the noise levels generated by commonly used grading equipment (e.g. loaders, graders and trucks) generate noise levels that typically do not exceed the middle of the range shown in Figure 5.6-5.

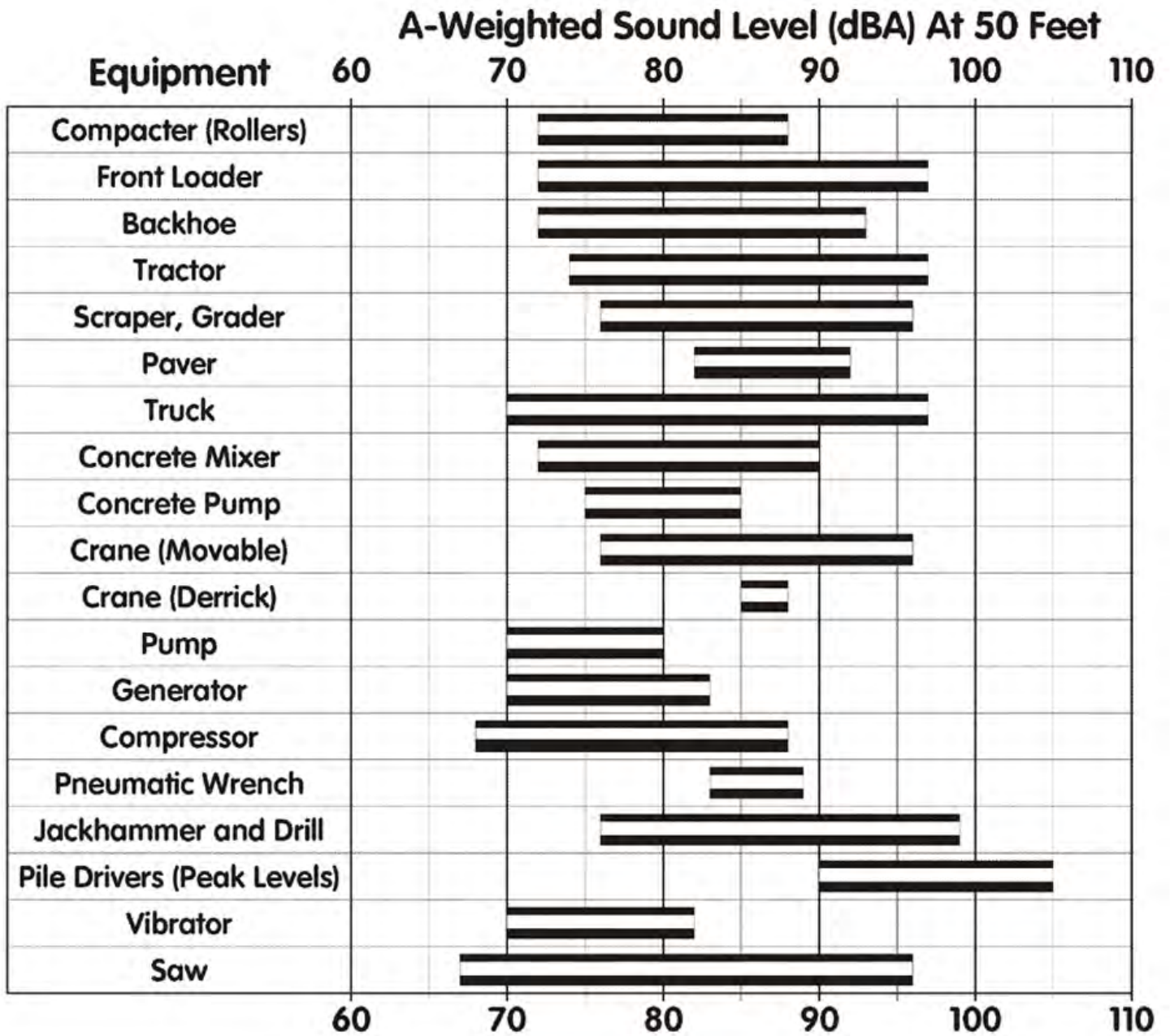
Although noise levels generated during construction would be high, their temporary nature and duration limitations imposed by the Noise Ordinance would reduce these impacts to below a level of significance. Noise-generating construction activities are limited to the hours between 7 a.m. and 7 p.m. Monday through Saturday; no construction noise is allowed on Sundays or national holidays.

Long-Term Impacts

Sensitive Noise Receptors

The primary sensitive noise receptors which could be impacted as a result of the proposed Specific Plan are residential areas. Other sensitive receptors include schools, medical facilities, libraries and churches.

Several potential noise sources could impact these sensitive noise receptors. Traffic noise is the most common source of impacts. Stationary noise sources associated with the project could also have an adverse noise impact on sensitive noise receptors. Potential stationary sources are associated with the wastewater treatment facility, golf course maintenance, commercial activities



Source: "Handbook of Noise Control,"
by Cyril Harris, 1979

Source: Mestve Greve Associates, 3/2004

including loading/unloading, parking lot noise and heating, ventilation and air conditioning (HVAC) equipment, and the employment center.

Traffic Noise

Traffic noise impacts would be associated with future noise sensitive receptors within the Specific Plan area (onsite) as well as existing sensitive receptors along roads to be traveled by automobile trips associated with the proposed development (offsite).

Onsite Traffic Noise

As illustrated in Figure 5.6-6, a number of roadways within the Specific Plan area would carry enough traffic in the year 2020 to cause noise levels to exceed the 60 dBA CNEL threshold identified earlier. Outdoor Noise levels would be in excess of 60 dBA CNEL along the following roadway segments within and adjacent to the Specific Plan area:

- Highway 101 (entire segment adjacent to Specific Plan area);
- A Street between Highway 101 offramp and H Street;
- B Street between Harrison Road and Van Buren Road;
- Main Street between Russell Road and Town Square;
- Van Buren Road between Russell Road and G Street;
- Russell Road between Highway 101 and N Street;
- San Juan Grade Road between Russell Road and Stirling Road;
- Stirling Road between J Street and San Juan Grade Road;
- Harrison Road between B Street and K Street;
- F Street between Russell Road and Main Street;
- J Street between Town Square and K Street;
- K Street, west of J Street; and
- L Street between Town Square and San Juan Grade Road.

Noise calculations, contained in Appendix F, indicate that outdoor residential uses located along these roadways would be significantly impacted unless noise attenuation measures are undertaken. Exterior sound levels in excess of 60 dBA CNEL could result in interior noise levels in excess of 45 dBA unless sound attenuation measures are undertaken. The analysis in Appendix F indicates that no other noise sensitive uses such as medical facilities, schools or churches would be located in areas where traffic noise would exceed 60 dBA CNEL. The study also concludes that commercial uses (e.g. office) would not be adversely impacted by traffic noise because they would not be located in areas where traffic noise would exceed 75 dBA CNEL.



Source: Mestre Greve Associates, 4/7/2004

Traffic Noise Contours (Alternative 2) _____ Figure 5.6-6

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It should be noted that future traffic volumes on K Street, west of J Street, may not achieve the maximum volumes assumed by the traffic analysis. The traffic model assumed that K Street would represent a convenient route from J Street to Harrison Road. As no specific route for K Street between J Street and Harrison Road is depicted on the Specific Plan, this connection could be circuitous and not be a favored route for through traffic. In the event noise attenuation may be less or not required at all.

Offsite Traffic Noise

Traffic noise on offsite roads would increase from the addition of Specific Plan traffic to background traffic volumes. Increased noise levels could impact existing homes along affected roadways. A noticeable increase is considered to be any increase in excess of 1.5 dBA CNEL. Based upon the analysis contained in Appendix G, one roadway segment: Russell Road, west of San Juan Grade would experience an increase in traffic noise in excess of 1.5 dBA CNEL with the addition of traffic generated by Alternative 2.

Noise Generator Impacts

Three primary sources of noise generation would be associated with the proposed Specific Plan: wastewater treatment, golf course maintenance and commercial operations including the employment center. Each of these is discussed below.

Commercial Operations

Noise impacts on sensitive receptors typically occur only where they directly abut commercial areas. The majority of the proposed commercial uses are located away from sensitive receptors. However, the project proposes several mixed-use areas and commercial and residential uses abut in several locations. The sources of noise from commercial portions of mixed uses that have the potential to impact residential uses include parking lot activity, mechanical equipment, and delivery trucks/loading docks. In addition, specific uses in the mixed-use portions of the project not yet identified area could generate significant noise levels. Restaurants, nightclubs, and bars are often sources of noise issues due to their late night operation.

Wastewater Reclamation Facility

The primary sources of noise associated with the facility are pumps, processing machinery and emergency generators. The facility would typically operate with a fairly constant noise level. Short-term peak noise levels could be caused by maintenance activities.

The wastewater reclamation facility plant is located approximately a minimum of 1,200 feet from the nearest proposed residence; however, existing houses lie within 100 feet. Most of the noise generating equipment (e.g. pumps and processors) would be located within enclosures (e.g. buildings or individual enclosures depending on location). This would limit the noise levels generated by the wastewater treatment process. Testing of the generator would occur during the day and could generate a noise level up to 83 dBA at a distance of 50 feet if it were to be tested for more than 30 minutes in an hour. Thus, the operation of the wastewater treatment plant could have a significant impact on noise sensitive receptors.

Golf Course Operations (Onsite)

Two aspects of the golf course operations have the potential to result in noise impacts: the maintenance facility and mowing of the golf course. Golf course operators traditionally mow greens as early as possible in the morning which typically makes this the most critical noise issue. Greens are located as close as 100 feet from proposed residences. Golf course fairways run directly adjacent to proposed homes. The maintenance facility would be located at least 350 feet from the nearest proposed residential area and less than 100 feet from the nearest existing residence.

Noise measurements performed by Mestre Greve Associates from previous projects show that greens mowers generate noise levels of approximately 62 dBA at a distance of 50 feet. The greens mowers typically operate in one area for approximately 5 to 15 minutes at a time. Larger riding fairway mowers generate noise levels of approximately 66 dBA at a distance of 50 feet. These mowers travel up and down the fairways and do not operate near any single receptor (e.g. home) for more than a few seconds at any one time and cumulatively for not more than a couple of minutes in any one day.

Greens mowing would generate a noise level of approximately 55 dBA at the residence nearest any green. It is not likely that typical mowing of a green would occur for more than 15 minutes in an hour. Therefore, greens mowing, even during the nighttime hours (10:00 p.m. to 7:00 a.m.) would not exceed the 55 dBA nighttime limit and not result in a significant noise impact.

Fairway mowing could generate noise levels as high as 75 dBA at the nearest residences. This would exceed the 55 dBA nighttime threshold and result in a significant impact on adjacent residential areas.

Fairway mowing between the hours of 7:00 a.m. to 10:00 p.m. would not exceed the hourly thresholds. At distances of more 30 feet the fairway mowers would generate noise levels less than 70 dBA. It is not expected that a fairway mower would be operating at a distance of 30 feet or less from any one receptor for more than one minute in an hour. At distances greater than 55 feet, the fairway mowers would generate noise levels less than 65 dBA. It is not expected that a fairway mower would be operating within 55 feet of any one receptor for more than 5 minutes in any hour. At distances greater than 90 feet, the fairway mowers would generate noise levels less than 60 dBA. It is not expected that a fairway mower would be operating within 90 feet of any one receptor for more than 15 minutes in any hour. At distances greater than 170 feet, the fairway mowers will generate noise levels less than 55 dBA. It is not expected that a fairway mower would be operating within 170 feet of any one receptor for more than 30 minutes in any hour. Therefore, fairway mowing during daytime hours would not result in a significant noise impact.

Operations at the golf course maintenance facility could impact adjacent existing and future residences if major operations commence before 7:00 a.m. However, the potential for this impact is considered low as it is estimated to require the simultaneous operation of over 17 fairway mowers within the facility to exceed the night-time threshold. Most of the activity at the maintenance facility would occur during the day. During the day the noise levels generated by

the maintenance facility could be as high as 83 dBA for a sustained noise source and 103 dBA for an impulse noise (both at 50 feet from the facility) and not exceed the noise ordinance at the nearest residence. It is very unlikely that the activities at the maintenance facility would exceed these levels. The maintenance center could generate noise levels 20 dB greater than the auto repair center and not exceed the daytime thresholds. Perceptually, 20 dB represents a noise level 4 times as loud. Therefore, the maintenance center would not in a significant noise impact.

Golf Course Operations (Offsite)

The Salinas Golf and Country Club operates adjacent to the southern boundary of the Specific Plan area. Thus, the same noise impacts from mowing activities discussed earlier could affect proposed residential areas which are located within 125 feet of greens or 200 feet of fairways associated with this course.

Schools

Although schools are commonly found in residential neighborhoods, localized conflicts can occur between residential areas and schools. The common conflicts relate to playground noise and student dropoff traffic. Playground noise is generally limited to elementary schools while student drop off traffic is associated with middle and high schools as well as elementary schools. The ultimate site planning for the schools would determine the potential for conflict. Location of playgrounds and drop off points would reduce potential conflicts.

5.6.3.2 Alternative 4E

Temporary Impacts

Temporary impacts generated from construction equipment would be the same as described for Alternative 2. As discussed above and shown in Figure 5.6-5, the equipment used for site grading would generate the highest construction noise levels.

As with Alternative 2, noise levels generated by heavy equipment for Alternative 4E would likely exceed the Noise Ordinance limits. However, as discussed earlier, conformance with the Noise Ordinance would avoid significant noise impacts.

Long-Term Impacts

Sensitive Noise Receptor Impacts

As with Alternative 2, the primary sensitive noise receptors which could be impacted as a result of the proposed Specific Plan are residential areas. These areas may be affected by traffic noise as well as stationary sources.

Traffic Noise

Onsite Traffic Noise

The same roadways would experience noise levels in excess of 60 dBA CNEL as would occur under Alternative 2. However, as illustrated in Figure 5.6-7, the addition of the Prunedale

Bypass would create a new roadway which would generate unacceptable noise levels affecting onsite residential uses. As with Alternative 2, nearby residential areas would be the only sensitive noise receptors affected by roadway noise within the Specific Plan area. Similarly, proposed commercial uses would not experience unacceptable traffic noise levels.

Offsite Traffic Noise

Traffic generated by Alternative 4E would have a different offsite impact than Alternative 2 due to the influence of the Prunedale Bypass. According to the analysis in Appendix F, traffic noise along the portion of North Main Street, south of Russell Road, would increase by more than 1.5 dBA CNEL along with Russell Road, west of San Juan Grade Road.

Noise Generator Impacts

As with Alternative 2, three primary sources of noise generation would be associated with Alternative 4E: wastewater treatment, golf course maintenance and commercial operations.

Commercial Operations

As with Alternative 2, noise sensitive receptors located near commercial areas could experience excessive noise levels associated with parking areas, loading docks and HVAC equipment. Thus, impacts could be significant.

Wastewater Reclamation Facility

As with Alternative 2, the wastewater treatment facility could have a significant noise impact on nearby sensitive receptors.

Golf Course Operations (Onsite)

As discussed above, maintenance activities on the golf course as well as the golf course maintenance facility would not significantly impact nearby residential areas.

Golf Course Operations (Offsite)

As discussed above, operations at the Salinas Golf and Country Club could affect proposed residential areas which are located within 125 feet of greens or 200 feet of fairways associated with this course.

Schools

As with Alternative 2, localized conflicts can occur between residential areas and schools due to playground and student drop-off noise. Location of playgrounds and would reduce potential conflicts.



Source: Mestre Greve Associates, 4/7/2004



Traffic Noise Contours (Alternative 4E)

Figure 5.6-7

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5.6.3.3 HYH Property Project

Temporary Impacts

Temporary impacts generated from construction equipment would be the same as described for Specific Plan. As discussed above and shown in Figure 5.6-5, the equipment used for site grading would generate the highest construction noise levels.

As the Specific Plan, noise levels generated by heavy equipment for the HYH Property project would likely exceed the thresholds identified in Table 4.6-1. However, as discussed earlier, conformance with the Noise Ordinance hours of operation would avoid significant noise impacts.

Long-Term Impacts

Sensitive Noise Receptor Impacts

As with the Specific Plan, the primary sensitive noise receptors which could be impacted as a result of the proposed HYH Property Project are residential areas. These areas may be affected by traffic noise as well as stationary sources.

Traffic Noise

Onsite Traffic Noise

The following roadways within the HYH Property Project would carry sufficient traffic to exceed 60 dBA CNEL:

- K Street between J Street and its terminus; and
- J Street between the western boundary and southern boundary.

As the proposed golf course lies adjacent to most of J Street and a portion of K Street, traffic noise impacts to noise sensitive areas would be relatively minimal. Medium and Low Residential areas lie along both sides of K Street, north of the golf course. Noise sensitive areas along J Street include two small areas of High Residential and a small portion of Low Residential. The other land use bordering J Street is Neighborhood Commercial which would not be impacted by traffic noise.

If the Prunedale Bypass is constructed, additional residential areas would be impacted within the HYH Property project including Low Residential and Estate Residential areas.

Offsite Traffic Noise

The traffic noise analysis in Appendix F concludes that traffic noise along only one roadway segment would increase beyond 1.5 dBA CNEL with the addition of traffic from the proposed project. The segment of Harrison Road, north of Russell Road, would experience an increase above 1.5 dBA CNEL. However, as no residences currently exist along the affected segment, no impacts would occur.

Noise Generator Impacts

As with the Specific Plan, three primary sources of noise generation would be associated with the HYH Property Project: wastewater treatment, golf course maintenance and commercial operations.

Commercial Operations

As with the Specific Plan, residential areas located near retail and resort areas with the property could experience excessive noise levels associated with parking areas, loading docks and HVAC equipment. Thus, significant noise impacts could occur.

Wastewater Treatment Facility

As with the Specific Plan, the wastewater treatment facility could have a significant noise impact on nearby sensitive receptors including existing and future residences.

Golf Course Operations (Onsite)

As discussed above, maintenance activities on the golf course as well as the golf course maintenance facility would not significantly impact nearby residential areas.

Golf Course Operations (Offsite)

As discussed above, operations at the Salinas Golf and Country Club could affect proposed residential areas which are located within 125 feet of greens or 200 feet of fairways associated with this course.

5.6.4 MITIGATION MEASURES

5.6.4.1 Alternative 2

The following section contains a summary statement for each significant noise impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Impact 5.6-1: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Direct)

Noise generated by traffic, construction, wastewater treatment and commercial activities could have a significant impact on nearby sensitive receptors. Implementation of the following mitigation measures could reduce noise impacts to below a level of significance but development-specific acoustical studies would be required to confirm this. However, until those

studies adequately demonstrate attenuation, the impact must be considered significant and not mitigated to below a level of significance.

Mitigation Measure 5.6-1a: Prior to issuance of a ~~certificate of occupancy~~ building permit for any residence located along the following roadways:

- Highway 101 (entire segment adjacent to Specific Plan area)
- A Street between Highway 101 offramp and H Street;
- B Street between Harrison Road and Van Buren Road;
- Main Street between Russell Road and Town Square;
- Van Buren Road between Russell Road and G Street;
- Russell Road between Highway 101 and N Street;
- San Juan Grade Road between Russell Road and Stirling Road;
- Stirling Road between J Street and San Juan Grade Road;
- Harrison Road between B Street and K Street;
- F Street between Russell Road and Main Street;
- J Street between Town Square and K Street;
- K Street, west of J Street; and
- L Street between Town Square and San Juan Grade Road.

An acoustical study shall be prepared for all adjacent noise sensitive uses and implemented by the applicant. The acoustical study shall identify appropriate measures to reduce outdoor noise levels to 60 dBA CNEL or less. Measures may include, but are not limited to, sound walls and earthen berms; preliminary sound wall locations and heights are approximated in Figure 5.6-8. Wherever possible, site planning techniques shall be used to avoid or minimize the need for sound walls.

Noise attenuation on K Street may be eliminated if the applicant can demonstrate to the satisfaction of the County that K Street will not ultimately carry sufficient traffic to warrant noise attenuation. If future traffic volumes could dictate future noise attenuation, the County may accept a ~~switchable~~ alternate form of security to assure that the noise attenuation does occur when needed.

Mitigation Measure 5.6-1b: Prior to issuance of building permits for any residence that would be exposed to outdoor noise levels in excess of 60 dBA CNEL, documentation shall be provided to show that the building meets the interior noise standard of 45 dBA CNEL with windows closed. Alternatively, the applicant can show that based on the buildings location relative to the roadway that it meets the appropriate interior noise standard with open windows. Where interior

noise levels would not be less than 45 dBA CNEL, the documentation shall identify architectural or other measures to be taken to assure that noise levels will not exceed 45 dBA CNEL in habitable space within residences.

Mitigation Measure 5.6-1c: Prior to issuance of building permits for the wastewater treatment facility, a detailed noise study shall be completed by a qualified acoustical consultant to document that noise attenuation has been included in the facility to assure that noise levels at surrounding sensitive receptors will not exceed levels identified in Table 5.6-1.

Mitigation Measure 5.6-1d: Prior to issuance of building permits for any commercial or industrial development sharing a property line with a noise sensitive use, a detailed noise study shall be completed by a qualified acoustical consultant to document that adequate noise attenuation has been included in the building design to assure that noise levels at surrounding sensitive receptors will not exceed levels identified in Table 5.6-1.

Mitigation Measure 5.6-1e: Golf course maintenance operations shall prohibit greens mowing within 125 feet of any residence and fairway mowing within 200 feet of any residence between the hours of 10:00 p.m. and 6:30 a.m. in accordance with Table 5.6-1 of the EIR.

Mitigation Measure 5.6-1f: Prior to approval of any grading or construction permits, such permits shall be conditioned as follows:

- All noise-generating construction activities shall be limited to weekdays between 7:30 6:30 a.m. and 7:00 p.m., and Saturdays between 8:00 a.m. and 5:00 p.m.. No construction is allowed on Sundays or on County holidays. Temporary berms or noise attenuation barriers shall be utilized when necessary at the discretion of County Job Inspectors to further reduce noise levels.
- Prior to the commencement of construction activities, a publicly visible sign that specifies project noise mitigation measures and the telephone number of the on-site contractor and person to contact regarding noise complaints shall be posted on the project site. This contact person shall respond to complaints and take corrective action by the end of the same day, if the complaint is received by 12:00 p.m. and within 24 hours, if the complaint is received later than 12:00 p.m. The telephone number of the Monterey ~~county~~ County Planning and Building Inspection Department shall be posted on this sign. A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices are implemented.

All construction equipment operated on the project site shall be equipped to limit noise generation to a maximum of 85 decibels beyond 25 feet of the equipment. The project proponent shall submit a written roster of equipment anticipated to be used on the project site, including noise generation information on each. Only those pieces of equipment meeting the standards through modifications or enclosures. Stationary sources shall be located away from sensitive receptors to the greatest extent feasible. ~~of the mitigation measure shall be permitted to operate. If equipment not meeting the noise standards is found to be operating on the project site, work shall be stopped until that equipment is removed or made to meet noise standards.~~



Noise Barrier Locations (Alternative 2)

Figure 5.6-8

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Level of Significance of Impact 5.6-1 After Mitigation: Significant.

Implementation of Mitigation Measure 5.6-1g-1f would reduce construction noise impacts to below a level of significance. Implementation of Mitigation Measure 5.6-1c would reduce wastewater treatment noise to below a level of significance. Mitigation Measure 5.6-1d would reduce commercial noise to below a level of significance. Implementation of Mitigation Measure 5.6-1e would reduce noise from the proposed golf course operations to below a level of significance. However, the project has no control over the operations associated with the Salinas Golf Course and Country Club. As adjacent homes within the Specific Plan may be exposed to excessive noise levels; the impacts are considered significant and not mitigated. Although noise attenuation measures are expected to be effective to reduce traffic noise levels to below a level of significance, individual acoustic studies would be required to confirm this. Therefore, traffic noise impacts are considered significant and not mitigated.

Impact 5.6-2: Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (Direct)

One roadway segment, Russell Road, west of San Juan Grade would experience an increase in traffic noise in excess of 1.5 dBA CNEL with the addition of traffic generated by Alternative 2. Implementation of the following mitigation measure could reduce the impact to below a level of significance. However, the ability of the applicant to implement the measure is unknown at this time. As no means exist to guarantee that sufficient right of way exists for barriers or that affected property owners would permit noise attenuation, the impact is considered significant and unmitigated.

~~**Mitigation Measure 5.6-2:** Prior to issuance of the first certificates of occupancy (excluding the HYH Property project area) for the Specific Plan, a noise barrier or equivalent means of reducing traffic noise levels to below 60 dBA CNEL shall be implemented for the existing homes along Russell Road, west of San Juan Grade. A detailed study shall be performed by a qualified acoustical consultant to determine the measures required to reduce future noise levels to below 60 dBA CNEL. This study shall be submitted to and approved by the County prior to implementation of sound attenuation.~~

Level of Significance of Impact 5.6-2 After Mitigation: Significant.**5.6.4.2 Alternative 4E****Impact 5.6-3: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Direct)**

As with Alternative 2, noise generated by traffic, construction, golf course maintenance, wastewater treatment and commercial activities could have a significant impact on nearby sensitive receptors. However, a new source of traffic noise would occur with Alternative 4E from the Prunedale Bypass. Should the Bypass be in place before construction of homes in the

Specific Plan area, the obligation to attenuate noise levels to 60 dBA CNEL would fall upon the developer. In the event, the Bypass does not exist at the time of construction of new homes, noise attenuation would be the responsibility of Caltrans. Mitigation Measures 5.6-1a through 1f would be required to be implemented as a part of Alternative 4E.

Level of Significance of Impact 5.6-3 After Mitigation: Significant.

Implementation of Mitigation Measure 5.6-1f would reduce construction noise impacts to below a level of significance. Implementation of Mitigation Measure 5.6-1c would reduce wastewater treatment noise to below a level of significance. Mitigation Measure 5.6-1d would reduce commercial noise to below a level of significance. Implementation of Mitigation Measure 5.6-1e would reduce noise from the proposed golf course operations to below a level of significance. However, the project has no control over the operations associated with the Salinas Golf Course and Country Club. As adjacent homes within the Specific Plan may be exposed to excessive noise levels particularly if homes near the Prunedale Bypass are constructed before the bypass; the impacts are considered significant and not mitigated. Although noise attenuation measures are expected to be effective to reduce traffic noise levels to below a level of significance, individual acoustic studies would be required to confirm this. Therefore, traffic noise impacts are considered significant and not mitigated.

Impact 5.6-4: Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (Direct)

Implementation of Alternative 4E would result in significant traffic noise impacts to existing residential uses adjacent to Russell Road, west of San Juan Grade Road and along North Main Street south of Russell Road. Implementation of the following mitigation measure could reduce the impact to below a level of significance. However, the ability of the applicant to implement the measure is unknown at this time. As no means exist to guarantee that sufficient right of way exists for barriers or that affected property owners would permit noise attenuation, the impact is considered significant and unmitigated.

~~**Mitigation Measure 5.6-4:** Prior to issuance of the first certificates of occupancy (excluding the HYH Property project area) for the Specific Plan, a noise barrier or equivalent means of reducing traffic noise levels to below 60 dBA CNEL shall be implemented for the existing homes along Russell Road, west of San Juan Grade Road. A detailed study shall be performed by a qualified acoustical consultant to determine the measures required to reduce future noise levels to below 60 dBA CNEL. This study shall be submitted to and approved by the County prior to implementation of sound attenuation.~~

Level of Significance of Impact 5.6-4 after Mitigation: Significant.

5.6.4.3 HYH Property Project

Impact 5.6-5: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Direct)

Traffic noise along J Street and K Street as well as the Prunedale Bypass (if constructed) would significantly impact residential areas within the HYH Property project. Noise attenuation measures are available to reduce onsite traffic noise impacts to below a level of significance. Should the Bypass be in place before construction of homes in the Specific Plan area, the obligation to attenuate noise levels to 60 dBA CNEL would fall upon the developer. In the event, the Bypass does not exist at the time of construction of new homes, noise attenuation would be the responsibility of Caltrans.

No offsite homes would experience significant increases in traffic noise as a result of additional trips related to the HYH Property project.

In addition, noise generated by golf course maintenance, wastewater treatment as well as commercial operations in the neighborhood commercial or resort could generate noise levels which would have a significant impact on nearby sensitive noise receptors.

Mitigation Measure 5.6-5a: Prior to issuance of a ~~certificate of occupancy~~ building permit for any residence located along the following roadways:

- Prunedale Bypass;
- J Street between Town Square and K Street; and
- K Street, west of J Street.

An acoustical study shall be prepared for all adjacent noise sensitive uses and implemented by the applicant. The acoustical study shall identify appropriate measures to reduce outdoor noise levels to 60 dBA CNEL or less. Measures may include, but are not limited to, sound walls and earthen berms; preliminary sound wall locations and heights are approximated in Figure 5.6-9. Wherever possible, site planning techniques shall be used to avoid or minimize the need for sound walls. If the applicant can demonstrate that the Prunedale Bypass will never be constructed, noise attenuation measures related to the roadway need not be implemented. The requirement to address acoustic impacts for residential units adjacent to the Prunedale Bypass would only apply to the subdivider if the Bypass is completed prior to the construction of the potentially impacted residential units in the HYH Properties project.

Mitigation Measure 5.6-5b: Prior to issuance of building permits for any residence that would be exposed to outdoor noise levels in excess of 60 dBA CNEL, documentation shall be provided to show that the building meets the interior noise standard of 45 dBA CNEL with windows closed. Alternatively, the applicant can show that based on the buildings location relative to the roadway that it meets the appropriate interior noise standard with open windows. Where interior noise levels would not be less than 45 dBA CNEL, the documentation shall identify architectural or other measures to be taken to assure that noise levels will not exceed 45 dBA CNEL in habitable space within residences.

Noise attenuation on K Street may be eliminated if the applicant can demonstrate to the satisfaction of the County that K Street will not ultimately carry sufficient traffic to warrant noise attenuation. If future traffic volumes could dictate future noise attenuation, the County may accept a switchable form of security to assure that the noise attenuation does occur when needed.

Mitigation Measure 5.6-5c: Prior to issuance of building permits for the wastewater treatment facility, a detailed noise study shall be completed by a qualified acoustical consultant to document that noise attenuation has been included in the facility to assure that noise levels at surrounding sensitive receptors will not exceed levels identified in Table 5.6-1.

Mitigation Measure 5.6-5d: Prior to issuance of building permits for any commercial development sharing a property line with a noise sensitive use, a detailed noise study shall be completed by a qualified acoustical consultant to document that adequate noise attenuation has been included in the building design to assure that noise levels at surrounding sensitive receptors will not exceed levels identified in Table 5.6-1.

Mitigation Measure 5.6-5e: Golf course maintenance operations shall prohibit greens mowing within 125 feet of any residence and fairway mowing within 200 feet of any residence between the hours of 10:00 p.m. and 7:00 a.m.

Mitigation Measure 5.6-5f: Prior to approval of any grading or construction permits, such permits shall be conditioned as follows:

- All noise-generating construction activities shall be limited to weekdays between ~~7:30~~ 6:30 a.m. and 7:00 p.m., and Saturdays between 8:00 a.m. and 5:00 p.m.. No construction is allowed on Sundays or on County holidays. Temporary berms or noise attenuation barriers shall be utilized when necessary at the discretion of County Job Inspectors to further reduce noise levels.
- Prior to the commencement of construction activities, a publicly visible sign that specifies project noise mitigation measures and the telephone number of the on-site contractor and person to contact regarding noise complaints shall be posted on the project site. This contact person shall respond to complaints and take corrective action by the end of the same day, if the complaint is received by 12:00 p.m. and within 24 hours, if the complaint is received later than 12:00 p.m. The telephone number of the Monterey ~~county~~ County Planning and Building Inspection Department shall be posted on this sign. A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices are implemented.
- All construction equipment operated on the project site shall be equipped to limit noise generation to a maximum of 85 decibels beyond 25 feet of the equipment. The project proponent shall submit a written roster of equipment anticipated to be used on the project site, including noise generation information on each. Only those pieces of equipment meeting the standards through modifications or enclosures. Stationary sources shall be located away from sensitive receptors to the greatest extent feasible. ~~of the mitigation measure shall be permitted to operate. If equipment not meeting the noise standards is~~

L E G E N D

	Residential Estate		Town Center
	Residential Low-1		Neighborhood Center-1
	Residential Low-2		Neighborhood Center-2
	Residential Medium-1		Office Professional
	Residential Medium-2		Employment Center
	Residential High-1		Live/Work
	Residential High-2		Hospitality
	Future Development		Public Facilities
			School
			Park
			Open Space
			Golf Course
	Hamson Road Study Area		
	Russell Road Study Area		
	HYH Boundary		
	RSJ Project Boundary		



--- Noise Barrier Location
 Buildings Requiring More Than 20 dB of Outdoor-To-Indoor Noise Reduction



Not to Scale

Source: Mestre Greve Associates, 4/7/2004

Noise Barrier Locations (Alternative 4E) _____ Figure 5.6-9

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~~found to be operating on the project site, work shall be stopped until that equipment is removed or made to meet noise standards.~~

Level of Significance of Impact 5.6-5 after Mitigation: Significant.

Implementation of Mitigation Measure 5.6-5f would reduce construction noise impacts to below a level of significance. Implementation of Mitigation Measure 5.6-5c would reduce wastewater treatment noise to below a level of significance. Mitigation Measure 5.6-5d would reduce commercial noise to below a level of significance. Implementation of Mitigation Measure 5.6-5e would reduce noise from the proposed golf course operations to below a level of significance. However, the project has no control over the operations associated with the Salinas Golf Course and Country Club. As adjacent homes within the Specific Plan may be exposed to excessive noise levels; the impacts are considered significant and not mitigated. Although noise attenuation measures are expected to be effective to reduce traffic noise levels to below a level of significance, individual acoustic studies would be required to confirm this. Therefore, traffic noise impacts are considered significant and not mitigated.

5.7 AIR QUALITY

Mestre Greve and Associates prepared an air quality assessment dated April 6, 2004 for the Specific Plan and HYH Property project. The air quality assessment is included as Appendix H and is summarized below.

5.7.1 EXISTING CONDITIONS

5.7.1.2 Specific Plan

Climate and Meteorology

The entire County of Monterey is located in the North Central Coast Air Basin (NCCAB). The NCCAB covers approximately 5,129 square miles of the central coast of California, including Santa Cruz and San Benito Counties. Regional meteorology is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. In the fall, the surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The airflow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High pressure cell, which allows pollutants to build up over a period of a few days.

During the winter, the Pacific High migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

Air Quality Management

The proposed project, which is located in the NCCAB, is jurisdictionally the responsibility of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) and to a lesser extent, the California Air Resources Board (CARB). The MBUAPCD sets and enforces regulations for stationary sources in the basin and develops and implements Transportation Control Measures (TCM). The CARB is charged with controlling motor vehicle emissions. Other important agencies in the air quality management for the basin include the U.S. Environmental Protection Agency (EPA) and the Association of Monterey Bay Area Governments (AMBAG). The EPA implements the provisions of the federal Clean Air Act and oversees preparation of local plans to achieve federal air quality standards including the Air Quality Management Plan (AQMP) for the Monterey Bay Region.

The MBUAPCD and AMBAG, in coordination with local governments and the private sector, have developed the AQMP. The 2000 AQMP is the most important air management document

~~for the NCCAB because it provides the blueprint for meeting state and federal ambient air quality standards. The AQMP addresses only attainment of the state ozone (O₃) standard. Attainment of the respirable particulate matter (PM₁₀) standard is addressed in a separate report.~~

The NCCAB has been redesignated by the California Clean Air Act (CCAA) as a moderate non-attainment area for 1-hour ozone. Ozone, the primary constituent of smog, is formed in the atmosphere through complex chemical reactions involving volatile organic carbon (VOC) and nitrous oxide NO_x in the presence of sunlight. The CCAA mandates the implementation of program that will achieve the California Ambient Air Quality Standards (CAAQS) and the CCAA mandates the implementation of new air quality performance standards.

The NCCAB is designated a non-attainment area for the PM₁₀. Attainment of State PM₁₀ standard is addressed in the District's 1995 Report on Attainment of the California Fine Particulate Matter Standards in the Monterey Bay Region. This report found that existing controls on sources of NO_x emissions which serve as precursors to PM₁₀ may lead to attainment and maintenance of the State PM₁₀ standard through 2010. This report was updated in 1996 and 1998.

Sources of Pollution

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates for the NCCAB have been made for existing emissions in the 2000 AQMP. Data indicates that mobile sources are the major source of VOC and NO_x emissions. Motor vehicles (i.e., on- and off-road mobile sources) account for approximately 52 percent of NO_x emissions and 38 percent of VOC emissions. Stationary sources (landfills, industrial processes, stationary source fuel combustion and all other miscellaneous processes) and organic solvents account for the remaining percentages of VOC and NO_x emissions.

Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly VOC and NO₂, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area.

Carbon monoxide (CO) is another important pollutant that is due mainly to motor vehicles. Currently, CO levels in the project region are in compliance with the state and federal 1-hour and 8-hour standards. High levels of CO commonly occur near major roadways and freeways.

Air quality can also be negatively impacted by secondary pollution sources such as dust, fumes, paints, thinners or solvents used in construction and maintenance activities; emissions from nearby gas stations; tire dust from wear; and re-suspended roadway dust. These emissions are typically either temporary or very small in comparison to project-related vehicular emissions. In addition to small airborne dust particulates, construction also generates many large particles that can settle on parked cars, benches, and other nearby horizontal surfaces creating a soiling nuisance and a possible temporary unhealthy air quality effect.

In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). As a part of the identification process, the ARB's Office of Environmental Health Hazard Assessment (OEHHA) evaluated the potential for DPM to affect human health. The OEHHA found that exposures to DPM resulted in an increased risk of cancer and an increase in chronic noncancer health effects including a greater incidence of cough, labored breathing, chest tightness, wheezing, and bronchitis. DPM is one of several airborne TACs. ARB studies show that DPM contributes approximately 71% of the potential inhalation cancer risk.

Heavy construction equipment is typically diesel-fueled, and will elevate DPM concentrations in the area where heavy construction equipment is operating. However, the effect of TAC's is quantified by calculating the number of additional cancer deaths that would occur during a 70-year exposure period. Grading for the entire project will only occur for a small portion of the 70-year exposure period used in calculating health risk. Additionally, construction near any one receptor will occur over an even shorter time. Therefore, the potential for DPM emissions associated with construction to result in a considerable health risk is small.

The Crazy Horse Landfill is located on Crazy Horse Canyon Road approximately two miles north of the Specific Plan area. The total capacity of the Crazy Horse Landfill is approximately 4.3 million cubic yards, and is expected to reach maximum capacity between 2004 and 2005. An expansion of the facility is proposed (see Section 5.12.5, Solid Waste, for more details). The landfill is required to comply with MBAUAPCD Rules 400-Visible Emissions, 402-Nuisances, and Rule 437 for Municipal Solid Waste Landfills. These rules are designed to eliminate any impact of the landfill on the surrounding area.

Baseline Air Quality

The project site is closest to the District's Salinas monitoring station which is located approximately five miles south of the project site. The data collected at this station is considered to be representative of the air quality experienced in the vicinity of the project area. The monitored air quality data at Salinas are available for ozone, carbon monoxide (CO), PM₁₀, and nitrogen dioxide (NO₂). The air quality monitored data from 2000 to 2002 for these pollutants are shown in Table 5.7-1

The monitored data shown in Table 5.7-1 indicate that the state or federal standards were not exceeded for any of the criteria pollutants.

Local Air Quality

Although periodic dust and odors are generated during onsite agricultural operations, there are not enough air pollutant emissions on the project site to result in considerable local air quality impacts. Therefore, local air quality is assessed at roadway intersections that will serve the project's traffic, and the focus is on carbon monoxide (CO) as this is the only pollutant that can become concentrated at intersections to a degree which could exceed state or federal levels.

**TABLE 5.7-1
Air Quality Levels Measured at Salinas Monitoring Station**

POLLUTANT	CALIFORNIA STANDARD	NATIONAL STANDARD	YEAR	% MSR.D. ¹	MAX. LEVEL	DAYS STATE STD. EXCEEDED ²
Ozone	0.09 ppm for 1 hr.	0.12 ppm for 1 hr.	2003	98	0.073	0
			2002	86	0.075	0
			2001	97	0.076	0
			2000	99	0.075	0
Carbon Monoxide	20 ppm for 1 hour	35 ppm for 1 hour	2003	98	2.8	0
			2002	52	2.0	0
			2001	98	2.5	0
			2000	82	3.5	0
Carbon Monoxide	9.0 ppm for 8 hour	9.0 ppm for 8 hour	2003	98	1.1	0
			2002	52	1.2	0
			2001	98	1.6	0
			2000	82	1.4	0
Particulates PM ₁₀ ² (24 Hour)	50 ug/m ³ for 24 hr.	150 ug/m ³ for 24 hr.	2003	100	67	4/21
			2002	-98	3346	0
			2001	100	5051	01/6
			2000	94	36	0
Particulates PM _{2.5} (24 Hour)	None	65 ug/m ³ for 24 hr.	2003	100	15.9	n/a
			2002	-91	23.5	n/a
			2001	--	25.6	n/a
			2000	--	26.4	n/a
Nitrogen Dioxide (1-Hour)	0.25 PPM for 1 hour	None	2003	99	0.053	0
			2002	5996	0.049	0/0
			2001	97	0.041	0/0
			2000	98	0.071	0/0

¹ Percent of year where high pollutant levels were expected that measurements were made

² First number shown in Days State Standard Exceeded column is the actual number of days measured that state standard was exceeded. The second number shows the number of days the standard would be expected to be exceeded if measurements were taken every day.

n/a – not applicable (no standards to compare with).

-- no data available.

Three intersections in the vicinity of the project were chosen based on the fact that they are the worst-case intersections which have the highest traffic or the most traffic increase. The three intersection selected are Main Street/Russell Road, Rogge Road/San Juan Grade Road and Blanco Road/David Road. As indicated in Table 5.7-2, CO levels at these intersections do not exceed state or federal levels.

**TABLE 5.7-2
Existing Carbon Monoxide Concentrations (ppm)**

INTERSECTION/RECEPTOR LOCATION	EXISTING CO CONCENTRATIONS	
	1-HOUR	8-HOUR
1. N.E. Main St./Russell Rd. on-site commercial	6.0	3.3
2. S.W. Rogge Rd. /San Juan Grade Rd. off-site residential	4.7	2.4
3. N.E. Blanco Rd./Davis Rd. off-site residential	6.3	3.5
State Standards:	20 ppm	9 ppm
No. of Exceedances	0	0

NOTE: The CO concentrations include the ambient concentrations of 4.0 ppm for 1-hour levels, and 1.9 ppm for 8-hour levels.

SOURCE: MBUAPCD's CEQA Air Quality Guidelines, September 2002.

5.7.1.3 HYH Property Project

Climate and meteorology

The climate and meteorology associated with the HYH Property Project reflect those of the Specific Plan area.

Air Quality Management

The HYH Property Project is subject to the same rules and regulations as described for the Specific Plan.

Sources of Pollution

Sources of pollution would be the same as described for the Specific Plan including motor vehicles, stationary sources (landfills, industrial processes, stationary source fuel combustion and all other miscellaneous processes), chemical reactions of various pollutants, dusts, fumes, paints, thinners or solvents used in construction and maintenance activities; emissions from re-suspended roadway dust.

Baseline Air Quality

The baseline air quality data for the HYH Property project area would be the same as described in Table 5.7-1, which indicate that the state or federal standards were not exceeded for any of the criteria pollutants.

Local Air Quality

The local air quality for the HYH Property project area would be the same as described for the Specific Plan area. As discussed earlier, local air quality is considered acceptable.

5.7.2 THRESHOLDS OF SIGNIFICANCE

Air quality impacts would be significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

5.7.3 POTENTIAL IMPACTS

Air quality impacts are divided into short-term and long-term. Short-term impacts are the result of construction, especially grading operations. Long-term impacts are associated with activities related to the proposed project including mobile-source emissions (e.g. motor vehicles) and stationary-source emissions (e.g. energy production and wastewater treatment).

5.7.3.1 Alternative 2

Short-Term Impacts

Buildout of Alternative 2 would result in short-term construction emissions. The primary impact would be related to dust (PM₁₀) levels. As discussed in the Appendices of the Air Quality Assessment (Appendix H), grading equipment would result in the following emissions: 295 pounds per day (lbs/day) of CO, 41 lbs/day of ROG, 316 lbs/day of NO_x, and 15 lbs/day of PM₁₀. As discussed earlier, TAC emissions would not be substantial due to their temporary nature. Construction equipment emissions related to VOC and NO_x would not exceed allowable levels. As these emissions would be short-term, they would not significantly conflict with implementation of the local air quality plan. Nor would they create substantial odors impacts.

Construction dust is anticipated to exceed the allowable level established by the MBAUAPCD. The MBAUAPCD established 82 pounds per day as the maximum allowed level for PM₁₀. It is estimated that the project could generate up to 187 pounds per day. This projection is based on the assumption that the maximum area of grading at any one time would be 50 acres per day and approximately 15,000 cubic yards (CY) of material would be moved on an average day. Thus, the construction process would result in a significant short-term impact related to PM₁₀.

Long-Term Impacts

Air emissions associated with the proposed project could result in significant impacts related to contribution to existing and projected air quality violations, cumulative increase in emissions related to non-attainment and odors. Sources for these emissions would be primarily associated with mobile source emissions related to motor vehicles associated with the development. However, power generation for the project would represent a stationary emission source. As the Specific Plan is consistent with the General Plan, implementation would not conflict with the local air quality plan. Furthermore, as discussed below, local carbon monoxide levels would not pose a risk to sensitive receptors.

Local Air Quality

Future carbon monoxide concentrations within the project were forecasted based on levels of service estimated by the traffic report. As the three intersections within the project area discussed above illustrated the highest increase in vehicular traffic (worst-case), these were evaluated first to determine the potential for impacts on the assumption that less congested intersections would not be affected if these three were not.

The results of the analysis indicated that none of the three most congested intersections in the Specific Plan area would generate CO levels which would exceed any of the state or federal standards. The future CO levels for Alternative 2 are projected to be below 5.0 ppm for the 1-hour averaging time, and below 3.0 ppm for the 8-hour averaging time. Therefore the projected CO levels are well below the 1-hour average standard of 20 ppm and the 8-hour average standard of 9 ppm at all three intersections.

Wastewater Treatment Facility

Treatment plants may create odors that may enter the local air-stream during ordinary use or from accidental spills. However, modern treatment facilities are generally engineered to minimize odor and have operational odor control systems to neutralize odors at those locations in the process stream where there is a potential for airborne release. Maximum odor strengths are around 30 odor units (require 30 fresh air dilutions to reach average human detectability). Air solids treatment may have odor strengths exceeding 1,000 odor units. The "odor envelope" around the plant would, therefore, extend only several hundred feet at worst, and normally would not even extend beyond the plant boundary. If the plant odor is detectable offsite, it would normally be on the nearby golf course early in the morning, but not at existing or planned residences which are located at least 350 feet away from the treatment facility.

Regional Air Quality

The primary source of regional emissions from the buildout of the Specific Plan would be generated by motor vehicle trips. Additional sources of emissions would be generated from the combustion of natural gas for space heating and the generation of electricity. Emissions would also be generated by the use of natural gas and oil for generation of electricity offsite.

Table 5.7-3 presents area source emissions and vehicular emissions found in Appendix H. Area source emissions include: onsite emissions from burning of natural gas for water heating and furnaces, landscape equipment and consumer products. Identified vehicular emissions are emissions from vehicles associated with the project and would be emitted on and off site. The table illustrates that vehicular emissions are the primary source of emissions associated with the project.

TABLE 5.7-3
Total Specific Plan Emissions (2020)

	<u>POLLUTANT EMISSIONS (LBS/DAY)</u>				
	<u>ROG</u>	<u>NO_x</u>	<u>CO</u>	<u>SO_x</u>	<u>PM₁₀</u>
<u>Area Source Emissions</u>	<u>202.7</u>	<u>51.9</u>	<u>21.6</u>	<u>0.60</u>	<u>0.2</u>
<u>Vehicular Emissions</u>	<u>314.6</u>	<u>288.4</u>	<u>3,541.7</u>	<u>5.20</u>	<u>879.2</u>
<u>Total Emissions</u>	<u>517.4</u>	<u>340.3</u>	<u>3,563.3</u>	<u>5.80</u>	<u>879.4</u>
<u>Emissions to Compare to Thresholds</u>	<u>517.4</u>	<u>340.3</u>	<u>21.6*</u>	<u>0.60*</u>	<u>0.0*</u>
<u>MBUAPCD Thresholds</u>	<u>137</u>	<u>137</u>	<u>550</u>	<u>82</u>	<u>150</u>

* The MBAUPCD Thresholds for CO, SO_x are only applied to direct emissions from the project and not indirect emissions which are due to mobile sources which access the project site but generally emit off-site. Threshold for PM₁₀ is only applied to fugitive dust on-site emissions. None of the PM₁₀ emissions associated with the operation of the project are included in this category.

TABLE 5.7-3
Total Specific Plan Emissions (2020)

	<u>POLLUTANT EMISSIONS (LBS/DAY)</u>				
	<u>ROG</u>	<u>NO_x</u>	<u>CO</u>	<u>SO_x</u>	<u>PM₁₀</u>
<u>Area Source Emissions</u>	<u>202.7</u>	<u>51.9</u>	<u>21.6</u>	<u>0.60</u>	<u>0.2</u>
<u>Vehicular Emissions</u>	<u>1,152.7</u>	<u>1,256.4</u>	<u>13,108.1</u>	<u>9.79</u>	<u>885.3</u>
<u>Total Emissions</u>	<u>1,355.4</u>	<u>1,308.3</u>	<u>13,129.7</u>	<u>10.39</u>	<u>885.5</u>
<u>MBUAPCD Thresholds</u>	<u>550</u>	<u>137</u>	<u>137</u>	<u>82</u>	<u>150</u>

As can be seen in Table 5.7-3, buildout of Alternative 2 would exceed emission standards for ROG, NO_x, CO and PM₁₀. As a consequence, implementation of the Specific Plan would have long-term significant impacts on regional air quality.

5.7.3.2 Alternative 4E

Short-Term Impacts

Implementation of Alternative 4E would result in the same short-term impacts as those described for Alternative 2. Consequently, grading associated with Alternative 4E is projected to generate 186.9 pounds per day of PM₁₀ emissions. This is well in excess of the 82 pounds per day significance threshold and would result in a significant impact.

Long-Term Impacts

Long-term impacts for Alternative 4E would be the same as to those described for Alternative 2.

Local Air Quality

As with Alternative 2, CO levels at congested intersections would not exceed state or federal standards. Similarly, no significant odors would be expected to be generated by the wastewater treatment plant.

Regional Air Quality

Regional air quality impacts would be the same as described for Alternative 2 in Table 5.7-4. As with Alternative 2, long-term emissions related to Alternative 4E would have a significant impact on air quality by exceeding emission standards for ROG, NO_x, CO and PM₁₀.

5.7.3.3 HYH Property Project

Short-Term Impacts

As with the Specific Plan, the only potential significant short-term air quality impact would be related to construction dust (PM₁₀). As the amount of area graded at any one time would be similar to that associated with the Specific Plan, development of the HYH Property Project would have a significant short-term impact on air quality due to the excessive amount of PM₁₀ emissions. For potential air quality impacts due to agriculture, see Chapter 5.11 (Agriculture)

Long-Term Impacts

Long-term impacts for the HYH Property Project would be similar to those described for the Specific Plan.

Local Air Quality

The future CO levels for the HYH Property project are projected to be below state and federal standards. Odors from wastewater treatment could significantly impact surrounding uses.

Regional Air Quality

As with Alternative 2, the primary source of regional emissions from the buildout of the HYH Property project would be generated by motor vehicle trips. Table 5.7-4 presents area source emissions and vehicular emissions for the HYH Property project.

As can be seen in Table 5.7-4, buildout of HYH would exceed emission standards for NO_x and CO. Thus, the HYH Property Project would have a significant long-term impact on regional air quality.

TABLE 5.7-4
Total HYH Property Project Emissions (2010)

	<u>POLLUTANT EMISSIONS (LBS/DAY)</u>				
	<u>ROG</u>	<u>NO_x</u>	<u>CO</u>	<u>SO_x</u>	<u>PM₁₀</u>
<u>Area Source Emissions</u>	<u>54.8</u>	<u>12.2</u>	<u>5.1</u>	<u>0.25</u>	<u>0.0</u>
<u>Vehicular Emissions</u>	<u>108.6</u>	<u>109.9</u>	<u>1,295.3</u>	<u>0.94</u>	<u>136.7</u>
<u>Total Emissions</u>	<u>163.4</u>	<u>122.1</u>	<u>1,300.4</u>	<u>1.19</u>	<u>136.7</u>
<u>Emissions to Compare to Thresholds</u>	<u>163.4</u>	<u>122.1</u>	<u>5.1*</u>	<u>0.25*</u>	<u>0.0*</u>
<u>MBUAPCD Thresholds</u>	<u>137</u>	<u>137</u>	<u>550</u>	<u>82</u>	<u>150</u>

* The MBAUPCD Thresholds for CO, SO_x are only applied to direct emissions from the project and not indirect emissions which are due to mobile sources which access the project site but generally emit off-site. Threshold for PM₁₀ is only applied to fugitive dust on-site emissions. None of the PM₁₀ emissions associated with the operation of the project are included in this category.

TABLE 5.7-4
Total HYH Property Project Emissions (2010)

	<u>POLLUTANT EMISSIONS (LBS/DAY)</u>				
	<u>ROG</u>	<u>NO_x</u>	<u>CO</u>	<u>SO_x</u>	<u>PM₁₀</u>
<u>Area Source Emissions</u>	<u>54.8</u>	<u>12.2</u>	<u>5.1</u>	<u>0.25</u>	<u>0.0</u>
<u>Vehicular Emissions</u>	<u>180.5</u>	<u>198.8</u>	<u>2,127.6</u>	<u>1.55</u>	<u>137.4</u>
<u>Total Emissions</u>	<u>235.3</u>	<u>211.0</u>	<u>2,132.7</u>	<u>1.80</u>	<u>137.4</u>
<u>MBUAPCD Thresholds</u>	<u>550</u>	<u>137</u>	<u>137</u>	<u>82</u>	<u>150</u>

5.7.4 MITIGATION MEASURES

The following section contains a summary statement for each significant air quality impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact.

Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.7.4.1 Alternative 2

Impact 5.7-1: Construction Emissions. (Direct)

Implementation of Alternative 2 would result in the generation of fugitive dust during grading, excavation, and construction of the site. In addition, construction equipment emissions would add to air quality problems related to ROG. Implementation of the following mitigation measures would reduce short-term air quality impacts related to construction, but not to the level that they would fall under the MBUAPCD's threshold for PM₁₀. Therefore, grading emissions would be significant and not mitigated.

Mitigation Measure 5.7.1a: Prior to issuance of a grading permit, and subject to the review and approval of the Monterey County Planning and Building Inspection Department, project plans shall include a construction dust control plan, to include the following measure to be implemented as necessary to adequately control dust:

- Water all active portions of the construction site at least twice daily, using a recycled water supply if feasible;
- Suspend all excavating and grading operations when wind speeds exceed 15 mph averaged over one hour, if other control activities are inadequate to control airborne dust;
- Apply water two times daily or chemical stabilizers according to manufacturer's specifications to all unpaved parking or staging areas, and unpaved road surfaces;
- Replace ground cover or apply MBUAPCD-approved chemical soil stabilizers according to manufacturer's specifications to all inactive construction areas (disturbed lands within construction project that are unused for at least four consecutive days). Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro-seed area;
- Sufficiently water or securely cover all material transported off-site and adjust on-site loads as necessary to prevent airborne dust conditions. Haul trucks shall maintain at least two feet of freeboard;
- Plant vegetative ground cover in, or otherwise stabilize, disturbed areas as soon as grading and construction activities in those areas are completed;
- Cover material stockpiles that remain inactive for more than 72 consecutive hours;
- Install wheel washers at the entrance to construction sites for all exiting trucks. ~~Pave all roads on construction site.~~ Sweep streets if visible soil material is carried out from the construction site;
- Post a publicly-visible sign which specifies the telephone number and person to contact regarding dust complaints. This contact person shall respond to complaints and take

corrective action by the end of the same day if the complaint is received by 12:00 noon and within 24 hours if the complaint is received later than 12:00 pm. The phone of the MBUAPCD shall be visible to ensure compliance with Rule 402 (Nuisance).

- Each developer shall maintain a dumpster onsite. The dumpster shall be emptied periodically whenever debris reaches the rim.
 - a. Construction materials shall be kept out of the street rights-of-way and setback areas at all times.
 - b. Developers shall keep all streets free from dirt, debris and spilled paving materials.
 - c. “Wash-out” areas shall be provided for concrete trucks on all construction sites.
 - d. As soon as earthwork commences, sediment control methods shall be installed in such a way as to filter all stormwater run-off from the track into the drainage areas. The sediment control system shall remain in place and in good repair until construction is complete, landscaping is installed and landscape areas are established.
- Limit traffic speed on all unpaved roads to 15 mph or less.

Mitigation Measure 5.7-1b: In order to reduce air pollutant emissions from construction equipment, the project proponent shall, to the extent feasible, use equipment powered by other means other than diesel fuel (CNG, bio-diesel, water emulsion fuel, electric). If diesel-fueled equipment is used, a minimum of 50 percent of the equipment shall use low sulphur diesel fuel. All equipment shall be maintained in a well-tuned condition, and idling time shall be minimized.

Level of Significance of Impact 5.7-1 After Mitigation: Significant.

Impact 5.7-2: Motor vehicle emissions would result in significant impacts on regional air quality. (Direct and Cumulative)

Implementation of Alternative 2 would result in regional emissions generated primarily from motor vehicle trips, and to a lesser extent, area source emissions. Implementation of Alternative 2 would exceed emission standards for ROG, NO_x, CO and PM₁₀. Implementation of the following mitigation measures, to the extent possible, would reduce long-term regional air quality emissions, but not below MBUAPCD thresholds. Therefore, emissions of ROG, NO_x, CO and PM₁₀ would exceed the MBUAPCD threshold even after mitigation, and long-term regional air quality impacts would be significant.

Mitigation Measure 5.7-2a: Provide bicycle paths within major subdivisions that link to an external network. Provide sidewalks to encourage pedestrian movement.

Mitigation Measure 5.7-2b: Provide preferential carpool/vanpool parking spaces. Provide for shuttle/mini bus service. Provide bicycle storage/parking facilities. Provide shower/locker facilities.

Mitigation Measure 5.7-2c: Provide onsite childcare centers.

Mitigation Measure 5.7-2d: Provide transit design features within the development. Develop park-and-ride lots.

Mitigation Measure 5.7-2e: Implement a rideshare program. Employ a transportation/rideshare coordinator. Provide incentives to employees to rideshare or take public transportation.

Mitigation Measure 5.7-2f: Implement compressed or flexible work schedules and telecommuting programs.

Mitigation Measure 5.7-2g: Utilize clean burning fuels in fleet vehicles.

~~**Mitigation Measure 5.7-2h:** Contribute funding to MBUAPCD sufficient to repower nine existing agricultural pumps to offset Nox emissions.~~

Significance of Impact 5.7-2 After Mitigation: Significant.

Impact 5.7-3: Wastewater treatment odor could create objectionable odors affecting a substantial number of people. (Direct)

Implementation of the wastewater treatment facility for Alternative 2 may create odors that could enter the local air-stream during ordinary use or from accidental spills. Implementation of the following mitigation measure would reduce impacts related to the wastewater treatment facility to less than significant.

Mitigation Measure 5.7-3: Prior to approval of a building permit, the MBUAPCD shall review and approve odor control devices in accordance with Rule 216.

Level of Significance of Impact 5.7-3 After Mitigation: Less than significant.

5.7.4.2 Alternative 4E

Significant impacts related to air quality impacts would be the same as Impacts 5.7-1 through 5.7-3. With implementation of mitigation measures listed above, Impact 5.7-3 would be less than significant, however, Impacts 5.7-1 and 5.7-2 would remain significant.

5.7.4.3 HYH Property Project

Impact 5.7-4: Construction Emissions. (Direct)

Implementation of the HYH Property project, as with the Specific Plan, would result in the generation of fugitive dust during grading, excavation, and construction of the site. In addition, construction equipment emissions would add to air quality problems related to ROG. Implementation of Mitigation Measures 5.7-1a and 1b would reduce short-term air quality impacts related to construction, but not to the level that they would fall under the MBUAPCD's threshold for PM₁₀. Therefore, grading emissions of would be significant and not mitigated.

Level of Significance of Impact 5.7-4 After Mitigation: Significant.

Impact 5.7-5: Motor vehicle emissions would result in a significant impacts on regional air quality. (Direct)

Implementation of the HYH property project, like the Specific Plan, would result in regional emissions generated primarily from automobile trips, and to a lesser extent, area source emissions. Implementation of the HYH Property project would exceed emission standards for NO_x and CO. Implementation of mitigation measures 5.7-2a through 5.7-2g, in combination with Mitigation Measure 5.7-5a, would reduce long-term regional air quality emissions, but not below MBUAPCD thresholds; however, HYH would not be required to construct a park and ride facility. Therefore, emissions of NO_x and CO would exceed the MBUAPCD threshold even after mitigation, and long-term regional air quality impacts would be significant.

Mitigation Measure 5.7-5a: Contribute funding to MBUAPCD sufficient to repower nine existing agricultural pumps to offset NO_x emissions.

Level of Significance of Impact 5.7-5 After Mitigation: Significant.

Impact 5.7-6: Wastewater treatment odor could create objectionable odors affecting a substantial number of people. (Direct)

As with the Specific Plan, implementation of the wastewater treatment facility on the HYH Property project may create odors that could enter the local air-stream during ordinary use or from accidental spills. Implementation of mitigation measure 5.7-3 would reduce impacts related to the wastewater treatment facility to less than significant.

Level of Significance of Impact 5.7-6 After Mitigation: Less than significant.

5.8 SOILS AND GEOLOGY

The following discussion summarizes information from the geologic study prepared by Kleinfelder in March 2003 for the Specific Plan (Appendix I), U.S. Geological Survey Maps, the Rancho San Juan ADC Feasibility Study, the Greater Salinas Area Plan and the Monterey County General Plan.

5.8.1 EXISTING CONDITIONS

The Salinas area, situated at the north end of the Salinas River Valley, lies within the Coast Ranges Geomorphic Province, a discontinuous series of northwest-southeast trending mountain ranges, ridges, and intervening valleys characterized by complex folding and faulting. Regional geomorphic features within the Salinas and Monterey areas are the result of a complex geologic history of uplift and folding ultimately caused by the interaction between the North American and Pacific tectonic plates.

5.8.1.1 Specific Plan

Topography of the Specific Plan area consists of gently rolling hills in the northern and northwestern portion and generally flat areas in the southern and eastern areas. Elevations range from about 120 feet to approximately 300 feet above mean sea level.

The project site is located in the Salinas Valley, which consists primarily of unconsolidated Quaternary deposits (less than two million years old). These deposits were derived from the Salinas River, its tributaries, basin and tidal flat sediments, and eolian or dune sediments. Underlying the Quaternary Age sediments is a layer of mostly marine Pliocene to Pleistocene Age sediments. The basement rock is composed of high grade metamorphic rock and Cretaceous granitic rock. The project site is underlain by Quaternary Age alluvium, eolian, and alluvial fan deposits.

Soils

Soil phases, described in detail below, are mapped on Figure 5.8-1. Due to the scale and mapping limitations of the SCS base map, small occurrences of some soil types are not shown, although they may be scattered over the entire area.

Arnold Series

The Arnold Series consists of excessively drained soils formed on hills and uplands in old marine sand dunes or in materials weathered from soft sandstone. The elevation range of this soil series is from 100 to 200 feet. In a representative profile, the surface layer, or horizon, is loamy sand to a depth of approximately eight inches underlain by loamy fine sand to a depth of about 48 inches. Beneath these soil horizons lies bedrock parent material consisting of soft sandstone.

The specific soil type within the Arnold Series that occurs on the property is Arnold Loamy Sand (AkF). This type occurs on 15 to 50 percent slopes. This soil is a moderately steep to steep upland soil having a soil profile representative of the series. Runoff is rapid and the erosion hazard is high. Due to the often steep slopes and high erosion hazard, this soil is generally unsuitable for development of structures or roads. This soil has high erosion hazard in cases where a close growing plant cover is not maintained.

Arroyo Seco Series

The Arroyo Seco Series consists of well-drained soils that formed in granitic alluvium on alluvial fans and plains. The series occurs on slopes up to nine percent from elevations between 100 and 3,000 feet. In a representative soil profile, the surface layer is gravelly sand loam 29 inches thick underlain by gravelly sandy loam and very gravelly coarse sandy loam to a depth of approximately 42 inches.

Arroyo Seco gravelly loam, is the specific Arroyo Series soil found on the property. It occurs on slopes up to 2 percent. This soil occurs on nearly level areas of alluvial fans. It has a profile similar to soils representative of the series, but has a sharp, angular gravel constituent. This soil exhibits slow runoff and retains a slight erosion hazard.

Chualar Series

Three soil types within the Chualar Series occur on the property.

Chualar loam (CbA) occurs on 0 to 2 percent slopes. This soil occurs on alluvial fans and terraces and has the profile described as representative of the series. It exhibits very slow runoff and is accompanied by a minimal to slight erosion hazard.

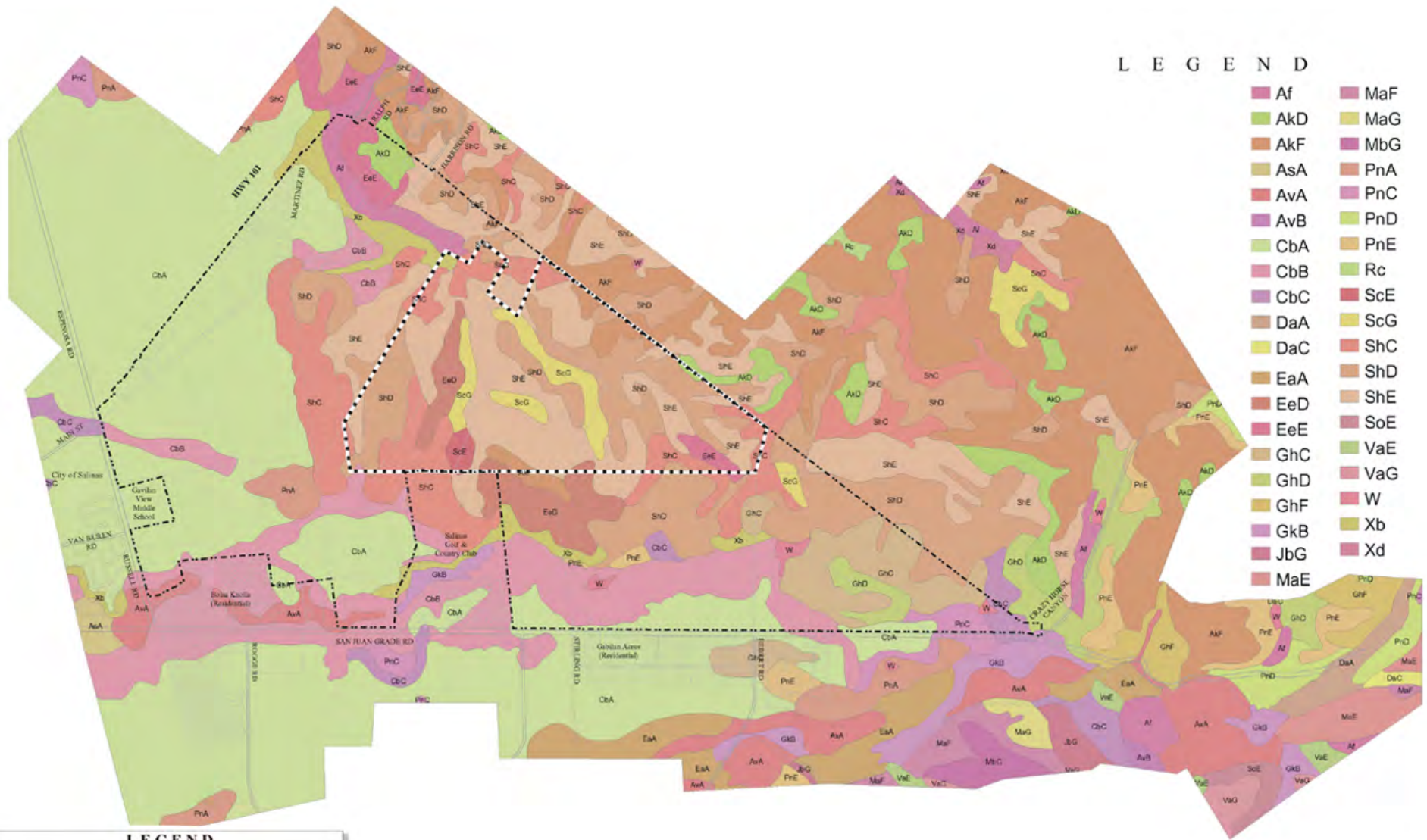
Chualar loam (CbB) occurs on 2 to 5 percent slopes. This soil occurs on gently sloping alluvial fans and terraces. The surface layer is loam or very fine gravelly loam from 16 to 24 inches thick with a subsoil from 10 to 20 inches thick. In some places, this soil is underlain by granite and shale cobbles, commonly at a depth of more than 40 inches. This soil exhibits slow runoff and has a slight erosion hazard. Permeability is moderately rapid to moderately slow.

Chualar loam (CbC) occurs on 5 to 9 percent slopes. This is a moderately sloping soil occurring on fans and some terraces. The Chualar Loam, 5 to 9 percent slope phase, has a soil profile representative of the series. This soil exhibits medium runoff and a moderate erosion hazard.

Elkhorn Variant

The Elkhorn variant consists of soils on marine terraces and dune-like hills. The typical profile of these soils exhibits a fine sandy loam to a depth of about 12 inches, fine sandy loam and clay loam to about 25 inches, and weakly consolidated loamy fine sand to a depth of 60 inches.

The Elkhorn Series soils occurring on the property are described below.



LEGEND

- | | | | |
|--|-----|--|-----|
| | Af | | MaF |
| | AkD | | MaG |
| | AkF | | MbG |
| | AsA | | PnA |
| | AvA | | PnC |
| | AvB | | PnD |
| | CbA | | PnE |
| | CbB | | Rc |
| | CbC | | ScE |
| | DaA | | ScG |
| | DaC | | ShC |
| | EaA | | ShD |
| | EeD | | ShE |
| | EeE | | SoE |
| | GhC | | VaE |
| | GhD | | VaG |
| | GhF | | W |
| | GkB | | Xb |
| | JbG | | Xd |
| | MaE | | |

LEGEND

	HYH Boundary
	Revised ADC Boundary



Not to Scale

Source: ProjectDesign Consultants, 4/29/2004

Soils Map

Figure 5.8-1

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Elkhorn fine sandy loam (EeD) is a thin surface variant which occurs on 5 to 15 percent slopes. This is a moderately sloping to strongly sloping soil on marine terraces. It has a soil profile generally representative of the variant, but with a depth to weakly consolidated sandy sediments or soft sandstone of 30 to 50 inches. This soil percolates and has a moderate erosion hazard.

Elkhorn fine sandy loam (EeE) is a thin surface variant which is found on 15 to 30 percent slope. This soil occurs on moderately steep hills and marine terraces and has a profile representative of the series. A capacity for runoff and existence of a high erosion hazard are typical of this soil, and landslides are common in some areas, especially when the soil is saturated for extended periods.

Gloria Series

The Gloria series consists of well drained and moderately well drained soils formed in granitic alluvium on benches, terraces and alluvial fans. These soils occur at elevations between 100 and 2,000 feet and have slopes ranging from two to 50 percent. The typical soil profile exhibits sandy loam to a depth of approximately seven inches thick. The substratum is typically hardpan to a depth of more than 60 inches.

The soil types within this series are described below.

Gloria sandy loam (GhC) is found on 2 to 9 percent slopes. This is a gently sloping to a moderately sloping soil having a profile representative of the series. This soil is moderately well drained and has a slight to moderate erosion hazard.

Gloria sandy loam (GhD) is found on 9 to 15 percent slopes. This soil exhibits characteristics similar to those of GhC, but it occurs on steeper slopes.

Placentia Series

The Placentia series consists of well drained soils that formed in alluvium derived from granitic and schistose rocks on old alluvial fans and terraces. Typically, this series has a surface layer of sandy loam to a depth of about 13 inches, a subsoil of clay loam and sandy clay loam to a depth of about, 58 inches, and a gravelly sandy loam that extends to a depth of more than 68 inches.

The soil types within this series are described below.

Placentia sandy loam (PnA) occurs on 0 to 2 percent slopes. This gently to moderately sloping soil has formed on old alluvial fans and terraces and has a soil profile representative of the series. This soil exhibits slow to moderate runoff and poses a slight erosion hazard.

Placentia sandy loam (PnC) is found on 2 to 9 percent slopes. This soil exhibits characteristics of the Placentia sandy loam, 0 to 2 percent slope phase, but because it occurs in slightly steeper areas, it has a higher propensity to erode.

Placentia sandy loam (PnE) occurs on 15 to 30 percent slopes. This soil exhibits characteristics similar to the above two soil phases, but has a high erosion hazard because it occurs on steeper slopes.

San Andreas Series

The San Andreas Series consists of well drained sandy loam, 15 to 30 percent slopes. This is a moderately steep soil on lower hillsides and has a soil profile representative of the series, but with a depth to parent material of 30 to 40 inches. It exhibits rapid runoff and a moderate erosion hazard.

The soil types within this series are described below.

San Andreas fine sandy loam (ScE) occurs on 30 percent slopes. This is a moderately steep soil on lower hillsides and has a soil profile representative of the series, but with a depth to parent material of 30 to 40 inches. It exhibits rapid runoff and a moderate erosion hazard.

San Andreas fine sandy loam (ScG) occurs on 30 to 75 percent slopes. This soil exhibits the tendencies of the San Andreas fine sandy loam, 15 to 30 percent slope phase, but because it occurs on steeper slopes, it has a higher erosion hazard.

Santa Ynez Series

The Santa Ynez soil consists of moderately well drained soils that formed in alluvium derived from sandstone and granitic rock. This soil has a fine sandy loam surface layer to about 18 inches and is underlain by clay loam to approximately 43 inches. The substratum is sandy loam.

The soil types within this series are described below.

Santa Ynez fine sandy loam (ScH) occurs on 2 to 9 percent slopes. This soil phase is present on moderately sloping terraces and has a soil profile typical of the series, but with a thicker, fine sandy loam surface layer. Runoff is slow to moderate, producing a slight to moderate erosion hazard.

Santa Ynez fine sandy loam (ShD) is found on 5 to 15 percent slopes. This is a strongly sloping soil that occurs on terraces and low hills and has a soil profile representative of the series. This soil has a medium runoff tendency and a moderate erosion hazard.

Santa Ynez fine sandy loam (ShE) is found on 15 to 30 percent slopes. This soil phase is on hilly terrain on dissected terraces. It has a soil profile representative of the series and exhibits characteristics of the other Santa Ynez soils. Because of its steep slopes, this soil exhibits rapid runoff tendencies and a high erosion hazard potential.

Xerothents sandy (Xb). These are well drained, strongly sloping to steep soils on banks and escarpments in elevation between different levels on alluvial fans or terraces. These soils are sands, loamy sands, sandy loams, and loams, and are characteristically high in sand and coarse

sand, but low in silt and clay. These soils exhibit moderately rapid runoff, with the erosion hazard varying considerably over short distances.

Slopes

Approximately 23 acres of the project site contains slopes over 30 percent as shown in Figure 5.3-3. However, areas having slopes over 30 percent are generally not considered suitable for development because of problems related to soil stability, erosion and runoff velocity.

Geologic Hazards

In general, there are three types of hazards associated with the property: seismic, slope stability and expansive soils.

Seismic Hazards

Seismic Conditions

The project site is located within the Salinian Block, a geologic tectonic unit bounded by the San Andreas Fault zone on the east and the Sur-Nacimiento fault zone offshore to the west. The Salinian Block is composed of a number of smaller fault-bounded blocks. These faults, along with the San Andreas Fault, have dominated the tectonic history of western California since the mid-Miocene time, approximately 12 to 15 million years ago.

Only a few of the fault traces present a seismic hazard to the project area. These include the San Andreas Fault, the Zayante- Vergeles Fault, the Pineate Fault, the Gavilan Fault, the Monterey Bay Fault zone, and the King City Fault zone (see Figure 5.8-2). These faults are considered active if movements have occurred within the last 10,000 years, or potentially active if movements have occurred within the last two to three million years.

The San Andreas Fault Zone is active and represents the major seismic hazard in northern California. The main trace of the San Andreas Fault runs northwest-southeast and extends over 700 miles from the Gulf of California through the Coast Ranges to Point Arena where the fault enters the Pacific Ocean. The San Andreas Fault lies about seven miles northeast of the project site at its closest point.

The two segments of the San Andreas Fault zone that could affect the project site are the San Jose to San Juan Bautista and the San Juan Bautista to Bear Valley segments. It is believed that no earthquakes exceeding Richter magnitude 6.5 have ever occurred in the San Juan Bautista to Bear Valley segment, the closest to the project site. The probable size of an earthquake on the San Jose to San Juan Bautista segment would likely have a Richter Magnitude of 6.5 to 7.0.

The Zayante-Vergeles Fault zone lies west of the San Andreas Fault and extends 51 miles from the Watsonville lowlands to the Santa Cruz Mountains. This fault is considered potentially active and capable of generating a 7.4 magnitude earthquake.

The Pineate Fault is a northwest/southeast-trending fault that lies north of the Zayante-Vergeles Fault. At its closest point, the Pineate Fault is five miles north of the project site. The Pineate Fault is considered to be inactive or potentially active.

The Gavilan Fault runs 19 miles along the Gavilan Range and is approximately two miles from the project site at its closest point. This fault is considered to be potentially active.

The Monterey Bay Fault Zone is 6 to 9 miles wide and approximately 25 miles long. The fault zone trends northwest/southeast and intersects the coast in the vicinity of Seaside and Fort Ord. The Tularcitos and King City Faults are the two faults within the Monterey Bay Fault Zone considered capable of generating up to 7.0 magnitude earthquakes.

Potential Seismic Effects

Seismic hazards may result from the following: surface rupture, seismic shaking (or ground shaking), and ground failure. Surface rupture occurs when fault movement breaks the ground surface. Ground rupture tends to occur along lines of previous faulting. The potential for ground rupture to occur is considered to be low as there is no evidence of active or potentially active faults on the project site.

Structural damage due to ground shaking is caused by the transmission of earthquake vibrations from the ground into a structure. Variables that determine the extent of damage are: the characteristics of underlying earth materials, design of the structure, quality of materials and workmanship used in construction, location and magnitude of the earthquake, and duration and intensity of the shaking. The most destructive effects of an earthquake are usually seen where the ground is unstable and structures are poorly designed and constructed.

The project site includes areas of steep and low slopes subject to seismically induced landslides and liquefaction. Liquefaction is the process in which a loose, saturated, sandy soil loses internal strength as a result of increased pore water pressure. These soils transform from a solid to a liquid state as a result of reduced, effective stresses within the soil mass. This phenomenon is typically induced by strong ground shaking associated with earthquakes. Liquefaction potential varies across the project site, based on ground water depth and soil profile.

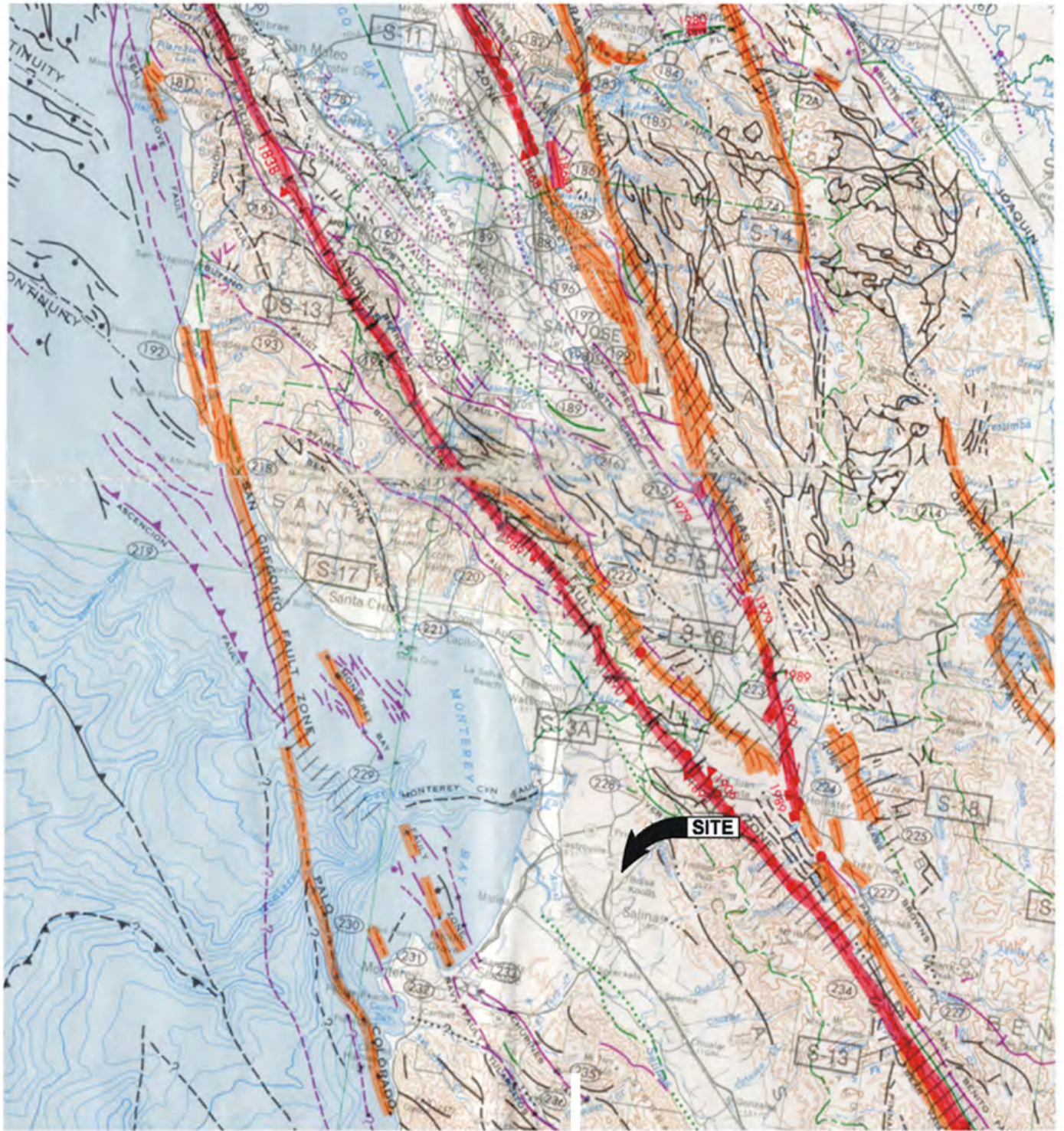
Slope Stability

Due to the relatively flat topography, the potential for landslides is considered low.

Soil Constraints

The primary constraint is associated with loose, near-surface soils in the western portions of the site. These soils are considered unsuitable to support buildings and pavement in their present condition.

Moderately to expansive soils occur over the majority of the property.



Source: Charles W. Jennings, 1994



1 inch = 12 miles

Fault Map

Figure 5.8-2

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5.8.1.2 HYH Property Project

Soils

The HYH Property contains the following soil types (please see descriptions above): AkF; EeD; EeE; ScG; ShC; ShD; and ShE.

Slopes

The HYH Property contains little flat land, as shown on Figure 5.8-2. The flattest land occurs in the western and southern portions of the site. Approximately 552 acres contain slopes under 20 percent. Slopes of 20 to 30 percent cover approximately 99 acres and are largely located in the central and eastern portions of the property. Over 78 percent of the slopes 30 percent or greater are located within the HYH Property. The HYH Property contains approximately 18 acres of slopes over 30 percent, which are primarily within the central and eastern portions of the site.

Geologic Hazards

Geologic hazards would be the same as those described for the Specific Plan.

5.8.2 THRESHOLDS OF SIGNIFICANCE

Soil and geology impacts would be significant if the proposed project:

- Exposes persons or property to geologic hazards such as ground shaking, liquefaction, landslides land subsidence or erosion; and/or
- Exposes soils susceptible to erosion, deposition, sedimentation and siltation or involves structures located on expansive soils.

5.8.3 POTENTIAL IMPACTS

5.8.3.1 Alternative 2

The project site could be affected by a moderate to major earthquake with it epicenter located on one of the active faults in the Salinas area. At present, it is not possible to predict when or where movement will occur on these faults. It may be assumed, however, that movement along one or more of these faults would result in a moderate to major earthquake during the anticipated life of the project.

Seismic Impacts

In the event of an earthquake, seismic risk to a structure would depend upon the distance of the structure from the epicenter and source fault, the characteristics of the earthquake, the geologic, groundwater and soil conditions underlying the structure and its vicinity, and the nature of the construction. A Richter Magnitude earthquake of 7.4 on the Zayante-Vergeles fault would cause strong ground motion, which in turn could damage structures onsite.

Ground failures, such as liquefaction and landslides, are related to soil, bedrock and ground water conditions. The presence of springs and the sandy nature of some of the project site soils results in the potential for these low to moderate secondary seismic hazards to occur. The potential increases in the rainy season with wetter soil conditions.

Preliminary estimates of ground response characteristics at this site indicate that high peak accelerations can be expected during a moderate or major earthquake. These events could cause severe ground shaking onsite. The duration of shaking and the frequency component of the vibrational waves depends on the magnitude and location of the earthquake. In order to further reduce potential project impacts, detailed ground failure/liquefaction investigations are recommended.

Soil Impacts

Based on a preliminary analysis of onsite soil conditions, soils pose moderate to high constraints for development purposes, as shown in Figure 5.8-2. Moderate constraint areas impose special considerations on the siting and design of building foundations. The Specific Plan area contains few slopes over 30 percent and therefore, significant development constraints are not anticipated due to unstable soil conditions. High constraint areas are generally developable, but would require extensive site preparation such as soil excavation or extensive maintenance.

The expansive characteristics of onsite soils were analyzed in terms of shrink-swell capacity. Although results indicate that shrink-swell capacity was low for all of the soil types in the project area, the shrink-swell tendencies of some onsite soils were found to adversely affect their engineering properties and could result in a potential significant impact to future development.

5.8.3.2 Alternative 4E

Potential impacts would be the same as those described for Alternative 2.

5.8.3.3 HYH Property Project

Potential impacts would be the same as those described for Alternative 2.

5.8.4 MITIGATION MEASURES

The following section contains a summary statement for each significant soils and geology impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.8.4.1 Alternative 2

Impact 5.8-1: Seismic shaking and expansive soil risk to future structures. (Direct)

Implementation of Alternative 2 could result in a potentially significant impact to future development due to the shrink-swell tendencies of some onsite soils, which were found to adversely affect their engineering properties. After mitigation this impact would be lessened to below a level of significance. In addition, high peak accelerations can be expected during a moderate or major earthquake. These events could cause severe ground shaking onsite. The duration of shaking and the frequency component of the vibrational waves depend on the magnitude and location of the earthquake. Implementation of the following mitigation measures would reduce soils and geology impacts associated with implementing the Specific Plan to less than significant.

Mitigation Measure 5.8-1a: Prior to approval of a ~~tentative tract~~ final map, a qualified soils engineer shall prepare a detailed analysis of specific characteristics and capabilities of underlying soils and shall identify potential geologic hazards. The report shall recommend appropriate measures for the design of proposed structures to minimize property damage and safety hazards related to ground shaking and unstable or expansive soils to below a level of significance.

Mitigation Measure 5.8-1b: Prior to the issuance of a building or grading permit, detailed ground failure/liquefaction investigations shall be conducted by a licensed geological analyst as part of the soil studies required for Final Tract Maps to identify remedial grading or contour measures, as appropriate. The recommendations of the investigation shall be implemented by the applicant so as to reduce ground failure/liquefaction impacts to below a level of significance.

Level of Significance of Impact 5.8-1 After Mitigation: Less than significant.

5.8.4.2 Alternative 4E

Significant impacts related to geologic hazards would be the same as Impact 5.8-1. With implementation of Mitigation Measures 5.8-1a through 5.8-1b, geologic impacts would be less than significant.

5.8.4.3 HYH Property Project

Impact 5.8-2: Seismic shaking and expansive soil risk to future structures. (Direct)

Implementation of the HYH Property project could result in a potentially significant impact to future development due to the shrink-swell tendencies of some onsite soils, which were found to adversely affect their engineering properties. After mitigation this impact would be lessened to below a level of significance. In addition, high peak accelerations can be expected during a moderate or major earthquake. These events could cause severe ground shaking onsite. The duration of shaking and the frequency component of the vibrational waves depends on the magnitude and location of the earthquake. Implementation of mitigation measures 5.8-1a and 5.8-1b would reduce soils and geology impacts associated with implementing the HYH Property project to less than significant.

Level of Significance of Impact 5.8-2 After Mitigation: Less than significant.

5.9 HYDROLOGY/WATER QUALITY

Information in this section is based on a Preliminary Drainage Study prepared by ProjectDesign Consultants located in Appendix J.1. Information relative to the HYH Properties is based on a drainage study prepared by Bestor Engineers in Appendix J.2.

5.9.1 EXISTING CONDITIONS

5.9.1.1 Specific Plan

Hydrology

Nearly the entire Salinas River Valley is drained by the Salinas River, with the exception of approximately 600 square miles of the hydrologically-distinct Soda Lake Watershed. The river encompasses approximately 4,400 square miles and originates near Santa Margarita, flowing northwest approximately 120 miles to the Pacific Ocean at Monterey Bay. The lower 70 miles of the river, from San Ardo to Monterey Bay, overlie the Salinas Valley Groundwater Basin. Major tributaries to the Salinas River within the groundwater basin include San Lorenzo Creek, the Arroyo Seco, Gavilan Creek and El Toro Creek. Approximately 885 square miles of watershed drain into the groundwater basin from minor tributaries of the Gavilan, Santa Lucia and Sierra de Salinas Mountains.

The Specific Plan area lies in the foothills of the Gavilan Range, between elevations 120 and 300 feet above mean sea level and is drained by several ephemeral creeks flowing through an area of rolling hills. Before the low lying lands near the Specific Plan area were used for agriculture, much of it was occupied by shallow lakes and seasonal marshes draining sluggishly to the ocean by way of a chain of tidal sloughs. To accommodate agricultural development, a number of drainage improvements have been made. The lower reaches of the creeks have been straightened and a drain constructed to intercept and convey flows to Tembladero Slough near Castroville. Several pump stations have been built to increase the capacity of the drains.

There are three separate drainages within the Specific Plan area. They include the Santa Rita drainage on the east side, the Merritt drainage on the south and west side, and the Espinosa drainage on the south side.

The Santa Rita Basin has a total drainage area of approximately 2.5 square miles (1,645 acres) at the downstream Specific Plan area boundary. This basin consists of seven sub-basins, which consist of both onsite and offsite drainage areas. The existing land uses within this basin are primarily open space pasture/woodland, agriculture, residential, and golf course. The Federal Emergency Management Agency (FEMA) 10-, 50-, 100-, and 500-year storm event discharges used to determine the flood boundaries through this reach of creek are 160, 400, 465, and 810 cubic feet per second (cfs), respectively.

The Espinosa Basin, which is located entirely within the project limits, consists of approximately 0.87 square miles (555 acres). The basin is divided into four sub-basins. The basin is located

within the flat southwest portion of the project and is bounded by the southerly and westerly project boundaries. Current storm flows drain to several agricultural drainage ditches that discharge flows across Highway 101. The existing land use consists primarily of agriculture with small pockets of residential and commercial land uses along Highway 101.

The Merritt Basin is located on the northwesterly side of the project and consists of approximately 2.9 square miles (1,875 acres) of onsite and offsite drainage area. This basin is located within the northerly portion of the project and drains to the westerly corner of the project boundary. The existing land uses within this basin are primarily open space pasture/woodland, agriculture, and residential.

Groundwater

For details regarding groundwater availability and recharge, see Chapter 5.10 (Water Resources). Groundwater quality is discussed below.

Water Quality

The State Water Resources Control Board identifies surface runoff and sewage discharged into the Salinas River as the primary cause of surface water pollution in Greater Salinas. Surface water quality in the Salinas River Valley is generally good. However, in the lower Salinas River, several water quality problems exist. These include eutrophication, mineralization, pesticide contamination, and elevated coliform bacteria levels from sources such as wastewater discharge and discharges from agricultural runoff, animal husbandry operations, septic system discharges and food processing industries. Levels of several chemicals in the Salinas River Valley water have exceeded public health standards. Accordingly, water for both irrigation and residential use are now limited in certain areas. The two most important contaminating chemicals are chloride and nitrate (NO_3). Chlorides are found mainly in areas intruded by salt water, while principal sources of nitrogen contamination are agricultural applications, animal husbandry operations, municipal and industrial wastes, and septic systems. Arsenic levels in wells on the site are currently below the ~~newly adopted~~ State Standards, but are of potential concern in the future and would have to be monitored.

The Specific Plan area lies within the Salinas Valley Groundwater Basin. The Salinas Valley Groundwater Basin has been divided into four hydraulically-connected sub-basins or areas: the Upper Valley Area, Forebay Area, Pressure Area and Eastside Area. The Specific Plan area lies within the East Side Area. In the East Side Area, groundwater exists primarily in two formations, the Unconfined Alluvial Aquifer and the Confined Deep Zone Aquifer.

The quality of groundwater for each aquifer within the Salinas Valley is generally good, being characterized as Class I or II irrigation water by the California Department of Water Resources (DWR) Standards. Historical water quality data collected by the Monterey County Flood Control and Water Conservation District (MCFCWCD) for wells in and around the Specific Plan area indicate that the local groundwater is of good quality with respect to mineral content, but that nitrate concentrations are relatively high and several wells exceed the NO_3 California primary drinking water quality standards of 45 milligrams per liter (mg/l).

Sources of groundwater contamination include both point and nonpoint sources. Domestic and industrial wastewater disposal discharges are typical point sources. Nonpoint sources represent isolated, scattered and mobile discharges or sources of contamination and may include animal husbandry operations, natural mineralization, automobile waste products, and urban runoff. Each basin or sub-basin experiences varying concentrations of contaminants in the groundwater as a result of local geologic and land use conditions. Health impacts associated with groundwater quality problems may be significant if affected groundwater supplies are used for domestic water supplies or incorporated in human food products.

The Specific Plan area and properties downstream are currently experiencing extensive erosion and sediment transfer/deposition problems due to berry cultivation on hillsides within the Specific Plan area. Sediment from erosion has filled detention basins and culverts resulting in extensive sedimentation along the Santa Rita Creek and Merritt Creek drainage.

Saltwater intrusion is the most significant issue affecting the 180-foot and 400-foot aquifers (in the Pressure Area) along the coast. No saltwater intrusion has been observed in the Deep Zone Aquifer; however, there is no evidence indicating that the Deep Zone Aquifer is not connected to the ocean. The movement of saline water from the coast is directly related to the geology as well as the location and seasonal pumping rates within the basin. Seawater intrusion occurs near the coast principally because extraction of fresh groundwater in the northern part of Salinas River Valley exceeds recharge in the northern part of the Valley. In recent decades, the annual volume of intrusion has ranged from 2,000 to 30,000 acre-feet per year (af/yr) and has averaged 17,000 af/yr. Seawater has advanced approximately six miles inland in the shallow aquifers. About 20,000 acres of agricultural land near the coast are underlain by one or more aquifers that contain water too salty for irrigation. In addition, along the East Side of the Valley south of Chalome Creek, runoff from the highly alkaline East Side Hills has yielded relatively poor water quality.

Other water quality problems in the Salinas Valley include declining groundwater levels in the East Side Area and nitrate contamination that may severely impact the future water supply of the basin. Nitrate has contaminated groundwater to varying concentrations throughout the Valley, but the level of contamination is especially high in the East Side, Forebay, and Upper Valley Areas. Suspected sources of nitrate pollution include wastewater discharges, agriculture return water, and septic system overloading. The maximum NO₃ contaminant level (MCL) for drinking water is 45 milligrams per liter (mg/l) as nitrate. In 50 percent of the wells sampled throughout the Valley, nitrate exceeds 45 mg/l; in some wells nitrate has reached several hundred mg/l. High concentrations of nitrate limit beneficial use of groundwater for potable uses and some agricultural uses.

An additional groundwater quality problem is salt build-up caused by a lack of subsurface outflow from the basin. Although impacts of such a condition are manifested much more slowly than other groundwater quality problems, there is a gradual long-term increase in salt concentration within the aquifer. Eventually, such a build-up will render the aquifer unusable for certain uses.

Regulations

Federal

The basis for the state and local controls is Section 402(p) of the federal Clean Water Act (CWA). The CWA establishes a framework for regulating storm water discharges from municipal, industrial, and construction activities under the National Pollutant Discharge Elimination System (NPDES). Under the CWA, municipalities across the nation are issued Municipal NPDES permits. In California, the State Water Resources Control Board (SWRCB) administers the NPDES program.

State

A Water Quality Control Plan for the Central Coast Basin (Basin Plan), was adopted by the Regional Water Quality Control Board (RWQCB) that recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems. The plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. As discussed previously, the project site is included in the Salinas River Watershed of the Salinas Hydrologic Unit and the Salinas Valley Groundwater Basin.

The Basin Plan sets forth water quality objectives for constituents which could potentially cause an adverse effect or impact on the beneficial uses of water. The Basin Plan identifies the following beneficial uses for surface waters within the project area:

- Water contact and non-contact recreation;
- Commercial and sport fishing;
- Warm freshwater habitat; estuarine and wildlife habitats;
- Rare, threatened, or endangered species; spawning, reproduction, and/or early development; and
- Shellfish harvesting.

Beneficial uses of groundwater in this basin include:

- Agricultural water supply; and
- Municipal and domestic water supply and industrial use.

Development within the Specific Plan must conform with the National Pollutant Discharge Elimination System (NPDES) Permit that is administered by the SWRCB. The SWRCB sets forth the provisions for storm discharges associated with construction and requires a General Permit for construction activity.

5.9.1.2 HYH Property Project

Hydrology

The entire HYH Property is located within the Merritt Basin, which consists of approximately 2.9 square miles (1,875 acres) of onsite and offsite drainage area. This basin drains to the westerly corner of the boundary. The existing land uses within this basin are primarily open space pasture/woodland, agriculture, and residential.

The 671-acre site currently drains to the existing creek, which begins northeast of the property, runs through the site near the north boundary and then drains westerly into Merritt Lake. A very small area, approximately nine acres, approximately 2,000 feet west of the southeast corner, drains southeast into Santa Rita Creek.

This north creek has two existing holding ponds, constructed in the early 1990s. They are only marginally functional, so virtually all runoff flows unimpeded to Merritt Lake.

Groundwater

For details regarding groundwater availability and recharge, see Chapter 5.10 (Water Resources). Groundwater quality is discussed below.

Water Quality

The HYH Property lies within the Salinas Valley Groundwater Basin and is within the Eastside Area sub-basin. In the East Side Area, groundwater exists primarily in two formations, the Unconfined Alluvial Aquifer and the Confined Deep Zone Aquifer.

As discussed for the Specific Plan, the quality of groundwater for each aquifer within the Salinas Valley is generally good, being characterized as Class I or II irrigation water by the California DWR Standards. Historical water quality data collected by the MCFCWCD for wells in and around the HYH Property area indicate that the local groundwater is of good quality with respect to mineral content, but that nitrate concentrations are relatively high and several wells exceed the NO₃ California primary drinking water quality standards of 45 mg/l.

There are two existing wells located within the proposed HYH Property. The North well is located on Assessor Parcel Number (APN) 113-212-43 and the South well is on APN 113-212-57. Both wells meet existing primary and secondary drinking water standards, however, the North well has an arsenic concentration of 8 parts per billion (ppb), which is close to the new federal standard of 100 ppb. This well also has iron concentrations close to the Secondary Maximum Contaminant Level (MCL) of 0.3 parts per million (ppm). The North well has not been tested for radiological contaminants. The State of California has not identified a MCL for arsenic at this time. It is possible that the standard will be lower than the federal standard in which case the North well may require treatment for arsenic removal. The well log indicates that the well was drilled to greater than 800 feet in depth and sealed to 300 feet in depth. A 30-foot plug was placed at a lower depth to try to reduce the arsenic level of the well.

The HYH Property area and properties downstream are currently experiencing extensive erosion and sediment transfer/deposition problems due to berry cultivation on hillsides within and surrounding the HYH Property area. Erosion has filled in detention basins and culverts resulting in extensive sedimentation along the Santa Rita Creek and Merritt Creek drainage.

There are several water quality problems in the Salinas Valley that could affect the HYH Property. There are declining groundwater levels in the East Side Area and nitrate contamination that may severely impact the future water supply of the basin. Groundwater contamination within the HYH Property likely includes both point and nonpoint sources. An additional groundwater quality problem in the basin is salt build-up caused by a lack of subsurface outflow from the basin. Although there currently are no water quality problems identified on the HYH property, there are potential groundwater contamination problems within the region and on-site which require ongoing monitoring.

Regulations

Federal

As with the Specific Plan, the HYH Property would also be subjected to the CWA, which establishes a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES. Under the CWA, municipalities across the nation are issued Municipal NPDES permits.

State

The HYH Property would also be subject to the Basin Plan, which recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems. As discussed previously, the project site is included in the Salinas River Watershed of the Salinas Hydrologic Unit and the Salinas Valley Groundwater Basin.

The Basin Plan identifies the following beneficial uses for surface waters within the project area:

- Water contact and non-contact recreation;
- Commercial and sport fishing;
- Warm freshwater habitat; estuarine and wildlife habitats;
- Rare, threatened, or endangered species; spawning, reproduction, and/or early development; and
- Shellfish harvesting.

Beneficial uses of groundwater in this basin include:

- Agricultural water supply; and
- Municipal and domestic water supply and industrial use.

Development within the HYH Property must also conform with the NPDES Permit that is administered by the SWRCB.

5.9.2 THRESHOLDS OF SIGNIFICANCE

Hydrology/water quality impacts would be significant if the proposed project would:

- Substantially alter a natural water course or divert existing surface flows and site runoff patterns in a manner which would result in substantial erosion or siltation on- or off-site.
- Substantially increase runoff velocities at discharge points resulting in localized and downstream erosion and sedimentation;
- Subject existing and proposed development to flooding hazards; and/or
- Substantially degrade the quality of groundwater and surface water by violating water quality standards or discharge permit requirements.

5.9.3 POTENTIAL IMPACTS

5.9.3.1 Alternative 2

Hydrology

Runoff

Any proposed residential structures located within the 100-year floodplain shall be elevated to a minimum of one foot above the base flood elevation and shall be constructed in accordance with Chapter 16.16 of the Monterey County Code. Any proposed commercial structures located within the 100-year floodplain shall be elevated to base flood elevation, at a minimum and shall be constructed in accordance with Chapter 16.16 of the Monterey County Code. There shall be no encroachments to the floodway portion of the 100-year floodplain.

The proposed Specific Plan would increase the amount of surface runoff generated by the Specific Plan area. The increase would primarily result from an increase in impervious surfaces, such as streets, parking areas, and rooftops. Increases would occur within all three of the drainage basins located within the Specific Plan area.

However, the proposed Specific Plan identifies physical drainage controls and guidelines which would reduce the increase in future surface runoff. Proposed drainage facilities for the project would consist of: 1) roadside vegetated swales that would be used to drain the roadway; 2) traditional curbs and gutters, 3) detention facilities located throughout the project that would be used to reduce downstream flows, and 4) multi-use retention facilities located throughout the project that would be used for stormwater infiltration.

Detention and retention basins would be located at key locations within the project (see Figure 5.9-1). The locations were selected to optimize maintenance and disease bearing insect control accessibility, maximize separation from residential uses, and hydraulic considerations e.g. detention volume availability). To achieve these goals, detention basins would primarily located in the following areas:

- Parks;
- Schools;
- Golf Course;
- Employment Areas;
- Attached Housing areas; and
- Swales and streams.

For those basins that would be located in parks and schools, the ponding depths would be kept below two to three feet (without freeboard) for safety. More detailed studies on the soil percolation rates would be performed during the tentative map and at final engineering phases of the project to determine appropriate basin parameters.

The major detention/retention facilities would not be located within the residential developments due to safety and the potential for vector and odor production. Although the Specific Plan allows for detention basins on single-family residential lots, these basins were excluded from consideration in the drainage study contained in Appendix J.1 since the jurisdictional agency (Monterey County Division of Environmental Health) would not have control over the function and maintenance of these small-scale facilities and is unlikely to permit their construction and operation.

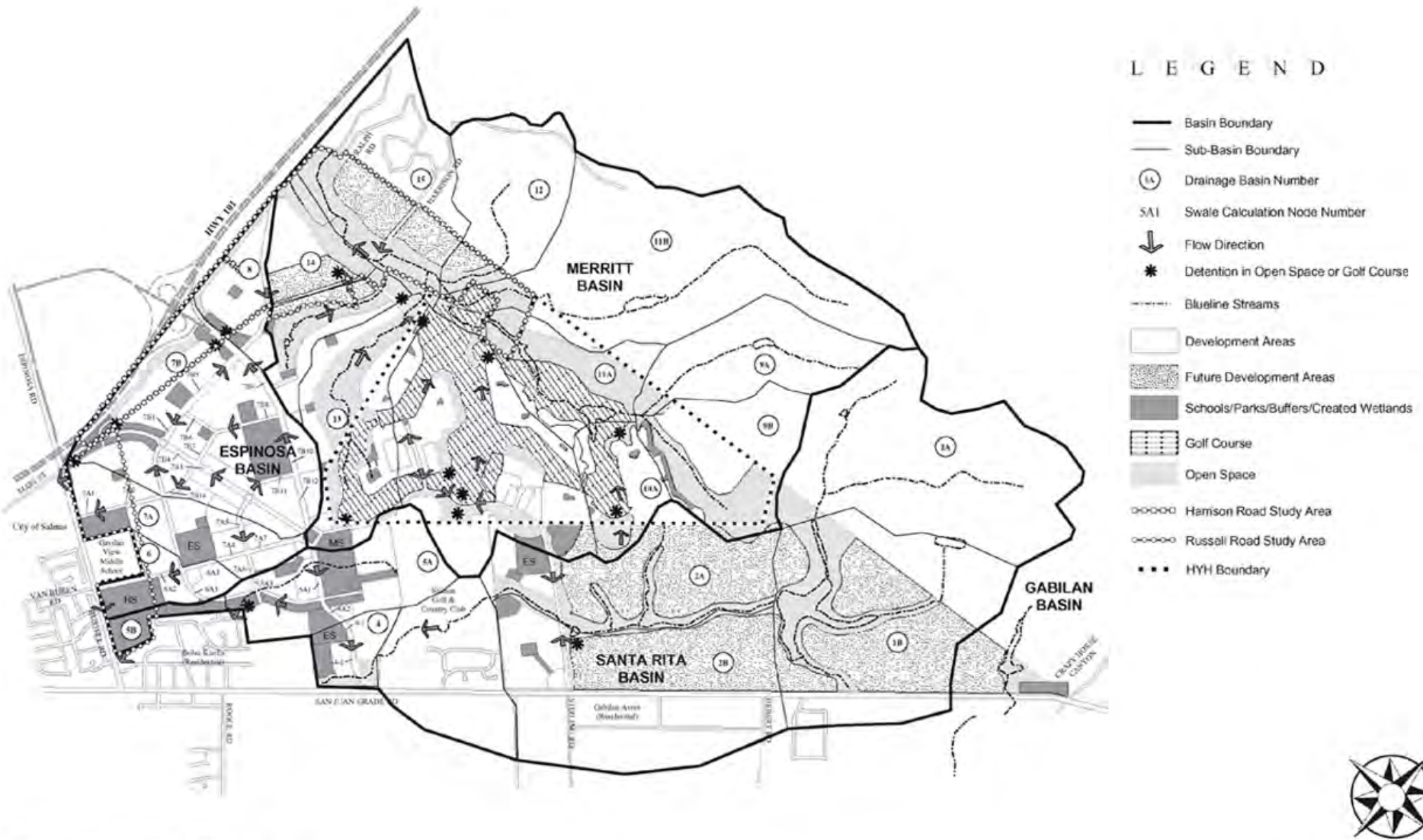
Water features in the new golf course development would also provide additional storage of runoff in order to provide additional flood control. These water features would not result in any adverse hydrology impacts.

As runoff would be controlled by a series of detention/retention basins as well as other controls, runoff impacts would not be significant.

Flooding

No structures within the Specific Plan area would be exposed to significant flood risk. Structures would not be constructed within the 100-year floodway and any structures within the 100-year floodplain would be located above the flood level.

If unattenuated, increased runoff from the Specific Plan area could pose a threat to downstream property. Without assuming any of the drainage controls imposed by the Specific Plan, development of the Specific Plan area would result in a 100-year peak flow of 2,450 cubic feet per second (cfs) which would represent a 40 percent increase over the estimated 1,750 cfs



Source: ProjectDesign Consultants, 3/12/2004

Drainage Basins

Figure 5.9-1

generated by the Specific Plan area. This flow would be comprised of runoff generated within the three drainage basins which include the subject property. Table 5.9.1 identifies the total flow as well as the flow within each of the drainage basins.

TABLE 5.9.1¹
Change in Runoff

DRAINAGE BASIN	TOTAL BASIN AREA (ACRES)	EXISTING CONDITION FLOW (CFS)	DEVELOPED CONDITION FLOW (CFS)	NET CHANGE FROM EXISTING TO DEVELOPED CONDITION
Santa Rita	1,645	590	760	-±170
Espinosa	550	175	660	+485
Merritt	1,875	986	1,030	+44
Total	4,070	1,751	2,450	+699

¹ 100-year event measured at the downstream discharge point of each drainage basin within the Specific Plan area.

In addition to the general benefits of the proposed drainage controls, the reduction in the 100-year peak flow over existing conditions within the Santa Rita Basin would benefit the Bolsa Knolls development which is located immediately downstream of the Specific Plan area, south of Russell Road. This area has experienced severe flooding in the past from surface runoff. The reduction of existing 100-year peak flows by 170 cfs would reduce the flooding experienced by residents within Bolsa Knolls. Reduced flooding would also occur in other areas downstream of the Specific Plan area including Ralph Lane and the Village Mobile Home Park. Proposed detention facilities would further reduce flooding by spreading out the peak flows. Therefore, no significant flooding impacts would occur with implementation of Alternative 2.

Drainage Course Alteration

Within the proposed development area (exclusive of the Future Development Area), construction of the golf course as well as portions of the developed areas within the Specific Plan would alter the majority of the natural drainage courses. Only those drainages located within the proposed conservation open space areas would be retained in a natural condition. The majority of the drainages within the Specific Plan area would be reconstructed or placed in an underground storm drain system. Wherever possible, the Specific Plan encourages runoff to be carried in vegetated surface drainages to encourage groundwater infiltration and filtration of urban runoff pollutants. Smaller drainages would be routed through storm drain pipes. Alteration of drainage courses would not create any significant hydrology impacts as the altered drainages would be designed to handle projected runoff.

Water Quality

Potential Pollutant Sources

Development in accordance with the proposed Specific Plan would include a number of potential sources for pollutants which could adversely affect the quality of both surface and subsurface water. Excessive levels of pollutants would be toxic to fisheries and other stream resources, and can adversely affect human uses. In addition to the toxic properties of such pollutants, nutrients can cause eutrophication (algal blooms), and sediments can cover and displace stream habitats.

The primary pollutant sources include:

- Urban runoff;
- Erosion and sedimentation;
- Seawater intrusion from groundwater overdrafting;
- Improper treatment of reclaimed water; and
- Improper storage of hazardous materials.

Each of these sources is discussed below.

Urban Runoff

The quality of surface runoff has become of increasing concern throughout California due to the pollution caused by non-point sources. Traditionally, concern for water pollution was focused on point sources such as industry and wastewater treatment facilities. However, recently it has become apparent that pollution associated with automobile products accumulating on paved surfaces, pesticides and herbicides applied to landscaping, etc. are also making significant contributions to poor water quality. These sources are collectively referred to as non-point sources, or also commonly known as "urban runoff".

The greatest concentration of urban runoff occurs during the early stages (typically the first 1/2-inch) of a rainfall or runoff event. This "first flush" contains the highest concentrations of contaminants that are washed from roadways, roofs, curbs and parking lots. Significant water quality concerns associated with runoff contaminant loads are discussed below:

- Chemical and physical contaminants (e.g., heavy metals, hydrocarbons such as fuels, solvents, oils and grease, and organic materials) carried by "first-flush" storm water runoff from urban areas can accumulate in bottom sediments resulting in contamination of waters long after the source is terminated. Hydrocarbons and trace amounts of heavy metals typically can originate from atmospheric deposition of airborne pollutants or leaking automobile fluids; however, toxicity thresholds may be reached at relatively low concentrations.
- Nutrients (e.g., nitrogen and phosphorous compounds) from fertilizers, pesticides, herbicides and reclaimed water in landscaped areas can also enter surface runoff. In aquatic

environments, nutrients carried in surface waters can stimulate plant growth and cause algae blooms that lead to depletion of dissolved oxygen (i.e., eutrophication). In small water bodies, an accelerated rate of eutrophication can result in large fish kills, odor formation and increased treatment needs.

- Biodegradable substances (e.g., dead vegetation and animals, feces, garbage, viruses and pathogenic micro-organisms) from sewage spills and domestic animals can undergo bacterial decomposition in aquatic systems, and contribute to eutrophication.
- Toxic materials generated by human activities (e.g., illegal discharges of chemicals, or trash to storm drains and drainage courses) can leach to surface waters posing a threat to plant, animal and public health.

Development of the property would generate a variety of sources of urban runoff, which if not controlled, would significantly reduce water quality. Major sources of urban runoff include parking lots associated with proposed commercial and business park uses as well as pesticides and fertilizers associated with the proposed golf course. Pesticide and fertilizer use associated with individual homeowners as well as common landscape areas would also affect water quality. Construction and subsequent use of roadways serving the development would also generate urban runoff.

Parking lots and roadways would impact water quality by allowing automobile products (e.g. motor oil, copper used in brake linings, antifreeze and gasoline) to accumulate on impermeable surfaces and be picked up in first flush rainfall events. In addition, rainfall, which occurs during the construction of parking lots and roadways before the asphalt has cured, would allow petroleum products associated with the asphalt material to enter surface water.

Landscape maintenance on the golf course would pose one of the greatest sources of urban pollutants due to the amount of herbicides, pesticides and fertilizers used to maintain the greens and fairways. Pesticides used on the golf course are expected to fall into the categories of fungicides and herbicides. Fungicides are primarily used on the greens where turf is highly vulnerable to disease due to the frequent mowing and foot traffic. Herbicides are applied more widely to fairway and tee areas, but also to greens, to control broadleaf weeds. Algaecides may also be used in the water features to control algae. The use of algaecides poses a particular risk to downstream water quality due to the natural occurrence of algae and their important role in the ecological balance. Conversely, fertilizers contribute nitrogen and nutrients that enhance algae growth. Production of algae blooms diminishes the supply of oxygen in water which in turn diminishes the ecological balance and adversely affects fish populations and overall water quality.

Important factors associated with pesticide and fertilizer use includes the type of products and the way in which they are applied. Products with high toxicity levels, high mobility, and long half-lives can be particularly dangerous to wildlife found in and along downstream drainages. In addition, over application of these products can facilitate entry into surface water by creating excess levels, which are picked up in first flush events.

Potential urban runoff related to development are considered potentially significant.

Erosion and Sedimentation

Erosion and sedimentation could be generated in the short-term during construction and in the long-term from inadequate landscape coverage and drainage control. Erosion is the movement of soil particles from their original location to another, generally less desirable, location. When soils are exposed to rainfall, the impact of raindrops loosens soil particles and moves them downslope to an area of concentrated runoff. Runoff then transports accumulated particles off-site, affecting water quality and resulting in deposition in natural drainage channels, including aquatic habitats, or an artificial drainage infrastructure.

Construction erosion and sedimentation would occur in the event proper drainage control measures are not undertaken (e.g. sandbags, brow ditches, and interim landscaping).

Long-term erosion and sedimentation could occur from inadequate landscaping which exposes ground areas to erosion or involves excessive irrigation. Uncontrolled storm water runoff and improper discharge controls could also result in erosion and sedimentation.

Development of the project with its proposed swales, retention, and detention facilities would result in a beneficial effect by substantially reducing the erosion and sediment transfer that currently occurs within the Specific Plan area. The hillsides, currently cultivated with strawberries, would be replaced by trees, shrubs and grasses that would decrease erosion. The construction of numerous swales, retention, and detention facilities would also reduce downstream transport of waterborne sediment.

Based on the controls imposed by the County during construction and the Specific Plan with respect to landscaping and erosion control, no significant erosion/sedimentation impacts are anticipated.

Improper Storage of Hazardous Materials

Improper use and storage of hazardous materials in the employment centers would also pose a threat to surface water quality. Accidental spills or improper handling of hazardous materials could allow these materials to be added to the surface runoff during rainfall. Storage and handling requirements imposed by the County's Fire Code, the requirements of the California Code of Regulations Title 19 and 22 (Division 4.5), and the California Health and Safety Code Chapters 6.50 and 6.95, would provide sufficient controls to prevent significant water quality impacts from hazardous materials associated with the employment centers within the Specific Plan area. The Monterey County Environmental Health Division, Hazardous Materials Program provides oversight throughout the County.

Seawater Intrusion

As discussed earlier, intrusion of seawater into groundwater storage has an adverse impact on the quality of drinking water as well as irrigation water. California Water Service Company (CWS) has indicated that the water supply situation in the Salinas Valley is rapidly changing due to

seawater intrusion. However, at the present time, seawater intrusion is only a problem in the western portion of the Salinas Valley and is not a problem within the vicinity of the Specific Plan area.

Wastewater Quality

Water quality degradation from the use of reclaimed water from the proposed wastewater treatment plant would not result in a significant impact on water quality. The wastewater treatment plant would be required to obtain appropriate wastewater discharge permits to assure that the water quality would be suitable for irrigation. Total dissolved solids would be controlled as would nitrates and phosphates. Thus, no significant impacts to water quality would be anticipated from the wastewater treatment plant and subsequent use of reclaimed water for irrigation.

5.3.3.2 Alternative 4E

The impact of Alternative 4E on hydrology and water quality would be similar to Alternative 2 as the overall land use types and impermeable surface areas would be essentially the same. As with Alternative 2, potentially significant impacts could occur with respect to downstream flooding, urban runoff, and drainage course alteration.

5.9.3.3 HYH Property Project

Hydrology

A drainage study completed for the proposed HYH development was prepared by Bestor Engineers. The results of this analysis are summarized in the following text. The full report is contained in Appendix J.2 of the EIR.

The drainage study indicates that development of the HYH Property would result in a change in runoff over the existing condition. It is estimated that the proposed project would generate a total of 192 cfs as opposed to the 104 cfs which currently is generated from the HYH property.

While the runoff volume would increase, the project would implement the drainage control measures identified in the Specific Plan. As illustrated in Figure 4.3-17, a series of five detention basins (ponds) would be created with the HYH Property to detain stormwater and reduce the flow rate as well as volume. These detention ponds would reduce storm water discharges up to a 100-year storm to a rate lower than the existing 10-year storm runoff rate. This would have a positive effect in reducing flow to Merritt Lake in minor storms, since detention would delay peak flows. It would have a very significant beneficial effect in major storms, however, effectively reducing Merritt inflow by as much as 40 to 50 cfs in a major storm. Thus, the HYH Property project would not result in significant hydrology impacts.

Drainage Course Alteration

Within the proposed HYH Property, construction of the golf course as well as portions of the developed areas within the Specific Plan would alter natural drainage courses. Nearly all of the

drainage areas would be affected. Only those drainages located within the proposed conservation open space areas would be retained in a natural condition.

The largest natural drainage occurs along the northern portion of the Specific Plan area. A number of tributary drainages within the HYH Property flow into this northern drainage. Approximately 90 percent (6,000 feet) of the tributary drainages would be graded to construct the golf course and associated development. The majority of the natural drainage courses through the golf course would be placed pipes under proposed fairways between the proposed golf course ponds, although the final design will maximize the degree to which natural drainages can be retained or re-created. The northerly drainage course would be crossed by roads in two locations. One crossing would provide access to the golf course maintenance facility while the other would provide access to the proposed wastewater treatment facility. Culverts would be provided under these crossings to accommodate runoff. As drainage would be properly handled within the proposed development, alteration of drainage courses would not result in a significant impact.

Water Quality

Implementation of the proposed HYH development would have similar groundwater impacts as described for Specific Plan. As with the Specific Plan, potential significant impacts would be related to urban runoff and pesticide/herbicide/fertilizer use on the golf course.

The HYH Property proponent has proposed to implement a Golf Course Management Plan to reduce potential water quality impacts associated with operation of the golf course. This Plan would include the following measures and procedures.

- The use of a state-of-the-art irrigation system that can (1) calculate the evaporative loss which occurs since the last irrigation cycle; (2) tell each sprinkler head how much to apply to replace the lost water; (3) apply water at a rate that will prevent runoff; (4) regulates pressure at each head to get maximum uniformity of water distribution and; and (5) allow the field staff to make site adjustments to compensate for shade, slope, sun exposure, etc.
- The reintroduction of drainage discharge water to the atmosphere to biodegrade nutrients and pesticides prior to the water entering drainage discharge channels.
- The engagement of an experienced, Certified Golf Course Superintendent capable of effectively managing the golf course using the principles of Integrated Pest Management.
- The use of a computer controlled boom sprayer to apply all approved nutrient sprays and biocides to the golf course.
- The adherence to Federal, State and County Laws concerning the selection, storage, loading, use and disposal of regulated biocides.
- The construction of a state-of-the-art maintenance facility for storage of pesticides and herbicides.

- Pests would be controlled, not eradicated, using a variety of cultural, biological, and mechanical practices. Pesticide applications would be made only when there is no alternative measure of control. Applications would not be made in winds in excess of five miles per hour unless a spray shroud is used.
- Notification of the application of a pesticide would be made in accordance with California State Posting Laws.
- Green waste shall be composted and reused or transported to an appropriate landfill disposal site.
- The drainage system within the golf shall be designed to pick up low flow runoff and direct it into golf course water features to allow natural filtration of water pollutants to occur. Where water features are not proposed, low flow runoff would be directed to biofiltration areas.
- The use of a Certified Pesticide Applicator to apply the recommended biocide to the target pest.

Water quality impacts associated with the golf course are potentially significant.

5.9.4 MITIGATION MEASURES

The following section contains a summary statement for each significant hydrology/water quality impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.9.4.1 Alternative 2

Impact 5.9-1: Downstream flooding from increased runoff. (Direct)

Implementation of Alternative 2 would result in an increase in impermeable surface area which will increase the amount of runoff generated by the Specific Plan area. Uncontrolled, this additional runoff could result in additional downstream flooding. Implementation of drainage control measures contained in the Specific Plan (e.g., retention/detention basins, roadside swales and biofiltration areas) would reduce this impact to below a level of significance.

Mitigation Measure 5.9-1: Prior to approval of a tentative map for any development within the Specific Plan, the project applicant shall submit a comprehensive drainage control plan for approval by the County. Retention/detention basins should reduce offsite flows to the 10-year pre-development rate. The Plan shall illustrate how the drainage control measures identified in the Specific Plan shall be implemented. At a minimum, the Plan shall include, but not be limited to, the following elements:

- Retention/detention basins to reduce offsite flows to a level which would not exceed a 10-year storm event;
- Natural drainage swales along roadways designed in accordance with specifications in the Specific Plan (excludes HYH Property);
- Grass swales or other biofiltration basins at discharge points of surface parking lots and roadways;
- Sedimentation and erosion control plans during construction; and
- Permanent landscaping.

Level of Significance of Impact 5.9-1 After Mitigation: Less than significant.

Impact 5.9-2: Urban runoff impacts on water quality. (Direct)

Runoff from parking lots, roads and driveways as well as landscaping would transport pollutants into natural drainages. Implementation of surface water controls identified in Mitigation Measure 5.9-1 would reduce urban runoff impacts to below a level of significance.

Level of Significance of Impact 5.9-2 After Mitigation: Less than significant.

Impact 5.9-3: Golf course herbicides, pesticides and fertilizers could pollute surface runoff. (Direct)

Implementation of Alternative 2 would result in the use of herbicides, pesticides and fertilizers for the golf course. Implementation of the following mitigation measure would reduce impacts to less than significant.

Mitigation Measure 5.9-3: Prior to issuance of a grading permit for the golf course, the applicant shall prepare a Golf Course Management Plan. The Management Plan shall be approved by the County of Monterey and implemented by the golf course operator. The Management Plan shall include, but not be limited to, the following elements.

- The use of a state-of-the-art irrigation system that can (1) calculate the evaporative loss which occurs since the last irrigation cycle; (2) tell each sprinkler head how much to apply to replace the lost water; (3) apply water at a rate that will prevent runoff; (4) regulates pressure at each head to get maximum uniformity of water distribution and; and (5) allow the field staff to make site adjustments to compensate for shade, slope, sun exposure, etc.
- The reintroduction of drainage discharge water to the atmosphere to biodegrade nutrients and pesticides prior to the water entering drainage discharge channels.
- The engagement of an experienced, Certified Golf Course Superintendent capable of effectively managing the golf course using the principles of Integrated Pest Management.

- The use of a computer controlled boom sprayer to apply all approved nutrient sprays and biocides to the golf course.
- The adherence to Federal, State and County Laws concerning the selection, storage, loading, use and disposal of regulated biocides.
- The construction of a state-of-the-art maintenance facility for storage of pesticides and herbicides.
- Pests would be controlled, not eradicated, using a variety of cultural, biological, and mechanical practices. Pesticide applications would be made only when there is no alternative measure of control. Applications would not be made in winds in excess of five miles per hour unless a spray shroud is used.
- Notification of the application of a pesticide would be made in accordance with California State Posting Laws.
- Green waste shall be composted and reused or transported to an appropriate landfill disposal site.
- The drainage system within the golf shall be designed to pick up low flow runoff and direct it into golf course water features to allow natural filtration of water pollutants to occur. Where water features are not proposed, low flow runoff would be directed to biofiltration areas.
- The use of a Certified Pesticide Applicator to apply the recommended biocide to the target pest.

Level of Significance of Impact 5.9-3 After Mitigation: Less than significant.

Impact 5.9-4: Erosion and sedimentation during construction. (Direct)

Uncontrolled runoff during construction could result in erosion and downstream sedimentation. However, erosion control measures contained in the Specific Plan and County's grading policies along with the following mitigation measures would reduce impacts to below a level of significance.

Mitigation Measure 5.9-4a: Prior to approval of any grading plan, the project applicant shall submit an erosion control plan which shall include a series of measures aimed at controlling erosion and sedimentation as well as construction equipment byproducts such as gasoline, oil and grease. Interim landscaping shall be instituted on graded areas as soon as practical to control erosion by minimizing the exposure of bare ground. Sediment would be controlled through a variety of practices including, but not limited to, the following:

- Gravel bags, berms, rock dams and/or silt fences;
- Interim desilting basins;
- Minimizing concentrated flows; and

- Dispersion of detention basin water onto pad areas by a pump and sprinkler system.

Construction material staging and vehicle parking areas shall be located away from storm drain inlets and shall be protected from surface stormwater flows by gravel bags, silt fences, fiber rolls and/or earthen berms. Water soluble materials shall be stored in enclosed or covered storage areas. Waste oil and fuel storage areas shall be bermed and provided with either plastic liner with a sump pump, or spill containment pallets.

Mitigation Measure 5.9-4b: Prior to issuance of any grading permit, the project applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with RWQCB standards.

Level of Significance of Impact 5.9-4 After Mitigation: Less than significant.

Impact 5.9-5: Drainage Alteration. (Direct)

Alteration of drainage courses could have a significant impact if not properly designed to handle anticipated flow. Implementation of the following measure would reduce the impact to below a level of significance.

Mitigation Measure 5.9-5a: Prior to approval of tentative map or use permit within the Specific Plan area, the project applicant shall submit hydraulic studies which demonstrate that realigned drainages or underground structures are capable of transmitting 100-year flows.

Mitigation Measure 5.9-5b: Prior to approval of a tentative map or use permit within the Specific Plan area, the applicant shall submit a detailed drainage study as set forth in Section 6.4.4 (Storm Water System Design) of the Rancho San Juan Specific Plan. The study shall be submitted for review and approval by the Monterey County Public Works Department, Water Resources Agency, Environmental Health Division and the Planning and Building Inspection Department. The purpose of the study is to determine the best percolation sites for the storm water detention facilities. The study shall include additional soil borings to augment the preliminary boring program that was previously conducted.

Mitigation Measure 5.5-5c: Prior to approval of a tentative map, the applicant shall submit a detailed drainage plan as set forth in Section 6.4.4 (Storm Water System Design) of the Rancho San Juan Specific Plan. The plan shall be submitted for review and approval by the Monterey County Public Works Department, Water Resources Agency, Environmental Health Division and Planning and Building Inspection Department. Where feasible, the plan shall include:

- a. Roadside vegetated swales to drain the roadway and adjacent lands and allow for percolation;
- b. Detention facilities to mitigate downstream flows on any hillside portions of the project;
- c. Multi-use detention facilities for stormwater infiltration and water quality enhancement on park and school sites; and

- d. Onsite retention facilities designed to meet the performance requirement in Section 6.4.4 of the Rancho San Juan Specific Plan.

Level of Significance of Impact 5.9-5 After Mitigation: Less than significant.

5.9.4.2 Alternative 4E

Significant impacts related to hydrology/water quality would be the same as Alternative 2. Implementation of mitigation measures associated with Alternative 2 would reduce potential hydrology and water quality impacts associated with Alternative 4E to below a level of significance.

5.9.4.3 HYH Property Project

Impact 5.9-6: Downstream flooding from increased runoff. (Direct)

Implementation of the HYH Property project would result in an increase in impermeable surface area which will increase the amount of runoff generated by the Specific Plan area. Uncontrolled, this additional runoff could result in additional downstream flooding. Implementation of drainage control measures contained in the Specific Plan and Mitigation Measure 5.9-1 would reduce this impact to below a level of significance.

Level of Significance of Impact 5.9-6 After Mitigation: Less than significant.

Impact 5.9-7: Urban runoff impacts on water quality. (Direct)

Implementation of the HYH Property project would result in runoff from parking lots, roads and driveways as well as landscaping would transport pollutants into natural drainages. Implementation of surface water controls identified in Mitigation Measure 5.9-1 would reduce urban runoff impacts to below a level of significance.

Level of Significance of Impact 5.9-7 After Mitigation: Less than significant.

Impact 5.9-8: Golf course herbicides, pesticides and fertilizers could pollute surface runoff. (Direct)

Implementation of the HYH Property project would result in the use of herbicides, pesticides and fertilizers for the golf course. Implementation of Mitigation Measure 5.9-3 would reduce impacts to less than significant.

Level of Significance of Impact 5.9-8 After Mitigation: Less than significant.

Impact 5.9-9: Erosion and sedimentation during construction. (Direct)

Implementation of the HYH Property project would result in uncontrolled runoff during construction which could result in erosion and downstream sedimentation. However, erosion

control measures contained in the Specific Plan and County's grading policies along with Mitigation Measures 5.9-4a and 4b would reduce impacts to below a level of significance.

Level of Significance of Impact 5.9-9 After Mitigation: Less than significant.

Impact 5.9-10: Drainage Alteration. (Direct)

Implementation of the HYH Property project would result in alteration of drainage courses which could have a significant impact if not properly designed to handle anticipated flow. Implementation of Mitigation Measure 5.9-5a and 5b would reduce the impact to below a level of significance.

Level of Significance of Impact 5.9-10 After Mitigation: Less than significant.

5.10 WATER RESOURCES

The following information is derived from two studies (Conceptual Groundwater Balance Analysis and Conceptual Water Supply and Storage Study) prepared by ProjectDesign Consultants as well as geologic, hydrogeologic and geotechnical assessment contained in Appendix H. The full report prepared by ProjectDesign Consultants is available in Appendices J.1 and J.2.

The estimations of groundwater demand in the RSJ Specific Plan area have been based upon a conservative evaluation of typical consumption patterns in the project vicinity. These were provided by California Water Company which is the primary purveyor in the area. California Water has also indicated that it would be willing to serve as the water purveyor for the HYH project and for the RSJ Specific Plan area. The 97.3 gallons per resident factor for indoor and outdoor use represents typical consumption patterns.

However, there are a number of factors which would reduce this average consumption under the scenarios defined in the Specific Plan. These include, but are not limited to, implementation of the "Sustainability Requirements" that are provided in detail in the Draft Specific Plan Section 8.10. All development in Rancho San Juan is required to incorporate a number of sustainable design features that will contribute to an additional reduction in resource impacts within the Specific Plan Area. Since the selection of sustainability options is left to the preferences of each developer, it is not possible at the DEIR stage to predict whether the measures selected would maximize water conservation efforts or attain other resource conservation goals. The initial evaluation of the efficacy of the proposed water conservation measures estimated that full implementation of the water conservation measures provided in the Specific Plan could result in a per person consumption rate of 70 gallons per day for indoor and outdoor use (as contrasted with the 97.3 gallons per person per day utilized in the DEIR). Other measures including maximization of the use of features to capture storm water runoff and maximization of the use of reclaimed water could result in an additional 200 af/yr reduction in groundwater overdraft on the project site from current uses.

The County also considered, but did not implement at this time, the option of requiring that the wastewater treatment facility be designed to include ~~a reverse osmosis component~~ (or ~~its an~~ technical equivalent process for reducing total dissolved solids). ~~This~~ These technology technologies ~~is~~ are cost prohibitive at this time. However, it is envisioned that ongoing advances in wastewater treatment technology in the near future could make this option more feasible. If this occurs, there could be additional benefits to the project area with respect to the ability to utilize the treated effluent. Mitigation measures described in Section 5.10.4 below incorporate these options if necessary in the future to address the achievement of water balance goals for the Specific Plan.

5.10.1 EXISTING CONDITIONS

5.10.1.1 Specific Plan

Groundwater Availability

As discussed in Chapter 5.9 (Hydrology/Water Quality), the project site is located within the Salinas Valley Groundwater Basin in the Salinas River Valley, which is parallel to and just west of the San Andreas fault zone. The Salinas Valley Groundwater Basin is separated into four hydrologically-linked areas: Pressure Area, East Side Area, Forebay Area, and Upper Valley Area. The proposed project site lies within the East Side Area.

Groundwater is the principal source of water in Monterey County, accounting for more than 95 percent of total water use. Water resources in Greater Salinas are primarily derived from the Salinas River groundwater basin which carries water both above and below ground. The flow of the Salinas River is controlled and monitored by the San Antonio and Nacimiento Reservoirs located in south Monterey County and north San Luis Obispo County. Although some dry farming is practiced in the Salinas Valley, the majority of the County's agricultural land is irrigated with groundwater. Irrigation water not used by crops or evaporated returns to the groundwater system by percolation through surface soils. Sewage effluent also returns by percolation through leach fields.

Many of the aquifers in the Salinas Valley experience localized overdrafting, a condition where more water is pumped out of an aquifer than is recharged on an average yearly basis. For some aquifers, overdrafting is causing a decline in water levels, eventually requiring deeper wells. In other aquifers, overdrafting is causing seawater intrusion (SWI). Wells affected by SWI must either be abandoned and a separate well dug further inland; or the water from an affected well may be mixed with pure water to dilute the salt concentration. In each of these cases, problems will continue for water users unless the groundwater supply is supplemented and overdraft halted.

The Specific Plan area lies within the boundaries of the approximately 95 square-mile East Side Area of the groundwater basin. Water demands within the project site are met by groundwater pumped from at least 19 known wells within the Specific Plan area.

In the East Side Area, groundwater exists in two primary formations: the Unconfined Alluvial Aquifer and the Confined Deep Zone Aquifer. Groundwater recharge in the East Side Area originates from irrigation return flow, precipitation, and percolation or runoff from the western slopes of the Gavilan Range to the east. Traditionally, water has flowed through the East Side Area to the downstream Pressure Area. However, as a result of extraction in excess of recharge, a decline in groundwater levels in the East Side Area has induced subsurface recharge from the Pressure Area, as well as from the Salinas River and the Forebay Area, thus reversing the naturally-occurring seaward gradient. The East Side Area is thus no longer serving as a source of recharge to the Pressure Area, and the inflow of groundwater from the Pressure Area to the East Side Area is estimated to be a larger source of recharge than the traditional recharge generated by the stream channels coming from the Gavilan Range. Overdraft in the East Side

Area thus contributes to the condition of overdraft in adjacent subbasins as well as regional overdraft. In addition, this reversal in the direction of groundwater flow aggravates SWI in the western portion of the Pressure Area.

Monterey County Water Resources Agency is in the process of implementing the Salinas Valley Water Project (SVWP) to address problems in the Salinas Valley Aquifer that have affected the quality and availability of groundwater for beneficial uses in the region. The SVWP consists of three major elements: 1) changes to the operation and maintenance of existing reservoirs; 2) construction of the Nacimiento Dam Spillway Modifications and 3) construction of the Salinas River Diversion Facility. These elements are designed to meet the overall goals of halting seawater intrusion, continuing conservation of water flows for recharge of the Salinas Valley basin through summer release, providing flood protection, improving long-term balance between recharge and withdrawal, and providing a sufficient water supply to meet water needs through the year 2030.

The potential water storage capacity of the subsurface recharge area beneath the Specific Plan area is approximately 137,287,920 gallons, or 421 acre-feet (af). The higher end of the percolation rate range is 35,673,239 gallons per day or 109 acre-feet per day (af/day). Given that the aquifer underlying the Specific Plan area may be more than 1,000 feet deep, at current rates of consumption, there appears to exist several hundred years of groundwater beneath the site. However, in addition to the loss of the resource, continued drawdown of the aquifer at elevations below sea level may have indirect negative consequences, such as salination, near the Specific Plan area.

~~Portions of the Drinking water supplied in development areas around the Specific Plan are~~ is currently serviced-supplied by the California Water Service Company (CWSC). The source of the CWSC water is groundwater which is obtained from more than 30 deep wells ranging between 340 and 810 feet deep in its service area. CWSC supplies water to its customers through water mains located along three sides of the Specific Plan area. An Eight-inch mains runs along Russell Road, and San Juan Grade Road. Another 12-inch main lies in Harrison Road and San Juan Grade Road. CWSC water needs no pre-treatment and is generally potable. The company only chlorinates the water occasionally. CWSC Water fully complies with California Department of Health Services drinking water standards. CWSC provides nitrate removal treatment at three well sites, uranium removal treatment at one well site, and treatment to remove PLE and MTBE at two well sites. Wells have been in activated and/or destroyed for MTBE and nitrate concentrations above the MCLS. CWSC provides disinfection treatment to all the water supplied to their customers on a continuous basis.

Groundwater Demand

Based on detailed calculations performed in Appendix H, the activities currently taking place within the Specific Plan area generate a total groundwater demand of 2,770 acre-feet per year (af/yr). The majority of this groundwater (2,469 af/yr) is consumed by agricultural activities. Existing dairy use is estimated at 112 af/yr. Existing residential and industrial water demand is 189 af/yr. The groundwater demand is supplied by wells within the Specific Plan area.

Groundwater Recharge

As indicated in Table 5.10-1, groundwater recharge occurs from a variety of sources on the property including rainfall, and irrigation. A total of 2,264 af/yr of water is returned to the groundwater table as a result of all of the recharge sources. Rainfall recharge is estimated to be 498 af/yr. The Specific Plan area also receives significant surface water run-on from upstream areas which soaks into the groundwater. Recharge from upstream run-on is estimated to average 317 af/yr. The recharge generated by return flow from onsite irrigation (primarily agriculture) within the Specific Plan area is approximately 846 af/yr. In addition, subsurface inflow of groundwater from upstream areas is estimated at 603 af/yr.

**TABLE 5.10-1
Existing Average Annual Groundwater Demand vs. Recharge**

RECHARGE	AMOUNT (AF/YR)
Precipitation Infiltration	498
Upstream Surface Run-on	317
Subsurface Flow	603
Irrigation Flow	846
Subtotal	2,264
DEMAND	
Aquifer Pumpage	2,770
Net Change in Groundwater Storage (Recharge – Demand)	-506

Net Groundwater Change

As shown in Table 5.10-1, the annual groundwater consumption exceeds the amount of recharge on an average annual basis by 506 af/yr.

5.10.1.2 HYH Property Project

The HYH Property is centrally located within the Specific Plan area, which means it is within the Salinas Valley Groundwater Basin and East Side Area sub basin. The existing demand for the HYH Property is included within the Specific Plan area's current demand of 2,770 af/yr and recharge of 2,264 af/yr. The primary source of water demand within the HYH Property is for irrigation of strawberry production crops.

5.10.2 THRESHOLDS OF SIGNIFICANCE

Water resource impacts would be significant if the proposed project would:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer storage volume or a lowering of the local groundwater table; and/or
- Result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

5.10.3 POTENTIAL IMPACTS

5.10.3.1 Alternative 2

The following analysis of the long-term availability of water to serve the proposed Specific Plan uses is based on the information contained in a Water Supply Assessment (WSA) which was prepared by the California Water Service Company (CWSC) as well as the information contained in Appendices J.1 and J.2; the WSA is included in Appendix K.4. Based on the WSA, CWSC believes that for a 20-year planning horizon, based on the highest water use assumption for the Specific Plan, there will be adequate water to serve the Specific Plan under normal, single dry year and multiple dry year conditions assuming implementation of mitigation measures described in the DEIR and CWSC water rationing program. Because of the anticipated reduction in existing groundwater over-drafting in this area, CWSC does not believe that implementation of the RSJ Specific Plan would negatively impact groundwater supplies for existing CWSC's Salinas District customers and other anticipated future users within the Salinas District.

Estimating the potential impact of the Specific Plan on groundwater supplies is based on the difference between average annual groundwater recharge and annual demand. Precise estimates of the groundwater recharge and demand are difficult due to the fact that the ultimate character of the development can only be estimated based on the general land use designations contained in the Specific Plan. A number of factors which cannot be forecast accurately in the Specific Plan would ultimately determine the recharge and demand. For example, the degree to which future development may incorporate water conservation measures over and above those required by codes and regulations is difficult to predict. Similarly, the degree to which xeriscape is planted in landscaping would affect the amount of water consumed in landscape irrigation.

Groundwater Demand

Water demand generated by future development within the Specific Plan area as well as interim agriculture would be met from local groundwater through a series of existing and proposed wells located within the Specific Plan area. Based on an evaluation of the demand generated by individual land uses allowed by the proposed Specific Plan, it is estimated that ~~full~~ development of the Specific Plan (including agricultural uses but not development within the designated Future Development Area) would generate an annual demand for groundwater of 3,370 af/yr. The breakdown and assumed consumption by land use are illustrated in Table 5.10-2.

**TABLE 5.10-2
Estimated Average Annual Groundwater Demand with Specific Plan**

LAND USE TYPE	DAILY DEMAND FACTOR	AMOUNT (AF/YR)
Residential (indoor)	74 gallons per resident	1,202.0 ¹
Residential (outdoor)	0.07 inches per acre	409.0
School	3,500 gallons per acre	66.5
Office	4,000 gallons per acre	99.9
Employment Centre	4,500 gallons per acre	800.4
Town Center Commercial	4,500 gallons per acre	255.6
Neighborhood Commercial	3,500 gallons per acre	66.7
Golf Course Clubhouse, Hotel, and Inn ²	5,000 gallons per acre	116.5
Active Park	2,000 gallons per acre	3.3
Agricultural Irrigation	15-20 inches per acre	350.0
TOTAL		3,370.0

¹ Based on a population per household of 3.16.
² Excludes golf course because it would be irrigated with reclaimed water.
 Source: Conceptual Groundwater Balance Analysis, ProjectDesign Consultants, 2003.

The water demand estimate is based on a series of assumptions which are identified in Appendix J2. One of the most critical assumptions involves the level of water conservation to be achieved based on gallons per capita per day (gpcd). CWSC data for residential water use in the Salinas Water District between 1998 and 2002 averaged 355.8 gallons/service/day. Using year 2000 U.S. Census data for Salinas, 3.66 persons/household represents the average number of residents per service. CWSC determined that the average per capita consumption or demand is 97.3 gallons/day for inside and outside uses. CWSC analyzed monthly customer water usage records for the year 2002 for a new single-family residential area in Salinas similar to the proposed HYH Property Project. With the application of conservation program measures, CWSC estimated that on average 25 percent of the water used by residents in the proposed HYH Property Project would be for landscape irrigation and 75 percent would be for inside use; or a per capita indoor use of 74 gallons/person/day. The 74 gpcd factor reflects the current uses of water saving fixtures within the study area. Furthermore, effective water conservation fixtures are being developed and will likely be in use over the life of the Rancho San Juan project. These more effective measures are likely to significantly reduce the water demand, but for the purpose of the study, the 74 gpcd was used to conservatively estimate the water demand.

Although the CWSC study assumed 3.66 persons per household, the demand projected in Table 5.10-2 is based on a population per household of 3.16 persons to conform with the County's General Plan. The 3.16 persons per household factor is used in the Monterey General Plan as representative of population concentration in the unincorporated area. The 3.66 persons per household factor is representative of urban areas such as the City of Salinas.

Groundwater Recharge

In order to estimate the potential impact of the groundwater demand generated by the Specific Plan, a comprehensive evaluation of groundwater recharge was undertaken. The results of this evaluation are presented in Appendix J2. The analysis took into account key sources of groundwater recharge including: irrigation return flow, rainfall infiltration, and surface and subsurface flow from upstream areas. Irrigation return flow represents that portion of the applied water which is not used by plants or lost through evaporation which percolates through the soil back into the groundwater table. Rainfall infiltration represents the portion of rainfall that enters the groundwater table and is not lost through surface runoff or evaporation. Surface flow from upstream areas represents the amount of runoff generated offsite but infiltrates into the local groundwater table before exiting the Specific Plan area. Similarly, groundwater moving through the Specific Plan area replaces groundwater moving into areas downstream of the Specific Plan area or consumed onsite.

The evaluation also took into account the amount of permeable areas within the Specific Plan area as well as the permeability characteristics of the different soil types. The analysis also incorporated features of the Specific Plan which would promote groundwater recharge. Key features included reclaimed water use for irrigation, stormwater infiltration basins and grass-lined swales in lieu of curb and gutters on local streets.

As indicated earlier, the Specific Plan includes a wastewater treatment plant which would generate reclaimed water suitable for irrigation. As described earlier, a portion of irrigation water would be expected to percolate into the groundwater. Thus, a portion of the water consumed in the process of providing sanitation to the Specific Plan area would be returned to the groundwater. Reclaimed water is expected to be used primarily on the golf course. In addition, reclaimed water would be placed in underground basins and allowed to percolate through the soil; this process is referred to as “applied subgrade reclaimed water”.

Stormwater retention would be a major source of groundwater recharge. Retention of surface runoff allows the water to percolate into the ground and recharge the groundwater table. The Specific Plan establishes minimum standards for runoff retention based on the land use type. Residential development of more than 5 units per acre and schools are required to retain 50% of the runoff from non-pervious areas. Commercial uses are expected to retain 50 percent of the pervious as well as impervious surface areas proposed to encourage surface water to enter the groundwater. The golf course is expected to retain 65 percent of its runoff.

Based on these assumptions, as illustrated in Table 5.10-3, it is estimated that a total of 2,907 af/yr would be returned to the groundwater supply.

**TABLE 5.10-3
Estimated Average Annual Groundwater Recharge with Specific Plan**

Source	AMOUNT (AF/YR)
Rainfall Recharge	743
Irrigation Inflow	297
Applied Subgrade Reclaimed Water	947
Upstream Surface Runon	317
Subsurface Flow	603
Total Annual Recharge	2,907

Based on a comparison of the annual groundwater demand (3,370 af/yr) and recharge (2,907 af/yr) at buildout of the Specific Plan area, water demand would exceed annual groundwater recharge. As depicted in Table 5.10-4, the demand would exceed the recharge by an estimated 463 af/yr. Although the proposed development would result in an annual overdraft, the deficit would be 43 af/yr less than the overdraft of 506 af/yr currently occurring within the Specific Plan area. While implementation of the Specific Plan would reduce water usage and increase recharge as compared to current conditions, nevertheless, there could be a lowering of the local groundwater table as an average annual deficit would continue after development. This is considered a cumulatively significant impact.

**TABLE 5.10-4
Comparison of Estimate Average Annual Groundwater Demand vs.
Recharge for Existing Conditions and Specific Plan**

	EXISTING (AF/YR)	PROPOSED (AF/YR)
RECHARGE		
Precipitation Infiltration	498	743
Irrigation Infiltration	846	297
Upstream Surface Runon	317	317
Subsurface Flow	603	603
Applied Subgrade Reclaimed Water		947
Subtotal	2,264	2,907
DEMAND		
Aquifer Pumpage	-2,770	-3,370
Total Change in Groundwater Storage	-506	-463

Additional water facilities would be limited to onsite distribution and storage facilities which are already included as part of the project. No significant environmental effects would be related to provision of the distribution and storage facilities.

5.10.3.2 Alternative 4E

Water consumption associated with Alternative 4E would generally be the same as Alternative 2. While the acreages devoted to residential would change, the number of homes would not. Furthermore, the acreage of residential would be less with Alternative 4E which would reduce the amount of outdoor irrigation. The other substantial change would be a reduction of approximately 200 acres of industrial uses which would also reduce the overall water consumption. Thus, overall water consumption associated with Alternative 4E would be less than Alternative 2 but still result in an overdraft which is a significant cumulative impact.

As with Alternative 2, the provision of the water facilities needed to serve the project would not result in a significant environmental effect.

5.10.3.3 HYH Property Project

The HYH Property would create water demand resulting from residential, commercial, and golf course uses onsite. It should be noted that water demand related to the proposed golf course is not included because this demand would be met through the use of reclaimed water generated by the proposed wastewater treatment facility.

Potable water necessary to serve the HYH Property would be provided by the California Water Service Company (CWSC). In an assessment of its ability to meet the potable water needs of the HYH Property (Appendix K.3), the Company indicates that the HYH Property would consume approximately 261 gpm of potable water. Furthermore based on the analysis in this assessment, sufficient supply exists to meet the needs of the proposed development. CWSC intends to convert and use two existing private wells that lie within the proposed project area as the source of water supply. These wells are currently being used to supply irrigation water for crops, principally strawberries, on the HYH property. Information provided by the developer's engineer, Bestor Engineers, Inc, and CWSC indicates that the South well is currently being pumped at a rate of 1,800 gpm and the North well at a rate of 1,200 gpm. From available information, it appears that these wells have been in operation for at least 5 years. While CWSC does not intend to use its existing wells that provide water to its customers in the City of Salinas to meet the needs of the HYH development, it intends, upon approval by the California Public Utilities Commission, to interconnect the two systems in order to improve total supply reliability through system integration and redundancy.

At buildout, development of the HYH Property, in and of itself, would not exceed the groundwater recharge within the overall Specific Plan area, resulting in a net positive contribution to groundwater recharge. By achieving a positive water balance, development of the HYH Property Project would contribute to the reduction of overdraft condition associated with the entire Specific Plan. In the short-term, before sufficient reclaimed water is available to

fulfill the needs of the golf course, development of the HYH Property would have a short-term impact on groundwater.

Long-term impacts would be avoided through the proposed use of reclaimed water for irrigating the golf course and other open space areas. The use of reclaimed water would not only reduce the demand for groundwater but would assist in groundwater recharge related to the percolation of irrigation water which does not evaporate or become absorbed by the landscaping. In addition, future development would be required to adhere to the water conservation guidelines and criteria contained in the Specific Plan.

As with Alternative 2, the provision of the water facilities needed to serve the project would not result in a significant environmental effect.

5.10.4 MITIGATION MEASURES

The following section contains a summary statement for the water resource impacts related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.10.4.1 Alternative 2

Impact 5.10-1: Overdraft of local groundwater supply. (Direct)

As discussed earlier, many aspects of the proposed Specific Plan would reduce the impact of the project on water resources. Appropriate and timely implementation of these guidelines would be assured through the following mitigation measures. Even with these measures, the water table is anticipated to drop an average of 463 af/yr. While this overdraft would be significant, it would represent a reduction in the overdraft of 506 af/yr which is presently occurring from agricultural activities on the property.

Mitigation Measure 5.10-1a: Prior to approval of any tentative map or use permit within the Specific Plan area, a groundwater supply analysis shall be completed. The analysis shall estimate the annual demand for groundwater associated with existing developed areas within the Rancho San Juan Specific Plan area as well as the amount of groundwater consumed by ongoing agricultural operations or other uses unrelated to development pursuant to the Specific Plan. Use of reclaimed water shall not be counted as groundwater demand. The sum of these groundwater demand sources shall be subtracted from the maximum annual allowed consumption of 3,370 af to determine the amount of supply available for the development contained on a proposed tentative map or use permit. If the supply is insufficient to meet the anticipated demand of a proposed development, the project applicant shall demonstrate, to the satisfaction of the County, that agricultural consumption will be proportionately reduced within the Specific Plan area or a

supply of potable water not related to groundwater has been secured; either one of these methods shall be guaranteed in perpetuity.

Mitigation Measure 5.10-1b: Prior to issuance of any building permit, the County shall make a determination that the project is consistent with the water consumption estimates identified in the tentative map application. If the proposed building exceeds the consumption estimates, the applicant shall be required to modify his proposal to reduce water consumption to or below the water consumption estimates before the project can be approved.

In addition, the County shall determine that all appropriate water conservation methods have been included in ~~the~~ all proposed buildings. Water conservation methods shall include but not be limited to the following:

- Low flow showerheads and toilets;
- Water-conserving irrigation equipment and procedures;
- Provision of literature to future building occupant(s) emphasizing the importance of water conservation and ways to reduce water consumption through day to day activities;
- ~~Individual gutter and cistern systems to collect rainwater to allow reuse for outdoor irrigation;~~ and
- Drought tolerant landscaping.

Mitigation Measure 5.10-1c: Prior to approval of final improvement plans, the County shall determine that all appropriate water conservation methods have been included in the proposed development including but not limited to the following:

- Surface runoff retention basins;
- Drought tolerant landscaping and irrigation; and
- Maximal use of reclaimed water, where available.

The County shall also determine that the long-term maintenance of water conservation methods will be assured.

Mitigation Measure 5.10-1d: Commencing one (1) year after construction of water-consuming improvements within a subdivision, the applicant shall submit annual reports on total water consumption which shall include total per unit consumption data. This shall include data on water consumption of the golf course. If either the per unit consumption calculation, estimated consumption for the golf course, or total consumption calculation for the particular subdivision exceeds the proportionate consumption cap established in the EIR, the applicant shall be required to adopt such water conservation sustainability measures available in the Specific Plan Matrix to achieve the appropriate annual consumption. If consumption still does not meet the caps established in the EIR, additional building permits in the non-compliant subdivision shall be withheld or, if the excess consumption is systemic, subsequent tentative maps will not be approved.

If, subsequent to approval of each tentative map, building permits, or at build-out of the Specific Plan, the amount of consumption (either per unit or total) exceeds the amount of water assumed in the EIR, then the Water Resources Agency shall impose some or all of the following measures:

- Water rationing;
- Landscape retrofit;
- Increased water consumption fees; and/or
- Installation of a reverse osmosis unit or its equivalent at the wastewater treatment plant for RSJ.

Mitigation Measure 5.10-1e: Prior to approval of a final map, the applicant shall prepare a detailed plan to implement a Water Balance Management System as set forth in Section 6.2.6 (Monitoring Process) of the Rancho San Juan Specific Plan. The plan shall be submitted for review and approval by the Monterey County Public Works Department, Environmental Health Division, Water Resources Agency and Planning and Building Inspection Department. The plan shall provide a means of metering the use of all water (ground water, waste water and storm water) and identify the proposed water conservation features that are to be implemented within the project.

Mitigation Measure 5.10-1f: The bylaws of the Community Services District (CSD), or other County entity that is responsible for the providing water services to Rancho San Juan, shall provide for the development and implementation of an ongoing water conservation educational program for the residents as set forth in Section 6.2.6 (Monitoring Process) of the Rancho San Juan Specific Plan. The program shall be subject to review and approval by the Monterey County Public Works Department, Water Resources Agency Environmental Health Division and Planning and Building Inspection Department. The purpose of the program is to help residents understand the relationship between individual actions and the long-term sustainability of the community's water supply.

Mitigation Measure 5.10-1g: Prior to final map recordation, ~~the~~ bylaws of the Community Services District (CSD), or other County entity that is responsible for the providing water services to the area within said map ~~Rancho San Juan~~, shall establish the position of Water Coordinator, or equivalent staff position, with the overall charge of maximizing the use of water for the least amount of energy input as set forth in Section 6.2.6 (Monitoring Process) of the Rancho San Juan Specific Plan. The Water Coordinator shall be responsible for all aspects of water use, reuse, treatment, collection, pumping and distribution for all land uses in Ranch San Juan. It shall be the Water Manager's responsibility to meter and monitor water balance levels and to bring any potential problems to the attention of the CSD Board of Directors and the community. The responsibilities of the position shall be subject to review and approval by the Monterey County Water Resources Agency.

Mitigation Measure 5.10-1h: The applicant shall submit plans and supporting materials showing how each phase of the development incorporates the sustainable building, construction and/or design features that are required by Section 8.10 (Sustainability Requirements) of the

Rancho San Juan Specific Plan. In addition, residential development, with the exception of residential estate homes, shall score a minimum of 38 points by incorporating additional sustainable options. Residential estate homes shall score a minimum of 51 points. Sustainable Options Bonuses (SOBs) are awarded for qualifying affordable housing projects. Public/Semi-Public, Commercial, and Industrial development shall score a minimum of 25 points. Compliance with the sustainable requirements shall be made a condition of tentative map approval. Prior to the issuance of a building permit, the Monterey County Planning and Building Services Manager shall determine that the project complies with the minimum score as specified in Section 8.10 (Sustainability Requirements) of the Rancho San Juan Specific Plan.

Mitigation Measure 5.10-1i: Prior to approval of any building permit within the Employment Center, the County shall verify that the combined water demand created by the proposed building permit, in combination with existing development within the employment center, shall not exceed a total annual demand of 600 AF/year. Water demand met by reclaimed water shall not be included in annual cap.

Level of Significance of Impact 5.10-1 After Mitigation: Significant.

5.10.4.2 Alternative 4E

Significant impacts would be the same as those for Alternative 2. As with Alternative 2, implementation of Mitigation Measures 5.10-1a through 5.10-1d would reduce but not avoid a significant impact on local groundwater storage.

5.10.4.3 HYH Property Project

Based on the demand projections versus recharge projections versus recharge projects, water demand associated with the proposed development would not be expected to exceed recharge in the long-term. However, as indicated in Section 5.10.3.3, in the short-term, before sufficient reclaims water is available to fulfill the needs of the golf course, development of the HYH Property would have a short-term impact on groundwater. However, to assure that these assumptions are accurate, Mitigation Measures 5.10-1a through ~~1d~~ 1e and 1i shall be applied to the project.

5.11 AGRICULTURE

The following discussion is based on information obtained from the following references: the Monterey County Crop Report 2001 (Monterey County Agricultural Commissioners Office April 2001), Monterey County Crop Report 2000 (Monterey County Agricultural Commissioners Office, 2000), Soil Survey for Monterey County (United States Department of Agriculture Soil Conservation Service, April 1978), 2000 Monterey County Important Farmlands Map (Department of Conservation, 2000), GIS data (Monterey County GIS Team, 2002), GIS data (Project Design Consultants, 2002), County, Regional & Statewide Farmland Conversion Tables (California Department of Conservation, 2003), and various correspondence and telephone conversations with the Monterey County Agricultural Commissioners Office and Monterey County Planning and Building Inspection Department. Comments received from the Department of Conservation and the Food and Agriculture Department during circulation of the Notice of Preparation were incorporated in the EIR (Appendix A).

5.11.1 EXISTING CONDITIONS

5.11.1.1 Specific Plan

Economic Value

Agriculture is a dominant part of the Monterey County economy and is very important to the industry in the area. Over 22 percent of all county wage and salary jobs in 1999 were in the agriculture sector. Approximately 250,000 acres of irrigated crops were in agricultural production in the county in 2001. Agricultural production in Monterey County in 2001 was valued at \$2.85 billion, with vegetable crops accounting for 71 percent of the total production value, and fruits and nuts another 17 percent. The average crop value for Monterey County acreage in vegetable production was \$7,345 per acre in 2001 (Monterey County Agricultural Commissioners Office, April 2001).

Agriculture is a major contributor to the local economy in the Greater Salinas area. Extensive areas of irrigated row crops are planted in the fertile lands near the Salinas River, while the Gavilan foothills east of Salinas are used primarily for grazing. Although the Greater Salinas Area Plan contains only 7 percent of the County's agricultural land, it contains approximately 20 percent of the County's prime agricultural land.

According to the Monterey Agricultural Commissioner, the total amount of acreage in agricultural production within the Specific Plan area is approximately 1,468 acres, or 57 percent of the area. The agricultural land in the plan area accounts for 0.6 percent of the total amount of agricultural land in the County of Monterey. Approximately 80 percent of the agriculture in production onsite is strawberries, the remaining 20 percent rotates between berry and row crop production. Strawberry fields are considered a locally-important commodity. Although lettuce is the major county crop in production, berries have a higher gross dollar value per acre. The project site also supports livestock and dairy activities, which accounts for a small portion of total county production in these sectors.

Soils and Farmland Value

Land Capability Classification

The *Soil Survey for Monterey County* (United States Department of Agriculture Soil Conservation Service, April 1978) places each soil type in a land capability classification. A land capability classification is the grouping of soils to show, in a general way, their suitability for most kinds of farming. It is a practical classification based on limitations of the soils, the risk of damage when they are used, and the way they respond to treatment. The soils are classified according to the degree and kind of permanent limitation, but without consideration of major and generally expensive land forming that would change the slope, depth, or other characteristics of the soils; and without consideration of possible but unlikely major reclamation projects.

Storie Index Rating

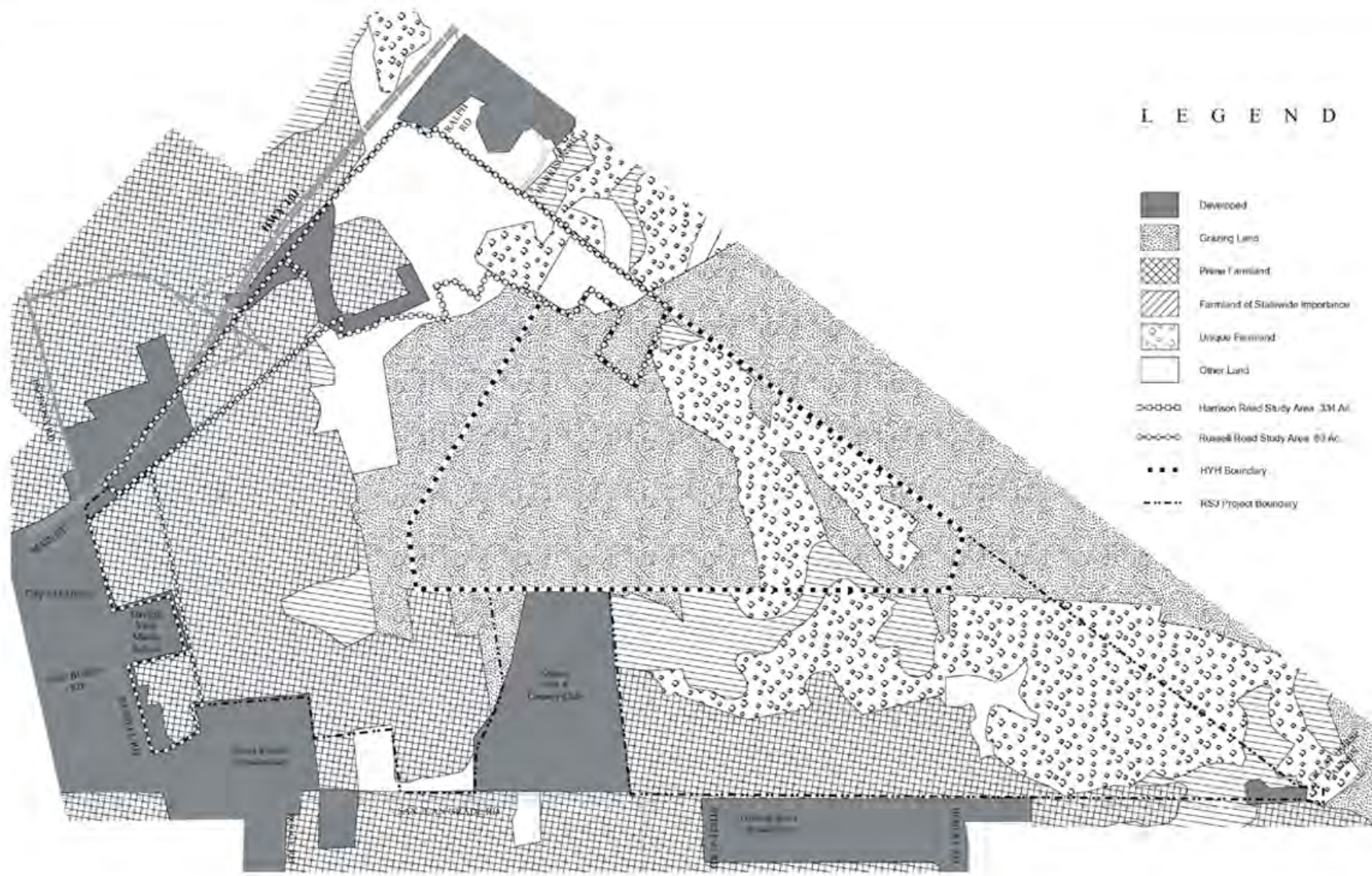
The USDA Soil Conservation Service uses the Storie index rating system to numerically express (from 0 to 100) the relative degree of suitability and value of a soil map unit for general intensive farming purposes. Four factors represent the inherent characteristics and qualities of soil under the Storie index rating. These factors are soil profile characteristics; texture of the surface horizon; slope; and other conditions, such as high water table, risk of erosion, and high alkalinity. Soils best suited for agricultural production fall between the Storie index range of 80 to 100 and are classified as Grade 1. Soils between the Storie index range of 40 to 60 are classified as Grade 3 and are suited for a few crops or for special crops and require special management (United States Department of Agriculture Soil Conservation Service, April 1978).

Important Farmland

The Specific Plan area includes approximately 1,532 acres of farmland which meet various designations established by the Department of Conservation. Figure 5.11-1 illustrates important farmland designations in the Specific Plan area. Table 5.11-1 provides a summary of the important farmlands located in the Specific Plan area. Each of the designations along with a description of their occurrence within the Specific Plan area follows.

**TABLE 5.11-1
Important Farmland Summary**

IMPORTANT FARMLAND DESIGNATION	ACREAGE IN PLAN AREA	PERCENTAGE OF PLAN AREA
Prime Farmland	836.7	32
Farmland of Statewide Importance	180.2	7
Farmland of Local Importance	--	--
Unique Farmland	514.8	20
Total	1,531.7	59



L E G E N D

- Developed
- Grazing Land
- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Other Land
- Harrison Road Study Area 334 Ac.
- Russell Road Study Area 83 Ac.
- HYH Boundary
- KSI Project Boundary



Source: ProjectDesign Consultants, 2003

Existing Agricultural Lands _____ Figure 5.11-1

Prime Farmland

Prime Farmland is land with the best combination of physical and chemical features for crop production. It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops when treated and managed according to current farming methods, including water management. The land must have been used for production of irrigated crops at some time during the four years prior to mapping (Department of Conservation, 2000).

Onsite

Three areas within the Specific Plan area meet the criteria for Prime Farmland. The largest area of Prime Farmland is located along the southern boundary and southwest of the Salinas Country and Golf Club. A small area of Prime Farmland is located north of the area described above, near the western border of the plan area. Another area of Prime Farmland is located along the eastern boundary, northeast of the Salinas Country and Golf Club. Combined, these Prime Farmlands constitute approximately 836 acres, or 32 percent of the Specific Plan area.

Offsite

No Prime Farmland is located immediately adjacent to the plan area. However, Prime Farmland is located near the southeastern boundary, east of the Salinas Golf and Country Club and adjacent to San Juan Grade Road. Prime Farmland is also located near the western boundary, adjacent to Highway 101.

Farmland of Statewide Importance

Farmland of Statewide Importance is similar to Prime Farmland, however, these soils have slight limitations due to slopes, moisture holding capacity, or other physical constraints. Farmland of Statewide Importance must also have been used for production of irrigated crops at some time during the four years prior to mapping (Department of Conservation, 2000).

Onsite

The California Department of Conservation classifies a total of 180 acres (7 percent) of the plan area as Farmland of Statewide Importance. Farmland of Statewide Importance is located near the western boundary of the plan area, and also located northeast of Russell Road, surrounded on three sides by Prime Farmland. A small area of Farmland of Statewide Importance is located at the northern boundary of the Specific Plan area, and another small area is located in the northeastern tip of the plan area. The largest portion of Farmland of Statewide Importance is adjacent to the Salinas Golf and Country Club to the northeast.

Offsite

Two areas of Farmland of Statewide Importance are located directly adjacent to the plan boundary. One area is located along the northern boundary less than half of a mile east of Highway 101; the other area is located along the northeastern plan boundary, contiguous with the Farmland of Statewide Importance within the plan area. Another area of Farmland of Statewide

Importance is located adjacent to San Juan Grade Road in the northeastern portion of the plan area.

Unique Farmland

Unique Farmland does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but has been used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality crops or high yields of a specific crop when treated and managed according to current farming methods (Department of Conservation, 2000).

Onsite

Unique Farmland covers 514 acres, approximately 20 percent, of the plan area. A small area of Unique Farmland is located along the northern boundary, near Highway 101 and another very small area is located in the northeastern portion of the plan area. One large area of Unique Farmland is located along the northern boundary, north of the Salinas Country and Golf Club. The largest area of Unique Farmland stretches from the Salinas Country and Golf Club up to the northeastern boundary of the Specific Plan area.

Offsite

Two areas of land designated Unique Farmland are located adjacent to the plan boundary. One area is contiguous with the Unique Farmland along the northern boundary. The other is contiguous with the Unique Farmland along the northeastern boundary.

Farmland of Local Importance

Farmland of Local Importance is either currently producing crops or has the capability of production. This land may be important to the local economy due to its productivity. This category varies from county to county and is defined by each county's board of supervisors and a local advisory committee. The Monterey County Board of Supervisors has not designated any Farmland of Local Importance within the County. Therefore no Farmland of Local Importance occurs within the Specific Plan area or in the immediate area. (Department of Conservation, 2000).

Grazing and Other Land

Although not designated as important farmland, the Department of Conservation also maps grazing and other land (Figure 5.11-1). Grazing Land is land on which existing vegetation is suited to the grazing of livestock, and must be at least 40 acres (Department of Conservation, 2000). A total of 712 acres, or 28 percent of the Specific Plan area is classified as Grazing Land. The largest portion of Grazing Land is located in the center of the Specific Plan area. Two smaller areas are located along the northern project boundary. Offsite Grazing Land is located along the northwestern boundary, contiguous with the Grazing Land within the Specific Plan area.

The remaining land within the Specific Plan area is categorized as Developed Land or Other Land. Developed Land is land with at least one structure on it; approximately 82 acres, or 3 percent of the plan area is characterized as Developed Land. Other Land is characterized as land that does not fit within any other category; some examples are wetlands, riparian areas not suitable for grazing, brush, and timber. Approximately 254 acres, or ten percent of the plan area are considered Other Land.

Williamson Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Local governments receive an annual subvention of forgone property tax revenues from the State via the Open Space Subvention Act of 1971.

The minimum term for a Williamson Act contract is 10 years, however, the County of Monterey has established Farmland Security Zones, which extend the contracts to 20 years. The term automatically renews on each anniversary date of the contract. Therefore, the actual term of a Williamson Act contract is indefinite. Contracts may be exited at the option of the landowner or local government by initiating the process of non-renewal. Under this process, the remaining contract term (nine years in the case of an original term of ten years) is allowed to lapse, with the contract null and void at the end of the term. Property tax rates gradually increase during the non-renewal period, until they reach normal (i.e., non-restricted) levels upon termination of the contract. Under a set of specifically defined circumstances, a contract may be cancelled without completing the process of term non-renewal. Contract cancellation, however, involves a comprehensive review and approval process, and the payment of fees by the landowner equal to 12.5 percent of the full market value of the property in question. Local activities such as eminent domain, or, in some rare cases city annexation, also result in the termination of Land Conservation Act contracts.

Onsite

No Williamson Act land occurs within the Specific Plan area.

Offsite

Several parcels located in the vicinity of the plan area are currently under a Williamson Act contract. These parcels are shown in Figure 5.11-1.

5.11.1.2 HYH Property Project

Important Farmland

The most recent data compiled by the Department of Conservation for the HYH Property project area includes large areas of farmland which meet various designations established by the

Department of Conservation. Figure 5.11-1 shows important farmland designations in the HYH Property area. Table 5.11-2 provides a summary of the important farmlands located in the HYH Property project area. Each of the designations along with a description of their occurrence within the HYH Property project area follows.

**TABLE 5.11-2
HYH Property Important Farmland Summary**

IMPORTANT FARMLAND DESIGNATION	ACREAGE IN HYH AREA	PERCENTAGE OF HYH AREA
Prime Farmland	--	--
Farmland of Statewide Importance	18.5	3
Farmland of Local Importance	--	--
Unique Farmland	160.7	24
Total	179.2	27

Prime Farmland

There is no prime farmland on the HYH Property.

Farmland of Statewide Importance

The California Department of Conservation classifies a total of 18.5 acres (3 percent) of the HYH Property area as Farmland of Statewide Importance. Farmland of Statewide Importance is located along the northwestern and northeastern portions of the property. The largest portion of Farmland of Statewide Importance in the Specific Plan area is located on the HYH Property.

Unique Farmland

Unique Farmland covers 160.7 acres, approximately 24 percent, of the HYH Property.

Farmland of Local Importance

The Monterey County Board of Supervisors has not designated any Farmland of Local Importance within the County. No Farmland of Local Importance occurs within the HYH Property area or in the immediate area. (Department of Conservation, 2000).

Grazing and Other Land

Approximately 346 acres, or 52 percent of the HYH Property is classified as Grazing Land. The largest portion of Grazing Land is located in the southern portion of the HYH Property.

There is a small amount (less than 10 acres) of Other Land along the western boundary.

Williamson Act

As with the Specific Plan, no Williamson Act land occurs within the HYH Property area.

5.11.2 SIGNIFICANCE THRESHOLDS

Implementation of the proposed project would have a significant impact on agricultural resources if the project would:

- Loss or conversion of Important Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance), as defined by the State Department of Conservation, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; and/or
- Involve other changes in the existing environment which, due to their location or nature, could result in pressure to convert Important Farmland to non-agricultural use.

5.11.3 POTENTIAL IMPACTS

5.11.3.1 Alternative 2

Loss of Important Farmland

Implementation of Alternative 2 would have a significant impact on agricultural resources. Full buildout of the plan area would commit approximately 2,271 acres (88 percent) of agricultural land to non-agricultural use. Of the 2,271 acres of agricultural land committed, approximately 836.7 acres (32 percent) is Prime Farmland, 180.2 acres (7 percent) is Farmland of Statewide Significance, and 514.8 acres (20 percent) is Unique Farmland. Implementation of the Specific Plan would result in the loss of strawberry production, as well as a limited amount of row crop and dairy production. ~~These numbers represent an incremental loss of acres over what is approved in the GSAP.~~

Although the land within the Specific Plan area is currently used for agriculture, it is not considered to represent the best agricultural land in the County. The land is characterized as transitional bottomland. The majority of the agricultural operations which are occurring within the Specific Plan are interim activities until development in accordance with the ADC occurs.

Although full buildout would ultimately displace agriculture and commit agricultural lands to development, agricultural activities could continue in the interim within the plan area. Most notably, agriculture could continue on approximately 500 acres in the eastern portion of the plan area, which are designated as Future Development Area. Agriculture could also continue within the portions of the Specific Plan area, which are planned for development until such time as development is proposed.

Although proportionately small in comparison with the agricultural land which exists in Monterey County and of relatively low value, the loss of agricultural land within the Specific

Plan area would represent a significant impact due to the importance of agriculture to the local economy and the number of acres which would be lost.

Although the loss of Important Farmland would be significant, it should be noted that the subject property is identified as an Area of Development Concentration (ADC) by the County's General Plan. The ADC designation is intended to prevent the conversion of other Important Farmland in the region by concentrating urban development where services can be provided and reduce sprawl patterns of growth. Nevertheless, there will be some unavoidable loss of significant farmland as a result of creation and implementation of the ADC.

Existing Agricultural Zoning and Williamson Act Contracts

The proposed land uses would conflict with the existing zoning, which is predominately agricultural. However, the adopted Monterey County General Plan designates the plan area as a "concentrated growth area." In addition, the GSAP designates the Specific Plan area as an ADC and specifies industrial, residential, commercial, visitor-serving, recreation, public facilities and open space uses in the Specific Plan area. The proposed land uses include these land uses, and the Specific Plan will constitute an overlay zone at the time of adoption. Monterey County would eliminate the existing base zoning for any given parcel in the plan area prior to development. Therefore, development of the plan area would have a less than significant impact on existing agricultural zoning.

No parcels located within the plan area are currently in a Williamson Act contract. Therefore, development of the plan area would have no impact on Williamson Act contract lands.

Development Pressure On Agriculture

As discussed earlier, agricultural activities occur both on the property and within the surrounding area. Development within the Specific Plan could result in pressure being placed on these agricultural activities due to complaints about agricultural impacts from new residents. Agricultural activities frequently generate noise, odors and dust and are often carried out around the clock. Typical agricultural activities could be disruptive or annoying to residents living near agricultural areas. However, under right to farm laws, agricultural operations that cause noise, dust or odors are not considered to be a nuisance. In addition, permits are required for some pesticide applications and burning, and this requirement reduces the potential for harmful effects from dangerous chemicals or smoke. By informing prospective residents of the surrounding agricultural operations and the right to farm ordinance, those persons who believe they may be adversely affected by such activities would be expected to reside in other location; thus, reducing the impact to below a level of significance.

In addition to development pressure related to complaints from nearby residential areas, new development can place other pressures on adjacent agricultural activities. Urban development affects agricultural activities in several ways. The integration of farming and urban land uses can result in trespassers, theft of crops and equipment, and vandalism. In addition, increased urbanization can lead to air pollution, road congestion, and increased competition for water, all of which can negatively affect farming. These issues can occur anytime that agriculture and

urban uses are located adjacent to one another. These issues are reviewed and considered by the general public, agency staff, and ultimately decided by elected public officials prior to designation of land for urban uses.

Development of the Specific Plan area could result in development pressure on both interim agricultural onsite as well as adjacent agricultural activities. Ultimately, full development of the Specific Plan would force existing and future agricultural activities onsite to be halted.

Development pressure of future development on agricultural uses within the Specific Plan area would not be significant. This conclusion is based on the fact that the Specific Plan area has been identified by the County as an Area of Development Concentration (ADC). As a consequence of this determination, agricultural use of the Specific Plan area would ultimately be displaced by development. Thus, any influence development may have on existing agriculture within the project area would not be considered significant.

There are several areas along the Specific Plan boundary where proposed development would be located adjacent to on-going agricultural operations. Agricultural operations would likely continue along the entire western boundary, portions of the northeastern and northwestern boundary, and portions of the eastern and southeastern boundary. Proposed development along the western boundary is buffered by an open space buffer and Highway 101. Proposed development along the eastern and southeastern boundary is buffered from adjacent agricultural operations by San Juan Grade Road. The land designated for Future Development located along the northwestern and northeastern boundary does not include specific land uses so the land use compatibility, and thus potential conflicts can not be specifically determined at this time. Agricultural compatibility studies would be prepared to determine the appropriate buffer required if the land is developed adjacent to ongoing agricultural operations outside the Specific Plan area.

5.11.3.2 Alternative 4E

This alternative would also have a significant impact on agriculture as the development areas would be similar between the two alternatives.

In addition, development would not have a significant impact on interim agricultural operation within the Specific Plan area or on surrounding agricultural activities.

5.11.3.3 HYH Property Project

Loss of Important Farmland

Implementation of the HYH Property project would result in the loss of Farmland of Statewide Importance and Unique Farmland. Full buildout of the HYH Property would commit approximately 671 acres to non-agricultural use. Of the 671 acres committed, approximately 18.5 acres (3 percent) is Farmland of Statewide significance and 160.7 acres (24 percent) is Unique Farmland.

Although proportionately small in comparison with the agricultural land which exists in Monterey County, the loss of agricultural land within the HYH Property project area would represent a significant impact due to the importance of agriculture to the local economy and the number of acres which would be lost.

Existing Agricultural Zoning and Williamson Act Contracts

The proposed residential uses associated with the land subdivision would conflict with the existing zoning, which is predominately agricultural. However, the adopted Monterey County General Plan designates the HYH Property as part of a “concentrated growth area.” In addition, the GSAP designates the HYH Property as part of an ADC. Monterey County would rezone the HYH Property project area prior to development. Therefore, the HYH development would not conflict with agricultural zoning.

No parcels located within the HYH Property area are currently in a Williamson Act contract. Therefore, development of the HYH Property area would not conflict with a Williamson Act contract.

Development Pressure On Agriculture

Future development within the HYH Property would be located adjacent to ongoing agricultural areas located within the Specific Plan area. However, as discussed earlier the impact would not be significant as the long-term future of these activities are already limited by the fact that they lie within an ADC. No offsite agricultural operations presently occur adjacent to planned residential areas within the HYH Property.

5.11.4 MITIGATION MEASURES

The following section contains a summary statement for each significant agriculture impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

5.11.4.1 Alternative 2

Impact 5.11-1: Loss of important farmland within the Specific Plan area. (Direct)

Implementation of the proposed development would eventually remove important farmland from potential production. Although this loss would be expected under the ADC designation applied to the property, the loss of farmland is considered significant due to the relative scarcity of this resource. Implementation of the following mitigation measure would reduce the impact but not to below a level of significance since there would still be a net loss of agricultural land.

Mitigation Measure 5.11-1a: Prior to approval of the first final map, the landowner shall fund the development of an agricultural compensation program. The program shall provide a mechanism, subject to approval of the County of Monterey Board of Supervisors, for acquiring development credits from owners of important farmlands and/or other means of preserving important farmland (defined as Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance or Unique Farmland) to reduce economic pressure to convert farmlands to development. The program shall provide for an in kind, 1:1 compensation ratio through easement dedication and/or payment of fees to the County; fees shall be equal to the per-acre value of a conservation easement over important farmland.

Mitigation Measure 5.11-1b: Prior to approval of each final map based on the second tentative map and all subsequent tentative maps approved, the project applicant shall comply with the agricultural compensation program identified in Mitigation Measure 5.11-1a.

Level of Significance of Impact 5.11-1 After Mitigation: Significant.

5.11.4.2 Alternative 4E

As with Alternative 2, implementation of Alternative 4E would result in a significant loss of important farmland. Creation and implementation of the agricultural compensation plan identified in Mitigation Measures 5.11-1a and 1b would reduce the impact but not below a level of significance.

5.11.4.3 HYH Property Project

Impact 5.11-2: Loss of important farmland within the HYH Property. (Direct)

Implementation of the proposed development would remove important farmland from production. Although this loss would be expected under the ADC designation applied to the property, the loss of farmland is considered significant due to the relative scarcity of this resource. Implementation of Mitigation Measure 5.11-1a would reduce the impact but not to below a level of significance.

Level of Significance of Impact 5.11-2 After Mitigation: Significant.

5.12 PUBLIC SERVICES AND UTILITIES

The analysis provided in this section is based on information contained in the Rancho San Juan Specific Plan as well as communications with local service providers. The discussion is broken down into the individual services with respect to setting, impacts and mitigation. Figure 5.12-1, and provides an overview of proposed public facilities locations.

5.12.1 WASTEWATER

5.12.1.1 Existing Conditions

Specific Plan

The Monterey Regional Water Pollution Control Agency (MRWPCA) is the primary agency responsible for wastewater transmission and treatment in the project region. Its service area includes the cities adjoining Monterey Bay and portions of the remainder of Monterey County. Wastewater is collected by the City of Salinas for the Salinas Service Area and processed by the agency.

The Specific Plan area is outside the MRWPCA and City of Salinas service areas and currently relies on septic systems for wastewater disposal. However, the project site is within the MRWPCA's potential service expansion area and, since the project site is in an unincorporated portion of Monterey County, the MRWPCA may ultimately be responsible for operating and maintaining the wastewater transmission and treatment systems for the project site. The local community services district would be responsible for operating and maintaining the local collection system.

MRWPCA maintains a regional treatment plant just north of Marina, with a treatment capacity of 29.6 million gallons per day (mgd) although it is currently permitted to only treat 27 mgd. The existing use is ~~21-21.5~~ mgd, leaving a remaining capacity of ~~8.68~~ 1 mgd. ~~The population within the service area produces approximately 103 gallons per day (gpd) of wastewater per person. This rate compared with the remaining capacity, gives MRWPCA the ability to service an additional 27,832 dwelling units, or 83,495 persons.~~ The combined residential, commercial, and industrial wastewater generation rate within MRWPCA's current service area, expressed in a residential per capita base, is approximately 82 gallons per person per day. This combined generation rate was derived by dividing the total plant average dry weather flow by the residential population being served. Using this factor the remaining plant capacity should be adequate to serve approximately 98,000 additional residents, along with the current mix of commercial and industrial discharges associated with that number of residents.

~~The Salinas pump station currently delivers 26.88~~ an average dry weather flow of approximately 12.8 mgd to the MRWPCA regional treatment plant, ~~as well as the plant's ocean outfall, and is in the process of being upgraded to increase the reliability and capacity to approximately 32.5 mgd. The~~ This pump station is expected to have adequate capacity at least through the year 2015, at which time additional upgrades are likely. MRWPCA maintains the financial plan to

~~pay for capacity expansions as they become necessary. All of MRWPCA's facilities were designed to facilitate future capacity increases.~~ was recently upgraded to increase its reliability and its peak wet weather pumping capacity to 32.4 mgd. This pump station is projected to have adequate capacity to serve planned future growth in its tributary area to beyond 2020 with no further improvements, if provisions to accommodate or reduce the occasional peak wet weather flow events are made. MRWPCA maintains a financial plan to pay for capacity expansions as they become necessary. MRWPCA's Salinas area transmission facilities, and its Regional Treatment Plant, were designed to facilitate future capacity increases.

In the Specific Plan area, the closest major sewer mains transporting wastewater to the regional plant follow North Main Street to the Salinas City limit at Russell Road. These mains were installed to accommodate development in Salinas and would not be available for development within the Specific Plan area because of inadequate capacity. Sewer mains were also recently installed north of Russell Road for the Santa Rita Union School District due to sanitation problems; however, the capacity would not be great enough to serve additional development in the Specific Plan area.

HYH Property Project

The existing conditions with respect to regional wastewater treatment conditions are the same as described for the Specific Plan.

5.12.1.2 Thresholds of Significance

Wastewater impacts would be significant if the proposed project would:

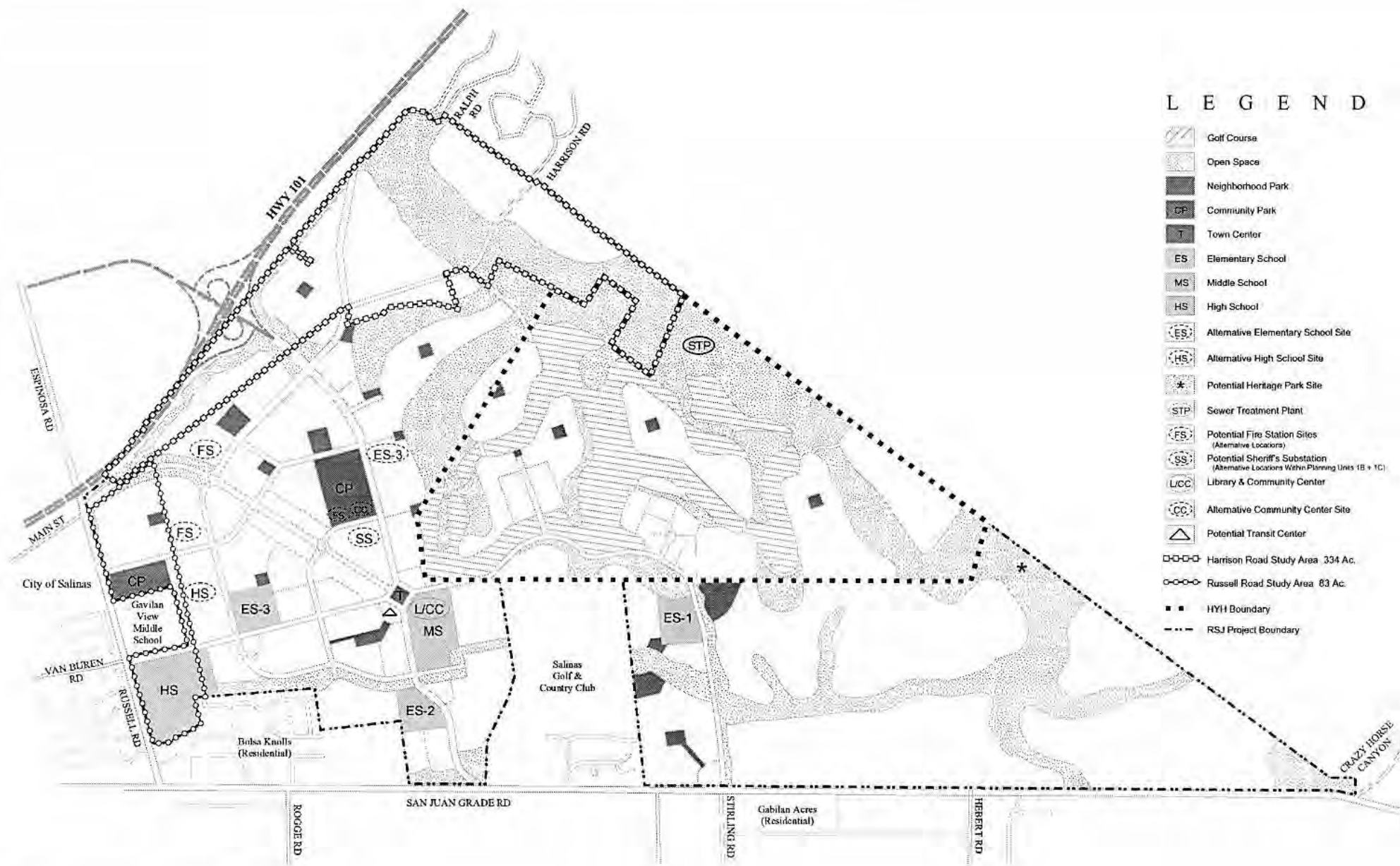
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

5.12.1.3 Potential Impacts

Alternative 2

No wastewater treatment facilities presently serve the area. As a result, the Specific Plan provides for an onsite wastewater treatment and recycling facility (See Figure 5.12-1 for location). As discussed in Section 4.3.1.2, use of reclaimed water is essential to achieving balance between groundwater supply and demand to assure that significant over drafting of the groundwater table does not occur.

As discussed in Section 4.3.1.2, the wastewater onsite would be treated by a centralized wastewater treatment system located within the HYH Property. Based on the anticipated population of the proposed Specific Plan and using a wastewater generation rate of 60 gpd per person, the proposed Specific Plan would generate a total of ~~2.316~~ 2.316 mgd. The onsite facility would be designed to provide sufficient capacity to meet the demand for wastewater treatment within the Specific Plan concurrent with need.



Source: ProjectDesign Consultants, 2/2004

Physical impacts from construction of the wastewater treatment plant would be related to air quality, biology, land use compatibility, noise, hydrology and water quality. No significant noise or air emissions would be anticipated from the wastewater treatment plant. Existing regulations would be sufficient to maintain air and noise levels to below a level of significance. As no significant air or noise emissions are anticipated, the wastewater treatment plant would be compatible with surrounding land uses. Mosquito abatement would also be conducted to reduce potential impacts from the reclaimed water impoundments. Compliance with the waste discharge permit required to construct the project would avoid significant impacts on water quality. Thus, construction of the wastewater treatment plant would not result in any impacts which would not be reduced to below a level of significance with appropriate mitigation measures.

Alternative 4E

While the development types and intensities associated with this alternative would change, the change would not be substantial. Furthermore, as with Alternative 2, the wastewater treatment system would be designed to meet the wastewater demand generated by development in accordance with Alternative 4E and with mitigation would not result in any unmitigable environmental impacts.

HYH Property Project

The HYH Property proposes to construct the first phase of the wastewater treatment facility for the Specific Plan. The first phase would be designed to handle a minimum of 300,000 gpd to serve the proposed development within the HYH Property.

In addition, the wastewater treatment facility would include water reclamation. The primary use for the reclaimed water would be irrigation of the proposed golf course as well as selected common open space areas. The use of reclaimed water would reduce demand on groundwater and assist in recharging groundwater supplies beneath the Specific Plan area.

As with Alternative 2 and Alternative 4E, the wastewater treatment plant which would serve the HYH project and with mitigation would not have a significant impact.

5.12.1.4 Mitigation Measures

The following section contains a summary statement for each significant wastewater impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is provided which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.1-1: Construction of a new wastewater treatment facility, and/or the expansion of an existing facility. (Direct)

Implementation of Alternative 2 would result in construction of a new wastewater treatment facility, the construction of which could cause significant biology, historic/archaeology, and hydrology/water quality effects. The wastewater treatment facility is proposed as a phased project, resulting in expansion of the facility over a projected period of 20 or more years. The facility is proposed within an area identified as a wildlife corridor. Implementation of archaeological Mitigation Measures 5.5-1 through 5.5-3 along with the following Mitigation Measures would reduce impacts to less than significant.

Mitigation Measure 5.12.1-1a: Prior to the approval of the first final map within the Specific Plan the applicant shall secure all required permits including: but not limited to, a Waste Discharge Permit from the Regional Water Quality Control Board and approval of system design from County Environmental Health Division.

Mitigation Measure 5.12.1-1b: Treatment plant capacity shall be increased to accommodate each phase of the project prior to filing of the final map for the respective project phases. A minimum 20 percent excess treatment capacity shall be added to the plant and disposal facilities, as needed, for each phase of the project, to accommodate future increases in wastewater flow rates, based on estimates of future development. In addition, flows shall be metered and records of the flows shall be provided to the RWQCB and Monterey County Health Department for review and approval.

Mitigation Measure 5.12.1-1c: Prior to issuance of final permits for the wastewater treatment facility, a mosquito abatement plan shall be submitted to Monterey County Health Department and to the Monterey County Mosquito Abatement District for review and approval to reduce potential impacts from proposed reclaimed water impounds.

Mitigation Measure 5.12.1-1d: Prior to issuance of building permits, a drift fence shall be constructed around the construction site to prevent possible wildlife movement through the corridor into the construction site area. Siting and installation of the fence shall be overseen by a biologist with appropriate permits. Pitfall traps and cover boards shall be placed along the inside of the fence line to capture animals dispersing from the work area during grading and construction. The traps shall be monitored daily through the grading and construction period and animals shall be removed from traps and placed on the outside of the fence line in appropriate cover. This measure shall be required during each expansion phase of the facility.

Level of Significance of Impact 5.12.1-1 after Mitigation: Less than significant.

Impact 5.12.1-2: Proposed sewage treatment and disposal do not conform to the standards and guidelines established by local, regional and state regulatory agencies. (Direct)

Implementation of Mitigation Measures 5.12.1-1a and 5.12.1-1b would require proof of conformance prior to approval of the first final map within the Specific Plan as well as mandatory expansion criteria, reducing associated impacts to less than significant.

Level of Significance of Impact 5.12.1-2 after Mitigation: Less than significant.

Impact 5.12.1-3: Proposed discharge would substantially contribute to groundwater contamination or contaminate a public water supply. (Direct)

Implementation of Mitigation Measures 5.12.1-1a and 5.12.1-1b would require proof of conformance prior to approval of the first final map within the Specific Plan as well as mandatory expansion criteria, reducing associated impacts to less than significant.

Level of Significance of Impact 5.12.1-3: Less than significance.

Impact 5.12.1-4: Create an odor nuisance. (Direct)

As discussed in Chapters 5.6 and 5.7, operation of the wastewater treatment plant could generate significant noise and odor impacts. Implementation of Mitigation Measures 5.6-1c and 5.7-3 would reduce potential noise and odor impacts to below a level of significance.

Level of Significance of Impact 5.12.1-4 after Mitigation: Less than significant.

Alternative 4E

Significant impacts related to wastewater would be the same as those for Alternative 2. With implementation of the corresponding mitigation measures, wastewater impacts would be less than significant.

HYH Property Project

Impact 5.12.1-5: Construction of a new wastewater treatment facility and the expansion of an existing facility. (Direct)

Implementation of the HYH Property would result in construction of a new wastewater treatment facility, the construction of which could cause significant biology, historic/archaeology, and hydrology/water quality effects. The wastewater treatment facility is proposed as a phased project, resulting in expansion of the facility over a projected period of 20 or more years. The facility is proposed within an area identified as a wildlife corridor. Implementation of archaeological mitigation measures 5.5-1 through 5.5-3 along with Mitigation Measures 5.12.1-1a through 5.12.1-1d would reduce impacts to less than significant.

Impact 5.12.1-6: Lack of wastewater treatment services for the HYH Property project. (Direct)

Implementation of the HYH Property project would result in the generation of approximately 300,000 gpd, or 345 acre-feet per year of wastewater. Implementation of Mitigation Measure 5.12.1-1a through 5.12.1-1d would reduce wastewater impacts associated with implementing the HYH Property project to less than significant.

Level of Significance of Impact 5.12.1-6 after Mitigation: Less than significant.

5.12.2 ENERGY UTILITIES

5.12.2.1 Existing Conditions

Specific Plan

Pacific Gas and Electric (PG&E) supplies all natural gas and electric service in the area. Natural gas is provided to the Specific Plan area by several two- to four-inch distribution mains serving Gavilan Acres and Bolsa Knolls. These lines follow Rogge Road westward to its intersection with San Juan Grade Road. The mains then branch south and north. The southern mains serve Bolsa Knolls and the northern serve the Gavilan Acres. In addition, PG&E has a major gas line that runs along San Juan Grade Road toward San Benito County.

Electrical distribution lines follow Harrison Road with some branching eastward into the Specific Plan area. Transmission lines also parallel San Juan Grade Road south to its intersection with Crazy Horse Canyon Road. Six tap lines lead westward into the Specific Plan area. Gavilan Substation serves the area with a capacity of 60 kilovolts (KV). Also, an unoccupied transmission line right-of-way traverses the Specific Plan southern area, crossing San Juan Grade Road south of Salinas Golf and Country Club and north of Bolsa Knolls and proceeding northwest across Harrison Road and out of the Specific Plan area. Transmission line rights-of-way are usually reserved for lines carrying voltages greater than or equal to 60 KV.

HYH Property

PG&E natural gas and electricity service for the Specific Plan area would also serve the HYH Property.

5.12.2.2 Thresholds of Significance

Energy utility impacts would be significant if the proposed project would:

- Require or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

5.12.2.3 Potential Impacts

Alternative 2

Relatively few, electrical and natural gas distribution lines currently exist within the Specific Plan area due to the general lack of development. Therefore, serving future development in the Specific Plan area would require significant expansion of electrical and natural gas lines within the Specific Plan area as well as within the surrounding area. Additional gas mains would be required as well as an increase in the pressure within some of the existing gas lines serving the area to maintain necessary flow rates.

Although some 12KV lines already enter the Specific Plan area, many more would need to be installed to serve future Specific Plan area users. In addition to increasing the number of electrical supply lines to the project, the Gavilan Electrical Substation would require an increase in its capacity to serve the ultimate development of the proposed Specific Plan.

The Specific Plan does provide for energy saving opportunities. One example is that the streets would be oriented in such a way to maximize passive solar design, and the Specific Plan provides guidance on incorporating active or passive solar design for structures.

While additional supply lines would be required, the demand generated by the proposed development would not have a significant impact on the ability of local utilities to meet the demand generated by the project.

Physical changes involved in providing additional power lines to the subject property could occur. Most likely environmental impacts would be potentially associated with biological resources within the designated wildlife corridor and cultural/archeological resources which may be impacted by excavation and/or equipment access. The location of these future power line projects cannot be forecast at this time within the Specific plan, so it would be speculative to forecast the impacts. However, subsequent environmental review must precede installation of these facilities. This analysis would identify and potentially mitigate environmental impacts associated with these projects.

Alternative 4E

As with Alternative 2, a number of improvements to the electrical and natural gas distribution system in the area would be required to serve development under Alternative 4E. The change in land use intensity related to Alternative 4E would not result in a substantially different demand on the electrical and natural gas infrastructure with respect to Alternative 2. As with Alternative 2, the supply of energy is expected to be able to meet the demand generated by development in accordance with Alternative 4E. In addition, environmental impacts associated with installation of these new facilities are at present unknown and would be subject to subsequent environmental review and mitigation.

HYH Property Project

Based upon a low of .05 and a high of 2.4 therms of natural gas per day per dwelling unit and a low of 18.7 and a high of 29.7 of kilowatts of electricity per hour per day per dwelling unit, the HYH Property is projected to utilize between 53.9 and 2,584.8 therms of natural gas and between 20,139.9 and 31,986.9 kilowatts of electricity per day, per dwelling unit. While the need for improvements to the energy infrastructure would be lower given the number of residential units and other development with respect to the Specific Plan, new electrical and natural gas lines would be required to serve the HYH Property. However, as discussed earlier, sufficient energy supply is expected to exist to meet the demand generated by development of the HYH project.

5.12.2.4 Mitigation Measures

The following section contains a summary statement for each significant ~~wastewater~~-energy utilities impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is provided which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.2-1: Construction of new energy facility(s), and/or the expansion of an existing facility. (Direct/Indirect)

Implementation of Alternative 2 would result in construction of new energy facility(s), and/or the expansion of an existing facility, the construction of which could cause significant effects to biology, archeology, and hydrology/water quality. Implementation of Mitigation Measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4b, and 5.9-5 would reduce impacts to below a level of significance.

Level of Significance of Impact 5.12.2-1 after Mitigation: Less than significant.

Alternative 4E

Significant impacts would be the same as those for Alternative 2. Implementation of corresponding mitigation measures would reduce impacts to less than significant.

HYH Property Project

Impact 5.12.2-2: Construction of new energy facility(ies), and/or the expansion of an existing facility. (Direct/Indirect)

Implementation of the HYH Property project would result in construction of new energy facility(ies), and/or the expansion of an existing facility, the construction of which could cause significant effects to biology, archeology, and hydrology/water quality. Implementation of

mitigation measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4b, and 5.9-5 would reduce impacts to below a level of significance.

Level of ~~Significant~~ Significance of Impact 5.12.2-2 After Mitigation: Less than significant

5.12.3 SCHOOLS

5.12.3.1 Existing Conditions

Specific Plan

The Specific Plan area is located in the jurisdiction of three school districts. For grades K through 8, the northeastern portion of the Specific Plan is within the Lagunita Elementary School District. The remainder of the project area, for grades K through 8, is located in the Santa Rita Union School District. The Salinas Union High School District provides education for grades 9 through 12 within the Specific Plan area.

Santa Rita Union School District

The Santa Rita Union School District encompasses almost all of the Specific Plan area that is proposed for development, and approximately half of the area proposed for future development. The schools that would serve the Specific Plan area would be La Joya Elementary, with a current enrollment of 725 students and Gavilan View Middle School with a current enrollment of 1,050 students. Both schools have a design capacity for only 300 students, therefore La Joya Elementary is 50 percent over capacity, and Gavilan View Middle School is approximately 75 percent over capacity.

Lagunita Elementary School District

The Lagunita Elementary School District serves the rural area north of Salinas and consists of five classrooms and administrative offices and provides education for grades K through 8. The school has a 2002 enrollment of 62 students, and has an agreement with the Santa Rita Union School District to take additional students as class space arises. The school has a capacity of approximately 100 students.

Salinas Union High School District

The entire Specific Plan area is within the Salinas Union High School District, which includes 14 middle and high schools. High school-aged children within the Specific Plan area would attend Everett Alvarez High School, located within the City of Salinas. Everett Alvarez High School was designed to accommodate 1,180 students, however, the current enrollment is 2,071 students. An expansion of facilities is planned in the near future for Everett Alvarez High School to accommodate an additional 594 students. Even with this expansion, the school would be over its design capacity with current enrollment.

HYH Property Project

Approximately 282 acres of the HYH Property are within the Lagunita Elementary School District, while the remaining 389 acres are within the Santa Rita Union School District. The entire HYH Property is within the Salinas Union High School District. The existing conditions for the specific schools which would serve the HYH Property are described above.

5.12.3.2 Thresholds of Significance

School impacts would be significant if the proposed project would:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios.

5.12.3.3 Potential Impacts

Alternative 2

Development of the Specific Plan area would result in increased enrollment in all three school districts. As discussed below, additional students generated within each of the school districts from development of the Specific Plan would overtax existing schools serving the Specific Plan area. The majority of these schools are already operating over their design capacity.

Physical impacts from construction of schools within the Specific Plan area would be related to biology, land use compatibility, and traffic; a detailed discussion of impacts is found in the respective sections of this EIR. Biological impacts would be insignificant as the school sites are presently disturbed. Traffic effects would be related to localized congestion from student pickup and dropoff areas. This congestion would be dealt with when site plans are prepared for the individual schools. Similarly, playground noise impacts on nearby residential areas would also be resolved during site planning for the schools. Thus, construction of schools within the Specific Plan area would likely not result in any environmental impacts which would not be reduced to below a level of significance. Furthermore, environmental review would be required for each school prior to approval of a design for the facility.

Santa Rita Union School District

Approximately 3,830 residential units are proposed within the Santa Rita Union School District. Using a student generation rate per household of 0.55 for grades K-6 and 0.12 for grades 7-8, the proposed project would generate 2,1073,064 elementary school students and 460 middle school students within the District boundaries.

The Santa Rita Union School District is currently operating beyond capacity. While the 2,1073,064 elementary and 460 middle school-aged students would potentially impact the Santa Rita Union School District, the construction of new elementary schools proposed as part of the Specific Plan would avoid impacting existing schools and assure that adequate capacity exists to

serve new elementary and middle school students generated within the Santa Rita Unified School District.

Three elementary schools are proposed as part of the Specific Plan (see Figure 5-12.1 for locations). One elementary school would be located north of the Salinas Golf and Country Club. A second would be located south of the Salinas Golf and Country Club. The third elementary school would be located north of Russell Road near the town center. Each would be located on approximately 10 acres. ~~Each elementary school would initially accommodate approximately 650 students, with an ultimate expansion capacity of 900 students using portable classrooms.~~

~~With a combined capacity of over 2,700 students, t~~The proposed elementary schools would be able designed to accommodate the 2,107,064 elementary school children generated by the proposed Specific Plan as long as the schools were available concurrent with need. In the event that elementary school construction is delayed, short-term overcrowding could occur.

~~The proposed middle school would have an initial capacity of 500 students, with the potential to expand by another 900-950 students.—~~The proposed middle school would occupy a site of approximately 20 acres southwest of the Salinas Golf and Country Club. The proposed middle school would be designed to accommodate the 460 middle school children generated by the proposed Specific Plan as long as the school is available concurrent with need. In the event that school construction is delayed, short-term overcrowding could occur.

~~With a capacity of 500 students, the proposed middle school would be able to accommodate the 460 middle school children generated by the proposed Specific Plan as long as the school is available concurrent with need. In the event that school construction is delayed, short term overcrowding could occur.~~

Lagunita Elementary School District

The development area of the Specific Plan within the Lagunita Elementary School District would generate an estimated 85 students based on the District’s household generation rate. Therefore, with current enrollment the total student demand would be 147 which would exceed the school’s current design capacity of 100.

Salinas Union High School District

As stated earlier, the entire Specific Plan area is within the Salinas Union High School District. Based on a generation rate of 0.21 high school students per household, development based on the Specific Plan would generate 840 new high school students. A 32-acre high school with the capacity of 2,000 students would be located in the southern portion of the Specific Plan area, adjacent to Russell Road. The capacity of the proposed high school would more than meet the needs of the Specific Plan.

Although the Specific Plan area is in the Salinas Union High School District area, it should be noted that the Santa Rita Union School District has prepared a unification study, and is actively

seeking to include high schools as part of the educational facilities offered by the District. Should this occur, it is possible that the Santa Rita Union rather than the Salinas Union High School District would provide for the high school needs of the proposed Specific Plan. Should Santa Rita's unification efforts be successful, the high school site would likely be located adjacent to the existing Gavilan View Middle School on the southern edge of the Specific Plan area. This would require the existing Gavilan View Middle School to be closed and become part of the high school. As with the proposed high school which would be included in the Salinas Union High School District, the new school operated by the Santa Rita Unified High School District would meet the needs of the Specific Plan as long as it is provided concurrent with need.

~~Physical impacts from construction of schools within the Specific Plan area would be related to biology, land use compatibility, and traffic; a detailed discussion of impacts is found in the respective sections of this EIR. Biological impacts would be insignificant as the school sites are presently disturbed. Traffic effects would be related to localized congestion from student pickup and dropoff areas. This congestion would be dealt with when site plans are prepared for the individual schools. Similarly, playground noise impacts on nearby residential areas would also be resolved during site planning for the schools. Thus, construction of schools within the Specific Plan area would likely not result in any environmental impacts which would not be reduced to below a level of significance. Furthermore, environmental review would be required for each school prior to approval of a design for the facility.~~

Alternative 4E

As with Alternative 2, development under this alternative would generate more students than existing schools can accommodate. The environmental impacts of construction and expansion of schools would be the same as for Alternative 2.

HYH Property Project

The HYH Property is anticipated to have a total of 1,077 residential units; approximately 907 units within the Santa Rita Union School District and 170 units within the Lagunita Elementary School District. In order to assure that the educational needs of development within the HYH Property is met, there would be a need to construct schools and or classrooms for a proposed middle and high school as well as for the three elementary schools. Otherwise, the development would exacerbate capacity problems for the Districts serving the HYH Property as schools.

Santa Rita Union School District

Approximately 907 of the HYH Property residential units would be within the Santa Rita Union School District. Using a student generation rate per household of 0.55 for grades K through 6, the proposed project would generate approximately ~~500~~ 726 students. Using the student generation rate for grades 7 through 8 of 0.12 per household, the proposed project would generate approximately 109 students within the District boundaries.

As discussed above, the Santa Rita Union School District is currently operating beyond capacity. Although the HYH Property would result in significantly fewer students than the entire Specific

Plan area, the students generated by the HYH Property would potentially impact the Santa Rita Union School District. No schools are proposed within the HYH Property boundaries, however, construction of new elementary schools proposed as part of the Specific Plan would avoid capacity problems for existing schools.

Lagunita Elementary School District

The portion of the HYH Property that is within the Lagunita Elementary School District would include approximately 170 residential units. The HYH Property would generate an estimated 85 students based on the District's household generation rate. With current enrollment, the total student demand would be 147, which would exceed the school's current design capacity of 100. No additional school construction or expansion is planned in this District at this time.-

Salinas Union High School District

The entire HYH Property is within the Salinas Union High School District. Based on a student generation rate of 0.21 high school students per household, development within the HYH Property would generate approximately 227 high school students. The amount of high school students generated by the HYH Property would potentially impact the Salinas Union High School District because Everett Alvarez High School is currently operating beyond capacity. No schools are proposed within the HYH Property boundaries, however, construction of a new high school proposed as part of the Specific Plan would avoid capacity problems for existing schools.

As with the Specific Plan, development of the HYH Property would generate more students than existing schools can accommodate. The environmental impacts of construction and expansion of schools would be the same as those described ~~below~~above.

5.12.3.4 Mitigation Measures

The following section contains a summary statement for each significant school impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is provided which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.3-1: Substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities. (Direct)

Implementation of Alternative 2 would result in construction of several schools, the construction of which could cause significant biology, historic/archaeology and hydrology/water quality impacts, in order to maintain acceptable service ratios. Implementation of mitigation measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce impacts to less than significant.

Significance of Impact 5.12.3-1 after Mitigation: Less than significant.

Alternative 4E

Significant impacts related to schools would be the same as Impact 5.12.3-1. With implementation of corresponding mitigation measures, school construction impacts would be less than significant.

HYH Property Project

Impact 5.12.3-2: Substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities. (Direct)

Implementation of the HYH Property project would result in construction of several schools, the construction of which could cause significant biology, historic/archaeology and hydrology/water quality impacts, in order to maintain acceptable service ratios. Implementation of mitigation measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce impacts to less than significant.

Significance of Impact 5.12.3-2 after Mitigation: Less than significant.

5.12.4 FIRE PROTECTION

5.12.4.1 Existing Condition

Specific Plan

Fire Protection Service

The North County Fire District (NCFD) serves the northern, northeastern, and central portions of the project area. The Salinas Rural Fire District (SRFD) serves the southern, southeastern, southwestern and central portions of the project area. All county agencies and cities share in a mutual aid agreement for cooperative response. NCFD and SRFD have adopted identical fire codes which reduce confusion for each agency and are available upon request.

North County Fire District

NCFD's closest fire station is Station 2, located on Pesante Canyon Road in the unincorporated community of Prunedale. The station is approximately 2.5 miles to the northwestern portion of the project site off Harrison Road, and average response time is five minutes. This station is staffed by a three-person engine company and has two fire engines for structural fires and one fire engine for wildland fires. NCFD has an Insurance Service Office (ISO) rating of four. NCFD has mutual aid agreements with the City of Salinas Fire Department, SRFD, the Aromas Fire District, and the City of Marina Fire Department. NCFD currently serves a population of 40,000 and averages 2,600 emergency responses per year.

Salinas Rural Fire District

The southern, southeastern, and southwestern portions of the project area are within the Salinas Rural Fire District (SRFD) service boundary. The Salinas Rural Fire Protection District was formed in 1934 with the original boundaries surrounding the City of Salinas, extending along River Road to Pine Canyon. Over the years, annexations into the District have increased the service area to approximately 232 square miles with a population of about 30,000 residents. SRFD and the City of Salinas signed an Emergency Services Agreement to provide fire and EMS service through the Salinas Fire District (SFD) for approximately 30 miles of land within the SFRD directly north of the City of Salinas including the proposed southern portion of Rancho San Juan Specific Plan area.

City of Salinas Fire District

The primary station that would respond is City Fire Station #6; located on East Bolivar Street, 1.6 miles from the intersection of San Juan Grade Road and Rogge Road. Travel time from the station to this intersection is approximately three minutes. The station is staffed by a three-person paramedic engine company and has one fire engine for structural fires and a patrol vehicle for wildland fires. This station is back-up by the City's five other stations, second alarm apparatus from Salinas Rural and mutual aid. The response to a structure fire in the Specific Plan area would be three engine companies, one truck company, one rescue company and a Battalion Chief with a total of 14 suppression personnel.

HYH Property Project

The entire HYH Property is located within the NCFD. See previous discussion for existing conditions related to this District.

5.12.4.2 Design Considerations

Specific Plan

New structures within the proposed project will be required to meet a number of design criteria including fire flow, water storage, hydrant space, and access. The water distribution system will be designed to meet Uniform Fire Code requirements in conjunction with the Uniform Building Code (UBC) requirements, which take into account the size of planned structures. Design of the project, including construction of fire facility(s) will meet national standards and California ordinances regarding roofing materials, defensible space, and the distance of ornamental vegetation from buildings.

HYH Property Project

The proposed project would be required to adhere to the same design standards outlined and discussed above.

5.12.4.3 Thresholds of Significance

Fire protection impacts would be significant if the proposed project would:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

5.12.4.3 Potential Impacts

Alternative 2

Development of the Specific Plan area would result in a significant demand for fire protection services due to the change from undeveloped rural land to a variety of uses including: residential, industrial, commercial, and public facilities. Although fire stations maintained by the NCFD and SFD are within five minutes of the Specific Plan area, the additional development resulting from implementation of the Specific Plan would exceed the capacity of the two existing stations serving the Specific Plan area.

Development of the Specific Plan would impact both County fire districts and indirectly SFD. The impact of the Specific Plan can be offset by a minimum of one new fire station, within the Specific Plan area, with a minimum of one staffed engine company with three personnel. The Specific Plan includes a minimum of one new fire station within the Specific Plan area, with a minimum of one staffed engine company with three personnel.

It has not been determined at this time if there would be a joint station serving each County District; two separate stations, one for each District; or if one of the existing fire districts would serve the entire area. (See Figure 5.12.1 for possible locations in addition to the site dedicated by the HYH project) Construction of the fire station(s) would be funded through a Fire Mitigation Fee or a similar method agreed upon by the fire district. Coverage for the Specific Plan within the SRFD boundaries would continue to be provided by the City of Salinas through the Emergency Services Agreement, or a re-negotiated agreement, until such time as a fire station is constructed and staffed at the fire station site located in the Specific Plan, Planning Area 3-2 and Figure 5-5. This site was identified in the Rancho San Juan Fire Protection Plan, dated September 2004 as the preferred site. ~~Coverage for the Specific Plan area within SRFD boundaries would continue to be provided by the City of Salinas through the Emergency Services Agreement, or a re-negotiated agreement.~~

The additional fire station(s) proposed as part of the Specific Plan, if provided concurrently with need, would allow the affected fire districts to maintain their response times.

A proposed site has been identified for a fire station within the HYH property to serve the Butterfly Village project and the North County Fire District. A proposed site has been identified for a fire station within the HYH property, which would serve the entire Specific Plan area in addition to any other sites determined appropriate (see Figure 5.12-1). ~~The site is located in the~~

southwest portion of the project, west of the proposed golf course and south of the proposed golf maintenance facility. Access would be from an extension of Harrison Road and/or proposed Emily Drive. The proposed location is not adjacent to any sensitive receptors; however, it is in an area designated as a wildlife corridor. Environmental impacts associated with construction of the facility would be very similar to those discussed above (Section 5.12.1 Wastewater Treatment) for the development of the wastewater treatment facility.

Alternative 4E

As with Alternative 2, this alternative would generate sufficient demand for fire protection to warrant a new fire station within the Specific Plan area. Similar to Alternative 2, new fire facilities would not likely result in any significant impacts on the environment.

HYH Property Project

As with the Specific Plan, development of the HYH Property would create a demand for fire protection services that would exceed the ability of the existing fire stations to service the proposed development. As with the Specific Plan, the provision of a fire station(s), concurrent with need, would allow the affected Districts to maintain their response times and would not result in significant environmental impacts.

5.12.4.4 Mitigation Measures

The following section contains a summary statement for each significant fire protection impact related to the significance threshold and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following the impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.4-1: Substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives. (Direct)

Implementation of Alternative 2 would impact the two local fire departments serving the Specific Plan area and result in an increased need for fire protection services. The increased ~~pressure-service demand~~ on the local fire departments would result in ~~lower-increased~~ response times as well as the need for additional staff and equipment and would require construction of, at minimum, one new fire facility. Implementation of Mitigation Measures 5.04-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce the environmental impacts associated with construction of a new facility(ies) associated with implementing the Specific Plan to less than significant.

Level of Significance of Impact 5.12.4-1 after Mitigation: Less than significant.

Alternative 4E

Significant impacts related to fire service would be the same as Impact 5.12.4-1. With implementation of corresponding mitigation measures, construction of fire facility impacts would be less than significant.

HYH Property Project

Impact 5.12.4-2: Substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives. (Direct)

Implementation of the HYH Property project would impact the two local fire departments serving the HYH Property area and result in an increased need for fire protection services. The increased pressure on the local fire departments would result in lower response times as well as the need for additional staff and equipment and would require construction of, at minimum, one new fire facility. Implementation of Mitigation Measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce the environmental impacts associated with construction of a new facility(ies) associated with implementing the Specific Plan to less than significant.

Level of Significance of Impact 5.12.4-2 after Mitigation: Less than significant.

5.12.5 SOLID WASTE

5.12.5.1 Existing Conditions

Specific Plan

Waste from the Specific Plan area is currently taken to the Crazy Horse Landfill located on Crazy Horse Canyon Road approximately two miles north of the Specific Plan area. The total capacity of the Crazy Horse Landfill is approximately 4.3 million cubic yards. As of January 2002, the remaining capacity of this landfill was approximately 450,000 tons. It is expected that the landfill will reach maximum capacity between 2004 and 2005.

To address long-term solid waste management on a regional basis, the Salinas Valley Solid Waste Authority (SVSWA) certified an EIR in January 2003 which examines the actions and activities necessary to provide for approximately 25 years of solid waste capacity, assuming a population growth rate of 1.5 percent in the Salinas Valley (Regional Solid Waste Facilities Project EIR). The EIR studies four scenarios, three of which involve the vertical expansion of the Crazy Horse Landfill to create over 600,000 tons of additional capacity. The approved project includes development of a Salinas Transfer Station and King City Transfer Station; 30

foot vertical expansion at Crazy Horse Landfill to increase capacity by 640,000 tons and the life of the landfill by three to seven years; a 100 foot vertical expansion of the Johnson Canyon Road Landfill to increase capacity by 4.5 million tons and the life of the landfill by 18 to 22 years; and vertical expansion of Jolon Road Landfill by 4.5 million tons and the life of the landfill by 13 to 17 years.

If the Crazy Horse Landfill is not expanded and closes between 2004 and 2005, refuse from the Specific Plan area would be sent to the Johnson Canyon Landfill, located approximately two miles east of the City of Gonzales, which is south of the Specific Plan area within the Central Salinas Valley. The Johnson Canyon Landfill has a site capacity of 6.6 million cubic yards and a remaining capacity of approximately 2.9 million tons as of June 1999. It is anticipated that this landfill will reach capacity in 2045 (based on the current jurisdictions served by the landfill).

HYH Property Project

As with the Specific Plan, the HYH Property would be served by the Crazy Horse Landfill. After this landfill reaches capacity, the site would be served by the Johnson Canyon Landfill unless alternate sites are identified by the County in the interim.

5.12.5.2 Thresholds of Significance

Solid waste impacts would be significant if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered solid waste facilities, the construction of which could cause significant environmental impacts, in order to fulfill solid waste disposal needs.

5.12.5.3 Potential Impacts

Alternative 2

Development of the Specific Plan area would increase solid waste generation. Monterey County uses a population-based solid waste generation rate to forecast landfill life. Based on 4,000 dwelling units and an estimated 3.16 persons per dwelling unit, the population of the Specific Plan area would be approximately 12,640 people. A population of this size would generate 37.8 tons of solid waste per day at the rate of 6.7 pounds per person per day. This generation rate is an average of the rates from all sources of solid waste, including commercial and industrial sources. As discussed above, the SVSWA has planned for at least 25 years of growth in the Regional Solid Waste Facilities Project EIR. Based on demographic data, the SVSWA used an annual growth rate of 1.5 percent for the Salinas Valley to assure adequate landfill capacity. The Specific Plan would not change the growth rate of 1.5 percent because the original ADC has been in place for over 20 years, and growth in this area has been anticipated. Based on the anticipated lifespan of the regional landfill system and ongoing expansion planning, no significant environmental impacts would occur from development under the proposed Specific Plan with regard to solid waste that have not already been assessed and planned for.

As existing landfills would be able to provide solid waste disposal, implementation of the project would not result in any physical changes related to accommodating solid waste generated by the project. Thus, no significant environmental impacts would be related to serving the proposed development.

Alternative 4E

As with the Alternative 2, this alternative would generate an estimated 37.8 tons of solid waste per day. Also, as with Alternative 2, sufficient landfill capacity exists to accommodate the proposed Specific Plan and no environmental impacts would occur as a result of implementing Alternative 4E.

HYH Property Project

Based on 1,077 dwelling units and an estimated 3.16 persons per dwelling unit, the population produced by development of the HYH Property would be approximately 3,404 people. A population of this size would generate 10.2 tons of solid waste per day at the rate of 6.7 pound per person per day. As concluded with respect to the Specific Plan, solid waste generated by the HYH Property would be accommodated by the existing landfill system without a significant impact and no environmental impacts would occur as a result of the HYH project.

5.12.5.4 Mitigation Measures

Alternative 2

No mitigation measures would be required, as sufficient landfill space is expected to be available for the project.

Alternative 4E

No mitigation measures would be required, as sufficient landfill space is expected to be available for the project.

HYH Property Project

No mitigation measures would be required, as sufficient landfill space is expected to be available for the project.

5.12.6 PARKS AND RECREATION

5.12.6.1 Existing Conditions

Specific Plan

The County of Monterey designates two kinds of parks, which are local and regional parks. Local parks are located largely within developments; therefore the County does not maintain information about these parks. The discussion below focuses on regional parks.

The County of Monterey's Department of Parks maintains nine regional parks encompassing over 12,155 acres of land and 10,000 acres of lakes. Of this total, over 800 acres are considered to be developed parkland. A variety of activities occur in the County park system, including camping, hiking, nature interpretation, lake activities, day use, group sports and special events.

Manzanita Park is located approximately two miles north of the Specific Plan area in Prunedale and is the closest regional park to the project site. The 464-acre park includes a sports complex for soccer, Little League baseball, and other activities as well as hiking and equestrian trails. Currently, the North County Youth Recreation Association has developed 56 acres of Manzanita Park. This portion of the park is not open to the general public and is not operated as a public park in the traditional sense.

Toro Park, located south of Salinas on SR 68, is the largest regional park in the County system. This park contains 4,783 acres, of which 77 acres have been developed for day uses. The park includes nearly 20 miles of trails available to hikers, equestrian users and mountain bikes.

Royal Oaks Park, located north of the project site off of Highway 101, is located in the project vicinity. Approximately 40 of its 122 acres have been developed for day use. The park provides recreational opportunities for soccer, basketball, volleyball, horseshoes and tennis. There are also trails for hiking and facilities for youth overnight campouts, group meetings and weddings.

HYH Property Project

The HYH Property would be served by the same parks described above.

5.12.6.2 Thresholds of Significance

Parks and recreation impacts would be significant if the proposed project would:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered park and recreation facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios.

5.12.6.3 Potential Impacts

Alternative 2

As indicated in Section 4.3.1.2, the Specific Plan includes a variety of park and recreation facilities and land to meet the needs of future development within the Specific Plan (see Figure 4.3-1 for locations). Typically, parkland is divided into two classifications: local and regional. Local parks provide opportunities for urban recreation in urban environments. In contrast, regional parks provide more rural or wilderness recreation opportunities. The County of Monterey standard for local developed parkland is 3 acres per 1,000 people while the standard for developed regional parkland is 0.7 acre per 1,000 people. In addition, the City of Salinas standard for local developed parkland is also 3 acres per 1,000 people; they do not have a requirement for regional parkland.

The Specific Plan would provide the following park and recreation facilities:

- A minimum of 31 acres of Mini-Parks and Neighborhood Parks; and
- Two Community Parks totaling a minimum of 30 acres.

The parkland proposed for the Specific Plan area would exceed the County's standard for developed local parkland. According to County standards, the park needs of the proposed project are based on an assumption of approximately 12,640 residents. Applying this standard results in the need for 38.9 acres of parkland. It should be noted that individual developers would have some discretion in location and size of parks, therefore there could be a minimum of 61 acres of parkland. The Specific Plan area would have nearly two times the requirement with approximately 80 acres of parkland. No recreation impacts would occur as long as the parkland is acquired and improved concurrent with need.

Section 19.12.010 of the Subdivision Ordinance, Item "D" Standards and Formula for Dedication of Land, indicates that parkland should be provided for a variety of needs and age groups, "including but not limited to tot lots, playlots, playgrounds, neighborhood parks, playfields, community or district parks and other specialized recreational facilities that may service the family group and also senior citizens and child care activities." The proposed project provides for the development of mini-parks, neighborhood parks, and community parks.

Development of the Specific Plan area would increase demand for developed regional as well as local parkland. Based on developed regional parkland standard, approximately 8.8 acres of developed regional parkland would be required to accommodate population generation in the Specific Plan area. Based on the total population of Monterey County and the total acres of regional parks, the County as a whole has well over the 0.7 acre per 1,000 people requirement. Although developed regional parkland is not proposed as part of the project, the Specific Plan would not impact the County's regional park system because the County as a whole has an adequate supply, and Manzanita Park is less than two miles from the Specific Plan area. In addition, a potential regional park could be located in the Future Development/Interim Agricultural area in the northeastern portion of the Specific Plan area. Such a regional park could include 50 acres and encompass the Hebert Ranch "Red Pony Barn" as a historical component of the park

No physical impacts would occur from construction of the parks beyond that associated with grading the property for development. The proposed parks are located within the proposed development areas. As a consequence, any biological impacts would be compensated as a part of the grading mitigation. Traffic would be minor as the parks will serve local residents, many of whom would likely walk or ride to the parks. The parks would be compatible with the surrounding uses.

Alternative 4E

As with Alternative 2, this alternative would provide more developed local parkland than required by the County. With respect to developed regional parkland, based on the total population of Monterey County and the total acres of regional parks, the County as a whole has well over the 0.7 acre per 1,000 people requirement. Although developed regional parkland is not proposed as part of the project, the Specific Plan would not impact the County's regional park system because the County as a whole has an adequate supply, and Manzanita Park is less than two miles from the Specific Plan area. As discussed above, no significant environmental effects would occur from development of onsite parks.

HYH Property Project

The projected population generated by development of the HYH Property would be 3,404 persons. Based on County standards, the HYH Property would generate demand for 10.2 acres of developed local parkland and 2.4 acres of developed regional parkland. While only 8.5 acres of developed local parkland would be constructed as part of the HYH Property proposal, the overall developed local parkland would be achieved with even with partial build-out of the overall Specific Plan. It is likely that such additional parkland will be provided before full build-out of the HYH project. Thus, the shortfall of developed local parkland, if it occurs, would be temporary and not significant.

With respect to developed regional parkland, the HYH Property would not include any regional parkland. However, as discussed above, the demand of 2.4 acres of developed regional parkland generated by the project would not be sufficient to overload the County's regional parkland system.

As discussed above, no significant environmental effects would occur from development of onsite parks.

5.12.6.4 Mitigation Measures

The following section contains a summary statement for each significant park and recreation impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.6-1: Increased pressure on local park and recreational resources requiring construction of new parks. (Direct)

Implementation of Alternative 2 would result in the need for 38.9 acres of local parkland and 8.8 acres of regional parkland resources. Implementation of Mitigation Measures 5.4-1 through 5.4-

5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce park construction impacts associated with implementing the Specific Plan to less than significant.

Level of Significance of Impact 5.12.6-1 after Mitigation: Less than significant.

Alternative 4E

Significant impacts related to park construction would be the same as Impact 5.12.6-1. With implementation of corresponding mitigation measure, park construction impacts would be less than significant.

HYH Property Project

Impact 5.12.6-2: Increased pressure on local park and recreational resources Requiring construction of new park-construction (Direct)

Implementation of the HYH property project would result in the need for 10.2 acres of local parkland and 2.4 acres of regional parkland resources. Significant impacts to park construction would be the same as Impact 5.12.6-1. With implementation of mitigation measures (except for 5.4-1a and 5.4-2 which would not apply to the HYH Properties project), park construction impacts would be less than significant.

Level of Significance of Impact 5.12.6-2 after Mitigation: Less than significant.

5.12.7 LIBRARY SERVICE

5.12.7.1 Existing Conditions

Specific Plan

Monterey County Free Libraries

Monterey County operates 17 branch libraries and three library services, two bookmobile libraries, a books-by-mail program, a pre-school children's outreach vehicle, one deposit collection and an adult literacy program. Two branch libraries currently exist in the project vicinity. The Prunedale Branch Library, 10 miles north of the Specific Plan area, occupies 7,200 square feet and houses approximately 42,000 volumes. The Castroville Branch Library is located five miles northwest of the Specific Plan area, occupies 3,800 feet, and holds approximately 25,000 volumes.

Bookmobiles stop at 35 locations throughout the County, in areas that are too distant from the branch facilities, or with populations too small to support a fixed branch. This service currently operates at capacity, but could be expanded with additional funding. The adult literacy program is a volunteer-based tutoring effort that matches one tutor with one adult. Demands on the program far outrun the supply of volunteer tutors. The books-by-mail program serves rural, inaccessible areas of the County.

Due to population growth and diversity, demand for library services has increased in recent years. Changes in the economy and job market have increased public needs for career training, job finding, and fiscal management information, as well as low cost recreation. Elimination of many public school library services has also caused an increased demand for public library facilities.

HYH Property Project

Existing conditions are the same as those described for the Specific Plan.

5.12.7.2 Thresholds of Significance

Library impacts would be significant if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios.

5.12.7.3 Potential Impacts

Alternative 2

Existing public library facilities are not adequate to meet the projected community’s needs. The maximum standard commute time to reach a library facility is fifteen minutes, while the target commute time is under five minutes. The nearest library facilities, Prunedale, Castroville, and El Gavilan are already exceeding capacity and are all too distant to provide adequate library service to the Specific Plan area. The project would also exceed the capacity of the bookmobile service.

The Monterey County General Plan requires that libraries be sited in areas of development concentration. The County of Monterey uses the following general standards for library service developed by the American Library Association (ALA):

Library square footage per capita	0.6 square feet
Library materials per capita	4 items
Reader seats per 1,000 population	5 seats
Staff persons per 1,000 population	0.4 persons
Professional staff per 20,000 population	1.0 professionals
Periodical subscription per 1,000 population	2 periodicals
Public service hours for a community with a population of 8,000 – 17,999	56/hours/week

Based on 4,000 dwelling units and an estimated 3.16 persons per dwelling unit, the population of the Specific Plan area at buildout would be approximately 12,640. Based on the American Library Association (ALA) standards and the projected project population, the following needs are estimated for the Specific Plan area at buildout:

- 7,584 square foot library facility;
- Library collection size of 50,560 items;
- 64 reader seats;
- A staff of approximately five persons and one professional;
- 25 periodical subscriptions; and
- No less than 56 open hours per week.

A public library is proposed for the middle school site which would meet the standards above. Any in-lieu library fees or property tax revenues from the Specific Plan area designated for libraries would be used to fund this public library. Thus, the proposed Specific Plan would meet standards for library as long as the new library is provided contingent with need.

No significant physical impacts would occur from construction of the library beyond that associated with the development of the middle school, which would be addressed at the time a project specific site has been agreed upon with the appropriate school district. Traffic generated by the library would be minimal and has already been assumed as part of the analysis of the Specific Plan.

Alternative 4E

As with Alternative 2, a new library would be constructed as part of this alternative. Nor would significant environmental impacts result from construction of a new library.

HYH Property Project

Based on the American Library Association (ALA) standards and the projected project population of 3,404, the following needs are estimated for the Specific Plan area at buildout:

- 2,042 square foot library facility;
- Library collection size of 13,616 items;
- 17 reader seats;
- A staff of approximately three persons and one professional;
- 6 periodical subscriptions; and
- No minimum operation hours per week.

The County Library Director has determined that the Specific Plan area would require only one library. Therefore, as long as the library is provided concurrent with need within the overall Specific Plan area, library service standards would be met for the HYH project. Nor would significant environmental impacts result from construction of a new library.

5.12.7.4 Mitigation Measures

The following section contains a summary statement for each significant library impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.7-1: Substantial adverse physical impacts associated with the provision of new or physically altered library facility(ies). (Direct)

Implementation of Alternative 2 would result in substantial adverse physical impacts associated with provision of new or physically altered library facility(ies), the construction of which could cause significant biology, historic/archaeology and hydrology/water quality impacts. Implementation of Mitigation Measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce impacts to less than significant.

Level of Significance of Impact 5.12.7-1 after Mitigation: Less than significant.

Alternative 4E

Significant impacts related to library service would be the same as Impact 5.12.7-1. With implementation of corresponding mitigation measures, environmental impacts associated with the construction of a library facility would be less than significant.

HYH Property Project

Impact 5.12.7-2: Substantial adverse physical impacts associated with the provision of new or physically altered library facility(ies). (Direct)

Implementation of the HYH Property project would result in substantial adverse physical impacts associated with provision of new or physically altered library facility(ies), the construction of which could cause significant biology, historic/archaeology and hydrology/water quality impacts. Implementation of Mitigation Measures 5.4-1 through 5.4-5, 5.5-1 through 5.5-3, and 5.9-1, 5.9-4B, and 5.9-5 would reduce impacts to less than significant.

Level of Significance of Impact 5.12.7-2 after Mitigation: Less than significant.

5.12.8 WATER

Refer to Section 5.10 for a discussion of water supply for the proposed Specific Plan.

5.12.9 SHERIFF SERVICES

5.12.9.1 Existing Conditions

Environmental Setting

Specific Plan

The Monterey County Sheriff's Office (MCSD) provides police protection services in unincorporated areas of the County, including the project area. The primary station that would serve the Specific Plan area is the Central Patrol Station, located at 1414 Natividad Road in Salinas. Stations located in the City of Monterey and City of King would have staff available for additional assistance as needed. The Sheriff's Office has a staff of approximately 100 deputies, and the County has a goal for a 1:1,000 deputy-to-population ratio standard for community areas.

The Central Patrol Station has anywhere from 5 to 14 deputies on patrol. A minimum of nine deputies are on duty during the day and five to six deputies are on duty at night. The Specific Plan area is in Beat 3a, which has an average response time of 13 minutes, 40 seconds.

HYH Property Project

This property would be served by the Salinas Station as indicated above.

Mutual Aid Agreement

The MCSD engages in mutual assistance programs with both the California Highway Patrol and the local fire agencies.

5.12.9.2 Thresholds of Significance

Police protection impacts would be significant if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable response times.

5.12.9.3 Potential Impacts

Alternative 2

At buildout of the project area, a total of 4,000 dwellings and a population of approximately 12,640 would be located in the Specific Plan area. Applying the Sheriff's Office goal of one officer per 1,000 persons, implementation of the project would result in a need for an additional 13 patrol deputies. The increase of population and subsequent increase of patrol officers would also necessitate additional supervisors, support staff, vehicles and equipment.

According to the Sheriff's Office, the proximity of the Natividad Road station would preclude the need for a full station to be located within the Specific Plan area. However, the Specific Plan provides for a community substation for deputies to work on reports and establish a "presence" in the community (see Figure 5.12-1 for possible location). The proposed substation would be located either in Planning Area 1 – Town Center and/or placed with the proposed fire station(s) and would not be a freestanding building. Or depending on staffing needs, the substation could be integrated into other Civic, Community Center, or Public Facility uses supporting sustainable principles and goals of the Specific Plan.

Since the proposed Specific Plan will be developed in phases over an estimated 20 years, the Sheriff's Office would analyze and determine facility and staffing needs and request phasing of additional staff and equipment as needed. Any request for additional facilities and staff would need to be approved by the Board of Supervisors. A new sheriff facility is not required, nor is substantial renovation or modifications needed to an existing facility; therefore there are no environmental impacts associated with additional sheriff services.

Alternative 4E

As with Alternative 2, this alternative would generate demand for 13 new deputies to provide service to the Specific Plan area; however, an additional facility or modifications to an existing facility will not be required because a substation will be created within the Specific Plan area as warranted.

HYH Property Project

As with Alternative 2, this alternative would generate demand for 4 of the 13 new deputies needed to provide additional service to the Specific Plan area; however, an additional facility or modifications to an existing facility will not be required because a substation will be created within the Specific Plan area as warranted.

5.12.9.4 Mitigation Measures

The following section contains a summary statement for each significant police protection impact related to the significance thresholds and identified in the previous discussion including a determination as to whether the significant impact is direct or indirect. Immediately following each impact statement are one or more mitigation measures which would reduce the impact. Lastly, a conclusion is indicated which indicates whether the mitigation measures would reduce the impact to below a level of significance.

Alternative 2

Impact 5.12.9-1: Substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable response times. (Direct)

Implementation of Alternative 2 would increase pressure on local police protection service, resulting in lowered response times and the need for additional staff and equipment; however, construction of additional facilities or modifications to existing facilities is not required. Implementation of the following mitigation measure would reduce police protection response time impacts associated with implementing the Specific Plan to less than significant.

Mitigation Measure 5.12.9-1: Prior to issuance of a certificate of occupancy, the applicant shall comply with the Monterey County Public Safety and Security Guidelines to the satisfaction of the Monterey County Sheriff's Department. ~~The following design features shall be included throughout development of the Specific Plan:~~

- ~~1. Levels of lighting, although muted to conform to the residential character of the setting will be incorporated into the project design to facilitate patrol performance;~~
- ~~2. Landscaping will be designed so as not to limit visibility of the homes for patrol purposes and residential security;~~
- ~~3. Address numbering will be consistent and a street guide will be provided at the entrance of residential subdivisions/multi-family complexes;~~
- ~~4. Doors surrounded by glass will be equipped by double deadbolts. Single cylinder deadbolts will be placed on all other doors. Sliding glass doors will have auxiliary locking devices; and Residents who intend to incorporate alarm systems into their homes will be advised of the Sheriff's Department and Communication Department policies and asked to consult with representatives of these two departments prior to installation of such systems. According to County Ordinance, alarm systems must be registered with the Sheriff's Department prior to installation.~~

Level of Significance of Impact 5.12.9-1 after Mitigation: Less than significant.

Alternative 4E

Significant impacts related to police protection would be the same as Impact 5.12.9-1. With implementation of Mitigation Measure 5.12.9-1, police protection impacts would be less than significant.

HYH Property Project

Impact 5.12.9-2: Increased need for police protection service. (Direct)

Implementation of HYH Property project would increase pressure on local police protection service, resulting in lowered response times and the need for additional staff and equipment. Implementation of mitigation measure 5.12.9-1 would reduce police protection impacts associated with implementing the HYH Property project to less than significant.

Level of Significance of Impact 5.12.9-2 after Mitigation: Less than significant.

CHAPTER 6.0

CUMULATIVE IMPACTS

Section 15130 of the State CEQA Guidelines requires that an EIR “address cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” According to Section 15065(c), “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Based on Section 15130, the discussion of cumulative effects “need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness.”

Due to the size of the proposed Specific Plan and the potential area of influence, the following analysis of cumulative impacts relies in part on the growth projections contained in the Draft Environmental Impact Report for Monterey County 21st Century General Plan Update (GPU DEIR). While this draft EIR has not been certified, it contains more accurate estimates of future growth because it is the most recently prepared assessment of potential growth in the County and the 12 cities in the County. Furthermore, the DEIR relies on information from completed studies and adopted plans.

The major categories of potential growth under the GPU are summarized below. According to GPU DEIR, the County has identified 8,830 acres as appropriate for urban development within the immediate future. These areas include the County portion of former Fort Ord, the Rancho San Juan Specific Plan area, and the communities of Castroville, Pajaro and Boronda. These five areas have a combined build-out potential of 10,567 new housing units. In addition, the plan includes other areas to be designated for growth: the area of Pine Canyon (west of King City), the community of San Lucas, and an expanded area to be added to Rancho San Juan. These additional growth areas would add another 2,626 acres to the plan’s land supply designated for growth, and have the potential for an additional 6,068 units, raising the number of potential new dwellings to 16,635. Development of existing lots of record has the potential to add to the total.

In addition to impacts that are cumulatively significant under the General Plan Update, there are also additional levels of cumulative impact resulting from city and County growth combined. The magnitude of future growth in the 12 cities is uncertain and projections range from around 87,000 persons (assuming AMBAG projections are correct and the cities and County split growth 64 percent and 36%, respectively) to more than twice that amount, 172,000 (assuming cities meet their desired growth levels, and a 70 percent and 30 percent cities/County split, respectively). The magnitude of city growth at either end of this potential range is great enough to result in impacts that are not only significant on their own, but also cumulatively significant in concert with similar impacts of the GPU.

Further, the City of Salinas is adjacent to the Specific Plan area so its General Plan is relevant to a cumulative impact assessment. The City of Salinas projects a future population of 69,287 additional people, and an increase of approximately 18,397 residential units.

This anticipated increase in development within the unincorporated area would combine with impacts related to the development of the Rancho San Juan Specific Plan and therefore result in cumulative impacts. Of the direct impacts discussed in Chapter 5.0 (Environmental Analysis), significant cumulative impacts are anticipated in the following areas:

- Agriculture;
- Air Quality;
- Archaeological/Historical Resources;
- Biology;
- Water Quality;
- Noise;
- Traffic and Circulation;
- Water Resources;
- Landform Alteration; and
- Visual Quality.

The cumulative impacts related to each of these areas are discussed in Section 6.1. As the two Specific Plan Alternatives would have essentially the same cumulative effects, the following discussion applies to both Alternative 2 and 4E. Although the cumulative effects of the HYH Property Project would reflect those of the Specific Plan, a separate discussion is provided to assure a project-level analysis.

The following issues considered in Chapter 5.0 (Environmental Analysis), are not associated with significant cumulative impacts. The basis for this conclusion is discussed in Section 6.2.

- Geology and Soils;
- Hydrology;
- Land Use;
- Parks and Recreation;

- Public Services (Fire Protection, Police Protection, Libraries, Schools, Solid Waste, Energy and Wastewater).

6.1 SIGNIFICANT CUMULATIVE IMPACTS

6.1.1 AGRICULTURE

Cumulatively significant agricultural impacts would occur with respect to the following significance thresholds identified in Chapter 5.11 (Agriculture):

- Loss or conversion of Important Farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance), as defined by the State Department of Conservation, to non-agricultural use; and/or
- Involve other changes in the existing environment which, due to their location or nature, could result in pressure to convert Important Farmland to non-agricultural use.

6.1.1.1 Impact

Specific Plan

The loss of ~~2,271~~ 1,531.7 acres of Important Farmland which would result from development within the Specific Plan area would combine with the loss of Important Farmland associated with other developments in the region. Although the amount of land in agricultural production has increased in recent years, development has removed Important Farmland from future use for agriculture. Additional development is expected to occur in the near future which will further reduce the acreage of Important Farmland.

Similarly, development of the Specific Plan area adjacent to ongoing agriculture would combine with other new development sharing boundaries with ongoing agriculture. As the Specific Plan is not located in the midst of extensive agriculture, it would not have a significant cumulative impact with respect to agricultural pressure.

Therefore, the cumulative impacts to agricultural lands are significant due to the conversion of Important Farmland to non-agricultural uses.

HYH Property Project

As with the Specific Plan, the loss of 179.2 acres of Important Farmland would combine with other losses throughout the County to result in a significant cumulative impact on agriculture. The interface of residential development with ongoing agriculture around the HYH property would not combine with development pressure from other future development to have a significant cumulative impact on existing agricultural operations.

6.1.1.2 Mitigation Measures

Specific Plan

As indicated in Chapter 5.11 (Agriculture), the County's General Plan has identified Areas of Development Concentration, such as Rancho San Juan, where development is to be concentrated to reduce the need to develop agricultural land to meet the job and housing needs of the region.

Implementation of Mitigation Measure 5.11-1b would also help reduce the loss of agricultural land which accompanies new development. This measure would require in-kind protection of agricultural land at a 1:1 compensation ratio through easement dedication and/or payment of fees to the County.

Although this measure would assure protection of other agricultural land, a net loss in agricultural land would remain. Thus, the cumulative impact of the proposed project would be significant and unmitigated.

HYH Property Project

As the HYH Property Project would be required to either contribute to funding County preparation of an agricultural compensation program if the project is the first to develop within the Specific plan, or abide by Mitigation Measure 5.11-1b discussed above, it may not be required to acquire easements over other Important Farmland. Thus, the project would result in a cumulatively significant impact due to farmland conversion.

6.1.1.3 Level of Significance of Impact 6.1.1 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.2 AIR QUALITY

Cumulatively significant air quality impacts would occur with respect to the following significance thresholds identified in Chapter 5.7 (Air Quality):

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality

standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); and/or

- Expose sensitive receptors to substantial pollutant concentrations.

6.1.2.1 Impacts

Specific Plan

As discussed in Chapter 5.7 (Air Quality), the North Central Coast Air Basin (NCCAB) within which the Specific Plan area is located experiences unhealthful air due to a variety of emission sources, of which, automobile emissions play a major role. The air basin is designated as a moderate non-attainment area for 1-hour ozone as well as a non-attainment area for the PM₁₀. By nature, air quality problems with the exception of CO hotspots, are regional rather than local due to the accumulation of multiple emission sources within individual air basins. Consequently, all development within the NCCAB contributes to the air quality issues related to ozone and PM₁₀.

Based on calculations contained in Chapter 5.7 (Air Quality), the proposed Specific Plan would generate short-term and long-term emissions that would exceed the thresholds discussed above. Based on the anticipated amount of grading to occur on any given day, the PM₁₀ levels generated from the project would exceed the daily emission standard. This PM₁₀ contribution combined with grading for other planned projects within the NCCAB would cause the daily emission standard to be exceeded and result in a significant cumulative short-term impact.

Automobile emissions upon buildout of the Specific Plan would exceed emission standards for ROG, NO_x, CO, and PM₁₀. These long-term emission levels would combine with long-term emissions from other future development to result in a significant cumulative long-term impact on regional air quality.

As indicated in Chapter 5.2 (Traffic/Circulation), development of the Specific Plan would adversely impact the level of services at a number of intersections and roadway segments within the project area. Many of these impacts would exceed the traffic flow thresholds established for air quality.

HYH Property Project

As with the overall Specific Plan, short-term levels of PM₁₀ related to construction within the HYH Property as well as long-term emissions related primarily to automobile trips would combine with other future development in the NCCAB to result in significant cumulative air quality impacts.

6.1.2.2 Mitigation Measures

Specific Plan

Implementation of best management practices related to construction (Mitigation Measures 5.7-1a through 1c and 5.7-2a through 2e) would reduce cumulative PM₁₀ impacts related to the Specific Plan through dust controls and construction equipment emission reductions. However, the remaining PM₁₀ generated during construction would still combine with other grading projects to have a significant cumulative impact on air quality due to the fact that emissions would exceed the threshold standard. The problem is exacerbated by the fact that the NCCAB is designated as a non-attainment basin for PM₁₀, and the inability of single projects to regulate other development in the region.

Implementation of Mitigation Measures 5.7-3a through 3g would reduce the dependence of residents of the Specific Plan on the automobile for transportation; thus, reducing the number of automobile emissions contributed to the NCCAB from the proposed Specific Plan. Similar measures required of other new developments would also proportionately reduce the amount of air emissions contributed by automobile use associated with new development in the region. However, reduction in the levels of existing automobile emissions is beyond the control of any single development project. Ultimately, the achievement of healthful air quality will be achieved through regional measures identified by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) and, to a lesser extent, the California Air Resources Board (CARB). The MBUAPCD sets and enforces regulations for stationary sources in the basin and develops and implements Transportation Control Measures (TCM) through the Air Quality Management Plan prepared for the Monterey Bay region. The CARB is charged with controlling motor vehicle emissions by establishing legal emission rates for new vehicles and enforcing the vehicle inspection program. Mitigation Measures 5.7-3a through 3g would not avoid significant cumulative air quality impacts. In addition, implementation of mitigation measures 5.2-1 through 3 would reduce but not avoid traffic congestion at local roadway segments and intersections.

HYH Property Project

Implementation of best management practices related to construction (Mitigation Measures 5.7-1a through 1c, and 5.7-2a through 2e) would reduce cumulative PM₁₀ impacts related to the HYH Property Project through dust controls and construction equipment emission reductions. However, the remaining PM₁₀ generated during construction would still combine with other grading projects to have a significant cumulative impact on air quality due to the fact that the NCCAB is designated as a non-attainment basin for PM₁₀.

As with the Specific Plan, implementation of Mitigation Measure 5.2.9 would reduce but not avoid automobile emissions and congestion at local intersections and roadway segments. Their cumulative air quality impacts would be significant and not reduced below a level of significance.

6.1.2.3 Level of Significance of Impact 6.1.2 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.3 ARCHAEOLOGICAL/HISTORICAL RESOURCES

Cumulatively significant archaeological/historical impacts would occur with respect to the following significance thresholds identified in Chapter 5.5 (Archaeological/Historical Resources):

- Cause a substantial adverse change in the significance of a cultural resource that is listed in, or determined to be eligible for listing in, the California Register of Historical Resources; listed in a local register of historical resources or identified as significant in an historical resource survey; or meets any of the following criteria:
 - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - Is associated with the lives of persons important in our past;
 - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of any important creative individual, or possesses high artistic values; or
 - Has yielded, or may be likely to yield, information important in prehistory or history (Section 15064.5 (b)).

6.1.3.1 Impact

Specific Plan

Significant cumulative impacts would occur with respect to archaeological and historical resources. As discussed in Chapter 5.5 (Archaeological/Historical Resources), development of the Specific Plan area would result in the loss of historic resources which are considered significant. In addition, the potential exists for impacts to undetectable subsurface archaeological resources which may occur within the Specific Plan area.

The physical loss of the Schoch Dairy, Espinosa Adobe, Battle of Natividad site and several structures in excess of 45 years old as well as indirect impacts on the rural context of the Red Pony Barn could combine with the losses of other historic buildings in the region to create a significant cumulative impact.

Should significant subsurface archaeological deposits occur within the development area, the loss of these resources and the associated information could have a significant cumulative impact on archaeological resources when combined with impacts of other future developments on archaeological resources.

HYH Property Project

Due to the potential presence of subsurface archaeological resources and the effect of the HYH Property Project on foreground views from the Red Pony Barn, this project could combine with other developments in the area to cumulatively impact archaeological and historical resources in the event that full mitigation cannot be achieved by other developments.

6.1.3.2 Mitigation Measures

Specific Plan

Mitigation measures identified in Chapter 5.5 (Archaeological/Historical Resources), would reduce the cumulative impacts on archaeological and historical resources by requiring analysis and data gathering of onsite resources before they are impacted. This action would retain valuable historical information associated with the onsite resources and make it available for future research. Although similar, measures taken on other projects could reduce the impact to cultural resources, the magnitude of the value of these resources could be sufficient to prevent analysis to fully compensate for the loss of an archaeological or historical resource. Consequently, the impacts to onsite resources could combine with other losses to create significant cumulative impacts to archaeological and historical resources which may not be able to be mitigated below a level of significance.

HYH Property Project

While the HYH Property Project, with mitigation measures, would not have a direct significant impact on any historic resources, the impacts to resources when combined with the impacts from other development in Rancho San Juan could result in a significant cumulative impact to historic resources. Thus, significant cumulative impacts would occur with respect to archeological and/or historical resources.

6.1.3.3 Level of Significance of Impact 6.1.3 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.4 BIOLOGY

Cumulatively significant biological impacts would occur with respect to the following significance thresholds identified in Chapter 5.4 (Biology):

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; and/or
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

6.1.4.1 Impact

Specific Plan

As discussed in Chapter 5.4 (Biology), the Specific Plan would impact several biological resources which are considered regionally significant including wetlands, native grasslands and associated sensitive plants and animals. Although future development within the Specific Plan area would be required to create new wetlands and grasslands including the fragrant fritillary, the proposed golf course would disrupt the natural drainage channel through the northern portion of the Specific Plan area as well as disrupt animal movement. Future development in the County will continue to diminish the amount of these resources through direct habitat destruction or indirect effects such as domestic pet harassment, noise and lighting. Thus, the proposed Specific Plan would result in cumulatively significant impacts on regional biological resources.

HYH Property Project

Impacts of the HYH Property Project on wetlands, native grasslands and the fragrant fritillary would combine with losses of these resources associated with other development. Due to the sensitivity of these resources, the impact would be considered cumulatively significant.

6.1.4.2 Mitigation Measures

Specific Plan

As with the proposed Specific Plan, other developments would be required to compensate for significant impacts to biological resources. Compensation would be required to take the form of

habitat creation and/or protection. While these measures would individually reduce the impact on biological resources, the cumulative impact would be unmitigated as many of the habitats and resources would experience a net reduction. Only wetland impacts could be expected to be fully mitigated due to state and federal requirements that there be no net loss in wetlands.

HYH Property Project

As with the Specific Plan, only the cumulative impacts on wetlands would be expected to be reduced to below a level of significance.

6.1.4.3 Level of Significance of Impact 6.1.4 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.5 NOISE

Cumulatively significant noise impacts would occur with respect to the following significance thresholds identified in Chapter 5.6 (Noise):

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. As discussed above, a level of 60 CNEL is used as the threshold for outdoor residential noise in accordance with the County's General Plan Update; the commercial threshold is 75 dBA CNEL for traffic noise. Noise levels in excess of levels identified in Table 5.6-1 shall be considered significant. A level of 45 dBA is used for indoor levels within habitable portions of residences; and/or
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels.

6.1.5.1 Impacts

Specific Plan

As discussed in Chapter 5.6 (Noise), traffic associated with buildout of the Specific Plan area would have a cumulatively significant impact on existing homes located along Russell Road, west of San Juan Grade Road, and North Main Street, south of Russell Road (Alternative 4E only). Even though the affected homes already experience unacceptable traffic noise levels, the additional project traffic in combination with other future developments served by these roads would result in substantial increase in the traffic noise for nearby residents and, thus, a significant cumulative noise impact.

HYH Property Project

Based on the analysis contained in Chapter 5.6 (Noise), the addition of HYH Property Project traffic to local roadways would only exceed significance thresholds on one roadway segment: Harrison Road, north of Russell Road. However, as no existing residences occur along this segment, no significant cumulative impacts would occur from implementation of the HYH Property Project.

6.1.5.2 Mitigation Measures

Specific Plan

Implementation of Mitigation Measures 5.6-2 and 3 would implement noise attenuation along impacted portions of North Main Street and Russell Road. These measures would be designed to attenuate additional traffic noise to below the significance thresholds. While attenuation would technically be sufficient to reduce cumulative traffic noise impacts to below a level of significance, implementation of these measures may not be guaranteed in the event that the right to implement measures cannot be secured from affected property owners. Furthermore, even with noise barriers, some increase in noise would be experienced by adjacent residents. Thus, cumulative traffic noise impacts related to the Specific Plan are considered significant and unmitigated.

HYH Property Project

No mitigation measures would be required.

6.1.5.3 Level of Significance of Impact 6.1.5 after Mitigation

Specific Plan

Significant.

HYH Property Project

Less than significant.

6.1.6 WATER QUALITY

Cumulatively significant water quality impacts would occur with respect to the following significance thresholds identified in Chapter 5.9 (Hydrology/Water Quality):

- Substantially degrade the quality of groundwater and surface water by violating water quality standards or discharge permit requirements.

6.1.6.1 Impact

Specific Plan

Reduced water quality associated with development of the Specific Plan would combine with urban runoff from other development projects in the area to degrade the quality of surface and ground water. Thus, cumulatively significant impacts to water quality would occur with implementation of the proposed Specific Plan.

HYH Property Project

Development of the proposed HYH Property Project would generate urban runoff which would combine with that generated by other development to result in a cumulative significant impact on water quality. Operation of the golf course poses the greatest potential for cumulative impacts due to the use of pesticides and fertilizers. Although best management practices would be conducted as part of the golf course, the potential pollutants from golf course operations cannot be reduced to zero. Thus, significant cumulative water quality impacts would occur.

6.1.6.2 Mitigation Measures

Specific Plan

Implementation of best management practices required by National Pollutant Discharge Elimination System Permit as well as project-specific measures would reduce the individual contributions. However, due to the severity of the water quality problems associated with surface and groundwater impacts, and the fact that best management practices are unable to eliminate all urban pollutants, the cumulative affect of the Specific Plan in combination with other development would be significant and not mitigated to a level of insignificance.

HYH Property Project

As with the Specific Plan, best management practices conducted as part of the HYH Property Project would not be able to reduce potential cumulative water quality impacts to below a level of significance.

6.1.6.3 Level of Significance of Impact 6.1.6 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.7 TRAFFIC AND CIRCULATION

Cumulatively significant traffic and circulation impacts would occur with respect to the following significance thresholds identified in Chapter 5.2 (Traffic and Circulation):

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; and/or
- Exceed, either individually or cumulatively, a level of service standard established by a county congestion management agency for a designated road or highway.

6.1.7.1 Impact

Specific Plan

As discussed in Chapter 5.2, Traffic and Circulation, traffic generated by the proposed Specific Plan would combine with future traffic anticipated by the year 2010 to impact roadway segments and intersections which are already experiencing congestion. This is largely due to the fact that the local street system is already operating over capacity in many locations. A total of 15 intersections and roadway segments in the project area would experience significant cumulative traffic impacts as a result of the proposed Specific Plan in combination with background traffic in 2010. All of the segments of Highway 101 which were analyzed would experience a significant cumulative impact from the project traffic in combination with background traffic in the year 2010. By the year 2020, a total of 7 intersections and 13 roadway segments would be impacted by the additional traffic related to the Specific Plan.

HYH Property Project

As the traffic volume generated by the HYH Property Project would be essentially the same as the degree of development assumed to occur throughout the overall Specific Plan by the years 2010 and 2020, the HYH Property Project would also have a significant cumulative impact on traffic when combined with background traffic in 2010.

6.1.7.2 Mitigation Measures

Specific Plan

Chapter 5.2 (Traffic and Circulation) identifies a number of roadway improvements which would improve the ability of the affected roadway segments and intersections to handle the combined traffic of the proposed Specific Plan in combination with background traffic served by those roadways. These improvements include additional lanes, restriping and signalization. While these improvements would be able to reduce cumulative traffic impacts, implementation of all of the identified improvements cannot be sufficiently assured. Although the County, consistent with State law, will continue to require developers to contribute their fair share for an ad hoc program maintained by the County, no adopted fee program is currently in place to enable applicants to programmatically compensate for individual project impacts. Also, inadequate right-of-way, lack of overall funding and/or inability to influence the controlling jurisdiction to undertake the

improvements could likely prevent implementation of one or more of the necessary improvements. Thus, cumulative traffic impacts are considered significant and not mitigated.

HYH Property Project

As with the Specific Plan, identified roadway improvements may not all be implementable. Consequently, cumulative traffic impacts associated with the HYH Property Project are considered significant and not mitigated.

6.1.7.3 Level of Significance of Impact 6.1.7 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.8 WATER RESOURCES

Cumulatively significant water resources impacts would occur with respect to the following significance thresholds identified in Chapter 5.10 (Water Resources):

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer storage volume or a lowering of the local groundwater table.

6.1.8.1 Impact

Specific Plan

The development of areas in unincorporated County and in the City of Salinas would most likely have a direct impact upon groundwater availability in the groundwater basin and specifically in the Specific Plan area. Additional withdrawals of groundwater from within the basin, especially in the immediate vicinity of the Specific Plan area, would further reduce the available groundwater supply for overall consumption in the general area. As discussed in Chapter 5.10 (Water Resources), groundwater levels in the vicinity of the proposed Specific Plan have been dropping steadily as demand has outpaced recharge. Although development of the Specific Plan will result in a reduction in overall water consumption over current usage, there would still be a net annual deficit. Therefore, the Specific Plan would result in a significant cumulative impact on water resources.

HYH Property Project

As discussed in Chapter 5.10 (Water Resources), the annual demand for groundwater generated by the HYH Property Project is not expected to exceed the annual recharge due to the

groundwater recharge associated with the golf course. Although HYH Project-level impacts may be mitigated to a less than significant level, the HYH project plus cumulative impacts from other development in the Specific Plan and region would result in a significant cumulative impact on water resources.

6.1.8.2 Mitigation Measures

Specific Plan

Although the Specific Plan by design and water conservation measures are expected to be implemented with individual projects, such measures would contribute to a reduction in overdraft as compared to current consumption, the impacts would still remain significant and unmitigable.

HYH Property Project

Project-level mitigation measures would reduce impacts to a level that is less than significant, but these would not reduce cumulative impacts to a level that is less than significant.

6.1.8.3 Level of Significance of Impact 6.1.8 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.1.9 VISUAL QUALITY

Cumulatively significant visual quality impacts would occur with respect to the following significance thresholds identified in Chapter 5.3 (Landform Alteration/Visual Quality):

- Substantially degrade the existing visual character or the quality of the site and its surroundings.

6.1.9.1 Impact

Specific Plan

Development of the proposed Specific Plan would combine with other projects in the area to result in cumulatively significant visual quality impacts. As discussed in Chapter 3.0, Environmental Setting, the project site lies immediately north of the City of Salinas which is highly developed and has already impacted the visual quality and character of the area. Anticipated additional development per the Salinas General Plan will continue to impact the

visual quality and character of the area. The Specific Plan plus anticipated regional development would result in cumulatively significant impacts to visual quality and character of the region.

HYH Property Project

As a part of the Specific Plan, development of the HYH Property likewise combines with other planned development and result in a significant cumulative impact on visual quality.

6.1.9.2 Mitigation Measures

Specific Plan

No mitigation measures are available beyond those cited in Section 5.3.5.1.

HYH Property Project

No mitigation measures are required beyond those cited in Section ~~fill in~~5.3.5.3.

6.1.9.3 Level of Significance of Impact 6.1.9 after Mitigation

Specific Plan

Significant.

HYH Property Project

Significant.

6.2 NON-SIGNIFICANT CUMULATIVE IMPACTS

6.2.1 GEOLOGY AND SOILS

6.2.1.1 Specific Plan

Geological hazards which occur on the project site would not interact with any similar conditions associated with other future developments in the area. Thus, no cumulative significant geology or soils impacts would occur as a result of the interaction of the proposed project with other planned development.

6.2.1.2 HYH Property Project

As with the Specific Plan, geology and soils constraints on the HYH Property would not interact with other developments to create a significant cumulative impact.

6.2.2 HYDROLOGY

6.2.2.1 Specific Plan

Implementation of the proposed Specific Plan would increase the quantity of surface runoff when combined with similar increases in impermeable surface area with other development in the area. However, the downstream rate of runoff would not be increased substantially as a result of the proposed project due to drainage control measures required by the proposed Specific Plan. As the potential hydrology impacts are primarily associated with increased runoff rate rather than quantity, no significant cumulative hydrology impacts would occur as a result of implementation of the proposed Specific Plan.

6.2.2.2 HYH Property Project

As with the Specific Plan, drainage improvements would be included in the HYH Property Project that would avoid increased runoff velocities downstream and not result in cumulatively significant impacts.

6.2.3 LAND USE

6.2.3.1 Specific Plan

As the proposed Specific Plan would be consistent with the land use types encouraged for Areas of Development Concentration, its implementation would not result in any land use precedents which could combine with other developments in the area to result in a cumulatively significant impact on land use planning. In addition, none of the proposed land uses would combine with other future development in the area to create significant cumulative land use conflicts.

6.2.3.2 HYH Property Project

As with the proposed Specific Plan, development of the HYH Property would be consistent with existing General Plan land use goals and policies. Planned development would not combine with the HYH Property Project to create significant land use conflicts. Thus, the proposed HYH Property Project would not result in significant cumulative land use impacts.

6.2.4 LANDFORM ALTERATION

6.2.4.1 Specific Plan

Encroachment into slopes over 30 percent and alteration of major ridgelines is limited by the County's General Plan and Zoning Ordinance. As with the Specific Plan, the County would be required to make specific findings relative to the Zoning Ordinance before projects could impact slopes over 30 percent or major ridgelines. Landform alteration is a function of project specific development activity onsite and would include project-level mitigation as appropriate. Cumulative plus project development are not likely to result in a significant impact.

6.2.4.2 HYH Property Project

As with the Specific Plan, HYH project landform alteration is a function of project specific development activity onsite not likely to result in a significant cumulative impact.

6.2.5 PUBLIC SERVICES AND UTILITIES

6.2.5.1 Specific Plan

Parks and Recreation

As development of the Specific Plan is anticipated to meet the recreation requirements imposed by the County's General Plan onsite, no additional demand would be placed on the existing recreational facilities in the vicinity of the project area that would require construction of additional parks. There are sufficient regional parks to accommodate cumulative growth plus project. As the project would not combine with the recreation demand generated by other development, no significant cumulative impacts that would result in park construction ~~recreation~~ would occur as a result of implementation of the proposed Specific Plan. Project level impacts for park construction are addressed in Section 5.12.6.

Libraries

Development of the Specific Plan would require construction of a new library. Project level construction impacts are provided in Section 5.12 (Public Services and Utilities). The Rancho San Juan library would be sized to accommodate the needs of residents in the Specific Plan and additional residents in unincorporated County in the vicinity of the Specific Plan. Accordingly, there would be no significant cumulative impacts resulting from the construction of libraries as a result of implementation of the Specific Plan.

Schools

Development of the Specific Plan would require construction of additional schools in the Project area. Project level construction impacts are provided in Section 5.12 (Public Services and Utilities). The schools would be sized to accommodate the needs of residents in the Specific Plan and additional residents in the affected school district. Accordingly, there would be no significant cumulative impacts resulting from the construction of schools as a result of implementation of the Specific Plan.

Solid Waste Disposal

As indicated in Chapter 5.12 (Public Services and Utilities), landfill capacity is available to projects in the Specific Plan through the year 2045. Cumulative plus project demands would not result in requirement to construct new or modify existing facilities. Accordingly, there are no significant cumulative solid waste disposal impacts that would occur as a result of the Specific Plan.

Wastewater

As indicated in Chapter 5.12 (Public Services and Utilities) the Specific Plan would include a wastewater treatment facility designed to treat the wastewater generated by the Specific Plan. The project would not place any additional demand on existing sewage treatment plants. New anticipated development in the City of Salinas would be accommodated through the regional facility. Additional development in the vicinity of Rancho San Juan would be accommodated either at the regional facility or onsite. Consequently, there would be no significant cumulative plus project impacts related to wastewater treatment.

Energy

There is no indication from energy providers that development within Rancho San Juan would contribute to a demand for facilities beyond the project level. While energy requirements associated with the proposed Specific Plan would require the construction or modification of new facilities (infrastructure), the impacts of construction would be limited to the project level within Rancho San Juan and would be mitigated to a level that is less than significant. Proposed modifications to energy infrastructure would be phased over the expected twenty-plus years of development of full build-out of the Specific Plan and therefore would not be cumulatively considerable.

Police Protection

Development of the Specific Plan would not require the construction of additional police facilities to serve this geographic area. Instead a substation will be established within an existing facility within the Specific Plan. Although the additional demand for police protection generated by future development in the area combined with the demand created by the proposed Specific Plan would result in cumulative demand impacts on police services, the demand would not result in additional construction. Therefore, the impact would not be cumulatively significant.

Fire Protection

Development of the Specific Plan would require the construction of additional fire facilities to serve this geographic area. Impacts of construction will be addressed at the project level. Although the additional demand for fire protection services generated by future development in the area combined with demand created by the proposed Specific Plan would result in cumulative demand for fire services. The additional facilities will be sized to accommodate full build-out and anticipated regional needs. Therefore, the impact would not be cumulatively significant.

6.2.5.2 HYH Property Project

Parks and Recreation

The HYH Project is required to provide park and recreational opportunities to address the demand generated by the development. Additional parks and recreational opportunities are provided elsewhere in the Specific Plan. As with the Specific Plan, no significant cumulative

impacts requiring additional construction of parks would occur as a result of implementation of the HYH Property Project. Project level impacts for park construction are addressed in Section 5.12.6 (Public Services and Utilities).

Libraries

Full build-out of the HYH project could require construction of a new library. Impacts for construction would be mitigated at the project level. Therefore, the impact would not be significant.

Schools

Full build-out of the HYH project could require construction of new schools. Impacts for construction would be mitigated at the project level. Therefore, the impact would not be significant.

Solid Waste Disposal

As indicated in Chapter 5.12 (Public Services and Utilities), landfill capacity is available to projects in the Specific Plan through the year 2045. Cumulative plus project demands would not result in requirement to construct new or modify existing facilities. Accordingly, there are no significant cumulative solid waste disposal impacts that would occur as a result of the HYH Property project.

Wastewater

As indicated in Chapter 5.12 (Public Services and Utilities) the Specific Plan would include a wastewater treatment facility designed to treat the wastewater generated by the Specific Plan. The project would not place any additional demand on existing sewage treatment plants. New anticipated development in the City of Salinas would be accommodated through the regional facility. Additional development in the vicinity of Rancho San Juan would be accommodated either at the regional facility or onsite. Consequently, there would be no significant cumulative plus project impacts related to wastewater treatment.

Energy

As with the Specific Plan, energy requirements associated with the proposed HYH Property Project would require construction of new infrastructure which would be mitigated at the project level. Therefore, the impact would not be cumulatively significant.

Police Protection

Full build-out of the HYH project would not require construction of additional police facilities; however additional staff and equipment may be required. Therefore, the impact would not be cumulatively significant.

Fire Protection

Full build-out of the HYH project could require construction of additional fire facilities. Impacts for construction would be mitigated at the project level. As with the specific plan, no additional facilities would be required to accommodate additional cumulative demand for services, since the facility will be sized to accommodate regional needs. Therefore, the impact would not be cumulatively significant.

CHAPTER 7.0

GROWTH INDUCEMENT

Section 15126.2(d) of the CEQA Guidelines requires discussion of the ways that a project could foster economic or population growth, either directly or indirectly, in the surrounding environment. The CEQA Guidelines also state that growth in an area should not be considered beneficial, detrimental or of little significance.

The following criteria are used in this EIR to assess the reasonably foreseeable growth-inducing impacts. Significant growth inducement would occur if the project would:

- Establish a precedent-setting action that encourages or facilitates other activities that could significantly affect the environment;
- Remove an impediment to growth such as: 1) the construction or extension of major infrastructure facilities and/or facility capacity that does not presently exist in an area or, 2) through discretionary approval of changes to the use of land that result in an intensification of land use; or
- Facilitate economic effects that directly or indirectly could have adverse effects on the environment.

For the reasons discussed below, implementation of the Rancho San Juan Specific Plan and HYH Property Project would not be growth-inducing except possibly with respect to the expansion area of the Rancho San Juan Community Area contemplated in the General Plan Update if that plan is enacted.

7.1 PRECEDENT-SETTING ACTION

7.1.1 Specific Plan

The Specific Plan would not establish a precedent that would facilitate unplanned activities that could significantly affect the environment. The Rancho San Juan Specific Plan is located in an area of the County which is designated as an Area of Development Concentration (ADC). The

concept of ADC designation was introduced in 1979 as part of the Monterey County Growth Management Plan. The ADC concept was then incorporated into the 1982 Monterey County General Plan and is incorporated into the Community Area concept in the proposed General Plan Update.

ADCs are to be utilized to help meet a number of County growth management goals including preservation of prime agricultural land, protection of natural resources, and provision of urban services in an orderly manner that does not create sprawl. In 1986, the Board of Supervisors designated the Rancho San Juan area as an ADC within the Greater Salinas Area Plan area. The Greater Salinas Area Plan targets much of Monterey County's future residential and economic growth for the Rancho San Juan ADC area.

In short, development of the type and intensity proposed in the Specific Plan has been envisioned for the Rancho San Juan area for many years and continues to be so.

7.1.2 HYH Property Project

As a part of the Rancho San Juan ADC, development of the HYH Property would be consistent with the growth management goals of the County of Monterey.

7.2 REMOVAL OF IMPEDIMENTS TO GROWTH

7.2.1 Specific Plan

Removal of impediments to growth are commonly associated with the availability of new or expanded infrastructure and intensification of land use designations.

Infrastructure

The proposed project would require expansion of existing public facilities as well as the creation of new facilities required to serve the proposed development. The resulting increased capacity to serve development would remove impediments to growth within the Specific Plan area and could potentially reduce impediments in surrounding areas. As discussed in Section 5.12, the property is included within the service areas of agencies providing schools, fire and police protection. However, in many cases, the facilities operated by these agencies are insufficient to serve both the existing demand and the demand created by development of the Specific Plan. As noted in Section 5.12, a number of public service facilities would be constructed within the Specific Plan area including additional schools, at least one fire station, and a library. While it is true that these facilities would benefit future development within the respective agency service areas, the proposed facilities are generally sized to accommodate anticipated development within the Specific Plan area. Consequently, they would not represent the major removal of existing impediments to future growth in the surrounding area.

While public services (e.g. schools, police, fire, libraries, etc) are generally available to serve future development, water and wastewater services are not currently available on the site. Access to these utilities is critical to development of the Specific Plan as well as any intensive

development on surrounding land. The Monterey Regional Water Pollution Control Agency (MRWPCA) is the primary agency responsible for wastewater transmission and treatment in the project region. In the Specific Plan area, the closest major sewer mains transporting wastewater to the regional plant operated by MRWPCA follow North Main Street to the Salinas City limit at Russell Road. These mains were installed to accommodate development in Salinas and would not be available for development within the Specific Plan area because of inadequate capacity. Sewer mains were also recently installed, north of Russell Road, for the Santa Rita Union School District due to sanitation problems, however the capacity would not be great enough to serve additional development in the Specific Plan area.

Future development within the proposed Specific Plan would be served by onsite treatment facility. Construction of the wastewater treatment facility would remove a major impediment to development as intensive development requires centralized wastewater treatment. While the construction of the onsite wastewater treatment plant would remove an important impediment to development of the Specific Plan area, it would not remove a significant impediment to the surrounding area for several reasons. First, the treatment plant would be sized to accommodate growth within Rancho San Juan and the service area would be limited to the Specific Plan boundary. In addition, land to the south is already urbanized as well as eligible for sewer service as it is located within the Salinas sewer service area.

In order to provide potable water to the proposed development, an onsite water company or other entity would assume responsibilities for managing the distribution of groundwater to the Specific Plan area. As water service would be provided only within the Specific Plan area and no new source of water is being developed (groundwater will be the source of supply as it is in the entire Salinas Valley region), no impediments to growth of the surrounding area related to water would be removed.

Although the project would include extension of several existing roadways (e.g. Stirling Road) into the property to serve proposed development, none of the roadway extensions would remove an impediment to development on surrounding properties. Regional access is already available to the area from Highway 101. In addition, local access is available from Russell Road, San Juan Grade Road and Harrison Road. The majority of road improvements, including development of new roads, would occur within the Specific Plan Area itself with minor road improvements to existing local access points. While roadway improvements anticipated as a result of fair share contributions made by development within the Specific Plan would improve traffic flow along these roadways, the resulting improvement of traffic flow is not as likely to represent a substantial inducement for growth of the surrounding area as would improvements to Highway 101.

Land Use Regulation

As an ADC, the subject property is already targeted by the County's General Plan as a growth area. The Specific Plan represents the first step toward implementing the General Plan's goals for this property. While adoption of the proposed Specific Plan would eliminate a regulatory impediment to future development within the Specific Plan area, it would not accommodate

development outside of the Specific Plan area. In fact, one of the reasons for the creation of an ADC and Specific Plan is to reduce development pressure on agricultural lands elsewhere in the County. Furthermore, as its adoption is anticipated in the ADC process, it would not set a precedent that would benefit surrounding property lying outside the Specific Plan area.

The General Plan Update proposed an expansion area for the Community Area contiguous to the Specific Plan area on the east and south. If the Update is enacted, the Specific Plan could facilitate development of this area. Otherwise, it is improbable that intensification of land use on parcels that surround the project site would occur over the next 20 years, even if urban infrastructure becomes available in the Specific Plan area. Land within the City of Salinas that borders the Specific Plan area on the south is already developed at urban densities. All remaining contiguous land is designated in the Monterey County Draft General Plan Update as Resource Land, to be conserved over the long-term as agricultural farmland or permanent grazing land.

7.2.2 HYH Property Project

As the first development of the Specific Plan area, development of the HYH Property would trigger the need for additional infrastructure including wastewater treatment and groundwater distribution. Consequently, these services would be constructed in the course of developing the HYH Property. Other public services would be funded by the payment of statutory development fees as more fully described in Chapter 5.12 (Public Services and Utilities). As these services, would be sized to accommodate the HYH Property and, in some cases, the overall Specific Plan area, their construction would not remove a substantial impediment to growth on surrounding lands outside the Specific Plan area.

7.3 ECONOMIC EFFECTS

7.3.1 Specific Plan

The proposed project would indirectly facilitate development outside the Specific Plan area through its population/income growth and employment effects. However, due to the inclusion of community-serving commercial uses, the degree of indirect growth inducement is not expected to be significant.

At build out, the Specific Plan would accommodate a population of approximately 12,640 people and provide for commercial, industrial, and other uses that could generate approximately 5,700 new jobs. Project residents will, through their earned income, create an increase in demand for local goods and services. While it is anticipated that the project residents will utilize goods and services provided within the Specific Plan area, they may seek goods and services located outside of the Plan area creating a “ripple” effect to the local economy. This ripple effect may result in increased sales of goods and services, creation of new businesses, and/or expansion of existing businesses outside of the Specific Plan area. However, development of the Specific Plan area would not create a substantial economic effect which would significantly induce growth in the surrounding area because the northern portion of the City of Salinas currently has two major

commercial developments, Harden Plaza and Northridge Shopping Mall, which could accommodate infill development through attrition. In addition, a portion of San Juan Grade Road within the County is currently zoned commercial as well as portions of land in Prunedale both of which have been evaluated for growth inducing impacts prior to issuance of land use zoning.

In addition, development of employment generating activities in a variety of economic sectors such as light industrial, light manufacturing, service commercial, professional office, retail commercial, etc., will also have an indirect ripple effect in that people may choose to commute into the Specific Plan area either locally within Monterey County or from other regions. In addition, for every job created within each of these sectors within the Specific Plan area, additional jobs from other economic activity may be stimulated outside the Specific Plan area either within Monterey County or in other regions. While this has a potential to induce growth, the Specific Plan has been designed to create a jobs housing balance and would provide additional employment opportunities for the community, thus development of the Specific Plan area would not create a substantial economic effect which would significantly induce growth.

Potential economic-related, growth-inducing effects would be substantially moderated by the provision of on-site commercial land uses. Approximately 3,500,000 square feet (an average of both Alternatives 2 and 4E) of commercial uses are proposed. A significant portion of the project's resident population demand for local commercial services will likely be met within the Specific Plan area. The residual demand for local goods and services that can be provided only by off-site enterprises is not expected to be substantial since a variety of land uses are proposed within the Plan area and will provide numerous commercial opportunities to meet the needs of the residents within the Plan area. Thus, development of the Specific Plan area would not create a substantial economic effect, which would significantly induce growth in the surrounding area.

7.3.2 HYH Property Project

Ultimately, future residents within the HYH Property would primarily be served by the commercial services located within the balance of the Specific Plan area. However, until these portions of the Specific Plan area develop, residents would be expected to seek these services from commercial operations located within the City of Salinas to the south or in the Prunedale Shopping Center to the north. The relatively small number of new residents combined with the gradual buildout rate would moderate the economic effect on businesses within the City of Salinas and in Prunedale. In addition, the City of Salinas currently has a commercial "strip" located along North Main including Harden Plaza and Northridge Mall, which could accommodate additional consumer base without requiring major commercial development to meet the needs. Furthermore, any influence would be greatly diminished when commercial uses within the Specific Plan area come on line. Thus, development of the HYH Property would not create a substantial economic effect, which would significantly induce growth in the surrounding area.

CHAPTER 8.0

EFFECTS FOUND NOT TO BE SIGNIFICANT

8.1 SPECIFIC PLAN

8.1.1 POPULATION AND HOUSING

No adverse impacts to population and housing are anticipated from implementation of either Alternative 2 or 4E. Residential uses were anticipated under the GSAP. The proposed project would generate up to 4,000 residential units without displacing any existing housing.

8.1.2 HAZARDS AND HAZARDOUS MATERIALS

No public health hazards, health risks, or hazardous material impacts are anticipated with either Alternatives 2 or 4E of the Specific Plan, with the exception of potential air or water quality impacts related to pesticides, herbicides and fertilizers (see Sections 5.7, Air Quality, and 5.9, Hydrology/Water Quality, for details regarding this potential impact).

Implementation of the Specific Plan would not involve the routine transport, use, or disposal of hazardous materials, nor would it create a significant hazard to the public or environment through the release of hazardous materials into the environment. Implementation of the Specific Plan would not result in hazardous emissions within one-quarter mile of an existing or proposed school. Additionally, the Specific Plan site is not located on hazardous materials site, and is not located within an airport land use plan or within two miles of a public airport.

Wildland fires are a major hazard in many areas of Monterey County. Extensive acreage of rugged, highly flammable terrain and expanding residential development can significantly increase fire hazard. The California Division of Forestry prepares Wildland Fire Hazard Maps for each county, rating fire hazards as low, moderate, high, or very high. The Specific Plan area is located in a low fire hazard zone.

Development of the Specific Plan area would result in changes to fuel characteristics of the subject property, increase the number of residents and other human activities on the site, and increase the value of structures on the property.

The proposed change in uses, from agricultural to residential and industrial, would help reduce the risk of wildfires which is currently the major cause of fires in the area through the replacement of natural vegetation with structures, irrigated landscape and irrigated fields. However, the increased human activity on the site would also increase the potential for human-caused fires from lawn mowers, barbecues, and other activities. These activities could result in fires in biological conservation areas within the Specific Plan that could spread to other wildlands and/or developed areas.

The magnitude of the Specific Plan's area increase in fire potential and demand on fire-fighting activities would place greater demands on fire district firefighters and equipment resources. The potential impact of the Specific Plan would be offset by the new fire station included as part of the proposed Specific Plan. This fire station would provide an adequate level of service to the Specific Plan provided the station is constructed concurrent with need.

8.1.3 MINERAL RESOURCES

No known economic mineral resources are present on the project site, therefore, no negative impacts would occur from implementation of Alternatives 2 or 4E.

8.2 HYH PROPERTY PROJECT

8.2.1 POPULATION AND HOUSING

As with the entire Specific Plan area, no adverse impacts to population and housing are anticipated with the HYH Property project. The proposed project would generate up to 1,077 residential units without displacing any existing housing.

8.2.2 HAZARDS AND HAZARDOUS MATERIALS

No public health hazards, health risks, or hazardous material impacts are anticipated with implementation of the HYH Property project, with the exception of potential air or water quality impacts related to pesticides, herbicides and fertilizers (see Sections 5.7, Air Quality, and 5.9, Hydrology/Water Quality, for details regarding this potential impact).

Implementation of the HYH Property project would not involve the routine transport, use, or disposal of hazardous materials, nor would it create a significant hazard to the public or environment through the release of hazardous materials into the environment. Implementation of the HYH Property project would not result in hazardous emissions within one-quarter mile of an existing or proposed school. Additionally, the HYH Property project site is not located on

hazardous materials site and is not located within an airport land use plan or within two miles of a public airport.

As with the Specific Plan, the HYH Property project is located in a low fire hazard zone. Development of the HYH Property would result in changes to fuel characteristics of the subject property, increase the number of residents and other human activities on the site, and increase the value of structures on the property.

The proposed change in uses, from agricultural to residential and industrial, would help reduce the risk of wildfires which is currently the major cause of fires in the area through the replacement of natural vegetation with structures, irrigated landscape and irrigated fields. However, the increased human activity on the site would also increase the potential for human-caused fires from lawn mowers, barbecues, and other activities. These activities could result in fires in biological conservation areas within the HYH Property area that could spread to other wildlands and/or developed areas.

The magnitude of the HYH Property project area increase in fire potential and demand on fire-fighting activities would place greater demands on fire district firefighters and equipment resources. The potential impact of the HYH Property would be offset by the new fire station included as part of the proposed Specific Plan. This fire station would provide an adequate level of service to the HYH Property project provided the station is constructed concurrent with need.

8.2.3 MINERAL RESOURCES

No known economic mineral resources are present on the project site, therefore, no negative impacts would occur.

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Wildland fires are a major hazard in many areas of Monterey County. Extensive acreage of rugged, highly flammable terrain and expanding residential development can significantly increase fire hazard. The California Division of Forestry prepares Wildland Fire Hazard Maps for each county, rating fire hazards as low, moderate, high, or very high. The Specific Plan area is located in a low fire hazard zone.

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The proposed change in uses, from agricultural to residential and industrial, would help reduce the risk of wildfires which is currently the major cause of fires in the area through the replacement of natural vegetation with structures, irrigated landscape and irrigated fields. However, the increased human activity on the site would also increase the potential for human-caused fires from lawn mowers, barbecues, and other activities. These activities could result in fires in biological conservation areas within the Specific Plan that could spread to other wildlands and/or developed areas.

The magnitude of the Specific Plan's area increase in fire potential and demand on fire-fighting activities would place greater demands on fire district firefighters and equipment resources. The potential impact of the Specific Plan would be offset by the new fire station included as part of the proposed Specific Plan. This fire station would provide an adequate level of service to the Specific Plan provided the station is constructed concurrent with need.

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No known economic mineral resources are present on the project site, therefore, no negative impacts would occur from implementation of Alternatives 2 or 4E.

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8.2.1 POPULATION AND HOUSING

As with the entire Specific Plan area, no adverse impacts to population and housing are anticipated with the HYH Property project. The proposed project would generate up to 1,077 residential units without displacing any existing housing.

8.2.2 HAZARDS AND HAZARDOUS MATERIALS

No public health hazards, health risks, or hazardous material impacts are anticipated with implementation of the HYH Property project, with the exception of potential air or water quality impacts related to pesticides, herbicides and fertilizers (see Sections 5.7, Air Quality, and 5.9, Hydrology/Water Quality, for details regarding this potential impact).

Implementation of the HYH Property project would not involve the routine transport, use, or disposal of hazardous materials, nor would it create a significant hazard to the public or environment through the release of hazardous materials into the environment. Implementation of the HYH Property project would not result in hazardous emissions within one-quarter mile of an existing or proposed school. Additionally, the HYH Property project site is not located on

hazardous materials site and is not located within an airport land use plan or within two miles of a public airport.

As with the Specific Plan, the HYH Property project is located in a low fire hazard zone. Development of the HYH Property would result in changes to fuel characteristics of the subject property, increase the number of residents and other human activities on the site, and increase the value of structures on the property.

The proposed change in uses, from agricultural to residential and industrial, would help reduce the risk of wildfires which is currently the major cause of fires in the area through the replacement of natural vegetation with structures, irrigated landscape and irrigated fields. However, the increased human activity on the site would also increase the potential for human-caused fires from lawn mowers, barbecues, and other activities. These activities could result in fires in biological conservation areas within the HYH Property area that could spread to other wildlands and/or developed areas.

The magnitude of the HYH Property project area increase in fire potential and demand on fire-fighting activities would place greater demands on fire district firefighters and equipment resources. The potential impact of the HYH Property would be offset by the new fire station included as part of the proposed Specific Plan. This fire station would provide an adequate level of service to the HYH Property project provided the station is constructed concurrent with need.

8.2.3 MINERAL RESOURCES

No known economic mineral resources are present on the project site, therefore, no negative impacts would occur.

CHAPTER 10.0

ALTERNATIVES

In considering the appropriateness of a proposed activity, CEQA mandates that alternatives to its implementation be discussed. Section 15126.6(f) of the CEQA Guidelines requires that a discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" be provided in the environmental document. Section 15126.6(f) further states that "the range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Thus, the following discussion focuses on those alternatives that are capable of eliminating environmental impacts or reducing them to below a level of significance, even if they would impede the attainment of some of the project objectives, or would be more costly. In accordance with Section 15126.6(f)(1) of the State CEQA Guidelines, among the factors that may be taken into account when addressing the feasibility of alternatives are: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In developing the alternatives to be addressed in this section, consideration was given to their ability to meet most of the basic objectives of the proposed project. These objectives are repeated below from Chapter 4.0 (Project Description) of this EIR

The primary objectives of the proposed Specific Plan are to:

- Contribute to the reduction of groundwater overdraft on the groundwater basin.
- Strengthen and direct development towards existing communities;
- Provide a wide choice of housing opportunities that promote affordable/workforce housing;
- Provide a variety of transportation choices;
- Utilize mixed land uses and create walkable neighborhoods
- Foster a distinctive and attractive town center with a strong identity and sense of place;

- Preserve open space, farmland, natural beauty and critical environmental areas; and
- Implement the Community Area designation of the General Plan Update.

The project objectives for development of the HYH Property include:

- To develop a range of housing opportunities;
- To develop an 18-hole golf course including a clubhouse facility and overnight accommodations for guests;
- To provide retail/commercial development to support local residents;
- To implement the open space system identified in the Specific Plan;
- To develop a wastewater treatment facility to serve the HYH Property development and provide for expansion to serve the overall Specific Plan area;
- To construct offsite portions of planned roadways to provide access to the HYH Property; and
- To settle pending litigation.

The focus of the following alternatives analysis is on ways to reduce or avoid significant impacts associated with the Rancho San Juan Specific Plan and the HYH Property development plans.

Based on the results and conclusions of the analysis in Chapter 5.0 (Environmental Analysis), the Specific Plan would result in significant impacts to agriculture, air quality, hydrology/water quality, land use, noise, public services, soils and geology traffic and circulation, visual quality/landform alteration, and, water resources. Significant cumulative impacts of the Specific Plan would occur with respect to air quality, agriculture, biology, hydrology/water quality, noise, and traffic and circulation.

Development of the HYH Property would mirror the impacts associated with the Specific Plan and would result in significant impacts to agriculture, air quality, hydrology/water quality, land use, noise, public services, soils and geology, traffic and circulation, and visual quality/landform alteration. Significant cumulative impacts of the HYH Property would occur with respect to air quality, agriculture, biology, hydrology/water quality, and traffic and circulation.

A comparison of the environmental impacts of the two Specific Plan alternatives with the impacts of the alternatives discussed below is contained in Table 1.4-1 of the Chapter 1.0, Executive Summary. Table 1.4-2 provides a comparison of the impacts of the proposed HYH Property Project with associated alternatives discussed below. Each of the tables contains a qualitative indication of whether the impacts of the alternatives would be greater, equal or less than the proposed project.

10.1 SPECIFIC PLAN

10.1.1 NO DEVELOPMENT ALTERNATIVE

10.1.1.1 Description

The No Development alternative would involve no new development within the Specific Plan area. In addition, the existing agricultural activities would continue but not be expanded. In other words, the No Development alternative would maintain the status quo. No Specific Plan would be adopted for the property nor would the proposed expansion of the adopted ADC occur. Although this project alternative would reduce environmental impacts, it would not achieve the primary objectives of the proposed project. The No Development alternative would not implement the land use goals of the County's General Plan or the General Plan Update for the property by providing needed housing and employment opportunities. It would also not achieve the goal of resolving the court order mandating preparation and adoption of a Specific Plan for the area. Although this alternative fails to achieve most of the project objectives, it is addressed pursuant to Section 15126.6(e) of the CEQA Guidelines in order to document the environmental effect of maintaining the existing environmental setting described in Chapter 3.0 (Environmental Setting).

10.1.1.2 Environmental Impacts

The No Development alternative would avoid the environmental impacts associated with the proposed Specific Plan and HYH Property development because no new development would occur on the property. A more detailed discussion of the potential environmental impacts in comparison with the proposed project follows.

Air Quality

The elimination of future development within the Specific Plan area would avoid mobile and stationary source air emissions associated with the proposed project. No new automobile emissions would be contributed by development of the subject property. Similarly, elimination of the demand for electrical power and the elimination of potential emission sources related to development (lawn mowers, fireplaces, etc.) would avoid emissions related to stationary sources. While the elimination of grading for future development would avoid associated particulate impacts, ongoing agriculture would continue to generate particulates when soil tilling occurs. As these activities are ongoing, this alternative would not generate a new significant impact on air quality.

Agriculture

The No Development alternative would allow the existing agriculture to continue as well as expand within the Specific Plan Area to make land which is not presently farmed available for future agricultural activities. Thus, this alternative would avoid the significant impact on

agriculture associated with the proposed project. However, it would not achieve the overall goal of developing ADCs to minimize regional impacts from development.

Archaeological/Historic Resources

The No Development alternative would avoid impacts to prehistoric as well as historic resources which occur on the subject property related to the proposed project. The elimination of development would lessen the risk to potential subsurface prehistoric resources which may occur in the vicinity of the Schoch Dairy/Espinosa Adobe site and the Battle of Natividad site.

With respect to historic sites, the No Development alternative would eliminate potential impacts associated with the proposed project on the following historic resources: Schoch Dairy/Espinosa Adobe, Hebert Ranch including the Red Pony Barn complex, and Battle of Natividad site. In addition, it would avoid impacts to any of the seven historic structures which were identified in the Specific Plan area as potentially significant. Direct impacts to the Schoch Dairy/Espinosa Dairy would be eliminated. Although direct impacts to the Red Pony Barn complex would not occur with the proposed project, indirect impacts were identified in relationship to the change in the views from the Red Pony Barn which are considered an integral part of its historic value. The No Development alternative would retain the existing viewshed within the Specific Plan area.

Biology

The No Development alternative would avoid impacts to biological resources which are associated with the proposed project. Most notably, it would eliminate additional impacts to wetland resources, mixed non-native/native grasslands and associated sensitive species. Elimination of the golf course and automobile by-products would avoid adverse water quality impacts on wildlife downstream. It would also retain potential habitat for the California red legged frog.

Hydrology/Water Quality

The No Development alternative would avoid the increase in runoff which would be associated with development of the property under the proposed Specific Plan. No increase in impermeable surface area would occur. Nor would there be a new source of runoff pollutants related to the golf course and automobile by-products which would occur under the proposed project. Surface drainages would be retained in their natural state.

However, the water quality impacts associated with the existing agricultural activities would continue. Similarly, the downstream flooding would continue to occur as no additional flood control measures would be taken on the subject property. In addition, existing drainages which have been disturbed by agriculture would not be restored under the No Development alternative.

Land Use

The potential conflicts between new development and ongoing agricultural activities around the Specific Plan area would be eliminated with the No Development alternative. Under this

alternative, no new development would occur within the Specific Plan area which would likely adversely affect adjacent agricultural activities. In addition, interim conflicts between new development and interim agriculture within the Specific Plan area would be avoided. Thus, no significant land use compatibility impacts would be related to the No Development alternative.

While this alternative would avoid potential land use conflicts, it would not implement the goals of the County's General Plan relative to providing housing and job opportunities to the region. As discussed earlier, the subject property is designated as an "Area of Development Concentration". This designation is applied to specific areas which are considered well suited to accommodate higher levels of development. Leaving this property undeveloped would undermine the General Plan's goals of guiding growth to appropriate areas which would result in a significant impact on land use plans and policies. The same conclusion applies to inconsistency with the General Plan Update.

Landform Alteration/Aesthetics

In the absence of development, no grading would be required within the Specific Plan area. The open character of the land would be retained. Thus, this alternative would eliminate the significant landform alteration/aesthetic impacts associated with the proposed project.

Noise

The No Development alternative would eliminate potential noise sources associated with the proposed project. Noise levels on nearby roadways would not increase in the absence of traffic generated by the proposed project. Similarly, potential noise associated with the golf course and wastewater treatment plant would be eliminated. In addition, no new development within the property would occur which would expose noise sensitive uses (e.g. residential) to unacceptable traffic noise levels.

Soils and Geology

Without development of new structures within the Specific Plan area, potential risk associated with soil and seismic conditions would be avoided. Consequently, no significant soils and geology impacts would be associated with the No Development alternative.

Public Services

Public service impacts related to the proposed project would be avoided by the No Development alternative. No demand would be placed on local school districts. No additional demand would be created by police or fire protection would be created. Thus, this alternative would not have a significant impact due to a need for new or expanded public facilities.

Traffic and Circulation

No new automobile traffic would be generated by the No Development alternative. While the limited traffic generated by uses on the property would remain. This traffic is already occurring in the area and constitutes a relatively low number of trips on the local and regional roadway

system. Thus, the significant traffic impacts associated with the proposed project would be eliminated by the No Development alternative.

Water Resources

No additional water demand would be created by the No Development alternative. However, the absence of new water demand would not alleviate significant impacts on local groundwater supplies. As indicated in Chapter 5.10 (Water Resources), annual water consumed in the process of irrigating existing crops on the subject property is already exceeding the annual amount of groundwater recharge. Thus, as with the proposed project, the No Development alternative would have a significant impact on water resources by resulting in a net reduction in the groundwater supply in the area. In fact, the average annual deficit would be higher under the No Development alternative than either Alternatives 2 or 4E because existing agricultural operations would result in a deficit of 506 af/yr while the proposed Specific Plan would result in an average annual deficit of 463 af/yr.

10.1.2 NO PROJECT: DEVELOPMENT IN ACCORDANCE WITH THE ADOPTED GENERAL PLAN

10.1.2.1 Description

Under this alternative, the property within the proposed Specific Plan area would be developed in accordance with the Greater Salinas Area Plan (GSAP) contained within the County's General Plan. Development of the property pursuant to the GSAP would eliminate the proposed expansion of the Area of Development Concentration, as this alternative would assume the current configuration of the ADC.

The GSAP provides policies and land uses which create opportunities for jobs and housing, along with strengthening the agricultural economy. The GSAP targets much of Monterey County's future residential and economic growth to occur in the Specific Plan area. The land uses allowed under GSAP would include residential, commercial, public facilities and industrial.

The GSAP identifies 1,310 acres within the proposed Specific Plan area which are available for residential development. The average residential density would be 5.1 units per acre which could yield up to 6,681 residential units including single- and multiple-family dwellings. High density residential would be clustered and have a density of 15 units per acre. The residential units would primarily be located in the central portion of the ADC.

In accordance with the GSAP, commercial development would be developed along the Highway 101 corridor. The commercial uses would include a hotel, neighborhood-serving commercial and commercial uses to serve employees of industrial areas. Mixed-use development with commercial on ground floor and residential on top would be allowed.

A total of 570 acres of industrial development would occur in the western portion of the proposed Specific Plan area along Highway 101. The GSAP would allow up to 6,207,300 square feet of industrial development within this area.

The GSAP allows for the construction of a 18-hole golf course within the ADC.

A total of 310 acres of land would be devoted to agricultural use in the northeast corner of the proposed Specific Plan area as required by the GSAP.

Public facilities would include schools, a fire station, library, community centers, and possibly a police station

Access to development under this alternative would be anticipated to occur in locations similar to the proposed project. Primary access would be taken from Stirling Road from San Juan Grade Road. Access to Highway 101 would depend on actions taken in the future by Caltrans to implement planned improvements for this highway.

It is anticipated that this alternative would rely on local groundwater and include the construction of an onsite wastewater treatment plant.

The No Project alternative would achieve the primary objectives of the proposed project. It would implement the land use goals of County General Plan and be consistent with ongoing General Plan Updated. In addition, it would comply with the Order of the Court requiring the County to complete a Specific Plan for this area.

10.1.2.2 Environmental Impacts

Air Quality

Air quality impacts associated with the No Project alternative would be greater than the proposed project due to the increase in the intensity of development. The increase in the number of homes and employment opportunities would translate into more automobile trips than the proposed project. The increase in development would also result in higher stationary source emissions. This increase in air emissions would also increase the cumulative impact related to other regional mobile and stationary emission sources. Thus, the No Project alternative would have a significant direct and cumulative impact on air quality which would be greater than the proposed project.

Agriculture

As with the proposed project, the loss of agricultural land which would result from development under the No Project alternative would result in a significant impact on agriculture. While the No Project alternative would specifically provide for the long-term preservation of 310 acres for continued agricultural operations, this area is insufficient to support a substantial agricultural operation. Thus, the No Project alternative would have a significant impact on agriculture, albeit somewhat less than the proposed project.

Archaeological/Historic Resources

The No Project alternative could avoid impacts to prehistoric as well as historic resources which occur on the subject property. Through clustering and increased residential densities, more open space would be preserved around the Red Pony Barn complex to decrease the change in visual character on the historic context of this resource. Similarly, the Schoch Dairy/Espinosa Dairy could be wholly or partially retained as could the Battle of Natividad site. As with the proposed project, impacts to subsurface prehistoric and historic resources would be difficult to avoid due to the lack of surface evidence.

Biology

The No Project alternative would likely result in equal or greater biological resources impacts than the proposed project. Golf course construction would likely occur in the same general area as the proposed Specific Plan. The greater residential density would likely require similar land development area. Thus, wetland impacts would be similar.

Hydrology/Water Quality

As with the proposed project, the No Project alternative would increase the impermeable surface area and result in development which would increase urban water pollutants related primarily to automobile by-products. In fact, the increase in the intensity of residential and employment development would result in proportionately greater surface runoff and automobile by-products. As with the Specific Plan, the golf course could result in water quality impacts associated with pesticides and herbicides. Thus, the No Project alternative would have hydrology/water quality impacts which would likely be greater than the proposed project.

Land Use

The potential conflicts between new development and ongoing agricultural activities around the Specific Plan area would occur with the No Project alternative. As with the proposed project, new development would occur within the Specific Plan area which would be adversely affected by adjacent agricultural activities. In addition, interim conflicts between new development and interim agriculture within the Specific Plan area would also occur with this alternative. Thus, significant land use impacts similar to the proposed project would be related to the No Project alternative.

This alternative would implement the land use goals of the County's General Plan and Update. Thus, this alternative would not have a significant impact relative to land use policy.

Landform Alteration/Aesthetics

This alternative would reduce landform alteration and the associated aesthetic impacts over those associated with the proposed project. This would be achieved by reducing the overall development area by increasing residential densities and employing clustering techniques. This approach would retain more of the ridgelines within the property and more natural open space.

Noise

The No Project alternative would result in noise impacts that would be similar to the proposed project. Future residents and other noise sensitive receptors along major roads within the development area as well in surrounding areas would be exposed to unacceptable traffic noise levels. Potential noise associated with the golf course maintenance and the wastewater treatment plant would occur. The No Project alternative would result in significant noise impacts which would potentially be greater than the proposed project due to the increased number of homes which would be affected.

Soils and Geology

The soils and seismic constraints which face future development of the proposed project would also affect future development under the No Project alternative. The No Project alternative would result in significant soils and geology impacts which could be greater than the proposed project due to the increased number of buildings.

Public Services

As indicated earlier, the development allowed under the GSAP is greater than the proposed project. Consequently, the No Project alternative would result in higher demand for public services. The increase in residential units would generate more school children. The increase in residential and commercial development would result in a higher demand for police and fire protection. Similarly, the generation of solid waste would be proportionately higher. Due to the increase development intensity under this alternative, the No Project alternative would have more significant impacts due to a need for new or expanded public facilities than the proposed project.

Traffic and Circulation

The increase in the development intensity would result in a proportionately higher level of traffic generated by the No Project alternative when compared against the proposed project. As this alternative would generate more traffic, the No Project alternative would result in significant traffic impacts which would be greater than the proposed project.

Water Resources

The No Project alternative would result in a demand for water that would exceed that of the proposed project due to the increase in land use intensity. Thus, the No Project alternative would have a significant impact on water resources which would likely exceed that of the proposed project.

10.1.3 NO GROUNDWATER DEFICIT

10.1.3.1 Description

The primary objective of this alternative is to avoid impacts related to groundwater supply. In order to avoid the projected net average annual deficit of 463 AF associated with the proposed project, this alternative would reduce the amount of employment uses included as part of the Specific Plan. The amount of acreage devoted to employment center uses would be reduced by 100 acres to a total of 54 acres. The unused employment center could be used for non-irrigated open space.

The alternative of eliminating approximately 2,000 residential units was rejected due to the importance of providing housing to the area. Although the proposed golf course creates a high demand for water, it would not be eliminated under the assumption that its irrigation needs would be met with reclaimed water generated by the onsite wastewater treatment process. Furthermore, the golf course offers an opportunity to help recharge groundwater supplies.

The No Groundwater Deficit alternative would eliminate the average annual groundwater deficit of 506 AF which is currently occurring as a result of ongoing agriculture on the property as well as allow development of the property without an average annual groundwater deficit. In addition, it would reduce air quality, noise and traffic impacts by reducing the number of daily automobile trips proportionate to the reduction in the employment center use. This alternative would still meet the primary objectives of the proposed Specific Plan. It would implement the majority of the land use goals of County General Plan and be consistent with ongoing General Plan Updated. In addition, it would comply with the Order of the Court requiring the County to complete a Specific Plan for this area.

10.1.3.2 Environmental Impacts

Air Quality

The reduction in the amount of employment center could result in a proportionate reduction in the related air emissions although some of the reduction could be lost because of the loss of jobs within the Specific Plan. Similarly, the stationary source emissions related to power production would also be proportionately reduced. Even though the air emissions related to the No Groundwater Deficit alternative would be lessened, this alternative would have a significant cumulative impact on air quality due to the unacceptable air basin conditions which exist already with respect to ROG, CO, and PM₁₀.

Agriculture

As with the proposed project, the loss of agricultural land which would result from development under the No Groundwater Deficit alternative would result in a significant impact on agriculture. Although the number of square feet of employment center uses would be decreased, the area devoted to these uses would not necessarily decrease development under this alternative would

ultimately preclude agriculture on the property. Thus, as with the proposed project, the No Groundwater Deficit alternative would have a significant impact on agriculture.

Archaeological/Historic Resources

The impact of this alternative on significant archaeological and historic cultural resources would not be reduced in comparison to the proposed project. Although the amount of employment center would be reduced, the development is located well away from the Red Pony complex and, thus, its elimination would not change the impact of the Specific Plan. Similarly, development would affect the Schoch Dairy/Espinosa Dairy and the Battle of Natividad site as these areas would continue to be graded under this alternative. Potential impacts to subsurface prehistoric and historic resources would also potentially occur.

Biology

The No Groundwater Deficit alternative would not result in a substantial reduction in the amount of sensitive biological resources that would be impacted in comparison with the proposed project. The development footprint would be expected to be similar and the golf course impacts on wetlands would remain.

Hydrology/Water Quality

As with the proposed project, the No Groundwater Deficit alternative would increase the impermeable surface area and result in development which would increase urban water pollutants related primarily to automobile by-products. However, the decrease in the square footage of employment center uses would result in proportionately less surface runoff and automobile by-products. In addition, golf course impacts on water quality impacts associated with golf course maintenance would occur under this alternative. Thus, although the No Groundwater Deficit alternative may result in proportionately less runoff, the No Groundwater Deficit alternative would have significant hydrology/water quality.

Land Use

The potential conflicts between new development and ongoing agricultural activities around the Specific Plan area would occur with the No Groundwater Deficit alternative. As with the proposed project, new development would occur within the Specific Plan area which would likely be adversely affected by adjacent agricultural activities. In addition, interim conflicts between new development and interim agriculture within the Specific Plan area would also occur with this alternative. Thus, as with the proposed project, significant land use impacts would be related to the No Groundwater Deficit alternative.

Landform Alteration/Aesthetics

The reduction in the acreage of employment center uses could allow for retention of more open space along Highway 101. However, any substantial development proposal for the subject property would alter the natural landform and aesthetic qualities to a point which would be significant.

Noise

The No Groundwater Deficit alternative would result in noise impacts that would be similar to the proposed project. Future residents and other noise sensitive receptors along major roads within the development area and the immediate vicinity would be exposed to unacceptable traffic noise levels. The reduction in the number of project trips would not be sufficient to substantially reduce noise levels on affected roadways. Thus, the No Groundwater Deficit alternative would result in significant noise impacts.

Soils and Geology

The soils and seismic constraints which face future development of the proposed project would also affect future development under the No Groundwater Deficit alternative. Thus, this alternative would result in significant soils and geology impacts, however, the number of buildings affected could be less than the proposed project.

Public Services

The reduction in the amount of employment center uses would not substantially diminish the demand for public services in comparison with the proposed project as employment center uses have minimal impact on fire, police and parks, and no impact on schools, libraries. Demand for solid waste disposal would be lessened. Although the No Groundwater Deficit alternative would minimally reduce impacts with respect to the proposed project, it would have essentially the same significant impacts on public services as the proposed Specific Plan.

Traffic and Circulation

The decrease in employment center development would result in a proportionately lower level of traffic when compared against the proposed project. As key roadways and intersections in the area are already congested, this alternative would result in cumulative significant traffic impacts; albeit less than the proposed project. The resulting loss of employment opportunities within the Specific Plan area could increase the number of work trips associated with future residents because they would not have the potential to work at jobs within the employment center.

Water Resources

Elimination of the 100 acres of employment center would eliminate the groundwater deficit provided sufficient opportunities are provided to replace groundwater recharge related to the plan to use reclaimed water to irrigate the golf course. Assuming this is possible, this alternative would not have a significant impact on groundwater resources.

10.1.4 REDUCED BIOLOGICAL IMPACT

10.1.4.1 Description

The goal of this alternative is to reduce the impact on sensitive biological resources located within the project area. As discussed in Chapter 5.4 (Biology), the proposed Specific Plan would

impact a number of important biological resources including wetlands, native grasslands, sensitive species and wildlife corridors. In particular, development within the large drainage course in the northern portion of the Specific Plan area was determined to impact wetlands as well as local and regional wildlife movement. The development of rural estate lots, a golf course maintenance facility and a wastewater treatment plant along the north side of this drainage was also determined to diminish the overall open space value of this drainage. In addition, development of portions of the proposed golf course and residential development within the HYH property would impact native grassland and associated sensitive plant species. The golf course would generate water pollutants which would likely impact downstream wildlife.

In order to reduce biological impacts of development within Rancho San Juan, the proposed golf course would be eliminated as would residential estate development within Planning Area 12C and the corresponding road crossings needed to provide access (Figure 10.1-1). Development within Planning Area 12A would be reconfigured to avoid mixed non-native/native grasslands. It is assumed that the 34 residential units within Planning Area 12C would be distributed throughout the balance of the residential areas of the Specific Plan to retain the maximum number of potential dwelling units. The golf course area would be included in the proposed biological conservation area where grading would not otherwise occur to create the proposed development areas. The wastewater treatment plant would be moved to a location near Highway 101 outside of the HYH Property. The 15 acres comprising the proposed wastewater treatment plant location would be placed in Conservation Area.

The Reduced Biological Impact alternative would meet the primary objectives of the proposed project. It would implement the land use goals of County General Plan and be consistent with ongoing General Plan Updated. In addition, it would comply with the Order of the Court requiring the County to complete a Specific Plan for this area.

10.1.4.2 Environmental Impacts

Air Quality

Elimination of the golf course would eliminate a relatively minor number of automobile trips. However, any reduction in automobile trips would reduce mobile source air emissions relative to the proposed project. Even though the air emissions related to the Reduced Biological Impact alternative would be lessened, this alternative would have a significant cumulative impact on air quality due to the unacceptable air basin conditions which exist already with respect to ROG, NO_x, CO, and PM₁₀.

Agriculture

As with the proposed project, the loss of agricultural land which would result from development under the Reduced Biological Impact alternative would result in a significant impact on agriculture. Although the area of development would be reduced by this alternative, the areas that would be removed from development would be placed into the biological conservation easement to achieve the goal of reducing impacts on biological resources. Consequently, no additional land for agricultural use would be available as a result of this alternative. However,

removal of the estate residential development along the northern boundary would lessen potential impacts on offsite agricultural operations by providing more buffer area between these activities and residential development within the Specific Plan area. Thus, the Reduced Biological Impact alternative would have less impacts on agriculture than the proposed project.

Archaeological/Historic Resources

The impact of this alternative on significant archaeological and historic cultural resources would not be reduced in comparison to the proposed project. Although the golf course would be eliminated and the Residential Estate homes would be relocated, the Residential Low area with the HYH Property would remain, thus views from the Red Pony complex would remain significant. Similarly, development would affect the Schoch Dairy/Espinosa Dairy and the Battle of Natividad site as these areas would continue to be graded under this alternative. Potential impacts to subsurface prehistoric and historic resources would also potentially occur.

Biology

The Reduced Biological Impact alternative would result in a substantial reduction in the amount of sensitive biological resources that would be impacted in comparison with the proposed project. This alternative would reduce impacts to wetlands in comparison with the proposed project by eliminating the golf course. Elimination of the golf course and reconfiguration of Planning Area 12A would avoid the impact on native grassland and associated fragrant fritillary.

In addition to the reducing the loss of sensitive plant communities and species, this alternative would result in a higher quality wildlife corridor along the northern boundary. Elimination of Planning Area 12C and the golf course maintenance facility and relocation of the wastewater treatment plant site would allow improved connectivity between the onsite corridor and undeveloped land which exists on land adjacent to the north. Removal of the golf course would also preserve tributary canyons to the south which would provide additional habitat and refuge for wildlife. Elimination of Planning Area 12C, the golf course maintenance facility and the proposed wastewater treatment plant site would also eliminate roadways proposed to provide access to these areas. This would remove a potential constraint to wildlife movement.

The elimination of development and the wastewater treatment plant site along the northerly boundary would also reduce the indirect impacts of the proposed project on natural areas which lie to the north by eliminating impacts created by noise, domestic pets and outdoor lighting.

While not avoiding significant biological impacts, this alternative would substantially reduce the biological impacts associated with the proposed project.

Hydrology/Water Quality

As with the proposed project, the Reduced Biological Impact alternative would increase the impermeable surface area and result in development which would increase urban water pollutants related primarily to automobile by-products. However, golf course impacts on water quality impacts associated with golf course maintenance would be avoided by this alternative.



Source: ProjectDesign Consultants, 2004



Not to Scale

Reduced Biological Impact Alternative

Figure 10.1-1

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Thus, while less than the proposed project, the Reduced Biological Impact alternative would have significant hydrology/water quality impacts.

Land Use

The potential conflicts between new development and ongoing agricultural activities around the Specific Plan area would occur with the Reduced Biological Impact alternative. However, the elimination of Planning Area 12C would reduce potential conflicts with offsite agricultural operations along the northern boundary of the Specific Plan area. In addition, interim conflicts between new development and interim agriculture within the Specific Plan area would also occur with this alternative. Thus, although reduced in comparison with the proposed project, significant land use impacts would be related to the Reduced Biological Impact alternative.

As with the proposed project, this alternative would provide the housing and job opportunity goals of the General Plan's ADC designation and the Community Plan designation in the Update.

Landform Alteration/Aesthetics

The amount of landform alteration would be reduced with the Reduced Biological Impact alternative. The elimination of Planning Area 12C would avoid grading impacts associated with providing individual development pads for the 30 homes which would have been constructed there under the proposed project. Removal of the golf course from the project would substantially reduce grading as well. Relocation of the golf course maintenance facility wastewater treatment plant site would reduce grading as the terrain is less pronounced in this portion of the Specific Plan area. Preservation of tributary canyons occupied by the proposed golf course would preclude placement of excess fill within these areas which would likely force excess fill to be hauled offsite to a suitable location.

Noise

The Reduced Biological Impact alternative would result in noise impacts that would be similar to the proposed project with the exception of golf course maintenance noise. Future residents and other noise sensitive receptors along major roads within the development area would be exposed to unacceptable traffic noise levels. However, noise generated by onsite golf course maintenance facility and associated maintenance activities would not occur. Thus, the Reduced Biological Impact alternative would result in significant noise impacts that would be somewhat less than the proposed project.

Soils and Geology

The soils and seismic constraints which face future development of the proposed project would also affect future development under the Reduced Biological Impact alternative. Thus, this alternative would result in significant soils and geology impacts which would be comparable to the proposed project.

Public Services

As the amount of residential development would be unchanged with this alternative, the impact on public services would be the same as the proposed project. Thus, the Reduced Biological Impact alternative would have the same significant impacts on public services as the proposed project.

Traffic and Circulation

While elimination of the golf course would reduce the anticipated traffic generated by development of the Specific Plan, this reduction would not substantially change the congestion anticipated with the proposed project. Thus, this alternative would result in significant traffic impacts which would be comparable to the proposed project.

Water Resources

Elimination of the golf course would reduce the amount of water consumed by development of the proposed project. However, the opportunity to use reclaimed water generated by the wastewater treatment plant as well as aquifer recharge opportunities would be lost without the golf course. These disadvantages partially outweigh the reduction in water demand associated with the golf course. Even without the golf course, a groundwater deficit would occur with this alternative. Thus, the impact on water resources would be significant albeit somewhat less than the proposed project.

10.1.5 REDUCED BIOLOGICAL IMPACT/NO GROUNDWATER DEFICIT

Based on the discussion which follows, the Reduced Biological Impact/No Groundwater Deficit is considered the environmentally-superior alternative because it would eliminate the average annual groundwater deficit which is currently occurring on the property and reduce impacts to biological resources while still achieving a basic objective of the project to provide a mixture of residential and commercial uses.

10.1.5.1 Description

The goal of this alternative is to reduce biological resource impacts and eliminate the average annual groundwater deficit by combining the basic elements of the two previous alternatives. As discussed in Section 10.1.3 (No Groundwater Deficit), 100 acres of employment center would be eliminated from the Specific Plan to avoid an average annual groundwater deficit. As discussed in Section 10.1.4 (Reduced Biological Impact), the proposed golf course would be eliminated as would residential estate development within Planning Area 12C and the corresponding road crossings needed to provide access (Figure 10.1-1). In addition, development within Planning Area 12A would be reconfigured to avoid mixed non-native/native grasslands. The golf course area would be included in the proposed biological conservation area where grading would not otherwise occur to create the proposed development areas. The wastewater treatment plant would be moved to a location near Highway 101.

10.1.6.2 Environmental Impacts

Air Quality

Elimination of the golf course combined with the elimination of 100 acres of employment center uses would reduce the number of automobile trips in comparison with the proposed project resulting in a proportionate reduction in mobile source air emissions relative to the proposed project. Even though the air emissions related to this alternative would be lessened, this alternative would have a significant cumulative impact on air quality due to the unacceptable air basin conditions which exist already with respect to ROG, CO, and PM₁₀.

Agriculture

As with the proposed project, the loss of agricultural land which would result from development under the Reduced Biological Impact/No Groundwater Deficit alternative would result in a significant impact on agriculture. Although the area of development would be reduced by this alternative, the areas that would be removed from development would be placed into the biological conservation easement to achieve the goal of reducing impacts on biological resources. Consequently, no additional land for agricultural use would be available as a result of this alternative. However, removal of the estate residential development along the northern boundary would lessen potential impacts on offsite agricultural operations by providing more buffer area between future agriculture activities and residential development within the Specific Plan area. Thus, the Reduced Biological Impact/No Groundwater Deficit alternative would have less impacts on agriculture than the proposed project.

Archaeological/Historic Resources

The impact of this alternative on significant archaeological and historic cultural resources would not be reduced in comparison to the proposed project. Although the amount of employment center would be reduced, the development is located well away from the Red Pony complex and, thus, its elimination would not change the impact of the Specific Plan. Similarly, although the golf course would be eliminated and Residential Estate lots would be relocated, the Residential Low area with the HYH Property would remain, thus changes to views from the Red Pony complex would remain significant. Similarly, development would affect the Schoch Dairy/Espinosa Dairy and the Battle of Natividad site as these areas would continue to be graded under this alternative. Potential impacts to subsurface prehistoric and historic resources would also potentially occur.

Biology

The Reduced Biological Impact/No Groundwater Deficit alternative would result in a substantial reduction in the amount of sensitive biological resources that would be impacted in comparison with the proposed project. This alternative would reduce impacts to wetlands in comparison with the proposed project by eliminating the golf course. Elimination of the golf course and reconfiguration of Planning Area 12A would avoid the impact on native grassland and associated fragrant fritillary.

In addition to the reducing the loss of sensitive plant communities and species, this alternative would result in a higher quality wildlife corridor along the northern boundary. Elimination of Planning Area 12C and the golf course maintenance facility and relocation of the wastewater treatment plant site would allow improved connectivity between the onsite corridor and undeveloped land which exists on land adjacent to the north. Removal of the golf course would also preserve tributary canyons to the south which could provide additional habitat and refuge for wildlife. Elimination of Planning Area 12C, the golf course maintenance facility and the proposed wastewater treatment plant site would also eliminate roadways proposed to provide access to these areas. This would remove a potential constraint to wildlife movement.

The elimination of development and the wastewater treatment plant site along the northerly boundary would also reduce the indirect impacts of the proposed project on natural areas which lie to the north by eliminating impacts created by noise, domestic pets and outdoor lighting.

While not avoiding significant biological impacts, this alternative would substantially reduce the biological impacts associated with the proposed project.

Hydrology/Water Quality

As with the proposed project, the Reduced Biological Impact/No Groundwater Deficit alternative would increase the impermeable surface area and result in development which would increase urban water pollutants related primarily to automobile by-products. However, the decrease in the employment center development would result in proportionately less surface runoff and automobile by-products. In addition, golf course impacts on water quality impacts associated with golf course maintenance would be avoided by this alternative. Thus, while less than the proposed project, the Reduced Biological Impact/No Groundwater Deficit alternative would have significant hydrology/water quality.

Land Use

The potential conflicts between new development and ongoing agricultural activities around the Specific Plan area would occur with the Reduced Biological Impact/No Groundwater Deficit alternative. However, the elimination of Planning Area 12C would reduce potential conflicts with offsite agricultural operations along the northern boundary of the Specific Plan area. In addition, interim conflicts between new development and interim agriculture within the Specific Plan area would also occur with this alternative. Thus, although reduced in comparison with the proposed project, significant land use impacts would be related to the Reduced Biological Impact/No Groundwater Deficit alternative.

As with the proposed project, this alternative would provide the housing and job opportunity goals of the General Plan's ADC designation and the Community Plan designation in the Update. Although the elimination of a portion of the employment center would reduce the number of jobs provided by the project.

Landform Alteration/Aesthetics

The amount of landform alteration would be reduced with the Reduced Biological Impact/No Groundwater Deficit alternative. The elimination of Planning Area 12C would avoid grading impacts associated with providing individual development pads for the 34 homes which would have been constructed there under the proposed project. Removal of the golf course from the project would substantially reduce grading as well. Relocation of the golf course maintenance facility wastewater treatment plant site would reduce grading as the terrain is less pronounced in this portion of the Specific Plan area. Preservation of tributary canyons occupied by the proposed golf course would preclude placement of excess fill within these areas which would likely force excess fill to be hauled offsite to a suitable location.

Noise

The Reduced Biological Impact/No Groundwater Deficit alternative would result in noise impacts that would be similar to the proposed project with the exception of golf course maintenance noise. Future residents and other noise sensitive receptors along major roads within the development area would be exposed to unacceptable traffic noise levels. However, noise generated by golf course maintenance facility and associated maintenance activities would not occur. Thus, the Reduced Biological Impact/No Groundwater Deficit alternative would result in significant noise impacts that would be somewhat less than the proposed project.

Soils and Geology

The soils and seismic constraints which face future development of the proposed project would also affect future development under the Reduced Biological Impact/No Groundwater Deficit alternative. Thus, this alternative would result in significant soils and geology impacts which would be comparable to the proposed project.

Public Services

As the amount of residential development would be unchanged with this alternative, the impact on public services would be the same as the proposed project. Thus, the Reduced Biological Impact/No Groundwater Deficit alternative would have the same significant impacts on public services as the proposed project.

Traffic and Circulation

While elimination of 100 acres of employment center and the golf course would reduce the anticipated traffic generated by development of the Specific Plan, this reduction would not substantially change the congestion anticipated with the proposed project. Thus, this alternative would result in significant traffic impacts which would be comparable to the proposed project.

Water Resources

Elimination of the 100 acres of employment center would eliminate the groundwater deficit provided sufficient opportunities are provided to replace groundwater recharge related to the plan

to use reclaimed water to irrigate the golf course. Assuming this is possible, this alternative would not have a significant impact on groundwater resources.

10.2 HYH PROPERTY PROJECT

As the development proposed for the HYH property is a reflection of the proposed Rancho San Juan Specific Plan, the discussion of alternatives to the proposed Specific Plan apply to the HYH property with one exception. A No Groundwater Deficit alternative is not included for HYH (see Table 1.4-2) because, as discussed earlier, the development of the HYH Property Project would result in net increase in groundwater recharge rather than a deficit. Thus, the discussion which follows represents a summary of the relevant aspects of Specific Plan alternatives.

The Reduced Biological Impact alternative is the environmentally superior alternative because it would reduce impacts on sensitive biological resources. As indicated in Table 1.4-2, this alternative would also reduce impacts related to hydrology/water quality and land use compatibility related to the wastewater treatment plant and golf course maintenance.

10.2.1 NO DEVELOPMENT (HYH)

10.2.1.1 Description

This alternative would eliminate future development of the HYH property including the proposed golf course resulting in continued agricultural operations on the property. However, development of the remainder of the Specific Plan area would take place in accordance with the proposed Specific Plan. Without development of the HYH Property, the wastewater treatment plant would be constructed within Planning Area 14. Stirling Road would likely continue to be extended from San Juan Grade Road to the proposed town center to maximize traffic flow in the Specific Plan area.

Although this project alternative would reduce environmental impacts associated with developing the HYH property, it would not achieve the primary objectives of the HYH property. The No Development (HYH) alternative would not implement the land use goals of the County's General Plan or Update for the property of providing needed housing and employment opportunities. It would also not achieve the goal of complying with the court order mandating preparation and adoption of a Specific Plan covering the HYH property. Although this alternative fails to achieve the project objectives, it is addressed pursuant to Section 15126.6(e) of the CEQA Guidelines in order to document the environmental effect of maintaining the existing environmental setting described in Chapter 3.0 (Environmental Setting).

10.2.1.2 Environmental Impacts

Air Quality

The elimination of future development within the HYH Property would avoid mobile and stationary source air emissions associated with the proposed development. No new automobile

emissions would be contributed by development of the subject property. Similarly, elimination of the demand for electrical power and the elimination of potential emission sources related to development (lawn mowers, fireplaces, etc.) would avoid emissions related to stationary sources. While the elimination of grading for future development would avoid associated particulate impacts, ongoing agriculture would continue to generate particulates when soil tilling occurs. As these activities are ongoing, this alternative would not generate a new significant impact on air quality and would have less impact than the proposed project.

Agriculture

The No Development (HYH) alternative would allow the existing agriculture to continue. Thus, this alternative would not have a significant impact on agriculture and would have less impact than the proposed project.

Archaeological/Historic Resources

Retaining the existing agricultural uses on the HYH property would avoid the impact of development on the viewshed of the Red Pony Barn complex. Thus, this alternative would not have a significant impact on cultural resources.

Biology

The No Development (HYH) alternative would avoid impacts to biological resources which are associated with the HYH Property Project. Most notably, it would eliminate additional impacts to wetland resources as well as mixed non-native/native grasslands and associated sensitive species including the fragrant fritillary. Elimination of the golf course would reduce adverse water quality impacts on wildlife downstream. It would also retain potential habitat for the California red legged frog and spineflower.

Hydrology/Water Quality

The No Development (HYH) alternative would avoid the increase in runoff which would be associated with development of the property. No increase in impermeable surface area would occur. Nor would there be a new source of runoff pollutants related to the golf course and automobile by-products which would occur under the proposed development.

The water quality impacts associated with the existing agricultural activities would continue. Similarly, the downstream flooding would continue to occur as no additional flood control measures would be taken on the subject property.

Land Use

The potential conflicts between new development within the HYH Property and ongoing agricultural activities around the Specific Plan area would be eliminated with the No Development (HYH) alternative. Thus, no significant land use impacts would be related to the No Development (HYH) alternative. However, continued agricultural operations within the

HYH Property would likely conflict with new development within the surrounding Specific Plan area.

While this alternative would avoid potential land use conflicts, it would not implement the goals of the County's General Plan and Update relative to providing housing and job opportunities to the region. The subject property is within an area which is designated as an "Area of Development Concentration" or Community Plan area in the Update. These designations are applied to specific areas which are considered well suited to accommodate higher levels of development. Leaving this property undeveloped would undermine the General Plan's goals of guiding growth to appropriate areas which would result in a significant impact on land use plans and policies.

Landform Alteration/Aesthetics

In the absence of development, no grading would occur within the HYH Property. As this property contains some of the more variable terrain, elimination of development of the HYH Property would reduce landform impacts associated with the Specific Plan. Thus, no significant landform alteration/aesthetic impacts would occur with the No Development (HYH) alternative.

Noise

The No Development (HYH) alternative would eliminate potential noise sources associated with the proposed project. Noise levels on nearby roadways would not increase in the absence of traffic generated by the proposed project. Similarly, potential noise associated with the golf course would be eliminated. In addition, no new development within the property would occur which would expose noise sensitive uses (e.g. residential) to unacceptable traffic noise levels. Relocation of the wastewater treatment plant to Planning Area 14 would result in a new noise source in this area. Planning Area 14 is not generally located adjacent to any sensitive noise receptors. However, a small residential area is planned on the southeastern boundary of Planning Area 14. If not properly located, this alternative would likely result in a significant noise impact by displacing the wastewater treatment plant to a location adjacent to a sensitive noise receptor.

Soils and Geology

Without development of new structures within the HYH Property, potential risk associated with soil and seismic conditions would be avoided. No significant soils and geology impacts would be associated with the No Development (HYH) alternative.

Public Services

Public service impacts related to development of the HYH property would be avoided by the No Development (HYH) alternative. No demand would be placed on local school districts. No additional demand would be created for police or fire protection. Thus, this alternative would have less impact than the proposed project.

Traffic and Circulation

No new automobile traffic would be generated from the HYH property by the No Development (HYH) alternative. While the limited traffic generated by uses on the property would remain, this traffic is already occurring in the area and constitutes a relatively low number of trips on the local and regional roadway system. Thus, the No Development (HYH) alternative would not result in a significant traffic and circulation impact and would have less impact than the proposed project.

Water Resources

No additional water demand would be created by the No Development (HYH) alternative. However, the absence of new water demand would not alleviate significant impacts on local groundwater supplies. As indicated in Chapter 5.10 (Water Resources), annual water consumed in the process of irrigating existing crops on the subject property is already exceeding the annual amount of groundwater recharge. Thus, the No Development (HYH) alternative would have a significant impact on water resources by resulting in a net reduction in the groundwater supply in the area and would have greater impact than the proposed project.

10.2.2 NO PROJECT (HYH) ALTERNATIVE: DEVELOPMENT IN ACCORDANCE WITH THE ADOPTED GENERAL PLAN

10.2.2.1 Description

The No Project (HYH) alternative would involve development of the HYH Property under the GSAP which would result in residential, golf course and commercial land uses. As described in Section 10.1.2 (No Project: Development in Accordance with the Adopted General Plan), the average density of residential development would be 5.1 per acre. Based on this density, it is anticipated that this alternative could result in up to 3,422 residential units. Given the GSAP golf course designation and interest of the project applicant in developing a golf course resort, this alternative assumes a facility similar to that included as part of the proposed Specific Plan. In addition, some level of support retail services would be anticipated to occur within the HYH property under the GSAP.

Future development in accordance the GSAP would be served by groundwater and an onsite wastewater treatment plant as the project is not currently within the service area of a provider of either of these services. Access to the site would be from a connection to San Juan Grade via Stirling Road. A second connection would be made to Harrison Road.

This alternative would achieve the primary objectives related to meeting the land use goals of the County's General Plan but it would not meet the objective of satisfying the court order related to the HYH property and settling pending litigation.

10.2.2.2 Environmental Impacts

Air Quality

Air quality impacts associated with the No Project (HYH) alternative would be greater than the proposed HYH development due to the increase in the intensity of development. The increase in the number of homes would translate into more automobile trips than the proposed development. The increase in development would also result in higher stationary source emissions. This increase in air emissions would also increase the cumulative impact related to the project traffic related to other regional mobile and stationary emission sources. Thus, the HYH/No Project (HYH) alternative would have a significant direct and cumulative impact on air quality which is greater than the proposed project.

Agriculture

As with the proposed HYH development, development in accordance with the GSAP would result in the loss of agricultural land. Thus, the No Project (HYH) alternative would have a significant impact on agriculture which would be comparable to the proposed HYH development.

Archaeological/Historic Resources

As this alternative would convert much of the foreground viewshed from the Red Pony Barn to development, it would have the same significant impact on this historical resource as the proposed development. Similarly, buried subsurface prehistoric deposits could be impacted by development under this alternative.

Biology

As with the proposed HYH development, development of the golf course would impact mixed non-native/native grasslands and wetlands as well as wildlife movement through the northern drainage. Thus, the No Project (HYH) alternative would result in significant biological impacts which would be similar to the proposed HYH development.

Hydrology/Water Quality

As with the proposed development, the No Project (HYH) alternative would increase the impermeable surface area and result in development which would increase urban water pollutants related primarily to automobile by-products. In fact, the increase in the intensity of residential development would result in proportionately greater surface runoff and automobile by-products than the proposed project. As with the proposed project, the golf course would impact water quality impacts due to golf course maintenance. Thus, the No Project (HYH) alternative would have significant hydrology/water quality impacts comparable to the proposed HYH development.

Land Use

The potential conflicts between new development and ongoing agricultural activities around the HYH Property would occur with the No Project (HYH) alternative. As with the proposed development, new housing would occur within the property which would likely be adversely affected by adjacent agricultural activities. In addition, interim conflicts between new development and interim agriculture within the HYH Property would also occur with this alternative. Thus, significant land use impacts similar to the proposed development would be related to the No Project (HYH) alternative.

As with the proposed development, this alternative would provide the housing and job opportunity goals of the General Plan's ADC designation.

Landform Alteration/Aesthetics

In order to achieve the development intensities anticipated by the GSAP, this alternative would require grading on the same order of magnitude as the proposed HYH Property development. Thus, the landform alteration impacts would be significant and, possibly greater than would occur under the proposed development on the HYH Property.

Noise

Future residents and other noise sensitive receptors along major roads within the development area would be exposed to unacceptable traffic noise levels. Thus, the No Project (HYH) alternative would result in significant noise impacts which could be potentially greater than the proposed development.

Soils and Geology

The soils and seismic constraints which face future development of the proposed project would also affect future development under the No Project (HYH) alternative. Thus, this alternative would result in significant soils and geology impacts which would be similar to the proposed development.

Public Services

As indicated earlier, the development allowed under the GSAP is greater than the proposed project. Consequently, the No Project (HYH) alternative would result in higher demand for public services. The increase in residential units would generate more school children. The increase in residential and commercial development would result in a higher demand for police and fire protection. Similarly, the generation of solid waste would be proportionately higher. Thus, the No Project (HYH) alternative would have significant impacts which would be greater than the proposed development.

Traffic and Circulation

The increase in the development intensity would result in a proportionately higher level of traffic generated by the No Project (HYH) alternative when compared against the proposed

development. As key roadways and intersections in the area are already congested, the No Project (HYH) alternative would result in significant traffic impacts which would be greater than the proposed development.

Water Resources

The No Project (HYH) alternative would result in a demand for water that would exceed that of the proposed project due to the increase in land use intensity. Thus, the No Project (HYH) alternative would have a significant impact on water resources which would likely exceed that of the proposed development.

10.2.3 REDUCED BIOLOGICAL IMPACTS (HYH) ALTERNATIVE

Based on the discussion which follows, the Reduced Biological Impacts alternative for the HYH Property Project is considered the environmentally-superior alternative because it would achieve most of the project goals, with the exception of the golf course, and would result in less biological impacts related to loss of mixed non-native/native grassland, wildlife movement impediment and wetland impacts.

10.2.3.1 Description

This alternative would be the same as the Specific Plan alternative described in Section 10.1.4 (Reduced Biological Impacts). Under this alternative, the golf course would be eliminated along with development within Planning Area 12C. The wastewater treatment plant would be constructed in Planning Area 14.

This alternative would achieve the primary objectives related to meeting the land use goals of the County's General Plan but it would not meet the objective of settling the pending litigation and of satisfying the court order related to the HYH property. It would not achieve the goal of the owner to develop a golf course.

10.2.3.2 Environmental Impacts

As the impacts of Reduced Biological Impacts (HYH) alternative are identical to those discussed in Section 10.1.4 (Reduced Biological Impact), the following discussion contains a summary of this section. The reader is referred to the section for a more complete discussion of the environmental effects of this alternative.

As discussed in Section 10.1.3, the Reduced Biological Impact (HYH) alternative would reduce impacts associated with the proposed development by preserving mixed non-native/native grasslands, wetlands and wildlife movement.

The elimination of the golf course and Planning Area 12C also reduce but not avoid impacts related to air quality, hydrology/water quality, land use compatibility, landform alteration, noise, traffic and visual quality.

Air quality impacts would be reduced by the elimination of automobile trips associated with the golf course.

Water quality impacts would be reduced by the elimination of herbicides and pesticides associated with golf course maintenance.

The amount of landform alteration would be reduced with the elimination of Planning Area 12C. Removal of the golf course from the project would substantially reduce grading as well.

Noise generated by golf course maintenance facility and associated maintenance activities would not occur.

Relocation of the wastewater treatment plant would reduce potential land use conflicts related to odor and equipment noise by moving it to an area which is predominantly non-residential.

While elimination of the golf course would reduce the amount of water consumed by development of the proposed project. The opportunity to use reclaimed water generated by the wastewater treatment plant to balance water consumption as well as aquifer recharge opportunities would be lost without the golf course.

Although not a substantial amount, the elimination of golf course traffic would reduce overall traffic impacts associated with the HYH Property Project.

10.3 ALTERNATIVES CONSIDERED BUT REJECTED

10.3.1 IMPORTANT FARMLAND RETENTION

The goal of this alternative would be to diminish the loss of Important Farmland within the Specific Plan area by permanently designating portions of the Specific Plan area for agriculture. To achieve this goal, a substantial portion of the proposed development area within the Specific Plan would have to be preserved for agriculture.

This alternative was rejected because it would be inconsistent with previous decisions that have been made by the County in planning for development of the region. As discussed earlier, the County identified specific areas where development should be concentrated. One of the basic motives for establishing these “Areas of Development Concentration” was to focus development into specific areas and thereby reduce development pressure on agricultural operations in other

areas of the County. Thus, retention of large areas of Rancho San Juan for agriculture would be inconsistent with the adopted County's General Plan and pending Update.

10.3.2 OFFSITE LOCATION

An offsite alternative would not satisfy the basic goals of the GSAP or the objectives of the Specific Plan. It would not promote the land use goals of the County's General Plan and Update relative to providing needed housing and job opportunities to the area. The majority of the Specific Plan area has been designated as an "Area of Development Concentration" or Community Plan area in the update. This designation is applied to land which is considered critical to meeting the residential and commercial needs of the region. Concentrating development in planned areas and Rancho San Juan in particular is an integral part of the County's strategy for preserving high quality agricultural areas. Leaving the subject property undeveloped would put additional pressure on these agricultural areas. Similarly, leaving the property in agriculture would not implement existing GP and proposed GPU goals related to smart growth. Located near the existing developed areas within the City of Salinas, the subject property can take advantage of existing infrastructure.

Similarly, an offsite alternative for the HYH property would not meet the goals of the GP/GSAP and objectives of the proposed development. An offsite location would not comply with the court order related to the subject property or meet the objective to settle litigation.

10.3.3 REDUCED HOUSING

An alternative for the Specific Plan and the HYH project of substantially reducing the number of residential units would not satisfy the long-standing planning goals of the County to provide needed housing and job opportunities in a concentrated fashion in order to reduce pressure for scattered development which would adversely affect agriculture and other resources. These goals have been reflected in the General Plan since 1982, and carried forward in other County planning efforts such as the GSAP. The policy is proposed to be continued in the pending Update of the General Plan. A substantial lowering of the number of planned residences would not even minimally accomplish the County's goals for Rancho San Juan. For these reasons, alternatives reducing the number of residential units in the Specific Plan area and for the HYH Project are considered fundamentally infeasible because they would not accomplish the basic objectives of existing and continuing County plans.

CHAPTER 11.0

REFERENCES

City of Salinas (Prepared by Cotton/Bridges/Associates), June 2002. Draft Environmental Impact Report.

Jones & Stokes Associates, Inc., January 24, 1991. The Impacts of Farmland Conversion in California (JSA 89-164). California Department of Conservation (WA-90-1).

Monterey County, 1982. Monterey County General Plan.

Monterey County, 1986. Greater Salinas Area Plan.

Monterey County, January 2004. 21st Century Monterey County General Plan Public Review Draft.

Monterey County, February 17, 2004. 21st Century Monterey County Environmental Impact Report.

Monterey County, General Plan Update website. County Facts-Energy Use. www.co.monterey.ca.us/gpu/countyfacts/energy.html

Salinas Valley Solid Waste Authority (Prepared by RBF Consulting), March 2002. Draft Regional Solid Waste Facilities Project EIR.

State of California, Department of Conservation. Farmland Mapping and Monitoring Program. http://www.conserv.ca.gov/DLRP/fmmp/map_products/download_gis_data.htm

State of California, Integrated Waste Management Board. Solid Waste Information System. <http://www.ciwmb.ca.gov/SWIS>

State of California, Integrated Waste Management Board. Jurisdiction Profile for Monterey County. <http://www.ciwmb.ca.gov/Profiles>

Transportation Agency for Monterey County (Prepared by DKS Associates), February 27, 2004. Nexus Study for a Regional Developer Impact Fee.

CHAPTER 12.0

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CHAPTER 13.0

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